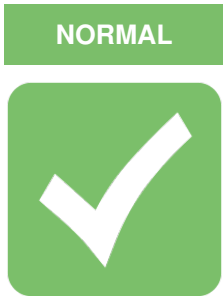
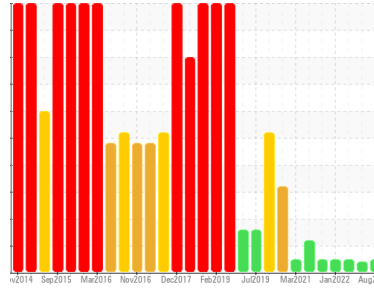


OIL ANALYSIS REPORT



Area
KEMP QUARRIES / RIVER VALLEY BACKBONE
Machine Id
WL088
Component
Rear Differential
Fluid
MOBIL MOBILTRANS HD 50 (--- GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. (Customer Sample Comment: Hour meter 6146)

Wear
All 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 | PCA0085867 | PCA0070231 | PCA0049262 |
| Sample Date | Client Info | 09 Aug 2023 | 14 Nov 2022 | 17 Feb 2022 |
| Machine Age | hrs | 6146 | 5802 | 5321 |
| Oil Age | hrs | 300 | 5802 | 2612 |
| Oil Changed | Client Info | Not Chngd | Changed | Not Chngd |
| Sample Status | | NORMAL | ATTENTION | NORMAL |

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|------------------|--------------|----------|----|
| Iron | ppm | ASTM D5185m >500 | 17 | 43 | 36 |
| Chromium | ppm | ASTM D5185m >3 | <1 | 1 | 1 |
| Nickel | ppm | ASTM D5185m >3 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m >2 | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >30 | 2 | 4 | 4 |
| Lead | ppm | ASTM D5185m >13 | <1 | <1 | 1 |
| Copper | ppm | ASTM D5185m >103 | 2 | 5 | 3 |
| Tin | ppm | ASTM D5185m >5 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185m >5 | --- | --- | <1 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | <1 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|-------------|--------------|----------|------|
| Boron | ppm | ASTM D5185m | 0 | 2 | 1 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | <1 | 3 | 2 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 10 | 26 | 31 |
| Calcium | ppm | ASTM D5185m | 1419 | 739 | 2243 |
| Phosphorus | ppm | ASTM D5185m | 653 | 476 | 889 |
| Zinc | ppm | ASTM D5185m | 817 | 623 | 1148 |
| Sulfur | ppm | ASTM D5185m | 2692 | 2052 | 3838 |

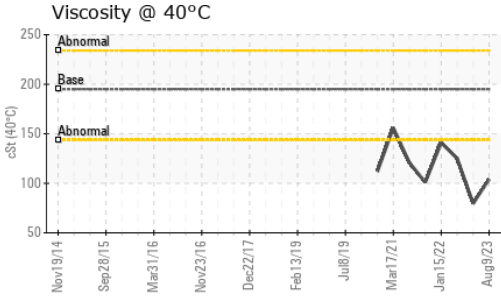
CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|------------------|--------------|----------|----|
| Silicon | ppm | ASTM D5185m >100 | 10 | 12 | 12 |
| Sodium | ppm | ASTM D5185m | 0 | 0 | 2 |
| Potassium | ppm | ASTM D5185m >20 | <1 | 2 | 2 |

VISUAL

| method | limit/base | current | history1 | history2 | |
|------------------|------------|---------------|--------------|----------|-------|
| White Metal | scalar | *Visual NONE | NONE | MODER | LIGHT |
| Yellow Metal | scalar | *Visual NONE | MODER | 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 >.2 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | NEG | NEG | NEG |

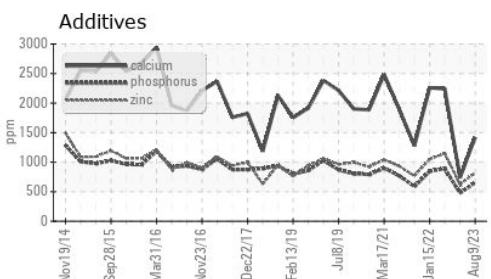
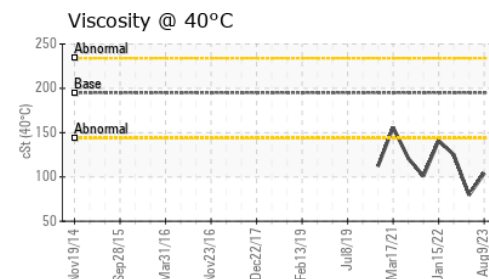
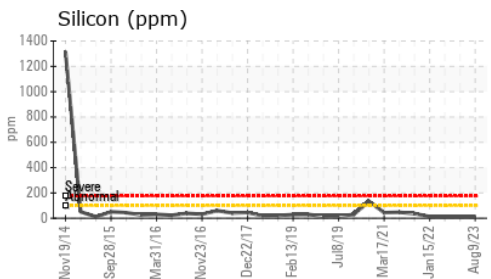
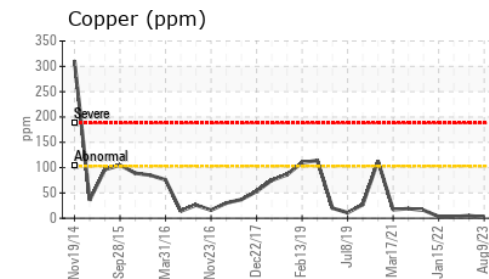
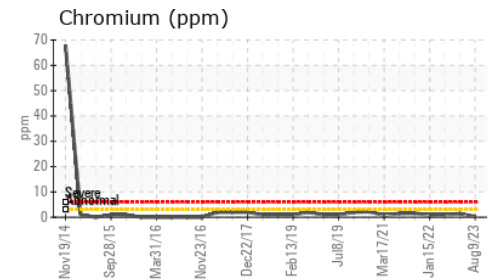
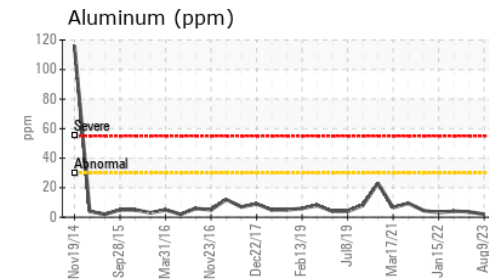
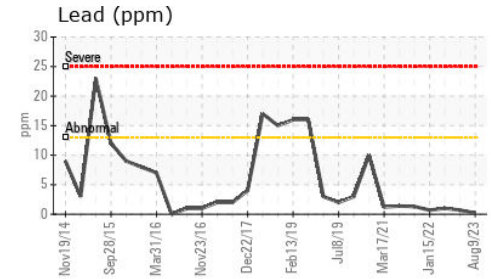
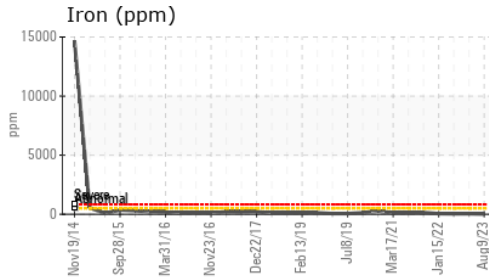
OIL ANALYSIS REPORT



| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|-----------|------------|------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 195 | 104 | ▲ 79.6 | 125 |

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0085867
Lab Number : 05924558
Unique Number : 10604505
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: