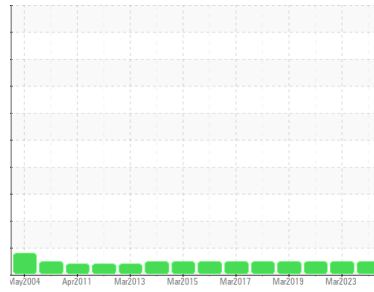




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
PIERCE TOWER-81
 Component
Hydraulic System
 Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | WC0907002 | WC0790368 | WC0430578 |
| Sample Date | Client Info | | | 05 Mar 2024 | 21 Mar 2023 | 22 Feb 2020 |
| Machine Age | hrs | Client Info | | 1429 | 0 | 1429 |
| Oil Age | hrs | Client Info | | 1429 | 0 | 0 |
| Oil Changed | Client Info | | | N/A | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.1 | NEG | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 4 | 3 | 3 |
| Chromium | ppm | ASTM D5185m | >10 | 1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >10 | 1 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >75 | 32 | 5 | 5 |
| Tin | ppm | ASTM D5185m | >10 | 1 | 0 | 0 |
| Antimony | ppm | ASTM D5185m | | --- | --- | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | <1 | <1 | <1 |

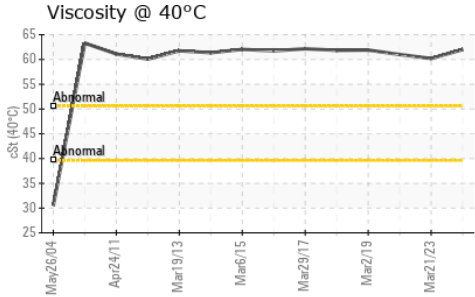
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 1 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 3 | 4 | 2 |
| Calcium | ppm | ASTM D5185m | | 130 | 98 | 95 |
| Phosphorus | ppm | ASTM D5185m | | 581 | 407 | 371 |
| Zinc | ppm | ASTM D5185m | | 916 | 527 | 473 |
| Sulfur | ppm | ASTM D5185m | | 7326 | 5845 | 6064 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m | >20 | 7 | 2 | 2 |
| Sodium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 0 | 0 |

| 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 | LIGHT | 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

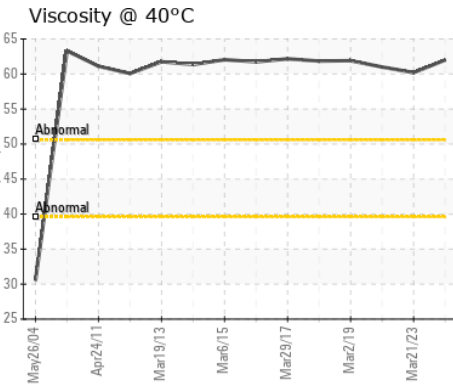
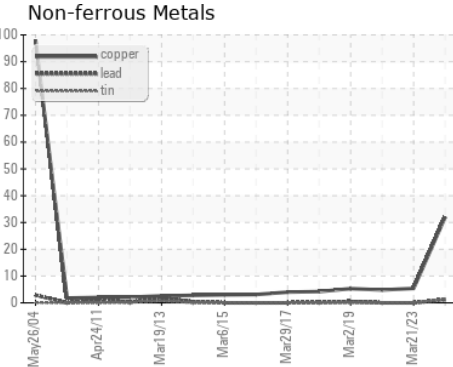
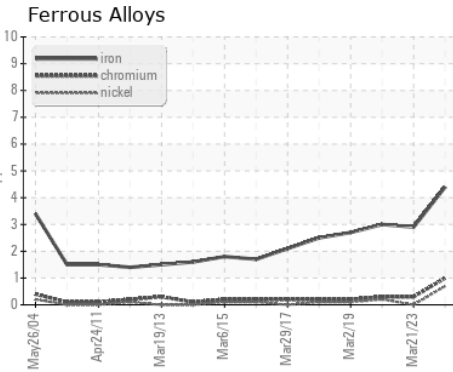


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 62.0 | 60.2 | 61.0 |

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

| | | | | | |
|--------|--|--|----------|----------|----------|
| Color | | | no image | no image | no image |
| Bottom | | | no image | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0907002 **Received** : 04 Apr 2024
Lab Number : 06139026 **Tested** : 05 Apr 2024
Unique Number : 10963834 **Diagnosed** : 05 Apr 2024 - Wes Davis
Test Package : FLEET

DELAND FIRE DEPARTMENT
 201 WEST HOWAY AVE
 DELAND, FL
 US 32720
 Contact: DAN LAGRANGE
 lagranged@deland.org

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: