EXPL

NOAA Office of Ocean Exploration Quick Look Report

Expedition Title: Search for Trouvadore Award # NA06OAR4600103

Results (please check all disciplines in which this cruise collected data)	Details (please describe any novel discoveries in the discipline, answers such as "possible, awaiting data analysis" and "no apparent discoveries" are acceptable)
Bathymetric Mapping □ Yes □ No	(please note total area mapped and technology employed, e.g. multibeam, side scan, etc.)
New Species Discovered	(please note number, type, and significance , i.e. radically new vs. slight adaptation of known species)
Bio-prospecting □ Yes □ No	(please note number, type, and potential use of new compounds discovered)
Habitat Range Extended	(please note species discovered in new habitats and how far from previous range were they found)
Chemical Processes □ Yes □ No	(please note new or unusual chemical properties such as methane seeps, hypersaline pools, vents, etc. observed)
Geologic Processes □ Yes □ No	(please note new or unusual geologic processes that may impact scientific understanding of the region)
Physical Processes	(please note new or unusual oceanographic processes that may impact scientific understanding of the region)
Sub/ROV/AUV Dives	(please note name, type, and cumulative hours of bottom time for each platform / if available please provide average working time per dive for each platform / please note if new depth records were set)
New Technology □ Yes □ No	(please note any new tools developed for or during this cruise, also identify first use of an existing technology in a new application)
Maritime Cultural Heritage x Yes □ No	(please note discoveries impacting knowledge of the past, i.e. number and type of shipwrecks) An iron-hulled wreck, anchors, jettisoned railroad equipment from the site of a ship stranding, a modern sailboat, and an early 19 th -century sailing ship. Some anomalies located during the survey were not tested because they were too deeply buried and were outside the scope of our permit, which was restricted to the Black Rock Wreck site.
Outreach x Yes □ No	(please describe outreach channels, e.g. Web, port call, etc., used in this project) Two web sites: www.trouvadore.org, www.slaveshiptrouvadore.com TV coverage in the TCI including promotional DVD before project (local TCI station) TV interviews after project (local TCI station) Radio interview after project (local TCI station) Newspaper articles before and after project (Gainesville Sun, July 8 and July 24, 2006)
Students Involved x Yes □ No	(please note the number and level of students on the expedition) One student intern from the international non-profit School for Field Studies (<u>www.fieldstudies.org</u>) participated in all aspects of the project. The goal was to build stronger ties to the Turks & Caicos Islands campus and to provide an opportunity for integrating environmental considerations during the survey of the near pristine coral reef ecosystem and lagoon of East Caicos
Multidisciplinary □ Yes □ No	(please identify the formal disciplines represented in the science party)
Exploration of New Regions x Yes □ No	(Please note if the area of operations had been previously studied, if so please check no and approximate as slight, moderate or significant, the level of knowledge before the cruise) Prior to 2004, the area had no systematic examination by archaeologists or marine scientists, so knowledge of the area was slight. The 2006 survey greatly expanded the 2004 study and included areas that were not previously studied.

OCEAN EXPLORATION QUICK LOOK REPORT

Award Number: NA06AOR46000103

PROJECT TITLE

The Search for *Trouvadore*

PRINCIPAL INVESTIGATORS AND INSTITUTIONS

Dr. Donald H. Keith, Ships of Discovery Mr. Nigel Sadler, Turks and Caicos National Museum

EXPEDITION TITLE

Search for Trouvadore 2006

EXPEDITION DATES AND ITINERARY

JUNE-JULY DATES	24 - 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22- 25
MOBILIZATION, PREPARATION	2														
ASSEMBLE TEAM ON GDT		А													
LOAD EXPLORER, SAIL TO EAST CAICOS, FIND SUITABLE MOORING			А												
SET UP WORK STATIONS, LAUNCH BOATS, TEST EQUIPMENT				А											
FILMING		3	3	3	3	3	3	3	3	3	3	3	3		
MAGNETOMETER SURVEY				3	3	3	3	3	3	3	3				
TOWING AND FINDS RECORDING				4	4	4	4	4	4						
TEST EXCAVATION OF BRW				4	4	4	4	4	4	4	4				
TEST EXCAVATION OF SITE "T-1"									3	4	4				
BACKFILL ALL TEST EXCAVATIONS												8			
BREAK DOWN BOATS, RECOVER BUOYS, DEPART EAST CAICOS												А			
UNLOAD EXPEDITION ON GDT													А		
DE-MOBILIZATION OF PERSONNEL													А		
DE-MOBILIZATION OF EQUIPMENT														3	3
NUMBER OF BOATS NEEDED				4	4	4	4	4	4	4	4	4			
NUMBER OF PEOPLE NEEDED	1	А	А	14	14	14	14	14	17	14	14	А	А	3	3

A = All

Numbers = Number of people required for each operation

CHIEF SCIENTIST AND INSTITUTION

Dr. Donald H. Keith, Ships of Discovery

CO-SPONSORS/PARTNERS/PARTICIPATING ORGANIZATIONS

Conservation Fund of the Turks and Caicos Islands Corpus Christi Museum of Science and History Dayton Foundation Department of Environment and Coastal Resources (DECR, TCI) Friends of the Turks & Caicos National Museum KUHT, HoustonPBS Ocean Exploration Grant Program San Francisco Foundation Ships of Discovery Teddy Foundation Turks & Caicos National Museum Turks and Caicos Islands Tourist Board Windward Media

VESSEL IDENTIFICATION

Caribbean Explorer I

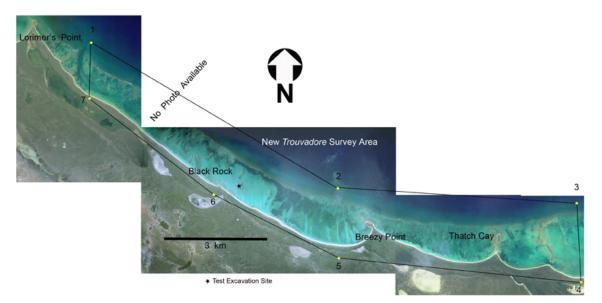
PRIMARY EQUIPMENT

Magnetometer and positioning equipment Marine Magnetics Explorer Mini Magnetometer w/ 50m (164ft) cable Trimble DSM 232 GPS Receiver w/ Antennae HiPac navigation software Oziexplorer software Garmin handheld Map 60c GPS receivers Keene Engineering 4" induction dredges with 5 hp Honda gasoline engines Mercury HD 430 inflatable boats, outboard engines SCUBA Apollo Diver propulsion vehicles Diver tow-boards High-definition video Sony HDW-700/1080 HD Camcorder

GEOGRAPHIC AREA OF OPERATIONS

"North coast of East Caicos Island"

19Q 233964 2407920 NW corner, 19Q 238868 2405313 N middle, 19Q 243729 2405034 NE corner, 19Q 243945 2403566 SE corner, 19Q 238884 2403772 S Breezy Point, 19Q 236416 2404980 NE corner, 19Q 233920 2406964 SW corner



Survey Area Search for Trouvadore, East Caicos

SUMMARY OF EXPEDITION OBJECTIVES

- 1) To complete a magnetometer survey of the search area
- 2) To complete the visual tow-board survey begun in 2004
- 3) To test excavate the Black Rock Wreck discovered in 2004
- 4) To film every aspect of the project in high-definition video

MILESTONES ACHIEVED

Key findings include:

1) The BRW is much larger, more deeply buried, and better preserved than expected

2) Large ship structures detected by the magnetometer 150 m East of the BRW appear to be associated with the BRW

3) While other objects such as anchors, debris, an iron-hulled wreck, jettisoned railroad equipment, and a modern sailboat were found, there were no other remains that could represent a large, early 19th-century sailing vessel within the search area.

SAMPLE LOG ENTRIES

Thursday, July 13 – Assignments and Teams

Dredge Team: James, Don [Leader], Randy (boat captain)

All day. Be prepared to measure and draw.

U/W Camera Team: Jenn, Levardo (boat captain), Toni [leader]

All day. Double duty with dredge team.

Mag Team: Mitch (boat captain), Jason [leader], Michael

All day. Double gas supply. Relay messages through dredge team as needed.

