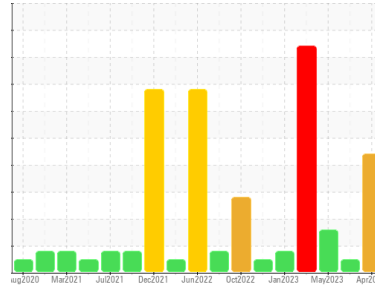




COOLANT REPORT

Sample Rating Trend



OFF SPEC



Area

Canton

Machine Id

[Canton] Coolant - Port Main Engine (Jacket)

Component

Coolant

Fluid

CATERPILLAR ELC (--- GAL)

DIAGNOSIS

Recommendation

We recommend drain/flush system, and refill with 50/50 antifreeze water mixture. We advise that you replenish the supplemental coolant additives (SCAs) and add per manufacturer's recommendations.

Corrosion

The iron level is abnormal.

Contaminants

Sediment present.

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	WC0805416	WC0769503	WC0735693
Sample Date	Client Info	22 Apr 2024	29 Dec 2023	24 May 2023
Machine Age	hrs	Client Info	0	10784
Oil Age	hrs	Client Info	0	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	1.039	1.064	1.069	
pH	Scale 0-14	ASTM D1287	8.61	8.42	8.69
Nitrites	ppm	AP-053:2009	824	788	900
Reserve Alkalinity	Scale 0-20	*ASTM D1121	---	---	---
Percentage Glycol	%	ASTM D3321	▲ 29.4	47.0	51.3
Freezing Point	°F	ASTM D3321	5	-28	-38
Total Dissolved Solids			260.5	381.0	339.0
Carboxylate			fail	fail	fail

CORROSION INHIBITORS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D6130	0	12	18	39
Phosphorus	ppm	ASTM D6130	0	<1	0	0
Boron	ppm	ASTM D6130	0	0	4	12
Molybdenum	ppm	ASTM D6130	950	217	562	94

CORROSION

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D6130	>15	▲ 22	0	▲ 87
Aluminum	ppm	ASTM D6130	>10	3	<1	9
Copper	ppm	ASTM D6130	>10	2	<1	7
Lead	ppm	ASTM D6130	>10	0	<1	<1
Tin	ppm	ASTM D6130	>10	0	2	<1
Zinc	ppm	ASTM D6130		0	1	1

CONTAMINANTS

method	limit/base	current	history1	history2		
Chlorine	ppm	ASTM D6130		39	13	103

CARRIER SALTS

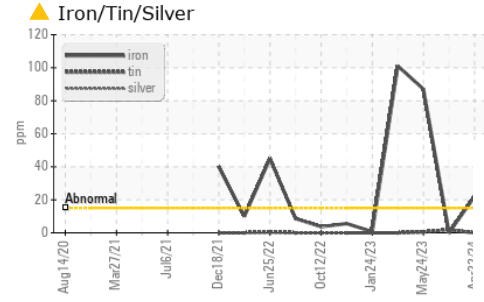
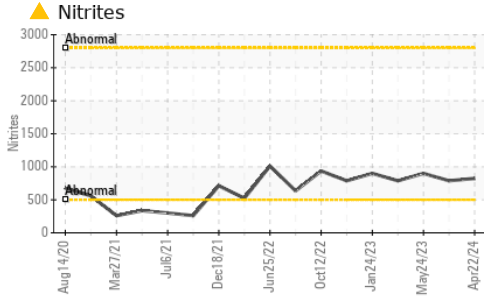
method	limit/base	current	history1	history2		
Sodium	ppm	ASTM D6130		2813	3816	6438
Potassium	ppm	ASTM D6130		34	5	107

SCALE POTENTIAL

method	limit/base	current	history1	history2		
Calcium	ppm	ASTM D6130		31	20	81
Magnesium	ppm	ASTM D6130		5	5	9

