



WATER-RIGHT DOCKET

White Sands National Monument

Docket No: 4

GARTEN WELL

Supporting Hydro Data

10-26-1957: letter to w.m. cruzan from regarding an artesian well near whsa

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON

REC'D NOV 2, 1957

J.E.L.

October 26, 1937

Mr. W. M. Cruzan,
301 Orpheum Building,
Tulsa, Oklahoma.

Dear Mr. Cruzan:

Your letter of October 8, regarding the artesian well located near the White Sands National Monument, has come to me for attention.

The well is located close to the center of the south half of Sec. 5, T. 18 S., R. 8 E., Otero County, New Mexico. It was drilled on the L. L. Garton property in 1916.

A flow of water said to have been 1100 gallons per minute was obtained from an "open cavity" between the depths of 889 to 892 feet. The temperature of the water is 96° F; its character is shown by the following laboratory report made by the Permutit Company of New York:

"Total hardness	Calculated as CaCO	2320
Calcium Hardness	" "	"
Magnesium Hardness	" "	"
Alkalinity A (Methyl Orange)	" "	96
Alkalinity B (Phenolphthalein)	" "	0
Causticity (Alkalinity)	" "	0
Free Carbon Dioxide	" "	CO ₂ 30
Chlorides	" "	Cl 2450
Sulphates	" "	SO ₃ 2730
Iron	" "	Fe 0.2
pH		6.9
Turbidity		5
Total Actual hardness as grains per US gal.		138
Total compensated Hardness		
as grains per US gallon		192

"An examination of this report discloses that this water is too high in dissolved solids to be generally applicable for drinking water. These chlorides and sulfates can only be removed by distillation which procedure is not of course satisfactory."

In the summer of 1936 the well began to crater and its flow gradually diminished until at present it is producing very little water, the estimated flow in April being from ten to twenty gallons per minute. This flow is hardly sufficient to maintain the level of the nearby lake which is used as a water-fowl refuge. Since this use has precedence over other demands and since there is no surplus of water, the leasing of the well by the Government for commercial purposes cannot be considered.

Sincerely yours,

(SGD.) A. E. DEMARAY

A. E. Demaray,
Acting Director.

cc - J. E. Taylor, Region IV ✓
U.S.G.S.
White Sands Nat'l Monument

Other Supporting Information

REPLY TO
ATTN OF:

MDE

HEADQUARTERS
AIR FORCE MISSILE DEVELOPMENT CENTER
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
Holloman Air Force Base, New Mexico 88330



SUBJECT: Land for Development of Water Supply for Holloman AFB and White Sands National Monument

TO: Mr. George Hartzog, Jr.
Director, National Park Service
Washington D. C. 20333

12 JUL 5

Dear Mr. Hartzog

1. Reference our telephone discussion on 29 Jun 65 concerning release of a portion of White Sands National Monument acreage, lying south of Highway 70, encompassing the Carton Well. There has been a considerable amount of interest generated by the municipal officials of Alamogordo, and the State Planning Commission for development of a recreational area in this vicinity. If the Park Service has no plans for development, and would consider declaring a portion as excess to their needs, we would like to acquire same, and trade with the State of New Mexico for a 600 acre tract we need badly for water development. An arrangement of this type would not only help the Air Force, but also the White Sands National Monument. We are presently furnishing the Monument 300,000 gallons of water per month and have agreed to increase that amount to 1.5 millions if required. The acquisition of the 600 acres adjacent to our present well field will insure adequate water for both the Air Force and the Park Service for many years.

2. As a matter of information, we have a contract with the United States Geological Survey and Doctor Theodosius, Geologist, to assist us in establishing a comprehensive long range water resources development for this area. On the attached map we have identified the Monument tract as "A", the 600 acres of State Land as "B", our well fields as "C", and Tract "D" which was acquired as a potential water source for the Monument years ago. (Map also shows location of Carton Well) *see*

3. We appreciate your interest in this matter and hope something can be worked out that will be satisfactory to all parties concerned.

Sincerely

Ray V. Land
RAY V. LAND

Acting Deputy for Civil Engineering

1 Atch
Map (dup)

APR 6 1965

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enc
4/6

L54-SLW

Hon. Clinton P. Anderson
United States Senate
Washington, D. C.

Dear Senator Anderson:

Your letter of March 25 inquired about the presence of a good artesian well in White Sands National Monument, New Mexico.

A similar question was raised about a month ago, although the well was described as a "recently drilled artesian well." At that time, the Superintendent checked with the city of Alamogordo, the Air Force Base, and the Missile Range, and no recently drilled artesian well was reported.

Presumably the well referred to by your constituent and also by the earlier inquiry is the so-called Garton Well about 1 1/2 miles east of Monument Headquarters. This well reportedly was drilled for oil in 1916 to a depth of almost 1,000 feet. No oil was found but a strong flow of warm brackish water was struck at about 890 feet. The well was used to supply Garton Lake. In 1936 the well began to "crater" and its flow gradually diminished until it produced only 10 or 20 gallons per minute. Apparently the flow is sufficient to maintain the lake.

The water is much too high in chlorides and sulfates to be used for drinking or irrigation purposes. It was used by the Monument for sanitary purposes until the connection with the Holloman Air Force Base supply was made more than 10 years ago.

We hope this information is satisfactory for your needs.

Sincerely yours,

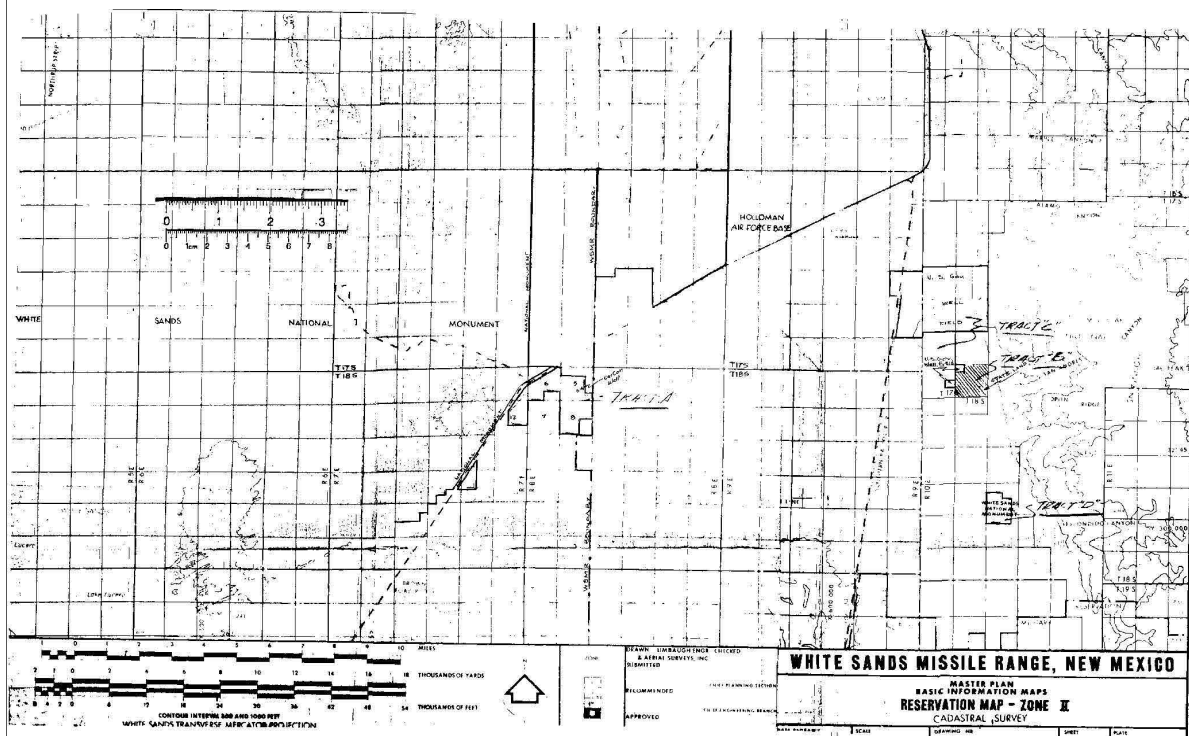
(SGD) JACKSON E. PUGH

Director

Assistant

cc:
Regional Director, Southwest, w/c inc.
Superintendent, White Sands, w/c inc.
Chief, WODC (2), w/c inc.
Mr. Melvin, w/c inc.
Mr. Bill, w/c inc.
Mr. Reed

EWReed:ljc 4-5-65



Docket Information

Number of Documents in Docket 5

Documents Dated from 10/26/1957 to 7/2/1965

Docket Compiled: 7/28/2011