



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
[MATTHEW JOHNSON LOGG]
 Machine Id
JOHN DEERE 437E 1T0437EDVNF426842
 Component
Hydraulic System
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0222069	JR0165194	---
Sample Date		Client Info		26 Jun 2024	17 Oct 2023	---
Machine Age	hrs	Client Info		3472	2118	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	17	7	---
Chromium	ppm	ASTM D5185m	>10	1	1	---
Nickel	ppm	ASTM D5185m	>10	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>10	<1	<1	---
Lead	ppm	ASTM D5185m	>10	0	<1	---
Copper	ppm	ASTM D5185m	>75	12	10	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

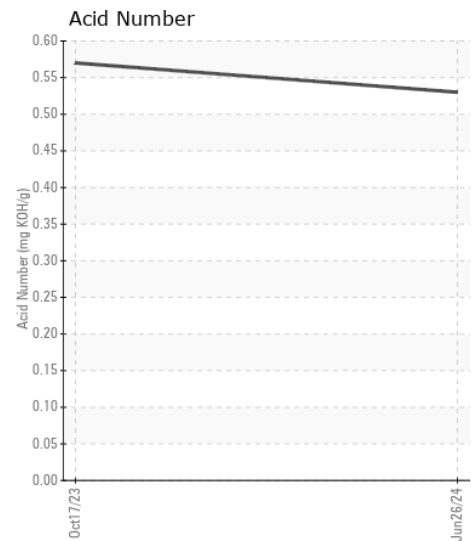
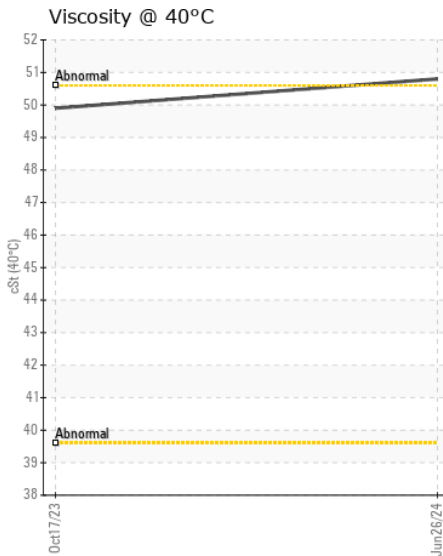
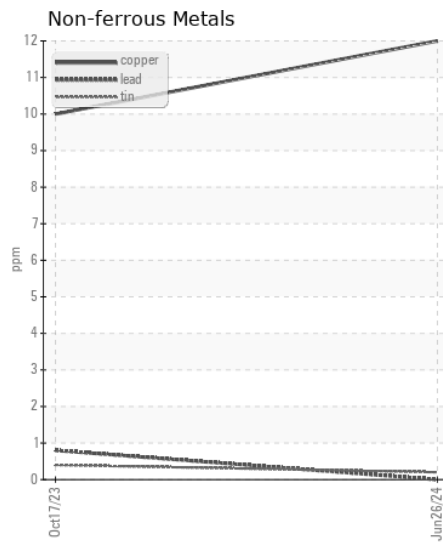
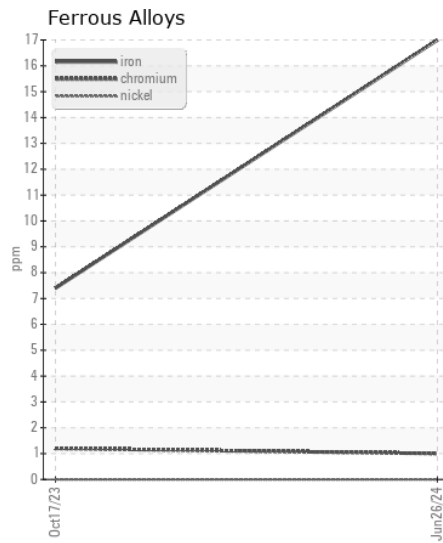
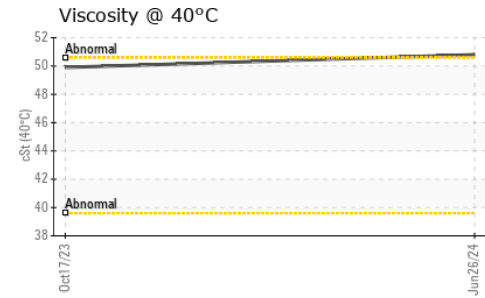
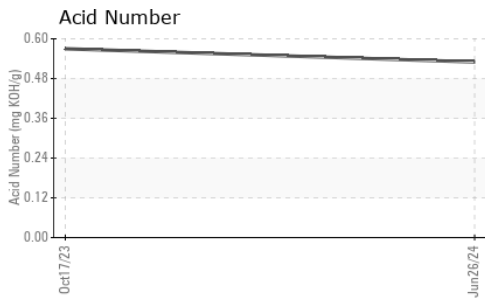
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	2	---
Potassium	ppm	ASTM D5185m	>20	4	5	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	---	▲ 13430	---
Particles >6µm		ASTM D7647	>1300	---	697	---
Particles >14µm		ASTM D7647	>160	---	32	---
Particles >21µm		ASTM D7647	>40	---	5	---
Particles >38µm		ASTM D7647	>10	---	1	---
Particles >71µm		ASTM D7647	>3	---	1	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	---	▲ 21/17/12	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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		8	11	---
Boron	ppm	ASTM D5185m		4	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		<1	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		17	<1	---
Calcium	ppm	ASTM D5185m		82	68	---
Phosphorus	ppm	ASTM D5185m		449	484	---
Zinc	ppm	ASTM D5185m		547	630	---
Sulfur	ppm	ASTM D5185m		2057	1956	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.53	0.57	---
Visc @ 40°C	cSt	ASTM D445		50.8	49.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0222069 **Received** : 17 Jul 2024
Lab Number : 06239043 **Tested** : 18 Jul 2024
Unique Number : 11127877 **Diagnosed** : 18 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529

Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com

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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