



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



Machine Id  
**JOHN DEERE 310E 1DW310EXEMF711881**  
Component  
**Rear Differential**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0224443</b>	JR0166064	JR0132837
Sample Date		Client Info		<b>03 Jul 2024</b>	17 Aug 2023	07 Oct 2022
Machine Age	hrs	Client Info		<b>3057</b>	2343	1952
Oil Age	hrs	Client Info		<b>0</b>	2343	1090
Filter Age	hrs	Client Info		<b>0</b>	2343	1090
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>75</b>	42	120
Iron	ppm	ASTM D5185m	>500	<b>177</b>	98	291
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	<1	3
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	2	8
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	0	5
Lead	ppm	ASTM D5185m	>25	<b>17</b>	8	17
Copper	ppm	ASTM D5185m	>100	<b>195</b>	83	▲ 162
Tin	ppm	ASTM D5185m	>10	<b>6</b>	3	7
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

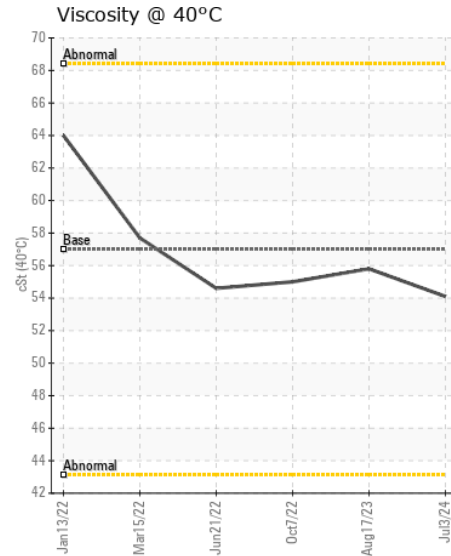
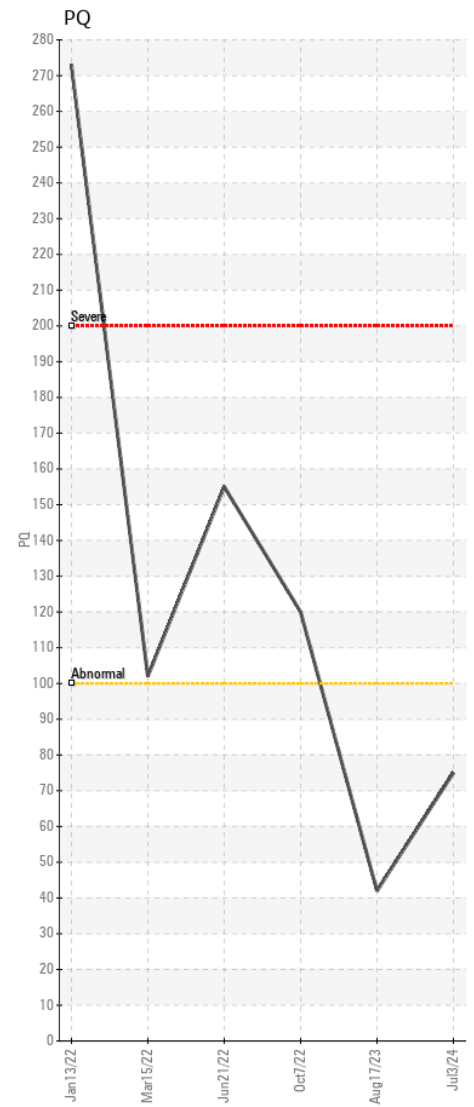
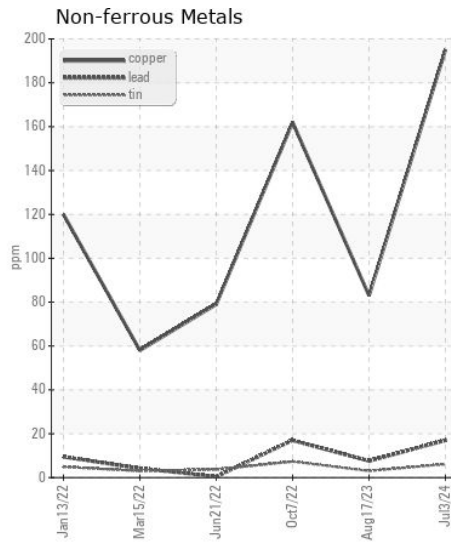
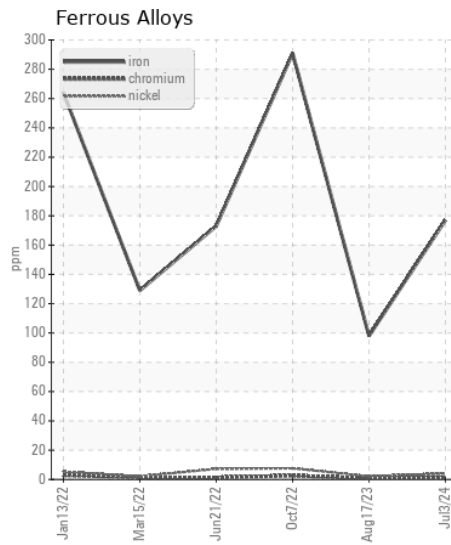
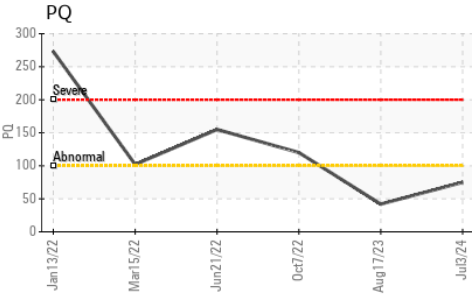
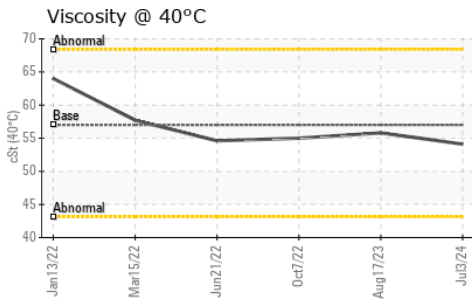
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	<b>14</b>	8	21
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	3
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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		<b>7</b>	4	10
Boron	ppm	ASTM D5185m	6	<b>18</b>	22	41
Barium	ppm	ASTM D5185m	0	<b>1</b>	<1	0
Molybdenum	ppm	ASTM D5185m	0	<b>11</b>	8	5
Manganese	ppm	ASTM D5185m		<b>8</b>	6	16
Magnesium	ppm	ASTM D5185m	145	<b>125</b>	119	98
Calcium	ppm	ASTM D5185m	3570	<b>3671</b>	3246	3518
Phosphorus	ppm	ASTM D5185m	1290	<b>1101</b>	973	1081
Zinc	ppm	ASTM D5185m	1640	<b>1302</b>	1169	1336
Sulfur	ppm	ASTM D5185m		<b>3980</b>	3991	4768
Visc @ 40°C	cSt	ASTM D445	57.0	<b>54.1</b>	55.8	55.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0224443  
**Lab Number** : 06228941  
**Unique Number** : 11112434  
**Test Package** : CONST ( Additional Tests: PQ )

**Received** : 05 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 2024 - Don Baldrige

**L2 CONSTRUCTION**  
 1950 BELLWOOD RD  
 RICHMOND, VA  
 US 23237

Contact: DANIEL LIPFORD  
 daniell@l2constructionservices.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)

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F: