

Before the Division of Water Resources
Department of Public Works
State of California

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In the Matter of Application 9495 of Santa Fe Gold Mines, Inc.
to Appropriate from Arrastrre Creek in San Bernardino
County for Mining and Domestic Purposes

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Decision A. 9495 D. 441

Decided May 9, 1939

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APPEARANCES AT HEARING HELD AT SAN BERNARDINO MAY 4, 1939

For Applicant

Santa Fe Gold Mines, Inc.

Grant Holcomb

For Protestants

J. Dale Gentry and A.R. Swarthout

J. Dale Gentry

John E. and Helma C. Carrier

Frank R. Wicks

Lewis Nelson James

John H. Hamer

EXAMINER: Harold Conkling, Deputy in Charge of Water Rights, Division of Water Resources, Department of Public Works, State of California.

O P I N I O N

Under Application 9495, Santa Fe Gold Mines, Inc. proposes to appropriate from Arrastrre Creek in San Bernardino County an amount of water not to exceed 0.25 of a cubic foot per second to be diverted throughout the entire year at a point within the NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 27, T 3 N, R 2 E, S.B.B. & M. for mining and incidental domestic purposes within the NE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 8, T 3 N, R 2 E, S.B.B. & M. Water used for mining purposes is to be returned to the Arrastrre Creek watershed.

Protests

J. Dale Gentry and A. R. Swarthout claim an appropriative right initiated prior to the effective date of the Water Commission Act to divert water from Arrastrre Creek at a point within the 8th of Section 31, T 4 N, R 3 E, S.B.B. & M. They claim that all of the water has been continuously used during the summer months and during the winter months the water was spread upon the ground where it percolates through to "Old Woman Springs" and is there reclaimed. Protestants allege in effect that any diversion of the waters of Arrastrre Creek will deprive them of water to which they are entitled for irrigation and domestic purposes.

John E. and Hilma C. Carrier, John H. Hamer and Lewis Nelson James claim rights as owners of land overlying an underground water basin fed by the waters of Arrastrre Creek and allege in effect that the proposed diversion of the applicant will result in diminishing the underground water supply upon which they are dependent.

Hearing Set in Accordance with Section 1a of
the Water Commission Act

Application 9495 was completed in accordance with the Water Commission Act and the Rules and Regulations of the Division of Water Resources and being protested was set for a public hearing in accordance with Section 1a of the Water Commission Act on May 4, 1939 at 10:00 o'clock A.M. in Supervisors Chamber, Court House, San Bernardino, California. Of this hearing applicant and record protestants were duly notified.

General Discussion

Arrastrre Creek, the source of the proposed appropriation, rises in the northeastern part of T. 1 N, R 2 E, S.B.B. & M. just north of Cienga Secca as shown on the San Gorgonio Quadrangle of the United States Geological Survey and flows somewhat west of north to the Mojave Desert. The Creek has

a rather uniform and not precipitous grade from the head down to Smarts Ranch which is about $1\frac{1}{2}$ miles above the applicants' proposed point of diversion. Below Smarts Ranch the bed of the canyon is precipitous to the point where the stream debouches on to the desert floor.

During the summer months it appears that the flow in the creek bed above Smarts Ranch is intermittent, the water rising and sinking along the stream bed but there is always a flow past the proposed point of diversion of the applicant. During the summer months the water disappears in the valley about one mile from the mouth of the canyon but during the winter months the flow is continuous and after leaving the mouth of the canyon flows in several channels toward Old Woman Springs which are located within the NW $\frac{1}{4}$ of Section 31, T 4 N., R 3 E., S.B.B. & M.

Below the proposed point of diversion a branch called the West Fork of Arrastrre Creek enters the main creek. This stream is not more than four miles in length and the summer flow is relatively small.

Testimony presented at the hearing indicated that the mean annual runoff of Arrastrre Creek drainage area above the mouth of the Canyon which embraces 32.9 square miles was about 2520 acre feet, of which amount applicant proposes to appropriate a continuous flow of 0.25 c.f.s. or approximately 185 acre feet per annum.

The record indicates that on May 1, 1911, Charles Martin and A. R. Swarthout posted a notice claiming 500 miners inches measured under a 4 inch pressure at a point on Arrastrre Creek about 6 miles south of Old Woman Springs (at the mouth of the Canyon) for "mining, milling, manufacturing, irrigating, stock watering, domestic purposes and all other purposes to which water can lawfully be applied, the said water to be used in reservoirs and troughs".

This notice was recorded at the request of A. R. Swarthout on May 8, 1911.

in the records of San Bernardino County. Subsequently a few lengths of pipe were installed and water diverted from the creek to watering troughs. About 4 or 5 years after the installation was completed, however, the diversion works were washed out and for many years protestants' cattle have been watered from pools in the stream bed itself, no water having actually been diverted for this purpose subsequent to the washing out of the pipe line.

The protestants stated at the hearing that this phase of their objections would be eliminated if facilities were provided and maintained at or near the point of diversion to allow free use of water for stock watering purposes. Applicant was agreeable to having such a condition inserted in the permit.

Protestants Gentry and Swarthout were apparently chiefly concerned as to the effect that applicants' proposed diversion may have upon the water which is taken and used from Old Woman Springs. The other protestants also object to the proposed diversion in so far as it may result in depleting the underground basin over which their property lies.

The flow of Old Woman Springs has been developed by driving a tunnel into the steep side of a long ridge of lava which strikes northwest. According to Water Supply Paper No. 578 published in 1929, the scarp of this ridge is continuous with that at Cottonwood Spring which is located within the SE $\frac{1}{4}$ of Section 25, T 4 N, R 2 E, and is doubtless due to faulting. The water apparently comes from cracks in the lava which is much broken. When the place was visited in December 1917 by David G. Thompson, the author of Water Supply Paper No. 578, the flow of the springs was about 125 gallons a minute. In wet years the yield is said to increase to as much as 176 gallons per minute (0.39 c.f.s.). The water was conducted to a reservoir about 40 feet in diameter and 4 feet deep and used for the irrigation of about 9 acres of alfalfa and to water 50 or 60 head of cattle.

Testimony presented at the hearing indicated that the flow from the tunnel varied from 14 to 20 miners inches and that the water was now used for the irrigation of a family orchard, consisting of about 30 fruit trees, about 100 or 150 cottonwood trees, and approximately 20 acres of alfalfa and for stock watering purposes.

Francis Edward Vaughn in his "Geology of San Bernardino Mountains North of San Gorgonio Pass" (University of California Publication, Bulletin of the Department of Geological Sciences, Vol. 13, No. 9, 1922) which was referred to at the hearing states at page 397 as follows:

"From Rock Corral a scarp extends to the southeast beyond the limits of the quadrangle and to the northwest two miles beyond Old Woman Springs. The stream channels on the plateau southwest of Rock Corral pursue very tortuous courses until they reach the top of the escarpment where they plunge down precipitously. This discordance is equally clear southeast of Old Woman Springs, where a flat bench of granite and basalt rises suddenly above the desert floor. Old Woman Springs are on this line and the water from them is warm, about 20° C. While this temperature is not very high, it is sufficient to indicate a deep source such as a fault might tap. Another spring is found on the same line about a mile northwest of Old Woman Springs. All this evidence is in agreement and points to the same thing: the scarp is the result of a movement on a fault."

That the water at the spring was of deep seated origin was supported by the testimony of Mr. Swarthout at the hearing who stated that he had attempted to obtain water by sinking a shaft at a point about one half mile toward the mouth of Arrastra Creek Canyon from Old Woman Springs. No water was obtained after sinking the shaft to a depth of 100 feet and there was no evidence of any seepage in the shaft.

It appears that due to the presence of the fault other streams contribute to origin of the waters of Old Woman Springs. Applicants' engineer estimated that the entire drainage area extending from Grapevine Creek on the west to an unnamed stream on the east which heads near Rock Creek, comprising approximately 115.7 square miles exclusive of the valley floor contributed water to the underground basin lying westerly of the fault; that the mean seasonal runoff from this area was about 4230 acre feet and that the 185 acre feet which applicant seeks to divert from the Arrastrre Creek, a large portion of which would be returned to the contributory watershed, would have little or no effect upon the flow in protestants' tunnel at Old Woman Springs.

While it is believed that the estimated runoff which enters the general valley area which is drained by the spring is probably much too high yet it is highly probable that a portion of the runoff from sources other than Arrastrre Creek does contribute to the flow of the spring. The diversion proposed by the applicant would no doubt affect the flow of the spring somewhat but to what extent can not be determined. It is believed however that the effect would be small and no material injury would result to the protestants as a result of the appropriation as applicant proposes to appropriate less than $\frac{7}{8}$ % of the estimated flow of Arrastrre Creek which is only one of the streams which contribute to the waters of the spring.

The same conclusion may be drawn as to the water supply of those protestants who own and occupy lands lying northeasterly of Old Woman Springs except that probably the only water available to them from Arrastrre Creek is water which during times of flood passes on the surface over the fault line and that which slowly percolates through the interstices of the lava dyke.

The protests filed by protestants John E. and Helma C. Carrier and John H. Hamer indicate that no water is being used by them at the present time.

Protestant James owns lands located about 4 miles northeasterly of Old Woman Springs and claims to have commenced the use of water about 1932 for domestic purposes and for the irrigation of a garden and fruit and shade trees. Although these protestants and others in Johnson Valley whose names were not mentioned were represented at the hearing by Mr. Wicks, he admitted that their interests were relatively small and that he had not talked to any of the people whom he represented having been engaged by protestants Gentry and Swarthout to represent them.

Conclusion

The purposes to which the applicant proposes to put the water are useful and beneficial ones; the applicant has been assured by the Forest Service that a conduit permit will be issued immediately upon the approval of Application 9495 by this office, and the applicant has already expended a large amount of money in the construction of buildings and roads.

While the diversion proposed by the applicant may somewhat reduce the waters of the underground basin which contribute to the flow of water in the tunnel at Old Woman Springs it is believed that the effect would be slight and would not interfere with the protestants obtaining the amount of water which has beneficially been used by them in the past. It is therefore the opinion of the Division that Application 9495 should be approved.

In order, however, that the protestants may continue to enjoy the privilege of watering their cattle at the mouth of Arrastré Canyon, a clause should be incorporated in any permit issued in approval of Application 9495 to the effect that at a point convenient of access at or near the point of diversion, satisfactory facilities shall be provided and maintained to allow free use of water for domestic and stock purposes by the public.

ORDER

Application 9495 for a permit to appropriate water having been filed
with the Division of Water Resources as above stated, protests having been
filed, a public hearing having been held and the Division now being fully in-
formed in the premises:

IT IS HEREBY ORDERED that said Application 9495 be approved and that
the permit be granted to the applicant subject to such of the usual terms and
conditions as may be appropriate and subject to a further special term and con-
dition to wit:

convenient of access at or near the point of
appropriation, necessary facilities shall be provided and maintained
for domestic and stock purposes by

Seal of the Department of Public Works of
Massachusetts, dated the 1st day of May, 1939.

EDWARD HYATT, State Engineer

EDWARD HYATT,
Deputy

SECRET

Application #690 for a permit to appropriate water located down stream with the Division of Water Resources as above stated, application having been filed, a public hearing having been held and the Division now being fully informed in the premises:

IT IS HEREBY ORDERED that said application #695 be approved and that a permit be granted to the applicant subject to such of the usual terms and conditions as may be appropriate and subject to a further special term and condition as follows, to wit:

At a point convenient of access at or near the point of diversion, satisfactory facilities shall be provided and maintained to allow free use of water for domestic and stock purposes by the public.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 9th day of May, 1939.

EDWARD HYATT, State Engineer

By A. L. G. [Signature]
Deputy

Hyatt