



P.O. Box 9429
3805 Talley Rd.
Richmond, VA 23228
804-266-9603

Bon Harbor 8/1/2023

Leak detection

Installing a backup waste valve

Installing CCH Endurance feeder

Hard piping fill line to return with future spot for garden timer

Met with Joe and Donnie upon arrival. They were able to give us a good history on the pool, and stress the main concerns.

After first round of visual inspection we noticed each skimmer had separated some from the pool structure and needed epoxy putty. Also noticed the waste line leaking by.

With the leakalyzer set up and the pool running on normal operation. It showed ~1 inch leak. With the pump off we were not showing any leak.

We then pressure tested the 1" returns. We were able to hold ~17 pounds of pressure. These were tapered winterizing plugs we had to use, so false negatives were avoided.

The second pressure test was on the skimmers. We found a leak behind the shallow end skimmer, river side. This is a suction side leak and might not actually be losing water through it with the pump on. Be on the lookout for rocks, dirt, or sand collecting in the pump strainer basket.

We dye tested the following-

Skimmer throats- Leaking

Cracks in shell- no leaks

Main drain- (cover removed and inspected as well) no leaks

Lights- no leaks

Epoxy puttied the skimmer throats.

Installed CCH Endurance feeder, back up waste valve, hard piped fill line, turned pump down to 3150 RPM for optimal filter performance, filled new feeder with tabs, adjusted feed rate to 1.4lbs per day.

Running the equalizer before our departure we recorded ZERO inches of leak. This could possibly be because evaporation rate slowed down at that point (around 8PM) but time will tell. During the day we had calculated ~ ½" evaporation for the day.

Assessment of pool-

-Level- Pool is not level causing the deep end skimmer to suck air once it gets to a certain level. (If leak persists, we can look into lowering this skimmer)

-Coping- is in good condition

-Caulk- is in good condition

-Perimeter Tile- Some perimeter tile is spalling, did not see anything dangerous though.

-Plaster- Very good condition on walls, some rough spots on certain areas of the floor. Moving my weights around the pool I heard a few hollow spots. These are not considered to be a problem until they break through.

-Header- There are some cracks, probably caused by freeze damage. These cracks are very sporadic, and no dye got sucked through. Make sure the caulk between the coping and deck is sealed annually to prevent any further damage. I don't believe this is a major concern, just something to keep an eye on.

-Long cracks in the deep end- I did not see any dye get sucked through showing a leak. It does look like it was patched at some point. This is something to keep an eye on. Make sure it doesn't get bigger, and dye test periodically.

-NO HYDROSTAT VALVE- This is a concern. If the pool is ever to be drained there needs to be one installed RIGHT AWAY. Without one the pool can float again. With being so close to the water, and having a history of floating, we might need to set up well points around the deck to pump ground water out before starting to drain the pool.

-Skimmer Equalizers- These have been banned on any new pool build. They have been grandfathered in for older pools, but they do require a VGB certified cover/grate. We have been deleting these out of the pools when we do major work. Until then, the pool might need to be drained down to the equalizer, and have the correct cover installed.

-No railing for steps- these are recommended. (Rough estimate ~\$1,800 for installation of deck mounted Safron railing)

-SVRS (Safety Vacuum Release System)- None installed, VGB requirement with a single main drain.

-Electrical Bonding- No signs of there being an electrical bonding grid. This might not have been installed with the original pool but should have been installed when the concrete was redone. Does anyone know if it has one?

All in all, this pool does not look to be in terrible shape if you can deal with the tilt from the floating. I would give this pool another 7 to 10 years of life no problem (maybe more with a hydrostat installation and plaster job later down the line). Let me know if you have any further questions.

Thank you,

Pool Crafters, LLC.

Thomas Bowles Jr.

Thomas.Bowles@poolcraftersva.com

Pump- Pentair IntelliFlo 3HP Variable Speed

Filter- Pentair Triton II TR100

Pipe- 2"

Suction Manifold- GF Compact Valves. MD and Skimmer

Skimmers- Sta-Rite U3 (With equalizers, NO GRATES)

Returns- Old Standard Bronze maybe? 1" PVC pipe

Equalizers- Old Standard Bronze? 1.5" PVC pipe

Main Drain- Looks like Hayward inner frame with Aquastar cover

NO HYDROSTAT VALVE/SUMP

~1380 sq. ft.

Recommend one new skimmer lid, possibly try some generic Weir doors in the skimmers to help skimming action (cannot screw in OEM weirs, too much putty and plaster around plates)