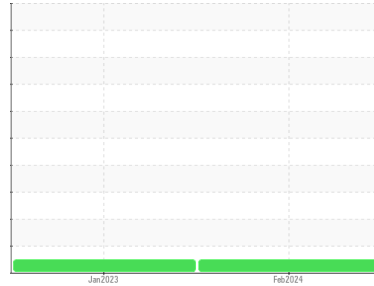


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**


Area  
**[W49788]**  
Machine Id  
**JOHN DEERE 544G DW544GD558708**  
Component  
**Hydraulic System**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**


**DIAGNOSIS**
**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**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		<b>JR0199712</b>	JR0147148	---
Sample Date	Client Info		<b>16 Feb 2024</b>	09 Jan 2023	---
Machine Age	hrs	Client Info	<b>16514</b>	15967	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Not Chngd</b>	Not Chngd	---
Sample Status			<b>NORMAL</b>	NORMAL	---

**CONTAMINATION**

	method	limit/base	current	history1	history2
Water	WC Method	>0.075	<b>NEG</b>	NEG	---

**WEAR METALS**

	method	limit/base	current	history1	history2
PQ	ASTM D8184	>50	<b>9</b>	10	---
Iron	ppm	ASTM D5185m	>71	<b>9</b>	13
Chromium	ppm	ASTM D5185m	>11	<b>&lt;1</b>	<1
Nickel	ppm	ASTM D5185m	>6	<b>0</b>	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	<1
Aluminum	ppm	ASTM D5185m	>11	<b>1</b>	2
Lead	ppm	ASTM D5185m	>13	<b>0</b>	<1
Copper	ppm	ASTM D5185m	>21	<b>&lt;1</b>	2
Tin	ppm	ASTM D5185m	>5	<b>0</b>	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6	<b>0</b>	2
Barium	ppm	ASTM D5185m	0	<b>0</b>	0
Molybdenum	ppm	ASTM D5185m	0	<b>38</b>	67
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1
Magnesium	ppm	ASTM D5185m	145	<b>11</b>	14
Calcium	ppm	ASTM D5185m	3570	<b>1000</b>	1634
Phosphorus	ppm	ASTM D5185m	1290	<b>549</b>	723
Zinc	ppm	ASTM D5185m	1640	<b>656</b>	768
Sulfur	ppm	ASTM D5185m		<b>3838</b>	3573

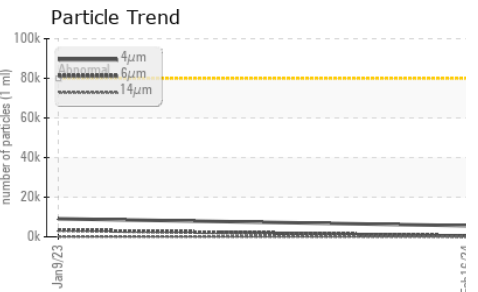
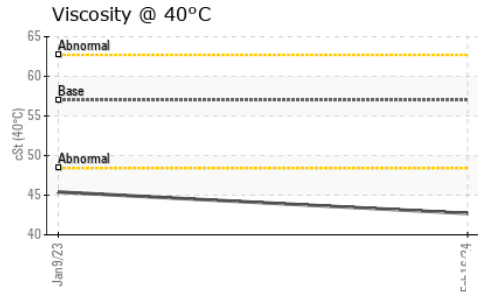
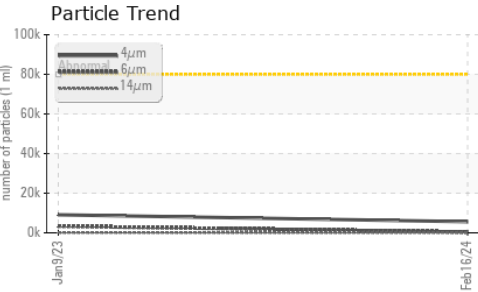
**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>24	<b>4</b>	6
Sodium	ppm	ASTM D5185m	>21	<b>0</b>	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0

**FLUID CLEANLINESS**

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>80000	<b>5605</b>	9114	---
Particles >6µm	ASTM D7647	>5000	<b>384</b>	3341	---
Particles >14µm	ASTM D7647	>640	<b>34</b>	78	---
Particles >21µm	ASTM D7647	>160	<b>11</b>	12	---
Particles >38µm	ASTM D7647	>40	<b>1</b>	1	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>23/19/16	<b>20/16/12</b>	20/19/13	---

# OIL ANALYSIS REPORT

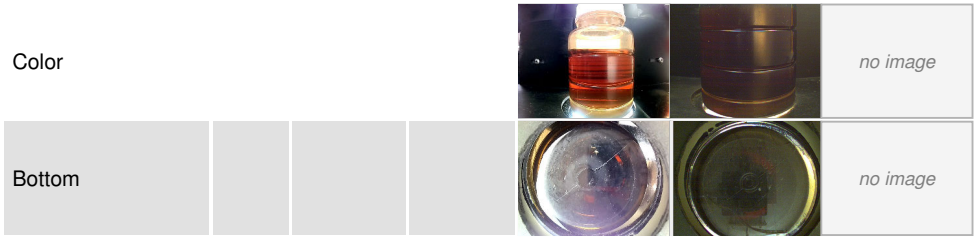


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	<b>0.76</b>	0.96	---

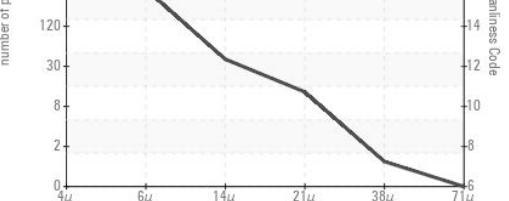
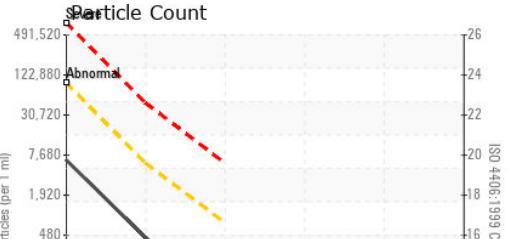
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	57.0	<b>42.7</b>	45.4	---

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0199712      **Received** : 27 Feb 2024  
**Lab Number** : **06101525**      **Tested** : 28 Feb 2024  
**Unique Number** : 10899755      **Diagnosed** : 29 Feb 2024 - Jonathan Hester  
**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)