



PROBLEM SUMMARY

Sample Rating Trend



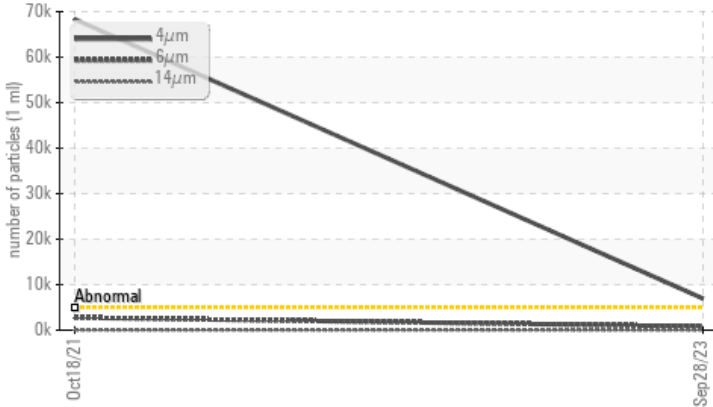
ISO



Machine Id
E-177
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



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. Please note that this is a corrected copy.

PROBLEMATIC TEST RESULTS

Sample Status		ATTENTION	ABNORMAL	---
Particles >4µm	ASTM D7647 >5000	▲ 6949	▲ 68333	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/12	▲ 23/19/12	---

Customer Id: DUKRAL
 Sample No.: WC0828538
 Lab Number: 05966224
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Alert	---	---	?	Please note that this is a corrected copy.

HISTORICAL DIAGNOSIS

18 Oct 2021 Diag: Jonathan Hester

CONTAMINANT



No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Appearance is hazy. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

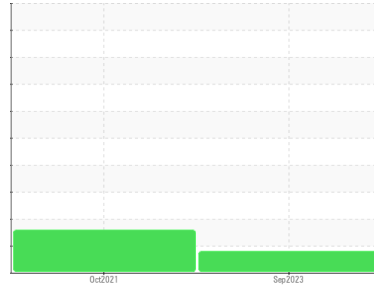
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
E-177

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- 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. Please note that this is a corrected copy.

Wear

All component wear rates are normal.

▲ Contamination

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

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0828538	WC0606894	---
Sample Date	Client Info		28 Sep 2023	18 Oct 2021	---
Machine Age	hrs	Client Info	2872	0	---
Oil Age	hrs	Client Info	1872	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			ATTENTION	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	4	5	---
Chromium	ppm	ASTM D5185m >10	<1	<1	---
Nickel	ppm	ASTM D5185m >10	<1	0	---
Titanium	ppm	ASTM D5185m	0	<1	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >10	0	2	---
Lead	ppm	ASTM D5185m >10	0	<1	---
Copper	ppm	ASTM D5185m >75	<1	7	---
Tin	ppm	ASTM D5185m >10	0	<1	---
Antimony	ppm	ASTM D5185m	---	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	76	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	2	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m	0	3	---
Calcium	ppm	ASTM D5185m 87	<1	2285	---
Phosphorus	ppm	ASTM D5185m 727	466	856	---
Zinc	ppm	ASTM D5185m 900	11	1034	---
Sulfur	ppm	ASTM D5185m 1500	49	2155	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<1	11	---
Sodium	ppm	ASTM D5185m	0	7	---
Potassium	ppm	ASTM D5185m >20	<1	0	---

FLUID CLEANLINESS

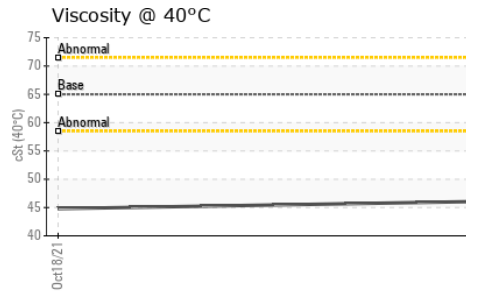
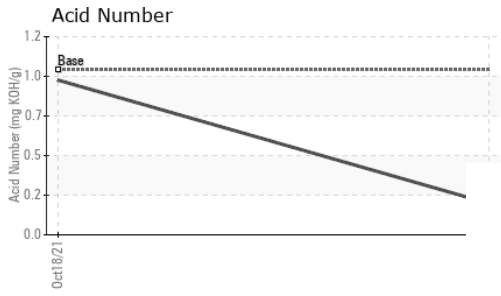
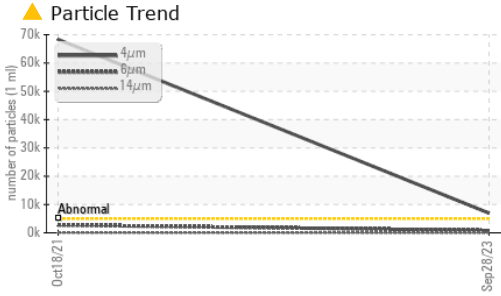
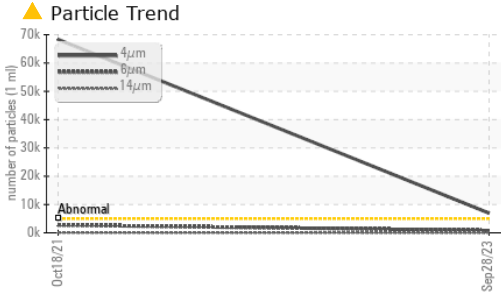
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 6949	▲ 68333	---
Particles >6µm	ASTM D7647	>1300	802	▲ 2756	---
Particles >14µm	ASTM D7647	>160	23	39	---
Particles >21µm	ASTM D7647	>40	5	7	---
Particles >38µm	ASTM D7647	>10	0	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/17/12	▲ 23/19/12	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.19	0.937	---



OIL ANALYSIS REPORT



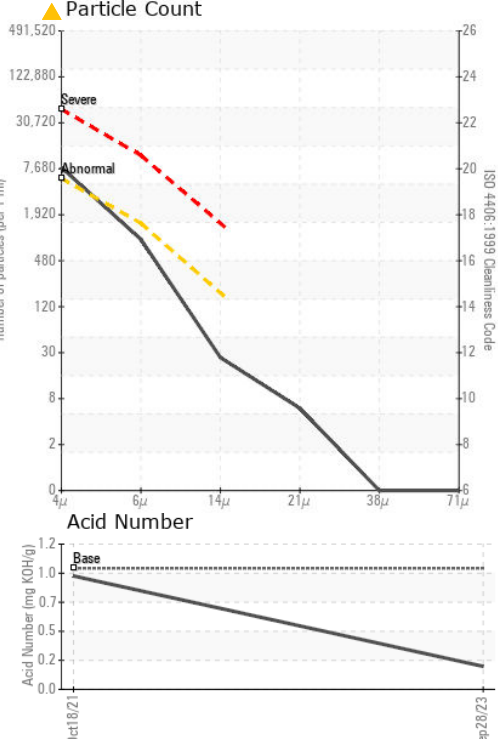
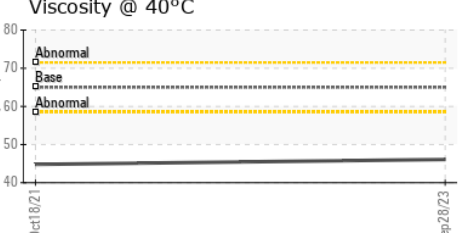
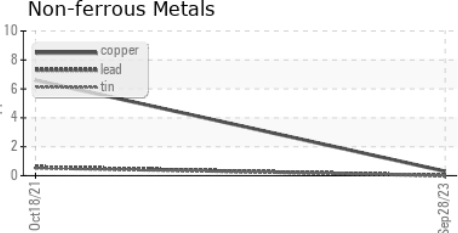
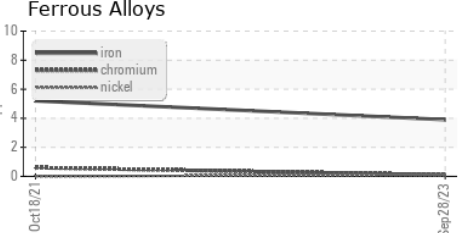
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	▲ HAZY
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 65	46.1	44.8	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				no image
Bottom				no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0828538 **Received** : 02 Oct 2023
Lab Number : 05966224 **Diagnosed** : 24 Oct 2023
Unique Number : 10672775 **Diagnostician** : Angela Borella
Test Package : CONST

DUKE LAZZARA
 4201 FAYETTEVILLE RD
 RALEIGH, NC
 US 27603
 Contact: NICK DIXON
 NICK.DIXON@DUKELAZZAM.COM
 T: (919)760-7797
 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)