



WATER-RIGHT DOCKET

Assateague Island National Seashore

Docket No: 7

TOM'S COVE WELL #2

Supporting Hydro Data

00-00-0000: #2 tom's cove test well general information

#7

#2 Toms Cove Test Well

The #2 Toms Cove test well is about 400 feet west of Assateague Beach Coast Guard Station, south of Toms Cove (enclosure 10).

Contract work was performed by Ideal Well Drillers, Salisbury, Md., under National Park Service Contract No. 14-10-5:622-757. The test hole was begun March 20, 1968, and was back-filled and abandoned with 39 feet of 12-inch surface casing in the ground on March 26, 1968.

The #2 Toms Cove test well was drilled to test the quality and yield of water from a sand occurring between 245 and 264 feet below land surface in the 2-inch well supplying Assateague Beach Coast Guard Station. A sample of water from this latter well contained 282 mg/l of chloride (enclosure 22). This concentration ^{slightly exceeds} approaches the recommended limit for public supply. _{as reported in various Dir.}

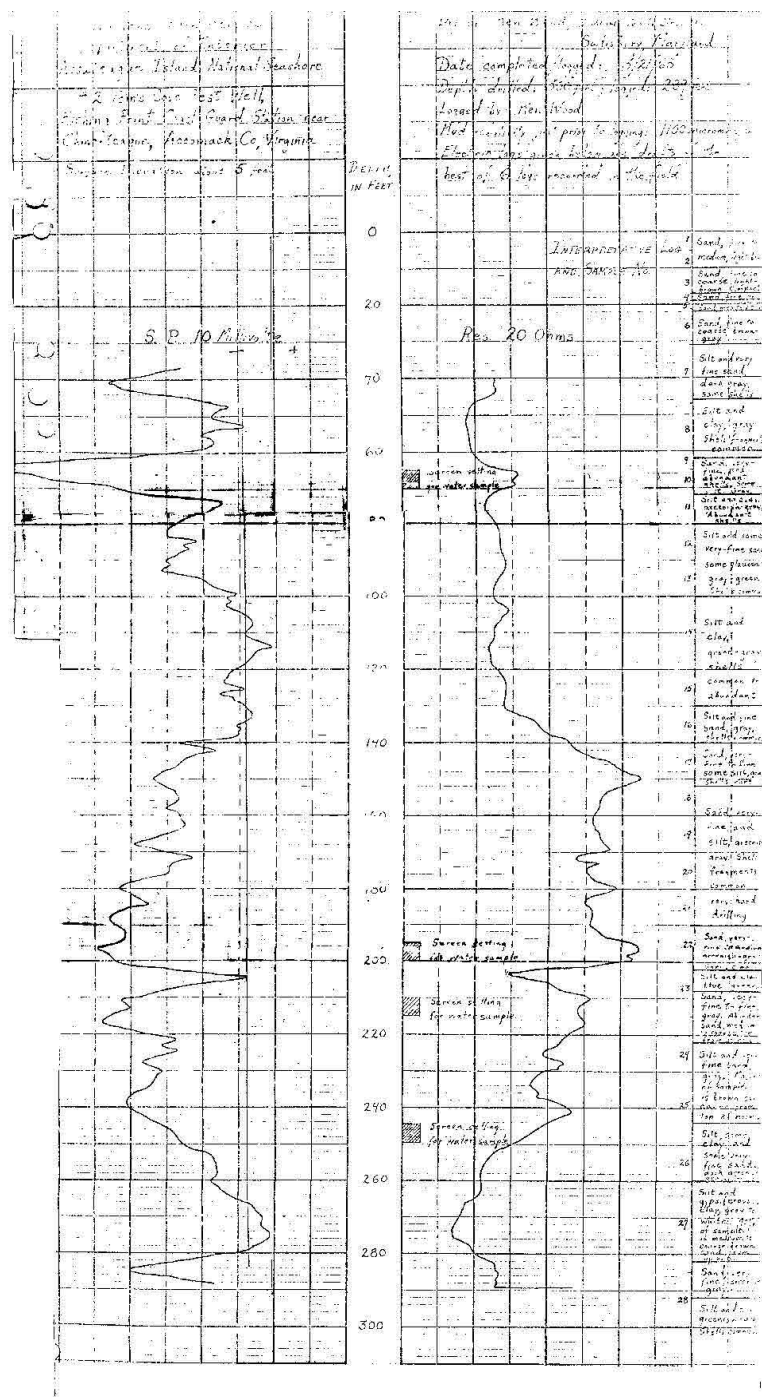
A 6-inch diameter test well was drilled to 300 feet by hydraulic-rotary method and electrically logged to 289 feet. The electric log indicated one thick sand between 140 feet and 244 feet which might contain suitable-quality water. The upper part of this sand drilled the hardest and slowest of all the materials penetrated in the well. Ditch samples of the materials penetrated were contaminated by coarse sand caving into the well around the bottom of the surface casing. An interpretative log based upon microscopic examination of the samples is shown with the electric log in enclosure 23.

Sands were selected for water-quality sampling on the basis of an examination of the electric log combined with the rate at which the sands were penetrated by the drill. Attempts were made to sample water from three zones in the sand between 140 feet and 244 feet; however, none of these zones responded adequately to development. Water from the sand between 62 feet and 72 feet had a specific conductance of 5900 micromhos per centimeter, indicating a chloride content of about 2000 mg/l.

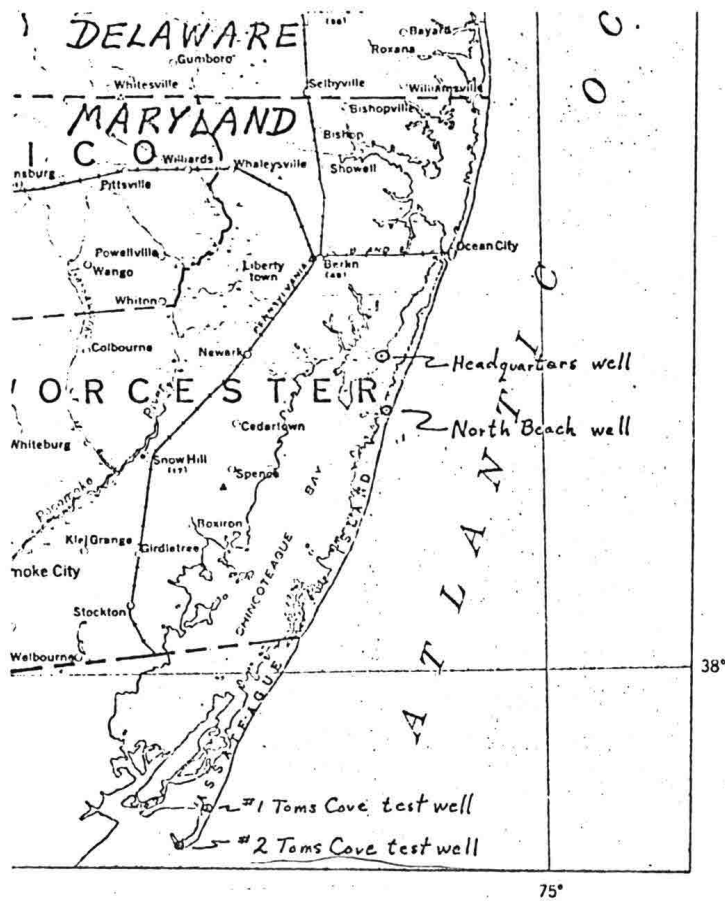
The #2 Toms Cove test well provided evidence that only marginal-quality water is available within 300 feet of the land surface south of Toms Cove and that sufficient yield probably cannot be obtained from a single production well.

USGS-WD Form GW		ANALYTICAL STATEMENT		COUNTY	Worcester
Townson WRD				LAS NO.	DC-4353
Location Assateague Island National Seashore, Md.		Date of collection		October 17, 1967	
Cond. 1,710; Cl 275		Ignition Loss	Color	15	
Source (type of well) Tom's Cove USCG		Dissolved Solids:		meq/l	mg/l
Owner Assateague Beach Well		Residue at 180°C	961	SiO ₂	18
Coast Guard Station		Calculated (Sum)	962	Fe	Total .49
Date driled		Total per Area Foot		Mn	Total .02
Cased to		Hardness as CaCO ₃	312	Ca	2.20 44
Depth 264'	Diam 2"	Non-carbonate Hardness	0	Mg	4.03 49
WSP	% Na	SAZ	98	Na	10.00 230
Water level	ft	Specific Conductance		K	1.02 40
Sampled after pumping	0.3 hrs with permanent	(micromhos at 25°C)	1,610	Na+K	17.25
Yield	gpm (max or est)	Alk as CaCO ₃	445	HCO ₃	8.90 543
Fe of well	spigot in bathroom	CO ₂ Calc.	7	CO ₃	.00 0
Appearance	clear			SO ₄	.48 23
Temp (°F)	18			Cl	7.96 282
Collector	E. F. Hollyday; 1500			F	.01 .2
Chemist	P. Young			NO ₃	.13 8.0
Date completed	March 21, 1968				17.48
Checked by	G. Nelson				
Date transmitted					

