James River Equipment

OIL ANALYSIS REPORT

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

Machine Id
## JOHN DEERE 1FF350GXCHF812280
Component
## Swing Drive Gear Case
Fluid
## JOHN DEERE GL-5 80W90 (13 GAL)

### RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

### WEAR

All component wear rates are normal.

### CONTAMINATION

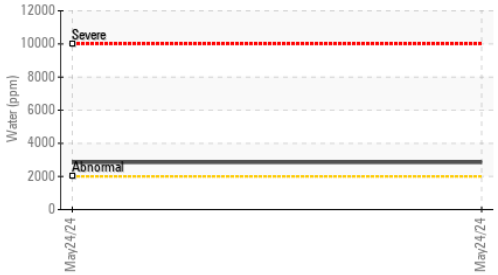
Appearance is hazy. There is a light concentration of water present in the oil.

### FLUID CONDITION

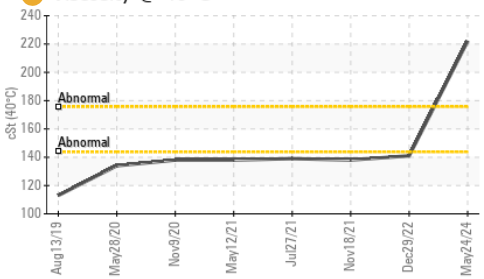
The oil viscosity is higher than normal.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **JR0210225** | JR0157641 | JR0106329 |
| Sample Date | | Client Info | | **24 May 2024** | 29 Dec 2022 | 18 Nov 2021 |
| Machine Age | hrs | Client Info | | **6316** | 4991 | 3973 |
| Oil Age | hrs | Client Info | | **0** | 4991 | 0 |
| Filter Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **Changed** | Changed | Changed |
| Filter Changed | | Client Info | | **N/A** | None | N/A |
| Sample Status | | | | **ABNORMAL** | NORMAL | NORMAL |
| PQ | | ASTM D8184 | | **17** | 31 | 22 |
| Iron | ppm | ASTM D5185m | >200 | **104** | 51 | 71 |
| 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 | <1 |
| Aluminum | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Lead | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Copper | ppm | ASTM D5185m | | **<1** | 0 | <1 |
| Tin | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | VLITE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silicon | ppm | ASTM D5185m | | **5** | 2 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 0 | 0 |
| Water | % | ASTM D6304 | >0.2 | ▲ **0.285** | --- | --- |
| ppm Water | ppm | ASTM D6304 | >2000 | ▲ **2850** | --- | --- |
| 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 | ● **HAZY** | NORML | NORML |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | **0.2%** | NEG | NEG |
| Sodium | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Boron | ppm | ASTM D5185m | | **61** | 54 | 33 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **6** | <1 | 1 |
| Manganese | ppm | ASTM D5185m | | **1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **23** | 2 | 2 |
| Calcium | ppm | ASTM D5185m | | **36** | 14 | 67 |
| Phosphorus | ppm | ASTM D5185m | | **569** | 457 | 360 |
| Zinc | ppm | ASTM D5185m | | **32** | 0 | 22 |
| Sulfur | ppm | ASTM D5185m | | **22490** | 25056 | 15999 |
| Visc @ 40°C | cSt | ASTM D445 | | ● **222.0** | 141 | 138 |

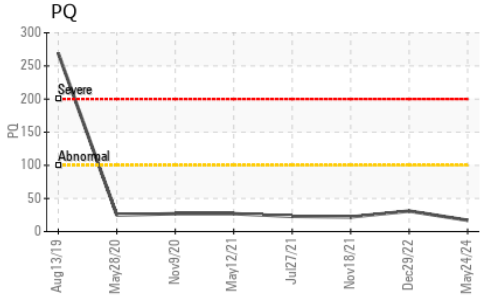
Water (KF)



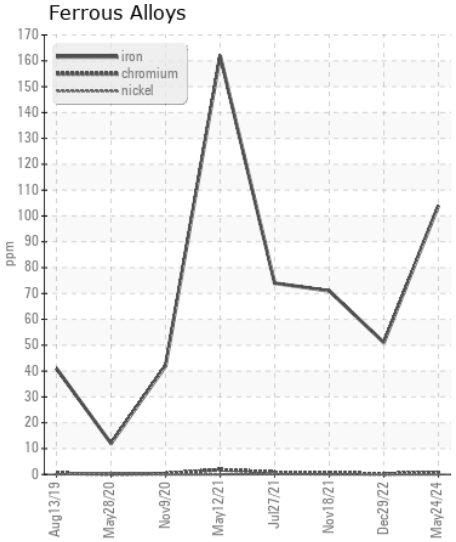

Viscosity @ 40°C



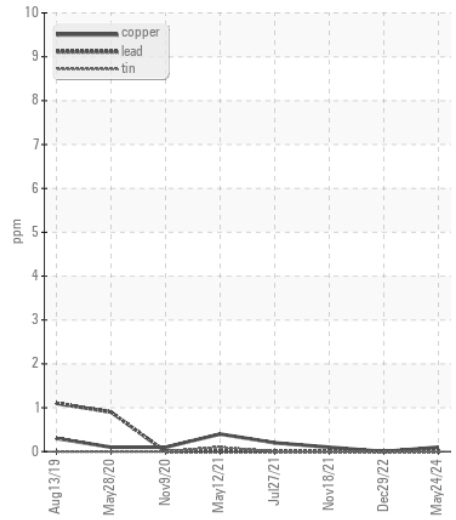

PQ



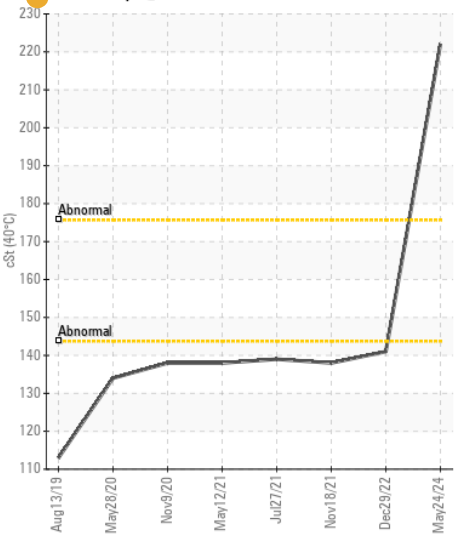

Ferrous Alloys



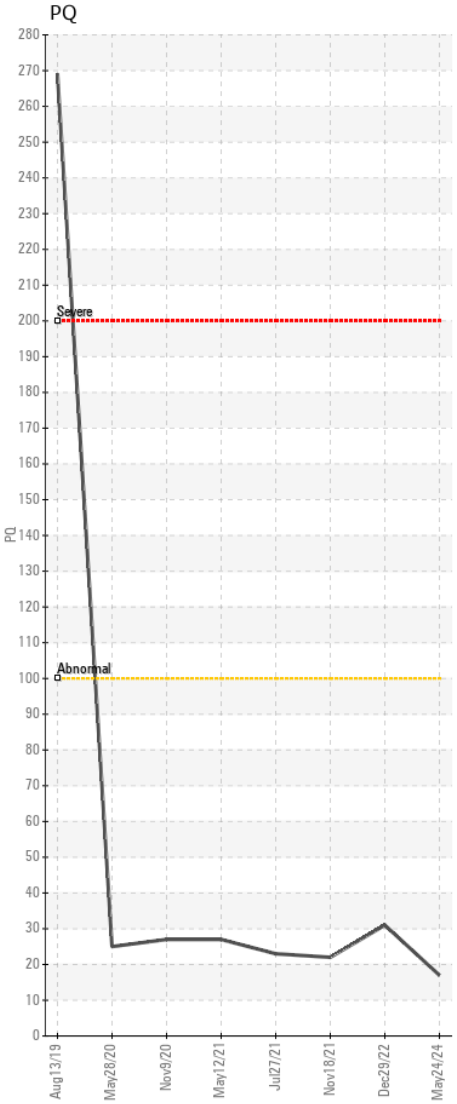

Non-ferrous Metals




Viscosity @ 40°C




PQ




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0210225
**Lab Number** : 06196049
**Unique Number** : 11058172
**Test Package** : CONST ( Additional Tests: KF, PQ )

**Received** : 30 May 2024
**Tested** : 05 Jun 2024
**Diagnosed** : 05 Jun 2024 - Jonathan Hester

**FITZGERALD EXCAVATING**
PO BOX 2168
WINCHESTER, VA
US 22604
Contact: Service Manager

*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)*

T:
F: