

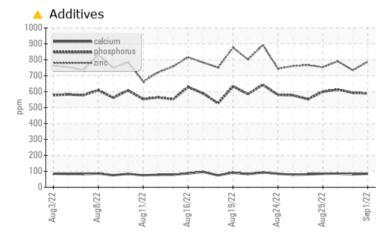
PROBLEM SUMMARY

Area WCLSNC Machine Id QC HY NC 08012022 Component

Hydraulic System

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

| PROBLEMATIC TEST RESULTS | | | | | | | | |
|--------------------------|-----|-------------|-----------|--------|--------|--|--|--|
| Sample Status | | | ATTENTION | NORMAL | NORMAL | | | |
| Magnesium | ppm | ASTM D5185m | <u> </u> | 0 | <1 | | | |
| Calcium | ppm | ASTM D5185m | <u> </u> | 81 | 86 | | | |
| Phosphorus | ppm | ASTM D5185m | <u> </u> | 593 | 613 | | | |
| Zinc | ppm | ASTM D5185m | <u> </u> | 734 | 791 | | | |
| Sulfur | ppm | ASTM D5185m | <u> </u> | 1484 | 1659 | | | |

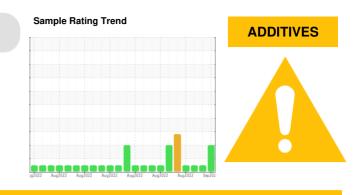
Customer Id: WEACARQA Sample No.: WC0739993 Lab Number: 05632334 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data: System Automation +1 905-569-8600 x230 Kevin.Marson@wearcheck.com

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



RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

31 Aug 2022 Diag: Angela Borella



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 amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



30 Aug 2022 Diag: Angela Borella



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29 Aug 2022 Diag: Angela Borella

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 amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



view report

NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





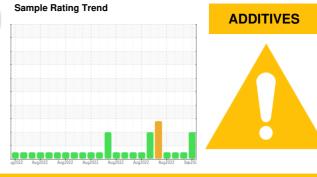
OIL ANALYSIS REPORT

Area WCLSNC Machine Id QC HY NC 08012022

Hydraulic System

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

DIAGNOSIS



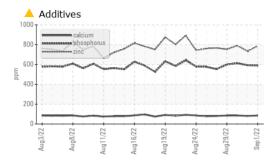
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
|------------------|---------------|--------------|------------|--------------------|-------------|---------------|
| Sample Number | | Client Info | | WC0739993 | WC0727776 | WC0727775 |
| Sample Date | | Client Info | | 01 Sep 2022 | 31 Aug 2022 | 30 Aug 2022 |
| 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 | | | | ATTENTION | NORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| PQ | | ASTM D8184 | | 15 | 11 | 15 |
| Iron | ppm | ASTM D5185m | | 11 | 11 | 11 |
| Chromium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | <1 | 1 |
| Aluminum | ppm | ASTM D5185m | | 1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | | 7 | 8 | 8 |
| Tin | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | <1 | 2 |
| Molybdenum | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | <u> </u> | 0 | <1 |
| Calcium | ppm | ASTM D5185m | | <mark> 8</mark> 5 | 81 | 86 |
| Phosphorus | ppm | ASTM D5185m | | 6 589 | 593 | 613 |
| Zinc | ppm | ASTM D5185m | | <u> </u> | 734 | 791 |
| Sulfur | ppm | ASTM D5185m | | 1 533 | 1484 | 1659 |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | | 2 | 1 | 2 |
| Sodium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | | 3 | 0 | 0 |
| Water | % | ASTM D6304 | | 0.013 | 0.007 | 0.013 |
| ppm Water | ppm | ASTM D6304 | | 130.3 | 73.0 | 137.7 |
| FLUID CLEANLIN | IESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 901 | 956 | 936 |
| Particles >6µm | | ASTM D7647 | | 55 | 88 | 75 |
| Particles >14µm | | ASTM D7647 | | 5 | 10 | 15 |
| Particles >21µm | | ASTM D7647 | | 2 | 2 | 6 |
| Particles >38µm | | ASTM D7647 | | 1 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | | 17/13/10 | 17/14/10 | 17/13/11 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.66 | 0.61 | 0.64 |
| 1:05:28) Rev: 1 | | /10 HW D0040 | | 0.00 | 0.01 | Submitted By: |

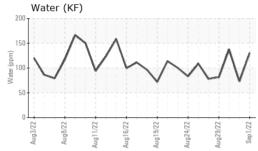


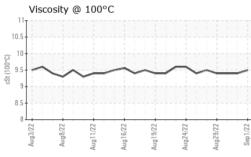
OIL ANALYSIS REPORT

Color

Bottom







| VISUAL | | method | limit/base | current | history1 | history2 |
|----------------------|--------|------------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |
| FLUID PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D445 | | 54.5 | 56.6 | 56.9 |
| Visc @ 100°C | cSt | ASTM D445 | | 9.5 | 9.4 | 9.4 |
| Viscosity Index (VI) | Scale | ASTM D2270 | | 159 | 148 | 147 |
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
| | | | | | | |

