

# **ProHawk AI Turbidity Use Case**

History Channel - The Curse of Oak Island ProHawk AI Vision Computer Vision Restoration

## ProHawk's Vision Restoration Enriches Oak Island's Treasure Hunt

## The HISTORY® Channel Reality TV Show The Curse of Oak Island, produced by Prometheus Entertainment.

The Curse of Oak Island chronicles the remarkable journey of Rick and Marty Lagina, along with their team of dedicated treasure hunters, as they embark on a tenyear quest to unravel the enigmas surrounding Oak Island. Season 10 Episode 1, titled "On Their Marks," witnessed a groundbreaking discovery facilitated by ProHawk Al Computer Vision Restoration technology.

This use case study delves into the pivotal role played by ProHawk's cutting-edge solution in exploring underwater tunnels near the suspected location for the treasure, known as the Money Pit. It significantly enhanced the team's progress in deciphering the 227-year-old mystery.

According to popular belief, the Money Pit is said to hold a hidden treasure of immense value. The exact nature of the treasure remains a mystery, fueling the intrigue and fascination surrounding the site. After a decade-long pursuit, Rick, Marty, and their team return to Oak Island and stumble upon compelling evidence of a mysterious tunnel in the Money Pit. With the aid of ProHawk AI, they gain a crystal-clear view of an underground structure for the first time ever, bringing them closer than ever to resolving the ancient puzzle.

## The Challenge: Darkness and Turbidity in Underground Caverns Filled with Water

The Oak Island treasure hunt has long been hindered by the complexities of exploring underwater tunnels surrounding the Money Pit. Limited visibility, due to the dark turbid murky waters, and treacherous conditions have impeded progress and thwarted the team's efforts to unveil the island's secrets. Countless attempts have been made over the years to navigate subterranean structures, but significant breakthroughs have remained elusive. The team's challenge lies in deciphering the direction of the tunnel by lowering a small camera down a borehole, designated as M16.25, situated over 100 feet below the surface and in near total darkness. With the absence of light, the team faces the challenges of water distortion, color distortion, and wooden tunnel obstacles, making it imperative to find a way to illuminate the path and uncover the hidden treasure.

In Season 10 Episode 1, Terry Matheson and historian Paul Troutman oversee the drilling of Borehole M16.25 in hopes of discovering further evidence of a 103-foot-deep tunnel. As anticipated, drillers Mike Tedford and Colton Robinson encounter a void bound by wood at the dark depth of 103-107 feet below the surface, suggesting the presence of a man-made tunnel. Motivated by this discovery, Marty Lagina instructs the team to retrieve the camera and lower it down into the tunnel, presenting them with the first-ever opportunity to witness an underground structure with their own eyes.

#### The Solution: ProHawk Vision – Patented Computer Vision Restoration

**P**roHawk Al's state-of-the-art computer vision restoration technology emerges as a promising solution to the hurdles faced in exploring the underwater tunnels. Leveraging advanced algorithms and machine learning, ProHawk AI's system enhances video quality, eliminates visual distortions caused by water turbidity, and provides unparalleled clarity when examining submerged structures. By integrating this technology with the team's existing underwater cameras, the team gains unprecedented visibility, enabling them to thoroughly examine the underground structures with newfound precision.

As the team is reviewing the original video, Rick Lagina indicates, "There's two things, it's either two separate beams, or it's a collapse. I'm not sure, it looks like it suffered some kind of catastrophic break. So that would be my guess."

Scott Barlow notices, "We just don't have the light to see where that tunnel might go and what might be in there."

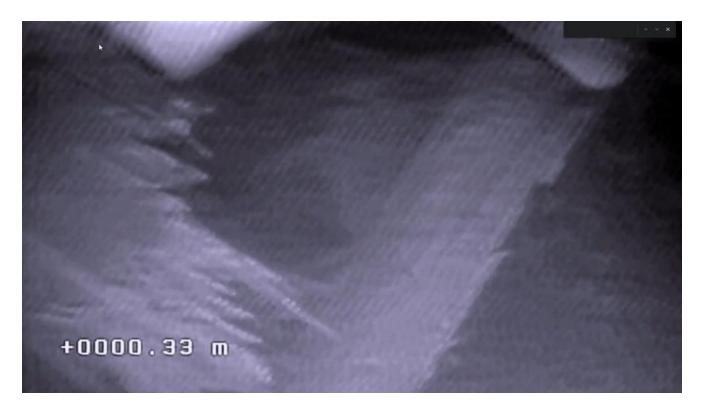
Scott Barlow and surveyor Steve Guptill proceed to lower a specialized underwater camera down Borehole M16.25. Rick Lagina says, "As the camera is lowered down into the hole, I think we all are hopeful we will have a real Ah-Ha moment." The camera, equipped with a 360degree view, enters the void at a depth of 32.06 meters, or 105 feet. Capturing footage of broken timbers, vertical wooden dowels used as fasteners, and a void, the team gains valuable insights. However, the lack of sufficient lighting hampers their ability to ascertain the tunnel's destination and what lies beyond. To overcome this challenge, they send the recorded video to ProHawk for analysis, with the expectation of enabling Marty to obtain a clear view of the footage.



Paul Troutman tells the team, "We should definitely send the video to ProHawk, so they can clean the video up. Maybe get through the sand and silt and get a better look at the structure."

The following morning, the Oak Island team assembled in the War Room, with Marty Lagina joining via video conference. Eager to share the footage collected. They showcase the original murky video captured by the camera, followed by the restored video made possible by ProHawk AI. As the video transitions to better clarity, the team exclaims, "This is the enhancement from ProHawk."

Marty's reaction of "Wow" highlights the impact of ProHawk AI's revolutionary software, which transforms murky images into high-resolution clarity. With this enhanced footage, the team confirms the presence of a broken timber and deduces that the ceiling had collapsed, causing the casing to descend into the tunnel. This discovery holds immense significance as it may lead to the actual location of the original Money Pit.



Equipped with the original and crystal clear ProHawk AI video feeds, the treasure hunters embark on an exciting expedition to investigate the newfound tunnel in the Money Pit area. They review the ProHawk AI-enhanced footage of the void intersected by M16.25 and discuss conducting a sonar scan to further explore the tunnel. Empowered by ProHawk AI's Computer Vision Restoration software, they penetrate deeper into the tunnels and capture high-resolution footage, unraveling architectural features, peculiar markings, and potential artifacts within the submerged tunnel.

#### The Results:

ProHawk Al's Computer Vision Restoration emerges as a game-changer for the Oak Island treasure hunters. For the first time in the show's history, the Fellowship gains a clear view of an underground structure, unearthing crucial clues that bring them closer than ever to solving the island's 227-year-old mystery. The improved footage facilitates the identification of significant architectural features, peculiar markings, and potential artifacts within the tunnel, reigniting excitement and revitalizing the team's determination.

The integration of ProHawk AI's Computer Vision Restoration technology marks a significant leap forward in the Oak Island treasure hunt. By providing superior visibility in underwater tunnels, the Fellowship gains access to previously inaccessible areas and garners invaluable insights into the island's enigmatic history. The success witnessed paves the way for further collaboration between ProHawk AI and the Oak Island team, holding the potential for continued advancements and groundbreaking discoveries in upcoming episodes.

The Curse of Oak Island's use exemplifies the revolutionary impact of ProHawk AI's Computer Vision Restoration technology. By conquering the long-standing challenges of exploring underwater tunnels near the Money Pit, the team acquires unprecedented clarity and makes significant strides in unraveling the ancient mysteries of Oak Island. ProHawk AI's solution showcases the immense potential of AI-enabled computer vision restoration in solving historical enigmas along with other numerous applications.