



COOLANT REPORT

Sample Rating Trend

OFF SPEC

Area

Kentucky

Machine Id

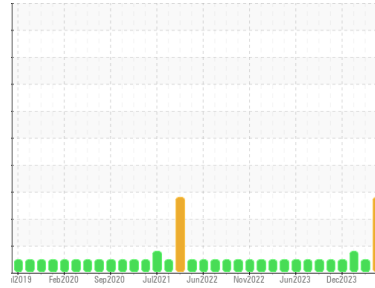
[Kentucky] Coolant - Starboard Main Engine (Jacket)

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: Tyson Bias)

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 lower than acceptable. The nitrite 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		WC0874826	WC0859929	WC0845759
Sample Date	Client Info		16 Mar 2024	16 Feb 2024	20 Jan 2024
Machine Age	hrs	Client Info	0	12937	0
Oil Age	hrs	Client Info	0	12937	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	NORMAL	ABNORMAL

PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Glycol Type	FT-IR		---	---	---
Specific Gravity	*ASTM D1298		1.044	1.061	1.060
pH	Scale 0-14 ASTM D1287		8.44	8.60	8.57
Nitrites	ppm AP-053:2009		712	184	448
Reserve Alkalinity	Scale 0-20 *ASTM D1121		---	---	---
Percentage Glycol	% ASTM D3321		▲ 32.8	45.3	44.9
Freezing Point	°F ASTM D3321		1	-24	-21
Total Dissolved Solids			221.5	243.5	305.0
Carboxylate			fail	fail	fail

CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130	0	10	6	8
Phosphorus	ppm ASTM D6130	0	0	0	0
Boron	ppm ASTM D6130	0	13	5	2
Molybdenum	ppm ASTM D6130	950	441	487	551

CORROSION

	method	limit/base	current	history1	history2
Iron	ppm ASTM D6130	>15	1	4	11
Aluminum	ppm ASTM D6130	>10	1	1	0
Copper	ppm ASTM D6130	>10	<1	2	<1
Lead	ppm ASTM D6130	>10	<1	2	<1
Tin	ppm ASTM D6130	>10	0	0	<1
Zinc	ppm ASTM D6130		<1	<1	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130		8	9	5

CARRIER SALTS

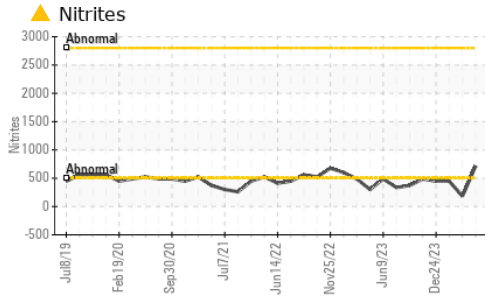
	method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130		2875	3528	4094
Potassium	ppm ASTM D6130		12	6	8

SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130		29	5	5
Magnesium	ppm ASTM D6130		4	2	<1

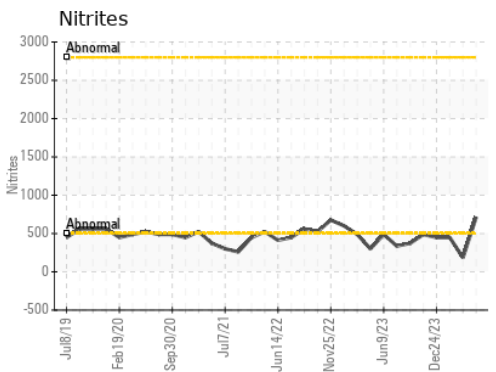
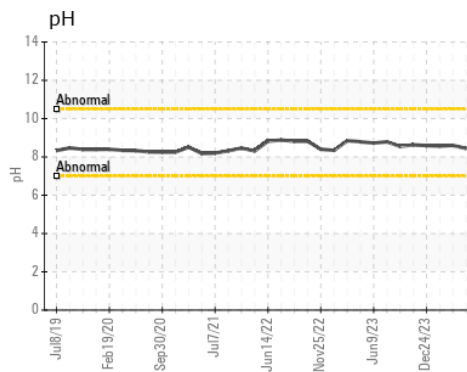
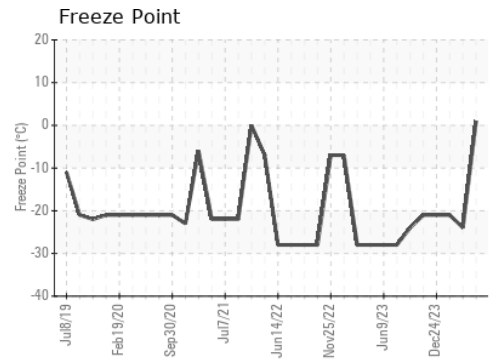
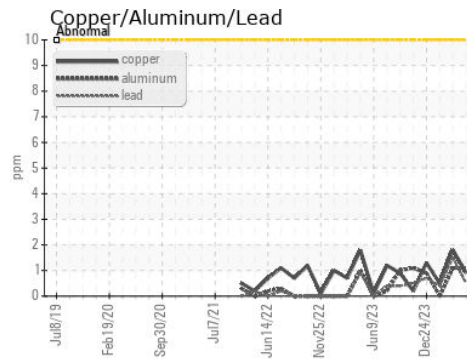
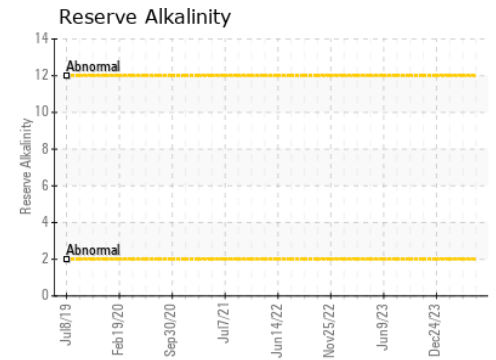
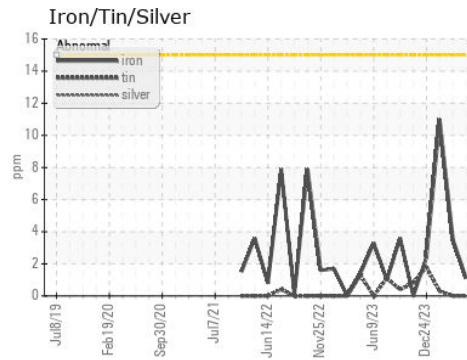


COOLANT REPORT



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. : WC0874826 **Received** : 27 Mar 2024
Lab Number : 06131272 **Tested** : 02 Apr 2024
Unique Number : 10950737 **Diagnosed** : 02 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: