



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 200LC C9009046 (S/N 050953)

Component
Hydraulic System

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

RECOMMENDATION

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0201484	---	---
Sample Date		Client Info		25 Jan 2024	---	---
Machine Age	hrs	Client Info		4646	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		17	---	---
Iron	ppm	ASTM D5185m	>20	17	---	---
Chromium	ppm	ASTM D5185m	>10	<1	---	---
Nickel	ppm	ASTM D5185m	>10	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>10	2	---	---
Lead	ppm	ASTM D5185m	>10	1	---	---
Copper	ppm	ASTM D5185m	>75	65	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

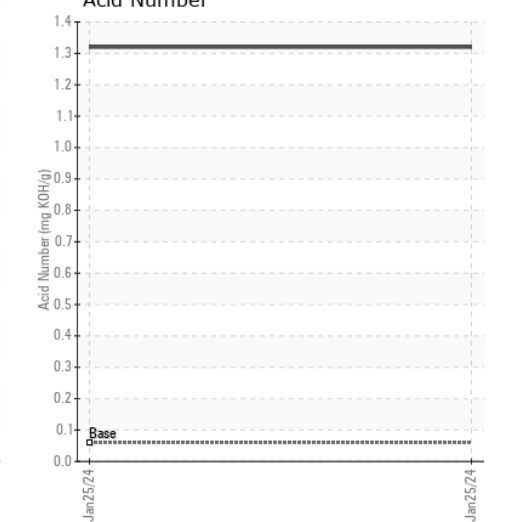
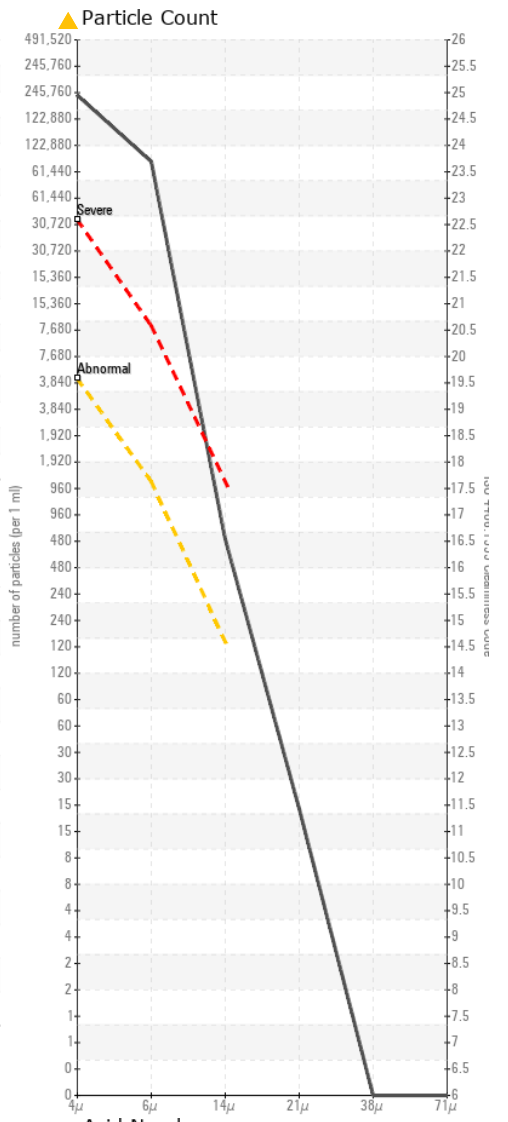
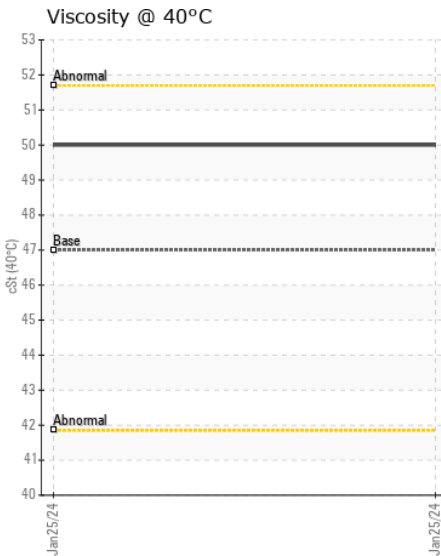
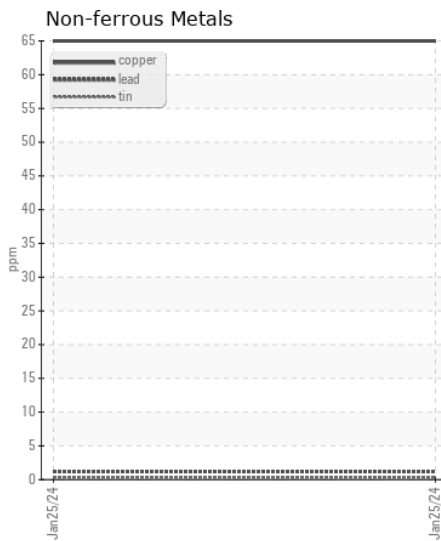
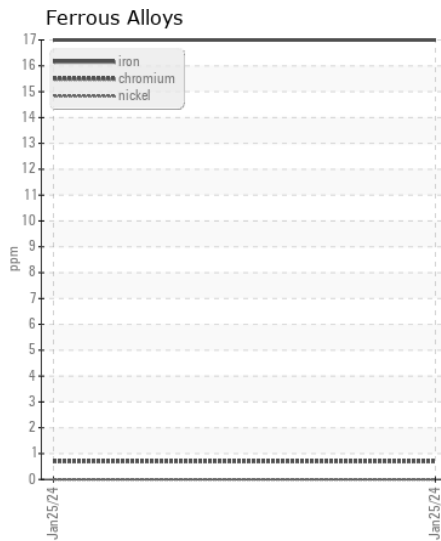
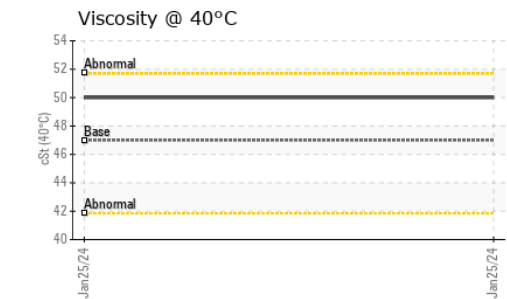
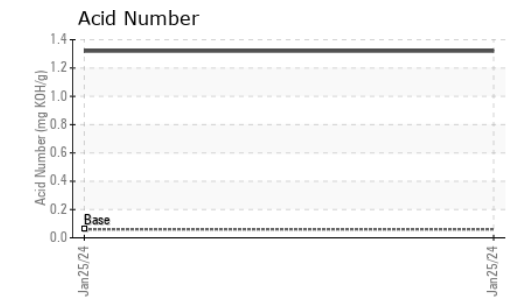
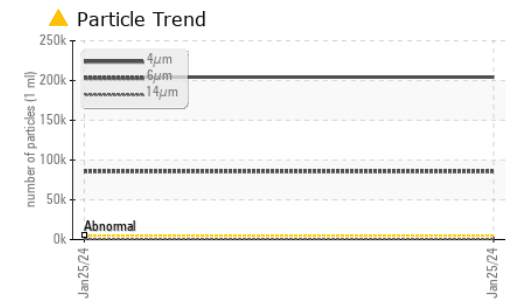
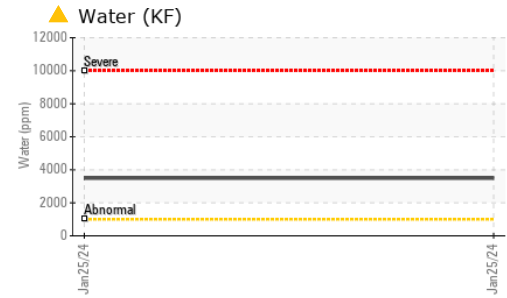
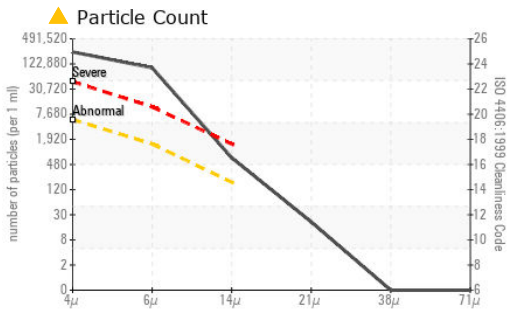
Appearance is hazy. There is a high amount of particulates present in the oil. There is a moderate concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>20	7	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Water	%	ASTM D6304	>0.1	▲ 0.349	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 3490	---	---
Particles >4µm		ASTM D7647	>5000	▲ 204392	---	---
Particles >6µm		ASTM D7647	>1300	▲ 85717	---	---
Particles >14µm		ASTM D7647	>160	▲ 613	---	---
Particles >21µm		ASTM D7647	>40	18	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 25/24/16	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	▲ HAZY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	0.2%	---	---

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oils additive package is suitable for further service.

Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m		6	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		2	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		17	---	---
Calcium	ppm	ASTM D5185m		2626	---	---
Phosphorus	ppm	ASTM D5185m	827	927	---	---
Zinc	ppm	ASTM D5185m	0	1108	---	---
Sulfur	ppm	ASTM D5185m	13	2955	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.06	1.32	---	---
Visc @ 40°C	cSt	ASTM D445	47	50.0	---	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0201484 **Received** : 09 Feb 2024
Lab Number : 06084692 **Tested** : 12 Feb 2024
Unique Number : 10872137 **Diagnosed** : 12 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF, PQ)

JRE - ASHEVILLE
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 US 28806
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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)