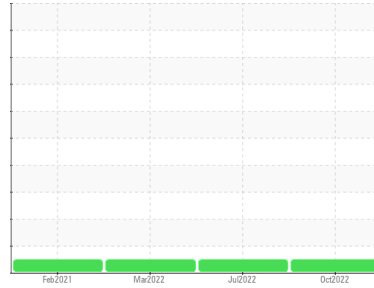




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
TEC 10K
 Machine Id
ATLAS COPCO AIF097826 - ARCH COAL
 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 INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | UCH05670489 | UCH05588918 | UCH05503912 |
| Sample Date | Client Info | | 11 Oct 2022 | 07 Jul 2022 | 21 Mar 2022 |
| Machine Age | hrs | Client Info | 69639 | 68949 | 68131 |
| Oil Age | hrs | Client Info | 8000 | 2723 | 2950 |
| Oil Changed | Client Info | | Changed | Not Changd | Not Changd |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >50 | <1 | 3 | 4 |
| Chromium | ppm | ASTM D5185m >5 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | <1 | <1 |
| Aluminum | ppm | ASTM D5185m >15 | 2 | 8 | 5 |
| Lead | ppm | ASTM D5185m >65 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >65 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185m >10 | 0 | <1 | 0 |
| Antimony | ppm | ASTM D5185m | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 172 | 192 | 106 |
| Zinc | ppm | ASTM D5185m | 46 | 73 | 36 |
| Sulfur | ppm | ASTM D5185m | 450 | 659 | 309 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >35 | 5 | 6 | 4 |
| Sodium | ppm | ASTM D5185m | <1 | 2 | 3 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | 0 |

FLUID DEGRADATION

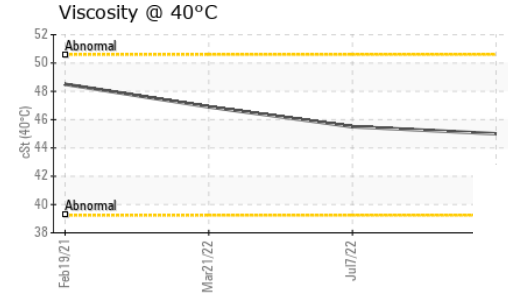
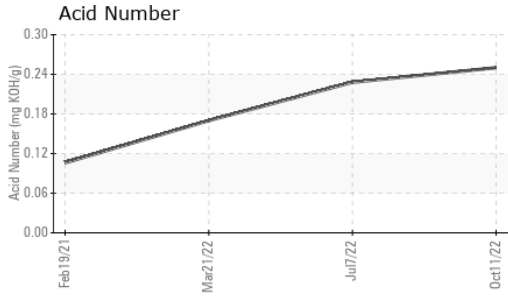
| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.25 | 0.228 | 0.17 |

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 >0.1 | NEG | NEG | NEG |
| Free Water | scalar | *Visual | NEG | NEG | NEG |

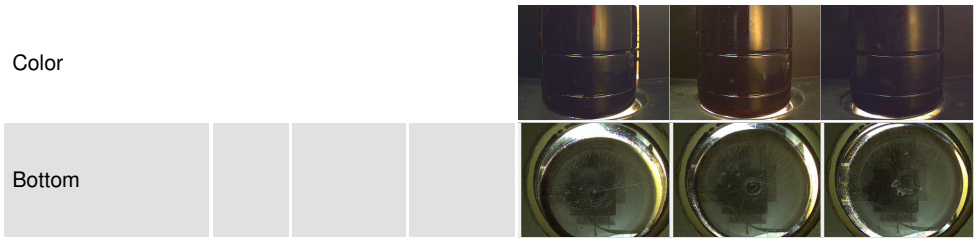


OIL ANALYSIS REPORT

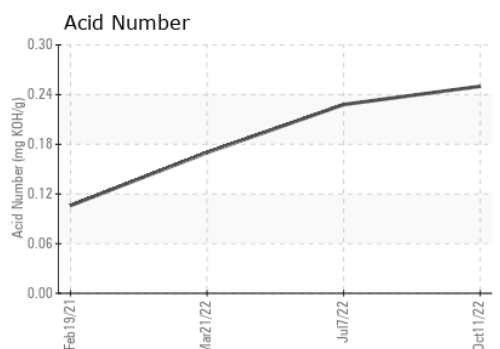
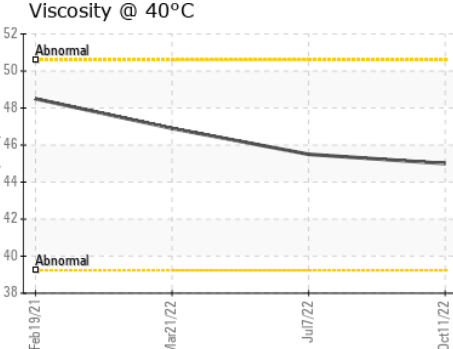
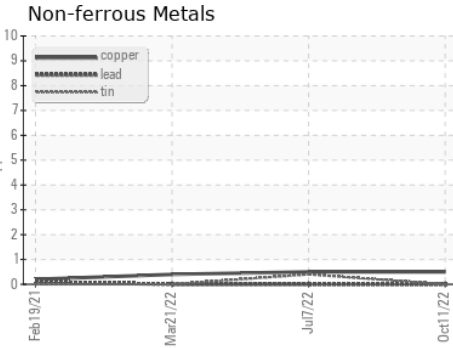
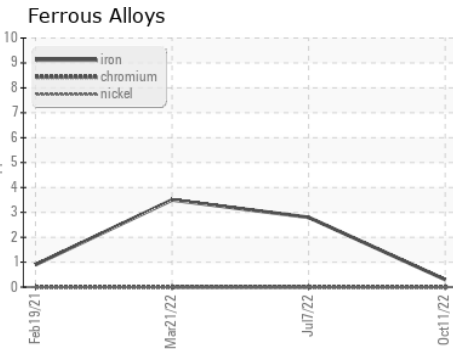


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 45.0 | 45.5 | 46.9 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCH05670489 **Received** : 19 Oct 2022
Lab Number : 05670489 **Diagnosed** : 20 Oct 2022
Unique Number : 10180059 **Diagnostician** : Jonathan Hester
Test Package : IND 2

TOTAL EQUIPMENT COMPANY
 200 SMILEY DR
 SAINT ALBANS, WV
 US 25177
 Contact:

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)

T:
F: