EDITORIAL: IN PRAISE OF SOME UNSUNG HEROS

As Newsletter Editor, I’ve allowed myself the indulgence of a ‘bully pulpit’ cleverly disguised as an editorial. You the reader exercise the right to read it, or move onto the mineralogical information contained inside; but in this instance, I hope you will pause to absorb these thoughts. My last two mustings were focused upon the difficult times facing mineralogy, and how we as an FM Chapter or regional club might cope with them.

I won’t rehash the litany of circumstances which have eroded the public interest in natural history, but for us, the serious collector, there is one problem we can’t ignore: the shrinking inventory of collecting sites. In order to be classified as an authentic mineral collector, one needs places to collect. For the 21st century field collector here in Pennsylvania, we’ve been confronted with the daunting prospect of losing collecting sites at an alarming rate. The reasons are fairly obvious.

The first one is urban sprawl. The population of the East Coast continues to expand at an unstoppable rate; we can reproduce more people but we can’t reproduce more land. A large portion of our most prolific locations have been found in the Piedmont Uplands, but urban sprawl from Philadelphia outward has demolished and eliminated hundreds of classic old localities. Shopping centers, housing developments, business parks and even hospitals now cap some of the best pegmatite and serpentine locations in Chester, Delaware, Bucks and Montgomery Counties.

Others such as Mineral Hill, will soon follow the same path. Our mineral forefathers would shake their heads in disbelief.

Another factor has been the changing mineral industry. A century or more ago, the Commonwealth sustained a profitable and bustling mineral industry composed mainly of small localized operations. Feldspar, chrome, graphite, talc, phosphates, iron, lead-zinc, copper and trap rock were all commodities which could be profitably mined and processed. A fortunate byproduct of these enterprises, was an abundant supply of specimens for the collector. In the wake of the post war years, changing technology and changing needs for raw materials precipitated the closure of most small quarrying and mining operations. The remaining survivors became fewer and larger, thus limiting the amount and variety of fresh rock exposures. Metallic deposits for example were now limited to three occurrences (Cornwall, Morgantown and Friedensville), primarily underground.

Collecting options were further limited, because the changing mining technology brought stringent environmental and governmental restrictions. The same OSHA standards enacted to protect the health and safety of miners and quarry workers, often closed the open-door policies of quarrying operations. The fear of litigation caused many business insurance underwriters to dictate who could or could not visit these commercial sites. The collecting picture looked grim. Collectors were increasingly forced to visit old locations that still existed, or to dig in construction sites.

But then, an ever-growing ray of hope appeared. Some quarry operations, perhaps in the interest of good public relations or under the influence of their company geologists, elected to sanction responsible collecting. Others have followed suit and while many remain off limits, we do have a growing list of options. Frequently, the value and generosity of this gesture remains unrecognized by the collecting community. A future editorial will explore methods of strengthening the bonds of friendship between the mineral collector and the mineral industry in Pennsylvania. But for now, we offer a salute to the managements of companies such as New Enterprise, Hansen, Eastern Industries, Talmage, Meekley and numerous others. They are the unsung heroes of Pennsylvania mineralogy.

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"MINERALS, MUSEUMS AND MORE"
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11 VETERANS SQUARE MEDIA, PENNSYLVANIA
Mudstones and Minerals

by

Joseph A. Dague

Introduction
The矿物学 of 微晶 deposits in Pennsylvania's sedimentary rocks is interesting, but under reported sector of the hobby and science. This article supplements the account of the Fairhope fire clay location published in the SUMMER 2003 issue of the Newsletter. Several other locations, including the unique phillipsite occurrence at Frankston, Blair County, are accurately described.

Wurtzite Occurrences
The concentration of certain components, such as a solution of calcium carbonate, in unconsolidated sediment results in a concretion. The nodular and lenticular siderite concretions in shales over some of the lower coals in western Pennsylvania and the flattened spherical calcareous concretions in the black shales of the Altoona region contain several collectible minerals. No less a personage than F.A.L.K.W. Genth collected the reddish-brown matrix lined with siderite crystals from Lawsonham, Clarion County, then reposes under glass at the Penn State Earth and Mineral Sciences Museum.

The rare zinc mineral, wurtzite, usually occurs in hydrothermal sulfate deposits. David Seaman and Howard Hamilton, however, described sedimentary wurtzite crystals on the walls of shrinkage cracks of claystone concretions they found at several localities around the Pittsburgh area in 1946 (Occurrence of polymorphous wurtzite in western Pennsylvania and eastern Ohio: Am. Mineral., 35, 1950, 43-50). They collected these wurtzite-bearing concretions from the Brush Creek Shale of the Pennsylvania Age (300,000,000 years old) Conemaugh Group.

My wife, Jeannine, and I began our search for wurtzite in the winter of 1988 at the type locality for the 4H and 6H polytypes of wurtzite near Sheloca, Indiana County (Seaman & Hamilton 1950). The wurtzite we found here occurred as tiny hexagonal pyramids embedded in platy barite with only a few exposed crystal faces. In August, later that year, while hunting for fossil specimens of the spiny brachiopod, Mesolobus (Hoskins, et al., 1983, p. 89-90), we found abundant wurtzite in the nearly flat-lying rocks at an abandoned strip mine in the village of Brockport, Elk County.

Unlike Sheloca, the Brockport horizon for the siderite nodules containing the wurtzite lies in the earlier black Columbian shales, directly above the Lower Kittanning (b) coal. The wurtzite here occurs as both individual crystals and radial groups of small, reddish-brown freestanding crystals of exceptional quality.

Subsequently we collected nodules from several similar occurrences of these two wurtzite-bearing horizons in counties all across western Pennsylvania. In December of 1993 Jeannine and I investigated an outcrop of Columbian shale down slope from a recently backfilled strip mine in the vicinity of Mt. Church Road, Horton Township, Elk County. At this site the concretions are lying loose in an erosion channel below the outcrop.

Isolated and radial groups of sharp, orange-brown, freestanding wurtzite crystals occur here within the septa of these nodules, associated with clear, colorless to white, bladed barite crystals, granular white calcite, tiny chalcopyrite tetrahe-drons, pyrite and sphalerite. The wurtzite crystals show a variety of habits consisting of a complex combination of upper and basal pyramids.

Although well-formed crystals occur only rarely, the stratigraphic range of wurtzite-bearing concretions covers a wide area of the Appalachian Plateau. Based on our field collecting experiences, the Columbian shales proved the most rewarding hunting ground for exceptional specimens of sedimentary wurtzite.

Mineralogists recognize at least nine natural polytypes of wurtzite (Howard V. Hamilton, personal commun., 1990). Further investigations will undoubtedly reveal new collecting sites for this unusual mineral and possibly new polytypes.

Delbert L. Oswald, former curator of the mineral section at Carnegie Museum in Pittsburgh, first reported one of the most interesting mineralized concretion sites in western Pennsylvania (R.C. Smith II, personal commun., 2003). Known as the "Franklin Siderite Nodule Locality" it consists of a grayish-black shale bed of the Mississippian Cuyahoga Formation located in a roadcut along the side of the southbound lane on State Route 8 south of the city of Franklin, Venango County (Geyer, et al., 1976, p.211-213).

Mineralized concretions occur as irregular siderite nodules up to two feet inter-spersed throughout the shale bed. Occasionally pales to golden-yellow siderite crystals, having a distinctive rhombohedral step-growth habit, line the openings in these nodules. In most instances, however, brown to black goethite coats the siderite crystals. The siderite crystals occur erratically, but generally in nodules near the base of the roadcut.

Sometimes dark yellowish-brown, tetra-hedral sphalerite crystals or vein fillings will occur with the siderite crystals. Other minerals in the nodules include small, doubly terminated quartz crystals, coatings of dickite and very small brassy-yellow pyrite cubes partially altered to goethite.

Jeannine and I first visited this site in November of 1989. In a few of the nodules we collected at that time we found small, acicular, black crystals in radiating groups perched on the edges of some of the siderite crystals. We never observed them again on any of our subsequent collecting.
trip until this past June. Once again al-
mast every nodule at one particular spot
in the strata yielded these small black, ta-
ered needles, up to an inch, projecting out
of the edges of the siderite crystals. These
needles occur only on the siderite crystals
in cavities coated with goethite and asso-
ciated with the drusy coatings of tiny al-
tered pyrite cubes.
Wishful thinking prompted my initial
identification of the needles as millerite,
but on further examination, a variety of
goethite called “needle iron-stone” seems a
far more likely candidate.

Both the wurtzite-bearing siderite nod-
ules and these siderite-lined nodules found
at Franklin formed under marine condi-
tions. However, the mineralization in the
contraction cracks of the wurtzite-bearing
nodules never extends to the outside of the
nodules. The essential minerals probably
concentrated as the nodules formed in the
marine sediments. The shrinkage cracks in
the Franklin siderite nodules do extend to
the surface allowing the precipitation of
minerals during or after lithification.

**Phillipsite Occurrences**

In 1962 David Snell, then Curator of the
Earth & Mineral Sciences Museum at Penn
State investigated an outcrop of the Bur-
kett member of the Upper Devonian Har-
rell shale about two miles south of Gra-
zierville, Blair County, where a bulldozer
earthed several concretions up to eight
feet in diameter. Deposition of these dark,
fine-grained shales and siltstone occurred
in the Acadian foredeep basin, preceding
the collision of North American and Eu-
rope. Snell reported little in the way of min-

*Siderite and sphalerite, SR 8 roadcut,
Sandy Creek Twp., south of Franklin,
Venango Co., Pennsylvania. Photos by
the author.*
MINERALS OF FRANKSTOWN
2. Cluster of phillipsite crystals, field of view 1°.

eralization at this site “except for occasional calcite or pyrite lined cavities” (Snell 1970, p. 6–7).

Years later Edward Carper reported that he and other F/M members purchased specimens labeled “Phillipsite, Grazieville, Pa.” from Don Smoley at the Eastern Federation Show in New Castle, Pennsylvania, in July 1978. According to Don Smoley, Delbert Os- wald identified the mineral as phillipsite, a member of the Zeolite group (Carper 1980).

Upon their return to Blair County, Ed Carper and Pen Ambler, visited the Grazierville junkyard, which spread over the nodule site, but failed to find any additional zeolite samples. Undaunted, Ed and Pen began a search for other shale pits in Blair County. Late that August Pen found some large concretions exposed in a shale pit along West Loop Road in Frankstown Township, Blair County (Carper 1980). One of the broken concretions here displayed “very fine barite crystals” as well as those much smaller colorless, cruciform crystals identified as phillipsite.

Ed reported that the mineralization, including the phillipsite and barite plus calcite, pyrite and asphaltum, occurred here chiefly in shrinkage cracks concentric to the outer dimension of these concretions, which obtained diameters up to five feet.

At first some confusion existed over the identity of the zeolite, according to Robert C. Smith, II, who performed powder diffraction analysis on samples of the similar mineral found at both Grazieville and Frankstown (R.C. Smith II, personal commun., 2003). Both phillipsite and a mineral named wellsite—now deleted from the list of zeolites—had comparable crystal habits and chemistry. These concretion-bearing black shales formed in an oxygen-depleted environment and normally contain enriched amounts of barium.

“In the absence of sulfate ions in solution,” Smith says, “it’s possible barium will not precipitate barite, but may precipitate other minerals, such as wellsite.” Smith’s test of the Frankstown sample gave a positive indication for barium. However, as barium would ideally substitute in the phillipsite formula with calcium, and wellsite no longer appears on the list of zeolites, the mineral likely stands as phillipsite.

