



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

Machine Id  
**JOHN DEERE 648LB 1DW648LBANF716232**  
 Component  
**Rear Differential**  
 Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (9 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0208909</b>	JR0200570	JR0193873
Sample Date		Client Info		<b>17 Jun 2024</b>	29 Feb 2024	15 Dec 2023
Machine Age	hrs	Client Info		<b>2114</b>	1535	1071
Oil Age	hrs	Client Info		<b>2114</b>	1071	581
Filter Age	hrs	Client Info		<b>1000</b>	0	581
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>172</b>	21	28
Iron	ppm	ASTM D5185m	>500	<b>123</b>	149	51
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>4</b>	4	1
Lead	ppm	ASTM D5185m	>25	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>100	<b>28</b>	17	16
Tin	ppm	ASTM D5185m	>10	<b>2</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

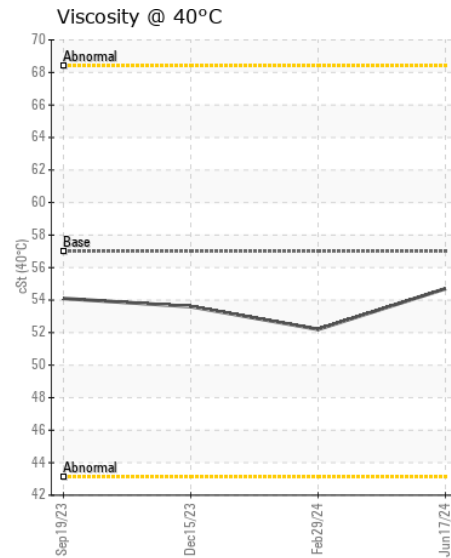
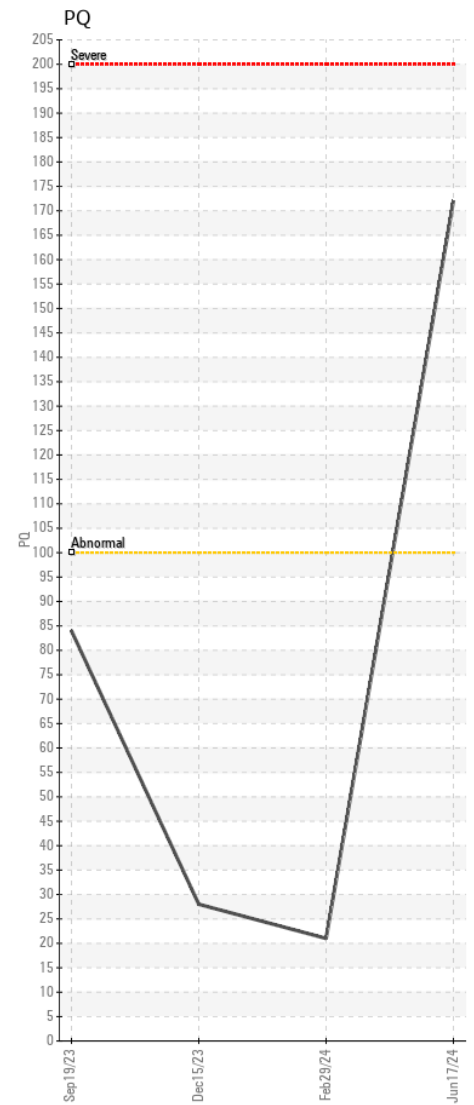
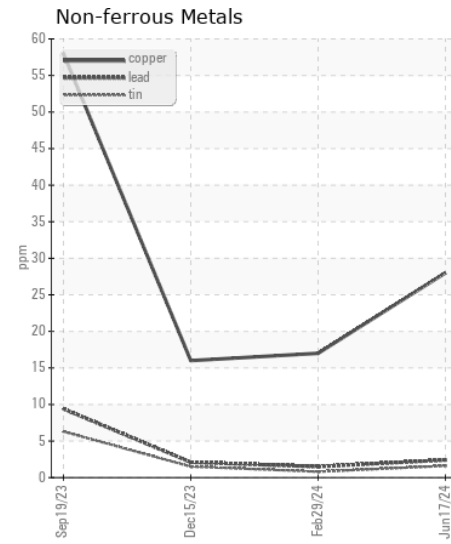
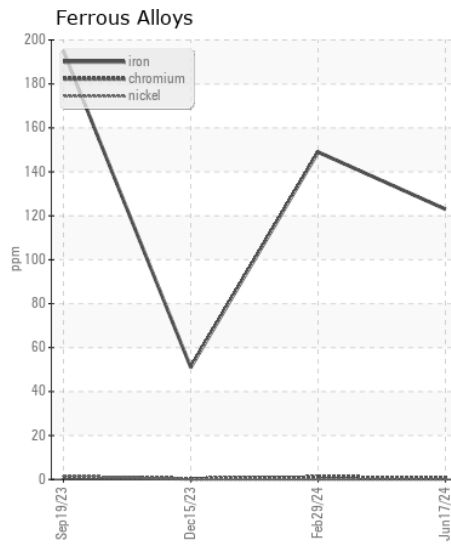
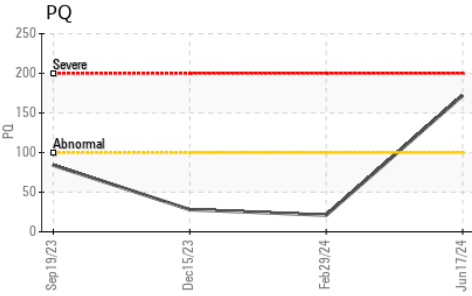
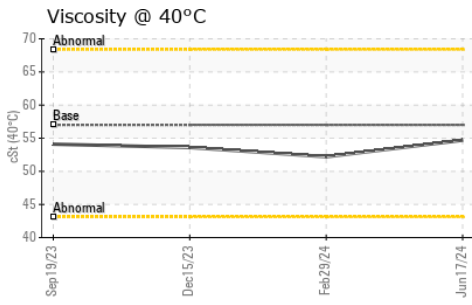
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>11</b>	41	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	1
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
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	>.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>5</b>	<1	3
Boron	ppm	ASTM D5185m	6	<b>&lt;1</b>	1	0
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>3</b>	2	1
Magnesium	ppm	ASTM D5185m	145	<b>81</b>	92	99
Calcium	ppm	ASTM D5185m	3570	<b>3379</b>	3340	3507
Phosphorus	ppm	ASTM D5185m	1290	<b>1041</b>	920	1045
Zinc	ppm	ASTM D5185m	1640	<b>1193</b>	1184	1255
Sulfur	ppm	ASTM D5185m		<b>3993</b>	4304	4133
Visc @ 40°C	cSt	ASTM D445	57.0	<b>54.7</b>	52.2	53.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0208909 **Received** : 20 Jun 2024  
**Lab Number** : 06216024 **Tested** : 22 Jun 2024  
**Unique Number** : 11088888 **Diagnosed** : 22 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**NEUSE RIVER FOREST PRODUCTS**  
 PO BOX 234  
 PRINCETON, NC  
 US 27569  
 Contact: Service Manager  
 neuseriverfp@gmail.com

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)

T:  
F: