



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



Area

**[48107]**

Machine Id

**JOHN DEERE 310E 1DW310EXJPF716428**

Component

**Front Differential**

Fluid

**JOHN DEERE HY-GARD HYD/TRANS (39 QTS)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0225611</b>	JR0211183	JR0192250
Sample Date		Client Info		<b>16 Jul 2024</b>	10 Apr 2024	08 Nov 2023
Machine Age	hrs	Client Info		<b>2465</b>	1950	1475
Oil Age	hrs	Client Info		<b>515</b>	917	955
Filter Age	hrs	Client Info		<b>0</b>	0	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>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>95</b>	284	260
Iron	ppm	ASTM D5185m	>500	<b>128</b>	376	313
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	4	3
Nickel	ppm	ASTM D5185m	>10	<b>5</b>	17	15
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>3</b>	4	9
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	1
Copper	ppm	ASTM D5185m	>100	<b>98</b>	▲ 273	190
Tin	ppm	ASTM D5185m	>10	<b>3</b>	10	8
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

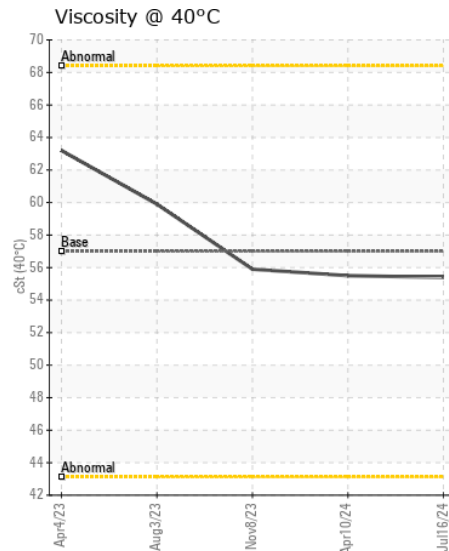
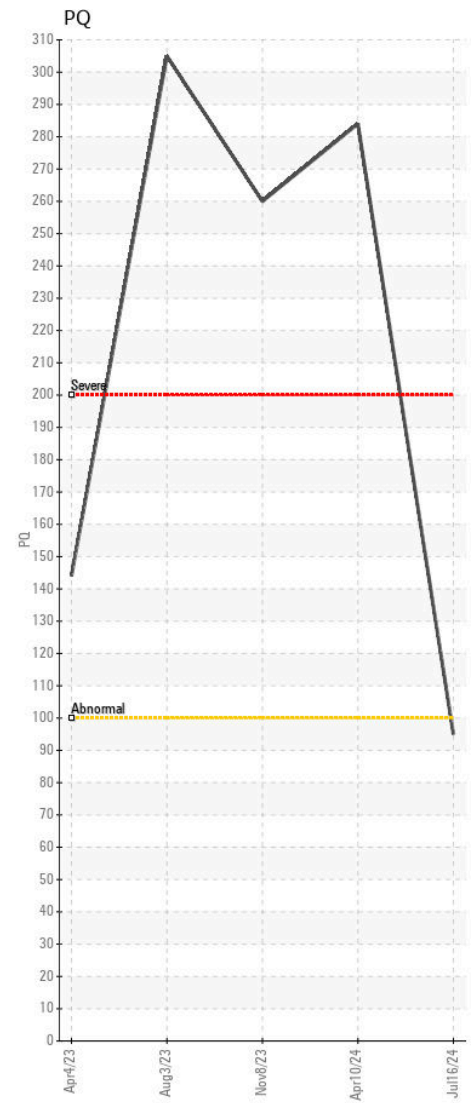
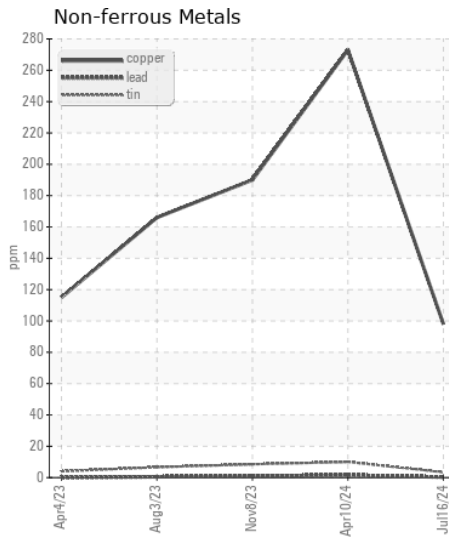
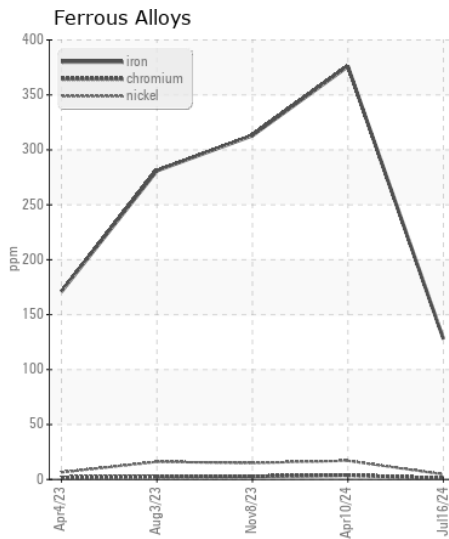
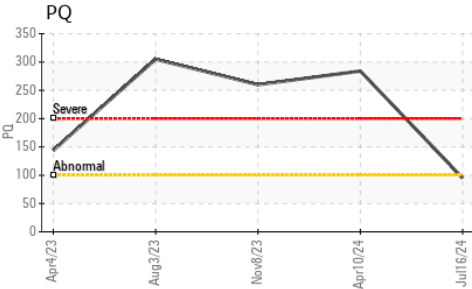
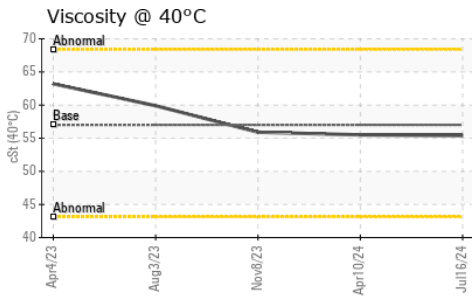
There is no indication of any contamination in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m	>75	<b>11</b>	25	32
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	2
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>MODER</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>0</b>	10	10
Boron	ppm	ASTM D5185m	6	<b>21</b>	57	46
Barium	ppm	ASTM D5185m	0	<b>&lt;1</b>	1	0
Molybdenum	ppm	ASTM D5185m	0	<b>9</b>	7	5
Manganese	ppm	ASTM D5185m		<b>10</b>	40	36
Magnesium	ppm	ASTM D5185m	145	<b>116</b>	84	97
Calcium	ppm	ASTM D5185m	3570	<b>3345</b>	3498	3477
Phosphorus	ppm	ASTM D5185m	1290	<b>921</b>	1207	1135
Zinc	ppm	ASTM D5185m	1640	<b>1232</b>	1278	1395
Sulfur	ppm	ASTM D5185m		<b>3842</b>	4614	3532
Visc @ 40°C	cSt	ASTM D445	57.0	<b>55.4</b>	55.5	55.9



Certificate L2367

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

Sample No. : JR0225611

Lab Number : 06239414

Unique Number : 11128248

Test Package : CONST ( Additional Tests: PQ )

Received : 17 Jul 2024

Tested : 18 Jul 2024

Diagnosed : 18 Jul 2024 - Wes Davis

JRE - MANASSAS PARK

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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)