



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

Machine Id  
**JOHN DEERE 644 X 1DW644XACPFW18652**  
 Component  
**Front Differential**  
 Fluid  
**TDH FLUID SAE 75W80 (--- GAL)**

### RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0213402</b>	JR0204809	JR0194506
Sample Date		Client Info		<b>11 May 2024</b>	25 Feb 2024	20 Dec 2023
Machine Age	hrs	Client Info		<b>2407</b>	1695	1175
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	SEVERE

### WEAR

Bearing and/or bushing wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>21</b>	17	22
Iron	ppm	ASTM D5185m	>500	<b>74</b>	76	75
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	3
Lead	ppm	ASTM D5185m	>25	<b>▲ 108</b>	▲ 92	▲ 126
Copper	ppm	ASTM D5185m	>100	<b>▲ 325</b>	▲ 257	▲ 685
Tin	ppm	ASTM D5185m	>10	<b>10</b>	9	▲ 61
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

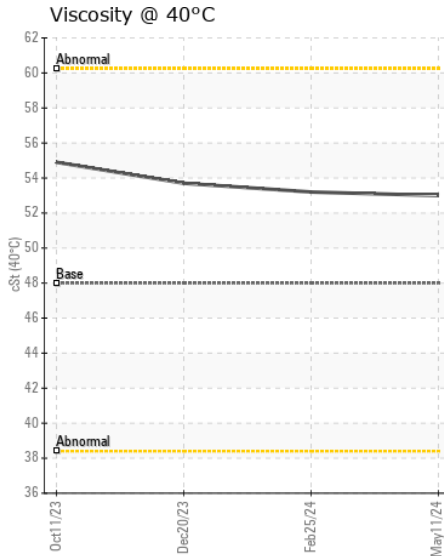
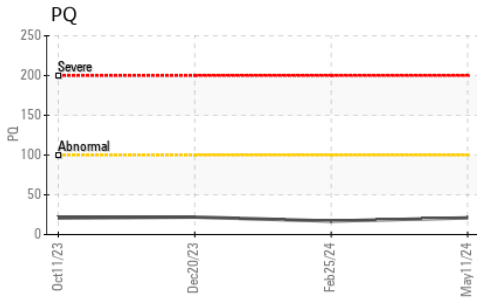
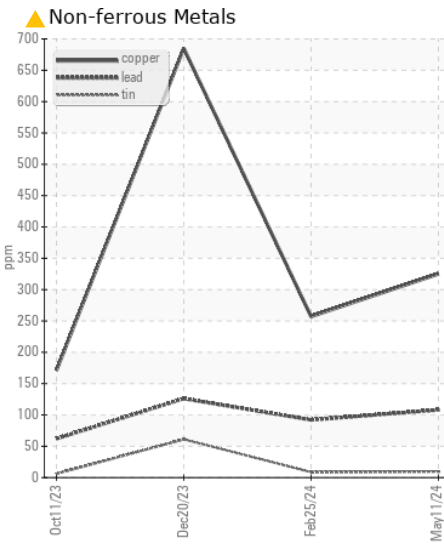
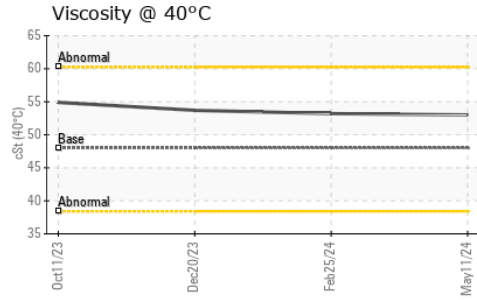
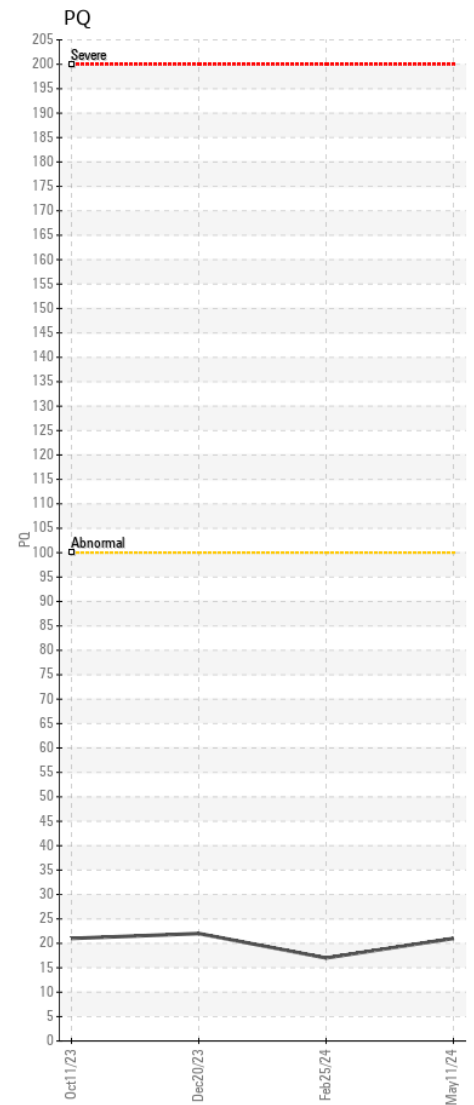
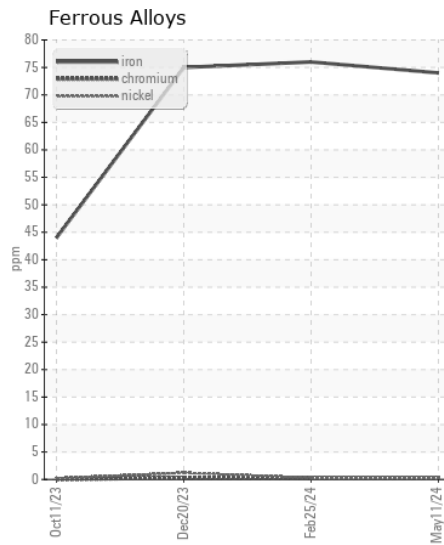
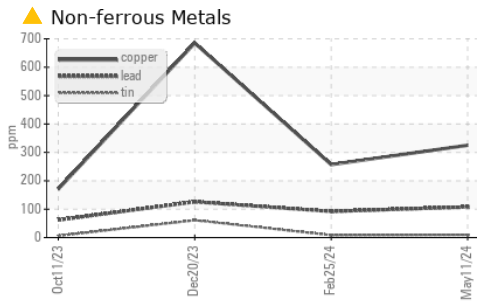
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>5</b>	11	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	3	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.

Sodium	ppm	ASTM D5185m		<b>7</b>	9	2
Boron	ppm	ASTM D5185m	10	<b>&lt;1</b>	3	2
Barium	ppm	ASTM D5185m	10	<b>5</b>	4	0
Molybdenum	ppm	ASTM D5185m	10	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>2</b>	2	2
Magnesium	ppm	ASTM D5185m	100	<b>84</b>	96	98
Calcium	ppm	ASTM D5185m	3500	<b>3104</b>	3354	3419
Phosphorus	ppm	ASTM D5185m	1150	<b>1137</b>	1009	1035
Zinc	ppm	ASTM D5185m	1150	<b>1119</b>	1211	1176
Sulfur	ppm	ASTM D5185m	5000	<b>4074</b>	3989	3975
Visc @ 40°C	cSt	ASTM D445	48	<b>53.0</b>	53.2	53.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0213402 **Received** : 10 May 2024  
**Lab Number** : 06175780 **Tested** : 13 May 2024  
**Unique Number** : 11021833 **Diagnosed** : 14 May 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GREENSBORO**  
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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)