



| | |
|-----------------|---------------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |



Area
[NUTRIEN AG SOLUTIONS]
 Machine Id
JOHN DEERE 644J DW644JX613783
 Component
Transmission (Manual)
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0211767 | JR0179761 | JR0148159 |
| Sample Date | | Client Info | | 17 Jun 2024 | 03 Jun 2024 | 12 Jan 2023 |
| Machine Age | hrs | Client Info | | 3219 | 3220 | 2867 |
| Oil Age | hrs | Client Info | | 1 | 0 | 0 |
| Filter Age | hrs | Client Info | | 1 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changed | Changed | Not Changed |
| Filter Changed | | Client Info | | Not Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| PQ | | ASTM D8184 | >95 | 17 | 9 | 8 |
| Iron | ppm | ASTM D5185m | >200 | 6 | 14 | 13 |
| Chromium | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >7 | <1 | 2 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >45 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >225 | 21 | 55 | 52 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

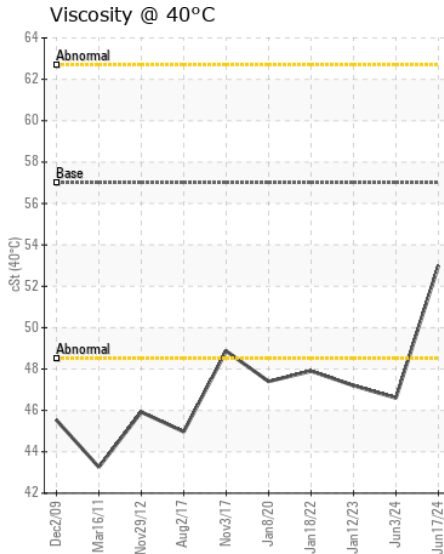
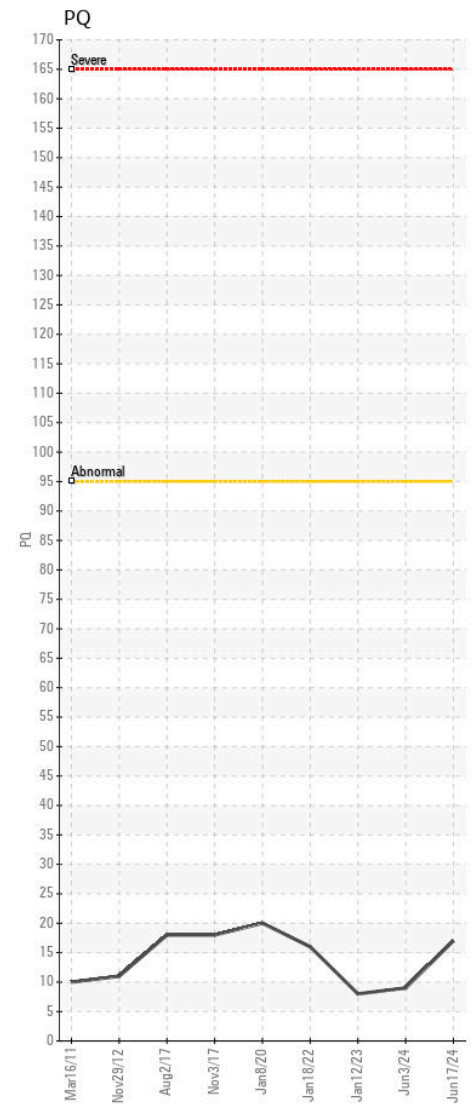
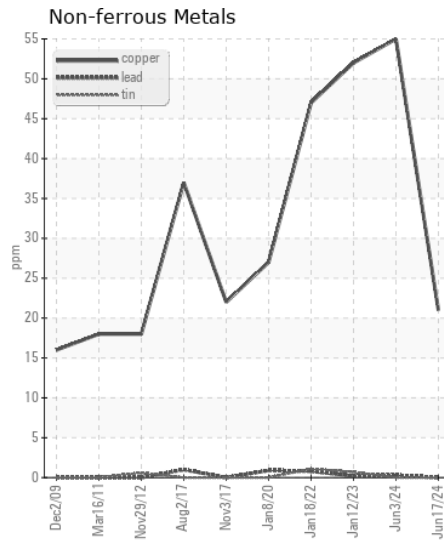
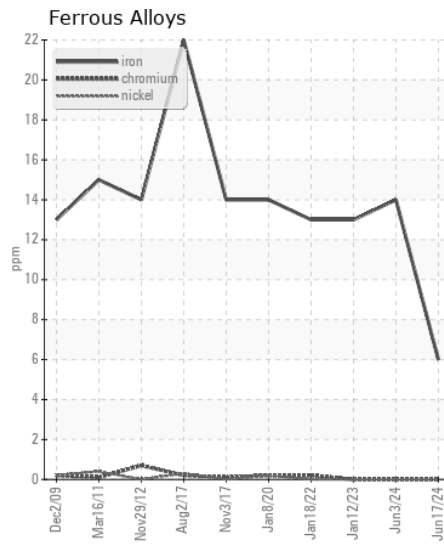
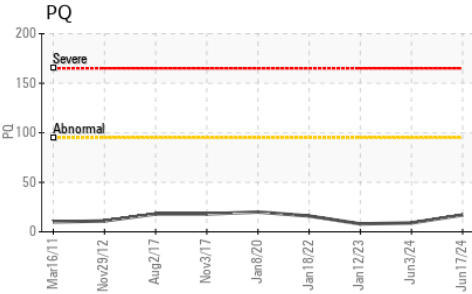
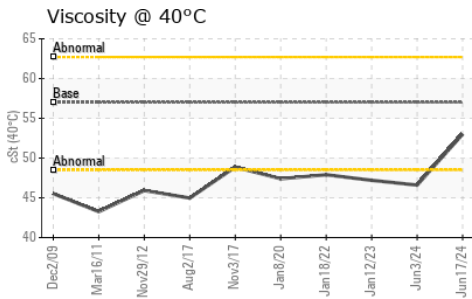
There is no indication of any contamination in the fluid.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >125 | 5 | 7 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 3 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | LIGHT | VLITE |
| 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 | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 2 | 5 | 2 |
| Boron | ppm | ASTM D5185m | 6 | 0 | 2 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | <1 | 0 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 145 | 97 | 91 | 93 |
| Calcium | ppm | ASTM D5185m | 3570 | 3365 | 3502 | 3636 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 972 | 1047 | 1030 |
| Zinc | ppm | ASTM D5185m | 1640 | 1196 | 1222 | 1258 |
| Sulfur | ppm | ASTM D5185m | | 3715 | 3912 | 3664 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 53.0 | 46.6 | 47.2 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211767 **Received** : 18 Jun 2024
Lab Number : 06213687 **Tested** : 20 Jun 2024
Unique Number : 11086551 **Diagnosed** : 20 Jun 2024 - Wes Davis
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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