

# **OIL ANALYSIS REPORT**

Area CONGEBEC INC GTAA Machine Id FRICK C3 (S/N 102411576862475) Component

Screw Compressor Fluid CIMCO TYPE A (40 GAL)

#### DIAGNOSIS

## Recommendation

Resample at the next service interval to monitor.

#### Wear

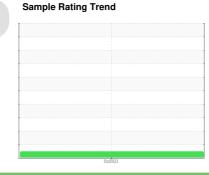
All component wear rates are normal.

#### Contamination

The water content is negligible. There is no indication of any contamination in the oil.

## Fluid Condition

Viscosity of sample indicates oil is within ISO 68 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



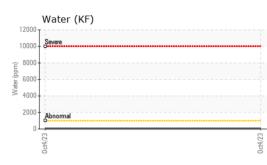


NORMAL

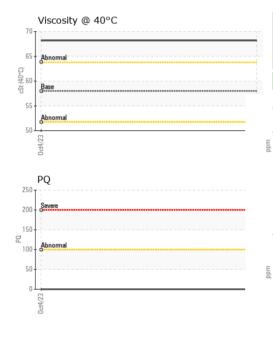
| SAMPLE INFORM    | <b>IATION</b> | method        | limit/base | current     | history1 | history2 |
|------------------|---------------|---------------|------------|-------------|----------|----------|
| Sample Number    |               | Client Info   |            | WC0831709   |          |          |
| Sample Date      |               | Client Info   |            | 04 Oct 2023 |          |          |
| Machine Age      | hrs           | Client Info   |            | 20417       |          |          |
| Oil Age          | hrs           | Client Info   |            | 20417       |          |          |
| Oil Changed      |               | Client Info   |            | Filtered    |          |          |
| Sample Status    |               |               |            | NORMAL      |          |          |
| WEAR METALS      |               | method        | limit/base | current     | history1 | history2 |
| PQ               |               | ASTM D8184*   |            | 0           |          |          |
| Iron             | ppm           | ASTM D5185(m) | >60        | 14          |          |          |
| Chromium         | ppm           | ASTM D5185(m) | >4         | 0           |          |          |
| Nickel           | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Titanium         | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Silver           | ppm           | ASTM D5185(m) |            | <1          |          |          |
| Aluminum         | ppm           | ASTM D5185(m) | >5         | <1          |          |          |
| Lead             | ppm           | ASTM D5185(m) | >10        | 0           |          |          |
| Copper           | ppm           | ASTM D5185(m) | >30        | <1          |          |          |
| Tin              | ppm           | ASTM D5185(m) | >15        | 0           |          |          |
| Antimony         | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Vanadium         | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Beryllium        | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Cadmium          | ppm           | ASTM D5185(m) |            | 0           |          |          |
| ADDITIVES        |               | method        | limit/base | current     | history1 | history2 |
| Boron            | ppm           | ASTM D5185(m) |            | <1          |          |          |
| Barium           | ppm           | ASTM D5185(m) |            | 2           |          |          |
| Molybdenum       | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Manganese        | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Magnesium        | ppm           | ASTM D5185(m) |            | 0           |          |          |
| Calcium          | ppm           | ASTM D5185(m) |            | <1          |          |          |
| Phosphorus       | ppm           | ASTM D5185(m) |            | <1          |          |          |
| Zinc             | ppm           | ASTM D5185(m) |            | 12          |          |          |
| Sulfur           | ppm           | ASTM D5185(m) |            | 35          |          |          |
| Lithium          | ppm           | ASTM D5185(m) |            | <1          |          |          |
| CONTAMINANTS     |               | method        | limit/base | current     | history1 | history2 |
| Silicon          | ppm           | ASTM D5185(m) | >50        | 2           |          |          |
| Sodium           | ppm           | ASTM D5185(m) |            | 1           |          |          |
| Potassium        | ppm           | ASTM D5185(m) | >20        | 0           |          |          |
| Water            | %             | ASTM D6304*   | >0.1       | 0.003       |          |          |
| ppm Water        | ppm           | ASTM D6304*   | >1000      | 36.3        |          |          |
| FLUID DEGRADA    | TION          | method        | limit/base | current     | history1 | history2 |
| Acid Number (AN) | mg KOH/g      | ASTM D974*    | 0.05       | 0.11        |          |          |



# **OIL ANALYSIS REPORT**







| VISUAL                     |   | method          | limit/base  | current     | history1 | history2   |
|----------------------------|---|-----------------|---|-------------|----------|--|
| White Metal                | scalar                                    | Visual*         | NONE  | NONE        |          |  |
| Yellow Metal               | scalar                                    | Visual*         | NONE  | NONE        |          |  |
| Precipitate                | scalar                                    | Visual*         | NONE  | NONE        |          |  |
| Silt                       | scalar                                    | Visual*         | NONE  | NONE        |          |  |
| Debris                     | scalar                                    | Visual*         | NONE  | NONE        |          |  |
| Sand/Dirt                  | scalar                                    | Visual*         | NONE  | NONE        |          |  |
| Appearance                 | scalar                                    | Visual*         | NORML   | NORML       |          |  |
| Odor                       | scalar                                    | Visual*         | NORML   | NORML       |          |  |
| Emulsified Water           | scalar                                    | Visual*         | >0.1  | NEG         |          |  |
| Free Water                 | scalar                                    | Visual*         |   | NEG         |          |  |
| FLUID PROPER               | ΓIES                                      | method          | limit/base  | current     | history1 | history2   |
| Visc @ 40°C                | cSt                                       | ASTM D7279(m)   | 58  | 68.2        |          |  |
| SAMPLE IMAGE               | S   | method          | limit/base  | current     | history1 | history2   |
|                            |   |                 |   |             |          |  |
| Color                      |   |                 |   |             | no image | no image   |
| Bottom                     |   |                 |   |             | no image | no image   |
| iron<br>chromium<br>nickel | ls  |                 | 221<br>20<br>18<br>16<br>16<br>14<br>12<br>10<br>10 | ) - Severe  |          |  |
| copper                     |   |                 | 8)<br>6)<br>4)<br>2)                                | ).          |          |  |
| 0.ct4/23                   |   |                 | 0ct4/23   | 0ct4/23     |          |  |
| Viscosity @ 40°C           |   |                 | 0.1   | Acid Number |          |  |
| Abnormal                   |   |                 | (B/HO   |             |          |  |
| Base                       |   |                 | B 0.1   | )           |          |  |
| Base                       |   |                 | n n Be  | Base        |          |  |
| Abnormal                   |   |                 | 0.01<br>0.0 Acid Number (mg KOH/g)                  |             |          |  |
| 0ct4/23                    |   |                 | 0.0 VCt4/23   | 0ct4/23     |          |  |
| 02588290                   | 75 Apple<br>Receive<br>Diagnos<br>Diagnos | d :11<br>ed :12 | lington, ON L<br>Oct 2023<br>Oct 2023<br>Quesnel    | 7L 5H9      |          | <b>) Refrigeratio</b><br>Corporate Dri<br>Burlington, C<br>CA L7L 6N |

Accredited Laboratory Test Package : IND 2 (Additional Tests: KF, TAN Man) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

Report Id: CIMTOR [WCAMIS] 02588290 (Generated: 10/12/2023 16:59:19) Rev: 1

CALA

ISO 17025:2017

Laboratory

Sample No. Lab Number

**Unique Number** 

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