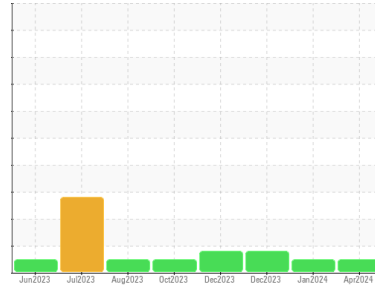




COOLANT REPORT

Sample Rating Trend



NORMAL



Area

Louisville

Machine Id

[Louisville] 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.

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 acceptable. The pH level of this fluid is within the acceptable limits.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0874758	WC0804841	WC0859800
Sample Date	Client Info		28 Apr 2024	30 Jan 2024	08 Dec 2023
Machine Age	hrs	Client Info	950	39416	0
Oil Age	hrs	Client Info	950	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	ABNORMAL

PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Glycol Type	FT-IR		---	---	---
Specific Gravity	*ASTM D1298		1.065	1.054	1.052
pH	Scale 0-14 ASTM D1287		8.04	7.65	7.33
Nitrites	ppm AP-053:2009		900	560	448
Reserve Alkalinity	Scale 0-20 *ASTM D1121		---	---	---
Percentage Glycol	% ASTM D3321		48.7	39.5	38.6
Freezing Point	°F ASTM D3321		-31	-11	-9
Total Dissolved Solids			307.0	258.0	236.0
Carboxylate			fail	fail	fail

CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130	0	9	4	6
Phosphorus	ppm ASTM D6130	0	0	4	2
Boron	ppm ASTM D6130	0	0	0	0
Molybdenum	ppm ASTM D6130	950	791	516	511

CORROSION

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

CONTAMINANTS

	method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130		8	13	13

CARRIER SALTS

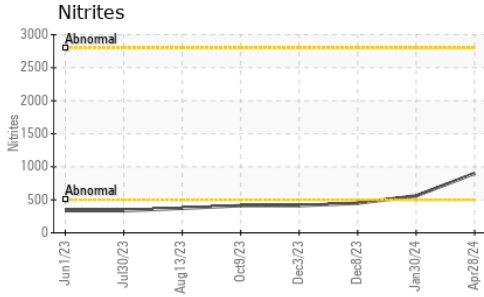
	method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130		4696	3239	3154
Potassium	ppm ASTM D6130		25	26	7

SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130		2	2	4
Magnesium	ppm ASTM D6130		<1	2	3

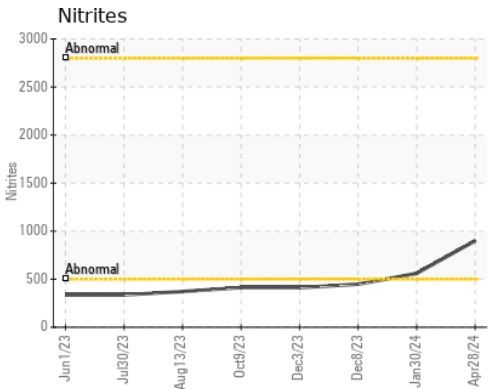
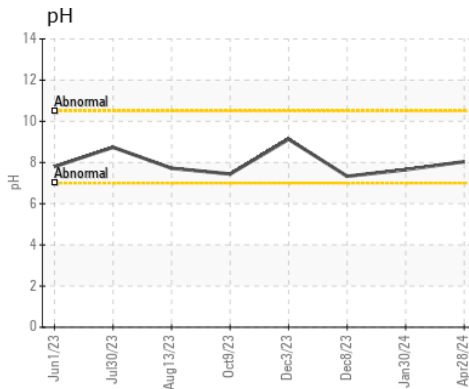
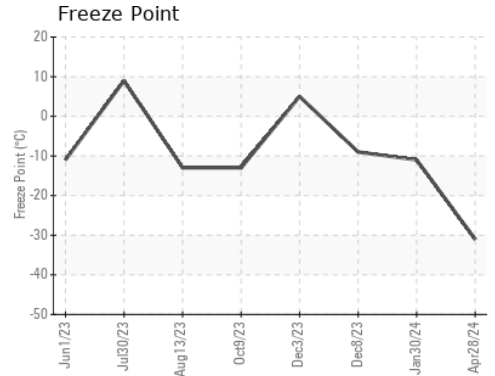
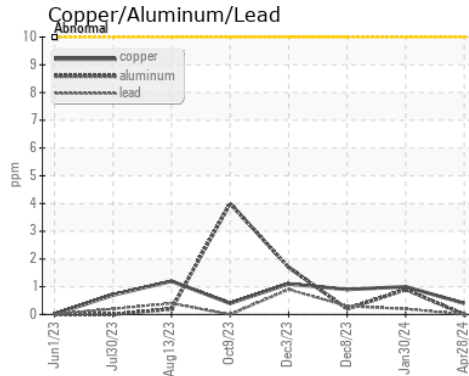
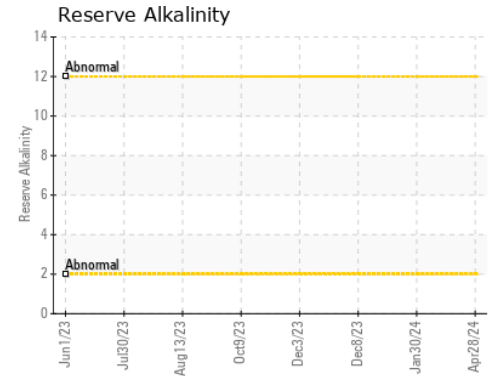
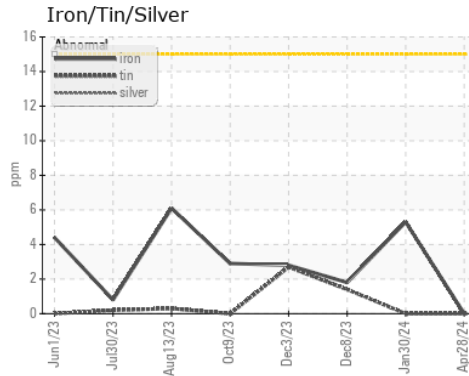


COOLANT REPORT



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. : WC0874758

Lab Number : 06181910

Unique Number : 11033236

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

Contact: CORY GUMBERT

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T: (606)585-3950

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