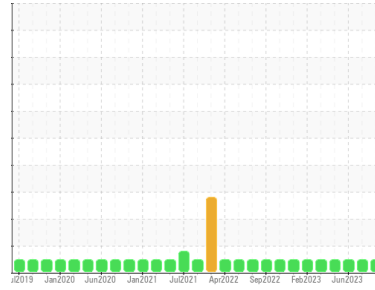




COOLANT REPORT

Sample Rating Trend



NORMAL



Area
Kentucky
 Machine Id
[Kentucky] Coolant - Starboard Main Engine (Jacket)
 Component
Coolant
 Fluid
CATERPILLAR ELC (--- GAL)

DIAGNOSIS

Recommendation

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

Glycol and nitrite levels are acceptable. The pH level of this fluid is within the acceptable limits.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0769173	WC0769202	WC0769522
Sample Date	Client Info		25 Aug 2023	06 Jul 2023	09 Jun 2023
Machine Age	hrs	Client Info	9750	8977	8461
Oil Age	hrs	Client Info	0	8977	0
Oil Changed	Client Info		N/A	N/A	Not Changd
Sample Status			NORMAL	NORMAL	NORMAL

PHYSICAL TEST RESULTS

	method	limit/base	current	history1	history2
Specific Gravity	*ASTM D1298		1.062	1.064	1.064
pH	Scale 0-14 ASTM D1287		8.55	8.79	8.72
Nitrites	ppm AP-053:2009		372	336	488
Reserve Alkalinity	Scale 0-20 *ASTM D1121		---	---	---
Percentage Glycol	% ASTM D3321		45.4	47.3	47.4
Freezing Point	°F ASTM D3321		-24	-28	-28
Total Dissolved Solids			314.0	328.0	322.0
Carboxylate			fail	pass	fail

CORROSION INHIBITORS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D6130	0	21	25	13
Phosphorus	ppm ASTM D6130	0	0	0	0
Boron	ppm ASTM D6130	0	18	24	3
Molybdenum	ppm ASTM D6130	950	844	911	1080

CORROSION

	method	limit/base	current	history1	history2
Iron	ppm ASTM D6130	>15	4	1	3
Aluminum	ppm ASTM D6130	>10	1	<1	0
Copper	ppm ASTM D6130	>10	<1	1	<1
Lead	ppm ASTM D6130	>10	<1	<1	0
Tin	ppm ASTM D6130	>10	<1	1	0
Zinc	ppm ASTM D6130		<1	<1	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Chlorine	ppm ASTM D6130		25	26	0

CARRIER SALTS

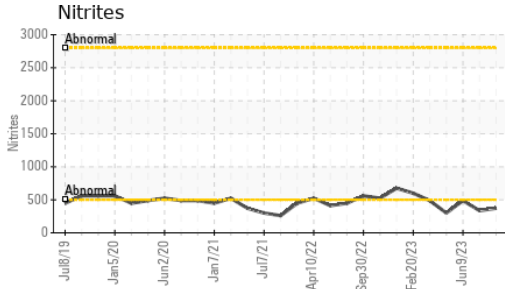
	method	limit/base	current	history1	history2
Sodium	ppm ASTM D6130		5118	6209	5770
Potassium	ppm ASTM D6130		3	173	0


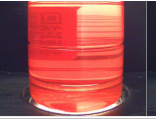
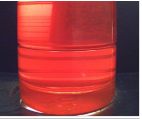
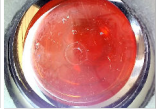


SCALE POTENTIAL

	method	limit/base	current	history1	history2
Calcium	ppm ASTM D6130		12	6	6
Magnesium	ppm ASTM D6130		3	2	2

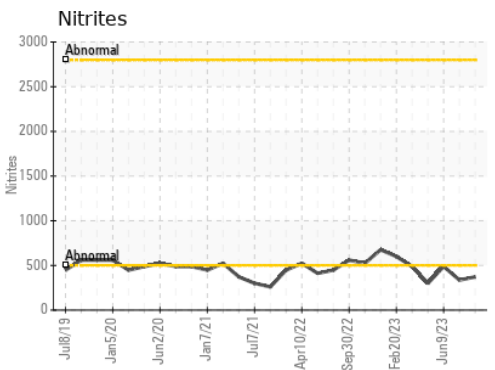
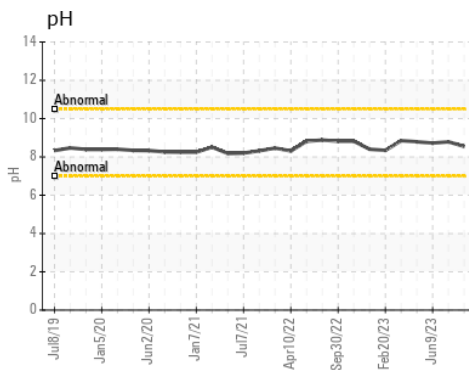
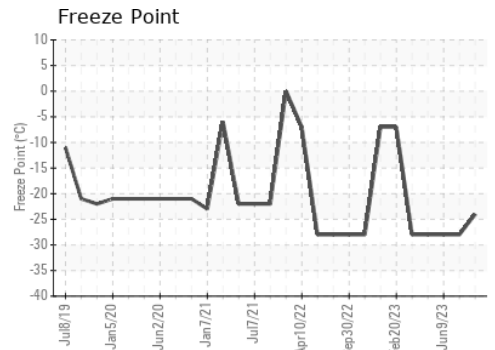
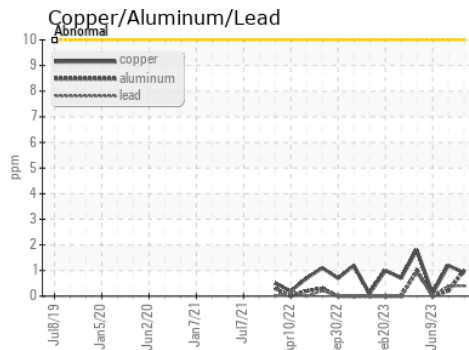
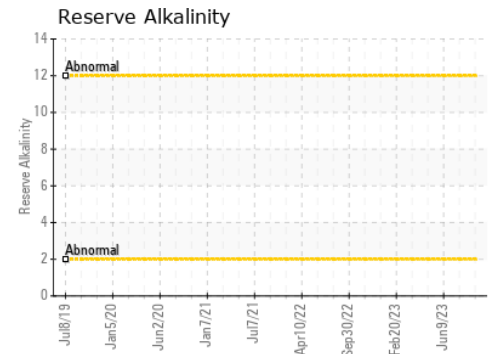
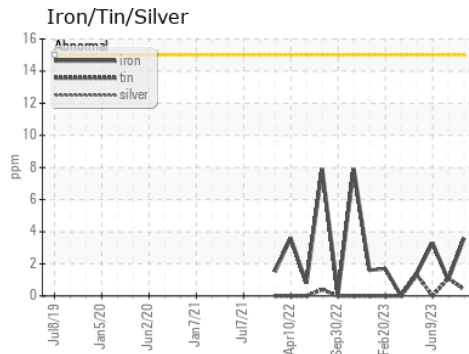


COOLANT REPORT



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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0769173 **Received** : 30 Aug 2023
Lab Number : 05938491 **Diagnosed** : 04 Sep 2023
Unique Number : 10629103 **Diagnostician** : Doug Bogart
Test Package : COOL- (Additional Tests: COOL, ICP)

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: