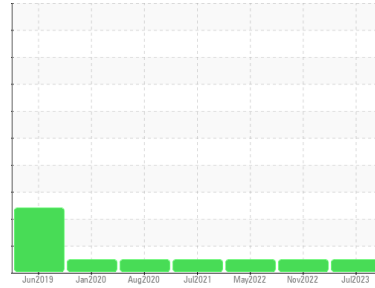


Area  
**PALASYN 45**  
Machine Id  
**SULLIVAN PALATEK 05A010 - RACK WORKS**  
Component  
**Compressor**



**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**

Moderate concentration of visible dirt/debris present 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>UCS05901346</b> | UCS05704623 | UCS05545831 |
| Sample Date        | Client Info |             |            | <b>13 Jul 2023</b> | 10 Nov 2022 | 12 May 2022 |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | 48236       | 47651       |
| Oil Age            | hrs         | Client Info |            | <b>4000</b>        | 585         | 1295        |
| Oil Changed        | Client Info |             |            | <b>Changed</b>     | Not Changd  | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | 0        | <1       |
| Chromium    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Nickel      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>2</b>     | 0        | <1       |
| Lead        | ppm | ASTM D5185m | >25        | <b>0</b>     | 0        | <1       |
| Copper      | ppm | ASTM D5185m | >50        | <b>3</b>     | 3        | <1       |
| Tin         | ppm | ASTM D5185m | >15        | <b>0</b>     | 0        | <1       |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b>   | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

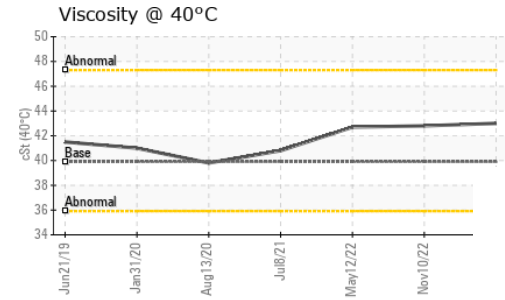
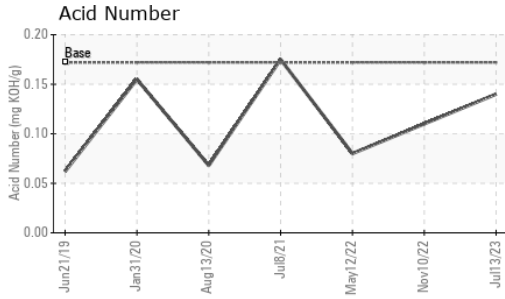
| ADDITIVES  |     | method      | limit/base | current     | history1 | history2 |
|------------|-----|-------------|------------|-------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 0.0        | <b>0</b>    | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 0.0        | <b>0</b>    | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 0          | <b>0</b>    | 0        | 0        |
| Manganese  | ppm | ASTM D5185m | 0          | <b>0</b>    | 0        | 0        |
| Magnesium  | ppm | ASTM D5185m | 0.0        | <b>0</b>    | 0        | 0        |
| Calcium    | ppm | ASTM D5185m | 0.0        | <b>0</b>    | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m | 966        | <b>690</b>  | 628      | 617      |
| Zinc       | ppm | ASTM D5185m | 0          | <b>0</b>    | 0        | 0        |
| Sulfur     | ppm | ASTM D5185m | 1309       | <b>1436</b> | 1270     | 905      |

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

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.172      | <b>0.14</b> | 0.11     | 0.08     |

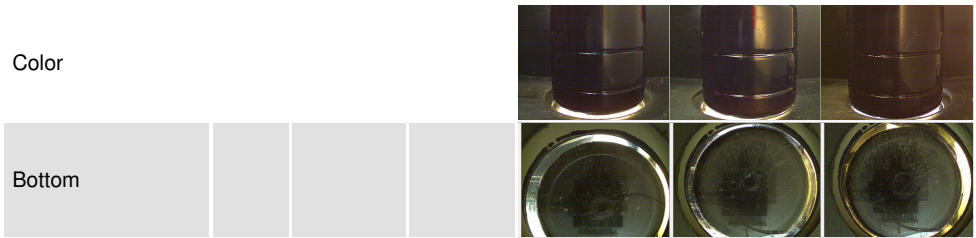
| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual | 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>MODER</b> | MODER    | NONE     |
| Sand/Dirt        | scalar | *Visual | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | *Visual | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | *Visual | >0.1       | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | *Visual |            | <b>NEG</b>   | ARRIVED  | UCSTAEK  |

# OIL ANALYSIS REPORT

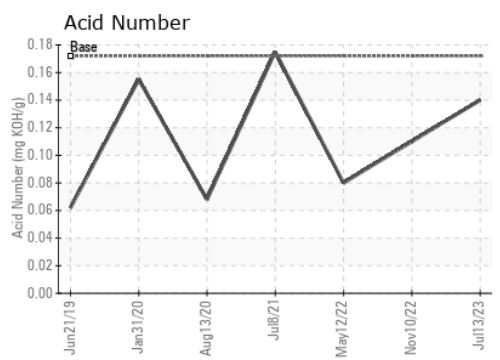
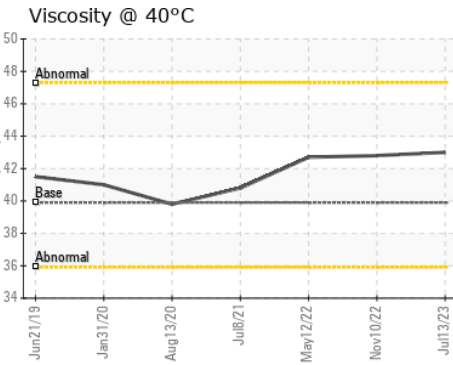
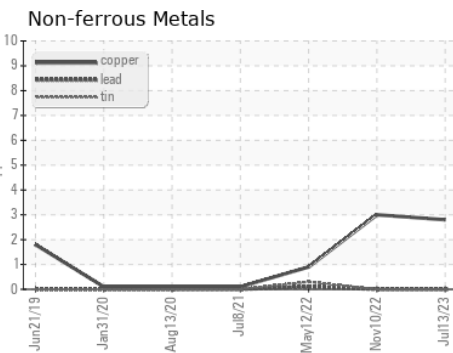
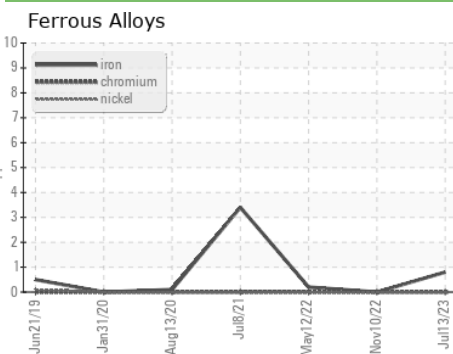


| FLUID PROPERTIES |     | method    | limit/base | current     | history1 | history2 |
|------------------|-----|-----------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D445 | 39.9       | <b>43.0</b> | 42.8     | 42.7     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : UCS05901346 **Received** : 18 Jul 2023  
**Lab Number** : **05901346** **Diagnosed** : 20 Jul 2023  
**Unique Number** : 10562702 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2

**STANLEY HEATING & AIR**  
 1002 DOBBINS MILL RD  
 ELKIN, NC  
 US 28621  
 Contact: DARRYL WEDDLE  
 darryl@stanleyvac.com  
 T: (336)366-4226  
 F:

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)