

UNITED STATES
v.
ROBERT W. AND MARJORIE E. MILLER

IBLA 2003-342

Decided May 9, 2005

Appeals from a decision of Administrative Law Judge Andrew S. Pearlstein dismissing a Government contest complaint challenging the validity of a lode mining claim. Contest No. Colorado 762.

Affirmed.

1. Evidence: Burden of Proof--Mining Claims: Contests--Mining Claims: Determination of Validity--Mining Claims: Discovery: Generally

When the Government contests a mining claim based on a charge of lack of discovery of a valuable mineral deposit, it bears the initial burden of going forward to establish a prima facie case in support of that charge, whereupon the claimant has the ultimate burden of persuasion to overcome that case by a preponderance of the evidence. The burden is different, however, for the contestee when a contest is filed as the result of a patent application. In such a situation, it is well settled that the Government must make a prima facie case in support of its charges and that, upon such a showing, the claimant must establish that the claim is valid, even apart from the issues raised in the prima facie case.

2. Evidence: Generally--Evidence: Sufficiency--Evidence: Weight--Rules of Practice: Evidence

Although this Board has de novo review authority, we ordinarily will not disturb a Judge's findings of fact based on credibility determinations where they are supported by

substantial evidence. The basis for this deference is the fact that the Judge who presides over a hearing has the opportunity to observe the demeanor of the witnesses and is in the best position to judge the weight to be given to conflicting testimony.

APPEARANCES: Paul Zogg, Esq., Boulder, Colorado, for Robert W. and Marjorie E. Miller; Daniel B. Rosenbluth, Esq., Senior Counsel, Office of the General Counsel, U.S. Department of Agriculture, Denver, Colorado, for the Forest Service.

OPINION BY DEPUTY CHIEF ADMINISTRATIVE JUDGE HARRIS

The Forest Service, U.S. Department of Agriculture (Forest Service), and Robert W. and Marjorie E. Miller have appealed from a July 31, 2003, decision of Administrative Law Judge Andrew S. Pearlstein, concluding that the claimants (Millers) had overcome, by a preponderance of the evidence, the Government's prima facie case concerning the existence of a discovery of a valuable mineral deposit on the Robin Redbreast Lode mining claim, CMC-164159, and dismissing the Government contest complaint challenging the validity of the claim on that basis.

I. Factual and Procedural Background

In 1890, a group headed by a Montrose, Colorado, banker located the Brutus mining claim in the approximate area of the present claim. That group abandoned the claim after constructing what is referred to in the record as the Brutus shaft. Thereafter, in 1896, Alexander Van Boxel located one or more claims on the same lands and conducted some mining activities, which apparently concluded in or around 1903. On July 7, 1938, three men, including Marjorie Miller's father, Elmer Eipper, located the Robin Red Breast lode mining claim and four other claims in the same area. In 1953, Eipper conveyed his interest in the Robin Red Breast lode mining claim to the Millers. (Tr. III at 9-21.)^{1/} On February 1, 1980, BLM declared that claim abandoned and void, along with four other claims held by the Millers. See Robert W. Miller, 51 IBLA 364 (1980). On August 31, 1980, the Millers relocated the Robin Red Breast claim as the Robin Redbreast Lode mining claim, CMC-164159. The lands embraced by the Robin Redbreast Lode claim are located in sec. 34, T. 45

^{1/} The transcript of the hearing is in five volumes, each representing a separate hearing day and each separately paginated. We will adopt Judge Pearlstein's convention for citing to the July 23, July 24, July 26, Sept. 10, and Sept. 11, 2002, hearing transcripts as Tr. I, Tr. II, Tr. III, Tr. IV, and Tr. V, respectively, referencing the relevant page number(s) in that volume.

N., R. 6 W., New Mexico Principal Meridian, Hinsdale County, Colorado, within the Uncompahgre National Forest. The Millers own four other lode mining claims, the Senator, President, Governor, and Boulder, in secs. 34 and 35 of that township.

The lands are situated four miles northwest of the 14,309-foot Uncompahgre Peak in the Porphyry Basin of the San Juan Mountains, within the Uncompahgre (formerly Big Blue) Wilderness Area.^{2/} The lands included in that wilderness area were withdrawn from all forms of appropriation under the mining laws, effective January 1, 1984, subject to valid existing rights. 16 U.S.C. § 1133(d)(3) (2000); see 94 Stat. 3268 (1980).

No road leads to the claim. Access is by means of a trail approximately 3.25 miles in length, the first 2.25 miles of which follow the Middle Fork Forest Service trail southward from a trailhead at an elevation of approximately 10,000 feet near the wilderness boundary along the Middle Fork of the Cimarron River. (Decision at 5.) An unsigned trail, known as the Porphyry Creek Trail, then branches off, proceeding uphill and generally eastward for approximately one mile to the claim. Id. at 6. The trailhead is approximately 43 miles by road from the Millers' home in Montrose, Colorado, and approximately 30 miles by road from the closest town, Ridgeway, Colorado. Id. The last four miles of road to the trailhead are "rough dirt, but passable for any pickup truck or high clearance vehicle." Id.

The Robin Redbreast Lode claim has an east-west orientation. The North and South Forks of Porphyry Creek flow onto the claim, joining near the western end of the claim, as Porphyry Creek, and exit the western boundary of the claim. (Decision at 6.) The Millers maintain a cabin near the confluence of the North and South Forks. (Ex. 3 (Forest Service Mineral Report, dated July 1, 2002), Figure 2.) Porphyry Creek is a tributary of the Middle Fork of the Cimarron River. Id. Heavy snows normally limit access to the claim to three months, July, August, and September. Severe summer thunderstorms are frequent. (Ex. 1 at 66.)

The main portion of the mineralized gold-bearing quartz vein that is of interest in this case, referred to as the Robin Redbreast vein, lies along and below the course of the North Fork of Porphyry Creek. (Decision at 6.) That vein, exposed on the surface of the claim for over 100 feet when not covered by rock and soil, strikes east-west and varies in width from one to eight feet. Sometime after 1896, Van Boxel constructed a small dam to divert the North Fork of Porphyry Creek and excavated a

^{2/} Congress established the wilderness area on Dec. 22, 1980, pursuant to section 102(a) of the Colorado Wilderness Act of 1980, Pub. L. No. 96-560, 94 Stat. 3265.

shaft on the west side of the creek to a depth of approximately 22 feet, ran a drift easterly under the creek and mined from that drift into a raised area identified in the record as the “raise,” the Van Boxel Stope, or the Covered Shaft.^{3/} (Decision at 7.) Marjorie Miller testified that Van Boxel discontinued mining after his dam broke and water carried rock and debris down the creek, filling his workings. (Tr. III at 10-11.) Sometime after 1938, Eipper and one of his partners used the erosive power of water to uncover the vein and the Van Boxel shaft by diverting the South Fork of Porphyry Creek into the North Fork of Porphyry Creek. (Decision at 7.) Having determined the location of the vein and the shaft, they commenced construction of an adit near the South Fork of Porphyry Creek approximately 450 feet west of the Van Boxel shaft in an attempt to access the mineralized vein at depth and avoid the danger of repeated floodings and rockslides in the North Fork drainage. The area where the adit is located is designated on claim maps (e.g. Ex. 3, Figure 3) as the Porphyry Basin Mine. Eipper worked on the adit, at times with the help of the Millers, using a hand drill and hammer. (Tr. III at 20-21.) The 5 x 6½-foot adit reached a length of about 35 feet. (Ex. 1 at 45, 462.) There is no evidence that the vein was ever exposed in the adit. Eipper never produced any ore from the claim. (Tr. III at 20.) Eipper made his last trip to the claim in 1958, the same year that a snowslide “actually jumped a cliff and tore 200 year old Englemann spruce out by the roots and tossed them a quarter mile down south Porphyry Creek.” *Id.* at 21. That snowslide ruined the old cabin that Eipper and the Millers had been using while working on the claim. The Millers sought permission from the Forest Service to construct a new cabin. The Forest Service approved, but required the construction of a concrete foundation. The Millers located the new cabin near the adit and for a while tried to work on the adit and the cabin, but then turned their attention to the cabin. *Id.* at 21. Construction was extremely slow because, at that time, and up until 1994, the Millers lived in New Mexico.

In 1980, the Forest Service solicited a plan of operations for the claim from the Millers and, in October 1980, the Millers filed a plan proposing to continue to drive the adit to intercept the Robin Redbreast vein below the Van Boxel workings.^{4/} The Millers were unable to meet Forest Service personnel on the claim in 1981 to allow

^{3/} A narrower split of the vein extends southeasterly from a point near the Van Boxel shaft. (Decision at 18.)

^{4/} At the time of their relocation of the claim in 1980, the Millers identified their “point of discovery” as “located approximately 600 feet upstream on the North Fork of Porphyry Creek from the point where it unites with the South Fork of Porphyry Creek.” (Ex. 3 at Attachment 1.) That point is in the immediate vicinity of the Van Boxel Shaft and Stope. *Id.* at Figure 3.

inspection, but did meet on the claims the following season in August 1982 with three representatives of the Forest Service, including the District Ranger, Ouray Ranger District, who by letter dated September 7, 1982, recounted their discussion with the Millers regarding the upcoming January 1, 1984, withdrawal of the lands. He noted that on that date lands within the wilderness area would be closed to location and entry under the mining laws, subject to valid existing rights, which would include preexisting mining claims on which there was a discovery of a valuable mineral deposit on that date. He stated that “[d]riving your adit as you have proposed in your operating plan and as you have in the past, appears to offer no chance of reaching your targeted ore body.” He advised that, in view of the status of future operations in wilderness areas, “it may be appropriate for you to reconsider your operating plan.” (Ex. 1 at 53.)

On March 9, 1983, the Forest Service received a letter from the Millers expressing their pleasure in having met with the Forest Service representatives in August 1982 and detailing their efforts on the claim in 1982,^{5/} when they worked on the claims for 25 days, and expressing their hope to clear the Van Boxel shaft and sample the floor in 1983. They stated that, if they could rent a drill to take in on horseback, they “intend[ed] to drill in the north fork of Porphyry Creek in an attempt to prove and delineate the ore body.” (Ex. 1 at 55.) The Forest Service responded by letter dated March 29, 1983, informing the Millers that it believed “the plan you submitted to us can be revised based on your recent letter” and that it hoped “to complete the needed paperwork prior to the area becoming snow free.” (Ex. 1 at 56.) On August 22, 1983, the Forest Service approved the plan in a Decision Notice accompanying an environmental assessment and finding of no significant impact. (Ex. 1 at 69.) In the Decision Notice, the Forest Service stated that it was selecting the alternative that allowed the use of mechanized equipment, “specifically a rock drill, water pump and chain saw for obtaining surface and subsurface samples from the Van Boxel shaft and from the vicinity of the North Fork of the Porphyry Creek.” *Id.* It further stated that the alternative offered “a reasonable opportunity for proving the validity of the mining claim” because it provided “opportunities for subsurface sampling that were lacking in the other alternatives.” *Id.*

The record shows that in the summer of 1983, prior to plan approval, the Millers had been working diligently to clear the Van Boxel shaft. They uncovered Van Boxel’s ladder and “[o]n September 2 [the Millers] took out Van Boxel’s iron-bound oaken mine bucket, which had been sitting in the shaft * * *” and “contained

^{5/} “In 1982, knowing that the deadline was fast approaching for the discovery of ore, we decided not to do any more work on the tunnel, but to concentrate on finding the ore body.” (Tr. III at 55.)

the miner's hammer and gad, along with a sack of coal.” (Ex. 1 at 127).^{6/} They pumped water out of the shaft and found that when they were down about 20 feet, “the pump suddenly could not handle the water.” *Id.* at 126. They continued to pump and bail and “discovered that Van Boxel had a drift leading off the shaft, meaning much more water per inch of depth.” *Id.* However, on September 13, 1983, when two Forest Service employees, Lewis French, a forester, and John Hill, a geologist, visited the claim to conduct an inspection, the Millers “could not get the Van Boxel shaft pumped out so they could inspect it.” *Id.* Subsequently, the Millers did get the shaft and drift cleaned out and “discovered a raise of fifteen feet at the end of the diggings.” *Id.* The Millers collected several samples during the time that they had the workings cleaned out. They recounted that they took a sample from a pile of ore at the bottom of the shaft next to Van Boxel's bucket that “assayed an ounce of gold.” *Id.* They also stated that they assayed three samples of “mineral that had fallen from the raise at the end of the drift” and that “[t]wo of them ran 0.43 and 0.35 ounces of gold.” *Id.*

Thus, in 1983, the Millers were able to excavate the Van Boxel shaft and the drift and get the Van Boxel stope “open enough you could get into it and see what it was like.” (Tr. III at 27-29.) At the time they left the claim in October 1983, the Millers had “the complete Van Boxel's workings open.” (Tr. III at 34.) They left a lid of two-inch boards over the shaft opening and placed sandbags between the opening to the shaft and the creek. (Ex. 1 at 127.)

By letter to the Millers dated January 24, 1984, the Forest Service notified them that, given the January 1, 1984, withdrawal, it was suspending their plan of operations pending a validity determination of the claim.^{7/} The Millers responded that they would “of course do no more mining or prospecting on the claims in Porphyry Basin, but will have to do some necessary maintenance while we wait for your evaluation.” (Ex. 1 at 127.) The Millers requested that a mineral examination be conducted, but indicated that due to their work schedules, the summer of 1985 would be the best time. The Forest Service agreed, but pointed out that “there are some additional risks involved for you” because “[a]nother winter and spring may destroy all the work that you accomplished last year.” (Ex. 1 at 128.) By letter to the

^{6/} Ex. 1 at 126-27 is a letter dated July 7, 1984, from the Millers to the Ouray District Ranger explaining their activities on the claim in 1983.

^{7/} Suspension precluded mining operations, but the Millers were allowed to maintain workings, sample exposed veins, and conduct annual assessment work, pending a final determination of the validity of the claim. (Tr. I at 29-31, 80-81, 107-08; Tr. III at 17, 36-37; Ex. 1 at 124, 206; Ex. 2 at 1; Ex. 9 at 2.)

Ouray District Ranger, dated March 29, 1985, the Millers stated that they had made it to the claims in Porphyry Basin during four weekends in the summer of 1984 and that the barrier they had erected around the Van Boxel shaft had kept the creek out and the lid over the opening was intact. (Ex. 1 at 129.) They further stated that they would “attempt to have the Van Boxel shaft available for your inspection” in the summer of 1985.

On August 21, 1985, four Forest Service employees, including Hill, visited the Robin Redbreast Lode to conduct a mineral examination. Although Hill was able to take several samples, he was unable to access the area at the end of the drift because it had caved in. (Ex. 1 at 139.) In a letter to Hill dated October 6, 1986, the Millers stated: “Thanks to that cave-in in the drift, we feel that it was impossible this year to prove or disprove the presence of ore in the Van Boxel mine.” *Id.* They requested that the Forest Service return the following summer to re-examine the claim.^{8/} On November 20, 1985, the Forest Service agreed, but due to a reassignment of Hill, no examination took place in the summer of 1986.

By letter dated May 13, 1987, the Ouray District Ranger informed the Millers that John S. (Rusty) Dersch, a Forest Service geologist, would be conducting a mineral examination of the Robin Redbreast Lode claim between August 31 and September 4. He requested that the Millers be sure to have the workings pumped free of water by August 31; that Dersch would want to go underground to inspect the area that was blocked by the cave-in; and that he might duplicate some of the work conducted by Hill in order to have first-hand knowledge of the claim. (Ex. 1 at 150.)

Dersch and other Forest Service employees traveled to the claim on September 1 and 2, 1987, in order to conduct a mineral examination. During that examination, Dersch took surface samples and an underground sample, but he was unable to access the stope. By letter dated April 29, 1988, the Forest Service informed the Millers that Dersch’s initial conclusion regarding their claim was that there was no discovery of a valuable mineral deposit. In a letter dated May 12, 1988, to the Ouray District Ranger, the Millers thanked Dersch and the others for their examination of the claim, but noted that they had been unable to sample the stope. (Ex. 1 at 160.) The Millers explained that they had discovered in the summer of 1987 that there had been a surface breakthrough into the stope and that alluvium had been funneled into the stope. They stated that before they left the claim in September they had covered that breakthrough area to prevent more loose material

^{8/} The Millers added that they had taken “a sample of the floor of the drift where Bob had you sample. You do not need to assay that particular sample. It is nothing but altered tuff.” (Ex. 1 at 139.)

from entering the stope and that they believed that they could now clean out the stope. Id. They stated that “[a]s long as the stope remains unsampled, we cannot relinquish the Porphyry Basin claims” and they requested an opportunity to get the stope opened for sampling. Id. The Forest Service granted that request and it was agreed that Dersch would examine the claim again in the summer of 1988. (Ex. 1 at 163.)

On August 30 and 31, 1988, Dersch conducted an examination of the claim. The record shows various communications between the parties regarding possible further examinations of the claim by the Forest Service, but none took place and, by letter dated October 25, 1990, the Ouray District Ranger notified the Millers that he had spoken to Dersch and that Dersch had indicated that he had sufficient information to proceed with his mineral report. (Ex. 1 at 175-80.) Dersch completed that report on August 1, 1991.

On February 4, 1992, BLM, at the request of the Forest Service, issued a contest complaint alleging, inter alia, “[n]o valuable mineral deposits have been discovered within the boundaries of the Robin Redbreast Lode.” The Millers filed an answer to the complaint and on May 25, 1993, Administrative Law Judge John R. Rampton, Jr., held a hearing on the contest in Montrose, Colorado, and on November 21, 1993, issued a decision declaring the claim invalid. He ruled that the Millers had failed to overcome the Government’s prima facie case that the claim was not supported by the discovery of a valuable mineral deposit as of the time of the 1984 withdrawal and the 1993 hearing. In a decision dated February 26, 1997, we reversed Judge Rampton’s decision and dismissed the contest complaint. United States v. Miller, 138 IBLA 246 (1997). Therein, we ruled that Judge Rampton had erred, as a matter of law, in stating that he was required to consider all evidence presented by both parties in determining whether the Government presented a prima facie case. We held that the determination of whether or not the Government has presented a prima facie case is to be made solely on the evidence adduced during the Government’s case-in-chief, which includes testimony elicited in cross-examination. United States v. Miller, 138 IBLA at 269. As we cautioned therein: “Evidence presented by the contestees in their own case or later by the Government in any rebuttal to contestees’ submissions is not properly considered in determining whether a prima facie case has been presented.” Id. at 270.

We also noted that, even if the Government has failed to present a prima facie case, if no motion to dismiss is made and the contestee proceeds to present evidence, the evidence tendered by a contestee may be considered, not for the purpose of curing any of the deficiencies in the Government’s prima facie case, but rather for the purpose of determining whether or not this evidence, when considered in the context

of all of the other evidence of record, affirmatively establishes that the claim is invalid. United States v. Miller, 138 IBLA at 270-71. Based on our review of the evidence, we concluded that the Government had failed to establish a prima facie case of invalidity and that the record, as a whole, did not establish that the claim was invalid. Accordingly, we dismissed the contest. We added, however, at page 281 that because of our disposition of the case, the Forest Service retained the authority to bring another contest:

The Forest Service, in essence, chose to challenge the claim on the theory that the cost of mining exceeded the value of the mineral being recovered. As shown above, the facts of record simply failed to substantiate this theory. Regardless of the failure of the Forest Service to present viable estimates of transportation and milling costs, the reality is that such costs must, as a practical matter, be absorbed if the proposed mining venture is to be successful. It may well be that, after reexamining this question, the Forest Service will decide that there is not a reasonable likelihood that the mineral from the claim can be mined, milled, and marketed at a profit. Nothing in our decision, herein, prevents it from requesting BLM to initiate a new contest based on a new mineral examination and report. We merely hold that, based on the present record, the Forest Service has failed to establish a prima facie case of invalidity and that nothing in that record affirmatively established that the Robin Redbreast Lode mining claim was invalid. ^{2/} [Emphasis added.]

On December 18, 1998, Dersch completed a second mineral report in which he concluded that “[t]he cost of mining, milling, and smelting far exceed the value of the mineralized material” and that “[l]imited development and no recorded production from this mining claim strongly suggests that it was not feasible to

^{2/} Judge Pearlstein states at several points in his decision that the Board “invited” a second contest in this case. E.g. Decision at 47-48. He also stated that the “‘law of the case’ has thus resulted in a directive that a second contest be held * * *.” Id. at 48. The Board clearly did not invite a second contest. Nor did it direct that one be initiated. It merely stated that our decision did not preclude the initiation of a new contest. In addition, the Board did not rule, as stated by Judge Pearlstein, that “the Millers preponderated on the issues raised in the first hearing.” (Decision at 42.) “The requirement of preponderation only arises as to issues for which the Government has presented a prima facie case. Where there is no prima facie case, there can be no issue on which a claimant must preponderate.” United States v. Pool, 78 IBLA 215, 220 (1984). Because the Forest Service did not successfully present a prima facie case, the Millers had no issues on which to preponderate.

develop a profitable mine; it continues to be unprofitable.” (Ex. 1 at 1374.) The report stated that, in addition to the previous dates of examination in 1987 and 1988, he conducted an examination on October 1, 1998. (Ex. 1 at 1352.) There is no evidence, however, that he undertook any sampling on that date. He concluded that a contest action would be appropriate. (Ex. 1 at 1374.)

On March 22, 1999, BLM issued a second contest complaint on behalf of the Forest Service, challenging the validity of the subject mining claim on the basis of lack of discovery of a valuable mineral deposit as of the date of withdrawal (January 1, 1984), or as of “the present time.” The Millers filed an answer on April 23, 1999, asserting that the claim was supported by a discovery. They also filed a lawsuit in Federal District Court, Miller v. U.S. Forest Service, No. 99-B-802 (D. Colo.), seeking to enjoin the contest proceedings.^{10/} However, the parties entered into a stipulation, approved by the court, that permitted the Millers, during 2000 and 2001, to undertake sampling and core drilling in an effort to establish the existence of a discovery, following which the contest could go forward.^{11/} (Order, Miller v. U.S. Forest Service, No. 99-B-802 (D. Colo. Oct. 7, 1999), at 2.) U.S. District Court Judge Babcock issued orders approving the stipulation, staying further judicial action, and retaining jurisdiction over the civil complaint, pending the conclusion of the administrative contest proceeding, which he directed should “proceed expeditiously.” (Order, Miller v. U.S. Forest Service, No. 99-B-802 (D. Colo. Dec. 21, 2001), at 12.)

^{10/} During the hearing, the Forest Service introduced Exhibit 1, which has been cited above in this opinion. That exhibit is a three-volume 1,413-page Administrative Record, prepared and submitted to the court in connection with the 1999 lawsuit. That record contains the entire administrative proceeding before the filing of the Millers’ lawsuit, including the record of the prior Government contest (Colorado 754).

^{11/} The stipulation and order allowed the Millers to “proceed to undertake all actions authorized in the operating plan approved by the Forest Service on August 22, 1983, including use of motorized equipment, which are deemed necessary by the Millers in their sole discretion for defending the administrative claim contest.” (Order, Miller v. U.S. Forest Service, No. 99-B-802 (D. Colo. Oct. 7, 1999), at 2; see Order, Miller v. U.S. Forest Service, No. 99-B-802 (D. Colo. Oct. 18, 1999), at 5.) It also provided that the Millers would give the Forest Service notice of sampling and drilling, and allow the Forest Service the opportunity to observe the sampling and drilling, photograph and study the samples, and sample at its own expense a portion of the pulps from the sampling and drilling. (Order, Miller v. U.S. Forest Service, No. 99-B-802 (D. Colo. Oct. 7, 1999), at 3.)

The Millers retained Charles R. Ponchak as a consulting geologist to conduct sampling on their claim, after his initial visit to the claim on July 29, 2000, at which time he took seven samples. (Tr. IV at 122.) Ponchak testified that he graduated from college in 1973 with a degree in geology and, after working in the oil and gas field, went to work for a small uranium company in 1977. In 1980, he became chief geologist for the Camp Bird Mine in Ouray, Colorado, a large gold mine. In that position he supervised other geologists, mining engineers, and assayers. As part of this job, he evaluated numerous additional gold mines or prospects in the area to fill extra milling capacity at Camp Bird. He also evaluated outside properties in other parts of the West for Federal Resources Corporation, the owner of the Camp Bird Mine.^{12/} He was responsible for permitting the Camp Bird and other mines brought into production. (Tr. IV at 112.) In 1989, he left full-time employment in the geological profession and purchased a business in Montrose, Colorado. He continued to do consulting work, however, which included the evaluation of gold projects. (Ex. 4, Appendix 5; Tr. III at 102-05; Tr. IV at 112-13.)

On September 15, 2000, Ponchak and Dersch visited the claim and each sampled the surface of the exposed vein along the North Fork of Porphyry Creek. The following year, they returned on September 12, 2001, and sampled underground in the Van Boxel stope, which the Millers had again opened. Between those two joint sampling dates, Ponchak took additional samples from the claim without notifying the Forest Service. The dates of those samplings were September 23, 2000, June 29, 2001, and July 28, 2001.^{13/} Ponchak completed his “Geologic and Mining Cost Evaluation of the Robin Redbreast Mining Claim” (Evaluation), introduced as Exhibit 4 at the hearing, in October 2001. On July 1, 2002, Dersch completed

^{12/} Ponchak’s statement of qualifications states that he supervised the restart of the Camp Bird Mine from a two-man operation to 150 employees and “[c]hanged mining methods from high production, low-grade operation to low production, high grade profitable program.” (Ex. 4, Appendix 5 at 1.)

^{13/} He explained that the sampling on Sept. 23, 2000, was done to assure himself that there was no “contamination” by either the Forest Service or the Millers. (Tr. IV at 127.) He stated that “[i]t’s not directed at anybody. That’s just a policy that I have.” Id. He stated that the Millers did not know he was going to the site. Id. He undertook sampling on the other two occasions (three surface samples on June 29, 2001, and four underground samples on July 28, 2001) when he visited the claims and found areas of the vein uncovered that had previously been unavailable. He felt it was important to get “some geological information” at those times. Id. at 184. He stated that he did not intend to violate the court order, and, in fact, did not have a copy of it at that time. He testified that the Millers did not know that he was sampling. Id. at 185.

another mineral report incorporating the results of the September 15, 2000, and September 12, 2001, samplings. (Ex. 3.)

