



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

Area  
**[W67130]**

Machine Id  
**HITACHI 470LC HCMJAG60C00060577**

Component  
**Left Final Drive**

Fluid  
**JOHN DEERE GL-5 80W90 (3 GAL)**

### RECOMMENDATION

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. ( Customer Sample Comment: W67130 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0215759</b>	JR0189068	JR0178041
Sample Date		Client Info		<b>20 May 2024</b>	05 Jan 2024	29 Aug 2023
Machine Age	hrs	Client Info		<b>8038</b>	8575	8296
Oil Age	hrs	Client Info		<b>6509</b>	6788	1787
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	NORMAL	ABNORMAL

### WEAR

Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>1157</b>	134	123
Iron	ppm	ASTM D5185m	>500	<b>▲ 5644</b>	520	▲ 1167
Chromium	ppm	ASTM D5185m	>10	<b>▲ 47</b>	6	▲ 10
Nickel	ppm	ASTM D5185m	>10	<b>5</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>▲ 27</b>	1	3
Silver	ppm	ASTM D5185m		<b>1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>● 256</b>	23	● 74
Lead	ppm	ASTM D5185m	>25	<b>1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>10</b>	1	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>2</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	▲ MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

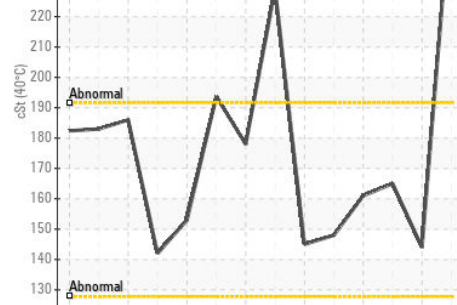
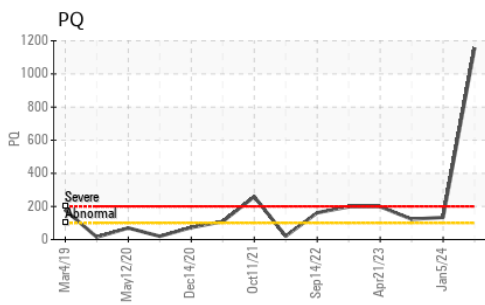
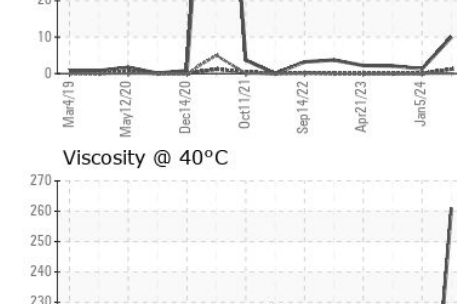
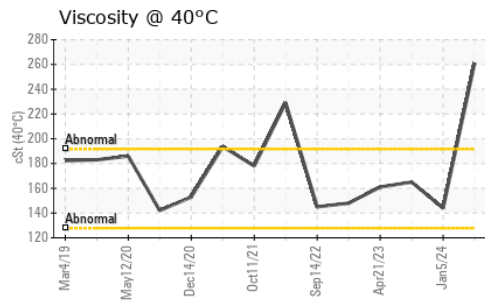
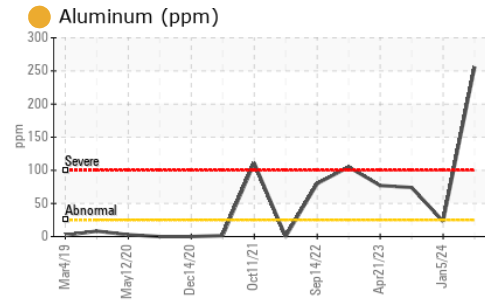
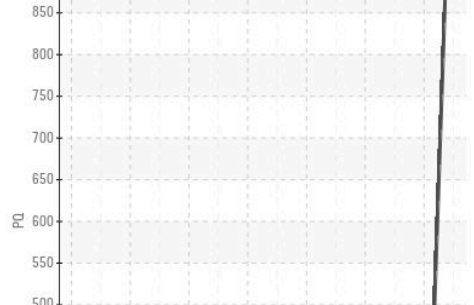
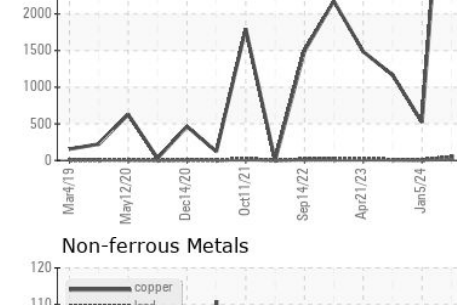
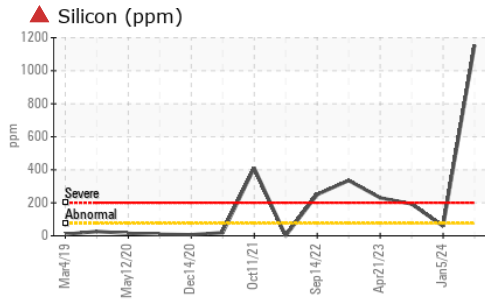
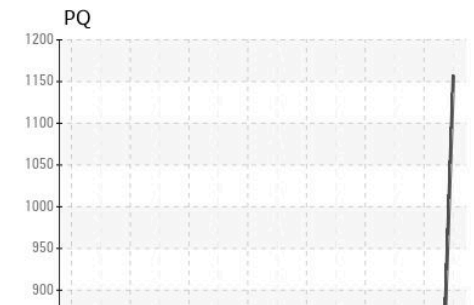
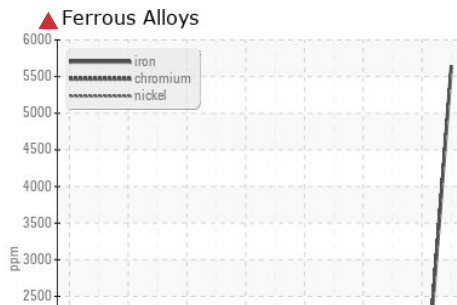
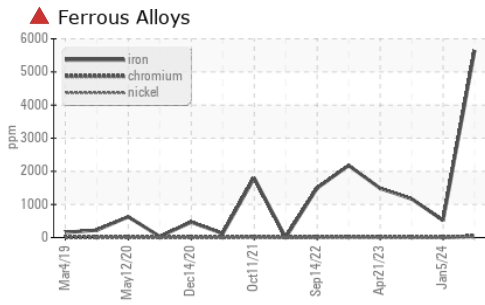
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	<b>▲ 1154</b>	58	▲ 193
Potassium	ppm	ASTM D5185m	>20	<b>41</b>	4	8
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>	NONE	▲ MODER
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>	NEG	NEG

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>24</b>	2	8
Boron	ppm	ASTM D5185m		<b>52</b>	7	34
Barium	ppm	ASTM D5185m		<b>2</b>	1	2
Molybdenum	ppm	ASTM D5185m		<b>5</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>46</b>	6	9
Magnesium	ppm	ASTM D5185m		<b>20</b>	<1	7
Calcium	ppm	ASTM D5185m		<b>30</b>	7	18
Phosphorus	ppm	ASTM D5185m		<b>820</b>	341	970
Zinc	ppm	ASTM D5185m		<b>16</b>	8	10
Sulfur	ppm	ASTM D5185m		<b>21672</b>	17490	23460
Visc @ 40°C	cSt	ASTM D445		<b>261</b>	144	165



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0215759 **Received** : 24 May 2024  
**Lab Number** : 06191315 **Tested** : 29 May 2024  
**Unique Number** : 11048067 **Diagnosed** : 29 May 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

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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)