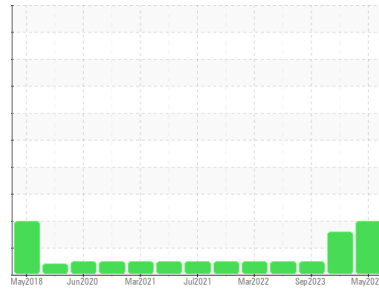


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / HULBERT
 Machine Id
OHT097
 Component
Rear Left Final Drive
 Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



VISCOSITY



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | PCA0085958 | PCA0109180 | PCA0086797 |
| Sample Date | Client Info | | 10 May 2024 | 10 Feb 2024 | 29 Sep 2023 |
| Machine Age | hrs | Client Info | 36071 | 35540 | 35032 |
| Oil Age | hrs | Client Info | 1000 | 0 | 34585 |
| Oil Changed | Client Info | | Not Chngd | Not Chngd | Changed |
| Sample Status | | | ATTENTION | ATTENTION | NORMAL |

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 | 49 | 64 | 142 |
| Chromium | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m >5 | 1 | <1 | 2 |
| Titanium | ppm | ASTM D5185m >15 | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m >2 | 1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >75 | 2 | 2 | 3 |
| Lead | ppm | ASTM D5185m >10 | <1 | 0 | <1 |
| Copper | ppm | ASTM D5185m >75 | 6 | 5 | 8 |
| Tin | ppm | ASTM D5185m >8 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | <1 | 0 | <1 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 23 | 28 | 65 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 9 |
| Molybdenum | ppm | ASTM D5185m | 4 | 4 | 8 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | 1 |
| Magnesium | ppm | ASTM D5185m | 53 | 68 | 98 |
| Calcium | ppm | ASTM D5185m | 1235 | 1662 | 242 |
| Phosphorus | ppm | ASTM D5185m | 628 | 802 | 655 |
| Zinc | ppm | ASTM D5185m | 677 | 861 | 378 |
| Sulfur | ppm | ASTM D5185m | 4038 | 5083 | 11488 |

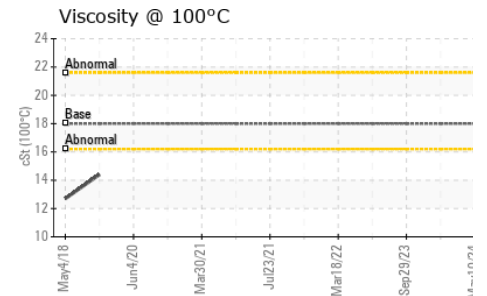
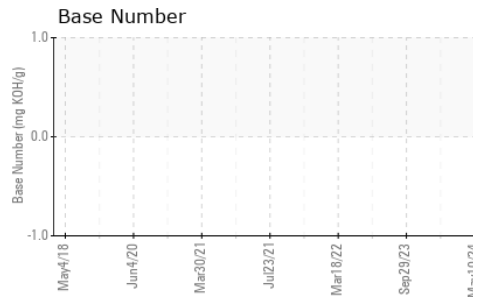
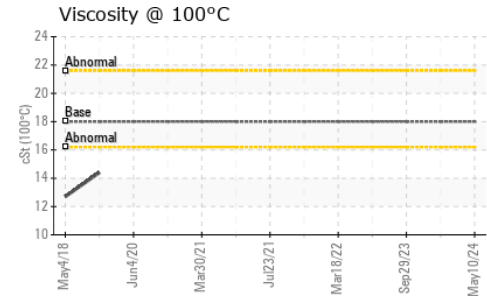
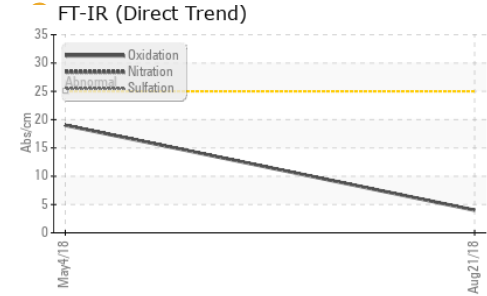
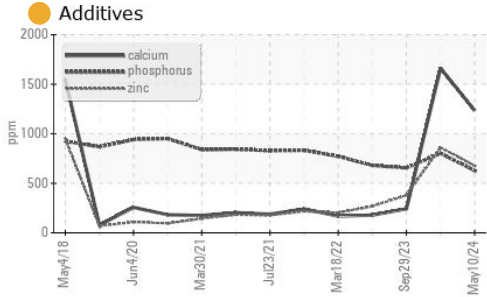
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|-----------|----------|----------|
| Silicon | ppm | ASTM D5185m >400 | 11 | 15 | 28 |
| Sodium | ppm | ASTM D5185m | 1 | <1 | 0 |
| Potassium | ppm | ASTM D5185m >20 | 2 | 1 | 2 |