As stated, Judge Pearlstein conducted a five-day hearing on July 23, 24, and 26, and September 10, and 11, 2002, in Montrose, Colorado. On July 23 and 24, the Government presented its case. On July 25, 2002, the Judge conducted a site visit to the claim. The Millers did not move to dismiss the contest and proceeded to present their evidence on July 26, and September 10 and 11, 2002. During Ponchak's testimony on September 10, the Millers offered a supplement to Ponchak's Evaluation (Supplemental Evaluation), designated as Exhibit 28, which he had prepared "to answer the questions and criticisms that the Forest Service had of my original report." (Tr. IV at 118.) Each side called rebuttal witnesses on September 11. In his decision, Judge Pearlstein concluded that the Millers had overcome, by a preponderance of the evidence, the Government's prima facie case that the claim was not supported by the discovery of a valuable mineral deposit, as of the date of withdrawal and the hearing:

The evidence shows that the Millers are reasonably likely to be able to mine ore at a grade of 2 ounces per ton of gold, [^{14/}] and that they would make a substantial profit from that operation. Even at the historically low price of gold at the time of the hearing (\$302.40 per ounce), the Millers would make a profit of about \$29,000 by following the updated slusher drift mining plan. * * * The profit would have been substantially higher at the time of the wilderness withdrawal of the claim[ed] lands in 1983 due to the much lower costs of mining and much higher price of gold. [Emphasis added.]

(Decision at 62.) Judge Pearlstein thus dismissed the Government's contest complaint. ^{15/}

^{14/} Clearly, what Judge Pearlstein intended to say was "2 ounces of gold per ton of ore."

^{15/} "Dismissal of a contest complaint does not determine the validity of the claim, but merely establishes that, as to the issues raised in the hearing, the mineral claimant has preponderated. Thus, in a hearing on a Government contest complaint, there is no requirement that a mining claimant show that the claim is valid; rather, the mineral claimant's burden is to preponderate on the issues raised by the evidence." United States v. Hooker, 48 IBLA 22, 26-27 (1980). Therefore, to the extent the Millers seek a ruling that dismissal of the contest by the Judge equated to a determination that the claim is valid, we decline to so rule.

The Forest Service and the Millers each appealed timely from Judge Pearlstein's decision. By order dated September 12, 2003, we denied the Forest Service's petition to stay the effect of that decision. In a December 19, 2003, order, we granted expedited consideration of the appeals.

II. The Law of Discovery

In its statement of reasons for appeal (SOR), the Forest Service contends that Judge Pearlstein erred in determining the quality and quantity of mineral on the claim and the costs likely to be incurred to mine, transport, mill, and market the mineral from the claim. Those errors, it asserts, resulted in an erroneous conclusion that the claim is supported by the discovery of a valuable mineral deposit. It asserts that the Judge should have found that it established a prima facie case that the claim is invalid and that the Millers failed to overcome that case by a preponderance of the evidence. The Forest Service requests the Board to reverse the Judge's decision to dismiss the Government contest complaint and declare the claim null and void for lack of a discovery.

Under 30 U.S.C. § 22 (2000), a mining claim must be supported by the discovery of a valuable mineral deposit within its boundaries. In locating a mining claim, a claimant asserts that, in his opinion, there is within the boundaries of the claim the discovery of such a deposit, since, in order to afford the claimant any rights against the United States, such an entry is required to coincide with a discovery. Davis v. Nelson, 329 F.2d 840, 844-46 (9th Cir. 1964); United States v. Bechthold, 25 IBLA 77, 82 (1976).

However, the United States, acting through the Secretary of the Interior and his or her delegates, retains the authority, under the mining laws, to determine for itself, at any time prior to patent, whether the claimant has, in fact, discovered a valuable mineral deposit, as required by 30 U.S.C. § 22 (2000). In doing so, the Secretary properly fulfills the duty to see that "valid claims [are] recognized, invalid ones eliminated, and the rights of the public preserved." Cameron v. United States, 252 U.S. 450, 460 (1920). Indeed, the Supreme Court has stated:

A mining location which has not gone to patent is of no higher quality and no more immune from attack and investigation than are unpatented claims under the homestead and kindred laws. If valid, it gives to the claimant certain exclusive possessory rights, and so do homestead and desert claims. But no right arises from an invalid claim of any kind.

Id. It is the necessity to determine whether a claim is, in fact, “invalid,” which justifies the Department in bringing a Government contest.

A valuable mineral deposit exists where minerals are found on the claim of such quality and in such quantity that a person of ordinary prudence is justified in the further expenditure of his labor and means with a reasonable prospect of success in developing a valuable mine. Chrisman v. Miller, 197 U.S. 313, 322-23 (1905); Castle v. Womble, 19 L.D. 455, 457 (1894). Thus, it must be demonstrated, as a present fact, that there is a reasonable likelihood that minerals can be extracted, removed, and marketed from the claim at a profit. United States v. Coleman, 390 U.S. 599, 600, 602-03 (1968); Layman v. Ellis, 52 L.D. 714, 721 (1929). It is not required, however, that the claimant be engaged in a profitable mining operation or that commercial success be assured. Barton v. Morton, 498 F.2d 288, 289 (9th Cir. 1974), cert. denied, 419 U.S. 1021 (1974); Barrows v. Hickel, 447 F.2d 80, 82 (9th Cir. 1971); United States v. Gunsight Mining Co., 5 IBLA 62, 69 (1972), aff'd, Gunsight Mining Corp. v. Morton, No. 72-92-TUC-JAW (D. Ariz. Sept. 11, 1973).

As we stated in United States v. Foresyth, 100 IBLA 185, 210, 95 I.D. 453, 467 (1988):

The prudent man rule requires the claimant to submit proof that a prudent man would develop a mine. It is not enough that a claimant himself desires to do so if the evidence leads to the conclusion that a prudent man would not. See Fresh v. Udall, 228 F. Supp. 738 (D. Colo. 1964); United States v. White, 72 I.D. 522 (1965). One of the most common means of demonstrating what a “prudent man” would do is through the testimony of expert witnesses who have examined the property and express their opinions, as experts, that the evidence supports a determination that further development is warranted. To have an expert in the field examine the property and render a decision is, itself, an exercise of prudence.

It is well established that a vein or other mineralized ore body must be physically exposed on an unpatented lode mining claim. United States v. Lehmann, 161 IBLA 40, 92-93 (2004). Geologic inference clearly may not be used to establish the existence of a valuable mineral deposit within the claim, absent any exposure of a vein or other mineralized ore body within the boundaries of a claim. United States v. Clouser, 144 IBLA 110, 115-16 (1998); United States v. Feezor, 74 IBLA 56, 71-74, 90 I.D. 262, 270-72 (1983), vacated in part on other grounds and remanded, 81 IBLA 94 (1984). However, given an exposure somewhere within the claim, it is not necessary that the vein be exposed at depth, by drilling or other means, in order reasonably to conclude that mineral values disclosed extend below the surface, or

that a valuable mineral deposit actually exists at depth. United States v. Clouser, 144 IBLA at 116. The use of geologic inference is a projection regarding what is reasonably likely to be found, but which has not yet been uncovered. It is entirely permissible, since a mining claimant is plainly not required to “block out” an ore body, in order to demonstrate that he has discovered a valuable mineral deposit. United States v. Clouser, 144 IBLA at 113; United States v. Hooker, 48 IBLA at 30.

However, geologic inference may not be used to establish that gold values at depth are higher than those reflected in surface sampling: “Mineral values must be physically disclosed before they may be projected by geologic inference.” United States v. Clouser, 144 IBLA at 116; see, e.g., United States v. Winkley, 160 IBLA 126, 145 (2003). We have acknowledged that

where ore has been found, the opinions of experts, based upon knowledge of the geology of the area, the successful development of similar deposits on adjacent mining claims, deductions from established facts--in short, all of the factors which the Department has refused to accept singly or in combination as constituting the equivalent of a discovery--may properly be considered in determining whether ore of the quality found, or of any mineable quality, exists in sufficient quantity to justify a prudent man in the expenditure of his means with a reasonable anticipation of developing a valuable mine.

United States v. Larsen, 9 IBLA 247, 262 (1973).

[1] When the Government contests a mining claim based on a charge of lack of discovery of a valuable mineral deposit, it bears the initial burden of going forward to establish a prima facie case in support of that charge, whereupon the claimant has the ultimate burden of persuasion to overcome that case by a preponderance of the evidence. See Hallenbeck v. Kleppe, 590 F.2d 852, 856 (10th Cir. 1979); United States v. Winkley, 160 IBLA at 142-43; United States v. Bechthold, 25 IBLA at 82. The burden is different, however, for the contestee when a contest is filed as the result of a patent application. In such a situation, it is well settled that the Government must make a prima facie case in support of its charges and that, upon such a showing, the claimant must establish that the claim is valid, even apart from the issues raised in the prima facie case. United States v. Mannix, 50 IBLA 110, 112 (1980). This case does not involve a patent application. Accordingly, the Millers need only preponderate on those issues raised in the prima facie case.

Where land has been withdrawn from mineral entry subject to valid existing rights, a valuable mineral deposit must be shown to have already been physically disclosed within the limits of a mining claim on the date of withdrawal. Cameron v.

United States, 252 U.S. at 456; United States v. Converse, 72 I.D. 141, 146 (1965), aff'd, Converse v. Udall, 262 F. Supp. 583 (D. Ore. 1966), aff'd, 399 F.2d 616 (9th Cir. 1968), cert. denied, 393 U.S. 1025 (1969). Thus, no further exploration for the purpose of physically exposing a valuable mineral deposit may be permitted after that date. Lara v. Secretary of Interior, 820 F.2d 1535, 1542 (9th Cir. 1987); United States v. Lehmann, 161 IBLA at 107-08; United States v. Gunsight Mining Co., 5 IBLA at 64; United States v. Converse, 72 I.D. at 146. In addition, the claim must be supported by a discovery at the time of the hearing. United States v. Lee Western, Inc., 50 IBLA 95, 98 (1980).

III. Sampling the Claim

At the hearing Dersch testified regarding his chip channel sampling on the claim.^{16/} In 1987, he took five such samples.^{17/} (Ex. 12 at 1-6.) He took three surface samples (Nos. 773, 774, and 775) on September 1, 1987, at locations 41W, 22W, and 14E, respectively.^{18/} Each sample was from 48 to 52 inches in length across the vein, which measured from 36 to 40 inches wide, in the bed of the North Porphyry Creek. (Tr. I at 142; Ex. 1 at 710-11; Ex. 3 at 11-12 and Figure 4; Ex. 12 at 1-3.) Assays of the three samples yielded gold values of 0.078, 0.103, and 0.136 opt, respectively.^{19/} (Ex. 3 at 14.) He took another surface sample on September 2, a

^{16/} Dersch did not rely on any of the three samples taken by Hill in 1985, which had assayed at gold values of 0.006, 0.02 and 0.30 ounces per ton (opt). (Ex. 1 at 138; Ex. 21 at 3-5.) Dersch testified that Hill “was not terribly confident of everything he had done. He told me that the best thing we could do is to start the process over again, and that’s what I did.” (Tr. I at 134-35.)

^{17/} He also took a grab sample (No. 1478) from the dump around the Porphyry Basin Mine area. (Ex. 12 at 5.)

^{18/} At the time of the sampling in 2000 and 2001, Ponchak established a system for identifying the position of samples along the surface exposure of the vein as it radiated east and west of the Van Boxel Shaft. The position of each sample was identified by the number of feet and the direction, either east (denoted as “E”) or west (denoted as “W”), from the shaft. Ponchak also marked the Van Boxel Stope, located at 30E, at five-foot intervals, so that the depth at which a sample was taken could be readily ascertained. (Ex. 3, Figure 4; Ex. 4 at 12.) Both conventions were adopted by Ponchak and Dersch, for the purpose of identifying all of their respective samples.

^{19/} All of the samples taken from the claim by Dersch and Ponchak were fire assayed by Bondar-Clegg, Inc. (B-C) (or its successor) of Lakewood, Colorado (later Sparks,
(continued...)

57-inch sample (No. 1476) along the west wall of the prospecting pit across the creek from the Van Boxel shaft. (Ex. 12 at 3; Ex. 3 at 12.) Finally, on September 2, he took a 40-inch chip channel sample (No. 1477) “in the drift at a point selected by Miller 20 feet from the shaft in the sill.” (Ex. 3 at 18; see Ex. 12 at 4.) The highest gold value disclosed in assays of those samples was 0.069 opt for No. 1476. ^{20/}

Dersch testified that his samples were taken at mineable widths across the vein. He considered a mineable width to be three and a half to four feet. (Tr. I at 142-46, 147-48; Ex. 3 at 11.) Dersch noted that the mineable width of his samples was dictated by the fact that the vein was actually composed of veinlets within the mineralized fissure, thus necessitating that each sample be taken across the entire fissure structure, in order to encompass all of the veinlets: “I was trying to make sure that I caught all sections of the quartz veinlets. There’s places where [the mineralized fissure] horsetails, comes together, [and] spreads apart[.]” (Tr. I at 144.)

