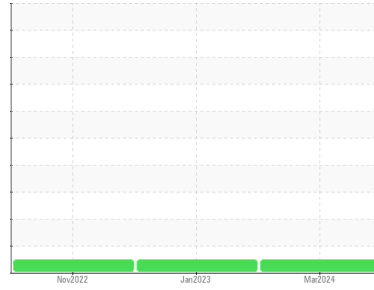




COOLANT REPORT

Sample Rating Trend



NORMAL



Area

Detroit

Machine Id

[Detroit] Coolant - Starboard 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		WC0804780	WC0731904	WC0731910
Sample Date	Client Info		25 Mar 2024	30 Jan 2023	07 Nov 2022
Machine Age	hrs	Client Info	19474	0	9544
Oil Age	hrs	Client Info	0	0	9544
Oil Changed		Client Info	N/A	N/A	Not Changd
Sample Status			NORMAL	NORMAL	NORMAL

PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Glycol Type	FT-IR		---	---	---
Specific Gravity	*ASTM D1298		1.048	1.001	1.052
pH	Scale 0-14	ASTM D1287	8.61	7.00	8.57
Nitrites	ppm	AP-053:2009	600	412	524
Reserve Alkalinity	Scale 0-20	*ASTM D1121	---	---	---
Percentage Glycol	%	ASTM D3321	35.1	5.2	38.5
Freezing Point	°F	ASTM D3321	-3	29	-9
Total Dissolved Solids			282.0	56.5	314.5
Carboxylate			fail	fail	fail

CORROSION INHIBITORS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D6130	0	14	37	29
Phosphorus	ppm	ASTM D6130	0	4	29	0
Boron	ppm	ASTM D6130	0	8	20	30
Molybdenum	ppm	ASTM D6130	950	569	13	1064

CORROSION

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D6130	>15	1	1	11
Aluminum	ppm	ASTM D6130	>10	<1	<1	0
Copper	ppm	ASTM D6130	>10	1	1	<1
Lead	ppm	ASTM D6130	>10	<1	<1	0
Tin	ppm	ASTM D6130	>10	<1	<1	0
Zinc	ppm	ASTM D6130		0	<1	0

CONTAMINANTS

	method	limit/base	current	history1	history2	
Chlorine	ppm	ASTM D6130		14	98	23

CARRIER SALTS

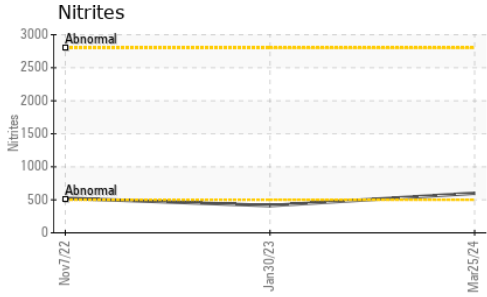
	method	limit/base	current	history1	history2	
Sodium	ppm	ASTM D6130		3576	1152	5175
Potassium	ppm	ASTM D6130		253	139	456

SCALE POTENTIAL

	method	limit/base	current	history1	history2	
Calcium	ppm	ASTM D6130		26	158	45
Magnesium	ppm	ASTM D6130		5	20	7

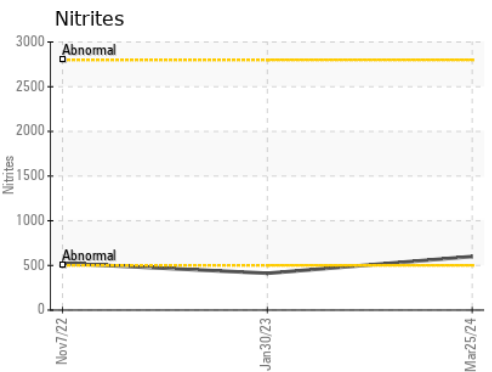
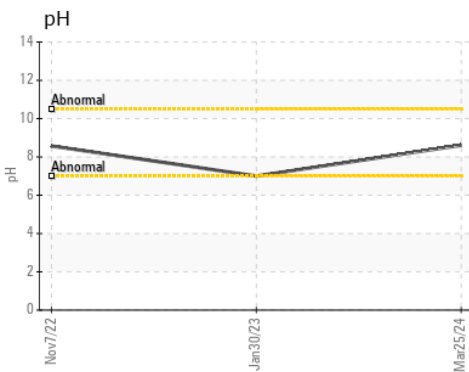
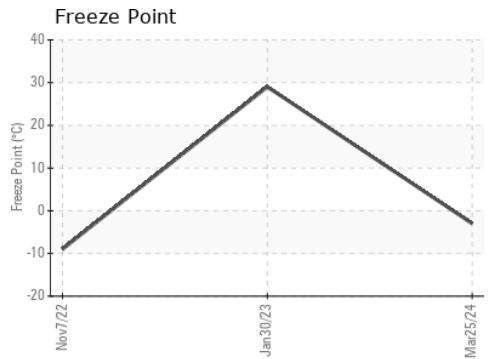
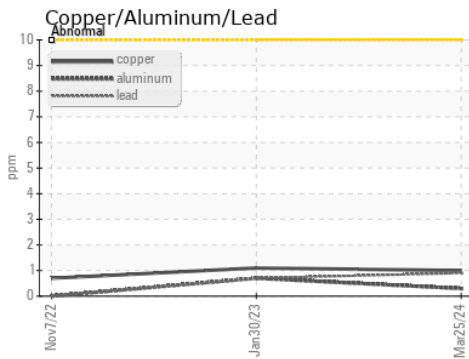
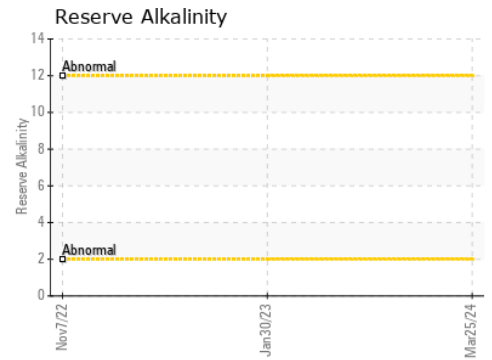
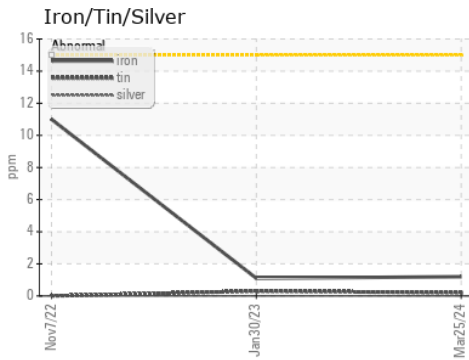


COOLANT REPORT



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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804780 **Received** : 05 Apr 2024
Lab Number : 06140425 **Tested** : 10 Apr 2024
Unique Number : 10965233 **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: