

H.C. 05081 (\$9.00) - S.F.

1962 July 3 AM 8:37
STATE ENGINEER OFFICE
DISTRICT I
ALBUQUERQUE, N. MEX.

1962 July 3 AM 9:22
STATE ENGINEER OFFICE
DISTRICT I
ALBUQUERQUE, N. MEX.

IMPORTANT-READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT TO CHANGE PARTIAL POINT OF DIVERSION
(by drilling a well to supplement surface waters)

RIO GRANDE UNDERGROUND WATER BASIN

Book No. _____ File No. RG-7781 amending 01728 and 01729

Application received July 3, 1962

- Name of applicant MARJORIE WILLIAMS
Postoffice address Jacona Ranch, City or Town Route 1, Santa Fe
County of Santa Fe, State of New Mexico
- Water right was acquired by beneficial use for irrigation purposes and is recorded in the State Engineer's Office under File No. _____
Priority date of water right being before 1900
- (a) Source of water supply Pojoaque, River, Tesuque Creek, Springs and well.
(river, arroyo, spring, etc., if applicable)
a tributary of Rio Grande, Name of Acequia Larga
(Acequia, Ditch, Lateral, etc.,

and Acequia Barranca supplying water)

(b) Present point of diversion lies in the _____
of Section 7, Township 19N, Range 9E, N. M. P. M.,
of the and in Section 12, 19N., 8E. Grant.

(if applicable and location projected)

or on _____ Map No. _____, Tract No. _____

(District or other)

at a point _____ feet from the _____ line, and _____ feet

from the _____ line of Section (Map No.) _____, Township (Tract No.) _____

Range _____ N. M. P. M.

(c) Quantity of water to be used from all combined sources 43.5 acre feet.

(d) Supplied to 14.5 acres of land described as follows:

Subdivision or District	Sec. or Map No.	Twp. or Tract No.	Rge.	Acres	Owner
<u>SW 1/4</u>	<u>11</u>	<u>19N</u>	<u>8E</u>	<u>14.5</u>	<u>Marjorie Williams</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

(e) If above lands have supplemental water rights, described each separately giving source of supply, File No., acreage and quantity or proportion of total supply furnished there- by

- Application is hereby made to change partial point of diversion for the following reasons: Difficulty and cost of maintaining diversions and ditches due to floods and gravel pits leased by the Hwy. Dept. and operated by Hwy contractors, and other causes. The system has become inefficient, making it more efficient to produce water from a well.

- Well to which change is to be made: (a) located in the _____
SW of section 11, Township 19N, Range 8E, N. M. P. M.,
on land owned by applicant
of the _____ Grant,

(if applicable and location projected)

or on _____ Map No. _____, Tract No. _____, at a

(District or other)

point _____ feet from the _____ line, and _____ feet

from the _____ line, of section (Map No.) _____ Township (Tract No.) _____

Range _____ N. M. P. M.,

(f) If an existing well give File No. New Well: state applicant's fractional or percentage interest therein _____; describe any other rights from well by File No., acreage, etc.

(g) if a new well give name of driller contract not let; diameter (outside) of casing, 10 inches; approximate depth to be drilled 200 feet; pumping equipment to be used, turbine motor, electric pump

- Additional statements or explanations
See statement attached.

1963 APR -4 AM 8:40
STATE ENGINEER OFFICE
SANTA FE, N. M.

1962 AUG -1 AM 8:53
STATE ENGINEER OFFICE
DISTRICT I
ALBUQUERQUE, N. MEX.

1962 JUL -3 AM 9:22
STATE ENGINEER OFFICE
SANTA FE, N. M.

Statement to Accompany Application
for Permit to Change Partial Point

1962 - AUG 10 AM 10:16
STATE ENGINEER OFFICE
DISTRICT I
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(by drilling a well to supplement
surface waters).

Accurate determination of the date of construction of Acequia Larga has not yet been made. W. W. Follett, in his report to the International Boundary (Water) Commission, United States and Mexico, sets the date of construction of the private ditches diverting from Pojoaque (Nambe) Creek as "The first or second decade of the 18th century". Herbert W. Yeo, former State Engineer of New Mexico in his "Report on Irrigation in the Rio Grande Basin in Texas Above Ft. Quitman and in New Mexico", Volume 1, page 192 refers to the date of construction as "Old".

The Acequia Larga de Jacona derives its supply from 1) a spring on the north side of Pojoaque (Nambe) River which water is carried across the river in an open ditch upstream from the head of the Acequia 2) from Pojoaque River 3) from springs located between the Pojoaque River and Tesuque Creek 4) from tailwater from Barranco Alto located between Pojoaque River and Tesuque and 5) from Tesuque Creek. Some records of measurements of the flow of water in the Acequia have been found as follows:

1) The U. S. Geological Survey maintained a Parshall Flume and automatic water stage recorder on the ditch at a point between the Pojoaque River and Tesuque Creek from May 1936 to December 1939m inclusive. The station recorded the combined diversions from the spring north of Pojoaque River, the diversions from Pojoaque River and the diversions from one of the lower springs. Entering the Acequia Larga below the U. S. G. S. station, and not recorded, were the flows of one spring, tailwater from Acequia Barranca and diversions from Rio Tesuque. The measured portion of the flows in the Acequia Larga are reported by the U. S. G. S. to have been 610 acre-feet in 1937, 852 in 1938 and 919 in 1939. The maximum daily average flow reported was 5 c.f.s.

2) Herbert W. Yeo, in the report previously mentioned, states that a field inspection was made on June 3, 1910, at which time the flow in the ditch was 2.25 c.f.s. He reports the capacity of the Acequia to be 5 c.f.s.

560 } The irrigated area under the Acequia Larga was reported by Yeo to be 150 acres. The portion of the supply measured by the U. S. G. S. averaged about 800 acre-feet per year or more than 5 acre-feet per acre. The unmeasured portion of the supply is unknown; but substantial.

In the early days when labor was very inexpensive, the use of systems like this was the only practical means of obtaining water. The cost of drilling wells and pumping water was prohibitive; but with the increase in labor costs, the old method of diversion and distribution which is very inefficient, has become so prohibitive in cost that maintenance is breaking down, causing periodic water shortages and increased temptation to take water out of turn. This situation was aggravated in 1960 and 1961 by the removal of sand and gravel from pits in the Pojoaque River by contractors operating under a permit granted by the United Pueblo Agency and the Council of the Pueblo of Pojoaque to the State Highway Commission of New Mexico, which resulted in lowering the bed of

the river by about 3 feet in the reach where the spring flows are brought across from the north side of the river, setting up a condition whereby these spring waters would not flow by gravity across the river far enough upstream to enter the Acequia. In 1962 a dam was constructed of steel posts, barbed wire and brush diagonally across the river, causing upstream sedimentation sufficient for a ditch crossing. However, the water table has dropped to the approximate level of the eroded channel, hence there are such seepage losses into the dry man-created sediments above the water table that the spring flows and the Pojoaque River flows were, on 27 June 1962, sinking into the bed of the river and reappearing below the dam where they are unavailable to Acequia Larga. On 15 June when the flows were greater there was enough water to exceed the seepage and provide some water to Acequia Larga.

The applicant prepared the land under Acequia Larga and planted seed in 1960 and 1961 and used all of the water that reached her land; but was unable to produce a crop. In 1962 water, as available, is being used to water native vegetation. The applicant has learned by experience that this system requires daily care and policing and that the cost of perfecting the system under today's condition is prohibitive so that the practical means of continuing to exercise her water rights is by use of a well.

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