

From: "wahlperry@aol.com" <wahlperry@aol.com>
Subject: **Moapa Valley CM1 appraisal**
Date: October 13, 2011 4:27:40 PM CDT
To: "Mayne, Rhiannon" <r.g.mayne@tcu.edu>, "Ehlmann, Arthur" <a.ehlmann@tcu.edu>
▶ 6 Attachments, 1.1 MB

Hi Rhiannon and Art,

Here is a copy of The appraisal of Moapa Valley .

Sonny

Your message is ready to be sent with the following file or link attachments:

Ted Bunch-Moapa Valley237
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Space Science Consulting Services, LLC

Desert Research Laboratory

Mr. Sonny Clarey
7275 N. Monte Cristo Way
Las Vegas, NV 89131

May 22, 2009

Dear Sonny and Georgia:

As a return favor for your gift of the Moapa Valley CM1 stone, I offer below an appraisal of the stone.

In order to reach a fair market value for Moapa Valley, I evaluated the stone based on several critical criteria and compared the ratings with several other rare carbonaceous meteorites.

Evaluation criteria used for meteorite appraisal

(Rating scale is 1.0 to 5.0 with 5.0 being the highest)

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Meteorite class: Carbonaceous chondrite CM1 (official classification by the Meteoritical Society Bulletin 96, 2009, in preparation).

Weight, size: The main mass weighs 699.

Condition (e. g., freshness, degree of weathering): The stone is in remarkable shape considering that it is a "soft" carbonaceous meteorite and is more subject to weathering than most other meteorites. Rating 4.7.

Desirability/presentation appearance: Only the rare carbonaceous chondrites, e.g., C1s and C2s (Tagish Lake), have such a black coaly appearance. For the specialized collector who admires carbonaceous meteorites, this stone is rare to unique (see below) and will probably appeal to a specialized market. Rating 4.3.

Scientific significance: Moapa Valley belongs to the important carbon-rich category of primitive meteorites that contains organic compounds that were mostly synthesized in the interstellar medium, in addition to nanodiamonds that also originated there. The overall significance of Moapa Valley is yet to

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be determined and the probability that important information about the early solar system will be forthcoming is very high. Rating 4.8.

Uniqueness: All CM1 meteorites recovered before Moapa Valley came from Antarctica. Moapa Valley is the only specimen available to collectors and it is also the largest ever found. Rating 4.7.

Comparative rating: Based on the critical appraisal elements for carbonaceous meteorites (above), Moapa Valley has a rating of 18.5 out of 20 or a desirability rating of 93% and compares favorably with many of the primitive carbonaceous meteorites.

Comparative market value: I have surveyed (March 25 to April 7, 2009) other rare, primitive carbonaceous chondrites of similar characteristics, from currently available internet listings and from private discussions, that are generally considered to be significant stones in terms of science, rarity, appearance, etc. These include the classics Orgueil, Ivuna, and Tagish Lake, among others. The prices per gram range from \$600 to \$2500/g. Of course, these retail prices are based on small pieces, one g or less and on variable quality and availability. Generally speaking, the price of a small piece per g

is higher than that for a much larger piece of the same meteorite. A meteorite main mass will cost less per gram than small fragments.

I have also compared Moapa Valley to outstanding specimens of the less primitive CM2 class, namely Boriskino, Mighei, Cold Bokkeveld, and Nogoya. When small samples of these classic stones appear on the market, their retail price is typically between \$300 and \$500/g. Because Moapa Valley is the only available CM1 specimen outside of Antarctica, its value is higher than for CM2 meteorites.

Moapa Valley is a US stone and is a unique example of a rare class, which makes it a valuable stone. On the down side, Moapa Valley is presently unknown to the meteorite community, which makes its value somewhat less than the rare, primitive counterparts (above). The value of the Moapa Valley may increase in the future with the development of a pedigree and a raised level of covetousness.

In conclusion, my appraised value for Moapa Valley is \$600 to \$800 per gram. Of course, the return you would receive from retail sales depends on the appeal of the stone to the market and your marketing skills.


I have attached an appendix that includes:

- 1) IRS Bull 2008-40, REC 140029-07, §1.170A-17 "Qualified appraisal and qualified appraiser".
- 2) Signed declaration within.
- 3) My qualifications within.
This may come into play if you ever donate part of the stone to a non-profit entity and declare the donation as an income tax deduction. It also verifies my qualification as an appraiser.
- 4) An abstract on Moapa Valley by Irving *et al.*, (2009)

I hope that this appraisal meets with your expectations. Please feel free to question or discuss any issues that pertain to any part of the appraisal.

Respectfully yours,

Ted



Theodore E. Bunch

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Internal Revenue Bulletin: 2008-40

October 6, 2008

REG-140029-07

§1.170A-17 Qualified appraisal and qualified appraiser (partial).

(a) **Qualified appraisal**—(1) **Definition.** For purposes of section 170(f)(11) and §§1.170A-16(d)(1)(ii) and 1.170A-16(e)(1)(ii), the term *qualified appraisal* means an appraisal document that is prepared by a qualified appraiser (as defined in paragraph (b)(1) of this section) in accordance with generally accepted appraisal standards (as defined in paragraph (a)(2) of this section) and otherwise complies with the requirements of this paragraph (a).

(2) *Generally accepted appraisal standards defined.* For purposes of paragraph (a)(1) of this section

(v) *Generally accepted appraisal standards* means the substance and principles of the Uniform Standards of Professional Appraisal Practice, as developed by the Appraisal Standards Board of the Appraisal Foundation.

(3) *Contents of qualified appraisal.* A qualified appraisal must include—

(i) The following information about the contributed property:

(A) A description in sufficient detail under the circumstances (taking into account the value of the property) for a person who is not generally familiar with the type of property to ascertain that the appraised property is the contributed property.

(B) In the case of real or personal tangible property, the condition of the property.

(C) The valuation effective date (as defined in paragraph (a)(5)(i) of this section).

(D) The fair market value (within the meaning of §1.170A-1(c)(2)) of the contributed property on the valuation effective date;

(ii) The terms of any agreement or understanding by or on behalf of the donor and donee that relates to the use, sale, or other disposition of the contributed property, including, for example, the terms of any agreement or understanding that— (iii) The date (or expected date) of the contribution to the donee;

(iv) The following information about the appraiser:

(A) Name, address, and taxpayer identification number.

(B) Qualifications to value the type of property being valued, including the appraiser's education and experience.

(C) If the appraiser is acting in his or her capacity as a partner in a partnership, an employee of any

person (whether an individual, corporation, or partnership), or an independent contractor engaged by a person other than the donor, the name, address, and taxpayer identification number of the partnership or the person who employs or engages the qualified appraiser;

(v) The signature of the appraiser and the date signed by the appraiser (appraisal report date);

(vi) The following declaration by the appraiser: "I understand that my appraisal will be used in connection with a return or claim for refund. I also understand that, if a substantial or gross valuation misstatement of the value of the property claimed on the return or claim for refund results from my appraisal, I may be subject to a penalty under section 6695A of the Internal Revenue Code, as well as other applicable penalties. I affirm that I have not been barred from presenting evidence or testimony before the Department of the Treasury or the Internal Revenue Service pursuant to 31 U.S.C. section 320(c);"

So affirmed T. E. Bunch Date May 23, 2009

- (vii) A statement that the appraisal was prepared for income tax purposes;
- (viii) The method of valuation used to determine the fair market value, such as the income approach, the market-data approach, or the replacement-cost-less-depreciation approach; and
- (ix) The specific basis for the valuation, such as specific comparable sales transactions or statistical sampling, including a justification for using sampling and an explanation of the sampling procedure employed.

(b) **Qualified appraiser—(1) Definition.** For purposes of section 170(f)(11) and §§1.170A-16(d)(1)(ii) and 1.170A-16(e)(1)(ii), the term *qualified appraiser* means an individual with verifiable education and experience in valuing the relevant type of property for which the appraisal is performed (as described in paragraphs (b)(2) through (b)(4) of this section).

Qualifications of T. E. Bunch as a qualified appraiser of meteorites:

- (a) **Education:** PhD in Space Science; MS in Geology; BA in Geology
- (b) **Experience:** 31 years of research in space science for NASA, Ames Research Center.

Over 100 peer-reviewed publications on meteorites

Scientific classifier of over 900 meteorites

Negotiator between buyer and seller of valuable meteorites

Taught/teach university courses on meteorites

Present public outreach educational programs on space science.

MOAPA VALLEY: A SECOND NON-ANTARCTIC CM1 CHONDRITE FROM NEVADA, USA. A. J. Irving¹, S. M. Kuehner¹, D. Rumble, III², R. L. Korotev³ and S. Clary. ¹Dept. of Earth & Space Sciences, University of Washington, Seattle, WA 98195, USA, irving@ess.washington.edu; ²Geophysical Laboratory, Carnegie Institution, Washington, DC, 20015, USA; ³Dept. of Earth & Planet. Sciences, Washington University, St. Louis, MO 63130, USA.

Discovery: A single dark gray, flattened stone (698.8 g), exhibiting subparallel contraction cracks and partially coated with black, vesicular fusion crust was found in 2004 in the Moapa Valley, southeast of Logandale, Nevada.

Petrography: Rounded to ellipsoidal objects (0.05 to 0.7 mm