



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 310E OT-6 (S/N 1DW310EXJMF711144)
 Component
Hydraulic System
 Fluid
JD (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0192877	JR0142176	---
Sample Date		Client Info		22 Apr 2024	11 Oct 2022	---
Machine Age	hrs	Client Info		1832	769	---
Oil Age	hrs	Client Info		1832	500	---
Filter Age	hrs	Client Info		0	500	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		Not Chngd	Changed	---
Sample Status				ATTENTION	NORMAL	---

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>50	10	12	---
Iron	ppm	ASTM D5185m	>71	7	4	---
Chromium	ppm	ASTM D5185m	>11	1	<1	---
Nickel	ppm	ASTM D5185m	>6	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>11	2	<1	---
Lead	ppm	ASTM D5185m	>13	0	0	---
Copper	ppm	ASTM D5185m	>21	2	1	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

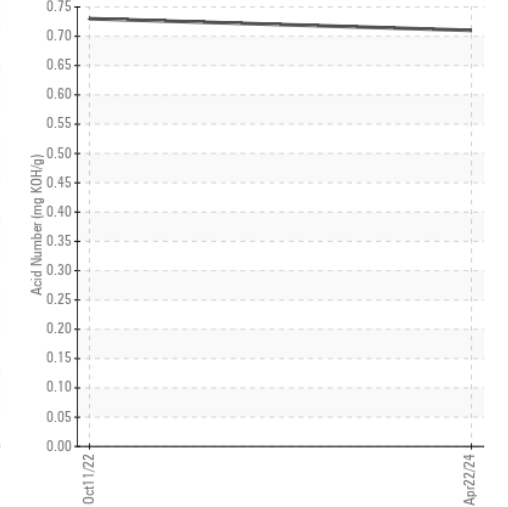
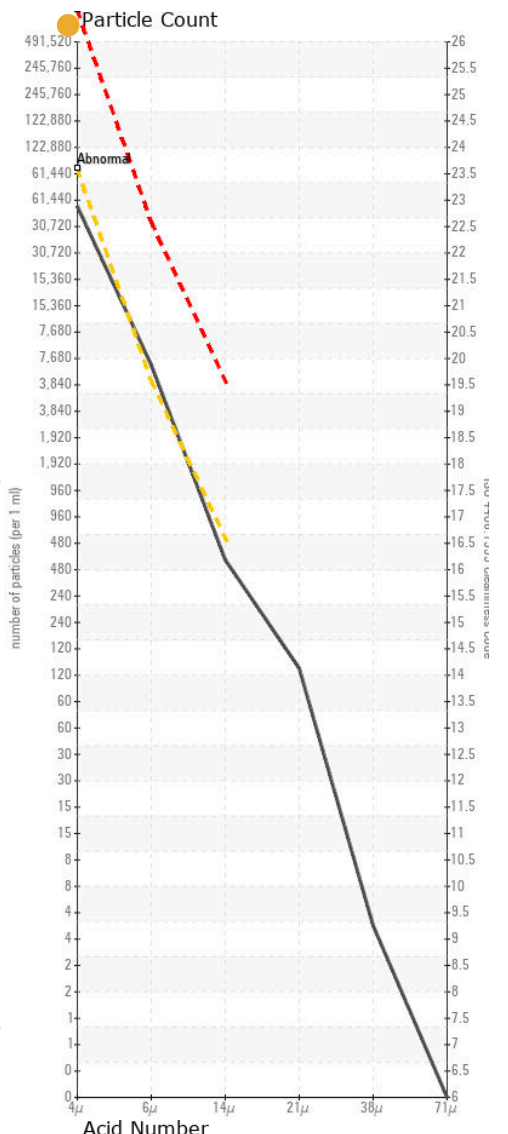
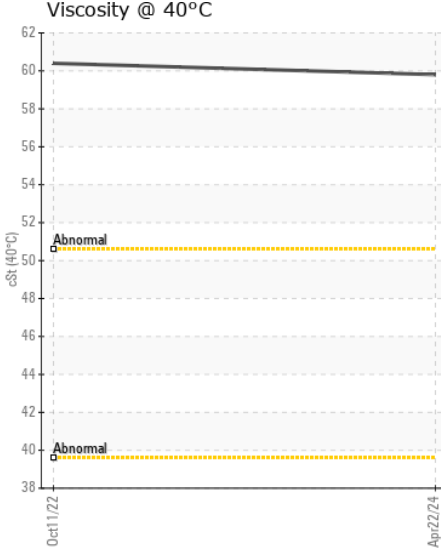
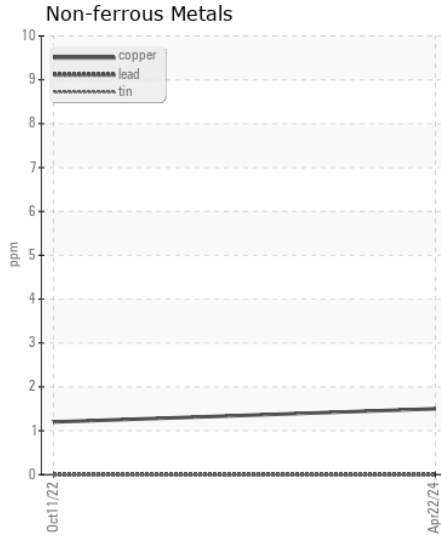
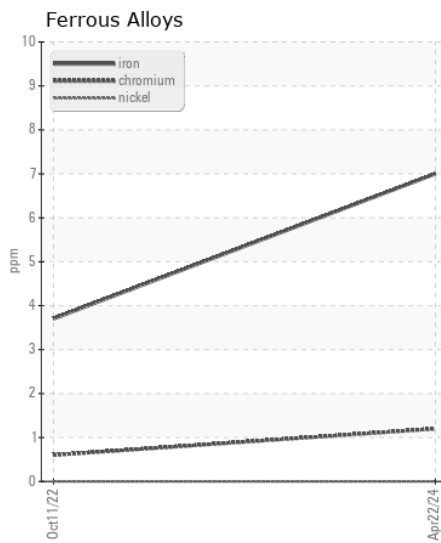
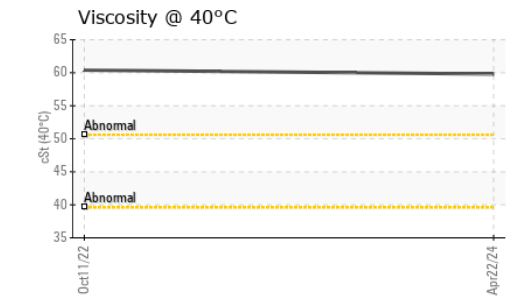
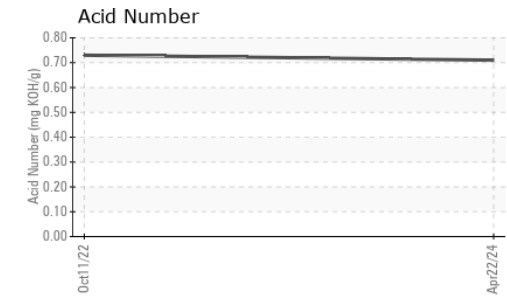
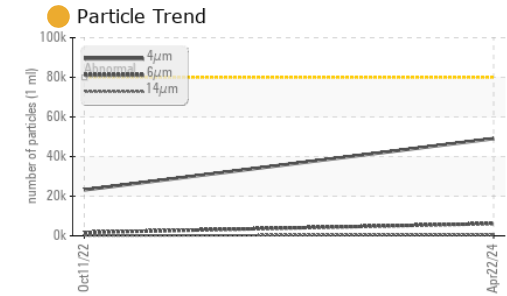
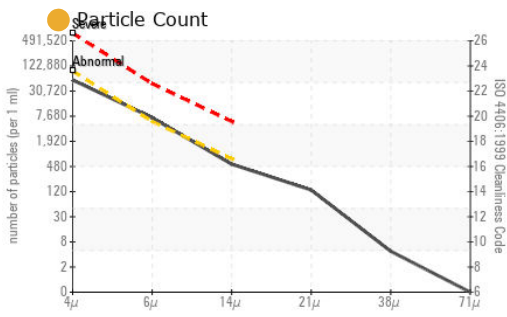
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>24	3	2	---
Potassium	ppm	ASTM D5185m	>20	4	5	---
Water		WC Method	>0.075	NEG	NEG	---
Particles >4µm		ASTM D7647	>80000	49071	23186	---
Particles >6µm		ASTM D7647	>5000	6148	1678	---
Particles >14µm		ASTM D7647	>640	480	157	---
Particles >21µm		ASTM D7647	>160	116	34	---
Particles >38µm		ASTM D7647	>40	4	2	---
Particles >71µm		ASTM D7647	>10	0	0	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	23/20/16	22/18/14	---
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	>0.075	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	>21	5	<1	---
Boron	ppm	ASTM D5185m		<1	0	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		1	<1	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		0	1	---
Calcium	ppm	ASTM D5185m		78	96	---
Phosphorus	ppm	ASTM D5185m		609	639	---
Zinc	ppm	ASTM D5185m		823	865	---
Sulfur	ppm	ASTM D5185m		1798	2008	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.71	0.73	---
Visc @ 40°C	cSt	ASTM D445		59.8	60.4	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0192877 **Received** : 26 Apr 2024
Lab Number : 06161346 **Tested** : 29 Apr 2024
Unique Number : 10996769 **Diagnosed** : 29 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: PQ)

KEVIN RICHARDSON GRADING
 151 BRICKYARD RD
 MOUNT HOLLY, NC
 US 28120
 Contact: B HELMS
 BHELMS@RICHARDSONGRADING.COM
 T:
 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)