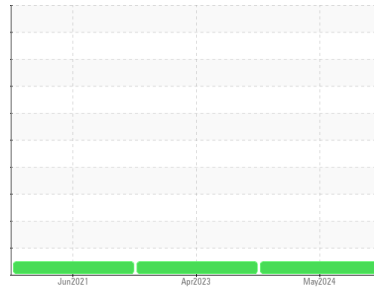




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area

04

Machine Id

[04] BASELINE - TURBINE LIFE 68 REF

Component

New (Unused) Oil

Fluid

{not provided} (1 QTS)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample. (Customer Sample Comment: Batch#24B2802)

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | HPL0004896 | HPL0003345 | HPL008195 |
| Sample Date | Client Info | | | 28 May 2024 | 11 Apr 2023 | 29 Jun 2021 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | Client Info | | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

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

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Chromium | ppm | ASTM D5185m | | 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 | | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185m | | 1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | | --- | --- | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | <1 |

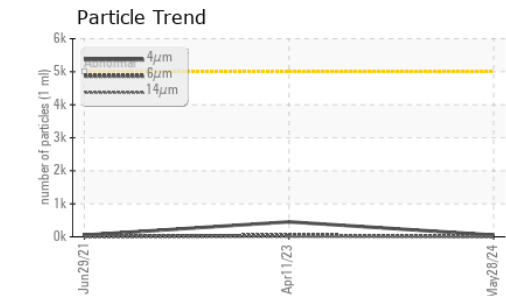
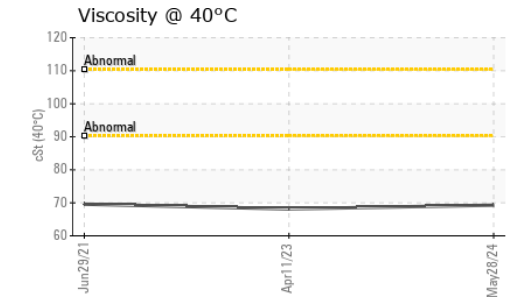
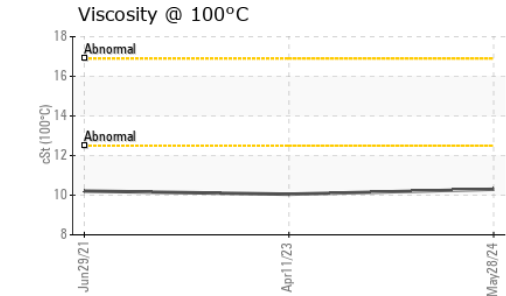
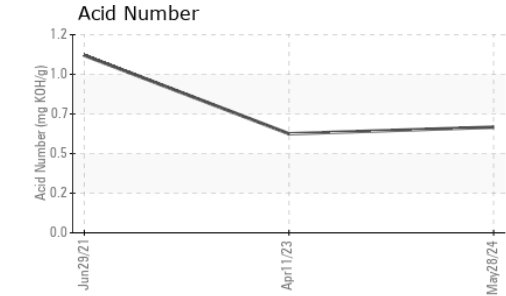
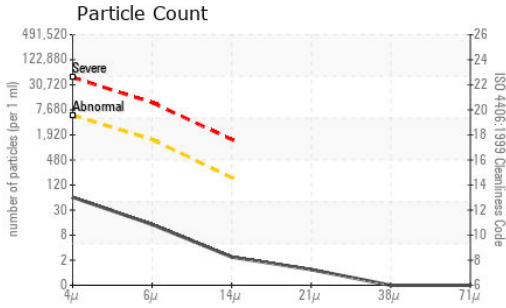
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 0 | 13 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | | 1 | 0 | 2 |
| Calcium | ppm | ASTM D5185m | | 1 | 2 | 4 |
| Phosphorus | ppm | ASTM D5185m | | 209 | 200 | 341 |
| Zinc | ppm | ASTM D5185m | | 3 | 2 | 2 |
| Sulfur | ppm | ASTM D5185m | | 24536 | 16891 | 16198 |

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

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | >5000 | 54 | 453 | 53 |
| Particles >6µm | | ASTM D7647 | >1300 | 12 | 43 | 10 |
| Particles >14µm | | ASTM D7647 | >160 | 2 | 5 | 1 |
| Particles >21µm | | ASTM D7647 | >40 | 1 | 1 | 0 |
| Particles >38µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 13/11/9 | 16/13/10 | 13/10/7 |



OIL ANALYSIS REPORT

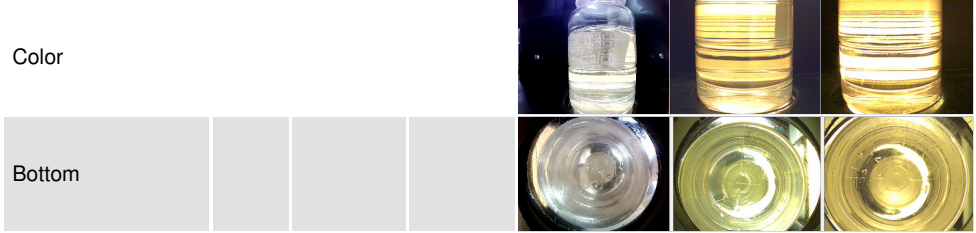


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.64 | 0.60 | 1.075 |

| 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 | NONE | NONE |
| 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 | | NEG | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG | NEG |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|----------------------|-------|------------|------------|--------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | | 69.29 | 68.15 | 69.59 |
| Visc @ 100°C | cSt | ASTM D445 | | 10.3 | 10.05 | 10.21 |
| Viscosity Index (VI) | Scale | ASTM D2270 | | 134 | 131 | 131 |

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



Color

Bottom



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0004896 **Received** : 03 Jun 2024
Lab Number : **06198102** **Tested** : 05 Jun 2024
Unique Number : 11060225 **Diagnosed** : 05 Jun 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI)

KENSING
 2525 S KENSINGTON RD
 KANKAKEE, IL
 US 60901

To discuss this sample report, contact Customer Service at 1-800-237-1369. Contact: TIM HUBERT
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. timothy.hubert@kensingolutions.com
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) T: (815)939-8918
 F: x