Away Team: Dylan, Angelie (boat captain), Nigel [leader], Johnny. Return to CEX1 for lunch. Work inside reef if too rough outside Surface Camera Team: Fujio, Richard [leader], Ronnie Work with Away Team, CEX1 crew

AM Briefing

Worked too late yesterday. All teams back to Explorer no later than 5:30 today.Mag Team should leave as soon as possible. All other boats wait until Mag Team has departed.

•Distance between mooring and work areas are too great to permit return to Explorer for lunch. All teams have to request "to go" lunches from galley on night before lunches are needed.

New pass through reef needs two more buoys to make it fool proof
Mag team and Dredge team need to switch boats-30 hp engine uses too much fuel for all-day Mag work.

•Away Team to survey E of Thatch Cay to stay out of Mag Team's way.

PM Briefing

• Reece repaired 30 hp Suzuki engine fuel leak and idle problem.

•Mag team's lap-top crapped out–Fujio loans them his so they could continue in the afternoon. Sea spray shelter for electronics was improved. Sea state confined mag team to inside lagoon E of Thatch Cay in afternoon where they established a DGPS base for that part of the survey.

•Main mooring placed on the BRW site using the "nuclear reactor" Levardo spotted on the beach near Breezy Point. It's stainless steel, very heavy, and studded with wires and pipes coming out at strange angles–just right for anchoring in the sand and tying a mooring buoy to.

All tools and induction dredge hoses were deposited on the site yesterday, so all we had to do today was connect them up to the Honda pump on board the dredge boat. Started clearing sand from Test Pit 1. Choppy sea caused oil level sensor in Honda pump to cut power frequently. Must disconnect before tomorrow.
Sea state restricted the Away Team to the area East of Thatch Cay. High tide allowed them to cross over the reef to survey the very shallow waters of the lagoon in the morning.

SUMMMARY OF DIGITAL DATA COLLECTED

High-definition video = 18 hours, about 30% underwater footage Magnetometer, positioning and mapping = 50 MB GPS mapping and tracking = 6 GB Digital images = 4 GB

SUMMARY OF OUTREACH AND EDUCATIONAL ACTIVITIES

Two Web sites: www.trouvadore.org, www.slaveshiptrouvadore.com TV coverage in the TCI including promotional DVD before project (local TCI station) TV interviews after project (local TCI station) Radio interview after project (local TCI station) Newspaper articles before and after project (Gainesville Sun, July 8 and July 24, 2006)

THOUGHTS FOR THE FUTURE

Various samples removed from the site have been sent to specialists for identification: **Wood**. Samples were taken from different timber "sets" of the hull: outer planking, keel, garboard, tree-nails, stringer, frames, etc. If one or more of these samples turn out to be "exotic" they may suggest a geographical area where the ship was built.

Coal. Some coal bears distinctive characteristics allowing it to be traced to its source.

Ballast stone. The specimen we recovered appears to be basalt, a type of stone which has been exhaustively studied worldwide and can be sometimes traced to region of origin.

Seed. A single large pit or seed found between the ship's frames could suggest origin or voyage history.

Ceramics. The three sherds recovered from the site are all the same type of ceramic, but may not be particularly diagnostic. In any case three sherds–possibly from the same vessel–do not constitute conclusive evidence of nationality or nature of the ship's last voyage.

At this point the Search for *Trouvadore* project must wait for the results of the sample and artifact analyses in order to establish if there is a possibility that the Black Rock Wreck is *Trouvadore*. Given the limited extent of the test excavations and the relatively unremarkable nature of the samples and artifacts recovered, it is unrealistic to expect a definitive result from the analyses alone. More telling, perhaps, is the fact that the Black Rock site is the *only* example of a large, wooden-hulled sailing ship wreck on the North coast of East Caicos. It is tempting to make the connection between *Trouvadore* and the Black Rock Wreck on the weight of this evidence alone; however, that is not sufficient. In the words of Sherlock Holmes, "Extraordinary claims require extraordinary evidence," and so far we do not have that evidence.

