

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA**

**ERNEST K. LEHMANN &  
ASSOCIATES OF MONTANA, INC.,  
et al.,**

**Plaintiffs,**

**v.**

**KEN SALAZAR, Secretary, U.S.  
Department of the Interior, et al.,**

**Defendants.**

**Civil Action 07-00762 (HHK)**

**MEMORANDUM OPINION**

Ernest K. Lehmann & Associates of Montana, Inc. and Mount Royal Joint Venture (collectively, “Lehmann”) bring this action against Ken Salazar, Secretary of the U.S. Department of the Interior, Rich Cardinale, Acting Assistant Secretary for Land and Minerals Management, and Ron Wenker, Acting Director of the Bureau of Land Management (“BLM”), each in their official capacities,<sup>1</sup> and the U.S. Department of Interior and the BLM (collectively, the “BLM”). Lehmann alleges that the BLM acted arbitrarily and capriciously and without substantial evidence when it determined that Lehmann had not made a valid discovery of a valuable mineral deposit on six mining claims held by Lehmann. The parties have filed cross motions for summary judgment [## 18, 19]. Upon consideration of the motions, the oppositions

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<sup>1</sup> Under Rule 25(d)(1) of the Federal Rules of Civil Procedure, Secretary of the Interior Ken Salazar has been substituted for former Secretary Dirk Kempthorne, Acting Assistant Secretary for Land and Minerals Management Rich Cardinale has been substituted for former Assistant Secretary C. Stephen Allred, and Acting Director of BLM Ron Wenker has been substituted for former Acting Director James M. Hughes.

thereto, and the record of this case, the court concludes that the BLM's motion must be granted and Lehmann's motion must be denied.

## I. BACKGROUND

### A. Legal Background

This case turns on whether Lehmann discovered valuable mineral deposits on six mining claims and therefore has a legal right to mine the claims. The Mining Law of 1872 ("Mining Law"), 30 U.S.C. § 22, *et seq.*, provides that

[A]ll valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, shall be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States . . . .

30 U.S.C. § 22. In other words, "citizens may enter and explore the public domain, and search for minerals." *Andrus v. Shell Oil Co.*, 446 U.S. 657, 658 (1980). "[I]f they discover 'valuable mineral deposits,' they may obtain title to the land on which such deposits are located." *Id.*

The Mining Law itself does not define when a "discovery" has been made. In *Castle v. Womble*, 19 L.D. 455, 457 (D.O.I. 1894), the Secretary of the Interior set out a "prudent man" test that is still in application today. Under the "prudent man" test, a discovery has been made "where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine." *Id.*; *see also United States v. Coleman*, 390 U.S. 599, 602 (1968) (upholding the Department of Interior's use of a marketability test, which required that for a discovery to be made, it must be shown that the mineral can be extracted, removed and marketed at a profit). Once a discovery has been made, a

claim is valid against the United States, although title to the lands remains with the United States until the claim is patented. *United States v. Jim*, 409 U.S. 80, 90 (1972).

Until the United States issues a patent, it has the right to determine whether a claim is valid, i.e., whether a discovery of a valuable mineral deposit has been made. If not, the United States may declare the claim null and void. Thus, if a mining claim is located on public lands that are later withdrawn or segregated from entry to explore for minerals (such as pursuant to an environmental law), the government has the authority to examine all claims within the withdrawn land to determine if they are valid. *See Allen C. Kroeze*, 153 IBLA 140, 144 (IBLA 2000). When the government contests the validity of a mining claim on such lands, in order for the claimant to show that he has a legal right to mine the claim, the evidence must show that a discovery existed within the boundaries of the claims at the time of withdrawal. *United States v. Boucher*, 147 IBLA 236, 242-43 (IBLA 1999).

When the United States, through the BLM, contests a mining claim, it does so before an Administrative Law Judge (“ALJ”). The BLM must first present sufficient evidence to establish a *prima facie* case that the claim is invalid. *Foster v. Seaton*, 271 F.2d 836, 838 (D.C. Cir. 1959). Such inquiry is limited to the evidence presented by the United States. The government presents a *prima facie* case where a governmental mineral examiner offers expert testimony, based on probative evidence, that the discovery of a valuable mineral deposit has not been made within the boundaries of a contested claim. *United States v. Pass Minerals, Inc.*, 168 IBLA 115, 123 (IBLA 2006). Once the government has made a *prima facie* case, the burden shifts to the claimant to overcome this showing by a preponderance of the evidence, preponderating on each issue for which the government has established a *prima facie* case. *Id.* at 123. “[T]o prevail, a

[claimant] must present sufficient proof of validity and cannot meet [his] burden of proof by asserting weakness in the Government's *prima facie* case." *Boucher*, 147 IBLA at 250. The claimant has the "ultimate burden of persuasion." *United States v. Rannells*, 175 IBLA 363, 380 (IBLA 2008) (citing *Hallenbeck v. Kleppe*, 590 F.2d 852, 856 (10th Cir. 1979)).

## **B. Factual Background**

In this case, the BLM withdrew certain public lands from mining and contested the validity of mining claims thereon, including those of Lehmann. Lehmann's claims are located on public lands in the Tootsie Creek area of the Sweet Grass Hills of Montana. Beginning in 1983, Lehmann explored the Tootsie Creek area seeking valuable minerals. Between 1983 and 1991, Lehmann located fourteen unpatented mining claims in this area named Patricia ("P") 7, 8, 14-16, 18, and 20; Butte ("B") 47-48; East Butte ("EB") 4-6; and Royal East ("RE") 1-2. In 1984 or 1985, Lehmann carried out geological sampling and, in 1985 or 1986, submitted a plan of operations to the BLM to continue mining exploration in the area. The plan was approved and shortly thereafter, Lehmann began a drilling program, drilling eleven holes in order to take samples. In 1988, Lehmann submitted a revised plan of operations to the BLM to drill several more holes; the revised plan was approved and Lehmann drilled three more holes.

In 1992, Lehmann submitted a new plan of operations, seeking to build 28,000 feet of road and drill 38-39 new holes. In response, the BLM prepared an Environmental Assessment under the National Environmental Policy Act and determined that an Environmental Impact Statement ("EIS") needed to be prepared before the new plan of operations could be approved. Thus, the BLM delayed approval. According to the government, the EIS raised significant environmental concerns. Therefore, the BLM decided to segregate from mining, subject to valid

existing rights, the Sweet Grass Hills, including the Tootsie Creek area. The BLM suspended processing Lehmann's 1992 plan of operations and informed Lehmann that its claims would be subject to a validity examination.

Between 1993 and 1995, the BLM asked Lehmann for its sampling data and conducted an independent examination to verify Lehmann's data. This effort was led by James Gruber, a mineral examiner at the BLM. In 1995, Gruber concluded his examination and presented his findings in a report ("Gruber Report"). In it, he concluded that eight of the claims were valid (i.e., a discovery of a valuable mineral deposit had been made within the claim at the time of withdrawal), but that six claims (P 14-16, RE 1-2 and EB 6) were invalid for lack of a discovery. Alleged errors in the Gruber Report, and the IBLA's reliance on it, encompass a great deal of Lehmann's challenge before this court.

In 1996, the BLM formally contested Lehmann's P 14-16, RE 1-2 and EB 6 claims before ALJ Harvey Sweitzer, alleging that minerals had not been found within the limits of each claim in sufficient quantities and/or quality to constitute a discovery of a valuable mineral deposit. Lehmann filed a motion for partial summary judgment regarding the validity of the EB 6 and RE 2 claims. The motion was denied, and the ALJ commenced a 5-day hearing. That hearing centered largely on the Gruber Report and Lehmann's opposition to the report, and Lehmann's own evidence. A brief summary of each side's argument at the hearing is useful to an understanding of this case.

The Gruber Report identified gold deposits in the Tootsie Creek area within three main zones: the Main Gold Zone, the East Gold Zone, and the South Fork Gold Zone. Based on the drill hole data and samples collected by Lehmann, Gruber found that the gold in the Tootsie

Creek area was not well oxidized. This is important, according to the BLM, because in areas that are not well oxidized (called sulfide areas), gold is harder to recover. Based on the experience of similar mines, Gruber concluded that a prudent miner would mine the oxidized zones, but not the sulfide zones. Gruber then calculated the amount and type of gold on Lehmann's claims using U.S. Geological Survey Circular 831. Using the classification system outlined in Circular 831, he identified "measured" and "indicated" reserves and determined the amount of gold that could be prudently mined from the three zones.

Gruber then created a mine model to determine whether each claim could be economically mined. Factoring in the costs of operating the mine and the price of gold, Gruber established a "cutoff grade," which he defined as the lowest grade that would meet project costs. The cutoff grade is the volume or weight of gold per the volume or weight of other material. Gruber defined a cutoff grade of 1163 parts gold per billion parts of other material (ppb). Gruber thus found the P 14-16 claims invalid because the surface samples on those claims (no holes had been drilled on these claims) had gold values much lower than his cutoff grade (ranging from 34-308 ppb). He also found that there were no deposits valuable enough to mine on RE 1-2 because the surface and drill hole samples revealed low amounts of gold found only in sulfide zones. On EB 6, Gruber found an exposure of above-cutoff-grade mineral, but he concluded that it was isolated and located in a sulfide zone and thus would not be prudently mined.

In response, Ernest Lehmann, a mining geologist, submitted his own report (the "Lehmann Report"). The Lehmann Report characterized the Tootsie Creek area as a low-grade, large-tonnage, disseminated gold deposit that covered the six contested claims, the eight valid claims, and surrounding property interests held by Lehmann. As such, the Lehmann Report

concluded that the claims could be profitably mined in a single, large volume, open pit operation covering all of this area. Under this model, according to the Lehmann Report, the mine would be profitable, and a prudent man would be justified in expending more money to mine it. Based on this different model, Lehmann vigorously objected to Gruber's requirement of above-cutoff-grade mineralization to support a finding that a discovery had been made.

In 1998, ALJ Sweitzer issued a decision in favor of the BLM with respect to all six claims. The ALJ noted that the law was not clear regarding whether an exposure of above-cutoff-grade mineralization is required to support a discovery, but decided to apply this requirement. Doing so, he determined that the government had made a *prima facie* case with respect to all six claims. Turning to whether Lehmann overcame that *prima facie* case by a preponderance of the evidence, ALJ Sweitzer determined that it had not for several reasons including Lehmann's failure to show whether, or to what extent, the sulfide nature of the area would affect the mining operation, and Lehmann's lack of a specific cost estimate.

In 1999, Lehmann appealed ALJ Sweitzer's decision to the Interior Board of Land Appeals ("IBLA"), which affirmed the ALJ's decision in 2004. In doing so, however, the IBLA stated that ALJ Sweitzer "went too far in adopting cutoff grade as if it were a rule of law," AR 740, while indicating that cutoff grades can be an important indicator of fact relevant to the overall validity determination. The IBLA then stated that it reviewed the contested claims *de novo* and determined that the BLM had made a *prima facie* case because the minerals exposed on these claims were of low value or were not within a valuable mineral deposit. Turning to whether Lehmann overcame this *prima facie* case by a preponderance of the evidence, the IBLA determined that Lehmann's case was speculative and lacked sufficient proof, and therefore no

discovery had been made. It is that decision, rendered by the IBLA, that is on review before this court.

## II. ANALYSIS

### A. Standard of Review

Lehmann brings its challenge under the Administrative Procedure Act (“APA”). Pursuant to the APA, a “reviewing court shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” *Bowman Transp., Inc. v. Ark.-Best Freight Sys., Inc.*, 419 U.S. 281, 284 (1974) (*quoting* 5 U.S.C. § 706(2)(A)). A court must ensure that the deciding body has “examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a rational connection between the facts found and the choices made.” *Kennecott Greens Creek Mining Co. v. Mine Safety & Health Maint.*, 476 F.3d 946, 952 (D.C. Cir. 2007) (*quoting* *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983)). An agency’s factual findings must be based upon substantial evidence. *JSG Trading Corp. v. Dep’t of Agric.*, 235 F.3d 608, 611 (D.C. Cir. 2001) (stating that substantial evidence is “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion when taking into account whatever in the record fairly detracts from its weight.”) (internal quotation marks omitted).<sup>2</sup> Furthermore, the Administrative Record should support the agency’s action,

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<sup>2</sup> The D.C. Circuit has held that “the distinction between the arbitrary and capricious standard and substantial evidence review is largely semantic.” *Lead Indus. Ass’n, Inc. v. EPA*, 647 F.2d 1130, 1146 (D.C. Cir. 2008) (*quoting* *Pac. Legal Found. v. Dep’t of Transp.*, 593 F.2d 1338, 1343 n.35 (D.C. Cir. 1979)). “[S]crutiny of even the most complex evidentiary issues is not inconsistent with the deferential standard of review, so long as the purpose of such scrutiny is to enable the court to better understand the issues before the agency.” *Id.*



and the reviewing court should base its decision on the record at the time of the agency's decision. *Fla. Power & Light Co. v. Lorion*, 470 U.S. 729, 743-44 (1985); see also *Ass'n of Data Processing Serv. Orgs., Inc. v. Bd. of Governors of Fed. Reserve Sys.*, 745 F.2d 677, 683 (D.C. Cir. 1984) (noting that "in the case of formal proceedings the factual support must be found in the closed record as opposed to elsewhere").

The parties have filed cross-motions for summary judgment as to all of Lehmann's claims. Summary judgment is the proper mechanism for deciding, as a matter of law, whether an agency action is supported by the administrative record and consistent with the APA standard of review. *Stuttering Found. of Am. v. Springer*, 498 F. Supp. 2d 203, 207 (D.D.C. 2007) (citing *Richards v. INS*, 554 F.2d 1173, 1177 & n. 28 (D.C. Cir. 1977)). However, this court does not apply typical summary judgment standards when reviewing a final action of an administrative agency under the APA:

Under Rule 56(c) of the Federal Rules of Civil Procedure, summary judgment is appropriate when the pleadings and the evidence demonstrate that "there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." FED. R. CIV. P. 56(c). In a case involving review of a final agency action under the [APA], however, the standard set forth in Rule 56(c) does not apply because of the limited role of a court in reviewing the administrative record. See *Sierra Club v. Mainella*, 459 F. Supp. 2d 76, 89-90 (D.D.C. 2006). Under the APA, it is the role of the agency to resolve factual issues to arrive at a decision that is supported by the administrative record, whereas "the function of the district court is to determine whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did." See *Occidental Eng'g Co. v. INS*, 753 F.2d 766, 769-70 (9th Cir. 1985); see also *Nw. Motorcycle Ass'n v. U.S. Dep't of Agric.*, 18 F.3d 1468, 1472 (9th Cir.1994) ("[T]his case involves review of a final agency determination under the [APA]; therefore, resolution of th[e] matter does not require fact finding on behalf of this court. Rather, the court's review is limited to the administrative record.").

*Stuttering Found.*, 498 F. Supp. 2d at 207. Accordingly, in reviewing the cross-motions for summary judgment, the court evaluates whether the evidence in the administrative record supports the conclusion of the IBLA that Lehmann had not made a valid discovery on the six contested claims.

**B. The IBLA’s Decision that the BLM Presented a *Prima Facie* Case Was Not Arbitrary & Capricious and Was Supported by Substantial Evidence.<sup>3</sup>**

Lehmann argues that the IBLA acted arbitrarily and capriciously and without substantial evidence when it ruled that “the Government establishes a *prima facie* case when a mineral examiner testifies that he has examined a claim and found the mineral values insufficient to support a finding of discovery,” AR 691, because the mineral examiner’s findings in this case were not based on proper legal standards or probative evidence.

**1. *Cutoff grade***

Lehmann argues that the IBLA erred with respect to EB 6 and RE 2 because Gruber’s finding that “the mineral values [were] insufficient to support a finding of discovery” was based on an erroneous interpretation of the Mining Law. AR 691. Gruber required a physical exposure of above-cutoff-grade mineralized rock on each claim to support a finding of a discovery. AR 972. Lehmann asserts that ALJ Sweitzer approved this interpretation but the ALJ noted that, if an exposure of cutoff-grade mineralization were not a requirement, then the BLM would not have established a *prima facie* case with respect to these two claims. On appeal, Lehmann points out

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<sup>3</sup> As an initial matter, the court notes that Lehmann’s argument that the IBLA’s longstanding practice of placing the burden of persuasion on the claimant in a government contest violates the APA is completely without merit. The D.C. Circuit squarely addressed this issue in *Foster*, 271 F.2d at 837-38, holding that the burden of persuasion shifts to the claimant once the government has put on sufficient evidence to establish a *prima facie* case, and the court is bound by that holding.

that the IBLA rejected the ALJ's ruling, holding that "Judge Sweitzer went too far in adopting cutoff grade as if it were a rule of law." AR 740. Lehmann contends that this ruling should have resulted in the IBLA holding that the BLM failed to present a *prima facie* case with respect to these two claims.<sup>4</sup>

The BLM rejoins that the IBLA's decision was not dependent on whether an exposure of above-cutoff-grade mineralization was present on each claim. Instead, the BLM argues, the IBLA analyzed the available samples and the gold values found in such samples prior to concluding that the claims were invalid irrespective of any cutoff grade. With respect to the RE 2 claim, the BLM contends that the IBLA credited Gruber's testimony, based on the objective data, that no trend could be found across the claim with high averages and that exposures on the claim were not well oxidized. With respect to EB 6, the BLM contends that the IBLA based its decision upon Gruber's testimony that a large part of the only identified deposit was shared with, and thus attributable to, a senior claim, and that the only other exposure above cutoff grade was not valuable because it was located in a sulfide zone. The BLM underscores that while the IBLA ruled that adopting a cutoff grade should not be a rule of law, it noted that "[t]he use of a cutoff grade is an indicator of fact" and that its opinion was "not to be construed in any way as rejecting the notion of establishing a cutoff grade for purposes of determining and assessing facts regarding a mining claim." AR 740.

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<sup>4</sup> Lehmann also argues more broadly that Gruber's interpretation of the Mining Law erroneously required the physical exposure of ore-grade mineralization, thus asking a claimant to prove certain profitability, and therefore IBLA's determination that the BLM had established a *prima facie* case was arbitrary and capricious with regard to all six claims. The court concludes that this argument is without merit, as discussed in greater detail later in this opinion.

The IBLA discussed the issue of Gruber’s cutoff grade at length in its opinion. *See* AR 736-44. The IBLA agreed that a valid discovery required the actual exposure of a mineral deposit within the limits of each claim. AR 739-40. It agreed that a cutoff grade can be a useful indicator of whether an actual exposure of a mineral deposit has been made, however it concluded that ALJ Sweitzer went too far in adopting Gruber’s cutoff grade as if it were a rule of law. AR 740. This was particularly true, according to the IBLA, because ALJ Sweitzer had found that Gruber’s cost and operating estimates were too high and therefore his cutoff grade was too high. AR 741 (“To the extent Judge Sweitzer failed to consider this necessary mathematical result of his conclusions because he had adopted the requirement that the mineral exceed the BLM cutoff grade as law of the case, this was error.”). The IBLA, however, found that ALJ Sweitzer had missed the significance of his other factual analysis, AR 740, and after “proceed[ing] to conduct the analysis as the factual inquiry it should have been,” the IBLA concluded that the BLM had made a *prima facie* case with respect to each claim. AR 741.

In evaluating the factual case for EB 6 and RE 2, the IBLA found that the “BLM concedes that an actual exposure of mineral exists on the EB 6 and RE 2 claims . . . [b]ut BLM argues that to the extent there is an exposure it is random and fails to expose a valuable mineral deposit, or to correlate with the valuable mineral deposit the existence of which is inferred from exposures on surrounding mining claims.” AR 741. Stating that Lehmann misperceives the requirement that the exposure be within a valuable mineral deposit (and not a non-valuable deposit or isolated bit of mineralization), the IBLA found that the BLM had made its *prima facie* case. AR 742-44. The court finds no fault in this analysis.

Lehmann correctly points out that in the portion of the opinion in which the IBLA “look[ed] . . . to the Government’s proof to determine whether it met its burden to establish a prima facie case” with respect to EB 6, its explanation appears to be completely dependent upon Gruber’s erroneous cutoff grade. See AR 743 (discussing only exposures that are above cutoff grade). And the IBLA’s statement that, “[t]he prima facie case was presented when Gruber ‘testifie[d] that he has examined a claim and found the mineral values insufficient to support a finding of discovery,’” AR 743-44 (*quoting Boucher*, 147 IBLA at 248) surely is wrong if Gruber’s determination was based upon assumptions about what constitutes a sufficient mineral value that were wrong. Nonetheless, the court finds that the rest of the IBLA’s explanation adequately demonstrates that the IBLA based its decision that the BLM had established a *prima facie* case on the fact that any exposures were random and failed to expose a valuable mineral deposit independent of Gruber’s cutoff grade. This is even more clear with respect to RE 2, for which the IBLA does not refer to Gruber’s cutoff grade at all in its explanation of its conclusion that a *prima facie* case had been made.

## **2. Circular 831**

Lehmann also contends that the IBLA erred with respect to all six of the claims because it relied on Gruber’s testimony and Gruber both erroneously used and erroneously applied the U.S. Geological Survey’s Circular 831 when he conducted his validity examination. Circular 831 and the terminology it uses to describe resources, according to Lehmann, were not designed to be used by mineral examiners in conducting validity determinations; instead mineral examiners are directed to use the BLM Handbook for Mineral Examiners. Lehmann points out that the most recent version of that handbook, published in 2007, expressly advises mineral examiners not to

use the terminology found in Circular 831. The BLM rejoins that Circular 831 is merely a revision of the system published as U.S. Geological Survey Bulletin 1450-A, a bulletin that the IBLA has repeatedly recognized is an appropriate guide. Moreover, the BLM points out the IBLA's statement that it "find[s] no support for finding that errors that allegedly may have resulted from use of the Circular are material." AR 750. Lehmann replies that this "finding" was not supported by any evidence. The BLM is correct.

Gruber's use of Circular 831 does not render the IBLA's decision arbitrary and capricious or unsupported by substantial evidence. In several cases, the IBLA has upheld determinations based on the use of Bulletin 1450-A, and Lehmann does not argue that this Bulletin is not a precursor to Circular 831. See *Vanderbilt Gold Corp.*, 126 IBLA 72, 78 (IBLA 1993); *United States v. Feezor*, 74 IBLA 56, 83 n.8, 84 (IBLA 1983). Lehmann fails to raise any argument that convinces the court that the IBLA has erred in this regard.

Lehmann further argues that even if Gruber's use of Circular 831 was not in error, his application of it was erroneous. Specifically, it contends that Gruber mistakenly believed that a showing of "reserves," as defined in Circular 831, was an absolute prerequisite to finding a discovery. This is wrong, according to Lehmann, because "reserves," as defined in Circular 831, means guaranteed success and this is not required by the prudent man rule. Instead, Lehmann argues, Gruber should have looked at inferred reserves, which he completely ignored. The BLM rejoins that the IBLA concluded that the evidence failed to support a finding of a deposit on these claims, a prerequisite to using geologic inference. And specifically with respect to RE 1-2 and EB 6, which bordered deposits found on other claims and thus presented the strongest cases, the BLM argues that the IBLA found that the isolated samples found on these claims were

insufficient to support a finding that the valuable mineral deposit that existed on the adjoining claims could be inferred to extend onto these claims. The BLM's arguments are well-taken.

Lehmann's argument essentially boils down to whether Gruber erred in not using geologic inference to infer that the valuable mineral deposits on adjoining claims extended onto the contested claims and whether the IBLA's decision is thus fatally flawed because it is based on this error.<sup>5</sup> Geologic inference may be used as a basis upon which to show the extent of a deposit to support a discovery under some circumstances. *See Feezor*, 74 IBLA at 71. In *Feezor*, the IBLA discussed at length the appropriate use of geologic inference. It stated that "where values have been high and relatively consistent, geologic inference can be used to infer sufficient quantity of similar quality mineralization beyond the actual exposed areas, such that a prudent man would be justified in expending labor and means with a reasonable prospect of success . . . ." *Id.* at 79. Geologic inference, however, may not be used to show the existence of a mineral deposit in the first place, and only may be used to show its extent. *Id.* at 71. In other words, "[g]eologic inference may not be used to establish the existence of a valuable mineral deposit" (i.e., "a mineral deposit of sufficient quantity and quality so as to justify a prudent man in expending both labor and money in developing a paying mine,") "where no mineral deposit has

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<sup>5</sup> To support its position, Lehmann points to ALJ Sweitzer's statement that "[t]here is no doubt that Mr. Gruber inaccurately characterized the [IBLA's] standard regarding the use of inferred reserves as an absolute prohibition against their use in proving a discovery." Pls.' Mot. Summ. J. at 24. ALJ Sweitzer, however, went on to say that "there may be circumstances in which an 'inferred reserve' could be considered in support of a discovery finding." AR 423 (internal citations omitted). This does not show that the circumstances of *this* case were such that inferred reserves should be considered.

been exposed within the claim.” *Id.* at 75.<sup>6</sup> In addition, where the evidence shows that results obtained by surface sampling are unreliable as a basis upon which to predicate estimates of a value at depth, such samples cannot serve as a factual predicate for inferring an extension beyond the exposed area. *Id.* at 77-79 (“Mere exposure of isolated mineralization in a vein structure, which mineralization is not, itself, the mineral deposit on which the claim’s validity is predicated, affords an inadequate factual basis for the utilization of geologic inference”).

With respect to the P 14-16 and RE 1 claims, the IBLA based its conclusion that the BLM had made a *prima facie* case on its discussion of the facts and on its agreement with ALJ Sweitzer. AR 748. In its discussion of the facts, the IBLA states that Gruber testified that there were no “identified reserves” in the P 14-16 claims “because he had no verification at depth of mineral values, and no ability to extrapolate information from known data points.” AR 720. He also testified with respect to RE 1 that gold values were significantly low throughout the area. *Id.* ALJ Sweitzer found that even putting aside Gruber’s testimony,

[T]he sample data and other facts presented in the Government’s case-in-chief independently show that no basic equivalency exists between the surface samples and drill hole samples, that each of the contested claims lacks an exposure of at least cutoff grade mineralization within a valuable mineral deposit, and that each, except the RE 2 and EB 6 claims, lack an exposure of any grade of mineralization within a valuable mineral deposit.

AR 424.

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<sup>6</sup> Lehmann appears to misstate this rule when it argues that “[i]t is well established . . . that where minerals are exposed (as demonstrated by the hundreds of samples outside of Gruber’s green arcs, geological inference may be used to evaluate the deposit to determine whether a valuable mineral deposit exists.” Pls.’ Opp’n to Defs.’ Mot. Summ. J. at 18. Lehmann appears to assume that exposing minerals is the same thing as exposing a mineral deposit. The BLM, however, correctly points out that the mere presence of gold on a claim does not indicate the presence of a mineral deposit and does not support the use of geologic inference to infer that the deposit is valuable. *See Feezor*, 741 IBLA at 77-79.



With respect to EB 6, the IBLA found that “the isolated samples [pointed to by Lehmann] are not related to the inferred oxide deposit, and so cannot be used to support a discovery.” AR 746. With respect to RE 2, the IBLA found that the data from the drill holes showed notably low values and that the highest value appeared isolated. *Id.* As stated above, the IBLA was correct to require that the mineralization upon which the inference is to be based be part of the deposit about which the inferences are to be made. The burden is on Lehmann to show that the IBLA was arbitrary and capricious when it relied on Gruber’s testimony and the ALJ’s finding that, with respect to these claims, geologic inference was inappropriate. Here, Lehmann has not shown that there was mineralization within the mineral deposit on which it believes the BLM should have inferred reserves, and that such mineralization was a reliable basis from which to predict estimates of a value at depth. Therefore, it has not met its burden.

### ***3. Prudent Man Model***

The BLM argues that Gruber wrongly employed a model that only looked at isolated, high-grade zones despite the fact that Lehmann had advised Gruber that it planned to mine a low-grade, large-tonnage, disseminated gold deposit, as supported by the U.S. Bureau of Mines. By doing this, according to Lehmann, Gruber left a great deal of valuable ore in the ground, something a person of ordinary prudence would not do. The BLM rejoins that Lehmann’s mine model was flawed because it failed to account for the added reclamation costs associated with mining in sulfide zones, and therefore the IBLA correctly concluded that Lehmann’s mine model must be rejected. The BLM is correct.

The IBLA found that Gruber based his model on the fact that below a shallow oxidized zone, the values indicated that the rock was sulfide, a factor which would severely reduce the

recoverability of the mineral and that for these reasons a prudent miner would not mine below the oxidized level. AR 744. The IBLA stated, “[c]ontestees failed to refute this evidence.” AR 744. The court concludes that Lehmann still fails to refute this evidence and that the IBLA’s determination was sensible and not arbitrary or capricious.

#### ***4. Group Claim Rule***

Lehmann argues that Gruber failed to apply the group claim rule, which it asserts “may allow for the mining of marginal claims” “by spreading costs over a larger tonnage.” Pls.’ Mot. Summ. J. at 28. Gruber, Lehmann contends, admitted that Lehmann had exposed gold and silver on each contested claim, and therefore, according to Lehmann, Gruber should have aggregated the minerals from all of its claims to determine whether there was a reasonable prospect of success in developing one valuable mine. The BLM rejoins that Lehmann misapplies the group claim rule. Lehmann’s interpretation of the rule, they contend, ignores two important aspects of the rule. First, according to the BLM, the rule requires the demonstration of a deposit on each claim to be grouped. Second, according to the BLM, each claim must bear its proportionate share of the costs. The IBLA was therefore correct, the BLM contends, to reject use of the group claim rule because Gruber testified to gold values that would have been insufficient to bear a proportionate share of the costs and to the absence of a deposit of valuable mineral on the contested claims.

The argument between Lehmann and the BLM boils down to what must be shown on a particular claim before it can be grouped with others under the group claim rule. Lehmann, citing *Schlosser v. Verle Pierce*, asserts that it must only show that a valuable mineral (as opposed to a valuable mineral deposit) is present on each claim. *See* 92 IBLA 109, 132 (IBLA

1986) (“it is apparent the practice of the Department has been to allow the consideration of a group of claims as a mining unit where the issue of profitability is at stake.”). The BLM, citing *United States v. Collord*, asserts that a mineral deposit that is reasonably perceived as marketable at profit is required before the group claim rule may be applied such that the recovery expected from each claim would bear a proportionate share of the development and capital costs attributed to the combined operations. *See* 128 IBLA 266, 287 (IBLA 1994) (“[i]n order to be considered valid under the mining law, each claim in a group must have, within its borders, a valuable mineral deposit capable of producing income that exceeds the cost of mining.”).

The IBLA rejected Lehmann’s argument stating, “[w]e need not address this difficult issue because we find that appellants have not overcome the Government’s prima facie case with probative evidence of more than isolated, random gold values.” AR 751. *Schlosser*, cited by Lehmann, supports this determination. *See Schlosser*, 92 IBLA at 133 (quoting, with approval, another IBLA decision holding that the mere presence of low-grade mineralization does not relieve the claimant from the responsibility for presenting the suitability of the project to low-grade high-tonnage extraction). The IBLA’s rejection of the group claim rule because gold values were isolated and random is thus consistent with both *Schlosser* and *Collord*. The court does not find the IBLA’s failure to require use of the group claim rule arbitrary and capricious.

**C. The IBLA's Conclusion that Lehmann Failed to Prove by a Preponderance of the Evidence that a Discovery of Valuable Mineral Deposits Had Been Made Was Not Arbitrary and Capricious and Was Supported by Substantial Evidence.**

*1. All Six Claims*

Lehmann argues with respect to all six claims that the IBLA's decision that Lehmann had not proven that a discovery of valuable mineral deposits had been made was arbitrary and capricious and not supported by substantial evidence because the IBLA inappropriately rejected Lehmann's mine model. Lehmann's model was for a low-grade, large-tonnage, disseminated gold mine covering the six contested claims, the eight valid claims, and Lehmann's surrounding claims. Lehmann contends that the IBLA inappropriately rejected this model by (1) relying on the oxidation issue and (2) requiring greater proof of marketability and thus guaranteed success. The BLM rejoins that the IBLA appropriately concluded that Lehmann's mine model was deficient because it failed to consider the additional costs of recovering gold from a sulfide zone and that the IBLA did not require guaranteed success.

Under Lehmann's model the claims would be mined in a single, large volume, open pit operation covering nearly the entire claim block. AR 1229-30. The higher-grade material (containing most of the gold) would be crushed and agglomerated prior to leaching, while the lower grade material would be removed and placed directly on the heaps without further processing. AR 1231. Using this model, Lehmann concluded that the mine would generate profits of \$77.7 million (before income taxes) and that a prudent man would be justified in expending more money with a reasonable prospect of success in developing a valuable mine. AR 1251-52.

The IBLA rejected this model finding that “the issue of oxidation is critical.” AR 744. It cited Gruber’s conclusion that mining in the sulfide zones would increase costs and reduce recovery rendering it uneconomic, and found that Lehmann had failed to refute Gruber’s evidence. *Id.* The IBLA stated that Lehmann agreed that the Tootsie Creek region contained primarily sulfide material, but argued that oxidation would not matter at this stage of mine development to a prudent miner. *Id.* “To accept this argument,” the IBLA stated, “would require us to accept, based on an admitted lack of knowledge of the extent and nature of the deposits by contestees’ witnesses, that when mining sulfide deposits, as opposed to oxidized deposits, there would be no significant change in the costs of mining or rate of recovery.” *Id.* The IBLA found that the record did not support this notion.

Lehmann argues that the oxidation/leachability issue was not an appropriate basis on which to reject its mine model for several reasons. First, it contends that Gruber made his conclusion that oxidation is the controlling factor in the ability to recover gold by improperly relying on a report prepared in 1983 by M. Stephen Enders and Leslie M. Rogers (“Enders Report”). The Enders Report, according to Lehmann, is not a textbook on how to evaluate low-grade, large-tonnage, disseminated gold deposits, but instead describes the mining program at two other mines, the Zortman and Landusky mines. While at the time of the Enders Report, the Zortman and Landusky mines were only mining in the oxidized zone, a 1993 form filed by the operators of the mines stated that, while ores exploited to date were from the oxidized zones, there were additional probable oxide and sulfide reserves. Second, Lehmann argues that the BLM’s own “bottle roll” tests conducted on samples from his claims showed a recovery of 77.78, 44.84, 45.70, and 42.86 percent of the gold in place in sulfide zones.

Neither of these pieces of evidence, however, render the IBLA's decision arbitrary, capricious or unsupported by substantial evidence. The IBLA directly addressed these arguments and found that Lehmann had assumed a recovery of 50 percent, failing to distinguish between oxide and sulfide ores, while at the Zortman mine recovery in the sulfide zones was 40 percent. AR 745 n.22. Moreover, the court finds that while the 1993 form may indicate that ores in the sulfide zone may be mined, Lehmann does not point to any evidence that the cost of mining does not differ significantly between the sulfide and oxide zones. In fact, the IBLA points to evidence that it does. AR 745 (taking judicial notice of the Supplemental Draft EIS for reclamation at the Zortman mine discussing the metallurgical problems involved with sulfide ore as opposed to oxide ore). Nor do the results of several bottle roll tests convince the court that the IBLA acted arbitrarily and capriciously in determining that Lehmann did not meet its burden where Lehmann did not consider the higher costs of mining in the sulfide zone.

Lehmann next argues that its mine model was inappropriately rejected because the IBLA set the bar too high, requiring that it prove a guaranteed success on each claim before a finding of a discovery could be made. The IBLA did this, according to Lehmann, by relying "on the so-called 'marketability' test from *United States v. Coleman*, 390 U.S. 599, 600-03 (1968)." Pls.' Mot. Summ. J. at 36. Lehmann contends that the BLM interprets this test to require a claimant to show, as a present fact, that the minerals on his claim can be extracted, removed and marketed at a profit to demonstrate a discovery. But while the Supreme Court believed that the prudent man rule and this "marketability test" were complementary, according to Lehmann, they are irreconcilable. Because "reasonable prospect of success" and "presently marketable at a profit" cannot be reconciled, Lehmann contends that the marketability test cannot be applied to minerals,

such as silver or gold, which are indisputably marketable. The BLM rejoins that Lehmann was not required to prove that success was guaranteed in order to validate its claims. Instead, according to the BLM, the IBLA evaluated whether Lehmann had shown a *reasonable prospect* that the deposits, if any, could be mined, removed and marketed at a profit.

The IBLA stated that “[d]iscovery requires a showing of a reasonable prospect that the deposit can be mined, removed, and marketed at a profit.” AR 690. Further, “[a] mineral deposit will be considered valuable where there is a reasonable likelihood that the value of the deposit exceeds the costs of extracting, transporting, processing, and marketing it.” *Id.* (quoting *United States v. Clouser*, 144 IBLA 110, 113 (IBLA 1998)). The court does not read this standard, articulated by the IBLA, and which focuses on a reasonable prospect of profitability, to require guaranteed success. Nor does the court see how requiring Lehmann to expose consistent values of a valuable mineral within a mineral deposit is tantamount to a requirement of guaranteed success. Moreover, this court sees no reason to revisit the Supreme Court’s decision in *Coleman*, applied to valuable minerals such as gold and silver by the Ninth and Tenth Circuits, as well as the IBLA, in its resolution of the instant motion. *See Dredge Corp. v. Conn*, 733 F.2d 704 (9th Cir. 1984); *Hallenbeck*, 590 F.2d 852; *United States v. Bush*, 157 IBLA 372, 376 (IBLA 2002).

## **2. EB 6 and RE 2**

Lehmann further argues, with respect to the EB 6 and RE 2 claims, that the IBLA acted arbitrarily and capriciously when it required Lehmann to expose minerals on the claim within a valuable mineral deposit. Even if the IBLA did not err in this requirement, Lehmann contends that with respect to each of these claims, the IBLA acted arbitrarily and capriciously and without substantial evidence when it found that Lehmann failed to expose valuable minerals within a

valuable mineral deposit on each of these claims. The court will address the first question jointly and the second with respect to each of the two claims.

Lehmann argues that with respect to both of these claims, the BLM found valuable mineral deposits running through the claim, but erroneously required Lehmann to expose minerals within that valuable mineral deposit on each claim. For example, with respect to EB 6, Lehmann argues that Gruber identified a valuable mineral deposit extending across three claims, including an approximately 10-foot-wide sliver of EB 6. Because Gruber calculated that this valuable mineral deposit contained 4,723 tons of reserves, and that 4,447 of these reserves were located on the other two claims, Lehmann argues that EB 6 must contain 276 tons of reserves within this valuable mineral deposit. This, however, the IBLA did not find sufficient to prove a discovery, according to Lehmann, because the IBLA required Lehmann to expose minerals on EB 6 within the valuable mineral deposit inferred by Gruber. Lehmann contends that this requirement is unprecedented. Where the BLM's mineral examiner determines that a valuable mineral deposit containing reserves exists on a mining claim, Lehmann argues, that is the end of the matter and a discovery is proven.

The BLM rejoins that Lehmann's arguments are based, in part, on the incorrect use of geologic inference to assume deposits on contested claims. Lehmann cannot, according to the BLM, prove a discovery based only on Gruber's inferences of deposits on those claims. Instead, before using geologic inference to infer that those deposits extended onto the contested claims, Lehmann needed to demonstrate the exposure of a deposit within the contested claim and that demonstrated values within that exposure are high and relatively consistent. With respect to RE 2 and EB 6, the BLM asserts that Lehmann did not do so, and instead pointed only to isolated



high value samples, unconnected to the inferred valuable deposit. Therefore, according to the BLM, Lehmann cannot use geologic inference to prove that a valuable mineral deposit exists on RE 2 and EB 6. The BLM further argues that the IBLA's requirement that Lehmann expose valuable minerals within a deposit for the deposit to be considered valuable is merely a reflection of the discovery rule, which requires demonstrating a valuable mineral deposit.

The court has already addressed the proper use of geologic inference when proving the discovery of a valuable resource. In accordance with that discussion, the court finds that the BLM is correct and that Lehmann cannot prove a discovery based on Gruber's geologic inferences without more. Further, the court agrees with the BLM that it makes sense that the discovery of a valuable mineral deposit requires more than the exposure of valuable minerals unconnected to the deposit alleged to be valuable.

Even if the BLM applied the correct standard, Lehmann asserts it has met the BLM's standard for both claims. With respect to EB 6, Lehmann points to a sample that was taken on EB 6 and had a grade of 960 ppb. Lehmann further points to drill hole data which produced a sample of 220 ppb on EB 6 within the valuable mineral deposit as inferred by Gruber.<sup>7</sup> The BLM rejoins that the IBLA evaluated Lehmann's high grade samples on the claim but found that the evidence showed the samples to be anomalous and located within a sulfide zone. Within the oxide zone, the IBLA found that the data revealed low values. Therefore, the BLM argues, the high value samples could not serve as evidence of a valuable mineral deposit.

The IBLA stated, with respect to EB 6,

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<sup>7</sup> Lehmann further argues that Gruber's identification of the valuable mineral deposit was flawed and that three other samples, measuring 360 ppb, 210 ppb and 222 ppb should have also been considered as samples within the inferred valuable mineral deposit.

The Government's case acknowledged the two data points relied on by appellants and found them to be isolated examples within a sulfide zone such that the data points, standing alone, did not disclose a valuable mineral deposit. Contestees' rebuttal consisted of Gruber's inference of a narrow band of mineral deposit extending across the EB 6 claim within the shallow oxide zone. But the isolated samples are not related to the inferred oxide deposit, and so cannot be used to support a discovery . . . .

AR 746. The court finds that the IBLA did not act arbitrarily and capriciously or without substantial evidence when it found that isolated high grade samples within a sulfide zone did not prove a discovery of consistent high values within a mineral deposit.

