



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

Machine Id  
**JOHN DEERE 50G 1FF050GXVHH287018**

Component  
**Right Final Drive**

Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. 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.

### WEAR

Gear wear is indicated.

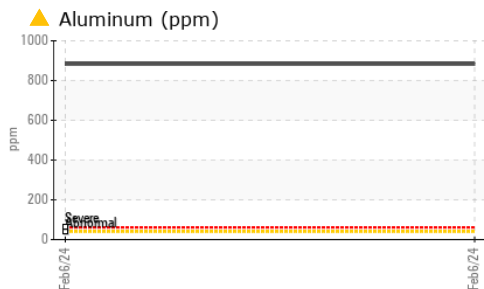
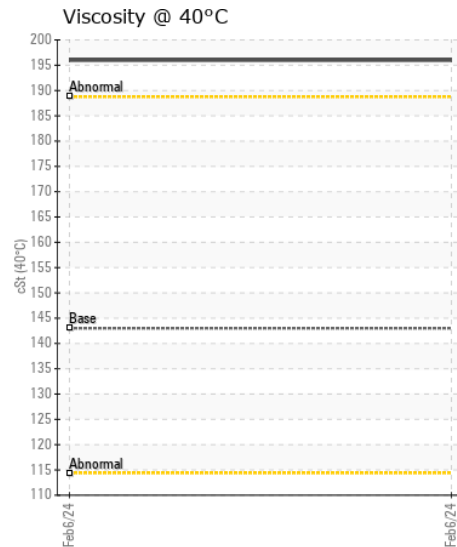
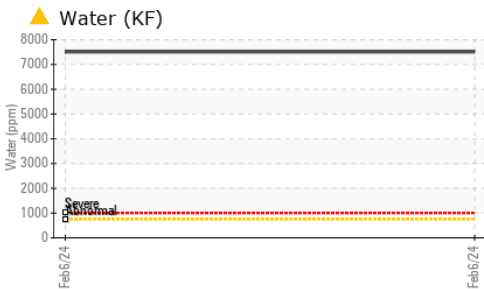
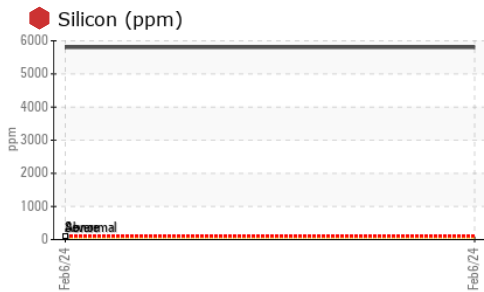
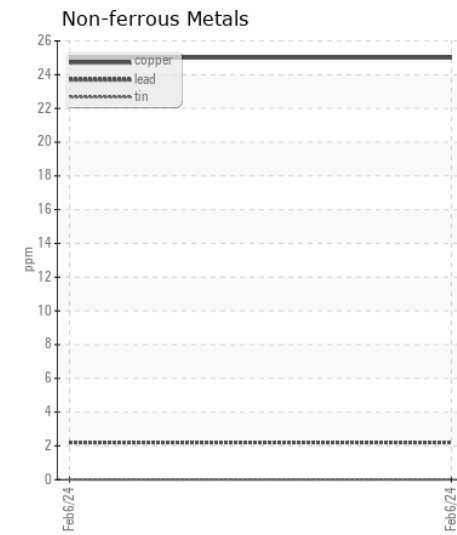
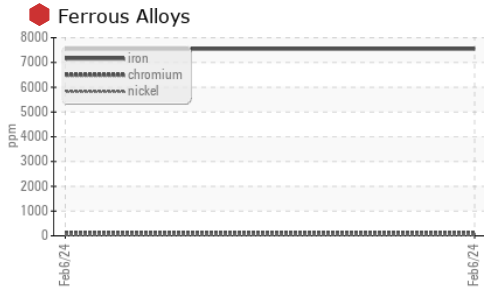
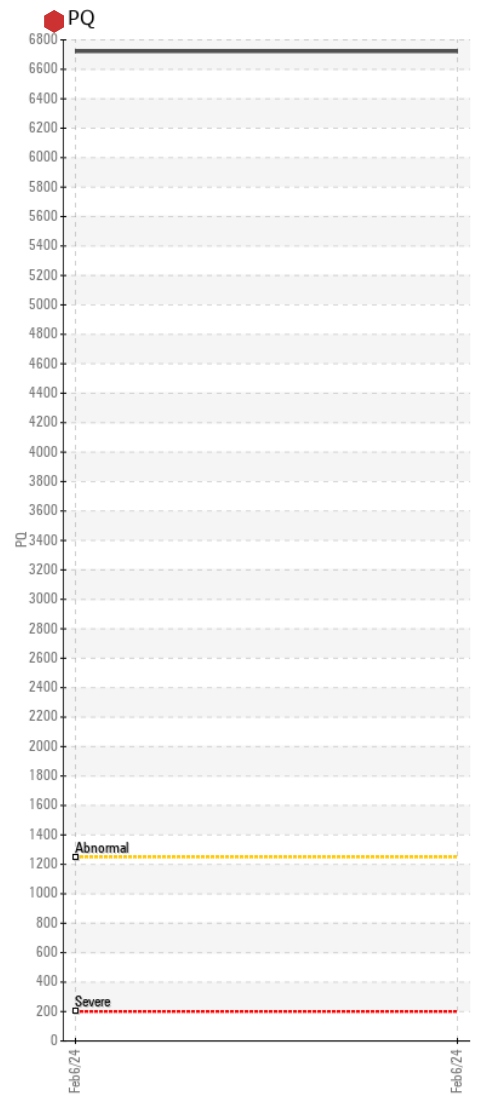
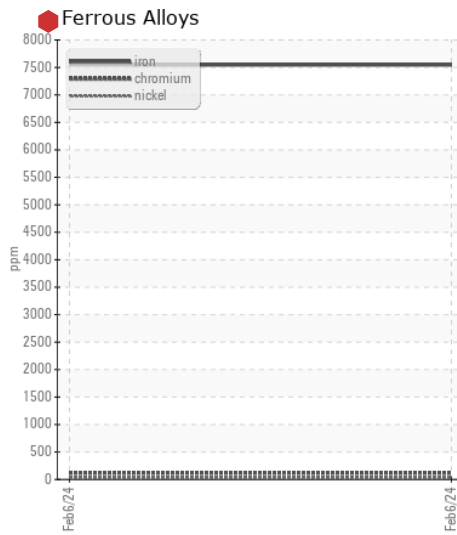
### CONTAMINATION

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>JR0200274</b>	---	---
Sample Date		Client Info		<b>06 Feb 2024</b>	---	---
Machine Age	hrs	Client Info		<b>1587</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Filter Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Changed</b>	---	---
Filter Changed		Client Info		<b>N/A</b>	---	---
Sample Status				<b>SEVERE</b>	---	---
PQ		ASTM D8184	>1250	<b>6722</b>	---	---
Iron	ppm	ASTM D5185m	>750	<b>7547</b>	---	---
Chromium	ppm	ASTM D5185m	>9	<b>117</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>27</b>	---	---
Titanium	ppm	ASTM D5185m		<b>75</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>40	<b>883</b>	---	---
Lead	ppm	ASTM D5185m	>15	<b>2</b>	---	---
Copper	ppm	ASTM D5185m	>40	<b>25</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>2</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silicon	ppm	ASTM D5185m	>75	<b>5803</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>291</b>	---	---
Water	%	ASTM D6304	>0.075	<b>0.751</b>	---	---
ppm Water	ppm	ASTM D6304	>750	<b>7510</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.075	<b>0.2%</b>	---	---
Sodium	ppm	ASTM D5185m	>170	<b>90</b>	---	---
Boron	ppm	ASTM D5185m	400	<b>55</b>	---	---
Barium	ppm	ASTM D5185m	200	<b>21</b>	---	---
Molybdenum	ppm	ASTM D5185m	12	<b>5</b>	---	---
Manganese	ppm	ASTM D5185m		<b>100</b>	---	---
Magnesium	ppm	ASTM D5185m	12	<b>49</b>	---	---
Calcium	ppm	ASTM D5185m	150	<b>151</b>	---	---
Phosphorus	ppm	ASTM D5185m	1650	<b>628</b>	---	---
Zinc	ppm	ASTM D5185m	125	<b>332</b>	---	---
Sulfur	ppm	ASTM D5185m	22500	<b>23747</b>	---	---
Visc @ 40°C	cSt	ASTM D445	143	<b>196</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : JR0200274

**Lab Number** : 06082737

**Unique Number** : 10870182

**Test Package** : CONST ( Additional Tests: KF, PQ )

**Received** : 07 Feb 2024

**Tested** : 08 Feb 2024

**Diagnosed** : 09 Feb 2024 - Sean Felton

**JRE - ASHLAND**

11047 LEADBETTER RD

ASHLAND, VA

US 23005

Contact: DAVID ZIEG

dzieg@jamesriverequipment.com

T: (804)798-6001

F: (804)798-0292

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)