

UNITED STATES OF AMERICA
v.
MULTIPLE USE, INC.

IBLA 88-403

Decided July 15, 1991

Appeals from a decision by Administrative Law Judge Harvey Sweitzer finding no discovery of valuable mineral on the White Vulcan No. 1 placer mining claim, and a discovery of valuable mineral on the White Vulcan No. 2 placer mining claim. AZ MC 28246-1.

Affirmed as modified and remanded.

1. Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Common Varieties of Minerals: Special Value—Mining Claims: Common Varieties of Minerals: Unique Property—Mining Claims: Locatability of Mineral: Generally—Mining Claims: Specific Mineral(s) Involved: Pumice

During the period preceding the date Congress enacted sec. 3 of the Act of July 23, 1955, pumice was locatable under the Mining Law of 1872. When Congress enacted the Common Varieties Act, it removed previously locatable mineral from the purview of the Mining Law of 1872 and made them subject to the provisions of the Materials Act of July 31, 1947. To determine if pumice is locatable, one must look to the intrinsic qualities of the mineralization. To be locatable, the mineral material must have some intrinsic quality that differentiates it from ordinary deposits of pumice. A showing that the deposit is of commercial value does not, in and of itself, make the pumice contained in the deposit an uncommon variety. The pumice contained in the deposit must hold a unique property which gives it a competitive edge over other pumice.

2. Mining Claims: Discovery: Generally—Mining Claims: Determination of Validity

As against the United States, a mining claimant acquires no vested rights by location of a mining claim. Even

though a claim may have been perfected in all other respects, unless and until a claimant is able to show that the claim is supported by a discovery of valuable locatable mineral within the boundaries of the claim, no rights are acquired. A discovery has been made if mineral has 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.

3. Mining Claims: Discovery: Generally—Mining Claims: Determination of Validity—Mining Claims: Discovery: Marketability

To have a reasonable prospect of success in developing a valuable mine, the mine owner must be able to demonstrate, as a present fact, that there is a reasonable probability that the mineral can be extracted and marketed at a profit. A discovery cannot be based on speculation that at some time in the future an economic change or untested technological advance will render the mine valuable.

4. Mining Claims: Determination of Validity—Mining Claims: Discovery: Generally—Mining Claims: Locatability of Mineral: Generally—Mining Claims: Withdrawn Land

When a withdrawal or similar event affecting the ability to locate a claim or restricting the type of mineral material subject to location occurs, the existence of a discovery at the time of the event becomes critical to the validity of a mining claim. If the mining claim is perfected on the date the event transpires, certain rights have vested in the claimant, and those rights cannot be cancelled by the action. On the other hand, if no discovery is made until after the event has transpired, the claim has not been perfected, no rights have been acquired, and nothing is lost by reason of the event.

Once made, a discovery must be maintained. Even though a claimant may have made a discovery and actually mined ore from a claim, until a patent application has been perfected and the equitable title has vested, a claimant runs the risk of losing his discovery if the mineral deposit is exhausted or if there is a material change in market conditions rendering it unreasonable to expect that the mineral can be mined at a profit.

5. Administrative Procedure: Adjudication—Mining Claims: Generally—Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Contests—Mining Claims: Discovery: Generally—Mining Claims: Determination of Validity—Mining Claims: Locatability of Mineral: Generally—Rules of Practice: Government Contests—Rules of Practice: Hearings

When the Government alleges that a mining claim is invalid because it was located for a mineral named in the Common Varieties Act, it must establish a prima facie case. When the claimant has filed an answer asserting that the mineral material is an uncommon variety, the Government's prima facie case may be made by a showing that the mineral material is sand, stone, gravel, pumice, pumicite, or cinders, that its value is comparable to similar mineral material sold for a common variety use, and that it has been unable to identify any use for the mineral material commanding a higher price. Once a prima facie case has been made, the burden of going forward shifts to the claimant, who must overcome the Government's case by a preponderance of the evidence. If a claimant presents evidence that a deposit has some unique property giving it a distinct and special value of sufficient weight to overcome the Government's showing, the resulting finding will be that the mineral material is not common variety and is therefore locatable.

Similarly, the Government has the responsibility of going forward to establish a prima facie case when a contest involves the issue of discovery. It may do so by presenting evidence that the mineralization fails to satisfy the prudent man test in one or more respects. Once the Government case is presented the claimant must present sufficient evidence to overcome the Government's case by a preponderance of the evidence, and if the mineral claimant elects to not present or fails to present sufficient evidence to preponderate, the Government will prevail, with a resulting finding that the mineral location is not supported by a discovery and is thus null and void.

The issue of "Locatability" presented by the Common Varieties Act does not necessarily implicate the question of "discovery," and there is a major distinction between the evidence and case law applicable to each. The prudent man test is not applicable when considering whether the mineral deposit has a unique property giving it a distinct

and special value. Comparing the value of mineral material on the claim to a "run of the mill" deposit has direct bearing on an uncommon variety determination, but little bearing on marketability.

6. Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Common Varieties of Minerals: Special Value—Mining Claims: Common Varieties of Minerals: Unique Property—Mining Claims: Determination of Validity—Mining Claims: Locatability of Mineral: Generally—Mining Claims: Specific Mineral(s) Involved: Pumice

When Congress passed the Common Varieties Act, 30 U.S.C. § 611 (1988), it specifically named common varieties of sand, stone, gravel, pumice, pumicite, and cinders as no longer subject to the Mining Law of 1872. If a common variety mineral meets an ASTI standard for a common variety use, that fact does no more than establish the ability to market and use it for that common variety use. Meeting the ASTI standard only establishes its value as a common variety mineral. To use ASTI standards as a basis for a determination that such mineral is an uncommon variety, it would be necessary to show that the qualities of the particular mineral so exceed ASTI standards that the particular mineral commands a higher price in the marketplace than similar common variety minerals.

7. Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Common Varieties of Minerals: Special Value—Mining Claims: Common Varieties of Minerals: Unique Property—Mining Claims: Contests—Mining Claims: Locatability of Mineral: Generally

When considering whether any of the mineral material on a mining claim may be considered an uncommon variety because it can be used for a particular use, a claimant need not demonstrate that the mineral material is an uncommon variety for that particular use. The mineral material on the claim is properly compared with other deposits of such mineral generally. Both direct and indirect evidence supporting a conclusion that other deposits of such mineral generally are unsuitable for that use can be used to establish that the mineral on the claim is an uncommon variety. Further, the claimant need only show that the mineral material is an uncommon variety by a preponderance of the evidence.

8. Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Common Varieties of Minerals: Special Value—Mining Claims: Common Varieties of Minerals: Unique Property—Mining Claims: Locatability of Mineral: Generally

A common variety deposit does not possess a distinct, special economic value over and above the normal uses of the general run of such deposits. When the preponderance of the evidence supports the conclusion that the use to which the mineral material must carry some special economic value over and above the general run of pumice deposits when applied to that use. If, on the other hand, the mineral material commands a premium over that sold for common variety uses, that fact is in and of itself evidence that the mineral material is of an uncommon variety. If the sales price for the mineral material sold for a particular use far exceeds the average sales price, the price differential advances the argument that the mineral material has some property giving it distinct and special value.

A claimant who bases his discovery on a deposit of mineral material listed in the Common Varieties Act, 30 U.S.C. § 611 (1988), must demonstrate by the preponderance of the evidence that the mineral material is of an uncommon variety. If a claimant demonstrates that the mineral material has some intrinsic quality rendering it suitable for a particular use, and that mineral material suitable for that use sells at a marked premium over mineral material used for common variety purposes, the claimant has met the burden of showing that the mineral material is of an uncommon variety. Unless and until evidence is presented establishing the fact that this use is also a common variety use, a claimant need not show that the product has some unique property rendering it suitable for the use commanding a premium.

9. Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Contests—Mining Claims: Determination of Validity—Mining Claims: Discovery: Generally—Mining Claims: Locatability of Mineral: Generally

If the mineral material supporting the discovery is a common variety mineral material listed in the Common Varieties Act, the claimant must demonstrate either that a discovery of the common variety mineral existed on July 23, 1955, or that the discovery mineral has

some unique property giving the deposit a distinct and special economic value. To establish a pre-July 23, 1955, discovery, the claimant must demonstrate by a preponderance of the evidence that the mineral was marketable on July 23, 1955. This can be accomplished by showing the existence of potential buyers and the price they would pay.

10. Mining Claims: Generally–Mining Claims: Discovery: Generally–Mining Claims: Determination of Validity–Mining Claims: Location–Mining Claims: Placer Claims

Under 30 U.S.C. § 35 (1988), no placer claim shall include more than 20 acres of each individual claimant. However, 30 U.S.C. § 36 (1988) also provides that an association of claimants may locate a claim of up to 160 acres in size. In order to hold a 160-acre claim the association must have no fewer than eight members. A corporation is considered to be an individual claimant, a corporation cannot locate a mining claim containing more than 20 acres. If a validly located 160-acre association placer claim has been perfected and contains a valid discovery on the date of conveyance to a corporate entity, all 160 acres can be conveyed. If, on the other hand, there was no discovery on the claim on the date of conveyance, the claim was not valid on that date, and a subsequent discovery by the corporation would only validate a 20-acre claim.

11. Mining Claims: Common Varieties of Minerals: Generally–Mining Claims: Contests–Mining Claims: Determination of Validity–Mining Claims: Discovery: Generally–Mining Claims: Discovery: Marketability–Mining Claims: Locatability of Mineral: Generally

On appeal, the Forest Service contends that the Administrative Law Judge erred because the record does not support a finding that the claimant has met the marketability test. To prevail, the Forest Service must either tender evidence that the claimant cannot meet the marketability test, or demonstrate that the evidence submitted by the claimant supports a finding that there is no reasonable prospect that the commercial value of the deposit will exceed the cost of extracting, processing, transporting, and marketing the contained locatable mineral. When, as in this case, the Forest Service presents no evidence or testimony on one or more of these issues, the claimant is not required to do so. However, when a claimant having no duty to present evidence of production cost and sales price does present the evidence,

the evidence presented by the claimant should be considered in making a discovery determination.

12. Mining Claims: Common Varieties of Minerals: Generally–Mining Claims: Contests–Mining Claims: Determination of Validity–Mining Claims: Discovery: Generally–Mining Claims: Discovery: Marketability–Mining Claims: Locatability of Mineral: Generally

When there is more than one market for the project from a claim, and the sales in one or more of those markets would be considered as a sale of a common variety mineral, that fact must be taken into consideration when determining whether there is a discovery of a locatable mineral. The uncommon (locatable) mineral must support the mining operation on its own, and the sale of other minerals (or products) may not be considered when predicting profitability.

13. Administrative Procedure: Adjudication–Mining Claims: Generally–Mining Claims: Contests–Mining Claims: Determination of Validity–Rules of Practice: Government Contests–Rules of Practice: Hearings

On appeal, the Forest Service urges a finding that too much weight was given to claimant's evidence. It does not, however, allege that there is any contrary evidence or tender any proof that it possesses evidence which would lead to a different result if another hearing were held. If an appellant seeks another hearing it must tender sufficient evidence indicating a discovery (or lack thereof) to convince this Board that such a further hearing is warranted. Without such offer, no hearing will be ordered.

14. Mineral Lands: Generally–Mineral Lands: Determination of Character of–Mining Claims: Generally–Mining Claims: Determination of Validity–Mining Claims: Discovery: Generally–Mining Claims: Discovery: Geologic Inference–Mining Claims: Discovery: Marketability–Mining Claims: Mineral Lands

The "mineral in character" and "discovery" tests are related, and "mineral in character" is determined using tests similar to the "prudent man" and the "marketability" tests applicable to discovery determinations. Both require mineralization which would cause a prudent person to expend further time and money on the property.

There are differences, however. A mining claim must be supported by a discovery, and in order to prove a discovery, a claimant must show an actual exposure of the valuable mineral within the claim. On the other hand, facts that will support a mineral in character determination may not support a discovery, because a determination that the land is mineral in character can be based entirely geologic inference or other observable external conditions upon which a prudent and experienced person would rely. Thus, a tract of land may properly be deemed to be mineral in character, even though it contains no exposure of valuable mineral. If the known conditions are such as to engender the belief that the land contains a mineral deposit of such quality and quantity as would render its extraction profitable and justify expenditures to that end, the land is mineral in character.

15. Mineral Lands: Generally—Mineral Lands: Determination of Character of—Mining Claims: Generally—Mining Claims: Determination of Validity—Mining Claims: Discovery: Generally—Mining Claims: Location—Mining Claims: Placer Claims

A placer claim larger than 10 acres in size must have a discovery within its boundaries and each 10-acre tract within the claim must be shown to be mineral in character.

16. Administrative Procedure: Adjudication—Mining Claims: Generally—Mining Claims: Contests—Mining Claims: Discovery: Generally—Mining Claims: Determination of Validity—Mining Claims: Locatability of Mineral: Generally—Rules of Practice: Government Contests—Rules of Practice: Hearings

In a contest not involving a patent application, when the Government raises an issue not set out in the complaint during the hearing or in its Posthearing brief, an Administrative law Judge's refusal to address the new issue will be affirmed on appeal to this Board. This general rule does not apply, however, if a patent application is pending. When a claimant has filed an application for patent to the claims subject to the contest and the newly raised issue is not barred by the doctrine of res judicata, that issue should be addressed if an adverse ruling on that issue would result in denial of the pending patent. The Department

cannot legally grant a mineral patent when the record does not contain sufficient evidence to persuade the Secretary or his authorized officers that the law has been met.

17. Administrative Authority: Estoppel—Mining Claims: Generally—Mining Claims: Common Varieties of Minerals: Generally—Mining Claims: Contests—Mining Claims: Determination of Validity—Mining Claims: Discovery: Generally—Mining Claims: Discovery: Marketability—Mining Claims: Locatability of Mineral: Generally

In an earlier mining claim contest, involving claims in close proximity to claims subsequently challenged, the Hearing Examiner found that the use of a similar common variety mineral found on those claims appeared to be a use over and above the normal uses of the general run of pumice deposits, held that the mineral was an uncommon variety, and dismissed the case. The prior decision is not binding on the Department in the subsequent case, and the Department is not collaterally estopped from claiming that the mineral on the claims subsequently challenged is a common variety. Therefore, the Administrative Law Judge hearing the second contest is not compelled to find the mineral an uncommon variety because it is the same as the mineral considered in the first contest. The mere fact that a claimant possesses claims similar to claims deemed to be valid in an earlier contest is not dispositive of a mining claim contest.

18. Mining Claims: Generally—Mining Claims: Determination of Validity—Mining Claim: Discovery: Generally—Mining Claims: Discovery: Marketability

The un rebutted evidence in a mining claim contest involving a claim subject to a patent application is that, as of the date of the hearing, there had been only one shipment of the mined product under an oral purchase and sales agreement. Being an oral contract, it was terminable at will, and a single shipment may have represented an isolated sale rather than the potential for continued sales of the mine product. thus, the evidence was not sufficient to support a conclusion 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.

19. Contests and Protests: Generally—Mining Claims: Generally—Mining Claims: Contests—Mining Claims: Determination of Validity—Rules of Practice: Government Contests

Until patent has issued, the rights of the mining claimant are limited by the statutes and regulations under which those rights are acquired and maintained. The title to the lands subject to unpatented mining claims remains in the United States. As the title owner, the United States may regulate mining activities in national forests in order to protect the surface resources. Therefore, the motivation of the managing Government agency in initiating a contest against a mining claim is irrelevant.

APPEARANCES: T. Aldrin Patron, Esq., Office of the General Counsel, U.S. Forest Service, Albuquerque, New Mexico, for the United States; Hale C. Tognoni, Esq., Phoenix, Arizona, for Multiple Use, Inc.

OPINION BY ADMINISTRATIVE JUDGE MULLEN

I. GENERAL INTRODUCTION

The U.S. Forest Service, Department of Agriculture (Forest Service or FS), and Multiple Use, Inc. (Multiple Use), both appeal from a March 25, 1988, decision by Administrative Law Judge Harvey C. Sweitzer following a contest initiated when the Forest Service challenged the validity of the White Vulcan Nos. 1 and 2 association placer mining claims.

In his decision Judge Sweitzer concluded:

No discovery of pumice exists on the White Vulcan No. 1 placer mining claim because (1) there has been no production from the claim for more than 20 years, (2) the pumice on the claim is common variety not subject to location under the General Mining Law, and (3) the lands therein are nonmineral in character.

A discovery of a valuable mineral deposit of uncommon variety pumice exists on the White Vulcan No. 2 placer mining claim because its unique properties (uniform size, absence of staining material) give it a special and distinct value (premium price) for stone washing over other ordinary domestic pumice deposits. However, [the N¹/₂ of the NW¹/₄ of the SE¹/₄, the E¹/₂ of the SE¹/₄, and the S¹/₂ of the SW¹/₄] are nonmineral in character * * *.

Furthermore, because any discovery that might have been made prior to October 31, 1957, was subsequently lost, a qualifying discovery was not made until after the claim devolved to a single entity, and the claim known as White Vulcan No. 2 must

be limited to no more than 20 acres (two regular and contiguous 10-acre parcels). The two parcels may be selected by contestee from [the S $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ and the N $\frac{1}{2}$ of the SW $\frac{1}{4}$ of the SE $\frac{1}{4}$]. Upon selection * * * the claim may go for patent, all else being regular.

(Decision at 51).

The Forest Service seeks to have that portion of Judge Sweitzer's decision finding a discovery of valuable mineral overturned. Multiple Use seeks to overturn those portions of his decision finding the White Vulcan No. 1 claim invalid and finding the White Vulcan No. 2 claim limited to 20 acres.

II. THE CLAIMS

On July 31, 1953, eight individuals located the White Vulcan Nos. 1 and 2 claims as 160-acre association placer claims. 1/ As located, the White Vulcan No. 1 included lots 3 and 4, and the E $\frac{1}{2}$ of the SW $\frac{1}{4}$ of sec. 19, T. 23 N., R. 8 E., Gila and Salt River Meridian, Arizona (equivalent to the SW $\frac{1}{4}$). The SE $\frac{1}{4}$ of the same section was subject to the White Vulcan No. 2. 2/ The claims were held by the original locators until October 31, 1957, when they were conveyed by quitclaim deed to Allen E. Siegal, who in turn conveyed the claims to Mark H. Siegal on November 8, 1960. 3/ On March 26, 1968, the claims were purchased at a sheriff's sale by Mineral Trust Corporation (Mineral Trust). They were conveyed to Mineral Services Corporation (Mineral Services) on September 19, 1978.

Mineral Services filed a patent application with the Bureau of Land Management (BLM) on November 1, 1978. On April 9, 1979, the BLM State

1/ The eight original locators were Paul M. Thomas, Roger C. Thomas, Rosa C. Thomas, Ida L. Thomas, Gilbert E. Oilstone, Hedwig M. Oilstone, Parley M. Lewis, and Mildred C. Lewis.

2/ For reasons discussed later, the parties described the various portions of the claims by dividing them into 32 equal tracts containing 10 acres each. Subsequent to issuance of the complaint, but before the hearing, a document was filed on behalf of the claim owner relinquishing seven 10-acre parcels roughly equivalent to the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ (tract Nos. 3, 4, 7 and 8), the W $\frac{1}{2}$ of the NE $\frac{1}{4}$ of the NW $\frac{1}{4}$ (tract Nos. 2 and 6), and the NE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$ (tract No. 1).

3/ Multiple Use has advanced a second chain of title originating in 1948. According to counsel for Multiple Use, two parties located two 160-acre association claims that year. These claims were allegedly conveyed to Siegal in 1951, and, according to counsel, the title to the two sets of claims "merged" when Siegal acquired the White Vulcan claims. As noted in footnote 6 to Judge Sweitzer's decision, no evidence was submitted regarding the size or location of the 1948 claims, and we find this evidence to have no value.

Office sought additional information BLM deemed necessary for further action on the patent application (Exh. 58 at 114-18). ^{4/} An amended mineral patent application was filed on October 23, 1981 (Exh. 58 at 31-41). This amended application included additional representations regarding the character of the mineral deposit and the use and market for the mineral production. On May 7, 1982, BLM issued a Mineral Entry Final Certificate, and held the claims for patent (Exh. 58 at 28). However, final approval of the application was withheld pending a field examination and mineral report.

In its amended application Mineral Services described the valuable mineral on the claim as pumice. A detailed discussion of the various physical characteristics of pumice is set out below. However, a brief description of the pumice on the claims will aid in understanding the applicable law.

In the 1968 edition of the U.S. Bureau of Mines Dictionary of Mining, Mineral, and related terms (Bureau of Mines Dictionary), at page 877, pumice is defined as: "A highly porous igneous rock, usually containing 65 to 75 percent SiO₂ and 10 to 20 percent Al₂O₃; with a glassy texture. Potassium, sodium, and calcium are generally present in small amounts. Insoluble in water, not attacked by acids. * * * Used as an abrasive; lightweight concrete aggregate."

The value of the pumice in this case is the value normally considered when examining pumice deposits – it is derived from the various uses for pumice and not the value of its contained elements. ^{5/} Physically, the pumice on the claims was described as "popcorn" pumice, because it occurs in the form of rounded nodules. A Multiple Use witness, who conducted a screen test of the pumice, testified that the size of the nodules in the pumice-rich air-fall bed was:

<u>Size</u>	<u>Percent by volume</u>
+ 1 inch *	17.01 %
1/2 to 1 inch	34.37 %
1/4 to 1/2 inch	31.90 %
1/8 to 1/4 inch	13.25 %
- 1/8 inch	3.47 %

* This includes 0.72% of the material that did not pass through a 2" screen.

(Tr. 1013).

^{4/} Not receiving the information it sought, on Sept. 22, 1981, BLM issued a decision that the application would be closed if the applicant did not remedy the deficiencies set forth in the Apr. 9 letter with 30 days (Exh. 58 at 82-83). It issued a further decision on Nov. 3, 1981, following the filing of the amended patent application. A document which can be considered a response was filed on Dec. 4, 1981.

^{5/} This distinction can be seen by comparing a talc deposit, which is mined and pulverized to make talcum powder, to a deposit of galena (PbS), which is mined and smelted to recover lead.

Generally, the geology at the site consists of a relatively thin overburden at the surface, under which there is a deposit of pumice containing material described as having been "reworked." This layer or bed contains pumice and other materials, such as scoria, tuff, mudflow, clay, and fine material, which have a deleterious effect on the value of the contained pumice (Tr. 841-43). Below this layer is a layer or bedded deposit about 20 feet thick containing largely unadulterated pumice. We will refer to the pumice in this bed of deposition as the "air-fall" pumice. ^{6/} Both parties to the contest recognize this air-fall bed as the one having value, but disagree as to the actual value of the deposit. It also appears that the value of air-fall pumice varies somewhat from place-to-place within the claims because of iron staining.

III. PROCEDURAL BACKGROUND

On October 26, 1982, Howard Wirtz (Wirtz), a Forest Service Mineral Examiner, commenced a mineral examination of the claims. Dr. Richard Helm (Helm), Associate Professor of Geology, Northern Arizona University, assisted Wirtz in his examination. Wirtz prepared a report of his findings and stated his opinion that the land was nonmineral in character and no discovery existed within the confines of the claims.

The Forest Service then initiated a proceeding contesting the validity of the claims by issuing a complaint which was served on Mineral Services on October 18, 1985. ^{7/} Answers were filed, and the matter was set for a May 1986 hearing. The May hearing was cancelled and a preheating conference was held on May 19 and 20, 1986. ^{8/} A hearing, held in Phoenix, Arizona, on October 27 through 31, 1986, was adjourned and a

^{6/} This term was used by Dr. Sheridan, an expert witness in the field of volcanology (volcanos and volcanic deposits) called by Multiple Use. Airfoil pumice is pumice that literally falls from the air during a volcanic eruption.

^{7/} Technically, mining claim contest proceedings are initiated by BLM on behalf of the Forest Service. The Forest Service actively sought issuance of the complaint, its expert witnesses were either employees of or consultants to the Forest Service, and its counsel is an employee of the Forest Service. Mineral Services, the owner of record when the complaint was issued, is a wholly owned subsidiary of Multiple Use. Multiple Use subsequently assumed the defense, and has been substituted as the named party.

^{8/} The May hearing was changed to a preheating conference upon motion of counsel for the claimants because certain documents requested by the claimants had not been delivered by the Forest Service. During the course of the preheating conference the parties were unable to stipulate to any facts or to agree upon a statement of the issues in the case. In a preheating conference Judge Sweitzer directed the parties to simultaneously exchange exhibits before Sept. 27, 1986.

further hearing was held on January 12 through 16, 1987. ^{9/} Following extensive briefing which continued through August 12, 1987, Judge Sweitzer issued his decision on March 25, 1988. ^{10/}

IV. APPLICABLE LAW

This is an appeal from a decision by an Administrative Law Judge after a hearing in which evidence was presented. This evidence took the form of testimony under oath and documentary evidence. Following the hearing the parties submitted written arguments which were considered by the Judge. After weighing the evidence presented by the parties and the arguments of fact and law offered by each, a written decision was issued setting forth the findings of fact and conclusions of law. In such cases, the appealing party has the burden of showing error in the Administrative Law Judge's decision. Yankee Gulch Joint Venture v. BLM, 113 IBLA 106, 129 (1990); United States v. Peterson, 47 IBLA 92 (1980). In such cases, this Board has had a long-standing reluctance to overturn the Administrative Law Judge's determinations, as he presided at the hearing, witnessed the deportment and demeanor of the witnesses, and is in the best position to weigh the credibility of the various witnesses. See United States v. Ramsey, 84 IBLA 66, 68 (1984); United States v. McDowell, 56 IBLA 100, 105 (1981); United States v. Smith, 54 IBLA 12, 14 (1981); United States v. Chartrand, 11 IBLA 194, 212, 80 I.D. 408, 417-18 (1973); c. Universal Camera Corp. v. NLRB, 340 U.S. 474, 496 (1951). This is especially true when the record contains testimony that could be construed as conflicting or contradictory when taken out of the context of the hearing, or when the resolution of disputed facts is influenced by the Judge's findings of credibility of a witness or the relative weight assigned by him to testimony that might otherwise be construed as conflicting. See Yankee Gulch Joint Venture v. BLM, *supra* at 136. On appeal an appellant must show adequate reason for appeal with some particularity, and support the allegations with arguments or appropriate evidence showing error. An appellant who fails to do so cannot be afforded favorable consideration. Conclusory allegations of error, standing alone, do not suffice. United States v. DeFisher, 92 IBLA 226, 227 (1986); United States v. Connor, 72 IBLA 254, 256 (1983); Rocky Mountain Natural Gas Co., 55 IBLA 3 (1981).

Judge Sweitzer recognized, but did not consider it necessary to emphasize, a very important distinction that must be kept in mind in contests

^{9/} The October hearing was adjourned at the request of counsel for the Forest Service to allow the Forest Service an opportunity to collect further evidence when its witness was unable to verify that the mineral materials the Forest Service had used for comparative purposes had all come from the claims.

^{10/} The record on appeal consists of 1,700 pages of transcript and over 100 hearing exhibits. Following the hearing the parties submitted over 120 pages of Posthearing briefs. Judge Sweitzer's opinion ran more than 50 pages, and the briefs on appeal cannot be described as brief.

concerning alleged common variety minerals. Such contests involve two separate issues: (1) is the mineralization within the claims locatable under the Mining Law of 1872; and (2) is there a discovery of a valuable mineral deposit within the claims. The relevance of certain facts to the ultimate outcome becomes blurred if this distinction is not carefully considered. Certain additional issues are also present in this case. These issues are best described as "interrelated" questions, and will be addressed later in this opinion.

IV(A). Determination of Whether the Pumice on the Claims Is Locatable Under The Mining Law of 1872

[1] There is one fact which is clearly not in issue in this case. The claims were located for pumice. Prior to the date Congress enacted section 3 of the Act of July 23, 1955 (30 U.S.C. § 611 (1988)), 11/ pumice was locatable under the Mining Law of 1872. See Bennett v. Moll, 41 I.D. 584, 586-87 (1912). When Congress enacted the Common Varieties Act, it removed previously locatable minerals from the purview of the Mining Law of 1872 and made them subject to the provisions of the Materials Act of July 31, 1947, 61 Stat. 681 (30 U.S.C. § 601 (1988)).

The Common Varieties Act provides:

No deposit of common varieties of sand, stone, gravel, pumice, pumicite, or cinders * * * shall be deemed a valuable mineral deposit within the meaning of the mining laws of the United States so as to give effective validity to any mining claim hereafter located under such mining laws: Provided, however, That nothing herein shall affect the validity of any mining location based upon discovery of some other mineral occurring in or in association with such a deposit. "Common varieties" as used in this subchapter and sections 601 and 603 of this title does not include deposits of such materials which are valuable because the deposit has some property giving it distinct and special value and does not include so-called "block pumice" which occurs in nature in pieces having one dimension of two inches or more. [Emphasis in original.]

30 U.S.C. § 611 (1988).

Further definition of a common variety mineral is found at 43 CFR 3711.1. Paragraph (a) of that regulation restates the provisions of 30 U.S.C. § 611 (1988). Paragraph (b) provides, in pertinent part:

(b) "Common varieties" includes deposits which, although they may have value for use in trade, manufacture, the sciences,

11/ For ease of recognition we will refer to this Act as the Common Varieties Act.

or in the mechanical or ornamental arts, do not possess a distinct, special economic value for such use over and above the normal uses of the general run of such deposits. Mineral materials which occur commonly shall not be deemed to be "common varieties" if a particular deposit has distinct and special properties making it commercially valuable for use in a manufacturing, industrial, or processing operation. In the determination of commercial value, such factors may be considered as quality and quantity of the deposit, geographical location, proximity to market or point of utilization, accessibility to transportation, requirements for reasonable reserves consistent with usual industry practices to serve existing or proposed manufacturing, industrial, or processing facilities, and feasible methods for mining and removal of the material. [Emphasis added.]

43 CFR 3711.1(b).

When a pumice deposit (which does not include so-called "block pumice," occurring in pieces having one dimension of 2 inches or more) has some property giving it distinct and special value, the deposit is locatable under the Mining Law of 1872. Therefore, to determine if the pumice is locatable one must examine the intrinsic qualities of the mineralization as well as the economic value. The drafters of the regulations recognized this when promulgating the language that calls for a deposit having "a distinct, special economic value for such use over and above the normal uses of the general run of such deposits," and noting that "[mineral materials which occur commonly shall not be deemed to be 'common varieties' if a particular deposit has distinct and special properties making it commercially valuable for use in a manufacturing, industrial, or processing operation." 43 CFR 3711.1(b) (emphasis added). As can be seen, the test is whether the product has some intrinsic quality that differentiates it from ordinary deposits of pumice. However, a showing that the deposit is of commercial value does not, in and of itself, make the mineral material contained in the deposit an uncommon variety. See United States v. U.S. Minerals Development Corp., 75 I.D. 127, 134 (1968). Thus, the pumice contained in the deposit must hold a unique property which gives it a competitive edge over general run pumice. See United States v. Thomas, 1 IBLA 209, 217, 78 I.D. 5, 11 (1971).

In McClarty v. Secretary of the Interior, 408 F.2d 907 (9th Cir. 1969), the court set out standards for distinguishing between common and uncommon varieties. The comparison must be with other deposits of such minerals generally. ^{12/} the material in question must have some unique

^{12/} See United States v. U.S. Minerals Development Corp., *supra* at 132. Congress had good cause for designating pumice as a common variety mineral. Pumice deposits can be found in almost all western states and are found in many places in Arizona and its surrounding states. It should be obvious, therefore, that the further afield one must go to find a comparable deposit the more unusual the particular deposit must be. For example, marble is a

property giving the deposit a distinct and special economic value, and that value should be reflected by a higher price which the material commands in the market place, or by a substantial reduction in cost or overhead. 13/

The sales price of the material sold for a "common variety use" is one of the most important facts to be considered in a contest involving the common variety question. When a mineral is of a common variety, a buyer can obtain his mineral product from many sources. Thus, the market is almost always controlled by the location of the deposit (transportation costs) and control of the deposit (ownership), rather than some intrinsic property of the mineral material.

In fact the common variety sales price is more important to a determination that the mineral is an uncommon variety than it is for a common variety determination. The truth of this statement can be illustrated by the following example:

If a miner sells rock as riprap, and is unable to get more than \$20 a ton because almost any of the rock in the general area can be used for riprap, the common variety sales price is \$20 a ton. His sale of rock for riprap will not support a finding that the rock is an uncommon variety, even though he may be making a sizeable profit at \$20 a ton. If he then finds that the stone he has been selling as riprap is a good ornamental building stone, and purchasers are willing to pay \$200 a ton for it, the miner will soon be selling ornamental building stone and riprap. On the

f. 12 (continued)

relatively common rock type. Italian marble suitable for carving the Pieta is not. A Colorado marble deposit containing marble comparable to high quality Italian marble would most likely be considered uncommon. It may well be helpful to compare such a deposit with the deposit in Italy, but if they are similar, the comparison does little to support a conclusion that the Colorado marble is run of the mill. The opposite is probably true. The more comparable, the more likely that the Colorado deposit is uncommon. See also note 69 and accompanying text.

13/ All mineral deposits are formed in a complex geologic and chemical environment, and the conditions during deposition will never be the same for any two deposits. Therefore, if one were to compare a sufficiently large set of physical variables (properties), one could conclude that no mineral deposit is a common variety deposit—each deposit can be found to be unique and distinguishable from all others. Thus, to give meaning to the Common Varieties Act, one must consider the property or combination of properties making the deposit unique to see if those properties impart a distinct and special value over run of the mill deposits of that material. By doing so one can determine if a particular mineral deposit is locatable under the Mining Law of 1872 or excluded from location.

other hand, if the miner were to demand \$200 a ton as building stone, and common variety stone would do, the builder would buy riprap at \$20 a ton and call it building stone.

This example illustrates the principles set out in McClarty v. Secretary of the Interior, *supra*: (1) the stone in question is compared with other deposits of such minerals generally; (2) the mineral deposit has some unique property (suitable for use as ornamental building stone); (3) the unique property gives the deposit some distinct and special value (if it did not, riprap would suffice); (4) the deposit has some distinct and special value for use as ornamental building stone; and (5) the distinct and special value is reflected in a 10-fold increase in the value of the stone. As can be seen, the willingness of a user to buy a mineral material at a higher price is a clear indication that the mineral material has a special intrinsic property that renders it an uncommon variety. If the sales price of the mineral material sold for common variety uses is established, the value of "other deposits of such mineral generally" has been determined.

Once a common variety sales price is established, evidence of an arm's-length purchaser's willingness to pay much more than the "common variety price" for a particular mineral material strongly supports a finding that the deposit of that material is intrinsically unique. The importance of this factor was recognized in McClarty. The court in that case overturned a finding that the claim was invalid and noted that the evidence presented by a stonemason was "undisputed and is the only testimony bearing on value; that is, value in terms of money. It, nevertheless, is evident that the hearing before the trial examiner did not focus on money value." Id. at 909.

IV(B). Discovery of Valuable Mineral Present on the Claims

[2] As against the United States, a mining claimant acquires no vested rights by staking a mining claim. Even though a claim may have been perfected in all other respects, unless and until a claimant is able to show that the claim is supported by a discovery of valuable locatable mineral within the boundaries of the claim, no rights are acquired. ^{14/} United States v. Coleman, 390 U.S. 599 (1968). Apart from whether the deposits are locatable, the issues of this appeal focus upon various requirements for making and maintaining a discovery capable of supporting a mining claim.

^{14/} A body of law described as "pedis possession" addresses the rights of a claimant as against other private parties prior to perfection of the claim. Pedis possession does not apply against the United States, the legal title holder of the property. A mining claimant's rights as against the United States are acquired only under the Mining Law of 1872, 30 U.S.C. § 21 (1988), and unless and until the claimant meets the requirements under those laws, no rights can be asserted against the United States.

The "prudent man test," the standard for determining whether there has been a discovery, was set out in Castle v. Womble, 19 L.P. 455 (1894). This test remains the accepted standard for this determination, although, like the Constitution, each word and phrase has been the subject of subsequent legal deliberation. A discovery has been made if "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." Id. at 457.

[3] At various times since United States v. Coleman, *supra*, decisions have alluded to a "supplemental" or "complementary" test, usually referred to as the "marketability test." e.g., United States v. Crawford, 109 IBLA 264 (1989); United States v. Holder, 100 IBLA 146 (1987). However, the "marketability test" is merely a means of ascertaining whether there will be a "valuable mine" and not a supplemental or complementary standard. The requirement of a showing that the evidence is of such a character that there is a reasonable prospect that the commercial value of the deposit exceeds the cost of extracting, processing, transporting, and marketing the contained mineral remains valid – no matter how it may be couched.

It is therefore evident that, to have a reasonable prospect of success in developing a valuable mine, the mine owner must be able to demonstrate, as a present fact, that there is a reasonable probability that the mineral can be extracted and marketed at a profit. ^{15/} A discovery cannot be based on speculation that at some time in the future an economic change or untested technological advance will render the mine valuable. ^{16/} A

^{15/} When establishing the potential sales price of a mineral product, it would certainly be advantageous if a claimant could show actual receipts from sales of the product. However, a claimant need only demonstrate a potential market for the product and actual sales (and sales slips) are not required. See United States v. Foresyth, 100 IBLA 185, 239, 94 I.D. 453, 483 (1987). Evidence of market potential is customarily given through the testimony of a person having specific or general knowledge of the existing market. See e.g., *id.*; United States v. Wittaker, 95 IBLA 271 (1987). That person may have knowledge of market conditions as a seller or as a buyer of that product or as an independent observer. See United States v. Shiny Rock Mining Corp., 112 IBLA 326 (1990). If this were not the case, the Government could not submit evidence regarding the sales price of common variety mineral material unless it presented the testimony of a purchaser and sales slips.

^{16/} This standard is not so rigid that it must be measured at a specific point in time. Rather, as noted in In re Pacific Coast Molybdenum Co., 75 IBLA 16, 29, 90 I.D. 352, 360 (1983), one must show that, as a present fact, considering historic price and cost factors and assuming they will continue, there is a reasonable prospect that a paying mine can be developed. Similarly, if the technology is generally known, and it is not unreasonable to expect that the technology can be applied at the property,

discussion of present marketability can be found in Ideal Basis Industries, Inc. v. Morton, 542 F.2d 1364, 1369-70 (9th Cir.1976). See also United States v. Holder, *supra* at 149-50.

When there is more than one market for the product from a claim, and the sale of pumice in one or more of those markets would be considered a sale of common variety mineral, that fact must be considered when determining whether there is a discovery of a locatable mineral. The uncommon (locatable) mineral must support the mining operation, and the sale of common variety minerals (or products) may not be considered when forecasting profitability. See United States v. Foresyth, 100 IBLA at 240-48, 94 I.D. 484-88.

[4] The above discussion addresses the "quality and quantity" of the mineralization necessary to support a discovery. In many cases an additional factor must also be considered. This factor is time. When a withdrawal or similar event affects the ability to locate a claim or restricts the type of mineral material subject to location, the existence of a discovery when the event takes place becomes critical to a validity determination. Simply stated, if the mining claim is perfected on the date of the event, certain rights have vested in the claimant, and those rights cannot be cancelled by the action. On the other hand, if there is no discovery until after the event, the claim was not perfected on that date, no rights were acquired, and nothing is lost by reason of the event. If, for example, land is withdrawn from mineral entry in January and the claimant makes a discovery in July, he acquires no rights upon discovery. He could not locate a claim in July, when he made his discovery. See United States v. Wichner, 35 IBLA 240 (1978).

Once made, a discovery must be maintained. Even though a claimant may have made a discovery and actually mined ore from a claim, until a patent application has been perfected and the equitable title has vested, a claimant runs the risk of losing his discovery if the deposit is exhausted or if a material change in market conditions renders it unreasonable to expect that the mineral can be mined at a profit. See e.g., Best v. Humbolt Placer Mining Co., 371 U.S. 334, 336 (1963); Multiple Use, Inc. v. Morton, 353 F. Supp. 184, 193 (D. Ariz. 1972), *aff'd*, 504 F.2d 448 (9th Cir. 1974).

IV(C). The Importance of the Distinction Between the Two Legal Issues

[5] Then the Government issues a mining claim contest complaint alleging that a mining claim is invalid because it was located for one or more of the minerals named in the common Varieties Act, the claimant has three basis defenses: (1) the claim was located prior to July 23, 1955,

fn. 16 (continued)

those facts can support a discovery, even though the process has yet to be used on the mineral deposit in question. See Yankee Gulch Joint Venture v. BLM, *supra* at 140.

and has been supported by a discovery from and before that date; (2) the mineral supporting the discovery is not one of the minerals named in the Act; and/or (3) the mineral supporting the discovery is one of the minerals named in the Act, but is an uncommon variety of that mineral. When an answer alleging one or more of the defenses is filed in a timely manner a hearing will usually ensue.

If the mineral material supporting the discovery is sand, stone, gravel, pumice, pumicite, or cinders, and a claimant can show by a preponderance of the evidence that the claim was located and supported by a discovery prior to July 23, 1955, and that the discovery has been maintained since that date, the minerals in the claim would not be within the purview of the Common Varieties Act. ^{17/} The inability or failure to demonstrate that a discovery existed on July 23, 1955, will not render a deposit of sand, stone, gravel, pumice, pumicite, or cinders unlocatable, however, if it is an uncommon variety.

At the hearing the Government has the burden of establishing a prima facie case. When the claimant files an answer asserting that the mineral material is an uncommon variety, ^{18/} the Government's prima facie case that the mineral material is subject to the Common Varieties Act may be a showing that the mineral material is sand, stone, gravel, pumice, pumicite, or cinders and that the price paid for mineral material similar to that found on the claim, when sold for what is typically considered a common variety use (such as sand used in concrete or rock used as rip rap) and testimony that the Government witness has been unable to identify any use for the mineral material commanding a higher price. Once a prima facie case has been made, the burden of going forward shifts to the claimant, who must overcome the Government's case by a preponderance of the evidence.

Petrified wood was made subject to the Common Varieties Act, regardless of the value of the deposit or the use to which it may be placed. On the other hand, a specific exception to the act was set out for sand, stone, gravel pumice, pumicite, and cinders. This exception provides that, if the deposit is valuable because it has some unique property giving it distinct and special value, it is not a common variety, and may be located. Thus, when the Government has presented a prima facie case that the mineral

^{17/} With some exceptions not applicable in this case, such as leasable minerals, the existence of a discovery of either a common variety or an uncommon variety mineral on July 23, 1955, would reserve all locatable mineral to the claimant.

^{18/} A claimant's answer may be in the form of a general denial and need not allege that the deposit is of an uncommon variety. The failure to specifically allege that the claim contains a deposit of uncommon variety mineral material does not bar the claimant from presenting testimony and evidence that the claim is located on a deposit of mineral material having a unique property giving it a distinct and special value. In the event that a general denial is filed by the claimant the Government need not present a prima facie case that it is not an uncommon variety.

is common variety, the claimant must demonstrate by a preponderance of the evidence that the deposit has some unique property giving it distinct and special value. If a claimant presents evidence that the deposit has some unique property giving it a distinct and special value, and the evidence presented is of sufficient weight to overcome the Government's showing, the resulting finding will be that the mineral material is not common variety and is therefore locatable.

Similarly, the Government has the responsibility of going forward to establish a prima facie case when a Government-initiated contest involves a question of the existence of a discovery. It may do so by presenting evidence that the mineralization fails to satisfy the prudent man test in one or more respects. Once the Government case is presented the claimant must present sufficient evidence to overcome the Government's case by a preponderance of the evidence. If the mineral claimant elects to not present or fails to present sufficient evidence to preponderate, the Government will prevail, with a resulting finding that the mineral location is not supported by a discovery and is thus null and void. ^{19/}

The issue of "locatability" presented by the Common Varieties Act does not necessarily implicate the question of "discovery," and there is a major distinction between the evidence and case law applicable to "locatability" and that applicable to "discovery." For example, if the mineral material on a claim located after 1955 is being sold at a common variety price for a common variety use, it matters not that the claimant has developed a valuable mine which is operating at a sizable profit. An overwhelming showing that the mineral material is marketable will not support a claim if the mineral material is not locatable. On the other hand, the inability to mine the mineral material at a profit does not render it common variety when the deposit has some unique property giving it a distinct and special value. The prudent man test is not applicable when considering whether the mineral deposit has a distinct and special value. Conversely, comparing the value of mineral material on the claim to what may be called a "run of the mill" deposit has direct bearing on a uncommon variety determination, but would have little bearing on the issue of marketability.

^{19/} The mining claim contest proceedings now under consideration are designed to afford the means for assuring that none of the public domain is wasted or is disposed of to a party not entitled to it. In a number of cases we have noted that if the Government case was weak it can be overcome with minimal evidence, but if the claimant did not present evidence to overcome that case the Government would prevail. See, e.g., United States v. Parker, 82 IBLA 344, 353, 91 I.D. 271, 276 (1984), and cases cited therein. We refused to remand for further evidence in those cases and remain equally reluctant to do so when the Government merely objects to the weight given to un rebutted evidence and makes no offer of proof that, if established, would compel reversal. See United States v. Pittsburgh Pacific Co., 68 IBLA 342, 89 I.D. 586 (1982); United States v. Martinez, 49 IBLA 360, 375-76 (1980).

The ease of confusing the locatability and discovery issues and the facts and case law relevant to each is a valid basis for arguing that the hearing on these two aspects of a contest involving a Common Varieties Act mineral should be bifurcated. The case before us was not, and we must carefully sort the evidence, making sure that the evidence (or lack of evidence) in one area is not construed as having impact on the other. Examples of the importance of distinguishing between locatability and discovery will be emphasized during the course of our analysis of Judge Sweitzer's decision.

V. JUDGE SWEITZER'S DECISION

After setting out facts similar to those set out above, Judge Sweitzer identified seven issues deemed by him to be decisive in this case. We will address each of these issues, his holding as to each, and the issues presented to this Board on appeal. However, we will deviate from the order of his decision to maintain the distinction between locatability and discovery. The first issue we will address is locatability.

V(A). Is the Pumice on the Claims Locatable under The Mining Law of 1972?

This was the primary issue during the hearing and remains the primary issue on appeal. During the hearing Multiple Use attempted to meet its burden in two ways. The first was its contention that the claims contain "'block pumice' which occurs in nature in pieces having one dimension of two inches or more." 30 U.S.C. § 611 (1988). That form of pumice is specifically excluded from the Common Varieties Act. The second argument adopted by Multiple Use was that the claims contain an uncommon variety of pumice.

V(A)(1). Block Pumice Exclusion

Multiple Use argues that the claims are excluded from the Common Varieties Act because a small portion of the air-fall deposit is in the form of block pumice. The clear weight of the evidence supports a conclusion that the White Vulcan deposit contains a small amount of block pumice occurring in nature in pieces having one dimension of 2 inches or more. Testimony supporting this conclusion was given by the Government witnesses as well as those who testified on behalf of the claimant. The best available evidence, the screen analysis evidence, indicates the somewhere between 0.72 percent (Tr. 1013) and 1 percent (Tr. 1585) of the pumice would qualify as block pumice, as that term is defined in the Common Varieties Act. 20/ The block pumice on the claims is locatable. The effect of this finding is discussed later in this opinion. (See section V(B)(2) below.) It is enough to say at this point that it remains proper

20/ Throughout the hearing witnesses for Multiple Use referred to any pumice having a dimension in excess of one inch as block pumice. The Common Varieties Act, 30 U.S.C. § 611 (1988), clearly states that block pumice must have one dimension of 2 inches or more.

to consider whether the other 99 percent of the pumice is of an uncommon variety and also locatable.

V(A)(2). Is the Pumice on the Claims Locatable Because It is An Uncommon Variety of Pumice When Used As a Lightweight Aggregate, Pozzolan, or in Other Construction-Related Uses?

A pumice deposit can be located under the Mining Law of 1872 if the claim contains an uncommon variety of pumice, even though it does not contain block pumice. The bulk of the evidence submitted by Multiple Use described the physical characteristics of the deposit and the uses of the pumice from the claims in an attempt to convince Judge Sweitzer that the White Vulcan claims contained an uncommon variety of pumice. According to Multiple Use, the White Vulcan air-fall pumice deposit can be used as a lightweight aggregate, pozzolan, and as an abrasive for garment finishing.

Multiple Use advanced eight characteristics of the air-fall deposit deemed by it to distinguish that deposit from other pumice deposits. These characteristics are raised again on appeal and are set out on page 9 of the Multiple Use statement of reasons for appeal (SOR) as: (a) high silica content (approximately 76 percent); (b) aphyric nature (no crystal impurities); (c) extremely low density; (d) uniform deposition through the area of the claims; (g) the small amount of overburden; and (h) pozzolanic quality. To this list we add low iron content, a characteristic not initially listed by the claimant but identified during the course of the hearing and addressed in Judge Sweitzer's decision.

