

BEFORE THE DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

oOo

In the Matter of Application 7865 of W. R. Wallace to Appropriate water from Darwin Wash in Inyo County for Mining and Domestic Purposes and in the Matter of Revocation of Permit 1086 heretofore issued in approval of Application 2359 of Wagner Assets Realization Corporation to appropriate water from Darwin Wash in Inyo County for Mining, Milling and Domestic Purposes.

oOo

DECISION A. 7865, 2359 D - 369

Decided *January 22, 1935*

oOo

APPEARANCES AT HEARING HELD AT LOS ANGELES, OCTOBER 10, 1934.

For Applicant

W. R. Wallace

Harvey W. Guthrie

For Protestant and Permittee

Wagner Assets Realization Corporation

Fred E. Pettit, Jr.
Benjamin H. Stansbury

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

oOo

O P I N I O N

GENERAL DESCRIPTION OF PROJECTS

Application 2359 was filed on May 26, 1921, by the Darwin Silver Company and approved on June 14, 1922, by the issuance of Permit 1086 for an appropriation of an amount of water from Darwin Wash not to exceed 2.0 cubic feet per second to be diverted throughout the entire year for mining, milling and domestic purposes and to be used at the Lucky Jim, Defiance,

Lane, Promontory and Columbia mining claims located within Sections 1, 2, 11, 13, 14, 15, 23 and 25, T 19 S, R 40 E, and within Sections 18, 30 and 31, T 19 S, R 41 E, M.D.B.&M. The point of diversion was described as being at a point N. 83° 35' E. 21,000 feet from corner common to Sections 14, 15, 22 and 23, T 19 S, R 40 E, M.D.B.&M. being within the projected NE $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 17, T 19 S, R 41 E, M.D.B.&M. According to the terms of the permit, construction work was to commence on or before September 1, 1922, to be completed on or before June 1, 1924, and the water applied to full beneficial use on or before June 1, 1925. On May 29, 1925, evidence of change in ownership was filed with this office and the records changed to indicate that Application 2359, Permit 1086 stood in the name of Wagner Assets Realization Corporation.

A steady showing of progress was manifested from the time permit was issued until the year 1928. The 1928 progress report indicated that some \$56,300 had been expended on construction work which included the sinking of wells, installing an electrically driven pumping plant, laying 4 miles of four inch pipe, installing storage tanks of 200,000 gallons capacity, concreting and roofing of pump house and well, acquiring a triplex plunger booster pump and general maintenance and repairs. The report also indicated that water had been used for the purposes designated in the permit. Several extensions of time had been granted based upon the showing of diligence and expenditures.

Subsequent to the year 1928 the Corporation was seriously hampered and retarded by internal difficulties encountered in the personnel and management of the organization of the lessee company involving extended negotiations and litigation and it was necessary to clear certain flaws and clouds

upon the title to its various properties. These difficulties were apparently cleared up but due to the continued low prices of zinc, silver and lead the mining was discontinued and water was used only for domestic and fire protection purposes. Since the year 1928 three extensions of time were granted at the permittee's request, the extensions being based upon the record of past diligence and the fact that the plant was maintained and ready to operate when the market conditions improved. The last extension granted was until December 1, 1936, within which to complete construction work and to apply the water to full beneficial use under the permit.

Application 7865 was filed by W. R. Wallace on March 7, 1934, to appropriate one cubic foot per second of water from Darwin Wash for mining and domestic purposes throughout the year upon the Bruce Mining claim located within the NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 13, T 19 S, R 40 E, M.D.B.&M. The point of diversion as described in Application 7865 was identical with that described in Application 2359, Permit 1086 of Wagner Assets Realization Corporation. The application was protested by the Wagner Assets Realization Corporation.

PROTEST

The Wagner Assets Realization Corporation claims rights initiated under Application 2359, Permit 1086 described above and alleges in effect that applicant's proposed point of diversion is actually about 500 feet above its point of diversion; that the amount of water available in Darwin Wash is already insufficient for use under Permit 1086 and that should Application 7865 be approved it would deprive it of water to which the Corporation is entitled and would render its project valueless.

W. R. Wallace alleges in effect that no use of water has been made by permittee since the year 1927 except for domestic use only and that the mining project has virtually been abandoned.

HEARINGS SET IN ACCORDANCE WITH SECTION 1a AND SECTION 20
OF THE WATER COMMISSION ACT

Application 7865 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 October 11, 1934, at 10:00 o'clock A.M. in Room 803 State Building, Los Angeles, California.

In view of the allegations of the applicant that diligence had not been maintained in connection with Application 2359, Permit 1086 it was deemed in order to set this project for hearing at the same time and place under Section 20 of the Water Commission Act in order that a showing might be made by the Wagner Assets Realization Corporation why its permit should not be revoked for failure to comply with the terms and conditions thereof.

Of these hearings applicant and permittee were duly notified.

PHYSIOGRAPHY AND HYDROLOGY

From a report by Reaburn and Bowen filed as protestant's Exhibit No. 1 at the hearing, it appears that Darwin Wash above the point of diversion described in Application 2359, Permit 1086 has a drainage area of approximately 160 square miles ranging in elevation from 4000 feet on the valley floor to 8850 feet at the summit of Maturango Peak in the Argus Range.

Normally Darwin Wash is a dry stream in its upper reaches, the subsurface flow appearing as a live stream over the bedrock in the constricted part of the canyon approximately five miles below the point of diversion described in Permit 1086. The surface flow of Darwin Wash apparently cannot be considered as being available for practical diversion and the water supply available must be obtained from the underground flow, the water table

being at least four or five feet below the level of the stream bed.

About four miles below the intake of the Corporation the water in Darwin Canyon comes to the surface and falls over the bedrock. Actual measurements at the falls indicate that the normal flow is about 0.40 cubic foot per second and both applicant and protestant agreed that the probable normal flow in Darwin Wash at the intake was probably not in excess of 0.50 of a cubic foot per second, the loss between the intake and the falls being occasioned by the transpiration from the vegetation between the two points.

PUMPING EQUIPMENT AND DIVERSION WORKS INSTALLED
BY WAGNER ASSETS REALIZATION CORPORATION

The record indicates that the Wagner Assets Realization Corporation has put down a well alongside of Darwin Wash at its point of diversion consisting of a 4' x 4' shaft sunk 17 feet to bedrock, from the bottom of which a lateral drift 5' x 5' in cross section extends into the Wash a distance of some ten feet. The top of the well is curbed with heavy concrete extending from a point 3 feet above the ground surface to about 7 or 8 feet below. Below this point the well is curbed with concrete ties. As soon as the conditions warrant the Corporation intends to extend the lateral drift or cut off wall clear across the underground channel which is about 72 feet in width.

The corporation has constructed a concrete pump house equipped with a $6\frac{1}{2}$ " by 15" horizontal triplex pump belt connected to a General Electric 75 H.P. 440-volt 60 cycle induction motor and a 1" Byron Jackson centrifugal sump pump coupled to a 5 H.P. General Electric motor. In addition there is a small booster plant consisting of a 5 H.P. Allis Chalmers 440 volt 60 cycle motor belt connected to a $1\frac{1}{2}$ " x 10" triplex horizontal pump. The pumping equipment alone together with the distribution system has cost the Corporation some \$70,000 and the power line from Keeler to the pumping plant an additional

\$30,000, making a total expenditure of some \$100,000 for pumping equipment. In addition to the diversion works several storage tanks have been constructed, a pilot mill and equipment installed having a capacity of about 100 tons of ore daily and several buildings constructed. The record indicates that since 1916 approximately \$3,000,000 has been expended upon the project including the development work.

That the present installation is temporary only is clearly indicated by the record. At the time Application 2359 was filed the letter of transmittal accompanying the application indicated that while the present pumping equipment which had already been installed was ample to supply applicant's present needs it was intended to construct a larger mill which would require more water.

As the 6 $\frac{1}{2}$ inch by 15 inch triplex pump described in the application was apparently inadequate to deliver the amount of water requested in Application 2359, applicant's attention was directed to this fact, and under date of January 10, 1922, applicant informed this office that the diversion works described in the application were temporary only, being designed to deliver only 250 gallons per minute against a 1600 foot head, but that it was intended to increase the capacity of the diversion works as the development of the project proceeded by adding other pumping units and pipe lines, etc. Based upon this information Application 2359 was amended to indicate that the diversion capacity would be increased and the application approved in this amended form.

The report of Reaburn and Bowen filed as Exhibit 1 of Wagner Assets Realization Corporation also indicates that the present installation is temporary only. On pages 10 and 11 of that report the following statement appears:

"Although a large proportion of these moneys have been spent in direct mining operations, yet a substantial part of this expense is the result of development work, and the investigation of the extent and character of the ore bodies. The present mill is in effect, a pilot mill, and has a capacity of but 60 tons per day. The re-financing program and proposed development of the properties contemplate the construction of the new mill with a capacity of from 300 to 500 tons per day."

The testimony presented at the hearing held on October 11, 1934, also clearly indicates that the present equipment is but for experimental purposes only and that it would probably necessitate the erection of a 500 ton mill before a reasonable return on the investment could be obtained. (See page 64 of Transcript.) Mr. Olund, a mining engineer and witness for the Corporation testified that the water supply was the limiting factor by which the estimates were fixed at 500 tons per day and that he would recommend the erection of a 1000 ton capacity mill on the property provided that sufficient water could be made available. (See page 52 of Transcript.)

USE OF WATER BY WAGNER ASSETS REALIZATION CORPORATION

The project under Application 2359, Permit 1086 was inspected by an engineer of this office on April 28, 1925, who reported that water had been used during the three years preceding the inspection for the milling of 125 tons of ore per day and for domestic purposes at eleven buildings for 130 people; that water had been used on the Defiance and Lane group of mining claims but none had been used on the Lucky Jim and Promontory claims and that approximately \$45,000 had been spent on construction work for the distribution of water. He stated that the diversion works had a capacity of 150 gallons per minute or 0.33 cubic foot per second.

Under date of March 31, 1926, Mr. H. E. Olund, agent for the Corporation, reported that the maximum daily use was approximately 200,000 gal-

lons and that the average use at the time of the report was approximately 125,000 gallons per day. He reported that the past use was not the maximum contemplated.

The testimony presented at the hearing indicated that prior to July 24, 1927, the Corporation was using approximately 60,000 gallons per day (0.09 c.f.s.) for the purposes designated in the permit; that subsequently the active mining operations had ceased due to the fact that it was impossible to operate at a profit on account of the prevailing price of lead and zinc; and consequently the use of water had been limited to about 200,000 gallons per month (0.01 c.f.s.) for domestic purposes by two watchmen for fire protection and to keep the redwood tanks filled to prevent them from deteriorating. Also about 31,000 gallons per month (0.002 c.f.s.) had been supplied to Wyman Brothers for the operation of a cyanide plant, a use not included under the permit.

PROJECT UNDER APPLICATION 2359, PERMIT 1086 NOT ABANDONED

The record indicates that the pumping facilities and the essential part of all necessary mining equipment have been maintained in very good condition at considerable expense to the permittee and the plant may be operated within a few days if necessary. It has been shown that considerable money has been expended on the project and during the last few years active efforts have been made to interest a number of different concerns in the project but due to the general economic condition and the low prices prevailing for zinc and lead the attempts have met with little or no success. The Corporation however still has hopes of developing the project to the limit of the water supply and maintains that in view of the expense which it has already undergone and the fact that an extension of time until December 1, 1936, was granted by this office within which to

complete the project, its permit should not be revoked at this time.

In view of the above it is the opinion of this office that the project has not in fact been abandoned but is lying dormant pending the resumption of active mining operations if and when the conditions so justify.

PROPOSED USE OF WATER BY W. R. WALLACE

W. R. Wallace, the applicant presented testimony to the effect that he had upon his mining claims what had been pronounced by engineers as "a very great showing" of copper, tungsten, gold and silver; that he had developed two trenches and a cross cut tunnel and had done some prospecting and is confident that he would experience no difficulty in financing the project should water be available to him under Application 7865. In his opinion availability of water depends entirely upon the revocation of Application 2359, Permit 1086 of Wagner Assets Realization Corporation and he is of the opinion that should Application 7865 be approved subject to prior rights initiated under Application 2359 the necessary capital could not be raised.

DUTY OF WATER FOR MILLING PURPOSES

At the hearing held on October 11, 1934, H. E. Olund, a mining engineer and witness for the permittee testified that the consumptive use of water in milling operations such as contemplated under Application 2359, Permit 1086 is approximately $2\frac{1}{2}$ tons of water (or about 670 gallons) per ton of ore treated. (Transcript page 52) This same duty is indicated in the Report of Reborn and Bowen filed as Exhibit 1 of Wagner Assets Realization Corporation. (See page 11 of Report.)

W. R. Wallace the applicant, testified that the use of water in South Africa averaged 193 gallons of water per ton of ore (Transcript page 81) and that in his opinion the amount of water for milling ore such as

exists in the Darwin area should not exceed 225 gallons of water per ton of ore. (Transcript, page 82.) This estimate however was not based upon actual experience but was apparently obtained from text books, the authorities not being stated.

During a hearing held on March 31, 1933, in connection with Application 6468 of Ballarat Mining Corporation, John F. Duling, a geologist and mining engineer testified that an output of 100 tons of ore per 24 hours would require 5 statutory miners inches of water or 0.125 cubic foot per second. (See transcript of this hearing, page 41.) This amount of water is equivalent to about 810 gallons of water for each ton of ore milled.

On January 2, 1935, C. A. Logan, Mining Engineer, Division of Mines, Department of Natural Resources, State of California, informed this office that a mill in the state of Nevada was operating with 600 gallons of water for each ton of ore milled and that he considered this duty very high.

The past use of Wagner Assets Realization Corporation as stated above during the operation of the 100 ton pilot mill was 60,000 gallons of water per day or approximately 0.09 cubic foot per second which is in agreement with the Nevada use described by Mr. Logan.

It would appear from the above that the duty of water as estimated by Mr. Olund witness for the permittee, is well within the limits of economical practice and that a plant of 500 tons per 24 hours capacity would require 0.46 of a cubic foot per second of water or approximately the entire amount of water which may be ultimately diverted at the permittee's point of diversion.

SUMMARY AND CONCLUSION

The record clearly indicates that the project under Application 2359, Permit 1086 has not been abandoned; that considerable expense has been incurred each year in maintaining the existing pumping and mining equipment and that the Corporation intends to resume active operations when the price of lead and zinc justify the same.

It also appears probable that the water supply is the limiting factor in the development of the Corporation mining claims and should the development proceed as contemplated there would be no unappropriated water available to a later priority on this source.

On December 2, 1932, more than fifteen months prior to the filing of Application 7865 of W. R. Wallace, an order was entered by this office granting an extension of time until December 1, 1936, within which to complete construction work and apply the water to beneficial use under Application 2359, Permit 1086 and because of the diligence manifested by the permittee in the past, the vast expenditure which has been made by the Corporation on this development, and the maintenance of its mining equipment during recent years, the Division does not feel justified in abrogating its former action at this time.

If it were feasible for Mr. Wallace to proceed with the development contemplated under his Application 7865, using the surplus which now exists because Wagner Assets Realization Corporation is presently inactive, and later depending upon the surplus which exists over and above legitimate uses under Application 2359, Permit 1086, we would be disposed to approve Application 7865. In such a case it would be necessary to hold Mr. Wallace to strict accountability in the matter of diligence and he could not appro-

privately plead cause for delay because of uncertainty as to the status of Application 2359, Permit 1086.

But such is not the case. Mr. Wallace testified at the hearing on October 11, 1934, that he could not proceed while the rights under Application 2359 were maintained. Under the circumstances therefore it is in order to suspend action on Application 7865 pending disposition of the earlier application and permit of Wagner Assets Realization Corporation, and to hold that company henceforth to strict accountability in the matter of diligence.

O R D E R

Permit 1086 having been heretofore issued in approval of Application 2359 and it appearing to the Division that permittee had failed to comply with the terms and conditions thereof, and permittee after due notice and a hearing thereon having shown cause why said permit should not be revoked at this time, and

Application 7865 for a permit to appropriate water having been filed with the Division of Water Resources, a protest to the approval thereof having been received, the matter having been duly noticed and heard, and the Division of Water Resources now being fully informed in the premises:

IT IS HEREBY ORDERED that action upon both Application 2359, Permit 1086 and Application 7865 be withheld until further order is entered.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 22nd day of January, 1935.

EDWARD HYATT, State Engineer

BY

Harold Conkling

Deputy

12-24-35
WES:
EMB: