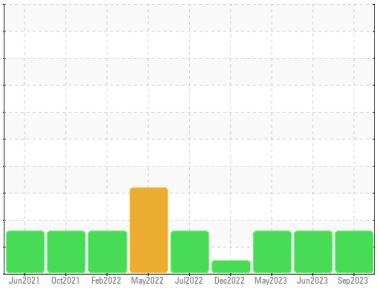
Sullivan Palatek

# PROBLEM SUMMARY

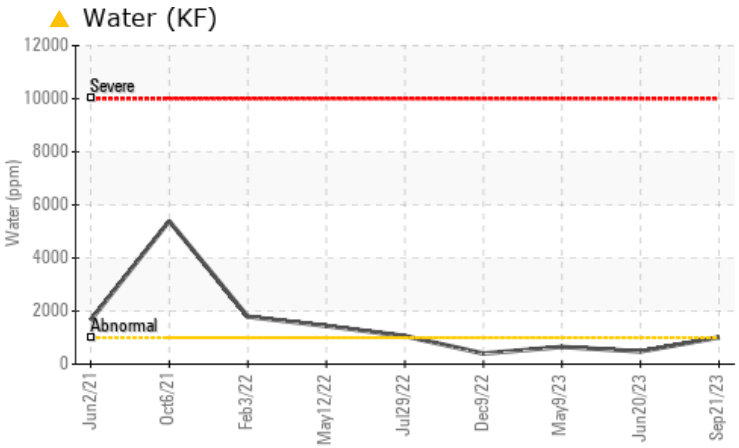
Area
**PALASYN 45**
Machine Id
**1703070004**
Component
**Compressor**

Sample Rating Trend




**WATER**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

We advise that you follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status | | | | ATTENTION | ATTENTION | ATTENTION |
|---|---|---|---|---|---|---|
| Water | % | ASTM D6304 | >0.1 | ▲ **0.101** | 0.048 | 0.065 |
| ppm Water | ppm | ASTM D6304 | >1000 | ▲ **1010** | 480 | 650 |
| Emulsified Water | scalar | *Visual | >0.1 | ▲ **0.2%** | 0.2% | 0.2% |

**Customer Id:** UCBRYBRO
**Sample No.:** UCS05959156
**Lab Number:** 05959156
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*To change component or sample information:*
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Water Drain-off | --- | --- | ? | We advise that you follow the water drain-off procedure for this component. |

## HISTORICAL DIAGNOSIS

**20 Jun 2023 Diag: Don Baldridge**

WATER

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report

**09 May 2023 Diag: Don Baldridge**

WATER

We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report

**09 Dec 2022 Diag: Jonathan Hester**

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

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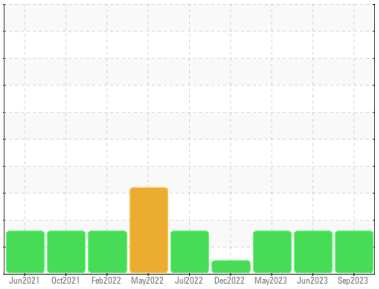
# OIL ANALYSIS REPORT

Sample Rating Trend




**WATER**

Area
**PALASYN 45**
Machine Id
**1703070004**
Component
**Compressor**

## DIAGNOSIS

**Recommendation**
We advise that you follow the water drain-off procedure for this component. The 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 a light concentration of water present in the oil.

**Fluid Condition**
The AN level is acceptable for this fluid.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **UCS05959156** | UCS05880269 | UCS05845039 |
| Sample Date | | Client Info | | **21 Sep 2023** | 20 Jun 2023 | 09 May 2023 |
| Machine Age | hrs | Client Info | | **22898** | 22042 | 21720 |
| Oil Age | hrs | Client Info | | **1178** | 3221 | 1000 |
| Oil Changed | | Client Info | | **Not Changd** | Changed | N/A |
| Sample Status | | | | **ATTENTION** | ATTENTION | ATTENTION |

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

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | 0.0 | **0** | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0.0 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185m | 0 | **0** | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 0.0 | **0** | 0 | 1 |
| Calcium | ppm | ASTM D5185m | 0.0 | **0** | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 966 | **572** | 530 | 522 |
| Zinc | ppm | ASTM D5185m | 0 | **0** | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 1309 | **1340** | 1450 | 1435 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >25 | **3** | 2 | 3 |
| Sodium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | <1 | 2 |
| Water | % | ASTM D6304 | >0.1 | ▲ **0.101** | 0.048 | 0.065 |
| ppm Water | ppm | ASTM D6304 | >1000 | ▲ **1010** | 480 | 650 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.172 | **0.091** | 0.091 | 0.283 |

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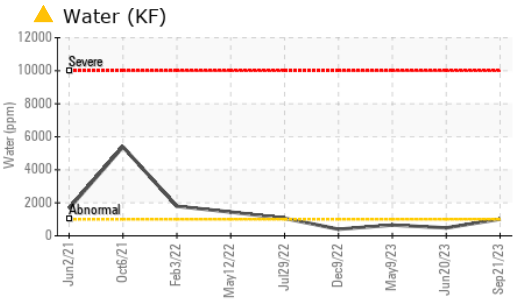
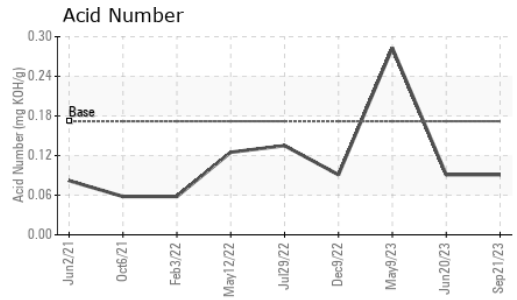
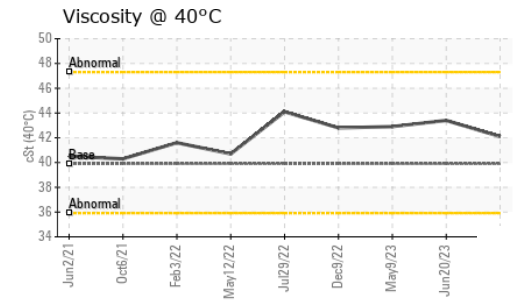
# OIL ANALYSIS REPORT

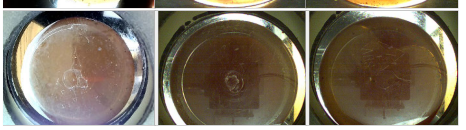


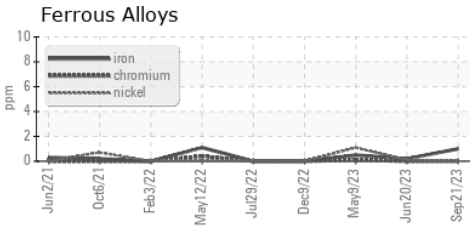



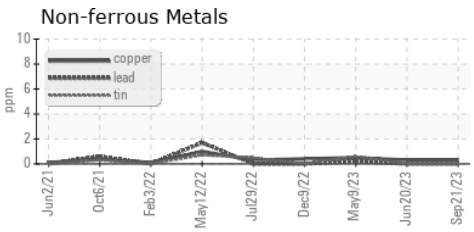

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | MODER | MODER |
| 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 | >0.1 | ▲ **0.2%** | 0.2% | 0.2% |
| Free Water | scalar | *Visual | | **NEG** | ▲ 10.0 | ▲ 10.0 |

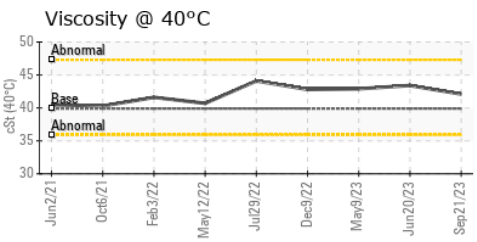
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 39.9 | **42.1** | 43.4 | 42.9 |

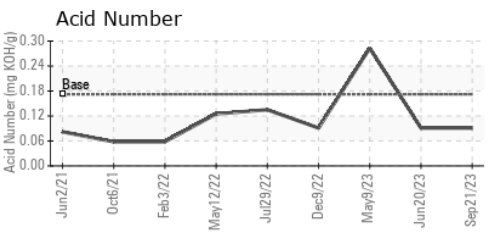
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  | | |
| Bottom | | |  | | |

## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : UCS05959156 **Received** : 22 Sep 2023
**Lab Number** : 05959156 **Diagnosed** : 25 Sep 2023
**Unique Number** : 10660369 **Diagnostician** : Don Baldridge
**Test Package** : IND 2 ( Additional Tests: KF )

*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)*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