

## **OIL ANALYSIS REPORT**

## Area Infasco - 102400 A2312100

Component Quench Oil Fluid QUENCH OIL (--- GAL)

## DIAGNOSIS

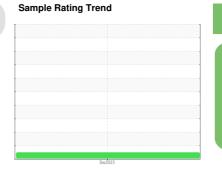
Recommendation

This is a baseline read-out on the submitted sample.

Wear Iron ppm levels are noted.

Contamination {not applicable}

Fluid Condition {not applicable}



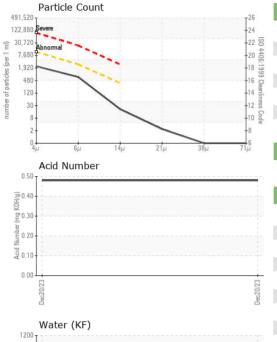


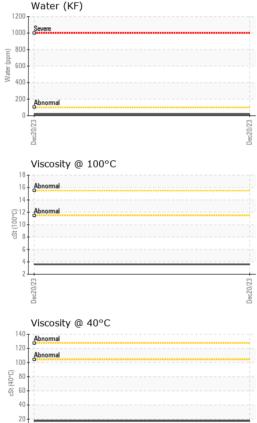
NORMAL

| SAMPLE INFORM    | <b>MATION</b> | method        | limit/base | current      | history1 | history2 |
|------------------|---------------|---------------|------------|--------------|----------|----------|
| Batch #          |               | Client Info   |            | 2023 12 0111 |          |          |
| Department       |               | Client Info   |            | Production   |          |          |
| Sample From      |               | Client Info   |            | Machine      |          |          |
| Production Stage |               | Client Info   |            | Final        |          |          |
| Sent to WC       |               | Client Info   |            | 12/20/2023   |          |          |
| Sample Number    |               | Client Info   |            | E30001024    |          |          |
| Sample Date      |               | Client Info   |            | 20 Dec 2023  |          |          |
| Machine Age      | hrs           | Client Info   |            | 0            |          |          |
| Oil Age          | hrs           | Client Info   |            | 0            |          |          |
| Oil Changed      |               | Client Info   |            | N/A          |          |          |
| Sample Status    |               |               |            | NORMAL       |          |          |
| WEAR METALS      |               | method        | limit/base | current      | history1 | history2 |
| Iron             | ppm           | ASTM D5185(m) |            | 61           |          |          |
| Chromium         | ppm           | ASTM D5185(m) |            | 1            |          |          |
| Nickel           | ppm           | ASTM D5185(m) |            | <1           |          |          |
| Titanium         | ppm           | ASTM D5185(m) |            | 0            |          |          |
| Silver           | ppm           | ASTM D5185(m) |            | 0            |          |          |
| Aluminum         | ppm           | ASTM D5185(m) |            | <1           |          |          |
| Lead             | ppm           | ASTM D5185(m) |            | 0            |          |          |
| Copper           | ppm           | ASTM D5185(m) |            | <1           |          |          |
| Tin              | ppm           | ASTM D5185(m) |            | 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) |            | 0            |          |          |
| Molybdenum       | ppm           | ASTM D5185(m) |            | 0            |          |          |
| Manganese        | ppm           | ASTM D5185(m) |            | 2            |          |          |
| Magnesium        | ppm           | ASTM D5185(m) |            | 3            |          |          |
| Calcium          | ppm           | ASTM D5185(m) |            | 80           |          |          |
| Phosphorus       | ppm           | ASTM D5185(m) |            | 10           |          |          |
| Zinc             | ppm           | ASTM D5185(m) |            | 12           |          |          |
| Sulfur           | ppm           | ASTM D5185(m) |            | 164          |          |          |
| Lithium          | ppm           | ASTM D5185(m) |            | <1           |          |          |
| CONTAMINANTS     | ;             | method        | limit/base | current      | history1 | history2 |
| Silicon          | ppm           | ASTM D5185(m) |            | 2            |          |          |
| Sodium           | ppm           | ASTM D5185(m) |            | 0            |          |          |
| Potassium        | ppm           | ASTM D5185(m) | >20        | <1           |          |          |
| Water            | %             | ASTM D6304*   |            | 0.002        |          |          |
| ppm Water        | ppm           | ASTM D6304*   |            | 16           |          |          |



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| Particles >4μm<br>Particles >6μm<br>Particles >14μm<br>Particles >21μm |          | method        |            |          |          | history2 |
|--|----------|---------------|------------|----------|----------|----------|
| Particles >14μm  |          | ASTM D7647    | >10000     | 2036     |          |          |
|  |          | ASTM D7647    | >2500      | 625      |          |          |
| Particles >21µm  |          | ASTM D7647    | >320       | 18       |          |          |
|  |          | ASTM D7647    | >80        | 2        |          |          |
| Particles >38µm  |          | ASTM D7647    | >20        | 0        |          |          |
| Particles >71µm  |          | ASTM D7647    | >4         | 0        |          |          |
| Oil Cleanliness  |          | ISO 4406 (c)  | >20/18/15  | 18/16/11 |          |          |
| FLUID DEGRADA  | TION     | method        | limit/base | current  | history1 | history2 |
| Acid Number (AN)   | mg KOH/g | ASTM D974*    |            | 0.48     |          |          |
| 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*       |            | NEG      |          |          |
| Free Water   | scalar   | Visual*       |            | NEG      |          |          |
| FLUID PROPERTI   | ES       | method        | limit/base | current  | history1 | history2 |
| Visc @ 40°C  | cSt      | ASTM D7279(m) |            | 17.5     |          |          |
| Visc @ 100°C   | cSt      | ASTM D7279(m) |            | 3.6      |          |          |
| Viscosity Index (VI)   | Scale    | ASTM D2270*   |            | 76       |          |          |
| SAMPLE IMAGES  |          | method        | limit/base | current  | history1 | history2 |
| Color  |          |               |            |          | no image | no image |
| Bottom   |          |               |            |          | no image | no image |

Laboratory CALA Sample No. Lab Number : 02604971 Diagnosed : 02 Jan 2024 Cobourg, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5698056 Diagnostician : Tatiana Sorkina CA K9A 5H5 Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI) Contact: Tatiana Sorkina To discuss this sample report, contact Customer Service at 1-905-372-2251. tsorkina@e360s.ca T: (800)263-3939 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. F: (905)373-4950

Dec 20/7