Smith also added that another sample from the Frankstown site examined under short wave fluorescence by Donald T. Hoff produced both an orange and a white response indicating the presence of sphalerite and possibly witherite. These barium-enriched calcarous shales could provide a potential host for wetherite according to Smith.

Due to the generosity of Ed and Pen in sharing this locality, Jeanne and I as well as dozens of other collectors across the Commonwealth, had the opportunity to collect handsome specimens of the fascinating mineral assemblage found in these concretions. Alas, reclamation and gentrification have closed this site to collecting. But hopefully other exposures of the Bur- kett member will turn up. Based on the extensive number of concretionary beds reported in Pennsylvania’s mudstones and shales, and the mineralization found within them, nodules should make an attractive target for collectors who have knowledge of their potential.

References

PA/FM MINERAL AUCTION: NOVEMBER 1, 2003

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A History and Mineralogy of the Valley Quarry, Gettysburg, Adams County, Pennsylvania

(A compilation of information from two sources)

by

John Teeter and Donald Hoff

Introduction

Recent permission to conduct an FM field trip at the Valley Quarries, Inc. Gettysburg operation (aka, the Teeter Quarry), brought back a rush of memories in preparing an article for this newsletter. Through the generosity of Valley Quarries, Inc., and in particular Fred Crabh, quarry manager, this mineralogically interesting occurrence has been opened to hundreds of collectors in recent years.

While the actual locality is familiar to Pennsylvania collectors, the details of its history and mineralogy remain sketchy to most visitors. This is due primarily to a lack of significant reference sources. Most newsletters that feature the location for club trips, simply abstract information from the popular MINERAL COLLECTING IN PENNSYLVANIA, 4/C (G33), by Geyer, Smith and Barnes. This source, by design, provides only an outline of the geology and mineralogy. Therefore, detailed information is sparse; this article will attempt to update the current body of available data.

During the early 1980s, I developed a serious interest in the history of Adams County mineral occurrences. In the process of gathering information, I learned that John Teeter, son of company founder, and manager during the most productive years, was living a quiet retirement near Gettysburg. I contacted him, and thought he had recently suffered a stroke, was still healthy enough to participate in an interview. He seemed pleased that someone was interested in learning about the commercial history of his operation.

This turned out to be a rewarding occasion for me, as he recounted the trials and tribulations (as well as high points) in the operation of a small, independent stone processing operation. The Teeter quarries at Gettysburg and Medford, MD, eventually traveled the path of most, surviving by way of acquisition. Teeter then wrote a short history of his years in the business and also shared some photos of those early days. Teeter told me that he always found empathy with the mineral collecting community, and allowed his location to be open for responsible collecting. In those years, mainly between the 1950s and 1970s, countless numbers of fine specimens were recovered. I promised Teeter, that the information he provided to me would someday be published.

One of the most avid investigators and collectors at the Teeter Quarry was FM member Donald Hoff. During his teenage years, Don lived near Gettysburg and attended the local high school. A school science club sharpened his interest in mineralogy, and after college graduation, he served as Earth Science Curator at the William Penn Museum (Harrisburg), between 1965 and 1991. He did extensive study of the location and built a comprehensive suite of specimens for the museum collection. His 1968 article in ROCKS AND MINERALS magazine (“Campbell’s Quarry: A Complex Mineral Locality in Gettysburg, Pennsylvania”), remains the best professional account of the location. Portions of that work (updated) are reproduced in this article.

The History of the Teeter Quarry

by

John Teeter

Teeter Stone was founded in 1925 by the late John S. Teeter (1883-1946) of Taneytown, Md. at Gettysburg, Pa., and at Taneytown, Md. He had been a farmer since 1910, a general contractor and crushed stone producer since 1925. The crushed stone business was located at Gettysburg, Pa., and the contracting business was operated out of Taneytown, Md., and Gettysburg, Pa.

