

# **INSPECTION REPORT**

**James Rocks Anchor**

**Report-Department of Maritime Archaeology  
Western Australian Maritime Museum No. 176.**

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## Technical Data

**Site Name:** James Rocks Anchor

**Date lost:** ?

**Date of Inspection:** 31 October 2003

**Personnel:** G. Anderton & M. Gainsford.

**OIC:** Matthew Gainsford

**Approximate Location:** 50m off James Rocks and ca. 250m North of the *Omeo* wreck, Cockburn Sound.

**GPS:** Unable to take position

**Datum Used:** N/A

**Chart No:** Aus 117

**Lat:** 32°6'34''S **Long:** 115°45'11''E (James Rocks)

**File No:** Cabinets 3 & 4

**File Name:** (3)Aus  
Charts(4)Fremantle

**Sailing Directions:** From Fisherman's Harbour turn south and proceed down to Cockburn Sound. The Anchor lies approximately 200-300 metres north of the *Omeo* wreck site, ca. 50 metres from James Rocks out to sea.

**Compass Bearing:** From rock point on the beach

A. To small Island out from the rock point 275°

B. To north end of Garden Island 240°

C. To the end of North Mole 330°

**Sextant angles for A - D Above:**

Not taken

**Visual Transits:**

Not taken

**Site Photographs:**

Colour Digital Images, see Appendix  
A

**Site Conditions on inspection:**

Sea and Swell:

Flat sea, no swell

Surge:

No surge

Visibility:

Eight to ten metres

Current:

No current

Sea-bed coverage e.g. weed, sand :

Mainly sand covering. About 3-4 metres NW of the site a sea grass bed starts. Apart from this there are limited algae and scattered seagrass growth.

**Chemical Measurements:**

Temperature:

Not taken

Salinity:

Not taken

Ph:

Not taken

Dissolved O<sub>2</sub>:

Not taken

Corrosion Potentials (Reading and location): Not taken

**Biological Data:**

Colonising fauna/flora:

Sea squirts, sponges and green-brown algae.

**Site Condition and Integrity:**

Site seems to be in quite good condition. There is a covering of concretion that seems to be protecting the site quite well. There are some places where active corrosion is occurring, noted by the red-brown iron corrosion products. This is probably due to its location in a shallow well oxygenated environment.

**Management considerations :**

(i) Natural Forces: The seabed composition is mainly light yellow fine-grained sand. This is the dominant feature of the seabed where the anchor lies. However to the north-west, about 3-4 metres from the site there is a seagrass bed that extends into the distance. The site is not well buried. Some of an arm and a fluke are buried, as well as the top portion of the shank the stock and the ring. This site is in such a position that there would be seasonal change in its environment. It lies in shallow water close to shore therefore the movement of sands from storms would affect it significantly.

(ii) Present and future Human forces: This site is very accessible to divers. It only lies 50 metres from shore in three metres of water. The site however is not that attractive to divers and as such should not have a significant amount of diver pressure. School students frequent the site regularly during term but only snorkel on the site with supervision from Graeme Anderton. The only real threat to the site, is that if someone decides to raise the anchor for his or her purposes.

(iii) Projected General site Stability: The site in view of the above statements seems to be in good condition. There is a build up of concretion that should protect the artefact to a degree and this combined with build up of sand at intervals would increase its survival. Diver pressure seems limited, as it is not a high interest site, with students only visiting to learn about SCUBA diving and wreck diving. This site should remain for quite some time if not interfered with by humans.

### Chart Excerpt from AUS 117 Showing approaches to James Rocks

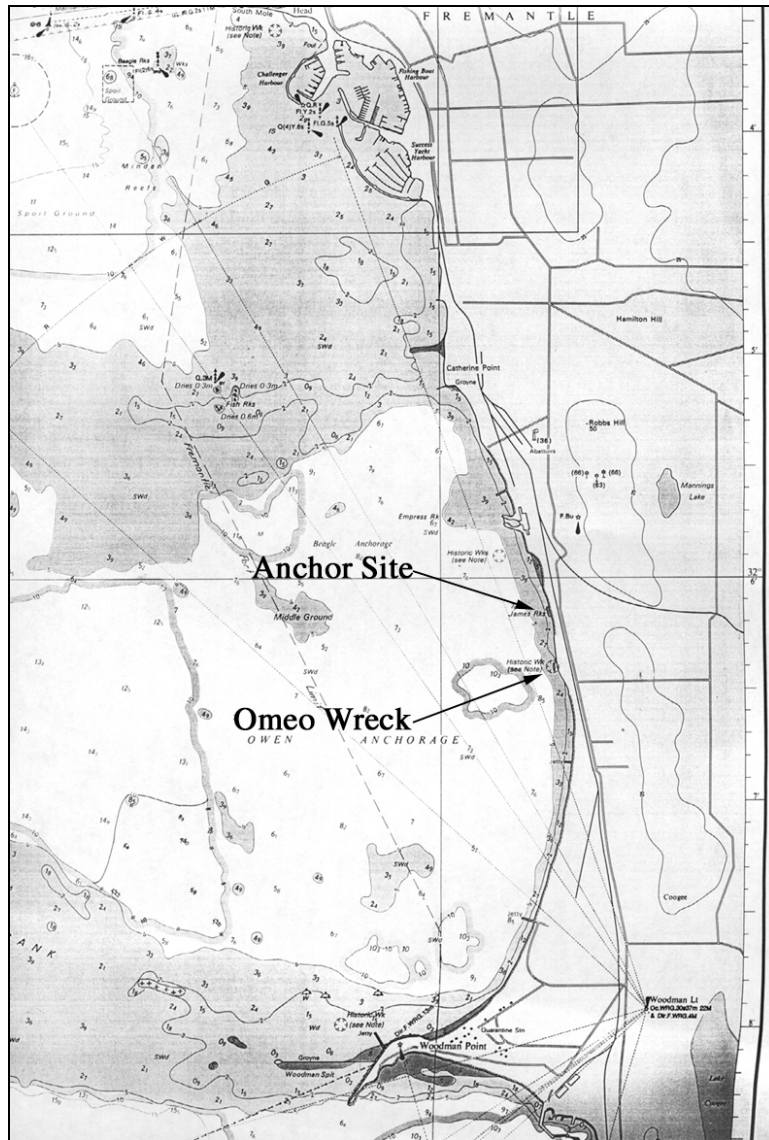


Figure 1: Approaches to Owens Anchorage.

## Description of Site

The site lies in three metres of water, ca. 50 metres off shore from James Rocks and ca. 200-300 metres north from the *Omeo* wreck site. The seabed is flat and dominated by sand with sparse patches of seagrass and algae close to the site. The anchor is covered in concretion and various fauna and flora. Approximately two-three metres north-west of the site a seagrass bed starts and continues out of sight. The site seems to be in good condition and the shape of the anchor is readily distinguishable as an Admiralty pattern anchor. It lies proud of the seabed apart from a fluke, some of the arm, shank and ring. Its profile is that it lies one metre proud of the seabed and as such should be easily spotted. There is another piece of iron located to the south-west of the site. This iron is amorphous and no other description can suffice. This iron is concerted also and is not distinguishable. The site can easily be reached from the shore by divers but does not offer much in the way of interest for the majority of modern divers.

## Plan of Site

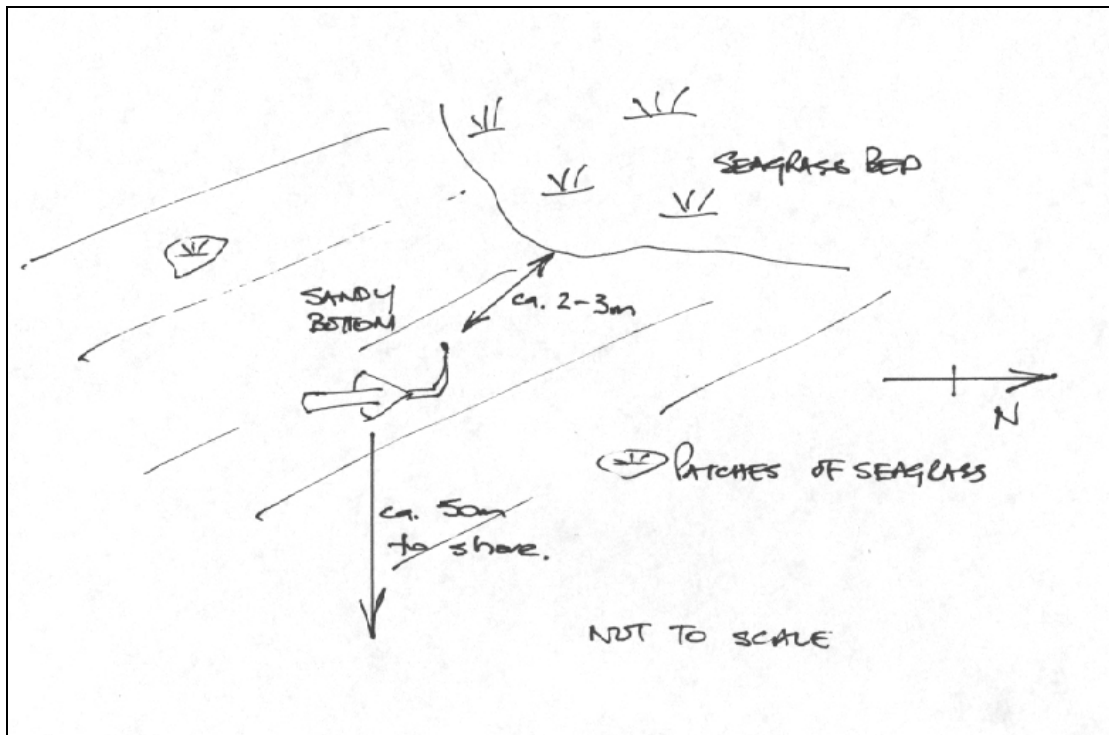


Figure 2. Seabed topography at the site.

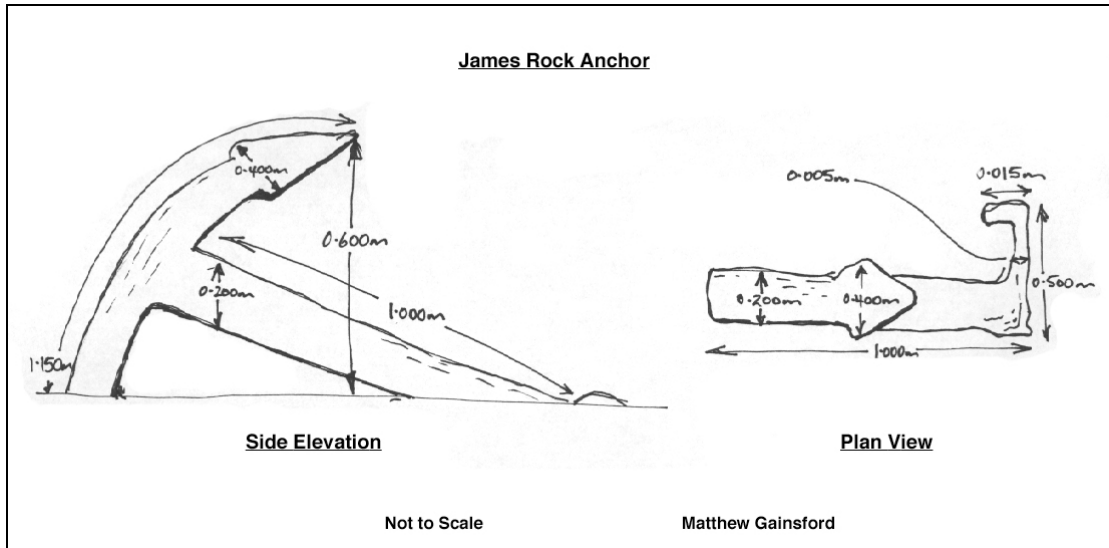


Figure 3. Dimensions of the anchor.

