



Area  
**[44632]**  
 Machine Id  
**HITACHI ZX210 1FFDCJ70LEE330546**  
 Component  
**Left Final Drive**  
 Fluid  
**JOHN DEERE GL-5 80W90 (6 QTS)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

### WEAR

Gear wear is indicated.

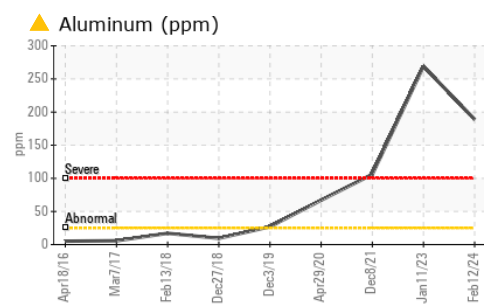
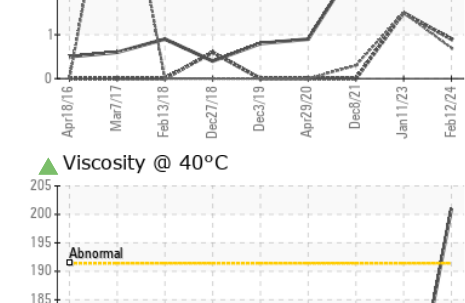
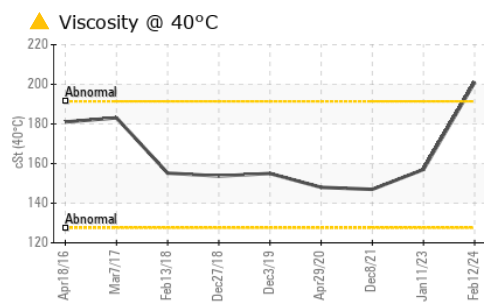
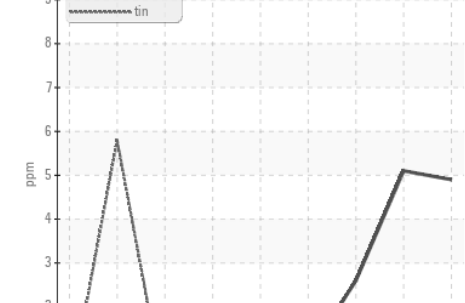
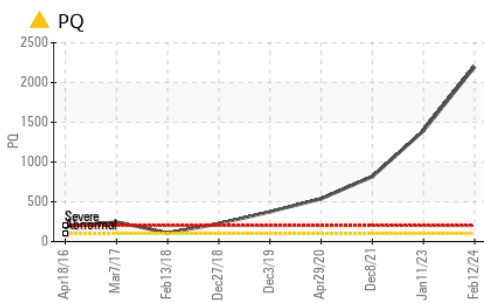
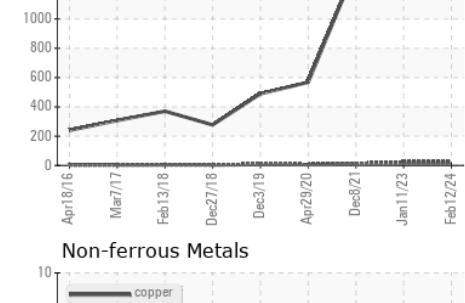
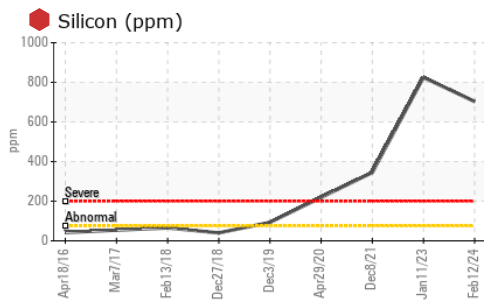
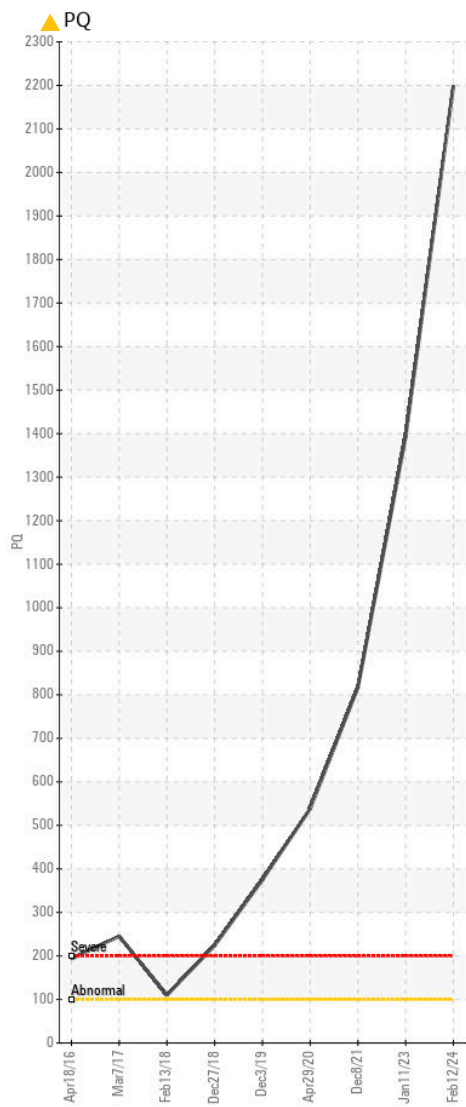
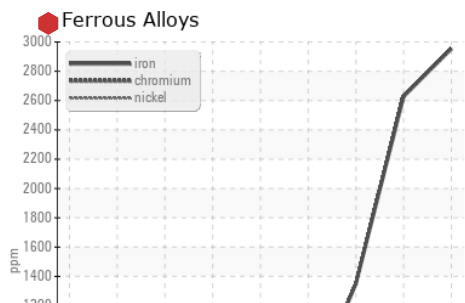
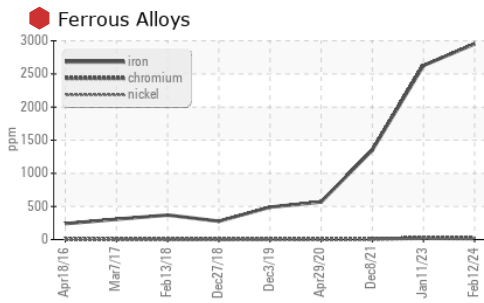
### CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0203264</b>	JR0157771	JR0110697
Sample Date		Client Info		<b>12 Feb 2024</b>	11 Jan 2023	08 Dec 2021
Machine Age	hrs	Client Info		<b>7239</b>	6545	5625
Oil Age	hrs	Client Info		<b>4675</b>	4901	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	None	Not Changd
Sample Status				<b>SEVERE</b>	SEVERE	SEVERE
PQ		ASTM D8184		<b>▲ 2199</b>	1393	817
Iron	ppm	ASTM D5185m	>500	<b>● 2953</b>	▲ 2627	▲ 1350
Chromium	ppm	ASTM D5185m	>10	<b>▲ 24</b>	▲ 23	▲ 11
Nickel	ppm	ASTM D5185m	>10	<b>4</b>	9	2
Titanium	ppm	ASTM D5185m		<b>16</b>	20	8
Silver	ppm	ASTM D5185m		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>25	<b>▲ 189</b>	▲ 269	▲ 106
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	0
Copper	ppm	ASTM D5185m	>50	<b>5</b>	5	3
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	2	<1
Vanadium	ppm	ASTM D5185m		<b>1</b>	1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>● 703</b>	● 825	● 345
Potassium	ppm	ASTM D5185m	>20	<b>54</b>	76	30
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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	>0.2	<b>NEG</b>	● 0.2%	NEG
Sodium	ppm	ASTM D5185m		<b>26</b>	28	16
Boron	ppm	ASTM D5185m		<b>11</b>	16	43
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	2	1
Manganese	ppm	ASTM D5185m		<b>24</b>	25	12
Magnesium	ppm	ASTM D5185m		<b>43</b>	61	26
Calcium	ppm	ASTM D5185m		<b>70</b>	137	65
Phosphorus	ppm	ASTM D5185m		<b>2208</b>	2277	2317
Zinc	ppm	ASTM D5185m		<b>31</b>	91	28
Sulfur	ppm	ASTM D5185m		<b>26038</b>	25056	22488
Visc @ 40°C	cSt	ASTM D445		<b>▲ 201</b>	157	147



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0203264 **Received** : 14 Feb 2024  
**Lab Number** : 06089705 **Tested** : 16 Feb 2024  
**Unique Number** : 10877150 **Diagnosed** : 16 Feb 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - MANASSAS PARK**  
 9107 OWENS DRIVE  
 MANASSAS PARK, VA  
 US 20111  
 Contact: DON VEST  
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 T: (703)631-8500  
 F: (703)631-4715

Certificate L2367  
 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)