

INTERNATIONAL INSTITUTE OF MINERALS APPRAISERS

P.O. Box 19529 Boulder, Colorado 80308

NEWSLETTER

October 2021

Vol. 25, No. 3

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CELEBRATING 30 YEARS

Yes, your Institute is looking back to 30 years of *Representing YOU*, of enabling *Certification* of You and your peers, and of providing *Education* about mineral appraisal to You and to the Public.

It was in the Fall of 1991 that I contacted Paul Fly, Don Warnken and Chuck Melbye and obtained their support toward the chartering of the Institute.

Reason: We were all disappointed with the dictates of the [*Financial Institutions Reform, Recovery, and Enforcement Act of 1989*](#) (FIRREA). Those included the requirement for the signing off on oil & gas and mining appraisals by ordinary real estate appraisers!!

Clearly, there was a wide gap between real Estate Appraisers' grasping the unique aspects of minerals in the ground and engineers' and geologists' understanding of real estate appraisal standards!

So, in response to this need, the Institute was founded. We grew rapidly and added the very important membership category of Associate Member. We now count many valuable Associate Members, who are working toward Certification, frequently being mentored by IIMA Members.

Also, the Affiliate Membership category was added to serve those experienced parties, who were engaged with the mineral business, but came from a non-technical educational background.

Now, after 30 years we can look back to many achievements. In 2012, our Institute became a Member of the *International Mineral Valuation Committee* (IMVAL). Over the last two years we have had the honor of chairing its global activities toward harmonization of mineral valuation standards.

Also, we can proudly point to the unique library of almost 100 recorded presentations, dealing specifically with the intricacies of mineral valuation. These were obtained, including many case histories, from the joint IIMA/SME sessions at the latter's Annual Conferences. The recordings are now available AT NO COST to interested parties (see below).

The next 30 years will undoubtedly present many challenges, of language nature, with regulatory agencies, in and out of court and in daily oil & gas and mining business.

Let us look forward to those challenges and stand together in that niche of the broad real estate

appraisal spectrum, which we call **MINERAL VALUATION!** *John Gustavson*

GREAT SALT LAKE IIMA REUNION

It's obvious - virtual meetings just aren't the same! With that in mind, Salt Lake City will be the place to be for face-to-face, in person events at the 2022 SME/IIMA meeting. Conference plans are currently in the making. Monday, February 28 will be the date of IIMA's annual Mentor-Mentee Workshop and Evening IIMA Social.

Next, a **full lineup** of sure-to-be outstanding technical presentations by YOU, our own esteemed members, will underpin a not-to-miss day of events on Tuesday, March 1. An annual IIMA lunch and annual meeting is also planned.

It is an absolute honor to be in the ranks of so many skilled, knowledgeable, and generous appraisers in our society. Thank you to everyone who makes our society tick and shows the appraisal industry that we have something special to share. Thank you! Thank you! Thank you! Thank you!

See you in Salt Lake!

2022 IIMA/SME CONFERENCE ABSTRACTS

Creating Value and Managing Risk With Staged Project Development Michael Samis

Staged project development is pushed by the mining industry as a means of reducing capital costs and financing requirements. Companies justifying a staged development approach often rely on qualitative arguments and financial analysis that is unable to demonstrate the true value and risk management benefits of this approach. In this paper,

we consider the Blackwater Gold Project to highlight the full value and risk management benefits of staging a project. We show that a staged project design reduces capital risk exposure by more than half while increasing value in contrast to a conventional design with a large initial capital investment.

Asset Appraisal Versus Company Valuations - Part 2

Amy Jacobsen

When determining the quantum of damages in legal arbitration cases, there are a number of schools of thought regarding the best approaches and methodologies in reaching a "Fair Market Value" to be used in achieving settlement. In such cases, the line sometimes becomes blurred between valuing the asset for damages and valuing the damage to a company's share value. This paper further dives into the differences between asset value and share value and how those valuation methodologies were applied in a few recent case studies. This paper also briefly looks at how the concept of ex-ante and ex-post analysis might change the quantum of damage.