With respect to RE 2, Lehmann points to a 692 ppb rock sample that it alleges is within the inferred valuable mineral deposit and within the portion of RE 2 that does not overlap a senior claim. Lehmann also argues that approximately 75 meters north of the inferred valuable mineral deposit as inferred by Gruber are numerous rock samples with grades ranging from 204 ppb to 3,389 ppb, and that some of these may have been mined had Gruber correctly delineated the valuable mineral deposit. The BLM rejoins that the IBLA examined the evidence and determined that the high-grade samples on RE 2 were "some distance from the South Fork Gold Zone" and that the data from the drill holes showed notably low values. AR 746. Based on this lack of equivalency, the IBLA rejected Lehmann's suggestion that the South Fork Gold Zone should be inferred to run across the RE 2 claim.

The IBLA found that the drill-hole data on the part of RE 2 that Gruber inferred the South Fork Gold Zone to cross demonstrated notably low values. AR 746. With respect to the two very high-grade samples north of the boundary of Gruber's inferred deposit, the IBLA stated that nearby drill hole, outcrop and trench samples do not come close to the values of these high-grade samples. AR 747. Instead, the IBLA concluded that

Contestees can only argue unconvincingly that a prudent miner would extend the line of the South Fork Gold Zone to ‘catch’ an anomalous rock chip sample some distance away randomly interspersed with low value samples. Such conjecture is not probative of whether appellants have made the requisite exposure of a valuable mineral deposit.

AR 747. The IBLA examined the relevant evidence and adequately explained its conclusions. Once again, the court concludes that Lehmann does not show that the IBLA was arbitrary and capricious, or acted without substantial evidence, when it determined that Lehmann’s evidence did not prove a discovery.

**D. The IBLA Was Not Arbitrary and Capricious When It Found that the BLM Did Not Unlawfully Prevent Lehmann from Gathering More Data to Prove Its Discoveries.**

Lehmann contends that the IBLA may not declare mining claims invalid for lack of a discovery when the BLM has prevented the claimant from acquiring the evidence necessary to prove a discovery. Lehmann alleges the BLM did so when it refused to approve Lehmann’s 1992 plan of operations. The BLM rejoins that a claimant may enter claims to gather evidence that a discovery already existed but not to seek a discovery that has not already been made (i.e., not to expose a deposit not exposed prior to withdrawal).

A claim cannot be declared “void for lack of a discovery when it is shown that the Government prevented the claimant from entering their claim to gather the information necessary to prove the existence of a discovery.” *United States v. Mavros*, 122 IBLA 297, 310 (IBLA 1992). The IBLA has explained this requirement as follows:

For example, if the claimant had driven an adit which exposed valuable mineral prior to withdrawal, the claimant should be allowed to reopen a caved portion of the adit to take samples of the mineral he had previously exposed. He could also drill in order to sample a previously disclosed valuable mineral deposit. On the other hand, the claimant may not drive an adit on what appears to be a promising

structure in hopes of finding valuable mineral, as that activity would be considered further exploration to disclose a deposit not exposed prior to withdrawal.

*Id.* at 310-11. “The existence of an exposure of valuable minerals that would support a discovery if quantity and continuous quality of these minerals continues for a reasonably projectable distance is critical to the right to enter withdrawn land for the purpose of drilling to confirm a discovery.” *Id.* at 313; *see also United States v. Parker*, 82 IBLA 344, 384 (IBLA 1984).

Lehmann asserts that the 1992 plan of operations contemplated road building and trenching on all six contested claims and drilling three holes in the RE 1 claim, one hole on the EB 6 claim and two holes on both the P 15 and P 16 claims. The BLM replies that Lehmann’s 1992 plan of operations (1) did not propose to test any sites on the RE 2 or P 14 claims, and (2) proposed to drill, for the first time, on the P 15 and 16 claims and on a previously untested portion of EB 6. Thus, the BLM concludes, with respect to these five claims, Lehmann cannot argue that the 1992 plan of operations was intended to confirm pre-existing discoveries.

The IBLA considered this argument at length. *See* AR 753-56. The IBLA distinguished between “permitting a party to conduct sufficient exploration to prove its case that it had found a discovery . . . prior to withdrawal, and exploring to find a discovery in the first place.” AR 754. It stated that “a crucial requirement is that the deposit be physically exposed as of the date of segregation from mineral entry. No further exploration to obtain such an exposure may be permitted after that date.” AR 755 (*quoting United States v. Conner*, 139 IBLA 361, 364 (IBLA 1997)). Finding that it was clear from the testimony of Lehmann’s witnesses that the purpose of the 1992 plan of operations was to obtain geologic information to identify future drilling targets, it found “no basis for concluding that a purpose of the 1992 plan was to confirm a pre-existing

discovery on any of the contested mining claims.” *Id.* The IBLA further noted that the 1992 plan of operations did not propose to drill in RE 2, P 14 or the relevant portion of EB 6 and that it would constitute the first drilling on P 15 and 16. AR 756. With respect to RE 1, the IBLA found that the evidence disclosed that “claimants were attempting to expand their exploration based upon ‘encouraging’ soil data ‘to assess the property as a whole,’” and concluded that this did not show that the BLM had deprived Lehmann of their right to prove the existence of a pre-existing discovery. *Id.*

The court concludes that the IBLA’s determination is not arbitrary or capricious, or unsupported by substantial evidence. The record shows that the IBLA considered Lehmann’s arguments and examined them with respect to each of the contested claims. While Lehmann must be allowed to enter the contested claims to take samples of the mineral it had previously exposed or to sample a previously disclosed valuable mineral deposit, the BLM need not allow Lehmann to seek new exposures, which appears to be the goal of the 1992 plan of operations. *See Mavros*, 122 IBLA at 310.

### **III. CONCLUSION**

For the foregoing reasons, the court concludes that the BLM’s motion for summary judgment [# 19] must be granted and Lehmann’s motion for summary judgment [#18] must be denied. An appropriate order accompanies this memorandum opinion.

Henry H. Kennedy, Jr.  
United States District Judge