

## **OIL ANALYSIS REPORT**

### Sample Rating Trend

### NORMAL

## RECO TYSBLO 4B 2 (S/N M817-240A) Component

**Refrigeration Compressor** USPI ALT-68 SC (--- GAL)

#### 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.

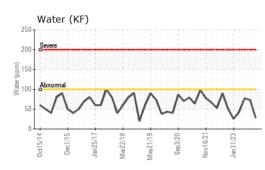


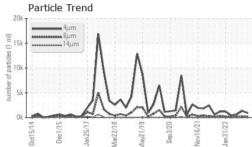


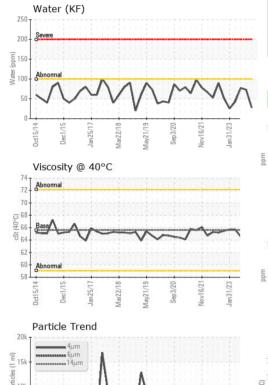
| SAMPLE INFORM    | IATION   | method       | limit/base | current     | history1    | history2    |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| Sample Number    |          | Client Info  |            | USP0004822  | USP0001304  | USP05903269 |
| Sample Date      |          | Client Info  |            | 10 Jan 2024 | 03 Oct 2023 | 14 Jul 2023 |
| Machine Age      | hrs      | Client Info  |            | 118017      | 116657      | 115449      |
| Oil Age          | hrs      | Client Info  |            | 0           | 0           | 0           |
| Oil Changed      |          | Client Info  |            | N/A         | N/A         | N/A         |
| Sample Status    |          |              |            | NORMAL      | NORMAL      | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >8         | <1          | 0           | <1          |
| Chromium         | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Silver           | ppm      | ASTM D5185m  | >2         | 0           | 0           | <1          |
| Aluminum         | ppm      | ASTM D5185m  | >3         | 0           | 0           | 0           |
| Lead             | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0           |
| Copper           | ppm      |              | >8         | 0           | 0           | 0           |
| Tin              | ppm      | ASTM D5185m  | >4         | 0           | 0           | 0           |
| Vanadium         | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Cadmium          | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| ADDITIVES        |          | method       | limit/base | current     | history1    | history2    |
| Boron            | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Barium           | ppm      | ASTM D5185m  |            | 0           | 1           | <1          |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Magnesium        | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Calcium          | ppm      | ASTM D5185m  |            | 1           | <1          | 0           |
| Phosphorus       | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Zinc             | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Sulfur           | ppm      | ASTM D5185m  | 50         | 0           | 29          | 12          |
| CONTAMINANTS     |          | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | 2           | 2           | 2           |
| Sodium           | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Potassium        | ppm      | ASTM D5185m  | >20        | 0           | 0           | <1          |
| Water            | %        | ASTM D6304   | >0.01      | 0.003       | 0.007       | 0.007       |
| ppm Water        | ppm      | ASTM D6304   |            | 28          | 73.0        | 77.3        |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   |            | 921         | 1340        | 630         |
| Particles >6µm   |          | ASTM D7647   | >2500      | 193         | 245         | 144         |
| Particles >14µm  |          | ASTM D7647   | >320       | 9           | 14          | 14          |
| Particles >21µm  |          | ASTM D7647   | >80        | 2           | 5           | 5           |
| Particles >38µm  |          | ASTM D7647   | >20        | 0           | 1           | 0           |
| Particles >71µm  |          | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >/18/15    | 17/15/10    | 18/15/11    | 16/14/11    |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D974    | 0.005      | 0.014       | 0.014       | 0.015       |

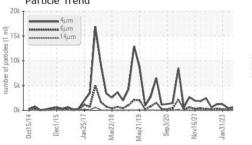


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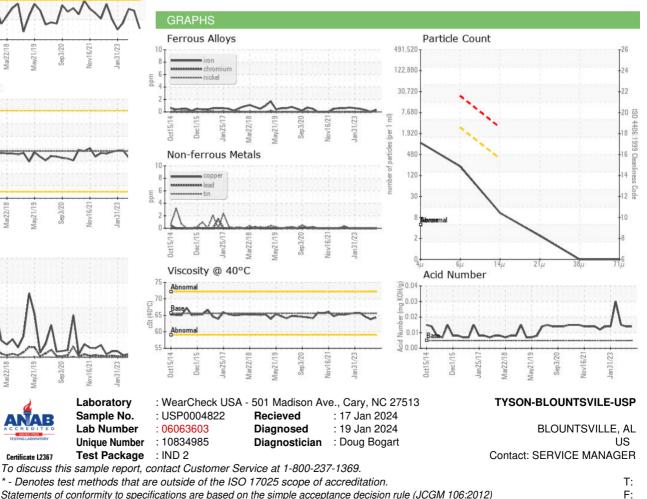






| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | 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   | >0.01      | NEG     | NEG      | NEG      |
| Free Water       | scalar | *Visual   |            | NEG     | NEG      | NEG      |
| FLUID PROPER     | TIES   | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 65.6       | 64.3    | 63.8     | 64.6     |
| SAMPLE IMAGE     | S      | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         |          |          |
| _                |        |           |            | 1000    | (A)      |          |

Bottom



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

Contact/Location: SERVICE MANAGER - TYSBLOAL