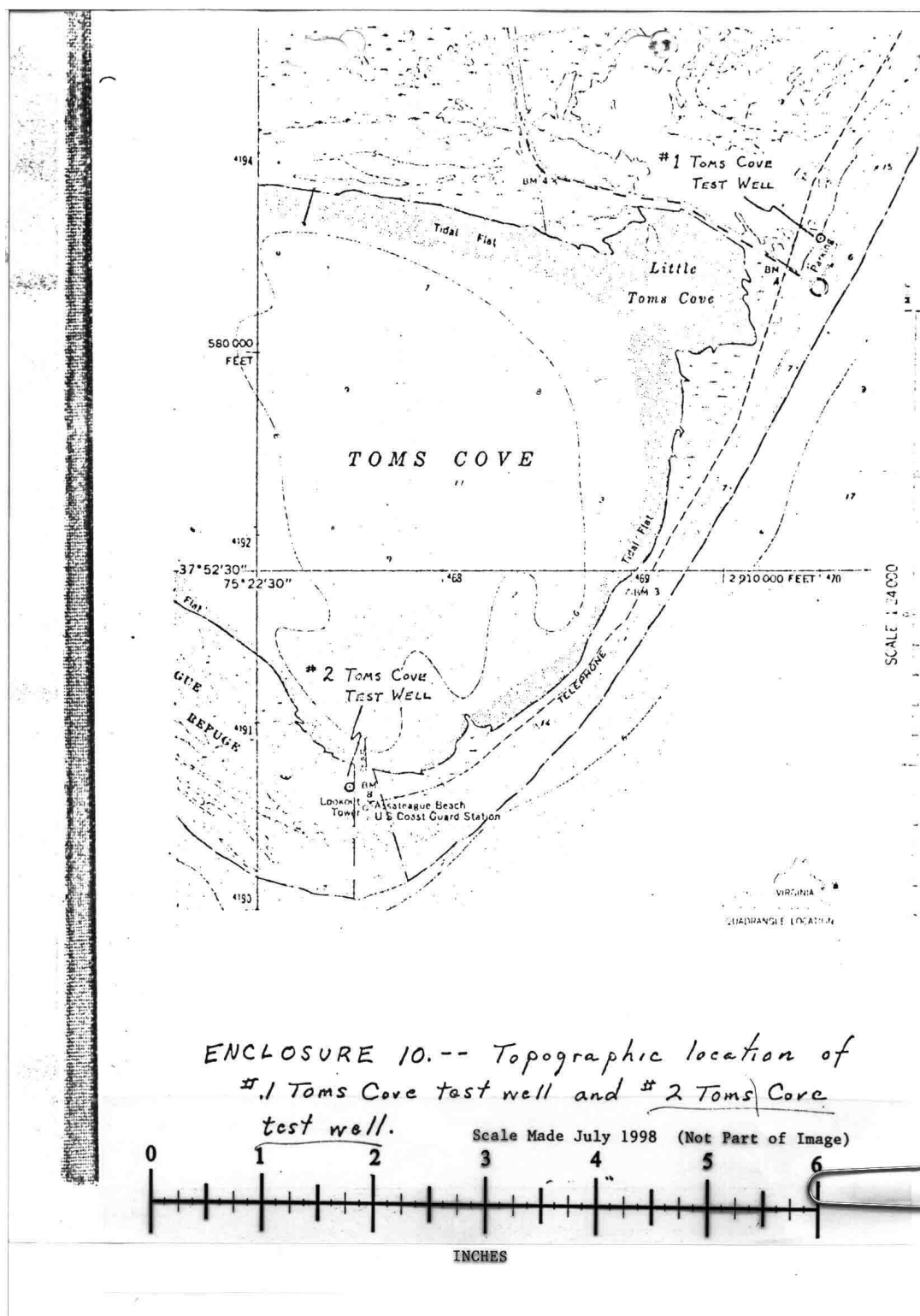
ENCLOSURE 22.-- Chemical analysis of water from Assateague Beach Coast Guard Station well; permanent screen setting; somewhere between 186 and 264 feet below land surface.



ENCLOSURE 23. -- Electric and interpretative logs of #2 Tom's Cove test well.



ENCLOSURE 1.-- Location of Assateague Island and test-well sites.



Docket Information

Number of Documents in Docket 6

Documents Dated from 10/12/1967 to 10/12/1967

Docket Compiled: 1/31/2011