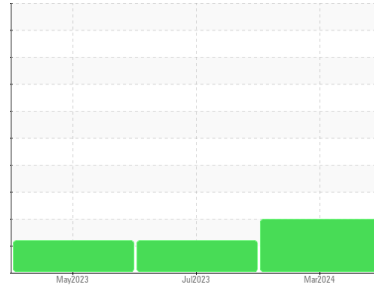




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
P-600
 Component
Pump
 Fluid
MOBIL SHC 626 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates 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 | | USP0008186 | USP243119 | USP243179 |
| Sample Date | Client Info | | 15 Mar 2024 | 25 Jul 2023 | 03 May 2023 |
| Machine Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >75 | 3 | 4 | 4 |
| Chromium | ppm | ASTM D5185m >5 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >5 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >15 | 0 | 0 | <1 |
| Tin | ppm | ASTM D5185m | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 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 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | <1 | 1 |
| Calcium | ppm | ASTM D5185m | 2 | 0 | <1 |
| Phosphorus | ppm | ASTM D5185m | 480 | 513 | 493 |
| Zinc | ppm | ASTM D5185m | 2 | 0 | 0 |
| Sulfur | ppm | ASTM D5185m | 4 | 0 | 0 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >20 | <1 | 0 | <1 |
| Sodium | ppm | ASTM D5185m | 0 | 0 | 3 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | <1 |
| Water | % | ASTM D6304 >.1 | 0.001 | 0.003 | 0.002 |
| ppm Water | ppm | ASTM D6304 >1000 | 15 | 32.4 | 20.2 |

FLUID CLEANLINESS

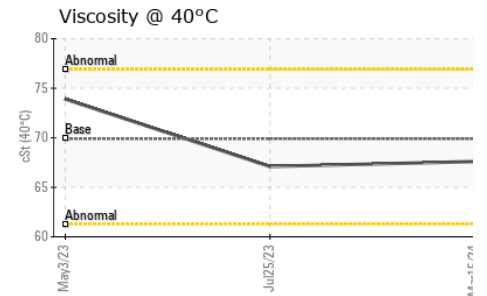
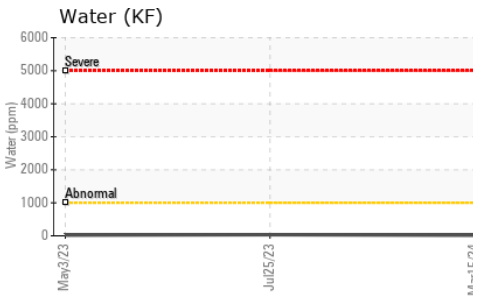
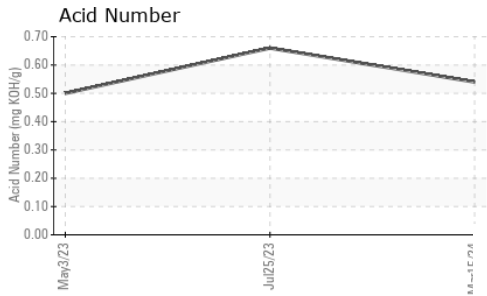
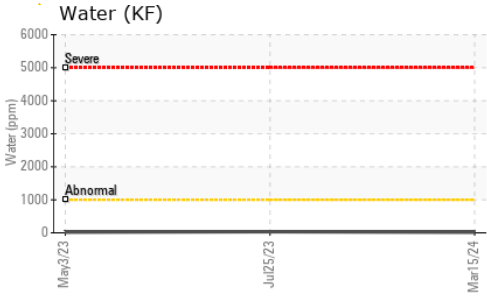
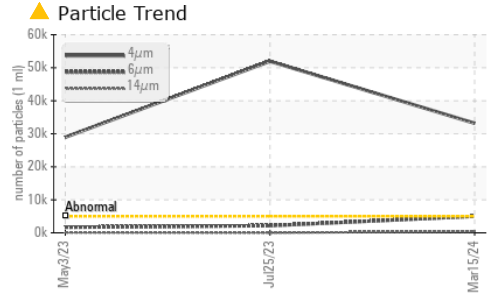
| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|------------|------------|
| Particles >4µm | ASTM D7647 | >5000 | ▲ 33186 | ▲ 51963 | ▲ 28961 |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 5008 | ▲ 2168 | ● 1683 |
| Particles >14µm | ASTM D7647 | >160 | ▲ 399 | 39 | 92 |
| Particles >21µm | ASTM D7647 | >40 | ▲ 88 | 7 | 18 |
| Particles >38µm | ASTM D7647 | >10 | 2 | 0 | 2 |
| Particles >71µm | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 22/20/16 | ▲ 23/18/12 | ▲ 22/18/14 |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.54 | 0.66 | 0.50 |



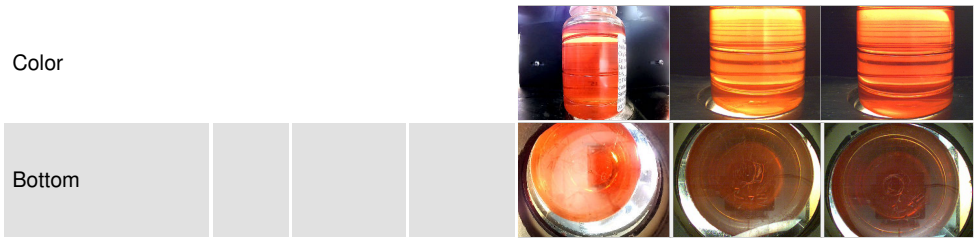
OIL ANALYSIS REPORT



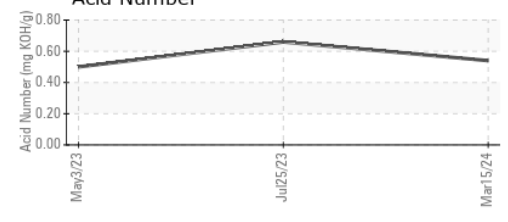
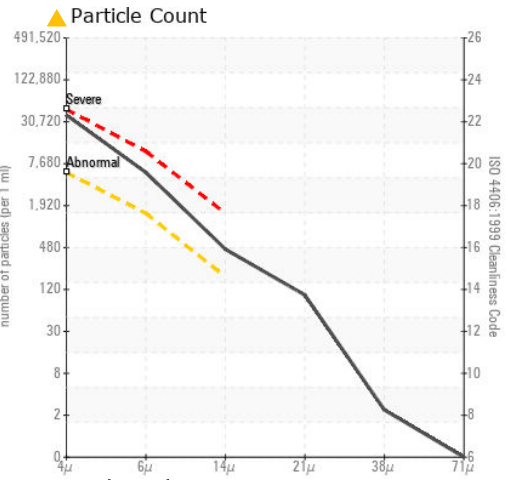
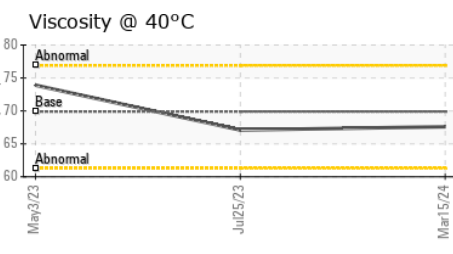
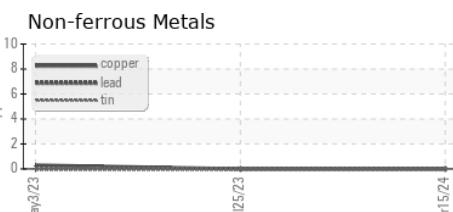
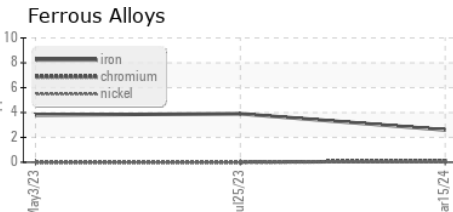
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | 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 | >.1 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 69.9 | 67.6 | 67.1 |

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0008186 **Received** : 01 Apr 2024
Lab Number : 06135007 **Tested** : 03 Apr 2024
Unique Number : 10954472 **Diagnosed** : 03 Apr 2024 - Doug Bogart
Test Package : IND 2

POET BIOPROCESSING
 3638 FIR AVE
 HANLONTOWN, IA
 US 50444
 Contact: Service Manager

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)