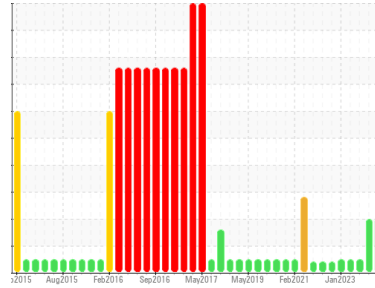


# OIL ANALYSIS REPORT



Area  
**KEMP QUARRIES / RIVER VALLEY ARKOMA**  
Machine Id  
**WL062**  
Component  
**Front Differential**  
Fluid  
**MOBIL MOBILTRANS HD 50 (--- GAL)**

Sample Rating Trend



## VISCOSITY



### DIAGNOSIS

#### Recommendation

The oil change at the time of sampling has been noted. 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. Additive levels indicate 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 |             | <b>PCA0084425</b>  | PCA0084024  | PCA0084237  |
| Sample Date   | Client Info |             | <b>22 Feb 2024</b> | 23 Oct 2023 | 04 Aug 2023 |
| Machine Age   | hrs         | Client Info | <b>26382</b>       | 25859       | 25405       |
| Oil Age       | hrs         | Client Info | <b>24267</b>       | 24267       | 1500        |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Not Changd  | Not Changd  |
| Sample Status |             |             | <b>ATTENTION</b>   | ATTENTION   | NORMAL      |

### CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >.2        | <b>NEG</b> | NEG      | NEG      |

### WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >500 | <b>152</b>   | 112      | 83       |
| Chromium | ppm    | ASTM D5185m >3   | <b>3</b>     | 2        | 2        |
| Nickel   | ppm    | ASTM D5185m >3   | <b>&lt;1</b> | 1        | <1       |
| Titanium | ppm    | ASTM D5185m >2   | <b>&lt;1</b> | <1       | 0        |
| Silver   | ppm    | ASTM D5185m >2   | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >30  | <b>2</b>     | 1        | 2        |
| Lead     | ppm    | ASTM D5185m >13  | <b>13</b>    | 11       | 11       |
| Copper   | ppm    | ASTM D5185m >103 | <b>89</b>    | 85       | 91       |
| Tin      | ppm    | ASTM D5185m >5   | <b>5</b>     | 4        | 5        |
| Vanadium | ppm    | ASTM D5185m      | <b>0</b>     | 0        | <1       |
| Cadmium  | ppm    | ASTM D5185m      | <b>0</b>     | 0        | 0        |

### ADDITIVES

|            | method | limit/base  | current     | history1 | history2 |
|------------|--------|-------------|-------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>    | 0        | 0        |
| Barium     | ppm    | ASTM D5185m | <b>0</b>    | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>    | 0        | <1       |
| Manganese  | ppm    | ASTM D5185m | <b>2</b>    | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>9</b>    | 9        | 7        |
| Calcium    | ppm    | ASTM D5185m | <b>70</b>   | 74       | 87       |
| Phosphorus | ppm    | ASTM D5185m | <b>380</b>  | 381      | 387      |
| Zinc       | ppm    | ASTM D5185m | <b>456</b>  | 463      | 444      |
| Sulfur     | ppm    | ASTM D5185m | <b>1126</b> | 979      | 1640     |

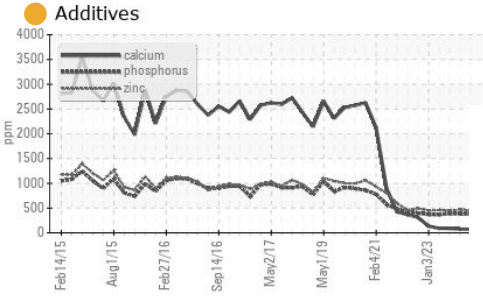
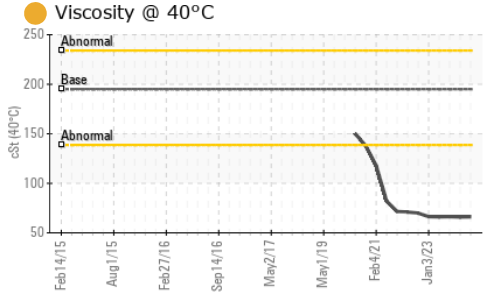
### CONTAMINANTS

|           | method | limit/base       | current  | history1 | history2 |
|-----------|--------|------------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >100 | <b>9</b> | 6        | 5        |
| Sodium    | ppm    | ASTM D5185m      | <b>1</b> | <1       | <1       |
| Potassium | ppm    | ASTM D5185m >20  | <b>0</b> | 1        | 0        |

