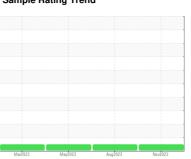


# **OIL ANALYSIS REPORT**

## Sample Rating Trend



## **NORMAL**



# FRICK SKID 2 (S/N 10242B26508777)

**Refrigeration Compressor** 

USPI ALT-68 SC (--- GAL)

### Recommendation

Resample at the next service interval to monitor.

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.

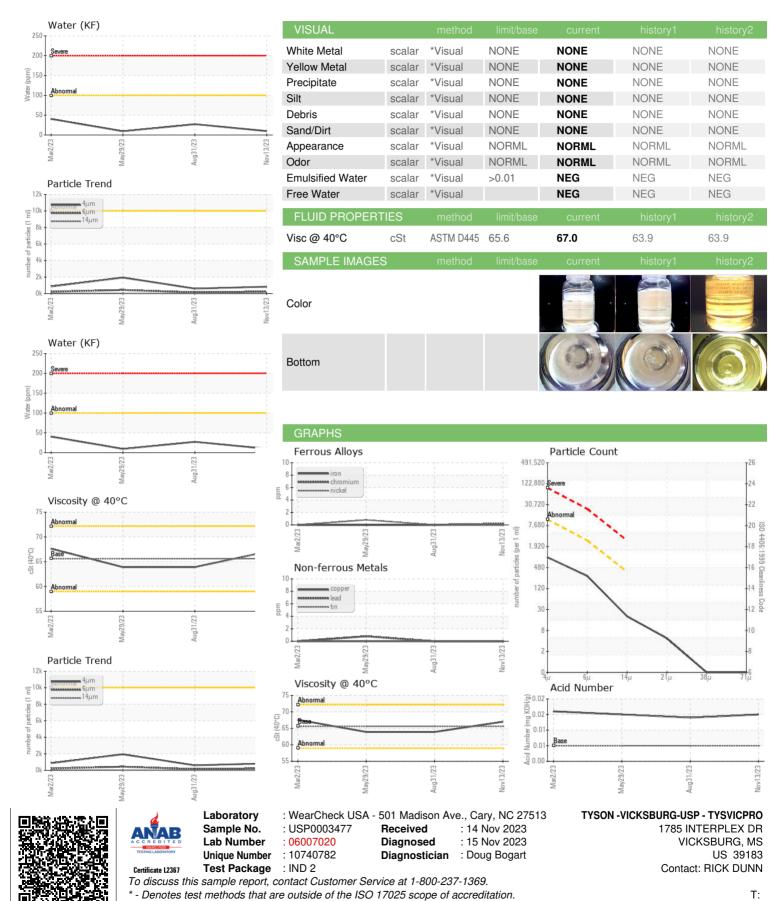
### **Fluid Condition**

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

|                  |          | Mar202       | 3 May2023  | Aug2023 No  | v2023       |             |
|------------------|----------|--------------|------------|-------------|-------------|-------------|
| SAMPLE INFORM    | MATION   | method       | limit/base | current     | history1    | history2    |
| Sample Number    |          | Client Info  |            | USP0003477  | USP0000336  | USP243293   |
| Sample Date      |          | Client Info  |            | 13 Nov 2023 | 31 Aug 2023 | 29 May 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      | NORMAL      |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2    |
| Iron             | ppm      | ASTM D5185m  | >8         | 0           | 0           | 0           |
| Chromium         | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |
| Nickel           | ppm      | ASTM D5185m  |            | 0           | 0           | <1          |
| Titanium         | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Silver           | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185m  | >3         | 0           | 0           | 0           |
| Lead             | ppm      | ASTM D5185m  | >2         | 0           | 0           | <1          |
| Copper           | ppm      | ASTM D5185m  | >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           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0           | <1          |
| Magnesium        | ppm      | ASTM D5185m  |            | <1          | <1          | 0           |
| Calcium          | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Phosphorus       | ppm      | ASTM D5185m  |            | 0           | <1          | <1          |
| Zinc             | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Sulfur           | ppm      | ASTM D5185m  | 50         | 0           | 0           | 0           |
| CONTAMINANTS     |          | method       | limit/base | current     | history1    | history2    |
| Silicon          | ppm      | ASTM D5185m  | >15        | <1          | 0           | <1          |
| Sodium           | ppm      | ASTM D5185m  |            | 1           | 0           | <1          |
| Potassium        | ppm      | ASTM D5185m  | >20        | <1          | 1           | 2           |
| Water            | %        | ASTM D6304   | >0.01      | 0.001       | 0.003       | 0.001       |
| ppm Water        | ppm      | ASTM D6304   | >100       | 9.9         | 27.2        | 9.4         |
| FLUID CLEANLIN   | ESS      | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |          | ASTM D7647   | >10000     | 828         | 598         | 1939        |
| Particles >6µm   |          | ASTM D7647   | >2500      | 241         | 147         | 436         |
| Particles >14µm  |          | ASTM D7647   | >320       | 17          | 15          | 24          |
| Particles >21µm  |          | ASTM D7647   | >80        | 4           | 3           | 5           |
| Particles >38µm  |          | ASTM D7647   | >20        | 0           | 0           | 0           |
| Particles >71µm  |          | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness  |          | ISO 4406 (c) | >20/18/15  | 17/15/11    | 16/14/11    | 18/16/12    |
| FLUID DEGRADA    | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN) | mg KOH/g | ASTM D974    | 0.005      | 0.015       | 0.014       | 0.015       |



# **OIL ANALYSIS REPORT**



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

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