



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

Machine Id  
**HITACHI 210-6 1ffdc571jmf341002**

Component  
**Right Final Drive**

Fluid  
**JOHN DEERE GL-5 80W90 (--- GAL)**

**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.

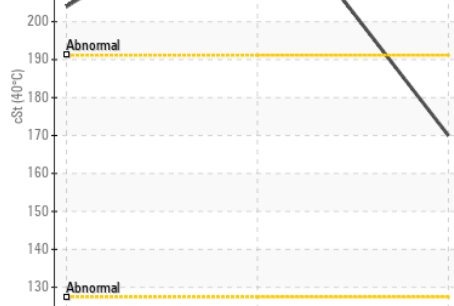
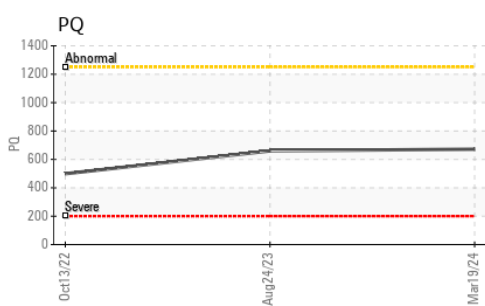
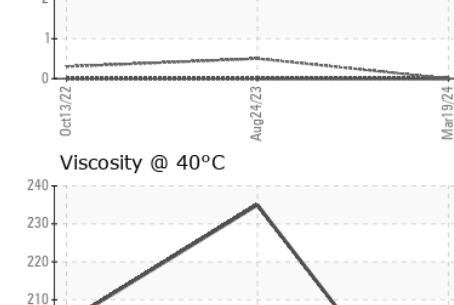
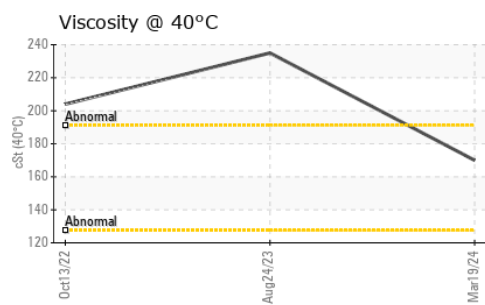
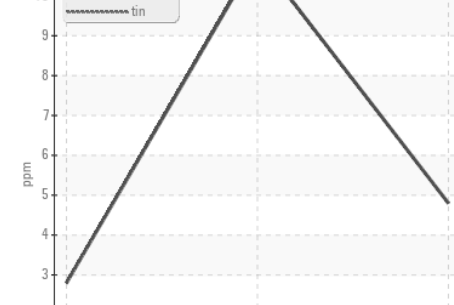
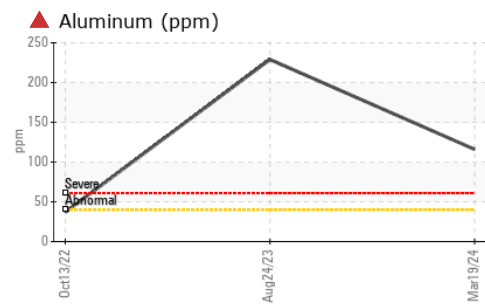
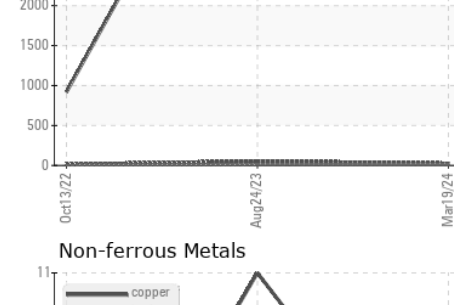
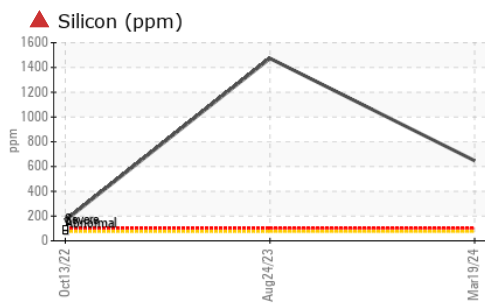
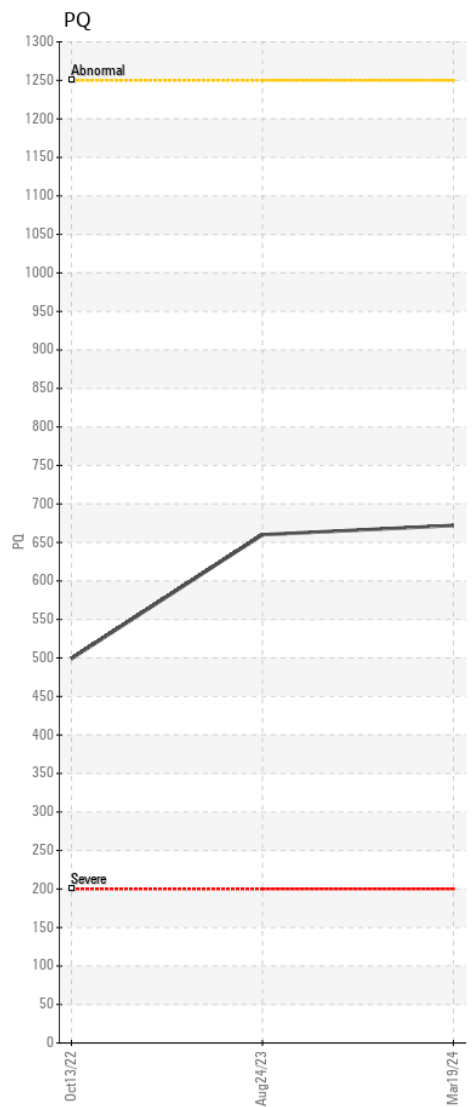
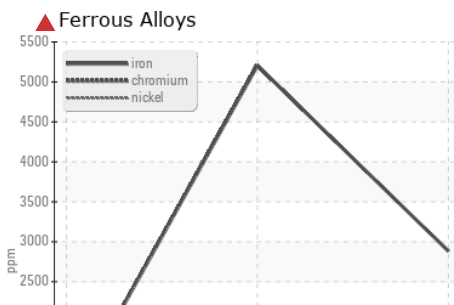
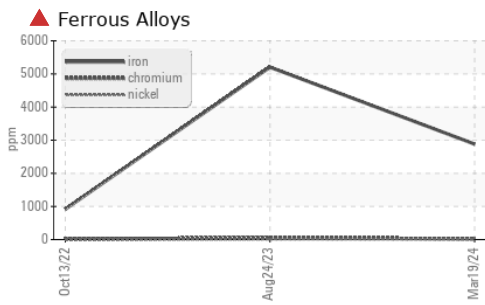
**CONTAMINATION**

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

**FLUID CONDITION**

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0204982</b>	JR0182607	JR0115687
Sample Date		Client Info		<b>19 Mar 2024</b>	24 Aug 2023	13 Oct 2022
Machine Age	hrs	Client Info		<b>2924</b>	2007	869
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	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	SEVERE	ABNORMAL
PQ		ASTM D8184	>1250	<b>672</b>	660	499
Iron	ppm	ASTM D5185m	>750	<b>▲ 2882</b>	▲ 5205	919
Chromium	ppm	ASTM D5185m	>9	<b>▲ 25</b>	▲ 53	13
Nickel	ppm	ASTM D5185m	>10	<b>5</b>	11	2
Titanium	ppm	ASTM D5185m		<b>11</b>	21	3
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>40	<b>▲ 116</b>	● 229	● 37
Lead	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>40	<b>5</b>	11	3
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	2	1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>▲ 647</b>	▲ 1473	▲ 164
Potassium	ppm	ASTM D5185m	>20	<b>22</b>	68	7
Water		WC Method	>0.075	<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	>0.075	<b>NEG</b>	NEG	NEG
Sodium	ppm	ASTM D5185m	>51	<b>14</b>	40	4
Boron	ppm	ASTM D5185m		<b>36</b>	90	64
Barium	ppm	ASTM D5185m		<b>3</b>	6	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	4	4
Manganese	ppm	ASTM D5185m		<b>24</b>	48	13
Magnesium	ppm	ASTM D5185m		<b>20</b>	19	0
Calcium	ppm	ASTM D5185m		<b>21</b>	60	101
Phosphorus	ppm	ASTM D5185m		<b>589</b>	538	502
Zinc	ppm	ASTM D5185m		<b>19</b>	49	39
Sulfur	ppm	ASTM D5185m		<b>21572</b>	25056	19188
Visc @ 40°C	cSt	ASTM D445		<b>170</b>	235	204



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0204982 **Received** : 20 Mar 2024  
**Lab Number** : 06123919 **Tested** : 21 Mar 2024  
**Unique Number** : 10938070 **Diagnosed** : 22 Mar 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - GREENSBORO**  
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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)