



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 210LC 1FFDC571CMF341012

Component
Pump Drive

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0204338	JR0155702	---
Sample Date		Client Info		21 Feb 2024	12 Dec 2022	---
Machine Age	hrs	Client Info		1033	404	---
Oil Age	hrs	Client Info		1033	404	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184		20	21	---
Iron	ppm	ASTM D5185m	>500	50	55	---
Chromium	ppm	ASTM D5185m	>15	1	1	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>20	<1	2	---
Lead	ppm	ASTM D5185m		<1	<1	---
Copper	ppm	ASTM D5185m	>35	3	2	---
Tin	ppm	ASTM D5185m	>4	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

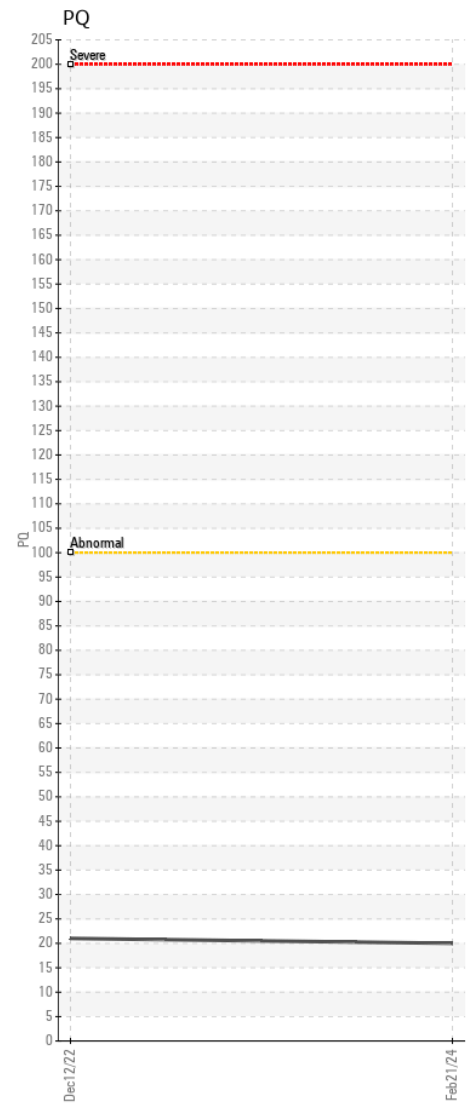
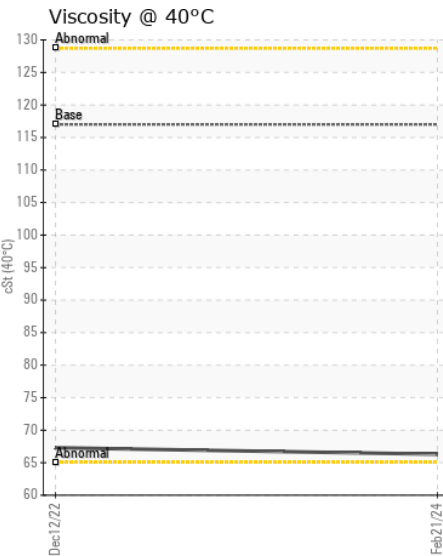
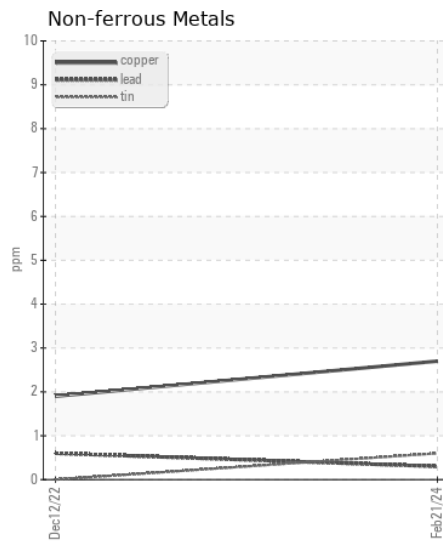
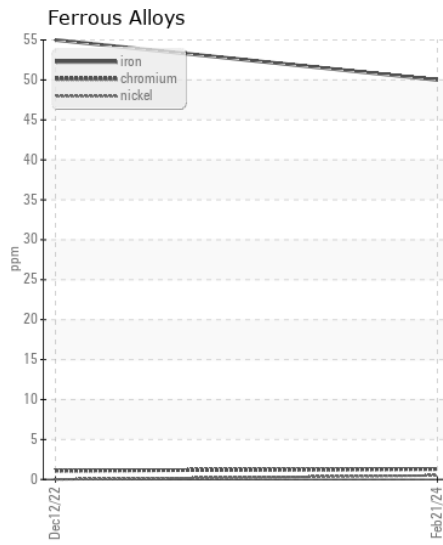
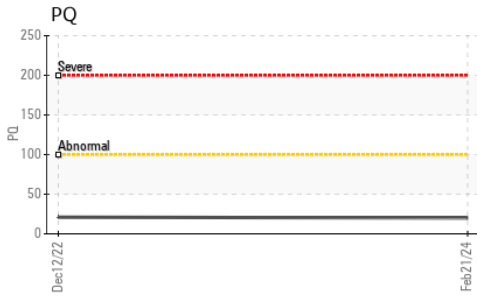
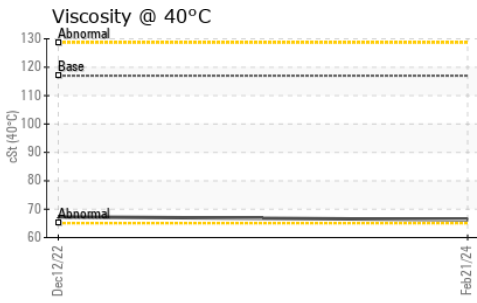
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	13	14	---
Potassium	ppm	ASTM D5185m	>20	3	0	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	VLITE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		0	1	---
Boron	ppm	ASTM D5185m		57	68	---
Barium	ppm	ASTM D5185m		12	7	---
Molybdenum	ppm	ASTM D5185m		99	102	---
Manganese	ppm	ASTM D5185m		2	2	---
Magnesium	ppm	ASTM D5185m		15	19	---
Calcium	ppm	ASTM D5185m		3645	4225	---
Phosphorus	ppm	ASTM D5185m		1003	1129	---
Zinc	ppm	ASTM D5185m		1184	1328	---
Sulfur	ppm	ASTM D5185m		9344	9811	---
Visc @ 40°C	cSt	ASTM D445	117	66.3	67.3	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0204338 **Received** : 23 Feb 2024
Lab Number : 06099340 **Tested** : 26 Feb 2024
Unique Number : 10897570 **Diagnosed** : 27 Feb 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)