



Docket No: 1

State Water Rights Documentation

ED. L. REED & ASSOCIATES
CONSULTING HYDROLOGISTS

CLIENT National Park Service S.W.L.

LOCATION U.S.P.S. Amistad Dam N.R.A. CASING

DATE June 7, 1978 PERFORATIONS

WELL NUMBER Rough Canyon DRILLER _____

SAMPLE DESCRIPTION

Page 1 of 1

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NATIONAL PARK SERVICE
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Memorandum

To: Superintendent, Amistad
From: Hydraulic Engineer, Water Resources, SWR
Subject: Chemical Analysis - Rough Canyon and Diablo East

Enclosed are the results of the chemical analysis for well water from Rough Canyon and Diablo East areas.

Rough Canyon - All constituents analyzed are within the recommended EPA Drinking Water Standards except Chloride which just exceeds 250 mg/l.

Diablo East - All constituents analyzed are within the recommended EPA Drinking Water Standards except Turbidity. We will conduct a follow-up analysis for Turbidity in the near future.

Should you have any questions please call.

BOURBON & WATER DO MIX

[SIGNED]

Garland Moore

Enclosures

cc:
Chief, Division of Natural Resources, WASO (Atten: Vic Berte') w/enclosures
Mitchell, PHS Officer, SWR w/enclosures
Moore, OM, SWR w/enclosures

Other Supporting Information

GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

38 2/25/72

HE
M. J. M.
2/25/72
Berkley

TO : Acting Associate Director, Professional Support DATE: Feb. 2, 1972

FROM : Hydraulic Engineer, Water Resources, Office of the Regional Chief Scientist

SUBJECT: Trip Report to Lyndon B. Johnson, NHS, January 18-21, 1972

1. Purpose of trip: Meet with the Superintendent and Park Staff of Lyndon B. Johnson National Historical Site regarding the location of a proposed water well site at LBJ Birthplace, and evaluate and make a study for an acceptable well design as requested by the Superintendent's memorandum of January 3, 1972. Enroute met with U.S. Geological Survey (Austin District) officials in Johnson City regarding the water resources FY 1972 program; and visited Amistad Recreational Area to evaluate and inspect the existing well and water resources potential at Diablo East.

2. Itinerary: Departed Santa Fe on January 18 for Lyndon B. Johnson National Historical Site at Johnson City, Texas. On duty at Lyndon B. Johnson NHS from January 19 through the morning of January 20, then proceeded to Amistad RA at Del Rio, Texas, arriving on the afternoon of January 20. Remained on duty at Amistad RA and returned to Santa Fe on the afternoon of January 21.

3. Companions: None

4. Lyndon B. Johnson NHS:

a. Accomplishments: Arrived at Lyndon B. Johnson NHS on the evening of January 18 and met with Superintendent Walter T. Bruce for a brief discussion on ground water problems at the site (Birthplace). On Wednesday morning, with Superintendent Walter T. Bruce and Maintenance Supervisor Manuel White, made an on-site inspection of the existing water facilities at the LBJ Boyhood Home in Johnson City and the LBJ Birthplace near Stonewall. Layout of utilities, existing water supply systems and use of the facilities were noted. As noted in Supervisor of Maintenance Ronald E. Cotten's Trip Report of November 29 and 30, the domestic supply system at the Birthplace is unacceptable due to a number of deficiencies involving well construction and water supply lines. Irrigation water is presently supplied from the Pedernales River through privately owned irrigation lines (surface installed) to the LBJ Ranch.

With Superintendent Bruce and Maintenance Supervisor White, met with USGS Austin District Water Resources Officials, Messrs. Allen G. Winslow and Edward R. Leggat, for an on-site discussion and review of the proposed Birthplace well site. The ground water geology of the area including information on existing wells in the vicinity, were discussed,



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particularly those wells drilled on the LBJ Ranch. Virdell Brothers Drilling Co. of Llano, Texas, who have drilled water wells on the LBJ Ranch and vicinity, was contacted and an on-site meeting was arranged with Mr. Taylor Virdell. We met with Mr. Virdell at the Birthplace and discussed drilling procedures, well designs and estimated drilling costs (including pump installation costs). Drilling costs are approximately \$3.50 per lin. foot; casing \$2.25 per lin. foot installed. Water requirements at the Birthplace is principally one of providing water for seasonal irrigation demands. Present irrigation use involves operating a sprinkler system with 19 sprinkler heads for a 2-acre area at a peak demand of 39 GPM (6 sprinkler heads at a time @ 6-1/2 GPM per head = 39 GPM). Future domestic needs for a comfort station and drinking facilities are estimated at 2 GPM.

As reported by the Superintendent, no water rights, licenses or other actions have been claimed by the park.

b. Conclusions: From an analysis of data available and information obtained while on a tour of the Birthplace, a well drilled to 300 feet should produce a moderate supply of water (10 to 50 GPM). As noted, 40 to 45 GPM is desired to meet future domestic and irrigation demands. Two drilling sites are proposed which are located northwest of the Birthplace just outside of the perimeter fence; one site is adjacent to the fence line and the other site is approximately 150 feet towards the river just north of the LBJ Ranch Road. Power is available to both sites which are located above the flood stage of the Pedernales River. Well design and recommended construction specifications are forthcoming pending receipt of additional information. It is noted that no facilities are provided or proposed for fire protection. Fire protection could be provided by mobile equipment, installation of a reservoir with hydrants, or using portable equipment. The estimated costs of drilling and casing is \$1,800, pumping facilities \$900 and distribution lines \$500. The assistance provided by Superintendent Bruce and his staff was helpful in evaluating and studying the water situation.

5. Amistad RA

a. Accomplishments: I proceeded to Amistad Recreation Area and met with Superintendent Coleman C. Newman and Maintenance Supervisor Clark Crane for a brief discussion on the existing well at Diablo East. We visited the Diablo East Site for a field discussion of the existing well facilities and the proposed site of a new well (PCP No. U-7-3, Phase IV, dated January 15, 1971). As pointed out by Superintendent Newman, one problem to be solved in conducting a pump test on the existing well is providing water to the site during the period of the pump test. It was generally agreed that the estimated capacity of the existing well has increased since filling the reservoir in the summer of 1968, which is outlined in the Southwest Region's memorandum of January 3, 1972, to the Denver Service Center, subject, "Drilling of Production Well, Diablo East, Amistad Recreation Area". Superintendent Newman commented that a second well is required in case maintenance problems are encountered with the existing well.

Rough Canyon and the area below the dam was visited, and according to Superintendent Newman, the test well drilling for Rough Canyon and Rio Grande (below dam), programmed for FY 1972 (see Water Resource Proposals AMIS-2 and AMIS-3 of September 3, 1970), is no longer required by the Park. At Rough Canyon, water is now supplied for park needs by the recently drilled Concessioner's well (8" diameter well, approximately 400 feet deep). According to the Park Staff, this well provides an adequate supply of potable water for present and future needs. A number of IBWC wells below the dam are available as a potential water supply source for any future development below the dam.

b. Conclusions: Additional data is required for analysing the total potential of the existing well at the Diablo East Site. As the Superintendent noted, to conduct an eight-hour pump test would interrupt the present water supply system. Since the existing water system does not supply water to permanent type structures (i.e., buildings) and visitation is at a minimum during this time of the year, shutting down the system for 24 hours would not cause too great an inconvenience if the pump test could be conducted by March or April of this year. Further action is being taken to schedule a pump test. Based on the water supply situation at the Rough Canyon and Rio Grande (below the dam) areas, it is recommended that Water Resource Proposals AMIS-2 and AMIS-3, dated September 3, 1970, for water resources exploration, be cancelled.

