



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 644 P 1DW644PAEMLZ11990
 Component
Brake
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0218749	JR0185087	---
Sample Date		Client Info		11 Jun 2024	06 Oct 2023	---
Machine Age	hrs	Client Info		1985	1470	---
Oil Age	hrs	Client Info		515	1470	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		28	24	---
Iron	ppm	ASTM D5185m	>350	25	33	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	2	---
Titanium	ppm	ASTM D5185m		<1	2	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>8	3	4	---
Lead	ppm	ASTM D5185m	>10	3	9	---
Copper	ppm	ASTM D5185m	>150	<1	2	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

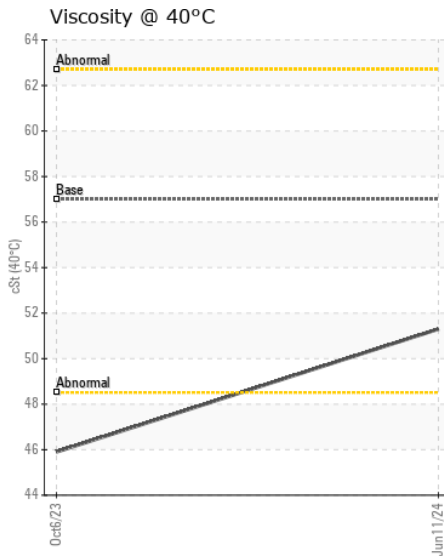
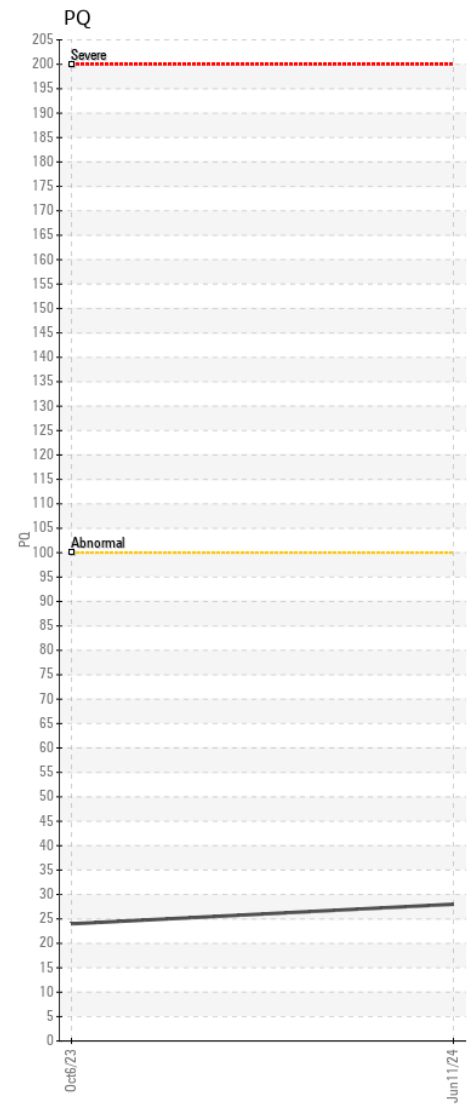
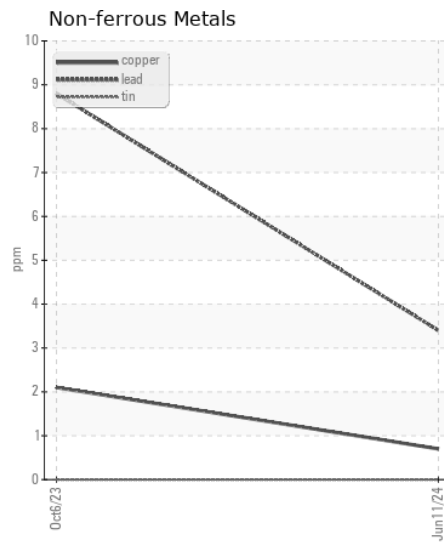
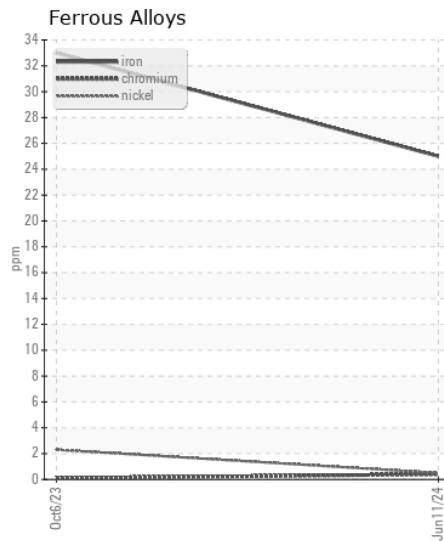
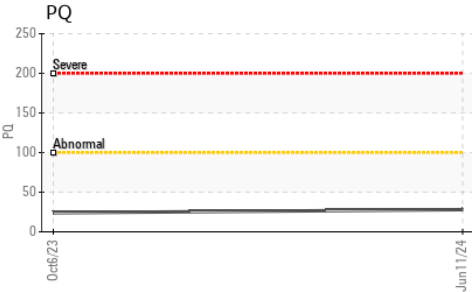
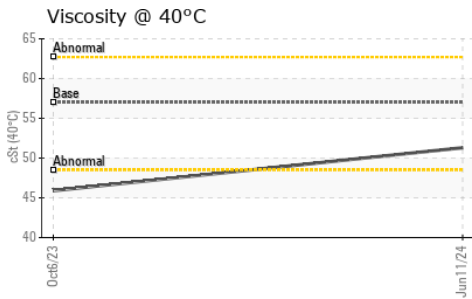
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185m	>400	247	▲ 848	---
Potassium	ppm	ASTM D5185m	>20	3	4	---
Water		WC Method	>0.2	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	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		9	17	---
Boron	ppm	ASTM D5185m	6	48	153	---
Barium	ppm	ASTM D5185m	0	<1	4	---
Molybdenum	ppm	ASTM D5185m	0	98	343	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m	145	213	495	---
Calcium	ppm	ASTM D5185m	3570	2927	1376	---
Phosphorus	ppm	ASTM D5185m	1290	939	706	---
Zinc	ppm	ASTM D5185m	1640	1142	853	---
Sulfur	ppm	ASTM D5185m		3209	2550	---
Visc @ 40°C	cSt	ASTM D445	57.0	51.3	45.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0218749 **Received** : 14 Jun 2024
Lab Number : 06210447 **Tested** : 17 Jun 2024
Unique Number : 11083311 **Diagnosed** : 18 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - ASHEVILLE
 101 BRUCE DRIVE
 ASHEVILLE, NC
 US 28806

Contact: Randy Warren
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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)

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