

CoOI S12E4 Concrete Evidence

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Synopsis by Jan Anderson

Money Pit

Terry, Charles, and Steve are in the Money Pit watching the progress of borehole FN15.5. FN15.5 is located in the southern part of the 30-foot X 15-foot Golden Egg and is in the area where Dr. Fred Michel believes metals found in the water are coming from. This borehole is also located only 5-10 feet from the Garden Shaft, where last year, the team hit what they believe was one of the flood tunnels. While probe drilling the bottom of the Garden Shaft last year, the team hit a possible flood tunnel, and saltwater began pouring in at a rate of 700 gallons per minute. Rick arrives as they bring over the core sample from 89 – 99 feet. Terry says the core is a little soft, but they will wait to see what the next core looks like. The next core sample is about the same. The team will decide on the location for the next borehole. The team is now drilling borehole GN16, which is located in the Golden Egg just 13 feet from the Garden Shaft. A core sample from 109 feet is brought over for examination. Terry describes the material as firm. The next sample arrives; again, it is firm with little sand and silt.

Research Center

Rick, Marty, Steve, and Scott are meeting in the Research Center to discuss a possible dig in Smith's Cove. Scott explains that the Restalls believed they found the flood tunnel. Scott shows them where the Restalls felt the convergence point of the finger drains was located. Because the convergence point is at the tidal level, a specific permit would be needed before the team could dig there. Scott wants to dig on the inland side of the road to try to find the tunnel and then follow it to the Money Pit. This would be close to the area where the Restalls found a stone-lined vertical shaft that they pumped concrete into to try and seal off the Flood Tunnel. Because most of the concrete did not set properly, the water from Flood Tunnel was not stopped. The team hopes to find pieces of concrete from the Restall attempt.

Lot 4

Craig and Gary are on Lot 4, searching through the 10 tons of spoils removed from the round feature on Lot 5. Gary begins to scan the area and gets a hit. Gary uses his pinpointter and finds a button that he feels is from the mid-1600s to mid-1700s and was probably from a tunic. Gary begins to scan again and gets another hit. Craig digs out the area, and they find a piece of lead that Gary says is a coin weight. Gary says this could have been used for payroll or by a merchant.

Smith's Cove

Team members have arrived at Smith's Cove to begin searching for a flood tunnel. They are using a survey map created in 1963 by Bobby Restall, and it is believed the flood tunnel is buried 30-40 feet deep. The next day, Rick arrives, and Peter tells him they are at depth and about 7 feet away. Billy begins to pull out buckets with cobbles that are similar in size. Rick says the description of the Flood tunnel is that it is 3 feet by 4 feet and packed with stones about the size of a human head. Billy and Rick examine the area where the cobbles came from and decide to look for more cobbles. As they continue to work, the team has found several timbers. The group discusses where the wood came from and whether it could have been reused by the Restalls. Rick finds a piece of concrete in the material Billy dug while searching for the flood tunnel. Rick wants Emma to do testing on the piece to get as much information from it as possible.

The Lab

Rick and Gary are meeting with Laird and Emma to hear the results of scans done on the weight and button found in the spoils from Lot 5. Emma did a CT scan on both artifacts and scanned them with the XRF. She tells the group that the button is made up of a copper-iron alloy with a high lead content. She then tells them there is no aluminum in it. She believes it is English and from the 1700s to early 1800s. Next, the group looks at the piece of lead. Laird tells them it weighs 26.2 grams; if it is a coin weight, it would be for a large coin such as a gold coin. Emma then tells them she thinks the lead is modern because the phosphorous content is very high, which isn't seen in lead alloys

until the mid-20th century. Laird also says that after 1066, there was a transition from lead weight to brass weight. Emma recommends doing laser ablation on the lead piece to determine the origin of the lead and hopefully determine the age of the piece. Rick also wants to find an expert to look at the piece.

War Room

The team is discussing the water testing program. The newest groundwater testing has been done, and Dr. Spooner says that by continuing to drill in the Golden Egg, the water disseminates or creates a dispersal plume. He is worried that by continuing to drill, they could dilute the particles. When the particles are diluted, that would make it difficult to detect where the source is located. Dr. Spooner wants to stop drilling and then recheck the data.