

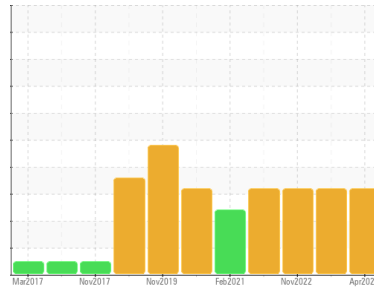


OIL ANALYSIS REPORT



Area
OKLAHOMA/102/EG - EXCAVATOR
 Machine Id
20.514L [OKLAHOMA^102^EG - EXCAVATOR]
 Component
Left Final Drive
 Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Gear wear is indicated.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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 | | WC0908849 | WC0778385 | WC0741069 |
| Sample Date | Client Info | | 10 Apr 2024 | 16 Jan 2023 | 18 Nov 2022 |
| Machine Age | hrs | Client Info | 1850 | 7005 | 6860 |
| Oil Age | hrs | Client Info | 1000 | 4724 | 4585 |
| 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 | ▲ 1345 | ▲ 1246 | ▲ 965 |
| Chromium | ppm | ASTM D5185m | >10 | 7 | 7 | 5 |
| Nickel | ppm | ASTM D5185m | >5 | <1 | 2 | 1 |
| Titanium | ppm | ASTM D5185m | >15 | 7 | 5 | 4 |
| Silver | ppm | ASTM D5185m | >2 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >75 | ● 105 | ● 64 | ● 57 |
| Lead | ppm | ASTM D5185m | >10 | 0 | 2 | 1 |
| Copper | ppm | ASTM D5185m | >75 | <1 | 2 | 2 |
| Tin | ppm | ASTM D5185m | >8 | <1 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | >50 | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Cadmium | ppm | ASTM D5185m | | <1 | <1 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 | |
|------------|--------|-------------|---------|--------------|----------|-------|
| Boron | ppm | ASTM D5185m | | 4 | 3 | 7 |
| Barium | ppm | ASTM D5185m | | 2 | 11 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 2 | 3 | 3 |
| Manganese | ppm | ASTM D5185m | | 13 | 11 | 9 |
| Magnesium | ppm | ASTM D5185m | | 36 | 31 | 29 |
| Calcium | ppm | ASTM D5185m | | 3141 | 2593 | 3035 |
| Phosphorus | ppm | ASTM D5185m | | 1049 | 875 | 1012 |
| Zinc | ppm | ASTM D5185m | | 1240 | 1098 | 1232 |
| Sulfur | ppm | ASTM D5185m | | 14327 | 13465 | 15875 |

CONTAMINANTS

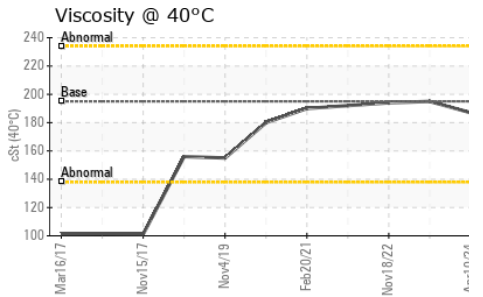
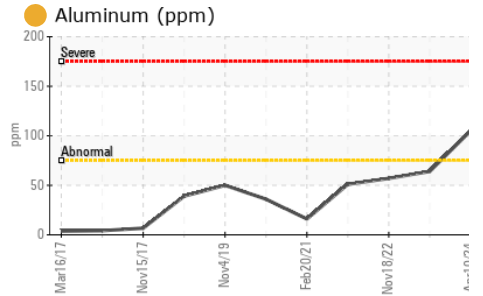
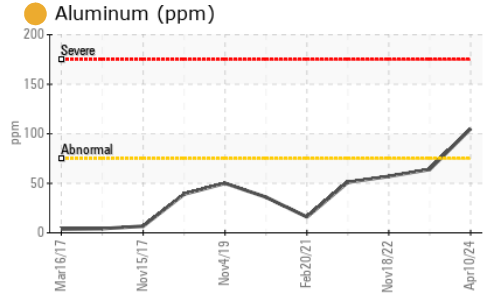
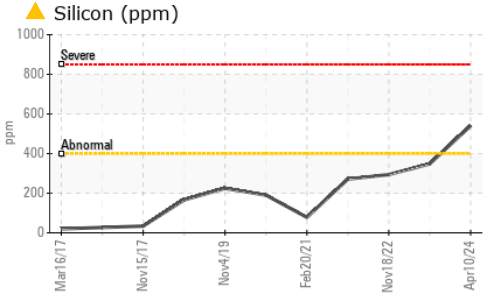
| | method | limit/base | current | history1 | history2 | |
|-----------|--------|-------------|---------|--------------|----------|-------|
| Silicon | ppm | ASTM D5185m | >400 | ▲ 540 | ▲ 348 | ▲ 294 |
| Sodium | ppm | ASTM D5185m | | 11 | 9 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 33 | 18 | 16 |

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 | 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 | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |



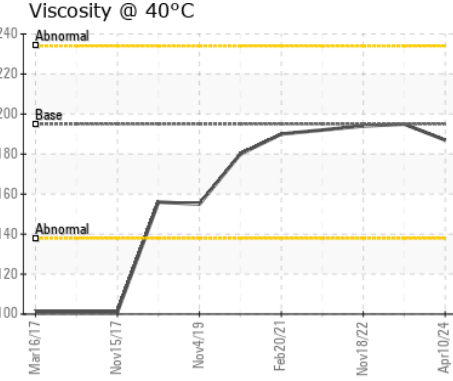
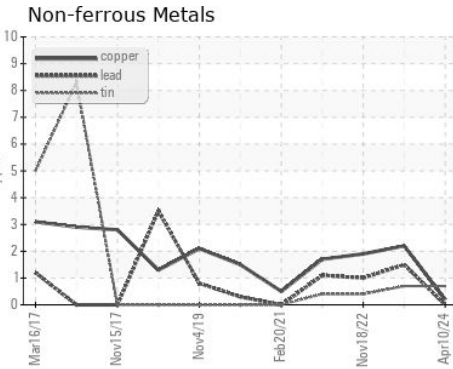
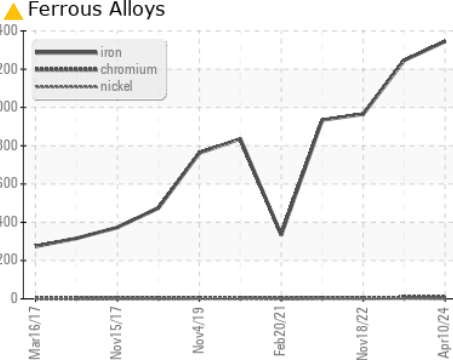
OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|------------|----------|-----|
| Visc @ 40°C | cSt | ASTM D445 | 195 | 187 | 195 | 194 |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0908849
Lab Number : **06156326**
Unique Number : 10991749
Test Package : CONST

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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)