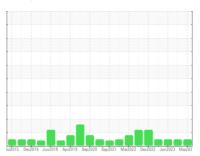


## **OIL ANALYSIS REPORT**

### **Sample Rating Trend**







# COMP 3 - REF060

Component

Refrigeration Compressor

USPI 1009-68 SC (40 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 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.

| ud015 Dud016 Jund018 Apr019 Sep2020 Sep2021 Mud022 Dud022 Jund022 Mud022 |         |              |            |             |             |             |
|--|---------|--------------|------------|-------------|-------------|-------------|
| SAMPLE INFORM  | MATION  | method       | limit/base | current     | history1    | history2    |
| Sample Number  |         | Client Info  |            | USPM241484  | USP241482   | USP241483   |
| Sample Date  |         | Client Info  |            | 14 Mar 2024 | 06 Nov 2023 | 14 Jun 2023 |
| Machine Age  | hrs     | Client Info  |            | 18183       | 18045       | 17383       |
| Oil Age  | hrs     | Client Info  |            | 0           | 0           | 700         |
| 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           | <1          | <1          |
| Chromium   | ppm     | ASTM D5185m  | >2         | 0           | <1          | 0           |
| Nickel   | ppm     | ASTM D5185m  |            | 0           | <1          | 0           |
| Titanium   | ppm     | ASTM D5185m  |            | 0           | 0           | 0           |
| Silver   | ppm     | ASTM D5185m  | >2         | 0           | 0           | 0           |
| Aluminum   | ppm     | ASTM D5185m  | >3         | 0           | <1          | 0           |
| Lead   | ppm     | ASTM D5185m  | >2         | 0           | <1          | <1          |
| Copper   | ppm     | ASTM D5185m  | >8         | 0           | <1          | 0           |
| Tin  | ppm     | ASTM D5185m  | >4         | 0           | <1          | 0           |
| Vanadium   | ppm     | ASTM D5185m  |            | 0           | 0           | 0           |
| Cadmium  | ppm     | ASTM D5185m  |            | 0           | <1          | 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           | <1          | 0           |
| Manganese  | ppm     | ASTM D5185m  |            | 0           | <1          | <1          |
| Magnesium  | ppm     | ASTM D5185m  |            | 0           | 0           | 0           |
| Calcium  | ppm     | ASTM D5185m  |            | 0           | 0           | 0           |
| Phosphorus   | ppm     | ASTM D5185m  |            | 0           | 0           | 0           |
| 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        | 0           | <1          | 0           |
| Sodium   | ppm     | ASTM D5185m  |            | <1          | 0           | 0           |
| Potassium  | ppm     | ASTM D5185m  | >20        | 0           | 1           | <1          |
| Water  | %       | ASTM D6304   | >0.01      | 0.001       | 0.002       | 0.002       |
| ppm Water  | ppm     | ASTM D6304   | >100       | 10          | 16          | 17.8        |
| FLUID CLEANLIN   | IESS    | method       | limit/base | current     | history1    | history2    |
| Particles >4µm   |         | ASTM D7647   | >10000     | 9522        | 9217        | 4501        |
| Particles >6µm   |         | ASTM D7647   | >2500      | 2136        | 1496        | 1004        |
| Particles >14μm  |         | ASTM D7647   | >320       | 134         | 18          | 30          |
| Particles >21µm  |         | ASTM D7647   | >80        | 29          | 2           | 5           |
| Particles >38μm  |         | ASTM D7647   | >20        | 1           | 0           | 0           |
| Particles >71µm  |         | ASTM D7647   | >4         | 0           | 0           | 0           |
| Oil Cleanliness  |         | ISO 4406 (c) | >20/18/15  | 20/18/14    | 20/18/11    | 19/17/12    |
| FLUID DEGRADA  | TION    | method       | limit/base | current     | history1    | history2    |
| A sist Nivesta su (ANI)  | I/OII/- | ACTM DOZA    | 0.005      | 0.014       | 0.015       | 0.015       |

Acid Number (AN)

0.015

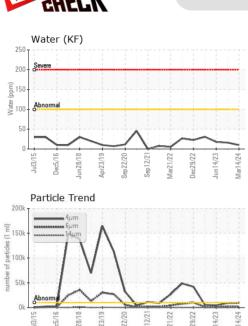
0.014

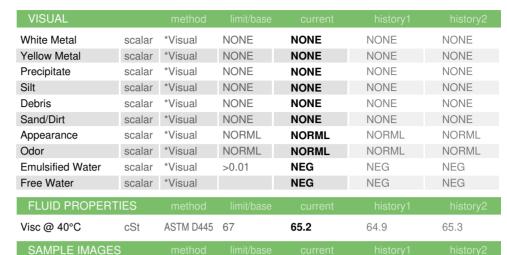
mg KOH/g ASTM D974 0.005

0.015



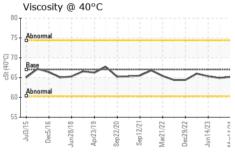
## **OIL ANALYSIS REPORT**

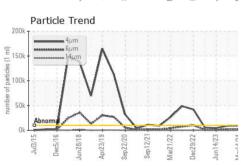




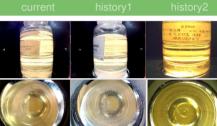
Water (KF) 250 200

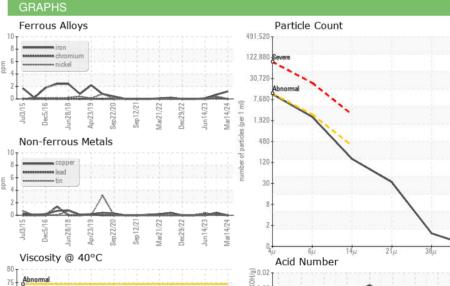
Color

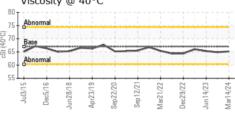




**Bottom** 







0.02 (mg KOH/g) 0.01 0.01 P 0.00



Certificate L2367

Sample No. Lab Number

Test Package : IND 2

: USPM241484 : 06124330 Unique Number: 10938481

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received **Tested** 

Diagnosed

: 25 Mar 2024 : 25 Mar 2024 - Jonathan Hester

: 20 Mar 2024

TYSON WARREN - BOSCOS PIZZA CO

25000 GUENTBER RD WARREN, MI US 48091 Contact:

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: F: