



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



Machine Id  
**JOHN DEERE 644 P 1DW644PAEMLZ11990**  
Component  
**Rear Differential**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0218747</b>	JR0185097	---
Sample Date		Client Info		<b>11 Jun 2024</b>	06 Oct 2023	---
Machine Age	hrs	Client Info		<b>1985</b>	1470	---
Oil Age	hrs	Client Info		<b>1985</b>	1470	---
Filter Age	hrs	Client Info		<b>515</b>	1470	---
Oil Changed		Client Info		<b>Changed</b>	Not Changd	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	ABNORMAL	---

### WEAR

All component wear rates are normal.

Test	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>21</b>	21	---
Iron	ppm	ASTM D5185m	>500	<b>91</b>	72	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	<1	---
Lead	ppm	ASTM D5185m	>25	<b>63</b>	▲ 59	---
Copper	ppm	ASTM D5185m	>100	<b>234</b>	▲ 212	---
Tin	ppm	ASTM D5185m	>10	<b>2</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

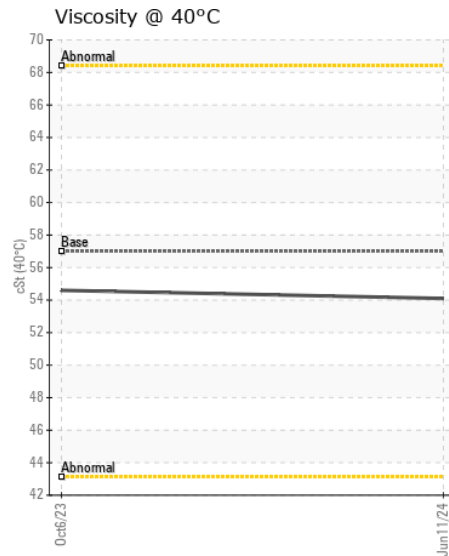
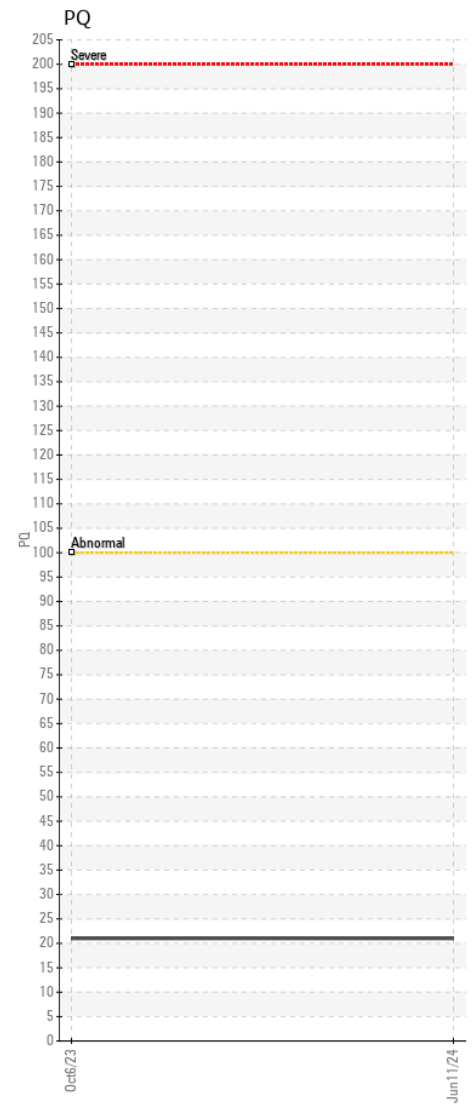
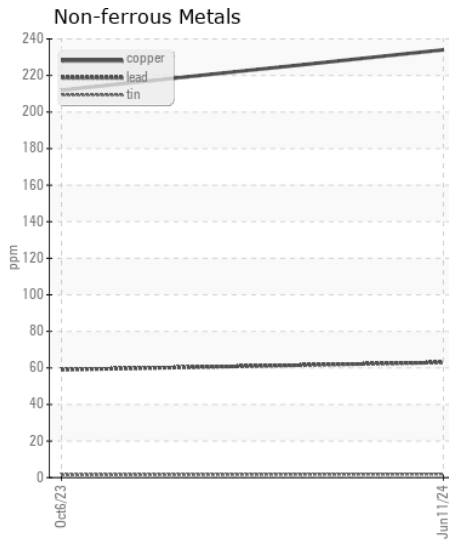
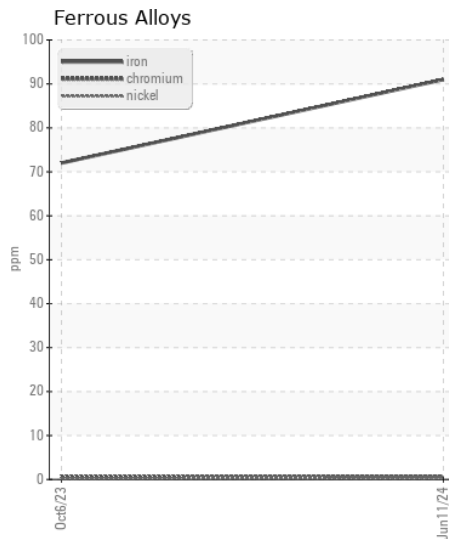
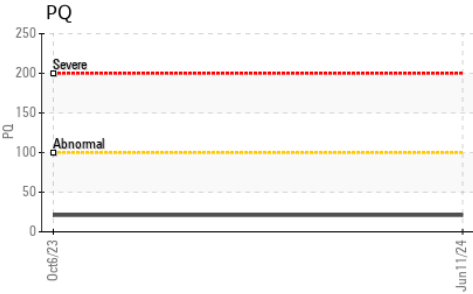
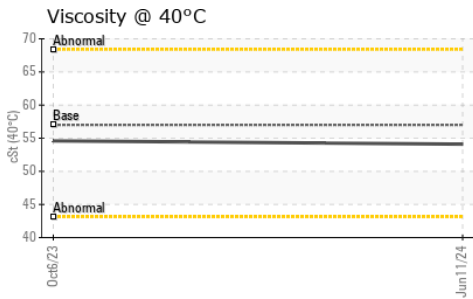
There is no indication of any contamination in the fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	<b>6</b>	7	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	4	---
Water		WC Method	>.2	<b>NEG</b>	NEG	---
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	>.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		<b>5</b>	4	---
Boron	ppm	ASTM D5185m	6	<b>6</b>	3	---
Barium	ppm	ASTM D5185m	0	<b>5</b>	7	---
Molybdenum	ppm	ASTM D5185m	0	<b>1</b>	0	---
Manganese	ppm	ASTM D5185m		<b>4</b>	4	---
Magnesium	ppm	ASTM D5185m	145	<b>98</b>	97	---
Calcium	ppm	ASTM D5185m	3570	<b>3423</b>	3204	---
Phosphorus	ppm	ASTM D5185m	1290	<b>1032</b>	1006	---
Zinc	ppm	ASTM D5185m	1640	<b>1237</b>	1214	---
Sulfur	ppm	ASTM D5185m		<b>3599</b>	3844	---
Visc @ 40°C	cSt	ASTM D445	57.0	<b>54.1</b>	54.6	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0218747 **Received** : 14 Jun 2024  
**Lab Number** : 06210449 **Tested** : 17 Jun 2024  
**Unique Number** : 11083313 **Diagnosed** : 18 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - ASHEVILLE**  
 101 BRUCE DRIVE  
 ASHEVILLE, NC  
 US 28806

Contact: Randy Warren  
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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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