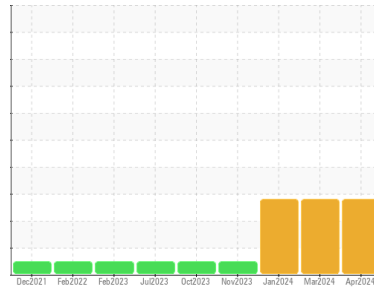




COOLANT REPORT

Sample Rating Trend



OFF SPEC



Area

Louisville

Machine Id

[Louisville] Coolant - Starboard Genset

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

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	WC0874765	WC0874804	WC0859856	
Sample Date	Client Info	28 Apr 2024	13 Mar 2024	30 Jan 2024	
Machine Age	hrs	Client Info	12436	11980	12931
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A	
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL	

PHYSICAL TEST RESULTS

method	limit/base	current	history1	history2	
Glycol Type	FT-IR	---	---	---	
Specific Gravity	*ASTM D1298	1.024	1.035	1.031	
pH	Scale 0-14	ASTM D1287	8.10	8.22	8.23
Nitrites	ppm	AP-053:2009	636	636	412
Reserve Alkalinity	Scale 0-20	*ASTM D1121	---	---	---
Percentage Glycol	%	ASTM D3321	▲ 19.3	▲ 26.5	▲ 23.9
Freezing Point	°F	ASTM D3321	17	9	12
Total Dissolved Solids			179.0	182.5	186.0
Carboxylate			fail	fail	fail

CORROSION INHIBITORS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D6130	0	4	4	
Phosphorus	ppm	ASTM D6130	0	0	<1	
Boron	ppm	ASTM D6130	0	16	37	41
Molybdenum	ppm	ASTM D6130	950	236	320	285

CORROSION

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

CONTAMINANTS

method	limit/base	current	history1	history2		
Chlorine	ppm	ASTM D6130		28	22	33

CARRIER SALTS

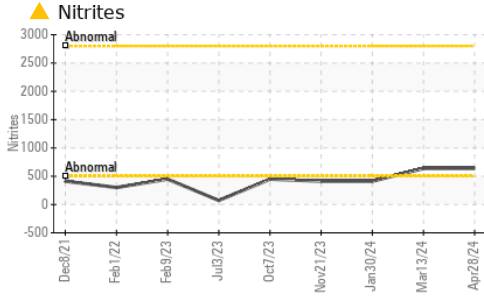
method	limit/base	current	history1	history2		
Sodium	ppm	ASTM D6130		1882	2530	2355
Potassium	ppm	ASTM D6130		10	9	19

SCALE POTENTIAL

method	limit/base	current	history1	history2		
Calcium	ppm	ASTM D6130		12	9	8
Magnesium	ppm	ASTM D6130		8	5	5

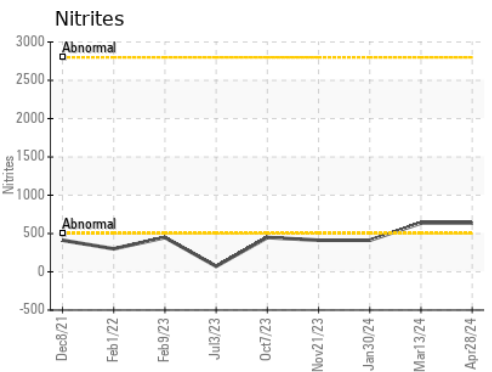
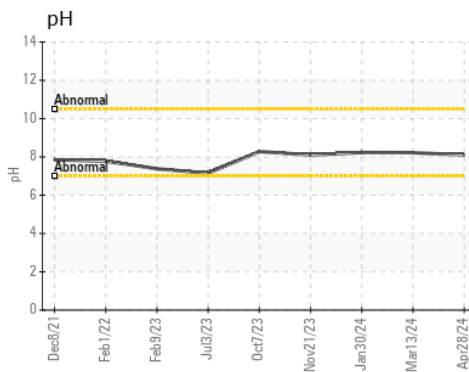
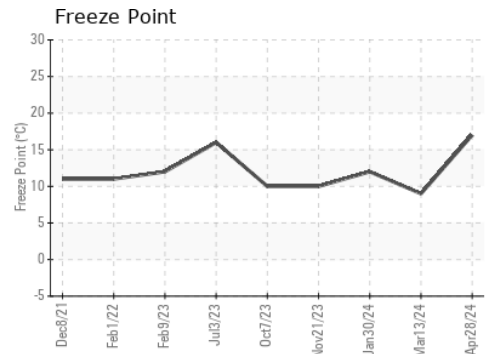
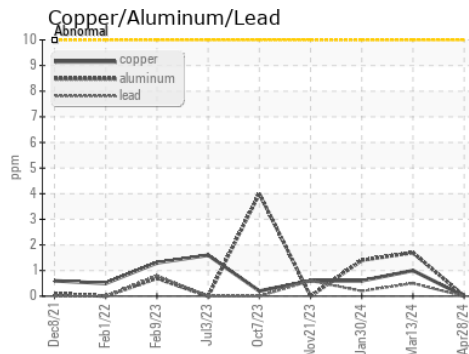
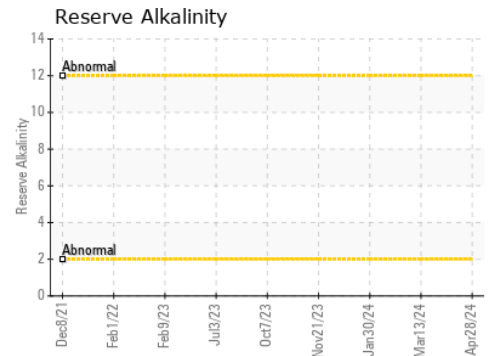
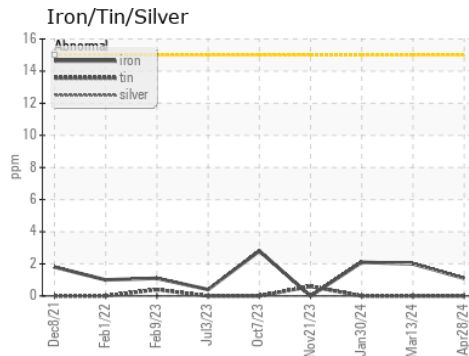


COOLANT REPORT



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

GRAPHS



Certificate L2367

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

Sample No. : WC0874765

Lab Number : 06181894

Unique Number : 11033220

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

cagumbert@marathonpetroleum.com

T: (606)585-3950

F: x: