

UNITED STATES

v.

KOSANKE SAND CORPORATION

3 IBLA 189

Decided September 3, 1971

Mining Claims: Discovery: Generally—Mining Claims: Hearings

A decision holding that certain placer mining claims located for silica sands are null and void for lack of a discovery of valuable deposit of mineral will be reversed where a preponderance of the evidence adduced at the contest hearing shows that the sands are of glass quality, that a market for such sands exists in close proximity and that it is reasonable to anticipate that such sands can be beneficiated at a cost which will make them competitive with present suppliers of the existing market.

INTERIOR BOARD OF LAND APPEALS

Kosanke Sand Corporation has appealed from the September 16, 1970, decision of the hearing examiner rejecting the patent applica-

tion for the following mining claims and holding them to be null and void:

Earache 1, 2, III, 4, Earach 5, Jeff, Pete, and Ray placer mining claims; and KO-KO 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20 lode mining claims, located in sec. 8, T. 1 N., R. 1 E., M.D.M., Contra Costa County, California.

It would appear that the contestee is not appealing that portion of the hearing examiner's decision which limited the number of claims which remain to be considered in the contest after certain stipulations were entered into, eliminating some claims contained in the complaint. The hearing examiner found at page 2 of his decision that:

The KO-KO 1 thru 20 are lode claims and the Earache 1 thru 5, Pete, Jeff and Ray are placer claims. At the opening of the hearing the parties stipulated that there were no lode minerals on any of the lode claims and Earache 1, the S $\frac{1}{2}$ of Earache 2, the Earache 4, and the Ray placer claims were void by reason of abandonment. Later in the proceeding (Tr. 371), the parties stipulated that the S $\frac{1}{2}$ of the Jeff placer claim was nonmineral in character. Because of the stipulations these claims are declared null and void.

It therefore appears that the appeal is taken from that portion of the hearing examiner's decision which relates to the placer claims located in sec. 8, T. 1 N., R. 1 E., M.D.M., which are:

N $\frac{1}{2}$ of Earache No. 2	N $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$
Earache No. III	NE $\frac{1}{4}$ NW $\frac{1}{4}$
Earach No. 5	NW $\frac{1}{4}$ NW $\frac{1}{4}$
Pete	SW $\frac{1}{4}$ NW $\frac{1}{4}$
N $\frac{1}{2}$ of Jeff	N $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$

The hearing examiner found that with reference to this group, located in 1963 for silica sand used in glass making and for other special purposes, the contestee failed to meet its obligation to affirmatively establish that the sand at issue can be processed to meet the requirements of the glass industry at a price competitive with existing sources of supply, and that, therefore, the contestee failed to rebut the Government's prima facie case that there has been no discovery of a valuable mineral deposit on the claims. We do not agree.

As noted by the hearing examiner, the parties were in agreement that silica sand used in the manufacture of glass is not a common variety, that there is a market for glass sand in the San Francisco Bay area where the claims are situated, and that the claims are accessible. He further noted that if the sand could be beneficiated to glass grade material at a price competitive with other sources, "there is every reason to believe that the contestee could capture a portion of the market." He correctly observed that if the sand could not compete economically, it would not be prudent to extract, remove, process and sell it. Therefore, he stated, the issue of whether there has been a dis-

September 3, 1971

covery of a valuable mineral deposit is dependent on the question of whether the contestee's process can improve the quality of the sand on an economical and competitive basis with the existing sources of supply.

The essential facts are these. The claims are situated 40 miles east of San Francisco on a massive sandstone deposit known as the Domengine Formation. They are accessible by road. The mantle of overburden is thin and the configuration of the deposit is such as to readily afford surface development. The claims have not been developed and there have been no sales of the sands by the contestee. Other areas on the Domengine Formation near and adjacent to the subject claims have produced silica sand which was used for glass manufacture as well as for foundry sand. However, in recent years there has been no production from this area, except for use for the same purposes for which a common variety of sand could be employed.

Foundry sand was mined by the Silver Sands Company on the Earache 1 claim as recently as 1962 or 1963. That company discontinued operations when its right to do so was successfully contested by the appellant. The Roberts Sand Company produced from "Pit No. 4" on Earache 3 and Earache 4. Other silica sand operations on the Domengine Formation were apparently discontinued by various producers at intervals between 1946 and 1962, as the deposits being mined were exhausted or of because the competition from producers from the Ione deposits in Amador County, who began their production in the early 1950's. Claims along the east boundary of the subject claims were worked underground for silica sand from the same formation, and drifts were driven to the boundary of the contested claims. This operation apparently was discontinued because the claims were worked out. Sand from this mine was used for 20 to 25 years for the manufacture of glass by Glass Containers Corporation, which has one plant only five or six miles away and another within the market area.

The Government's expert witness estimated the available glass sand market in the Bay area to be around 600,000 tons annually, although this figure may not be sufficiently encompassing, as the witness indicated that he had no knowledge of the amounts used locally by several large corporate consumers. Virtually the entire market for glass sand in the Bay area is being supplied by two plants in Amador County which are producing from the Ione Formation—the Owens-Illinois Company, which produces 1800 to 2000 tons per day, and the International Pipe and Ceramic Company, producing 700 tons per day. However, one of the Government's witnesses testified that foundry sand is being shipped from Overton, Nevada, to the Bay area and to Los Angeles, and that some foundry sand is being shipped in from

Illinois. The contested claims are 42 miles from San Francisco, whereas the Ione deposits are approximately 126 miles from the city.

Glass manufacturers in the Bay area are combining the silica sand from Ione with feldspathic sands from Monterey County and with sodium carbonate and limestone. Because of the higher alumina content of the silica sand from the Domengine Formation, the contestant contends that it could not be blended with feldspathic sand, which also contains alumina in large amounts. It was said that users of Domengine sand would have to purchase additional sodium carbonate, which would increase the cost of the mix, or batch. However, no evidence was given as to the amount of such increase per ton, if this was to be attempted.

In addition to the alumina, the iron (ferric oxide) content of the sands on the contested claims is alleged by the contestant to be so high as to preclude these sands from economic competition in the market. Contestant's witness testified that manufacturers of glass demand a very low ferric oxide content in the silica sand because they can then utilize a cheaper limestone, which also contains iron. An excess of iron produces discoloration in the glass.

Testimony varied as to the acceptable maxima of iron and alumina for glass making, as did the reports and bulletins entered as exhibits. On review, we conclude that ferric oxide can run as high as .10%, and the alumina can reach 8.0% to 8.5% in inferior grades of container glass.¹ After beneficiation, sands marketed by the Ione plants run from .02% to .025% ferric oxide and to .5% alumina. The sands on the Kosanke claims were extensively sampled by the contestant and by the contestee. One Government sample consisted of individual samples taken at 10 foot intervals over 300 feet and analyzed for ferric oxide. The 30 individual samples thus obtained ranged from .15 percent to 2.30 percent ferric oxide. The mathematical average of all 30 of these samples was 1.023 percent Fe_2O_3 . After a wash by an independent metallurgical laboratory, which employed agitation, but not attrition, the iron content dropped to .33% ferric oxide, indicating that a substantial portion of the iron associated with the sand could be removed by washing. The average aluminum oxide content of this consolidated sample was 7.12%. Sample splits from six other Government channel samples were combined for a composite sample and sent to the metallurgical laboratory where analysis showed that the composite contained 1.31% ferric oxide and 5.93% aluminum oxide.

¹ However, Exhibit G, a report prepared by a BLM mining engineer, stated that for sixth quality green container glass and window glass and for seventh quality green glass the Bay area glass manufacturers specified .3 percent Fe_2O_3 .

September 3, 1971

Steven Kosanke, president of the contestee corporation, appeared for it without benefit of counsel. In the presentation of his case it developed that George Omo first examined and sampled the deposit in 1962. He then contacted Kosanke, who staked the claims, established the discovery points and formed the corporation. Kosanke then took channel samples at each of the discovery points from which he made a proportional composite sample, which he shipped to Omo at El Paso, Texas. Omo had it analyzed by El Paso Testing Laboratories, which reported the content to be 95.90 percent silica, 1.25 percent alumina and .47 percent ferric oxide, plus small amounts of titanium oxide and calcium oxide. Omo then personally performed a size, weight and screen analysis on a proportional representative portion of the sample sent to El Paso. He also instructed El Paso Laboratories to perform a simple acid test. They used a water and hydrochloric acid solution and agitated the samples for 5 minutes, 15 minutes and 30 minutes. Their report states that there was a considerable increase of iron in the acid after 15 minutes and a much lesser increase in the interval from 15 to 30 minutes. An analysis of the sand after washing four times with water revealed only minute traces of iron, in the 1 to 5 parts per million range, indicating that the acid had removed the iron quite effectively. The silica content after the test was 97.6 percent.

Omo asserted repeatedly that the iron presented no problem; that not only could it be removed by a simple acid bath, but also by attrition, agitation and commercial machines that are presently in use in glass sand plants. Omo owns ten percent of the stock of Kosanke Sand Corporation.

Thomas I. Sharps, presently senior geologist in the mining division of Vitro Mineral Corporation, first learned of the deposit from Kosanke, who then was also employed there. He testified that his company is interested in expanding into the non-metallies field and that silica sands were included in its scope of interest. For this reason he examined the claims. He testified that the sand could be very easily and inexpensively exploited because of the configuration of the claims and the thin covering of overburden. He stated that if title to the property could be acquired, a prudent individual would "most definitely" be justified in the further expenditures of money to develop the claims. He stated his belief that these sands could capture part of the market. He estimated roughly that there are at least 25 million tons of commercial sand on the claims. He further stated that he anticipated that upon his return to his company's home offices he would recommend to the company that it take further interest in

the development of these claims. On cross-examination, Sharps conceded that further exploration and development were required. He stated that by this he meant conducting a pilot plant study and market analysis. When asked if such work would not be considered exploration, he acknowledged that it would, stating that exploration does not cut off, that it has to phase from one stage into the other, from exploration into development and exploitation. On re-direct examination he stated that he felt that the work that he had observed and read of pertaining to this property had gone past what is normally considered the raw initial exploration phase.

Kosanke explained in considerable detail the process proposed for the beneficiation of the sand. He has designed a mill suited to the topography and the bedded deposits to be mined initially, and selected the sites of haul roads, settling ponds, and fill areas. The geology of the claims has been well mapped and delineated. A detailed report of the property, describing the sands, the mining, milling, flotation, quality control and marketing operations proposed, complete with detailed cost data and flotation test results, was prepared by Kosanke as a prospectus for presentation to mining companies.

Kosanke testified that he developed the flow sheet for milling and flotation at the Metallurgy Department at the University of Texas, where there is a one ton capacity pilot mill. He stated that after making his original test of the beneficiation of the sand by attrition and in the silicon flotation cell, he did in fact run considerable amounts of material into the pilot mill in an effort to duplicate what would take place in a normal producing cycle in the flotation mill he had synthesized. A chemical analysis based upon this experimentation showed 99.8 percent silicon, 0.12 percent alumina and .023 percent ferric oxide. The projected cost per ton for the Kosanke process was set at \$3.07, based upon a mining cost of 93 cents, milling cost of \$1.85, with an additional 29 cents attributed to quality control and sales.

The contestant's witness, George Scarfe, responded to Kosanke's plan for beneficiating the sand with skepticism. Acknowledging that it is difficult to argue with a flow sheet until it is actually in operation, he stated that sometimes such plans do not work out as expected, that problems develop, some of which can be met and some of which cannot. He stated that processing sand in a laboratory is vastly different from duplicating the process on the large scale in an actual commercial mining and milling operation. In his opinion, a prudent man would be justified in the development of this property with a reasonable expectation of creating a valuable mine only after the validity of the process had been proved by running thousands of tons of the material through a pilot plan, which has not been done in this instance.

September 3, 1971

Scarfe also testified at length regarding the sand specifications required by Bay area glass manufacturers, indicating that only the high quality silica sands supplied from the Ione deposits could meet these requirements. However, in this connection, the following exchange took place on cross-examination:

Q. BY MR. KOSANKE: How many companies have you asked in your diligent search about their iron requirements; Mr. Scarfe?

A. You are talking about consumers only?

Q. Consumers only.

A. One.

Contestant's exhibit 19, a Colorado School of Mines bulletin dated March 1968 entitled "The Economics of a Small Milling Operation," lists in Table No. 5 a summary of the pre-design operating cost for a typical 500 ton per day flotation concentration mill. Amortized over an eight-year period, the estimated cost is \$3.88 per ton. For the same plant amortized over 20 years, the estimated cost is \$3.25 per ton. However, the author of the bulletin acknowledges that these are merely rough estimates and that costs can vary widely. The mill design hypothesized in the bulletin is substantially different from that proposed by Kosanke Sand Corporation.

The hearing examiner failed to note that the projected Kosanke mill cost is not merely an estimate by Mr. Kosanke, but rather is based on firm bids from suppliers which were put in evidence. His projected milling cost was \$1.85 per ton. He estimated his total cost for mining, milling, quality control and sales at \$3.07 per ton. But even if his cost were higher, even if actual costs approximated those projected by the Government, there is no evidence to show that this would make competition with the Ione sands impossible. The method of beneficiating the Ione sands was not accurately described and no evidence was provided as to the cost. It was therefore impossible to compare the cost of the Ione operation with the projected cost of the Kosanke operation. However, there was testimony that the flotation process utilized to beneficiate the Ione sand is a "neutral circuit" (without acid), whereas the flotation process proposed by Kosanke involves an acid wash, which is more costly.

The contestee introduced as exhibit G an approved 90-page report of a mineral examination dated July 29, 1963, prepared on behalf of the Bureau of Land Management in connection with a different matter, and devoted solely to the N $\frac{1}{2}$ N $\frac{1}{2}$ sec. 8. The mining engineer who prepared this report stated as follows:

It is the conclusion of the examining engineer that the N $\frac{1}{2}$ N $\frac{1}{2}$ sec. 8, T. 1 N., R. 1 E., M.D.M., is mineral in character because it contains large reserves of an uncommon variety of high silica sand that is suitable for the manufacture of glass and for use in the foundry industry. The sand is suited to this market

because of its physical and chemical properties, and production from adjacent lands has established this fact. The subject lands are accessible, and there is a large market for the material within a radius of 40 miles.

One of the contestant's witnesses testified that he is familiar with where the samples listed in the report were taken and that none were taken on the claims in issue. In fact, he said that several samples were taken from the Domengine Formation twenty miles from the claims. The decision notes that this witness' testimony suggests that the report was on the Domengine Formation in general rather than the land occupied by the claims in issue here. We find this in no way persuasive. The conclusion quoted above deals precisely with a specific 120 acres of the 160 acres here at issue. The contention that it deals with the Domengine Formation generally is belied by the very title of the report and the language of the conclusion, and the suggestion that the conclusion was based upon samples taken more than 20 miles distant is an insupportable tax on our credulity. Moreover, the engineer who prepared the report makes the matter quite clear on page 57 thereof, stating:

The samples were taken from the sandstone beds exposed in the old mine workings in Sec. 5 because there were no fresh exposures of sand in Sec. 8, although this formation does outcrop the subject lands, and Sample No. 6 was taken approximately 50 feet north of the section line between Secs. 5 and 8. The bed was well exposed in Sec. 8, and these sand beds are fairly consistent in its [*sic*] physical and chemical properties over a large area. And, for this reason, the samples taken from Sec. 5 should be indicative of the quality of the sand on the adjacent subject lands.

The weight to be accorded testimony and exhibit evidence is a matter peculiarly, but not exclusively, within the province of the hearing examiner. However, since the decision appealed from is premised upon the examiner's determination that the evidence adduced by contestee was insufficient to rebut the Government's prima facie case, we are obliged to ascertain whether the evidence presented by both sides was accorded proper weight.

The examiner apparently attached considerable significance to two letters by Russell E. Manley of Manley Bros., a concern which leased the claims from the Kosanke Sand Corporation, the salient portions of which were reproduced in his decision. In the first of these letters Manley declared that the quality of the sand could produce a first quality glass and foundry sand, that the reserves were excellent and that the economic and market potential justified the development of the claims. In the second letter, written after relinquishing the lease upon payment to the contestee of \$13,000, Manley asserted that the statements made in the first letter were erroneous and that he no longer believed them to be true. Mr. Manley was not called as a witness, and

September 3, 1971

his statements were not subject to examination. We therefore have no means of knowing on what his judgment of the claims was based, i.e., the nature and extent of his testing, if any, his research into the production methods and systems, if any, the cost analysis performed by him, if any, and so forth. It is undeniable that the second Manley letter negates the first, but beyond this they are of small evidentiary worth.

The weight which the hearing examiner accorded the testimony of Steve Kosanke is expressed in the following quotation from the decision at page 8:

Mr. Kosanke prepared the flotation plan and expressed the opinion that it will work. He then eliminated the possibility that his opinion could be accorded any real weight by testifying that he was not an expert in the field of flotation or chemistry.

Kosanke did testify that he was not expert in these fields. However, he also testified that he had worked as a contract miner for some seven years, that he subsequently obtained a Bachelor of Science degree in geology from the University of Texas at El Paso, that he had started a gold mine in Nevada, that he had worked as a consultant in silica flotation for Arrowhead Silica, that he had worked as a consultant in the field of geology and metallurgy, principally in the hire of F. W. Millard and Son, that he had performed flotation on silicates for one of the heads of the Department of Metallurgy at the University of Texas at El Paso, and that he had visited the Ottawa Silica Corporation in Illinois and made suggestions regarding their flotation processes which were subsequently adopted by the company. He testified that he had designed plants similar to the one which he proposes, and several of them have been in partial production. He has also been employed as a field engineer servicing mining equipment, and as an exploration geologist in uranium. We cannot know whether Kosanke's denial that he is an expert was attributable to undue modesty or to ignorance of the legal requirements for expert qualification. However, in view of his stated experience and background, we are of the opinion that his testimony should not have been so lightly regarded.

