



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 210G 1FF210GXPHF524889
 Component
Hydraulic System
 Fluid
HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0207883	JR0185109	JR0168333
Sample Date		Client Info		08 Apr 2024	04 Oct 2023	15 May 2023
Machine Age	hrs	Client Info		7910	7345	6885
Oil Age	hrs	Client Info		3995	3430	2970
Filter Age	hrs	Client Info		1025	460	1086
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Changed	Not Chngd	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	16	13	11
Iron	ppm	ASTM D5185m	>32	4	4	6
Chromium	ppm	ASTM D5185m	>9	<1	<1	0
Nickel	ppm	ASTM D5185m	>5	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	1	0	4
Lead	ppm	ASTM D5185m	>28	1	0	0
Copper	ppm	ASTM D5185m	>50	2	1	2
Tin	ppm	ASTM D5185m	>5	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

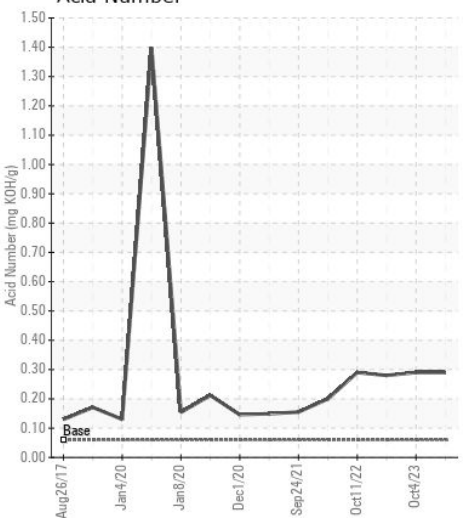
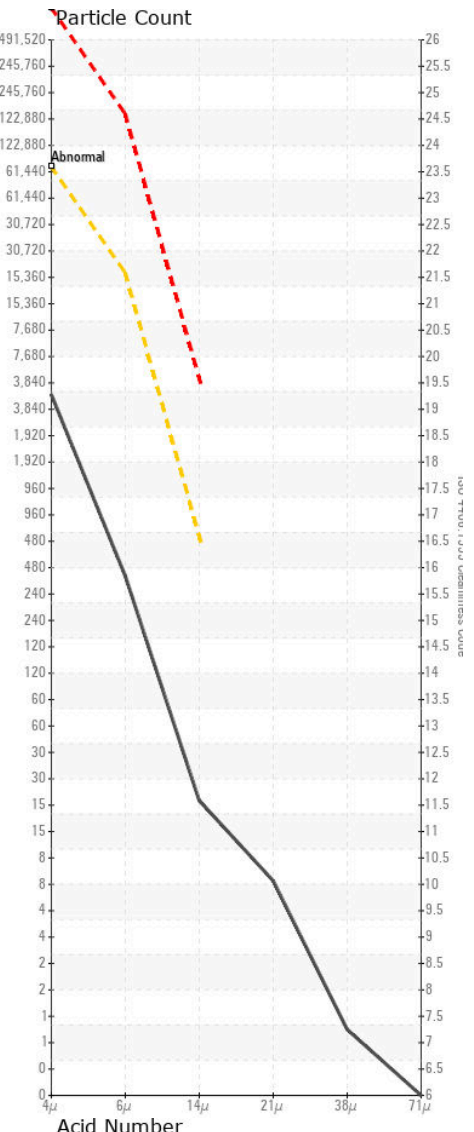
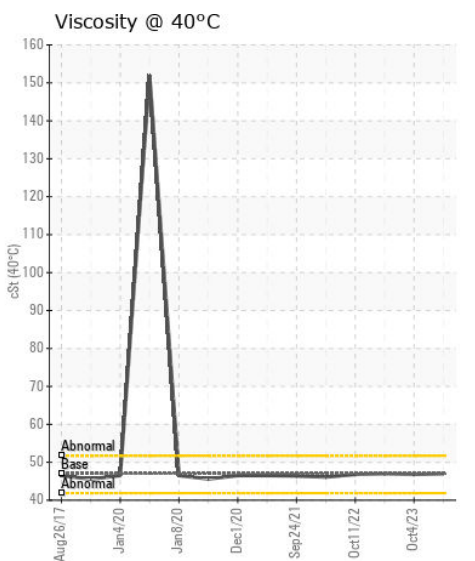
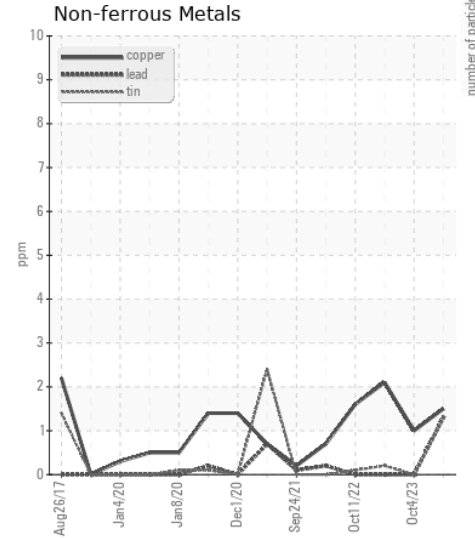
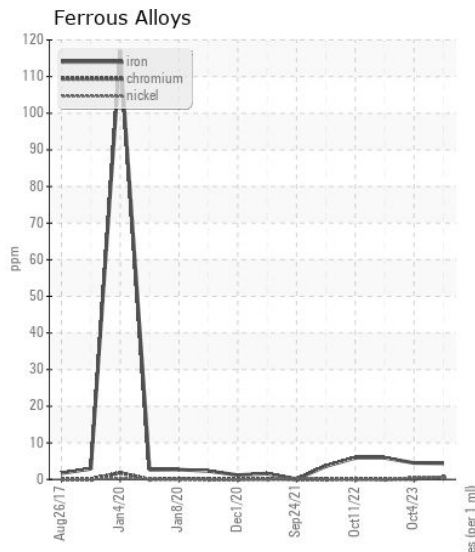
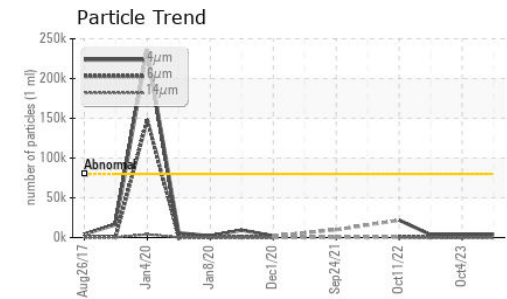
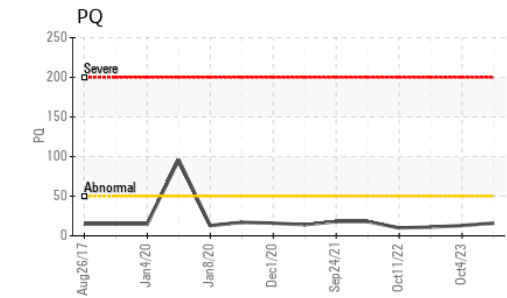
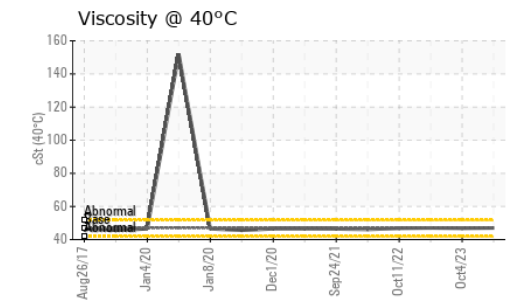
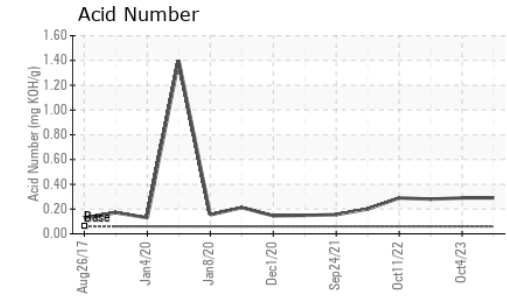
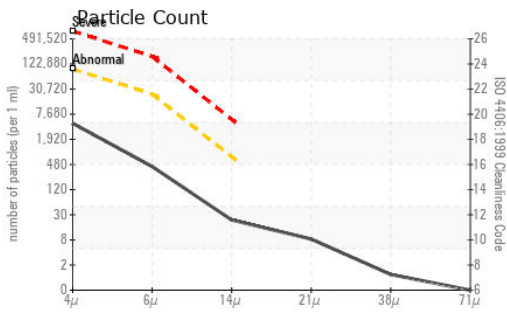
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	<1	<1	1
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	4068	3068	3560
Particles >6µm		ASTM D7647	>20000	378	343	377
Particles >14µm		ASTM D7647	>640	20	38	17
Particles >21µm		ASTM D7647	>160	7	13	3
Particles >38µm		ASTM D7647	>40	1	2	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	19/16/11	19/16/12	19/16/11
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

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	0	0	<1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	<1	<1
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		3	4	12
Calcium	ppm	ASTM D5185m		97	120	170
Phosphorus	ppm	ASTM D5185m	827	625	570	530
Zinc	ppm	ASTM D5185m	0	62	80	▲ 94
Sulfur	ppm	ASTM D5185m	13	182	292	142
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.29	0.29	0.28
Visc @ 40°C	cSt	ASTM D445	47	47.0	46.8	47.0



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0207883 **Received** : 12 Apr 2024
Lab Number : 06147208 **Tested** : 15 Apr 2024
Unique Number : 10977286 **Diagnosed** : 15 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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 Contact: MARK ROSS
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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)