



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



Machine Id  
**JOHN DEERE 310E 1DW310EXVMF712233**  
Component  
**Rear Differential**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0213763</b>	JR0122042	JR0122267
Sample Date		Client Info		<b>21 May 2024</b>	02 Feb 2023	31 May 2022
Machine Age	hrs	Client Info		<b>3934</b>	2427	955
Oil Age	hrs	Client Info		<b>0</b>	0	955
Filter Age	hrs	Client Info		<b>0</b>	0	955
Oil Changed		Client Info		<b>N/A</b>	N/A	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

### WEAR

Bearing and/or bushing wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>98</b>	168	162
Iron	ppm	ASTM D5185m	>500	<b>239</b>	93	166
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	1	2
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	3
Lead	ppm	ASTM D5185m	>25	<b>▲ 16</b>	<1	7
Copper	ppm	ASTM D5185m	>100	<b>▲ 194</b>	5	82
Tin	ppm	ASTM D5185m	>10	<b>▲ 7</b>	0	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

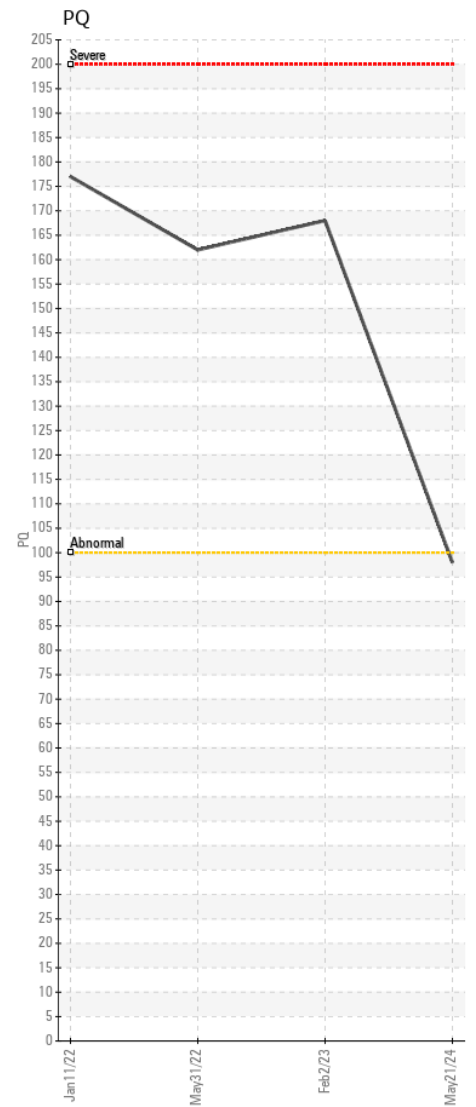
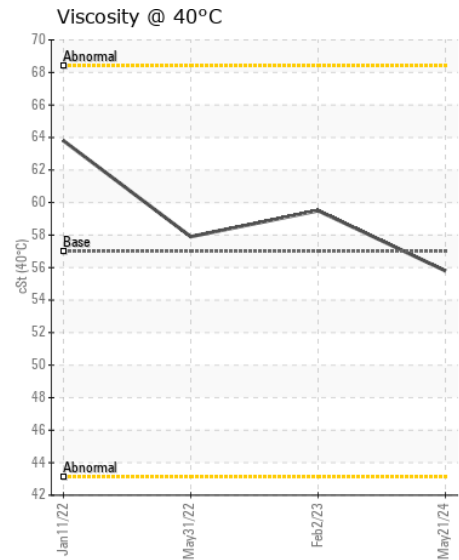
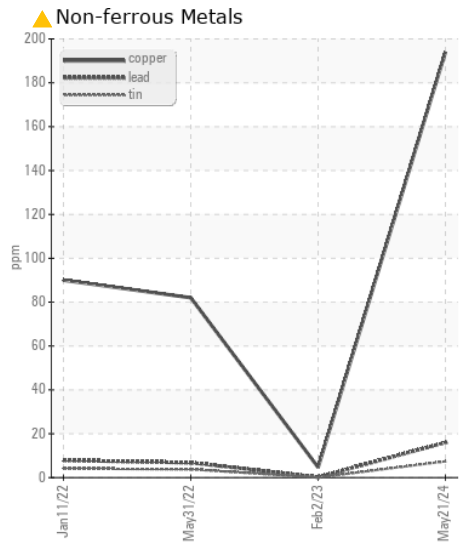
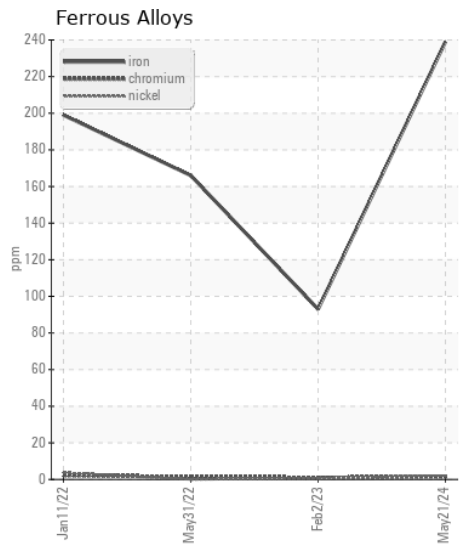
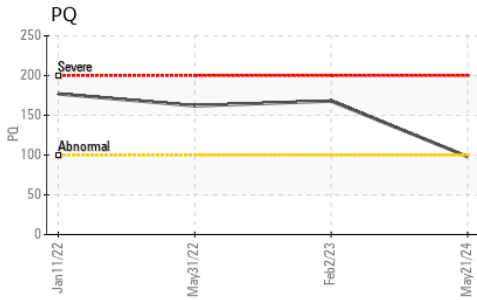