On August 30 and 31, 1988, Dersch returned to the claim to take underground samples. He did not sample on August 30, because, as he reported in his field notes, “shaft [stope] not quite ready for sampling-some muck needs to still be removed.” (Ex. 12 at 7.) On August 31, 1988, he took two chip channel samples in the Van Boxel Stope: one (No. 1479) a 48-inch sample “along the east wall * * * two feet above sill” (Ex. 12 at 9) and the other (No. 1480) a 30-inch sample “on the left or

^{19/} (...continued)

Nevada), for the Forest Service and by Root & Norton Assayers (R&N) of Montrose, Colorado, for the Millers. Although questions were raised concerning the reliability and accuracy of the different assay results, based on the relative size of the assaying firm and, more importantly, the assaying technique used, the assay results of split samples generated by both B-C and R&N are in general agreement. See Decision at 23 (“The splits of the Millers’ samples analyzed by both Bondar-Clegg and Root & Norton assayed at generally consistent gold values, although Root & Norton’s results averaged slightly higher”).

^{20/} We note that in his 2002 Mineral Report Dersch described each of these 5 samples as 2 inches wide and either 1 inch deep or averaging 1 inch deep (Ex. 3 at 11-12), while in his field notes, he stated that the first 3 were each 4 inches wide by 2 inches deep. (Ex. 12 at 1-3.) Those notes did not include width and depth measurements for the last two samples.

northeast rib about 2 feet from the sill.”^{21/} (Ex. 3 at 18.) The highest gold value from those underground samples was 0.025 opt in No. 1480.

Dersch took his remaining samples on September 15, 2000, and September 12, 2001, eight samples (Nos. 1855 through 1861, and 1874) from surface exposures of the vein, at locations 38W, 24W, 12.5W, 5W, 5W, 15E, 96E, and 325W, respectively,^{22/} and 11 samples (Nos. 1862 through 1872) from underground exposures of the vein in the Van Boxel Stope, at depths of 25, 25, 24.5, 24.5, 20, 17.5, 15, 12.5, 10, 7.5, and 2.5 feet, respectively. (Tr. I at 142-43; Ex. 3 at 2, 12-13, 18-19; Ex. 3 at Figures 4 and 5.) The surface samples were taken at lengths from 8 to 42 inches across the vein, and the underground samples were taken from 12 to 24 inches across the vein.^{23/} Thus, many of these samples, including all the underground samples, were taken across less than what Dersch considered to be a mineable width. The surface sample that assayed with the highest gold value was No. 1860, which was a 24-inch long sample yielding 0.169 opt. (Ex. 3 at 14.) The underground sample with the highest gold value was No. 1869, a 12-inch long sample taken at 12.5 feet. It yielded 0.078 opt. (Ex. 3 at 19.)

Based on his sampling and the assay results, Dersch calculated the weighted average grade of ore in the exposed mineralized vein, relying on the highest values, revealed by nine surface samples (Nos. 773, 774, 775, 1855 through 1858, 1860, and 1861) taken along the entire 137-foot length of the exposed vein.^{24/} (Tr. II at 25-26; Ex. 3 at 21.) In determining the weighted average grade of the 137-foot long vein, Dersch multiplied each assay value by the length of the sample across the vein and by

^{21/} Again, Dersch reports in this field notes that the samples were each 4-inches wide by 2-inches deep (Ex. 12 at 9), while in his 2002 Mineral Report he stated that they averaged 2-inches deep and 1-inch wide. (Ex. 3 at 18.)

^{22/} On Sept. 12, 2001, Dersch took another sample (No. 1873) from a prospecting pit, which assayed at a gold value of 0.0003 opt. (Ex. 3 at 13, 14.)

^{23/} Regarding the underground sampling, Ponchak testified that “it was difficult to get into, quite cramped. Mr. Dersch had a tough time getting his samples, but just because he is so tall. This is not a place for a tall guy. And I think he did a remarkable job of getting his samples out of there. Pretty tight, pretty ugly, pretty miserable, pretty wet.” (Tr. IV at 166; see Tr. II at 39; Ex. 3 at 18.)

^{24/} Dersch did not include the results of any of Ponchak’s sampling in his calculation of the weighted average grade of the ore, because he stated that he was unable to verify that Ponchak had sampled across the mining width, which was the width that Dersch considered necessary to accommodate expected mining operations. (Ex. 3 at 17-18, 20.)

the interval (the length to which the sample was deemed to extend its influence along the vein, which is halfway to the next sample point in either direction), and then, after adding together all of these figures, divided the result by the sum of the widths times the intervals of all of the samples. (Ex. 3 at 21; see Ex. 1 at 843; Ex. 31 at 7; see United States v. Clouser, 144 IBLA at 124 n. 20.) He determined that the weighted average grade for gold was 0.085 opt. (Ex. 3 at 21.)

In a table on pages 15-17 of Exhibit 3 displaying the results of all his surface sampling, Dersch included the results of Ponchak's 2000 surface sampling, based on a sample log description provided by Ponchak, showing the location of his samples and the widths, which ranged from 0.4 to 3.2 feet in length. (Ex. 3, Appendix 11; Ex. 3 at 17.) Dersch commented that Ponchak's samples "were always significantly less than a minable width which in effect tends to 'high-grade' the sample." (Ex. 3 at 18.) Dersch stated in his report that his "sampling did not reveal any 'high-grade' areas underground." (Ex. 3 at 20; see Tr. I at 154.) He did not include any information about Ponchak's sampling in his table of 2001 underground sampling at pages 19-20 of his report because "Ponchak did not send a list of samples and locations as was done in 2000" and, thus, he could not verify with certainty the locations and widths of those samples. ^{25/} (Ex. 3 at 20.)

In his July 2002 Mineral Report, Dersch included an economic analysis involving driving a 4 x 6-foot drift to the west from the base of the Van Boxel shaft or east in the existing drift, "a concept similar to the objective behind the Porphyry Basin Mine," in order to mine approximately 30 tons of ore, "as originally proposed by the Millers." ^{26/} (Ex. 3 at 22, 25.) Dersch concluded that such an operation would result in the recovery of 32.7 tons of mineral ore from 47.5 tons of material; that the weighted average grade of the ore would be 0.085 opt; and that, after processing, transporting, milling, and smelting, the total return of the operation would be \$34.56/ton in 1984 and \$24.91/ton in 2002. (Ex. 3 at 24-25, 36-37.) In estimating the returns, Dersch looked at the recovery of not only gold, but also silver from the

^{25/} Ponchak testified that he forgot to do so, but that he would have sent the 2001 sample information, if Dersch had called and requested it. (Tr. V at 17.) He also testified that he took his underground samples in 2001 before Dersch arrived because Dersch "was late" and "there wasn't really room in the bottom of the shaft for both of us, because it is very narrow." (Tr. V at 16.) When Dersch arrived, Ponchak went down with him and "stood above him most of the time when he took his samples just for safety purposes * * *." Id.

^{26/} We note that the prudent man test is an objective standard. Thus, it does not depend on what the claimant actually plans to do. United States v. Willsie, 152 IBLA 241, 271 (2000), and cases cited therein.

ore. The return for silver was minimal, on the order of \$0.16/ton (silver) in 1984 and \$0.08/ton (silver) in 2002. *Id.* at 21; Ex. 3, Attachment 13A at 2; Ex. 3, Attachment 13B at 2. Since he estimated that the total costs needed to generate the total returns were \$734.64/ton in 1984 and \$1,164.52/ton in 2002, Dersch concluded that mining and related operations were not likely to be profitable. In his opinion, a person of ordinary prudence would not be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine on the Robin Redbreast Lode claim.

The Millers and their mineral expert (Ponchak) sampled the surface and underground exposures of the vein. From 1983 to 1990, the Millers took a number of samples from the claim, which yielded gold values ranging from 0.001 to 1.076 opt, but generally less than 0.5 opt. (Tr. III at 25-26, 29, 32, 67, 80-81, 132-35; Ex. 1 at 117-18, 127, 131, 135-36, 139, 151, 160, 165, 170, 502-03, 648-57, 659-60, 688-89; Ex. 3 at Attachment 4; Ex. 23.) However, these samples were either grab samples from piles of loose ore on the floor of the underground workings, which had naturally fallen from the walls of the workings or been gathered together by prior mining activity, or vein samples, without any evidence regarding exactly where and/or how they were taken. As Judge Rampton stated in his November 12, 1993, decision in the first contest: “[T]he assay results obtained from the samples taken by the Millers are virtually meaningless, because there is insufficient information to determine the quality and quantity of the material, whether or not there is actually a mineable quantity, and whether the samples are representative of the site or merely isolated values.”^{27/} (Ex. 1 at 1142.)

Ponchak took a total of 78 chip channel samples from surface and underground exposures of the vein on six occasions (July 29, September 15, and 23, 2000, and June 29, July 28, and September 12, 2001).^{28/} *See* Tr. IV at 123 (“[W]hat I was trying to do at the Robin Redbreast was to do a proper surface evaluation, not to miss anything, to make certain I had sampled all phases of the vein”). Sample weights varied depending on the width of the sample, but ranged from one to five pounds. (Ex. 4 at 2.)

^{27/} Without evidence regarding the origin or derivation of the material, none of these samples accurately represents the value of the mineral in the vein. *See United States v. Mavros*, 122 IBLA 297, 306 (1992); *United States v. Taylor*, A-30776 (Oct. 6, 1967), at 5.

^{28/} The Forest Service was provided with splits of all of the samples taken by Ponchak on Sept. 15, 2000, and Sept. 12, 2001, and obtained assay results which were generally consistent with those obtained by Ponchak. *See, e.g.*, Tr. V at 8, 15.

Ponchak initially took seven samples (Nos. 1A through 7A) on July 29, 2000, 0.1 to 1.3 feet across the vein at what he thought would be “one of the best exposures of the vein,” which was in the vicinity of location 20E, in order to determine for himself “if they [Millers] had any valuable mineral that we could really proceed on.” (Tr. IV at 122; see Tr. IV at 121-22; Ex. 4 at 1, “Map No. 1”; Ex. 4, Appendix 1 (Sample Log) at 1-2.) Assays of the seven samples yielded gold values ranging from less than 0.008 to 1.082 opt, and averaging 0.39 opt. (Ex. 4, Appendix 1 at 1-2.) The highest gold value of 1.082 opt came from a sample (No. 2A) cut 0.5 feet across the vein at location 20E. The next highest gold value of 0.73 opt came from a sample (No. 1A) cut 1.3 feet across the vein at location 20E.

On September 15, 2000, Ponchak took 32 samples (Nos. VB1 through VB32), 0.2 to 3.2 feet across the vein. (Tr. IV at 122; Ex. 4 at 2; Ex. 4, Appendix 1 at 3-6.) Assays of the 32 samples yielded gold values ranging from 0.006 to 0.656 opt, and averaging 0.11 opt. (Ex. 4, Appendix 1 at 3-6.) The highest gold value of 0.656 opt came from a sample (No. VB26) cut 1.7 feet across the vein at location 20E. The other high values were 0.286 opt (No. VB1, taken 1.6 feet across the vein at 39W), 0.464 opt (No. VB9, taken 0.4 feet across the vein at 13.5W), and 0.432 opt (No. VB19, taken 0.5 feet across the vein at 10E).

On September 23, 2000, Ponchak took 11 samples (Nos. VB33 through VB36, VB36A, VB36B, and VB37 through VB41) cut 0.3 to 1.3 feet across the vein. (Ex. 4 at 2; Ex. 4, Appendix 1 at 6-7.) Assays of the 11 samples yielded gold values ranging from 0.06 to 0.748 opt, and averaging 0.19 opt. (Ex. 4, Appendix 1 at 6-7.) The highest gold value of 0.748 opt came from a sample (No. VB36B) cut 1.3 feet across the vein at location 20E.

On June 29, July 28, and September 12, 2001, Ponchak took a total of 28 samples (Nos. VB52 through VB79) cut from 0.1 to 3.2 feet across the vein, 6 from the surface and 22 underground in the Van Boxel stope. (Tr. IV at 122; Ex. 4 at 3; Ex. 4, Appendix 1 at 9-11.) Assays of the samples yielded gold values ranging from 0.004 to 1.182 opt, and averaging 0.15 opt. (Ex. 4, Appendix 1 at 9-11.) The highest gold values were 1.182, 0.736, and 0.576 opt, which were disclosed in samples (Nos. VB53, VB69, and VB60) which were cut, respectively, 0.8, 0.5, and 1.8 feet across the vein at locations 42W, 20 feet deep in the stope, and 25 feet deep in the stope, respectively.

In addition, Ponchak created 21 samples by hand sorting or selecting material from the vein that appeared to contain mineralization (referred to by the parties as prepared samples), and 6 samples, each of which consisted of 2 to 5 pounds of vein

material which “he believed to contain the best grades of gold ore” (referred to by the parties as bulk samples).^{29/} (Decision at 26.)

