



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



Machine Id  
**JOHN DEERE 310E 1DW310EXJPF716543**  
Component  
**Rear Differential**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (33 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0225430</b>	JR0211056	JR0192370
Sample Date		Client Info		<b>03 Jul 2024</b>	21 Mar 2024	13 Nov 2023
Machine Age	hrs	Client Info		<b>2458</b>	1952	1446
Oil Age	hrs	Client Info		<b>0</b>	1952	941
Filter Age	hrs	Client Info		<b>0</b>	500	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	N/A
Filter Changed		Client Info		<b>Not Changed</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>77</b>	60	112
Iron	ppm	ASTM D5185m	>500	<b>135</b>	206	182
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	2	1
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	7	7
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	<1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	10	3
Lead	ppm	ASTM D5185m	>25	<b>8</b>	13	12
Copper	ppm	ASTM D5185m	>100	<b>60</b>	123	106
Tin	ppm	ASTM D5185m	>10	<b>3</b>	6	6
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

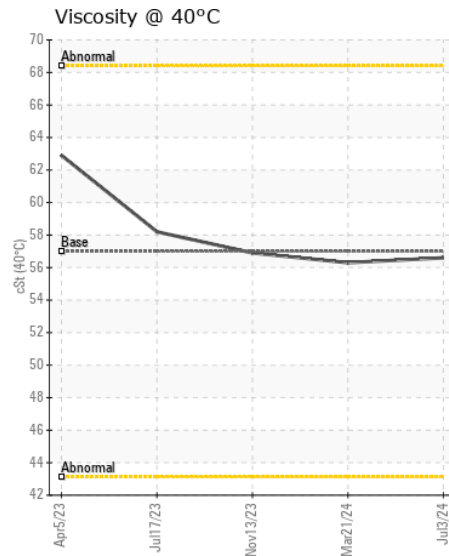
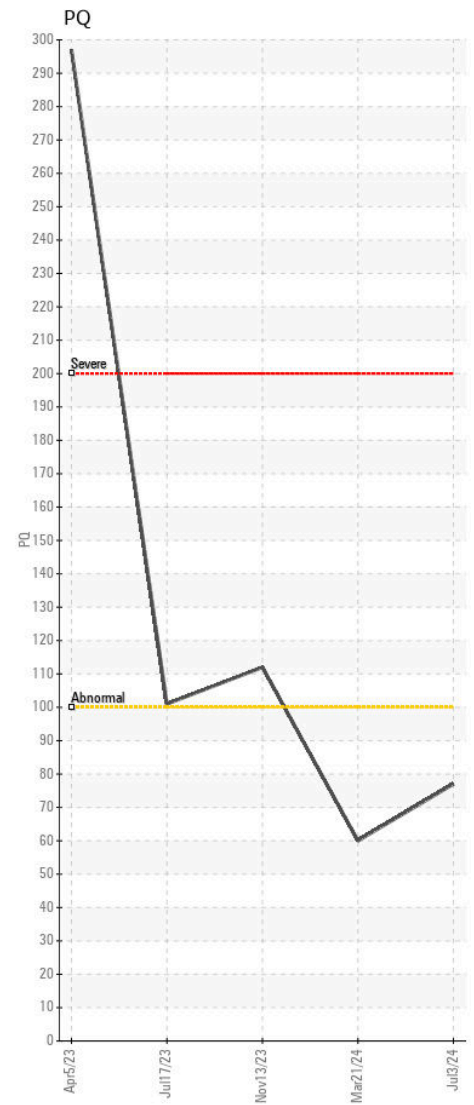
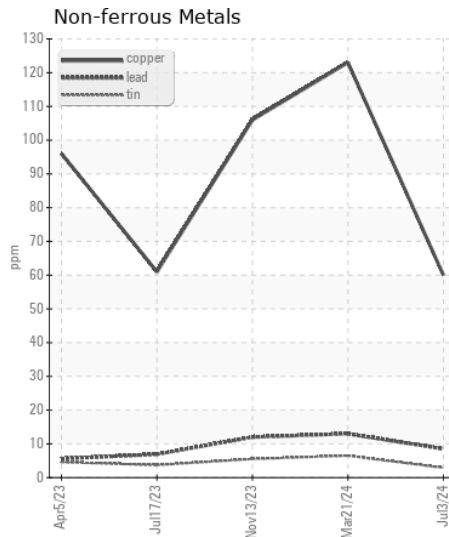
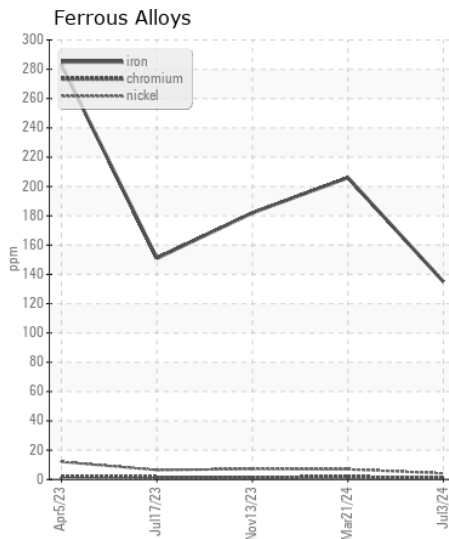
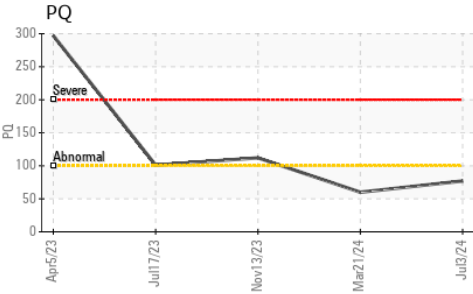
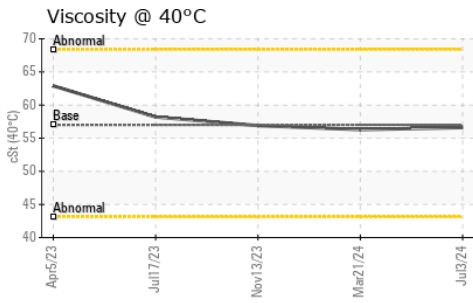
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>12</b>	33	11
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
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	LIGHT
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>6</b>	11	9
Boron	ppm	ASTM D5185m	6	<b>18</b>	36	38
Barium	ppm	ASTM D5185m	0	<b>1</b>	0	<1
Molybdenum	ppm	ASTM D5185m	0	<b>10</b>	7	6
Manganese	ppm	ASTM D5185m		<b>7</b>	14	14
Magnesium	ppm	ASTM D5185m	145	<b>126</b>	101	101
Calcium	ppm	ASTM D5185m	3570	<b>3619</b>	3273	3424
Phosphorus	ppm	ASTM D5185m	1290	<b>1102</b>	1051	1089
Zinc	ppm	ASTM D5185m	1640	<b>1285</b>	1255	1307
Sulfur	ppm	ASTM D5185m		<b>4294</b>	4207	3452
Visc @ 40°C	cSt	ASTM D445	57.0	<b>56.6</b>	56.3	56.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0225430 **Received** : 05 Jul 2024  
**Lab Number** : 06228915 **Tested** : 08 Jul 2024  
**Unique Number** : 11112408 **Diagnosed** : 08 Jul 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: PQ )

**B & S SITE DEVELOPMENT**  
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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)