

## **OIL ANALYSIS REPORT**

#### Area MAIN PLANT Machine Id SULLAIR CMP-CMP1 (S/N 003-128398) Component

Compressor

### ULTRACHEM PALEXTRA 44 (5 QTS)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

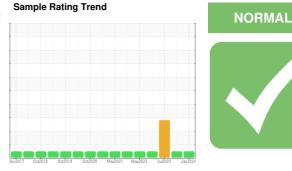
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

#### Fluid Condition

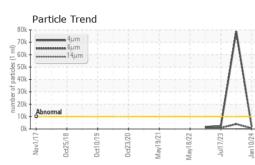
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

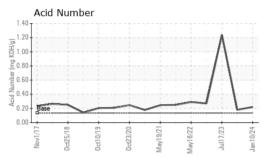


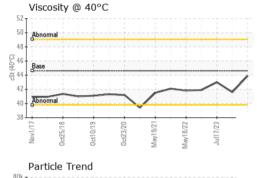
| SAMPLE INFORM    | IATION   | method       | limit/base | current     | history1    | history2    |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info  |            | WC0884876   | WC0830446   | WC0830450   |
| Sample Date      |          | Client Info  |            | 10 Jan 2024 | 17 Jul 2023 | 17 Jul 2023 |
| Machine Age      | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Age          | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info  |            | N/A         | N/A         | N/A         |
| Sample Status    |          |              |            | NORMAL      | NORMAL      | ABNORMAL    |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >50        | 0           | 0           | 8           |
| Chromium         | ppm      | ASTM D5185m  | >10        | 0           | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Silver           | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Aluminum         | ppm      | ASTM D5185m  | >25        | 2           | 0           | 2           |
| Lead             | ppm      | ASTM D5185m  | >25        | 0           | 0           | 0           |
| Copper           | ppm      | ASTM D5185m  | >50        | <1          | <1          | 5           |
| Tin              | ppm      | ASTM D5185m  | >15        | <1          | 0           | 0           |
| 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          | 0           | 0           | 1           |
| Barium           | ppm      | ASTM D5185m  | 0.3        | 0           | 2           | <b>1</b> 67 |
| Molybdenum       | ppm      | ASTM D5185m  | 0          | <1          | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m  | 0.3        | 0           | 0           | 1           |
| Magnesium        | ppm      | ASTM D5185m  | 0.4        | 0           | 0           | 2           |
| Calcium          | ppm      | ASTM D5185m  | 0          | 0           | 0           | ▲ 22        |
| Phosphorus       | ppm      | ASTM D5185m  | 689        | 475         | 454         | <b>1</b> 4  |
| Zinc             | ppm      | ASTM D5185m  | 0          | 0           | 0           | <b>1</b> 26 |
| Sulfur           | ppm      | ASTM D5185m  | 1237       | 774         | 815         | 440         |
| CONTAMINANTS     |          | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >25        | 2           | 2           | 3           |
| Sodium           | ppm      | ASTM D5185m  |            | 6           | 5           | 101         |
| Potassium        | ppm      | ASTM D5185m  | >20        | 1           | <1          | 5           |
| Water            | %        | ASTM D6304   | >0.1       | NEG         | NEG         | NEG         |
| FLUID CLEANLIN   | IESS     | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >10000     | 1767        | 2494        | ▲ 78821     |
| Particles >6µm   |          | ASTM D7647   | >2500      | 509         | 923         | ▲ 3972      |
| Particles >14µm  |          | ASTM D7647   | >320       | 41          | 117         | 119         |
| Particles >21µm  |          | ASTM D7647   | >80        | 9           | 39          | 35          |
| Particles >38µm  |          | ASTM D7647   | >20        | 0           | 1           | 3           |
| Particles >71µm  |          | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/18/15  | 18/16/13    | 18/17/14    | ▲ 23/19/14  |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 0.135      | 0.22        | 0.18        | 1.24        |

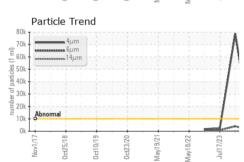


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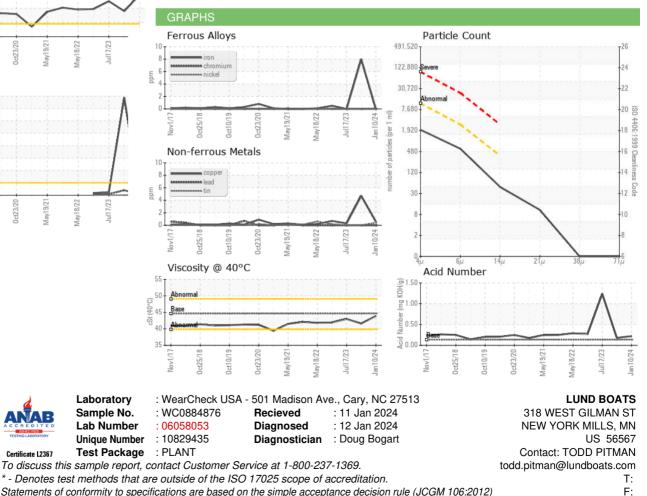




| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | 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   | >0.1       | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPERT    | IES    | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 44.62      | 43.9    | 41.6     | 43.0     |
| SAMPLE IMAGES    |        | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |



Bottom



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)