



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[05W47618]

Machine Id

JOHN DEERE 135G 1FF135GXHMF502961

Component

Hydraulic System

Fluid

HITACHI HYDRAULIC SUPER EX 46HN (100 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0225315	JR0192355	JR0163037
Sample Date		Client Info		19 Jun 2024	03 Nov 2023	20 Mar 2023
Machine Age	hrs	Client Info		6684	4921	2970
Oil Age	hrs	Client Info		1763	4921	0
Filter Age	hrs	Client Info		1763	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	13	7	11
Iron	ppm	ASTM D5185m	>32	8	16	10
Chromium	ppm	ASTM D5185m	>9	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>9	3	<1	2
Lead	ppm	ASTM D5185m	>28	<1	0	<1
Copper	ppm	ASTM D5185m	>50	1	2	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

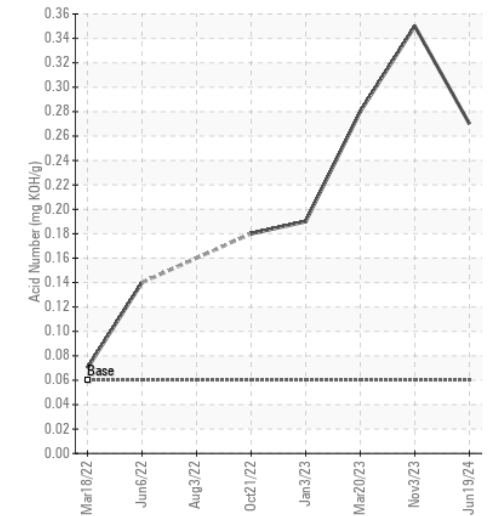
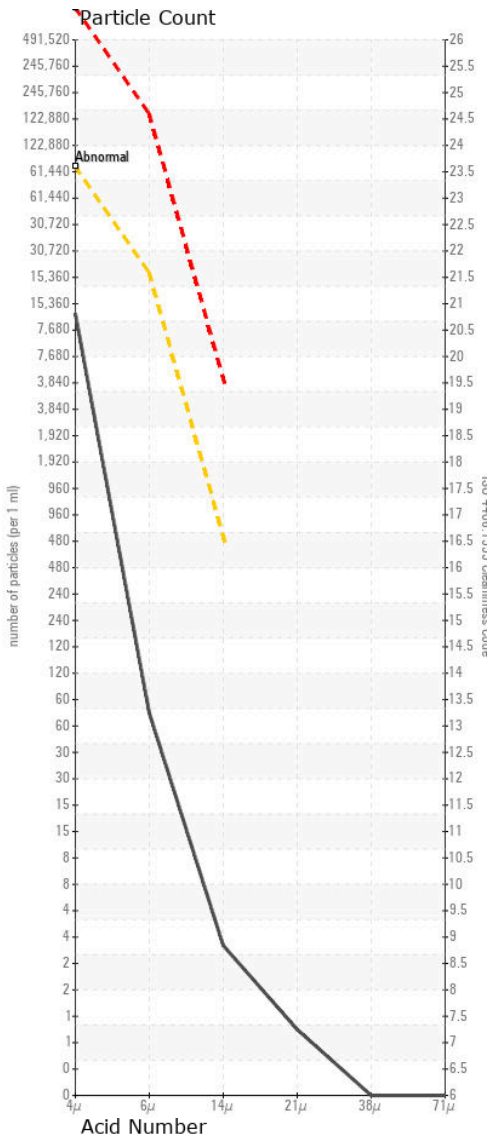
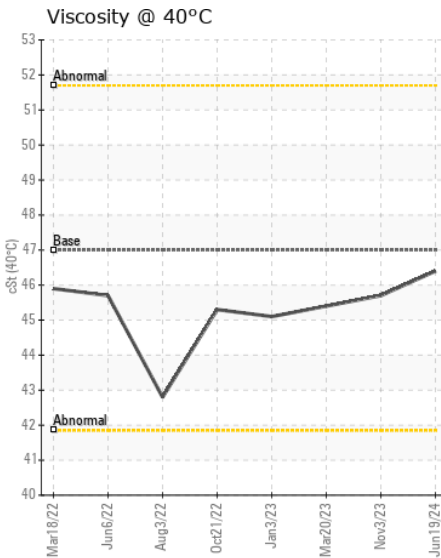
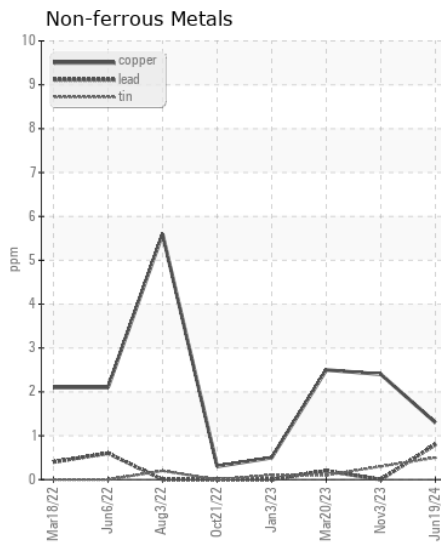
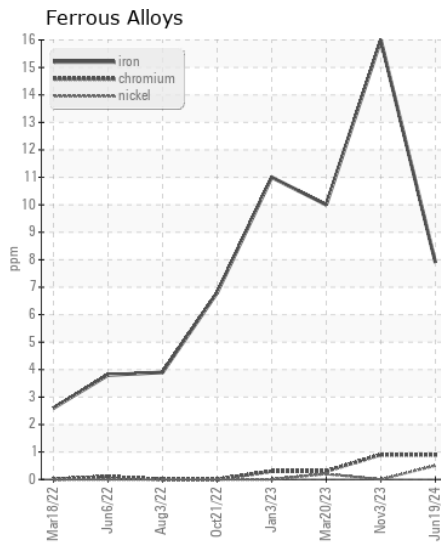
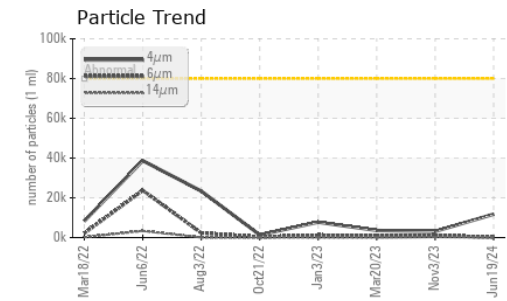
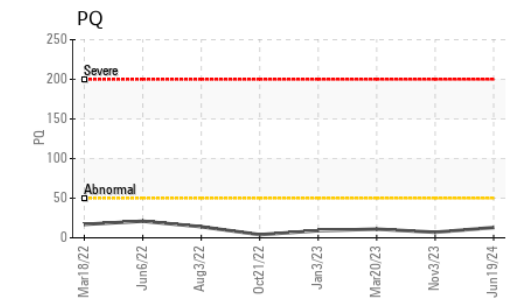
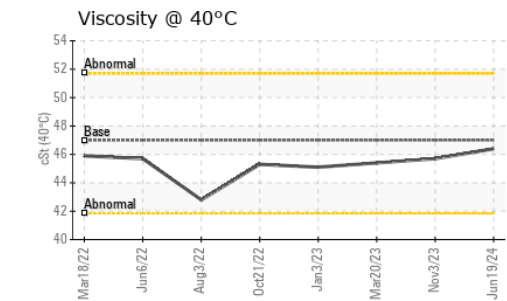
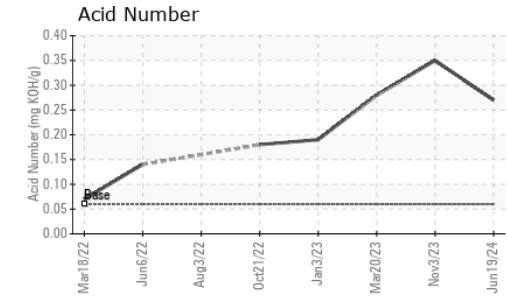
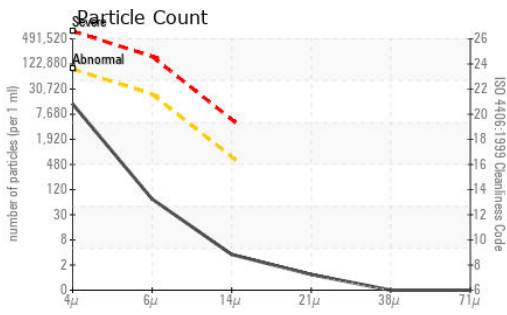
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>11	2	4	2
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	11755	3110	3572
Particles >6µm		ASTM D7647	>20000	63	1200	911
Particles >14µm		ASTM D7647	>640	3	272	44
Particles >21µm		ASTM D7647	>160	1	94	7
Particles >38µm		ASTM D7647	>40	0	7	1
Particles >71µm		ASTM D7647	>10	0	1	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	21/13/9	19/17/15	19/17/13
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	<1	3	0
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		1	0	<1
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		2	0	2
Calcium	ppm	ASTM D5185m		91	213	230
Phosphorus	ppm	ASTM D5185m	827	497	460	435
Zinc	ppm	ASTM D5185m	0	82	▲ 163	▲ 153
Sulfur	ppm	ASTM D5185m	13	395	556	568
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	0.27	0.35	0.28
Visc @ 40°C	cSt	ASTM D445	47	46.4	45.7	45.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0225315

Lab Number : 06215728

Unique Number : 11088592

Test Package : CONST (Additional Tests: PQ)

Received : 20 Jun 2024

Tested : 25 Jun 2024

Diagnosed : 25 Jun 2024 - Wes Davis

JRE - MANASSAS PARK

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US 20111

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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)