The road construction was primarily with Maryland State Roads Commission and Penna. Department of Highways, however, some sub-contracting work and some private work were done.

The crushing plant installed at that time had a capacity of 50 tons per hour. This operation continued over the years, with its ups and downs, with the recession starting in ’29 and with World War II in 1942.

During the years 1926-1930 we were also doing some major road construction work in Pennsylvania excavating and laying reinforced concrete pavements. We were doing this same type of work with the Maryland State Roads Commission.

From 1931 thru 1933 we were more or less just trying to hold our own. In 1934 the business was incorporated in the name of John S. Teeter & Sons, Inc. which carried thru until August 31, 1959 when we became a part of the Harry T. Campbell Sons’ Corporation.
A sequence of photos from the early 1950s, offer a view of the Teeter Quarry. Above, the open cut looking towards the west wall, with north wall to the right. Photo to the right shows the modest company office. Below, a photo of John Teeter, taken at a quarry owners conference. Photos courtesy of John Teeter.
During the years 1927–1940, I operated the business first as project superintendent and by 1934 as general superintendent. Starting in 1940, John S. Teeter operated the farms and the trucking part of the business while I operated the contracting and crushed stone business as executive vice-president. In 1946 with the death of John S. Teeter, I was made president of John S. Teeter & Sons, Inc.

From the middle 30’s up to and including 1946 we were primarily doing road construction work for Penna. Department of Highways, Carroll County Roads Department, Maryland State Roads Commission, Letterkenney Ordnance Depot, and Fort Ritchie.

In 1947, with a backlog of construction projects that could not be built because of the war, it was necessary that we increase our crushed stone capacity so we installed a unitized plant with a capacity of 250 tons per hour. The plant at that time consisted of a 25 x 40 primary; 10 x 36 secondary; 4 x 24 roll crushe; and a 40 x 33 hammermill. At this time we were doing a large volume of business in Adams County, Penna. and in Carroll County, Maryland. Due to the shortage of crushed stone available and with construction projects on hand, it was necessary that we open a plant in Carroll County, Maryland.

We could not get enough stone to build roads so in 1949 we leased the Hyde Quarry and installed another plant there. This plant was smaller in size than our Gettysburg plant because we considered a 100-ton per hour plant large enough at that time. It was only a few years until we were in production-wise and had to increase our plant to a 350-ton per hour plant. This was done by adding a 40 x 50 double impactor primary and two 40 x 33 hammermill secondaries in addition to the 30 x 42 secondary which we used as a primary and secondery before.

Both of our plants operated at 75% capacity over a 9-month period each year. In 1949 we had time enough to move the Gettysburg plant over on the Pennsylvania Turnpike and produce material for several jobs. Likewise, in 1952 we moved the Gettysburg plant to Fairfield and opened up and operated there for about a year and a half. In 1953 we moved to Sparrow Point and crushed some slag for the Maryland Slag Company. In 1955 we opened a quarry for the Rockville Crushed Stone Company at Rockville, Maryland and produced a large tonnage for them until they got their machinery installed. All this we did by providing and building up inventory at both Gettysburg and Westminster and having time to do some work on the side for other people.

Along came 1958 and we found that our reserves at Hydes were running out so we bought a farm at Medford, did some testing, and moved the plant from Hydes—which we called our Westminster operation—to what we now know as our Medford operation. We used principally the same equipment at Medford as we had used at Hydes with the exception of a few modifications in the set-up, etc.

Of course you know that on August 31, 1959, John S. Teeter and Sons, Inc. sold their business to Harry T. Campbell Sons' Corporation. Since that time we have been operating about the same as we had been in the past.

Our number of employees vary from 45-55. We have 1 employee with more than 30 years of service; 9 with more than 20 years; 11 with more than 15 years; 8 with more than 10 years; and 12 with greater than 5 years.

I have had a full and rewarding life with my varied past experience in the construction field and the crushed stone industry. If I had my life to live over, I would want to do the same thing again.

