

**Stelco Report on Nail and Washer and Other Documents
South Shore Shaft
Oak Island, Nova Scotia
Compiled by Les MacPhie
February 2007**

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February 27th, 1970.

Mr. Allan Dove,
Senior Development Metallurgist,
Steel Company of Canada Ltd.,
Wilcox Avenue,
Hamilton, Ontario.

Dear Mr. Dove:

I don't know how familiar you are with the Oak Island story. The enclosed newspaper reprint should give you a reasonably good background, in the event that the subject is new to you.

The Triton Alliance group is undertaking an extensive operation on the island to resolve the mystery once and for all. To this end, a drilling program has been undertaken, preparatory to shafting, and the entire project should be well underway by the end of May. In the meantime, though, I would like you to examine the enclosed pieces of metal. They were recovered from a hidden shaft which was uncovered accidentally during the drilling program. It was about 65 ft. deep and filled with stagnant, stinking water. The nail and the other pieces were found in the muck at the bottom of the shaft. Specifically, we would like to know their age and origin. Mr. Aumont, with Steel Co. in Montreal, says that he has spoken to you about this and that you have kindly volunteered to give us your opinion. The two pieces have been photographed, and can be tested in any way that you wish - although naturally, we would like to have them returned as little damaged as possible.

We appreciate your assistance and look forward eagerly to your assessment of the enclosed material.

Thanking you for your kind assistance, I am,

Yours faithfully,

Kerry Ellard.

(2)

The Steel Company of Canada, *Limited*



CANADA WORKS, Hamilton, Ontario.

March 11, 1970

The Oak Island Exploration
6200 Grande Allee
St. HUBERT, Quebec

Attention: Mr. K. Ellard

Dear Mr. Ellard:

I have examined the samples which you sent with your letter of February 27th. I would report on the two samples - the nail and the flat plate washer - as follows:

Nail

The nail has a round section, a relatively round head, and relatively poor head formation. Round nails were not made until 1835. Rather than destroy the nail in order to find out more about it, particularly the head area, we snipped a small piece off the end of the shank. You will be able to see on examining the nail that the shank is certainly round. A micro-section was made as shown in photograph number 1. This indicates a very clean steel - indeed a clean steel far too advanced to have been made before the year 1860. The malformation of the head would indicate that the nail itself was produced sometime between 1860 and 1900 and, as a guess, probably in the 1870 to 1880 range; so it is about 100 years old. This nail has passed through fire as shown by some of the red haematite oxide showing on the shank of the nail in two or three areas. The shape of the head would seem to indicate that the possibility remains that this nail was made by hand craft rather than completely by machine. Were it not for the cleanliness of the steel, I would have suggested that it was made between 1835 and 1860 but the steel removes any doubt in this regard. The conclusion I would come to is that the nail was probably made between 1870 and 1880.

Washer Plate

We cut a small corner out of this washer in order to examine it and the result is shown in the photographs, numbers 2 and 3. At the surface is a Widmanstatten structure probably due to the washer having been heated and slowly cooled. The core was not heated sufficiently to establish the same type of structure, as shown in photograph 3. Cracks from the surface, due to heating and cooling while under strain, have filled with oxide as shown in the photographs. It would be a temptation to say that this spring washer, which is curved away from the less scaly side, was a fairly old piece of material. This is not the case, however, since in the yellow marked circle

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on one side, you will see the figure "5". There was also the trace of the figure "8" to the right of the figure "5", indicating that this was probably a 5/8" spring washer. Stamp prints were not used until fairly hard steels could be produced and this again places the date of the spring washer after 1860, probably in the same time period as the nail.

I had hoped that I would be able to tell you that these artifacts dated back to before 1800 but it is obvious that this is not the case since the steel structure and constitution of both nail and washer are well after that period.

The artifacts are being returned under separate cover.

If I can be of any further assistance, please let me know.

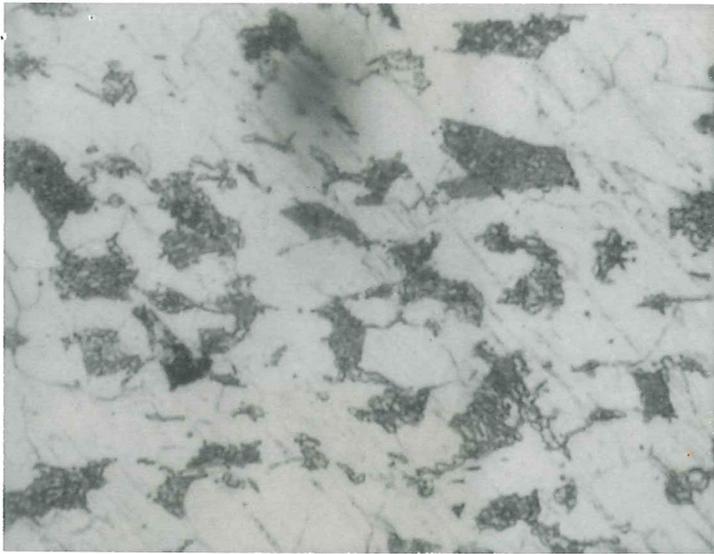
Yours very truly,
THE STEEL COMPANY OF CANADA, LIMITED



A. B. Dove
Senior Development Metallurgist
Wire and Fastener Division

ABD/ST

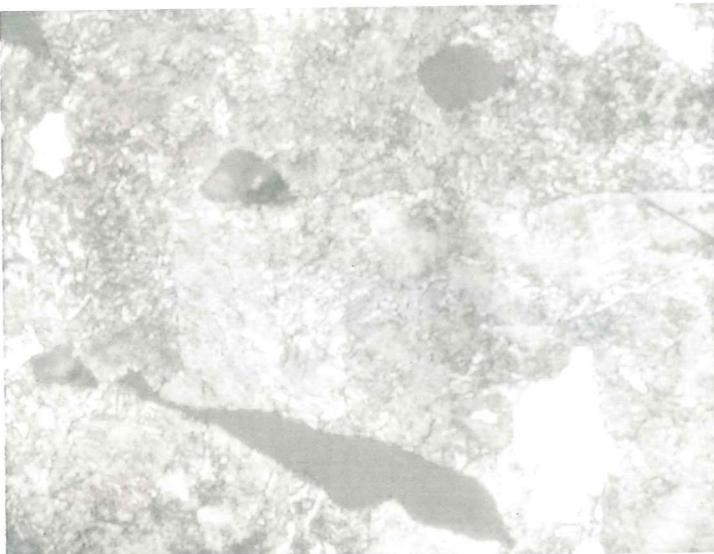
Copy to: Mr. J. Aumond
Montreal Office



1 Carbon .10-.15% Nail



2 C. .50-.60% Washer, surface.



Washer Core

Magnification
320x.

March 16th, 1970.

Mr. A.B. Dove,
Senior Development Metallurgist,
Wire and Fastener Division,
Steel Company of Canada Ltd.,
Wilcox Avenue,
Hamilton, Ontario.

Dear Mr. Dove:

Thank you very much for your detailed and thorough-going analysis of the samples which I sent you. Naturally, we were somewhat disappointed to learn that they are too recent to have been left on the island by any of the original depositors, but since we now believe that anything of significance will not be found above bedrock, it was not too surprising.

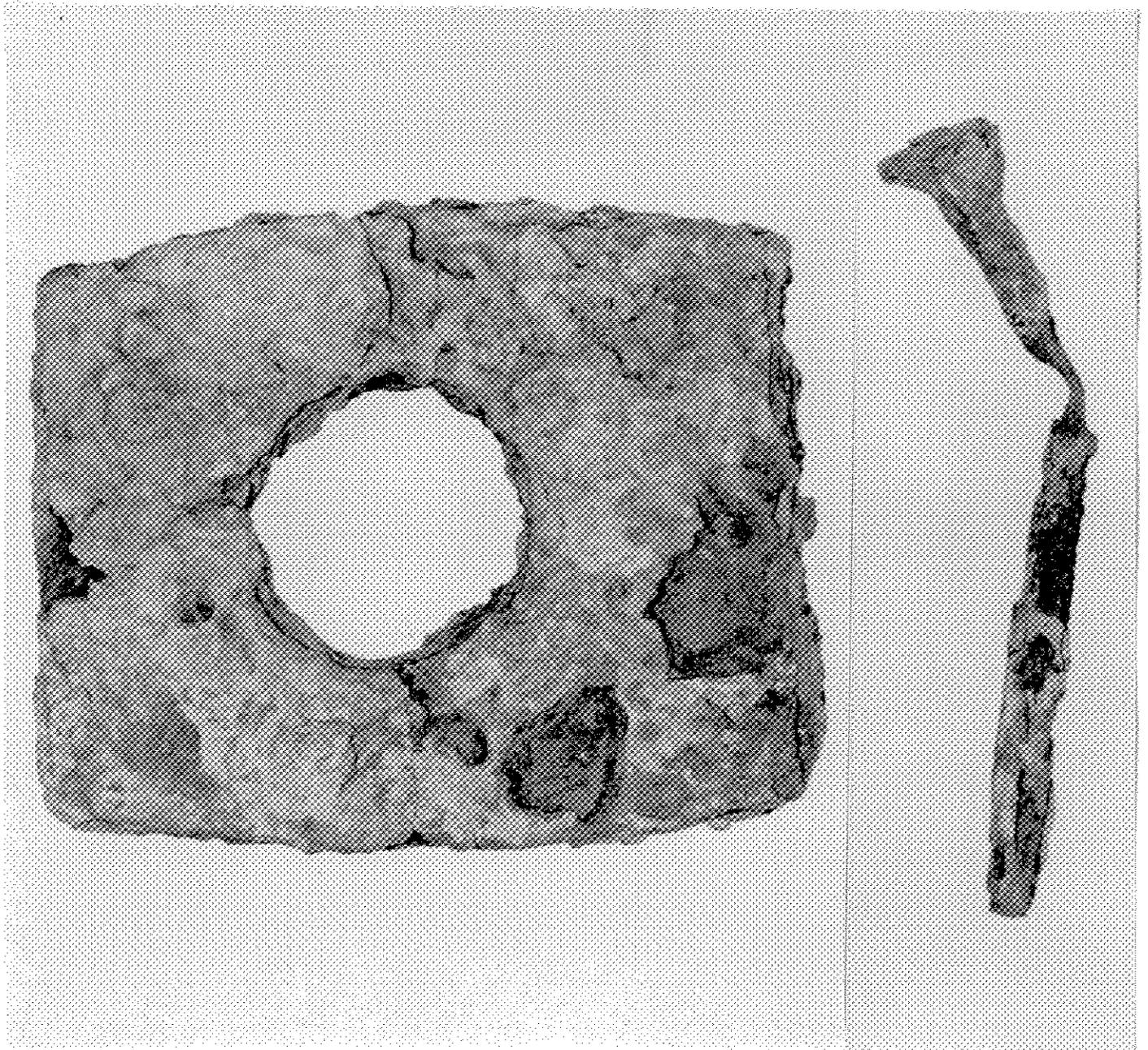
We very much appreciate the trouble which you went to on our behalf.

Yours sincerely,

Kerry Ellard,
Project Coordinator.

KE/mb

c.c. Mr. J. Aumond
Public Relations Director- Mtl.



A hand-wrought nail and some type of nut or washer, discovered October 31, 1967, at the bottom of a dome shaped shaft filled with black stagnant water. This shaft, 60 ft. deep, was discovered accidentally on the south shore in an area immediately beneath the triangle of small stones which had been first noticed in 1897.

TRANSCRIPT OF NOTES BY DAN BLANKENSHIP ON EXCAVATION AT SOUTH SHORE SHAFT

(Transcribed by Les MacPhie on June 20/99 from copy of original notes – Revised February 2007)