The examiner's decision also notes that Thomas Sharps, witness for the contestee, stated that he has had no previous experience in mining silica sands, that he is not a metallurgist and not qualified to make a determination of whether the Kosanke process will work satisfactorily. Mr. Sharps is a graduate geologist who has completed some graduate work at the Colorado School of Mines. He has done advanced studies in oceanography and sedimentation, he is a registered professional engineer by written examination in the State of Colorado, and a certified professional geologist. He has worked in the Colorado School of Mines Research Foundation for four years and is the author of several mineral industrial publications. He also conducted an unsuccessful

silica sand search for Coors Brewery, during which he sampled and rejected several deposits in Colorado.

George Omo, a witness for the contestee, is a graduate mining engineer with a number of years of mining consulting and responsible corporate employment in the mineral field. With reference to his testimony that a prudent man would be justified in developing the claims for silica sand, the hearing examiner observed that he has had no experience in mining silica sands.

The deficiencies in the background and experience of the contestee's witnesses, upon which the hearing examiner remarked, are equally attributable to George Scarfe, the principal witness for the contestant, who also acknowledged that he is not a flotation expert or a metallurgist, that he never performed any beneficiation of glass sand, and that he has never been employed in the manufacture or fabrication of glass. Nevertheless, the examiner relied heavily on Scarfe's testimony.

It is apparent that the sands of the Domengine Formation are suitable for both glass manufacture and foundry work, because they have been successfully extracted, marketed and used for these purposes in the past. It is equally apparent that the sands from the Ione deposits are of better quality than are those on the Kosanke claims. The evidence establishes that the Kosanke sand can be beneficiated to achieve a quality that equals the product marketed from Ione, but at somewhat greater expense. The major markets are 40 to 80 miles closer to the Kosanke claims, but the hearing failed to develop the extent of the economic advantage that appellant would derive from this fact.

The evidence is clear that if the appellant can offer an acceptable grade of sand at a price competitive with the Ione sand, it can capture a portion of the market. The price of Ione sand is \$4.75 f.o.b. the plant. Current shipping costs from Ione to the Bay area buyers is not found in the record, but certainly some economic advantage must lie with the Kosanke claims by virtue of their being closer to the market. This aspect was not considered in the decision below. Contestee also elicited testimony that barge haulage, which affords extremely cheap freight to consumers with waterfront facilities, is only three or four miles from the property, and that railroad facilities are also available nearby.

As noted by the hearing examiner, there is no disagreement that a substantial market for glass sand exists locally. In fact the claims lie virtually in the heart of a large market area with a number of glass manufacturers in close proximity. Contestee's Exhibit C, a letter from Glass Containers Corporation, which is self-explanatory, is set forth below:

January 26, 1970

Dear Mr. Kosanke:

Subject: *Sand Consumption*

In answer to your inquiry of January 22, 1970, we have listed our approximate

September 3, 1971

requirements for silica sand tonnage. We feel that this tonnage could be supplied by such an operation as you have proposed as this deposit has been mined before for glass sand.

Our present needs amount to approximately 4,000 tons of silica sand per month at our Antioch plant. Our plant at Hayward consumes a like amount and both plants are presently being supplied by Ione and Del Monte sands. Due to the shipping differential, your company could probably expect to capture this market provided you can maintain the quality required and be price competitive. Our present price is in the \$4.50-\$5.00/ton range. Other markets do exist in the immediate area and a prudent individual could expect to capture an additional tonnage equal to that used by Glass Containers. You mentioned staking your claims in 1963 and I can assure you that the market for silica sand of high purity existed prior to that time.

We appreciate your interest in our company and do expect to discuss this matter in detail sometime prior to construction of your plant.

Sincerely yours,

/s/ C. H. MEYERS,
Plant Manager,
Glass Containers Corporation.

The milling and flotation process described by Kosanke is similar in many respects to that in other plants operated for the beneficiation of glass sands in California and elsewhere, and is not a bizarre or novel concept. The record discloses no basis for assuming that it will not perform as intended. The unit cost of construction and operation is a critical aspect, but the figures supplied by the contestee were not disproven. Clearly, if the sand could be produced for the cost related by the contestee, the profitability of the operation would be virtually assured. The weakness of the contestant's case lies in its failure to offer any probative evidence that these costs are not accurately represented, or to demonstrate at what point a higher cost might dissuade a prudent man from reasonably anticipating that he could successfully compete in the existing market. The skepticism expressed by Mr. Scarfe must be accorded some weight, but its value is severely limited by his failure to show on the basis of specific itemized costs that his opinion is more nearly correct than the contestee's.

The preponderance of the evidence strongly indicates that the sand can be beneficiated economically to meet the minimum standards for inferior grades of glass. Whether it can be upgraded to compete economically with Ione sands for use in first quality optical products and the better grades of polished plate is more doubtful, but such a possibility has not been precluded. The evidence adduced by the contestant in making its *prima facie* case was successfully rebutted by the detailed showing of the contestee that he has good and sufficient reason to believe that the sands can be produced and sold at a profit in the present market in competition with existing suppliers.

Appellant submits that the following language from *Solicitor's Opinion*, 69 T.D. 145, 146 (1962), is applicable in this instance:

* * * When a nonmetallic mineral is not of extremely wide occurrence and when a general demand for that mineral exists, it may be enough, instead of showing an actually existing market for the products of that particular mine, to show that a general market for the substance exists of a type which a reasonably prudent man would be justified in regarding as one in which he could dispose of those products.

Appellant is not required to prove *certainty of profit* or *certainty of future sales* or actual sales. *United States v. Clear Gravel Enterprises, Inc.*, 2 IBLA 285 (1971); *United States v. Harold Ladd Pierce*, 75 I.D. 270, 283 (1968), and cases therein cited.

In concluding that a discovery of a valuable mineral deposit has been effected on the claims in question, thereby removing a major obstacle to the issuance of a patent, we recognize that the claimant may not be able to finance the mill and flotation plant he has described or it may, after all, prove impossible to beneficiate and market the silica sand at a price competitive with the present suppliers of the market. But we are persuaded that a prudent man would be justified in the further expenditure of his labor and means in the reasonable anticipation that a valuable mine can be developed, and that is the sole issue for our determination.

In reaching this conclusion we have been obliged to compare our action with *United States v. Maurice Duval et al.*, 1 IBLA 103 (1970), a case involving very similar circumstances in which this Board reached an opposite conclusion. The essential distinction between the two lies in the fact that the land occupied by the *Duval* claims was withdrawn from mineral location on July 18, 1961, and it was therefore incumbent upon the claimants to demonstrate a valid discovery as of that date by showing that the silica sands were marketable at a profit prior to the date of withdrawal. *United States v. United States Silica Corp.*, A-30400 (August 24, 1965), *aff'd. sub nom. Simplot Industries, Inc. v. Udall*, Civil No. LV 1024 (D. Nev. June 19, 1969). In the instant case no withdrawal is involved.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior (211 DM 13.5; 35 F.R. 12081), the decision appealed from is affirmed with reference to the KO-KO Nos. 1-20 lode mining claims, the Earache 1, the S $\frac{1}{2}$ of Earache 2, the Earache 4, the Ray and the S $\frac{1}{2}$ of the Jeff placer mining claims; the decision is reversed insofar as it pertains to the remaining claims and portions of claims, and the case is remanded to the Bureau of Land Management for further action consistent herewith.

EDWARD W. STUEBING, *Member.*

WE CONCUR:

FREDERICK FISHMAN, *Member.*

NEWTON FRISHBERG, *Chairman.*

September 3, 1971

Frederick Fishman, concurring.

I agree with the reasoning and conclusion in the main decision. I do feel, however, that certain facets of the case warrant further discussion.

The overturning of the fact findings of the examiner accords with the authority of the Board in making all findings of fact and conclusions of law based upon the record necessary to decide the case just as though the Secretary were making the decision in the first instance. *See United States v. T. C. Middleswart et al.*, 67 I.D. 232, 234-35 (1960), which quotes from a leading treatise as follows:

The final distillation from the case law is that the primary fact-finder is the agency, not the examiner; that the agency retains "the power of ruling on facts * * * in the first instance"; that the agency still has "all the powers which it would have in making the initial decision"; that the examiner is a subordinate whose findings do not have the weight of the findings of a district judge; that the relation between examiner and agency is not the same as or even closely similar to the relation between agency and reviewing court; that the examiner's findings are nevertheless to be taken into account by the reviewing court and given special weight when they depend upon demeanor of witnesses; and that the examiner's findings probably have greater weight than they did before adoption of the APA. 2 Davis, *Administrative Law Treatise* (1958), sec. 10.04.

It is settled law that a hearing examiner's findings are not as unassailable as a master's and may be reversed by the agency even when not clearly erroneous. *Universal Camera Corp. v. National Labor Relations Board*, 340 U.S. 474, 492 (1951). *See Federal Communications Commission v. Allentown Broadcasting Corp.*, 349 U.S. 358, 364 (1955). Section 8 of the Administrative Procedure Act, 5 U.S.C. sec. 557(b) (1970) supports this rule by stating:

* * * On appeal from or review of the initial decision, the agency has all the powers which it would have in making the initial decision except as it may limit the issues on notice or by rule. * * *

Since the agency may reverse a hearing examiner's findings of fact even when not clearly erroneous, it is obvious that it has that authority where clear error appears. In my opinion, the fact findings below were afforded due consideration in the main decision.

The facts of record lend themselves to an independent judgment by this Board. Our conclusions, which override those of the examiner, rest upon such facts. We have not second-guessed the examiner as to the veracity and demeanor of the witnesses. *Cf. Universal Camera Corp. v. National Labor Relations Board*, 340 U.S. 474 (1951); *National Labor Relations Board v. James Thompson & Co.*, 208 F.2d 743 (2d Cir. 1953).

Although, at first blush, my views in this case may seem inconsistent with *State Director for Utah v. Edgar Dunham*, 3 IBLA 155, 78 I.D. 272 (1971), *Dunham* is clearly distinguishable in that the hearing examiner's findings therein rested largely, if not primarily, upon his determination of the veracity of the witnesses.

I fully recognize that the main decision in this case appears to be dissonant with the consideration given to mining claim contests in applying the "prudent man" concept. That concept, enunciated in *Castle v. Womble*, 19 L.D. 455, 457 (1894), and approved in *Chrisman v. Miller*, 197 U.S. 313, 322 (1905), is stated as follows:

Where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, *with a reasonable prospect of success*, in developing a valuable mine, the requirements of the statute have been met. [Italics supplied.]

The Department in *United States v. Theodore R. Jenkins*, 75 I.D. 312, 318 (1968), construed the prudent man rule as follows:

* * * The test is not whether there is an operating profitable mine, or whether a prudent man at some time in the future under more favorable circumstances might expect to develop a profitable mine, but whether under the circumstances *known at the time* a profitable mine might be expected to be developed. This expectation must be based upon present considerations as to the value of the deposit as determined by the extent of saleable mineral within it, and the market price for the mineral, and by comparing the expected costs of the mining operation. [Footnote omitted.]

In *United States v. Estate of Alvis F. Denison*, 76 I.D. 233, 240 (1969), the Department construed *Jenkins* as follows:

As the *Jenkins* case, *supra*, further indicates the expectation of future remunerative market prices must be based upon rational considerations, including normal market ups and downs, and not upon conjectures and speculation as to possible sharp increases in market prices due to unpredictable changes in world political and economic conditions, or to a Government subsidy, or to the unforeseen lowering of costs because of dramatic technological breakthrough. Thus, the expectation of future profitability under the prudent man test must be based upon present economic circumstances known then and not upon mere speculation as to possible substantial changes in the market place.

In essence, a mining claimant, to sustain the validity of his claim in a mining contest (after the Government has made a prima facie case of invalidity), must show by a preponderance of the evidence that there is a *reasonable prospect* that he can mine, remove, and market the mineral at a profit. See *United States v. Robert E. Anderson, Jr. et al.*, 74 I.D. 292 (1967); *United States v. Michael Batesel, Muriel Batesel et al.*, Nevada Contest Nos. 062008, 062009-1 and 2, and 062012 (August 6, 1969).

Other than for *Anderson* and *Batesel*, so far as I am aware, there have been few, if any, Departmental or Bureau of Land Management decisions in recent times which have recognized as valid those mining claims from which there have been no *actual* sales of minerals which are not inherently valuable.

The Department has recognized that a reasonable prospect of success "does not mean a sure thing." *United States v. C. B. Myers et al.*, 74 I.D. 388, 390 (1967). *Converse v. Udall*, 399 F. 2d 616, 623 (9th Cir. 1968), *cert. denied*, 393 U.S. 1025 (1969), confirms this conclusion by

September 3, 1971

approving the standard that "the nucleus of value which sustains a discovery must be such that with actual mining operations under proper management *a profitable venture may reasonably be expected to result.*" [Italics supplied.]

