



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 350G 1FF350GXVJF812433
 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		JR0186261	JR0181512	JR0163433
Sample Date		Client Info		14 Nov 2023	25 Jul 2023	11 Apr 2023
Machine Age	hrs	Client Info		5501	5160	4686
Oil Age	hrs	Client Info		2949	3082	3055
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Changed	Not Chngd
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184	>50	10	12	11
Iron	ppm	ASTM D5185m	>32	<1	2	4
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	<1	<1	2
Lead	ppm	ASTM D5185m	>28	0	0	0
Copper	ppm	ASTM D5185m	>50	3	6	20
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

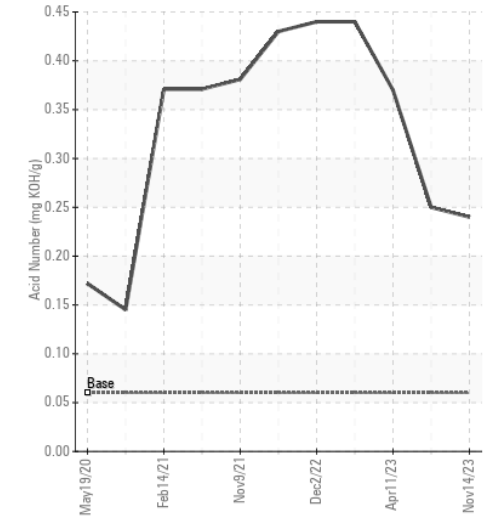
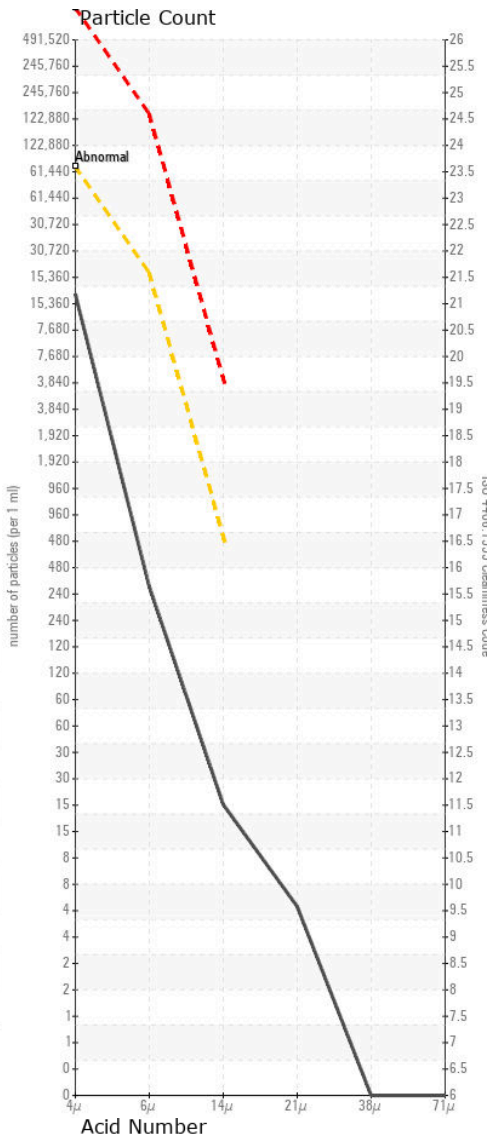
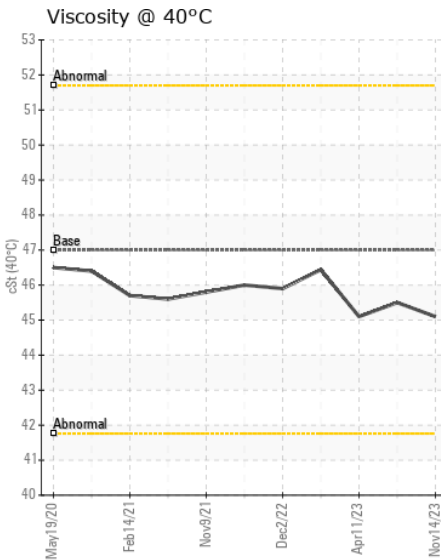
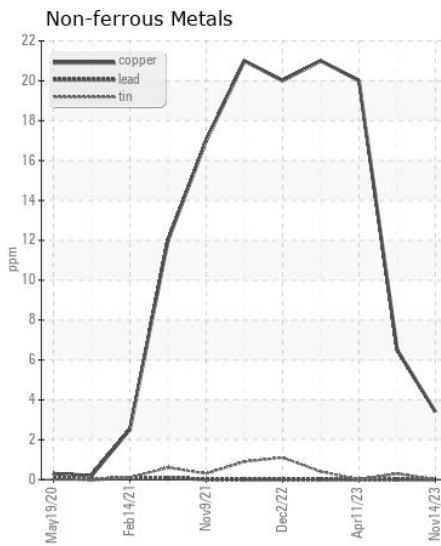
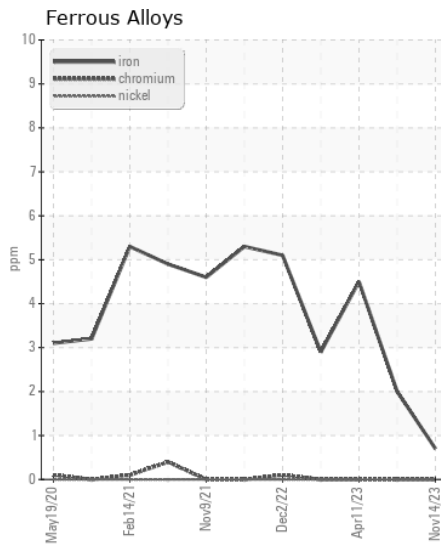
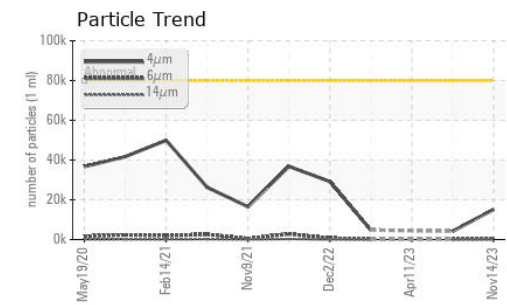
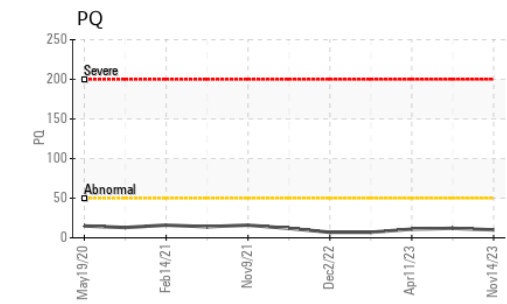
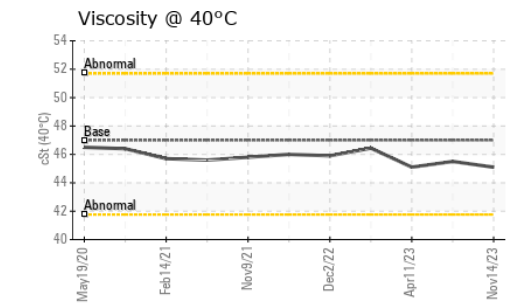
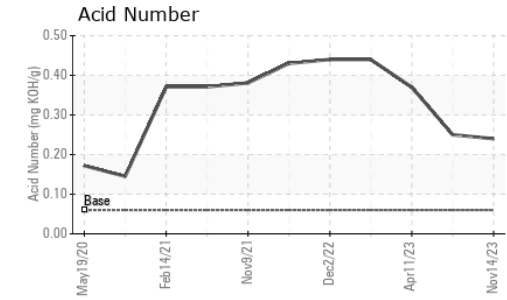
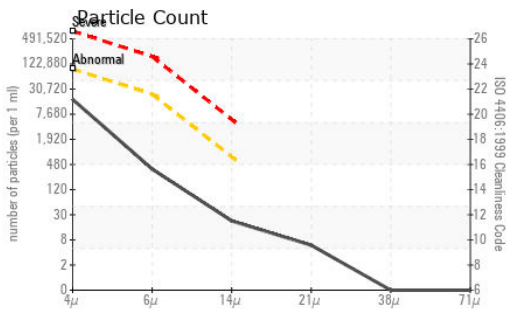
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>11	2	2	3
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	15142	4139	---
Particles >6µm		ASTM D7647	>20000	329	259	---
Particles >14µm		ASTM D7647	>640	19	16	---
Particles >21µm		ASTM D7647	>160	5	3	---
Particles >38µm		ASTM D7647	>40	0	0	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/16/11	19/15/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODER
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	0	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		<1	<1	<1
Calcium	ppm	ASTM D5185m		67	78	214
Phosphorus	ppm	ASTM D5185m	827	594	567	596
Zinc	ppm	ASTM D5185m	0	64	67	▲ 167
Sulfur	ppm	ASTM D5185m	13	293	296	618
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.24	0.25	0.37
Visc @ 40°C	cSt	ASTM D445	47	45.1	45.5	45.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0186261 **Received** : 15 Nov 2023
Lab Number : 06008253 **Tested** : 16 Nov 2023
Unique Number : 10742015 **Diagnosed** : 17 Nov 2023 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
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 Contact: RALEIGH SHOP
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 F: (919)779-5432

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)