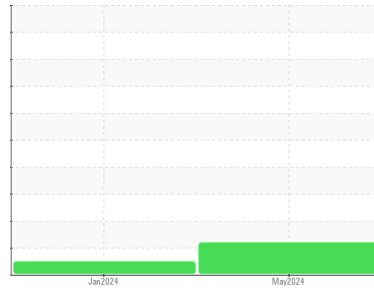




# OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id  
**VACPUMP-025 (S/N 98195H)**  
 Component  
**Vacuum Pump**  
 Fluid  
**SAE 10W (--- QTS)**

## DIAGNOSIS

### ▲ Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. 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.

### ▲ Fluid Condition

The AN level is at the top-end of the recommended limit.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|----------|
| Sample Number      | Client Info |             |            | <b>WC0877130</b>   | WC0390934   | ---      |
| Sample Date        | Client Info |             |            | <b>11 May 2024</b> | 15 Jan 2024 | ---      |
| Machine Age        | mths        | Client Info |            | <b>0</b>           | 0           | ---      |
| Oil Age            | mths        | Client Info |            | <b>0</b>           | 0           | ---      |
| Oil Changed        | Client Info |             |            | <b>N/A</b>         | N/A         | ---      |
| Sample Status      |             |             |            | <b>ABNORMAL</b>    | NORMAL      | ---      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >.1        | <b>NEG</b> | NEG      | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >20        | <b>1</b>     | 0        | ---      |
| Chromium    | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | ---      |
| Nickel      | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>1</b>     | 2        | ---      |
| Lead        | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | ---      |
| Copper      | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 1        | ---      |
| Tin         | ppm | ASTM D5185m | >20        | <b>0</b>     | <1       | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |

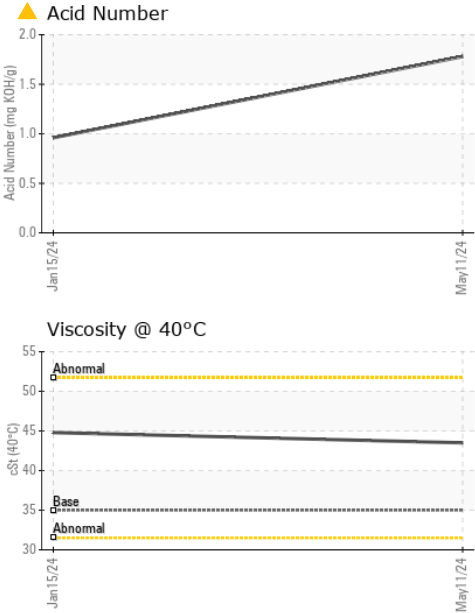
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 0        | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>0</b>     | <1       | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | <1       | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | 3        | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>18</b>    | 17       | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>8</b>     | <1       | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>297</b>   | 134      | ---      |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>17</b>    | 12       | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>8</b>     | 5        | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | ---      |

| FLUID DEGRADATION |          | method     | limit/base | current       | history1 | history2 |
|-------------------|----------|------------|------------|---------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 |            | <b>▲ 1.78</b> | 0.96     | ---      |



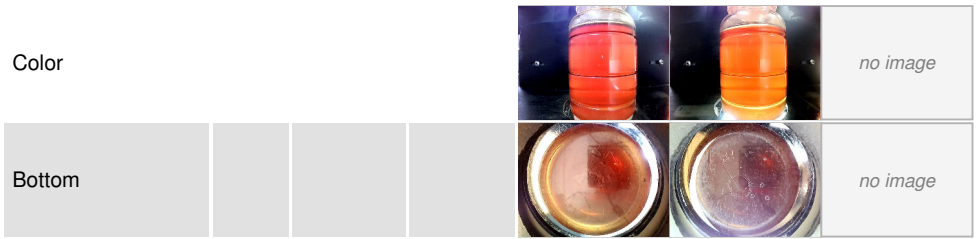
# OIL ANALYSIS REPORT



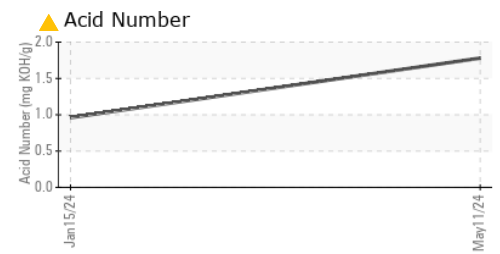
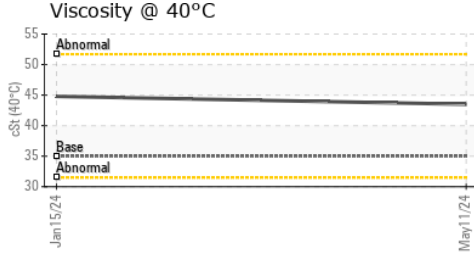
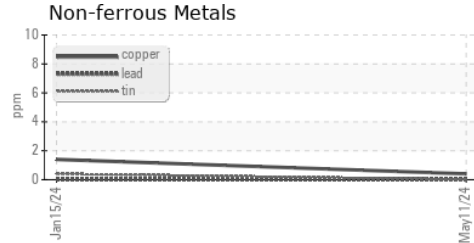
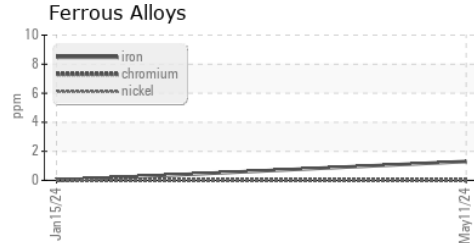
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      |
| Debris           | scalar | *Visual    | NONE    | NONE     | LIGHT    |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      |
| Emulsified Water | scalar | *Visual    | >.1     | NEG      | ---      |
| Free Water       | scalar | *Visual    |         | NEG      | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |     |
|------------------|--------|------------|---------|-------------|----------|-----|
| Visc @ 40°C      | cSt    | ASTM D445  | 35.0    | <b>43.5</b> | 44.8     | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0877130      **Received** : 10 May 2024  
**Lab Number** : **06175662**      **Tested** : 13 May 2024  
**Unique Number** : 11021715      **Diagnosed** : 13 May 2024 - Doug Bogart  
**Test Package** : IND 2

**PRINSCO - JESUP**  
 850 HAWKEYE RD  
 JESUP, IA  
 US 50648

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)

Contact: Spencer Reedy  
spencer.reedy@prinsco.com

T:  
F: