



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



Machine Id  
**JOHN DEERE 244J LU244JX722841**  
Component  
**Front Right 6WD Hub**  
Fluid  
**JOHN DEERE GL-5 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0176602</b>	---	---
Sample Date		Client Info		<b>18 Oct 2023</b>	---	---
Machine Age	hrs	Client Info		<b>12906</b>	---	---
Oil Age	hrs	Client Info		<b>12906</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---

### WEAR

Gear wear is indicated.

PQ		ASTM D8184		<b>697</b>	---	---
Iron	ppm	ASTM D5185m	>200	<b>4548</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>39</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>8</b>	---	---
Titanium	ppm	ASTM D5185m		<b>15</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m		<b>317</b>	---	---
Lead	ppm	ASTM D5185m		<b>1</b>	---	---
Copper	ppm	ASTM D5185m		<b>6</b>	---	---
Tin	ppm	ASTM D5185m		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>MODER</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

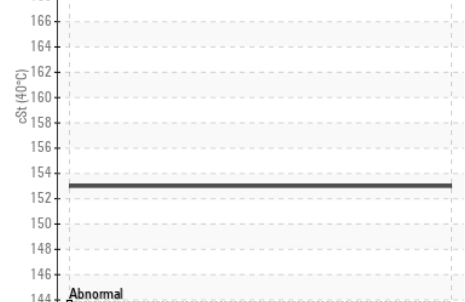
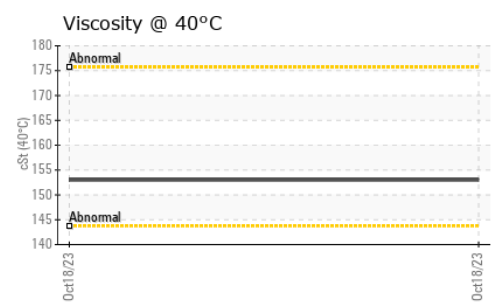
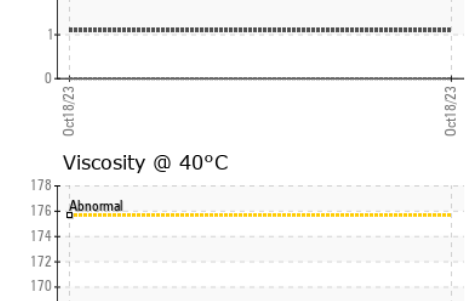
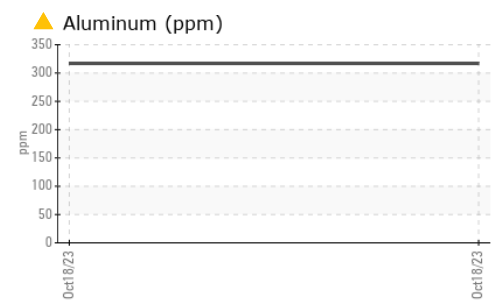
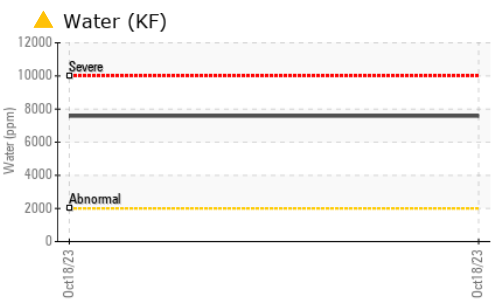
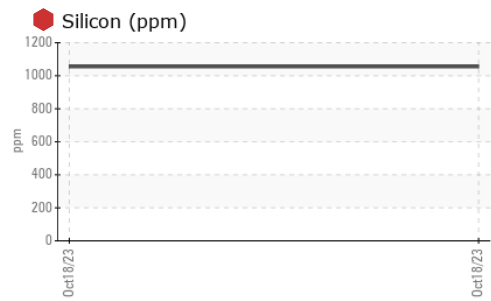
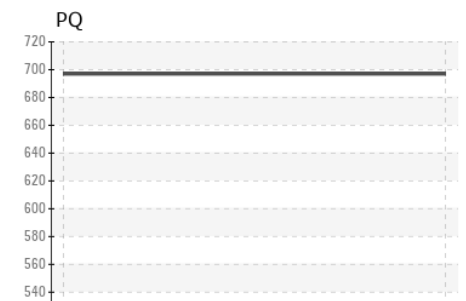
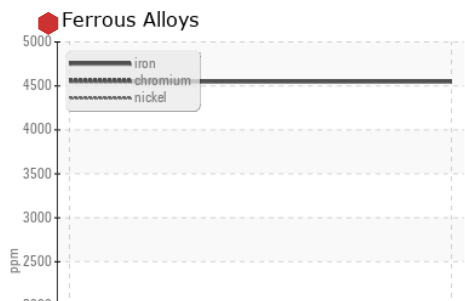
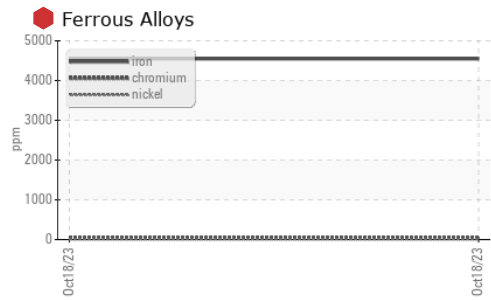
There is a moderate concentration of water present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m		<b>1055</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>131</b>	---	---
Water	%	ASTM D6304	>0.2	<b>0.758</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>7580</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>0.2%</b>	---	---

### FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		<b>86</b>	---	---
Boron	ppm	ASTM D5185m		<b>11</b>	---	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>4</b>	---	---
Manganese	ppm	ASTM D5185m		<b>36</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>33</b>	---	---
Calcium	ppm	ASTM D5185m		<b>278</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>2391</b>	---	---
Zinc	ppm	ASTM D5185m		<b>105</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>32603</b>	---	---
Visc @ 40°C	cSt	ASTM D445		<b>153</b>	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0176602 **Received** : 20 Oct 2023  
**Lab Number** : 05985784 **Tested** : 24 Oct 2023  
**Unique Number** : 10708446 **Diagnosed** : 24 Oct 2023 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: KF, PQ )

**GARNER - MARTIN MARIETTA**  
 1111 E GARNER RD  
 GARNER, NC  
 US 27529  
 Contact: JASON GILMORE  
 jason.gilmore@martinmarietta.com  
 T:  
 F:

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)