



WATER-RIGHT DOCKET

Virgin Islands National Park

Docket No: 7

WELL #7, HAWKSNEST BAY

Supporting Hydro Data

00-00-0000: table 1: records of drilled test wells; construction data, hydrologic data, supplementary data

National Park, St. John, V. I.									
DESIGNATION					CONSTRUCTION DATA				
Well number	Location	Type	Date completed (year)	Depth (feet)	Casing record		Finish (feet)	Depth of lift	Type of lift
					Diam-eter (inches)	From To			
NPS-2	Cruz Bay	Drilled	1964	99	4	0	20	0	99
NPS-3	Cruz Bay	do	1964	54	6	0	25	0	54
NPS-4	Lind Point	do	1964	200	6	-	0	0	200
NPS-5	Trunk Bay	do	1964	60	6	0	12	0	60
NPS-6	Cinnamon Bay	do	1964	70	6	0	50.7	0	70
NPS-7	Hawksnest Bay	do	1964	36	6	0	27	0	36
NPS-8	Cinnamon Bay	do	1964	50	6	-	0	0	50
NPS-9	Cinnamon Bay	do	1964	60	6	0	39	0	Submersible
NPS-10	Lameshur	do	1964	66	4	0	67	0	67

Finish: 0 - open hole, S - slotted.
Water-bearing material: Vb, volcanic breccia; Vt, volcanic tuff; V, volcanic undifferentiated.
Use: T, test; O, observation; P, public supply.

National Park, St. John, V. I.									
HYDROLOGIC DATA					SUPPLEMENTARY DATA				
Well number	Location	Type	Date completed (year)	Depth (feet)	Casing record		Finish (feet)	Depth of lift	Type of lift
					Diam-eter (inches)	From To			
NPS-2	Cruz Bay	Drilled	1964	99	4	0	20	0	99
NPS-3	Cruz Bay	do	1964	54	6	0	25	0	54
NPS-4	Lind Point	do	1964	200	6	-	0	0	200
NPS-5	Trunk Bay	do	1964	60	6	0	12	0	60
NPS-6	Cinnamon Bay	do	1964	70	6	0	50.7	0	70
NPS-7	Hawksnest Bay	do	1964	36	6	0	27	0	36
NPS-8	Cinnamon Bay	do	1964	50	6	-	0	0	50
NPS-9	Cinnamon Bay	do	1964	60	6	0	39	0	Submersible
NPS-10	Lameshur	do	1964	66	4	0	67	0	67

Finish: 0 - open hole, S - slotted.
Water-bearing material: Vb, volcanic breccia; Vt, volcanic tuff; V, volcanic undifferentiated.
Use: T, test; O, observation; P, public supply.

Table 2.--Chemical quality of water from drilled test wells, Virgin Islands National Park, St. John, V. I.

MUGLIN ISLANDS RELIEF/DRI FERR, ST. JOHN, V.I.																			
Well Number	Location	Date of collection	PARTS PER MILLION															Dis-charge (gpm)	
			Silica (SiO ₂)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Barsium (Ba)	Sulfate (SO ₄)	Chloride (Cl)	Fluoride (F)	Nitrate (NO ₃)	Dissolved solids	Hardness as CaCO ₃ , cal-cium, mag-nesium at 25° C	Specific conductance (micro-mhos at 25° C)	pH		
NPS-2	Cruz Bay	5-18-64	31	0.00	66	67	320	-	664	46	470	0.6	4.9	1,400	440	0	2,490	7.9	1
NPS-3	Cruz Bay	6-3-64	34	.00	94	77	377	-	632	45	480	.5	4.4	1,420	551	33	2,270	7.8	5
NPS-4	Cruz Bay housing	Dry hole																	
NPS-5	Trunk Bay	7-17-64	38	.05	80	61	188	-	482	39	300	.0	.0	988	450	55	1,670	7.9	6
NPS-6	Cinnamon Bay	8-2-64	34	.00	46	81	224	-	380	47	400	.3	.4	1,060	448	128	1,900	8.2	8
NPS-7	Hawneet Bay	8-8-64 ^{1/}	35	.00	68	88	214	-	272	57	505	.1	2.2	1,260	534	308	2,090	7.9	12
NPS-7	Hawkeet Bay	8-8-64 ^{2/}	38	.05	106	577	628	-	360	276	2,425	.0	.4	5,640	2,637	2,342	7,440	7.5	12
NPS-8	Cinnamon Bay	Dry hole																	
NPS-9	Cinnamon Bay		36	.00	58	71	183	-	504	30	275	.5	.0	964	436	23	1,610	8.4	8
NPS-10	Ianeshur Bay		23	.04	70	111	-	-	544	-	1,003	.3	.9	2,380	631	185	4,090	7.8	2

1/ Sample taken at beginning of test, 5 minutes pumping.

2/ Sample taken at end of test, 12 hours pumping.

Other Supporting Information

12 Arroyo Street
Hato Rey, Puerto Rico 00918

January 12, 1965

Mr. Frank R. Givens, Superintendent
National Park Service
Virgin Islands National Park
P. O. Box 1707 Charlotte Amalie
St. Thomas, V. I. 00802

Dear Mr. Givens:

A tabulation is enclosed of funds spent on test-well drilling for the National Park Service in St. John, Virgin Islands. The funds were assigned in FY-1964, but the drilling contract carried over into FY-1965.

If you have any questions about the data shown, Mr. Donald G. Jordan, our resident engineer in St. Thomas, is in the best position to provide answers. Sufficient copies of the tabulation have been provided for your possible transmittal to appropriate other NPS offices.

Exploring for and finding water for some of your needs was an interesting technical problem. The second phase of observing how the well supplies stand up under regular use also will be interesting. Pivotal in this phase is knowing how much water is pumped. I believe Mr. Jordan has made recommendations on what information is needed.

Cordially yours,


Dean B. Bogart
Chief, Caribbean District, WAD

In triplicate

cc: D. G. Jordan, St. Thomas, V. I.

Area Hydrologist, Arlington, Va.

DEB/gmp

Water-Supply Project for National Park Service
in Virgin Islands National Park, St. John

Summary of costs of test-well drilling, FY-1964 funds

Funds assigned to drilling	\$15,000
Less: 12 3/4% Washington Office	
Technical Service Charge	<u>1,912</u>
Net funds available for drilling	<u>\$13,088</u>

Well number	Depth drilled, ft 14.75/ft	Casing installed, ft 5.00/ft	Casing pulled, ft 1.25/ft	Experimental time, hr \$11.00/hr	Pumping and bailing tests, hr \$11.00/hr	Cost
NPS-2	98	-	18	-	2 1/2	\$ 1,495.50
3	54	25	-	-	13 1/2	1,070.00
4	200	-	13	-	0	2,966.25
5	60	13	-	-	17	1,137.00
6	70	54	-	-	10 1/2	1,418.00
7	36	28	-	-	15 1/2	841.50
8	50	-	21	-	0	763.75
9	60	45 1/	-	1	9	1,220.00
10	<u>66</u>	<u>53 1/</u>	<u>-</u>	<u>-</u>	<u>8</u>	<u>1,326.50</u>
Total	694	218	52	1	73	\$12,233.50
Bulldozing 2/						<u>810.00</u>
						<u>\$13,043.50</u>

1/ 4-inch diameter plastic liner was installed, in addition to steel casing.

2/ Bulldozing drilling sites.

December 31, 1964

U. S. Geological Survey
San Juan, Puerto Rico

Docket Information

Number of Documents in Docket 4

Documents Dated from 12/31/1964 to 1/12/1965

Docket Compiled: 7/28/2011