Editor's Postscript

The turbulent nature of the quarrying business increased in the 1960s. Eight years after the acquisition of the Teeter operation, Campbell acquired the Gettysburg Limestone Products Company at nearby Fairfield. In 1969, it merged with the Plintkote Company and continued stone contracting operations until it merged with Genstar Stone Products in 1981. In 1983, the Gettysburg and Fairfield Quarries were acquired by Valley Quarries, Inc., itself a division of the highly successful New Enterprise Corporation.

Mineralogy of the Valley Quarry

by

Donald Hoff

The Valley Quarries operation at Gettysburg, a noted Pennsylvania mineral locality, is located approximately 2.2 miles (3.55 km) southeast of Center Square in Gettysburg. The entrance road is situated along U.S. Route 140. Though the quarry enterprise was first established as the Teeter Quarry, it has gone through several iterations of ownership up to the present Valley Quarries nomenclature. Many collectors continue to use the original Teeter Quarry name.

Prior to 1974, the Valley Quarry was a noted zeolite suite locality. With the discovery of a skarn-magnitite zone in 1974, additional suites of minerals were discovered.

The Valley Quarry is in the south central portion of a long structural basin produced by subiding crustal movements during the Triassic period. This tectonic feature, known as the Gettysburg basin, trends northeast-southwest for approximately 90 miles (145 km) through part of southeastern Pennsylvania and northern Maryland. Its maximum width is 18 miles (29 km). During Late Triassic times, rivers and streams flowing from surrounding highlands deposited sediments into the basin as it subsided and then tilted. Minor lacustrine deposits of essentially the same age occur near the center of the basin.

As a general rule, the sediments of the basin dip gently to the northwest and consist chiefly of shale, sandstone, and conglomerate with minor argillites, limy mudstones, and impure limestones. Sheets and dikes of Upper Triassic diabase intrude the sediments and minor extrusions of basaltic lava accompanied the igneous activity.

The Valley Quarry exposes a thermally metamorphosed shale unit of the Triassic Gettysburg Formation near the bottom of a large diabase intrusion known as the Gettysburg sheet. This large northwesterly dipping igneous body trends northeast-southwest, and averages 1,800 feet (549 m) in thickness along its 38 mile (61 km) length (Stose and Bascom, 1929, page 12). As mapped by Stose and Bascom, the diabase sheet has a thickness of approximately 1/2 mile (805 m) in the quarry area. Fracturing and metamorphism at the Valley Quarry was increased by a large convex roll located on the bottom of the diabase body. The roll, which bears a large southerly trending protuberance, occurs approximately 500 feet (152 m) northeast of the quarry. Magmatic heat baked the sediments in the quarry area producing a hard, dense, grey, contact metamorphic rock called hornfels. Heating of ground water
and thermal remobilization of Ca, Na, Al, Si, and Fe was followed by hydrothermal solution redistribution. Epidote, albite, zeolites, minor calcite and hematite crystallized out of solution in the fractures. Chemical-rich hydrothermal expulsions from the diabase magma were a possible source for some of the hornfels mineralization.

Blasting during 1974 exposed a lenticular shaped body of sulfide bearing skarn and magnetite enclosed in the hornfels. The extent of this zone of contact metamorphism and contact metasomatism is not known. A calcium carbonate rich sediment was verified by the author as the host rock for silicate and magnetite replacement. Expulsion of fluids from the diabase in place, or fluids working up along the basal-sediment contact from the diabase source magnatic chamber were the source of Fe, Mg, Si, Ca, and perhaps much of the K in the replacement zone.

Mineralogy of the Hornfels

Abundant hornfels mineralization found in place by the author is associated with a fracture set striking an average of N5° W, near vertical to dipping 72° easterly, and planar to curved. Throughout the many years, stibnite has been the chief collectable mineral.