Assessing Diminution in Value in Eminent Domain Proceedings

James Beck

Mineral properties are often subject to eminent domain actions providing for or establishing rights-of-way for highways, utilities, temporary construction easements, etc. Such rights-of-way or easements are typically narrow, linear strips of land (of limited areal extent) and are known as "partial takings". Partial takings, however, often (but not always) result in otherwise unforeseen damage to the "larger parcel" disproportionate to the tons or surface actually taken. The "remainder" can be damaged (or not) or rendered uneconomic, effectively resulting in a diminution in value. Condemnation documents and condemnor appraisals often fail to recognize the incremental damages that are unique to mining, as well as the manner in which such damages can be realistically quantified. It is incumbent upon the

appraiser to identify such damages and opine diminution of value, if any, because the opposing appraiser may fail to do so. The appraiser must possess both minerals expertise, as well as a sufficient command of eminent domain appraisal procedures in order to correctly define the “larger parcel”, “part(s) taken”, and “economic/uneconomic remainders”, and do so in a compelling manner.

Gold Property Transaction Values - A Deeper Dive into Human Factors

Grant Malensek

SLR Mining Advisory has updated its global market transactions database to include 2020 transactions on gold properties containing mineral resources and mineral reserves. In this presentation, besides presenting current results in normalized \$/oz or gold equivalent where gold is the dominant component, a subset of property transactions will be assessed against 14 physiographic factors with an emphasis of looking at “Human Factors” such as Regional Investment (as expressed in Fraser Institute rankings), environment/permitting, and social aspects of the properties in the analysis.

Determination of the Fair Market and Orderly Liquidation Values of a Producing Mine

Dennis Noll

The determination of a mine’s fair market and orderly liquidation values involves a large degree of judgement by an appraiser. Ultimately, reasonable exposure time is key, but consideration of the status of the existing assets plays a large part in assigning reasonable exposure time, the highest and best use, and the appraisal approach. In this case history the assets include the following: the producing mine, the adjacent properties, and the existing finished product stockpiles.

The producing mine is contained within properties that meet the definition of a proven reserve. The adjacent properties are controlled, have been drilled and tested, but are not yet permitted. These were classified by the author to be either probable reserves

or inferred resources, depending upon their highest and best use. The finished product stockpiles were classified as personal property. The nature of the assets dictated the appraisal approach used to determine a cumulative value. The income approach was utilized for the producing mine, the market approach was utilized for the personal property, and the market and cost approaches were utilized for the adjacent properties and their buildings.

The Search for Mineral Property Comparable Sales

Fred Pirkle and John Gustavson

The search for comparable sales in a nondisclosure state can be daunting. Nondisclosure states record transactions, makes them available to the public but do not list financial terms. How are comparable sales found and how are qualifying comparable sales selected? The subject property is a sand mine in a nondisclosure state. The search for comparable sales candidates is facilitated if there are prior sales. The prior sale must be at the same stage of use as the subject property. In this study the comparable sales search was undertaken by identifying sand mines within about a 15-mile radius, reviewing sales history, and determining the comparable sales candidates' Highest and Best Use at time of sale. Candidates also included properties identified by market knowledge. The candidate transactions must meet the definition of Fair Market Value to be reliable and relevant. Sales data, tax records, loan instruments and other property lists were used in the search as well as deed searches from real estate transactions. Through diligent searches, the sales comparison candidates could be adjusted to provide the Fair Market Values of the subject property.

Principle of Substitution in Minerals Appraisal

Michael Samis

How can a well-constructed DCF result in a deeply flawed mine appraisal? Often, the culprit is misunderstanding or inability to competently employ the principle of substitution. This case study

examines one property with two markedly different appraisal results.

Mineral appraiser peers have geoscientific training, understand mineralization, technical development factors, and the comparability of one deposit with another. This case explores side by side, the methodology, and decisions made by a commercial appraiser vs. a mineral appraiser.

Minerals appraisers recognize mineral real estate as a substitutable input into mining, processing, and shipment systems (businesses). Often, errors are made by disregarding substitute properties and assuming a subject property must satisfy demand. Although many key differences are noted, the principle of substitution and the appraiser's ability to compare geoscientific attributes between alternate source properties is emphasized.

Pitfalls of Retrospective Appraisals of Oil and Gas Interests

Betsy Suppes

Retrospective appraisals are sometimes requested by attorneys when settling an estate. However, the mineral owner may not realize that their property was not worth much at that time and the cost to appraise it could potentially exceed the value of the property. The appraiser may not be aware of the relatively modest value of the property until they are halfway into the appraisal. Examples of retrospective appraisals and mitigating techniques are discussed.

What About the Word "Comparable" Do You Not Understand?

Alan Stagg

One of the three Approaches to Value an appraiser is to consider is the Sales Comparison Approach. Although somewhat more difficult to use for mineral appraisals than for real estate, it can be done with appropriate reconciliatory techniques. One not so subtle nuance frequently overlooked is the fact sales of mineral properties can involve differing interests. A passive investor seeking royalty income can be expected to make a different investment decision

than an investor that is to operate the property. This distinction is particularly significant when the property in question is producing. Two notable misuses of this approach I am encountering frequently involve the selection of an indication of value for reserves and the selection of a discount rate. Recent examples of each are provided in this presentation.

The Financial Phase Diagram Approach to Project Valuation

Lynette Hutson

Mining is a capital-intensive industry, where strategic decisions to buy, sell, develop, expand, or close a project require a strong understanding of the economic value and financial risks involved. However, conventional discounted cash flow (DCF) and real options methods of analyses either fail to consider many combinations of variables or are difficult to execute and opaque. This talk will describe a new, analytics-based approach to financial valuations that showcases myriad potential project outcomes in a way that explicitly defines the 'boundary conditions' of a successful project with respect to multiple variables. The approach is analogous to a geochemical phase diagram, which uses a field or surface to define the region of stability of a chemical compound with respect to different physicochemical conditions. This approach is more comprehensive than DCF and more transparent than real options analysis. It also provides a useful evaluation framework to aid technical staff in project evaluation, including a robust set of interactive visualizations.

To Before and After?

David Falkenstern

While most texts and accepted appraisal practice on the subject dictate that partial acquisitions of mineral properties be valued with the Before and After technique; specifically using royalty income, is it always appropriate? Do different site-specific situations necessitate a different appraisal approach to partial acquisitions?

Permitted/active and non-permitted/reserve mineral properties

Acquisition involves part of an eminently mineable section within a well-defined mine plan

Separate royalty/mineral owners within the mine

If the partial acquisition is a significant percentage of an active operation

Is royalty income the only damage?

Reserve replacement

New permitting costs

Do juries grasp Before and After?

The goal of this presentation is to present different examples of partial acquisitions and facilitate an open dialog of our appraisal experiences on the subject.

A Baseline Market Analysis of the New England Aggregate Industry Darwin Werthessen

A relevant and reliable market analysis is the basis for appropriately valuing any property interest. The northeastern United States has experienced accelerated levels of construction over the past several years and there are many projects partially completed or within the development pipeline as of Q3 2021. The aggregate industry supplies the raw materials used in residential and commercial construction projects as well as road and highway development.

This presentation will provide an overview of producing aggregate mines within New England, production volumes, and the construction markets they primarily serve. Primary focus will be placed on three of the largest core market areas in New England as measured by population; Boston (630,000), Providence (180,000), and Worcester (180,000).

This information will then be contrasted with the demand figures developed through study of the construction projects in progress, permitted and approved, and other relevant construction figures, such as highway construction and residential construction (new housing starts).

The culmination of this presentation will be an assessment and forecast of the vitality for the New England aggregate industry.

Applying the Reasonableness Standard Early in a Property Evaluation

David Abbott

The “Reasonableness” principle in the IMVAL Template (2021) should be adapted and applied to all types of geoscience reports via geoscience ethics codes. Early application of some reasonably estimated modifying factors to property evaluations can provide a basis for valid conclusions without acquiring and analyzing large amounts of supporting data. The sixth principle in the IMVAL Template (2021) is the “Reasonableness” standard. As modified for general application, “‘Reasonableness’ means that other qualified and experienced geoscientists with access to the same information for the same date and basis would consider the author(s)’s interpretations and conclusions to be with a reasonable range of variation. Any standards used, assumptions applied, and any method relied upon should be reasonable within the context of the purpose of the report or presentation.” I add as cautionary note: presenting lots of data does not assure the completeness of a report. A couple of examples are provided. The “Modifying Factors” of the CRIRSCO Template apply throughout the property delineation process. A number of “laws of exploration” from Agricola and others illustrate this point.

Mentor-Mentee Workshop in IIMA Suite in SLC

We are returning to the informal workshops for Mentors and Mentees in the IIMA Suite as part of the IIMA Annual Meeting and Valuation Sessions at the SME Convention. It will take place Monday, February 28 at 3 PM.

Our Chair of the *Mentoring Committee*, Kevin Weller has already arranged for one of the subjects to be discussed. Kevin has asked John Gustavson to share his experiences, good and bad, with *valuation of conservation easements*.

Background: Appraisal of mineral assets in the ground is frequently used in the filing of conservation easements. Often, a Before and an After Value are presented to support the claimed value of the difference as the donation value for tax purposes. The After Value is almost always negligible, because the right to extraction of the minerals has been extinguished in the donation. So, the potential tax deduction depends on the Before Value.

Therefore, the Before Value may reach wonderland proportions, frequently caused by appraiser ignorance and/or lack of compliance with USPAP, industry standards and prevailing regulations.

This 45-minute Workshop outlines some of the most egregious errors and omissions, which singly or in combination have led to order-of-magnitude overstatement of value. These include errors in resource/reserve classification, unsupported low discount rates, improper reliance on other parties, sales comparison approach errors, speculative Highest & Best Use, omission of prior sales, inadequate market study, and understatement of permitting, zoning, and financing risks.

Case histories will be discussed, while names, affiliations and detailed locations will be withheld, aiming only to highlight pitfalls for IIMA Members to avoid in future mineral appraisals.

Annual Meeting

It is that time of the year again, namely planning for our *IIMA Annual Meeting* in Salt Lake City, scheduled for Tuesday, March 1, 2022 at our noon Luncheon. We take a 2-hour break from the *Valuation Sessions* at the Conference, so we need a place nearby.

If you know of any good break-out room in a restaurant near the Convention Center, let me know. We expect 20-25 people.

John Gustavson, President

SOCIAL GATHERING IN SLC – DONATIONS WELCOME

We also plan a Social gathering Monday evening, February 28 from 6 PM on. It will be in the IIMA Suite, hotel and suite # to be announced.

In prior years, this get-together has been one of the highlights of our Annual Meeting events. We talk and text with many other members over the year, but rarely have time to see each other and relax. We try to make this evening enjoyable with good spirits and food set-up.

To reduce the bite into our IIMA Budget we humbly ask for your donation. We talk so much mineral appraisal at this event that you might even consider it as a Continuing Education budget item!

Just kidding; however, I now ask you to dig into your company treasury and DONATE a Gold, Silver or Copper gift to help make our Social event become a success with a sponsored bar and delicious munchies for Monday evening in SLC!

A \$300 donation will make you a GOLD sponsor, \$200 announces you as SILVER, and \$100 lists you as a gracious COPPER donor! I personally look forward to exchanging mineral appraisal views with you at the Social, here on the eve of my presidency! Thanks for considering being a Sponsor!

Just drop me an Email at Johngustavson1@aol.com and name your metal. I will send you an invoice, if needed. Checks can be mailed to the IIMA, P.O. Box 19529, Boulder, Colorado, USA 80308.

You can also “Make Payment” via the Member Check-in on the IIMA Website. THANK YOU!

John Gustavson, President

The NEWSLETTER is published by the International Institute of Minerals Appraisers, PO Box 19529 Boulder, Colorado, 80308 USA: Phone: (303) 443-2209; Fax (303) 443-3156

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Special thanks to the contributions made. The strength of the IIMA organization is through the commitment, education, and contributions of its members. We are always looking for

articles to enhance our profession and welcome any material that members may provide.

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