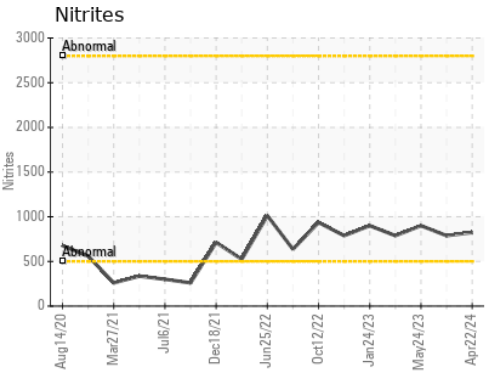
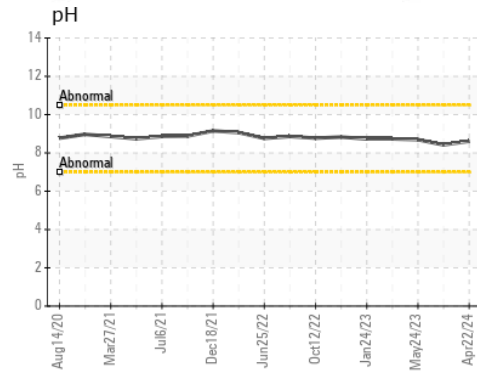
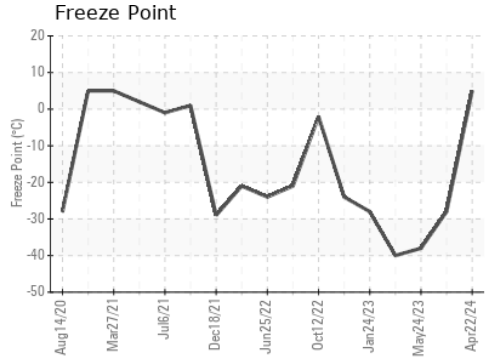
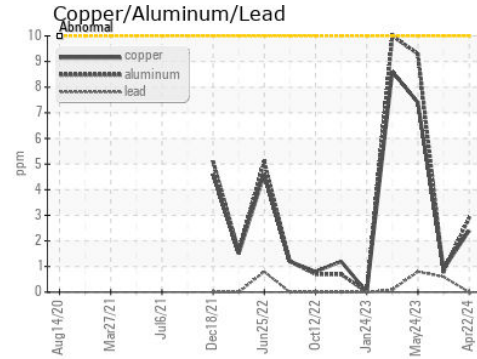
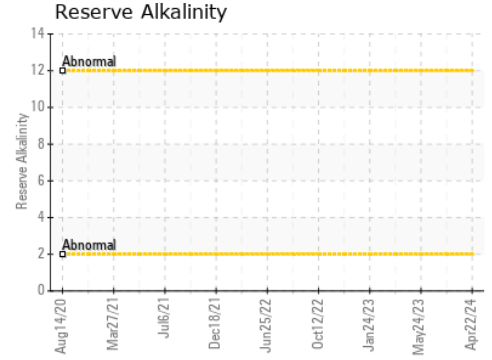
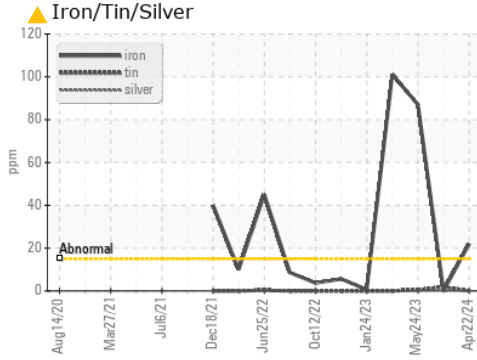


COOLANT REPORT



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

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0805416 **Received** : 16 May 2024
Lab Number : 06181893 **Tested** : 24 May 2024
Unique Number : 11033219 **Diagnosed** : 24 May 2024 - Jonathan Hester
Test Package : COOL- (Additional Tests: BoilingPoint, COOL, GlycolType, ICP, KF)

MARATHON PETROLEUM CO.
 101 12TH ST
 CATLETTSBURG, KY
 US 41169
 Contact: M/V CANTON
 mvvcanton@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)