



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

Machine Id
FORD F150 V101
 Component
Front Differential
 Fluid
GEAR OIL SAE 80W140 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | JR0193332 | JR0144761 | JR0178978 |
| Sample Date | | Client Info | | 16 Jan 2024 | 20 Oct 2023 | 09 Aug 2023 |
| Machine Age | mls | Client Info | | 114673 | 109183 | 104052 |
| Oil Age | mls | Client Info | | 20687 | 35966 | 5266 |
| Filter Age | mls | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changed | Not Changed | Not Changed |
| Filter Changed | | Client Info | | Changed | Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|-------|--------------|------|------|
| PQ | | ASTM D8184 | | 58 | 15 | 16 |
| Iron | ppm | ASTM D5185m | >1206 | 31 | 16 | 9 |
| Chromium | ppm | ASTM D5185m | >9 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >9 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 51 | 23 | 28 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >72 | 2 | 1 | <1 |
| Lead | ppm | ASTM D5185m | >56 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >57 | <1 | 0 | <1 |
| Tin | ppm | ASTM D5185m | >6 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

There is no indication of any contamination in the oil.

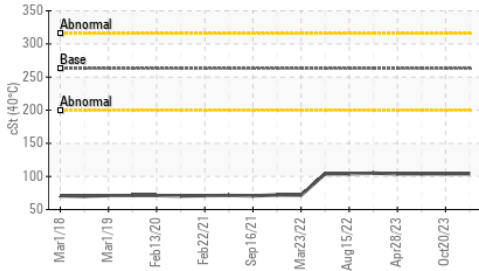
| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >344 | 12 | 12 | 9 |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 0 | <1 |
| Water | | WC Method | >.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | 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 | >.2 | NEG | NEG | NEG |

FLUID CONDITION

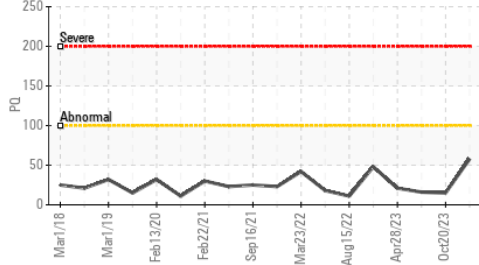
The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | | <1 | 1 | <1 |
| Boron | ppm | ASTM D5185m | 400 | 305 | 301 | 349 |
| Barium | ppm | ASTM D5185m | 200 | 2 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 12 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 2 | 1 | 2 |
| Magnesium | ppm | ASTM D5185m | 12 | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 150 | 30 | 43 | 1 |
| Phosphorus | ppm | ASTM D5185m | 1650 | 1222 | 1428 | 1354 |
| Zinc | ppm | ASTM D5185m | 125 | 0 | 17 | 0 |
| Sulfur | ppm | ASTM D5185m | 22500 | 23234 | 22220 | 25056 |
| Visc @ 40°C | cSt | ASTM D445 | 263 | 104 | 104 | 104 |

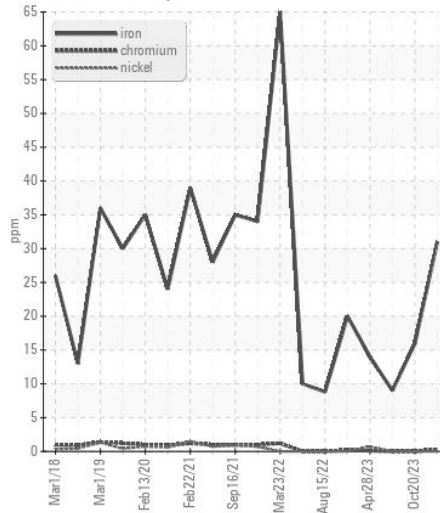
Viscosity @ 40°C



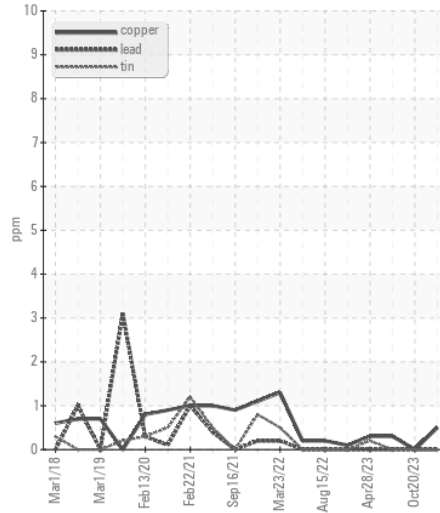
PQ



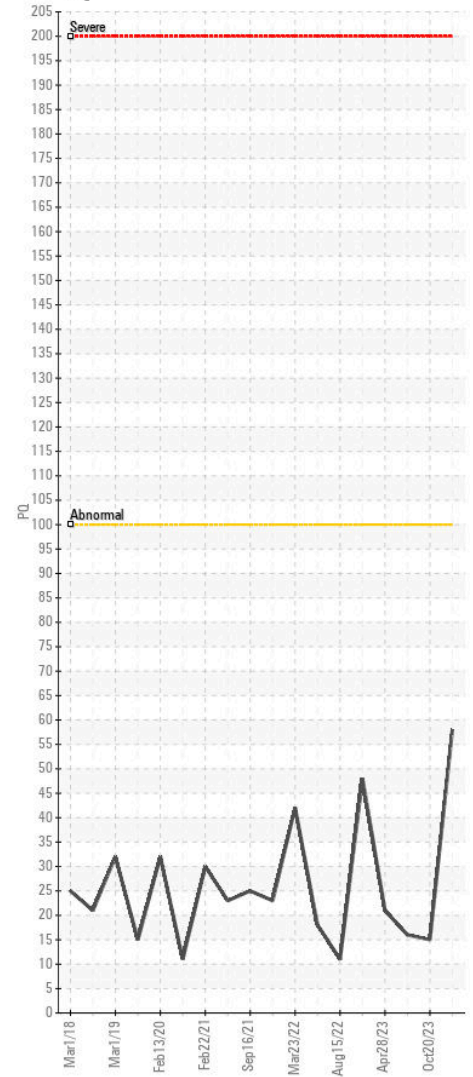
Ferrous Alloys



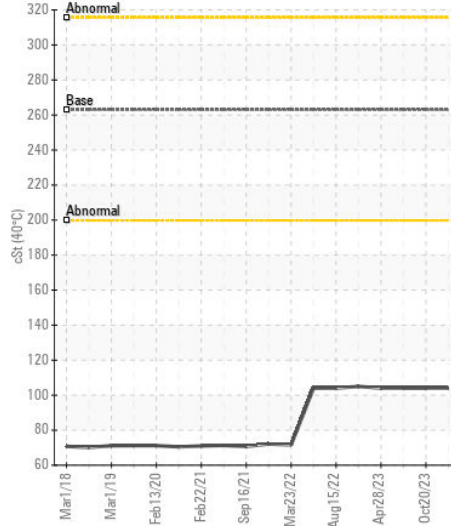
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0193332 **Received** : 07 Feb 2024
Lab Number : 06082734 **Tested** : 08 Feb 2024
Unique Number : 10870179 **Diagnosed** : 09 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: PQ)

MATTHEWS CONSTRUCTION
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 ROCK HILL, SC
 US 29732
 Contact: Tad Clinton
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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)