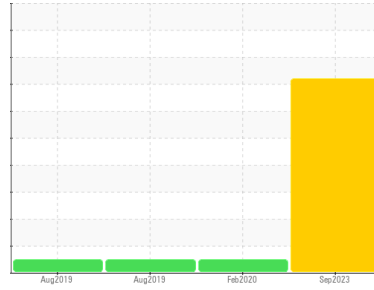


# PROBLEM SUMMARY

Sample Rating Trend



**DIRT**

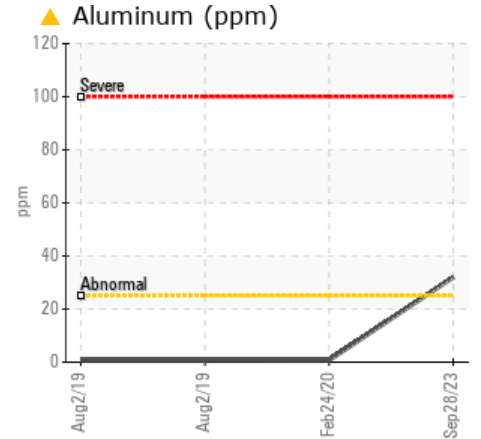
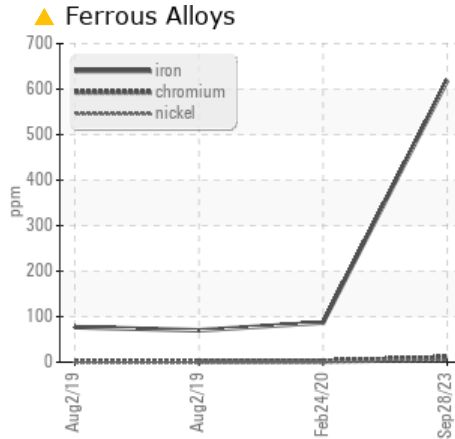
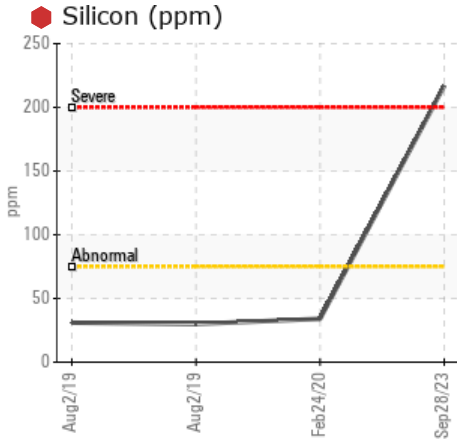


Machine Id  
**HITACHI ZX135LC-6N HCMDAT60J00200241 - EVAL**

Component  
**Right Final Drive**

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

## COMPONENT CONDITION SUMMARY



## 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	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>500	▲ <b>619</b>	87	77
Chromium	ppm	ASTM D5185m	>10	▲ <b>11</b>	3	2
Aluminum	ppm	ASTM D5185m	>25	▲ <b>32</b>	<1	<1
Silicon	ppm	ASTM D5185m	>75	● <b>217</b>	34	31

Customer Id: JAMASH  
Sample No.: JR0180136  
Lab Number: 05965627  
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

### 24 Feb 2020 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

[view report](#)



### 02 Aug 2019 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

[view report](#)



### 02 Aug 2019 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

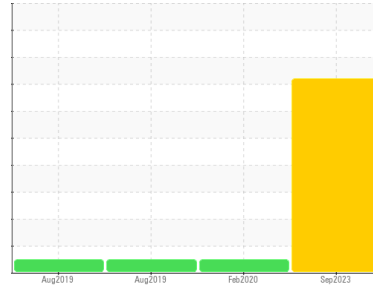
[view report](#)



Machine Id  
**HITACHI ZX135LC-6N HCMDAT60J00200241 - EVAL**

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>JR0180136</b>	JR0034760	JR0015897
Sample Date	Client Info		<b>28 Sep 2023</b>	24 Feb 2020	02 Aug 2019
Machine Age	hrs	Client Info	<b>3056</b>	988	453
Oil Age	hrs	Client Info	<b>1056</b>	0	453
Oil Changed	Client Info		<b>Changed</b>	N/A	Not Changd
Sample Status			<b>SEVERE</b>	NORMAL	NORMAL

**WEAR METALS**

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>239</b>	106	103
Iron	ppm	ASTM D5185m >500	<b>▲ 619</b>	87	77
Chromium	ppm	ASTM D5185m >10	<b>▲ 11</b>	3	2
Nickel	ppm	ASTM D5185m >10	<b>4</b>	0	0
Titanium	ppm	ASTM D5185m	<b>3</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>▲ 32</b>	<1	<1
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m >5	<b>---</b>	3	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	<1

**ADDITIVES**

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>53</b>	57	59
Barium	ppm	ASTM D5185m	<b>0</b>	6	6
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	1
Manganese	ppm	ASTM D5185m	<b>8</b>	2	2
Magnesium	ppm	ASTM D5185m	<b>7</b>	1	1
Calcium	ppm	ASTM D5185m	<b>32</b>	8	10
Phosphorus	ppm	ASTM D5185m	<b>486</b>	452	450
Zinc	ppm	ASTM D5185m	<b>64</b>	35	30
Sulfur	ppm	ASTM D5185m	<b>15773</b>	12024	12640

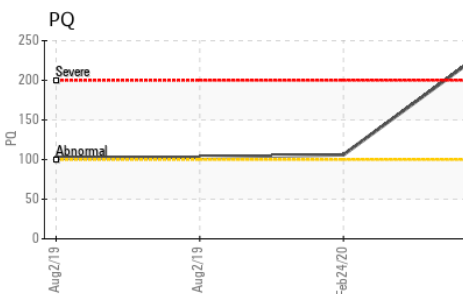
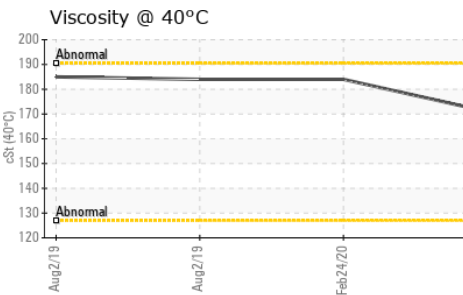
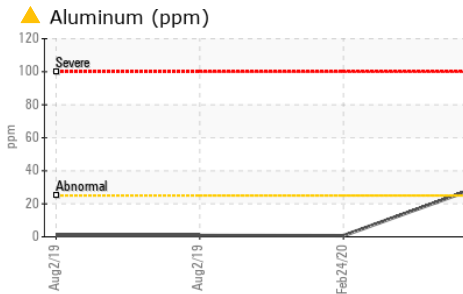
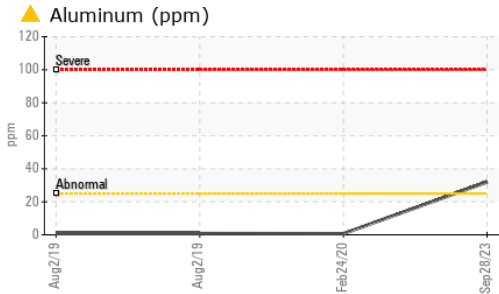
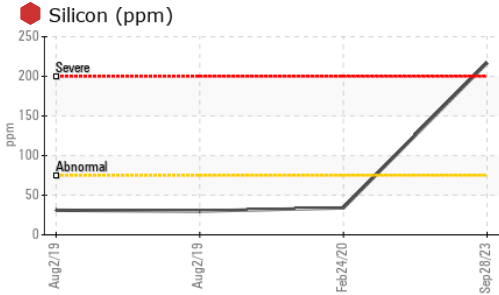
**CONTAMINANTS**

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	<b>● 217</b>	34	31
Sodium	ppm	ASTM D5185m	<b>1</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>12</b>	0	0

**VISUAL**

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	LIGHT
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>	LIGHT	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>	NEG	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG

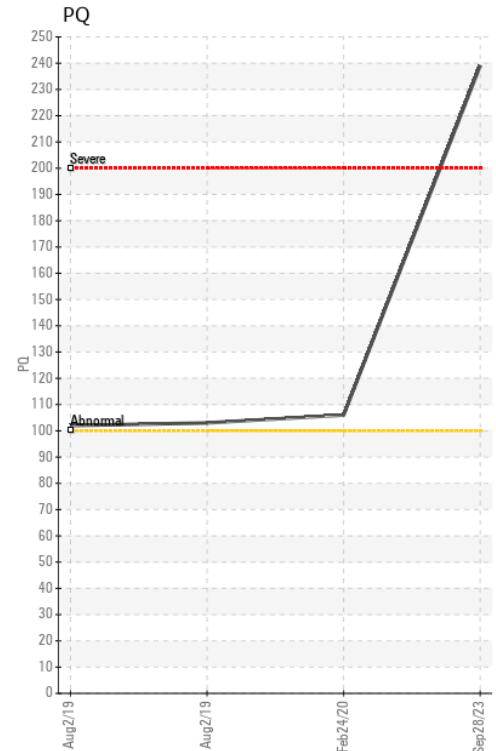
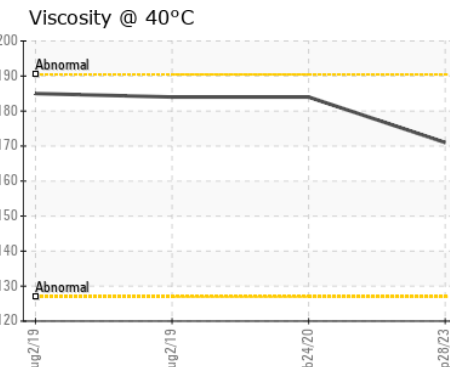
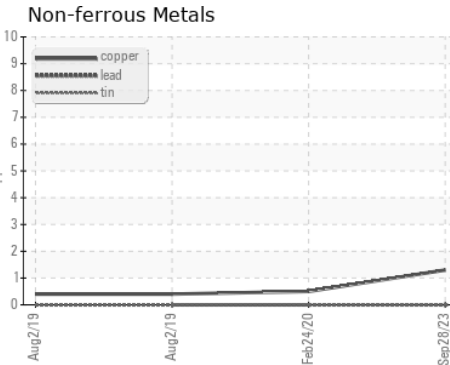
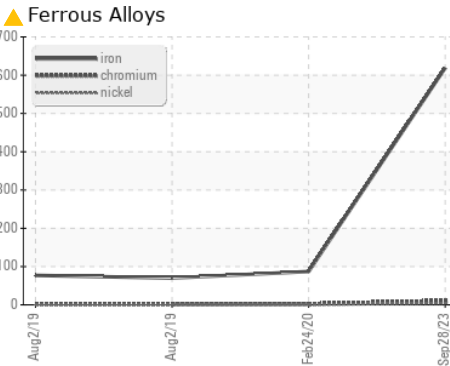
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		<b>171</b>	184	184

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0180136 **Received** : 29 Sep 2023  
**Lab Number** : 05965627 **Diagnosed** : 02 Oct 2023  
**Unique Number** : 10672178 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

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)

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