

## **OIL ANALYSIS REPORT**

### Sample Rating Trend



NORMAL



Machine Id

# FRICK FRICK RXF-101H COMPRESSOR 5 (S/N X0237UFMCLHAA03)

Refrigeration Compressor

USPI ALT-68 SC (34 GAL)

#### 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.

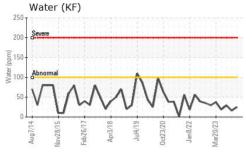
### **Fluid Condition**

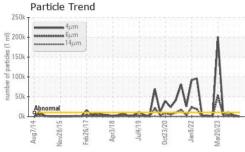
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

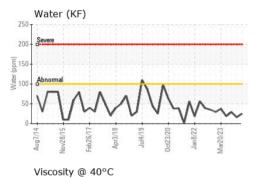
| g2014 Nov2015 Feb2017 Apr2018 Ju2019 0x2020 Jan2022 Mar2022 Mar2023 |          |              |            |             |             |             |
|---|----------|--------------|------------|-------------|-------------|-------------|
|   |          |              |            |             |             |             |
| SAMPLE INFORM   | 1ATION   | method       | limit/base | current     | history1    | history2    |
| Sample Number   |          | Client Info  |            | USP0013072  | USP0006088  | USP0004546  |
| Sample Date   |          | Client Info  |            | 19 Jun 2024 | 12 Mar 2024 | 28 Dec 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      | ATTENTION   |
| 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  |            | <1          | 0           | <1          |
| Titanium  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Silver  | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |
| Aluminum  | ppm      | ASTM D5185m  | >3         | 0           | 0           | 0           |
| Lead  | ppm      | ASTM D5185m  | >2         | <1          | 0           | 0           |
| Copper  | ppm      | ASTM D5185m  | >8         | <1          | 0           | 0           |
| Tin   | ppm      | ASTM D5185m  | >4         | <1          | 0           | <1          |
| Vanadium  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Cadmium   | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| ADDITIVES   |          | method       | limit/base | current     | history1    | history2    |
| Boron   | ppm      | ASTM D5185m  |            | 0           | 0           | 0           |
| Barium  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Molybdenum  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Manganese   | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Magnesium   | ppm      | ASTM D5185m  |            | <1          | <1          | <1          |
| Calcium   | ppm      | ASTM D5185m  |            | 0           | <1          | 0           |
| Phosphorus  | ppm      | ASTM D5185m  |            | 0           | 0           | 1           |
| Zinc  | ppm      | ASTM D5185m  |            | <1          | 0           | 0           |
| Sulfur  | ppm      | ASTM D5185m  | 50         | 0           | 3           | 7           |
| CONTAMINANTS  |          | method       | limit/base | current     | history1    | history2    |
| Silicon   | ppm      | ASTM D5185m  | >15        | 1           | 1           | <1          |
| Sodium  | ppm      | ASTM D5185m  |            | 0           | 0           | 1           |
| Potassium   | ppm      | ASTM D5185m  | >20        | 1           | <1          | <1          |
| Water   | %        | ASTM D6304   | >0.01      | 0.002       | 0.002       | 0.003       |
| ppm Water   | ppm      | ASTM D6304   | >100       | 25          | 16          | 29          |
| FLUID CLEANLIN  | ESS      | method       | limit/base | current     | history1    | history2    |
| Particles >4µm  |          | ASTM D7647   | >10000     | 531         | 3419        | 0 10531     |
| Particles >6µm  |          | ASTM D7647   | >2500      | 144         | 787         | 3829        |
| Particles >14µm   |          | ASTM D7647   | >320       | 8           | 21          | 273         |
| Particles >21µm   |          | ASTM D7647   | >80        | 2           | 3           | 48          |
| Particles >38μm   |          | ASTM D7647   | >20        | 0           | 0           | 0           |
| Particles >71µm   |          | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness   |          | ISO 4406 (c) | >20/18/15  | 16/14/10    | 19/17/12    | 21/19/15    |
| FLUID DEGRADA   | TION     | method       | limit/base | current     | history1    | history2    |
| Acid Number (AN)  | mg KOH/g | ASTM D974    | 0.005      | 0.014       | 0.014       | 0.014       |

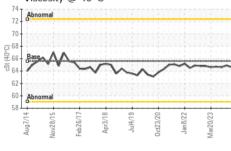


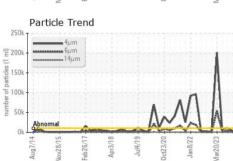
## **OIL ANALYSIS REPORT**









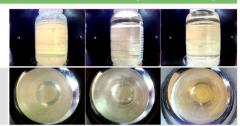


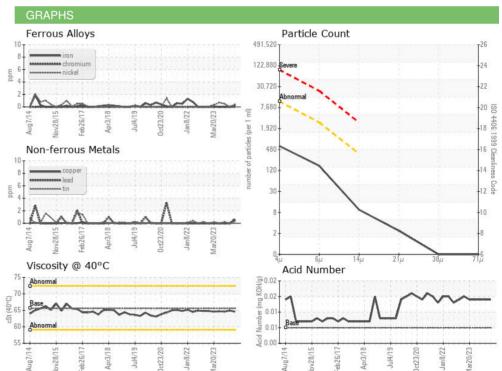
| VISUAL                  |        | method  | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal             | scalar | *Visual | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal            | 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    |
| <b>Emulsified Water</b> | scalar | *Visual | >0.01      | NEG     | NEG      | NEG      |
| Free Water              | scalar | *Visual |            | NEG     | NEG      | NEG      |
| FLUID PROPERT           | TIEC   | method  | limit/base | current | history1 | history2 |

| . 20.5      |     |           |      |      |      |      |
|-------------|-----|-----------|------|------|------|------|
| Visc @ 40°C | cSt | ASTM D445 | 65.6 | 64.6 | 64.9 | 64.6 |

| SAMPLE IMAGES | > | method |  |
|---------------|---|--------|--|
|               |   |        |  |
|               |   |        |  |
| Color         |   |        |  |
| COIOI         |   |        |  |
|               |   |        |  |
|               |   |        |  |

**Bottom** 









Certificate 12367

Laboratory Sample No.

: USP0013072 Lab Number : 06218814 Unique Number : 11097011 Test Package : IND 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Jun 2024

**Tested** : 26 Jun 2024 Diagnosed : 26 Jun 2024 - Doug Bogart TYSON PF-HUTCHINSON-USP

521 SOUTH MAIN HUTCHINSON, KS US 67501

T: (620)669-8761

F: (620)669-8762

Contact: ERIC JOHNSON

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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

Report Id: TYSHUT [WUSCAR] 06218814 (Generated: 06/30/2024 14:44:35) Rev: 1

Contact/Location: ERIC JOHNSON - TYSHUT