Epidote was usually the first mineral to crystallize in the fractures. However, chlorite deposition sometimes preceded and then followed epidote. Albite postdates epidote with colorless albite crystals enclosing green epidote crystals. Zeolites were the next to form in the sequence of mineral crystallization (paragenesis). Lamontite crystallized first, followed by chabazite and then naevandite. Natrolite was not found by the author in association with chabazite, but natrolite deposition postdates naevandite in the one specimen available for study. Stibnite was the last zeolite to form, but is sometimes contemporaneous with natrolite. Rare calcite crystals crystallized on stilbite, and equally rare platy hematite crystals were contemporaneous with, and followed stibnite.

Mineralogy of the Skarn—Magnatic Zone

The exposed zone of complex contact metamorphism and metasomatism exhibits a bewildering, zoned array of textures and mineral associations. As textures and relative abundance of various mineral associa-

Weathering Minerals—

Entire Quarry

Chrysocolla, cuprite, goethite (limonite), malachite, and native copper are found in the skarn-magnatic zone as oxidation products of the copper and iron bearing sulfides. Bright green malachite, sometimes as divergent groups of microcrystals, and blue to green chrysocolla occur as fracture surface coatings in sulfide rich skarn. Stellated groups of fibrous malachite crystals possessing light to dark green color banding rarely coat fracture surfaces.

Cuprite is occasionally found as red to impure orange coatings on fracture surfaces and rarely as the variety chalcotrichite in vugs in djurleite rich skarn. Rare native copper occurs as micro arborescent crystal groups in small vugs associated with cuprite microcrystals.

Malachite and chrysocolla occur in small vugs in skarn produced by the dissolving out of massive chalcopyrite and bornite. Massive, “limonite” often lines these vugs followed by chrysocolla and malachite deposition. This occurrence yields attractive micro, botryoidal, bright green velvety malachite groups on bright blue botryoidal chrysocolla.

Pyrolusite occurs as dendrites on orthoclase crystals and fracture surfaces throughout the Valley Quarry. The black sooty coatings on epidote, byssolite, and other minerals in the skarn epidote vugs have not been analysed, but in all probability are pyrolusite.

Rare “limonite” pseudomorphs after pyrite are found in the hornfels rock or embedded in zeolites found in hornfels fractures.

Montmorillonite occurs as pink to white earthy masses near zeolites in hornfels fractures.

Acknowledgements

The author extends a note of appreciation to Dr. Robert C. Smith of the Pennsylvania Geological Survey, Harrisburg, Pennsylvania, for his x-ray diffraction identification of djurleite, chalcocite, and diopside. Dr. Smith collected the first djurleite specimen at this location. This discovery was the first for djurleite in Pennsylvania.

The author is also grateful to the Valley Quarries, Inc. for giving collectors permission to enter their Gettysburg quarry.

References


Editor's Postscript

Since the publication of this article, there has been no further significant investigation of the Valley Quarry mineralogy. The popular and widely distributed MINERALS OF PENNSYLVANIA (G33) was last published in 1976. The map and species listing on pgs. 28-30 has become the standard reference for the locality. In 1978, THE MINERALOGY OF PENNSYLVANIA, 1966-1975,
VALLEY QUARRY MINERALS
1. Stilbite of the common sheaf crystal variety, 3 × 4". 2. Stilbite of the less common nodular form, 3 × 3". 3. Epidote crystals from the skarn zone, 3 × 3". 4. Djarlale as metallic bands in bornfels, 5 × 7". 5. Pyrolusite dendrites on bornfels, 5 × 7". 6. Natrolite in radial crystals groups, 1½ × 3".
by Robert G. Smith, II was published by the PA/PA chapter. It contains a detailed description of the djurleite discovery at the Valley Quarry (then listed as Campbell's/Teezer's quarries).

Donald Hoff reported during this update that after the publication of his article, the species stellerite and gold (in small electrum-like grains) have been verified. Micromounter Larry Eisenberger has reported additional new species to the quarry list.

