

### **OIL ANALYSIS REPORT**

# KEMP QUARRIES / BCS-STILWELL **TTH036**

Component **Hydraulic System** 

PETRO CANADA HYDREX AW 68 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: PM-1 sampled fluid. Filters not avail this service )

#### Wear

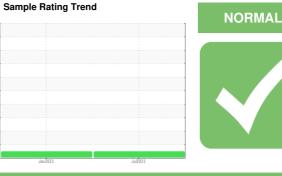
All component wear rates are normal.

#### 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.





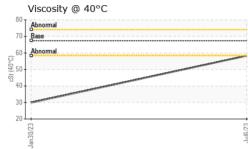
|                  |               |             | JanZUZ3    | Jul2023     |             |          |
|------------------|---------------|-------------|------------|-------------|-------------|----------|
| SAMPLE INFORM    | <b>IATION</b> | method      | limit/base | current     | history1    | history2 |
| Sample Number    |               | Client Info |            | PCA0086292  | PCA0086715  |          |
| Sample Date      |               | Client Info |            | 06 Jul 2023 | 30 Jan 2023 |          |
| Machine Age      | hrs           | Client Info |            | 6958        | 6499        |          |
| Oil Age          | hrs           | Client Info |            | 6958        | 6499        |          |
| Oil Changed      |               | Client Info |            | N/A         | Changed     |          |
| Sample Status    |               |             |            | NORMAL      | NORMAL      |          |
| WEAR METALS      | 5             | method      | limit/base | current     | history1    | history2 |
| Iron             | ppm           | ASTM D5185m | >20        | 9           | 19          |          |
| Chromium         | ppm           | ASTM D5185m | >10        | <1          | <1          |          |
| Nickel           | ppm           | ASTM D5185m | >10        | <1          | 0           |          |
| Titanium         | ppm           | ASTM D5185m |            | 0           | 0           |          |
| Silver           | ppm           | ASTM D5185m |            | 0           | 0           |          |
| Aluminum         | ppm           | ASTM D5185m | >10        | 2           | 0           |          |
| Lead             | ppm           | ASTM D5185m | >10        | 0           | 0           |          |
| Copper           | ppm           | ASTM D5185m | >75        | 5           | 9           |          |
| Tin              |               | ASTM D5185m | >10        | 0           | 0           |          |
| Vanadium         | ppm<br>ppm    | ASTM D5185m | 210        | 0           | 0           |          |
| Cadmium          | ppm           | ASTM D5185m |            | 0           | 0           |          |
| ADDITIVES        | ppm           | method      | limit/base | current     | history1    | history2 |
| Boron            | nom           | ASTM D5185m | 0          | 0           | 0           |          |
| Barium           | ppm           | ASTM D5185m |            | 0           | 0           |          |
|                  | ppm           |             |            | 16          | <1          |          |
| Molybdenum       | ppm           | ASTM D5185m | 0          | -           |             |          |
| Manganese        | ppm           | ASTM D5185m |            | <1          | <1          |          |
| Magnesium        | ppm           | ASTM D5185m | 0          | 250         | 2           |          |
| Calcium          | ppm           | ASTM D5185m | 50         | 358         | 236         |          |
| Phosphorus       | ppm           | ASTM D5185m | 330        | 540         | 292         |          |
| Zinc             | ppm           | ASTM D5185m | 430        | 654         | 337         |          |
| Sulfur           | ppm           | ASTM D5185m | 760        | 1919        | 1192        |          |
| CONTAMINAN       | TS            | method      | limit/base | current     | history1    | history2 |
| Silicon          | ppm           | ASTM D5185m | >20        | 6           | 16          |          |
| Sodium           | ppm           | ASTM D5185m |            | 1           | 1           |          |
| Potassium        | ppm           | ASTM D5185m | >20        | 2           | 0           |          |
| VISUAL           |               | method      | limit/base | current     | history1    | history2 |
| White Metal      | scalar        | *Visual     | NONE       | NONE        | NONE        |          |
| Yellow Metal     | scalar        | *Visual     | NONE       | NONE        | NONE        |          |
| Precipitate      | scalar        | *Visual     | NONE       | NONE        | NONE        |          |
| Silt             | scalar        | *Visual     | NONE       | NONE        | NONE        |          |
| Debris           | scalar        | *Visual     | NONE       | NONE        | NONE        |          |
| Sand/Dirt        | scalar        | *Visual     | NONE       | NONE        | NONE        |          |
| Appearance       | scalar        | *Visual     | NORML      | NORML       | NORML       |          |
| Odor             | scalar        | *Visual     | NORML      | NORML       | NORML       |          |
| Emulsified Water | scalar        | *Visual     | >0.1       | NEG         | NEG         |          |
| Free Water       | scalar        | *Visual     |            | NEG         | NEG         |          |
| FLUID PROPER     | RTIES         | method      | limit/base | current     | history1    | history2 |
| Visc @ 40°C      | cSt           | ASTM D445   | 67.4       | 58.3        | 29.9        |          |
|                  |               |             |            |             |             |          |

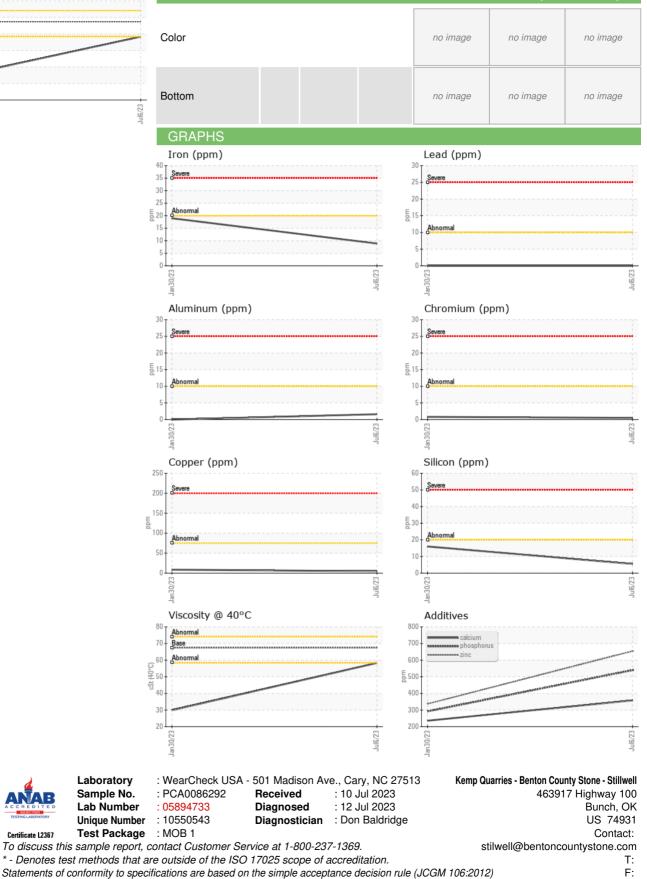
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## **OIL ANALYSIS REPORT**

SAMPLE IMAGES





Certificate L2367