



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**[127686]**

Machine Id  
**JOHN DEERE 824L 1DW824LXVML712912**

Component  
**Brake**

Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- QTS)**

## RECOMMENDATION

We advise that you check for the source of water entry. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WE0007961</b>	WE0006833	WE0006448
Sample Date		Client Info		<b>15 Jul 2024</b>	11 Apr 2024	05 Feb 2024
Machine Age	hrs	Client Info		<b>5107</b>	4524	4097
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	Not Chngd	Changed
Filter Changed		Client Info		<b>N/A</b>	Not Chngd	Changed
Sample Status				<b>ABNORMAL</b>	SEVERE	NORMAL

## WEAR

A sharp increase in the copper level is noted.

PQ		ASTM D8184		<b>19</b>	66	10
Iron	ppm	ASTM D5185m	>350	<b>32</b>	217	3
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	4	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>8	<b>4</b>	4	2
Lead	ppm	ASTM D5185m	>10	<b>5</b>	6	0
Copper	ppm	ASTM D5185m	>150	<b>▲ 348</b>	5	1
Tin	ppm	ASTM D5185m	>5	<b>&lt;1</b>	6	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

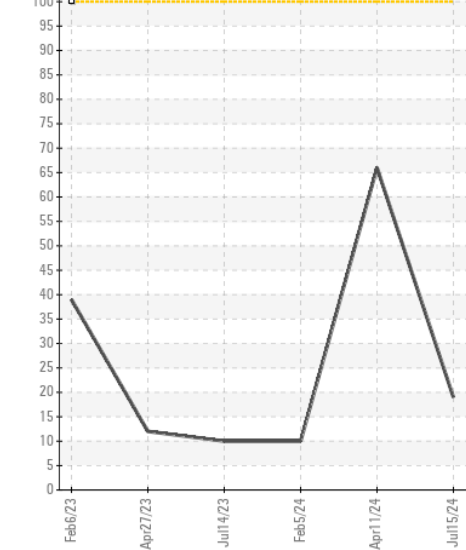
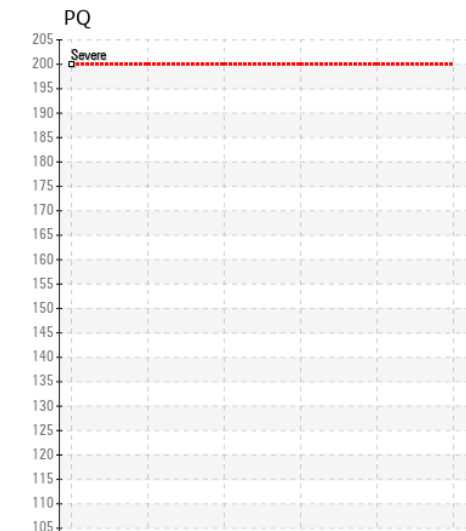
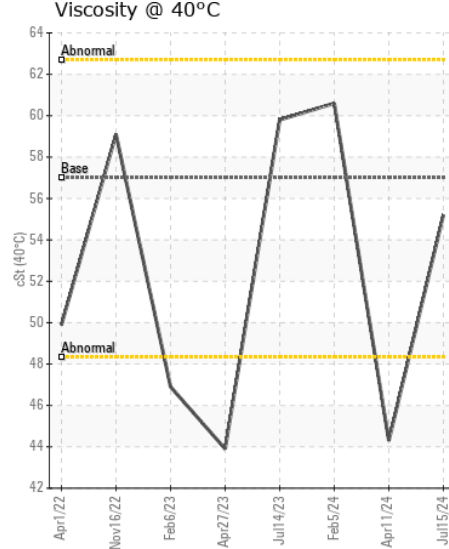
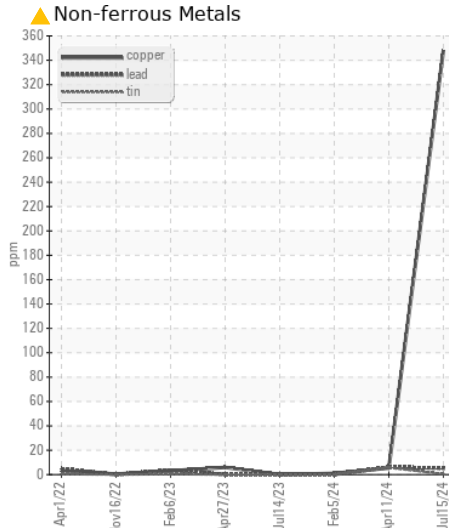
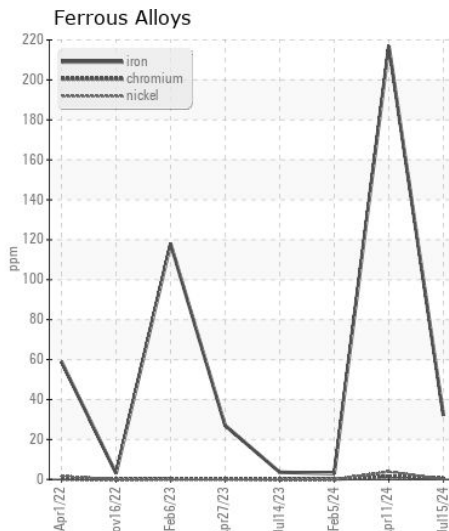
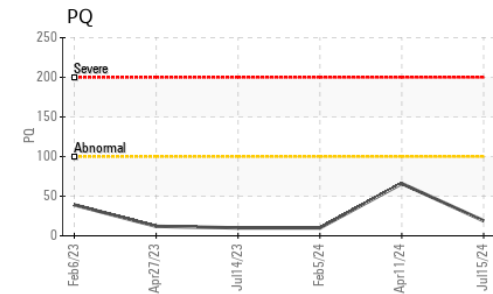
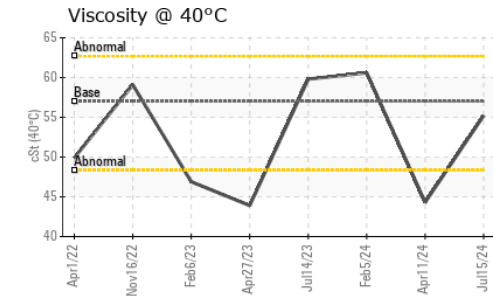
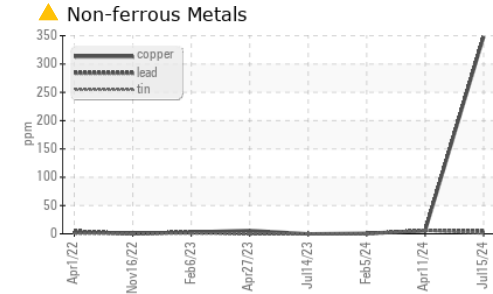
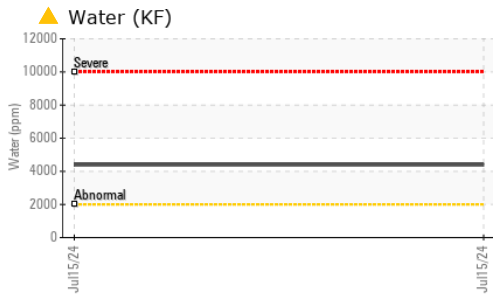
There is a moderate concentration of water present in the fluid.

Silicon	ppm	ASTM D5185m	>400	<b>5</b>	<b>▲ 761</b>	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	4	3
Water	%	ASTM D6304	>0.2	<b>▲ 0.439</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 4390</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>▲ 0.2%</b>	NEG	NEG

## FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>0</b>	15	4
Boron	ppm	ASTM D5185m	6	<b>8</b>	77	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	5	0
Molybdenum	ppm	ASTM D5185m	0	<b>10</b>	260	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	6	0
Magnesium	ppm	ASTM D5185m	145	<b>75</b>	417	160
Calcium	ppm	ASTM D5185m	3570	<b>3518</b>	2051	4592
Phosphorus	ppm	ASTM D5185m	1290	<b>1056</b>	819	1563
Zinc	ppm	ASTM D5185m	1640	<b>1174</b>	844	1802
Sulfur	ppm	ASTM D5185m		<b>3637</b>	3012	5718
Visc @ 40°C	cSt	ASTM D445	57.0	<b>55.2</b>	44.3	60.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WE0007961 **Received** : 18 Jul 2024  
**Lab Number** : 06240580 **Tested** : 19 Jul 2024  
**Unique Number** : 11129414 **Diagnosed** : 20 Jul 2024 - Don Baldridge  
**Test Package** : CONST ( Additional Tests: KF, PQ )

**WARRIOR TRACTOR AND EQUIPMENT - NORTHPORT**  
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Certificate L2367  
 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)