The 21 prepared samples (Nos. 101A, 101B, 102A, 102B, 103A through 103E, 106A, 106B, and VB42 through VB51) came from material sampled from the vein on July 29, September 15, and September 23, 2000. (Ex. 4, Appendix 1 at 2-3, 7-8.) Assays of the 21 samples yielded gold values ranging from 0.036 to 2.01 opt, and averaging 0.48 opt. The two highest gold values in the prepared samples (1.85 and 2.01 opt.) came from location 20E, which was the location that he thought, on his first visit to the claim on July 29, 2000, was one of the best exposures of the vein. (Ex. 4, Appendix 1 at 2; Tr. IV at 122.) He explained that “all you are trying to do with a prepared sample is take out the waste and put in the vein material only, and then run an assay on it to see exactly what the vein is going to run.” (Tr. IV at 211; see Tr. IV at 213.) In his opinion, the prepared sample provided an indication of how the grade of the ore could be improved by cobbing or hand sorting the material--a mining method intended to be pursued by the Millers. (Tr. IV at 212.)

Ponchak’s six bulk samples consisted of material taken from surface and underground exposures of the vein. Four of them were cut samples, and two were “composites of rejects” from the assayer. (Tr. IV at 139.) He did not fire assay those samples. Rather, he evaluated them using a traditional (or “old timer”) mining technique, which involved crushing, screening, baking, tumbling, and panning the material down to gold. (Tr. IV at 137-41, 215-16; Ex. 29.) The six samples, as identified in Ponchak’s “Bulk Sample Log,” were: (1) a 5-pound sample taken from 20E on September 15, 2000, yielding gold values of 4.92 opt; (2) a 3-pound sample taken from 40W on September 23, 2000, yielding 4.72 opt; (3) a 2-pound sample from rejects from sample VB22 taken at 15E on September, 15, 2000, yielding 7.92 opt; (4) a 2-pound sample from rejects from sample VB25 taken at 20E on September 15, 2000, yielding 2.71 opt; (5) a 2-pound sample from between the depths of 20 and 25 feet on the east wall of the Van Boxel stope, on September 12, 2001, yielding 39.38 opt; and (6) a 2-pound sample taken on September 12, 2001, from a depth of 17.5 feet on the west wall of the Van Boxel stope, yielding 3.75 opt. (Ex. 29.)

Ponchak did not include the results of his bulk sampling in his Evaluation “because this isn’t very scientific.” (Tr. IV at 139.) He stated that “[y]ou have to do assaying to present a case to prove that you have discovery and to prove you can mine it” (id. at 201), but “[t]he bulk samples I took tend to prove that the gold values

^{29/} In a footnote to Table I of his mineral report (Ex. 4), Ponchak explained that “[p]repared samples are upgraded samples which represent [t]hat sorting of mined ore would improve the grade.”

will probably be higher than the actual sampled assays.” *Id.* at 158. “[W]hen you do a bulk sample and recover gold out of the sample, then suddenly you’re beginning to see most likely what was going to be there.” *Id.* at 201.

Ponchak determined that there were three areas of the claim having probable reserves of mineral ore which could be successfully mined.^{30/} (Tr. IV at 204-05, 222; Ex. 4 at 12, 17-18, Tables I and III, Map No. 7; Ex. 28 at Tables I and III.) Two of the areas were found on the surface of the claim, running 20 feet along the strike of the vein from 0 to 20E (termed the “East Reserve”), and 20 feet along the strike of the vein from 30W to 50W (termed the “West Reserve”). The third area, which also ran 20 feet along the strike of the vein, was disclosed underground, extending from the Van Boxel stope east away from the East and West Reserves, from 30E to 50E (termed the “Van Boxel Stope Reserve”). Each reserve area was based on mining the vein to a 25-foot depth, 20 feet long, and 2 feet wide. Ponchak also concluded that there was a possible ore reserve, which ran 36 feet along the strike of the vein, 2 feet wide, and 25 feet deep from 0 to 30W, between the East and West Reserves (termed the “Possible Reserve”). (Tr. IV at 152, 205; Ex. 4 at Tables I and III, Map No. 7; Ex. 28 at Tables I and III.)

Ponchak mapped the probable and possible reserves on the claim, concluding that the three probable reserves contained approximately 80 tons of ore each.^{31/} He also estimated that the possible reserve contained close to 150 tons.^{32/} (Decision at 55; see Tr. IV at 204-05, 222; Ex. 4 at Table III; Ex. 28 at Table III.)

^{30/} Ponchak defined a probable ore reserve as a reserve where the occurrence of mineral ore was, “to all essential purposes, reasonably assured, but not absolutely certain.” (Ex. 4 at Table III.)

^{31/} Judge Pearlstein noted that Ponchak regarded his estimate of probable ore reserves as “conservative,” since the vein was “likely” to actually extend below 25 feet and be longer than 20 feet. (Decision at 26; see Tr. IV at 205-06.) However, we agree that the estimate was appropriate, considering that it was based on actual exposures of the vein. We also note that Dersch did not disagree with a depth of 25 feet. (Tr. I at 212.)

^{32/} Ponchak based his calculations on a cubic foot per ton of ore conversion of 12 cubic feet per ton. We note that Dersch posited a factor of 12.12 cubic feet per ton. (Ex. 3 at 25.) Further, the evidence presented during the original hearing established, to the Board’s satisfaction, that there were 12.5 cubic feet per ton of ore material. United States v. Miller, 138 IBLA at 264, 273; see Ex. 1 at 533-34, 554-55, 599, 844; United States v. Clouser, 144 IBLA at 121 n.16. For this reason, Ponchak’s calculations of ore tonnage were conservative also.

Based on his sampling and assaying efforts, Ponchak calculated the average grade of ore in the mineralized vein on the claim, relying on the higher values of certain chip channel samples in the three probable ore reserves (nine samples from the East Reserve, five from the West Reserve, and three from the Van Boxel Stope Reserve). He determined that the total average grade for all of the probable ore reserves was 0.294 opt of gold, with the following average grades for each of the three reserves: 0.385 opt (East Reserve); 0.368 opt (West Reserve); and 0.283 opt (Van Boxel Stope Reserve).^{33/} (Ex. 4 at Table I; Ex. 28 at Table I.) He then computed a weighted average grade for East and West Reserves as 0.392 opt (East Reserve) and 0.272 opt (West Reserve). No weighted average was given for the Van Boxel Stope Reserve. (Ex. 4 at Table I; Ex. 28 at Table I.) For the Possible Reserve, Ponchak determined that the relevant grade was 0.464 opt, based on the highest grade sample taken in the area between the East and West Reserves. (Tr. IV at 205; Ex. 4 at 12-13, Table III, Map No. 1; Ex. 28 at Table III.)

Ponchak also calculated the “Weighted Avg.: Prepared Samples” for the East Reserve and West Reserve as 1.02 opt and 0.424 opt, respectively, based on assays of eight such samples in the East Reserve and three in the West. (Tr. IV at 206; Ex. 4, Table I; Ex. 28 at Table I.) It was this weighted average grade derived from the prepared samples that Ponchak then used in determining the value of the probable ore reserves in the East and West Reserves. (Ex. 4 at Table III; Ex. 28 at Table III.)

In his Evaluation, Ponchak posited an operation initially involving driving a slusher drift about 50 feet into the West Reserve from the north side of the creek. (Ex. 4 at 21.) He testified that the reason for that was to “generate cash flow and prove the ore was there.” (Tr. IV at 227.) He also developed a scenario in which a drift would be driven from the Porphyry Basin Mine adit area approximately 450 feet to intersect the vein at depth. (Ex. 4 at 23; Tr. IV at 228.) He stated, however, in presenting his Supplemental Evaluation, that “[a]fter we heard all the testimony from the Forest Service, the Millers and I thought it was best that we do a little more detail on those particular plans and offer some alternatives * * *.”^{34/} (Tr. IV at 228.) In

^{33/} The average grade for the Van Boxel Stope Reserve was based solely on the samples taken from the east face of the stope, as that reserve extended east. No prepared samples were created for the Van Boxel Stope Reserve.

^{34/} Ponchak also prepared the Supplemental Evaluation in response to criticism of his cost projections offered by the Government through the testimony of Mark Edward Levin, a mining engineer and majority owner and general manager of a firm known as Mining and Environmental Services, LLC, in Idaho Springs, Colorado, and Bruce King Stover, a senior mining geologist and project manager for mining
(continued...)

the Supplemental Evaluation, Ponchak proposed an “Updated Mining Plan” in which the Millers would mine through the West Reserve to the East Reserve, and then to the Van Boxel Stope Reserve.^{35/} (Tr. IV at 229.) Under such a scenario, 357 tons of ore would be mined with 549 tons of waste. (Ex. 28 at 5.) In all cases, costs were estimated on driving 7-foot by 7-foot drifts, employing narrow width mining methods, cobbing and sorting the ore, and shipping only the high-grade gold-bearing ore. No costs were including for milling. The proposed mining method would allow ore to be shipped directly to the smelter. (Tr. V at 47-50.)

Ponchak concluded that the Millers’ revenues from mining the 357 tons of ore would have exceeded their expenses in 2002 and 1983, providing them with a profit of \$29,215 in 2002 and \$112,375 in 1983. In each case, his revenue projections were based on an average gold value for the 357 tons of ore of 2.0 opt.^{36/}

IV. Discussion

Based on his review of the testimony and evidence presented at the hearing, Judge Pearlstein concluded that the Forest Service established a prima facie case that the subject claim is not supported by the discovery of a valuable mineral deposit. (Decision at 55, 63.) Nevertheless, he characterized the Forest Service’s efforts in sampling the claim and assessing the likely gold values as “somewhat minimal or sloppy.” Id. at 52; see id. at 51. The Judge concluded that Dersch failed to sample at certain sites, even “when specifically requested” by the Millers or their mineral

^{34/} (...continued)

services, for Hayward Baker, Inc., in Denver, Colorado, as part of the Government’s prima facie case. (Tr. II at 88-297, Exs. 13, 14.)

^{35/} He also included an alternative plan to open up the old Brutus shaft “because it was isolated away from the stream, and go in there in that particular area, sink the shaft deep, drive over underneath the reserves and mine those from that shaft.” (Tr. IV at 229.)

^{36/} In his Evaluation, Ponchak stated at page 19-20:

“The two-year sampling effort undertaken on the Robin Redbreast Vein indicates roughly 240 tons of probable ore reserves and 150 tons of possible reserves. The grade of these reserves, based strictly on sampling, is approximately 0.50 oz/ton gold. In this instance, assay values are not the only consideration that should be given in the final evaluation. The intense structure of the Robin Redbreast Vein, the vein composition, and the weathering factor should all be considered. The sharp contrast between ore and waste and upgraded samples indicate grade can be substantially increased by hand sorting. Ponchak believes that high-grade weathered ore from the Robin Redbreast Vein will carry a shipped value of 2.0 oz/ton gold.”

expert, Ponchak. The Judge considered this to be a violation of Dersch's duty to sample discovery points identified by the claimant. Id. at 54; see id. at 21, 22, 54-55. In addition, the Judge found that Dersch "never satisfactorily explained" his failure to sample points identified by the Millers or Ponchak. Id. at 54. He noted that "Mr. Ponchak was able to identify the vein and its mineralization far better than Mr. Dersch." Id. at 54.

A. Duty to Sample

While we agree that Ponchak was better able than Dersch to identify the vein and its mineralization, we find no violation by Dersch of his duty to sample. The sites that Dersch allegedly failed to sample were on the east face of the stope and at 20E. At the first hearing in this case, Dersch testified that he and the Millers had agreed on all the locations for his sampling in 1987 and 1988.^{37/} (Ex. 1 at 501.) The only contradiction offered by Robert Miller at the first hearing was that evidence of their discovery existed in the Van Boxel Shaft based on an assay ("the most important one") of "the find that Van Boxel had sitting alongside his bucket," and that Dersch had not taken a sample from that location, explaining to Miller that "[h]e said that wasn't in place, and that he wasn't allowed to sample it."^{38/} Miller made no objection at the first hearing, as he did at the second, that in 1988 he requested that Dersch take "a window or door sample" in the middle of the east wall of the stope, "which I felt that was the one that was going to make or break the mineral examination." (Tr. III at 137.) Miller recalled that Dersch stated that the size of such a sample "could be either a 4 by 7[-foot] or 4 by 6[-foot] or a 5 by 7[-foot]." Id. Miller stated that, when he saw Dersch's mineral report, he was surprised that Dersch had not taken that sample. Id. He added that his wife "found that out earlier," because she "went down the next day" and "there was no evidence of any channel sample across that face." Dersch did not recall such a request. (Tr. II at 56). Nor did he take a 4 by 6-foot sample. Id. If such a sample had the importance that Miller ascribed to it at the second hearing, it seems that the failure to take such an in-place sample would have been at least raised by the Millers at the first hearing. There is no evidence that it was.

^{37/} The Board found that "[t]he Millers showed Dersch where [they] thought the best samples could be obtained." United States v. Miller, 138 IBLA at 251.

^{38/} "The sample having the highest gold value, 0.948 ounce per ton, was taken in 1983, and described as 'several pieces from the pile of ore next to Van Boxel's bucket on the floor of the shaft' (Exh. MC/D-6). The Millers found the bucket, which they described as Van Boxel's bucket, underneath all the material, when they 'finally reached the bottom of the shaft' (Tr. 196; Exh. MC/D-27 at 7)." United States v. Miller, 138 IBLA at 261.

In addition, Ponchak testified that, when he was sampling at 20E, he “actually threw Mr. Dersch a rock and told him that if he would look at [it] he would probably see free gold and gold tellurides in it.”^{39/} (Tr. V at 18.) While Ponchak stated that he was surprised that Dersch did not sample at 20E (*id.*), there is no evidence in the record that Ponchak expressly requested that Dersch take a sample at that location. Moreover, the record supports the conclusion that Dersch sampled at locations that he thought contained visible mineralization likely to reflect significant mineral values. (Tr. II at 33-34, 35; Ex. 3 at 11-13, 18-19.) Further, Dersch testified that during the sampling program undertaken jointly with the Millers in 2000 and 2001, “[Ponchak] took samples first and then I went back and filled in some other places.” (Tr. I at 150; *see* Tr. II at 33-34; Tr. V at 18.) This procedure may have been based on his knowledge that he would be provided splits of the samples taken by Ponchak.

While Dersch’s judgment regarding where to sample may be subject to question, particularly given the results of Ponchak’s sampling at 20E, we conclude that Dersch properly fulfilled his duty to sample “areas of exposed mineralization,” both on the surface and in underground workings, within the limits of the subject claim.^{40/} United States v. Bagwell, 143 IBLA 375, 382 (1998); *see, e.g., United States v. Crowley*, 124 IBLA 374, 377 (1992). Moreover, there is no evidence that the Millers were prevented from introducing evidence regarding gold values found at these or any other sites on the claim.

B. Prima Facie Case

The Judge also concluded that Dersch “did not take enough samples, of the proper types and at the proper locations, to be able to prepare a reliable mineral examination of the Robin Redbreast claim.” (Decision at 53.) The Judge then stated that “[t]he record shows that Mr. Dersch’s examination may have met the minimum standards necessary to make a prima facie case, but was insufficient to overcome the

^{39/} Tellurides are “[o]res of the precious metals (chiefly gold) containing tellurium.” A Dictionary of Mining, Mineral, and Related Terms 1125 (Bureau of Mines 1968). Tellurium is “[a]n element in group IV of the period chart,” which is silvery white in color with metallic luster and characteristics. *Id.*

^{40/} We note that BLM has long provided the following policy regarding sampling undertaken by a Government mineral examiner: “The discovery points should be located and samples taken * * *. The mineral examiner may consider other reasonable sampling requests by the mining claimant. In addition[,] the mineral examiner must exercise the best professional judgment in selecting any other sample sites necessary to verify the discovery.” [Emphasis added.] (Ex. 1 (BLM Manual, § 3891.31.H (Rel. 3-162 (7/8/87))) at 810.)

far more detailed, substantive, and credible evidence presented by the Millers and their witnesses.” (Decision at 55.) The Judge later stated that the Forest Service had “presented a prima facie case that the costs of mining the Robin Redbreast lode mining claim would exceed the value of the mineral resources.” (Decision at 63.)

While the Judge was not impressed with the case presented by the Forest Service, it is clear that he was evaluating it against the case presented by the Millers. However, as we stated in our earlier decision, the determination of whether or not the Government has presented a prima facie case is to be made solely on the evidence adduced during the Government’s case-in-chief, which includes testimony elicited in cross-examination. United States v. Miller, 138 IBLA at 269. As we cautioned therein: “Evidence presented by the contestees in their own case or later by the Government in any rebuttal to contestees’ submissions is not properly considered in determining whether a prima facie case has been presented.” Id. at 270.

To the extent the Judge referred to “Dersch’s mineral examination” being “insufficient to overcome” the evidence presented by the Millers, he may have been confusing the burden of proof. When the United States contests a mining claim, it bears only the burden of going forward with sufficient evidence to establish a prima facie case on the charges in the contest complaint. Generally, when a Government mineral examiner, who has had sufficient training and experience to qualify as an expert witness, testifies that he has physically examined a claim and found mineral values insufficient to indicate the discovery of a valuable mineral deposit, the United States has established a prima facie case that the claim is not supported by a discovery. United States v. Gillette, 104 IBLA 269, 274-75 (1988); United States v. Copple, 81 IBLA 109, 133 (1984). Once a prima facie case of lack of discovery has been established, the contestee has the burden to overcome that case by a preponderance of the evidence. United States v. Winkley, 160 IBLA at 142, and cases cited therein.

Based on our review of the Government’s case-in-chief, as well as the testimony elicited on cross-examination, we conclude that the Forest Service presented a prima facie case of lack of discovery of a valuable mineral deposit on the claim.^{41/} The weakness of that case, however, was quickly apparent upon presentation of the Millers’ case. Based on our review of all the evidence, we conclude, for the reasons set forth below, that the Millers overcame that prima facie

^{41/} As a Government mineral examiner, Dersch was not required to drill or otherwise sample beyond the existing workings and exposed mineralization on the claim, in an effort to prove the discovery of a valuable mineral deposit. United States v. Winkley, 160 IBLA at 144; United States v. Bechthold, 25 IBLA at 84-85.

case by a preponderance of the evidence.^{42/} Accordingly, we agree with Judge Pearlstein that the contest must be dismissed.

C. Mineable Width

The record shows, as recounted above, that the claim has been the subject of extensive sampling and assaying of material from the claim. We agree with Judge Pearlstein that all of the sampling and assaying clearly demonstrates that there exists on the claim a “fairly continuous and uniform exposure of the mineralized Robin Redbreast vein” and that the vein had been physically exposed, both on the surface and underground as of January 1, 1984. (Decision at 56, emphasis added; see Tr. II at 80, 273, 284-86; Tr. III at 34; Tr. IV at 130-35; Ex. 3 at 21 and Figure 3; Ex. 4 at 6-7, 9-10, and Map Nos. 1-4.) It is also undisputed that there is no record of any mineral production from the claim, although the Millers and Ponchak offered their opinions that ore was mined from the Van Boxel workings. (Tr. I at 29, 135, 196, 208; Tr. II at 190-91, 245, 249; Tr. III at 20, 84.)

The Millers assert that they intend to rely on a selective mining method which takes into account the high-grade, narrow vein system found on the subject claim. They intend to run a drift directly under the vein, access the vein from the drift or a short stope, and then “split shoot” the vein, across a narrow one and one-half or two-foot width, allowing the vein material to drop into the drift, whereupon it would be hand sorted in order to separate out the high-grade ore, which would be transported directly to the smelter.^{43/} (Tr. IV at 28-31; Tr. V at 47-49, 121-23, 124-25.) The Millers propose to mine not much more than the narrow vein, which contains the gold, and thereby reduce the mining costs that would otherwise be necessitated by extracting not only the vein, but also a considerable amount of waste material on either side of the vein. The Judge concluded that the Forest Service did not properly take into account the Millers’ plan to employ narrow-width mining methods.

The Forest Service contends that, unlike Ponchak, Dersch sought to obtain representative vein samples by chip channel sampling not only at proper intervals along the length of the vein, but also across a full mining width. (SOR at 3-4.) It asserts that these samples were properly taken, yielding a weighted average gold value for the entire length and width of the vein and adjacent material of 0.085 opt.

^{42/} It is clear that consideration of all the evidence does not affirmatively establish the invalidity of the claim. See United States v. Miller, 138 IBLA at 270-71.

^{43/} Even if cobbing or hand sorting were to take place underground, the waste material would still have to be brought to the surface for disposal.

The Forest Service argues that Ponchak failed to sample across a full mining width, rendering his weighted average gold values not representative of the entire length and width of the vein segments and adjacent material.

In general, in order to properly compare the anticipated costs of mining a vein or other mineralized ore body with the expected mineral values that will be recovered and used to recoup the costs of mining, as well as transporting, milling, and marketing the mineral, it is necessary to determine the value of all of the material, including mineral ore and adjacent waste material which must be extracted from the ore body. United States v. Clouser, 144 IBLA at 123-24. Failing to do so improperly maximizes the value which can be recovered, since it ignores the low value waste material that must necessarily be mined, or minimizes the costs which will be incurred, since it ignores the costs associated with extracting the waste material, thereby creating a false sense of the likelihood that the mineral ore can be mined at a profit. United States v. Mavros, 122 IBLA at 308, and cases cited therein. Accordingly, in order to properly evaluate whether a mineralized ore body constitutes a valuable mineral deposit, it is necessary to determine the value of that body across its entire mining width, and then compare that value with the mining costs necessary to realize that value.

In this case, the Millers intend to selectively mine the exposed mineralized areas of the vein structure. At the hearing, they offered the testimony of Lance Barker, a geologist, who operates the Golden Wonder Mine, a gold mine near Lake City, Colorado, with a partner and one other person, in support of such a mining method. (Tr. IV at 21-22.) Barker stated that he and his partner lease the mine and pay the owner a 14.125% royalty based on net smelter returns. Id. at 23, 69. According to Barker, the mine had operated off and on since the 1880's, but "not very profitably." Id. at 61. However, since they took over, their three-person operation "has produced well over a million dollars a year in the five years we've been producing." Id. at 68. He stated that they mine telluride gold from a small fissure-type structure. Id. at 22-23.

Barker testified that "[i]n the stopes and production areas we mine from foot and-a-half to three and-a-half feet wide, but we average around two feet." (Tr. IV at 28). In order to mine such narrow widths, they "make the openings bigger. The access openings are bigger so we can get in and out, but as we mine the stope on the vein we can drill our holes tightly placed and 2 foot width is all that's required." Id. He stated that their "main level" drift is 8 by 8 feet, but other drifts are 6 by 4 feet, with some as small as "3 to 4 feet wide." Id. at 29-31. They drive ore passes between levels and "drop the ore down." Id. at 29. Their main level is "rubber-tire access" and they have an underground loader to pick up ore and take it out. Id. at 30. He stated that "[y]ou never can mine only the ore" and that "there is dilution." Id. at 31.

At times they hand sort the ore to upgrade it. *Id.* at 31-32. Ponchak stated that such narrow fissure vein mining methods would be possible on the Robin Redbreast Lode claim. (Ex. 4 at 14-17; Tr. IV at 189-91.)

The testimony of the Millers' witnesses established that the proposed mining method is technically feasible and would clearly be undertaken by a prudent miner on the Robin Redbreast Lode, in order to minimize mining costs and promote the profitability of mining operations. *See* Tr. II at 174-75, 181-82; Tr. IV at 25 ("The small miner can get on the high grade in the vein and develop just the high grade and be quite profitable"), 28.

D. Gold Values

The Judge noted that Ponchak, who sampled considerably more than Dersch, disclosed gold values that were "consistently significantly higher" than those revealed by Dersch. (Decision at 24.) He found that "[t]he average of all assays run from Mr. Ponchak's samples is 0.53 ounces of [gold] per [ton]." (Decision at 26.) He based that finding on the testimony of Levin, the mining engineer, and Levin's Exhibit 31 at page 3. However, 0.53 opt of gold was not, as the Judge found, the average of all assays run from Ponchak's samples. In fact, Levin pointed out that his calculation was based on the information provided by Ponchak in Table III of Exhibit 28. That table, titled "Reserve Worksheet" provided Ponchak's calculations for probable reserves in the West, East, and Van Boxel Stope Reserves to which Ponchak assigned the grades of 0.424 opt, 1.02 opt, and 0.283 opt, those figures having derived from Table I in Ponchak's Supplemental Evaluation (Ex. 28), which as noted above included assays of selected samples. Ponchak calculated the tonnage in each of those reserves as 80 tons. He also calculated 150 tons of possible reserves to which he assigned a grade of 0.464 opt. Although disputing the validity of the values and the tonnage estimates, Levin accepted them for purposes of this average grade calculation.

Levin's conclusion at page 3 of Exhibit 31 was that, even using Ponchak's prepared sample data, "the measured average grade of mineralized material is only 0.53 ounces per ton, and not 2, 5, or 20 ounces per ton." Levin's conclusion was consistent with Ponchak's statement in his Evaluation that "[t]he grade of these reserves, based strictly on sampling, is approximately 0.50 oz/ton gold." (Ex. 4 at 19.) However, as Levin pointed out, the average grade of the reserves is lower, if the actual assays of Ponchak's chip channel samples, as set forth in Table I of Ex. 28 are utilized and the "commonly-accepted 'Methods of Sections'" is applied, "which accounts for different widths and lengths of representation of each sample." (Ex. 31 at 5; *see* Tr. V at 148-55.) Utilizing that methodology, which resulted in a weighted average vein width of 1.1 feet, Levin calculated the weighted average grade to be

0.272 opt.^{44/} (Ex. 31 at 5-6; Tr. V at 154.) Even accepting 0.53 opt as the average grade and the costs assigned by Ponchak, Levin calculated a loss of \$121,547 in 2002 and \$27,909 in 1983 (Ex. 31 at 4).

We note that Ponchak's weighted average and average grades for the three reserves of 0.392, 0.272, and 0.283 opt are less than the 0.7 opt, which Judge Pearlstein noted was "generally recognized" to be a "rough indication" of a break-even (or cut-off) grade for ore which would be profitable to produce. (Decision at 20, 56.) For this claim, however, he concluded that, "[i]f the average grade of ore shipped to the smelter turns out to be only one ounce of gold per ton, * * * the Millers would * * * sustain a loss of approximately \$73,500 in today's market." (Decision at 35.) He stated that, given the costs of mining and related operations, the Millers "will likely have to mine and ship ore to the smelter in the range of 1.5 ounces of gold per ton in order to turn a profit."^{45/} *Id.* at 55-56. However, none of the weighted average or average values based on Ponchak's chip channel samples (excluding or including his prepared samples) was "in the range of 1.5 ounces of gold per ton." Most of the values were well below 1.5 opt, and only the weighted average value of 1.02 opt for the East Reserve (based only on prepared samples) approached 1.5 opt.

Therefore, Judge Pearlstein concluded that a discovery depended on evidence regarding the existence of higher grade ore:

Mr. Ponchak testified that he believed that the actual grades of ore the Millers would be likely to mine and ship would be in the range of 2 to 5 ounces of gold per ton, and very possibly higher. The ultimate success of the Millers' mining venture depends on the correctness [of] Mr. Ponchak's assessment that the claim will yield such higher grade ore in general and still higher at depth.

^{44/} Levin testified regarding the effects of dilution: "If you were to take a 1 and-a-half foot [mining] width, you would be looking at a term where 1 and-a-half is the numerator and 1.1 [is] the divisor, which would give you a dilution factor of 1.36, or a dilution of 36 percent, which would make this number 0.272 work out to 0.181 assuming you were mining 1 and-a-half feet. But only had a 1.1 foot average." (Tr. V at 154-55.) A two-foot mining width would result in further dilution to 0.1496 opt. *Id.*

^{45/} "At the Golden Wonder Mine, the estimated break-even grade is * * * 1.5 to 2 ounces [of gold] per ton." (Decision at 35.)

The key issue in this case thus devolves into whether the preponderance of the evidence supports the testimony of Mr. Ponchak that the Millers will likely mine higher grades of gold ore than are shown on the assays of the exposed mineralized vein. [Emphasis added.]

(Decision at 55.)

Judge Pearlstein, in fact, agreed with Ponchak that the actual value of the ore was likely higher, even considerably higher, than was disclosed by Ponchak's chip channel sampling. See Decision at 27. He also found that the values obtained by Ponchak's chip channel sampling of the mineralized ore body or vein on the claim were "somewhat marginal," but that the evidence generally disclosed that these values "likely significantly underestimate the grade of gold [ore] that can be mined from the claim." Id. at 58.

Judge Pearlstein concluded that the testimony and evidence presented by Ponchak and Barker "proved much more comprehensive and credible than that evidence offered by the Forest Service witnesses." (Decision at 54.) He stated that Ponchak "prepared detailed mapping of the geology of the claim, examined samples under a microscope, formulated a theory of the geological history of the gold mineralization, and took bulk samples on the claim." Id. at 55. He held that Ponchak's reports and testimony were "much more comprehensive and credible" than Dersch's, and, for that reason, accepted Ponchak's assessment of the geology and mineral values on the claim over those of Dersch. Id. He also concluded that Ponchak properly used geologic inference to project the continuation of the vein at depth. (Decision at 55.)

Importantly, Judge Pearlstein specifically credited testimony by Ponchak and Barker, both of whom are trained geologists with considerable experience with small gold mines, regarding the unreliability of chip channel samples, compared with bulk samples, to assess the gold values which can actually be mined on a small-scale basis in the San Juan Mountains:

Mr. Ponchak and Mr. Barker both testified that in their experience in the San Juans, assay results [of chip channel samples] often significantly underestimated the actual grade of gold that could be mined. This is due partly to the uneven distribution and diffusion of gold in the small portions of samples that are actually graded by the assayer, often resulting in unrepresentative assays.

(Decision at 56.) This was more fully explained by Barker when asked why chip channel samples were not representative of the value of the ore at the Golden Wonder Mine:

Because, like I say, you are only scratching the surface of the vein. When you go in and take a chip sample no matter how you take it, you're going to end up with 2 to 3 pounds of material. When you got that to the lab, the lab is only going to analyze a half an ounce of that material. Even if you have in that one sack a two and-a-half, three pound sample, if you have a half an ounce of gold, which would make it a very valuable sample. That half ounce of gold, if it does not end up in the assayer's half ounce of material that he runs, you don't get it. If, when you are in a bigger production type of mine, the ore is more disseminated. Chip sampling is more representative. But in these small high-grade type of veins, it's virtually impossible.

(Tr. IV at 36-37; see id. at 35.) He stated that they had “completely stopped chip sampling other than to identify zones of high-grade and when you do that, you take a spot sample on a rock type.” (Tr. IV at 36.) When he was chip sampling at the Golden Wonder Mine, “he routinely shipped ore that graded out at values 10 times, or an order of magnitude, greater than shown in the assays for that portion of the vein.” (Decision at 56.)

In light of his conclusion that assays of chip channel sampling on a vein structure such as that exposed on the Robin Redbreast Lode do not accurately reflect the grade of gold that can be mined and shipped from the claim, which was based on the testimony of Barker and Ponchak, Judge Pearlstein turned to other evidence offered by the Millers regarding gold values on the claim, particularly bulk sampling.

Judge Pearlstein found that “[m]iners in the San Juan region, such as Mr. Ponchak and Mr. Barker, believe this bulk sample processing technique provides a more accurate indication of the true gold processing potential of a vein than assays of chip samples, which are much more diffuse and unrepresentative of the high-grade areas.” (Decision at 26.) He also stated that “Mr. Ponchak and Mr. Barker both testified that their bulk sampling and processing technique, learned from old-timers in the San Juan mining district, was much more accurate in projecting mineable gold values from a prospect. Mr. Ponchak's bulk samples taken and processed by this method produced gold values in the range of 3 to 8 ounces of gold per ton, and in one case, nearly 40 oz.” (Decision at 56.) While acknowledging Ponchak's testimony that his bulk sampling analysis was not a scientific technique, Judge Pearlstein characterized it as a “practical skill that has been used by miners in the San Juan district for many years.” Id. at 57.

The Forest Service, however, challenges Ponchak's bulk sampling, asserting that it did not properly disclose the representative gold values actually found on the subject claim. It thus contends that Judge Pearlstein erred by crediting such sampling as "probative" of the proper valuation of the mineral deposit at issue here.

Initially, we believe that the term "bulk sampling" is inappropriately used in this case to describe the samples in question. We have approved the use of bulk sampling as a means of assessing the presence of mineral values that may be recovered by actual mining operations on a claim where such values are likely to be unevenly distributed in the mineralized ore body. United States v. Bagwell, 143 IBLA at 389; see United States v. Clouser, 144 IBLA at 115. However, we have noted that, in order to demonstrate "what would be recovered by actual mining operations" along an entire vein, bulk sampling should involve "relatively large samples * * * taken at regular intervals along [the] vein." 143 IBLA at 389. In order to be considered bulk samples, the samples taken by Ponchak should have encompassed at least several hundred pounds of mineral ore, which would have been impractical in this case, given the remote location of the claim. See A Dictionary of Mining, Mineral, and Related Terms 149 (Bureau of Mines 1968) (defining "bulk samples" as "[l]arge samples of a few hundredweight or more"). In addition, as noted, bulk samples would be taken at regular intervals along the vein.

Instead, Ponchak took surface samples "at the most promising locations at 20E, 15E, and 40W" and two underground locations in the Van Boxel stope. (Decision at 27.) In the present case, the two- to five-pound samples taken by Ponchak were clearly nothing more, in terms of size, than any of the chip channel samples taken by Dersch or Ponchak. Nevertheless, they were, in fact, the type of samples that both Barker and Ponchak testified, based on their experience with gold mining in the San Juan Mountains, would provide the best evidence of gold values. As Barker testified: "[W]orking with the one or two-pound sample or four or five po[und] sample would give me a lot better feel for what was there than any assayer is going to tell you." (Tr. IV at 42.) Ponchak stated: "[Y]ou do spot sampling, spots you think are going to be the higher grade because * * * you need to know what you're going to mine and what it's going to be worth." Id. at 124. He also testified that "[a]s part of any project that I am on, I do what has been typically called high-grade. I will go to a spot on the mine at various sites on the surface and take a bulk sample." Id. Finally, he stated: "You can cut all the samples you want, but you give me a five-pound sample of the high-grade zone and I will tell you how much gold is there." Id. at 138.

Judge Pearlstein relied on such testimony, as well as Ponchak's analysis of the geological formation of gold-bearing veins in the San Juans, the projected use of

narrow-width mining methods, and the existence of Van Boxel's workings on the claim to find that "[i]t is reasonably likely that the actual ore grades the Millers could mine on the Robin Redbreast will substantially exceed the assay results of chip channel samples." (Decision at 27.) He also stated that "I find the evidence and testimony of Mr. Barker and Mr. Ponchak on bulk samples, as the witnesses with the greatest knowledge of local mining geology, fully credible. Therefore the bulk sample results represent substantial evidence of the gold values that can be mined on the Robin Redbreast claim." (Decision at 57.) Those findings served as the basis for his conclusion that "the Millers are reasonably likely to be able to mine ore at a grade of 2 ounces [of gold] per ton of [ore]." ^{46/} (Decision at 62.)

As noted above, Judge Pearlstein expressly pinned his findings of fact relating to gold valuation on the credibility of the witnesses. The Millers point to Board decisions in which we have expressed our reluctance to overturn administrative law judge determinations that are expressly based on findings of the credibility of witnesses, citing United States v. Multiple Use, Inc., 120 IBLA 63, 76 (1991), and United States v. Aiken Builders Products, 95 IBLA 55, 58-59, n.3 (1987).

[2] The Millers are correct. Although this Board has de novo review authority, we ordinarily will not disturb a Judge's findings of fact based on credibility determinations where they are supported by substantial evidence. United States v. Higgins, 134 IBLA 307, 316 (1996); BLM v. Carlo, 133 IBLA 206, 211-12 (1995). As we have stated, the basis for this deference is the fact that the Judge who presides over a hearing has the opportunity to observe the demeanor of the witnesses and is in the best position to judge the weight to be given to conflicting testimony. See, e.g., Yankee Gulch Joint Venture v. Bureau of Land Management, 113 IBLA 106, 136 (1990); United States v. Whittaker, 95 IBLA 271, 286 (1987). Clearly, there is substantial evidence in this case supporting the Judge's findings of fact relating to gold valuations and his conclusions based thereon. We find no support for the Forest Service's contention that Judge Pearlstein "trespassed the line between findings of actual fact and advocacy." (SOR at 7.) Its contention that he ignored certain evidence of gold values must be rejected. The fact that he ultimately chose the Millers' evidence over that presented by the Forest Service does not mean that such evidence was ignored. To the contrary, the record shows that he carefully weighed all the evidence related to gold valuation and based his findings and conclusions on

^{46/} The Judge found that based on the proposed updated mining plan and costs set forth in Ex. 28, with the appropriate market prices of gold in 2002 and 1983, which were not in dispute, break-even ore grades for those dates were 0.67 ounces of gold per ton in 1983 and 1.6 ounces of gold per ton in 2002. (Decision at 35.)

his determination of the credibility of the witnesses. We find no reason to disturb his findings and conclusions in that regard.^{47/}

E. Mining Costs Projections

Judge Pearlstein also analyzed the evidence presented regarding the costs of mining. While the Forest Service asserts that he erred in this determination, it does so on the basis that the Judge should have relied on its witnesses' testimony, rather than the Millers'. The Forest Service complains that "[i]f Levin's testimony had been properly credited rather than Mr. Barker's (a rival, small miner), [Judge Pearlstein] could not have found this operation even remotely approached the Mining Law standard of economic feasibility." (SOR at 8.) However, the relevant portions of the transcript cited by the Forest Service in support of that assertion are Levin's direct testimony offered as part of the Government's prima facie case (Tr. II at 88-229), when he criticized various aspects of Ponchak's cost analysis in Ponchak's Evaluation. As set forth below, Ponchak addressed those concerns in this Supplemental Evaluation.

Judge Pearlstein explained his consideration of mining costs, as follows:

While both parties presented a great deal of evidence on projected costs of mining on the Robin Redbreast claim, the record ultimately converged, for the most part, on a relatively undisputed projection of those costs. In the first days of the hearing, it soon became evident that the estimates of mining costs presented by both Mr. Ponchak and Mr. Dersch were both significantly flawed. The testimony of Mr. Levin on the costs of regulatory compliance, overhead, and, to a lesser extent, labor, showed that Mr. Ponchak had omitted or underestimated some of these cost components. Cross-examination of

^{47/} The Forest Service also objects to what it terms improper use of geologic inference to establish reserves on the claim. We do not find improper use of geologic inference in this case. The Judge made a determination of gold valuation based on the evidence presented to him. As we have stated, when there is an exposure on the claim, it is not necessary that the vein be exposed at depth, by drilling or other means, in order reasonably to conclude that mineral values disclosed extend below the surface, or that a valuable mineral deposit actually exists at depth. The use of geologic inference is itself a projection regarding what is reasonably likely to be found, but which has not yet been uncovered. United States v. Clouser, 144 IBLA at 113, 116. The evidence presented by Ponchak regarding the geology of the claim and the gold mineralization is the type of evidence that supports the use of geologic inference.

Mr. Dersch, as well as testimony by the Millers and Mr. Ponchak, showed that many of Mr. Dersch's cost projections were based on erroneous assumptions involving the Millers' mining plans, transportation of the ore, and milling the ore. However, through the admission of additional evidence and testimony, primarily by Messrs. Ponchak, Barker, and Levin, many of these deficiencies in the cost estimates were remedied.

During the break between hearing dates, Mr. Ponchak prepared a supplemental report that refined and modified (and overall increased) his original cost estimates. (Ex. 28). The report was admitted into evidence over the Forest Service's strenuous objections. Although this exhibit was only made available at the beginning of the reconvened hearing on September 10, 2002, the Forest Service had sufficient opportunity to review it as the hearing progressed over the next two days. A third day was reserved for hearing if necessary. The overall cost estimates, methodology, and conclusions in Mr. Ponchak's supplemental report were not significantly inconsistent with his original cost projections in his initial report (Ex. 4), although considerably more detail was supplied.

As Mr. Ponchak forthrightly testified, Exhibit 28 incorporated some additional cost components, particularly related to overhead and regulatory compliance, in direct response to points raised in the testimony of Forest Service witnesses, mainly Mr. Levin. Much of the Forest Service's case-in-chief was directed at criticizing specific aspects of Mr. Ponchak's report (Ex. 4). Mr. Ponchak's supplemental report represented a perfectly proper response to those criticisms. Due to the break between hearing dates, he had the opportunity to prepare that response in written form. Essentially the same evidence could have been received through oral testimony alone. Receiving the supplemental report aided the record by presenting the Millers' updated cost projections in a clearer format. Indeed, this exhibit greatly aids the record by providing the most useful, comprehensive, and accurate evidence on costs submitted by the parties in this proceeding.

In his supplemental report, Mr. Ponchak increased his estimate of total costs, mainly by adding some costs for overhead, increasing labor costs, and projecting mining of only one round in the drift per day, rather than two. (Compare Ex. 4, pp. 24-26 with Ex. 28, pp. 4-6). He also based the supplemental report on a more detailed, updated mining plan for the probable and potential reserves. In the original

report, Mr. Ponchak's projected total costs for mining, shipping, and smelting 275 tons of ore was approximately \$119,000. In the supplemental report, his estimate of total costs for mining, shipping, and smelting 357 tons of ore was about \$176,000. This increased the average cost per ton from approximately \$433 to \$493, about a 14% increase. The latest figures include the costs for excavating 549 tons of waste rock while drifting toward the vein. (Ex. 28, p. 5).

The supplemental report, supported by Mr. Ponchak's testimony, also includes detailed breakdowns of the various cost components, such as for equipment, overhead, permitting, and transportation. The costs for equipment were decreased from those in the original report, due to updated specific information on the prices of available used equipment. (FF [Finding of Fact] #83). The cost estimates as shown in Exhibit 28 are therefore largely adopted as supported by a preponderance of the evidence (FF ##82 et seq[.]).

(Decision at 59-60.)

The Judge went on to discuss various areas of disagreement regarding costs, but he found Ponchak's and Barker's testimony more credible and persuasive than French, Dersch or Levin's on matters of labor, costs of transportation of equipment, costs to ship ore to the smelter, and regulatory compliance.^{48/} *Id.* at 60-62. The Forest Service's contention that Judge Pearlstein treated the costs of mining the Golden Wonder Mine, about which Barker testified, as "valid and absolutely controlling" (SOR at 9), must be rejected. Only after making his own findings based on the evidence and testimony presented did Judge Pearlstein make reference to the overall costs of mining the Golden Wonder as corroborating those findings. See Decision at 62. A reading of Judge Pearlstein's decision discloses that he was well aware of the differences between the two mine sites and the impact of those differences on the costs of mining. (Decision at 28, 30, 35-36, 62.)

It is clear from our review of the record that Judge Pearlstein gave careful and serious consideration to all the evidence presented by the parties in this case. He

^{48/} Regarding labor costs, Ponchak testified that he thought that "Mr. Dersch took his information from a general publication across the United States from his testimony. I didn't think it really applies to work in the San Juans, and I think Mr. Levin did the same thing. He has accurate costs from a different area other than the San Juans. And Mr. Dersch's report was lacking the local information that he needed to really do an accurate assessment of miners['] costs, of transportation costs, of any of those things." (Tr. V at 23.)

provided detailed findings of fact and based his conclusions thereon. Aside from the minor disagreements we have highlighted herein, those findings and conclusions are fully supported by the record.

V. Contestees' Arguments

We turn now to the Millers' contentions that Judge Pearlstein erred in ruling on procedural questions raised by them, which should have resulted in dismissal of the contest. The Millers contend first that the present contest proceeding is barred by res judicata or its administrative counterpart, the doctrine of administrative finality, since it involves the same parties and the same issue, "whether the Millers have discovered a val[uable] mineral deposit on the Robin Redbreast lode claim," which was finally determined by the Board, in its February 1997 decision. (SOR at 11.) They assert that Judge Pearlstein erred by failing to dismiss the Government's present contest complaint on this basis. See Decision at 36, 37-40. We disagree.

Judge Pearlstein posed the question as "whether the lengthy procedural history of this case is justified upon an analysis of the relevant law." (Decision at 37.) He properly recognized that "under the law governing the powers of the Department of the Interior to administer the public lands, there is an exception carved out from the application of the doctrine of res judicata or administrative finality." Id. at 38.

Until a mining claim is patented and title transferred from the United States, the Government retains the authority to bring a mining claim contest to examine the question of the validity of the claim. ^{49/} Davis v. Nelson, 329 F.2d at 846; United States v. Martin, 9 IBLA 236, 237, 241 (1973). The Supreme Court has clearly stated that "so long as the legal title remains in the government it does have power, after proper notice and upon adequate hearing, to determine whether the claim is valid and, if it be found invalid, to declare it null and void." Cameron v. United States, 252 U.S. at 460. Thus, we conclude that the Government clearly has the authority to bring successive Government contests. As the Board stated in United States v. Martin, 9 IBLA at 241:

Furthermore, the fact that a mining claim may have been found at one time to be valid does not estop the Department, under the princip[le] of

^{49/} Certainly, the filing of successive contests by the Government for the sole purpose of seeking to exhaust a claimant, by causing him to run out of money or energy, and thus defeat the claimant by means other than a legitimate inquiry into the validity of the claim cannot be countenanced. However, we reject Millers' suggestion that that is what occurred here. Nor do we believe that the second contest was initiated merely to "harass" the Millers, as they charge. (SOR at 5.)

res judicata, from bringing an adverse proceeding against the claim to determine whether there is a present, validating discovery so long as title to the land is in the United States. United States v. Ideal Cement Company, Inc., 5 IBLA 235, 79 I.D. 117, 120 (1972) [aff'd, 542 F.2d 1364 (9th Cir. 1976)] ; United States v. H. B. Webb, 1 IBLA 67 (1970) [aff'd, (D. Ariz. Nov. 9, 1982), aff'd, 723 F.2d 917 (9th Cir. 1983), cert. denied, 466 U.S. 972 (1984)].

The exercise of such authority is clearly warranted when the initial contest was determined not to raise specific legitimate complaints regarding the discovery of a valuable mineral deposit, or otherwise found to be in error or deficient. See, e.g., United States v. U.S. Borax Co., 58 I.D. 426, 431-32 (1945). A mining claim remains subject to scrutiny by the United States, under the mining law, until a patent is issued.^{50/}

The Millers' arguments against the Department's authority to bring a second contest run counter to their recognition that the Department retains the authority to challenge the validity of mining claims up until the time of patent: "The Millers did not, and do not, dispute the power of the Interior Department to contest the validity of mining claims so long as claims are unpatented and title remains in the United States." (SOR at 12.) However, they would afford only "one bite of the apple," whereupon, following the unsuccessful prosecution of a contest challenging the validity of a claim, the Department is forever barred from challenging the validity of the claim, absent some changed circumstance, which, they contend, did not exist in this case. They assert that "interpreting the Supreme Court's decision in Cameron without regard to the *more recent* Supreme Court cases on *administrative res judicata*, as the administrative law judge did, is error." (SOR at 15.)

None of the cases cited by the Millers has any bearing on the present situation, which involves the Secretary's responsibility under the mining laws. Judge Pearlstein correctly concluded that the law "is clear that the duty and responsibility of the Government to safeguard the public lands, in this case a wilderness area, from invalid claims and entries supersedes the principle of administrative finality or res judicata in the context of mining contests." (Decision at 40.) The limitation urged by the Millers would unjustifiably strip the Department of its continuing authority over Federal

^{50/} At any time a mining claimant may file a patent application for his claim. The filing of such an application requires that the Government determine, once and for all, whether his claim is supported by the discovery of a valuable mineral deposit, and otherwise satisfies the requirements of the United States mining laws. See, e.g., United States v. Hooker, 48 IBLA at 26-27.

lands under the U.S. Constitution. See, e.g., United States v. White, 118 IBLA 266, 308-10, 98 I.D. 129, 151-52 (1991).

In our February 1997 decision, we merely concluded that the Government had failed to present a prima facie case of invalidity, given the particular issues concerning the existence of a valuable mineral deposit on which it chose to focus, and the evidence as a whole introduced at the original hearing failed to demonstrate the invalidity of the claim.^{51/} See United States v. Miller, 138 IBLA at 277-78, 279-81. While that decision constituted a final decision for the Department, there were no questions of fact or other matters which were “distinctly put in issue and directly determined,” or “finally resolved,” as argued by the Millers at page 11 of their SOR, which should have been excluded from further adjudication by the Department.

While the Millers complain bitterly about the second contest proceeding and state that the Forest Service should be required to “prepare more professional showings before bringing these types of contests in the future” (SOR at 16), they are the beneficiaries of the ineptitude of the Forest Service at the first hearing. Had the Forest Service presented a prima facie case of lack of discovery of a valuable mineral deposit at the first contest hearing, it is more than likely that the claim would have been declared invalid for lack of discovery of a valuable mineral deposit. The only expert witness that the Millers offered at the first hearing was Fred C. Grigsby, a geologist. As we stated in our earlier decision, Grigsby “never visited the claim.” 138 IBLA at 260. “One of the most common means of demonstrating what a ‘prudent man’ would do is through the testimony of expert witnesses who have examined the property and express their opinions, as experts, that the evidence supports a determination that further development is warranted. To have an expert in the field examine the property and render a decision is, itself, an exercise of prudence.” United States v. Foresyth, 100 IBLA at 210, 95 I.D. at 467. The second contest allowed the Millers to have their “expert in the field,” Ponchak, “examine the property,” and his testimony and the evidence he produced, combined with the testimony of Barker, proved decisive in this case.^{52/}

^{51/} As noted supra, we did not hold in our earlier decision, as stated by Judge Pearlstein, that “the Millers preponderated on the issues raised in the first hearing.” (Decision at 42.)

^{52/} Judge Pearlstein expressly held that he had no reason to doubt that, following dismissal of the first contest, “the Forest Service then pursued this contest in the good faith belief that a fuller analysis of the mineral values and projected costs of mining the Robin Redbreast claim” would result in a determination that the claim was invalid for lack of discovery of a valuable mineral deposit. (Decision at 43.)

The present contest proceeding was not barred by the doctrine of administrative finality, and Judge Pearlstein properly declined to dismiss the Government contest complaint on that basis.

Next, the Millers contend that Judge Pearlstein erred in finding that the Governmental delay in this case was not a violation of the Millers' due process rights under the Fifth Amendment of the U.S. Constitution. What Judge Pearlstein held, after discussing various court cases concerning due process rights and attempting to apportion to the various parties responsibility for the delays in this case, was that "[a]t this juncture, I am simply not prepared to rule, even if I have the power to do so, that the delays in this entire process have amounted to a deprivation of the Millers' property interest in the claim without the due process of law guaranteed by the Fifth Amendment. I will leave any such determinations to the superior tribunals to which this decision may be appealed." (Decision at 49.) Essentially, Judge Pearlstein recognized the limitation on his authority to decide constitutional questions, but acknowledged that, even if he had the power, he would not find a deprivation of a property interest without due process of law.^{53/} We recognize the same limitation on our authority.

We reject the Millers' contention that they were denied fundamental fairness because the Department "repeatedly litigat[ed] the same issues over and over against a citizen * * * without substantial justification." (SOR at 25 (citing, e.g., Continental Can Co., U.S.A. v. Marshall, 603 F.2d 590, 596-97 (7th Cir. 1979)).) The Millers were not subjected to repeated litigation of issues. Although the existence of the discovery of a valuable mineral deposit was once again placed in issue in the second contest, the specific issues which arose in that contest are new and/or arise from new or additional evidence which was not previously adjudicated by the Department. The Millers again complain that "*no reason has ever been shown why the Forest Service mineral examiner could not have done a more careful and thorough job in the first claim contest.*" (SOR at 30.) While we agree that the Forest Service should have done a more careful and thorough job at the first hearing (as attested to by our dismissal of the contest), we note again that the presentation of a prima facie case at the first hearing is not likely to have benefitted the Millers, other than to have saved them the expense of another hearing.

^{53/} It is well established that the Department of the Interior, as an agency of the executive branch of the Government, is not the proper forum to consider constitutional arguments. Laguna Gatuna, Inc., 131 IBLA 169, 173 (1994); Slone v. Office of Surface Mining Reclamation and Enforcement, 114 IBLA 353, 357-58 (1990).

The Millers have provided no basis for dismissal of the contest complaint on procedural grounds. To the extent other arguments have been raised, either by the Forest Service or the Millers, they have been considered and rejected.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, Judge Pearlstein's decision dismissing the contest is affirmed.

Bruce R. Harris
Deputy Chief Administrative Judge

I concur:

H. Barry Holt
Chief Administrative Judge