



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 437E 1T0437EDJMF396804
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WE0007928	WE0000274	---
Sample Date		Client Info		19 Jun 2024	08 Jan 2022	---
Machine Age	hrs	Client Info		6252	1826	---
Oil Age	hrs	Client Info		500	1826	---
Filter Age	hrs	Client Info		500	0	---
Oil Changed		Client Info		Not Changed	Changed	---
Filter Changed		Client Info		Not Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		16	---	---
Iron	ppm	ASTM D5185m	>20	5	8	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m		<1	<1	---
Aluminum	ppm	ASTM D5185m	>10	3	1	---
Lead	ppm	ASTM D5185m	>10	<1	<1	---
Copper	ppm	ASTM D5185m	>75	1	2	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

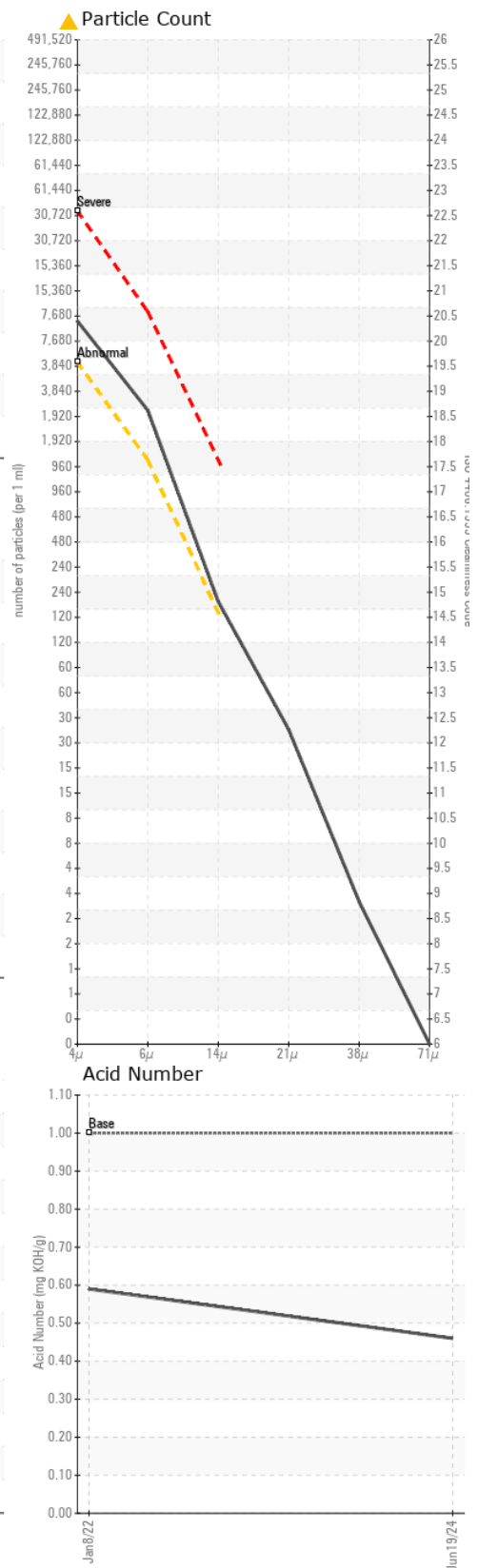
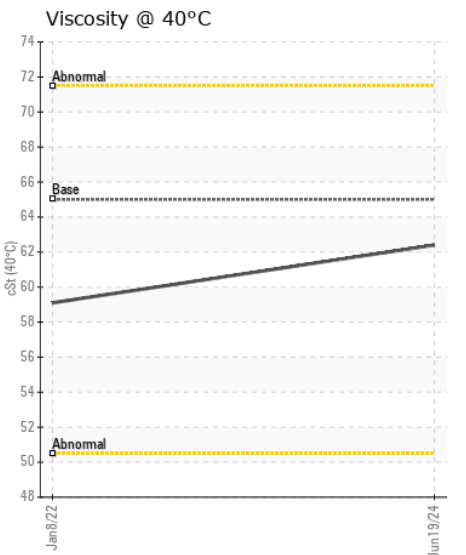
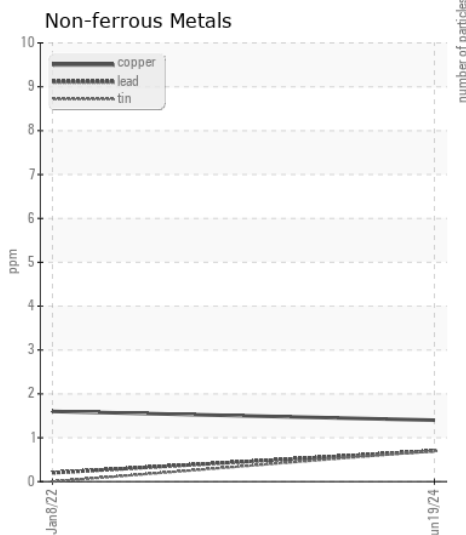
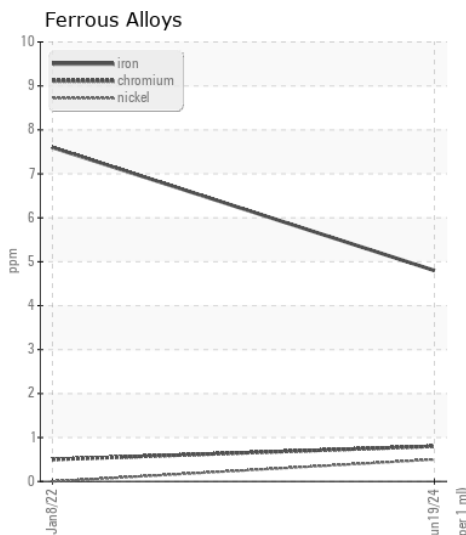
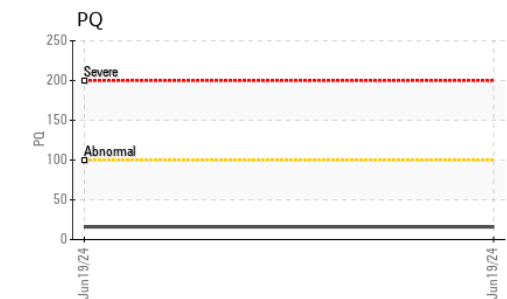
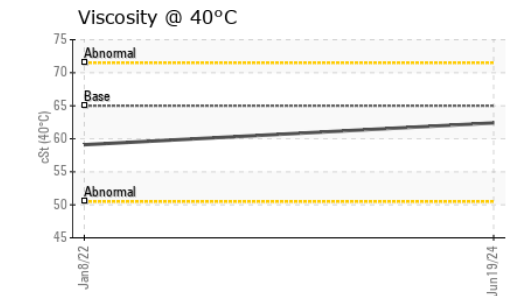
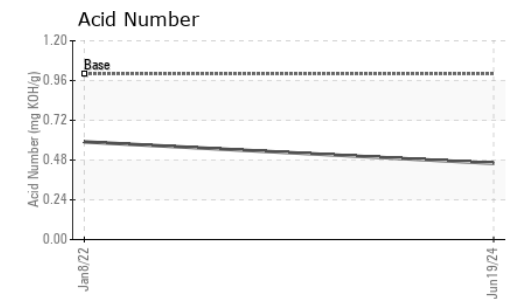
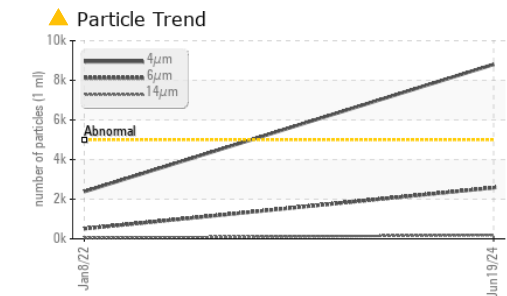
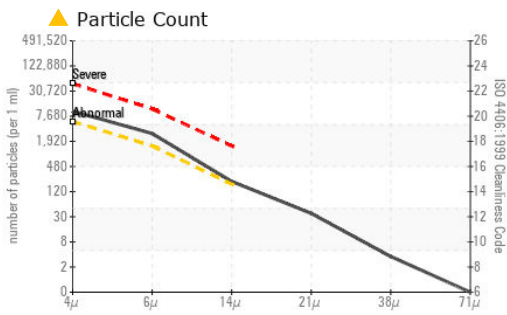
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	2	2	---
Potassium	ppm	ASTM D5185m	>20	3	<1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>5000	8803	2382	---
Particles >6µm		ASTM D7647	>1300	2579	508	---
Particles >14µm		ASTM D7647	>160	186	45	---
Particles >21µm		ASTM D7647	>40	32	14	---
Particles >38µm		ASTM D7647	>10	3	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/19/15	18/16/13	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT	---
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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<1	<1	---
Boron	ppm	ASTM D5185m		<1	10	---
Barium	ppm	ASTM D5185m		1	0	---
Molybdenum	ppm	ASTM D5185m		<1	2	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		<1	2	---
Calcium	ppm	ASTM D5185m	87	62	151	---
Phosphorus	ppm	ASTM D5185m	727	540	542	---
Zinc	ppm	ASTM D5185m	900	629	702	---
Sulfur	ppm	ASTM D5185m	1500	1340	1309	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.46	0.59	---
Visc @ 40°C	cSt	ASTM D445	65	62.4	59.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WE0007928 **Received** : 21 Jun 2024
Lab Number : 06216773 **Tested** : 24 Jun 2024
Unique Number : 11089637 **Diagnosed** : 24 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

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US 35476
Contact: SCOTT GOOD
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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)