



OIL ANALYSIS REPORT

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

Machine Id
JOHN DEERE 8250R 8250R UNIT 4 (S/N 187038)

Component
Hydraulic System

Fluid
TDH FLUID SAE 75W80 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | PE0003793 | PE0002514 | PE0002523 |
| Sample Date | | Client Info | | 08 Feb 2024 | 29 Nov 2023 | 15 Nov 2023 |
| Machine Age | hrs | Client Info | | 3276 | 3123 | 3112 |
| Oil Age | hrs | Client Info | | 3123 | 3112 | 2969 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | ATTENTION | ABNORMAL |

WEAR

All component wear rates are normal.

| PQ | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 12 | 11 | 11 |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | <1 | <1 | 2 |
| Lead | ppm | ASTM D5185m | >10 | <1 | 0 | 1 |
| Copper | ppm | ASTM D5185m | >75 | 7 | 6 | 8 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

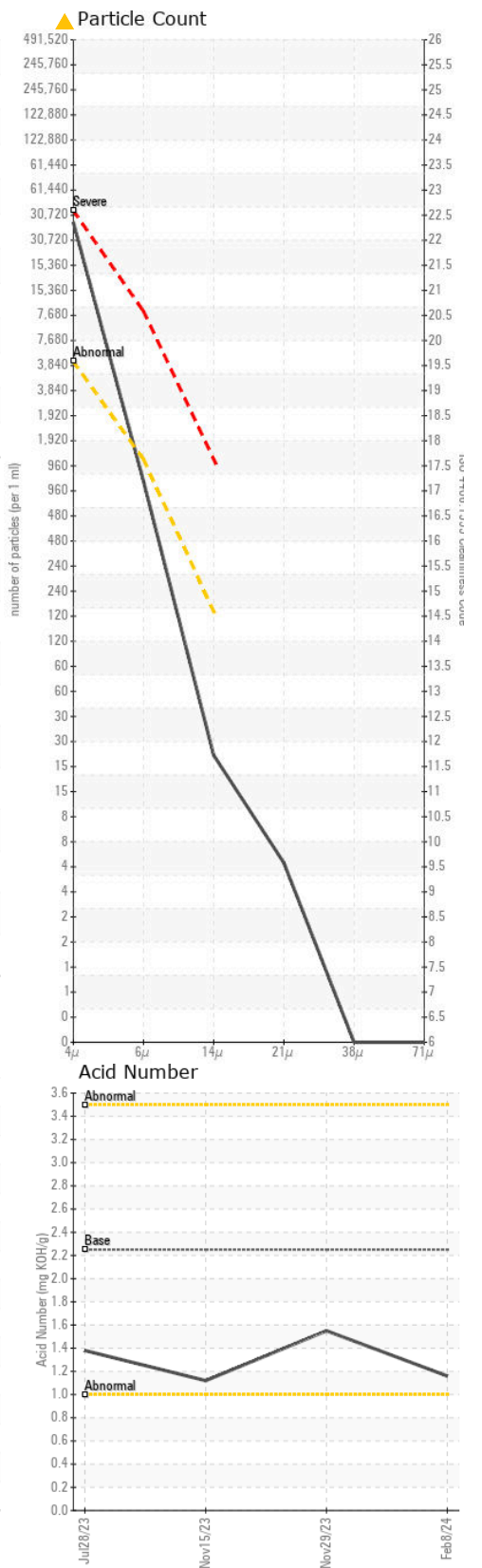
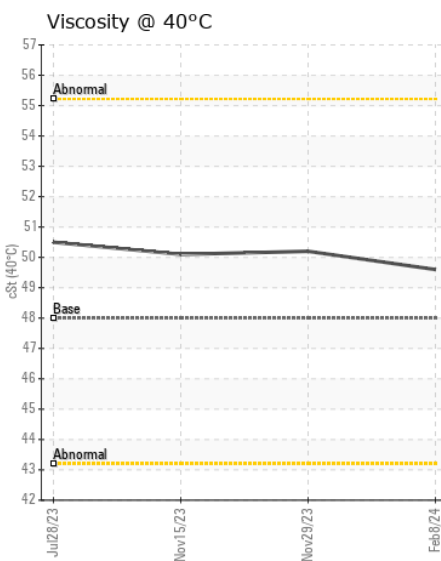
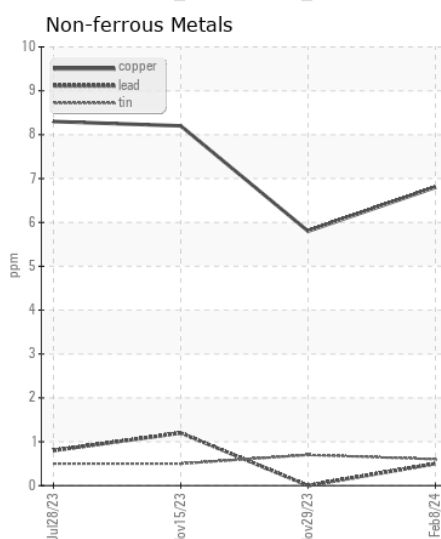
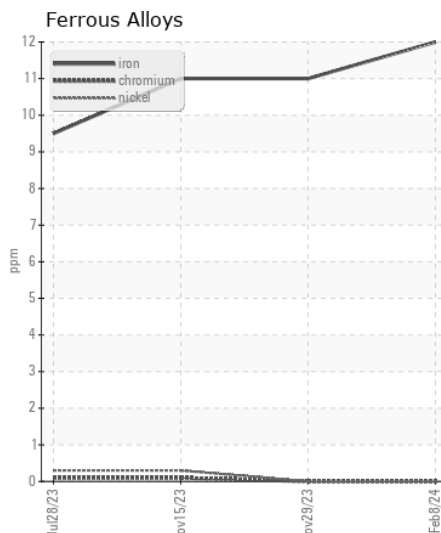
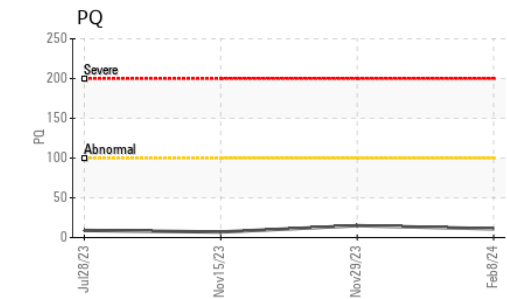
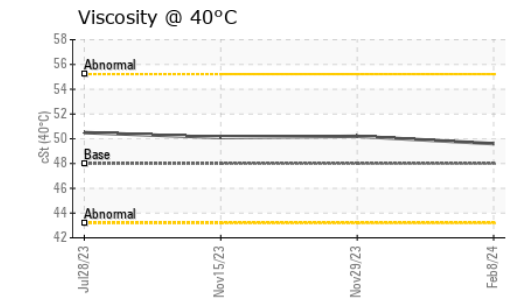
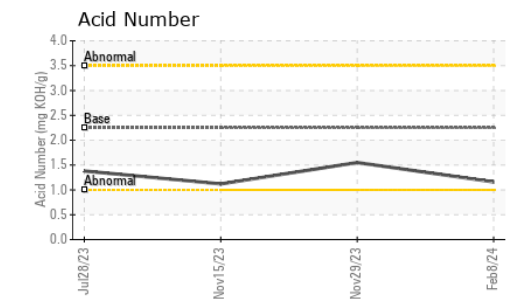
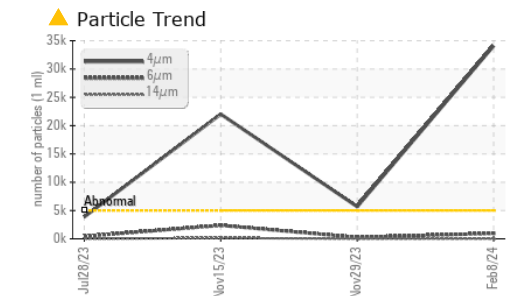
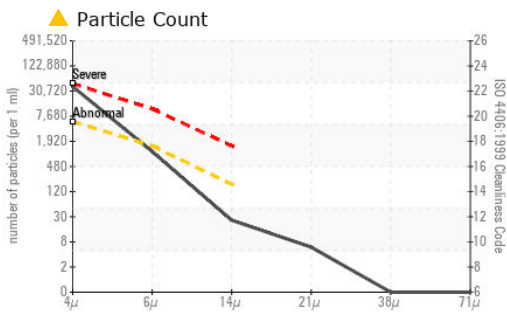
There is a high amount of silt (particulates < 6 microns in size) present in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|-------------------|------------|------------|
| Silicon | ppm | ASTM D5185m | >20 | 4 | 4 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | <1 | 3 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >5000 | ▲ 34088 | ▲ 5675 | ▲ 22026 |
| Particles >6µm | | ASTM D7647 | >1300 | 961 | 256 | ▲ 2378 |
| Particles >14µm | | ASTM D7647 | >160 | 22 | 14 | ▲ 140 |
| Particles >21µm | | ASTM D7647 | >40 | 5 | 5 | ▲ 51 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 0 | 5 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | ▲ 22/17/12 | ▲ 20/15/11 | ▲ 22/18/14 |
| 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 | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 1 | 0 | 0 |
| Boron | ppm | ASTM D5185m | 10 | 4 | 5 | 4 |
| Barium | ppm | ASTM D5185m | 10 | 0 | 0 | 10 |
| Molybdenum | ppm | ASTM D5185m | 10 | <1 | <1 | 2 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 100 | 70 | 68 | 66 |
| Calcium | ppm | ASTM D5185m | 3500 | 2922 | 2924 | 3022 |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1006 | 986 | 986 |
| Zinc | ppm | ASTM D5185m | 1150 | 1235 | 1194 | 1191 |
| Sulfur | ppm | ASTM D5185m | 5000 | 3520 | 3289 | 3624 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 2.25 | 1.16 | 1.55 | 1.12 |
| Visc @ 40°C | cSt | ASTM D445 | 48 | 49.6 | 50.2 | 50.1 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PE0003793 **Received** : 14 Feb 2024
Lab Number : 06088668 **Tested** : 15 Feb 2024
Unique Number : 10876113 **Diagnosed** : 15 Feb 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: ICP, KV40, PQ, PrtCount, SCREEN)

MORNING STAR DAIRY
 801 FM 694
 DALHART, TX
 US 79022
 Contact: JOHN DEVRIES
 johndevries@gmail.com
 T:
 F:

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)