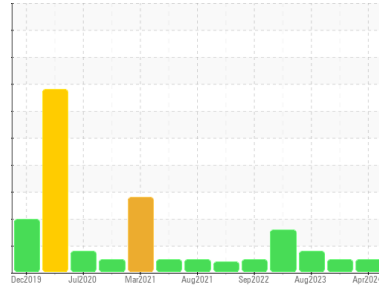




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
COOLING TOWER PUMP MOTORS
 Machine Id
P-751-LOWER
 Component
Bearing
 Fluid
MOBIL SHC 626 (2 QTS)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a moderate amount of silt (particulates < 14 microns in size) present 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 | | WC0919963 | WC0866660 | WC0844693 |
| Sample Date | Client Info | | 02 Apr 2024 | 11 Oct 2023 | 04 Aug 2023 |
| Machine Age | mths | Client Info | 36 | 6 | 36 |
| Oil Age | mths | Client Info | 0 | 4 | 2 |
| Oil Changed | Client Info | | N/A | Oil Added | Not Changd |
| Sample Status | | | NORMAL | NORMAL | ATTENTION |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >2 | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >20 | 8 | 5 | 8 |
| Chromium | ppm | ASTM D5185m >20 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >20 | 2 | 0 | <1 |
| Lead | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >20 | 1 | <1 | 2 |
| Tin | ppm | ASTM D5185m >20 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | <1 |
| 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 | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | <1 | 0 | <1 |
| Calcium | ppm | ASTM D5185m | 4 | 0 | <1 |
| Phosphorus | ppm | ASTM D5185m | 439 | 521 | 562 |
| Zinc | ppm | ASTM D5185m | 36 | 41 | 62 |
| Sulfur | ppm | ASTM D5185m | 121 | 235 | 281 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >15 | <1 | 2 | 0 |
| Sodium | ppm | ASTM D5185m | <1 | 1 | 1 |
| Potassium | ppm | ASTM D5185m >20 | 1 | 0 | 0 |

FLUID CLEANLINESS

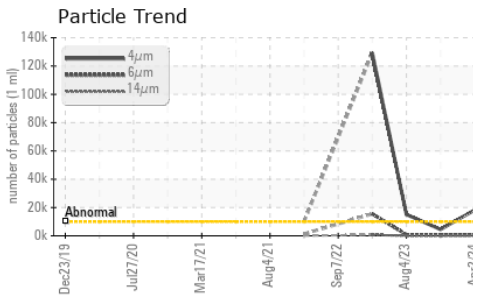
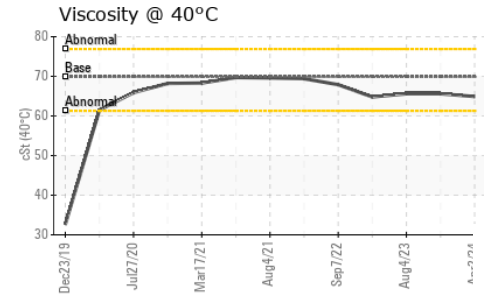
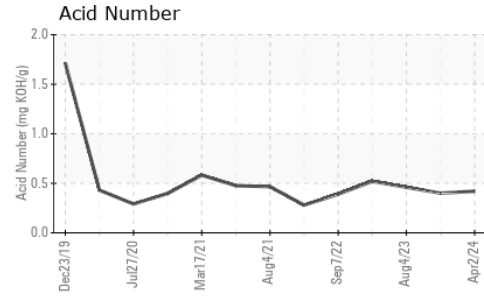
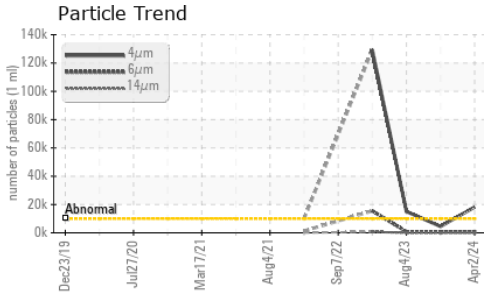
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >10000 | 18210 | 4511 | 15065 |
| Particles >6µm | ASTM D7647 | >2500 | 767 | 745 | 796 |
| Particles >14µm | ASTM D7647 | >160 | 26 | 53 | 11 |
| Particles >21µm | ASTM D7647 | >40 | 5 | 10 | 3 |
| Particles >38µm | ASTM D7647 | >10 | 0 | 0 | 1 |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >20/18/14 | 21/17/12 | 19/17/13 | 21/17/11 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.42 | 0.40 | 0.46 |



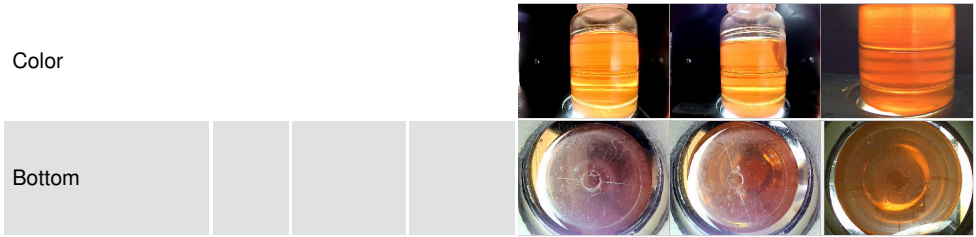
OIL ANALYSIS REPORT



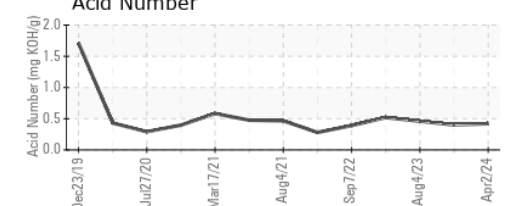
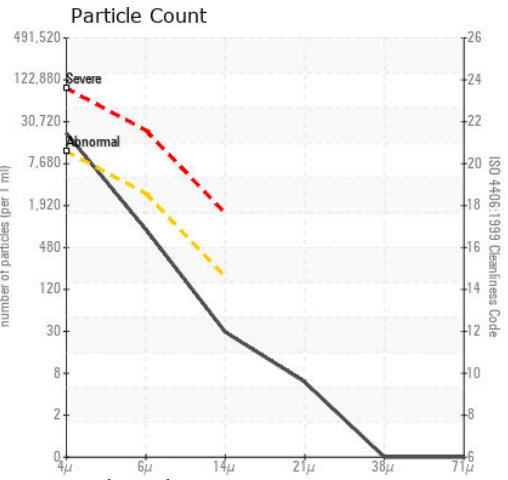
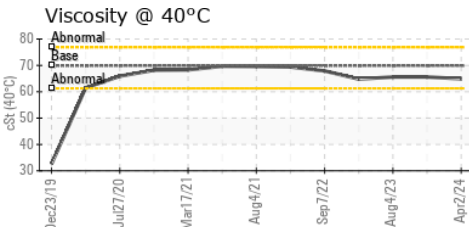
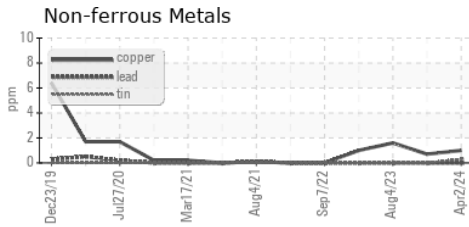
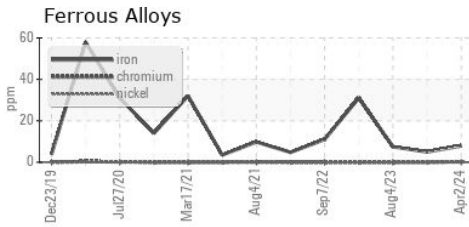
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 69.9 | 65.6 | 65.6 |

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0919963 **Received** : 04 Apr 2024
Lab Number : 06138514 **Tested** : 05 Apr 2024
Unique Number : 10963322 **Diagnosed** : 06 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

POET BIOREFINING - Groton
 40425 133RD STREET
 GROTON, SD
 US 57445-6400
 Contact: GAVIN KRUEGER
 Gavin.Krueger@POET.COM
 T: 6(05) 846-6863
 F: (605)397-2754

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)