



Machine Id  
**JOHN DEERE 180G 1FF180GXEJF020853**  
 Component  
**Rear Right Final Drive**  
 Fluid  
**JOHN DEERE GL-5 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check for the source of water entry. We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. ( Customer Sample Comment: W13167 )

### WEAR

Gear wear is indicated.

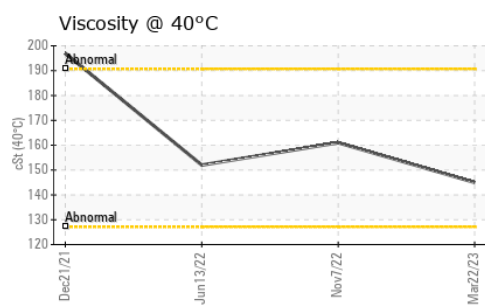
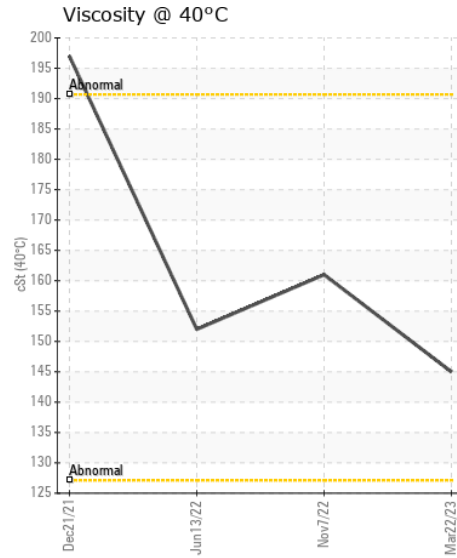
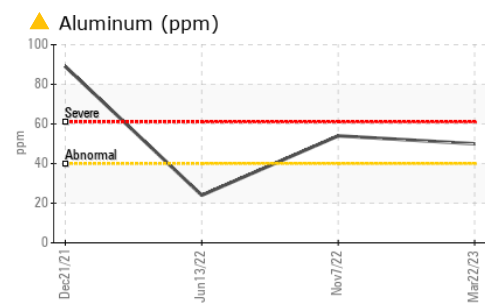
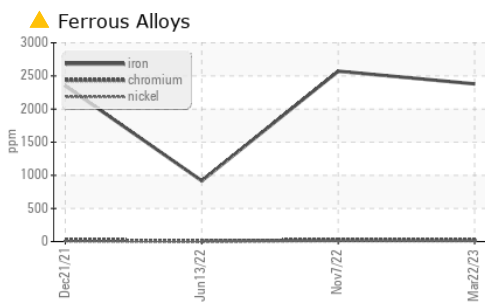
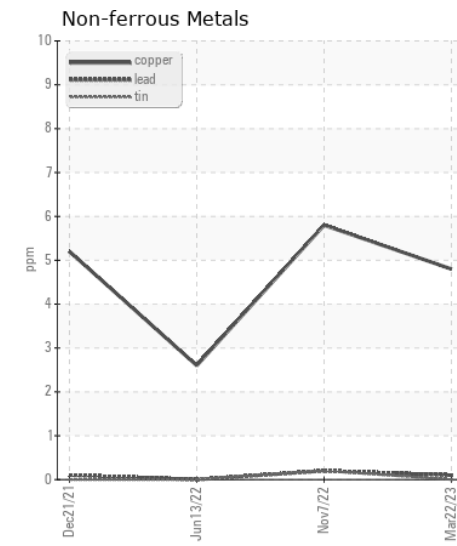
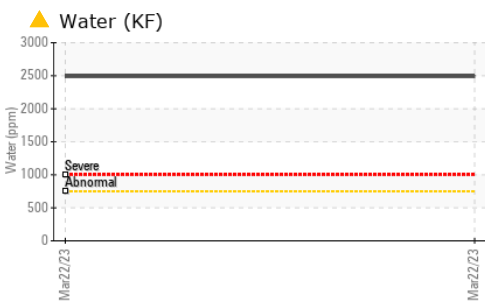
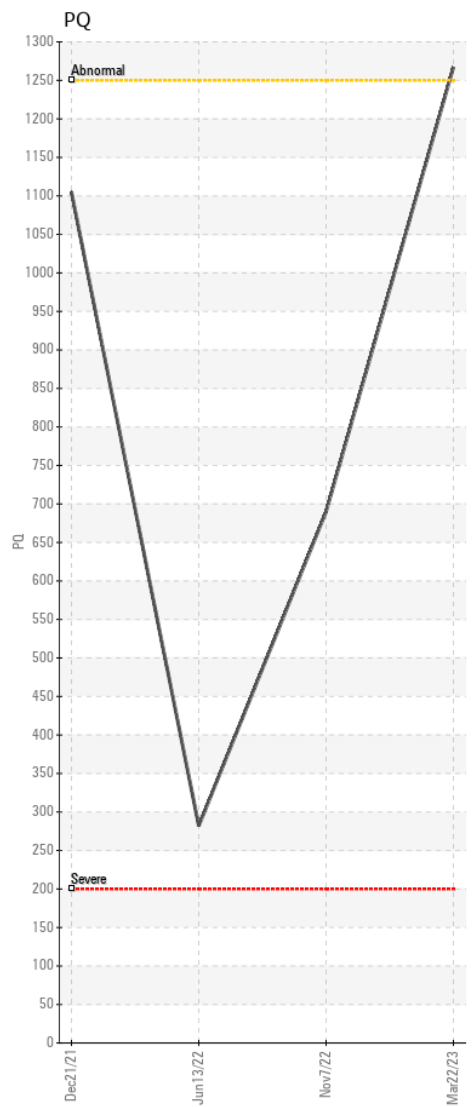
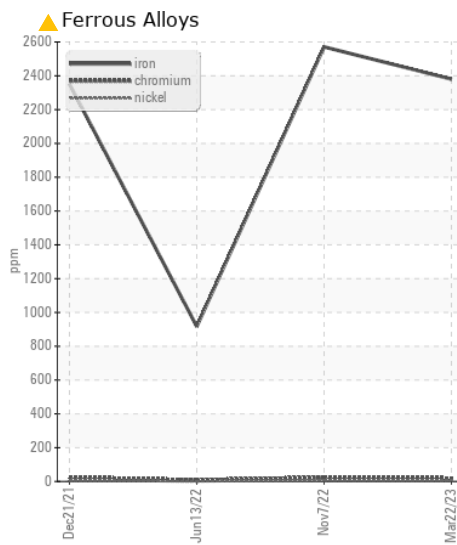
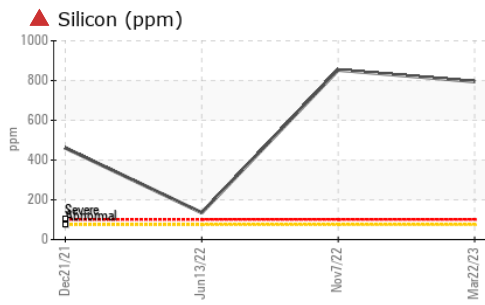
### CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate 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>JR0161043</b>	JR0136235	JR0121740
Sample Date		Client Info		<b>22 Mar 2023</b>	07 Nov 2022	13 Jun 2022
Machine Age	hrs	Client Info		<b>3521</b>	3019	2474
Oil Age	hrs	Client Info		<b>1572</b>	1070	525
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	SEVERE	ABNORMAL
PQ		ASTM D8184	>1250	<b>1267</b>	690	282
Iron	ppm	ASTM D5185m	>750	<b>▲ 2380</b>	▲ 2571	▲ 917
Chromium	ppm	ASTM D5185m	>9	<b>▲ 19</b>	▲ 24	8
Nickel	ppm	ASTM D5185m	>10	<b>5</b>	6	<1
Titanium	ppm	ASTM D5185m		<b>11</b>	▲ 12	2
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>▲ 50</b>	▲ 54	24
Lead	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>40	<b>5</b>	6	3
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>MODER</b>	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	<b>▲ 795</b>	▲ 853	▲ 135
Potassium	ppm	ASTM D5185m	>20	<b>8</b>	15	8
Water	%	ASTM D6304	>0.075	<b>▲ 0.249</b>	---	---
ppm Water	ppm	ASTM D6304	>750	<b>▲ 2490</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	>0.075	<b>▲ 0.2%</b>	NEG	NEG
Sodium	ppm	ASTM D5185m	>51	<b>0</b>	2	2
Boron	ppm	ASTM D5185m		<b>10</b>	23	17
Barium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185m		<b>2</b>	3	2
Manganese	ppm	ASTM D5185m		<b>17</b>	20	8
Magnesium	ppm	ASTM D5185m		<b>4</b>	6	10
Calcium	ppm	ASTM D5185m		<b>10</b>	35	24
Phosphorus	ppm	ASTM D5185m		<b>372</b>	323	318
Zinc	ppm	ASTM D5185m		<b>3</b>	26	25
Sulfur	ppm	ASTM D5185m		<b>19832</b>	19006	15627
Visc @ 40°C	cSt	ASTM D445		<b>145</b>	161	152



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0161043  
**Lab Number** : 05801753  
**Unique Number** : 10399282  
**Test Package** : CONST ( Additional Tests: KF, PQ )

**Received** : 24 Mar 2023  
**Tested** : 28 Mar 2023  
**Diagnosed** : 29 Mar 2023 - Don Baldrige

**JRE - CASTLE HAYNE**  
 113 CROWATAN ROAD  
 CASTLE HAYNE, NC  
 US 28429-5819

Contact: MARC BAKER  
 marc.baker@jamesriverequipment.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: (910)675-9211

F: