

# PROBLEM SUMMARY

Area

**[W52279]**

Machine Id

**JOHN DEERE 333G 1T0333GMCMF402595**

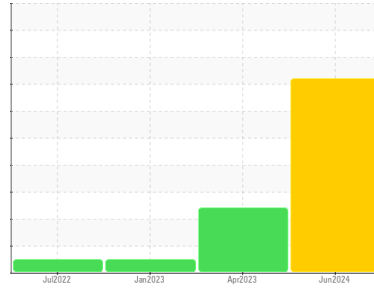
Component

**Right Final Drive**

Fluid

**JOHN DEERE GL-5 80W90 (--- GAL)**

Sample Rating Trend

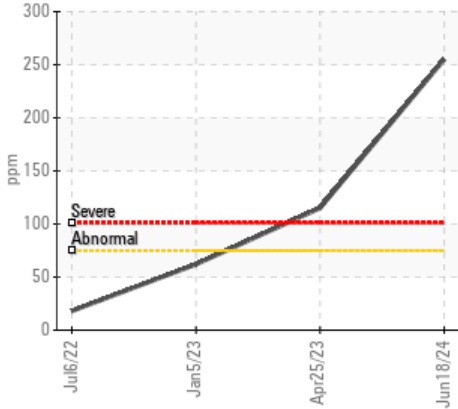


**DIRT**

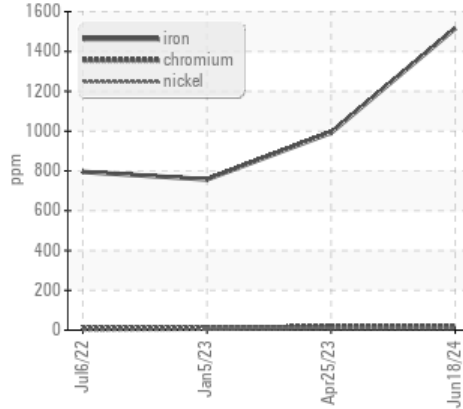


## COMPONENT CONDITION SUMMARY

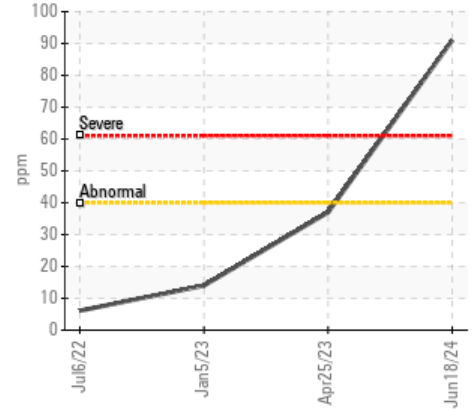
▲ Silicon (ppm)



▲ Ferrous Alloys



● Aluminum (ppm)



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>750	▲ 1516	992	757
Chromium	ppm	ASTM D5185m	>9	▲ 19	17	12
Silicon	ppm	ASTM D5185m	>75	▲ 255	▲ 115	62

Customer Id: JAMASH  
Sample No.: JR0211765  
Lab Number: 06214962  
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Sean Felton +1 919-379-4092  
[sfelton@wearcheckusa.com](mailto:sfelton@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

DIRT



**25 Apr 2023 Diag: Don Baldrige**

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. All component wear rates are normal for time on oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report



NORMAL



**05 Jan 2023 Diag: Don Baldrige**

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



NORMAL



**06 Jul 2022 Diag: Don Baldrige**

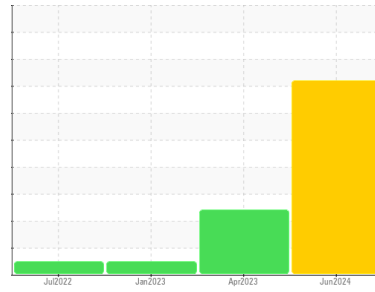
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