### VISUAL

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

# OIL ANALYSIS REPORT



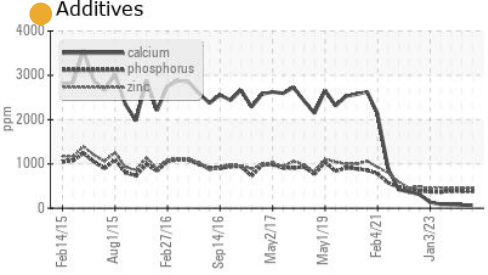
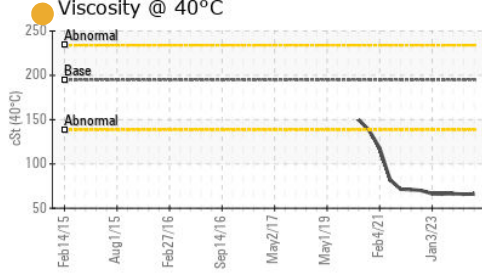
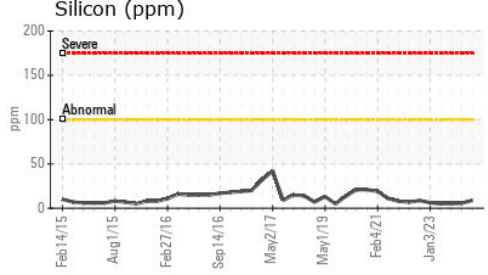
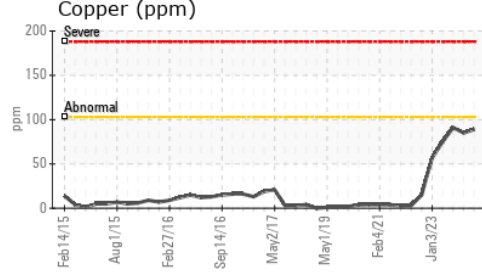
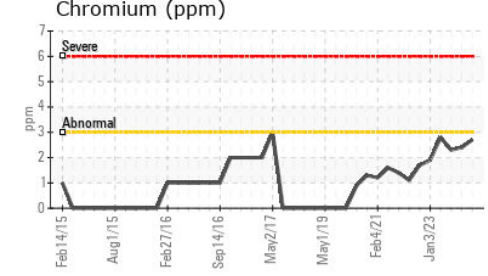
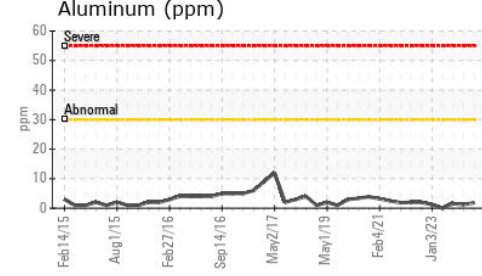
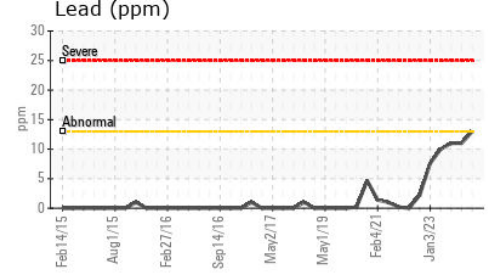
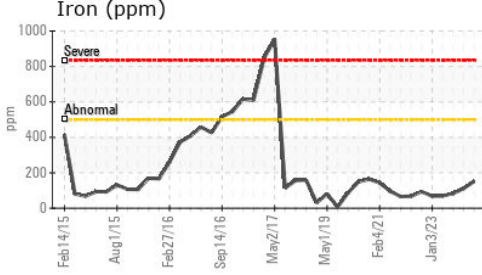
## FLUID PROPERTIES

Visc @ 40°C    cSt    ASTM D445    195    **66.1**    65.9    66.3

## 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.** : PCA0084425    **Received** : 01 Mar 2024  
**Lab Number** : **06106817**    **Tested** : 04 Mar 2024  
**Unique Number** : 10910314    **Diagnosed** : 05 Mar 2024 - Sean Felton  
**Test Package** : MOB 1

**Kemp Quarries - River Valley - Arkoma**  
 12971 HWY 9a  
 Shawnee, OK  
 US 74804  
 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)

arkomashop@kempquarries.net  
 T:  
 F: