

COOLANT REPORT

Sample Rating Trend



JOHN DEERE 644K LDR009 Component Coolant

EXTENDED LIFE COOLANT (--- GAL)



DIAGNOSIS

Recommendation

We recommend that you drain the system and refill with a 50/50 long-life coolant/water mixture. We recommend an early resample to monitor this condition.

Corrosion

Copper ppm levels are abnormal. The high metal levels indicate corrosion in the system.

Contaminants

There is no indication of any contamination in the coolant.

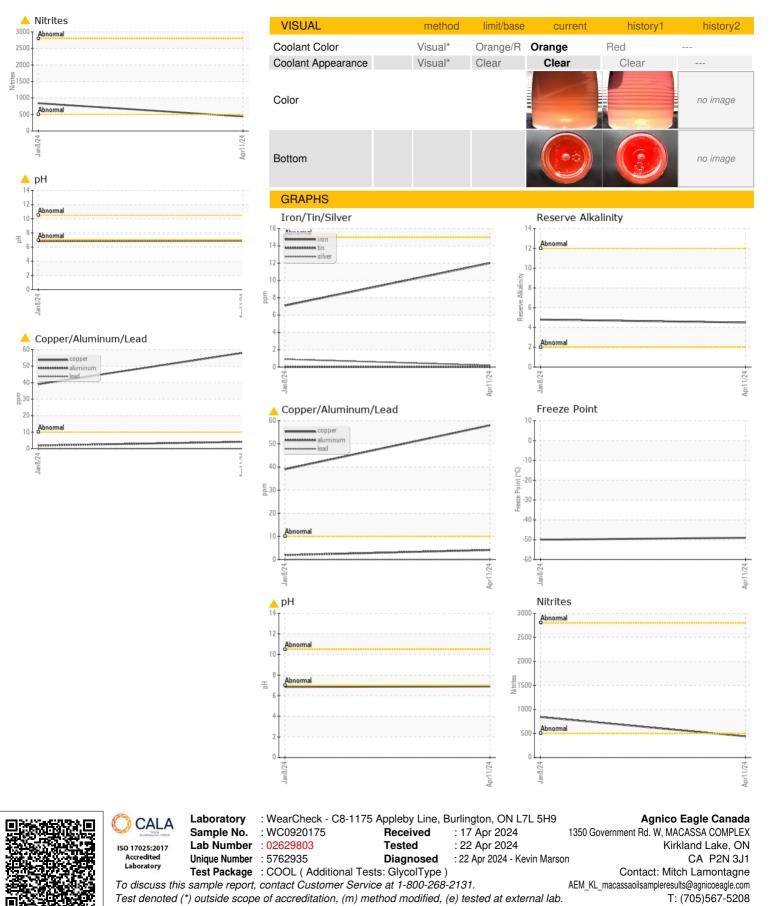
Coolant Condition

The pH is low which causes rust formation. The reserve alkalinity of this fluid is acceptable.

| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--------------------|---------------|-----------------|------------|-------------------|-------------|----------|
| Sample Number | | Client Info | | WC0920175 | WC0892477 | |
| Sample Date | | Client Info | | 11 Apr 2024 | 08 Jan 2024 | |
| Machine Age | hrs | Client Info | | 12657 | 111363 | |
| Oil Age | hrs | Client Info | | 0 | 0 | |
| Oil Changed | | Client Info | | Not Changd | Not Changd | |
| Sample Status | | | | ABNORMAL | ABNORMAL | |
| PHYSICAL TEST F | RESULTS | method | limit/base | current | history1 | history2 |
| Glycol Type | | FT-IR | | UNK | | |
| Specific Gravity | | ASTM D1298* | | 1.079 | 1.075 | |
| рН | Scale 0-14 | ASTM D1287* | 9.0 | 6.90 | 6.85 | |
| Nitrites | ppm | Alcan Test Kit* | | 440 | 840 | |
| Reserve Alkalinity | Scale 0-20 | ASTM D1121* | | 4.5 | 4.8 | |
| Percentage Glycol | % | ASTM D3321* | 50 | 59.2 | 56.0 | |
| Freezing Point | °C | ASTM D3321* | -40 | -49 | -50 | |
| Carboxylate | | | | | | |
| CORROSION INH | IBITORS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | | 158 | 121 | |
| Phosphorus | ppm | ASTM D5185(m) | | 80 | 53 | |
| Boron | ppm | ASTM D5185(m) | | 968 | 855 | |
| Molybdenum | ppm | ASTM D5185(m) | | 135 | 136 | |
| CORROSION | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >15 | 12 | 7 | |
| Aluminum | ppm | ASTM D5185(m) | >10 | 4 | 2 | |
| Copper | ppm | ASTM D5185(m) | >10 | <mark>/</mark> 58 | A 39 | |
| Lead | ppm | ASTM D5185(m) | >10 | 0 | 0 | |
| Tin | ppm | ASTM D5185(m) | >10 | 0 | 0 | |
| Silver | ppm | ASTM D5185(m) | >10 | <1 | <1 | |
| Zinc | ppm | ASTM D5185(m) | | 21 | 12 | |
| CARRIER SALTS | | method | limit/base | current | history1 | history2 |
| Sodium | ppm | ASTM D5185(m) | | 7954 | 10088 | |
| Potassium | ppm | ASTM D5185(m) | | 360 | 289 | |
| SCALE POTENTI | AL | method | limit/base | current | history1 | history2 |
| Calcium | ppm | ASTM D5185(m) | >100 | 5 | 8 | |
| Magnesium | ppm | ASTM D5185(m) | >40 | 2 | 2 | |
| Hardness | mg/L CaCO3 | In-house* | <75 | 21 | 27 | |



COOLANT REPORT



Validity of results and interpretation are based on the sample and information as supplied.

Report Id: KIR370KIR [WCAMIS] 02629803 (Generated: 04/22/2024 07:59:47) Rev: 1

Contact/Location: Mitch Lamontagne - KIR370KIR

F: (705)567-5221