

# **OIL ANALYSIS REPORT**

Sample Rating Trend

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### NORMAL

## Machine Id RECO TYSBER HS-7 (S/N GDSH193L0089Q)

Refrigeration Compressor

USPI ALT-68 SC (50 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 component. The amount and size of particulates present in the system is acceptable.

### Fluid Condition

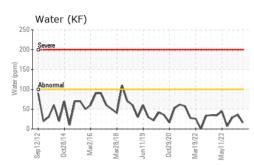
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

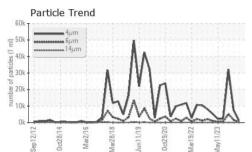
| SAMPLE INFORM    | ΜΑΤΙΟΝ   | method       | limit/base | current     | history1    | history2     |
|------------------|----------|--------------|------------|-------------|-------------|--------------|
| Sample Number    |          | Client Info  |            | USP0006423  | USP0005709  | USP0003009   |
| Sample Date      |          | Client Info  |            | 10 Apr 2024 | 17 Jan 2024 | 26 Oct 2023  |
| Machine Age      | hrs      | Client Info  |            | 10277       | 9295        | 8005         |
| Oil Age          | hrs      | Client Info  |            | 0           | 0           | 0            |
| Oil Changed      |          | Client Info  |            | N/A         | N/A         | N/A          |
| Sample Status    |          |              |            | NORMAL      | NORMAL      | ABNORMAL     |
| WEAR METALS      |          | method       | limit/base | current     | history1    | history2     |
| Iron             | ppm      | ASTM D5185m  | >8         | 0           | 0           | <1           |
| Chromium         | ppm      | ASTM D5185m  | >2         | <1          | <1          | <1           |
| Nickel           | ppm      | ASTM D5185m  |            | 0           | 0           | 0            |
| Titanium         | ppm      | ASTM D5185m  |            | <1          | 0           | 0            |
| Silver           | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0            |
| Aluminum         | ppm      | ASTM D5185m  | >3         | 0           | 0           | <1           |
| Lead             | ppm      | ASTM D5185m  | >2         | 0           | 0           | 0            |
| Copper           | ppm      | ASTM D5185m  | >8         | <1          | <1          | <1           |
| Tin              | ppm      | ASTM D5185m  | >4         | <1          | 0           | 0            |
| Vanadium         | ppm      | ASTM D5185m  |            | 1           | 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           | 0            |
| Molybdenum       | ppm      | ASTM D5185m  |            | 0           | 0           | 0            |
| Manganese        | ppm      | ASTM D5185m  |            | 0           | 0           | 0            |
| Magnesium        | ppm      | ASTM D5185m  |            | <1          | <1          | 0            |
| Calcium          | ppm      | ASTM D5185m  |            | 0           | <1          | 0            |
| Phosphorus       | ppm      | ASTM D5185m  |            | 0           | 0           | 0            |
| Zinc             | ppm      | ASTM D5185m  |            | 0           | 0           | 0            |
| Sulfur           | ppm      | ASTM D5185m  | 50         | 0           | 0           | 0            |
| CONTAMINANTS     | 8        | method       | limit/base | current     | history1    | history2     |
| Silicon          | ppm      | ASTM D5185m  | >15        | <1          | 2           | 2            |
| Sodium           | ppm      | ASTM D5185m  |            | 1           | 0           | 0            |
| Potassium        | ppm      | ASTM D5185m  | >20        | 10          | <1          | 1            |
| Water            | %        | ASTM D6304   | >0.01      | 0.002       | 0.003       | 0.003        |
| ppm Water        | ppm      | ASTM D6304   | >100       | 16          | 36          | 29.2         |
| FLUID CLEANLIN   | IESS     | method       | limit/base | current     | history1    | history2     |
| Particles >4µm   |          | ASTM D7647   |            | 1215        | 7363        | 32151        |
| Particles >6µm   |          | ASTM D7647   | >2500      | 254         | 1605        | <b>5</b> 105 |
| Particles >14µm  |          | ASTM D7647   | >320       | 9           | 49          | 90           |
| Particles >21µm  |          | ASTM D7647   | >80        | 1           | 8           | 12           |
| Particles >38µm  |          | ASTM D7647   | >20        | 0           | 0           | 1            |
| Particles >71µm  |          | ASTM D7647   |            | 0           | 0           | 0            |
| Oil Cleanliness  |          | ISO 4406 (c) | >/18/15    | 17/15/10    | 20/18/13    | A 22/20/14   |
| FLUID DEGRADA    | ATION    | method       | limit/base | current     | history1    | history2     |
| Acid Number (AN) | mg KOH/g | ASTM D974    | 0.005      | 0.028       | 0.014       | 0.014        |
|                  |          |              |            |             |             |              |

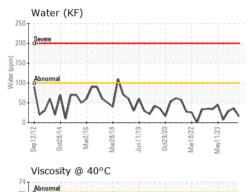
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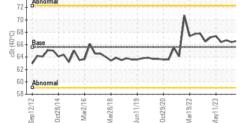


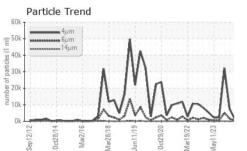
# **OIL ANALYSIS REPORT**



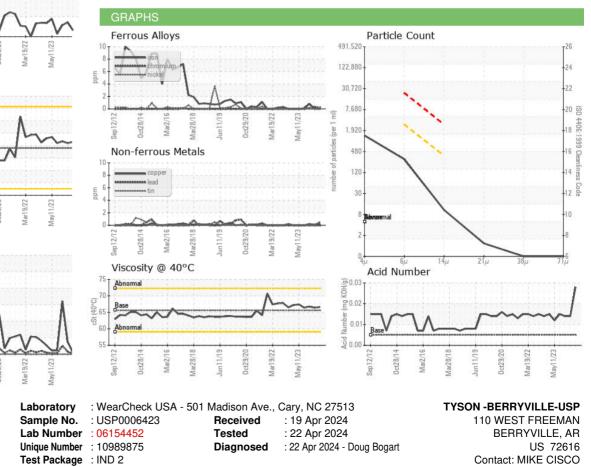








| VISUAL           |        | method    | limit/base | current | history1        | history2 |
|------------------|--------|-----------|------------|---------|-----------------|----------|
| White Metal      | scalar | *Visual   | NONE       | NONE    | NONE            | NONE     |
| Yellow Metal     | 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    |
| 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 | 65.6       | 66.6    | 66.4            | 66.7     |
| SAMPLE IMAGES m  |        | method    | limit/base | current | history1        | history2 |
| Color            |        |           |            |         | •               |          |
| Bottom           |        |           |            |         | $( ( \circ ) )$ |          |



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) T: (870)423-5556 F: (870)423-1602

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