In *United States et al. v. Coleman et al.*, 390 U.S. 599, 603 (1968), the Supreme Court explicitly recognized the marketability standard as simply a refinement of the prudent man rule, stating:

Finally, we think that the Court of Appeals' objection to the marketability test on the ground that it involves the imposition of a different and more onerous standard on claims for minerals of widespread occurrence than for rarer minerals which have generally been dealt with under the prudent-man test is unwarranted. As we have pointed out above, the prudent-man test and the marketability test are not distinct standards, but are complementary in that the latter is a refinement of the former. While it is true that the marketability test is usually the critical factor in cases involving nonmetallic minerals of widespread occurrence, this is accounted for by the perfectly natural reason that precious metals which are in small supply and for which there is a great demand, sell at a price so high as to leave little room for doubt that they can be extracted and marketed at a profit.

It is noteworthy that the Government stated in the brief¹ filed by the Secretary in the rehearing held in *Coleman, et al. v. United States* before the Court of Appeals for the Ninth Circuit:

The *Coleman* opinion states several times that the Department has imposed an "absolute requirement of proof of present marketability at a profit" (or words to that effect) as the standard of discovery for minerals of widespread occurrence. If the court means that the Department has required a showing that an actual profitable marketing operation was in existence on the critical date, the court has misread the Department's decisions. All that the Department has required has been a showing of facts from which *the conclusion could reasonably be drawn that a profitable mining operation could have been conducted on the pertinent date, not that such an operation was actually being conducted.* [Italics supplied.]

The application of the marketability test to minerals not inherently valuable is not a novel doctrine. In *United States v. C. E. Strauss et al.*, 59 I.D. 129, 138 (1945), the Department stated:

* * * [W]hether particular deposits of these and other mineral substances of wide occurrence are *valuable* mineral deposits within the contemplation of the mining laws and whether the lands containing them are therefore subject to location and purchase under the mining laws are questions of fact, *held to depend upon the marketability of the deposit.* The rule long laid down by both the courts and the Department requires that to justify his possession the mineral locator or applicant must show that by reason of accessibility, *bona fides* in development, proximity to market, existence of present demand, and other factors, the deposit is of such value that it can be mined, removed, and disposed of at a profit. [Italics in original.] *Ickes v. Underwood et al.*, 78 App. D.C.

¹ Supplemental and Replacement Brief and Appendix for the United States, Appellee, and Brief and Appendix for Stewart L. Udall, Secretary of the Interior, Appellee and Counterclaim Defendant at 58, *Coleman v. United States*, 363 F. 2d 190 (9th Cir. 1966).

396, 141 F. (2d) 546 (1944); *opinion of Acting Solicitor*, 54 I.D. 294 (1933); *Layman v. Ellis*, 52 I.D. 714 (1929). In *Big Pine Mining Corp.*, 53 I.D. 410, 412 (1931), the syllabus said:

"Lands containing limestone or other minerals, which *under the conditions shown in the particular case cannot probably be successfully mined and marketed*, are not valuable because of their mineral content, nor subject to location under the mining law." [Last italics supplied.]

There is a constant thread in these decisions—the "reasonable prospect of success" of *Castle v. Womble* is the progenitor of the concept that to sustain the validity of a mining claim, it must be established that the mineral can "probably be successfully mined and marketed," although in some cases it is suggested that in the absence of actual sales of the mineral, a presumption of non-marketability arises. See *United States v. Alfred N. Verrue*, 75 I.D. 300, 307 (1968), *rev'd*, *Verrue v. Secretary of the Interior*, Civil No. 6898 (D. Ariz., filed December 29, 1970), *appeal pending*.

In the decision below, the examiner postulated the issue of discovery on "whether the Kosanke process can improve the quality of the sand on an economical and competitive basis with the existing sources of supply." The letter of January 26, 1970, to the contestee from Glass Containers Corporation suggests the feasibility of contestee's plans by stating, "We feel that this tonnage could be supplied by such an operation as you have proposed as this deposit has been mined before for glass sand."

Admittedly, the letter is something less than a ringing endorsement of the contestee's plan of operations—it is, however, something more than a mere expression of interest. But the point is that there is insufficient countervailing evidence in the record. It seems to me that the contestee has successfully borne the risk of non-persuasion, *i.e.*, he has established by a preponderance of the evidence that there is a reasonable prospect that he can mine, remove, and market the mineral at a profit. His showing does not rest upon the premise that "unforeseeable developments might some day make the deposit commercially feasible . . ." *Foster v. Seaton*, 271 F. 2d 836, 838 (D.C. Cir. 1959).