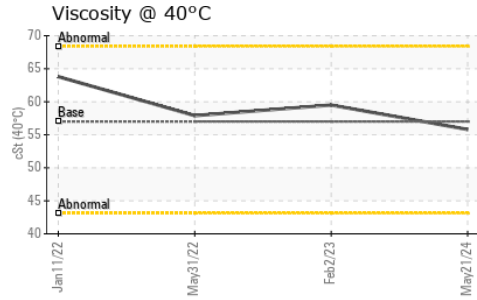
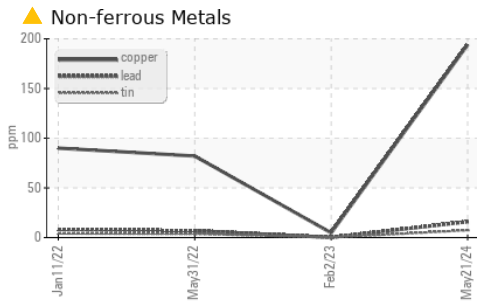
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	<b>15</b>	9	11
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	2
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>9</b>	4	9
Boron	ppm	ASTM D5185m	6	<b>56</b>	317	45
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>20</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>20</b>	1	29
Magnesium	ppm	ASTM D5185m	145	<b>145</b>	1	63
Calcium	ppm	ASTM D5185m	3570	<b>3307</b>	8	3417
Phosphorus	ppm	ASTM D5185m	1290	<b>839</b>	1285	1071
Zinc	ppm	ASTM D5185m	1640	<b>1266</b>	9	1291
Sulfur	ppm	ASTM D5185m		<b>3861</b>	26273	3821
Visc @ 40°C	cSt	ASTM D445	57.0	<b>55.8</b>	59.5	57.9



Certificate L2367

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

**Sample No.** : JR0213763

**Lab Number** : 06187941

**Unique Number** : 11044693

**Test Package** : CONST ( Additional Tests: PQ )

**Received** : 22 May 2024

**Tested** : 24 May 2024

**Diagnosed** : 24 May 2024 - Sean Felton

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)

**JRE - GREENSBORO**

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