



WATER-RIGHT DOCKET

Cape Cod National Seashore

Docket No: 5

DUCK HARBOR, GRIFFIN ISLAND WELL.

Supporting Hydro Data

00-00-0000: test well drilling at duck harbor, griffin island

TEST WELL DRILLING AT DUCK HARBOR, GRIFFIN ISLAND

Location of well. The well is in the northwestern part of Griffin Island, about 500 feet west of Chequesset Neck Road and about 75 feet west of an unnamed dirt road. It is directly between the two bench marks on this part of the island, about 1270 feet southeast of the northern bench mark and about 660 feet northwest of the southern bench mark (see figure 1).

Physical description of well. This 8-inch diameter well is 77.6 feet deep with a 10 foot #15 Johnson stainless steel screen and a coupling from 67.2 to 77.6 feet. The well casing extends 2.0 feet above the land surface; the top of the first coupling is 3.8 feet below land surface. For details, see figure 2.

Geohydrologic description of well. The well is screened in unconsolidated sands. See table 1 for the log of subsurface materials. The land surface is 45.9 feet above mean sea level. On October 29, 1968, the static water level was 42.68 feet below land surface or about 3.2 feet above mean sea level. Ocean tides probably have a small affect on the water level.

The well was pumped for 8 hours at 40 gpm. At the end of 8 hours the drawdown was about 1.7 feet. Full recovery occurred within 2 minutes. Specific capacity of the well is 23.5 gpm. At the design yield of 20 gpm, the drawdown will be about 0.9 foot and there will be little danger of salt-water encroachment. Suggested maximum intermittent pumping is 35 gpm.

Chemical quality of water. After 8 hours of pumping, field tests indicated that the chloride content (38 ppm) had not changed and was within the normal range for fresh ground water on Cape Cod. The iron content (0.05 ppm) is low and no treatment will be necessary. The complete chemical analysis will be supplied later.

Test drilling. The only test well (about 3 feet south of the final well) was drilled to a depth of 84 feet. The log of this well is in table 1.

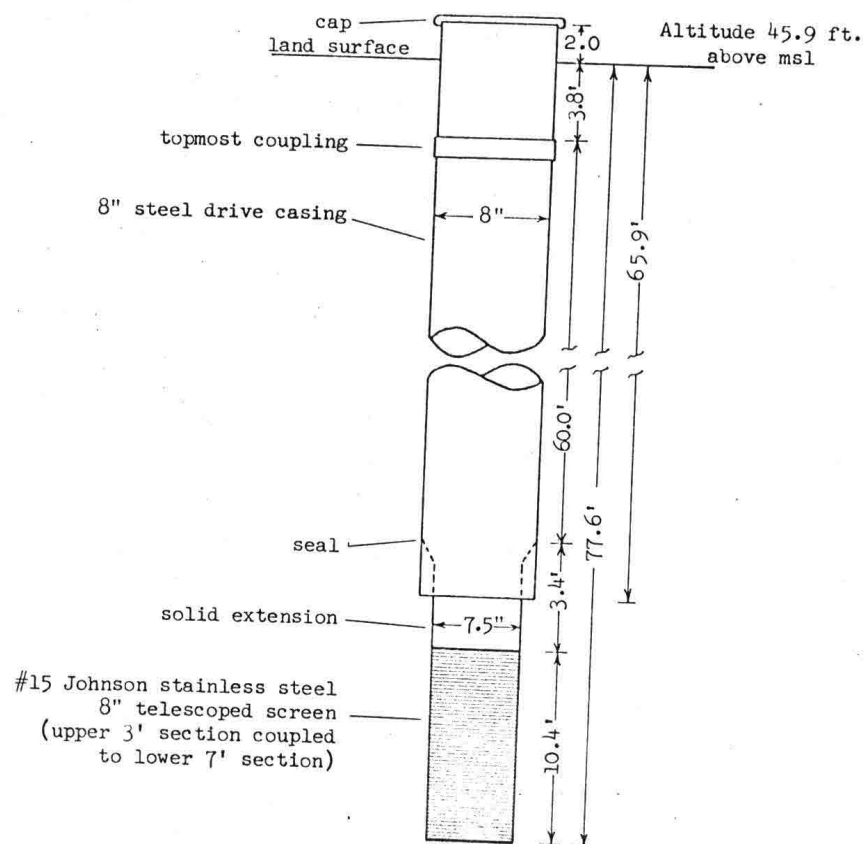


Figure 2.--Design of well at Duck Harbor, Griffin Island

Table 1.--Generalized combined log of test well
and final well at Duck Harbor, Griffin Island

