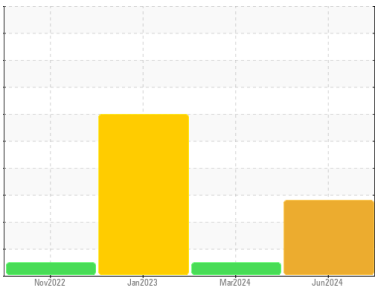
COOLANT REPORT

Sample Rating Trend



OFF SPEC

Area
Detroit
Machine Id
[Detroit] Coolant - Port 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. The carboxylate level of this fluid is acceptable.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0804740**	WC0804775	WC0731928
Sample Date		Client Info		**03 Jun 2024**	25 Mar 2024	30 Jan 2023
Machine Age	hrs	Client Info		**23178**	22305	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	SEVERE

PHYSICAL TEST RESULTS		method	limit/base	current	history1	history2
Glycol Type		FT-IR		**---**	---	---
Specific Gravity		*ASTM D1298		**1.013**	1.044	1.031
pH	Scale 0-14	ASTM D1287		**8.89**	8.56	8.54
Nitrites	ppm	AP-053:2009		**900**	524	448
Reserve Alkalinity	Scale 0-20	*ASTM D1121		**---**	---	---
Percentage Glycol	%	ASTM D3321		▲ **11.8**	32.6	23.4
Freezing Point	°F	ASTM D3321		**25**	1	12
Total Dissolved Solids				**90.0**	237.0	167.0
Carboxylate				**pass**	fail	fail

CORROSION INHIBITORS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D6130	0	**4**	3	37
Phosphorus	ppm	ASTM D6130	0	**12**	2	30
Boron	ppm	ASTM D6130	0	**0**	7	28
Molybdenum	ppm	ASTM D6130	950	**19**	451	70

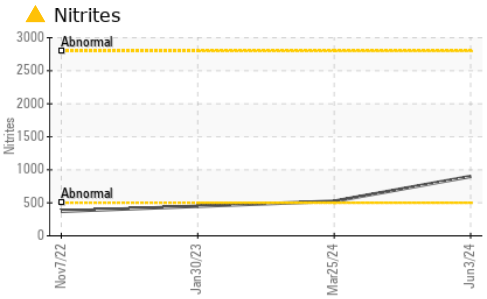
CORROSION		method	limit/base	current	history1	history2
Iron	ppm	ASTM D6130	>15	**3**	2	▲ 33
Aluminum	ppm	ASTM D6130	>10	**<1**	<1	2
Copper	ppm	ASTM D6130	>10	**0**	1	2
Lead	ppm	ASTM D6130	>10	**0**	<1	2
Tin	ppm	ASTM D6130	>10	**0**	<1	<1
Zinc	ppm	ASTM D6130		**0**	0	1

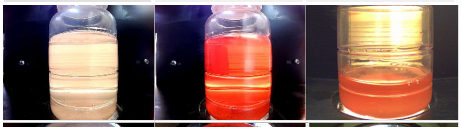
CONTAMINANTS		method	limit/base	current	history1	history2
Chlorine	ppm	ASTM D6130		**48**	24	124

CARRIER SALTS		method	limit/base	current	history1	history2
Sodium	ppm	ASTM D6130		**836**	3327	4056
Potassium	ppm	ASTM D6130		**69**	6	186

SCALE POTENTIAL		method	limit/base	current	history1	history2
Calcium	ppm	ASTM D6130		**17**	23	85
Magnesium	ppm	ASTM D6130		**<1**	4	3

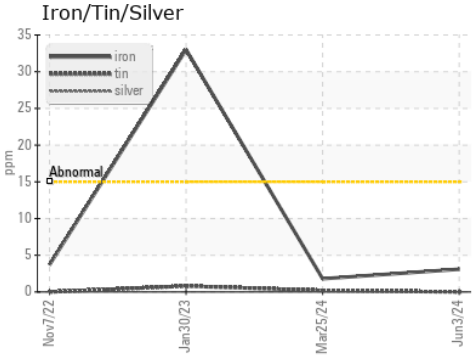
COOLANT REPORT



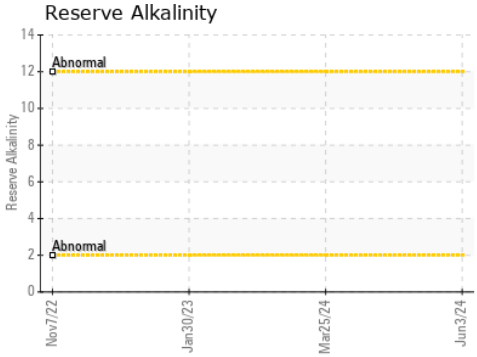
VISUAL		method	limit/base	current	history1	history2
Coolant Color		*Visual		**Clear**	Orange	Red
Coolant Appearance		*Visual	Clear	**normal**	normal	normal
Color						
Bottom						

GRAPHS

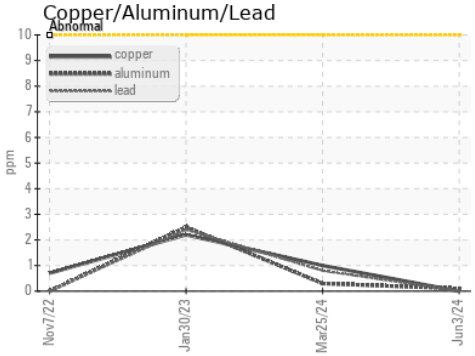
Iron/Tin/Silver



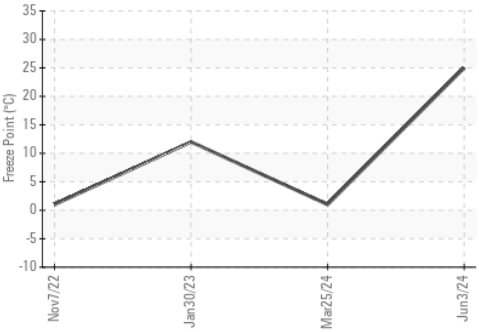
Reserve Alkalinity



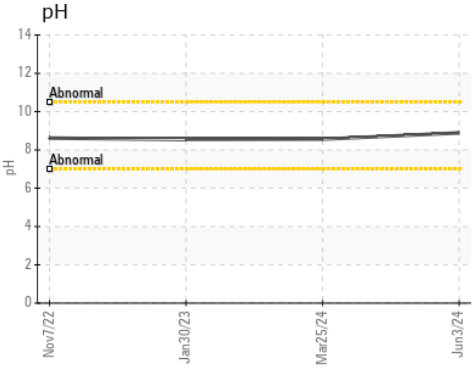
Copper/Aluminum/Lead



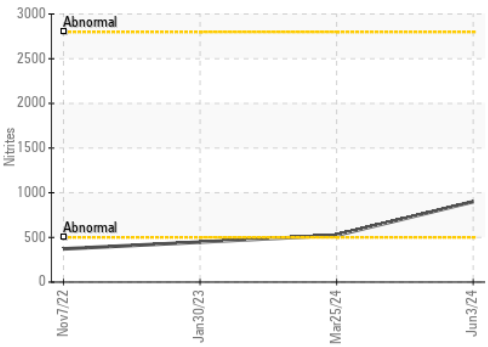
Freeze Point



pH



Nitrites



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804740 **Received** : 25 Jun 2024
Lab Number : 06220317 **Tested** : 16 Jul 2024
Unique Number : 11098514 **Diagnosed** : 16 Jul 2024 - Doug Bogart
Test Package : COOL- (Additional Tests: 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)

MARATHON PETROLEUM CO.
101 12TH ST
CATLETTSBURG, KY
US 41169
Contact: CORY GUMBERT
cagumbert@marathonpetroleum.com
T: (606)585-3950
F: x: