



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

Machine Id  
**JOHN DEERE 644L 1DW644LZJLL706347**

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>JR0226178</b>	JR0208951	JR0200669
Sample Date		Client Info		<b>14 Jul 2024</b>	19 Apr 2024	09 Feb 2024
Machine Age	hrs	Client Info		<b>7971</b>	7471	6993
Oil Age	hrs	Client Info		<b>4422</b>	3922	4394
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184	>95	<b>17</b>	17	16
Iron	ppm	ASTM D5185m	>200	<b>42</b>	39	36
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>7	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>45	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>225	<b>10</b>	12	8
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
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 fluid.

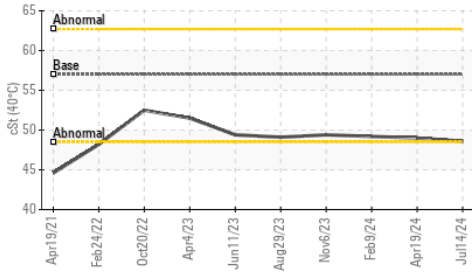
Silicon	ppm	ASTM D5185m	>125	<b>10</b>	11	11
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

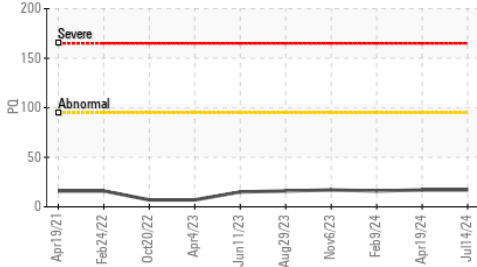
The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<b>3</b>	3	2
Boron	ppm	ASTM D5185m	6	<b>1</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	<1	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	0
Magnesium	ppm	ASTM D5185m	145	<b>85</b>	91	87
Calcium	ppm	ASTM D5185m	3570	<b>2950</b>	3039	3076
Phosphorus	ppm	ASTM D5185m	1290	<b>954</b>	1000	941
Zinc	ppm	ASTM D5185m	1640	<b>899</b>	965	977
Sulfur	ppm	ASTM D5185m		<b>3619</b>	3800	3274
Visc @ 40°C	cSt	ASTM D445	57.0	<b>48.6</b>	49.0	49.2

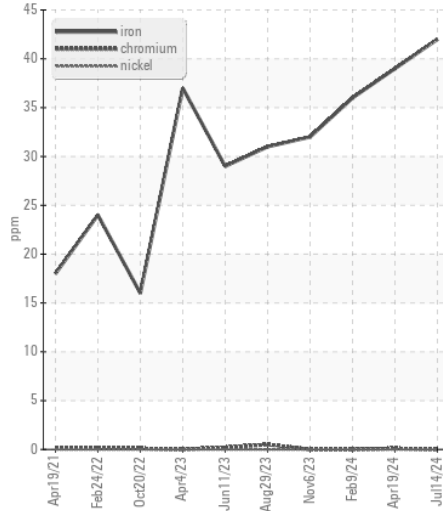
Viscosity @ 40°C



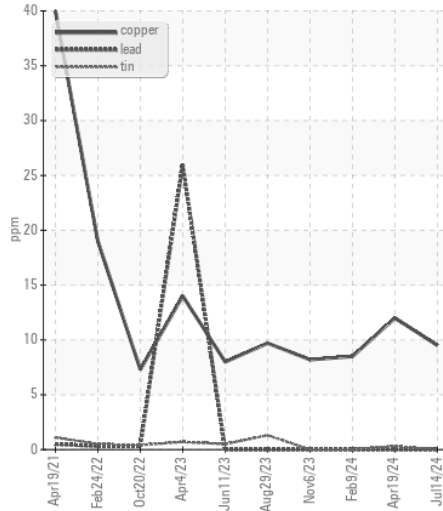
PQ



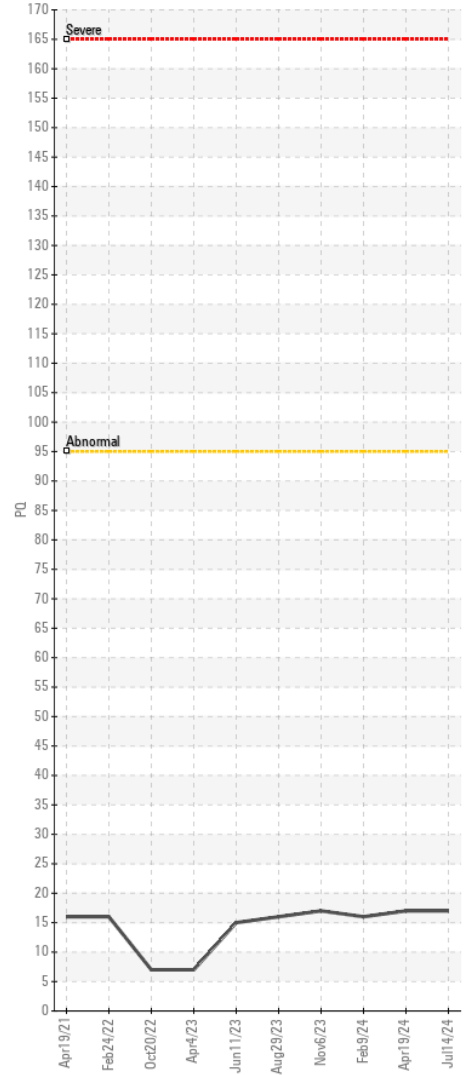
Ferrous Alloys



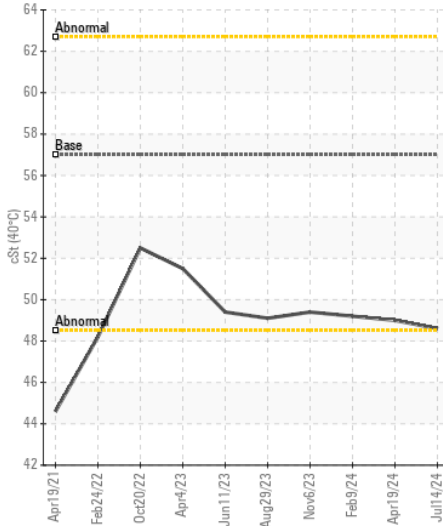
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0226178

Lab Number : 06238028

Unique Number : 11126862

Test Package : CONST ( Additional Tests: PQ )

Received : 16 Jul 2024

Tested : 17 Jul 2024

Diagnosed : 17 Jul 2024 - Wes Davis

JRE - GREENVILLE

3604 HIGHWAY 264 E

GREENVILLE, NC

US 27834-5800

Contact: GREENVILLE SHOP

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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)

T:

F: