

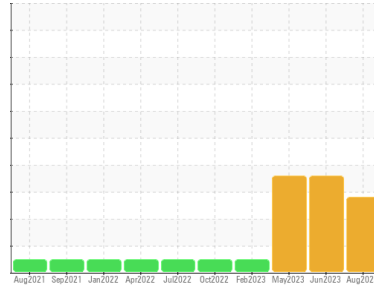


# COOLANT REPORT

Sample Rating Trend

OFF SPEC

Area  
**Martinsville**  
 Machine Id  
**[Martinsville] Coolant - Port Main Engine (Jacket)**  
 Component  
**Coolant**  
 Fluid  
**CATERPILLAR ELC (--- GAL)**



## DIAGNOSIS

**Recommendation**  
 We recommend that you perform a partial drain and top off with straight antifreeze to increase level of glycol. ( 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 low. The pH level of this fluid is within the acceptable limits.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0769134</b>	WC0769439	WC0719200
Sample Date	Client Info		<b>08 Aug 2023</b>	13 Jun 2023	15 May 2023
Machine Age	hrs	Client Info	<b>16703</b>	15506	14928
Oil Age	hrs	Client Info	<b>16703</b>	15506	14928
Oil Changed	Client Info		<b>Changed</b>	Not Changd	N/A
Sample Status			<b>MARGINAL</b>	ABNORMAL	ABNORMAL

## PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298		<b>1.043</b>	1.033	1.033
pH	Scale 0-14 ASTM D1287		<b>9.32</b>	8.00	8.02
Nitrites	ppm AP-053:2009		<b>448</b>	224	488
Reserve Alkalinity	Scale 0-20 *ASTM D1121		<b>---</b>	---	---
Percentage Glycol	% ASTM D3321		<b>▲ 32.1</b>	▲ 25.8	▲ 25.6
Freezing Point	°F ASTM D3321		<b>1</b>	10	10
Total Dissolved Solids			<b>238.5</b>	184.0	185.5
Carboxylate			<b>fail</b>	pass	fail

## CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130	0	<b>65</b>	10	25
Phosphorus	ppm ASTM D6130	0	<b>0</b>	0	49
Boron	ppm ASTM D6130	0	<b>165</b>	0	25
Molybdenum	ppm ASTM D6130	950	<b>728</b>	637	568

## CORROSION

	method	limit/base	current	history1	history2
Iron	ppm ASTM D6130	>15	<b>&lt;1</b>	5	8
Aluminum	ppm ASTM D6130	>10	<b>0</b>	<1	2
Copper	ppm ASTM D6130	>10	<b>1</b>	<1	2
Lead	ppm ASTM D6130	>10	<b>&lt;1</b>	0	1
Tin	ppm ASTM D6130	>10	<b>&lt;1</b>	0	1
Zinc	ppm ASTM D6130		<b>&lt;1</b>	0	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130		<b>29</b>	18	81

## CARRIER SALTS

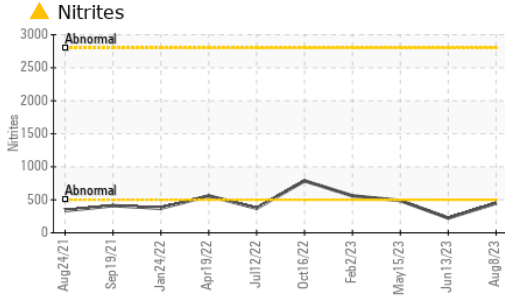
	method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130		<b>5024</b>	4063	3610
Potassium	ppm ASTM D6130		<b>425</b>	112	63

## SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130		<b>18</b>	7	7
Magnesium	ppm ASTM D6130		<b>4</b>	16	16

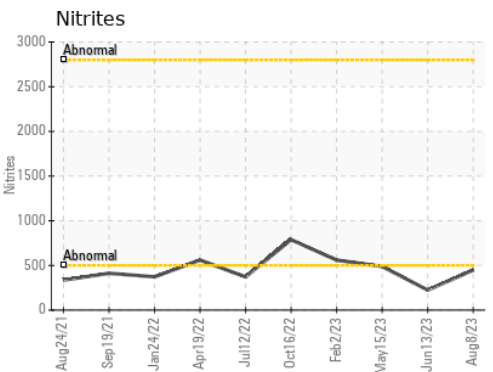
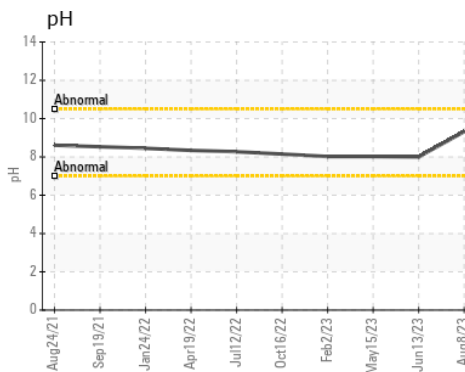
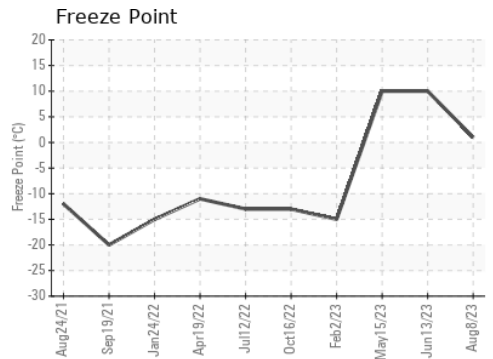
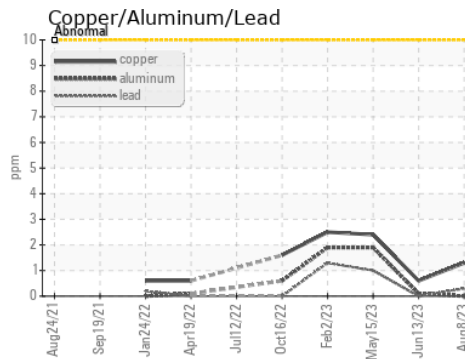
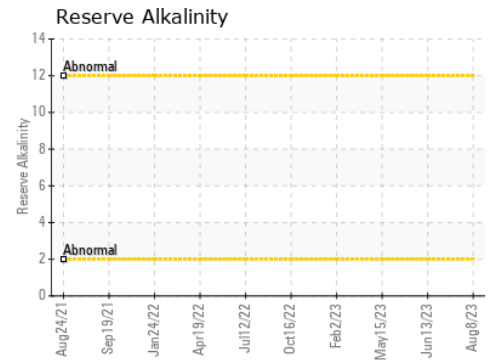
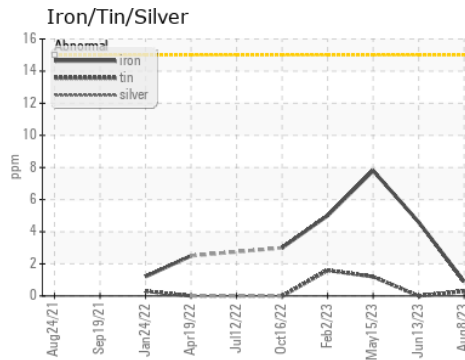


# COOLANT REPORT



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

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0769134 Received : 17 Aug 2023  
 Lab Number : 05927677 Diagnosed : 24 Aug 2023  
 Unique Number : 10607624 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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