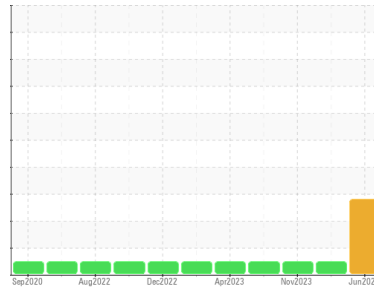




COOLANT REPORT

Sample Rating Trend



OFF SPEC



Area

Findlay

Machine Id

[Findlay] Coolant - Port Genset

Component

Coolant

Fluid

CATERPILLAR ELC (20 GAL)

DIAGNOSIS

Recommendation

We recommend that you perform a partial drain and top off with straight antifreeze to increase level of glycol.

Corrosion

All metal levels are normal indicating no corrosion in the cooling system.

Contaminants

There is no indication of any contamination in the coolant.

Coolant Condition

Carboxylate test failed. The glycol level is lower than acceptable. The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0874697 | WC0859879 | WC0804917 |
| Sample Date | Client Info | | 18 Jun 2024 | 23 Feb 2024 | 05 Nov 2023 |
| Machine Age | hrs | Client Info | 11806 | 10783 | 9547 |
| Oil Age | hrs | Client Info | 11806 | 0 | 9547 |
| Oil Changed | Client Info | | Not Chngd | Not Chngd | Not Chngd |
| Sample Status | | | ABNORMAL | NORMAL | NORMAL |

PHYSICAL TEST RESULTS

| | method | limit/base | current | history1 | history2 |
|------------------------|-------------|-------------|---------------|----------|----------|
| Glycol Type | FT-IR | | --- | --- | --- |
| Specific Gravity | *ASTM D1298 | | 1.038 | 1.056 | 1.055 |
| pH | Scale 0-14 | ASTM D1287 | 8.44 | 8.48 | 8.53 |
| Nitrites | ppm | AP-053:2009 | 600 | 412 | 448 |
| Reserve Alkalinity | Scale 0-20 | *ASTM D1121 | --- | --- | --- |
| Percentage Glycol | % | ASTM D3321 | ▲ 28.3 | 41.0 | 40.7 |
| Freezing Point | °F | ASTM D3321 | 7 | -15 | -13 |
| Total Dissolved Solids | | | 223.5 | 244.0 | 324.0 |
| Carboxylate | | | fail | fail | fail |

CORROSION INHIBITORS

| | method | limit/base | current | history1 | history2 | |
|------------|--------|------------|---------|------------|----------|-----|
| Silicon | ppm | ASTM D6130 | 0 | 1 | 8 | 6 |
| Phosphorus | ppm | ASTM D6130 | 0 | 0 | 0 | 2 |
| Boron | ppm | ASTM D6130 | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D6130 | 950 | 348 | 447 | 484 |

CORROSION

| | method | limit/base | current | history1 | history2 | |
|----------|--------|------------|---------|--------------|----------|----|
| Iron | ppm | ASTM D6130 | >15 | <1 | 3 | 0 |
| Aluminum | ppm | ASTM D6130 | >10 | <1 | 0 | <1 |
| Copper | ppm | ASTM D6130 | >10 | 0 | 1 | 2 |
| Lead | ppm | ASTM D6130 | >10 | 0 | <1 | <1 |
| Tin | ppm | ASTM D6130 | >10 | 0 | 0 | 1 |
| Zinc | ppm | ASTM D6130 | | 0 | 0 | 1 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 | |
|----------|--------|------------|---------|-----------|----------|----|
| Chlorine | ppm | ASTM D6130 | | 17 | 8 | 10 |

CARRIER SALTS

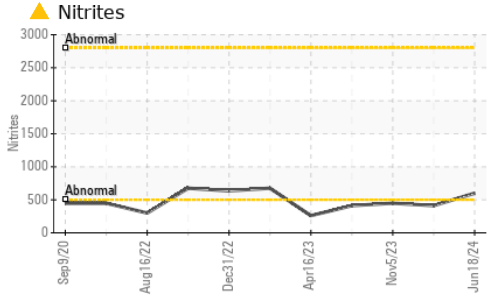
| | method | limit/base | current | history1 | history2 | |
|-----------|--------|------------|---------|-------------|----------|------|
| Sodium | ppm | ASTM D6130 | | 2386 | 2944 | 2975 |
| Potassium | ppm | ASTM D6130 | | 4 | 67 | 66 |

SCALE POTENTIAL

| | method | limit/base | current | history1 | history2 | |
|-----------|--------|------------|---------|-----------|----------|---|
| Calcium | ppm | ASTM D6130 | | 14 | <1 | 3 |
| Magnesium | ppm | ASTM D6130 | | 6 | <1 | 2 |

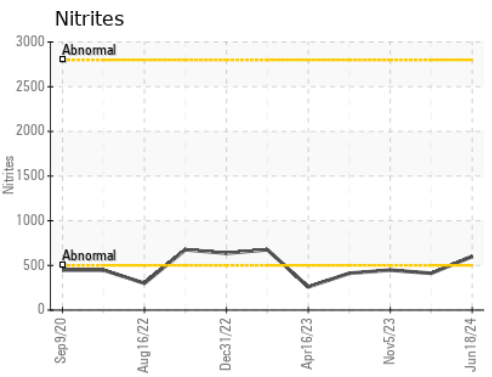
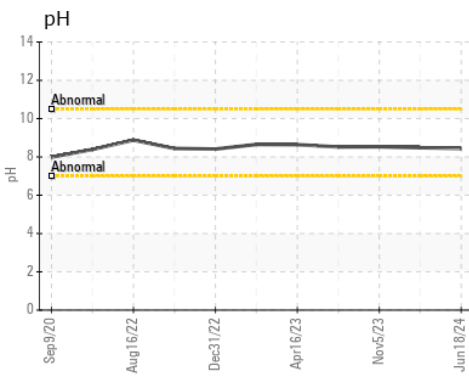
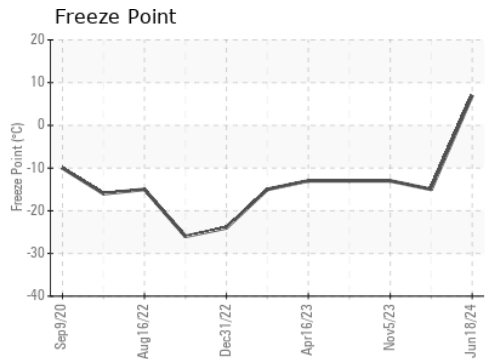
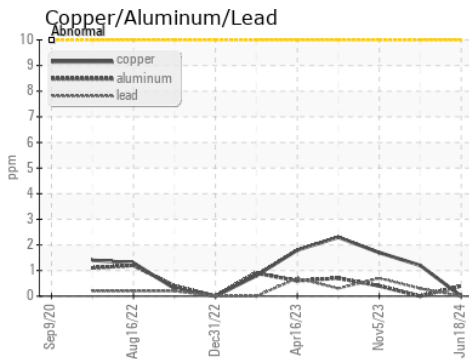
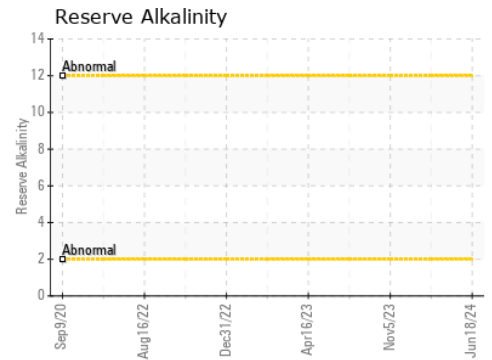
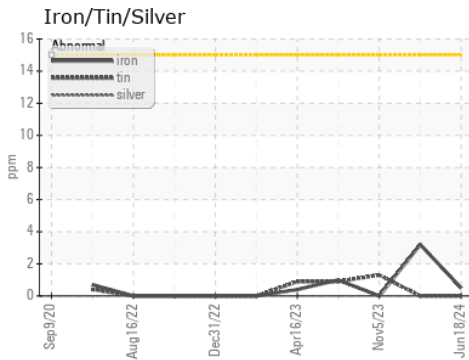


COOLANT REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|--------------------|---------|------------|---------|----------|----------|
| Coolant Color | *Visual | | Red | Pink | Pink |
| Coolant Appearance | *Visual | Clear | normal | normal | normal |
| Color | | | | | |
| Bottom | | | | | |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874697 **Received** : 25 Jun 2024
Lab Number : 06220310 **Tested** : 27 Jun 2024
Unique Number : 11098507 **Diagnosed** : 27 Jun 2024 - Jonathan Hester
Test Package : COOL- (Additional Tests: GlycolType, ICP, KF)

MARATHON PETROLEUM CO.
 101 12TH ST
 CATLETTSBURG, KY
 US 41169
 Contact: CORY GUMBERT
 cagumbert@marathonpetroleum.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: (606)585-3950

F: x: