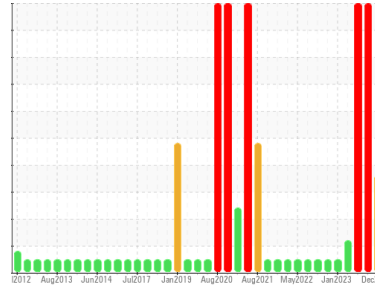


OIL ANALYSIS REPORT

Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
 Machine Id
WL079
 Component
Front Right Final Drive
 Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



VISUAL METAL



DIAGNOSIS

Recommendation
 We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear
 High concentration of visible metal present. Bearing and/or bushing wear is indicated.

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 | PCA0084792 | PCA0085848 | PCA0085856 |
| Sample Date | Client Info | 28 Dec 2023 | 13 Oct 2023 | 09 Aug 2023 |
| Machine Age | hrs | 48609 | 48226 | 47885 |
| Oil Age | hrs | 383 | 1200 | 900 |
| Oil Changed | Client Info | Not Chngd | Changed | Not Chngd |
| Sample Status | | ABNORMAL | SEVERE | SEVERE |

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 | 33 | 48 | 48 |
| Chromium | ppm ASTM D5185m >10 | <1 | <1 | <1 |
| Nickel | ppm ASTM D5185m >5 | 2 | 2 | 2 |
| Titanium | ppm ASTM D5185m >15 | <1 | <1 | <1 |
| Silver | ppm ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm ASTM D5185m >75 | 2 | 2 | 4 |
| Lead | ppm ASTM D5185m >10 | 33 | 84 | 70 |
| Copper | ppm ASTM D5185m >75 | 159 | 431 | 315 |
| Tin | ppm ASTM D5185m >8 | 11 | 27 | 23 |
| Vanadium | ppm ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm ASTM D5185m | <1 | <1 | 0 |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|-----------------|--------------|----------|----------|
| Boron | ppm ASTM D5185m | <1 | 0 | <1 |
| Barium | ppm ASTM D5185m | 0 | 9 | 0 |
| Molybdenum | ppm ASTM D5185m | 2 | 2 | 2 |
| Manganese | ppm ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm ASTM D5185m | 19 | 23 | 35 |
| Calcium | ppm ASTM D5185m | 3306 | 2987 | 4348 |
| Phosphorus | ppm ASTM D5185m | 984 | 989 | 1412 |
| Zinc | ppm ASTM D5185m | 1171 | 1192 | 1683 |
| Sulfur | ppm ASTM D5185m | 7273 | 7501 | 9652 |

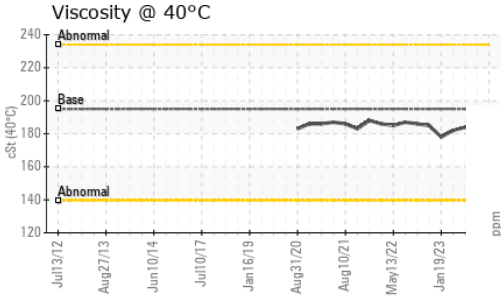
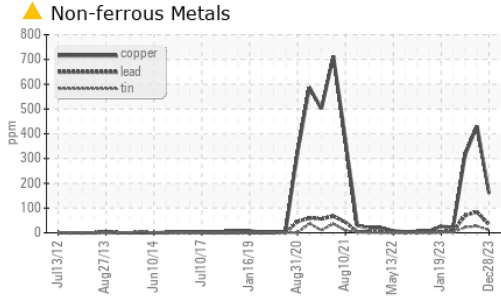
CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|----------------------|-----------|----------|----------|
| Silicon | ppm ASTM D5185m >400 | 13 | 18 | 22 |
| Sodium | ppm ASTM D5185m | 0 | 0 | 0 |
| Potassium | ppm ASTM D5185m >20 | 2 | 2 | 2 |

VISUAL

| method | limit/base | current | history1 | history2 |
|------------------|----------------------|----------------|----------|----------|
| White Metal | scalar *Visual NONE | NONE | ▲ HEAVY | NONE |
| Yellow Metal | scalar *Visual NONE | ▲ HEAVY | NONE | ▲ HEAVY |
| 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

