



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

Area
[16W16293]
 Machine Id
JOHN DEERE 544 P 1DW544PAHNLZ15954
 Component
Transmission
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (22 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: 16W16293)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0207191 | JR0196395 | JR0185358 |
| Sample Date | | Client Info | | 22 May 2024 | 15 Feb 2024 | 26 Sep 2023 |
| Machine Age | hrs | Client Info | | 1476 | 982 | 472 |
| Oil Age | hrs | Client Info | | 1476 | 982 | 472 |
| Filter Age | hrs | Client Info | | 1476 | 982 | 472 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| PQ | | ASTM D8184 | >100 | 15 | 12 | 24 |
| Iron | ppm | ASTM D5185m | >61 | 28 | 20 | 18 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Nickel | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 2 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 1 | <1 | 2 |
| Lead | ppm | ASTM D5185m | >9 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >100 | 11 | 8 | 7 |
| Tin | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

Elemental level of silicon (Si) above normal indicating ingress of seal material.

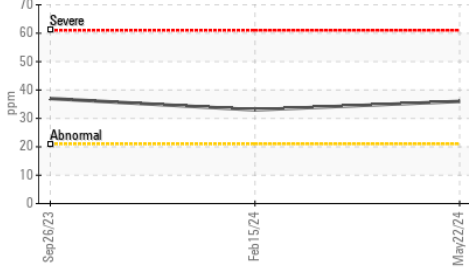
| | | | | | | |
|------------------|--------|-------------|--------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >21 | ▲ 36 | ▲ 33 | ▲ 37 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 0 | 1 |
| Water | | WC Method | >0.075 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | 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 | >0.075 | NEG | NEG | NEG |

FLUID CONDITION

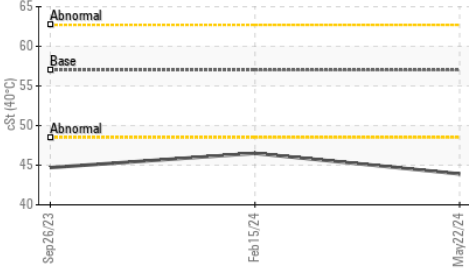
The condition of the fluid is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | >30 | 20 | 20 | 21 |
| Boron | ppm | ASTM D5185m | 6 | 6 | 1 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 2 | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | 0 | 2 | 2 | 2 |
| Manganese | ppm | ASTM D5185m | | 1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 145 | 87 | 81 | 84 |
| Calcium | ppm | ASTM D5185m | 3570 | 3266 | 3072 | 3221 |
| Phosphorus | ppm | ASTM D5185m | 1290 | 1013 | 979 | 1005 |
| Zinc | ppm | ASTM D5185m | 1640 | 1264 | 1165 | 1212 |
| Sulfur | ppm | ASTM D5185m | | 3775 | 3306 | 3517 |
| Visc @ 40°C | cSt | ASTM D445 | 57.0 | 43.9 | 46.5 | 44.7 |

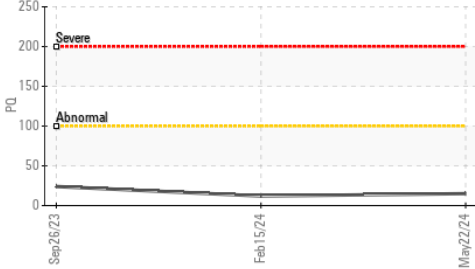
▲ Silicon (ppm)



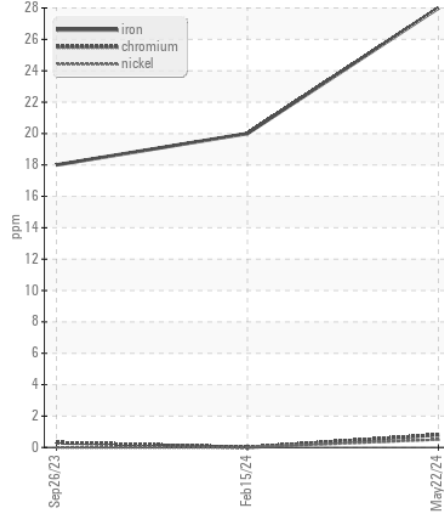
Viscosity @ 40°C



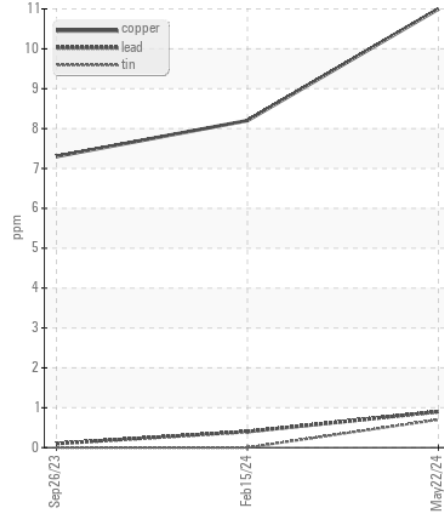
PQ



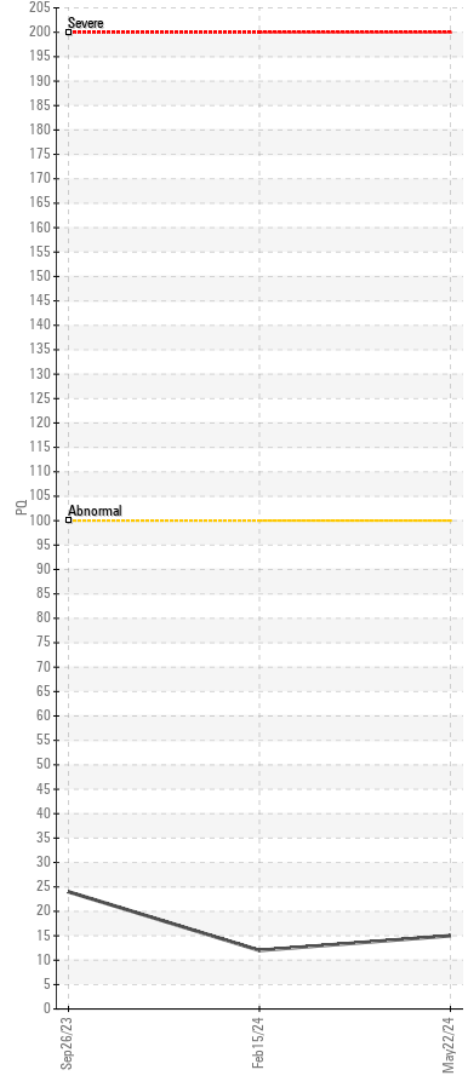
Ferrous Alloys



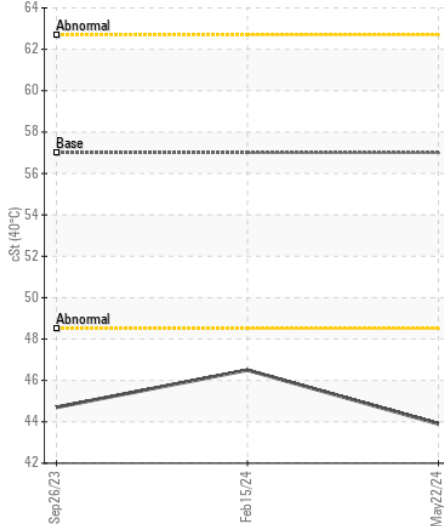
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0207191 **Received** : 24 May 2024
Lab Number : 06190733 **Tested** : 29 May 2024
Unique Number : 11047485 **Diagnosed** : 29 May 2024 - Sean Felton
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)

JRE - CASTLE HAYNE
 113 CROWATAN ROAD
 CASTLE HAYNE, NC
 US 28429-5819

Contact: WILMINGTON SHOP

todd.simmons@jamesriverequipment.com; canastasio@wearcheck.com; canastasio@we

T: (910)675-9211

F: