



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 350G 1FF350GXEMF815178

Component
Hydraulic System

Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- QTS)

RECOMMENDATION

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil. (Customer Sample Comment: Top Up Amount: 7 QTS)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211189	JR0166557	JR0154360
Sample Date		Client Info		15 Apr 2024	24 Mar 2023	05 Dec 2022
Machine Age	hrs	Client Info		3984	3458	2936
Oil Age	hrs	Client Info		3984	3458	2936
Filter Age	hrs	Client Info		3984	3458	0
Oil Changed		Client Info		Oil Added	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	12	7	8
Iron	ppm	ASTM D5185m	>32	4	6	7
Chromium	ppm	ASTM D5185m	>9	0	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	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	6	6	6
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

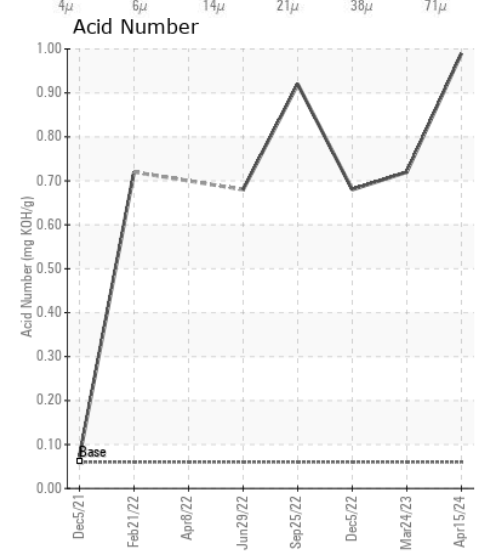
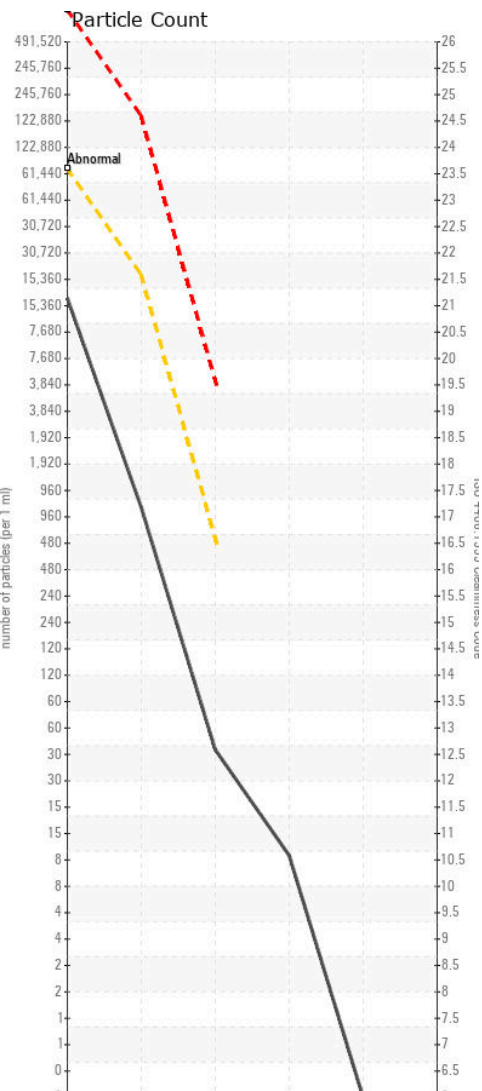
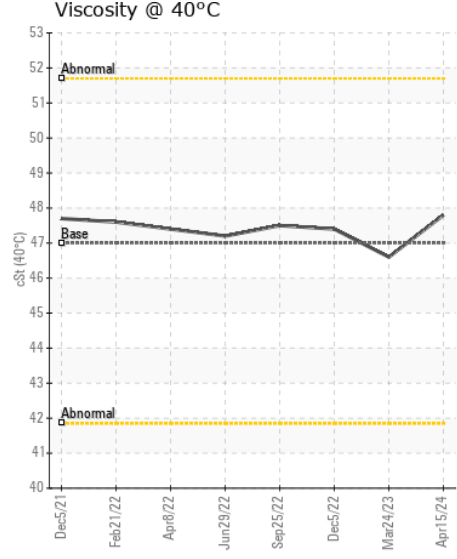
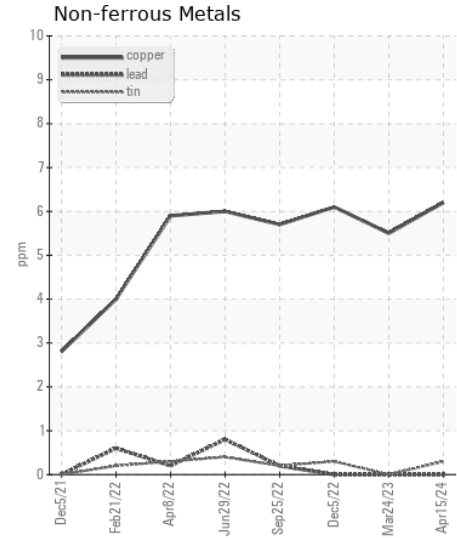
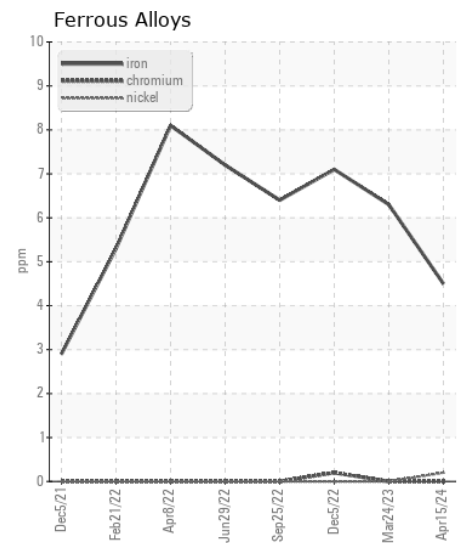
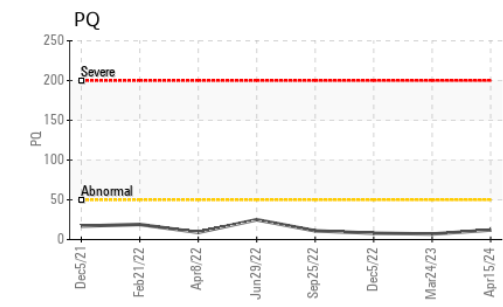
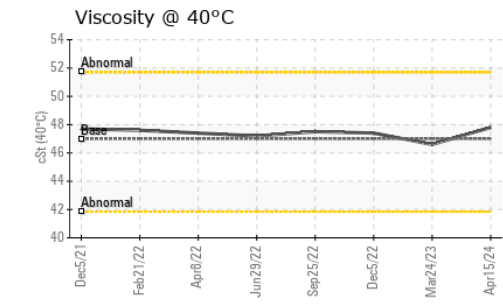
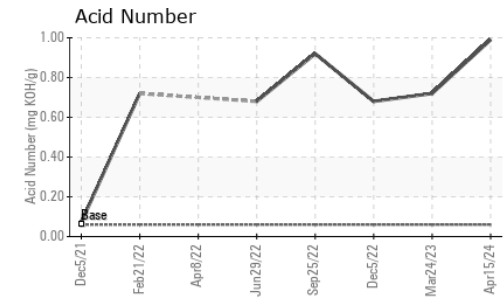
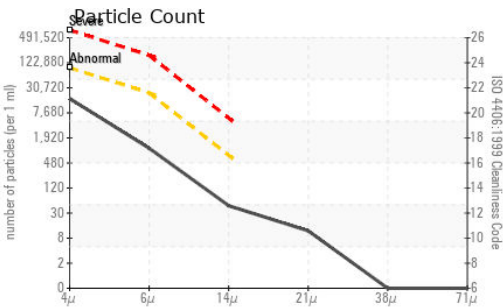
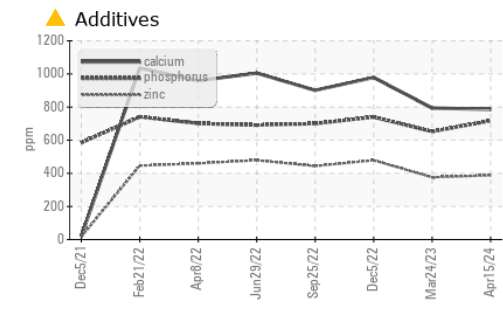
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	4	3	5
Potassium	ppm	ASTM D5185m	>20	2	<1	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	14737	22705	49122
Particles >6µm		ASTM D7647	>20000	952	1572	11077
Particles >14µm		ASTM D7647	>640	40	18	1080
Particles >21µm		ASTM D7647	>160	10	3	247
Particles >38µm		ASTM D7647	>40	0	0	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/17/12	22/18/11	23/21/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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

Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m	>21	3	<1	<1
Boron	ppm	ASTM D5185m		1	<1	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	2	2
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		7	6	9
Calcium	ppm	ASTM D5185m		786	794	979
Phosphorus	ppm	ASTM D5185m	827	717	652	740
Zinc	ppm	ASTM D5185m	0	▲ 388	▲ 376	▲ 479
Sulfur	ppm	ASTM D5185m	13	1273	1202	1286
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.99	0.72	0.68
Visc @ 40°C	cSt	ASTM D445	47	47.8	46.6	47.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211189 **Received** : 16 Apr 2024
Lab Number : 06151040 **Tested** : 17 Apr 2024
Unique Number : 10981118 **Diagnosed** : 19 Apr 2024 - Don Baldrige
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)