James River Equipment

OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE 310SL 1T0310SLCJF343241
Component
## Hydraulic System
Fluid
## JOHN DEERE HY-GARD HYD/TRANS (--- GAL)

### RECOMMENDATION

Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

### CONTAMINATION

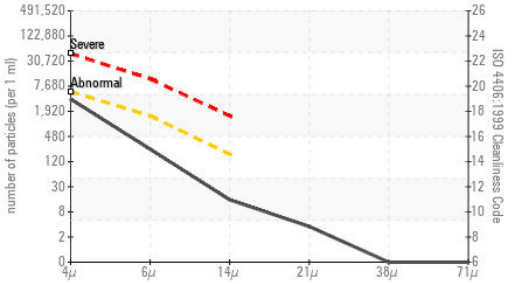
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

### FLUID CONDITION

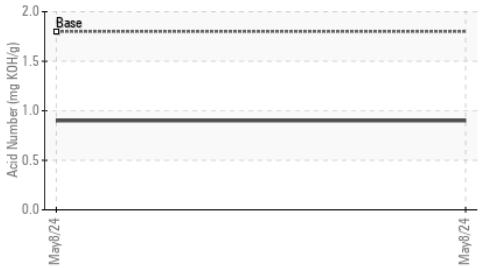
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | JR0081341 | --- | --- |
| Sample Date | | Client Info | | 08 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 793 | --- | --- |
| Oil Age | hrs | Client Info | | 793 | --- | --- |
| Filter Age | hrs | Client Info | | 793 | --- | --- |
| Oil Changed | | Client Info | | Not Changd | --- | --- |
| Filter Changed | | Client Info | | Not Changd | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |
| PQ | | ASTM D8184 | | 16 | --- | --- |
| Iron | ppm | ASTM D5185m | >20 | 3 | --- | --- |
| Chromium | ppm | ASTM D5185m | >10 | 3 | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | --- | --- |
| Lead | ppm | ASTM D5185m | >10 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m | >75 | 3 | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Silicon | ppm | ASTM D5185m | >20 | 3 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 8 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | >5000 | 3292 | --- | --- |
| Particles >6µm | | ASTM D7647 | >1300 | 211 | --- | --- |
| Particles >14µm | | ASTM D7647 | >160 | 13 | --- | --- |
| Particles >21µm | | ASTM D7647 | >40 | 3 | --- | --- |
| Particles >38µm | | ASTM D7647 | >10 | 0 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 19/15/11 | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | --- | --- |
| Sodium | ppm | ASTM D5185m | | <1 | --- | --- |
| Boron | ppm | ASTM D5185m | 6 | 0 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 145 | 2 | --- | --- |
| Calcium | ppm | ASTM D5185m | 3570 | 99 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1290 | 631 | --- | --- |
| Zinc | ppm | ASTM D5185m | 1640 | 873 | --- | --- |
| Sulfur | ppm | ASTM D5185m | | 1748 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 1.8 | 0.90 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 58.0 | --- | --- |

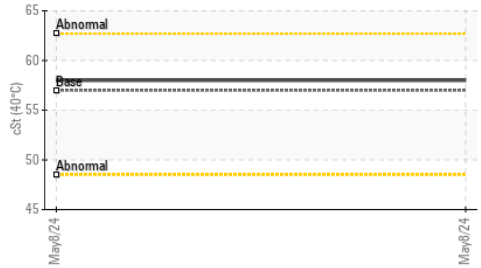
Particle Count



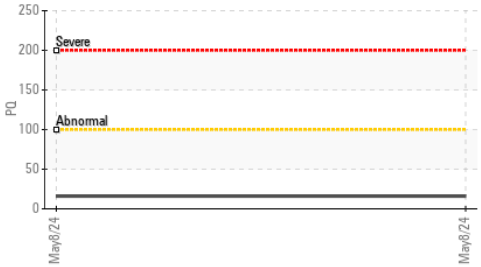

Acid Number



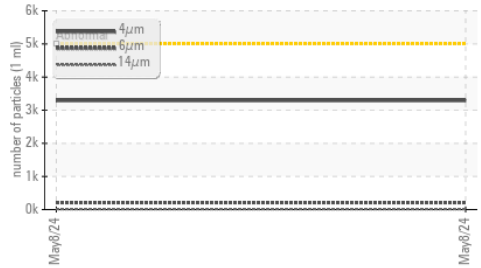

Viscosity @ 40°C



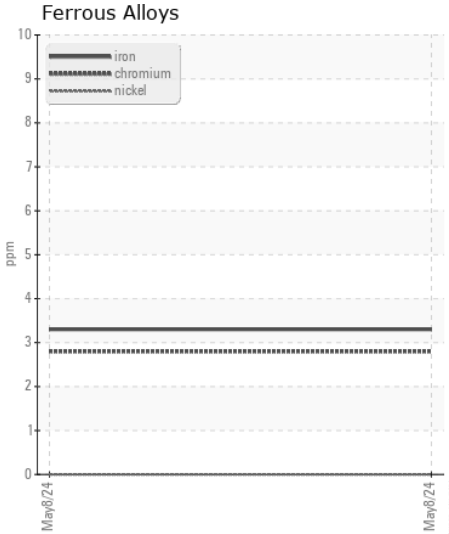

PQ



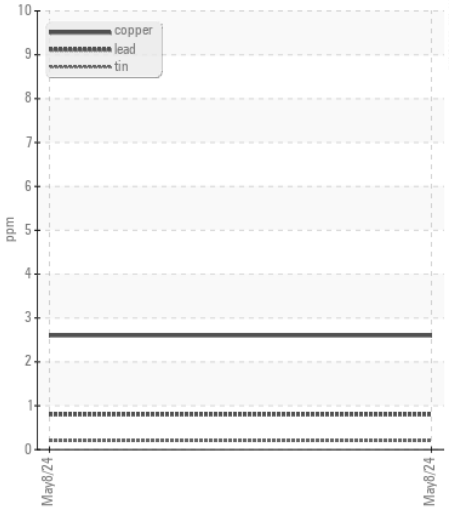

Particle Trend



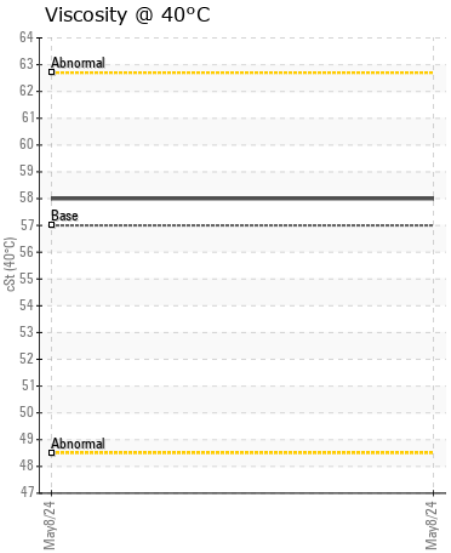

Ferrous Alloys



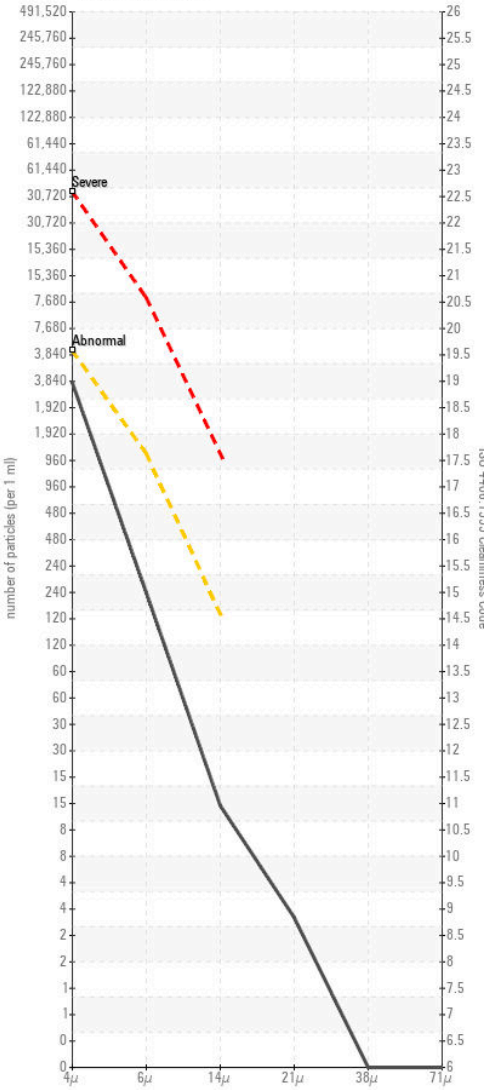

Non-ferrous Metals



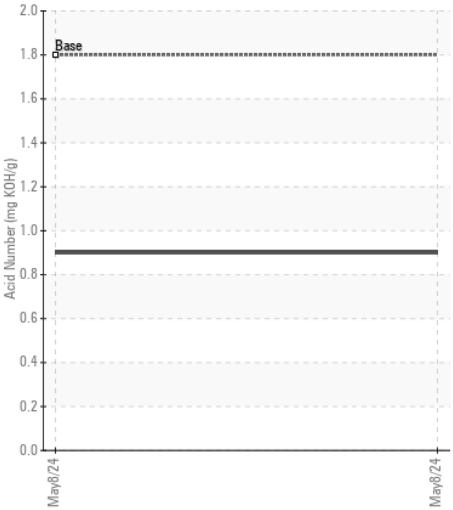

Viscosity @ 40°C




Particle Count




Acid Number




**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0081341
**Lab Number** : 06175355
**Unique Number** : 11021408
**Test Package** : MOBCE ( Additional Tests: PQ )

**Received** : 10 May 2024
**Tested** : 13 May 2024
**Diagnosed** : 13 May 2024 - Don Baldridge

Certificate L2367

*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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