



Machine Id
JOHN DEERE E-CAB OT-99 (S/N 23552)

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)



DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0107031	---	---
Sample Date	Client Info		20 Oct 2023	---	---
Machine Age	hrs	Client Info	637	---	---
Oil Age	hrs	Client Info	250	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.1	<1.0	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >51	17	---	---
Chromium	ppm	ASTM D5185m >11	0	---	---
Nickel	ppm	ASTM D5185m >5	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m >3	0	---	---
Aluminum	ppm	ASTM D5185m >31	5	---	---
Lead	ppm	ASTM D5185m >26	9	---	---
Copper	ppm	ASTM D5185m >26	▲ 211	---	---
Tin	ppm	ASTM D5185m >4	1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	13	---	---
Barium	ppm	ASTM D5185m 10	0	---	---
Molybdenum	ppm	ASTM D5185m 100	66	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 450	943	---	---
Calcium	ppm	ASTM D5185m 3000	1213	---	---
Phosphorus	ppm	ASTM D5185m 1150	932	---	---
Zinc	ppm	ASTM D5185m 1350	1282	---	---
Sulfur	ppm	ASTM D5185m 4250	2661	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >22	4	---	---
Sodium	ppm	ASTM D5185m >158	4	---	---
Potassium	ppm	ASTM D5185m >20	<1	---	---

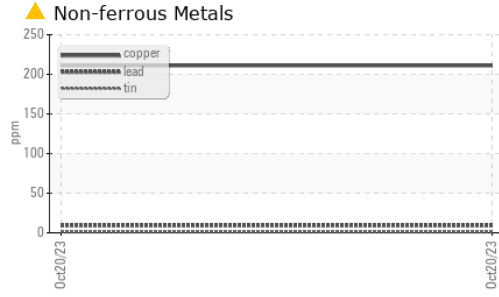
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624 >20	7.8	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.1	---	---

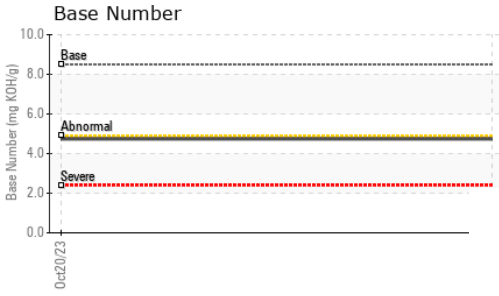
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.2	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	4.74	---	---

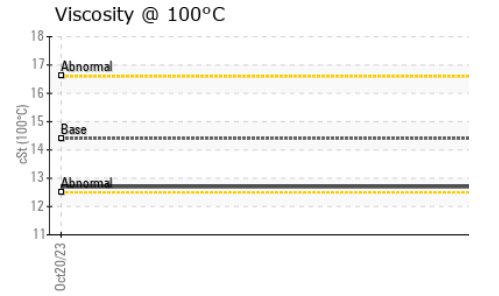
OIL ANALYSIS REPORT



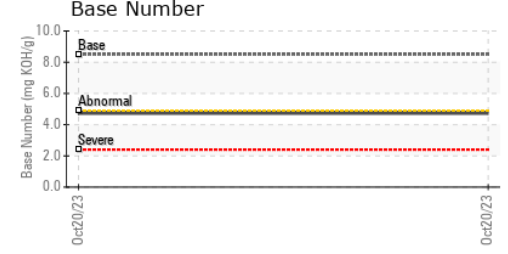
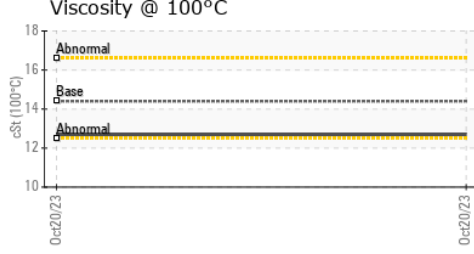
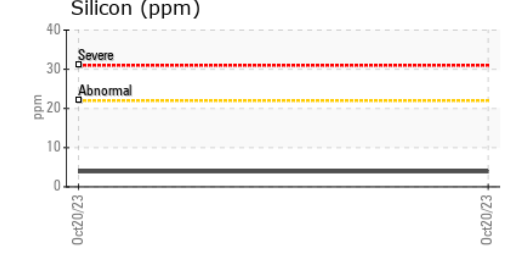
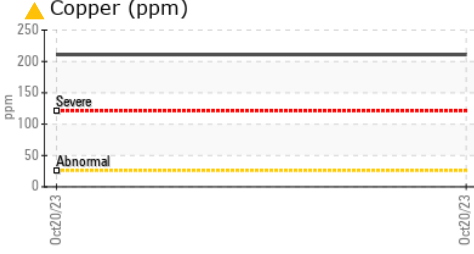
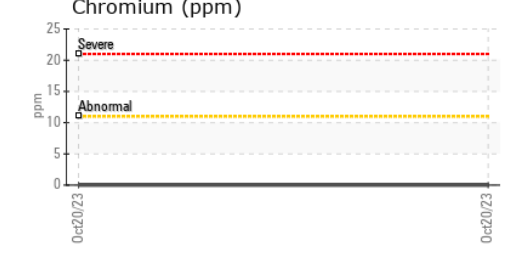
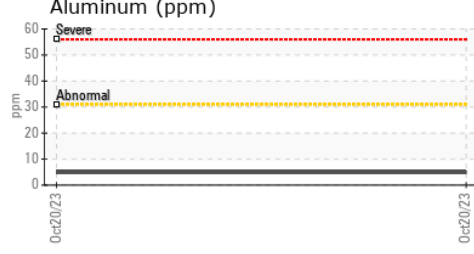
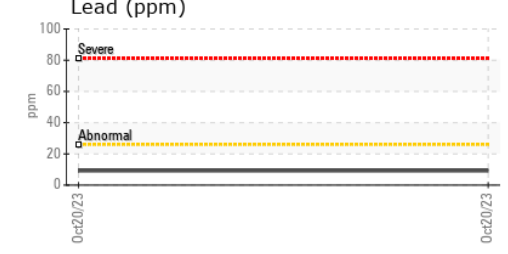
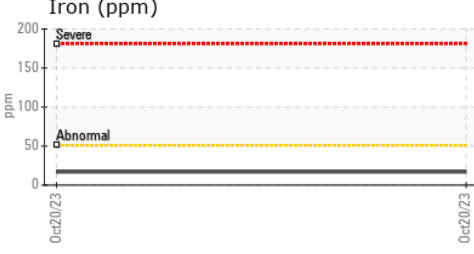
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---
Free Water	scalar	*Visual		NEG	---



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	12.7	---



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0107031 **Received** : 02 Nov 2023
Lab Number : 05996878 **Diagnosed** : 04 Nov 2023
Unique Number : 10725238 **Diagnostician** : Don Baldrige
Test Package : MOB 2

TRINITAS FARMING
 45499 W PANOCHE RD
 FIREBAUGH, CA
 US 93622

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)

Contact: SPENCER COOPER
 spencer.cooper@trinitasfarming.com
 T: (209)493-2999
 F: