

# **PROBLEM SUMMARY**

# Sample Rating Trend

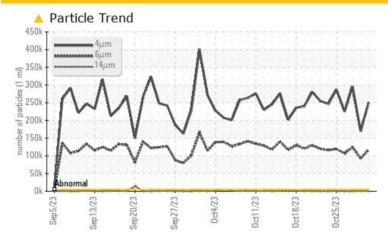
# ISO

# WCLSNC QC230801HY

Component **Hydraulic System** 

JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

### **COMPONENT CONDITION SUMMARY**



#### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS								
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL			
Particles >4µm	ASTM D7647	>5000	<b>250855</b>	<u>▲</u> 169758	<u>\$\text{295721}\$</u>			
Particles >6µm	ASTM D7647	>1300	<b>117279</b>	<b>92956</b>	<u>124195</u>			
Particles >14µm	ASTM D7647	>160	<u></u> ▲ 661	<u>^</u> 768	<b>▲</b> 412			
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>25/24/17</b>	25/24/17	25/24/16			

Customer Id: WEACARQA **Sample No.:** WC0865978 Lab Number: 05994348 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Jonathan Hester +1 919-379-4092 x4092 ihester@wearcheckusa.com

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

#### **RECOMMENDED ACTIONS**

Action Status Date Done By	Description
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Change Filter MISSED Nov 08 2023 ? We recommend you service the filters on this component.

### HISTORICAL DIAGNOSIS

### 30 Oct 2023 Diag: Jonathan Hester





We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



#### 27 Oct 2023 Diag: Jonathan Hester

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



#### 26 Oct 2023 Diag: Jonathan Hester

ISO



We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



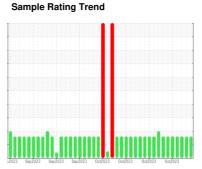


# **OIL ANALYSIS REPORT**

# WCLSNC QC230801HY

**Hydraulic System** 

JOHN DEERE HY-GARD HYD/TRANS (--- GAL)





### **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is a high amount of particulates present in the oil.

#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

AL)		12023 Sep20	23 Sep2023 Sep2023	Oct2023 Oct2023 Oct2023	0et2023	
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0865978	WC0865977	WC0865974
Sample Date		Client Info		31 Oct 2023	30 Oct 2023	27 Oct 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>47	22	5	32
Iron	ppm	ASTM D5185m	>78	53	60	63
Chromium	ppm	ASTM D5185m	>2	<1	<1	<1
Nickel	ppm	ASTM D5185m	>3	<1	2	2
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>5	1	2	1
Lead	ppm	ASTM D5185m	>11	7	9	9
Copper	ppm	ASTM D5185m	>84	75	78	78
Tin	ppm	ASTM D5185m		2	2	3
Vanadium	ppm	ASTM D5185m	<i>-</i> 1	0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	<1
	ррпп		11 11 11	-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	6	102	108	99
Barium	ppm		0	0	0	<1
Molybdenum	ppm	ASTM D5185m	0	<1	<1	<1
Manganese	ppm	ASTM D5185m		14	17	18
Magnesium	ppm	ASTM D5185m	145	29	21	19
Calcium	ppm	ASTM D5185m	3570	3065	3379	3388
Phosphorus	ppm	ASTM D5185m	1290	1017	1188	1179
Zinc	ppm	ASTM D5185m	1640	1228	1412	1405
Sulfur	ppm	ASTM D5185m		2826	3826	3759
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>11	7	9	8
Sodium	ppm	ASTM D5185m	>23	18	16	14
Potassium	ppm	ASTM D5185m	>20	0	2	3
Water	%	ASTM D6304	>0.1669	0.068	0.065	0.069
ppm Water	ppm	ASTM D6304	>1669	685.5	655.7	694.7
FLUID CLEANLINE	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>250855</b>	▲ 169758	<u>\$\text{295721}\$</u>
Particles >6μm		ASTM D7647	>1300	<u> </u>	<b>△</b> 92956	<u> </u>
Particles >14μm		ASTM D7647	>160	<b>661</b>	<u>^</u> 768	<b>▲</b> 412
Particles >21µm		ASTM D7647	>40	16	13	11
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<u>25/24/17</u>	<u>△</u> 25/24/17	<u>△</u> 25/24/16
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	0.84	0.93	0.91
	- 3					



## OIL ANALYSIS REPORT





Certificate L2367

**Unique Number** 

: 10722708

Diagnosed Diagnostician

: Jonathan Hester Test Package : IND 2 (Additional Tests: KF, KV100, PQ, VI)

Contact: WCLS CARY NC

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)

F: (919)379-4050

T: (919)379-4102

US 27513