



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



Area  
**[46991]**  
Machine Id  
**JOHN DEERE 310E 1DW310EXJNF714255**  
Component  
**Front Differential**  
Fluid  
**JOHN DEERE HY-GARD HYD/TRANS (37 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0217645</b>	JR0202985	JR0187858
Sample Date		Client Info		<b>22 May 2024</b>	01 Feb 2024	18 Sep 2023
Machine Age	hrs	Client Info		<b>2439</b>	1939	1448
Oil Age	hrs	Client Info		<b>500</b>	945	0
Filter Age	hrs	Client Info		<b>0</b>	945	0
Oil Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

PQ		ASTM D8184		<b>73</b>	226	103
Iron	ppm	ASTM D5185m	>500	<b>77</b>	259	153
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	5	3
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>1</b>	3	2
Lead	ppm	ASTM D5185m	>25	<b>0</b>	4	2
Copper	ppm	ASTM D5185m	>100	<b>60</b>	184	138
Tin	ppm	ASTM D5185m	>10	<b>2</b>	9	5
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

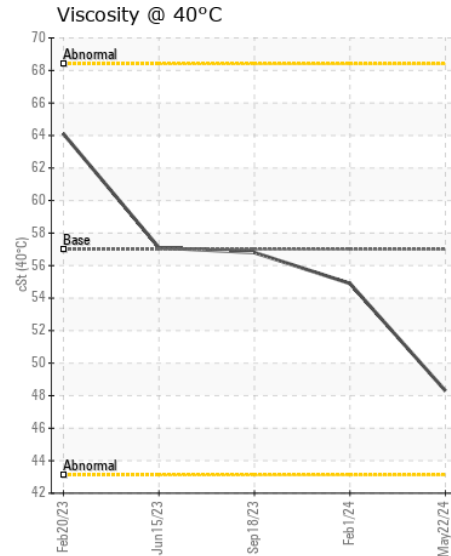
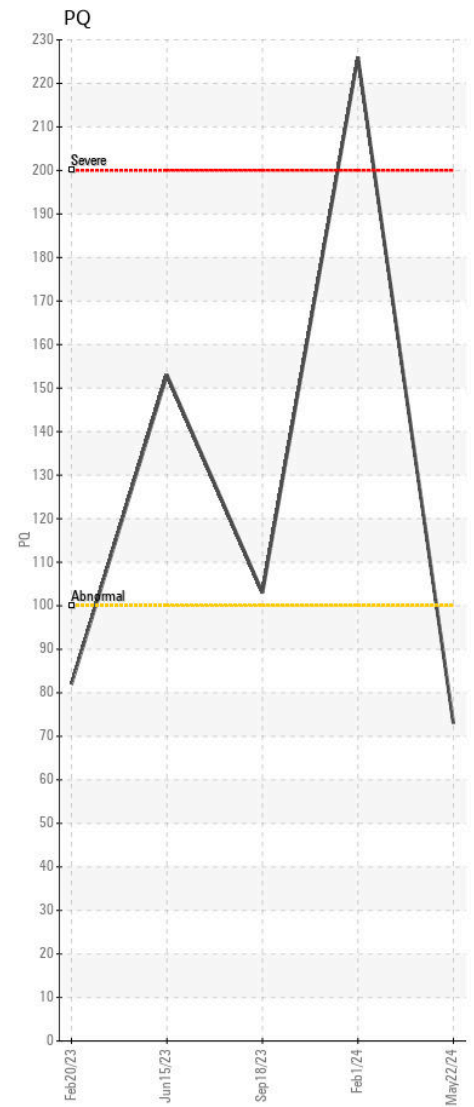
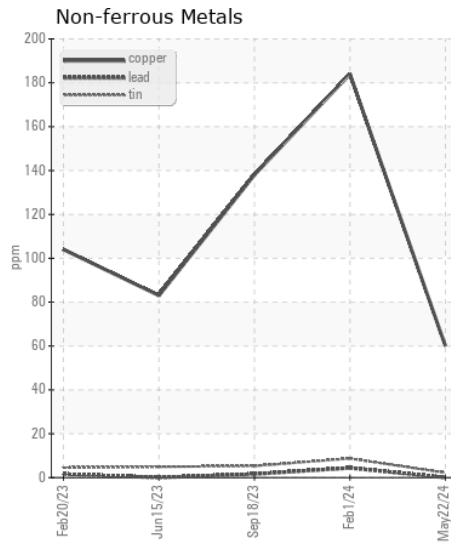
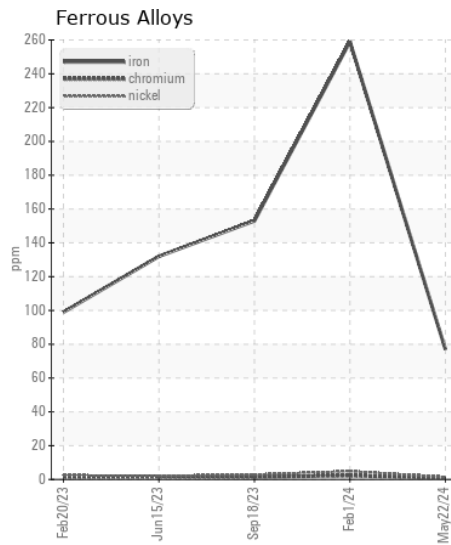
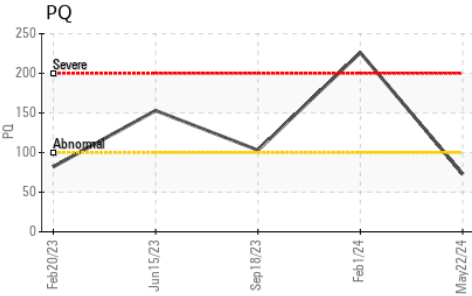
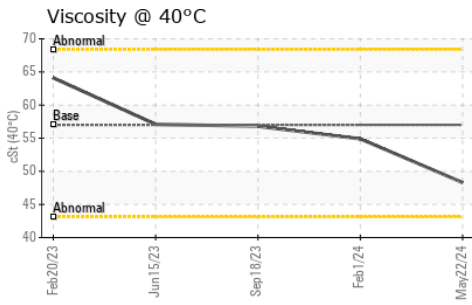
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>8</b>	17	12
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	1	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>	LIGHT	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.

Sodium	ppm	ASTM D5185m		<b>2</b>	13	10
Boron	ppm	ASTM D5185m	6	<b>14</b>	48	44
Barium	ppm	ASTM D5185m	0	<b>0</b>	3	0
Molybdenum	ppm	ASTM D5185m	0	<b>5</b>	5	5
Manganese	ppm	ASTM D5185m		<b>2</b>	6	4
Magnesium	ppm	ASTM D5185m	145	<b>109</b>	91	89
Calcium	ppm	ASTM D5185m	3570	<b>3350</b>	3472	3443
Phosphorus	ppm	ASTM D5185m	1290	<b>992</b>	1102	1010
Zinc	ppm	ASTM D5185m	1640	<b>1216</b>	1297	1289
Sulfur	ppm	ASTM D5185m		<b>3688</b>	3265	3989
Visc @ 40°C	cSt	ASTM D445	57.0	<b>48.3</b>	54.9	56.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0217645 **Received** : 23 May 2024  
**Lab Number** : 06189793 **Tested** : 29 May 2024  
**Unique Number** : 11046545 **Diagnosed** : 29 May 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)