



Machine Id  
**HITACHI 470 HCMJAA70C00030815**  
 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. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### WEAR

Gear wear is indicated.

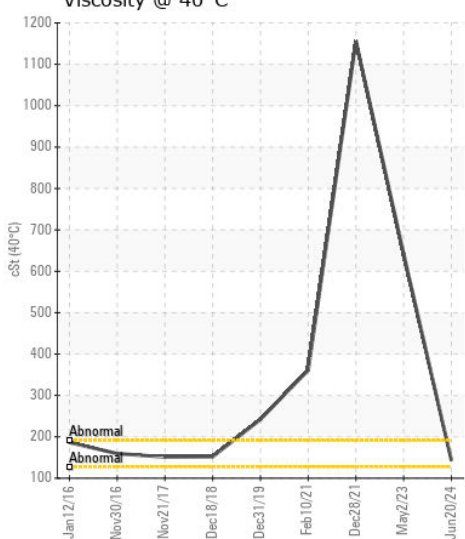
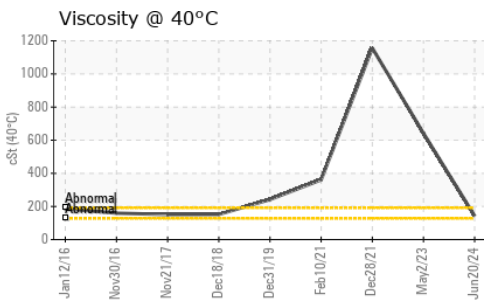
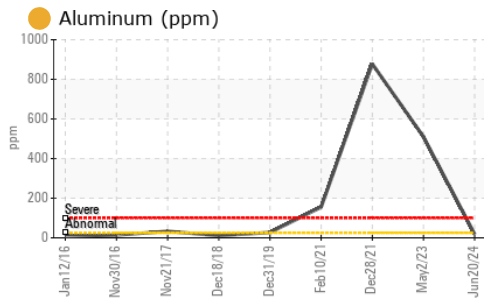
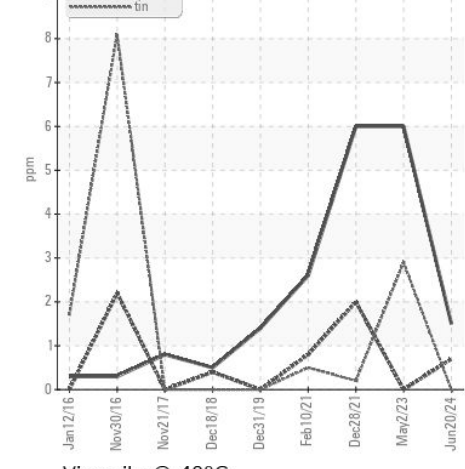
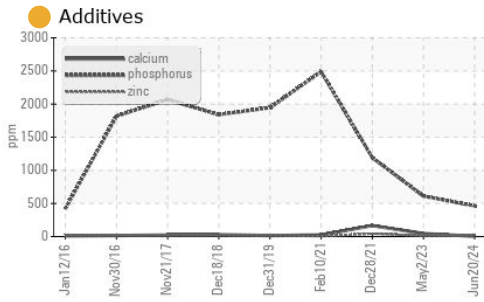
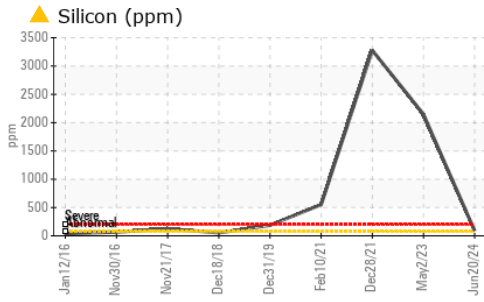
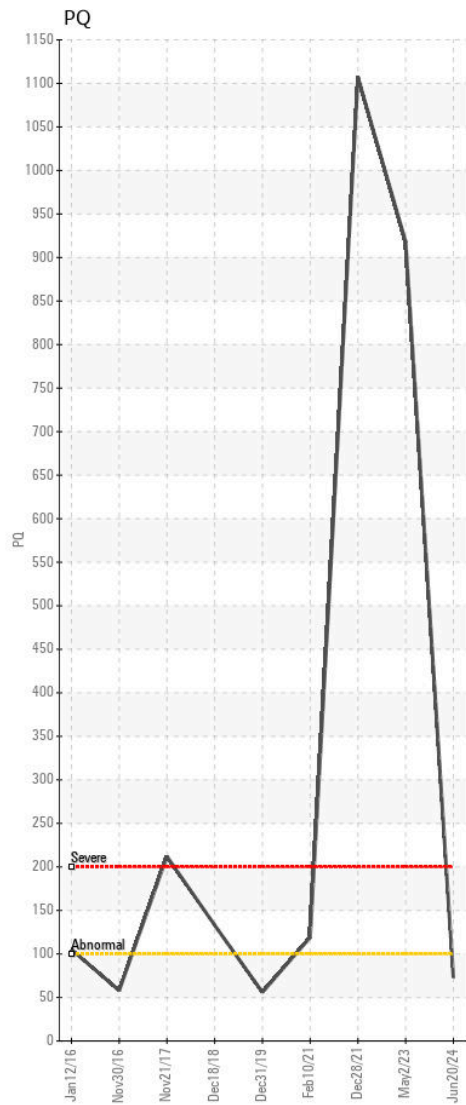
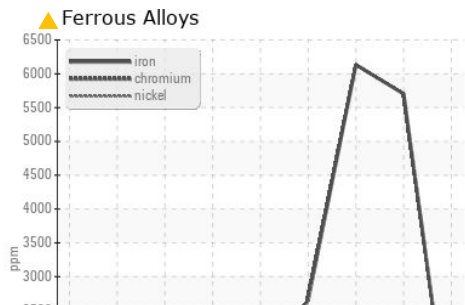
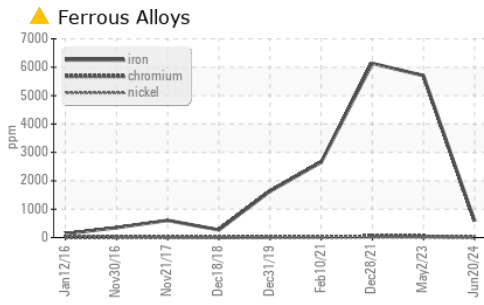
### CONTAMINATION

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>JR0211843</b>	JR0147668	JR0106183
Sample Date		Client Info		<b>20 Jun 2024</b>	02 May 2023	28 Dec 2021
Machine Age	hrs	Client Info		<b>17963</b>	15979	13989
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>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	SEVERE	SEVERE
PQ		ASTM D8184		<b>73</b>	918	1107
Iron	ppm	ASTM D5185m	>500	<b>▲ 579</b>	▲ 5702	▲ 6135
Chromium	ppm	ASTM D5185m	>10	<b>7</b>	▲ 44	▲ 46
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	4	7
Titanium	ppm	ASTM D5185m		<b>2</b>	24	54
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>● 19</b>	● 510	● 878
Lead	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	2
Copper	ppm	ASTM D5185m	>50	<b>2</b>	6	6
Tin	ppm	ASTM D5185m	>10	<b>0</b>	3	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	2	3
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>▲ 92</b>	▲ 2148	▲ 3278
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	129	217
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>	▲ 0.2%	▲ 0.2%
Sodium	ppm	ASTM D5185m		<b>0</b>	34	62
Boron	ppm	ASTM D5185m		<b>12</b>	30	66
Barium	ppm	ASTM D5185m		<b>1</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>2</b>	5	4
Manganese	ppm	ASTM D5185m		<b>6</b>	42	48
Magnesium	ppm	ASTM D5185m		<b>2</b>	23	40
Calcium	ppm	ASTM D5185m		<b>4</b>	45	166
Phosphorus	ppm	ASTM D5185m		<b>462</b>	611	1192
Zinc	ppm	ASTM D5185m		<b>● 11</b>	11	44
Sulfur	ppm	ASTM D5185m		<b>19958</b>	36199	35118
Visc @ 40°C	cSt	ASTM D445		<b>143</b>	▲ 642	▲ 1156



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211843 **Received** : 25 Jun 2024  
**Lab Number** : 06219965 **Tested** : 26 Jun 2024  
**Unique Number** : 11098162 **Diagnosed** : 26 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

**JRE - ASHLAND**  
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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)