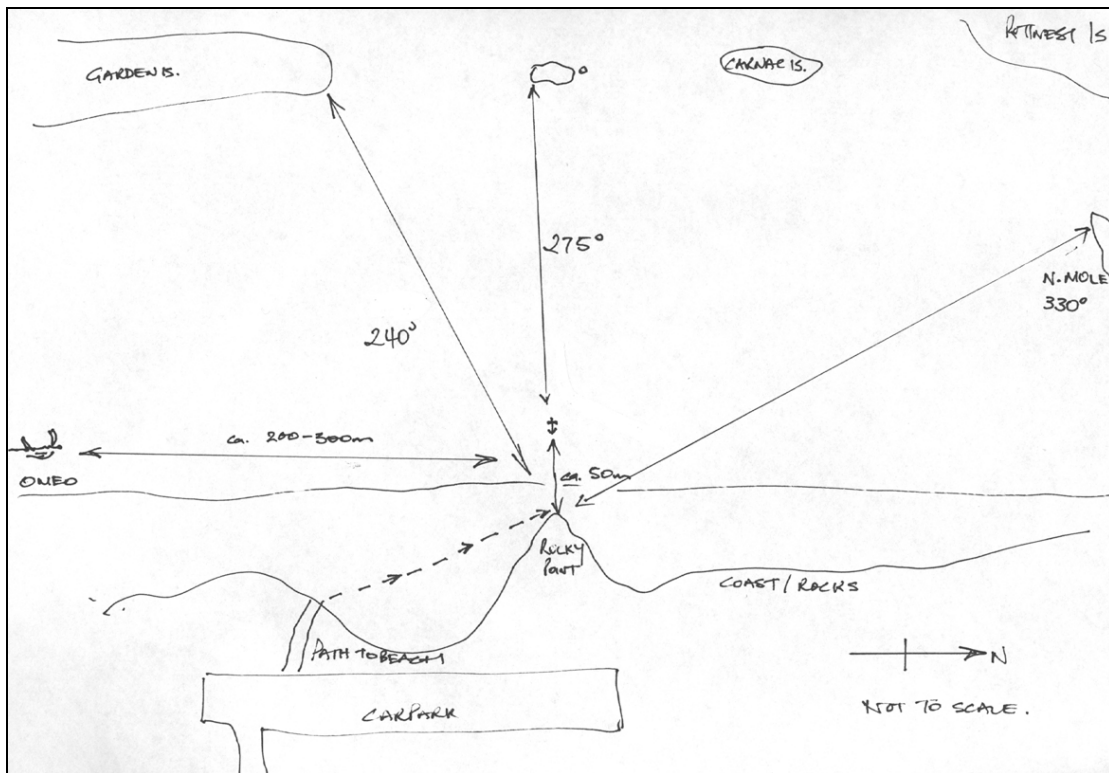


Figure 4. Compass directions and location.



## **Material Raised**

No material was raised from the site.

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## **Site Identification Comments**

The site appears to be an Admiralty pattern anchor. The history of the anchor is unknown but perhaps it was used as a mooring in the past for vessels anchoring in Owens Anchorage. The anchor is ca. one metre in length, which is not large but is identifiable as an admiralty pattern anchor from its shape and dimensions. Its size indicates that it was probably used for the mooring of vessels to ca. 200 tons.

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## **Wreck- site History**

(i) Contemporary Salvage: There is no contemporary salvage evident at the site. The anchor is intact and shows no evidence of tampering.

(ii) When found in modern times and by whom: Found, 18 December 2002 by Graeme Anderton.

(iii) Modern Salvage: No modern salvage is noticeable at the site.

(iv) Casual Diver interference: The site is visited regularly by students, but the site does not suffer from this as they consist of mainly snorkelers who are being taught by Graeme. There is no evidence of casual diver interference at the site.

(v) Modern diver use: Classes of students are taken to the location quite regularly; by Graeme Anderton; who runs wreck diving courses and the like.

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## **Assessment of Site Significance**

(i) Archaeological: Since there are relatively numerous examples of this anchor type there does not seem to be a lot of archaeological significance to the anchor. Perhaps the only significance is its location and what its purpose was.

(ii) Technological: This represents a type of anchor not dissimilar than other anchors used before this type was developed. Its development is based on previous models that do not vary a great deal. Also we have a significant amount of information pertaining to this type of anchor and as such it may not add too much in the way of unknown technology.

(iii) Scientific: Site formation processes at the site could add to the knowledge we already have on the subject. As an anchor in a shallow sand covered site, close to the shore information could be gleaned as this could represent an unique site not seen before, as far as site formation processes are concerned.

(iv) Educational: As an educational tool the site has already proven itself. Graeme Anderton regularly takes students to the site as part of his wreck divers course at South Fremantle High School.

(v) Recreational: Due to the lack of things to observe the site does not have a lot in the way of recreational significance.

(vi) Cultural: There also is not a lot of cultural significance apart from the questions why is it there, what was it used for, and who used it?

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## **Management Proposals**

The anchor situated offshore from James Rocks, Cockburn Sound is not in need of a significant management strategy. The anchor lies in water that does not suffer from high diver interference or diver pressure. The site seems to be relatively stable from the inspection and does not need a conservation strategy either. It represents a type of anchor where information abounds to its construction with many extant examples that are on display around the world. The author believes that the best strategy for this artefact is for it to remain *in situ* with minimal intervention.

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## **Recommendations**

There are no recommendations other than for the anchor to remain *in situ* in its present location.

## References

Anderton, G., 2003, Personal Communication.

## **Appendix A: Site Photographs**

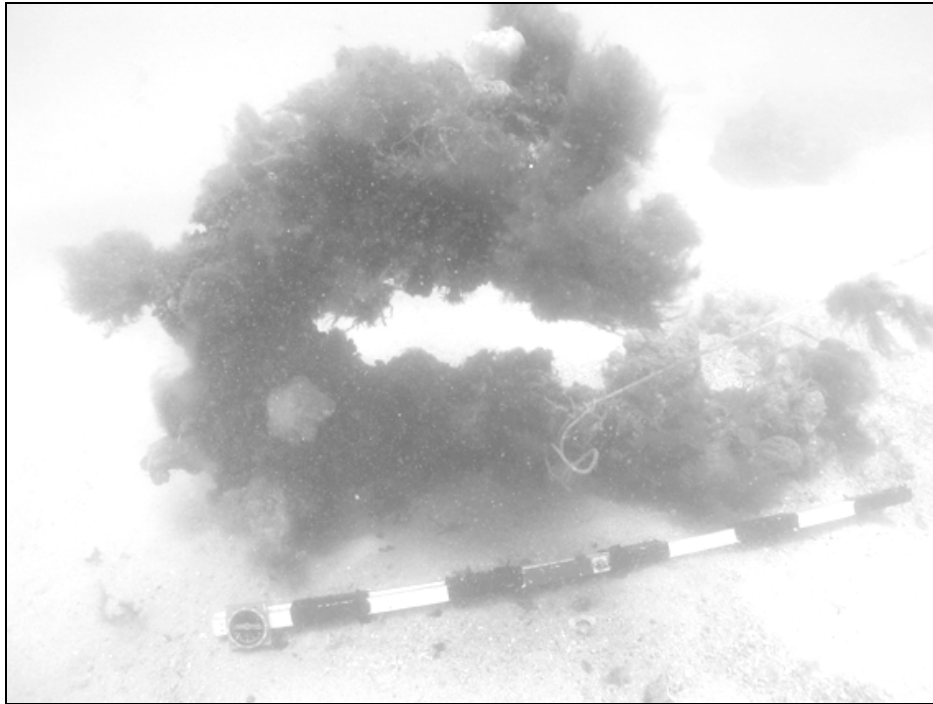


Figure 5. Side View of the anchor, facing south.

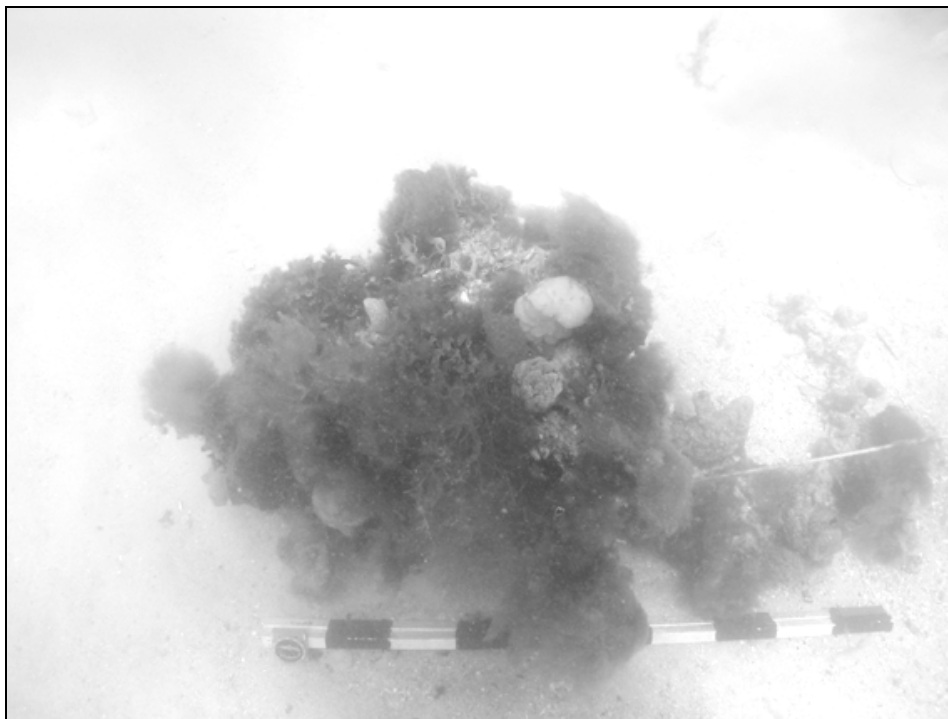


Figure 6. Top view of the anchor.

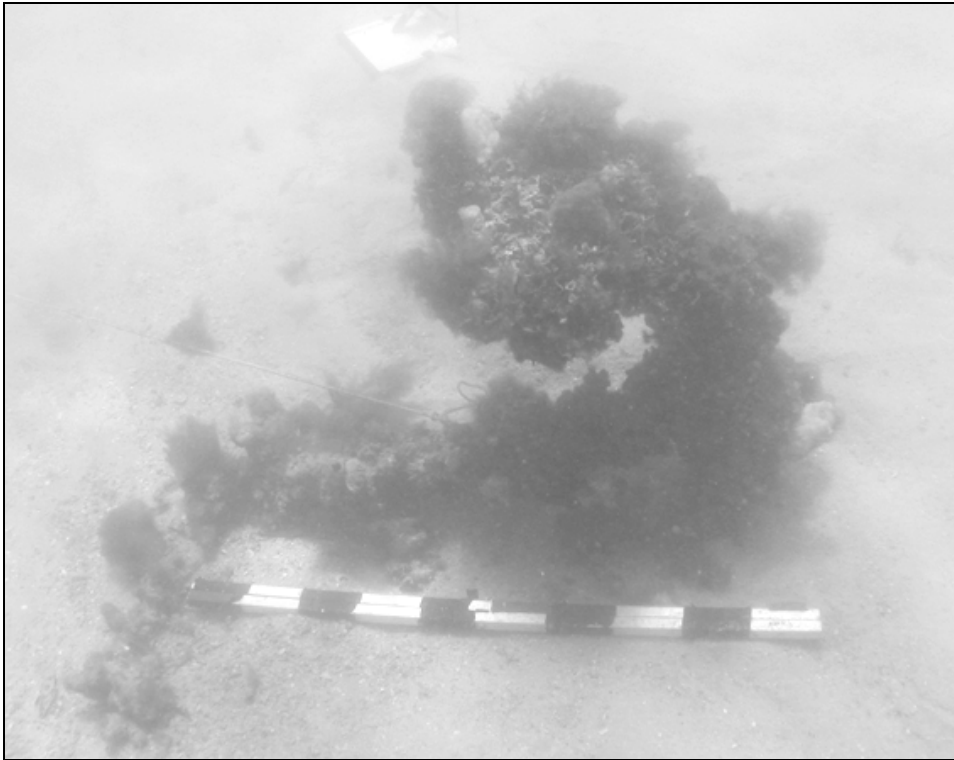


Figure 7. Side view of the anchor, facing north.

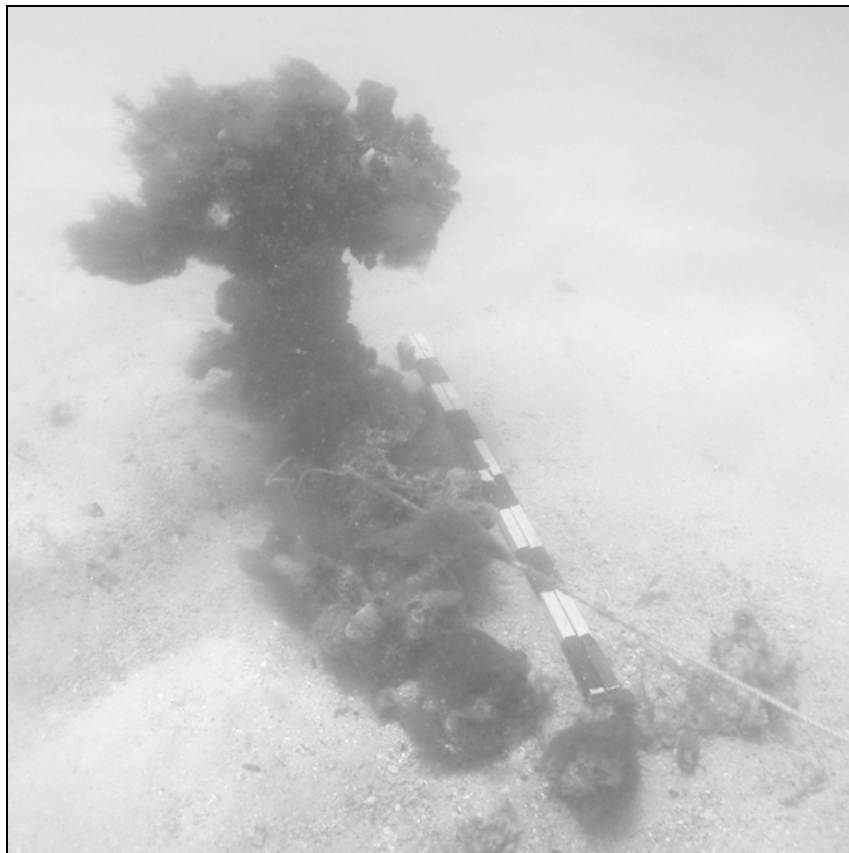


Figure 8. End view of the anchor, facing east.



Figure 9. The stock of the anchor, top view

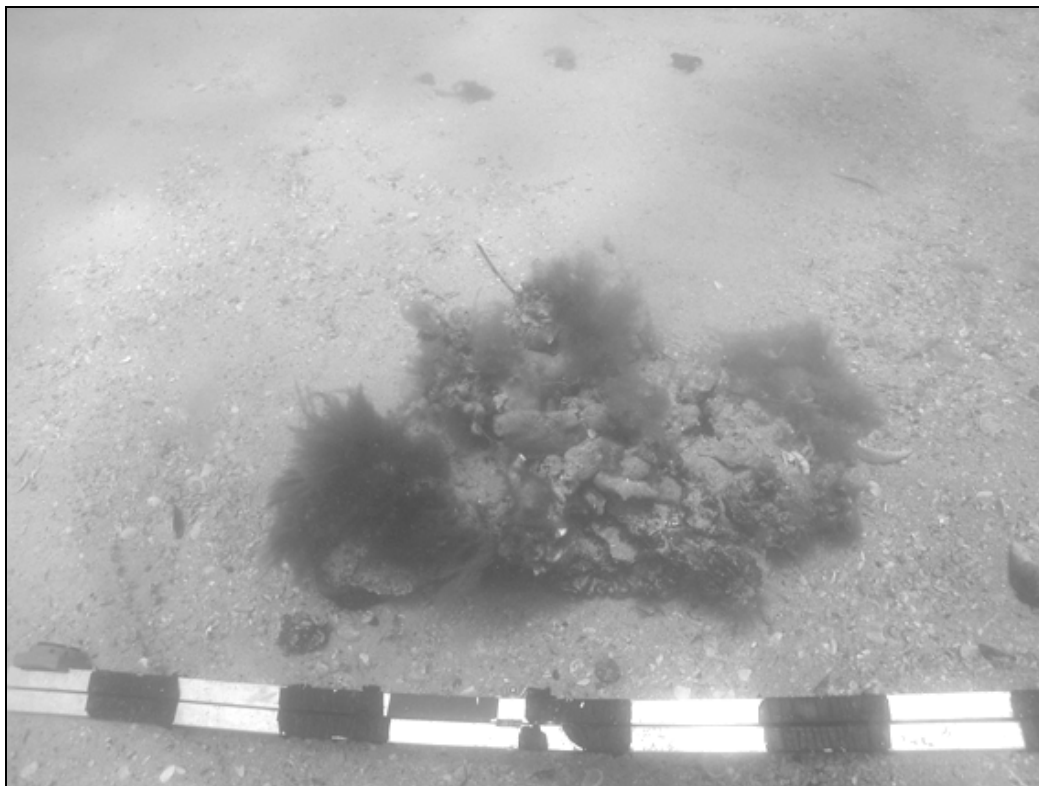


Figure 10. Photo of the amorphous lump of iron next to the anchor.