



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 305EC 305E-706 (S/N XFA01040)

Component
Left Final Drive
 Fluid
SAE 50W (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Bearing and/or gear wear is indicated.

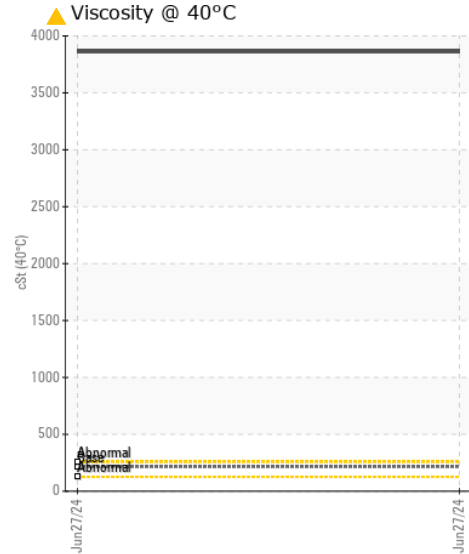
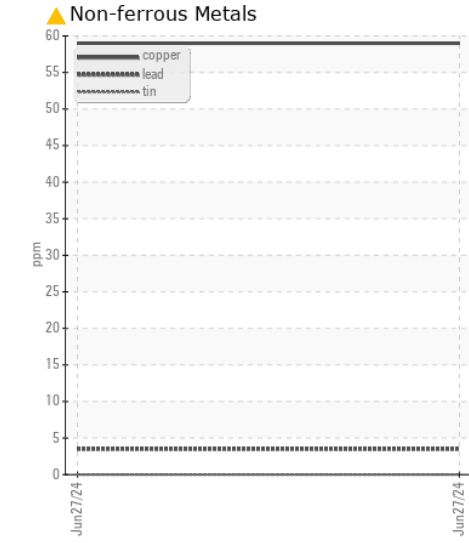
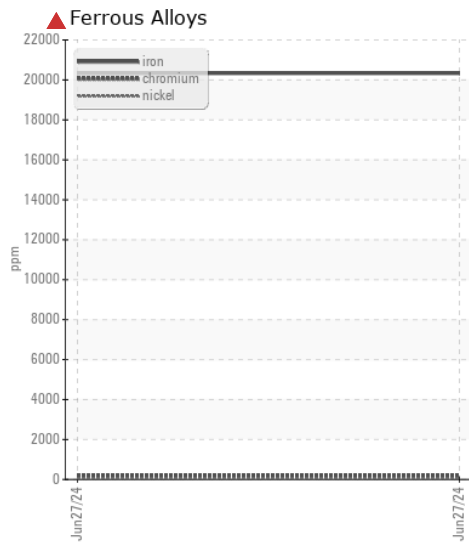
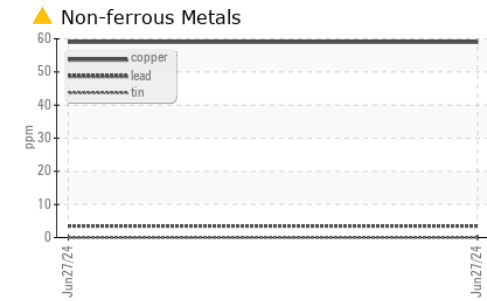
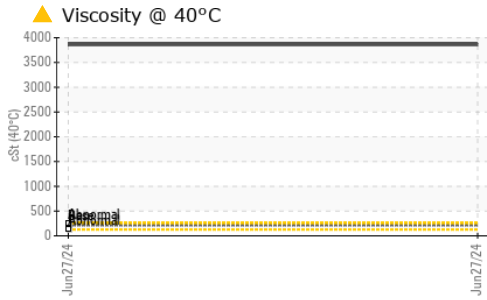
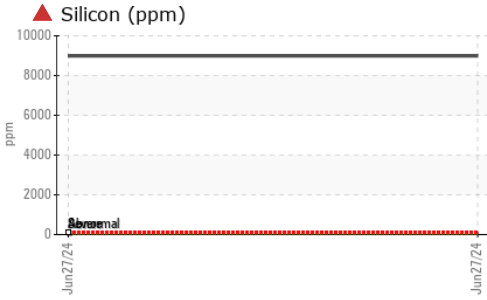
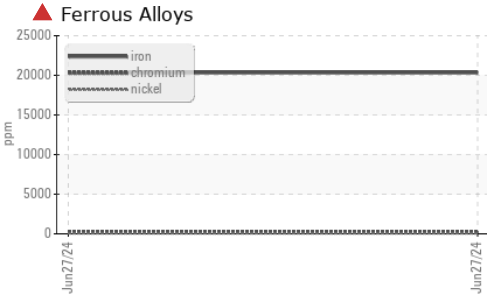
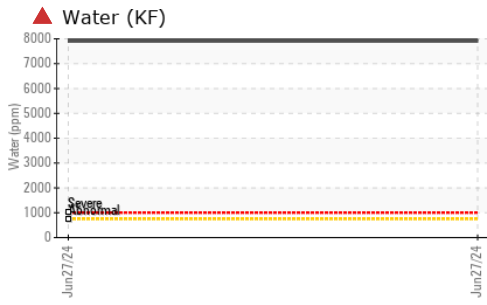
CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high concentration of water present in the oil.

FLUID CONDITION

The oil viscosity is higher than normal. The oil is oxidized and beyond the limit of serviceability. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TLY0002575	---	---
Sample Date		Client Info		27 Jun 2024	---	---
Machine Age	hrs	Client Info		5400	---	---
Oil Age	hrs	Client Info		4624	---	---
Filter Age	hrs	Client Info		4624	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		Not Changd	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>750	▲ 20333	---	---
Chromium	ppm	ASTM D5185m	>9	▲ 200	---	---
Nickel	ppm	ASTM D5185m	>10	▲ 58	---	---
Titanium	ppm	ASTM D5185m		▲ 139	---	---
Silver	ppm	ASTM D5185m		<1	---	---
Aluminum	ppm	ASTM D5185m	>40	● 1535	---	---
Lead	ppm	ASTM D5185m	>15	4	---	---
Copper	ppm	ASTM D5185m	>40	▲ 59	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		5	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>75	▲ 8989	---	---
Potassium	ppm	ASTM D5185m	>20	349	---	---
Water	%	ASTM D6304	>0.075	▲ 0.791	---	---
ppm Water	ppm	ASTM D6304	>750	▲ 7910	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.075	▲ 0.2%	---	---
Sodium	ppm	ASTM D5185m	>51	67	---	---
Boron	ppm	ASTM D5185m		114	---	---
Barium	ppm	ASTM D5185m		2	---	---
Molybdenum	ppm	ASTM D5185m		21	---	---
Manganese	ppm	ASTM D5185m		159	---	---
Magnesium	ppm	ASTM D5185m		124	---	---
Calcium	ppm	ASTM D5185m		270	---	---
Phosphorus	ppm	ASTM D5185m		489	---	---
Zinc	ppm	ASTM D5185m		121	---	---
Sulfur	ppm	ASTM D5185m		56854	---	---
Visc @ 40°C	cSt	ASTM D445	215	▲ 3862	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLY0002575 **Received** : 05 Jul 2024
Lab Number : 06229330 **Tested** : 09 Jul 2024
Unique Number : 11112823 **Diagnosed** : 09 Jul 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: KF)

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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