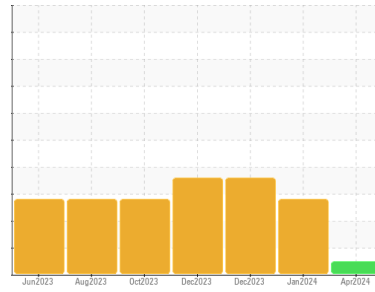




# COOLANT REPORT

Sample Rating Trend



**NORMAL**



Area

**Louisville**

Machine Id

**[Louisville] Coolant - Starboard Main Engine (Aftercooler)**

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		<b>WC0874767</b>	WC0804843	WC0859759
Sample Date	Client Info		<b>28 Apr 2024</b>	30 Jan 2024	08 Dec 2023
Machine Age	hrs	Client Info	<b>950</b>	39416	0
Oil Age	hrs	Client Info	<b>950</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

## PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Glycol Type	FT-IR		<b>---</b>	---	---
Specific Gravity	*ASTM D1298		<b>1.059</b>	1.039	1.039
pH	Scale 0-14 ASTM D1287		<b>8.40</b>	8.60	9.15
Nitrites	ppm AP-053:2009		<b>788</b>	412	600
Reserve Alkalinity	Scale 0-20 *ASTM D1121		<b>---</b>	---	---
Percentage Glycol	% ASTM D3321		<b>43.4</b>	▲ 29.6	▲ 29.5
Freezing Point	°F ASTM D3321		<b>-19</b>	5	5
Total Dissolved Solids			<b>269.5</b>	213.0	200.0
Carboxylate			<b>fail</b>	fail	fail

## CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130	0	<b>2</b>	0	5
Phosphorus	ppm ASTM D6130	0	<b>0</b>	2	1
Boron	ppm ASTM D6130	0	<b>0</b>	0	0
Molybdenum	ppm ASTM D6130	950	<b>653</b>	337	374

## CORROSION

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

## CONTAMINANTS

	method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130		<b>9</b>	13	13

## CARRIER SALTS

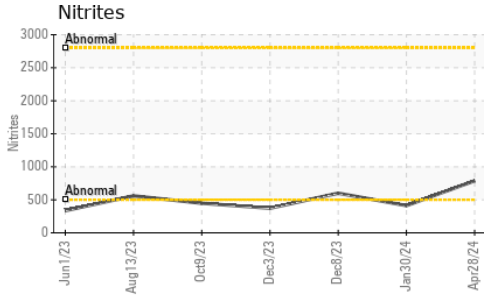
	method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130		<b>4071</b>	2424	2538
Potassium	ppm ASTM D6130		<b>12</b>	17	6

## SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130		<b>7</b>	6	4
Magnesium	ppm ASTM D6130		<b>3</b>	<1	1

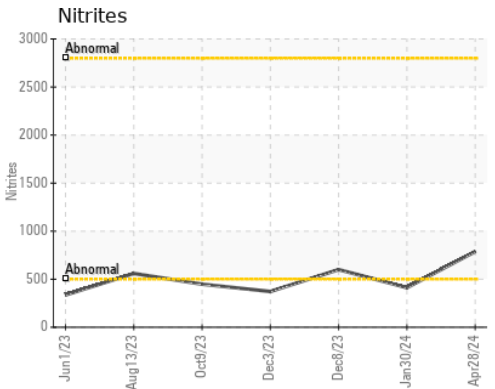
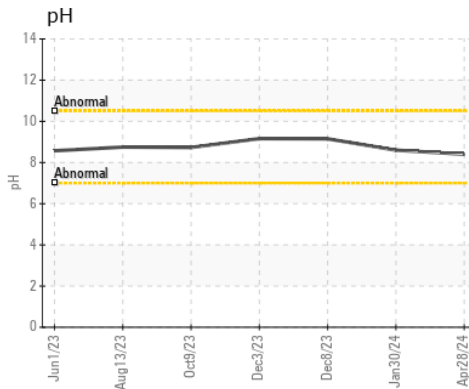
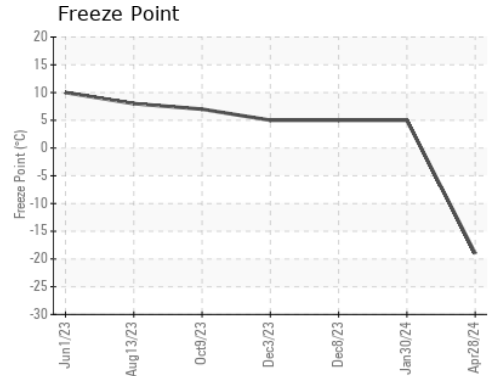
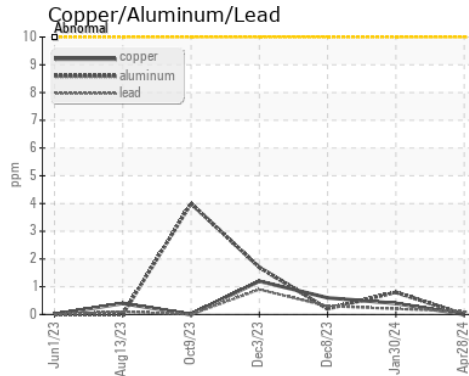
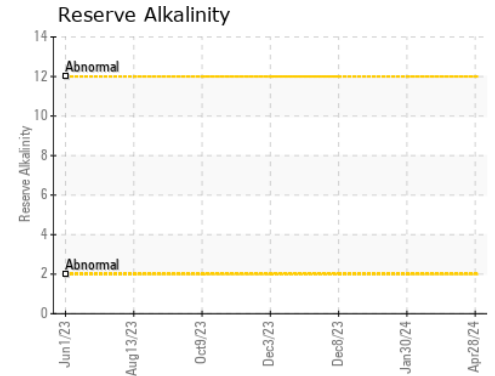
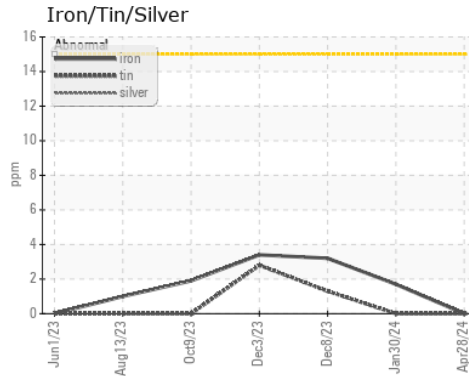


# COOLANT REPORT



VISUAL	method	limit/base	current	history1	history2
Coolant Color	*Visual		Red	Red	Red
Coolant Appearance	*Visual	Clear	normal	normal	▲ sediment
Color					no image
Bottom					no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : WC0874767

**Lab Number** : 06181913

**Unique Number** : 11033239

**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)

**Received** : 16 May 2024

**Tested** : 24 May 2024

**Diagnosed** : 24 May 2024 - Jonathan Hester

**MARATHON PETROLEUM CO.**

101 12TH ST

CATLETTSBURG, KY

US 41169

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