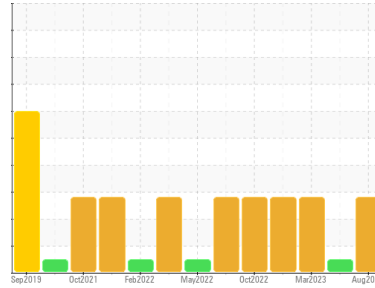




# COOLANT REPORT

Sample Rating Trend

OFF SPEC



Area  
**Martinsville**  
 Machine Id  
**[Martinsville] Coolant - Starboard Genset**  
 Component  
**Coolant**  
 Fluid  
**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. ( Customer Sample Comment: George Willis )

### 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. The glycol level is higher than 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>WC0769184</b>	WC0719196	WC0735278
Sample Date	Client Info	<b>08 Aug 2023</b>	13 Jun 2023	20 Mar 2023
Machine Age	hrs	<b>16449</b>	15815	14953
Oil Age	hrs	<b>16449</b>	15815	14953
Oil Changed	Client Info	<b>Not Chngd</b>	Not Chngd	N/A
Sample Status		<b>MARGINAL</b>	NORMAL	MARGINAL

## PHYSICAL TEST RESULTS

method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298	<b>1.098</b>	1.089	1.098
pH	Scale 0-14 ASTM D1287	<b>7.93</b>	7.89	7.91
Nitrites	ppm AP-053:2009	<b>636</b>	224	864
Reserve Alkalinity	Scale 0-20 *ASTM D1121	<b>---</b>	---	---
Percentage Glycol	% ASTM D3321	<b>▲ 78.4</b>	69.2	<b>▲ 78.0</b>
Freezing Point	°F ASTM D3321	<b>-56</b>	-66	-56
Total Dissolved Solids		<b>623.0</b>	692.5	751.0
Carboxylate		<b>fail</b>	fail	fail

## CORROSION INHIBITORS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130 0	<b>20</b>	31	39
Phosphorus	ppm ASTM D6130 0	<b>0</b>	0	0
Boron	ppm ASTM D6130 0	<b>214</b>	257	276
Molybdenum	ppm ASTM D6130 950	<b>174</b>	227	149

## CORROSION

method	limit/base	current	history1	history2
Iron	ppm ASTM D6130 >15	<b>1</b>	<1	<1
Aluminum	ppm ASTM D6130 >10	<b>0</b>	0	0
Copper	ppm ASTM D6130 >10	<b>2</b>	<1	4
Lead	ppm ASTM D6130 >10	<b>&lt;1</b>	0	0
Tin	ppm ASTM D6130 >10	<b>&lt;1</b>	<1	<1
Zinc	ppm ASTM D6130	<b>1</b>	0	1

## CONTAMINANTS

method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130	<b>375</b>	408	432

## CARRIER SALTS

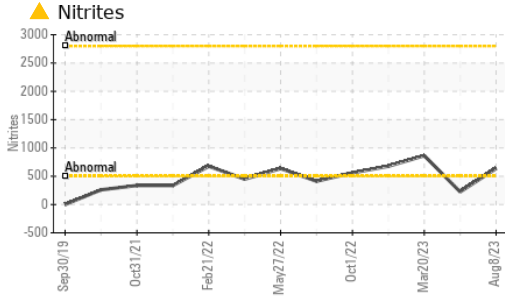
method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130	<b>6171</b>	6485	7442
Potassium	ppm ASTM D6130	<b>6307</b>	9804	10000

## SCALE POTENTIAL

method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130	<b>49</b>	66	50
Magnesium	ppm ASTM D6130	<b>55</b>	66	63

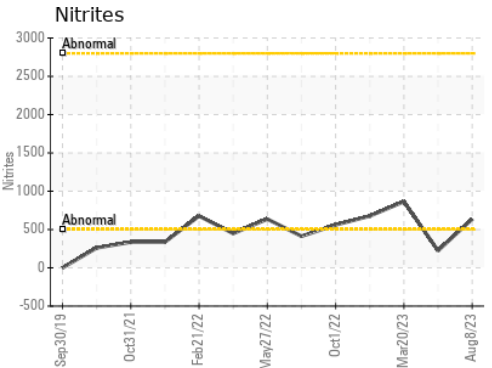
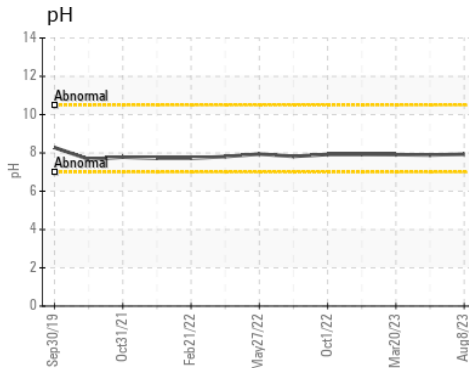
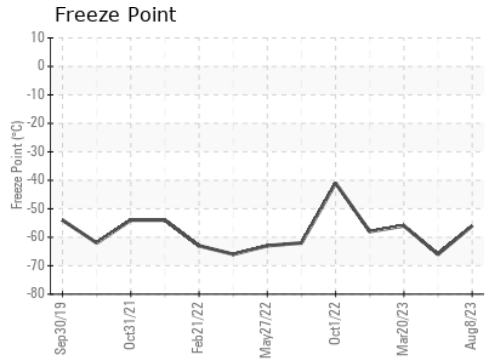
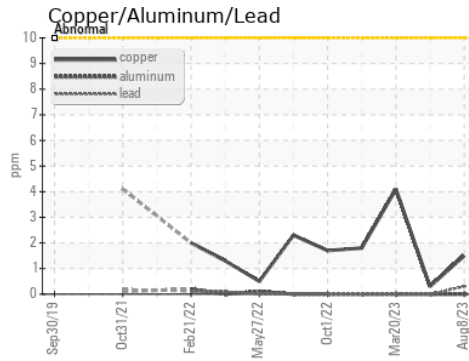
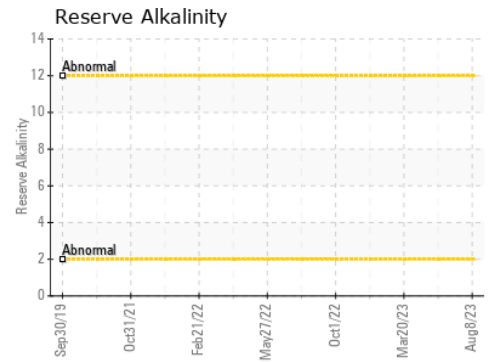
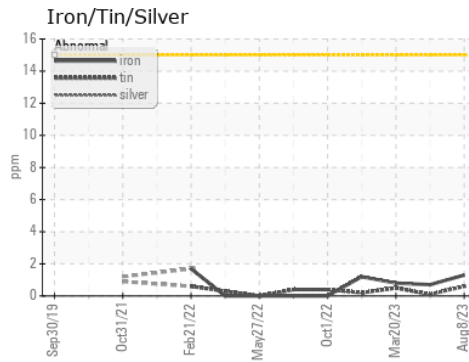


# COOLANT REPORT



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

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0769184 Received : 17 Aug 2023  
 Lab Number : 05927676 Diagnosed : 24 Aug 2023  
 Unique Number : 10607623 Diagnostician : Doug Bogart  
 Test Package : COOL- ( Additional Tests: COOL, ICP )

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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