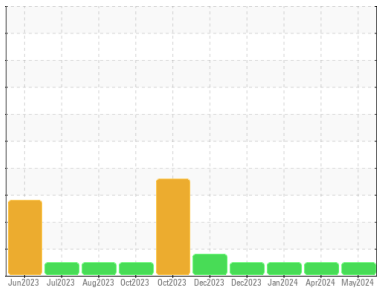
# COOLANT REPORT

Sample Rating Trend




NORMAL

Area
**Louisville**
Machine Id
**[Louisville] Coolant - Port Main Engine (Jacket)**
Component
**Coolant**
Fluid
**CATERPILLAR ELC (--- GAL)**

## DIAGNOSIS

**Recommendation**
No corrective action is recommended at this time. The fluid is suitable for further service.

**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. Glycol and nitrite levels are acceptable. The pH level of this fluid is within the acceptable limits.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0898534** | WC0874759 | WC0859847 |
| Sample Date | | Client Info | | **29 May 2024** | 28 Apr 2024 | 30 Jan 2024 |
| Machine Age | hrs | Client Info | | **1356** | 950 | 39417 |
| Oil Age | hrs | Client Info | | **0** | 950 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| PHYSICAL TEST RESULTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Glycol Type | | FT-IR | | **---** | --- | --- |
| Specific Gravity | | *ASTM D1298 | | **1.065** | 1.065 | 1.059 |
| pH | Scale 0-14 | ASTM D1287 | | **7.93** | 7.99 | 8.16 |
| Nitrites | ppm | AP-053:2009 | | **676** | 900 | 560 |
| Reserve Alkalinity | Scale 0-20 | *ASTM D1121 | | **---** | --- | --- |
| Percentage Glycol | % | ASTM D3321 | | **47.8** | 48.5 | 43.3 |
| Freezing Point | °F | ASTM D3321 | | **-28** | -31 | -19 |
| Total Dissolved Solids | | | | **326.0** | 347.5 | 279.0 |
| Carboxylate | | | | **fail** | fail | fail |

| CORROSION INHIBITORS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D6130 | 0 | **12** | 14 | 3 |
| Phosphorus | ppm | ASTM D6130 | 0 | **6** | 0 | 10 |
| Boron | ppm | ASTM D6130 | 0 | **4** | 0 | 0 |
| Molybdenum | ppm | ASTM D6130 | 950 | **646** | 755 | 589 |

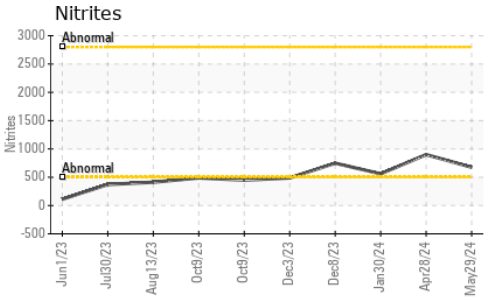
| CORROSION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D6130 | >15 | **2** | 0 | 4 |
| Aluminum | ppm | ASTM D6130 | >10 | **<1** | 0 | <1 |
| Copper | ppm | ASTM D6130 | >10 | **1** | <1 | <1 |
| Lead | ppm | ASTM D6130 | >10 | **0** | 0 | <1 |
| Tin | ppm | ASTM D6130 | >10 | **<1** | 0 | 0 |
| Zinc | ppm | ASTM D6130 | | **0** | 0 | 0 |

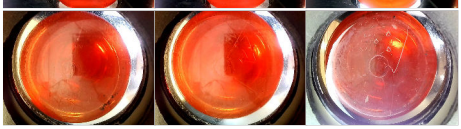
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Chlorine | ppm | ASTM D6130 | | **13** | 12 | 10 |

| CARRIER SALTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sodium | ppm | ASTM D6130 | | **3963** | 4548 | 3555 |
| Potassium | ppm | ASTM D6130 | | **39** | 39 | 44 |

| SCALE POTENTIAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Calcium | ppm | ASTM D6130 | | **3** | 2 | 2 |
| Magnesium | ppm | ASTM D6130 | | **2** | 1 | 2 |

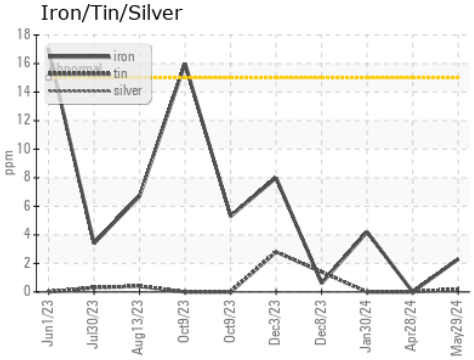
# COOLANT REPORT



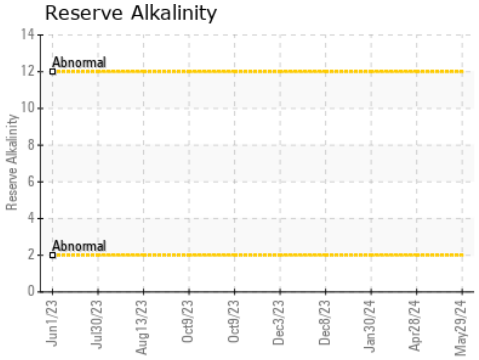

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Coolant Color | | *Visual | | **Red** | Red | Red |
| Coolant Appearance | | *Visual | Clear | **normal** | normal | normal |
| Color | | | |  | | |
| Bottom | | | |  | | |

## GRAPHS

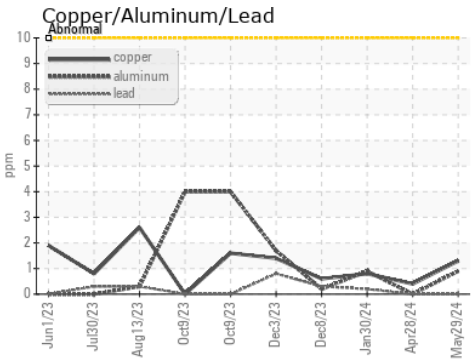
Iron/Tin/Silver



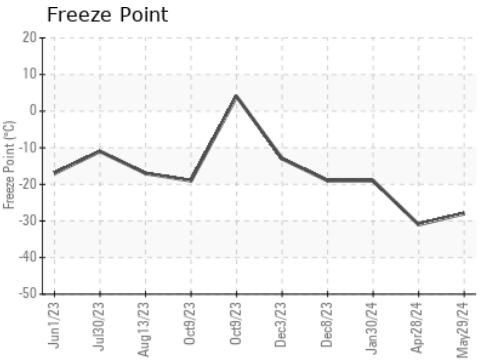

Reserve Alkalinity



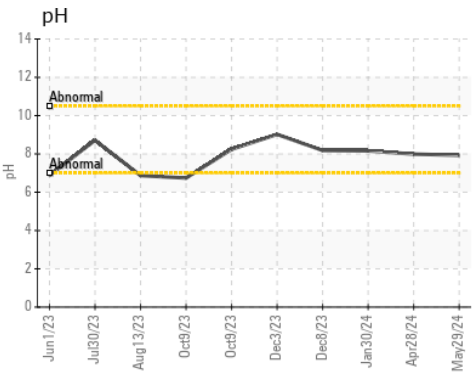

Copper/Aluminum/Lead



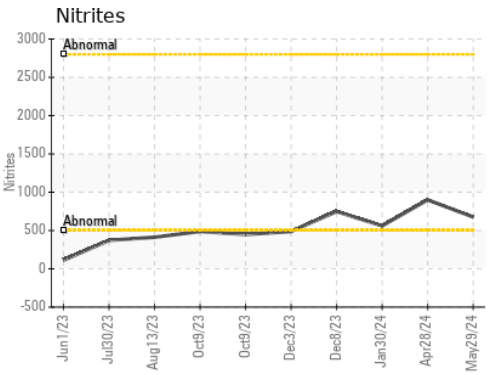

Freeze Point




pH




Nitrites




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0898534 **Received** : 06 Jun 2024
**Lab Number** : 06201948 **Tested** : 11 Jun 2024
**Unique Number** : 11069409 **Diagnosed** : 11 Jun 2024 - Jonathan Hester
**Test Package** : COOL- ( Additional Tests: BoilingPoint, COOL, GlycolType, ICP, KF )

*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)*

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