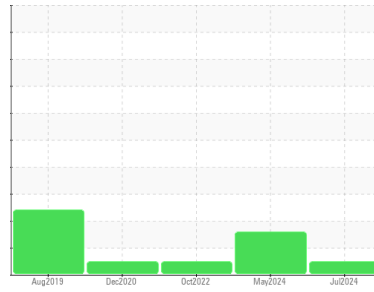


OIL ANALYSIS REPORT

Area
PALASYN 45
Machine Id
PALATEK 1503240004 - RAYS TIRE
Component
Compressor

Sample Rating Trend



DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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 | | UCS06237902 | UCS06199347 | UCS05669525 |
| Sample Date | Client Info | | 11 Jul 2024 | 24 May 2024 | 13 Oct 2022 |
| Machine Age | hrs | Client Info | 21393 | 21141 | 17855 |
| Oil Age | hrs | Client Info | 252 | 4000 | 0 |
| Oil Changed | Client Info | | Not Changed | Changed | Changed |
| Sample Status | | | NORMAL | ATTENTION | NORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.1 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | 0 | 0 | <1 |
| Chromium | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m >25 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >50 | 4 | 0 | <1 |
| Tin | ppm | ASTM D5185m >15 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | --- | --- | --- |
| 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 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m 0.0 | <1 | 0 | 0 |
| Calcium | ppm | ASTM D5185m 0.0 | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m 966 | 633 | 630 | 570 |
| Zinc | ppm | ASTM D5185m 0 | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m 1309 | 1414 | 864 | 294 |

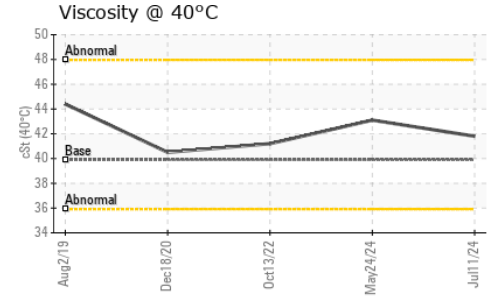
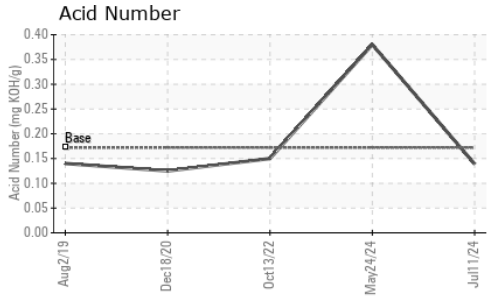
CONTAMINANTS

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

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.172 | 0.139 | 0.38 | 0.15 |

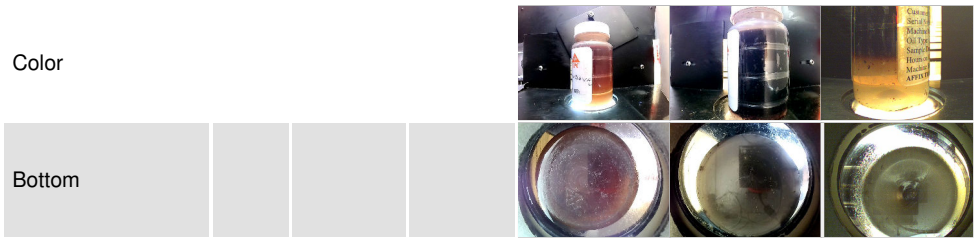
OIL ANALYSIS REPORT



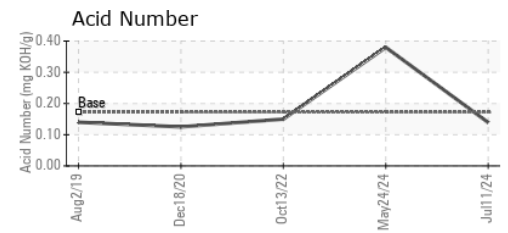
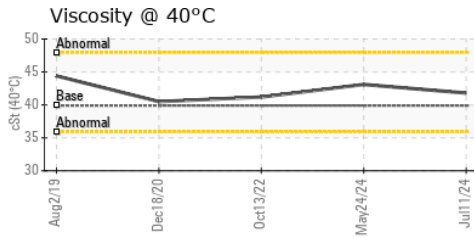
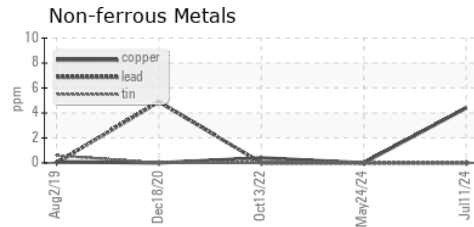
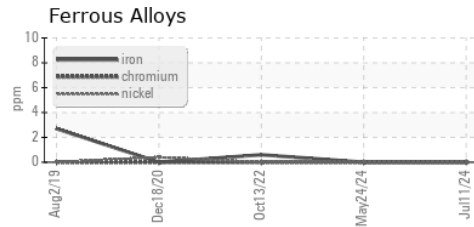
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | MODER | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | 0.2% |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 39.9 | 41.8 | 43.1 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCS06237902 **Received** : 16 Jul 2024
Lab Number : **06237902** **Tested** : 17 Jul 2024
Unique Number : 11126736 **Diagnosed** : 18 Jul 2024 - Sean Felton
Test Package : IND 2

VACUUM PUMP and COMPRESSOR
 1490 GRUBER RD
 GREEN BAY, WI
 US 54313
 Contact: ROBIN
 robin@vpc-inc.com
 T: (920)662-1113
 F: (920)662-1116

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)