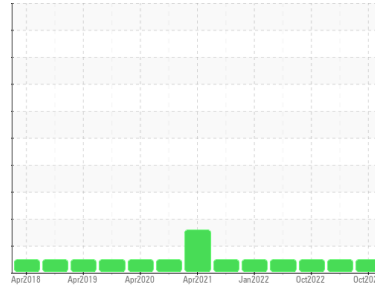




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
DUNHAM-BUSCH C1 - PFG (S/N X1829)
 Component
Refrigeration Compressor
 Fluid
SR 2033 (--- GAL)

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 | | WC0832896 | WC0818864 | WC0700822 |
| Sample Date | Client Info | | 25 Oct 2023 | 18 Jun 2023 | 18 Oct 2022 |
| Machine Age | hrs | Client Info | 110948 | 107874 | 103334 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | Not Chngd | N/A | N/A |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >8 | 1 | <1 | 0 |
| Chromium | ppm | ASTM D5185m >2 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >3 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >8 | <1 | 0 | 0 |
| Tin | ppm | ASTM D5185m >4 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | <1 | 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 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Calcium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Phosphorus | ppm | ASTM D5185m | 2 | 1 | 5 |
| Zinc | ppm | ASTM D5185m | 0 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 18 | 37 | 0 |

CONTAMINANTS

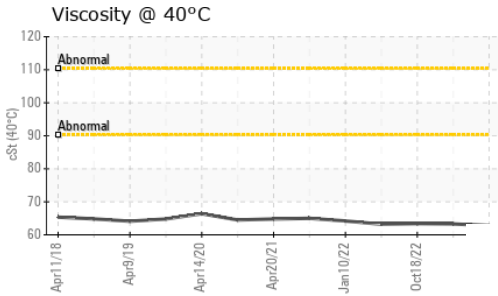
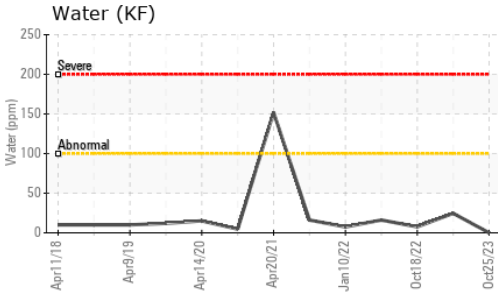
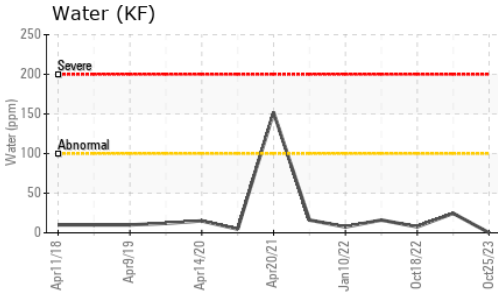
| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | <1 | 0 | 0 |
| Sodium | ppm | ASTM D5185m | 1 | 0 | 0 |
| Potassium | ppm | ASTM D5185m >20 | <1 | <1 | 0 |
| Water | % | ASTM D6304 >0.01 | 0.00 | 0.002 | 0.001 |
| ppm Water | ppm | ASTM D6304 >100 | 0.00 | 24.6 | 7.6 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974 | 0.015 | 0.014 | 0.016 |



OIL ANALYSIS REPORT



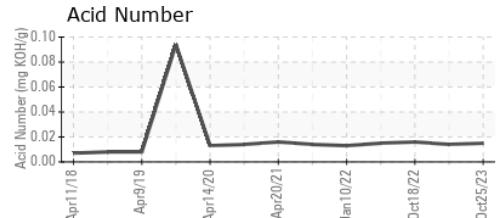
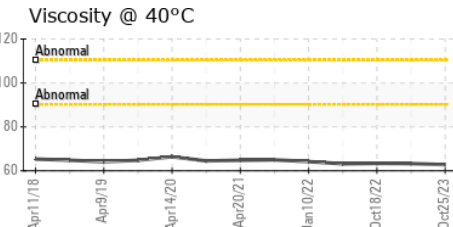
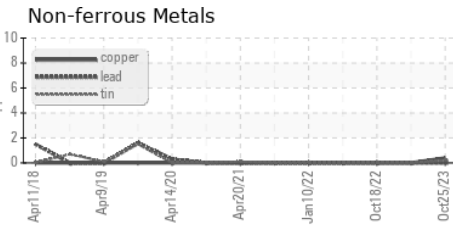
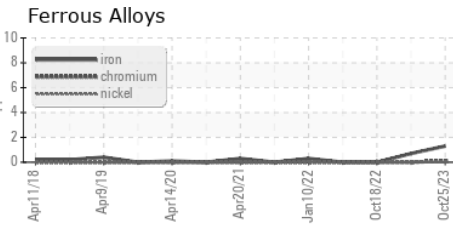
| PARAMETER | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | VLITE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.01 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| PARAMETER | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| FLUID PROPERTIES | | | | | |
| Visc @ 40°C | cSt | ASTM D445 | 62.8 | 63.3 | 63.4 |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0832896
 Lab Number : 05994472
 Unique Number : 10722832
 Test Package : IND 2

Received : 31 Oct 2023
 Diagnosed : 01 Nov 2023
 Diagnostician : Doug Bogart

SOUTHEASTERN REFRIGERATION
 310 26TH AVE. WEST
 BIRMINGHAM, AL
 US 35204
 Contact: GREGG KING
 gregg@serfco.com
 T: (205)322-6587
 F: (205)322-6580

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)