Judge Sweitzer's decision is rooted in the language of the Common Varieties Act, and the regulations interpreting that Act. It is also quite clear that he was cognizant of the tests set out in McClarty v. Secretary of Interior, *supra*, and United States v. U.S. Minerals Development Corp., *supra*. In making his "common variety" determination for pumice on the White Vulcan claims, Judge Sweitzer examined the evidence regarding its physical properties and considered whether those physical properties somehow impart some distinct special economic value over and above the general run of such deposits.

Judge Sweitzer held that "[Multiple Use] has failed to show that the properties inherent in its claimed pumice deposit impart any distinct economic advantage for uses as a natural pozzolan or lightweight aggregate or other construction related uses" (Decision at 39 (emphasis in original)). On appeal Multiple Use claims error in this finding, and the Forest Service urges the Board to sustain this portion of his decision.

Had Judge Sweitzer gone no further, the Forest Service would probably not have appealed. However, he addressed another use of the pumice and found that "the pumice on the White Vulcan No. 2 has some properties distinct from the pumice on the White Vulcan No. 1 and other general domestic pumice deposits that give it a distinct and special value for use as a stone-washing agent in the garment finishing industry" (Decision at 48).

Those properties were its uniform size and the absence of staining material (Decision at 51). He found that "17 percent of the deposit brings approximately ten times the price per pound that the rest of the pumice does in the market for construction related uses, [and] it appears that the uncommon variety use can sustain a profitable mining operation * * *" (Decision at 49). Multiple Use finds no fault with this "uncommon variety" finding. On the other hand, on appeal the Forest Service contends that Judge Sweitzer erred when finding the air-fall pumice on the White Vulcan No. 2 has unique properties and when finding that the deposit met the marketability test. We will address the two findings separately.

V(A)(2)(a). Do the Properties Inherent in the Pumice Deposit Impart a Distinct Economic Advantage for Use as a Lightweight Aggregate, Pozzolan, or Other Construction-Related Uses?

We will now examine the various characteristics identified by Multiple Use, and determine whether, for any of the identified uses, Multiple Use has demonstrated that the air-fall pumice on the White Vulcan claims possesses a distinct and special economic value over and above the normal uses of the general run of such deposits. If the White Vulcan air-fall deposit (or any part of it) has a unique property (or combination of properties) rendering it commercially more valuable than ordinary pumice for any of the identified uses, it might be considered an uncommon variety pumice. 21/

V(A)(2)(a)(i). High Silica Content

We find two faults in the Multiple Use argument that the silica content of the air-fall pumice on the White Vulcan claims causes that pumice to be unique when used as a lightweight aggregate. First, we note that the silica content is within the range stated in the Bureau of Mines Dictionary definition of pumice (set out above), and thus cannot be segregated from a common variety pumice by definition. 22/ Second, although Multiple Use's witnesses could testify that the pumice on the White Vulcan claims was in the upper range for pumice, Multiple Use could show no actual demonstrable tie between silica content and distinct, special economic value for use as a lightweight aggregate.

Similarly, Multiple Use is correct when saying that the pozzolanic qualities of the White Vulcan air-fall pumice is attributable, at least in

21/ When determining the commercial value, we will consider the factors set out in 43 CFR 3711.1(b). Many of those factors will be discussed in detail. The other factors were also considered, but have less bearing on the outcome of this case.

22/ See, e.g., United States v. Chas. Pfizer & Co., 76 I.D. 331, 342-43 (1969), Request for Clarification Denied, 6 IBLA 514 (1972), which held that limestone containing 95-percent calcium and magnesium carbonates is an uncommon variety of limestone, locatable under the Mining Law of 1872.

part, to the high silica content. Natural pozzolan is a silicious material of volcanic origin (Bureau of Mines Dictionary at 856). During the hearing the Forest Service presented evidence that many substances, such as fly ash from coal-fired generation plants, are used as pozzolanic agents, and that pumice from many sources is used for that purpose. In the face of this evidence, Multiple Use has failed to establish that the high silica content of the air-fall pumice renders it uncommon when used as a pozzolanic agent. Nothing in the evidence presented convinces us that the pozzolanic properties of the White Vulcan pumice differ in any material way from that of common variety pumice. Further, it is very doubtful that the air-fall pumice has much economic value as a pozzolan. The large-scale infusion of fly ash as a pozzolan, the ability to use fly ash as a substitute in almost all cases, and the market price of the fly ash appear to render the air-fall deposit subeconomic as a pozzolanic agent for the foreseeable future. 23/ Therefore, although a strong argument can be made that a high-grade pumice suitable for pozzolan was, at one time, an uncommon variety, that argument can no longer be made. As is the case with the value of a deposit for discovery purposes, a deposit considered to have some unique property giving it a distinct and special value may be rendered a common variety deposit by subsequent technological advances. 24/

At this point we will separate the abrasive uses into two categories. The use of pumice to stone-wash denim in the designer jean industry is technically a use of pumice as an abrasive. However, this use will be addressed as a separate category in section V(A)(3) below. A limited amount of testimony was presented regarding use of pumice as an abrasive in other applications. However, Multiple Use failed to submit any evidence regarding the existence of any potential market for air-fall pumice as an abrasive, the actual or potential value of this pumice as an abrasive, or the potential sales price. Not having this information, we are obviously unable to make a finding that the White Vulcan pumice possesses any distinct and special economic value for use as an abrasive over and above common variety pumice. 25/

23/ Increasingly stringent standards for removal of particulate matter from coal-fired generating plant emissions has created a glut of fly ash on the market.

24/ The opposite conclusion is also true. A technological advance may be made in some manufacturing industry which is dependent upon the use of a pumice having a particular combination of characteristics. Such event may well render a deposit previously suitable only for common variety uses an uncommon variety of pumice if the particular combination of characteristics needed for the industrial use is sufficiently uncommon to command a higher price.

25/ Nor are we willing to remand this case for additional testimony on this point. Each side has a burden of proof to carry, and a party's failure to carry that burden should not be the basis for a remand. Neither the Administrative Law Judge nor this Board is charged with the responsibility for what evidence counsel for the claimant or the Government places (or does not place) in the record. To do so would reduce our role to that of an advocate for a party.

As can be seen, Multiple Use has failed to demonstrate that the silica content of the White Vulcan pumice is a unique property imparting a distinct, special economic value over and above the general run of pumice deposits when used as a lightweight aggregate, natural pozzolan, or abrasive.

V(A)(2)(a)(ii). Aphyric Nature (No Crystal Impurities)

The only evidence that the absence of crystalline impurities would have any material bearing on the use of the pumice as a lightweight aggregate may be the inference that the presence of such impurities adds to the weight of the product. However, this evidence is inconclusive at best because there is no evidence that common variety pumice containing the impurities is materially heavier than that found on the claims. We find no evidence that the aphyric nature of the pumice imparts any economic advantage to pumice used as a lightweight aggregate.

The aphyric nature of the deposit might impart some economic benefit over less glassy deposits when grinding pumice to make powdered pozzolan. However, the weight of the evidence supports a finding that the property is not economically viable as a pozzolan mine, and there is no need to speculate on this point. Likewise, the aphyric nature of the pumice may well enhance the value of the pumice as an abrasive, but without evidence of the potential market for pumice as an abrasive, the potential sales price, or a comparative cost of rendering the pumice suitable for sale, we are obviously unable to make a finding that this quality of the White Vulcan pumice imparts any distinct and special economic value over and above the general run of pumice.

In conclusion, Multiple Use has also failed to demonstrate that the aphyric nature of the White Vulcan pumice imparts a distinct and special value to that pumice which makes it commercially valuable for use as a lightweight aggregate, natural pozzolan, or abrasive.

V(A)(2)(a)(iii). Extremely Low Density

[6] The bulk of Multiple Use's evidence is directed to the qualities of the White Vulcan air-fall pumice as a lightweight aggregate. In such use weight is a primary factor. However, the mere fact that the White Vulcan air-fall pumice is lightweight will not make the pumice on those claims locatable, if its weight does not distinguish the White Vulcan pumice from common variety pumice, when used for a common variety purpose. As noted above, pumice is commonly used in lightweight aggregate, and use of a material as an aggregate is normally considered a common variety use.

There is no question that the air-fall pumice from the White Vulcan claims was marketable as a lightweight aggregate at the time of the hearing. The product was being processed at the site, shipped to the Phoenix, Arizona, area, and marketed under the registered trade name "Arizona Tufflite." It appears from the record that production for this use commenced about 1978 with clear evidence of sales every year since 1981

(Exh. GG). We are also satisfied that Arizona Tufflite was being sold at a profit at the time of the hearing, and thus the White Vulcan air-fall pumice was commercially valuable for use in a manufacturing, industrial, or processing operation. Therefore, the remaining issue is whether the White Vulcan air-fall pumice possesses a distinct and special economic value as a lightweight aggregate over and above the general run pumice deposits.

One aspect of this question is most interesting. The pumice from the property is being marketed under a trade name. Does the White Vulcan pumice possess a unique property which permits its marketer to market it under that name, or does the fact that it is marketed under a trade name impart some aura of uniqueness to common variety material? 26/ To make our finding on this question more understandable, we will first make some observations regarding the building industry. Our observations are general and based upon the testimony and other documents of record.

When the designer of a building or other structure decides how it is to be built, that information is commonly set out in the plans and specifications for the project, whether the project is a small building or a large structure, such as a concrete dam. In most cases these design standards are couched in terms of requiring that a component of the structure meet specified uniform design or quality standards established by the American Society for Testing Materials (ASTM). The builder will then take steps to assure that the materials meet these standards. These steps often include such measures as ordering a specific brand of material and conducting periodic quality tests of the materials. A factor of prime importance to the builder is the ability to install compliant components at the lowest possible cost.

Concrete, a common material used in many structures, is the material considered in this determination. Concrete normally has four components: (1) cement, (2) aggregate (sand and gravel), (3) water, and (4) additives which either give the finished product some characteristic or aid in the fabrication and placement of the product. 27/ The concrete component most readily adjusted to affect the weight of the final product is the aggregate. Thus, the use of a light substance, such as pumice, is the primary means of making lightweight concrete. As with other substances, ASTM has standards for concrete and for the aggregates in concrete. For example, ASTM Standard

26/ A similar question often asked is whether the brand name drug is more expensive than the generic because of something in the drug or because one is paying for the brand name.

27/ The cement additive discussed at length at the hearing and in this opinion is a pozzolanic agent. Dr. Sheridan described a pozzolanic agent as one which, when mixed with cement, causes a reaction between the silica and the calcium in the cement to form calcium silicate, a more durable substance than cement without a pozzolanic agent (Tr. 1096-97).

C-330 addresses the standard specifications for lightweight aggregates for structural concrete (Exh. 51).

When undertaking a construction project, the builder has two primary means of knowing, or at least gaining some comfort in the belief that, the products he installs will meet the design specifications. First, he could test each component of the materials going into the structure to make sure that it will meet the requirements. The record indicates that this approach has been taken for the Glen Canyon Dam and an atomic generation plant in Arizona. The second, and by far most common means, is to make the supplier aware of the specifications and have the supplier agree to furnish materials meeting the design specifications. It is obvious that, for most projects, the cost of in-detail preliminary testing makes that approach impractical.

Of course, a supplier is anxious to have a builder purchase his product, and the more attractive he can make a product, the more likely he is to sell it. Thus, in many cases a supplier will undertake testing in order to be able to tell the potential user that the product meets applicable design standards. Therefore, it is not surprising that the owners of the Arizona Tufflite trademark have undertaken to test the product sold under that trade name and publish a brochure setting out the fact that it meets certain design specifications (Exh. 49). This pamphlet contains information about the strength of Arizona Tufflite, anticipated compressive strength, fire resistance, shrinkage, and specific gravity (stated in Exhibit 49 as being 1.14). In addition Exhibit 49 states that "[f]or concrete and concrete masonry units, our aggregates conform to ASTM C-330-80, for structural concrete; C-331-81, for concrete masonry units; C-332-80 for insulating thermal concrete."

Having had the White Vulcan air-fall pumice tested, the supplier of Arizona Tufflite is able to represent that the air-fall pumice meets the ASTM standards noted above. When a builder is called upon to install lightweight concrete meeting those standards, he can in turn call upon the supplier to use Arizona Tufflite, thus holding the supplier and Arizona Tufflite to those representations. This ability to rely upon a product because the supplier has made representations that it will meet the stated ASTM design specifications is so important to a builder that a product sold under the trade name and backed by the representations is more valuable than the same product would be if sold as a generic without similar representations as to fitness for use.

On the other hand, the fact that a pumice meets certain ASTM standards does not make it an uncommon variety of pumice. It is clear that when Congress passed the Common Varieties Act, it specifically named common varieties of sand, stone, gravel, pumice, pumicite, and cinders as being no longer subject to the Mining Law of 1872. One common thread runs through each of these mineral products. That thread is the use of those products as aggregates in making concrete products. If pumice meets the ASTM standard for use as a lightweight aggregate, that fact does no more

than establish the ability to market and use it as an aggregate. ^{28/} It therefore only supports its value as a common variety mineral. To use ASTM standards as a basis for a determination that an aggregate is an uncommon variety, it would be necessary to show that the qualities of the particular aggregate so exceed an ASTM standard that the particular aggregate commands a higher price in the marketplace than similar aggregates. Multiple Use has failed to demonstrate this fact generally, and, specifically, it has failed to show that the specific gravity of the pumice differs so appreciably from common variety pumice as to command a premium price. We accept the statement in Exhibit 49 that the lowest specific gravity that the suppliers of Arizona Tufflite desire to be held to is 1.14, even though much lower values were presented at the time of the hearing.

The low specific gravity of the pumice is a result of entrapped air. Witnesses for Multiple Use testified that it would be necessary to finely pulverize the pumice in order to market it as a pozzolanic agent. This act of crushing the air-fall pumice would destroy the vugs in the rock, increasing its unit weight. Thus, it is obvious that this factor has no bearing on the use of pumice as a pozzolanic agent.

No material evidence was presented to indicate that the weight of the pumice had any bearing upon its use as an abrasive.

In conclusion, Multiple Use has failed to demonstrate that the density of the White Vulcan pumice imparts a distinct and special value over and above the general run of pumice deposits when used as a lightweight aggregate, natural pozzolan, or abrasive.

V(A)(2)(a)(iv). Uniform Coarse Grain Size

We recognize that, in certain circumstances, a mineral may be deposited in a manner which results in it containing particles of uniform size. In some cases this event may be so unusual that the deposit is thereby rendered locatable. See United States v. McCormick, 27 IBLA 65 (1976). However, a careful examination of the testimony of the witnesses with expertise regarding pumice deposition reveals that the very nature of air-fall pumice deposition causes the beds or deposits of air-fall pumice to typically contain lateral stratification by particle size with the particles of pumice deposited in a particular area being generally uniform in size. As noted by both experts, there is a natural gradation of air-fall pumice particles, with the heavier, larger particles being deposited nearer to the source and a predictable lateral gradation as one progresses away

^{28/} Not all gravel deposits are suitable for use as aggregates. A gravel deposit may contain some substance deleterious to concrete. It may contain substances making it more costly to produce than other similar deposits. Many of the same arguments advanced in support of Multiple Use's contention that the air-fall pumice is an uncommon variety could be advanced for most commercially viable gravel deposits. For obvious reasons those arguments do not work.

from the source. This being the case, it could be argued that it is somewhat unusual that the size of the air-fall pumice particles in the White Vulcan deposit, as indicated in the screen-test results set out above, is not more uniform.

While uniform size would be an advantage when considering pumice for use as a pozzolanic agent, to be economically advantageous for that use, the size of the particles would have to be much smaller. The bulk of the pumice on the claims would have to be crushed to render it marketable as a pozzolanic agent. This would, in fact, create an economic disadvantage if compared to more friable pumice or to a deposit containing smaller particle sizes. The pumice on the White Vulcan claims is at a clear economic disadvantage when compared to the readily available fly ash.

Other than the garment-washing use described below, no evidence was presented to indicate that the grain size of the pumice found on the White Vulcan claims imparts any distinct and special economic value for use as an abrasive over and above common variety pumice.

In conclusion, aside from the use discussed below, Multiple Use has also failed to demonstrate that the relatively uniform grain size of the White Vulcan pumice imparts a distinct and special economic value over and above the general run of pumice deposits when used as a lightweight aggregate, natural pozzolan, or abrasive.

V(A)(2)(a)(v). Lack Of Lithic (Rock) Impurities

In the context of this case the term lithic impurities refers to those substances in a pumice deposit other than pumice. In this regard, Dr. Sheridan described the strata overlying the air-fall bed as a bed of pumice containing other materials, such as scoria, tufa, mudflow, clay, and fine particles, which have a deleterious effect on the value of the contained pumice. He explained that the presence of these other substances was the result of the deposit having been reworked by surface water, and differentiated between the two beds by referring to the upper bed as common variety pumice.

We agree that an absence of lithic impurities should enhance the value of the contained pumice, but it may well be necessary for a common variety pumice deposit to be free from lithic impurities if it is to be commercially viable. The lack of lithic impurities does not automatically make a pumice deposit an uncommon variety of pumice. One must examine the value of the pumice for a particular use and then determine if the lack of lithic impurities makes the pumice more valuable than common variety pumice, or simply makes it economically viable as a common variety pumice. If it merely makes it economically viable, the lack of lithic impurities would not render the deposit one of an uncommon variety of pumice.

When the weight of the evidence indicates that the use of the pumice as a lightweight aggregate is a common variety use, to sustain a determination that the mineral material is locatable, the preponderance of the

evidence must show that a lack of lithic impurities renders the deposit more valuable than run of the mill deposits of the material. We will first examine the apparent extent to which the lack of lithic impurities enhances the value of the air-fall deposit for use as a lightweight aggregate. As a baseline we note that the report for pumice in the 1987 Minerals Yearbook, printed by the Bureau of Mines (1987 Minerals Yearbook), states that in 1987, the average value, F.O.B. the mine or mill, for domestic pumice and pumicite was \$11.46 per ton, a 10-percent increase compared with the 1986 value. 29/

During the course of the hearing, none of the experts stated that it was normal for a domestic pumice miner to wash, sink-float, or otherwise treat the pumice to remove lithic impurities. In fact, the only mining operation described in any detail was the Lipari, Italy, deposit where the mined product was just sized and loaded on ships by conveyor belt. The best cost information for mining the White Vulcan air-fall pumice was that the operator incurred costs of \$11 per cubic yard, F.O.B. minesite, to mine and treat the material. The operator testified that the specific gravity of the pumice is approximately 1.1 (Tr. 1213). Therefore, a yard of pumice contains approximately 0.93 tons of pumice. Converting the per-yard cost to a per-ton cost, one arrives at an approximate cost of \$11.85 per ton, F.O.B. minesite. The similarity between this cost of mining and the \$11.46 average F.O.B. minesite price received for pumice in 1987 is striking and surely puts to rest the idea that the lack of lithic impurities in the White Vulcan deposit allows a marked reduction in the cost of mining, thus rendering the deposit an uncommon variety deposit.

Although it is also likely that the lack of lithic impurities in the White Vulcan air-fall deposit would have a direct bearing on the economic viability of the deposit as a source for lightweight aggregate, pozzolan, or abrasive (other than discussed below), Multiple Use has failed to show by a preponderance of the evidence that the lack of lithic impurities imparts a distinct and special economic value to that deposit. See United States v. McCormick, supra, for an example of evidence supporting a finding that a deposit qualifies.

V(A)(2)(a)(vi). Thick And Uniform Deposition

Some testimony was offered describing the White Vulcan deposit as having a relatively uniform thickness. 30/ However, no reliable comparative information was given to support a finding that either the thickness or the

29/ This Board may take official notice of such documents. See 43 CFR 4.24(b).

30/ One could draw the opposite conclusion. Multiple Use's witness, Dr. Sheridan, testified that the upper portion of the deposit had been reworked by surface waters (Tr. 231). It could therefore be expected that the lower contact and the upper contact of the air-fall bed will be uneven. This is borne out by the cross sections in Exhibit 29.

uniformity of the deposit was unusual. ^{31/} We also find no material evidence which would support a finding that either the uniformity or thickness of the deposit is unique, or that either factor imparts any distinct and special economic value over and above the general run pumice deposit. The contention that the deposit is uniform in nature is discussed above under the heading V(A)(2)(a)(iv) "Uniform Coarse Grain Size."

V(A)(2)(a)(vii). Small Amount of Overburden

We find one very important reason for rejecting Multiple Use's arguments that the small amount of overburden at the White Vulcan claims renders the deposit uncommon. The presence or lack of overburden is of no consequence. Said another way, overburden is not an intrinsic quality of the pumice being sold. The amount of overburden has a direct bearing on the economic viability of any mineral deposit, but an absolute lack of overburden will not turn a common variety mineral into an uncommon variety mineral. The two factors are not directly related.

V(A)(2)(a)(viii). Pozzolanic Quality

The air-fall pumice on the White Vulcan claims does possess pozzolanic qualities. During the course of the hearing Multiple Use noted the results of a 1960 mining claim contest involving claims a few miles from the White Vulcan claims. See Exh. 57. ^{32/} In that proceeding the contest was dismissed after a finding that the claim contained an uncommon variety of pumice because it was suitable for manufacture of pozzolan. Although it may be true that at one point in time the claims contained pumice suitable for manufacture of pozzolanic agents, the subsequent change in market conditions clearly supports a finding that the pumice is no longer an uncommon variety because of its pozzolanic qualities. This change in the market conditions is a direct result of Environmental Protection Agency (EPA) action in the coal fired electric generation industry.

Since 1960 the EPA standards for particulate emissions have resulted in the installation of facilities to capture and collect the particulate matter previously released when coal was burned at electrical generation facilities. In turn there must be some way to dispose of this particulate matter, or fly ash. If it is sold as a pozzolanic agent, the cost of capture and disposal can be offset by the amount received from the sale. The record indicates that it is beneficial to sell fly ash at a loss, as the alternative disposal costs may be greater than the cost of selling fly ash as a pozzolanic agent. Thus, the EPA requirement that fly ash be removed from coal-fired electric generating plants and the subsequent acceptance of

^{31/} We gather from Dr. Sheridan's testimony that the Lipari, Italy, deposit, located on an island near Sicily, and a major supply of pumice for East Coast users, is much thicker.

^{32/} This case was styled United States of America v. B. B. Bonner, Jr., Contest No. Arizona 10060 (Feb. 12, 1960). An additional discussion of this case is found below.

fly ash as a pozzolanic agent has rendered the price of fly ash the common variety price against which the price of the White Vulcan pumice-pozzolan must be measured. However, when this comparison is made, there is no evidence that the White Vulcan product commands a higher price than fly ash. In fact, Clarence Morgan, the Multiple Use witness having the greatest knowledge of the market potential for pumice as a pozzolanic agent, stated that he expected that there would be no premium paid for the pozzolan is now a common variety product and that the pozzolan from the claims is a common variety pozzolan.

Multiple Use has also failed to prove that this pozzolanic attribute is sufficiently unusual to impart any increased value and thus render the pumice an uncommon variety when used as coarse aggregate in the lightweight aggregate industry. There is no evidence that pozzolanic qualities impart any value to pumice when it is used as an abrasive.

V(A)(2)(a)(ix). Low Iron Oxide Content

Some testimony was presented that low iron oxide content may be a consideration in ornamental concrete products. However, no evidence was presented which would establish that a premium is paid for pumice having a low iron content, and, therefore, the testimony does not support a conclusion that the low iron content of the White Vulcan pumice imparts a distinct and special economic value for use as an aggregate over and above the normal uses of the general run of such deposits.

The testimony was more convincing regarding the Multiple Use contention that, if pumice were used as a pozzolanic agent, the light color may give it an advantage over the darker fly ash when the color of the concrete is important. However, Multiple Use failed to establish that the pumice was other than common variety for that use. No evidence was presented that might be used to estimate the potential market for the product under such circumstances. In spite of Multiple Use's urging for the product under such circumstances. In spite of Multiple Use's urging on this point, there is no evidence that a premium would be paid for low iron content pumice. Lastly, as noted above, we find that Multiple Use has failed to carry its burden by showing that the pumice from the property carries a distinct and special value, and therefore would command a higher price in the market place if it were mined and sold as a pozzolanic agent.

Except for the garment-washing use discussed below, Multiple Use has also failed to demonstrate that the White Vulcan pumice with a low iron oxide content imparts a distinct and special value to that pumice when sold for use as lightweight aggregate, natural pozzolan, or abrasive.

V(A)(2)(a)(x). Summary

A great deal of evidence and testimony were presented during the course of the hearing on the issue of whether the various properties of the White Vulcan pumice were unique or imparted a distinct economic advantage for uses as a lightweight aggregate, natural pozzolan, and abrasive.

Judge Sweitzer's determination was clearly supported by the preponderance of the evidence. From time-to-time we have referred to testimony or evidence found to be particularly relevant. Judge Sweitzer has specifically referred to a large body of evidence in his decision that we did not cite, and that evidence is also on point. Numerous additional citations to evidence supporting his determination could have been made by him and by us. Judge Sweitzer's finding that Multiple Use failed to show that those properties inherent in its air-fall pumice deposit impart a distinct and special economic advantage when produced and sold as a natural pozzolan or lightweight aggregate or other construction-related uses is affirmed. To that determination we must add the determination that, except as discussed below, Multiple Use failed to show that the properties inherent in its airfall pumice deposit impart a distinct and special economic advantage for use as an abrasive.

V(A)(3). Is the Pumice on the Claims Locatable Because it is an Uncommon Variety of Pumice When Used as an Abrasive for Stone-Washing Garments?

Judge Sweitzer's decision focused upon evidence regarding use of the air-fall pumice from the White Vulcan claims as an abrasive for washing denim in a process recognizable by reference to stone-washed designer jeans. In his decision he set out lengthy quotes from the transcript describing the sale of "oversized" pumice (pumice larger than 1 inch in diameter) for use in the washed denim industry. His decision was based in part upon the testimony that an expanding market existed for pumice as an abrasive in the stone-washing industry, and the testimony that the claimants had determined that the pumice on the claims was suitable for this use. ^{33/} The weight of the evidence supports a finding that the air-fall pumice sold for use in stone-washing denim commands a premium over and above the value of air-fall pumice sold for common variety uses. Unrebutted and unrefuted testimony indicates that Arizona Tufflite was selling pumice for lightweight aggregate, F.O.B. its materials yard, Glendale, Arizona, at \$17 per yard (Tr. 1294). This price equates to about 0.8 cents per pound, assuming a specific gravity of approximately 1.1 (Tr. 1213). Clarence Morgan, who made his living in the aggregate business for over 25 years, and who operated the pumice mine under lease from Multiple Use, testified that in the previous 60 days his company, Arizona Tufflite, had delivered over 200 truckloads of oversized pumice from the claims to El Paso, Texas, for use as an abrasive for stone-washing fabric (Tr. 1242). He further testified that Arizona Tufflite had entered into verbal agreements with two plants in

^{33/} Witnesses for the Forest Service were aware of this potential market for at least 6 months prior to the conclusion of the hearing. Cass, a Forest Service employee assigned to examine the claim, testified that in June 1986 he had been told that 20 to 25 yards of pumice had been sold for that purpose (Tr. 812-13). In January 1987, Clarence Morgan, whose company leases the claims, stated that between 10,000 and 12,000 yard of oversized pumice had been delivered to El Paso, Texas, for use as a stone-washing agent during the preceding 60-day period (Tr. 1242).

El Paso for delivery of six loads a week at 8 cents per pound, and that other manufacturers were seeking the product (Tr. 1295).

In his decision Judge Sweitzer noted three properties of the White Vulcan air-fall pumice he considered as giving that pumice a distinct and special value in the stone-washing industry. As noted above, these properties were size, shape, and the absence of staining material. He based his findings upon testimony quoted in the opinion concerning low iron and clay content and the rounded shape of the White Vulcan air-fall pumice. ^{34/} He then noted that the weight of the evidence supported a conclusion that 17 percent of the air-fall pumice could be classified as oversized. He specifically addressed the evidence regarding the price being paid for pumice suitable for stone-washing denim ^{35/} and concluded, based on undisputed evidence, that the sales price was approximately 10 times that received for lightweight aggregate.

As previously noted, the Forest Service has taken exception to this portion of Judge Sweitzer's finding. The first basis for its objection is its stated belief that Judge Sweitzer erred when finding that the pumice has unique properties for use in the stone-washing industry. Particular exception is taken to his finding that uniform size and absence of staining material rendered the material locatable for stone-washing pumice.

The Forest Service focuses its first argument on the finding that the absence of staining material (iron oxide and clay) rendered the air-fall pumice unique. It argues that the testimony regarding staining material offered during the hearing was directed to the use of air-fall pumice in lightweight concrete and not to its use as a stone-washing abrasive (FS SOR at 3-4). After noting the specific references to absence of staining material in the decision, it argues that there is no evidence of record that the presence of iron oxide in the pumice presents a problem to the stone-washing industry. The Forest Service contends that the only evidence on the question of the harmful effect of deleterious materials in

^{34/} The absence of staining may be due to a lack of lithic materials in the form of clay (Tr. 1351) or to the lack of iron (Tr. 1145-46). It would be reasonable to conclude from the testimony that both properties are important. One witness pointed to one characteristic and the second pointed to the other. The Administrative Law Judge evidently found them both credible. We agree with his finding that the weight of the evidence supports the conclusion that this pumice deposit has both a low content of lithic impurities and a low iron content rendering it an uncommon variety deposit suitable for use as an abrasive for stone-washing denim.

^{35/} Thus, Judge Sweitzer avoided the error which caused the court to remand the McClarty case. The court specifically noted that, based on the evidence before it, the weight of the evidence supported a validity determination. The reason for remanding was the Hearing Examiner's apparent failure to "focus on money value." McClarty v. Secretary of the Interior, *supra* at 909.

the pumice was directed to the fact that the White Vulcan pumice was free from lithic impurities such as clay and dirt.

On appeal the Forest Service assigns no error to and does not challenge Judge Sweitzer's conclusion regarding the price a manufacturer was willing to pay for pumice suitable for stone-washing denim. Instead, the Forest Service argues that Judge Sweitzer gave too much weight to "the uncorroborated and self-serving testimony of Clarence Morgan" (FS SOR at 5). ^{36/} Additionally, the Forest Service refers to the Morgan testimony concerning the lack of clay and quoted in the opinion as "a nugget of self-serving hearsay" and urges us to ignore Morgan's testimony because it was not corroborated by any expert witness. ^{37/} The Forest Service then states that there is nothing in the record to suggest that the lack of clay with a significant unoxidized iron constituent is an unusual property in a pumice deposit. It urges a finding of error because Multiple Use never presented evidence comparing this deposit with other pumice deposits as to this property (FS SOR at 5-6). The Forest Service also contends that Judge Sweitzer gave undue weight to testimony that was based on the legally faulty premise advanced by Multiple Use's counsel that the mere fact that a deposit is commercially viable is proof that the deposit is uncommon. It also describes as "confusing" his finding that the uniform size of the material was a special property of the White Vulcan No. 2 pumice (see FS SOR at 7-10).

A second error is alleged in the Forest Service contention that the White Vulcan pumice has no distinct and special value as a stone-washing agent. The Forest Service cites McClarty v. Secretary of the Interior, supra, for the proposition that one must compare the sales price of the material with the sales price for similar materials not having a unique property. It therefore seeks to have the Board analyze the evidence and rule that Multiple Use has failed to overcome the Forest Service's case on locatability because it has not shown that the White Vulcan pumice commands a premium, when compared with other pumice sold for stone-washing denim. It argues that Multiple Use never developed any record as to what properties were required for stone-washed jean application (FS SOR at 12-13).

^{36/} We note the testimony was actually Wesley Morgan's (Tr. 1352).

^{37/} The Morgan brothers were called to testify on behalf of the claimant, but their testimony should not be taken as having been given by parties in interest. The Forest Service had initially called Clarence Morgan as their witness, and no attempt was made to make him an adverse witness. A Forest Service employee also testified that he had assured the Morgans that they would be able to continue their operations even if the claims were declared invalid. In fact, the Forest Service employee who spoke to Morgan testified that he had told Morgan that, if the claim was invalid, the Morgans could obtain the material from the Forest Service "at a little lessor price than they were presently paying for it" (Tr. 665-66). This testimony logically leads to the conclusion that the Morgans should be considered as neutral witnesses. The Forest Service made sure that they would have no economic motive to favor Multiple Use. See also note 66 infra.

As its final argument the Forest Service argues that the record does not support a finding that Multiple Use has met the marketability test by demonstrating that there is a reasonable prospect that the commercial value of the deposit exceeds the cost of extracting, processing, transporting, and marketing the contained locatable mineral.

We will address each contention raised by the Forest Service. However, only the first two contentions are related to the issue of whether the pumice is locatable. Therefore, the third contention will be addressed under the discovery heading. The first issue to be addressed here is whether proper weight was given to the Morgan testimony. The Forest Service argues that his testimony should have been given no weight because it was not supported by expert testimony.

As previously noted, Clarence Morgan testified at some length regarding his company's successful operation of the property since 1979. In turn his testimony was supported and reaffirmed by the testimony of Wesley Morgan, Clarence Morgan's brother, who acted in the capacity of sales consultant for Arizona Tufflite (Tr. 1342). Wesley Morgan was active in the successful development of markets for the mineral product and demonstrated a detailed knowledge of those attributes of the product pertinent to the markets he served (Tr. 1346-47). When describing the properties making pumice suitable for a stone-washing abrasive, he stated that the pumice cannot have any clay lumps or staining in it (see Tr. 1352 (emphasis added)). Having been a sales consultant for a company that successfully developed a market for its mineral product we believe it reasonable to conclude that Wesley Morgan had detailed personal knowledge of the physical attributes of the company's mineral products and a working knowledge of how those attributes render those products saleable. He noted that the first lot of oversized air-fall pumice sold directly to the user had been shipped to El Paso, Texas, on January 15, 1987 (Tr. 1351-52). The Forest Service has never alleged that White Vulcan pumice is not fit for use in the stone-washing industry, and apparently acknowledges that fact when concluding that "the fact that Arizona Tufflite, Inc. was able to capture the Levi Strauss account because the White Vulcan No. 2 pumice was located closer to El Paso, Texas, than an almost identical deposit at Lipari, Italy" (FS SOR at 11).

Concerning the Forest Service confusion at Judge Sweitzer's finding that uniform size was a special property, we observe that it is based upon Clarence Morgan's testimony that the 1-1/4 to 6 inch pumice "has good rounded circles because it does not tear the material" (Tr. 1241-43). Clarence Morgan is president of Arizona Tufflite (Tr. 690). He has worked for more than 25 years in the concrete industry as laborer, foreman, contractor, and owner-operator (Tr. 1160-64). In the process he as gained great deal of experience in the various aspects of the industry. Clarence Morgan's testimony regarding industrial uses and sales of mineral material took about 150 pages of the transcript. At no time during that testimony did any of his answers raise a question regarding his competence as a witness or his obvious expertise in his chosen field of endeavor. His testimony was directed to the things necessary to mine, process, and sell pumice,

the markets for pumice products, and the price one can receive in the various markets.

The testimony presented by Clarence and Wesley Morgan and the evidence of their successful study, product development, and sales of Tufflite all support the logical conclusion that the Morgans are experienced and successful businessmen with sufficient knowledge of the product they are successfully mining and marketing to be considered experts in the field of pumice marketing. They are not "purchasers" of the product they market but their lengthy and successful experience as "sellers" of the product is not something that can be easily ignored. It was not necessary to support their testimony with that of another expert or documentary evidence. We find nothing in the record to impeach the testimony they presented. In fact, they had far more expertise in the field of mining and marketing pumice than any other witness, including those who testified on behalf of the Forest Service.

At no time during the hearing, or in any of the subsequent pleadings submitted on behalf of the Forest Service during the 18-month time span following the Morgan testimony, was there even a suggestion that White Vulcan pumice was not being shipped to and used by stone-washing plants in the El Paso area. This silence becomes even more pronounced when, after a lapse of 18 months, counsel for the Forest Service concludes his comparison of the physical properties of the White Vulcan pumice to pumice from Lipari, Italy, with the previously noted statement that Arizona Tufflite captured the Levi Strauss account because the White Vulcan No. 2 pumice was closer to El Paso than "an almost identical deposit at Lipari, Italy" (FS SOR at 11).

There is ample basis for a finding that Judge Sweitzer properly considered the expertise of the various witnesses and afforded the respective testimony the proper weight. In most areas there is absolutely no conflicting evidence. As noted earlier in this decision, when the record contains testimony that could be construed as conflicting or contradictory when taken out of context or when the resolution of disputed facts is influenced by the Judge's findings of credibility of a witness or the relative weight assigned by him to testimony that might otherwise be construed as conflicting, the Administrative Law Judge who presided at the hearing and witnessed the deportment and demeanor of the witnesses is in the best position to weigh the credibility of the testimony. We find no error in Judge Sweitzer's reliance upon the testimony of Wesley and Clarence Morgan when making his finding of fact that the pumice from the White Vulcan No. 2 claim had a unique combination of properties making it suitable for use in the stone-washing industry. 38/

38/ If the testimony by a person who has made his livelihood from the sales of a product for many years should be afforded little weight because he is not an espoused "expert" and there were no sales receipts supporting his testimony (under oath), should we not apply the same standard to testimony regarding sales prices and mining costs given by a Forest Service

[7] The next issue is whether any of the pumice on the White Vulcan claims may be considered an uncommon variety when used for stone-washing denim because of the economic value for such use over and above the normal uses of the general run of such deposits. The Forest Service incorrectly casts the holding in McClarty v. Secretary of the Interior, *supra*, when it contends that Multiple Use must show that the White Vulcan pumice is unique in the stone-washing industry. Multiple Use need only compare the pumice on the White Vulcan claims "with other deposits of such minerals generally." *Id.* at 908. Both direct and indirect evidence supporting the conclusion that other deposits of such mineral generally are unsuitable for that use only show that the mineral material is an uncommon variety by a preponderance of the evidence. United States v. Crawford, *supra*; United States v. Wolk, 100 IBLA 167 (1987).

[8] As noted previously, a common variety deposit does not possess a distinct, special economic value over and above the normal uses of the general run of such deposits. See 43 CFR 3711.1(b). The Forest Service presented ample evidence to establish that use of pumice as a lightweight aggregate is a common variety use, and Multiple Use failed to establish that its pumice carried any special economic value over and above the normal use of the general run of pumice deposits. Again, when examining the evidence of the use of the pumice as a pozzolanic agent, we find the weight of the evidence supports a finding that the White Vulcan pumice does not bring a meaningful premium over common variety pumice, and that there is no reasonable expectation that the pumice could be economically mined and sold as a pozzolanic agent. After Multiple Use had presented its evidence that pumice suitable for stone-washing garments was of an uncommon variety, the Forest Service has two opportunities to either discredit or rebut that evidence. The first was in cross-examination, and the second was rebuttal evidence. For whatever reason, the Forest Service chose to present no evidence in an attempt to overcome Multiple Use's evidence by establishing that the use of pumice in the stone-washing industry is a common variety use. ^{39/} The preponderance of the evidence clearly

fn. 38 (continued)

geologist who admits that he has never produced, purchased, or sold mineral products? The dissent chooses to accept the uncorroborated testimony of Government witnesses without comment, but does not accord the same treatment to claimant's evidence. *Cf.* note 65 *infra*.

^{39/} The most obvious means of doing so would have been to present some form of evidence that those using pumice for stone-washing denim are not paying a premium. The Forest Service presented a detailed case establishing the common variety price in the lightweight aggregate and pozzolan industries, and thus prevailed in those areas. It chose to submit no evidence regarding the price paid in the stone-washing industry or to challenge the price quoted by the claimant. At the end of the hearing both parties were asked if they wished to submit any further testimony or evidence (Tr. 1722). None was submitted. Nor did the Forest Service ask for a continuance to allow an opportunity to develop further evidence (as it

supports Judge Sweitzer's finding that the users of pumice for stone-washing denim are willing to pay 10 times the going rate for common variety pumice suitable for stone-washing garments. See McClarty v. Secretary of the Interior, supra.

This distinction between a common variety use and use in the stone-washing industry is supported by the report of pumice in the 1987 Minerals Yearbook. The Bureau of Mines notes that in 1987 the average value, F.O.B. the mine or mill, of domestic pumice and pumicite was \$11.46 per ton. When commenting about a 10-percent increase in the value of the product, compared with the 1986 value, it noted that this increase was primarily due to the greater demand for higher priced block pumice. In 1987, United States' apparent consumption decreased 29 percent when compared with 1986, primarily due to a significant decline in the use of pumice and pumicite as an abrasive increased 71 percent the same year, primarily owing to the large demand for use in washing designer jeans. 1987 Minerals Yearbook, Vol. 1 at 714.

During the year in which the testimony was given, Arizona Tufflite, the lessee of the White Vulcan claims, was selling the product as a lightweight aggregate at a price very near the average price for pumice. Thus, it would appear that, if a premium is being paid for the White Vulcan airfall pumice used as an aggregate, that premium is negligible. On the other hand, when comparing the sales price for the materials sold to the denim-washing industry, the price far exceeds the average sales price. This factor indicates that, if it is useable in the denim-washing industry, the White Vulcan pumice has properties giving it distinct and special value. See United States v. U.S. Minerals Development Corp., supra at 134-35.

The distinction to be made here can be seen from the following illustration: When challenged in a mining claim contest, a claimant who bases his discovery on a deposit of sand is made subject to the tests imposed by the Common Varieties Act because sand is one of the items specifically made

fn. 39 (continued)

had 3 months before). Like the claimant who chooses to rest on the behalf that the Government has failed to make a prima facie case (see United States v. Pool, 78 IBLA 320 (1984)), the Forest Service must bear the consequences of its choice. The presumption in both cases is that the party who fails to present evidence to the contrary cannot present enough evidence to overcome what has gone before. See Patricia C. Alker, 79 IBLA 123 (1984); Hal Carson, Jr., 78 IBLA 333 (1984).
 40/ The volume of the aggregate market declined from 697,000 short tons to 376,000 short tons while use for all forms of abrasive increased from 17,000 short tons to 29,000 short tons. As can be seen, sales for all forms of abrasive represent a small fraction of the sales for use as aggregates. Likewise, the mention of use in the stone-washing industry does not render a mineral a common variety. One must look to the relative quality of the product consumed by the respective uses. Such comparison gives a strong indication of what is common and what is uncommon.

subject to that Act. The claimant must show that he has an uncommon variety of sand – one that can readily be used in making glass, for example. ^{41/} The unique intrinsic property in such a case could be the high silica content or low iron content of the sand. Once this has been established, and the claimant demonstrates that: (a) glass sand is unique and thus sells at a marked premium over sand used for common variety purposes, such as in concrete; (b) there is a market for this type of sand in the glass industry; and (c) there is glass sand on the claim, the claimant has met the burden of showing that the sand is an uncommon variety. ^{42/} A claimant need not take the next step urged by the Forest Service, *i.e.*, he need not show that the mineral material has some unique quality in the glass industry unless and until evidence is presented that common variety sand could serve the same use as glass sand. ^{43/}

In this case Multiple Use was required to present evidence demonstrating that its pumice deposit is of an uncommon variety. In fulfillment of this obligation, it presented evidence that its pumice was fit for use as a garment-washing abrasive, commanding a price well above that paid for common variety pumice. For whatever reason, the Forest Service presented no evidence to the contrary, *i.e.*, that any pumice could have served the purpose. Having failed to do so, the Forest Service cannot now complain that the weight of the evidence presented by the Forest Service to support a finding that use of a pumice as a stone-washing agent is a common variety use. ^{45/} Multiple Use has shown by a preponderance of the evidence that the pumice from the White Vulcan is fit for use as an abrasive in the stone-washing

^{41/} See, *e.g.*, United States v. Duval, 53 IBLA 34 (1981).

^{42/} Again it should be noted that this question is separate and apart from the question of whether there is a discovery.

^{43/} The Forest Service logic could be taken to the extreme. For example, if the sand carries a premium because it can readily be used in glass, does a claimant have to show that it is not a common variety "glass sand"? If so, what if the claimant then shows that it can be used to make green glass? Must he then show that is not common variety "green glass sand" because it can be used to make high temperature green glass? Must the claimant then show that it is not a common variety "high temperature green glass sand"? This series of demands could be repeated again and again, *ad nauseam*. If the Government seeks a determination that the run of the mill, common variety mineral material can be used for a particular purpose, it must introduce evidence in support of that contention.

^{44/} See also note 33.

^{45/} Testimony that the pumice could be used "as a cleansing agent for denim, the large lumps are used as a cleaning agent" was given by a Multiple Use witness, Sheridan, in October 1986 (Tr. 351). At the request of the Forest Service the hearing was recessed until January 1987, at which time Forest Service witnesses testified for approximately 2-1/2 days. During the course of its direct testimony, the cross-examination, and the rebuttal testimony, the use of pumice as a cleaning agent for denim was never characterized by the Forest Service as a common variety use.

industry. The evidence that a premium is paid for pumice purchased for this use, when compared to the price of pumice sold for common variety uses, is unrefuted.

V(B). Are the White Vulcan Claims supported by a Discovery?

As discussed previously, under the Mining Law of 1872 each mining claim must be supported by a discovery. If a discovery has never been made, the claim is not valid. It turns, if the discovery is lost, the claim becomes invalid. A number of dates are important to this decision, and the existence of a discovery on each of those dates will be considered.

V(B)(1). Was a Discovery Made Prior to July 23, 1955?

Judge Sweitzer held that Multiple Use has not shown by a preponderance of the evidence that a discovery existed on either White Vulcan claim prior to July 23, 1955, because Multiple Use has not shown that the air-fall pumice (or any other mineral product) was marketable as of that date. "The marketability test requires at least a showing of the existence of potential buyers and of the price they would pay" (Decision at 31). On appeal Multiple Use urges this Board to find error in the finding on this issue, and the Forest Service, and the Forest Service contends that there is no error.

[9] As previously noted, if the mineral material supporting the discovery is a common variety mineral substance listed in the Common Varieties Act, the claimant must demonstrate either that a discovery of the common variety mineral existed on July 23, 1955, or that discovery mineral has some unique property giving the deposit a distinct and special economic value. To establish a pre-July 23, 1955, discovery based upon a common variety mineral, the claimant must demonstrate by a preponderance of the evidence that the mineral was marketable on July 23, 1955. This can be accomplished by showing the existence of potential buyers and the price they would pay. See United States v. Foresyth, supra.

Addressing the factual issue of the existence of a pre-July 23, 1955, discovery, Judge Sweitzer stated:

There is a paucity of evidence indicating actual or potential exploitation of the claim prior to [July 23, 1955]. There is no evidence that the eight locators of the White Vulcan claims exploited them in any way. There is some evidence of limited sales by B.B. Bonner and Alan Siegal for uses as soil conditioner, but that venture terminated after a short while. There is the expert opinion of Dr. Sheridan that a certain amount of pumice was removed from the claim prior to 1955, but no evidence of what price was received, or whether or not it was profitable, or what uses it was put to.

(Decision at 29). This finding is supported by Bonner's testimony (reprinted in Exhibit 57 at pages 298-301 and quoted in the opinion at pages 29 through 31) and by Exhibit G. Judge Sweitzer concluded that

Multiple Use had failed to demonstrate there was a potential economically viable market for pumice as of July 23, 1955.

On appeal Multiple Use contends that the evidence that there was a market for pumice in 1955 was "uncontroverted" (SOR at 5). Multiple Use points to the evidence presented by its witnesses that there were workings on the claims prior to 1955, arguing that pumice had been produced from the claims before that date. Appellant points to four uses of the pumice on the White Vulcan claims which existed during that time: soil additives, pozzolan, lightweight filler, and lightweight aggregate. ^{46/} By again raising this argument on appeal, Multiple Use has apparently missed the point of Judge Sweitzer's finding that the evidence of occasional sales for these purposes does not support a conclusion that there was a reasonable expectation in 1955 that the deposit could be mined at a profit, which is what is required for a "discovery." There is no question that, given the right circumstances and broadly speaking, pumice can be put to each use described by Multiple Use. ^{47/}

The question is whether, in 1955, a prudent person could reasonably expect that the White Vulcan pumice could be extracted and marketed in a manner which would result in a profit. In the case of soil additives, for example, the evidence of record would indicate that the owners of the claims had attempted to market the White Vulcan pumice as a soil additive, but abandoned this venture when the moisture content of the White Vulcan pumice made it impractical to mine and process the mineral material for sale at the market price. Nothing presented by Multiple Use either before, during or after the hearing would overturn this conclusion. Likewise, Multiple Use argues that the product was successfully used to stabilize the pumice pit roads. The use of the material on the claims for road stabilization can hardly be deemed a basis for demonstrating the existence of a market demand or the price a willing third party buyer would pay.

V(B)(2). Does the Block Pumice Support a Discovery?

