



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[MORALES LOGGING]

Machine Id

JOHN DEERE 437E 1T0437EDJPL442301

Component

Hydraulic System

Fluid

{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0222035	JR0164609	---
Sample Date		Client Info		16 Jul 2024	06 Dec 2023	---
Machine Age	hrs	Client Info		2007	1016	---
Oil Age	hrs	Client Info		0	1016	---
Filter Age	hrs	Client Info		0	1016	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	2	2	---
Chromium	ppm	ASTM D5185m	>10	0	<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	0	1	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>75	2	2	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

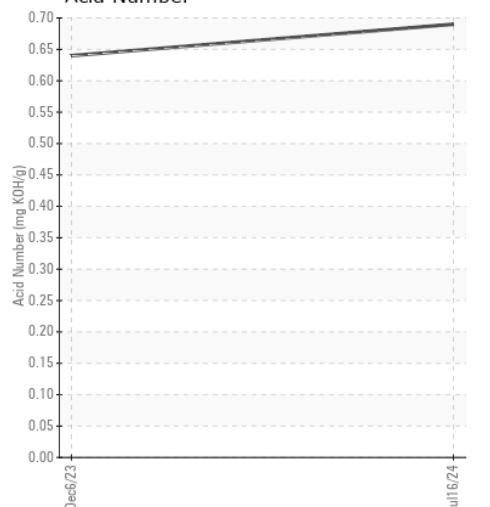
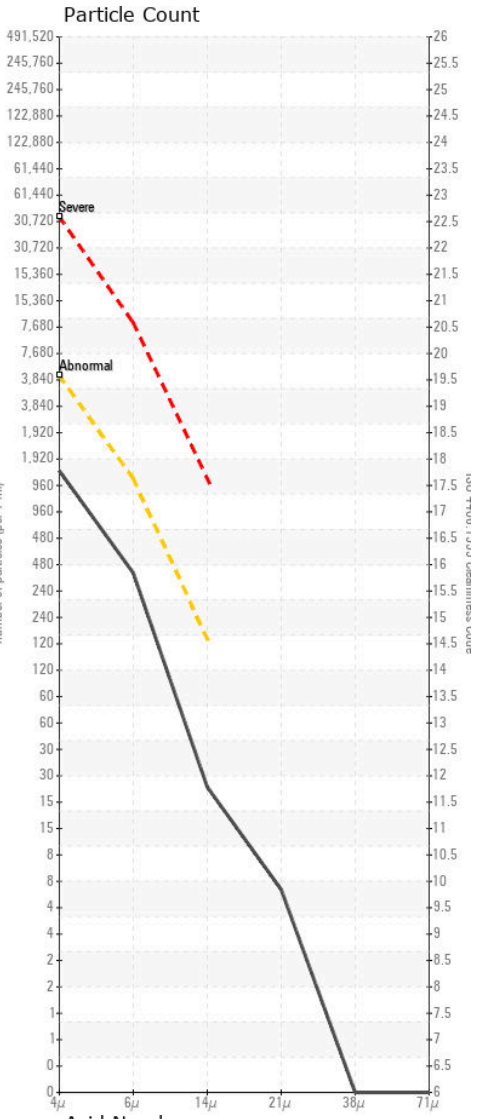
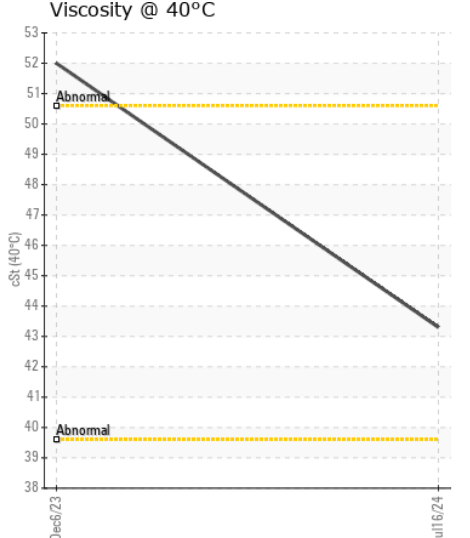
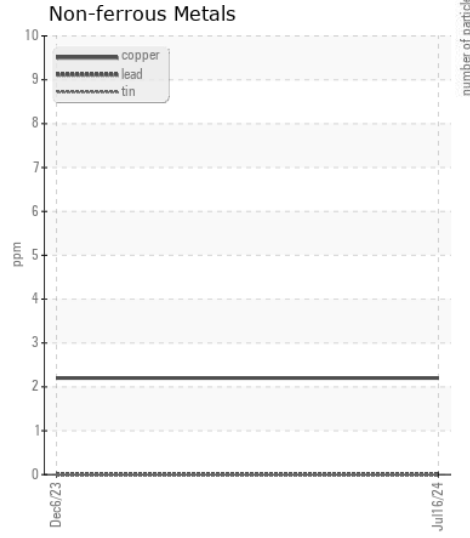
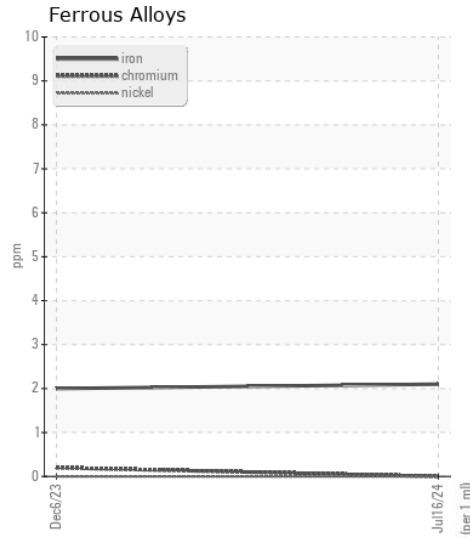
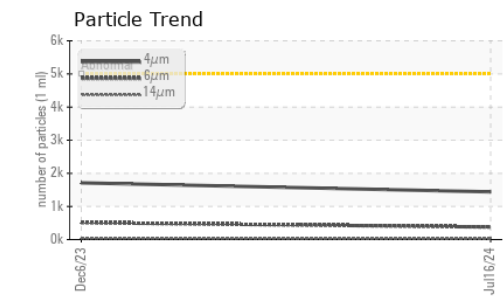
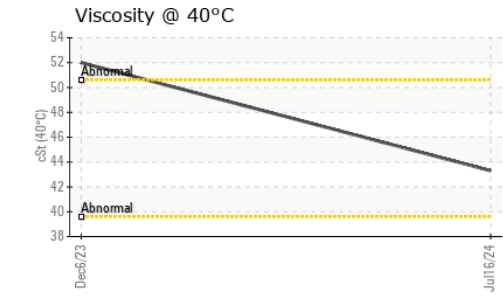
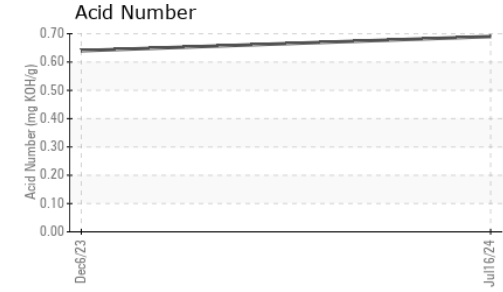
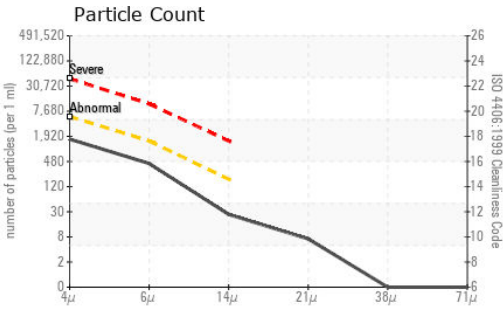
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	3	2	---
Potassium	ppm	ASTM D5185m	>20	1	3	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	1440	1713	---
Particles >6µm		ASTM D7647	>1300	378	511	---
Particles >14µm		ASTM D7647	>160	23	39	---
Particles >21µm		ASTM D7647	>40	6	9	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/16/12	18/16/12	---
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		2	0	---
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	3	---
Molybdenum	ppm	ASTM D5185m		0	0	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m		3	3	---
Calcium	ppm	ASTM D5185m		609	285	---
Phosphorus	ppm	ASTM D5185m		646	622	---
Zinc	ppm	ASTM D5185m		799	824	---
Sulfur	ppm	ASTM D5185m		2268	2018	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.69	0.64	---
Visc @ 40°C	cSt	ASTM D445		43.3	52.0	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0222035 **Received** : 19 Jul 2024
Lab Number : 06241588 **Tested** : 22 Jul 2024
Unique Number : 11130422 **Diagnosed** : 22 Jul 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)