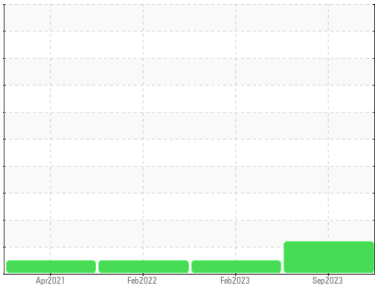
PROBLEM SUMMARY

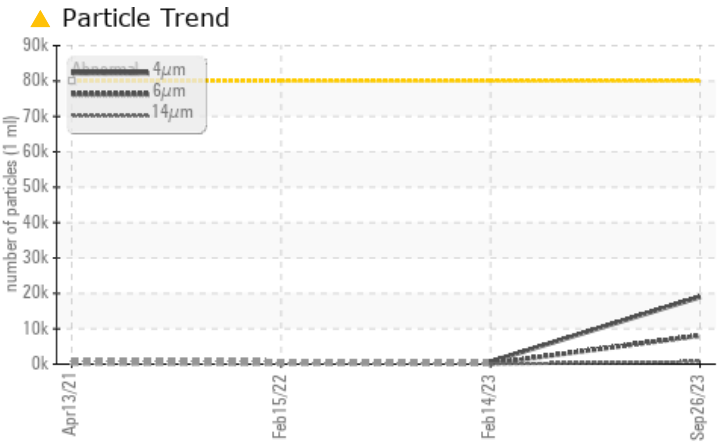
Area
[W46858]
Machine Id
JOHN DEERE 410E 1DW410EBAMF709228
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

Sample Rating Trend



ISO

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status				**ATTENTION**	NORMAL	NORMAL
Particles >6µm		ASTM D7647	>5000	▲ **8069**	147	---
Particles >14µm		ASTM D7647	>640	▲ **709**	14	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	▲ **21/20/17**	17/14/11	---

Customer Id: JAMASH
Sample No.: JR0179215
Lab Number: 05967701
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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 Filter	---	---	?	We recommend you service the filters on this component.

HISTORICAL DIAGNOSIS

14 Feb 2023 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

15 Feb 2022 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor. We were unable to perform a particle count due to insufficient sample.All component wear rates are normal. Insufficient sample was received to conduct all the routine laboratory tests. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

13 Apr 2021 Diag: Don Baldridge

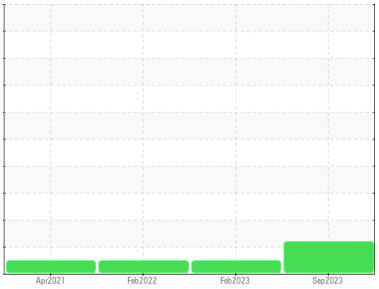
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. 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

Area
[W46858]
Machine Id
JOHN DEERE 410E 1DW410EBAMF709228
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

DIAGNOSIS

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

Wear
All component wear rates are normal.

Contamination
There is a light 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		**JR0179215**	JR0147941	JR0084829
Sample Date		Client Info		**26 Sep 2023**	14 Feb 2023	15 Feb 2022
Machine Age	hrs	Client Info		**4970**	4465	2380
Oil Age	hrs	Client Info		**0**	0	2380
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ATTENTION**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	**9**	13	13
Iron	ppm	ASTM D5185m	>71	**6**	4	4
Chromium	ppm	ASTM D5185m	>11	**2**	1	1
Nickel	ppm	ASTM D5185m	>6	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>11	**0**	<1	0
Lead	ppm	ASTM D5185m	>13	**<1**	0	<1
Copper	ppm	ASTM D5185m	>21	**2**	<1	2
Tin	ppm	ASTM D5185m	>5	**0**	0	0
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	<1
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	0	<1
Magnesium	ppm	ASTM D5185m		**3**	3	2
Calcium	ppm	ASTM D5185m	87	**84**	89	89
Phosphorus	ppm	ASTM D5185m	727	**580**	614	643
Zinc	ppm	ASTM D5185m	900	**801**	829	755
Sulfur	ppm	ASTM D5185m	1500	**1717**	1876	1376

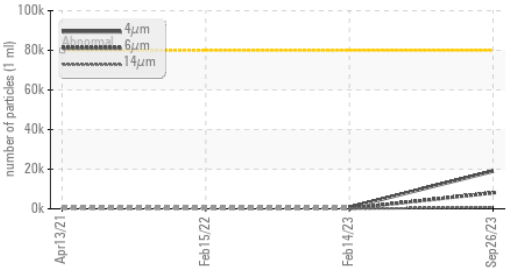
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>24	**2**	1	1
Sodium	ppm	ASTM D5185m	>21	**1**	<1	1
Potassium	ppm	ASTM D5185m	>20	**4**	1	4

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>80000	**18981**	685	---
Particles >6µm		ASTM D7647	>5000	▲ **8069**	147	---
Particles >14µm		ASTM D7647	>640	▲ **709**	14	---
Particles >21µm		ASTM D7647	>160	**113**	2	---
Particles >38µm		ASTM D7647	>40	**1**	0	---
Particles >71µm		ASTM D7647	>10	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>23/19/16	▲ **21/20/17**	17/14/11	---

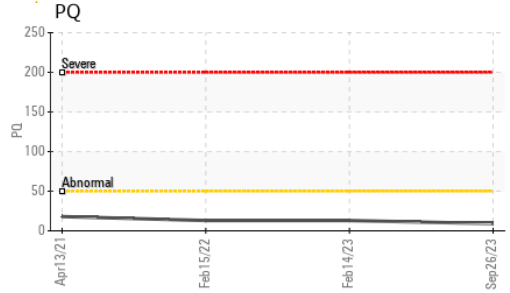
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	**0.70**	0.68	1.116

OIL ANALYSIS REPORT

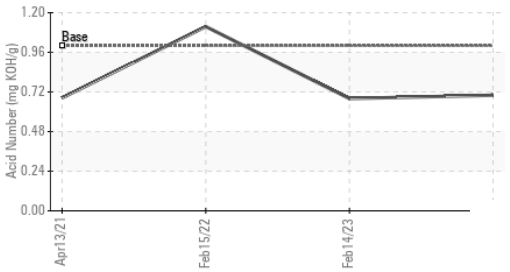
Particle Trend



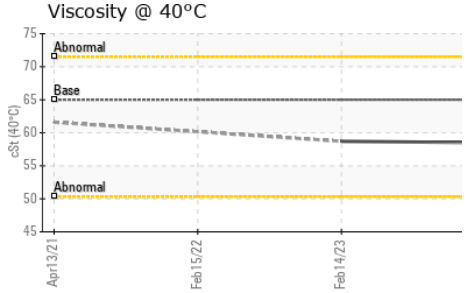
PQ



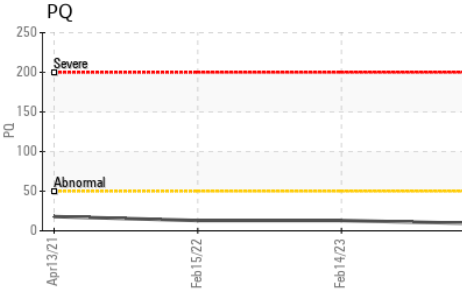
Acid Number



Viscosity @ 40°C

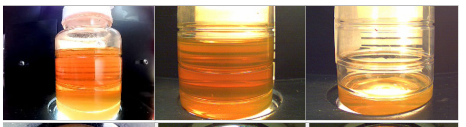


PQ



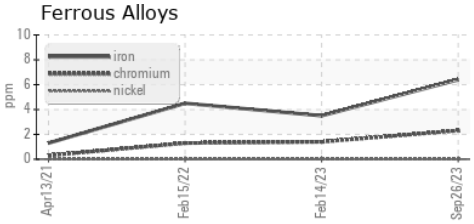
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**LIGHT**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	65	**58.5**	58.7	---

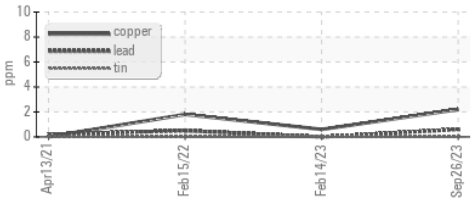
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

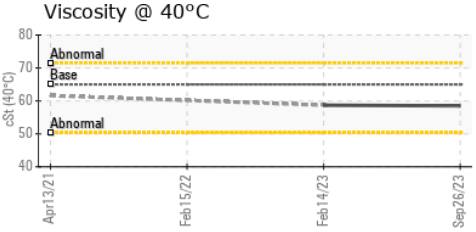
Ferrous Alloys



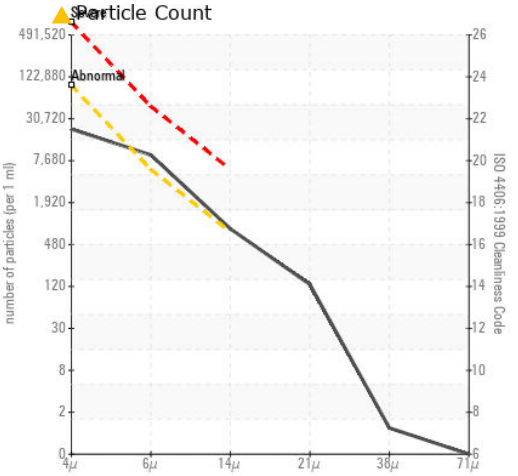
Non-ferrous Metals



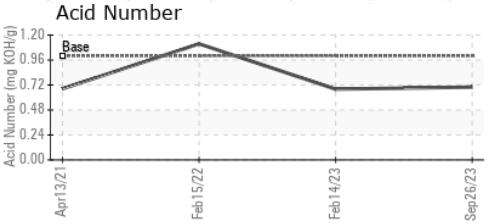
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0179215 **Received** : 03 Oct 2023
Lab Number : 05967701 **Diagnosed** : 04 Oct 2023
Unique Number : 10674252 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: PQ)

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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