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**President’s Message**

Well I had knee surgery this past month. I don’t think it’ll get me out of raking up the leaves this fall. I am going to forget about those leaves the Weekend of Nov 1st and 2nd. That’s the Symposium weekend! I for one think there is a lot to look forward to. The list of speakers is impressive to say the least. The field trip site or sites are confirmed and don’t forget lunch is included with your registration fee. I have seen a few pre-registration forms to date. As always, everyone seems to hold off till the last minute. Now you will need to register at the door. Registration begins at 8 AM. I was at the Denver show this past month. Due to the airlines I was delayed in Chicago and did not make the F.M.Board meeting on Friday. I did however attend the Saturday FM Social at the main show. It was a pleasure to meet and talk with other FM members. Some I already knew and others were new to me. This brings me to another point about our Symposium here in Pennsylvania. It affords the same opportunity as in Denver, bringing together the membership. Some of my best friends and collecting buddies are off shoots of an on-going involvement in the FM over the years. So come on out to the Symposium make new friends in the mineral collecting discipline and renew old friendships as well. Heck! You might even find that killer specimen or book at our Auction. Go to our web site; we have a few of the many specimens listed.

Thanks to the efforts of our Web Master Dave Saja.

**CORRECTION TO THE PRE-REGISTRATION FORM IN THE LAST NEWSLETTER. IT SHOULD HAVE READ SAT. NOV 1 & SUN. NOV 2 (It was incorrect on the form reading Sat. 2 and Sun the 3rd). I hope this did not confuse or stop anybody from registering for the Symposium!**

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**VALLEY QUARY SPECIES LIST**

This list is assembled from various sources, but remains incomplete as recent discoveries have not been verified.

Andradite  
Bornite  
Calcite  
Chabazite  
Chalocite  
Chalcopyrite  
Chlorite group  
Chryscolla  
Copper  
Djurleite  
Epidote  
Goethite  
Gold  
Hematite  
Heulandite  
Laumontite  
Magnetite  
Natrolite  
Orthoclase  
Pyrite  
Pyrolusite  
Quartz (milky)  
Stellerite  
Titanite  
Tremolite

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**Report of Recent Finds**

The news of several recent occurrences, gleaned at the recent PESA event at Macungie, are listed here for those FM members in search of some autumn collecting locations. As is so frequently the case, diabase either directly or indirectly is the catalyst.

**Rt. 222 construction site, Shillington, Berks County.** Several collectors, including Vince Olshofski of Easton, have been following the progress of the Rt. 222 road construction near Reading, in anticipation of igneous contact areas that might yield anticipated mineralization. This materialized in August and September when an outcrop, possibly a skarn zone, obviously influenced by regional diabase, produced a sequence of minerals. The host rock resembles the familiar Reesor’s Summit (York Co.) occurrence. Andradite garnets, well-crystallized and up to an inch in diameter have been collected. Accessory minerals include actinolite, hematite and possible tremolite. Joe Dague reports small, but perfect Japan-law quartz twins in the vugs. With ongoing progress continuing, this exposure will have limited availability.

**Brookdale Mine, Phoenixville, Chester County.** This location, noted for specimen production since the 1850’s, was subject to backhoe trenching earlier this year. The anticipated species were recovered. FM member Tom Federowicz was among the successful collectors; he showed this editor two large pyromorphite-rich matrix specimens collected in August. Arnie Mogel also reported finding cerussite.

**Haines-Kibbichouse Quarry, Silver Hill, Lancaster County.** This diabase aggregate quarry has experienced production cutbacks, but continues to produce mineral suites. In September, Joe and Jeanne Dague collected additional attractive fluorapatite specimens in lustrous bladed actinolite. They reported that the specimens came from the site of an earlier find made by FM member Bob Weaver. Blasting shattered the crystal prisms, but they produced interesting hand specimens showing multiple cross-sections of pink crystals with white outer rims.
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