QAR Field Operations – October 2006

Artifact Conservation & Documentation

Sarah Watkins-Kenney – QAR Project Chief Conservator
Wendy Welsh—QAR Assistant Conservator

I. Personnel:

At least two members of the QAR Conservation & Documentation (C&D) team will be on site for each day of field operations.

C&D Team:

Sarah Watkins-Kenney (SWK)	QAR Project Chief Conservator
Wendy Welsh (WMW)	QAR Assistant Conservator/(C&D Field Team Leader)
Valerie Grussing (VJG)	QAR Conservation Technician
Franklin Price (FHP)	Underwater Archaeology Technician
Anne Corscadden-Knox (ACK)	Underwater Archaeology Technician
Steve Lambert (S L)	Underwater Archaeology Technician
Johnny Masters (JPM)	Underwater Archaeology Technician
Linda Carnes McNaughton (LCMN)	Volunteer, Historian/Conservation assistant

III. Documentation ON SITE includes:

i TAGS-

- Mylar or Tyvek are available from C&D team.
- Must be tied to all artifact/concretions with cable ties so that tag lies on top surface as in situ. Provenance E & N taken to tag.
- QAR# marked in industrial permanent black marker on both sides of the tag – while tag dry. For Fall 2006 – tags will be pre-numbered.
- Additional information -marked in pencil (both types of tag can be written on with pencil underwater).
- Information that must be on each tag, attached to artifacts, before they are brought to the surface: QAR#.
- Additional information to be put on tag (either by field C&D or lab based C&D), Unit number in circle, E, N provenance, diver initials, date recovered.
- For ballast, dredge/sieve material – one tag should be place inside bag and one tied to outside of container as appropriate.

ii BAG & CONTAINER LABELS -

- Each bag should be marked on outside, in permanent marker, with Unit #, E&N provenance, QAR#.
- Each container should have duck tape label on outside listing QAR# of contents.

iii. ARTIFACT INVENTORY LIST

- Record of QAR.000# assigned – as assigned.
- No. of containers per QAR.000#
- Deposition (shore, transferred to QAR lab, etc)

iv C&D – ARTIFACT FIELD LOG -

- Main field record of: QAR# sequentially assigned – also includes Unit number, E, N provenance, Diver initials, basic object information, conservator initials etc.
- To be completed by C&D team as work done.

v C&D – DAILY LOG (NOTES) -

- To record daily – general C&D activity notes as well as additional comments on artifacts (noting QAR#) as needed.

vi ARTIFACT LAB SHEETS

- Record basic dimensions and sketch drawing for each artifact recovered as appropriate
- Record any conservation steps taken.
- Record deposition – location and dates of artifacts as moved from ship to shore to QAR lab.

vii CONSERVATION DATABASE

- Records to be entered on master artifact database held at QAR Lab in Greenville after artifacts transferred. At site C&D laptop will have latest version of artifact database for reference.

IV. Conservation and Documentation – Numbering:

The following applies to all artifacts studied & recorded in situ and those for which recovery –i.e. removal from site is deemed to be the most appropriate step -see QAR Full Recovery Plan Fall 2006 (Wilde-Ramsing et al). For consistency the C&D Field Team Leader (WMW) will be responsible for assigning QAR# s and for maintaining inventory of artifacts transferred from boat to shore and then shore to QAR lab.

i. In situ:

- Artifacts/ concretions being recorded in situ may be assigned **a general number** if tagging archaeologist is not available (e.g. Cannon – C1 etc; Anchors- A1 etc; Hoops - H1 etc).
- They may also be assigned **a Field/QAR #** whilst in situ if it is planned that they will be recovered in 2006. Conservation will assign the next sequential QAR# as appropriate when requested by diver/archaeologist.
- The concretion/artifact will be **tagged in situ** with a **MYLAR or TYVEK** tag, with **QAR# written on both sides with industrial permanent black marker.**

Tag to be tied to artifact/concretion with cable ties or line so that tag lies on top surface of object.

- Additional information (Unit #, provenience, recovery date, diver initials) will be added to the tag in pencil after the artifact has been recovered.

ii. Dredge/sieving:

- Retrieving and documenting artifacts recovered from dredge/sieving responsibility of C&D team.
- Diver/archaeologist must let C&D team know provenance (Unit # and E &N) of area being dredged before start and when changed.
- Each dredge area will be assigned a QAR.000#. Artifacts will be assigned sequential sub numbers (e.g. QAR601.001; 601.002; 601.003) once transferred to the QAR lab. If artifacts from same dredge area are separated, e.g. by material type for storage and transport, at site, each group will have the same QAR.000#. Designated C&D Field Team Leader will be responsible for maintaining record of number of containers per QAR# and their deposition.
- TAGS – each artifact or group of artifacts to have a TYVEK tag with: Provenance (Unit #, E, N); QAR#; date; diver initials – written in pencil.

iii. Ballast Stones:

- Diver/archaeologist must tag ballast or groups of ballast with TYVEK or MYLAR tag - with provenance (Unit #, E, N), diver initials, and date in pencil, before passing ballast over for processing.
- Each group of ballast from a particular 5x5 ft excavation unit will be assigned a QAR.000#.
- Individual ballast stones will not normally be given an individual QAR#. If they are it will be assigned a sequential sub numbers by C&D Field Team Leader (e.g. QAR601.001; 601.002; 601.003).

V. Artifacts and concretions recovery – Diver/archaeologist responsibility:

i. Dredging around artifacts and mapping each artifact in all units.

ii. The mapping archaeologist is the ONLY person who gives the ok to remove an object from a unit.

iii. Recovery of artifacts (bringing them to the surface) is the responsibility of diver/archaeologist/conservator.

iv. Artifacts should be recovered from site in lift containers of appropriate size, material and strength for the item being recovered. C&D team will provide a range of options.

v. Mapping Diver/archaeologist will correspond with the C&D team to provide exact provenience

- MYLAR or TYVEK tag tied to each concretion or artifact – with cable ties, or line. Tag to be marked with **QAR# pre-written on both sides with industrial permanent black marker.**
- Tag to be tied so that lies on top surface (as in situ) of artifact/concretion.

VI Artifacts and concretions processing – C&D team responsibility:

C&D team responsible for:

1. Documentation – including assigning field/QAR #, and logging all information including provenance, recovery date, diver initials in Artifact Field log.
2. First Aid Conservation Treatment.
3. Wet storage of finds.
4. Transfer of finds – a. from boat to shore storage at end of each day and b. from shore storage to QAR Conservation Lab in Greenville at the end of the week.
5. Keeping a Daily Log of conservation activities during field operation

On receiving the artifact sequence of actions likely to be:

i. Preliminary Documentation – at dive platform:

- Check that tag (marked with QAR#) securely attached to artifact.
- Place object in seawater in a container or wrap in wet foam and plastic – keep object wet at all times.
- Enter artifact information – QAR#; Provenience (Unit #, E, N, recovery date, diver initials) in C&D Artifact Field log.
- Inform diver/archaeologist of artifact field/QAR#
- Enter information in C&D Daily Log.

ii. First Aid Conservation – at dive platform:

- All artifacts (except ballast stones) to be kept wet at all times.
- Place artifact in seawater, in container appropriate to size and fragility of the object. E.g. plastic bag, plastic ex-food container, plastic bucket. If too large for container keep artifact wet by wrapping with wet cloth or foam and sealing in plastic sheeting or tarp. Ensure that long and/or large concretions/artifacts are appropriately supported – for example have a rigid support underneath when being lifted or transferred – eg from ship to dockside.
- As far as practical keep metals, organics, and in-organics (ceramics, glass, bone) in separate overall containers.
- As far as possible avoid any cleaning of artifacts. Any cleaning should be limited to gentle rinsing to remove loose sand or other non-artifact debris.
- Containers to be kept covered, and as cool as possible – e.g. not in direct sun if possible.

iii. **Secondary Documentation: at dive platform or at shore storage area (see D).**

- If circumstances permit take digital field photo of object and indicate that photo taken in Artifact log. Digital photo of artifact (with scale and field# in frame) – both sides as appropriate. Complete C&D Artifact Field Log.
- Record the following information on the lab sheet in pencil:
  - QAR # (Field # if assigned)
  - Recovery date
  - Recovered by
  - Provenience (Unit #, E, N)
  - Count
  - Basic description
  - Sketch with dimensions or 1:1 scale drawing/sketch on the reverse of sheet as appropriate.

Although more accurate, detailed information will be recorded once the artifact is at the QAR Lab. It is critical to record as much of the above as soon as possible on site, as a means of identifying the artifact in case it becomes separated from its labels.

iv. Transfer of Artifacts from boat to shore storage.

At the end of each day finds recovered will be transferred from boat to shore storage.

- C&D team responsible for listing and recording deposition of artifacts transferred.
- All finds must have TAGS with field/QAR# assigned before they leave the boat.
- No finds to be left on boat overnight.
- Water in transfer containers should be at minimum possible to keep artifacts wet – less water – lighter container. Artifacts should be padded as appropriate to minimize physical damage during transfer from boat to dockside.
- Conservator to note on Field Inventory where each artifact has been deposited.
- At storage venue: seawater in containers to be replaced with 50/50 seawater/tap water, if possible or tap water. Metal artifacts to be placed in c. 2.5% sodium carbonate solution in tap water if deemed appropriate by conservator.
- All containers to be kept sealed, covered, as cool and as dark as possible.

v. Transfer of Artifacts to QAR Shipwreck Conservation Lab. in Greenville.

- At the end of each field week C&D team will transfer all finds (unless otherwise instructed by QAR Project Manager, or QAR Field Director) to the QAR Lab. in Greenville.
- At least two people (conservators or conservator and/or other project member) to transfer the artifacts. State vehicle to be used.
- Artifacts should be padded in containers with wet foam as appropriate to minimize physical damage during transfer.
- Water in transfer containers should be at minimum possible to keep artifacts wet – less water – lighter container. Artifacts should be padded as appropriate to minimize physical damage during transfer from boat to dockside.

- All secondary level documentation (see C above) to be completed before artifacts are transferred.
- Each batch of artifacts transferred to the QAR Lab MUST have a copy of the appropriate pages of the C&D Field Inventory; the Artifact Field Log, and also copies of the Unit's Plans if available.
- At the QAR Lab the Artifact Field Log (dimensions, weights, photos as needed) and Artifact Lab sheets and other post recovery documentation will be completed – as described in Appendix I – Artifact Field to Lab Protocol Fall 2006.
- At end of Field Operation copies of Artifact Field Log, Daily Log, lab sheet for each artifact to be given to Field Director (CS) and to QAR Project Manager (MWR) as well as copies of any other paperwork – lists, notes, sketches etc, relating to the artifacts.

SWK &WMW
09-26-06

Appendix I

QAR Lab – Post Recovery Artifact Protocol, Fall 2006. SWK & WMW 09-26-06

Artifacts Arriving at Lab

- ❑ Check security of tag and any artifacts NOT labeled set aside for query
- ❑ Place a check in **RECEIVED** box once object has reached storage at the lab
- ❑ Try to determine any missing tag situations with what is not checked, if still questions ask field conservators

Artifact Processing

*Start to make Tank Inventory by writing down each number in a list; if you use the field list then there is too much room for ERROR! While making tank inventory list, complete tag information, weights and measurements

Tag Information

*Get info from Field Log—Write in Pencil on Tag

- ❑ Put Unit # in circle and E&N Coordinates in **right** top corner of tag
- ❑ Put Diver Initials in bottom **right**
- ❑ Put Recovery Date in bottom **left** corner

Weighing and Measuring

*Record this information initially in Field Log to make Lab Sheets easier

- ❑ Record all weights as Kilograms(Kg) unless too small, then record in grams(g)
- ❑ Measurements are taken in tenths of inches, usually to the nearest ¼ measurement

Photographing

- ❑ Objects that DO NOT have a field photograph need to be photographed
- ❑ Photograph objects on gray background with cm/inches scale
- ❑ Put the images in a folder on server and label it by date and then tank number
- ❑ Record that the object was photographed in the Field Log (Along with Green Activity Sheet)
- ❑ Each week the photos taken in the field will be removed from the laptop and put on file at lab to consult if any number mix-ups occur

Folders in Filing Cabinet

- ❑ Create folder for each new 000#
- ❑ Create an 'Artifact Lab Sheet Location' form for each folder
- ❑ Record on 'Artifact Lab Sheet Location' form which binder contains the lab sheet

Lab Sheets

- ❑ Complete lab sheet for all new 000#s—Put 'Y' in Field Log table when lab sheet is completed
- ❑ File the lab sheet in the binder marked 'Field Fall 2006'

Database

- ❑ Go into number on database and add accession # to lab sheet if not there
- ❑ Complete all fields in the database for each record
    - o In *General Provenience* use this form— Unit 10/06 #24 E80 N90
    - o In *Exact Provenience* put artifact's precise coordinates—otherwise use unit coordinates
    - o In *Conservation Material*—if concretion with glass and ceramic visible on outside—in 1st field put concretion and which ever is more visible put glass and ceramics in the 2nd and 3rd consmat fields
- ❑ Complete conservation steps/details for each record