



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 245G 1FF245GXTNF802771
 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007832	WE0005221	WE0004234
Sample Date		Client Info		08 Jul 2024	06 Oct 2023	15 Mar 2023
Machine Age	hrs	Client Info		1555	984	472
Oil Age	hrs	Client Info		1555	0	0
Filter Age	hrs	Client Info		1555	0	0
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	15	15	8
Iron	ppm	ASTM D5185m	>32	17	4	2
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	2	<1	<1
Lead	ppm	ASTM D5185m	>28	0	0	0
Copper	ppm	ASTM D5185m	>50	7	2	2
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

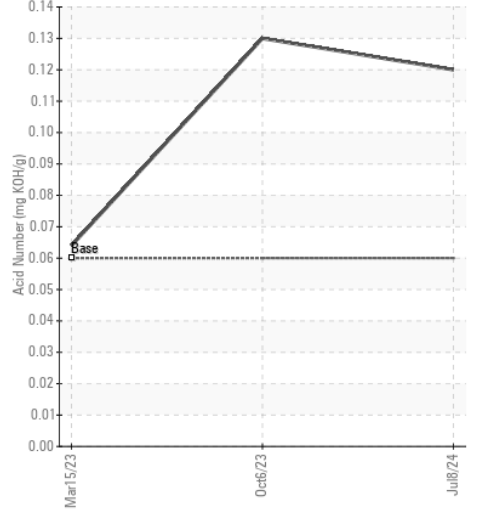
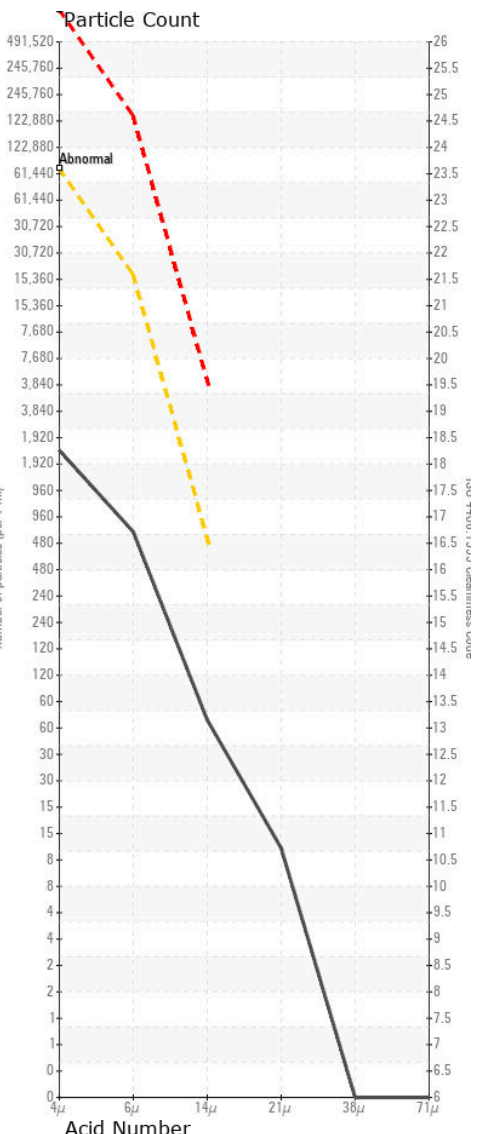
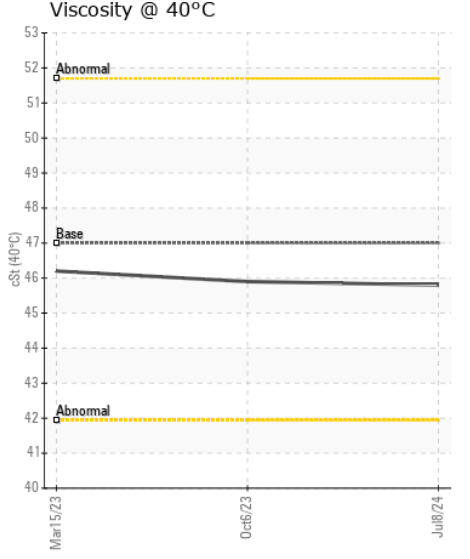
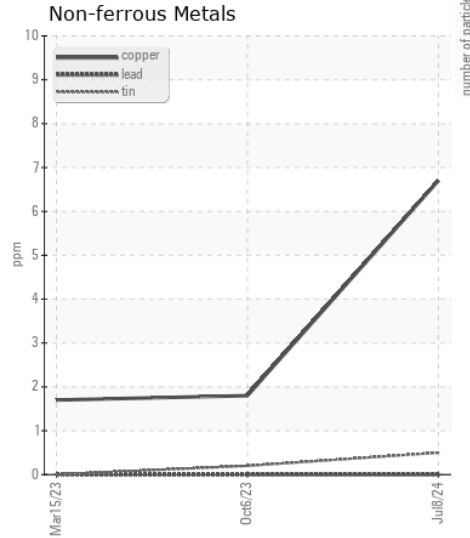
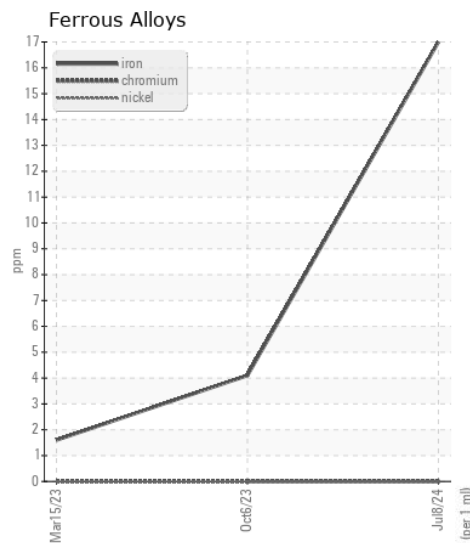
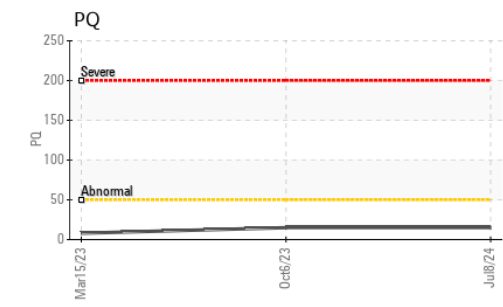
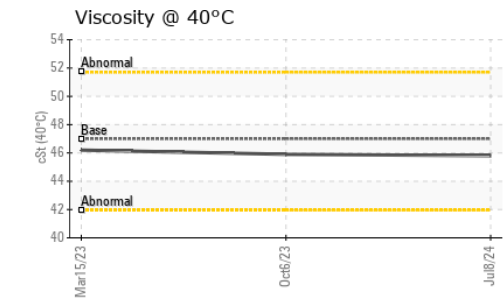
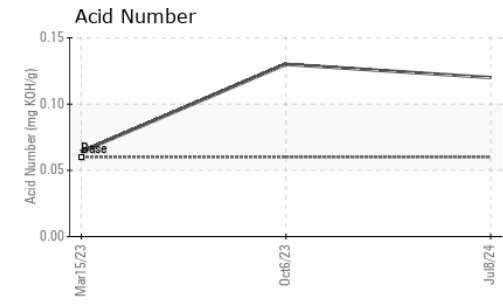
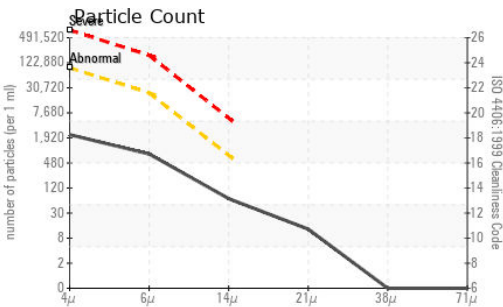
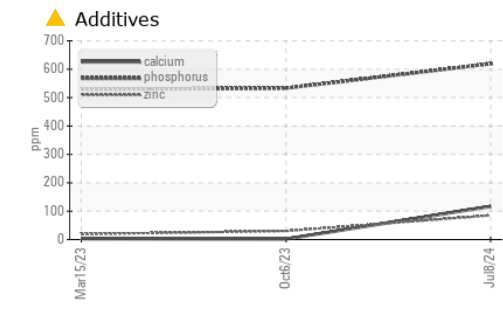
The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>11	3	1	2
Potassium	ppm	ASTM D5185m	>20	6	0	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	2012	2024	15908
Particles >6µm		ASTM D7647	>20000	692	598	3766
Particles >14µm		ASTM D7647	>640	59	49	188
Particles >21µm		ASTM D7647	>160	11	12	31
Particles >38µm		ASTM D7647	>40	0	0	2
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	18/17/13	18/16/13	21/19/15
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

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

Sodium	ppm	ASTM D5185m	>21	2	0	<1
Boron	ppm	ASTM D5185m		<1	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		10	0	5
Calcium	ppm	ASTM D5185m		117	2	3
Phosphorus	ppm	ASTM D5185m	827	619	533	529
Zinc	ppm	ASTM D5185m	0	▲ 85	30	19
Sulfur	ppm	ASTM D5185m	13	391	131	0
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.12	0.13	0.064
Visc @ 40°C	cSt	ASTM D445	47	45.8	45.9	46.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0007832 **Received** : 10 Jul 2024
Lab Number : 06232192 **Tested** : 11 Jul 2024
Unique Number : 11115685 **Diagnosed** : 11 Jul 2024 - Don Baldridge
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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