

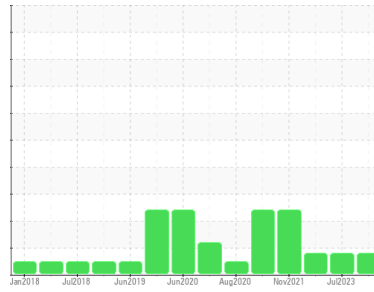


OIL ANALYSIS REPORT



Area
OKLAHOMA/102/EG - DOZER
 Machine Id
39.62 [OKLAHOMA^102^EG - DOZER]
 Component
Right Final Drive
 Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The chromium level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0914472 | WC0832338 | WC0745895 |
| Sample Date | Client Info | | 07 Jun 2024 | 27 Jul 2023 | 10 Nov 2022 |
| Machine Age | hrs | Client Info | 9350 | 8888 | 8446 |
| Oil Age | hrs | Client Info | 456 | 6956 | 1393 |
| Oil Changed | Client Info | | Changed | Not Changd | Not Changd |
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.2 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 | |
|----------|--------|-------------|---------|--------------|----------|------|
| Iron | ppm | ASTM D5185m | >800 | 605 | 597 | 615 |
| Chromium | ppm | ASTM D5185m | >10 | ▲ 12 | ▲ 11 | ▲ 11 |
| Nickel | ppm | ASTM D5185m | >5 | 1 | <1 | 1 |
| Titanium | ppm | ASTM D5185m | >15 | 3 | 3 | 3 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >75 | 47 | 47 | 48 |
| Lead | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >75 | 4 | 5 | 4 |
| Tin | ppm | ASTM D5185m | >8 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185m | >50 | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 | |
|------------|--------|-------------|---------|--------------|----------|-------|
| Boron | ppm | ASTM D5185m | | 9 | 0 | 9 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 8 | 9 | 9 |
| Manganese | ppm | ASTM D5185m | | 7 | 8 | 7 |
| Magnesium | ppm | ASTM D5185m | | 35 | 36 | 34 |
| Calcium | ppm | ASTM D5185m | | 2639 | 2567 | 2469 |
| Phosphorus | ppm | ASTM D5185m | | 1020 | 919 | 872 |
| Zinc | ppm | ASTM D5185m | | 1105 | 1023 | 989 |
| Sulfur | ppm | ASTM D5185m | | 10442 | 11946 | 11466 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|-------------|---------|------------|----------|-----|
| Silicon | ppm | ASTM D5185m | >400 | 271 | 260 | 246 |
| Sodium | ppm | ASTM D5185m | | 4 | 7 | 5 |
| Potassium | ppm | ASTM D5185m | >20 | 15 | 14 | 10 |

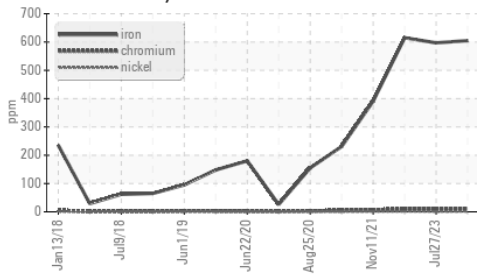
VISUAL

| | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|--------------|----------|-------|
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | LIGHT | 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 | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

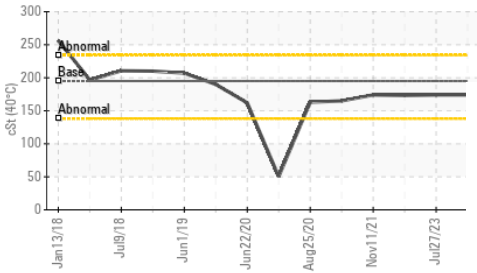


OIL ANALYSIS REPORT

▲ Ferrous Alloys



Viscosity @ 40°C



FLUID PROPERTIES

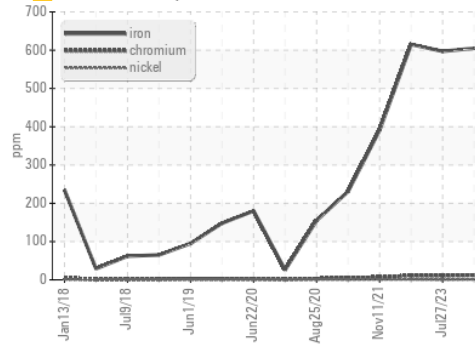
| method | limit/base | current | history1 | history2 | | |
|-------------|------------|-----------|----------|------------|-----|-----|
| Visc @ 40°C | cSt | ASTM D445 | 195 | 174 | 174 | 173 |

SAMPLE IMAGES

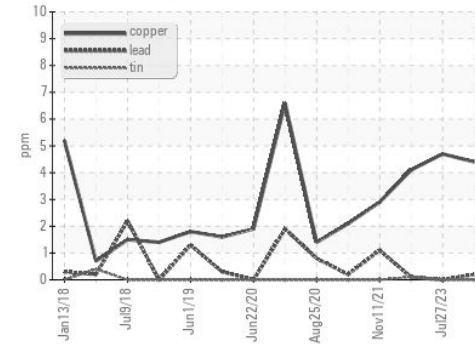
| method | limit/base | current | history1 | history2 | |
|--------|------------|---------|----------|----------|----------|
| Color | | | no image | no image | no image |
| Bottom | | | no image | no image | no image |

GRAPHS

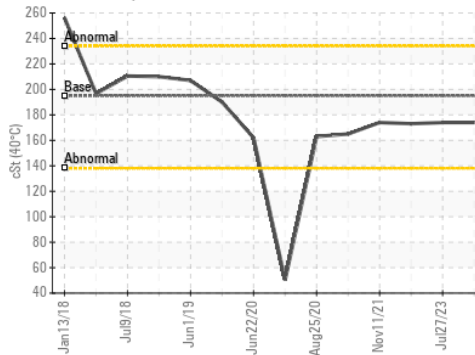
▲ Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0914472
Lab Number : **06216114**
Unique Number : 11088978
Test Package : CONST

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 23 Jun 2024 - Don Baldrige

SHERWOOD CONSTRUCTION CO INC
 3219 WEST MAY ST
 WICHITA, KS
 US 67213
 Contact: DOUG KING
 doug.king@sherwood.net
 T: (316)617-3161
 F: x:

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)