Multiple Use has clearly failed to make a showing that the block pumice on the White Vulcan claims will support a discovery. In order to support a block pumice discovery, all of the mining costs would be applied against no more than 1 percent of the production. ^{48/} Nor was any evidence presented

^{46/} None of these uses involves block pumice.

^{47/} Dr. Sheridan, who testified as an expert witness for Multiple Use clearly demonstrated his knowledge that pumice produced in Italy was used for each of these purposes, and that certain of the physical characteristics of the White Vulcan pumice.

^{48/} The screen test indicated 0.72 percent of the pumice would not pass through a 2-inch screen (Tr. 1013). The most reliable evidence regarding the cost of mining pumice was that mining, screening, and loading costs

indicating the sales price of block pumice (either to a manufacturer or as a finished product), the cost of manufacturing the items using block pumice (e.g. grill cleaning devices), or whether a market potential actually existed.

We find nothing on appeal to give us cause for reversing Judge Sweitzer's conclusion that no qualifying discovery of pumice had been made by a claimant of record prior to July 23, 1955. His holding on this point was neither arbitrary nor capricious and was amply supported by the record.

V(B)(3). Between July 23, 1955, and the Time of the Hearing, was there a Reasonably Continuous Disclosure of Pumice of Sufficient Quantity and Quality to Constitute a Qualifying Discovery?

Judge Sweitzer addressed this issue on pages 31 through 33 of his decision and found that there was a negligible amount of pumice produced from the claims between 1955 and 1978, and that the material removed had been removed for testing and not marketed. He noted that when there is no longer a market for a common variety mineral, a claim located for that mineral is lost. Citing Doria Mining & Engineering, 17 IBLA 380 (1974), 49/ Judge Sweitzer found that:

From 1966 to 1978, there was a negligible amount of pumice produced from the White Vulcan claims. The pumice that was produced was removed for testing purposes rather than marketed (Tr. 1058-1059). Dr. Sheridan's report indicates that there was essentially no production on the claims from 1955 to 1975, and thereafter only from White Vulcan No. 2 (the main pit) (Exh R. pp. 22, 24).

*** [L]ack of evidence of sales *** from the claims is not conclusive on the issue of marketability. However, the presence of a market sufficient to justify a reasonable and prudent person in the expenditure of his time and money in the expectation of developing a profitable mine must be established ***.

United States v. Johnston, 100 IBLA 322, 346 (1987).

fn. 48 (continued)

were \$11 per cubic yard (Tr. 1006). The best evidence indicates that the specific gravity of the pumice is about 1.1 (see text below). Thus a cubic yard of pumice would contain about 13.3 pounds of block pumice (62.5 lb per cubic feet (weight of water) x 27 cubic feet in a cubic yard x 1.1 specific gravity) x 0.0072 = 13.3 lb/cu yd). This equates to about \$1,650 per ton, F.O.B. the minesite ((2,000 lb/ton / 13.3 lb/yd) x \$11/yard = \$1,654/ton).

49/ Aff'd sub nom., Doria Mining & Engineering v. Morton, 420 F. Supp. 837 (C.D. Calif. 1976), vacated and remanded on other grounds, 608 F.2d 1255 (9th Cir. 1979), cert. denied, 455 U.S. 962 (1980).

* * * * *

Contestees have failed to show that any discovery that might have existed on either claim prior to July 23, 1995, has continued since that date because they have not shown that the pumice was marketable between 1966 and 1978.

(Decision at 32-33).

We have no problem with this finding, and note that this issue was addressed by Judge Sweitzer after assuming arguendo that a discovery existed on July 23, 1995. Because we have found Judge Sweitzer's decision to be correct on the first issue, the second issue is moot. If there was no discovery on July 23, 1955, no discovery could be maintained based upon common variety pumice after that date, as common variety minerals were no longer locatable. The issue of whether the deposit contains a discovery supported by pumice which was (or at some time became) an uncommon variety is discussed below.

V(B)(4). Was a Qualifying Discovery Made Prior to October 31, 1957, When All Interests in the Claim Were Transferred to a Single Entity?

In his opinion Judge Sweitzer stated that Multiple Use's burden for this issue was to show a discovery of common or uncommon variety pumice within the claims prior to July 23, 1955, and to show that the claims remained valid through October 31, 1957. He noted that, alternatively, Multiple Use could show that there was a discovery of an uncommon variety of mineral on or before October 31, 1957, and that the discovery continues to exist. After stating these requirements, he found that Multiple Use had not shown that any qualifying discovery existed on either date. On appeal Multiple Use urges that there was a discovery on July 23, 1955, which continued to exist through the date of the hearing.

[10] As noted by Judge Sweitzer, the October 31, 1957, date is important because the claims were conveyed from the original locators (eight in number) to a corporation on that date. The law applicable to this situation, 30 U.S.C. § 35 (1988), provides that no placer claim "shall include more than twenty acres for each individual claimant." However, 30 U.S.C. § 36 (1988) also provides that an association of claimants may locate a claim of up to 160 acres in size. As a logical progression of this law, it has been determined that, in order to locate a 160-acre claim, the association must have no fewer than eight members. See 43 CFR 3842.1-2.

A corporation is considered to be an individual claimant within the meaning of the law. United States v. Toole, 224 F. Supp. 440, 456 (D. Mont. 1963); Brattain Contractors, 37 IBLA 233 (1978); United States v. Schneider Minerals, Inc., 36 IBLA 194 (1978). As an individual claimant, a corporation cannot locate a mining claim large than 20 acres in size. This principle is balanced against rights of the holder of a valid unpatented mining claim, which include the right to convey that claim. Forbes v. Gracey, 94 U.S. 762, 767 (1876). The date of transfer becomes

crucial. If the claims were valid (i.e., there was a discovery on each of the claims) on the date of transfer, the 160-acre claims could be conveyed. If, on the other hand, it cannot be shown that there was a discovery on the claims on that date, the claims were not valid on the date of conveyance, and a subsequent discovery by the corporation would only apply to a 20-acre claim.

We have previously held that Judge Sweitzer's finding that there was no discovery on July 23, 1955, was neither arbitrary nor capricious, and found it to be amply supported by the evidence. We also find that the preponderance of the evidence supports the conclusion that no discovery existed on October 31, 1957. We therefore affirm his decision on this issue.

V(B)(5). If the Answer to the Question Stated in Section V(B)(4) Above is No, or if Such Discovery was Subsequently "Lost," has any Subsequent Qualifying Discovery Been Made?

It is clear from the record that any discovery on the White Vulcan claims based upon use of air-fall pumice as an abrasive in the stone-washing industry was made within 5 years prior to the date of the hearing. All of the testimony, and the action of operators, clearly indicate that any market for this pumice developed within that time span. There was no testimony to support any conclusion that this market existed before the claims were conveyed to the corporate entity, or that Multiple Use, or anyone directly or indirectly associated with that company or its owners, was aware of that market prior to 1980. The question of whether a discovery was made after 1980 must be answered in several parts. First, however, it is appropriate to set out Judge Sweitzer's findings.

Judge Sweitzer found that air-fall pumice exposed on the White Vulcan No. 2 claim has properties distinct from the pumice on White Vulcan No. 1 and other general domestic pumice deposits, and that these properties give it a distinct and special value for use as an abrasive in the stone-washing industry. He supported this conclusion with lengthy quotes from the transcript (Decision at 41-48; Tr. 812-13, 1145-46, 1241-44, 1294-96, 1352, 1562, 1582, 1632-33). In effect he found that there was an exposure of locatable mineral on the White Vulcan No. 2 claim. He also held that the preponderance of the evidence supported a conclusion that the air-fall pumice on the White Vulcan No. 2 claim was capable of supporting a discovery. For the White Vulcan No. 1 claim he did not reach the same findings. He found that Multiple Use had not overcome the Forest Service case that there was no discovery because no similar exposure of locatable pumice existed on the White Vulcan No. 1 claim.

As noted above, both the Forest Service and Multiple Use object to Judge Sweitzer's findings on this issue. Understandably, they do not take issue with the same aspect of his holding on this point. The Forest Service objects to the finding that the air-fall pumice from the White Vulcan No. 2 claim supports a discovery. Multiple Use objects to his finding that the stain-free air-fall pumice on the White Vulcan No. 2 claim supporting a discovery had not been found on the White Vulcan No. 1 claim.

V(B)(5)(a). Is There an Exposure of Locatable Mineral on the White Vulcan No. 1 and White Vulcan No. 2 Claims?

Each claim must be supported by a discovery, and, therefore, there must be an actual exposure of the valuable mineral within the claim. *United States v. Dresselhaus*, 81 IBLA 252 (1984); *United States v. Feezor*, 74 IBLA 56, 90 I.D. 262 (1983). Judge Sweitzer found that there was no exposure of locatable pumice on the White Vulcan No. 1 claim. The cited basis for this determination was the testimony of Wesley Morgan (brother of Clarence Morgan), when describing the properties making pumice suitable for a stone-washing abrasive. He stated that the pumice cannot have any clay lumps or staining in it (see Tr. 1352 (emphasis added)). ^{50/} Exhibit 74, a color photograph of pumice samples from the two claims, graphically illustrates the difference in coloration. The fact that the pumice on the White Vulcan No. 1 claim was not free from staining was also noted by Multiple Use's witness Sheridan, when he concluded that the coloration of the pumice from the White Vulcan No. 1 claim, as depicted in Exhibit 74, appeared to be hydrated iron oxide stain (Tr. 1632-33; see also Tr. 1650).

We note that the testimony Judge Sweitzer relied upon when concluding that there was no showing of iron stain free pumice on the White Vulcan No. 1 claim was presented by witnesses for both Multiple Use and the Forest Service. We agree with his interpretation of this testimony. We also agree that the preponderance of the evidence supports a finding that the air-fall pumice on the White Vulcan No. 2 claim has those above-described properties which give it a distinct and special value for use as an abrasive in the stone-washing industry.

V(B)(5)(b). Does the Locatable Pumice on the White Vulcan No. 2 Claim Support a Discovery?

[11] On appeal, the Forest Service contends that Judge Sweitzer erred because the record does not support a finding that Multiple Use has met the marketability test. The test stated by counsel for the Forest Service is the marketability test which is applied when determining whether the claimant has a discovery within the claim pursuant to the Mining Law of 1872.

^{50/} After quoting this testimony as being evidence presented by the claimant (FS SOR at 5), the Forest Service argues that the record is "deficient as to the alleged special properties * * * except for some speculative and self-serving hearsay by a lay witness." If we were to deem this testimony speculative, self-serving, or hearsay (and it is not), it would, nevertheless, be admissible in a hearing before an Administrative Law Judge. When a contention is supported by such evidence and the opposing party does nothing, the evidence does not disappear. It remains as evidence to be overcome. Assuming it to be the very weakest of evidence (and it is not), as long as it remains the only evidence, it is sufficient to preponderate.

(See the discussion at IV(B) above.) For issues pertaining to marketability, the Forest Service must either tender evidence that the claimant cannot meet the marketability test, or demonstrate that the evidence submitted by the claimant supports a finding that there is no reasonable prospect that the commercial value of the deposit will exceed the cost of extracting, processing, transporting, and marketing the contained locatable mineral. If the Government opts not to or fails to present any evidence regarding the sales price of the product or the costs of mining, the claimant has no Government case to overcome. When, as in this case, the Forest Service presents no evidence or testimony on one or more of these issues, the claimant is not required to do so.^{51/} Thus, when the Government offers no evidence of the cost of producing the mineral product or the sales price, the claimant has no obligation to do so. However, when a claimant having no duty to present evidence of production cost and sales price does present the evidence, as in this case, the evidence presented by the claimant should be considered in making a discovery determination. United States v. Rice, 73 IBLA 128 (1983); United States v. Beckley, 66 IBLA 357 (1982).

In its appeal to this Board from a finding that the White Vulcan No. 2 claim is supported by a discovery the Forest Service is not attempting to use the claimant's evidence to prove a lack of discovery, but is attempting to have this Board overturn Judge Sweitzer's conclusion that the weight of the evidence supported a finding that a discovery exists on the White Vulcan No. 2 claim by alleging that the claimant has failed to present sufficient evidence to determine whether there is a reasonable prospect that

^{51/} The dissent suggests that after a prima facie case was presented by the Forest Service, the claim should be deemed invalid because the claimant overcame the Forest Service case, but did so with what he chooses to call "uncorroborated" and "self-serving" evidence. Surely he does not intend to place so onerous a burden on a claimant. A prima facie case is prima facie only as to those elements challenged, and a claimant need only preponderate on those points. Cactus Mines Limited, 79 IBLA 20, 26 (1984); United States v. Hooker, 48 IBLA 22 (1980); United States v. Taylor, 19 IBLA 9, 82 I.D. 68 (1975). For example, recognizing that the Government chooses the basis upon which to (or not to) establish its prima facie case, if the entire Government case was that there was not a sufficient quantity of mineral to interest anyone in further expenditure of time or means, no prima facie case is made on the issue of marketability, and the claimant should not be in jeopardy of having the claim declared null and void because neither party introduced evidence on the cost of mining. If a patent application was pending and the Board was of the opinion that the cost of mining must be considered before patent could issue, it could remand for further evidence on that point. On remand the initial burden to present a prima facie case on the issue of marketability would remain with the Government. The claimant would need only to overcome the Government case by a preponderance of the evidence to prevail.

the commercial value of the locatable mineral exceeds the cost of extracting, processing, transporting, and marketing.

[12] As previously noted, when there is more than one market for the product from a claim, and the sales in one or more of those markets would be considered as a sale of a common variety mineral, that fact must be taken into consideration when determining whether there is a discovery of a locatable mineral. The uncommon (locatable) mineral must support the mining operation on its own, and the sale of other minerals (or products) may not be considered when predicting profitability. Thus, if the "undersized" pumice produced from the White Vulcan claims is sold for a common variety use such as a lightweight aggregate, the income or reduction of cost resulting from such sales should be disregarded when projecting profitability. On the other hand, if the "oversized pumice" is deemed an uncommon variety, it is permissible to combine the pumice qualifying as block pumice with other "oversized" pumice when calculating costs and returns, since both are being sold at the premium price and stone-washing garments.

With this in mind, we will examine Judge Sweitzer's finding that "the uncommon variety use can sustain a profitable mining operation" (Decision at 49). As previously noted, the Forest Service introduced no direct evidence regarding either the cost of producing mineral product at the site or transportation costs. In fact, the Forest Service witnesses generally agreed with the Tufflite cost and sales figures presented by claimant's witnesses, whose testimony had been taken out of order and presented before most Forest Service witnesses had testified.

[13] In its statement of reasons the Forest Service describes the evidence regarding marketability as an abrasive in the stone-washing industry as "rather wild eye speculations" by Clarence Morgan (FS SOR at 14). It does not, however, allege that it possesses evidence which would lead to a different result if another hearing was held. If an appellant seeks another hearing it must tender sufficient evidence indicating a discovery (or lack thereof) to convince this Board that such a further hearing is warranted. Without such offer, no hearing will be ordered. United States v. Rice, *supra* at 141. United States v. Thomas, *supra* at 218, 78 I.D. at 12; United States v. Stevens, 77 I.D. 97, 195 (1970). See note 25, *supra*.

In any event, there is sufficient unrefuted evidence in the record to make a profitability determination, as the stone-washing pumice is produced in the same manner and using the same screening plant used to separate the pumice suitable for Tufflite. As a starting point we accept the testimony that the specific gravity of the pumice is approximately 1.1 as being the most reliable (Tr. 1213). This being the case, one cubic yard of material in place will contain approximately 0.93 tons of pumice.

As indicated above, the cost figures presented by Multiple Use were found acceptable by Judge Sweitzer and appear to be within reason. With this information we are able to calculate the estimated production costs. The best evidence is that it costs \$11 per yard, F.O.B. minesite, to mine

screen, and load the pumice at the claims. ^{52/} Converting the per yard cost to a per ton cost (\$11/0.93), we arrive at a cost of approximately \$11.85 per ton, F.O.B. minesite.

The Forest Service quotes Morgan's statement that 1-1/4- to 6-inch material was being sold to the stone-washing industry as the basis for its argument that the percentage of the total volume represented by the 1-1/4- to 6-inch material is unknown (FS SOR at 15). If one were to literally interpret Morgan's statement, the percentage of the material suitable for shipment to El Paso may be questioned. However, when the record as a whole is examined, the uncertainty disappears.

A screening plant had been operating on the property for some years and Morgan, who was in charge of plant operations, testified that he had a screen analysis of the material (Tr. 1213). In addition he spoke with appreciable knowledge and authority regarding the amount of material represented by the various sizes. ^{See} Tr. 1232, 1236, 1237, 1239, and 1244. Although he stated that they sold the materials over 1-1/4 inches in diameter as garment-washing pumice (Tr. 1243), this statement was clarified to mean everything not passing through the 1-inch screen was sold as "block pumice" for use as stone-washing abrasive (Tr. 1244). ^{See also} Tr. 1242. Judge Sweitzer relied upon Morgan's testimony that he was selling the oversized material (+ 1 inch) in concluding that 17 percent of the material can be sold as an abrasive in the denim-washing industry in El Paso, Texas. We agree. Judge Sweitzer's conclusion is based upon his interpretation of Morgan's testimony, and is clearly supported by the evidence.

If 17 percent of the material can be sold as an uncommon variety mineral, approximately 5.9 tons of mineral in place must be removed and treated to recover 1 ton of uncommon variety (oversized) pumice. Therefore, it would cost approximately \$70 per ton to mine, process, and load 1 ton of oversized pumice, F.O.B. minesite. ^{53/}

The evidence in the record regarding the anticipated return from the sales of the pumice as a stone-washing agent is the testimony of Clarence Morgan that in the previous 60 days Arizona Tufflite had delivered 10,000 to 12,000 yards of White Vulcan pumice to El Paso, Texas, stone-washing

^{52/} The following costs, expressed in dollars per yard of material, were given at the hearing: removal, screening, and loading – \$4; overburden removal and site restoration – \$3; overhead – \$2 royalty –\$2. Delivery from Flagstaff to Phoenix, Arizona, was given as \$8 (Tr. 1006).

^{53/} This extrapolation of the cost per ton of product reflects the cost of loading 5.9 tons of material, rather than 1 ton, payment of a royalty on 5.9 tons rather than 1 ton, and use of 100 percent of the mined material as Tufflite rather than approximately 80 percent. If these adjustments were made, the costs per ton of oversized material would be substantially reduced. We use \$70 per ton (\$11.89/ton x 5.9 tons pumice/ton stone-washing pumice = \$69.91, rounded to \$70/ton) because that figure weighs very heavily in favor of the Forest Service.

plants (Tr. 1242), and that Arizona Tufflite has a verbal commitment from two plants for the purchase of six truckloads of stone-washing pumice a week at 8 cents a pound (Tr. 1295). The Forest Service produced no contrary evidence, either at a time of the hearing or in any of the subsequently filed documents. Thus, these statements are the best evidence regarding the reasonably anticipated price for pumice sold as an abrasive in the stone-washing industry. At 8 cents a pound the product sells for \$160 per ton. Subtracting the \$70 per ton costs, the profit margin for a ton of oversized pumice, F.O.B. minesite, is approximately \$90 per ton.

The sales price of stone-pumice used for stone-washing garments stated by Morgan are F.O.B., El Paso, Texas (Tr. 1295). No direct evidence was presented about the cost of transporting the pumice from Flagstaff to El Paso. Nonetheless, a projection of the shipping costs from Flagstaff, Arizona, to El Paso, Texas, can be made, based on the evidence of the cost of transportation to Phoenix, Arizona (\$8.60 per ton). The distance from Flagstaff to El Paso is approximately four times that to Phoenix. Therefore, by straight line projection, a \$35 per ton transportation cost can be estimated, even though it would be reasonable to expect that figure to be high. Using this figure, the cost of mining and transporting the pumice to El Paso would be approximately \$105 per ton, F.O.B. El Paso. Arizona Tufflite would still have a healthy profit margin of about \$55 per ton.
54/

Morgan testified that, during the 2-month period immediately preceding the hearing, Arizona Tufflite had shipped between 10,000 and 12,000 yards, or between 9,000 and 11,000 tons of "oversized" air-fall pumice. Clearly a case has been made that the property is economically profitable if mined only for the oversized air-fall pumice sold as an abrasive in the stone-washing industry.

Contrary to the Forest Service contention that Multiple Use has failed to present sufficient evidence that there is a reasonable prospect that the commercial value of the deposit exceeds the cost of extracting, processing, transporting, and marketing the contained mineral, there is no question that Judge Sweitzer's conclusion that there was, in fact, a reasonable prospect that the locatable product could be mined, processed, and sold at profit was supported by the vast preponderance of the evidence presented to him.

V(C). Are the Aliquot 10-Acre Subdivisions of the Mining Claims Mineral In Character?

When addressing this issue Judge Sweitzer stated that it, in turn, raised two distinct but related questions. He posed these questions in the following manner:

54/ The margin between the projected total costs, including shipping, and the 8-cent per-pound sales price allows more than a 100-percent margin of error in the projected shipping cost. That is, the miner would continue to show a profit if it cost twice as much (\$70 per ton) to transport the pumice to El Paso.

A. Does each claim (and each aliquot 10-acre subdivision) contain mineralization of sufficient quantity and quality to warrant a reasonable expectation of developing a profitable mine?
and;

B. Is there sufficient demand (market) for material from each claim to warrant a reasonable expectation that the material can be profitably exploited?

(Decision at 49).

One aspect of the proceedings should be explained before addressing these questions. The "10-acre rule" will be discussed below. As previously noted, each claim contains approximately 160 acres, and in footnote 2 we noted that the parties had divided the claims into 32 approximately equal 10-acre tracts. To make it easier to identify, examine, and give testimony regarding each 10-acre tract, these tracts were identified and numbered in a manner similar to the system used by the cadastral survey. ^{55/} Having established this method of description, the witnesses could tie their observations and interpretations to specific 10-acre tracts by reference to a tract number.

Subsequent to issuance of the compliant, but before the hearing, a document was filed on behalf of Multiple Use relinquishing tracts No. 1, 2, 3, 4, 6, 7, and 8. The evidence indicates that the relinquishment was made because the principals of Multiple Use were of the opinion that these parcels did not contain sufficient air-fall pumice to be considered mineral in character. In his discussion Judge Sweitzer addressed the mineral character of the relinquished 10-acre tracts and correctly concluded that they were not mineral in character. We do not deem it necessary to give a detailed review of his findings for those tracts.

After addressing this question, Judge Sweitzer found tract Nos. 5, 10 through 15, 17 through 19, 22 through 26, and 32 (approximately 160 acres) to be mineral in character. His determination was based primarily upon his earlier findings and testimony by Government witnesses that there was either an exposure of air-fall pumice or that a reasonable projection from existing exposures would allow a conclusion that the air-fall pumice bed existed on the identified tracts. ^{56/}

^{55/} A boustrophedonic numbering method was adopted. The 16 10-acre parcels in the White Vulcan No. 1 claim were assigned number 1 through 16, starting at the northwest corner of the claim. The numbers ran from left to right for parcels 1 through 4, then right to left for parcels 5 through 8, etc. A similar numbering sequence was used for the White Vulcan No. 2 claim also started in the northwest corner.

^{56/} An outline of the testimony regarding what tracts contained air-fall pumice was set out on page 49 and 50 of Judge Sweitzer's decision.

On appeal, Multiple Use urges this Board to find error in Judge Sweitzer's finding, claiming that it has "proven that air-fall pumice exists not only on each 20-acre portion of the association placer, but on each 10-acre subdivision thereof" (SOR at 25). As a basis for its argument it contends that Judge Sweitzer construed the 10-acre requirement too narrowly, and did not consider that the "mineral in character" requirement could be satisfied by a showing of a geologic projection. In addition, Multiple Use argues that the 10-acre rule does not apply to it because the claims were not located in bad faith. As can be seen, after eliminating that acreage relinquished by Multiple Use, the only contested tracts are Nos. 9, 16, 20, 21, and 27 through 31 (approximately 90 acres). The Forest Service raises no objection to Judge Sweitzer's 10-acre rule findings.

[14] Judge Sweitzer noted that the "mineral in character" and "discovery" tests are related, and that mineral in character is determined using tests similar to the "prudent man" and the "marketability" tests. We also recognize that the facts necessary to make a mineral-in-character determination are similar to those necessary for making a discovery determination in many respects. Both require mineralization which would cause a prudent person to expend further time and money on the property.

There are differences, however. A mining claim must be supported by a discovery. United States v. Williamson, 45 IBLA 264, 87 I.D. 34 (1980). As previously noted, in order to prove a discovery, a claimant is required to show an actual exposure of the valuable mineral within the claim. United States v. Dresselhaus, *supra*; United States v. Feezor, *supra*. This is true regardless of the size of the claim, be it less than 10 acres in size or a 160-acre association placer claim.