Sample interval (ft. below surface)	Material description
0 - 5	Sand, fine to coarse, predominantly medium and coarse; brownish buff
5 - 10	Sand, fine to coarse, predominantly medium and coarse; buff
10 - 15	Sand, fine to coarse, predominantly medium and coarse; buff
15 - 20	Sand, fine and medium, predominantly medium; buff
20 - 25	Sand, fine and medium, predominantly medium; buff
25 - 30	Sand, fine to coarse, predominantly medium and coarse; buff
30 - 35	Sand, fine to coarse, predominantly medium and coarse; buff
35 - 40	Sand, fine to coarse, predominantly medium and coarse; buff
40 - 45	Sand, fine to coarse, predominantly medium and coarse; buff
45 - 50	Sand, fine to coarse, predominantly medium and coarse; buff
50 - 55	Sand, very fine to medium, predominantly very fine and fine; buff
55 - 60	Sand, very fine to medium, predominantly fine and medium; buff
60 - 63	Sand, very fine to coarse, predominantly medium and coarse; buff
63 - 65	Sand, very fine to coarse, predominantly medium and coarse; buff
65 - 70	Sand, fine to very coarse, predominantly medium and coarse; buff
70 - 75	Sand, fine to very coarse, predominantly medium to very coarse; buff
75 - 77	Sand, fine to very coarse, predominantly medium to very coarse; some very fine gravel; buff
77 - 80	Sand, fine to very coarse; predominantly medium and coarse; buff
80 - 84	Sand, fine to very coarse; predominantly medium and coarse; buff

Complete chemical analysis, in parts per
million, of water from well at Duck Harbor

Date of collection-----	10/29/68
Temperature (°C)-----	11
Silica (SiO ₂)-----	4.1
Iron (Fe) total-----	.02
Manganese (Mn) dissolved-----	.00
Calcium (Ca)-----	8.0
Magnesium (Mg)-----	1.5
Sodium (Na)-----	13
Potassium (K)-----	.5
Bicarbonate (HCO ₃)-----	10
Carbonate (CO ₃)-----	0
Sulfate (SO ₄)-----	4.8
Chloride (Cl)-----	28
Fluoride (F)-----	.0
Nitrate (NO ₃)-----	.0
Dissolved solids	
Calculated-----	65
Residue on evaporation at 180°C----	74
Hardness as CaCO ₃ -----	26
Noncarbonate-----	18
Specific conductance	
(micromhos at 25°C)-----	126
pH-----	6.8
Color-----	3

Other Supporting Information

*True
More*

Cape Cod National Seashore
South Wellfleet, Massachusetts 02663

D52

November 13, 1968

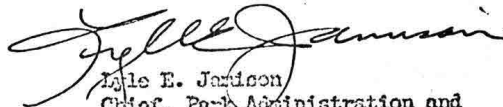
LETTER OF ACCEPTANCE

The Able Drillers and Pump Company
Route #2
Woodstock, Connecticut 06081

Gentlemen:

In accordance with the specifications for Contract No. 14-10-7-993-308, for Test Well Drilling at Duck Harbor, Cape Cod National Seashore, Wellfleet, a final inspection was made on October 29, 1968. This inspection revealed that the work was completed on October 29, 1968, in accordance with the plans and specifications and is entirely acceptable.

Sincerely yours,


Lyle E. Jansson
Chief, Park Administration and
Contracting Officer

cc: Chief, Office of Land and Water Rights, WSC
USGS, Boston, Mass. Attn: John Cotton
NERO

Cape Cod National Seashore
South Wellfleet, Massachusetts 02663

D52

November 13, 1968

REQUEST FOR RELEASE OF CLAIMS

The Able Drillers and Pump Company
Route #2
Woodstock, Connecticut 06281

Gentlemen:

In order that the final payment may be made on your Contract 14-10-7-993-308 for the Test Well Drilling at Duck Harbor, Cape Cod National Seashore, Wellfleet, you are requested to execute the original and all copies of the enclosed RELEASE OF CLAIMS. You should keep one copy for your office files and return the original and other copies to this office.

The requirement for this release is contained in the General Provisions, Standard Form 23A, Clause 7, "Payments to Contractors," subparagraph (d).

If you have any claims against the Government arising under and by virtue of this contract, they should be excepted and described in sufficient detail to identify them and the amounts of each should be stated separately.

If you have no claims you should have the words "No Exceptions" typed in the space immediately above the last sentence reading "This release has been executed ***."

Final payment on your contract will not be made until this release has been signed by you and furnished this office.

Sincerely yours,


Lyle E. Jamison
Chief, Park Administration and
Contracting Officer

Enclosure

cc: Chief, Office of Land and Water Rights, WSC
USGS, Boston, Mass., Attn: John Cotton
NERO

RELEASE OF CLAIMS

For and in consideration of the receipt of final payment in the amount of \$3,806.83 from the United States of America (hereinafter called the Government) under and pursuant to Contract No. 14-10-7-993-308, for Test Well Drilling at Duck Harbor, Cape Cod National Seashore, Wellfleet, the undersigned hereby does remise, release, and discharge the Government, its officers, agents, and employees of and from any and all claims and demands whatsoever under or arising from the said contract, except specified claims in stated amounts listed as follows:

No Exceptions

This release has been executed this 22nd day of November, 1968.

The Able Drillers and Pump Company

(Contractor)

Samuel Kaplan

By

Samuel Kaplan

President

(Title)

Form 10-194
Rev. 9/60UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Cape Cod National Seashore

(Park)

Check One:

Monthly
Estimate☐Final
Estimate☒

UNIT PRICE CONTRACT

ESTIMATE NO. 1	FOR (Period) 10/19/68 - 10/29/68	DATE November 13, 1968
CONTRACT NO. 14-10-7-993-308	COMPLETION DATE November 27, 1968	EXTENDED DATE
CONTRACTOR Able Drillers & Pump Co., Rte 2, Woodstock, Conn. 06281		ORIGINAL CONTRACT \$4,955.00
PROJECT Test Well Drilling at Duck Harbor		CHANGE ORDERS* \$
LOCATION Wellfleet, Massachusetts		TOTAL CONTRACT \$3,806.83

ITEM NO.	CONTRACT QUANTITY	DESCRIPTION	QUANTITY TO DATE	UNIT PRICE	AMOUNT TO DATE
<u>SCHEDULE A</u>					
1	200 lf	Drill, case, remove casing, etc.	84 lf	4.75	399.00
2	12 hr	Pump test for yield	6 hr	10.00	60.00
<u>SCHEDULE B</u>					
1	90 lf	Drilling hole to receive 8" diam. casing	77.60 lf	13.00	1,008.80
2	90 lf	Furnishing and installing 8" casing	67.87	7.50	509.03
3	1	Furnishing and installing 8" diam. 10' stainless steel well screen	1	LS	750.00
4	24	Develop well, pumping & surging	24	35.00	840.00
5	8	Pump testing for yield of well	8	30.00	240.00
6	8	Standby time	-	-	-
7		8" hole casing if lost	-	-	-

RECOMMENDED (Project Supervisor) <i>John E. Cotton</i> John E. Cotton, Geological Survey, Water Resources Division		SUMMARY	
APPROVED (Contracting Officer) <i>Lyle E. Jamison</i> Lyle E. Jamison, Chief, Park Adm.		DATE 11/25/68	
		TOTAL TO DATE..... \$ 3,806.83	
		LESS RETAINED AMOUNT..... -	
		NET..... 3,806.83	
		LESS PREVIOUS PAYMENTS..... -	
		LESS LIQUIDATED DAMAGES..... -	
		DUE THIS ESTIMATE..... 3,806.83	
		% COMPLETED TO DATE: 100%	

(Show Breakdown on Reverse)

(See Reverse for Distribution)

Maps and Miscellaneous Information

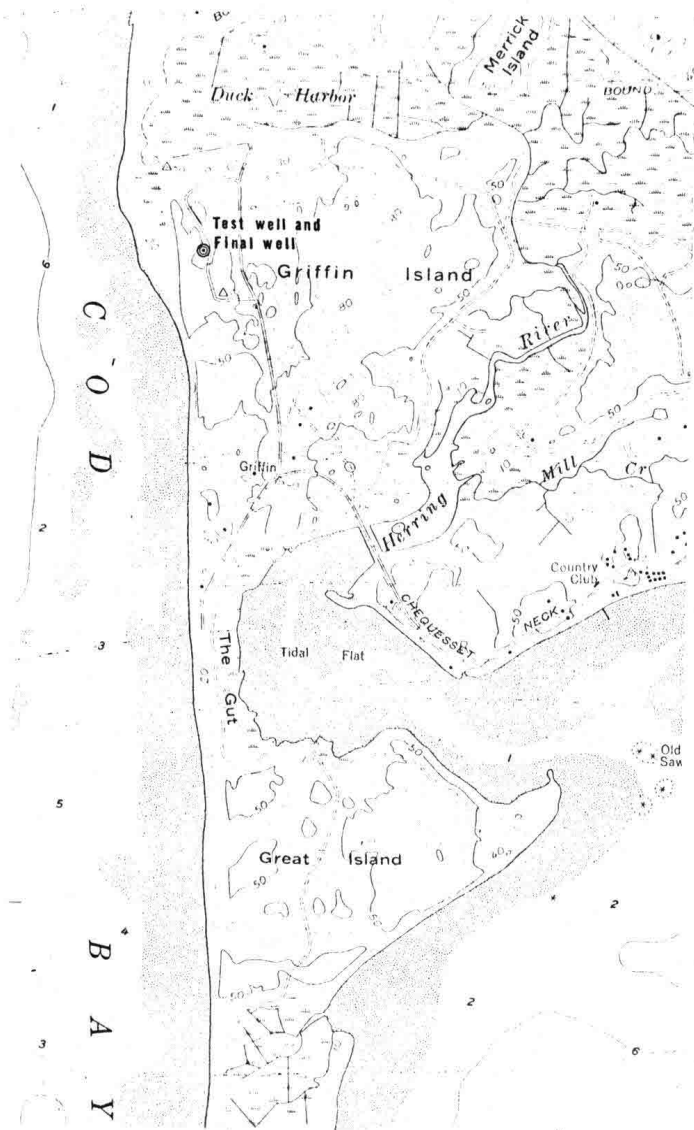


Figure 1.--Location of test well and final well at
Duck Harbor, Griffin Island

Docket Information

Number of Documents in Docket 9

Documents Dated from 10/29/1968 to 11/25/1968

Docket Compiled: 2/1/2011