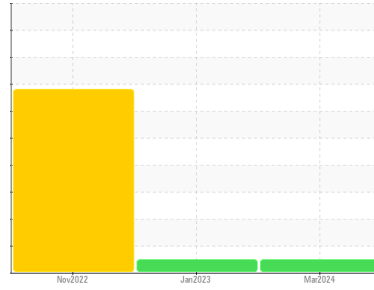




# COOLANT REPORT

Sample Rating Trend



NORMAL



Area

**Detroit**

Machine Id

**[Detroit] Coolant - Port Main Engine (Jacket)**

Component

**Coolant**

Fluid

**CATERPILLAR ELC (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. The fluid is suitable for further service. ( Customer Sample Comment: Chris Wray )

### 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>WC0804782</b>	WC0731924	WC0731912	
Sample Date	Client Info	<b>25 Mar 2024</b>	30 Jan 2023	07 Nov 2022	
Machine Age	hrs	Client Info	<b>19472</b>	0	9544
Oil Age	hrs	Client Info	<b>19472</b>	0	9544
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	Not Chngd	
Sample Status		<b>NORMAL</b>	NORMAL	SEVERE	

## PHYSICAL TEST RESULTS

method	limit/base	current	history1	history2	
Glycol Type	FT-IR	---	---	---	
Specific Gravity	*ASTM D1298	<b>1.048</b>	1.043	1.052	
pH	Scale 0-14	ASTM D1287	<b>8.60</b>	9.13	8.56
Nitrites	ppm	AP-053:2009	<b>524</b>	300	560
Reserve Alkalinity	Scale 0-20	*ASTM D1121	---	---	---
Percentage Glycol	%	ASTM D3321	<b>35.1</b>	31.9	38.5
Freezing Point	°F	ASTM D3321	<b>-3</b>	3	-9
Total Dissolved Solids			<b>266.5</b>	208.5	286.5
Carboxylate			<b>fail</b>	fail	fail

## CORROSION INHIBITORS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D6130	0	<b>16</b>	58	33
Phosphorus	ppm	ASTM D6130	0	<b>3</b>	30	0
Boron	ppm	ASTM D6130	0	<b>7</b>	23	29
Molybdenum	ppm	ASTM D6130	950	<b>548</b>	596	1061

## CORROSION

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D6130	>15	<b>10</b>	13	▲ 51
Aluminum	ppm	ASTM D6130	>10	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D6130	>10	<b>1</b>	1	2
Lead	ppm	ASTM D6130	>10	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D6130	>10	<b>&lt;1</b>	1	0
Zinc	ppm	ASTM D6130		<b>0</b>	1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2		
Chlorine	ppm	ASTM D6130		<b>16</b>	57	22

## CARRIER SALTS

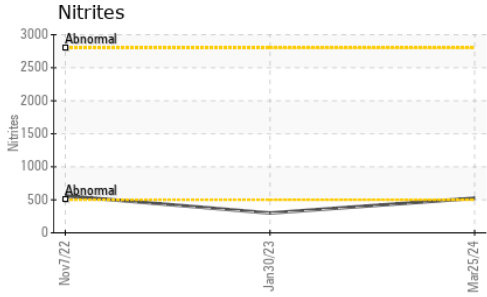
method	limit/base	current	history1	history2		
Sodium	ppm	ASTM D6130		<b>3467</b>	5389	5213
Potassium	ppm	ASTM D6130		<b>246</b>	359	457


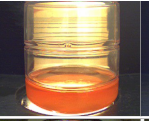
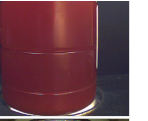



## SCALE POTENTIAL

method	limit/base	current	history1	history2		
Calcium	ppm	ASTM D6130		<b>25</b>	10	46
Magnesium	ppm	ASTM D6130		<b>5</b>	3	7

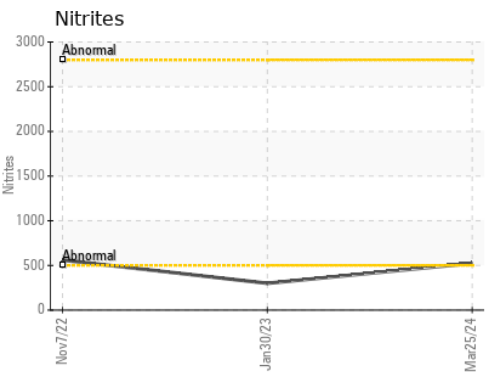
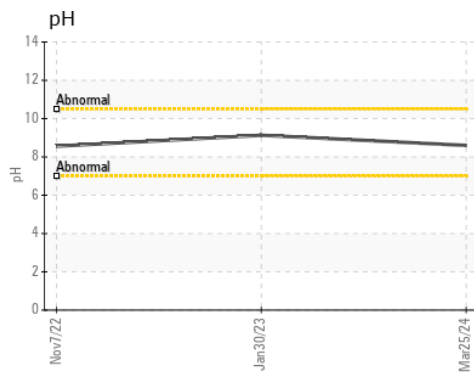
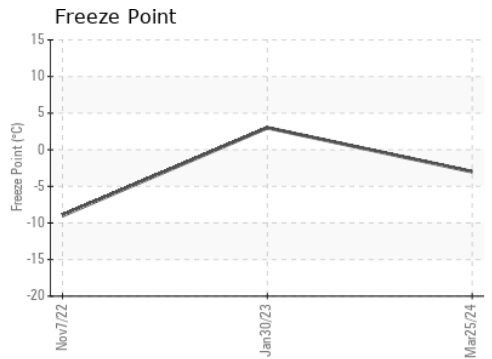
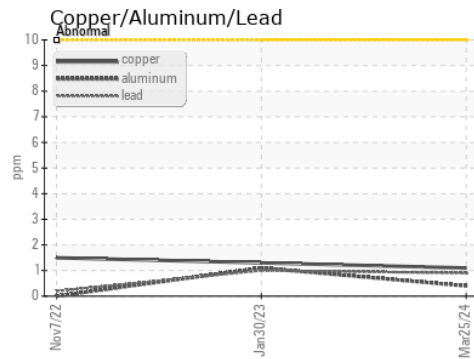
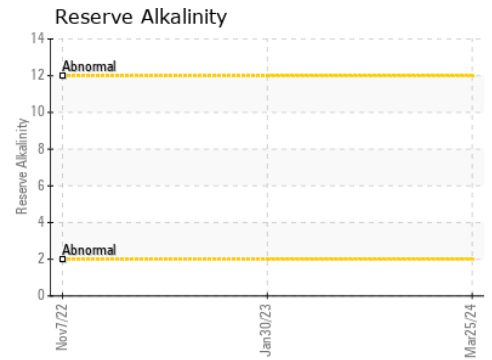
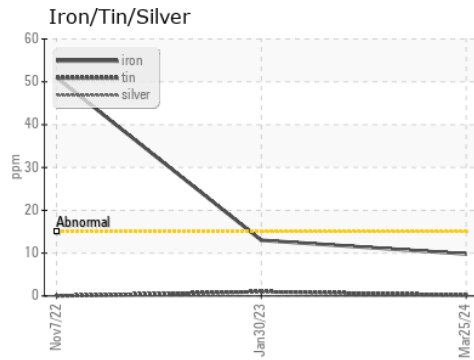


# COOLANT REPORT



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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0804782      **Received** : 05 Apr 2024  
**Lab Number** : **06140424**      **Tested** : 10 Apr 2024  
**Unique Number** : 10965232      **Diagnosed** : 10 Apr 2024 - Jonathan Hester  
**Test Package** : COOL- ( Additional Tests: BoilingPoint, COOL, GlycolType, ICP, KF )

**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: