



WATER-RIGHT DOCKET

Hot Springs National Park

Docket No: 2

WELL #2

Other Supporting Information

10-30-1986: note to the file regarding wells 1 and 2

NOTE TO THE FILES

HOT SPRINGS NATIONAL PARK

Arlington Lawn - Wells 1 and 2

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HOSP Well No. 2

These wells are located on Arlington Lawn, at the north end of the city block which contains Bath House Row. I spoke with Jay Meredith, Utilities Foreman, about these wells. Jay is responsible for the water distribution system, its operation and maintenance.

Jay reported that about 1949 a central water cooling system was established at the park. Prior to this time each bath house had its own water cooling system. This new system acquired water by a pipeline which was laid in the Creek Arch for several hundred feet up stream. Flowing water in the Creek Arch (surface water drainage from the basin to the north) was diverted to the pipeline and flowed by gravity to a reservoir near the present cooling towers. Water was pumped, as needed, from the reservoir to the heat exchanger system. However, the water contained sediment and bits of trash which was undesirable, i.e., caused wear on the pump and build up of material within the heat exchanger pipes.

Jay started work at the park in 1972 and at that time the cooling water for the heat exchanger was obtained from the two subject wells. However, well yield did not meet the needs during peak demands. Further, Jay reports that after pumping for some time the wells produced water of increasing temperature. In an effort to increase the yield, assistance from Gary Moore was requested. Moore, a hydrologic engineer, was the Water Resources Coordinator for the Southwest Region. Jay reports that Moore had the wells cleaned out, but yield was still insufficient. (See memorandum of August 6, 1974 from Gary Moore to HOSP Superintendent as filed in Water Right Docket: HOSP 0003)

About 1974 the park tied into the City of Hot Springs water supply system to obtain the required water quantity for the heat exchanger system operation. This was accomplished by laying a 3" diameter pipeline from the city water pipeline in Central Avenue.

William Werrell
Hydrologist, Water Resources Division, NPS
October 30, 1986

WELL & PUMP DATA

WELL NO.	DEPTH (FT)	CASING DIAM (INCHES)	DATE DRILLED	CASING DEPTH (FT)	WELL SCREEN	PUMP TEST DATE	FLOW RATE (GPM)	PUMP DATA
✓ 1	203	8	10-30 MARCH 1955	0-161 (61)	SLOTTED 40-161 1/2" X 4" S.W.	MAY 16-17 1955	85	TURBINE PUMP, FAIRBANKS- MORSE - 25 HP 175' OF 4" COLUMN & 1" SHAFT 5 STAGE 6" H.C. BOWLS
✓ 2	200	8	13-23 JUNE 1955	53	PROBABLY 0	29-30 AUG 1955	200?	TURBINE PUMP, FAIRBANKS- MORSE - 20 HP 200 GPM @ 300' TDH 175' OF 4" COLUMN & 1" SHAFT 5 STAGE 6" H.C. BOWLS

LEGEND

● EXISTING WELL
○ PROPOSED WELL
--- PROPOSED WATER LINES (COOL)
--- EXISTING WATER LINES (COOL)

Number of Documents in Docket	3		
Documents Dated from	10/30/1986	to	10/30/1986
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