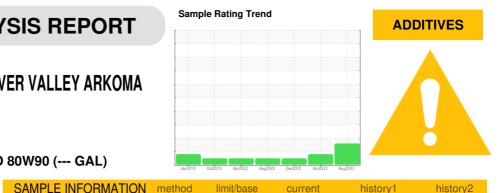


OIL ANALYSIS REPORT



KEMP QUARRIES / RIVER VALLEY ARKOMA **OHT102** Component **Rear Left Final Drive** Fluid

MOBIL MOBILUBE HD 80W90 (--- GAL)

| DIAGNOSIS | SAMPLE INFOR | | method | limit/base | current | history1 | history2 |
|--|------------------|------------|-------------|------------|---------------|-------------|---------------|
| A Recommendation | Sample Number | | Client Info | | PCA0084286 | PCA05834763 | PCA0070393 |
| Resample at the next service interval to monitor. | Sample Date | | Client Info | | 22 Aug 2023 | 20 Apr 2023 | 09 Dec 2022 |
| Wear | Machine Age | hrs | Client Info | | 29115 | 28531 | 27903 |
| All component wear rates are normal. | Oil Age | hrs | Client Info | | 28531 | 0 | 27510 |
| Contamination | Oil Changed | | Client Info | | Changed | N/A | Not Changd |
| There is no indication of any contamination in the | Sample Status | | | | ATTENTION | ABNORMAL | NORMAL |
| oil. | WEAR META | S | method | limit/base | current | history1 | history2 |
| Fluid Condition Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The condition of the oil is acceptable for the time in service. | Iron | ppm | ASTM D5185m | | 126 | 171 | 80 |
| | Chromium | ppm | ASTM D5185m | | <1 | 1 | <1 |
| | Nickel | ppm | ASTM D5185m | | <1 | 1 | 0 |
| | Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| | Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | | <1 | 0 | 1 |
| | Lead | ppm | ASTM D5185m | | 1 | 0 | 0 |
| | Copper | ppm | ASTM D5185m | | 69 | ▲ 84 | 27 |
| | Tin | | ASTM D5185m | | 2 | 3 | 1 |
| | Vanadium | ppm ppm | ASTM D5185m | ~0 | 2 <1 | 0 | 0 |
| | Cadmium | | ASTM D5185m | | <1 | 0 | 0 |
| | | ppm | | | | | |
| | ADDITIVES | | method | limit/base | | history1 | history2 |
| | Boron | ppm | ASTM D5185m | | <u> </u> | 297 | 269 |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | | 2 | 11 | 5 |
| | Manganese | ppm | ASTM D5185m | | 2 | 2 | <1 |
| | Magnesium | ppm | ASTM D5185m | | 2 | 2 | 0 |
| | Calcium | ppm | ASTM D5185m | | <u> </u> | 27 | 16 |
| | Phosphorus | ppm | ASTM D5185m | | 754 | 1008 | 973 |
| | Zinc | ppm | ASTM D5185m | | <u> </u> | 11 | 7 |
| | Sulfur | ppm | ASTM D5185m | | ▲ 5250 | 20254 | 22920 |
| | CONTAMINA | NTS | method | limit/base | current | history1 | history2 |
| | Silicon | ppm | ASTM D5185m | >400 | 14 | 8 | 4 |
| | Sodium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| | Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | 0 |
| | VISUAL | | method | limit/base | current | history1 | history2 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | MODER |
| | Yellow Metal | scalar | *Visual | NONE | NONE | MODER | 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 |
| | FLUID PROPI | ERTIES | method | limit/base | current | history1 | history2 |
| | Visc @ 40°C | cSt | ASTM D445 | 136 | 192 | 138 | 137 |
| Report Id: KEMSHA [WUSCAR] 05936839 (Generated: 08/29/2023 | | | | | · | | Submitted By: |



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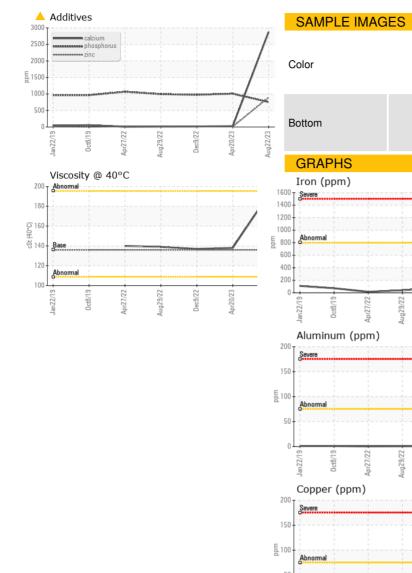
method

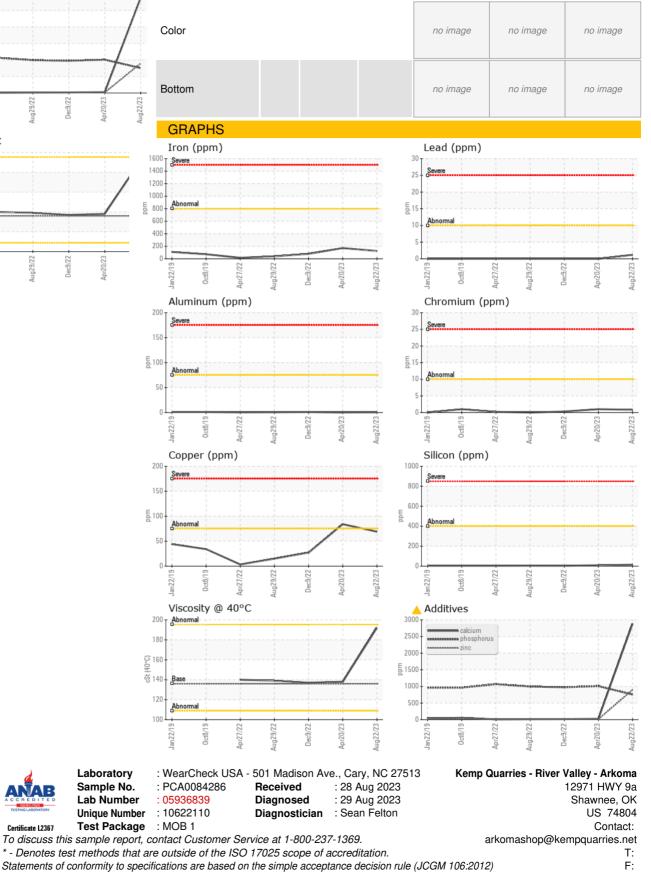
limit/base

current

history1

history2





Certificate L2367