

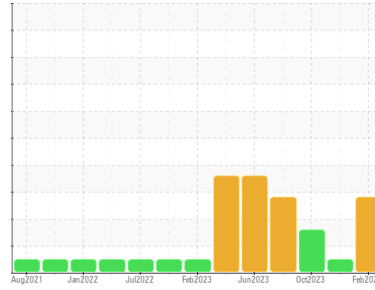


COOLANT REPORT

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.

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		WC0805452	WC0845973	WC0769056
Sample Date	Client Info		15 Feb 2024	27 Nov 2023	03 Oct 2023
Machine Age	hrs	Client Info	18719	18719	17533
Oil Age	hrs	Client Info	16703	18719	201
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			MARGINAL	NORMAL	ABNORMAL

PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Glycol Type	FT-IR		---	---	---
Specific Gravity	*ASTM D1298		1.043	1.052	1.052
pH	Scale 0-14 ASTM D1287		9.28	8.65	8.78
Nitrites	ppm AP-053:2009		824	488	448
Reserve Alkalinity	Scale 0-20 *ASTM D1121		---	---	---
Percentage Glycol	% ASTM D3321		▲ 31.8	38.3	38.1
Freezing Point	°F ASTM D3321		3	-9	-9
Total Dissolved Solids			253.5	241.5	269.0
Carboxylate			fail	fail	fail

CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130	0	35	10	5
Phosphorus	ppm ASTM D6130	0	52	5	1
Boron	ppm ASTM D6130	0	72	7	0
Molybdenum	ppm ASTM D6130	950	399	424	560

CORROSION

	method	limit/base	current	history1	history2
Iron	ppm ASTM D6130	>15	4	9	▲ 17
Aluminum	ppm ASTM D6130	>10	0	<1	1
Copper	ppm ASTM D6130	>10	<1	2	1
Lead	ppm ASTM D6130	>10	<1	<1	<1
Tin	ppm ASTM D6130	>10	0	<1	1
Zinc	ppm ASTM D6130		0	1	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130		13	23	13

CARRIER SALTS

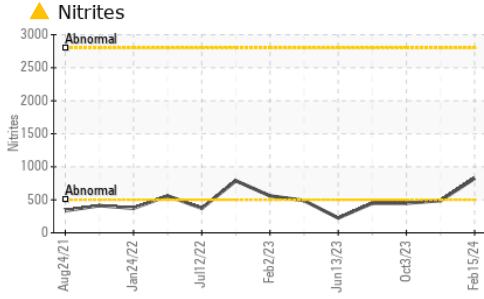
	method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130		2935	2963	3595
Potassium	ppm ASTM D6130		493	220	1

SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130		8	11	3
Magnesium	ppm ASTM D6130		2	5	1

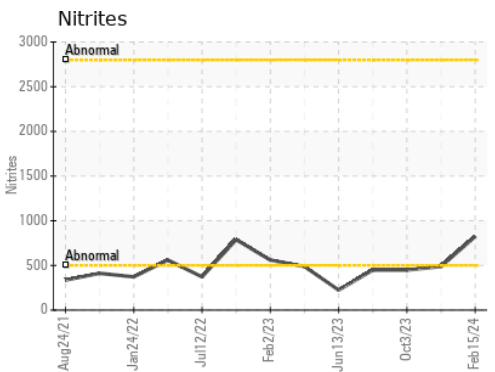
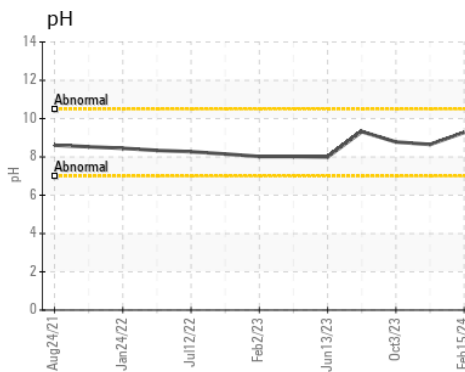
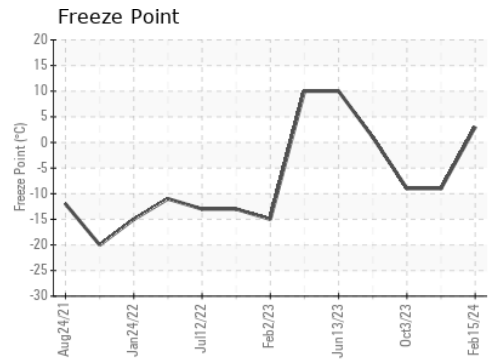
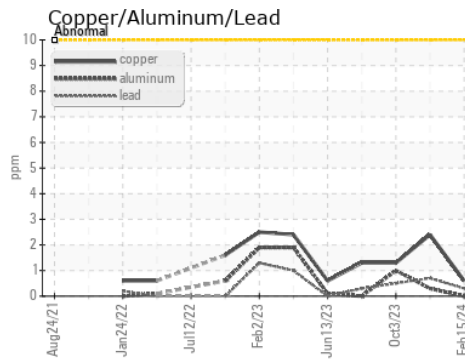
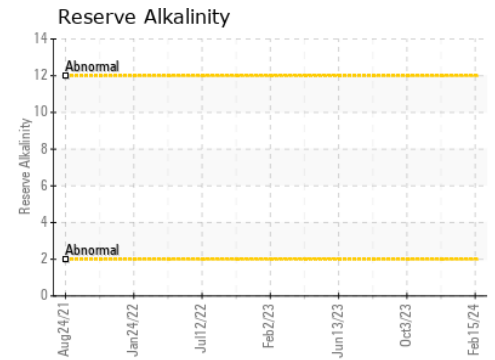
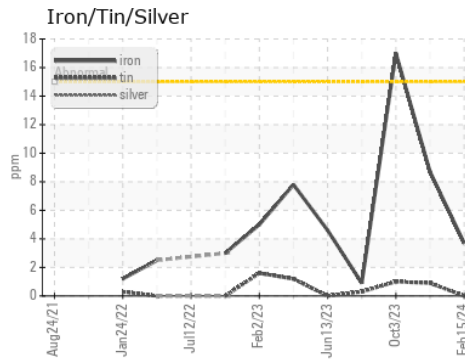


COOLANT REPORT



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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0805452

Lab Number : 06122875

Unique Number : 10937026

Test Package : COOL- (Additional Tests: BoilingPoint, COOL, GlycolType, ICP, KF)

Received : 19 Mar 2024

Tested : 22 Mar 2024

Diagnosed : 22 Mar 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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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)