



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

[W53146 CRANEMASTERS]

Machine Id
JOHN DEERE 331G 1T0331GKJLF371355

Component
Hydraulic System

Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0225168 | JR0164293 | JR0148035 |
| Sample Date | | Client Info | | 12 Jul 2024 | 04 Aug 2023 | 30 Dec 2022 |
| Machine Age | hrs | Client Info | | 1938 | 1445 | 977 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changd | Changed |
| Filter Changed | | Client Info | | Changed | Not Changd | Changed |
| Sample Status | | | | NORMAL | ABNORMAL | ATTENTION |

WEAR

All component wear rates are normal.

| PQ | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 8 | 10 | 19 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 4 | 2 |
| Copper | ppm | ASTM D5185m | >75 | 5 | 8 | 22 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

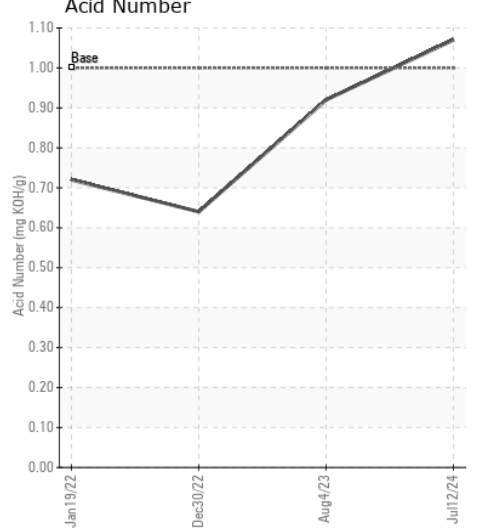
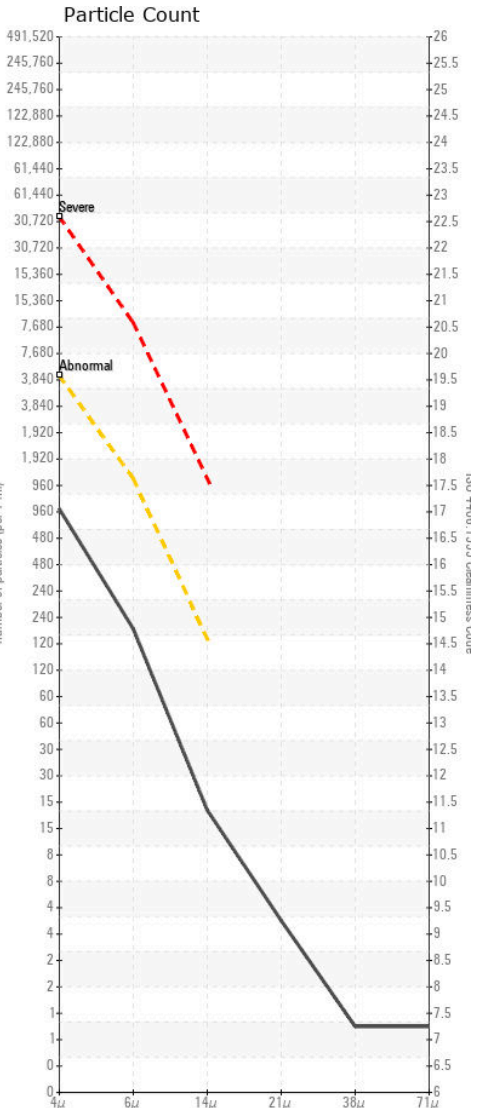
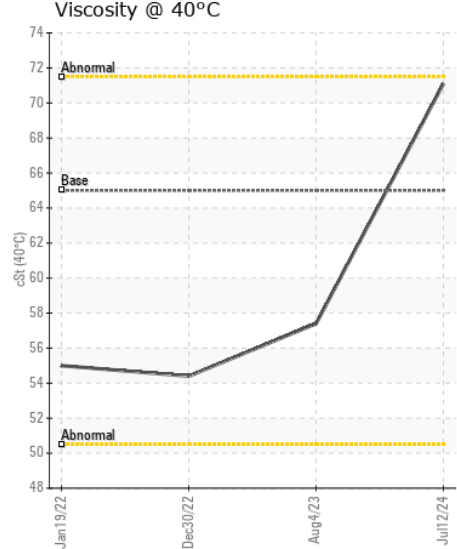
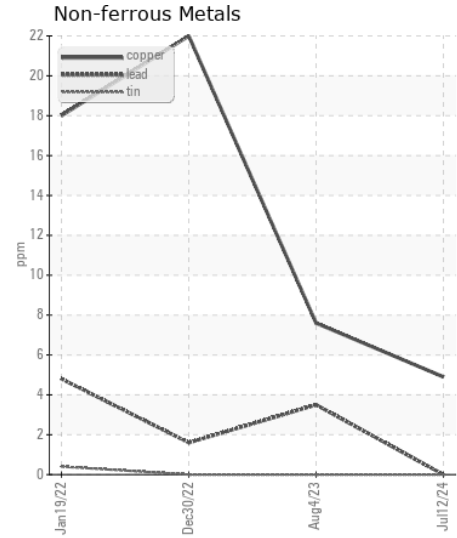
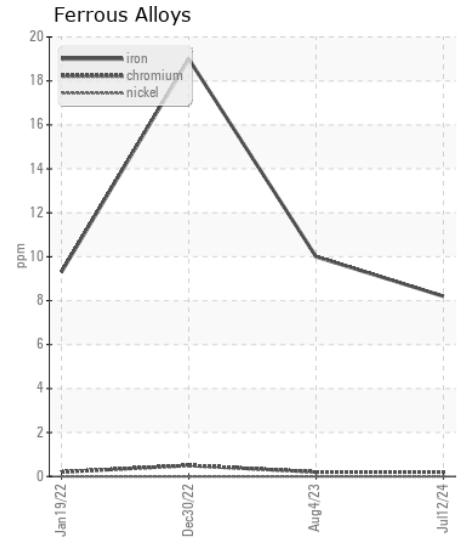
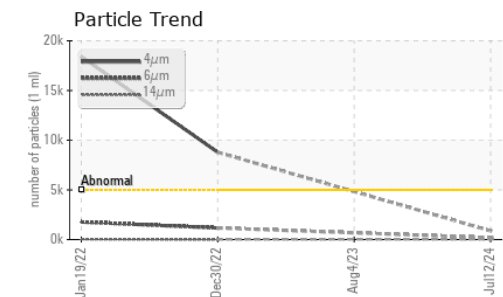
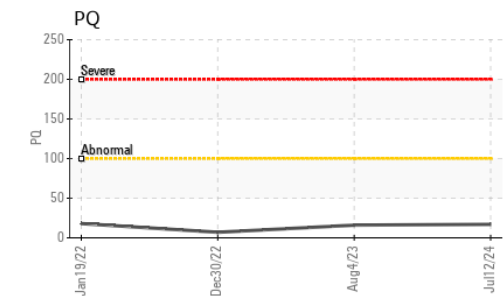
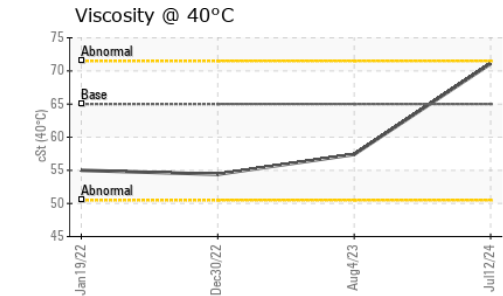
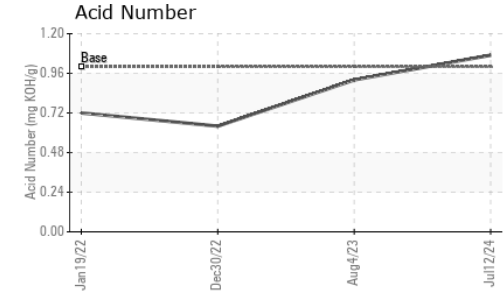
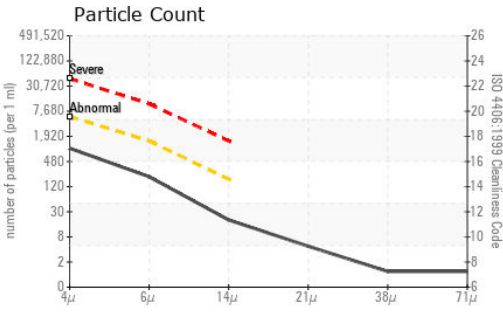
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|---------|----------|
| Silicon | ppm | ASTM D5185m | >20 | 4 | 2 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 0 | 3 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | 875 | --- | 8780 |
| Particles >6µm | | ASTM D7647 | >1300 | 182 | --- | 1166 |
| Particles >14µm | | ASTM D7647 | >160 | 17 | --- | 7 |
| Particles >21µm | | ASTM D7647 | >40 | 4 | --- | 1 |
| Particles >38µm | | ASTM D7647 | >10 | 1 | --- | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 1 | --- | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 17/15/11 | --- | 20/17/10 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | ▲ MODER | 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 | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 2 | 0 | 0 |
| Boron | ppm | ASTM D5185m | | 40 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | | 19 | <1 | 4 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | 266 | 32 | 52 |
| Calcium | ppm | ASTM D5185m | 87 | 1024 | 124 | 139 |
| Phosphorus | ppm | ASTM D5185m | 727 | 786 | 641 | 624 |
| Zinc | ppm | ASTM D5185m | 900 | 940 | 929 | 824 |
| Sulfur | ppm | ASTM D5185m | 1500 | 2862 | 2325 | 1724 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.0 | 1.07 | 0.92 | 0.64 |
| Visc @ 40°C | cSt | ASTM D445 | 65 | 71.1 | 57.4 | 54.4 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0225168 **Received** : 17 Jul 2024
Lab Number : 06239057 **Tested** : 18 Jul 2024
Unique Number : 11127891 **Diagnosed** : 18 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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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)