# OIL ANALYSIS REPORT

Sample Rating Trend



Area  
**[W52279]**  
 Machine Id  
**JOHN DEERE 333G 1T0333GMCMF402595**  
 Component  
**Right Final Drive**  
 Fluid  
**JOHN DEERE GL-5 80W90 (--- GAL)**

## DIAGNOSIS

**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.

**Fluid Condition**  
 The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>JR0211765</b>	JR0165830	JR0147054
Sample Date	Client Info			<b>18 Jun 2024</b>	25 Apr 2023	05 Jan 2023
Machine Age	hrs	Client Info		<b>2247</b>	1477	989
Oil Age	hrs	Client Info		<b>747</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>SEVERE</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.075	<b>NEG</b>	NEG	NEG

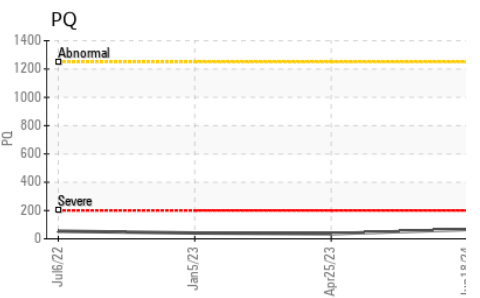
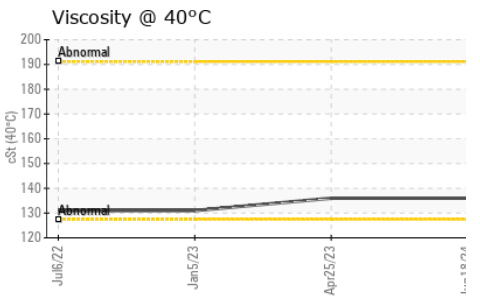
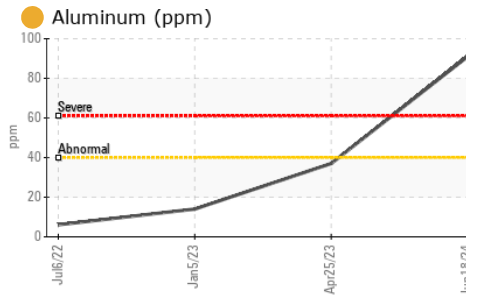
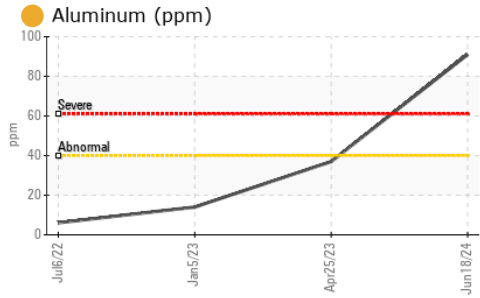
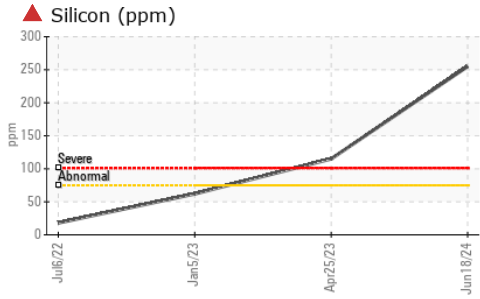
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>1250	<b>66</b>	36	41
Iron	ppm	ASTM D5185m	>750	<b>1516</b>	992	757
Chromium	ppm	ASTM D5185m	>9	<b>19</b>	17	12
Nickel	ppm	ASTM D5185m	>10	<b>9</b>	8	4
Titanium	ppm	ASTM D5185m		<b>6</b>	3	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>40	<b>91</b>	37	14
Lead	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>40	<b>2</b>	2	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>15</b>	24	29
Barium	ppm	ASTM D5185m		<b>7</b>	19	24
Molybdenum	ppm	ASTM D5185m		<b>3</b>	3	2
Manganese	ppm	ASTM D5185m		<b>15</b>	11	7
Magnesium	ppm	ASTM D5185m		<b>12</b>	10	5
Calcium	ppm	ASTM D5185m		<b>88</b>	27	18
Phosphorus	ppm	ASTM D5185m		<b>346</b>	527	384
Zinc	ppm	ASTM D5185m		<b>31</b>	33	29
Sulfur	ppm	ASTM D5185m		<b>20396</b>	24188	17001

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	<b>255</b>	115	62
Sodium	ppm	ASTM D5185m	>51	<b>10</b>	7	2
Potassium	ppm	ASTM D5185m	>20	<b>23</b>	15	11

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
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>NEG</b>	0.2%	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

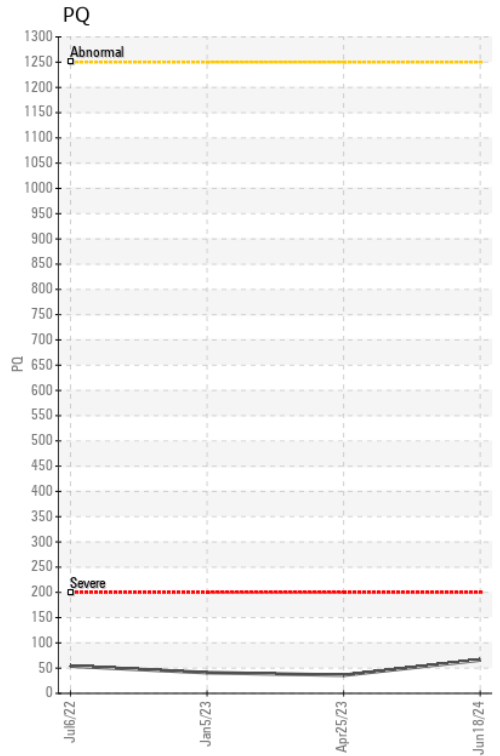
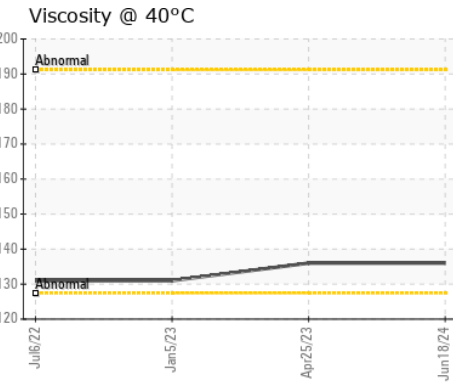
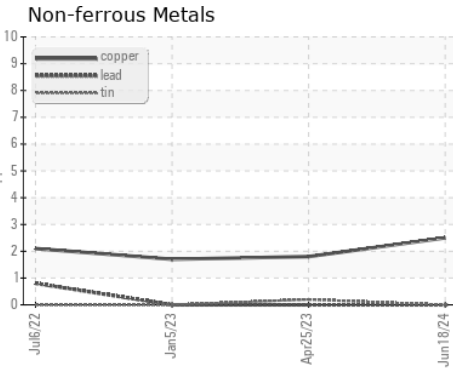
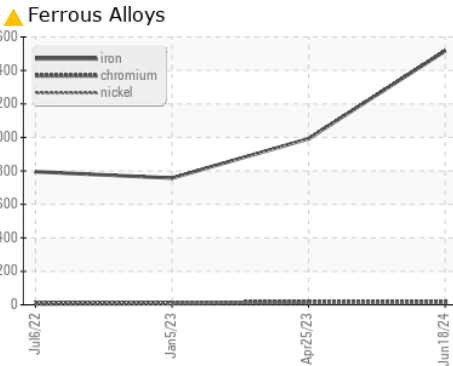


FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	136	136	131

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color			no image	no image	no image
Bottom			no image	no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0211765      **Received** : 19 Jun 2024  
**Lab Number** : 06214962      **Tested** : 20 Jun 2024  
**Unique Number** : 11087826      **Diagnosed** : 21 Jun 2024 - Sean Felton  
**Test Package** : CONST ( Additional Tests: PQ )

**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)