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 |

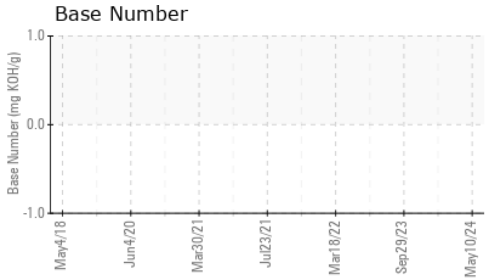
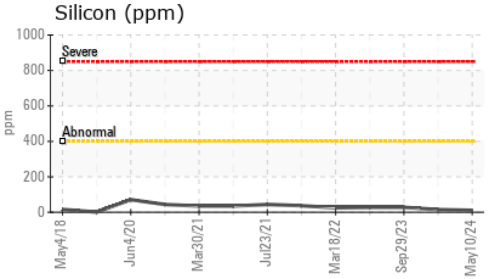
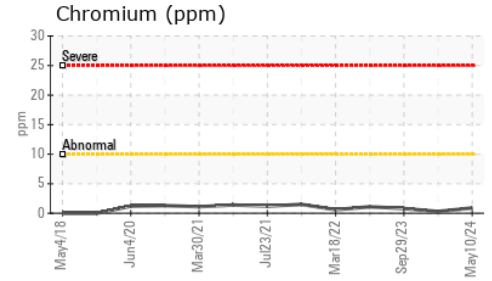
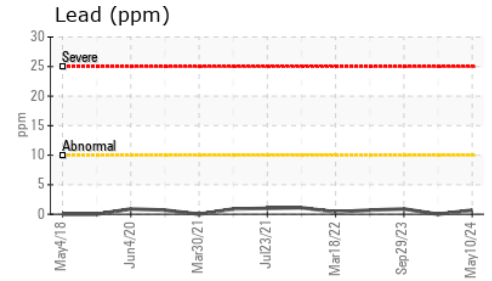
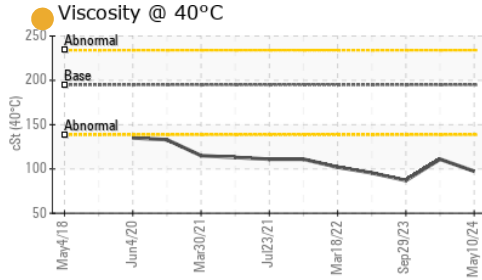
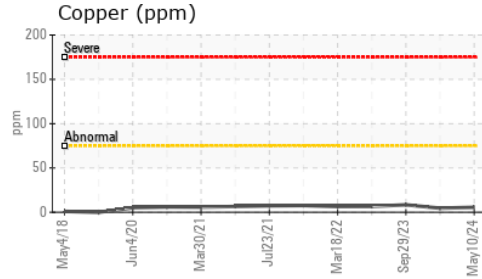
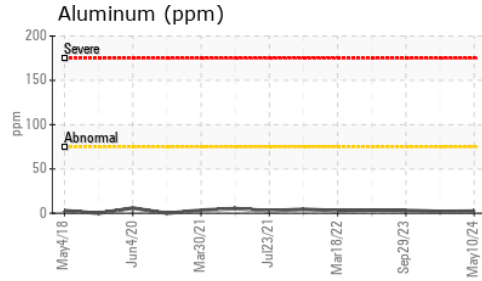
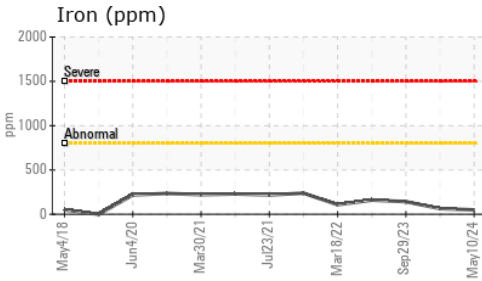
OIL ANALYSIS REPORT



| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 195 | 97.4 | 111 | 87.0 |

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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0085958
Lab Number : 06193126
Unique Number : 11049878
Test Package : MOB 1 (Additional Tests: FT-IR, KV100, TBN)

Received : 28 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 2024 - Sean Felton

Kemp Quarries - Kemp Stone - Hulbert
 17801 Hwy 80
 Hulbert, OK
 US 74441
 Contact:
 hulbert@kempstone.com

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)