The documents relative to the *Trouvadore* story tell us very little about *Trouvadore* itself. We know that it was a brigantine (two masted vessel) of about "111 Tons burthen" built some time before 1841. It was capable of carrying at least 200 people, required a crew of at least 20, and "the net proceeds of the hull and materials" salvaged was £71 3/5. While the excavated physical remains of the Black Rock Wreck are consistent with this description, they are not unique. They could be those of any similar-size ship built a century earlier or half a century later. According to the dispatches of the US Consul's office on Grand Turk, there are three other ships that wrecked near Breezy Point in the 19th century. Counting *Trouvadore* there should be the remains of four large sailing ships on the North coast of East Caicos, yet we found only one. How can this be? Were three of the ships re-floated or completely salvaged, leaving nothing behind? If so, which three ships were they? Is the Black Rock Wreck one of these vessels rather than *Trouvadore*? How can we tell the difference?

The strategy we intend to follow to answer these questions is (1) continue to pursue archival research, (2) look for clues to the BRW's nationality, vessel type, origin, mission and identity

through analysis of the samples, artifacts, and construction features of the ship's hull, and (3) based on the results of these efforts to determine if there is sufficient reason to continue excavation of the BRW site. If we can determine that the BRW is *not Trouvadore* then we have no reason to continue either the survey or the excavation of the BRW. On the other hand, if there is some evidence to suggest that the BRW *could be Trouvadore*, we must consider a third season during which all effort would be concentrated on further test excavation of the BRW. The archival research effort has been broadened to include the three other vessels known to have wrecked near Breezy Point.

In any case the results of the surveys and test excavations are now part of the Museum's inventory of sites of historical and archaeological significance in the Turks and Caicos Islands, an asset that will always be available to the Department of the Environment and Coastal Resources and other authorized government entities.

SUMMARY OF EXPEDITION OPERATIONS

Because the project's license included permission to continue its survey of the North coast of East Caicos, as well as to test excavate and to collect samples and diagnostic artifacts for analysis, archaeological work force was split into four teams to tackle the four objectives simultaneously.

Magnetometer Survey

Although operating the sensitive electronic magnetometer and positioning equipment from a 14foot inflatable boat was challenging, the magnetometer survey was completed successfully. Ships of Discovery is currently awaiting a full report from the contractor, but one of the targets detected by the magnetometer and tested by the archaeological team appears to be part of the Black Rock Wreck's debris field. The hull remains and iron artifacts in this location were completely buried in deep sand and hence were invisible to the team conducting the towboard survey.

Towboard Survey

The towboard survey, was highly successful despite rough seas that made the task more difficult and dangerous. Among the team's accomplishments were the discovery that one suspected shipwreck site is really a "train wreck"–evidently a place where a ship carrying railroad equipment was stranded and forced to jettison tons of railroad wheels and axles to escape the reef. The team also found the remains of a relatively modern sailboat in very shallow water at the extreme northwestern end of the survey area.

Test Excavation of the Black Rock Wreck

We were relieved to find that the "Black Rock Wreck" site we discovered in 2004 had not been disturbed in the intervening two years. Within a few minutes from commencement of test excavations we discovered that the site was larger, more deeply buried and better preserved than we had thought. Our original objectives with respect to test excavation of the BRW were to:

1) tow magnetometer over site to develop a "baseline profile" and to see if large concentrations of iron artifacts were in the immediate area.

2) locate bow and stern ends of the keel.

3) excavate an exploratory trench transversely across the hull to discover width of vessel amidships.

4) locate the vessel's mastercouple (widest part of the hull).

5) expose the "stempost."

- 6) recover wood samples from scantlings (the ship's major structural timbers) See Appendix I.
- 7) record dimensions of the scantlings.
- 8) uncover and document construction features of the hull.

9) recover potentially diagnostic artifacts. See Appendix II.

Although we were not able to locate the bow or stern ends of the shipwreck or the mastercouple, we did accomplish all the other objectives which gave us a much better idea (although still just an approximation) of the ship's original size.

Photographic and Video Coverage

All aspects of the project on the surface and below water were filmed in high-definition video. . Photographic stills were taken by many members of the project and compiled in digital format for distribution to the Museum and the DECR.

APPENDIX I: SAMPLES AND SPECIMENS RECOVERED FROM THE BLACK ROCK WRECK

Ethnobotanical Sample Inventory

Site: "Wooden Shipwreck" aka "Black Rock Wreck", East Caicos, Turks & Caicos Islands

Note: All samples collected from one of two areas: 1) Area 1 in association with the centerline components, or 2) Area 2 in association with the cathead timber. Refer to field notes for geographic location of each area. Samples taken to Texas for analysis are held by Ships of Discovery. All wood left at the TCNM conservation lab stored wet in freshwater treated with bleach. Water is from a rainwater cistern at the TCNM. Samples brought to Texas for analysis, were NOT treated with bleach or a fungicide.

Wood samples collected from major frame components as indicated below

Sample #:	BRW-EB001
Description:	Frame
Notes:	Collected Area 1, test area at 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed w/freshwater, stored wet.
Sample #:	BRW-EB002
Description:	Treenail, several pieces
Notes:	Collected area 1, test area at 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed w/freshwater, stored wet.
Sample #:	BRW-EB003
Description:	Longitudinal stringer
Notes:	Collected area 1, test area at 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed w/freshwater, stored wet.
Sample #:	BRW-EB004
Description:	Keel
Notes:	Collected area 1, test area at 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed w/freshwater. Stored wet.

Sample #:	BRW-EB005
Description:	Hull planking (outer)
Notes:	Collected Area 1, test area 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed w/freshwater. Stored in freshwater.
Sample #:	BRW-EB006
Description:	Treenail #2
Notes:	Collected Area 1, test area 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed in freshwater, stored wet.
Sample #:	BRW-EB007
Description:	Garboard strake
Notes:	Collected Area 1, vicinity of 14-16m on baseline. Taken to Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Sample #:	BRW-EB008
Description:	Keel #2 (in bag marked K&L)
Notes:	Collected area 1, test area at 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Treatment.	Kinsed neshwater, stored wet.
Sample #:	BRW-EB009
Description:	Unknown wood, 3 pieces. From ship timbers.
Notes:	Collected area 1, test area at 14-16m on baseline. To Texas for analysis.
Photo:	No
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Other wood sa	amples:
Sample #:	BRW-EB010
Description:	Pit/seed, 1 piece
Notes:	Collected Area 1, vicinity of 14-16m on baseline. Taken to Texas for analysis.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Sample #:	BRW-EB011
Description:	¹ / ₂ round, split wood; approximately 30 pieces.
L	

Notes:	Collected Area 2 in direct association with cathead. Approximately 6 pieces taken to Texas for analysis. Remainder left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Sample #:	BRW-EB012
Description:	Burned wood, approximately 30 pieces.
Notes:	Collected Area 1, test area 14-16m on baseline. Several pieces taken to Texas for analysis. Remainder left at TCNM.
Photo:	No
Drawing:	No
Treatment:	Rinsed w/freshwater. Stored in freshwater.
Recorded by:	Toni L. Carrell
	July 24, 2006
	Turks & Caicos National Museum

APPENDIX II: ARTIFACTS RECOVERED APPENDIX II: ARTIFACTS RECOVERED FROM THE BLACK ROCK WRECK

Artifact Inventory

Site: "Wooden Shipwreck" aka "Black Rock Wreck", East Caicos, Turks & Caicos Islands

Note: All samples collected from one of two areas: 1) Area 1 in association with the centerline components, or 2) Area 2 in association with the cathead timber. Refer to field notes for geographic location of each area. Samples taken to Texas for analysis are held by Ships of Discovery. All wood stored wet in freshwater treated with bleach in TCNM conservation lab.

Artifact #: Description: Notes: Photo: Drawing: Treatment:	001 Copper sheathing, 6 pieces, 1 tack Collected area 1, test area at 14-16m on baseline. Left at TCNM. Yes No Rinsed w/freshwater. Stored in freshwater.
Artifact #: Description: Notes:	002, 003 Ballast stones, 2 pieces Collected area 1, test area at 14-16m on baseline. One piece to Texas for analysis, one piece left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored dry.
Artifact #: Description: Notes: Photo: Drawing: Treatment:	004 Concreted 'ring', possible thimble, 1 piece. Collected area 1. Left at TCNM Yes No Rinsed w/freshwater. Stored in sodium carbonate.
Artifact #:	005, 006, 007
Description:	Coal, 3 pieces. Taken to Texas for analysis.
Notes:	Collected area 2 in association with cathead and other large concretions. Also seen
	in Area 1.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed w/freshwater. Stored wet.
Artifact #: Description: Notes:	008, 009, 010 Ceramics, 3 pieces. Two body sherds (008, 009), one base fragment (010). Collected Area 1, at location of 'stem post'. All taken to Texas for analysis.

Photo:	Yes
Drawing:	No
Treatment:	Rinsed in freshwater, stored damp.
Artifact #: Description:	011 Glass bottle base with kick-up, green, 1 piece. "R. Cooper & Co. Portobello" on bottom.
Notes:	Collected on shore at Breezy Point. Left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored dry.
Artifact #: Description: Notes: Photo: Drawing: Treatment:	012 Curved wood piece, probable cant piece from cask. Several nail holes on outer (curved) edge. 1 piece. Collected Area 1, vicinity of knees. Location on basemap. Left at TCNM Yes No Rinsed freshwater, stored wet.
Artifact #: Description:	013 Cask stave; complete but broken into 3 pieces. Dimension: 108.5cm (42 3/4 in) long; 11 cm (4 1/4 in) wide; 2.2cm (7/8 in) thick.
Notes:	Collected Area 2. Left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Artifact #:	014
Description:	Bronze fastener, no head, 1 piece, 18cm long, tapered end, slight curve, square cross-section.
Notes:	Collected Area 1, at 14-16m on baseline. Left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Artifact #: Description:	015 Bronze fastener, no head, 1 piece, 11cm long, tapered end, straight, square cross- section.
Notes:	Collected Area 1, at 14-16m on baseline. Left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Artifact #:	016
Description:	Bronze fastener, with head, 1 piece, 38cm long, broken end, round cross-section.

Notes: Photo: Drawing: Treatment:	Collected Area 1, at 22m on baseline. Left at TCNM. Yes No Rinsed freshwater, stored wet.
Artifact #: Description:	017 Bronze fastener w/head and washer, 1 piece, wood concreted to shaft, round cross- section, peaned both ends; 42cm long, 17mm diam.
Notes: Photo: Drawing:	Collected Area 1, at 14-16m on baseline. Left at TCNM. Yes No
Treatment:	Rinsed freshwater, stored wet.
Artifact #: Description:	018 Bronze fastener, 1 piece, tapered point, with head, straight, square cross-section, 19 cm long.
Notes: Photo:	Collected Area 1, at 14-16m on baseline. Left at TCNM. Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Artifact #: Description:	019 Bronze Fastener, 1 piece, tapered point, w/head, square cross-section, 15 cm long,
Notes: Photo:	wood present. Collected Area 1, at 14-16m on baseline. Left at TCNM. Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Artifact #: Description:	020 Bronze fastener, 1 piece, incomplete, square cross-section, 11 cm long, wood
-	present.
Notes: Photo:	Collected Area 1, at 14-16m on baseline. Left at TCNM. Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored wet.
Artifact #: Description:	021 Concretion with pinched ring on round-shafted eye-bolt fastener with key on tip, 2 pieces. Has 3 fasteners concreted to it: 1 round cross-section, 1 square cross-
Notes: Photo:	section, 1 square cross-section that has broken off (this is the second piece). Collected Area 2. Left at TCNM. Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored in sodium carbonate.

Artifact #:	022
Description:	Concretion with two pinched-ring eye-bolt fasteners. Small fastener has key on end. Both eye-bolts are round cross-section. Other miscellaneous fasteners
	attached. 1 piece.
Notes:	Collected Area 2. Left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored in sodium carbonate.
Artifact #:	023
Description:	Ballast, 1 very small piece.
Notes:	Collected Area 1, at 14-16m on baseline. Left at TCNM.
Photo:	Yes
Drawing:	No
Treatment:	Rinsed freshwater, stored dry.
Recorded by:	Toni L. Carrell
	July 24, 2006
	Turks & Caicos National Museum