



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



Machine Id  
**JOHN DEERE 644K 1DW644KZTED658665**  
Component  
**Transmission (Manual)**  
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>JR0217922</b>	JR0199525	JR0172864
Sample Date		Client Info		<b>17 May 2024</b>	24 Jan 2024	05 May 2023
Machine Age	hrs	Client Info		<b>13936</b>	13381	12317
Oil Age	hrs	Client Info		<b>555</b>	11706	11348
Filter Age	hrs	Client Info		<b>555</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>95	<b>13</b>	14	12
Iron	ppm	ASTM D5185m	>200	<b>17</b>	32	21
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>7	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	<1
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>225	<b>3</b>	5	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</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 fluid.

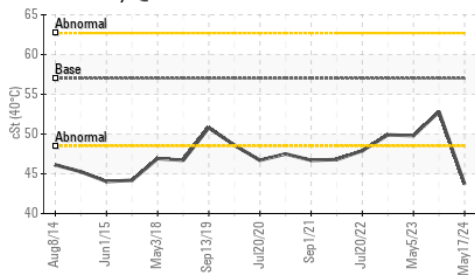
Silicon	ppm	ASTM D5185m	>125	<b>5</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

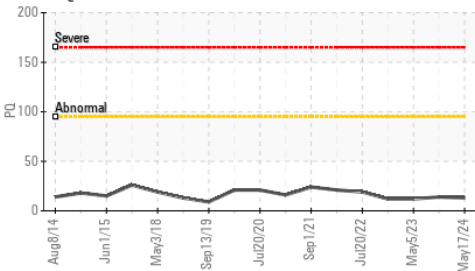
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>0</b>	0	2
Boron	ppm	ASTM D5185m	6	<b>12</b>	18	12
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>10</b>	15	10
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	145	<b>120</b>	135	120
Calcium	ppm	ASTM D5185m	3570	<b>3164</b>	3086	3140
Phosphorus	ppm	ASTM D5185m	1290	<b>946</b>	1112	994
Zinc	ppm	ASTM D5185m	1640	<b>1163</b>	1200	1204
Sulfur	ppm	ASTM D5185m		<b>3544</b>	4019	4103
Visc @ 40°C	cSt	ASTM D445	57.0	<b>43.7</b>	52.8	49.8

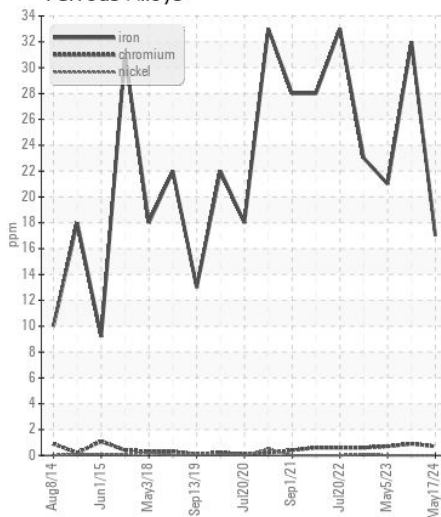
Viscosity @ 40°C



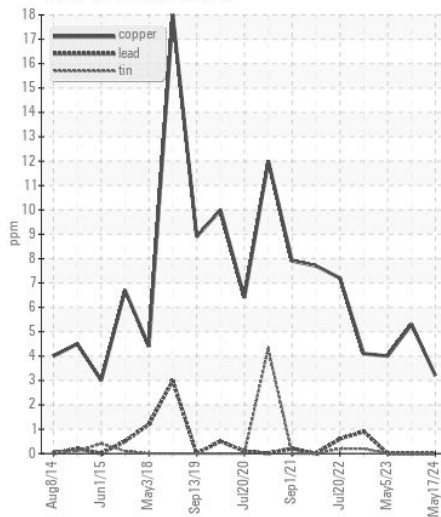
PQ



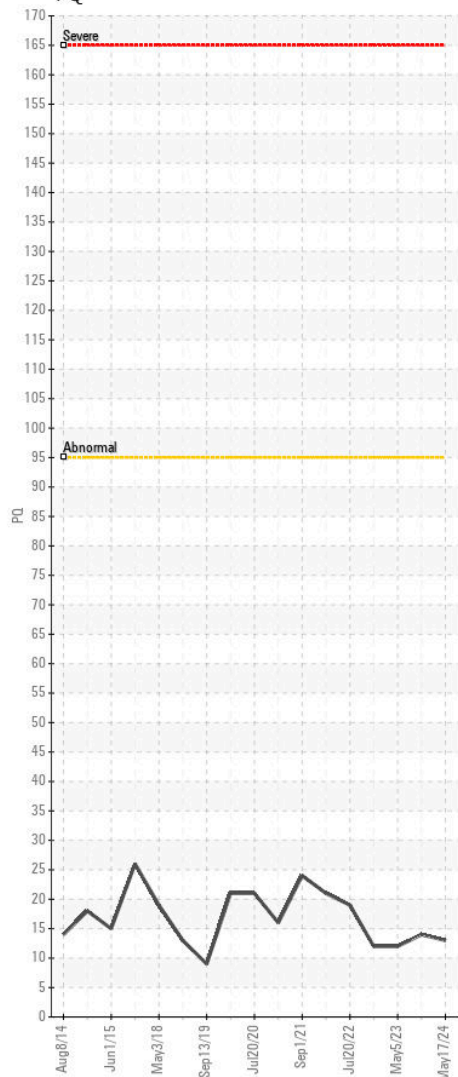
Ferrous Alloys



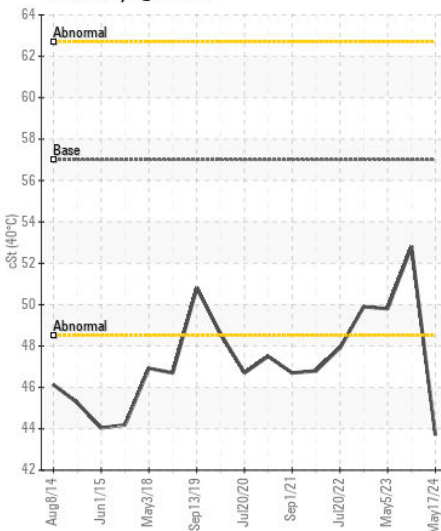
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0217922 **Received** : 23 May 2024  
**Lab Number** : 06189786 **Tested** : 30 May 2024  
**Unique Number** : 11046538 **Diagnosed** : 30 May 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
 MANASSAS PARK, VA  
 US 20111  
 Contact: DON VEST  
 dvest@jamesriverequipment.com  
 T: (703)631-8500  
 F: (703)631-4715

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)