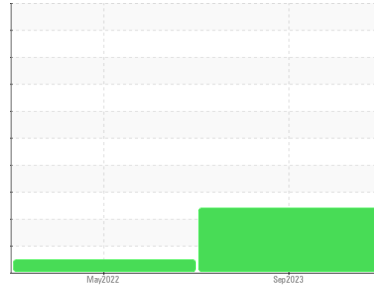


PROBLEM SUMMARY



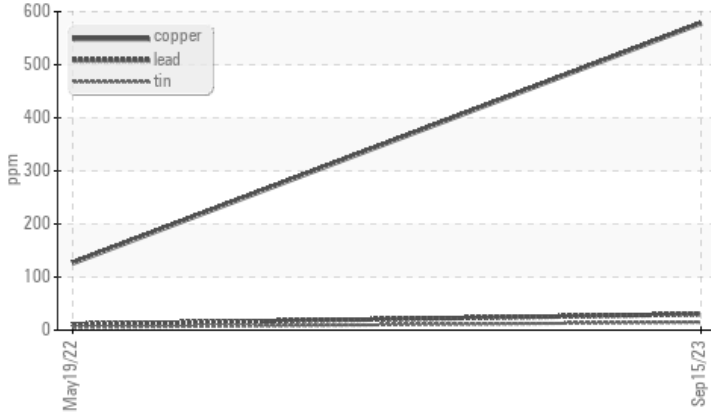
Area
[W46585]
 Machine Id
JOHN DEERE 310E 1DW310EXPMF712243
 Component
Center Differential
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	---
Lead	ppm	ASTM D5185m	>25	▲ 30	11	---
Copper	ppm	ASTM D5185m	>100	▲ 578	126	---
Tin	ppm	ASTM D5185m	>10	▲ 15	5	---

Customer Id: JAMASH
 Sample No.: JR0179982
 Lab Number: 05963716
 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
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

19 May 2022 Diag: Don Baldrige

NORMAL



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

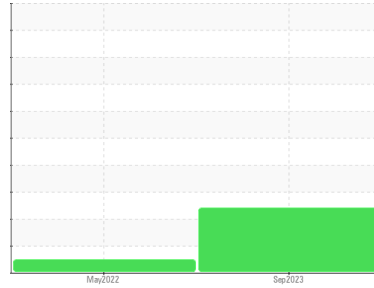


OIL ANALYSIS REPORT



Area
[W46585]
Machine Id
JOHN DEERE 310E 1DW310EXPMF712243
Component
Center Differential
Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

▲ Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

▲ Wear

Copper, lead and tin ppm levels are abnormal. Thrust washer and/or bearing/bushing wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		JR0179982	JR0124356	---
Sample Date	Client Info		15 Sep 2023	19 May 2022	---
Machine Age	hrs	Client Info	2016	501	---
Oil Age	hrs	Client Info	0	501	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			ABNORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		169	218	---
Iron	ppm	ASTM D5185m >500	431	252	---
Chromium	ppm	ASTM D5185m >10	3	3	---
Nickel	ppm	ASTM D5185m >10	6	6	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m	0	<1	---
Aluminum	ppm	ASTM D5185m >25	5	4	---
Lead	ppm	ASTM D5185m >25	▲ 30	11	---
Copper	ppm	ASTM D5185m >100	▲ 578	126	---
Tin	ppm	ASTM D5185m >10	▲ 15	5	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 6	23	107	---
Barium	ppm	ASTM D5185m 0	5	0	---
Molybdenum	ppm	ASTM D5185m 0	1	<1	---
Manganese	ppm	ASTM D5185m	22	48	---
Magnesium	ppm	ASTM D5185m 145	95	25	---
Calcium	ppm	ASTM D5185m 3570	3714	3584	---
Phosphorus	ppm	ASTM D5185m 1290	1178	1183	---
Zinc	ppm	ASTM D5185m 1640	1451	1422	---
Sulfur	ppm	ASTM D5185m	4138	2825	---

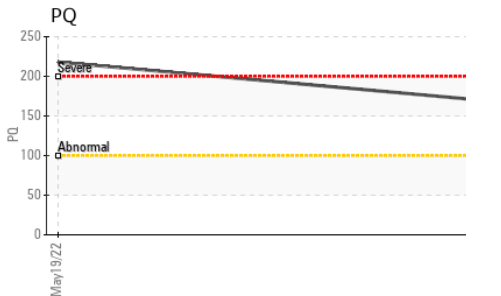
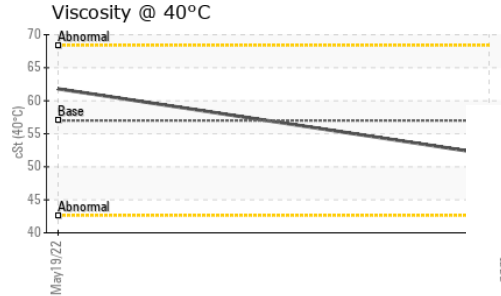
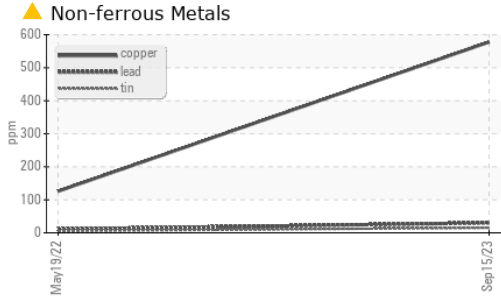
CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	20	16	---
Sodium	ppm	ASTM D5185m	8	19	---
Potassium	ppm	ASTM D5185m >20	2	<1	---

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	MODER	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
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 >.2	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---

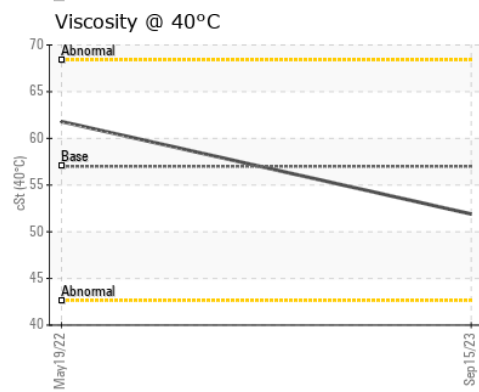
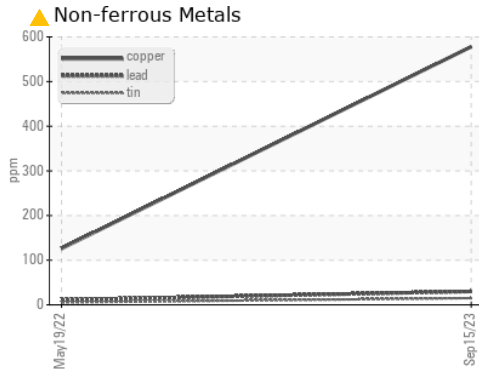
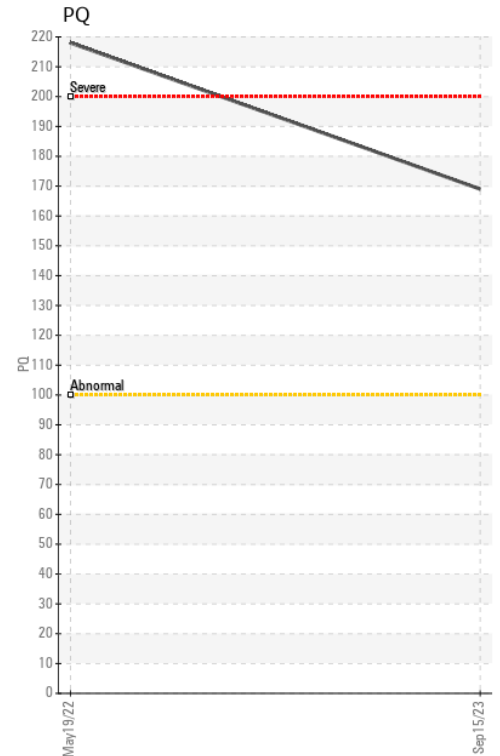
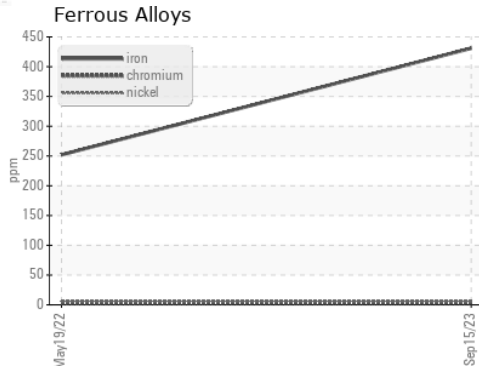
OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	57.0	51.9	61.8	---

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0179982 **Received** : 28 Sep 2023
Lab Number : 05963716 **Diagnosed** : 29 Sep 2023
Unique Number : 10670267 **Diagnostician** : Angela Borella
Test Package : CONST (Additional Tests: PQ)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292

*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)*