On the other hand, facts that will support a mineral-in-character determination may not support a discovery, because a determination that the land is mineral in character can be based entirely upon geologic inference or other observable external conditions upon which a prudent and experienced person would rely. See Schlosser v. Pierce, 92 IBLA 109, 93 I.D. 211 (1986); United States v. Meyers, 17 IBLA 313 (1974). Thus, a tract of land may properly be deemed to be mineral in character, even though it contains no exposure of valuable mineral. If the known conditions are such as to engender the belief that the land contains a mineral deposit of such quality and quantity as would render mineral extraction profitable and justify expenditures to that end, the land is mineral in character. See Diamond Coal & Coke Co., v. United States, 233 U.S. 236 (1914); Lara v. Secretary of the Interior, 820 F.2d 1535, 1540 (9th Cir. 1987); Laden v. Andrus, 595 F.2d 482, 488 (9th Cir. 1979).

[15] When considering the validity of a placer claim, if a discovery is shown, an additional test is imposed. A placer claim larger than 10 acres in size must have a discovery within its boundaries, and each 10-acre tract within the claim must be shown to be mineral in character. See Schlosser v. Pierce, *supra*; United States v. Bell, 68 IBLA 367 (1982).

Dr. Sheridan testified that all of the tracts now in question were mineral in character. The Forest Service witness Wirtz expressed a belief that the tracts in question and tracts 13, 14, 15, 17, 22, and 32 were non-mineral. Forest Service witness Cass was of the opinion that tract 22 was also non-mineral, and Dr. Holm, who was also a Forest Service witness, expressed the same opinion as that ultimately reached by Judge Sweitzer. Basically, Judge Sweitzer accepted the "combined" opinion of the Forest Service witnesses and held that the land was mineral in character if any one of the three expressed a belief that it contained the air-fall pumice.

Geologic maps of the surface exposures on the claims and cross sections were also prepared by Forest Service witnesses Cass and Holm (Exhs. 23, 28, 29). These maps and cross sections graphically illustrate that the air-fall pumice is neither uniformly deposited nor continuous throughout the claims. They clearly indicate that in places the air-fall pumice bed had been drastically eroded. This fact was confirmed by Dr. Sheridan when he stated that tracts 1 through 4 and 6 through 8 "would not be able to provide [an] economic source of [air-fall] pumice according to my geologic opinion" (Tr. 345). The geological maps above mentioned support the conclusion reached by Judge Sweitzer, and Dr. Sheridan's testimony supports the observations depicted on the maps. On the other hand, the computer-aided projection of the upper contact of the air-fall pumice prepared by Dr. Sheridan (Exh. R-21) indicates the existence of air-fall pumice in areas where the surface mapping shows the air-fall bed to have been completely eroded away. ^{57/}

Contrary to the opinion expressed in the Multiple Use statement of reasons, Judge Sweitzer's determination included tracts having no surface exposure of the air-fall pumice bed. The best available maps of the surface geology (Exhs. 23, 28) do not depict any surface exposure of the pumice bed in tract 13 or tract 32. He did, in fact, include tracts believed to contain the bed or air-fall pumice based upon reasonable projections. It is therefore obvious that neither the witnesses nor Judge Sweitzer construed the term mineral in character so narrowly as to require an exposure of mineral. It is equally obvious that Judge Sweitzer considered the testimony of each of the witnesses on the issue of the mineral character of the land and based his determination on testimony and documentary evidence presented to him. His determination that combined weight of the evidence presented by Wirtz, Cass, and Dr. Holm outweighed that presented by Dr. Sheridan is supported by the record and is neither arbitrary nor capricious.

V(D). Is There sufficient Demand (Market) to Warrant a Reasonable Expectation that the Material Can Be Profitably Exploited?

Judge Sweitzer began his discussion of this question by noting that there was clearly a market for the air-fall pumice from the White Vulcan

^{57/} In addition, the reserve estimates made a part of Dr. Sheridan's Exhibit R-20 have no proven, probable, or inferred reserves for any of the contested 10-acre tracts.

No. 2 claim because the product was being sold as a lightweight aggregate at the time of the hearing. He also concluded that the air-fall pumice on the White Vulcan No. 1 claim was suitable for use as lightweight aggregate. However, based upon his earlier finding that the use of the air-fall pumice as a lightweight aggregate was a common variety use, he held that this use could not support a finding that there was a market for a locatable mineral, citing United States v. Foresyth, supra, in support of this conclusion.

He then noted his previous determination that the weight of the evidence supported a finding that there was no exposure of air-fall pumice suitable for use as an abrasive in the stone-washing industry on the White Vulcan No. 1 claim, and that there was, therefore, no market for the pumice on that claim for an uncommon variety use. Based upon this determination, he concluded that the land in the White Vulcan No. 1 claim was non-mineral in character because there was no market for the locatable mineral on that claim.

After making these findings, Judge Sweitzer determined that, being previously found a discovery on the White Vulcan No. 2 claim based upon the presence of a commercially valuable uncommon variety of pumice, that portion of the White Vulcan No. 2 claim identified as tracts 17 through 19, 22 through 26, and 32 were deemed to contain sufficient quantities of pumice to be considered mineral in character.

He then noted that some evidence had been introduced by the Forest Service suggesting that the above parcels "contain 'excess reserves' that would therefore be unmarketable and cause the parcels to be deemed non-mineral in character" (Decision at 50). He addressed this issue by separating those tracts upon which active mining was taking place from those upon which there was no mining.

For those 10-acre parcels upon which there was active mining, thus exposing uncommon variety air-fall pumice (tracts 23, 24, 25, and 26), Judge Sweitzer found the tracts to be mineral in character based upon the actual exposure of locatable mineral (presence of a discovery) within each of those tracts. He then made the following finding:

With respect to parcel no's. 17, 18, 19, 22, and 32, contestee has failed to show that these parcels contain the same pumice as in the main pit or that the pumice on these parcels could be profitably exploited for the same uncommon uses as the main pit. Although mineralization on those 10-acre subdivisions may be established, such evidence without evidence that the production of the minerals therefrom is economically feasible is insufficient to show that the land is mineral in character.

(Decision at 50-51).

As previously noted, Multiple Use has objected to the finding to the extent it found any portion of the claims non-mineral in character (other than that portion it relinquished). The Forest Service objects to the implications of this finding that any of the air-fall pumice on the White

Vulcan claims contains a distinct and special value, that it meets the marketability test, or that the land embraced by the claims is mineral in character.

We will consider Judge Sweitzer's findings regarding the demand for air-fall pumice separately for each of the White Vulcan claims, taking the discovery. United States v. Dresselhaus, *supra*; United States v. Feezor, *supra*.

We have previously noted our agreement with Judge Sweitzer's finding that there was no evidence of an exposure of air-fall pumice suitable for use as an abrasive for stone-washing designer clothes. This being the case, there is no discovery on the White Vulcan No. 1 claim, and that claim is invalid. There is no need for making a determination regarding the mineral character of the land. Therefore, we will strike that portion of his decision finding that the land subject to the White Vulcan No. 1 claim is non-mineral in character.

[16] We will now consider whether the White Vulcan No. 2 claim is mineral in character. At the outset, we note that this portion of Judge Sweitzer's decision was written in part to address the Forest Service arguments that the claims contained "excess reserves." In cases not involving a patent application, when the Government raises a new issue during the hearing or in its posthearing brief, a refusal to address the new issue will be affirmed on appeal to this Board: "A Government contest compliant which asserts the invalidity of a claim because of insufficient quantity and quality of the located mineral within the limits of the claim does not put into issue the existence of excess reserves within the limits of the claim." United States v. Foresyth, *supra* at 252, 94 I.D. at 490.

The general rule does not strictly apply, however, if a patent application is pending. When a claimant has filed an application for patent to the claims subject to the contest, a refusal to consider the excess reserves issue on strictly procedural grounds would leave open the question of whether patent should issue. When the record does not contain sufficient evidence to persuade the Secretary or his authorized officers that the law has been met, the Department cannot legally grant a mineral patent. United States v. Higbee, 52 IBLA 83 (1981); United States v. Pittsburgh Pacific Co., 30 IBLA 388 (1977). ^{58/} Therefore, if an adverse ruling on the belatedly raised issue, such as the issue of excess reserves, would result in

^{58/} The element of surprise is always present when the Government raises an issue not clearly framed in the complaint, and, when this happens, justice may well dictate a favorable response to a request for a continuance of the hearing to permit adequate time to prepare a defense.

denial of a patent, that issue should be addressed if consideration is not barred by the doctrine of res judicata.

We will, therefore, consider the issue of excess reserves to determine whether Judge Sweitzer's ruling on this point is sufficient error to cause us to either reverse his decision or remand the case to allow further evidence. First, we agree with Judge Sweitzer's conclusion that the weight of the evidence supports a finding that locatable air-fall pumice is exposed in tracts 23, 24, 25, and 26. As previously noted, he properly found tract Nos. 17, 18, 19, 22, and 32 to be mineral in character because reasonable projections would engender the belief that the land contains a mineral and justify expenditures to that end. However, he concluded that "contestee has failed to show that the pumice on these parcels contain the same pumice as in the main pit or that the pumice on these parcels could be profitably exploited for the same uncommon uses as the main pit" (Decision at 51). He then held that "although mineralization on those 10-acre subdivisions may be established, such evidence without evidence that the production of the minerals therefrom is economically feasible is insufficient to show that the land is mineral in character" (Decision at 51).

As just noted, the weight of the evidence supports a finding that locatable air-fall pumice has been exposed on four tracts in immediate proximity to those now in question. Approximately 10,000 yards of this material have been shipped to and accepted by the user during the 60-day period immediately preceding the mid-January 1987 hearing (Tr. 1242). ^{59/} This evidence must be weighed against one sample taken from one small pit (Exh. 74). The distance from this pit to the tracts now being considered is further than the distance from the exposures of the locatable pumice to the tracts now in question. The bulk of the evidence supports a conclusion that tracts Nos. 17, 18, 19, 22, and 32 are mineral in character. Reasonable projections would endanger the belief that the land contains a mineral deposit of such quality and quantity as would render its extraction profitable and justify expenditures to that end. Judge Sweitzer's decision is modified to reflect this finding.

The Forest Service based its "excess reserves" contention on its reserve estimates set out in Exhibit 60, which contains tract-by-tract estimates of the quantity of pumice suitable for use as lightweight aggregate. The lightweight aggregate pumice reserve estimate for both White Vulcan claims (320 acres) is stated to be 1,077,088 cubic yards of proven reserves and 866,321 yards of probable reserves (1,943,409 cubic yards total).

Judge Sweitzer properly concluded that there was no discovery on the White Vulcan No. 1 claim, and properly held that the White Vulcan No. 2

^{59/} As previously noted, this represents almost 60,000 yards of air-fall pumice, 17 percent of which meets the requirements for stone-washing pumice.

claim was limited in size to 20 acres. Appropriate adjustments to the estimated reserves must be made to reflect Judge Sweitzer's findings when considering excess reserves. There being no discovery on the White Vulcan No. 1 claim, the estimated reserves on that claim must be deducted. By doing so, the estimated quantity of lightweight aggregate pumice on the White Vulcan No. 2 claim (160 acres) is 631,698 yards of proven reserves and 525,649 yards probable reserves (1,157,347 yards total). Multiple Use must choose 20 acres from this 160 acres (two of the nine tracts) and the reserves must be further reduced to reflect the quantity found in 20-acre claim. Addressing the issue in the manner most favorable to the Forest Service by using the two 10-acre tracts having the greatest total reserves considering both proven and probable reserves (tracts 18 and 23), the total reserves would be further reduced to 489,062 yards.

As noted previously, when considering the validity of a claim, the return from common variety minerals cannot be considered. The mineral reserves must also be stated in terms of the quantity of uncommon variety mineral, which is approximately 17 percent of the total contained pumice. If the estimated reserves suitable for lightweight aggregate is 80 percent of the total contained pumice, the estimated total pumice content in tracts 18 and 23 would be approximately 611,250 yards (489,000/0.80). Using this quantity for the total contained pumice, the total (proven and probable) reserves of uncommon variety pumice in tracts 18 and 23 is approximately 104,000 yards (611,250 x 0.17). If Arizona Tufflite expectancy of the claim is approximately 6-2/3 years. Accepting the Forest Service reserve estimates as accurate, we do not find there to be excess reserves of pumice suitable for stone-washing fabric on the White Vulcan No. 2 claim.

V(E). Does the Hearing Examiner's Decision in United States of American v. B. B. Bonner, Jr., Contest No. Arizona 10060 (Feb. 12, 1960, Compel a Finding that the Pumice on the Subject Claims Is an Uncommon Variety?

[17] During the course of the proceedings before Judge Sweitzer, an argument was presented to the effect that the Bonner decision, cited above, was binding on the Department in this case, and that the Department was collaterally estopped from claiming that the pumice on the White Vulcan claims was common variety. In the Bonner case, the Government initiated as case against the White Rabbit Nos. 1 and 2 and Bee Line Nos. 1 and 2 mining claims, which are located in the general proximity of the claims now in question. 60/ The case was argued before a Hearing Examiner (the equivalent to an Administrative Law Judge at the time). The Hearing Examiner found that the use of the pumice on those claims as a pozzolanic agent appeared to be a use over and above the normal uses of the general run of

pumice deposits. ^{61/} Based upon this finding, the Hearing Examiner found that the Bonner pumice was of an uncommon variety and dismissed the case. ^{62/} It appears that the contest initiated against the Bonners was premised entirely on the contention that the pumice on Bonner's claims was common variety pumice, and the question of the existence of a discovery was never raised or addressed.

Judge Sweitzer noted the similarity the Bonner case and the United States v. Hooker, 48 IBLA 22 (1980), in which the Board held that the dismissal of a contest does not determine the validity of the claim, but merely indicates that the claimant has preponderated on those issues raised in the hearing. He held that the Bonner case was specific to the facts presented to the Hearing Examiner and did not compel him to decide that the pumice on the White Vulcan claims should be deemed an uncommon variety because the White Vulcan pumice, like the product from the Bonner claims, can be used as a natural pozzolan without calcining. Judge Sweitzer noted that, while it may be possible that the absence of the need to calcine the pumice is a unique property for use as a pozzolan, he was not convinced by the evidence presented by Multiple Use that the ability to use the White Vulcan pumice as a natural pozzolan without calcining imparts a special and distinct value to the White Vulcan pumice.

In his opinion Judge Sweitzer noted that no pumice had been removed from the claim for use as a pozzolanic agent since 1966. ^{63/} He also noted that the bulk of the testimony was that fly ash was as good as natural pozzolan, the trend is to use fly ash, rather than natural pozzolan, and there is little or no market for natural pozzolan. He concluded that there was "little evidence of any market into which sales can presently be made or reasonably expected to be made" (Decision at 40).

On appeal, Multiple Use claims error in Judge Sweitzer's opinion because "[t]he air-fall pumice on Contestee's claims was determined to be 'special and unique' in United States v. Bonner, A10060, Feb. 16, 1960." It argues that the Bonner decision stands for the proposition that air-fall pumice in the Flagstaff area is special and unique, and that the Forest Service is estopped by the Bonner decision.

We do not find Judge Sweitzer's opinion on this issue to be at all arbitrary or capricious. The argument that we are now estopped from

^{61/} Pumice from the Bonner claims was being used a natural pozzolan in the construction of the Glen Canyon Dam, and thus the marketability of the product was not in issue at the time of the Bonner hearing. See Exh. 57 at pages 9 and 413.

^{62/} The case was not appealed and became final for the Department. See Roy Jones, 10 IBLA 122 (1973).

^{63/} In 1982 the lessees of the claims had a sample of the White Vulcan pumice pulverized and tested its pozzolanic attributes. It was estimated that the cost of grinding would add a minimum of \$12.62 per ton to the mining and processing costs (Tr. 1220-30).

reaching another conclusion is similar to that advanced by the Government in United States v. Duval, 53 IBLA 341 (1981). In a prior case with many more similarities than those between this case and the Bonner case and the Bonner case, United States v. Duval, 1 IBLA 103 (1970), aff'd, 347 F. Supp. 501 (D. Ore. 1972), aff'd, No. 72-2839 (9th Cir. Dec. 19, 1973), mining claims were held to be invalid because of a failure to demonstrate that an uncommon variety of sand had been located. In the subsequent Duval case, the Government argued that the same result should accordingly be obtained in the second case. As in this case, the conclusion did not flow from the premise. The Board noted, "[t]he mere facts that the appellees possessed similar claims which had been deemed to be invalid in an earlier contest cannot be said to be dispositive of the instant appeal." United States v. Duval, 53 IBLA at 346.

As noted above, Judge Sweitzer recognized Multiple Use's contention that the absence of the need to calcine the pumice is a unique property for use as a pozzolan. However, he was not convinced by the evidence presented by Multiple Use that this imparted a special and distinct value to the White Vulcan pumice. Additionally, he found that, notwithstanding this possibly unique property, Multiple Use had failed to demonstrate by a preponderance of the evidence that the pumice on the claims could support a discovery based upon the use of the pumice as a pozzolanic agent. This finding will stand the test of review regardless of any finding that the deposit is or is not unique for use as a pozzolanic agent.

Considering the cost of grinding the material fine enough to be suitable for use as a pozzolanic agent, and the price paid for readily obtainable substitute products such as fly ash or more friable natural pozzolan from other sources, we find that Multiple Use's own evidence does not support a finding that there is a reasonable profitability that the property would be economically viable if the pumice were mined and sold as a pozzolanic agent.

VI. EVIDENCE OF CONTINUING SALES POTENTIAL

[18] The thrust of almost every Forest Service argument on appeal goes to the weight Judge Sweitzer gave to the evidence when making his finding of fact regarding the use of pumice as a stone-washing abrasive. If the Board were to accept unsupported arguments as the basis for reversal or reopening a hearing it would be necessary to reverse or reopen a hearing for further evidence whenever an Administrative Law Judge has made a finding of fact adverse to the interest of the appealing party, as it is always possible to tender more evidence. This problem was recognized in United States v. Downs, 61 IBLA 251, 263 (1982), when the Board noted that a mining claim contest will not be reopened if the appellant objecting to the findings of fact does not make a tender of proof and submit evidence of an equitable justification for further proceedings in the case. Recognizing that a pending patent application may be deemed sufficient equitable justification for reopening the hearing, we are left with the Forest Service failure to suitable for use as a stone-washing abrasive, that Arizona Tufflite would not receive 8 cents per pound for that product, or that a

prudent man could not expect to profitably produce and sell pumice at that price. In effect the Forest Service seeks to have this Board ignore both the weight of the evidence and the Administrative Law Judge's findings of fact and declare the claim invalid based merely on the Forest Service's unsupported broad allegation that the unrefuted evidence submitted by the claimant is in one way or another "insufficient" or "self serving." The Forest Service has proffered no basis for reversal and the Board will not order a further hearing in a mining claim contest case where a patent application has been filed merely because the evidentiary record is inadequate to invalidate the claim. United States v. Martinez, supra.

There are striking similarities between this case and United States v. Pittsburgh Pacific Co., 68 IBLA 342, 89 I.D. 586 (1982), an appeal from a contest involving claims subject to a patent application. In that case, the Forest Service had failed to tender an offer of proof to the Board on three issues. The Board remanded on another issue, and the Forest Service took an interlocutory appeal from the Administrative Law Judge's pretrial order limiting the scope of the hearing by excluding consideration of the three issues. In its decision on this interlocutory appeal, the Board noted two affidavits submitted in support of reopening the record on the three issues and said that

[h]ad the Forest Service or intervenor submitted on appeal an offer of proof that, if established, would have compelled a reversal of [the Judge's findings on any of the three aforementioned issues, our decision would be different. * * * In light of the prior hearing, reflected in 1,200 pages of testimony, and the Board decision approving [the Judge's] findings, further evidence on these issues is unnecessary. [Emphasis added.]

68 IBLA at 346-47, 89 I.D. at 589.

We find that Judge Sweitzer's finding that pumice from the White Vulcan No. 2 claim is suitable for stone-washing garments is supported by the evidence, and the Forest Service has made no offer of any evidence that, if established, would have compelled a reversal on this point. 64/

64/ The Forest Service alludes to a lack of evidence of the physical characteristics of the deposit making it suitable for stone-washing fabric. In doing so it ignores the fact that the pumice does not undergo a physical change when used for another purpose. There is more than ample evidence regarding the physical characteristics of the deposit. For example, claimant's witness testified about the importance of the absence of iron staining (see note 34 and accompanying text). The Forest Service testimony that the absence of iron stain when considering the properties of White Vulcan pumice as an agent for stone-washing garments. Indeed, lack of staining materials in and roundedness of the pumice were all acknowledged by witnesses for the Forest Service when testifying that these attributes did not make the pumice unique when used as a lightweight aggregate.

Similarly, we find his finding that the pumice suitable for stone-washing garments commands a sizable premium over run of the mill pumice is supported by the evidence, and the Forest Service has made no offer of any evidence that, if established, would have compelled a reversal on this point. Therefore, Judge Sweitzer's conclusion that the pumice on the White Vulcan claim is locatable is legally sound and supported by the evidence.

As to the issue of the existence of a discovery on the claim, we find Judge Sweitzer's determination that the White Vulcan No. 1 claim does not contain an exposure of pumice suitable for use as a stone-washing abrasive is supported by the evidence, and Multiple Use has made no offer of any evidence that, if established, would have compelled a reversal on this point. His finding that the White Vulcan No. 2 claim contains an exposure of pumice suitable for use as a stone-washing abrasive is supported by the record, and the Forest Service has made no offer of any evidence that, if established, would have compelled a reversal on this point. We find his conclusion that a prudent person would expend his time and means in the further development of the White Vulcan No. 2 claim with a reasonable probability that a successful mine could be developed when the stone-washing quality pumice is sold in El Paso, Texas, for 8 cents a pound is supported by the record, and the Forest Service has made no offer of any evidence that, if established, would have compelled a reversal on this point.

Notwithstanding the above findings, we find ourselves in a position similar to that we found ourselves in when rendering the first decision in United States v. Pittsburgh Pacific Co., 30 IBLA 388, 84 I.D. 282 (1977). There is one narrow point with sufficient impact to cause us to remand this case for further consideration. There is no question that the record is sufficient to support dismissal of the contest if no patent application were pending. See United States v. Lewis, 58 IBLA 282 (1981). However, as noted previously, when the record does not contain sufficient evidence on an essential issue to persuade the Secretary or his authorized officers that the law has been met, the Department cannot legally grant a mineral patent. United States v. Higbee, *supra*; United States v. Hooker, 48 IBLA 22, 27 (1980); United States v. Pittsburgh Pacific Co., 30 IBLA 388, 84 I.D. 282 (1977). The record on the issue of discovery is lacking in one respect. Judge Sweitzer based his determination on Morgan's un rebutted testimony that his company was operating under an oral contract for the sale and purchase of two truckloads of stone-washing quality pumice a week at 8 cents a pound. Morgan further testified that he made one shipment of pumice under that contract. Our concern is that, because the purchase and sales agreement is an oral contract, it is terminable at will, and the single shipment (or small number of shipments) may represent an isolated sale of White Vulcan pumice at a premium over and above the price paid for common variety pumice.

We are unable to determine whether the sale and shipment of pumice described by Morgan represents a regular market for the stone-washing grade pumice at 8 cents a pound or higher, or an isolated transaction. See United States v. Slater, 34 IBLA 31, 37 (1978); United States v. Boyle, 76 I.D. 318 (1969), *aff'd*, Boyle v. Morton, 519 F.2d 551 (9th Cir. 1975), *cert. denied*, 423 U.S. 1033 (1975); United States v. Estate of Denison,

76 I.D. 233 (1969). We would have no difficulty dismissing the contest if a patent application were not pending, but one is and we are unable to adequately discern the extent of the potential for continued sales of stone-washing pumice from the White Vulcan No. 2 claim at a price which is sufficient to support a conclusion 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. We therefore find it necessary to remand the case for the tender of further evidence on that issue. ^{65/}

VII. OTHER MATTERS RAISED ON APPEAL

[19] On appeal Multiple Use again raises a contention made many times during the course of the proceedings below. It claims that the Forest Service arbitrarily and capriciously subjected its claims to a validity hearing. Judge Sweitzer properly dismissed this argument, and we find it appropriate to do so as well. As noted by Judge Sweitzer, until patent has issued, the rights of the mining claimant are limited by the statutes and regulations under which those rights are acquired and maintained in the United States. See Cameron v. United States, 252 U.S. 450 (1920). As the title owner, the United States may regulate mining activities on Federal lands to protect the surface resources. See United States v. Rice, *supra* at 132; United States v. MacLaughlin, 50 IBLA 176 (1980).

Without further belaboring this opinion with additional references to and discussion of other contents raised by either Multiple Use or the Forest Service regarding errors of fact and law, except to the extent they have been expressly or impliedly addressed in this decision, they are, in whole or in part, contrary to the facts and law or are immaterial. National Labor Relations Board v. Sharples Chemicals, Inc., 209 F.2d 645, 652 (6th Cir. 1954).

VIII. OBSERVATIONS REGARDING DISSENTING OPINION

The dissent begins his discussion by acknowledging that Judge Sweitzer's opinion is well reasoned and succinct. He then provides a

^{65/} Notwithstanding the narrow scope of this remand, Administrative Law Judge may expand the scope of his review in the event that either party tenders an offer of proof sufficient to permit him to conclude that, if established, the facts tendered would compel a reversal of his previous findings of fact. See Ideal Basic Industries, Inc., v. Morton, 542 F.2d 1364 (9th Cir. 1976); United States v. Pittsburgh Pacific Co., 68 IBLA at 3342, 89 I.D. at 586. It is equally within the scope of his authority to limit the scope of the hearing if no offer of proof is tendered or, if tendered, he is not convinced that the facts would compel a reversal of his prior decision.

pastiche of selectively chosen evidence in an attempt to make plausible his conclusion that Judge Sweitzer erred when finding that the claimant has overcome the Forest Service prima facie case and the majority erred when finding Judge Sweitzer's decision supported by the record. ^{66/} He seeks to have the White Vulcan No. 2 claim declared invalid because the record is "comprised only of self serving, and uncorroborated testimony of the mining operator" (Dissent at 1 (emphasis added)). To reach this end, he also invents a novel evidentiary rule that, in a mining claim contest, the claimant must support the sworn testimony of its witnesses with documentary evidence or corroborative expert testimony.

The mineral patent process is initiated when a claimant files an application for patent. A properly completed application includes a statement that a valuable mineral deposit has been found on the claim and that the claimant is in compliance with statutory requirements. The statements pertaining to discovery are not made under oath, and the required proof is nowhere near that the dissent demands. An applicant need only submit the data needed necessary to assist BLM in its determination that the statutory requirements have been met. When the mineral examiner cannot make a determination from the data submitted he may, and often does, seek further information.

A mineral patent could well – and often does – issue without a formal hearing. If the reviewing official is satisfied that the applicant's statements are complete and accurate and the field examination has verified compliance with the mining laws, he issues a decision that patent should issue. It is only when (and to the extent that) information is deemed lacking that additional information may be sought. Thus, under well-established Departmental practice, a patent application may be approved even though approval is based in large part on "self-serving and uncorroborated" statements by the claimant. The Government official responsible for making the factual determinations routinely accepts a claimant's statements as true even though those statements are not made under oath. See 43 U.S.C. § 1211 (1988). A claimant should not be in jeopardy of having his claim

^{66/} The characterizations and selective quotes are not limited to the record. Note for example the argument presented in footnote 6 of the dissent. A reading in full text of our opinion at the cited pages will disclose that, for the first two, the language the dissent refers to was cited by us after noting the Forest Service failure to offer any evidence or suggest that it could offer any evidence to refute the statements made by the Morgans. The Forest Service statement in its statement of reasons regarding "cornering the market" merely highlights the Forest Service's recognition of the issue and total failure to offer a scintilla of evidence to the contrary. As to the last reference in the dissent's footnote, we do not believe that the dissent can honestly argue that the Forest Service admission that the White Vulcan deposit was "located closer to El Paso, Texas than an almost identical deposit at Lipari" has no meaning in the context of our discussion of a comparison of the White Vulcan deposit to other deposits.

declared invalid because a statement made by a party in interest was not corroborated by documentary evidence or testimony offered by some "disinterested" party. ^{67/} The dissent would impose a degree of proof far more stringent than that required under established patenting procedure.

The role of an Administrative Law Judge and this Board is judicial. Neither should become an advocate for either the Government or a claimant. Cross-examination and rebuttal evidence are the mainstay guarantors of the trustworthiness and reliability of evidence. A failure to cross-examine a witness on a particular issue and/or failure to present rebuttal evidence on that issue give rise to only one inference: the fact presented is true. See Stone v. First Wyoming Bank N.A. Lusk, 625 F.2d 332, 342 n.15 (10th Cir. 1980); Chicago, Rock Island & Pacific Ry. Co. v. Howell, 401 F. 2d 752, 754 (10th Cir. 1968); Cundick v. Broadbent, 383 F.2d 157 (10th Cir. 1967). In the face of this well established principle, the dissent espouses a new evidentiary rule that an "interested party's" testimony cannot be accepted as true without corroborative evidence.

We know of no case standing for the radical proposition that a patent must be rejected and the claim declared invalid because a claimant's unchallenged and unrefuted testimony on some point was not supported by corroborative evidence. The dissent must advance his evidentiary rule to overcome the operator's unrefuted testimony standing in the way of finding the claim invalid. The testimony the dissent finds troublesome either remained unchallenged during the course of cross-examination and unrefuted during the course of the subsequent rebuttal, or was actually elicited during the course of cross-examination. The dissent's evidentiary requirements is justified only if the one presumes that witnesses are lying under oath. We find no other basis for imposing such an onerous burden proof. The dissent does not contend that there is nothing in the record, or contend that the preponderance of the evidence presented below does not support Judge Sweitzer's decision. He merely concludes that it is not enough - because the evidence is "comprised only of self-serving and uncorroborated testimony of the mining operator." He seeks to declare the claim invalid because he finds insufficient evidence to declare it valid, and avoids any discussion of whether the claimant has demonstrated his point by the preponderance of the evidence.

To adopt this new rule of evidence would have a disastrous effect on the hearing process when a contest involves a claim subject to a patent application. Consider, for example, the question of whether a mineral product could be sold at a profit. Many cases have turned upon the operator's testimony regarding mining costs. There is no case rejecting the

^{67/} If it is found that a claimant has made false statements in the patent application a patent can be vacated, even after patent has issued. Multnomah Mining Milling & Dev. Co. v. United States, 211 F. 100, 102 (9th Cir. 1914). Thus, in this context there is no difference between corroborated and uncorroborated statements. It must only be shown that material statements are untrue.

operator's "uncorroborated, self-serving" testimony and invalidating the claim because the operator has failed to corroborate testimony on the cost of explosives and diesel fuel with copies of the bills and testimony by suppliers. If we were to apply the dissents' "rule" to the capital costs, an equipment supplier would have to appear and testify as to the cost of capital equipment. A claimant's miner would have to appear and testify as to the wage rate he would be willing to accept if a wage rate is used in a cost estimate. A railroad or trucking representative would have to testify as to freight costs. If a witness (under oath) were to state a spot price of a metal, that testimony would have to be corroborated with the testimony of a "disinterested" metals merchant that he was actually buying the metal at that price before it would be deemed credible.

The dissent suggests that the majority position may trigger a need to have Government witnesses from the boiling rock, floor sweep and kitty litter industries waiting in the halls in this case. But visualize the parade of witnesses that would be required to present a case that a claim is valid if the dissent's rule of evidence were adopted. The hearing would last for months. A claimant would adopt the understandably cautious approach that nothing stated by his witness could be considered as true unless and until corroborated by an expert's testimony or documentary evidence not connected in any way with the claimant.
68/

In our view, if the sworn testimony of a claimant or operator remains unrefuted and unchallenged, it is presumed to be true. The customary trial procedure permits opposing counsel to ask probing questions on cross-examination when to do so will support his case. It also permits him to delve no further if asking additional questions on a point might elicit damaging answers. If the new rule of evidence proposed by the dissent were applied, there would be no need for the Government to cross-examine or submit rebuttal evidence – even when the claimant's testimony was totally persuasive. It would be far easier and less dangerous to characterize a claimant's testimony as "unsupported" or "self-serving" or "uncorroborated" in subsequent posthearing or appeal briefs.

The Forest Service and the claimants presented geologists with expertise in volcanology who testified about the physical characteristics of the White Vulcan pumice. Their testimony regarding those characteristics was surprisingly consistent in almost every case. It was only when addressing whether the characteristics unique to the White Vulcan deposit rendered that pumice more valuable than run of mill pumice that consistent divergence appeared.

Dr. Sheridan, a recognized expert in the formation, deposition, and composition of pumice, testified as an expert on the physical characteristics of pumice and pumice deposits. He did not appear as a marketing

68/ If the dissent's proposed rule of evidence were adopted a Judge would run a strong risk of committing reversible error if he were to limit a claimant's testimony or discourage introduction of further evidence because it would be cumulative or repetitive.

expert and freely admitted his incomplete knowledge in the field of minerals marketing. This admission does not detract from either his own testimony or the testimony of a subsequent witness who made his living marketing pumice. Regardless of whether the dissent chooses to recognize them as experts, the only witnesses having any experience in pumice marketing, and the only parties capable of testifying about their first hand experience with the suitability of the pumice for sale, were the Morgan brothers. No "formal" education can top actually earning a living doing it, and when it came to "marketing," their expertise was totally unchallenged.

The dissent finds a "paucity" of evidence regarding the unique properties of the White Vulcan Pumice. The experts – on both sides – testified as to the physical characteristics of the pumice. Undisputed evidence was presented that: (1) a portion of the pumice deposit is within the size limits acceptable by the industry; (2) the pumice is round; (3) the pumice has low iron content; (4) the pumice is free from clay. ^{69/} Do the physical characteristics of pumice somehow change with each use or does the suitability of pumice for a particular use depend on its physical characteristics which do not change from use to use? We find testimony by a Forest Service witness that the absence of iron staining imparts no special value as a pozzolanic agent has evidentiary weight as to the absence of iron staining components of the same pumice when used as an agent for stone-washing garments. Similarly, testimony that the rounded character of the pumice particles gives no unique benefit to the deposit when it is ground and used as a floor sweeping compound will be relevant when considering whether the pumice is suitable for use as a stone-washing abrasive because its rounded edges do not tear the garments. There is a "paucity of evidence" only when one ignores literally hundreds of pages of testimony and documentary evidence on the physical properties of White Vulcan pumice.

The dissent cites Patricia Alker supra, for the proposition that the claim should be declared invalid because no sales receipts or transaction bills were submitted in evidence. As we said recently in Twin Arrow, Inc., 118 IBLA 55, 58-59 (1991):

[It is] well established Board precedent that an unsupported allegation of error is insufficient and that an appellant who does not support allegations with evidence showing error cannot

^{69/} In the presentation of the claimant's case Sheridan testified as an expert on the physical attributes of pumice and Morgan testified that this is what the customer wanted. One does not need to know how a circuit board works or the shape of the room in which the stereo will be used to be a good stereo salesman – what is important is knowledge of what the customer wants. Sheridan described the box full of wires, showing that it was an amplifier. The Morgans described an audiophile and the going price for that quality amplifier. Their expertise was complementary, and when one wandered into the other's field the lack of knowledge was admitted. This does not detract from the expertise of either.

be afforded favorable considerations. See Leonard J. Olheiser, 106 IBLA 214 (1988); United States v. Connor, 72 IBLA 254 (1986). Conclusory allegations of error, standing alone, do not suffice. United States v. DeFisher, 92 IBLA 226 (1988). When a party has relevant evidence within its control which it fails to produce and such evidence would be expected to be produced under the circumstances, such failure gives rise to the inference that the evidence is unfavorable. Patricia C. Alker, [supra]; Hal Carson, Jr., 78 IBLA 333 (1984). [Emphasis added.]

The dissent's attempt to obfuscate the evidence presented on behalf of the claimant does not erase the fact that the claimant's evidence was never rebutted by the Forest Service. 70/

In a last ditch effort to find a basis for declaring the claim invalid, the dissent compares the Morgan testimony and the report in the Minerals Yearbook. It is true that the claimant did not present any evidence to counter the dissent's assertion that the claimant appears to be responsible for a disproportionate amount of the reported pumice production. Of course, the claimant has never before been made aware of this accusation, and has never been given the opportunity to prove it to be erroneous.

As noted in the acknowledgements to the 1988 Minerals Yearbook, at page v:

Statistical data were compiled from information supplied by mineral producers and consumers in response to canvasses, and their voluntary response is greatly appreciated. Information obtained from individual firms by means of *** canvasses has been grouped to provide statistical aggregates. Data on individual firms are presented only if available from published or other nonproprietary sources or when permission of the respondent has been granted. [Emphasis added.]

The premise advanced by the dissent fails if the base statistical data is incomplete. To the extent that any producer or consumer is not canvassed, or, if canvassed, refuses or fails to respond, any analysis based upon the resulting statistical aggregates will be skewed. Thus, the Bureau of Mines report of tonnage produced can be used only if it is shown that the report is sufficiently accurate to be used for that purpose. To that end there is no foundation (let alone corroboration) for the use of the evidence in the manner applied by the dissent. There is absolutely no basis for assuming that the claimant, Arizona Tufflite, or the consumer of the White Vulcan pumice were either canvassed or reported any production from those claims. If they were not canvassed or did not respond to the questionnaire, the

70/ When the Alker shoe is placed on the proper foot the Forest Service silence is very loud indeed. The dissent's attempt to belittle the evidence actually before us cannot overcome the basic fact that the Forest Service presented absolutely nothing to contradict it.

Bureau of Mines aggregation would not include or reflect White Vulcan production or the price received, and could not be used as the basis for an assumption that the White Vulcan production was anything other than what the claimants said it was. We refuse to invalidate as claim based on this flimsy statistical conjecture. If, on remand, the claimant is able to demonstrate that there was a continued sale potential, that evidence will answer both the concern we have expressed and put to rest any question of whether the "conflict" perceived by the dissent is a result of the limited success of the Bureau of Mines canvassing efforts or the unrealistic expectation of the producers.

An examination of the dissent's opinion for references to Forest Service evidence regarding the unique qualities and marketability of the pumice used for stone-washing garments is revealing. There is no reference to the Forest Service presented at the hearing. There is no reference to any Forest Service attempt to seek permission to tender further evidence after that hearing, and there is no reference to a Forest Service officer of proof to this Board. The dissent's opinion says nothing because there is nothing he can say. No amount of smoke will obscure this fact.

An Administrative Law Judge has the authority to judge the credibility of the evidence presented by witnesses before him and may, in extreme cases, reject even un rebutted evidence if based on his observation of the demeanor of the witnesses. Smith v. C.I.R., 800 F.2d 930, 935 (9th Cir. 1986). Judge Sweitzer found the unchallenged and unrefuted testimony offered by the claimant's witnesses to be credible after observing the demeanor of the witness and listening to the tone and pace of delivery of the answers given to the various questions. After review of the record we are confident that his conclusions were sound. His decision was written some months after the hearing and after each side had presented its respective post trial brief. In our view it is considered and cogent.

The dissent would reverse Judge Sweitzer's findings as to witness credibility based on a sterile transcript. We do not share the dissent's view that Judge Sweitzer's judgement somehow failed him when he found a witness's testimony – given under oath, subjected to cross-examination, and unanswered and unchallenged in rebuttal – to be probative and believable. Judge Sweitzer's decision was clearly supported by the evidence.

IX. CONCLUSION

Throughout this analysis and review we have kept in mind that it is the burden of the appealing party to show error in the decision below by a preponderance of the evidence. Except as noted, we find no fault with Judge Sweitzer's analysis of the facts, the interpretation of applicable law, or the results expressed in his March 25, 1988, decision as modified by his addendum dated April 1, 1988.

The Forest Service bases its appeal on allegations that the claimant has not proffered sufficient evidence to support Judge Sweitzer's conclusion that the White Vulcan No. 2 pumice was an uncommon variety or his

conclusion that the pumice could be profitably marketed as an abrasive for stone-washing garments. It punctuates its argument with provocative and totally unsupported innuendos regarding credibility of the witnesses who testified about the uses and sales price of the pumice produced from the property. 71/ These allegations may have been given some consideration if the Forest Service had tendered one iota of supporting evidence. 72/ For example, much is made of the fact that the claimant's witnesses's testimony was not supported by some documentary evidence. However, nothing has ever been submitted to support a suggestion that the testimony was incorrect or that there was no evidence supporting that interpretation. The Forest Service has merely fabricated another interpretation of the evidence – not to make it more clear, but to confuse it. By taking sections of the transcripts out of context and attempting to show them to be contradictory, the Forest Service (and the dissent) merely emphasize the importance of hearing the testimony from the mouth of the witnesses if the evidence seems contradictory. 73/ Judge Sweitzer was there and did

71/ We could speculate on the extent of Arizona Tufflite's interest in the property. As noted above, a Forest Service employee testified that he assured Morgan that the Forest Service would sell the pumice to Arizona Tufflite if the claims were found invalid, and that the purchase price would probably be less than that Arizona Tufflite was paying to the claimant (Tr. 665-66). Specifically, immediately after being reminded by his counsel that he was under oath, he stated:

"And in talking with Mr. Morgan, both Senior and Junior, they were very interested in the proceedings and we discussed what would happen if the Government was to prevail in this hearing and their – that would terminate the contract they had with [Multiple Use]. So I outlined to them the fact that they would be entitled to purchase this material from the Forest Service, that they would have to make arrangements with the local forest district in Flagstaff, and that it would be certain that they would probably be allowed to buy this material, and I alleged that it probably would be at a little lesser price than they were paying for it. I don't consider this to be out of tune at all with what my usual work was in doing this." (Tr. 665-66 (emphasis added)).

72/ The dissent professes to be startled by the claimant's "failure to produce" evidence, as if there were some intent to do so in spite of a insistence upon additional evidence (Dissent at 3). There has never been the slightest hint that the counsel for the Forest Service doubted the truth of the witnesses' statements or sought further evidence or testimony.

73/ In the text of our decision, when addressing the specific gravity of pumice, we noted that there was broad range of estimates of the weight of pumice (expressed in terms of weight per cubic yard and specific gravity). See discussion in section V(A)(2)(v), V(A)(3), V(B)(5)(b), and note 48.

just that. The Forest Service was charged with showing by a preponderance of the evidence that Judge Sweitzer's decision was not supported by the evidence. It failed to do so. We find nothing to cause us to conclude that Judge Sweitzer's findings of fact were not supported by the record.

The Forest Service states that (using the Forest Service words) "Arizona Tufflite, Inc. was able to capture the Levi Strauss account because the White Vulcan No. 2 pumice was located closer to El Paso, Texas than an almost identical deposit at Lipari, Italy" (FS SOR at 11). The Forest Service finds this to be evidence of the product being common variety. Judge Sweitzer has found the fact that prior to using the White Vulcan pumice the plants were looking to Lipari, Italy, for a source of suitable pumice to be evidence of the White Vulcan pumice being an uncommon variety. We agree with Judge Sweitzer. The fact that a user looks to Lipari, Italy, for pumice, a common variety mineral found in abundance in almost every state in the western United States, paying a premium for the Italian pumice, is evidence that the pumice being used is a variety of pumice not commonly found in the western United States. 74/

On marketability, the Forest Service arguments that too much weight was given to evidence presented by the Morgans merely accentuate the fact the record contains evidence supporting Judge Sweitzer's marketability finding. The absence of any Forest Service discussion of or reference to any evidence that the operation could not be operated at a profit amplifies the fact that the Forest Service tendered nothing to overcome that evidence before, during, or after the hearing. It is not enough for the

fn. 73 (continued)

Similarly, it is not surprising that the witnesses expressed a range of prices for pumice when sold as lightweight aggregate. One can reasonably expect that the estimates of both will vary from sample to sample and from sale to sale. Weight per unit volume depends on the method of measurement and the sample measured. The sales price of something like pumice depends on the competitive market at any given point in time. In fact, if there had been no range of figures for these variables we would have been suspicious. Judge Sweitzer clearly had a basis in the record for the weight and specific gravity used as a basis for his decision and we agree with his choice. Further, we find that the figures he used were based on the most consistent and credible evidence as to weight, specific gravity and price.

74/ If the Lipari material was "common variety" why was Levi Strauss importing it rather than getting its supply from one of the many common dissent pumice deposits in Texas, New Mexico, Colorado, and Arizona? The dissent quickly accepts testimony that the Italian producer was selling pumice for delivery to El Paso as firm evidence supporting his "common variety" conclusion. The evidence supporting this conclusion was not presented through testimony of industry officials associated with garment finishing and was not supported by sales slips or shipping receipts, but the dissent is very willing to accept it as true, and, at the same time, reject the testimony of the party responsible for production, sales, and delivery of garment-quality pumice as "feeble."

Forest Service to allege on appeal that too much weight was afforded certain evidence. It must also be shown that a different result will ensue if that evidence is afforded less weight. This is possible only if there is contrary evidence. In this case there is none.

We have undertaken a detailed examination of the evidence regarding anticipated sales prices and costs. Notwithstanding this fact, we also note that the Forest Service readily accepted the evidence that the Morgans were selling the pumice F.O.B. plantsite in Phoenix, Arizona, for about \$17 a yard (eight-tenths of a cent per pound) and making a profit. Claimant's witness testified that in the preceding 60 days 10,000 to 12,000 yards of White Vulcan pumice had been shipped to El Paso, Texas, stone-washing plants and that he had commitment from two plants in El Paso to accept the product for 8 cents a pound (\$172 per yard). Judge Sweitzer correctly noted that "17 percent of the deposit brings approximately ten times the price per pound that the rest of the pumice does in the market for construction related uses" (Decision at 49). It takes no mathematical genius or shipping expert to conclude that Judge Sweitzer's determination that there was a reasonable prospect that the commercial value of the deposit exceeds the cost of extracting, processing, transporting, and marketing the contained mineral was both based on the evidence and sound. ^{75/}

Judge Sweitzer's finding that no discovery of locatable mineral existed on the White Vulcan No. 1 claim at the time of the hearing is supported by the record, and we find no basis for overturning his decision. However, his conclusion that the land within that claim is non-mineral in character is stricken.

We affirm his finding that a valuable mineral deposit of an uncommon variety pumice was found on the White Vulcan No. 2 placer mining claim. The record clearly supports that conclusion. We also agree with his finding that locatable mineral has been exposed on those tracts described as tract Nos. 23, 24, 25, and 26. We amend his decision, however, by finding tract Nos. 17, 18, 19, 22, and 32 to be mineral in character. We affirm his finding that Multiple Use has failed to show by a preponderance of the evidence that tract Nos. 20, 21, and 27 through 31 are mineral in character.

^{75/} The Forest Service argument regarding the lack of evidence about the cost of transporting the material to El Paso might have merit if the potential profit margin was not substantial. A reasonably prudent operator selling at a profit in Phoenix could anticipate a profit when delivering the product to El Paso without knowing the exact shipping cost. The undisputed evidence is that, after treatment, four-fifths of the mineral material can be sold in Phoenix at less than \$20 per ton. If only one-fifth of the material could be used, it must be sold for \$80 per ton. In order to be unprofitable in this scenario, the shipping costs from Phoenix to El Paso must exceed \$80 per ton if the pumice is sold F.O.B. El Paso at 8 cents a pound. Compare this to a cost of \$8 per ton for shipping it to Phoenix. We find it reasonable for a prudent miner to assume the costs of shipping the material to El Paso will not exceed \$80 per ton.

We affirm Judge Sweitzer's finding that the preponderance of the evidence supports findings that (a) no discovery of valuable mineral existed on the claim on October 31, 1957; (b) there was no discovery of valuable locatable mineral on either claim when the ownership passed to a corporate entity capable of holding more than 20 acres in any one mineral claim. Therefore, we affirm his holding that Multiple Use would be required to select 20 regular and continuous acres from among the 10-acre tracts that are mineral in character.

By reason of our amendment of his decision, we hold that Multiple Use would be able to select the 20-acre parcel from land identified as tract Nos. 17, 18, 22 through 26, and 32. ^{76/} Multiple Use is cautioned, however, that at least one of two tracts must be chosen from among parcels 23 through 26, as the discovery lies in those tracts. If, for example, parcels 17 and 18 were selected, there would no longer be an exposure of mineral within the boundaries of the claim and it would no longer be valid.

We agree with Judge Sweitzer's finding that the preponderance of the evidence supports a conclusion that an uncommon variety of pumice exists on the White Vulcan No. 2 mining claim; and that the preponderance of the evidence presented supports a finding that there is a discovery of valuable locatable mineral on the White Vulcan No. 2. As noted previously, we would have no difficulty dismissing the contest if a patent application were not pending, but one is and we are unable to adequately discern the extent of the potential for continued sales of stone-washing pumice from the White Vulcan No. 2 claim at a price which would allow us to conclude 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. We therefore find it necessary to remand the case for the tender of further evidence on that issue.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed as modified and remanded for a further hearing.

R. W. Mullen
Administrative Judge

I concur:

Will A. Irwin
Administrative Judge

^{76/} Tract 19 is not contiguous to tract 23, 24, 25, or 26, and therefore is not available for selection.

CHIEF ADMINISTRATIVE JUDGE HORTON DISSENTING IN PART:

The vast majority of the Administrative Law Judge's decision, viz., that portion which finds the White Vulcan No. 1 placer mining claim to be invalid, is supported by a preponderance of the evidence and should be affirmed. However, both the Administrative Law Judge and the majority err in concluding that a valuable mineral deposit of an uncommon variety of pumice exists on the White Vulcan No. 2 claim. Since only a limited portion of the Administrative Law Judge's decision is not supported by the evidence, and the decision appealed from is otherwise well reasoned and succinct, this is an appropriate case to selectively incorporate and adopt the Administrative Law Judge's decision. See e.g., United States v. Melluzzo, 105 IBLA 252 (1988).

This mining claim contest evolves from a patent application filed by Multiple Use (contestee, claimant) concerning the White Vulcan No. 1 and 2 association placer mining claims. In this situation, it is not open to question that once the Government has made a prima facie case against the validity of a mining claim, it is the clear obligation of the contestee to affirmatively establish the claim's validity by a preponderance of the evidence. United States v. Crawford, 109 IBLA 264 (1989); 2 Am. L. of Mining, § 35.14[3][c] (2d ed. 1984). Here, neither the Administrative Law Judge nor the majority denies that the Government established a prima facie case as to the invalidity of all claims contested. Yet, on the basis of a record comprised only of self-serving and uncorroborated testimony of the mining operator, it has been found that the claimant met its burden of proof in this case as to a portion of its claim deemed valuable for the production of pumice for stonewashing denim. Because I do not regard the scant and conflicting testimony offered by the mining operator to be credible, I respectfully dissent.

The paucity of evidence in this case concerning the alleged unique properties of White Vulcan No. 2 pumice – and its marketability – for use in garment finishing is underscored by the following revelation of the claimant's chief expert witness, Dr. Michael Sheridan. Dr. Sheridan, described by the claimant as one of the world's "foremost experts on pumice in general and the White Vulcan claims in particular" (Contestee's Statement of Reasons (SOR) for Appeal at 7), testified in his first day of testimony that he had "just heard this morning" that pumice could be used as a "cleaning agent for denim" (Tr. 350). (In point of fact, the use of pumice in garment finishing had been occurring for at least 5 years preceding the hearing. In addition, the claimant's operator-lessee, Clarence Morgan, had even sold a small amount of pumice for this purpose, about 25 yards, 4 months prior to the hearing, at the same price obtained in sales of pumice for use as lightweight aggregate (ALJ Decision at 42 n.17).) Needless to say, having just heard of use of pumice for stonewashing, Dr. Sheridan was unable to speak to the uniqueness of White Vulcan pumice for such use and none of his studies received into evidence evaluated that use.

See, e.g., Exhibit R, containing Dr. Sheridan's October 27, 1986, report entitled "Quality and Quantity of the White Vulcan Pumice, San Francisco Peaks, Arizona." Even after learning following commencement of the hearing that pumice could be used in garment finishing, Dr. Sheridan's supplemental report on the White Vulcan pumice, prepared January 13, 1987 (Tr. 1637), still failed to include stonewashing as a specific use of pumice. See Exhibit HH. In fact, Dr. Sheridan's market study identified 28 separate industrial uses of pumice, not one of which included the use of pumice as an abrasive in garment finishing (Exhibit HH at 3).

The above summary is not related to suggest that pumice is not used in garment finishing. It is. What the record plainly shows, on the other hand, is that no mineral expert ever testified about unique properties of White Vulcan pumice for use in stonewashing. This was in marked contrast to the thorough testimony given by Dr. Sheridan, among other witnesses unaffiliated with the claimant or the operator, concerning special qualities of White Vulcan pumice for use as lightweight aggregate. In this regard, of the more than 100 exhibits introduced by the parties in the course of 10 days of hearing, none entailed the use of pumice for stonewashing or the subject for such use. 1/

Even if the claimant's expert witness had expressed knowledge about the use of pumice for stonewashing, the best evidence about the needs of the industry would still be expected to come from industry users. Of all the evidentiary failures of the claimant, upon whom the duty devolves to prove the validity of its claim, the failure to produce any testimony by alleged users of pumice for garment finishing is the most startling. Contestee clearly did not run this risk in its lightweight aggregate presentation. Extensive testimony was adduced by the contestee from witnesses who had purchased or used it pumice for lightweight aggregate purposes. See, e.g., Testimony of Dean Lufkin, Tr. 1340-41; Howard Pugh, Tr. 1663-85; and Dale Bedenkop, Tr. 1685-1722. It is obvious that claimant's counsel well knew through prior Departmental adjudication that the Department places great stock in uncommon variety cases on the testimony of witnesses willing to part with money in arm's length transaction with the seller. See United States v. McCormick, 27 IBLA 65 (1976) (14 of the 22 pages of the majority opinion in McCormick review the testimony of four separate users of the claimant's mineral aggregate).

Not only is the record devoid of any testimony from purchasers of pumice for garment finishing as to why claimant's pumice was purchased

1/ The only "documentary" material cited in the majority opinion is the 1987 Minerals Yearbook, Vol. 1, published by the Bureau of Mines. The yearbook reports that in 1986 "the use of pumice and pumicite as an abrasive increased 71%, primarily owing to the large demand for use in washing designer jeans." To the degree pertinent to this case, this information confirms that a common use of pumice as an abrasive in 1986 was stonewashing. The yearbook gives no indication that there is only a limited supply of pumice suitable for this purpose, nor is the price of pumice sold for stonewashing use in 1986 reported.

and at what cost, ^{2/} the record reveals that the operator, Clarence Morgan, never made any direct sales of White Vulcan pumice to users, thereby qualifying him to state why his pumice was purchased and the value of any such transactions. Through the conclusion of the hearing, the only direct sales testified to by Clarence Morgan involved sales to an unidentified "middleman" – "[w]e sell it for \$12 a yard and they pick it up at the pit" (Tr. 1295). This is no more, and in some cases is even less, than sales of pumice for lightweight aggregate. See Testimony of Clarence Morgan, Tr. 1190 ("our product is \$24 a yard" delivered in Phoenix); Wesley Morgan, Tr. 1353-54 (pumice sells for "\$25 to \$28 per ton at the pit" and the price per ton is "almost exactly" twice the price per yard); Brian Tognoni, Tr. 1006 ("Morgan presently receives \$24 a yard from the White Vulcan pumice, delivered in Phoenix"); and Clarence Morgan, Tr. 1294 (he has sold pumice for lightweight aggregate buyers from Los Angeles at \$17 per yard "FOB our yard" (meaning, presumably, the company yard in Glendale)). That the above prices are at least the equivalent of \$12 per yard received by the claimant for pumice sales for garment finishing is clearly evident, based on the testimony of claimant's own witnesses.

Notwithstanding the above, the majority opinion concludes that the weight of the evidence supports a finding that the air-fall pumice sold for use in stonewashing denim commands a premium over and above the value of air-fall pumice sold for common variety uses. Since the testimony of contestee's witnesses refutes rather than supports such a conclusion, it behooves the Board to focus carefully on what possible evidence points in this direction.

Two sources were noted by Clarence Morgan for the proposition that White Vulcan pumice has a value to the garment finishing industry greater than the \$12 per yard he has been able to sell it for. The first source is referred to by Clarence Morgan as a "guy" he sells pumice to, who then "sells it to them" (Tr. 1242). Presumably this "guy" is part of the "they" who "pick it up at the pit" for \$12 per yard (Tr. 1295). While Mr. Morgan stated that he would sell the pumice "for one cent; well, a little over, about a cent and one-half" per pound (Tr. 1294), he testified that the "guy" he sold it to received 11 cents per pound for the material (Tr. 1295). It is apparently this testimony on which the Administrative Law Judge based a finding that the deposit in question "brings approximately ten times the price per pound" as pumice sold for construction related uses (ALJ Decision at 49). The second source is identified in but one sentence, following Mr. Morgan's statement that he sells the pumice at

^{2/} Of the over 1,700 pages of transcript from the hearings, no more than 18 pages entail testimony concerning the use of pumice for stonewashing. The majority refers to Judge Sweitzer's "lengthy quotes from the transcript" concerning the evidence on stonewashing (Opinion at 96, 108). However, virtually all testimony on this use was set out in the decision below.

the pit for \$12 per yard. As this one sentence of testimony out of a hearing transcript of over 1700 pages appears to form the crux of the majority's finding of locatability and marketability, it is quoted in its entirety: "But now we have verbal approval of two plats [sic] there that will take about six loads a week, bulk, at eight cents a pound [delivered]" (Testimony of Clarence Morgan, Tr. 1295).

Regarding the above alleged agreement, the majority at least recognizes that the matter agreed to might possibly constitute a limited or isolated transaction and that further evidence on this score is required (Opinion at 125). However, this possibility is one the claimant should have sought to dispel at the hearing by, at a minimum, calling the alleged unnamed purchaser or purchasers to testify. Such evidence is precisely what the Board and the Administrative Law Judge looked to in the last "prospective market" uncommon variety case adjudicated. United States v. Foresyth, 100 IBLA 185, 94 I.D. 453 (1987). In Foresyth, a finding of marketability of limestone turned on thorough, detailed, and documented evidence of a specific prospective market to Calco, Inc., as testified to extensively by Calco officers, among others. The distinction between the alleged verbal agreement in this case with parties unknown and the specific commitment established by a preponderance of the evidence in Foresyth is patently obvious. This claimant has had its day in court and is not now entitled to a second chance to prove the validity of its claim. I therefore disagree with the limited remand ordered by the majority to explore this "narrow point" (Opinion at 124).

Contestee never seeks to explain why the unidentified middleman ^{3/} or the unidentified prospective direct sale purchasers were not or could not be called for direct testimony in this proceeding. Without their direct testimony, the answer to questions vital to contestee's case is missing. For example, even assuming that the unidentified middleman did sell White Vulcan pumice to garment finishers at prices considerably higher than the amount he paid Mr. Morgan, how are we to know that such price was obtained because of "unique properties that give the mineral a distinct and special value," as required by McClarty v. Secretary of the Interior, 408 F.2d 907

^{3/} There is testimony which suggests that in lieu of learning directly from the unidentified middleman that he was selling White Vulcan pumice for 11 cents per pound to garment finishers, such information was told to Clarence Morgan by a host of other unidentified persons. Thus, in answer to the question whether the middleman was "making a little margin off of" purchases from Clarence Morgan, Morgan replied: "Yes, he was. The reason we found out about it was 15 companies across the nation called us and tried to buy it from us" (Tr. 1295). Testimony that one unidentified source reported what another unidentified person obtained in sales to an unidentified purchaser is not particularly probative. It is clearly not evidence on which the Secretary should be basing decisions bearing on the retention or patent of Federal lands.

(9th Cir. 1969)? The Secretary is entitled to that minimal showing, sparing speculation that perhaps the middleman enjoyed a favored business relationship with the buyer, that there was a temporary inability of regular sources to make expected deliveries, or any other possible basis no matter how odd.

Further, because the claimant introduced no evidence regarding the cost of loading and transporting White Vulcan pumice for the garment finishing market, the economics of effecting sales of pumice at a delivered price of 8 cents per pound was not established. One of the undisputed facts emerging from the record is that transportation costs are a major factor in the economics of pumice mining and operations. See Testimony of Dr. Sheridan, Tr. 1623; see also Testimony of Wesley Morgan, Tr. 1351 (we're only competitive because of the ease of mining") and Tr. 1353 ("so half our cost on a retail basis is transportation").

It is well established that when a party has relevant evidence within its control which it fails to produce, when such evidence would be expected to be produced under the circumstances, such failure gives rise to the inference that the evidence is unfavorable. Twin Arrow, Inc., 118 IBLA 55 (1991); Patricia Alker, 79 IBLA 123 (1984). Contestee's presentation abounds in the absence of relevant evidence within its control and the adverse inference rule is properly invoked.

The majority justifies its singular reliance on the testimony of the mining operator, unsupported by any documentary evidence or industry or expert testimony, on two bases. First, it seeks to portray Clarence Morgan and his brother, Wesley Morgan, as neutral witnesses inasmuch as they do not own the claims. It is simply not credible, however, to regard either of these individuals as having other than a major property interest at stake in the outcome. The Morgan brothers have operated the subject claims as a lessee of Multiple Use, Inc. (Multiple Use), since 1979, or over 7 years by the time of the hearing. This property interest would cease upon a final determination that the claims are invalid. ^{4/} Moreover, Clarence Morgan testified that his company, Arizona Tufflite, owns

^{4/} Contrary to the conclusions reached by the majority, the record does not support a finding that the "Forest Service made sure that they [the Morgans] would have no economic motive to favor Multiple Use" (Opinion at 98 n.37). Howard Wirtz of the Forest Service was questioned concerning allegations that the Government had promised preferential sales or a "lease" to the Morgans, if the claims were found invalid:

"Q. Did you ever represent to the Morgans that if they assisted the government in preparing its case, that they would somehow be given some sort of a preferential or special treatment in these future purchases of minerals in the claims and that sort of thing?

"A. No, I certainly made no such offer. And the fact that it was called a lease is ridiculous, because the government only leases leasable minerals, which oil and gas are probably the main ones, sulfur and a few other things. No lease would even be considered, and I myself would not be a party to handling such contractual work if it was to be purchased by them. So I made no such offer."

and leases other claims in the area of the White Vulcan claims. See Tr. 691, 696-97, 1060. For all of these reasons, it is understandable if the Morgans favor a determination that the White Vulcan claims were valid claims.

It is also a stretch to cast the Morgan brothers as expert witnesses. It is not denied that they may be quite familiar with the deposit leased by them from Multiple Use. However, familiarity with the claims they operate, which would be expected, does not make them mineral experts beyond that. For example, Wesley Morgan, a sales specialist, has degrees in Philosophy and English. 5/ More to the point, neither of these witnesses testified that they had ever visited or seen garment finishing operations or that they otherwise knew, first-hand, the pumice needs of the industry.

The second basis offered by the majority for reliance on the testimony of the Morgan brothers, most particularly that of Clarence Morgan, is that their testimony was generally accepted by the Administrative Law Judge regarding the stonewashing issue and that the Board should therefore be deferential to credibility determinations made by him. However, the testimony of the Morgan brothers raises many more questions than are ever answered. For example, as to the simple but critical issue of the alleged oral agreement to sell pumice directly to two plants at 8 cents per pound, Wesley Morgan, in testimony noted by the majority, stated that the first such shipment had been made on January 15, 1987 (Opinion at 99, 124). Clarence Morgan, the president of the company, testified that the first direct shipment would be made the following month, i.e., in February 1987. The majority favors Wesley Morgan's version. In the absence of any corroboration by the unnamed alleged purchaser, I find neither version to be credible.

The large quantities of pumice allegedly sold to the unidentified middleman during the 60-day period preceding the hearing (10,000 to 12,000 yards, or, in the majority's calculation, 9,000 to 11,000 tons) also brings the credibility of the Morgans into question. The 1987 and 1988 Minerals Yearbook notes that the total tonnage of pumice and pumicite sold and used by producers in Arizona in 1986 was 2,000 short tons and in 1987 and 1988 was 1,000 short tons. Thus, in a mere 2 months the Morgan brothers' single operation vastly exceeded total sales State-wide for all 3 years.

Moreover, while the 1988 Minerals Yearbook recognizes the continued growth of the designer jeans market, the total production for all abrasive

5/ The majority places greater reliance on Wesley Morgan's testimony regarding alleged special properties of white Vulcan pumice. However, among Wesley Morgan's revelations at the hearing were these statements: "[T]he term aphrylic is brand new to me and i had not heard it prior to the hearings in these proceedings" (Tr. 1355-56); "Splitting tensile strength, I really don't know what that means" (Tr. 1360); regarding the petographic analysis, "I really don't know what that really means" (Tr. 1368); and "I don't know what a phenocryst is" (Tr. 1372).

uses in 1987 was 29,000 tons and in 1988 was 36,000 tons. Claimant's projected deal (six truckloads per week) would result in an annual production of 14,508 tons (50 yds x 6 truckloads x .93 x 52 weeks), or more than half the total production in 1987 and roughly 40 percent of the entire production for abrasive use in 1988. Furthermore, the total value of pumice sold for abrasive use was \$719,000 in 1987 and \$846,000 in 1988, in effect averaging \$24.80 per ton in 1987 and \$24.40 per ton in 1988. The projected value of claimant's production at \$160 a ton (8 cents per pound) would be \$2,321,280 or 3 times the entire 1987 value of pumice sold and used by domestic producers for all abrasive use and 2-1/2 times the 1988 total value.

Also, given the fact that the use of pumice for stonewashing jeans markedly increased from 1987 and 1988, the fact that the per-ton value fell would indicate that the average value of pumice used for stonewashing jeans was less than the average value of pumice used for other abrasive uses.

It is wrong to suggest, as the majority does numerous times, that it was incumbent on the Forest Service to adduce the testimony of users involved with stonewashing. There are at least four reasons why the Forest Service was under no obligation. Foremost, as has already been noted, once the Government establishes a prima facie case that a contested claim is invalid, which all reviewing officials concede was achieved, the full burden of proof shifts to the contestee to prove the validity of its claim by a preponderance of the evidence. By virtue of the testimony of its two expert witnesses, Howard Wirtz and Hilton Cass, and the extensive documentary evidence entered into the record through their testimony, the Administrative Law Judge had no difficulty finding that a prima facie case was established.

Second, the record contains no evidence whatsoever that up to the commencement of the hearing in this case, and through the first half of the hearing held from October 27 through October 31, 1986, that any more than 25 cubic yards of pumice had been sold from the subject claims for stonewashing or that the price obtained for this use exceeded that for which the White Vulcan deposits produced from other sales. It would have been more reasonable for the Government to have garment finishing experts waiting in the wings at the start of this proceeding than it would have been to line the corridors with representatives from broiling rock, floor sweep, and cat litter industries, which, unlike stonewashing, are at least some of the markets identified in the claimant's amended patent application as present uses of White Vulcan pumice. See Exhibit A at 6. No one questions the fact that from the time of the prehearing conference in this case in May 1986, through the conclusion of the hearing on October 31, 1986, this contest was seen by the parties as a lightweight aggregate case.

Third, at no time during the 60-day recess from November-December 1986, when pumice from the White Vulcan claims allegedly was purchased for stonewashing at prices considerably in excess of the value of pumice sold for aggregate, nor any time preceding the resumption of the contest

hearing on January 13, 1987, did the contestee seek to (1) further amend its patent application to denote this use, or (2) notify the Administrative Law Judge or the Government of this new realm of evidence on which its claim of validity might be based. This failure violated the spirit if not the letter of the Administrative Law Judge's October 10, 1986, Pre-Trial Order and resulted in an evidentiary proceeding into factual issues which only one party to the case was ostensibly prepared to try.

Fourth, following contestee's presentation of its case, it was clearly apparent to the Forest Service that the contestee had failed to establish the validity of its White Vulcan claims on the newly alleged ground that they contained an uncommon variety of pumice for use in the garment finishing industry. This rendered it unnecessary to seek to exact from the contestee the identity of its unidentified sources of information or to seek a continuation of the hearing so that such sources or other industry witnesses might be called. ^{6/}

Testimony overlooked or only scarcely noted by the majority opinion includes evidence to the effect that air-fall pumice is the most common type of pumice deposit (Tr. 712); White Vulcan pumice is similar to the major deposit from Lipari, Italy, which is 100 to 1,000 times larger than the White Vulcan deposit (Tr. 355) and is also similar to the Bishop deposit in California, which is 1,000 to 10,000 times larger than the White Vulcan claims (Tr. 356). There is also evidence that the garment finishing market in El Paso, Texas, had recently been receiving shipments from a source in New Mexico (Tr. 126). Although the Administrative Law Judge and the majority conclude that 17% of the White Vulcan No. 2 deposit consists of "oversized" material that can be sold at premium prices for use in stonewashing, the record establishes that contestee also sells its oversized pumice for at least two other uses, decorative fronts (Tr. 1020) and broiling rock (Tr. 1022).

^{6/} The majority charges that in its SOR, the Forest Service acknowledges that "Arizona Tufflite, Inc., was able to capture the Levi Strauss account" (Opinion at 99, 100, 133). The majority misinterprets what the Forest Service argues. The argument given was that though Clarence Morgan "testified that pumice from Lipari, Italy was used to supply the Levi Strauss market in El Paso until the Morgans captured that market with their lower priced product * * * the fact that Arizona Tufflite, Inc. was able to capture the Levi Strauss account because the White Vulcan No. 2 pumice was located closer to El Paso, Texas, than an almost identical deposit at Lipari, Italy had absolutely nothing to do with whether it had unique properties" (Forest Service SOR at 11). Government counsel was merely responding to testimony by Clarence Morgan for the purpose of explaining that "the factor of location is extrinsic to the deposit, not intrinsic" and that "it is therefore not proper to consider location in deciding whether a deposit contains unique properties." *Id.* Even assuming that the phrase from the Forest Service brief highlighted by the majority was somehow a Government statement noting that White Vulcan pumice had captured the market in El Paso, which it obviously is not and which would be contradictory to its brief as a whole, it matters not. The record does not support such a finding.

Returning to one of the principal failures of the claimant's case – the failure to call any users from the garment finishing industry – it is impossible to make any comparisons of White Vulcan pumice used for stonewashing with pumice used or available from New Mexico, California, or other state and foreign markets. This includes comparisons as to alleged special properties of White Vulcan No. 2 pumice as well as what industry has paid or is willing to pay for contestee's product in relation to other pumice on the market. And, as previously noted, the only expert witness called to testify on claimant's behalf was unable to speak to whether the subject pumice contained unique properties giving the mineral a "distinct and special value" for use in stonewashing jeans. See McClarty v. Secretary of the Interior, *supra*.

It is, of course, not for the Government or this Board to prove the validity of the contestee's mining claim following a patent application and a contest hearing brought in response thereto. Such duty devolves solely upon the claimants. United States v. Crawford, *supra*. Here, it would be an injustice to the public to allow the feeble, 11th hour attempt by Multiple Use to show a "newly established market" for its pumice with no effort by the contestee to produce testimony by user witnesses, any documentary evidence, or any expert testimony, and relying instead on self-serving, contradictory testimony of the mining operator. In lieu of requesting a continuation of the hearing so that probative evidence could be gathered and offered in support of its new contention, contestee elected to surprise the Government with a stonewashing case based on vagueness and speculation. If contestee had better evidence available, it obviously did not want any such evidence subjected to close scrutiny or cross-examination. The scant record as developed by the contestee in lieu of evidence that could be considered probative cannot, under any reasonable evaluation of the hearing, result in a finding that the White Vulcan No. 2 claim is valid. ^{7/} Nor should the claimant be afforded a further opportunity to make its case, as the remand ordered by the majority allows. If a further hearing is justified, it is warranted on more than the narrow point prescribed by the majority and should delve completely into the record of sales alleged by the claimant between November and December 1986, including industry corroboration as to the price paid for White Vulcan pumice, and, if such price exceeded that for which pumice is generally purchased, explanations as to why.

^{7/} The majority chooses to perceive that the dissent has crafted new evidentiary standards for mining claimants. This is erroneous. It could not be more plain that the infirmity of contestee's case is that it failed to adduce by credible evidence the unique properties for and the value of its pumice to the stonewashing industry. Had even one industry witness been called to testify concerning that which the contestee would have us believe is true, the claimant's case would be significantly advanced. For whatever reason, contestee chose not to place on the stand anyone with first-hand knowledge about the pumice needs of the garment finishing industry. No amount of direct or cross-examination of the Morgans, who never made any

For all of these reasons I dissent to the majority opinion's disposition of this appeal as it relates to the White Vulcan No. 2 claim.

Wm. Philip Horton
Chief Administrative Judge

fn. 7 (continued)

direct sales of pumice to the garment finishing industry and who never testified that they had seen garment finishing operations or met with representatives of this industry, would serve to prove the value of White Vulcan pumice to garment finishers. "Proof" is the glaring missing element in contestee's case. The majority has effectively replaced the preponderance of the evidence standards with a determination that "some" evidence of validity, regardless of its probativeness, is all that need be shown.

