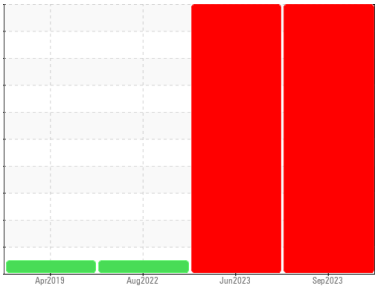
PROBLEM SUMMARY

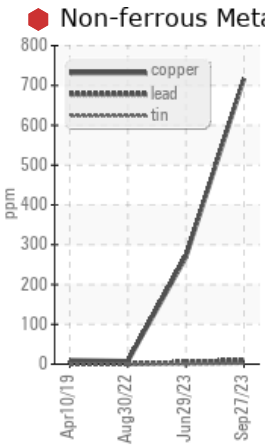
Area
[W7887]
Machine Id
JOHN DEERE 844K DW844KX626817
Component
Front Differential
Fluid
JOHN DEERE GL-5 80W90 (--- GAL)

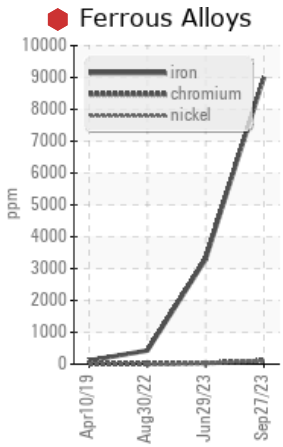
Sample Rating Trend

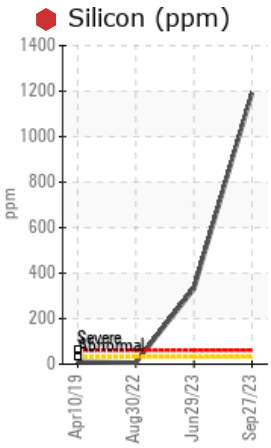


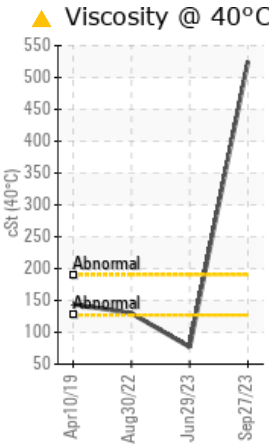
WEAR

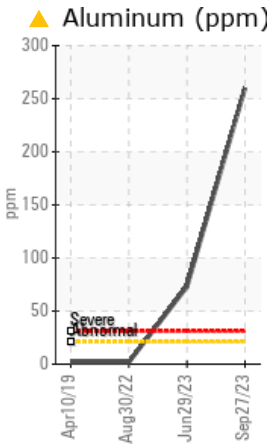
COMPONENT CONDITION SUMMARY











RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: W7887)

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	NORMAL
Iron	ppm	ASTM D5185m	>1501	**9005**	3295	427
Chromium	ppm	ASTM D5185m	>11	**106**	31	1
Nickel	ppm	ASTM D5185m	>10	**105**	39	2
Aluminum	ppm	ASTM D5185m	>21	**260**	73	2
Copper	ppm	ASTM D5185m	>101	**717**	269	8
Silicon	ppm	ASTM D5185m	>31	**1192**	331	6
Visc @ 40°C	cSt	ASTM D445		**525**	76.8	130

Customer Id: RWMGAR
Sample No.: JR0183248
Lab Number: 05968005
Test Package: MOBCE

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

29 Jun 2023 Diag: Don Baldridge

WEAR

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.Gear wear is indicated. Bearing and/or bushing wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The oil is no longer serviceable due to the presence of contaminants.

view report

30 Aug 2022 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

10 Apr 2019 Diag: Don Baldridge

NORMAL

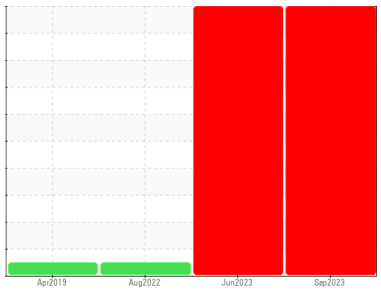
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Area
[W7887]
Machine Id
JOHN DEERE 844K DW844KX626817
Component
Front Differential
Fluid
JOHN DEERE GL-5 80W90 (--- GAL)

Sample Rating Trend



WEAR

DIAGNOSIS

Recommendation
We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. (Customer Sample Comment: W7887)

Wear
Gear wear is indicated. Bearing and/or bushing wear is indicated.

Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition
The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR0183248**	JR0173589	JR0138957
Sample Date		Client Info		**27 Sep 2023**	29 Jun 2023	30 Aug 2022
Machine Age	hrs	Client Info		**26863**	26393	24812
Oil Age	hrs	Client Info		**26863**	505	24812
Oil Changed		Client Info		**Not Changd**	Oil Added	Not Changd
Sample Status				**SEVERE**	SEVERE	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**4161**	934	23
Iron	ppm	ASTM D5185m	>1501	⬢ **9005**	⬢ 3295	427
Chromium	ppm	ASTM D5185m	>11	⬢ **106**	⬢ 31	1
Nickel	ppm	ASTM D5185m	>10	⬢ **105**	⬢ 39	2
Titanium	ppm	ASTM D5185m		**1**	2	<1
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>21	▲ **260**	▲ 73	2
Lead	ppm	ASTM D5185m	>51	**10**	5	<1
Copper	ppm	ASTM D5185m	>101	⬢ **717**	⬢ 269	8
Tin	ppm	ASTM D5185m	>10	**2**	0	<1
Antimony	ppm	ASTM D5185m	>5	**---**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	<1	<1
Cadmium	ppm	ASTM D5185m		**<1**	<1	0

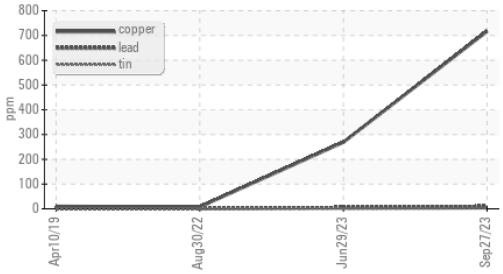
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**98**	116	72
Barium	ppm	ASTM D5185m		**0**	3	0
Molybdenum	ppm	ASTM D5185m		**10**	4	<1
Manganese	ppm	ASTM D5185m		**81**	▲ 28	3
Magnesium	ppm	ASTM D5185m		**70**	▲ 78	<1
Calcium	ppm	ASTM D5185m		**1158**	▲ 2451	6
Phosphorus	ppm	ASTM D5185m		**754**	▲ 1125	617
Zinc	ppm	ASTM D5185m		**391**	▲ 802	13
Sulfur	ppm	ASTM D5185m		**13926**	▲ 10994	16000

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>31	⬢ **1192**	⬢ 331	6
Sodium	ppm	ASTM D5185m	>51	**92**	25	4
Potassium	ppm	ASTM D5185m	>20	**58**	18	3

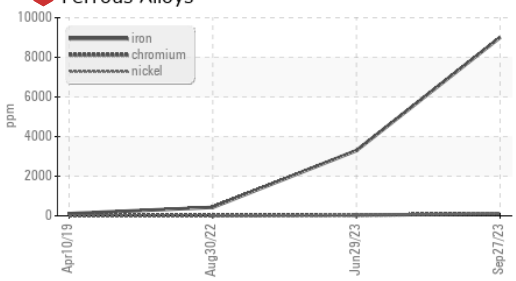
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

OIL ANALYSIS REPORT

Non-ferrous Metals



Ferrous Alloys

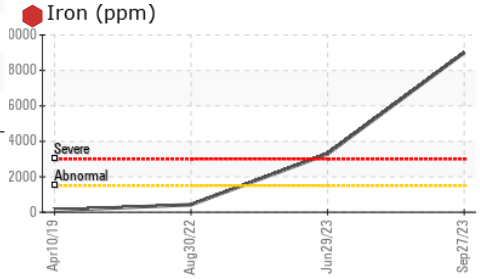


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		▲ **525**	▲ 76.8	130

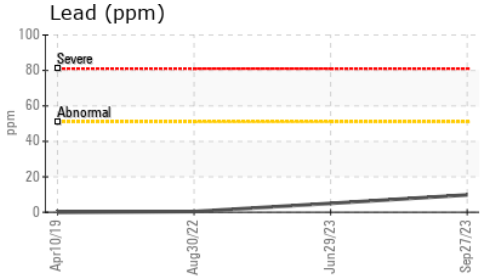
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

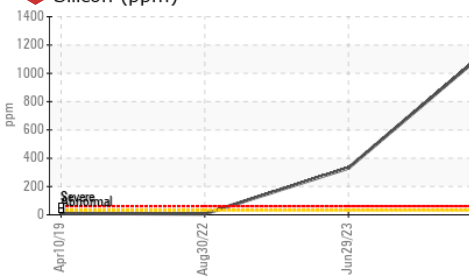
Iron (ppm)



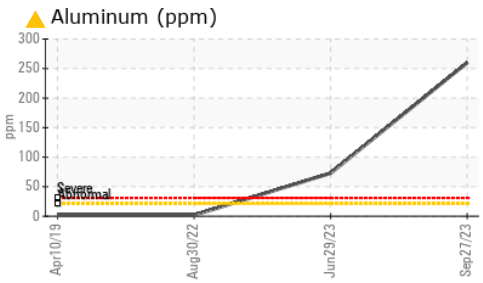
Lead (ppm)



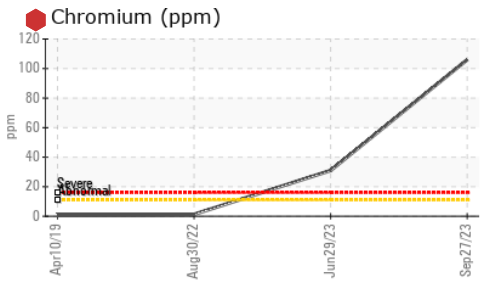
Silicon (ppm)



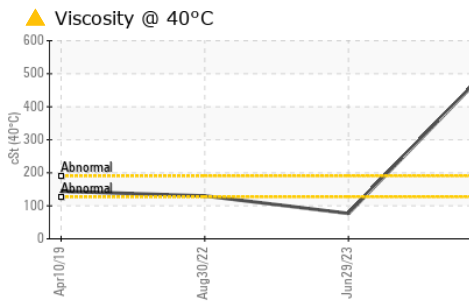
Aluminum (ppm)



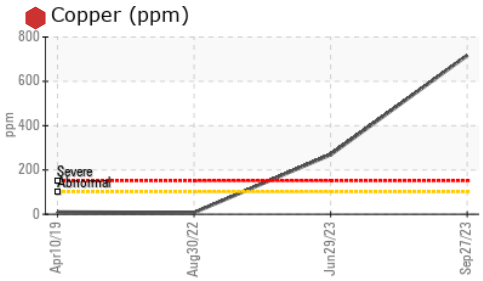
Chromium (ppm)



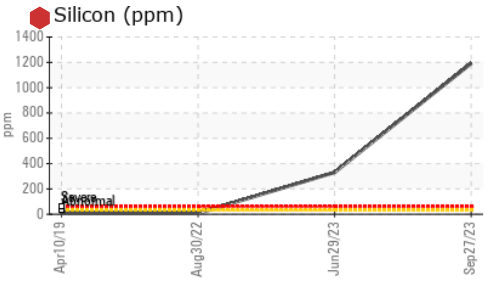
Viscosity @ 40°C



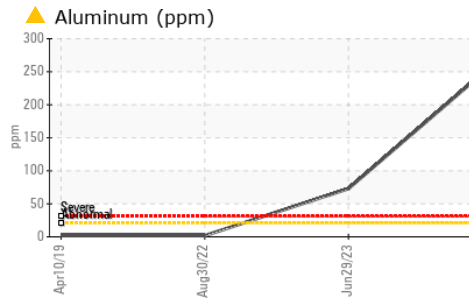
Copper (ppm)



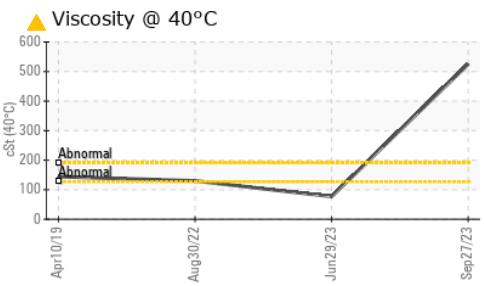
Silicon (ppm)



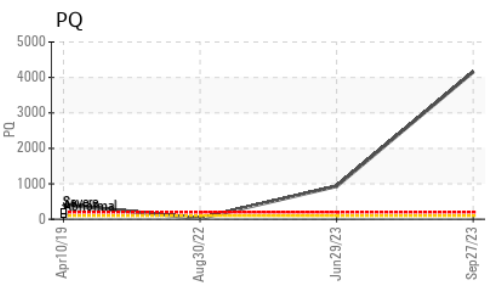
Aluminum (ppm)



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0183248 **Received** : 03 Oct 2023
Lab Number : 05968005 **Diagnosed** : 05 Oct 2023
Unique Number : 10674556 **Diagnostician** : Don Baldridge
Test Package : MOBCE (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)

JRE - GARNER
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T: (919)614-2260
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