

COOLANT REPORT

Sample Rating Trend



Machine Id

Alstom C9-A

Component Reservoir Coolant

Fluid VALVOLINE ZEREX G-05 ANTI-FREEZE (--- GAL)

DIAGNOSIS

Recommendation

The fluid is suitable for further service. Resample at the next service interval to monitor.

Corrosion

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

Contaminants

There is no indication of any contamination in the coolant.

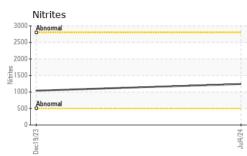
Coolant Condition

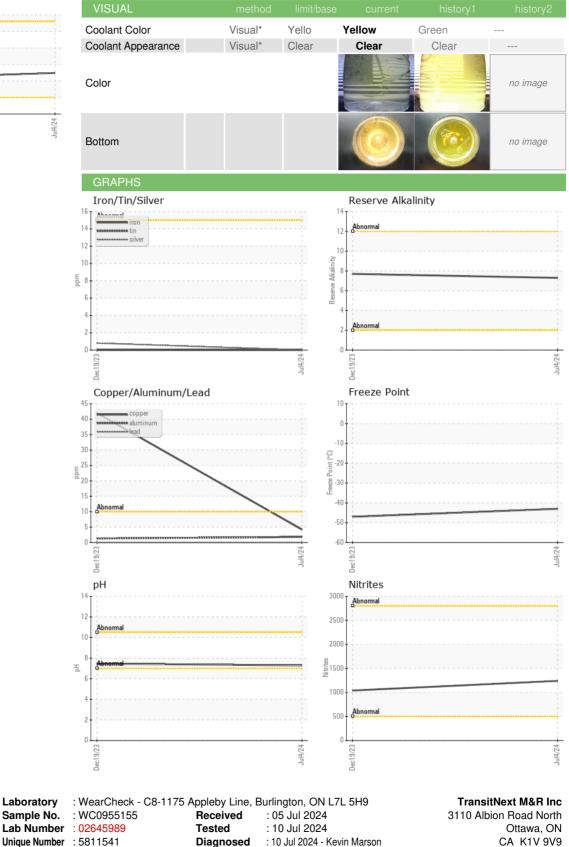
The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--------------------|---------------|-----------------|------------|-------------|---------------|----------|
| Sample Number | | Client Info | | WC0955155 | WC0891331 | |
| Sample Date | | Client Info | | 04 Jul 2024 | 19 Dec 2023 | |
| Machine Age | hrs | Client Info | | 3237 | 0 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | N/A | N/A | |
| Sample Status | | | | NORMAL | ABNORMAL | |
| PHYSICAL TEST F | RESULTS | method | limit/base | current | history1 | history2 |
| Glycol Type | | FT-IR | | | | |
| Specific Gravity | | ASTM D1298* | 1.060 | 1.073 | 1 .074 | |
| рН | Scale 0-14 | ASTM D1287* | 8.0 | 7.29 | 7.46 | |
| Nitrites | ppm | Alcan Test Kit* | | 1240 | 1040 | |
| Reserve Alkalinity | Scale 0-20 | ASTM D1121* | 10.0 | 7.3 | 7.7 | |
| Percentage Glycol | % | ASTM D3321* | 50 | 54.1 | 55.1 | |
| Freezing Point | °C | ASTM D3321* | -36 | -43 | -47 | |
| Carboxylate | | | | | | |
| CORROSION INH | IBITORS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | 240 | 56 | 49 | |
| Phosphorus | ppm | ASTM D5185(m) | 0 | 17 | 14 | |
| Boron | ppm | ASTM D5185(m) | | 1571 | 1717 | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | |
| CORROSION | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >15 | 0 | 0 | |
| Aluminum | ppm | ASTM D5185(m) | >10 | 2 | 1 | |
| Copper | ppm | ASTM D5185(m) | >10 | 4 | <u> </u> | |
| Lead | ppm | ASTM D5185(m) | >10 | 0 | 0 | |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | 0 | |
| Silver | ppm | ASTM D5185(m) | >10 | 0 | <1 | |
| Zinc | ppm | ASTM D5185(m) | | 1 | 0 | |
| CARRIER SALTS | | method | limit/base | current | history1 | history2 |
| Sodium | ppm | ASTM D5185(m) | | 6320 | 10500 | |
| Potassium | ppm | ASTM D5185(m) | | 185 | 612 | |
| SCALE POTENTI | AL | method | limit/base | current | history1 | history2 |
| Calcium | ppm | ASTM D5185(m) | >100 | 8 | 3 | |
| Magnesium | ppm | ASTM D5185(m) | >40 | 3 | 3 | |
| Hardness | mg/L CaCO3 | In-house* | <75 | 29 | 19 | |



COOLANT REPORT





Unique Number : 5811541 Test Package : COOL (Additional Tests: GlycolType) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

CA K1V 9V9 Contact: Denis Deschamps Denis.Deschamps@atkinsrealis.com Т: F:

```
Report Id: TRA3100TT [WCAMIS] 02645989 (Generated: 07/10/2024 11:26:05) Rev: 2
```

Laboratory

Contact/Location: Denis Deschamps - TRA310OTT