



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

Area  
**[W8423]**  
 Machine Id  
**HITACHI 210LC-6 1FFDC571LJF340529**  
 Component  
**Left Final Drive**  
 Fluid  
**JOHN DEERE GL-5 80W90 (2 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: W8423 )

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0183124</b>	JR0141107	JR0140597
Sample Date		Client Info		<b>30 Jan 2024</b>	01 Aug 2023	10 Jan 2023
Machine Age	hrs	Client Info		<b>4001</b>	3505	2943
Oil Age	hrs	Client Info		<b>2466</b>	2532	2435
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>	SEVERE	ABNORMAL

### WEAR

Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		<b>2463</b>	2064	450
Iron	ppm	ASTM D5185m	>500	<b>3820</b>	3507	855
Chromium	ppm	ASTM D5185m	>10	<b>33</b>	30	7
Nickel	ppm	ASTM D5185m	>10	<b>7</b>	6	2
Titanium	ppm	ASTM D5185m		<b>11</b>	10	4
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>57</b>	52	32
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>10</b>	8	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	MODER	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.

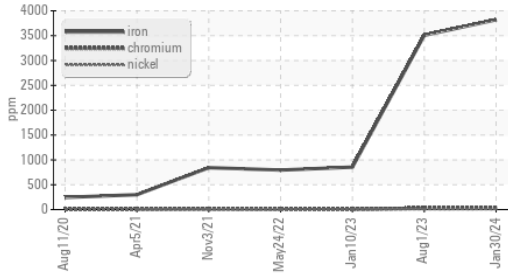
Silicon	ppm	ASTM D5185m	>75	<b>787</b>	743	233
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	17	4
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

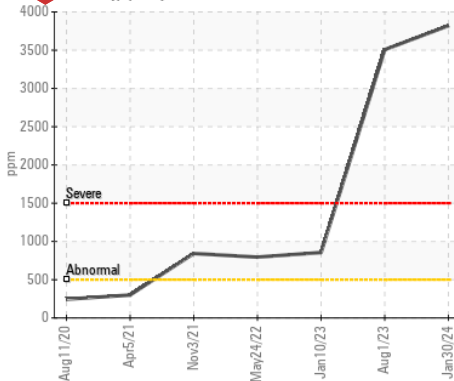
The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	2
Boron	ppm	ASTM D5185m		<b>35</b>	33	4
Barium	ppm	ASTM D5185m		<b>3</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>5</b>	2	<1
Manganese	ppm	ASTM D5185m		<b>33</b>	31	7
Magnesium	ppm	ASTM D5185m		<b>12</b>	3	3
Calcium	ppm	ASTM D5185m		<b>21</b>	13	61
Phosphorus	ppm	ASTM D5185m		<b>322</b>	368	353
Zinc	ppm	ASTM D5185m		<b>21</b>	27	8
Sulfur	ppm	ASTM D5185m		<b>17055</b>	19749	21964
Visc @ 40°C	cSt	ASTM D445		<b>168</b>	162	141

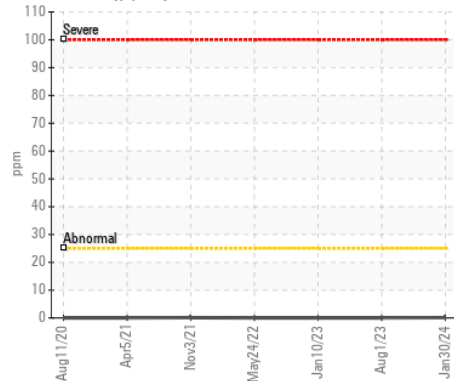
**Ferrous Alloys**



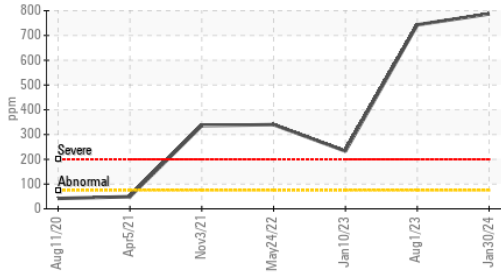
**Iron (ppm)**



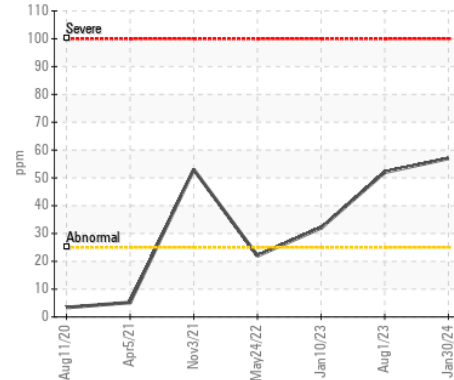
**Lead (ppm)**



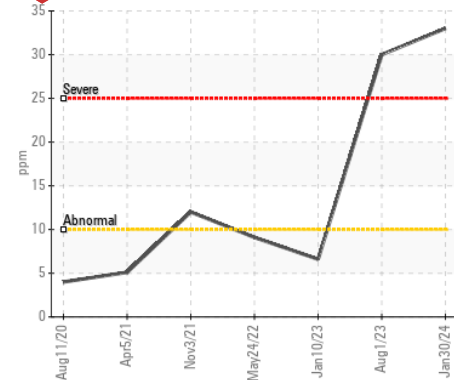
**Silicon (ppm)**



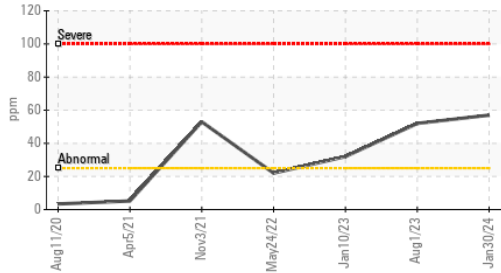
**Aluminum (ppm)**



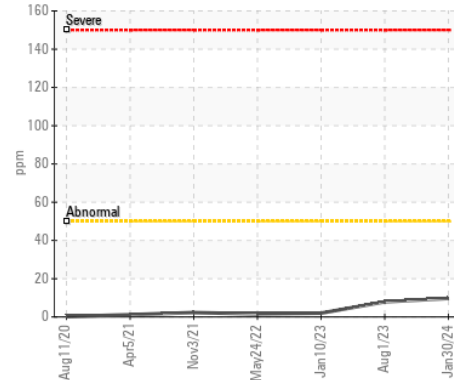
**Chromium (ppm)**



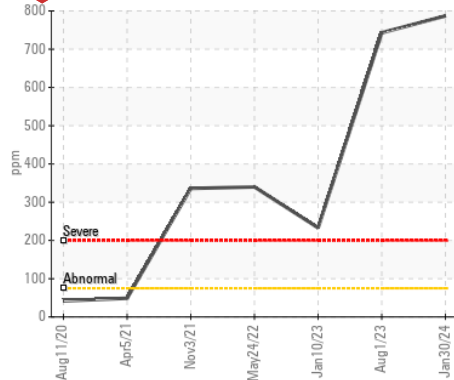
**Aluminum (ppm)**



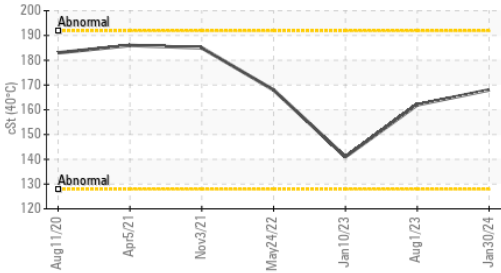
**Copper (ppm)**



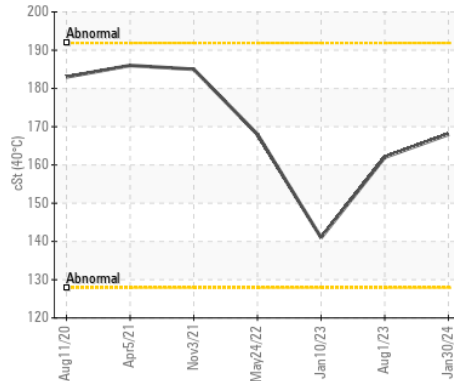
**Silicon (ppm)**



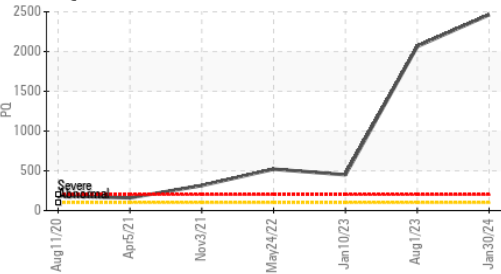
**Viscosity @ 40°C**



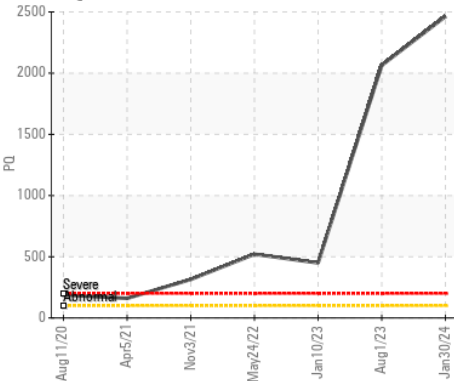
**Viscosity @ 40°C**



**PQ**



**PQ**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0183124 **Received** : 01 Feb 2024  
**Lab Number** : 06077166 **Diagnosed** : 03 Feb 2024  
**Unique Number** : 10859257 **Diagnostician** : Don Baldrige  
**Test Package** : MOBCE ( Additional Tests: PQ )

**JRE - HOPE MILLS/FAYETTEVILLE**  
 5039 HWY 301 SOUTH  
 HOPE MILLS, NC  
 US 28348  
 Contact: FAYETTEVILLE SHOP  
 stephen.mullis@jamesriverequipment.com; panastasio@wearcheck.com

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)

T:  
F: