<u>Sullivan</u> Palatek.

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area **PALLUBE 32** Machine To **SULLIVAN PALATEK 1604190002 - METAL BUILDING PRODUCTS (SPIRCO)** Component Compressor

DIAGNOSIS

Recommendation

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 INFORM | IATION | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|------------|-------------|-------------|----------|
| Sample Number | | Client Info | | UCS06154500 | UCS06095683 | |
| Sample Date | | Client Info | | 01 Apr 2024 | 25 Jan 2024 | |
| Machine Age | hrs | Client Info | | 23244 | 22776 | |
| Oil Age | hrs | Client Info | | 0 | 2000 | |
| Oil Changed | | Client Info | | Changed | Not Changd | |
| Sample Status | | | | NORMAL | NORMAL | |
| CONTAMINATION | J | method | limit/base | current | history1 | history2 |
| Water | | WC Method | >0.1 | NEG | NEG | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185m | >50 | 0 | 1 | |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 0 | |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | |
| Silver | ppm | ASTM D5185m | | <1 | 0 | |
| Aluminum | ppm | ASTM D5185m | >25 | 1 | 1 | |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | |
| Copper | ppm | ASTM D5185m | >50 | <1 | <1 | |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | |
| Cadmium | ppm | ASTM D5185m | | <1 | 0 | |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185m | 1 | 0 | 0 | |
| Barium | ppm | ASTM D5185m | 730 | 425 | 149 | |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | |
| Manganese | ppm | ASTM D5185m | 0.0 | 0 | 0 | |
| Magnesium | ppm | ASTM D5185m | 0 | <1 | 0 | |
| Calcium | ppm | ASTM D5185m | 0 | 5 | 0 | |
| Phosphorus | ppm | ASTM D5185m | 0 | 59 | 104 | |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 | |
| Sulfur | ppm | ASTM D5185m | 590 | 713 | 405 | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >25 | 2 | 1 | |
| Sodium | ppm | ASTM D5185m | | 14 | 57 | |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 3 | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.14 | 0.081 | 0.27 | |



OIL ANALYSIS REPORT

VISUAL



| Yellow Metal Precipitate Silt Debris Sand/Dirt | scalar ** scalar ** scalar ** scalar ** | Visual Visual Visual | NONE NONE NONE | NONE NONE NONE | NONE NONE NONE | |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precipitate Silt Debris Sand/Dirt | scalar *' scalar *' scalar *' | Visual Visual | NONE | NONE | NONE | |
| Silt Debris Sand/Dirt | scalar *' | Visual | NONE | NONE | NONE | |
| Debris Sand/Dirt | scalar * | viouui | ITOTTE | | | |
| Sand/Dirt | Jouran | Visual | NONE | NONE | NONE | |
| Sand/ Dirt | scalar * | Visual | NONE | NONE | NONE | |
| Appearance | scalar * | Visual | NORMI | NORMI | NORMI | |
| Odor | scalar * | Visual | NORMI | NORMI | NORMI | |
| Emulsified Water | scalar * | Visual | | NEG | NEG | |
| Eree Water | scalar * | Visual | 20.1 | NEG | NEG | |
| | Scalal | visuai | | NEG | NEG | |
| FLUID PROPERT | | | limit/base | current | history1 | history2 |
| | COL A | 13 T M D443 | 42.0 | 41.3 | 30.3 | |
| SAMPLE IMAGES | S | method | limit/base | current | history1 | history2 |
| Color | | | | | A | no image |
| Bottom | | | | | | no image |
| GRAPHS | | | | | | |
| Ferrous Alloys | | | | | | |
| 10 imp | | | | | | |
| 8 | | | | | | |
| E 6 T | | | | | | |
| - 4 | | | | | | |
| | | | | | | |
| 5/24 | | | 1/24 | | | |
| Jan 29 | | | Apri | | | |
| Non-ferrous Meta | s | | | | | |
| ¹⁰ T | | | | | | |
| 8 - copper | | | | | | |
| E 6 tin | | | | | | |
| 4 | | | | | | |
| 2 | | | | | | |
| 24 24 | | | 24 | | | |
| an 25/ | | | Apr1/ | | | |
| → Viscosity @ 40°C | | | | _ | | |
| 50 T | | | 0.20 | Acid Number | | |
| Abnormal | | | (B) | | | |
| ⊕ 45 Base | | | P 0.24 | | | |
| 5 (f | | | | Base | | |
| Abnormal | | | 20.06 | • | | |
| 35 | | | | | | |
| 25/24 | | | r1/24 | 25/24 | | |
| Jan, | | | Ap | Jan | | |
| : WearCheck USA - 50 | 1 Madison | Ave Carv. | NC 27513 | | BLAKE AND | PENDLETO |
| : UCS06154500 | Receive | ed : 19 | Apr 2024 | | | |
| : 06154500 | Tested | : 22 | Apr 2024 | | N | /EMPHIS, T |
| : 10989923 | Diagnos | sed : 23 | Apr 2024 - Sea | in Felton | - | US 3813 |
| : IND 2 | ing at 1 and | 007 4000 | | | Contact: J | |
| | //// 21 1-2/// | | | | A REPORT OF A REPORT OF A | |
| | Free Water FLUID PROPERT Visc @ 40°C SAMPLE IMAGE Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Viscosity @ 40°C Viscosity @ 40°C Official and Alloys Color Non-ferrous Meta Color Non-ferrous Meta Color Viscosity @ 40°C Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color Color | Free Water scalar FLUID PROPERTIES Visc @ 40°C cSt A SAMPLE IMAGES Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Viscosity @ 40°C Color WearCheck USA - 501 Madison UCS06154500 Receive 10989923 Diagnos | Free Water scalar "Visual FLUID PROPERTIES method Visc @ 40°C cSt ASTM D445 SAMPLE IMAGES method Color Bottom GRAPHS Ferrous Alloys Ferrous Alloys Non-ferrous Metals Non-ferrous Metals Viscosity @ 40°C Viscosity @ 40°C Jong Jong Jong Jong Jong Jong Jong Jong | Free Water scalar Visual FLUID PROPERTIES method imit/base Visc @ 40°C cSt ASTM D445 42.8 SAMPLE IMAGES method imit/base Color Bottom GRAPHS Ferrous Alloys | Free Water scalar "Visual NEG FLUID PROPERTIES method limit/base current Visc @ 40°C cSt ASTM D445 42.8 41.5 SAMPLE IMAGES method limit/base current Color Bottom GRAPHS Ferrous Alloys | Free Water scalar Visual NEG NEG FLUID PROPERTIES method limit/base current history1 Visc @ 40°C cSt ASTM D445 42.8 41.5 38.3 SAMPLE IMAGES method limit/base current history1 Color Imit/base current history1 Bottom Imit/base current history1 Some Imit/base current history1 GRAPHS Ferrous Alloys Imit/base Imit/base Imit/Imit/Imit/Imit/Imit/Imit/Imit/Imit/ |

Contact/Location: JAY GIANNINI - UCBLAMEM