



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 437E 1T0437EDLMF391737
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0006437	WE0005220	---
Sample Date		Client Info		26 Feb 2024	06 Oct 2023	---
Machine Age	hrs	Client Info		6800	6769	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				NORMAL	ATTENTION	---

WEAR

All component wear rates are normal.

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

CONTAMINATION

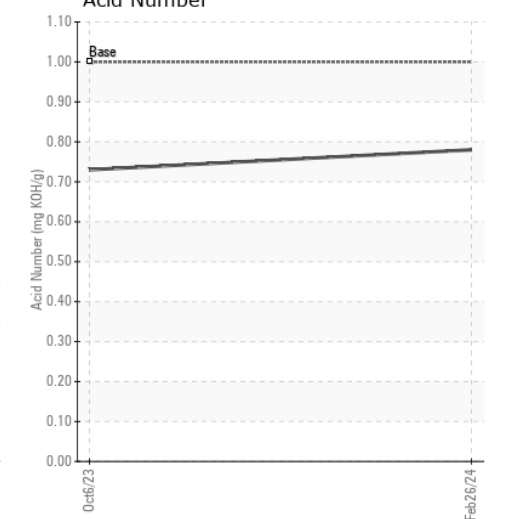
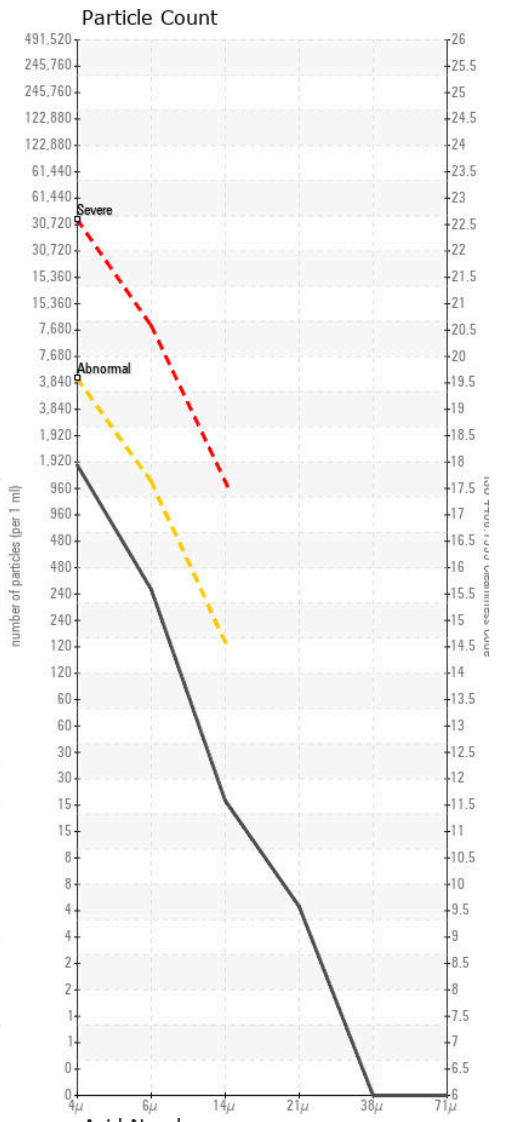
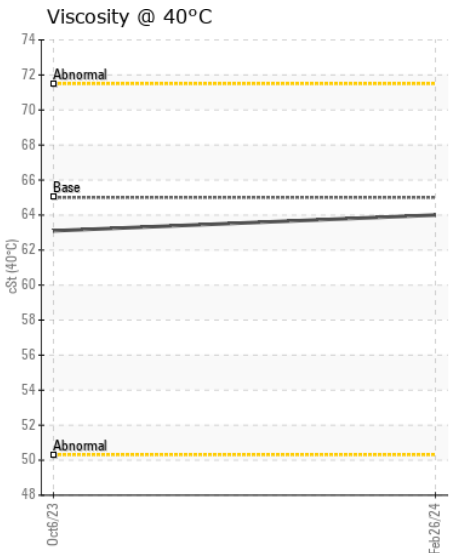
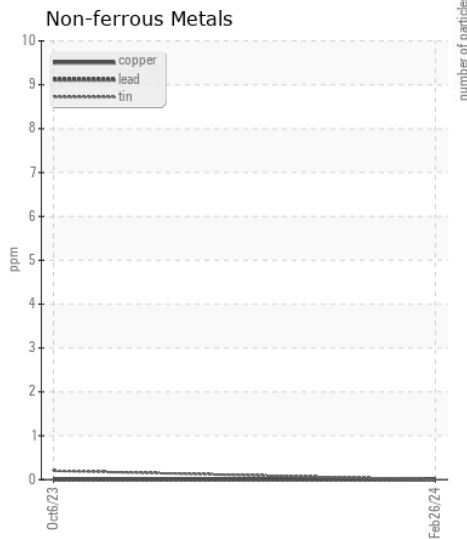
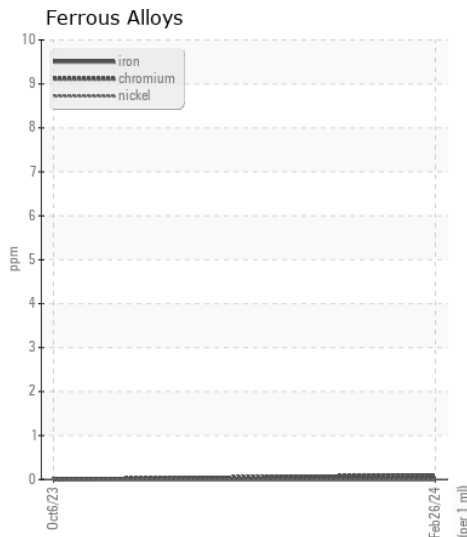
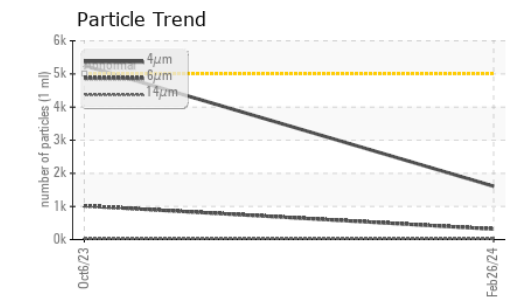
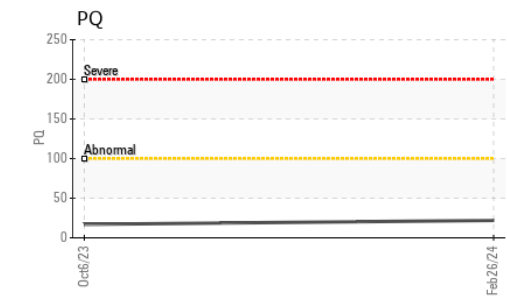
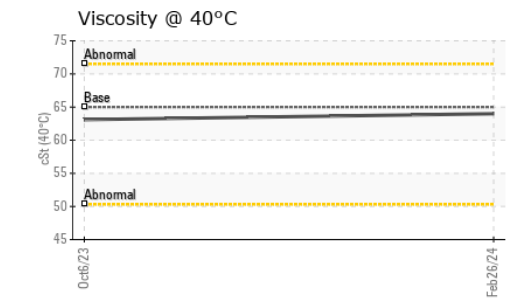
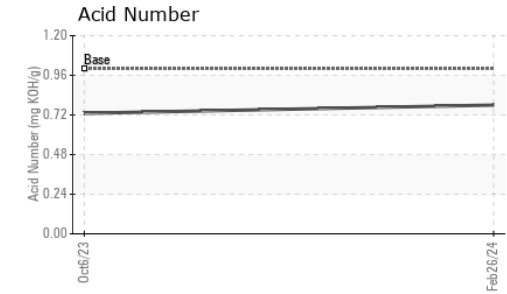
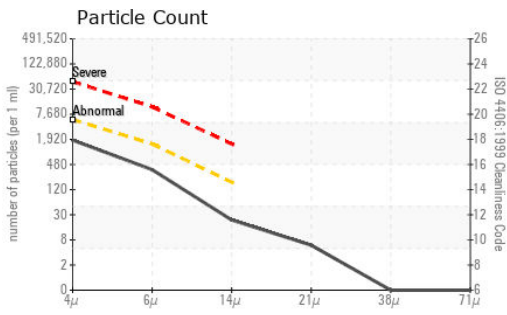
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	0	<1	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	1610	▲ 5257	---
Particles >6µm		ASTM D7647	>1300	317	1017	---
Particles >14µm		ASTM D7647	>160	20	28	---
Particles >21µm		ASTM D7647	>40	5	5	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/15/11	▲ 20/17/12	---
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	>0.1	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		0	0	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m		5	3	---
Calcium	ppm	ASTM D5185m	87	114	129	---
Phosphorus	ppm	ASTM D5185m	727	596	634	---
Zinc	ppm	ASTM D5185m	900	830	812	---
Sulfur	ppm	ASTM D5185m	1500	1526	1545	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.78	0.73	---
Visc @ 40°C	cSt	ASTM D445	65	64.0	63.1	---



Certificate L2367

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

Sample No. : WE0006437

Lab Number : 06101507

Unique Number : 10899737

Test Package : CONST (Additional Tests: PQ)

Received : 27 Feb 2024

Tested : 28 Feb 2024

Diagnosed : 28 Feb 2024 - Wes Davis

WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT

P.O. BOX 412

NORTHPORT, AL

US 35476

Contact: SCOTT GOOD

sgood@warriortractor.com

T: (205)339-0300

F:

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)