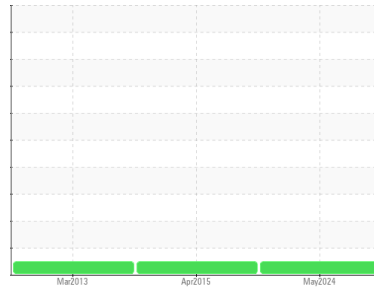




# OIL ANALYSIS REPORT

Area  
**KAESER S-460**  
 Machine Id  
**KAESER 1040 - PHONAK LLC**  
 Component  
**Compressor**

### Sample Rating Trend



### DIAGNOSIS

**Recommendation**  
 Oil and filter change at the time of sampling has been noted. 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 acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2    |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number      | Client Info |             |            | <b>UDI0000276</b>  | UCH03725872 | UCH03245809 |
| Sample Date        | Client Info |             |            | <b>22 May 2024</b> | 15 Apr 2015 | 08 Mar 2013 |
| Machine Age        | hrs         | Client Info |            | <b>59952</b>       | 13944       | 9123        |
| Oil Age            | hrs         | Client Info |            | <b>7003</b>        | 0           | 6065        |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Not Changd  | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.05      | <b>NEG</b> | NEG      | NEG      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | 2        | 2        |
| Chromium    | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >3         | <b>&lt;1</b> | 0        | 0        |
| Titanium    | ppm | ASTM D5185m | >3         | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >2         | <b>1</b>     | <1       | 0        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>1</b>     | <1       | 0        |
| Lead        | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | <1       |
| Copper      | ppm | ASTM D5185m | >50        | <b>11</b>    | 4        | 11       |
| Tin         | ppm | ASTM D5185m | >10        | <b>&lt;1</b> | 0        | 0        |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b>   | 0        | <1       |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | <1       |
| Cadmium     | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |

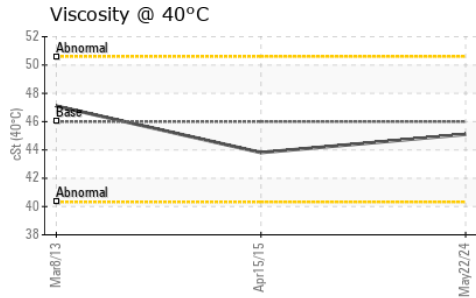
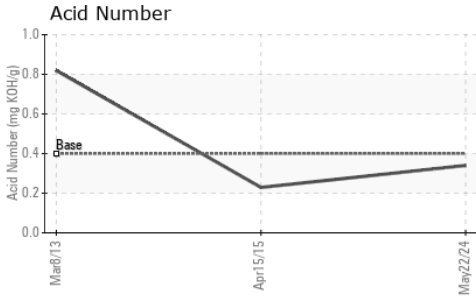
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | <1       | 0        |
| Barium     | ppm | ASTM D5185m | 90         | <b>0</b>     | 0        | <1       |
| Molybdenum | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm | ASTM D5185m | 90         | <b>&lt;1</b> | 34       | 2        |
| Calcium    | ppm | ASTM D5185m | 2          | <b>0</b>     | 0        | <1       |
| Phosphorus | ppm | ASTM D5185m |            | <b>63</b>    | 5        | 279      |
| Zinc       | ppm | ASTM D5185m |            | <b>0</b>     | 50       | 160      |
| Sulfur     | ppm | ASTM D5185m |            | <b>13051</b> | 16499    | 5146     |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>1</b> | <1       | 0        |
| Sodium       | ppm | ASTM D5185m |            | <b>0</b> | 15       | <1       |
| Potassium    | ppm | ASTM D5185m | >20        | <b>1</b> | 2        | 0        |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.4        | <b>0.34</b> | 0.229    | 0.819    |



# OIL ANALYSIS REPORT



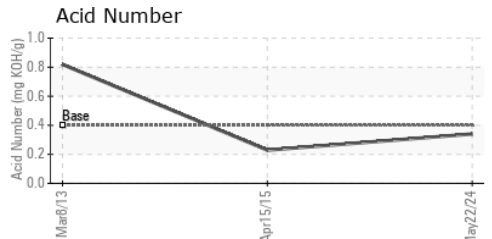
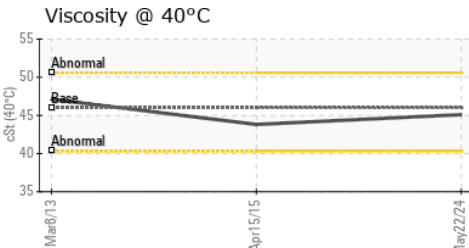
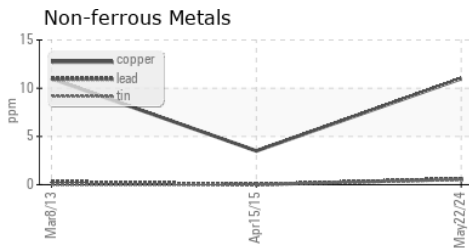
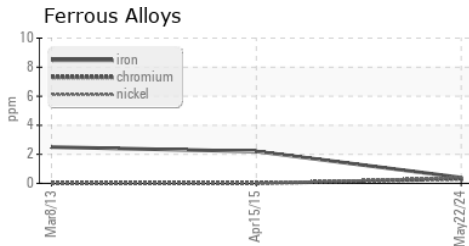
| VISUAL           | method | limit/base | current | history1     | history2 |       |
|------------------|--------|------------|---------|--------------|----------|-------|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     | LIGHT |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     | NONE  |
| Precipitate      | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     | NONE  |
| Silt             | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     | NONE  |
| Debris           | scalar | *Visual    | NONE    | <b>NONE</b>  | MODER    | LIGHT |
| Sand/Dirt        | scalar | *Visual    | NONE    | <b>NONE</b>  | NONE     | NONE  |
| Appearance       | scalar | *Visual    | NORML   | <b>NORML</b> | HAZY     | NORML |
| Odor             | scalar | *Visual    | NORML   | <b>NORML</b> | NORML    | NORML |
| Emulsified Water | scalar | *Visual    | >0.05   | <b>NEG</b>   | 0.2%     | NEG   |
| Free Water       | scalar | *Visual    |         | <b>NEG</b>   | NEG      | NEG   |

| FLUID PROPERTIES | method | limit/base   | current     | history1 | history2 |
|------------------|--------|--------------|-------------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 46 | <b>45.1</b> | 43.81    | 47.1     |

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

|        |  |  |  |          |          |
|--------|--|--|--|----------|----------|
| Color  |  |  |  | no image | no image |
| Bottom |  |  |  | no image | no image |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : UDI0000276      **Received** : 29 May 2024  
**Lab Number** : **06194198**      **Tested** : 30 May 2024  
**Unique Number** : 11056321      **Diagnosed** : 31 May 2024 - Angela Borella  
**Test Package** : IND 2

**DELTA INDUSTRIES - DOWNERS GROVE**  
 2201 CURTISS STREET  
 DOWNERS GROVE, IL  
 US 60515  
 Contact: MICHAEL FERRIS

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: (630)960-3931