



Area  
**[05W46063]**  
Machine Id  
**HITACHI PM061149**  
Component  
**Left Final Drive**  
Fluid  
**JOHN DEERE GL-5 80W90 (9 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. We recommend an early resample to monitor this condition.

### WEAR

Gear wear is indicated.

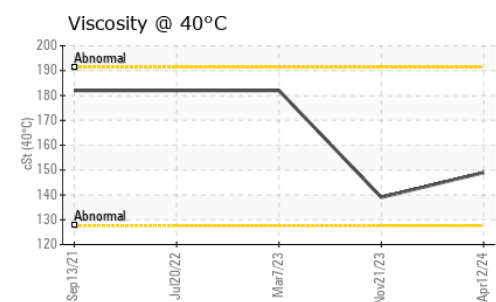
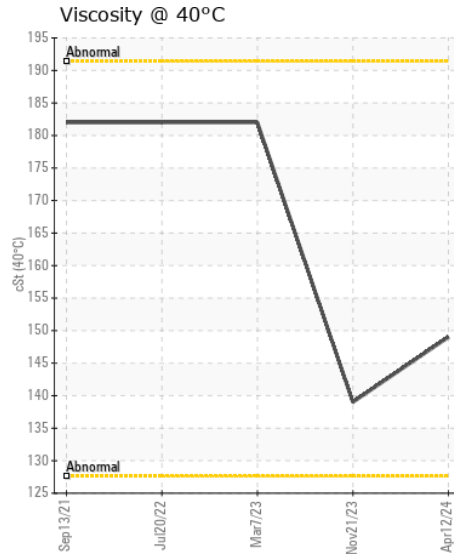
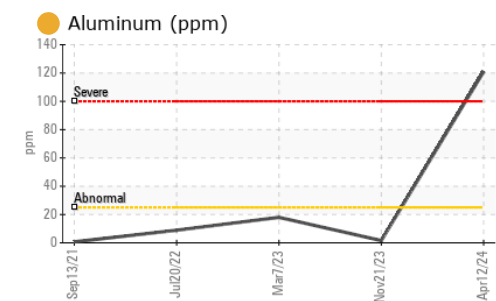
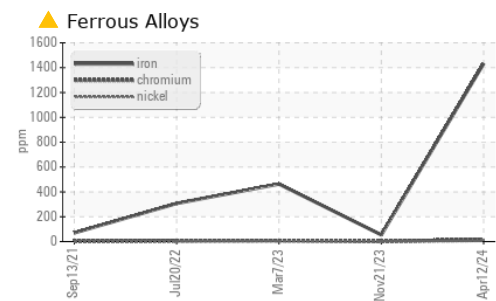
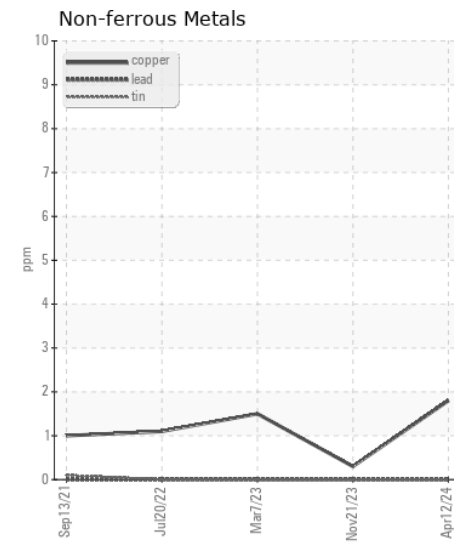
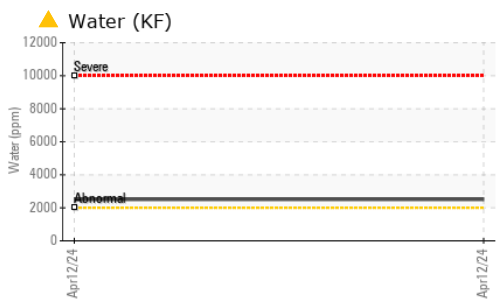
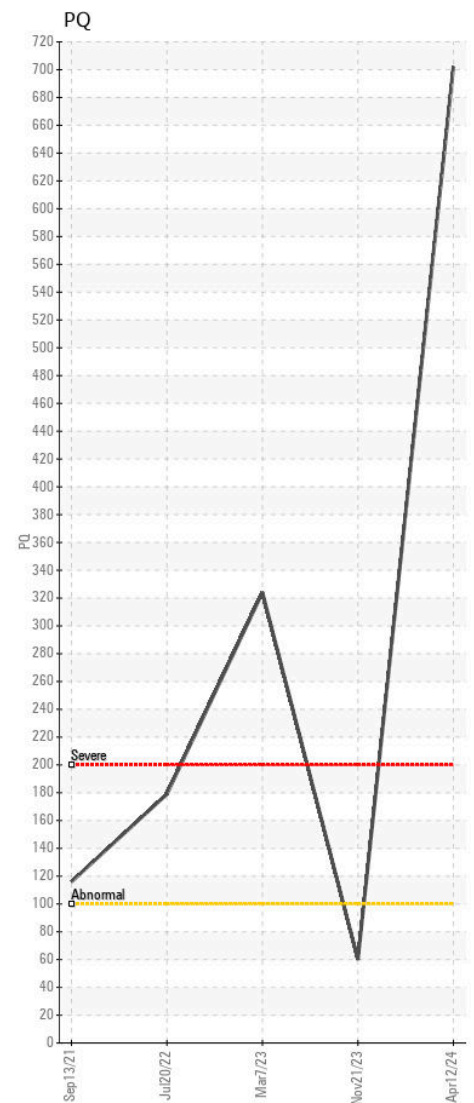
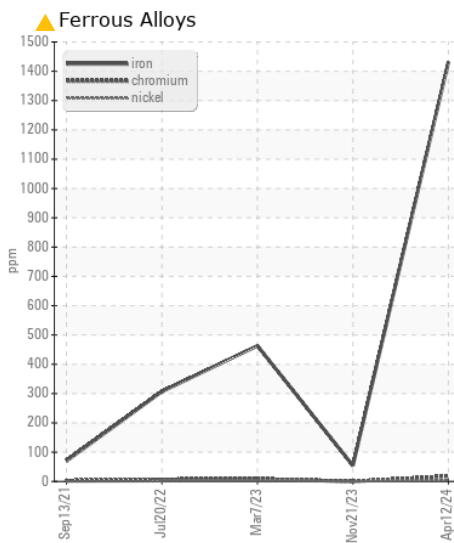
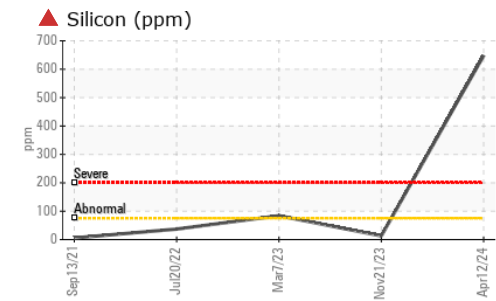
### CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil.

### 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>JR0211285</b>	JR0196080	JR0163016
Sample Date		Client Info		<b>12 Apr 2024</b>	21 Nov 2023	07 Mar 2023
Machine Age	hrs	Client Info		<b>3018</b>	2475	1936
Oil Age	hrs	Client Info		<b>1000</b>	539	1936
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>N/A</b>	None	N/A
Sample Status				<b>SEVERE</b>	NORMAL	ABNORMAL
PQ		ASTM D8184		<b>702</b>	60	324
Iron	ppm	ASTM D5185m	>500	<b>▲ 1432</b>	54	463
Chromium	ppm	ASTM D5185m	>10	<b>▲ 18</b>	<1	9
Nickel	ppm	ASTM D5185m	>10	<b>5</b>	0	2
Titanium	ppm	ASTM D5185m		<b>16</b>	<1	2
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>● 121</b>	2	● 18
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	<1	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>▲ 648</b>	13	▲ 84
Potassium	ppm	ASTM D5185m	>20	<b>34</b>	0	11
Water	%	ASTM D6304	>0.2	<b>▲ 0.251</b>	---	---
ppm Water	ppm	ASTM D6304	>2000	<b>▲ 2510</b>	---	---
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>▲ 0.2%</b>	NEG	NEG
Sodium	ppm	ASTM D5185m		<b>9</b>	<1	0
Boron	ppm	ASTM D5185m		<b>96</b>	8	51
Barium	ppm	ASTM D5185m		<b>0</b>	0	4
Molybdenum	ppm	ASTM D5185m		<b>1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>15</b>	<1	7
Magnesium	ppm	ASTM D5185m		<b>19</b>	0	4
Calcium	ppm	ASTM D5185m		<b>63</b>	36	21
Phosphorus	ppm	ASTM D5185m		<b>807</b>	362	489
Zinc	ppm	ASTM D5185m		<b>25</b>	7	36
Sulfur	ppm	ASTM D5185m		<b>19659</b>	18730	14679
Visc @ 40°C	cSt	ASTM D445		<b>149</b>	139	182



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211285 **Received** : 16 Apr 2024  
**Lab Number** : 06151322 **Tested** : 19 Apr 2024  
**Unique Number** : 10981400 **Diagnosed** : 19 Apr 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: KF, PQ )

**FITZGERALD EXCAVATING**  
 PO BOX 2168  
 WINCHESTER, VA  
 US 22604  
 Contact: Service Manager

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)

T:  
F: