



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E 1DW310EXKHF682023
Component
Center Final Drive
Fluid
JOHN DEERE HY-GARD HYDRAULIC/RANSMISSION (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205637	JR0161235	---
Sample Date		Client Info		13 Mar 2024	03 May 2023	---
Machine Age	hrs	Client Info		7306	5460	---
Oil Age	hrs	Client Info		1846	500	---
Filter Age	hrs	Client Info		0	500	---
Oil Changed		Client Info		Not Changed	Changed	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>1250	313	9	---
Iron	ppm	ASTM D5185m	>750	956	2	---
Chromium	ppm	ASTM D5185m	>9	6	<1	---
Nickel	ppm	ASTM D5185m	>10	5	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>40	5	0	---
Lead	ppm	ASTM D5185m	>15	0	0	---
Copper	ppm	ASTM D5185m	>40	223	0	---
Tin	ppm	ASTM D5185m	>10	7	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

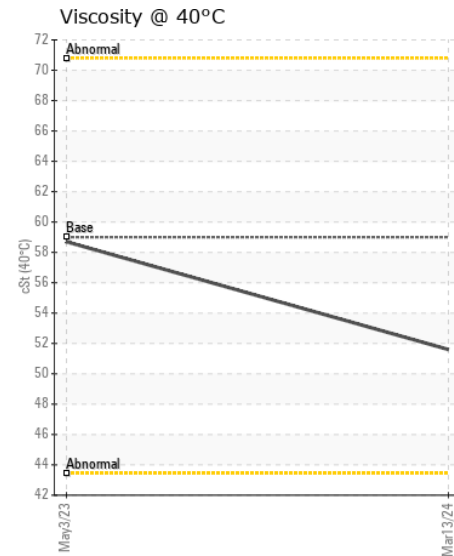
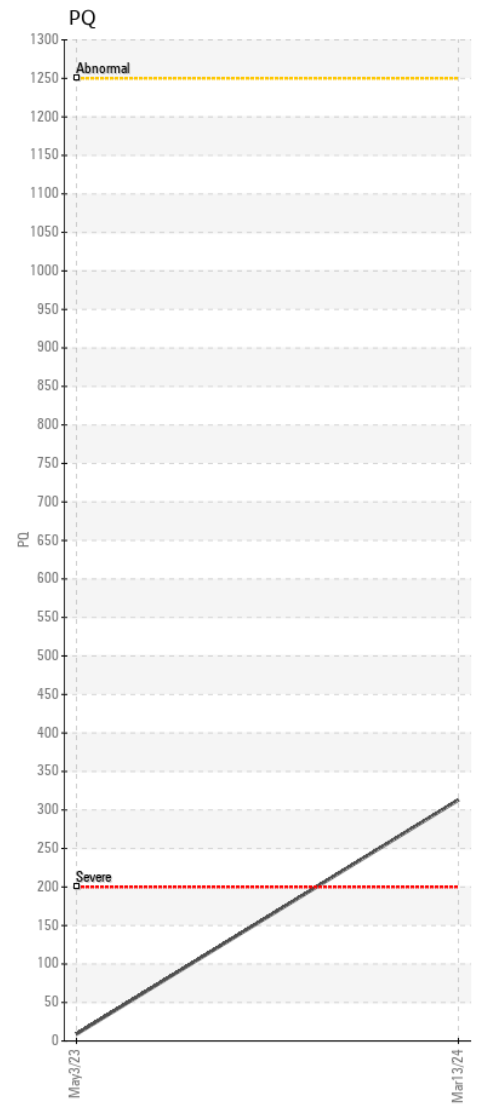
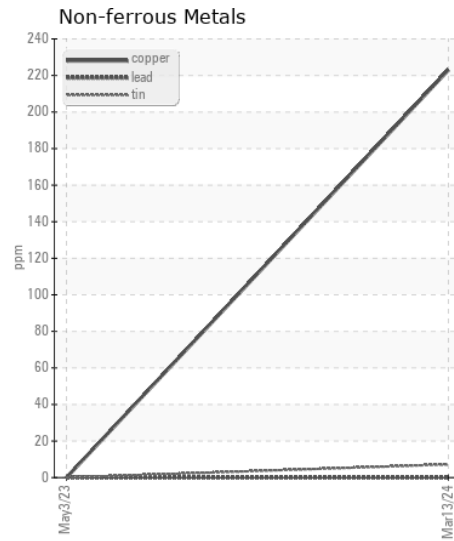
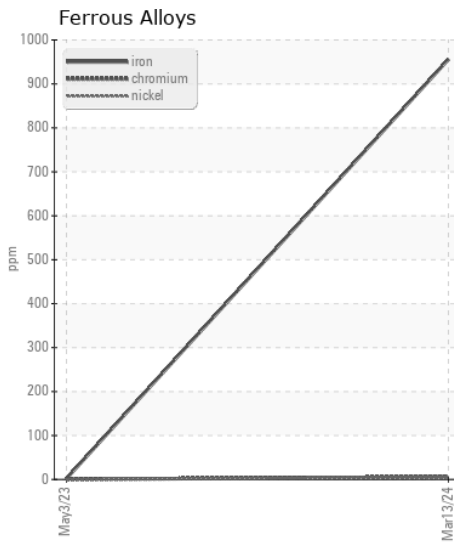
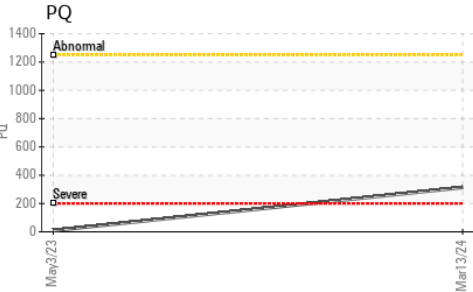
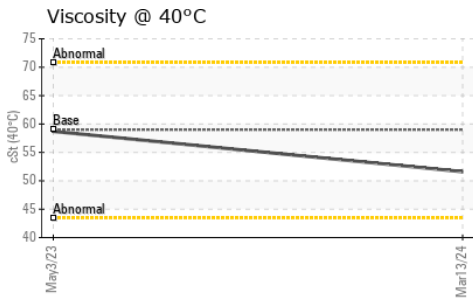
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	12	6	---
Potassium	ppm	ASTM D5185m	>20	2	<1	---
Water		WC Method	>0.075	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	3	<1	---
Boron	ppm	ASTM D5185m		15	<1	---
Barium	ppm	ASTM D5185m		<1	0	---
Molybdenum	ppm	ASTM D5185m		3	<1	---
Manganese	ppm	ASTM D5185m		11	<1	---
Magnesium	ppm	ASTM D5185m		80	97	---
Calcium	ppm	ASTM D5185m		3237	3304	---
Phosphorus	ppm	ASTM D5185m		1017	946	---
Zinc	ppm	ASTM D5185m		1184	1214	---
Sulfur	ppm	ASTM D5185m		4109	3484	---
Visc @ 40°C	cSt	ASTM D445	59	51.6	58.7	---



Certificate L2367

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

Sample No. : JR0205637

Lab Number : 06122672

Unique Number : 10936823

Test Package : CONST (Additional Tests: PQ)

Received : 19 Mar 2024

Tested : 20 Mar 2024

Diagnosed : 21 Mar 2024 - Wes Davis

JRE - CHARLOTTE

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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)