D. J. Campbell

Cleared for Distribution:

Act. Assoc. Director
Professional Support

Date

Maps and Miscellaneous Information

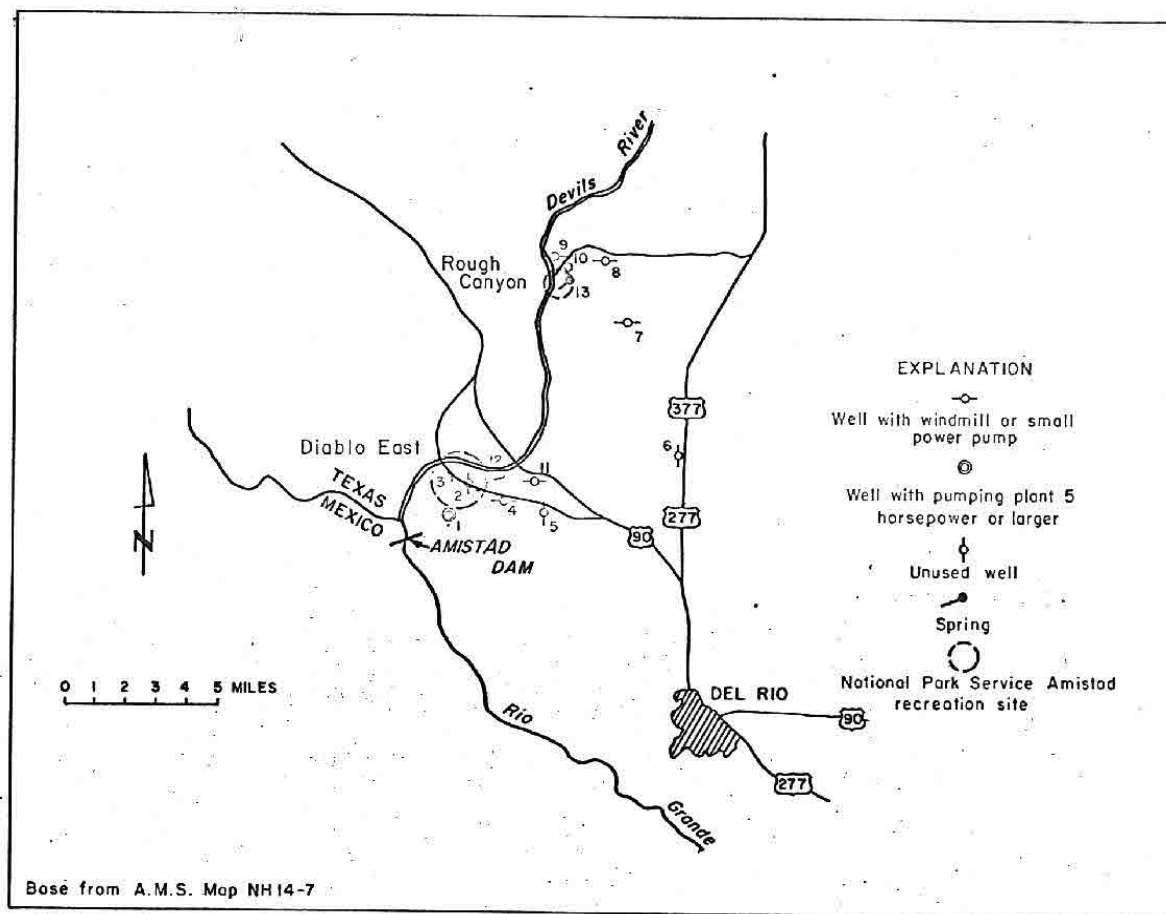


FIGURE I.-Locations of wells and springs near the Amistad Recreation Areas, Amistad Dam, Texas

Docket Information

Number of Documents in Docket 6

Documents Dated from 2/2/1972 to 6/7/1978

Docket Compiled: 1/28/2011