



WEAR	<b>ATTENTION</b>
CONTAMINATION	<b>ABNORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**HITACHI 470 HCMJAA70K00030813**  
 Component  
**Right Final Drive**  
 Fluid  
**JOHN DEERE GL-5 80W90 (--- QTS)**

### 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. Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

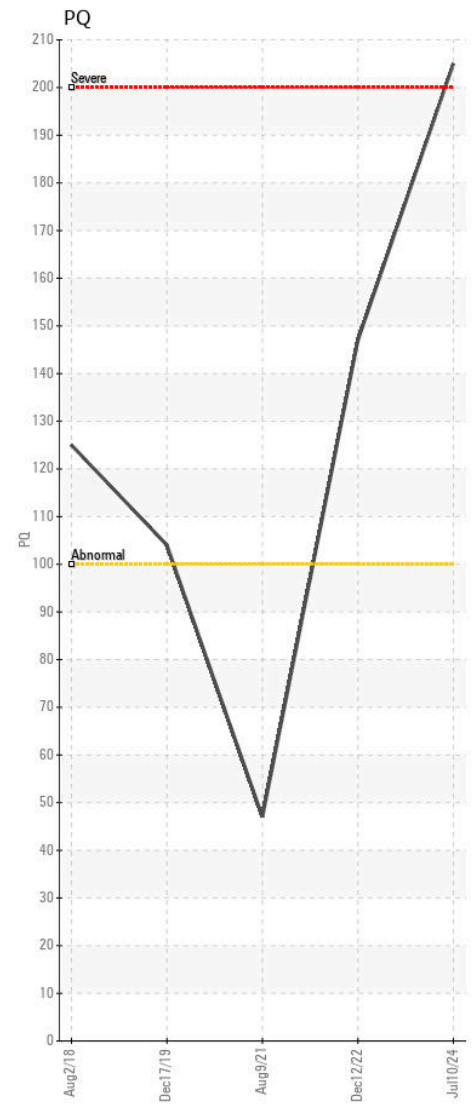
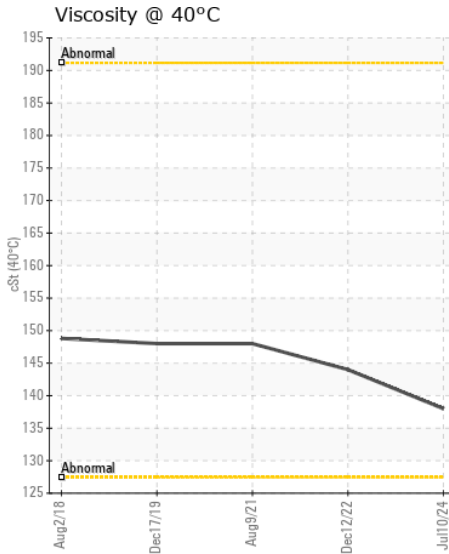
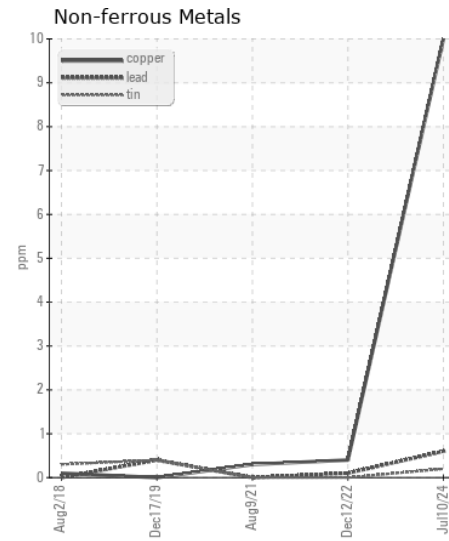
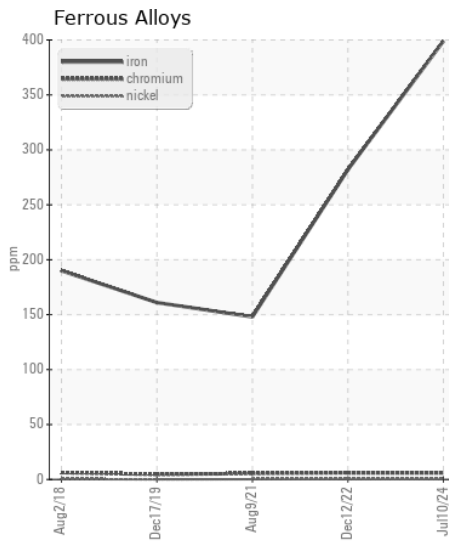
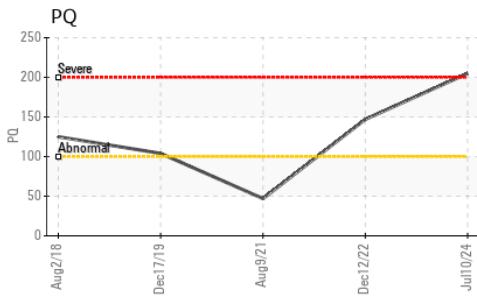
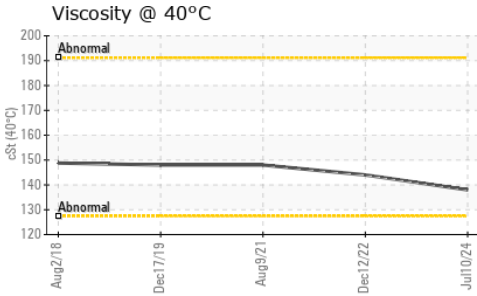
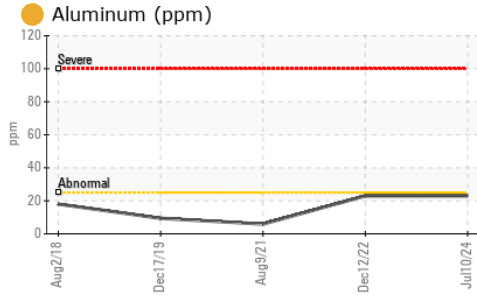
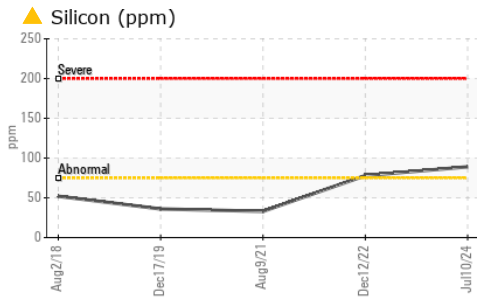
### CONTAMINATION

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

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>JR0224436</b>	JR0147213	JR0088554
Sample Date		Client Info		<b>10 Jul 2024</b>	12 Dec 2022	09 Aug 2021
Machine Age	hrs	Client Info		<b>13968</b>	11953	9958
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>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	N/A
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL
PQ		ASTM D8184		<b>205</b>	147	47
Iron	ppm	ASTM D5185m	>500	<b>399</b>	282	148
Chromium	ppm	ASTM D5185m	>10	<b>6</b>	6	5
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>2</b>	2	1
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>23</b>	23	6
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>10</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>89</b>	78	33
Potassium	ppm	ASTM D5185m	>20	<b>16</b>	6	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
Sodium	ppm	ASTM D5185m		<b>2</b>	4	4
Boron	ppm	ASTM D5185m		<b>14</b>	45	30
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>4</b>	3	2
Magnesium	ppm	ASTM D5185m		<b>8</b>	6	5
Calcium	ppm	ASTM D5185m		<b>106</b>	33	62
Phosphorus	ppm	ASTM D5185m		<b>618</b>	984	2438
Zinc	ppm	ASTM D5185m		<b>41</b>	11	6
Sulfur	ppm	ASTM D5185m		<b>19963</b>	25056	28402
Visc @ 40°C	cSt	ASTM D445		<b>138</b>	144	148



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0224436 **Received** : 11 Jul 2024  
**Lab Number** : 06234071 **Tested** : 12 Jul 2024  
**Unique Number** : 11122905 **Diagnosed** : 14 Jul 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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)

**JRE - ASHLAND**  
 11047 LEADBETTER RD  
 ASHLAND, VA  
 US 23005  
 Contact: DAVID ZIEG  
 dzieg@jamesriverequipment.com  
 T: (804)798-6001  
 F: (804)798-0292