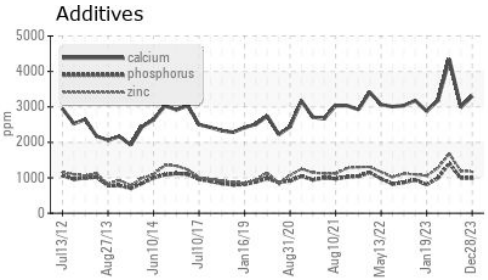
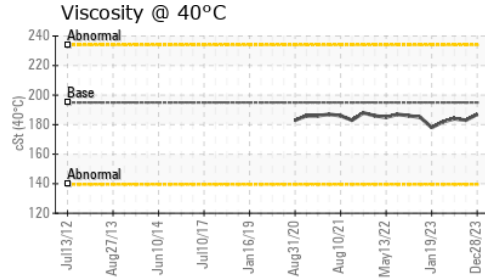
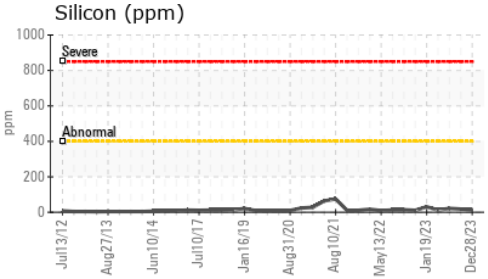
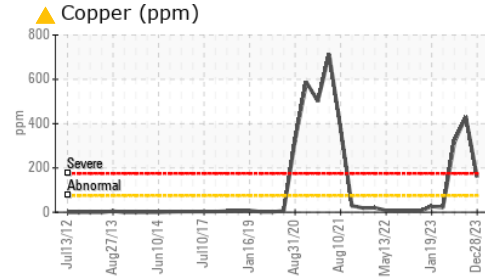
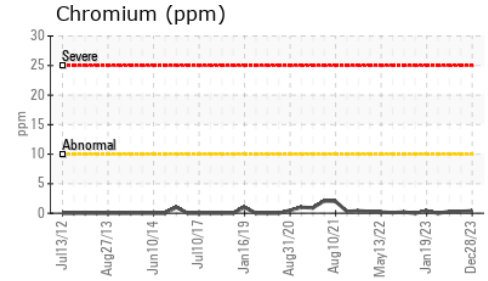
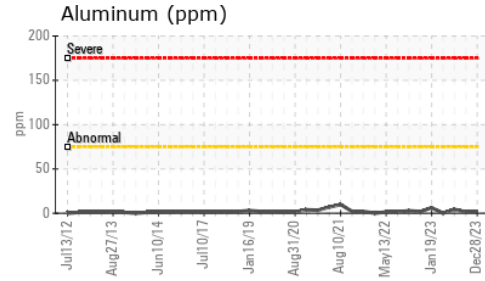
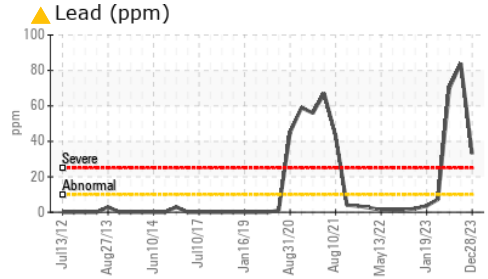
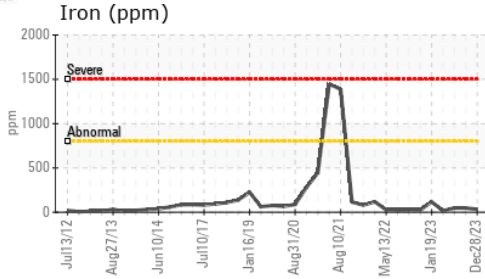


| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|-----------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 195 | 187 | 183 | 184 |

| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
|---------------|--|--------|------------|---------|----------|----------|
|---------------|--|--------|------------|---------|----------|----------|

| | | | | | | |
|--------|--|--|--|----------|----------|----------|
| Color | | | | no image | no image | no image |
| Bottom | | | | no image | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0084792 **Received** : 08 Jan 2024
Lab Number : 06054426 **Diagnosed** : 10 Jan 2024
Unique Number : 10820375 **Diagnostician** : Jonathan Hester
Test Package : MOB 1

Kemp Quarries - River Valley - Backbone
 5600 S Hwy 253
 Huntington, AR
 US 72940

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)

backbone@rivervalleyquarries.com

T:
F: