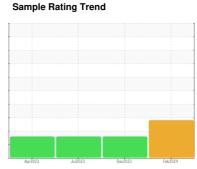


# **COOLANT REPORT**

# Huntington [Huntington] Coolant - Starboard Genset

Coolant

{not provided} (--- 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.

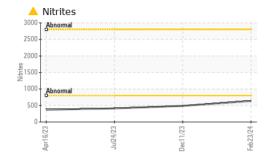
#### Coolant Condition

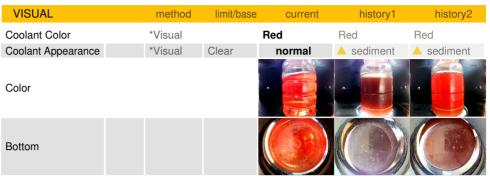
Carboxylate test failed. The glycol level is lower than acceptable. The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits.

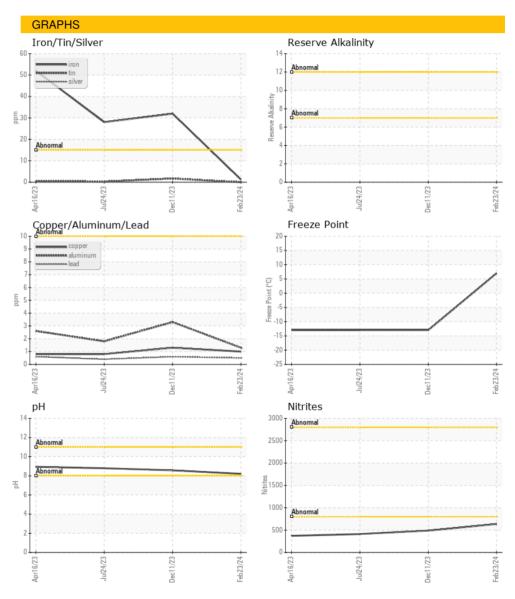
Sample Date         Client Info         23 Feb 2024         11 Dec 2023         24 Jul 2023           Machine Age         hrs         Client Info         18403         0         0         0           Oil Age         hrs         Client Info         Not Changd         N/A         N/A           Oil Changed         Client Info         Not Changd         N/A         N/A           Sample Status         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL           PHYSICAL TEST RESULTS method         limit/base         current         history1         history2           Glycol Type         FT-IR              Specific Gravity         "ASTM D1298         1.038         1.055         1.055           Jhitrites         ppm         AP-053:2009         636         488         412           Reserve Alkalinity         Scale 0:14         ASTM D1212              Reserve Alkalinity         Scale 0:14         ASTM D3321         7         -13         -13           Treezing Point         "F         ASTM D3321         7         -13         -13           Total Dissolved Solids         178.5			Apr202	3 Jul2023	Dec2023 F	eb2024	
Sample Date	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age         hrs         Client Info         18403         0         0           Oil Age         hrs         Client Info         0         0         0           Oil Changed         Client Info         Not Changd         N/A         N/A           Sample Status         ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL           PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Glycol Type         FT-IR                Specific Gravity         **Scile 0-14         ASTM D1287         8.21         8.57         8.79           Nitrites         ppm         AP-053:2009         636         488         412           Reserve Alkalinity         *Scile 0-20         *ASTM D1281              Perceratage Glycol         %         ASTM D3321         7         -13         -13         -13           Treezing Point         *F         ASTM D3321         7         -13         -13         -13           Total Dissolved Solids         Treezing Point         *F         ASTM D6130         0         0         0<	Sample Number		Client Info		WC0804937	WC0804938	WC0769347
Oil Age         hrs         Client Info         Not Changd         N/A         N/A           Sample Status         Not Changd         N/A         N/A         N/A           ABNORMAL         ABNORMAL         ABNORMAL         ABNORMAL           PHYSICAL TEST RESULTS         method         limit/base         current         history1         history2           Glycol Type         FT-IR               Specific Gravity         *ASTM D1288         1.038         1.055         1.055           pH         Scale 0-14         ASTM D1287         8.21         8.57         8.79           Nitrites         ppm         AP-058;2009         636         488         412           Reserve Alkalinity         *G         ASTM D121              Percentage Glycol         *G         ASTM D3321         7         -13         -13         -13           Treazing Point         *F         ASTM D3321         7         -13         -13         -13         -13         -13         -13         -13         -13         -13         -13         -13         -13         -13         -13         -13	Sample Date		Client Info		23 Feb 2024	11 Dec 2023	24 Jul 2023
Oil Changed Sample Status         Client Info         Not Changd ABNORMAL         N/A ABNORMAL ABNORMAL         N/A ABNORMAL ABNORMAL           PHYSICAL TEST RESULTS method         limit/base         current         history1         history2           Glycol Type         FT-IR              Specific Gravity         'ASTM D1298         1.038         1.055         1.055           pH         Scale 0-14         ASTM D1287         8.21         8.57         8.79           Nitrites         ppm         AP-053:2009         6.36         488         412           Reserve Alkalinity         °F         ASTM D1321              Percentage Glycol         % ASTM D3321         7         -13         -13           Total Dissolved Solids          178.5         270.5         217.0           Carboxylate         Ferezing Point         °F         ASTM D6130         4         4         4           CORROSION INHIBITORS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         0         0         0         0           Boron         ppm <td>Machine Age</td> <td>hrs</td> <td>Client Info</td> <td></td> <th>18403</th> <td>0</td> <td>0</td>	Machine Age	hrs	Client Info		18403	0	0
ABNORMAL   ABNORMAL   ABNORMAL   ABNORMAL   ABNORMAL   PHYSICAL TEST RESULTS   method   limit/base   current   history1   history2	Oil Age	hrs	Client Info		0	0	0
PHYSICAL TEST RESULTS method limit/base current history1 history2           Glycol Type         FT-IR                                    8.79         8.21         8.27         4.08         4.12         9.2         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.08         17.0	Oil Changed		Client Info		Not Changd	N/A	N/A
Specific Gravity   FT-IR           Specific Gravity   'ASTM D1298   1.038   1.055   1.055   1.055   pH   Scale 0.14   ASTM D1287   8.21   8.57   8.79   Nitrites   ppm   AP-053:2009   636   488   412   ASTM D1287   40.8   40.4   ASTM D3321	Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Specific Gravity         'ASTM D1298         1.038         1.055         1.055           pH         Scale 0-14         ASTM D1287         8.21         8.57         8.79           Nitrites         ppm         AP-053:2009         636         488         412           Reserve Alkalinity         Scale 0-20         'ASTM D1121              Percentage Glycol         %         ASTM D3321         ↑         28.7         40.8         40.4           Freezing Point         °F         ASTM D3321         ↑         -13         -13         -13           Total Dissolved Solids         178.5         270.5         217.0         217.0         217.0         40.8         40.4         4           Carboxylate         fail         fail         fail         fail         fail         fail           CORROSION INHIBITORS method limit/base current         limit/base current         history1         history2           Silicon         ppm         ASTM D6130         0         0         0         0           GORROSION INHIBITORS method limit/base current         history1         history2           Iron         ppm         ASTM D6130         >10         1<	PHYSICAL TEST R	ESULTS	method	limit/base	current	history1	history2
pH         Scale 0-14 ASTM D1287         8.21 B.57 B.79         8.79           Nitrites         ppm AP-053:2009         636 ABB         488 A12           Reserve Alkalinity         Scale 0-20 *ASTM D1121	Glycol Type		FT-IR				
Nitrites	Specific Gravity		*ASTM D1298		1.038	1.055	1.055
Reserve Alkalinity   Scale 0-20	рН	Scale 0-14	ASTM D1287		8.21	8.57	8.79
Percentage Glycol   %   ASTM D3321	Nitrites	ppm	AP-053:2009		636	488	412
Freezing Point         °F         ASTM D3321         7         -13         -13           Total Dissolved Solids         178.5         270.5         217.0           Carboxylate         fail         fail         fail           CORROSION INHIBITORS method         limit/base         current         history1         history2           Silicon         ppm         ASTM D6130         4         8         28           CORROSION         method Bimit/base         current							



## **COOLANT REPORT**









Laboratory Sample No.

Lab Number : 06131276 Unique Number : 10950741

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0804937 Received : 27 Mar 2024

**Tested** : 02 Apr 2024 Diagnosed : 02 Apr 2024 - Jonathan Hester MARATHON PETROLEUM CO. 101 12TH ST

CATLETTSBURG, KY US 41169

Test Package : COOL- ( Additional Tests: BoilingPoint, COOL, GlycolType, ICP, KF ) To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: CORY GUMBERT cagumbert@marathonpetroleum.com T: (606)585-3950

\* - 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)

F: x: