

IN THE MATTER OF APPLICATION NO. 13430  
IN NAME OF REORGANIZED SILVER KING  
DIVIDE MINING COMPANY TO APPROPRIATE  
UNDERGROUND WATER FOR MINING AND  
DOMESTIC PURPOSES, LANDER COUNTY, NEV.

RULING

Application No. 13430 was filed June 29, 1950 by Reorganized Silver King Divide Mining Company to appropriate 0.1 c.f.s. of water from an underground source for mining and domestic purposes. The proposed point of diversion is within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  Section 10, T. 20 N., R. 40 E., and the proposed place of use is to be within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  Section 16, T. 20 N., R. 40 E.

On October 16, 1950 a protest to the granting of a permit under said Application No. 13430 was filed by Wayne H. Smith. This protest reads as follows:

"The mining company had a well bored to a depth of 108 feet. This well is within fifty feet of our water-right No. 9984 and within one hundred feet of our water-right No. 9641. It is a deeper development of our present water-rights. The Mining Co. has given up the bond and lease on our property and has stopped all work on the adjoining property. They do not own any mining property in the district. Our pipe line is connected to the well and is the only outlet for the water. Our contract with the Mining Co. calls for all improvements to be left on our property."

On August 20, 1951 a field investigation was made by J. A. Millar, Office Engineer of the State Engineer's office, accompanied by Kenneth P. Dillon, attorney for Applicant, and by Protestant Wayne H. Smith and wife. The watchman for the Applicant also was in attendance.

On October 24, 1951 another field investigation was made by H. E. Winchester, Geologist, and J. A. Millar, Office Engineer, both of the State Engineer's office. Mr. Wayne Smith, Protestant, and his mine operator, A. J. Cooley, were present. No representation of the Reorganized Silver King Divide Mining Company was in attendance, although Mr. Kenneth P. Dillon, attorney for the Company was notified.

The reports of the two investigations are of record in the office of the State Engineer.

Mr. Wayne H. Smith's protest to the granting of a permit under Application No. 13430 is partially based on the grounds that he is the owner of two certificates to appropriate underground water in the immediate vicinity of the well applied for under Application No. 13430. These water rights are as follows:

Application No. 9641 filed November 26, 1932 by Charles E. Towle was approved November 21, 1933. On December 12, 1940 Certificate No. 2554 was issued under this permit in the amount of 0.025 c.f.s. (11.22 gallons per minute) for mining, milling and domestic use. By assignment, the ownership of this certificate is now in the names of Wayne H. Smith and Elizabeth H. Smith. This water was developed by means of a dug well 3½' x 5' x 52' deep, timbered with redwood and equipped with a gasoline engine and pump. Water was conveyed through 4,000' of 2" pipe line to a 3,000 gallon storage tank. On September 17, 1933 the water level in the well was 35 feet below the surface of the ground.

Application No. 9984 was filed April 27, 1936 by Wayne H. Smith to appropriate underground water within the SW¼ SW¼ Section 10, T. 20 N., R. 40 E. Said application was approved October 24, 1936 and on December 12, 1940 Certificate No. 2555 was issued in the amount of 0.025 c.f.s. (11.22 gallons per minute) for mining, milling and domestic purposes. This well was, according to our records, drilled to a depth of 80 feet.

According to the report of the field investigation, some time prior to the year 1950 the Reorganized Silver King Divide Mining Company had the Wayne Smith property under bond and lease, and also had under bond and lease the adjoining mining property belonging to J. H. Bible, George Hennen and John Berlin. The aforementioned mining company, desiring to treat the ores from the two properties by one mill and finding the water supply from the two Smith wells not sufficient for their needs, drilled another well. This well, the water from which is applied for under Application No. 13430, was drilled during June of 1950 by J. B. Reynolds, a licensed well driller from Fallon, Nevada. According to the log of the well, it was drilled to a depth of 108 feet and at the time of completion had a free flow of 12 gallons per minute. This well is located about 97 feet southeasterly of the dug well under Permit No. 9641 and about 75 feet easterly of the drilled well under Permit No. 9984. The flow was measured at the time of the field investigation on August 20, 1951 and was found to be 0.7 gallons per minute, and on October 24, 1951 the flow was 1.2 gallons per minute. The log of said well indicates that the artesian flow comes from just below a 4-foot layer of clay found between 76 and 80-foot depths.

Recently the Reorganized Silver King Divide Mining Company gave up their bond and lease on the Smith property, but retained their bond and lease on the Bible-Hennen-Berlin property. The 108-foot well drilled by the mining company, and on which Application No. 13430 was filed, was, according to our information, located on the Smith property and we understand litigation is pending between the parties as to the ownership of this well.

The wells are located very close together. The 52' dug well (Permit No. 9641) is located near the head of a ravine having an easterly course. The 80' drilled well (Permit No. 9984) is located about 60' southerly from the dug well and is above the

bottom of the ravine. The 108-foot well drilled by the mining company (Application No. 13430) is in the bottom of the ravine and is 97' down-grade from the 52' dug well. The elevation of the ground surface at the 108-foot well is about 10 or 12 feet lower than the 52' dug well.

From observation on the ground, it appears that the water supply for these three wells is furnished from a small catchment area of a few acres in area, lying above the wells and which would be dependent upon winter precipitation in the form of snow. Apparently some of the water as it percolates downward, finds its way below the clay stratum, and as it percolates downhill builds up pressure and when such structure was penetrated by the 108-foot well, the pressure was sufficient to cause the water to rise and flow freely from the top of the casing.

While there may not be any direct connection between the wells under Permits Nos. 9641 and 9984, and the 108-foot well under Application No. 13430, it seems obvious to us that since the wells obtain their water from a common source, the drawing off of water from the lower well (Application No. 13430) would take water that would otherwise be available from the Smith wells. It is stated in the report of the field investigation on August 20, 1951, that about 30 or 40 feet below the 108' well a volcanic reef crosses the canyon and would act as a dam. If such is the case, and if the artesian well (108' well under Application No. 13430) was closed, the result would be that there would be very little water escaping downstream and the aquifer which furnishes such artesian water would fill up to the intake area. Much of the water percolating downward from the intake area would then find its outlet through the upper aquifers that furnish the Smith wells.

Certificates Nos. 2554 and 2555 issued under Permits Nos. 9641 and 9984, respectively, is in the total amount of 0.05 c.f.s. or 22.44 gallons per minute. Mr. Smith, the owner of said certificates, would then have the right to divert this amount of water from his two wells. If these two wells in their present status would not give that amount of water, he could, if he so desired, deepen either one or both of these wells. If the 58' dug well was deepened approximately 50 feet the artesian aquifer encountered in the 108-foot well would be penetrated. While it would be unlikely that water would flow from the deepened well, he would still be able to pump to its capacity. This then should very adversely affect the 108-foot well applied for by the mining company.

It is our opinion that the amount of ground water available in this basin is very limited, probably not enough to supply the rights of Mr. Smith if continuous diversions were made.

RULING

Based on the reports of the field investigation, and also on our knowledge of the occurrence and hydraulics of ground water, it is my opinion that the granting of a permit under Application No. 13430 would tend to impair existing rights of protestant. The protest to the granting of said application is therefore sustained and said Application No. 13430 is herewith denied.

Respectfully submitted,

  
HUGH A. SHAMBERGER  
State Engineer

November 21, 1951