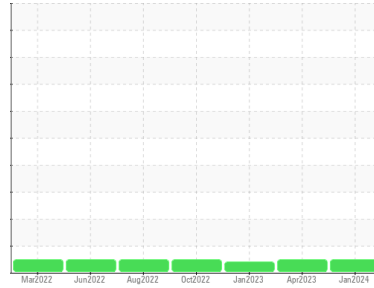


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / RIVER VALLEY BACKBONE**  
Machine Id  
**WL147**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 68 (--- GAL)**

Sample Rating Trend



**NORMAL**



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

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2    |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number      | Client Info |             |            | <b>PCA0069952</b>  | PCA0085829  | PCA0037165  |
| Sample Date        | Client Info |             |            | <b>30 Jan 2024</b> | 06 Apr 2023 | 13 Jan 2023 |
| Machine Age        | hrs         | Client Info |            | <b>29627</b>       | 28770       | 28425       |
| Oil Age            | hrs         | Client Info |            | <b>1200</b>        | 345         | 1200        |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Not Changd  | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | ABNORMAL    |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.1       | <b>NEG</b> | NEG      | NEG      |

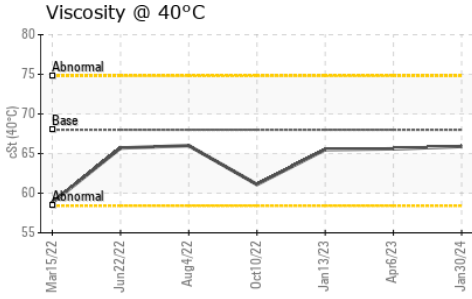
| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >20        | <b>3</b>     | <1       | 2        |
| Chromium    | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>3</b>     | <1       | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >75        | <b>1</b>     | 0        | <1       |
| Tin         | ppm | ASTM D5185m | >10        | <b>1</b>     | 0        | 0        |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 5          | <b>&lt;1</b> | 1        | <1       |
| Barium     | ppm | ASTM D5185m | 5          | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 5          | <b>5</b>     | 2        | 2        |
| Manganese  | ppm | ASTM D5185m |            | <b>1</b>     | <1       | 0        |
| Magnesium  | ppm | ASTM D5185m | 25         | <b>36</b>    | 14       | 8        |
| Calcium    | ppm | ASTM D5185m | 200        | <b>113</b>   | 141      | 80       |
| Phosphorus | ppm | ASTM D5185m | 300        | <b>387</b>   | 360      | 333      |
| Zinc       | ppm | ASTM D5185m | 370        | <b>483</b>   | 477      | 390      |
| Sulfur     | ppm | ASTM D5185m | 2500       | <b>892</b>   | 779      | 675      |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >20        | <b>1</b>     | <1       | 1        |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 0        |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | ▲ MODER  |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | *Visual | >0.1       | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | NEG      | NEG      |

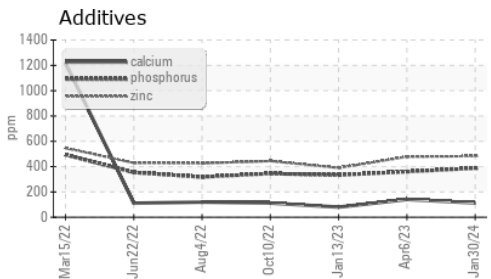
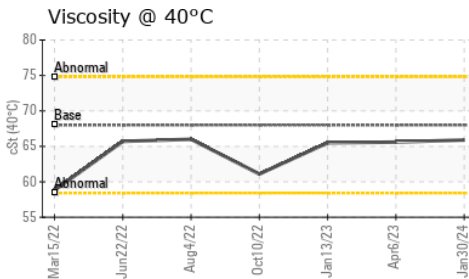
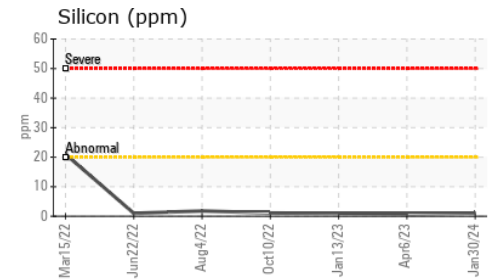
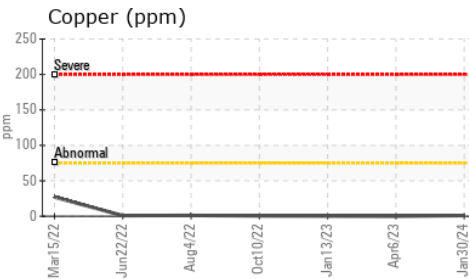
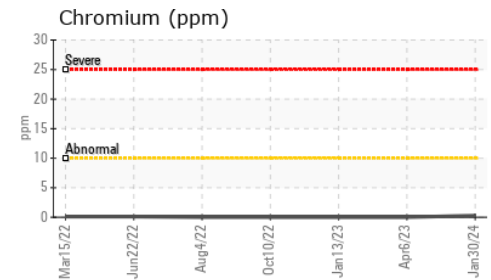
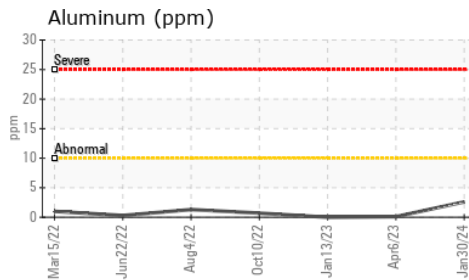
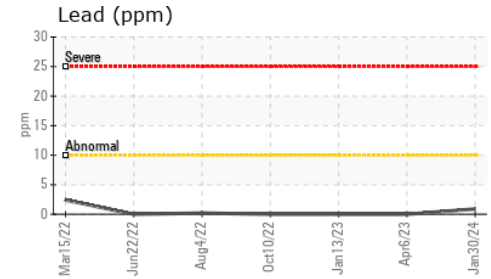
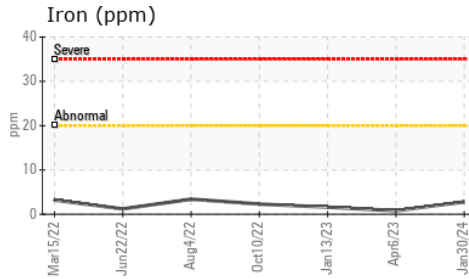
# OIL ANALYSIS REPORT



| FLUID PROPERTIES |     | method    | limit/base | current     | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 68         | <b>65.9</b> | 65.6     | 65.5     |

| 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.** : PCA0069952  
**Lab Number** : 06082137  
**Unique Number** : 10869582  
**Test Package** : MOB 1

**Received** : 06 Feb 2024  
**Tested** : 07 Feb 2024  
**Diagnosed** : 07 Feb 2024 - Wes Davis

**Kemp Quarries - River Valley - Backbone**  
 5600 S Hwy 253  
 Huntingtny, AR  
 US 72940  
 Contact:

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: