



OIL ANALYSIS REPORT

| | |
|-----------------|--------|
| WEAR | NORMAL |
| CONTAMINATION | NORMAL |
| FLUID CONDITION | NORMAL |



Area
HORRY
Machine Id
JENBACHER UNIT 1
Component
Biogas Engine
Fluid
76 TRITON 7010 (179 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0884948 | WC0884950 | WC0884952 |
| Sample Date | | Client Info | | 20 May 2024 | 09 Apr 2024 | 26 Mar 2024 |
| Machine Age | hrs | Client Info | | 52051 | 51831 | 51566 |
| Oil Age | hrs | Client Info | | 972 | 752 | 487 |
| Filter Age | hrs | Client Info | | 972 | 752 | 487 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >20 | 7 | 7 | 4 |
| Chromium | ppm | ASTM D5185m | >5 | 1 | 1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | <1 | 1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >5 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >15 | 7 | 6 | 4 |
| Lead | ppm | ASTM D5185m | >20 | 1 | 1 | 0 |
| Copper | ppm | ASTM D5185m | >15 | 3 | 2 | <1 |
| Tin | ppm | ASTM D5185m | >5 | 3 | 2 | <1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

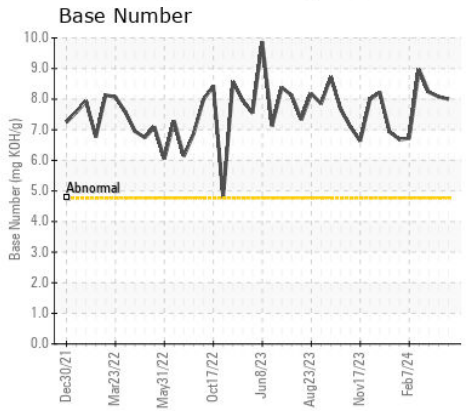
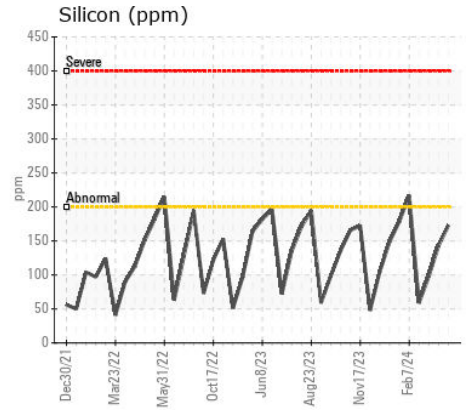
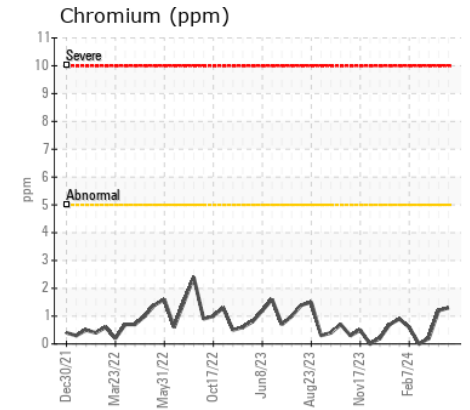
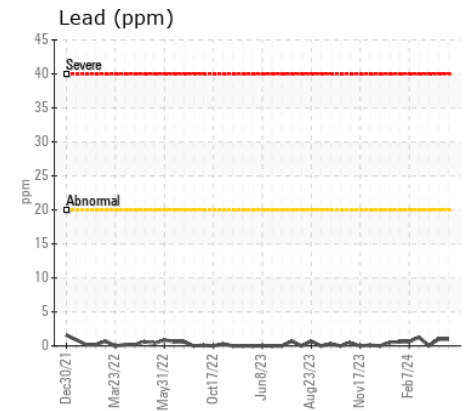
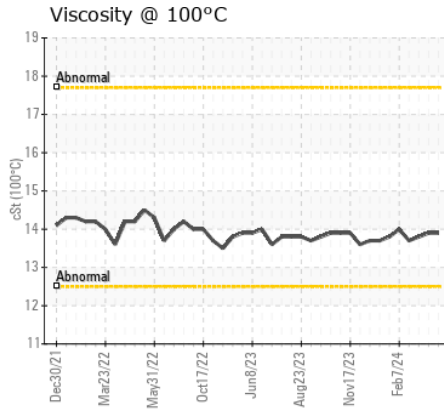
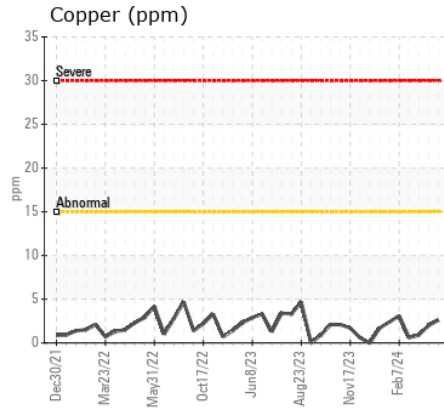
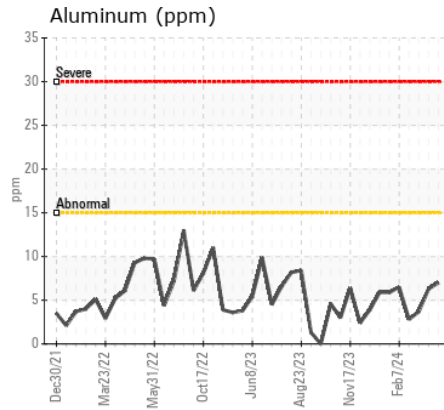
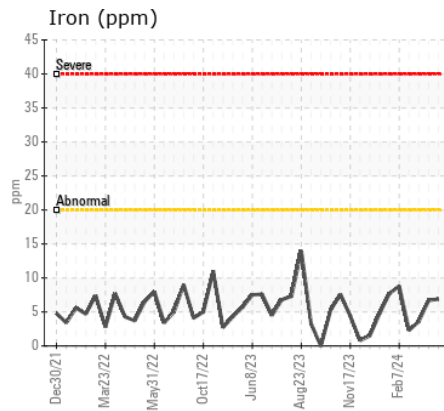
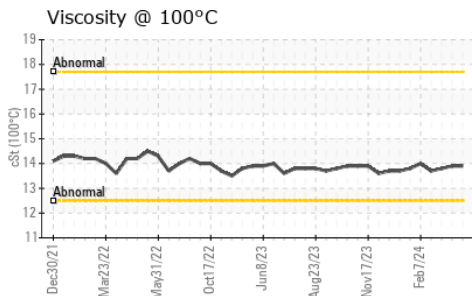
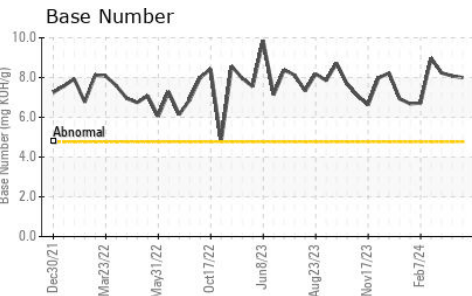
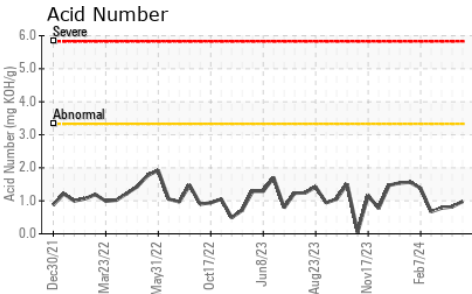
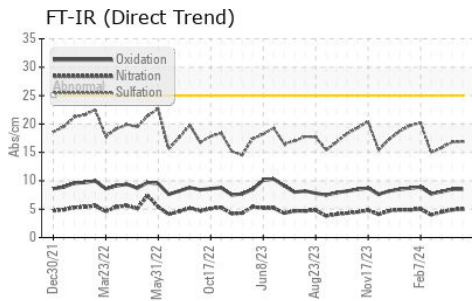
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >200 | 173 | 143 | 98 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 2 | 2 |
| Fuel | | WC Method | >4.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >2 | 0 | 0 | 0 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.0 | 4.9 | 4.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 16.9 | 16.8 | 15.8 |
| 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 | >.2 | NEG | NEG | NEG |

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|-----|--------------|------|------|
| Sodium | ppm | ASTM D5185m | >20 | <1 | 1 | <1 |
| Boron | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 2 | 3 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | 8 | 11 | 7 |
| Calcium | ppm | ASTM D5185m | | 3134 | 3409 | 3036 |
| Phosphorus | ppm | ASTM D5185m | | 324 | 338 | 296 |
| Zinc | ppm | ASTM D5185m | | 371 | 406 | 359 |
| Sulfur | ppm | ASTM D5185m | | 5358 | 5527 | 4859 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 8.5 | 8.5 | 8.1 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.98 | 0.82 | 0.78 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.00 | 8.08 | 8.23 |
| Visc @ 100°C | cSt | ASTM D445 | | 13.9 | 13.9 | 13.8 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0884948
Lab Number : 06186380
Unique Number : 11043132
Test Package : MOB 2

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 23 May 2024 - Sean Felton

SANTEE COOPER - HORRY COUNTY LANDFILL
 100 ELM STREET
 CONWAY, SC
 US 29526

Contact: DERRICK CHESTNUT
 drchestn@santeecooper.com

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: