BRITANNIA'S GOLD LTD

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Project Triton – Cluster 1 Survey

Britannia's Gold is very pleased to announce that survey operations on the first cluster of shipwrecks has now successfully completed. Over the previous weeks the survey team of 37 personnel has worked around the clock to locate, identify and survey the targets using state of the art marine survey equipment.

Will Carrier, BGL's Operational Director said *"Mobilisation on to the charter vessel was intense and time consuming due to the vast amount of our survey equipment requirements. However the team worked faultlessly with the integration ensuring everything was completed ahead of the vessel's departure from port. A brief stop in transit to the first location allowed for the Remotely Operated Vehicle (ROV) to be 'wet-tested' and for the survey equipment to be accurately calibrated. Positional data for the shipwrecks supplied by our research department was excellent, allowing us to arrive at the given coordinates, dive the ROV and immediately commence operations. We were able to gather all the information we set out to obtain within the given charter period, together with reassuring ourselves that the wrecks remain intact with no visible evidence of previous salvage attempts".*

Using a Dynamically Positioned (DP) vessel as the work platform BGL made numerous dives to the various shipwrecks using a procedural approach. This entailed deploying the ROV to a depth shallower than that given for the wreck and engaging the onboard multibeam to 'sweep' the coordinate locations, thus giving a generalised 3D image of the wreck and its surrounding areas. This also identifies the bearing of the shipwrecks which is important to the team during the closer visual inspections. Using original shipbuilders plans as reference, the engineers were able to superimpose AutoCAD replicas into the survey navigation systems which gave the ROV pilots and surveyors accurate representations and also aided in identifying points of interest on the targets. After completing 'as-found' and General Visual Inspection (GVI) using HD and Silicon Intensified Technology (SIT) video cameras as the recording medium, the team engaged the acoustic multibeam system, conducted low level sweeps of the wrecks to generate highly detailed 3D fly-by movies and images capable of being manipulated in a software environment.

Seb Lacombe, BGL's Senior Salvage Engineer added *"The generation of the 3D models and implementation into a software package is immensely important to us, giving us exact information as to how the wrecks reside today. Furthermore, we can superimpose the 3D model into the subsea navigation system, thereby clearly representing the wreck, and the positions of ROV's and all the salvage tooling in a "real-time" software environment during the salvage phase. This coupled with real-time 3D SONAR becomes essential when physical visibility becomes effected through turbidity in dark waters".*

Further data is collected during the survey phase relating to the environmental and geophysical conditions at the time, such as seabed consistency and state, currents, scour and surface conditions, all of which is closely analysed together with the wreck survey data and addressed ahead of the salvage phases. BGL is now assessing all results and planning the forthcoming salvage phase of the project.

Will Carrier | COO | Britannia's Gold Ltd