

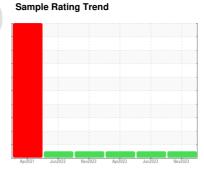
Nashville

COOLANT REPORT

Component Coolant

HYBRID (HOAT) COOLANT (--- GAL)

[Nashville] Coolant - Port Genset





DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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.

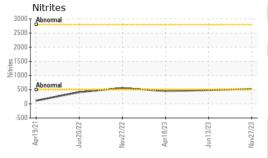
Coolant Condition

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

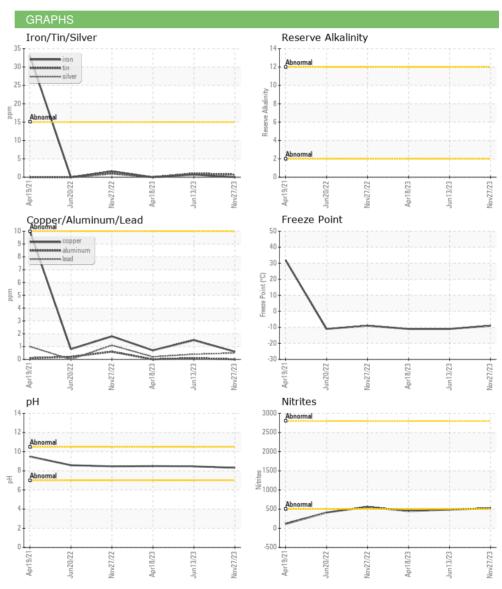
Sample Number Client Info WC0805242 WC0683266 WC0719596 Sample Date Client Info 27 Nov 2023 13 Jun 2023 18 Apr 2023 Machine Age hrs Client Info 9454 8018 0 Oil Age hrs Client Info 9454 0 0 Oil Changed Client Info Not Changd N/A NORMAL NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity "ASTM D1287 1.052 1.053 1.053 PH Scale 0-14 ASTM D1287 8.32 8.46 8.49 Nitrites ppm AP-0532009 524 488 448 Reserve Alkalinity Ppm ASTM D3321 Percentage Glycol % ASTM D3321 38.8 39.1 39.1 39.1 Freezing Point "F ASTM D3321 -9 -11 -11 -11 -11 -11 -11	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Machine Age hrs Client Info 9454 8018 0 Oil Age hrs Client Info 9454 0 0 Oil Changed Client Info Not Changd Not Changd N/A Sample Status NORMAL NORMAL NORMAL NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity *ASTM D1298 1.052 1.053 1.053 PH Scale 0:40 ASTM D1287 8.32 8.46 8.49 Nitrites ppm AP-053:2009 524 488 448 Reserve Alkalinity scale 0:40 ASTM D3321 38.8 39.1 39.1 Freezing Point *F ASTM D3321 -9 -11 -11 Total Dissolved Solids 235.0 264.0 288.5 Carboxylate fail pass fail CORROSION INHIBITORS method limit/base current history1	Sample Number		Client Info		WC0805242	WC0683266	WC0719596	
Oil Age hrs Client Info 9454 0 0 Oil Changed Client Info Not Changd NORMAL Not Changd NORMAL Not Changd NORMAL N/A PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity "ASTM D1287 8.32 8.46 8.49 Nitrites ppH Scale 0-24 ASTM D1287 8.32 8.46 8.49 Nitrites ppm ASTM D1281 Percentage Glycol % ASTM D1321 38.8 39.1 39.1 Freezing Point "F ASTM D3321 38.8 39.1 39.1 Freezing Point "F ASTM D3321 38.8 39.1 39.1 Freezing Point "F ASTM D3321 39.2 264.0 288.5 Carboxylate "T Stale D420 Molybedia pass fail Borron ppm ASTM D6130 227 37 32	Sample Date		Client Info		27 Nov 2023	13 Jun 2023	18 Apr 2023	
Oil Changed Sample Status Client Info Not Changd NORMAL Not Changd NORMAL N/A NORMAL PHYSICAL TEST RESULTS method limit/base current history1 history2 Specific Gravity "ASTM D1298" 1.052 1.053 1.053 pH Scale 0-14 ASTM D1297 8.32 8.46 8.49 Nitrites ppm AP-053:2009 524 488 448 Reserve Alkalinity Scale 0-20 'ASTM D1291	Machine Age	hrs	Client Info		9454	8018	0	
Sample Status	Oil Age	hrs	Client Info		9454	0	0	
PHYSICAL TEST RESULTS method limit/base current history1 history2	Oil Changed		Client Info		Not Changd	Not Changd	N/A	
Specific Gravity	Sample Status				NORMAL	NORMAL	NORMAL	
pH Scale 0-14 ASTM D1287 8.32 8.46 8.49 Nitrites ppm AP-053-2009 524 488 448 Reserve Alkalinity Scale 0-20 "ASTM D1121 Percentage Glycol % ASTM D3321 38.8 39.1 39.1 Freezing Point °F ASTM D3321 -9 -11 -11 Total Dissolved Solids 235.0 264.0 288.5 Carboxylate fail pass fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 227 37 32 Phosphorus ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 >15 0 <1 0 CORROSION method limit/base current history1 hist	PHYSICAL TEST F	RESULTS	method	limit/base	current	history1	history2	
Nitrites	Specific Gravity		*ASTM D1298		1.052	1.053	1.053	
Reserve Alkalinity Scale 0-20 "ASTM D1121	pH	Scale 0-14	ASTM D1287		8.32	8.46	8.49	
Percentage Glycol % ASTM D3321 38.8 39.1 39.1	Nitrites	ppm	AP-053:2009		524	488	448	
Freezing Point °F ASTM D3321 -9 -11 -11 Total Dissolved Solids 235.0 264.0 288.5 Carboxylate fail pass fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 227 37 32 Phosphorus ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 >15 0 <1 0 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Zinc ppm ASTM D6130 0 <	Reserve Alkalinity	Scale 0-20	*ASTM D1121					
Total Dissolved Solids 235.0 264.0 288.5 Carboxylate fail pass fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 227 37 32 Phosphorus ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 220 520 505 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Cinc ppm ASTM D6130 0 <1 <1	Percentage Glycol	%	ASTM D3321		38.8	39.1	39.1	
Carboxylate fail pass fail CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 227 37 32 Phosphorus ppm ASTM D6130 9 35 22 Boron ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 220 520 505 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Zinc ppm ASTM D6130 0 <1 <1 <1 CONTAMINANTS method limit/base	Freezing Point	°F	ASTM D3321		-9	-11	-11	
CORROSION INHIBITORS method limit/base current history1 history2 Silicon ppm ASTM D6130 227 37 32 Phosphorus ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 220 520 505 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Tin ppm ASTM D6130 0 <1 <1 <1 CONTAMINANTS method limit/base current history1 history2	Total Dissolved Solids				235.0	264.0	288.5	
Silicon	Carboxylate				fail	pass	fail	
Phosphorus ppm ASTM D6130 <1	CORROSION INH	IBITORS	method	limit/base	current	history1	history2	
Boron ppm ASTM D6130 9 35 22 Molybdenum ppm ASTM D6130 220 520 505 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 0 <1 0 Copper ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Tin ppm ASTM D6130 >10 <1 1 0 Zinc ppm ASTM D6130 0 <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 2804 5516 5105 Sodium ppm ASTM D6130 7 96 22 <td cols<="" th=""><th>Silicon</th><th>ppm</th><th>ASTM D6130</th><th></th><th>227</th><th>37</th><th>32</th></td>	<th>Silicon</th> <th>ppm</th> <th>ASTM D6130</th> <th></th> <th>227</th> <th>37</th> <th>32</th>	Silicon	ppm	ASTM D6130		227	37	32
Molybdenum ppm ASTM D6130 220 520 505 CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 0 <1 0 Copper ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Tin ppm ASTM D6130 >10 <1 1 0 Zinc ppm ASTM D6130 0 <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 11 32 24 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 7 96 22 <td colsp<="" th=""><th>Phosphorus</th><th>ppm</th><th>ASTM D6130</th><th></th><th><1</th><th>8</th><th>0</th></td>	<th>Phosphorus</th> <th>ppm</th> <th>ASTM D6130</th> <th></th> <th><1</th> <th>8</th> <th>0</th>	Phosphorus	ppm	ASTM D6130		<1	8	0