Item	Transcribed Notes from Dan Blankenship Sketch
1.	<p>Orig. find Oct 31st <i>(LM Note: This was in 1965)</i>. Dome shaped shaft, approx. 8' diameter, 12' below surface, top 3' to 4' was vacant. Distinct pick marks were on sidewalls and on top. We lowered a pump and pumped out 7' to 8' of water. A few twigs were on top of the water. We dug for 4 days with a clamshell that was too big for the hole and consequently didn't make much time. We dug to 54' then set off a case of dynamite and moved off.</p>
2.	<p>Digging in hidden shaft second time <i>(LM Note: This was in 1966)</i>. Hard digging through 12' of puddle clay which was in distinct alternating layers red and blue. Red was coarse and sandy, blue was very fine. Blue was to seal and red was to soak up accumulating water, positive evidence of man-made. Heavier particles of red would be more indented in blue. After passing thru puddled clay came upon reservoir of stagnant, stinking fresh water and muck. Bailed this and <i>(LM Note: Several words not legible)</i> down 4 or 5 feet, getting full bucket each time, approx. 48 to 50 yds., proving bottom about 15' by 15'. After muck about 15 to 20 yds. of rocks about the size of a man's head. These rocks were granite and definitely came from the surface. I have examined so called "ballast rocks" and found them to be about the same size.</p> <p>My theory: They spent so much time in making the tunnel and installing the treasure that the bottom of the shaft flaked excessively and consequently they placed the stones there to displace the earth and to have something stable to walk on. A well was formed in one side to facilitate bailing out.</p>
3.	<p><u>Items found on So. Shore:</u></p> <ol style="list-style-type: none"> a. Ship's ringbolt in boulder b. Triangle of rocks c. Flat rock with obscured writing d. A beach below beach about 2' deep e. A replica of the triangle of rocks in about 10' of water 200' from shore due So. f. Women's hair about 3' down below low tide g. Stones that were definitely exposed to the elements hundreds of years, 3' below the shore line h. A wooden stake 2½' below the shore line that was cut with an up and down saw and the top was sawed off square i. A piece of dish 3' below the existing grade (which I still have) j. A large semi circle of stones in the water
4.	<p><u>Items found in hidden shaft:</u></p> <ol style="list-style-type: none"> a. Pieces of twigs and branches b. Piece of juniper or cedar (which I still have) 60' down c. Old nail (hand made) which I still have d. Stagnant water e. Round stones
5.	<p><u>Solution:</u> Sink a safe shaft approx. 8' x 10', 90' down where original hidden shaft found</p>
-	<p><i>(LM Note: The notes on the sketch of the shaft are transcribed below and commentary is given)</i></p> <p>0' to 12' <i>(LM Note: Ground surface to top of void as per Item 1 above)</i></p> <p>12' to ±15.5' <i>(LM Note: Void as per Item 1 above)</i></p> <p>±15.5' to ±23' <i>(LM Note: Water as per Item 1 above)</i></p> <p>±23' to 54' <i>(LM Note: No description given)</i></p> <p>at 54' <i>(LM Note: End of 1965 work and set off case of dynamite as per Item 1 above)</i></p> <p>54' to 65' <i>(LM Note: Start of 1966 work and no description given)</i></p> <p>65' to 77' Thin layers of clay red and blue</p> <p>77' to 85' Soft muck very bad smell (tunnel)</p> <p>85' to 90' Rocks at bottom</p>

③ Items found on So. Shore

- a. Ships Ring bolt in Boulder
- b. triangle of Rocks
- c. flat Rock w/observed writing
- d. A beach below a beach, about 2" deep
- e. A replica of the triangle of Rocks in about 10' of water 300' from shore due So.
- f. Womens hair about 3' down below low tide
- g. Stones, that were definitely exposed to the elements hundreds of years, 3' below the shore line
- h. A wooden stake 2 1/2' below the shore line that was cut with an axe down to the top
- i. A piece of dish 3' below the exist. grade (which I still have)
- j. A large siml circle of stones in the water

④ Items found in Hidden Shaft

- a. pieces of twigs & branches
- b. piece of juniper or Cedar (which I still have) 60' down
- c. old nail (hand made) which I still have
- d. stagnant water
- e. Round stones

⑤ Solution:

Sink a safe shaft approx 8'x10' 90' down where original Hidden Shaft found

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Digging in Hidden Shaft second time:

Hard Digging thru 12' of puddle Clay which was in distinct Alternating layers Red & Blue. Red was coarse & sandy Blue was very fine. Blue was to seal & Red was to soak up accumulating water Positive evidence of Man Made; Heavier particles of Red would be more Indented in Blue After passing thru puddled Clay came upon Reservoir of stagnant, stinking fresh water & Muck Daily this was getting full bucket each time down 4 or 5 feet, getting full bucket each time Approx. 48 to 50 yds. proving bottom about 15'x15' After Muck, about 15 to 20 yds. of Rocks about the size of a mans Head. These Rocks were granite & definitely came from the surface. I have examined so called "Ballast Rocks" & found them to be about the same size

My theory: They spent so much time in Making the tunnel & installing the treasure, that the bottom of the shaft flaked excessively consequently they placed the stones there to displace the earth & to have something stable to walk on. A well was formed on side to facilitate baling out.



thin layers of Clay Red & Blue

150 ft Muck Very Bad smell

Rocks at Bottom

Water

Orig. find

Domed shape shaft

Approx. 8' Diameter

12' Below surface

top 3' to 4' was vacant

Distinct pick marks were on side walls & on top. We lowered

A pump & pumped out

7 to 8' of water. A few

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4 days with A Crowbar that was too big for the

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