

# **OIL ANALYSIS REPORT**

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### NORMAL

## Machine Id MYCOM TYSNRH HS310 (S/N 2015457)

Refrigeration Compressor

USPI 1009-68 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

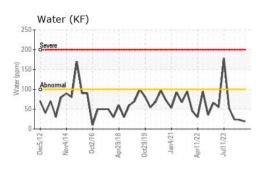
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

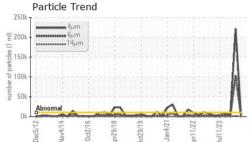
| c2012 New2014 Occ2016 Apr2016 Occ2013 Jan2021 Jan2022 Jan2023 |               |              |            |             |                 |             |  |  |
|---|---------------|--------------|------------|-------------|-----------------|-------------|--|--|
| SAMPLE INFORM   | <b>IATION</b> | method       | limit/base | current     | history1        | history2    |  |  |
| Sample Number   |               | Client Info  |            | USP0006739  | USP0004988      | USP0001205  |  |  |
| Sample Date   |               | Client Info  |            | 11 Apr 2024 | 15 Jan 2024     | 15 Oct 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      | ABNORMAL        | NORMAL      |  |  |
| WEAR METALS   |               | method       | limit/base | current     | history1        | history2    |  |  |
| Iron  | ppm           | ASTM D5185m  | >8         | <1          | <1              | 0           |  |  |
| Chromium  | ppm           | ASTM D5185m  | >2         | <1          | <1              | 0           |  |  |
| Nickel  | ppm           | ASTM D5185m  |            | <1          | 0               | <1          |  |  |
| Titanium  | ppm           | ASTM D5185m  |            | <1          | 0               | 0           |  |  |
| Silver  | ppm           | ASTM D5185m  | >2         | 0           | 0               | 0           |  |  |
| Aluminum  | ppm           | ASTM D5185m  | >3         | 1           | 0               | 0           |  |  |
| Lead  | ppm           | ASTM D5185m  | >2         | 1           | 0               | <1          |  |  |
| Copper  | ppm           | ASTM D5185m  | >8         | <1          | 0               | 0           |  |  |
| Tin   | ppm           | ASTM D5185m  | >4         | 1           | 0               | 0           |  |  |
| 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  |            | 0           | 0               | 0           |  |  |
| Molybdenum  | ppm           | ASTM D5185m  |            | <1          | 0               | 0           |  |  |
| Manganese   | ppm           | ASTM D5185m  |            | <1          | 0               | 0           |  |  |
| Magnesium   | ppm           | ASTM D5185m  |            | <1          | 0               | <1          |  |  |
| Calcium   | ppm           | ASTM D5185m  |            | 0           | 0               | 0           |  |  |
| Phosphorus  | ppm           | ASTM D5185m  |            | 0           | 0               | 0           |  |  |
| Zinc  | ppm           | ASTM D5185m  |            | 0           | 0               | <1          |  |  |
| Sulfur  | ppm           | ASTM D5185m  | 50         | 0           | 0               | 0           |  |  |
| CONTAMINANTS  |               | method       | limit/base | current     | history1        | history2    |  |  |
| Silicon   | ppm           | ASTM D5185m  | >15        | <1          | <1              | 0           |  |  |
| Sodium  | ppm           | ASTM D5185m  |            | 0           | 0               | 0           |  |  |
| Potassium   | ppm           | ASTM D5185m  | >20        | <1          | <1              | <1          |  |  |
| Water   | %             | ASTM D6304   | >0.01      | 0.002       | 0.002           | 0.002       |  |  |
| ppm Water   | ppm           | ASTM D6304   | >100       | 19          | 23              | 23.9        |  |  |
| FLUID CLEANLIN  | IESS          | method       | limit/base | current     | history1        | history2    |  |  |
| Particles >4µm  |               | ASTM D7647   | >10000     | 7072        | <b>A</b> 221360 | 4082        |  |  |
| Particles >6µm  |               | ASTM D7647   | >2500      | 1865        | ▲ 102854        | 1116        |  |  |
| Particles >14µm   |               | ASTM D7647   | >320       | 66          | <b>1</b> 731    | 59          |  |  |
| Particles >21µm   |               | ASTM D7647   | >80        | 13          | <u> </u>        | 13          |  |  |
| Particles >38µm   |               | ASTM D7647   | >20        | 1           | 0               | 0           |  |  |
| Particles >71µm   |               | ASTM D7647   | >4         | 0           | 0               | 0           |  |  |
| Oil Cleanliness   |               | ISO 4406 (c) | >20/18/15  | 20/18/13    | ▲ 25/24/18      | 19/17/13    |  |  |
| FLUID DEGRADA   |               | method       | limit/base | current     | history1        | history2    |  |  |
| Acid Number (AN)  | mg KOH/g      | ASTM D974    | 0.005      | 0.014       | 0.014           | 0.012       |  |  |

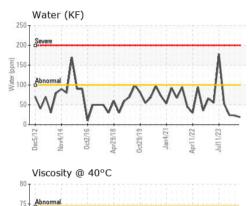
Contact/Location: JOHN MORGAN - TYSNORTX

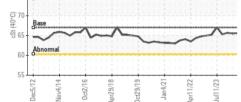


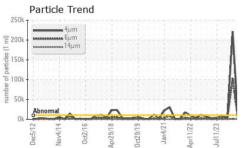
# **OIL ANALYSIS REPORT**



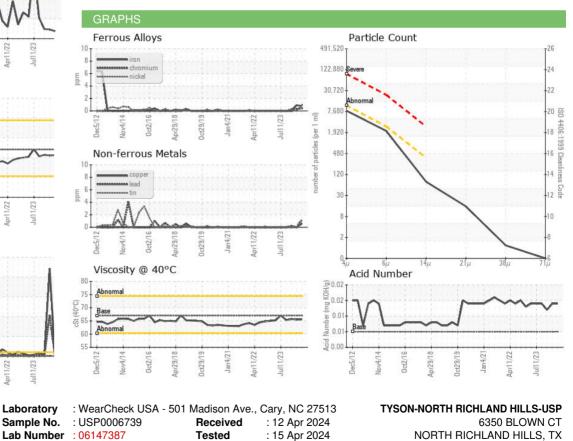








| VISUAL           |        | method    | limit/base | current | history1 | history2 |
|------------------|--------|-----------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual   | NONE       | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual   | NONE       | NONE    | LIGHT    | LIGHT    |
| 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 PROPERT    | IES    | method    | limit/base | current | history1 | history2 |
| Visc @ 40°C      | cSt    | ASTM D445 | 67         | 65.6    | 65.5     | 65.7     |
| SAMPLE IMAGES    | 3      | method    | limit/base | current | history1 | history2 |
| Color            |        |           |            |         | A MARKET |          |
| Bottom           |        |           |            |         |          |          |



: 15 Apr 2024 - Doug Bogart



Unique Number : 10977465 Certificate 12367 Test Package : IND 2

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)

Diagnosed

T: (817)514-3519 F:

Contact: JOHN MORGAN

Report Id: TYSNORTX [WUSCAR] 06147387 (Generated: 04/15/2024 21:19:03) Rev: 1

Contact/Location: JOHN MORGAN - TYSNORTX

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