CORROSION method limit/base current history1 history2 Iron ppm ASTM D6130 >15 0 <1 0 Aluminum ppm ASTM D6130 >10 0 <1 0 Copper ppm ASTM D6130 >10 <1 2 <1 Lead ppm ASTM D6130 >10 <1 <1 <1 Tin ppm ASTM D6130 >10 <1 1 0 Zinc ppm ASTM D6130 0 <1 <1 <1 CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 11 32 24 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 7 96 22 SCALE POTENTIAL method limit/base current history1 history2	Boron	ppm	ASTM D6130		9	35	22	
Iron ppm ASTM D6130 >15 0 <1	Molybdenum	ppm	ASTM D6130		220	520	505	
Aluminum ppm ASTM D6130 >10 0 <1	CORROSION		method	limit/base	current	history1	history2	
Copper ppm ASTM D6130 >10 <1	Iron	ppm	ASTM D6130	>15	0	<1	0	
Lead ppm ASTM D6130 >10 <1	Aluminum	ppm	ASTM D6130	>10	0	<1	0	
Tin ppm ASTM D6130 billion >10 control <1 color	Copper	ppm	ASTM D6130	>10	<1	2	<1	
Zinc ppm ASTM D6130 0 <1	Lead	ppm	ASTM D6130	>10	<1	<1	<1	
CONTAMINANTS method limit/base current history1 history2 Chlorine ppm ASTM D6130 11 32 24 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2804 5516 5105 Potassium ppm ASTM D6130 7 96 22 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 18 30 23	Tin	ppm	ASTM D6130	>10	<1	1	0	
Chlorine ppm ASTM D6130 11 32 24 CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2804 5516 5105 Potassium ppm ASTM D6130 7 96 22 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 18 30 23	Zinc	ppm	ASTM D6130		0	<1	<1	
CARRIER SALTS method limit/base current history1 history2 Sodium ppm ASTM D6130 2804 5516 5105 Potassium ppm ASTM D6130 7 96 22 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 18 30 23	CONTAMINANTS	;	method	limit/base	current	history1	history2	
Sodium ppm ASTM D6130 2804 5516 5105 Potassium ppm ASTM D6130 7 96 22 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 18 30 23	Chlorine	ppm	ASTM D6130		11	32	24	
Potassium ppm ASTM D6130 7 96 22 SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 18 30 23	CARRIER SALTS	;	method	limit/base	current	history1	history2	
SCALE POTENTIAL method limit/base current history1 history2 Calcium ppm ASTM D6130 18 30 23	Sodium	ppm	ASTM D6130		2804	5516	5105	
Calcium ppm ASTM D6130 18 30 23	Potassium	ppm	ASTM D6130		7	96	22	
	SCALE POTENTI	AL	method	limit/base	current	history1	history2	
	Calcium	ppm	ASTM D6130		18	30	23	
	Magnesium		ASTM D6130		5	8	6	



COOLANT REPORT











Laboratory Sample No. Lab Number Unique Number : 10776762

: WC0805242 : 06026971

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

Diagnosed

: 06 Dec 2023 : 14 Dec 2023 Diagnostician : Jonathan Hester

Test Package : COOL- (Additional Tests: COOL, 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.

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: x: