

COOLANT REPORT

Sample Rating Trend

OFF SPEC

Martinsville [Martinsville] Coolant - Port Genset

Coolant

CATERPILLAR ELC (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you perform a partial drain and top off with straight water to decrease abnormal level of overconcentrated antifreeze.

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

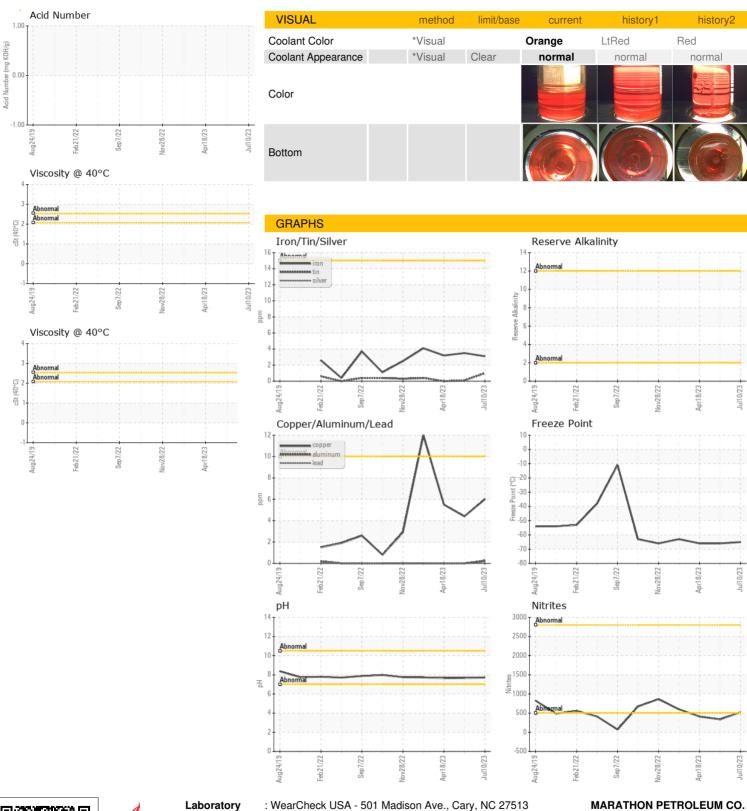
The glycol level is higher than acceptable. The carboxylate level of this fluid is acceptable. The pH level of this fluid is within the acceptable limits.

| T REPORT | Camp | one maning men | nating front | |
|--------------------|---------|-------------------|----------------|--------|
| I IILI OIII | | | | |
| t Genset | Aug2019 | Feb.7022 Sep.7022 | Nordozz Apdoza | Ju2023 |
| SAMPLE INFORMATION | method | limit/base | current | h |

| SAMELE INFORM | MATION | memou | IIIIIIIIIIIIIII | Current | HISTORY | HISTORYZ |
|------------------------|------------|-------------|-----------------|-------------|--------------|--------------|
| Sample Number | | Client Info | | WC0769446 | WC0769437 | WC0600456 |
| Sample Date | | Client Info | | 10 Jul 2023 | 13 Jun 2023 | 18 Apr 2023 |
| Machine Age | hrs | Client Info | | 3795 | 3488 | 2805 |
| Oil Age | hrs | Client Info | | 3795 | 3488 | 2805 |
| Oil Changed | | Client Info | | N/A | Not Changd | N/A |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| PHYSICAL TEST R | RESULTS | method | limit/base | current | history1 | history2 |
| Specific Gravity | | *ASTM D1298 | | 1.092 | 1.091 | 1.091 |
| рН | Scale 0-14 | ASTM D1287 | | 7.72 | 7.67 | 7.65 |
| Nitrites | ppm | AP-053:2009 | | 524 | 336 | 412 |
| Reserve Alkalinity | Scale 0-20 | *ASTM D1121 | | | | |
| Percentage Glycol | % | ASTM D3321 | | 72.1 | <u></u> 71.6 | <u></u> 71.0 |
| Freezing Point | °F | ASTM D3321 | | -65 | -66 | -66 |
| Total Dissolved Solids | | | | 611.0 | 761.0 | 693.5 |
| Carboxylate | | | | pass | fail | fail |
| CORROSION INH | IBITORS | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D6130 | 0 | 42 | 33 | 41 |
| Phosphorus | ppm | ASTM D6130 | 0 | 0 | 0 | 16 |
| Boron | ppm | ASTM D6130 | 0 | 210 | 293 | 286 |
| Molybdenum | ppm | ASTM D6130 | 950 | 150 | 223 | 226 |
| CORROSION | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D6130 | >15 | 3 | 4 | 3 |
| Aluminum | ppm | ASTM D6130 | >10 | <1 | 0 | 0 |
| Copper | ppm | ASTM D6130 | >10 | 6 | 4 | 6 |
| Lead | ppm | ASTM D6130 | >10 | <1 | 0 | 0 |
| Tin | ppm | ASTM D6130 | >10 | 1 | <1 | 0 |
| Zinc | ppm | ASTM D6130 | | <1 | <1 | 1 |
| CONTAMINANTS | ; | method | limit/base | current | history1 | history2 |
| Chlorine | ppm | ASTM D6130 | | 282 | 368 | 370 |
| CARRIER SALTS | | method | limit/base | current | history1 | history2 |
| Sodium | ppm | ASTM D6130 | | 5615 | 6499 | 8383 |
| Potassium | ppm | ASTM D6130 | | 6395 | 8936 | 10000 |
| SCALE POTENTI | AL | method | limit/base | current | history1 | history2 |
| Calcium | ppm | ASTM D6130 | | 120 | 185 | 154 |
| Magnesium | ppm | ASTM D6130 | | 51 | 75 | 65 |
| _ | | | | | | |



COOLANT REPORT







Laboratory Sample No. Lab Number **Unique Number**

: WC0769446 : 05904722 : 10566078

Received : 21 Jul 2023

Diagnosed : 01 Aug 2023 Diagnostician : Doug Bogart Test Package : COOL- (Additional Tests: COOL, ICP, KV40, SCREEN, TAN Man)

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: