From the analysis it is evident that the mineral conforms in a general way to the columbite formula and may be considered as columbite in which some manganese and iron is replaced by uranium, which is present in sufficiently important amount to justify making it a new species.

The age of the mineral was determined as about 300 million years which is very much lower than that of the Ontario uraninites (1100–1200 million) but this result is not conclusive, as, in the writer's experience minerals of this sort often give very much lower age results than they should, due doubtless to the leaching or replacement of part of the lead.

That the material analyzed can be a mixture or intergrowth appears highly improbable. The microscopic examinations revealed no evidence of a lack of homogeneity. Nevertheless because of the opaque character of the mineral the possibility that it might be an intergrowth or mixture of columbite and uraninite was considered though no uraninite was found in the dike. If this were the case treatment with nitric acid would remove the uraninite, a test which was applied with negative results.

The name Toddite is proposed for this mineral in honor of E. W. Todd of the Ontario Department of Mines who has contributed so much to our knowledge of Canadian radioactive minerals.

NOTES ON THE MINERAL LOCALITIES OF RHODE ISLAND. I. PROVIDENCE COUNTY

LLOYD W. FISHER AND EDWIN K. GEDNEY, *Brown University*

A recent survey of the minerals of the state of Rhode Island which are included in the museum collections of the Department of Geology of Brown University and of Roger Williams Park of Providence, together with a careful study in the field by the authors and others have revealed the presence of at least sixty species of minerals from forty-five localities. A brief discussion of the chief mineral localities and occurrences in Providence County[1] is here recorded.

[1] A paper is being prepared by the authors on the remaining localities.

MINERALS FOUND

Actinolite
Albite
Allanite
Ankerite
Anthophyllite
Apatite
Aragonite
Arfvedsonite
Augite
Azurite
Barite
Beryl
Biotite
Boltonite
Bowenite
Calcite
Chalcopyrite
Crocidolite
Cryolite
Cyanite
Dolomite
Enstatite
Epidote
Fluorite
Galena
Garnet
Glaucophane
Gold[2]
Göthite
Graphite
Hematite
Hornblende
Hortonolite
Ilmenite
Ilvaite
Jamesonite
Knebelite
Limonite
Magnetite
Malachite
Melanterite
Microcline
Muscovite
Molybdenite
Octahedrite
Opal
Orthoclase
Ottrelite
Phlogopite
Pyrite
Pyrolusite
Pyrrhotite
Quartz
Rhodochrosite
Rhodonite
Riebeckite
Rutile
Scapolite
Scolecite
Serpentine
Siderite
Sphalerite
Talc
Titanite
Tourmaline
Tremolite
Zoisite

LOCALITIES

CRANSTON

Fenner's Ledge on Cranston street has been worked in the past for graphite and graphitic anthracite and shows quite a number of the minerals listed from Violet Hill, Manton Avenue. Large veins of fibrous quartz replacing actinolite traverse the exposure.

LOCALITY	MINERALS FOUND	REMARKS
Fenner's Ledge	Actinolite	With graphite.
	Graphite	Foliated, veined and bedded in shale.
	Hematite	Bright red in shale.
	Limonite	Yellow and iridescent.
	Melanterite[3]	Yellow and white, incrusting.
	Ottrelite[4]	Small lustrous plates in schist.
	Pyrite	In shale.
	Quartz	Massive, crystalline. Pseudomorphous after actinolite.
	Talc	With quartz in schist.

[2] In chalcopyrite.

[3] Occurring with the melanterite but not directly in contact with it are two different iron sulphates, one almost pure white and the other of a cream color. Both show considerable amounts of ferric iron and magnesium is noted in the pure white one.

[4] A study of ottrelite, its crystallography, chemistry and origin is being made by the authors with Prof. C. W. Brown and will be presented in a later paper.

Cumberland

Fully one-half of the minerals of Providence county are found within the limits of this township. Quartz, epidote and hematite are common while fluorite and galena are more or less abundant.

Locality	Minerals found	Remarks
Beacon Pole Hill	Arsenopyrite	Rare.
	Crocidolite	Blue, fibrous, with smoky quartz.
	Quartz	Smoky.
Copper Mine Hill	Actinolite	
	Azurite	Rare. Coatings on chalcopyrite.
	Chalcopyrite	Massive, with magnetite.
	Epidote	Veined.
	Hornblende	
	Magnetite	Massive, with cumberlandite.
	Malachite	Botryoidal, with chalcopyrite.
Cumberland Hill	Beryl	Green crystals, sparingly, with quarts.
Village	Biotite	Small plates.
-in quartz veins	Calcite	In glacial boulders with sphalerite, siderite and cryolite.
	Chalcopyrite	With galena and sphalerite.
	Chlorite	Altering to magnetite and ilmenite.
	Cryolite	Same as calcite.
	Cumberlandite	Massive.
	Epidote	Massive. Some large crystals.
	Fluorite	Octahedrons. Purple chlorophane.
	Galena	Cubes, octahedrons, some coated with pyrite, sphalerite, chalcopyrite and fluorite.
	Hematite	Fine crystals in veins in chlorite.
	Hornblende	Elongated crystals on quartz.
	Ilmenite	Lustrous plates in chlorite schist.
	Limonite	Coatings on quartz.
	Magnetite	Small octahedrons.
	Malachite	Botryoidal. Rare. On chalcopyrite.
	Molybdenite	In boulders with magnetite.
	Phlogopite	Crystals near contact with schist.
	Pyrite	Crystalline. Not common.
	Pyroxene	Augite crystals in quartz.
	Quartz	Rock crystal; Smoky; Milky; Massive; Ferruginous; Sagenitic, with hornblende and tourmaline; Prase.
	Siderite	In glacial boulders with calcite, etc.
	Sphalerite	"Black jack," crystalline, with chalcopyrite, fluorite and galena.

[5] Schorl in quartz at contact with gneiss, dichroite at contact with green schist.

Locality	Minerals Found	Remarks
	Tourmaline[5]	Schorl in unterminated crystals, and dichroite, rare.
Diamond Hill	Barite	Rare.
	Hematite	
	Hornblende	
	Limonite	Coating quartz.
	Quartz	Var. Agate; Amethyst; Chalcedony; Chrysoprase; Heliotrope; Jasper; Milky; Onyx; Rock crystal; Sardonyx; Smoky.
	Zoisite	Dark crystalline with quartz.
Iron Mine Hill	Actinolite	
	Epidote	
	Hornblende	
	Hortonolite	Dark crystals.
	Ilvaite	In veins.
	Magnetite	Massive in cumberlandite boulders.
	Molybdenite	With magnetite.
	Pyrolusite	With iron ore and in gneiss.
	Serpentine	Greenish with iron ore.
	Talc	White and green foliated with iron ore.

Lincoln

The Harris limestone quarries in this township are rather important because of the abundance of minerals found and these include the beautiful specimens of flattened, yellowish-tinged quartz.

Locality	Minerals found	Remarks
Harris Quarry	Calcite	Milky crystals, modified scalenohedrons and rhombohedrons; white calcite rhombs; Iceland spar. Limestone with graphite. Graphitic marble.
	Limonite	Black and brown.
	Opal	Blue coatings on weathered quartz.
	Quartz	Flat, tabular crystals, tinged with yellow in veins with calcite.
	Rutile	Minute brownish crystals in quartz.
	Scolecite	Minute crystals with calcite.
	Serpentine	Var. bowenite in limestone.
	Talc	White, pale green, foliated.

[6] These cuts are located along the right of way of the Providence to Woonsocket Electric Railway chiefly between Miner's Crossing and Lime Rock Station (Wilbur Road).

Locality	Minerals Found	Remarks
Trolley cuts[6]	Actinolite	In schist.
	Bowenite	With calcite.
	Calcite	Milky, good rhombs, in schist.
	Chalcopyrite	Massive in granite pegmatite.
	Göthite	From pyrite.
	Malachite	Botryoidal on chalcopyrite.
	Molybdenite	Rare. In granite.
	Muscovite	Rather large plates in granite.
	Octahedrite	White and pale pink crystals accompanying titanite.
	Orthoclase	Bright red, pink and rarely white in granite porphyry.
	Pyrite	In cubes in granite and schist.
	Quartz	Crystalline in veins; blue in contact.
	Rhodonite	Massive and crystalline in schist.
	Serpentine	With calcite in schist.
	Titanite	Black curved prisms in schist and granite.
	Tremolite	
	Johnston	
Centredale Mineral Spring Ave.	Calcite	Rhombs, in green schist with epidote and quartz.
	Chalcopyrite	With epidote and quartz.
	Tremolite	White, fibrous.
Smith street—in green schist	Actinolite	
	Calcite	Rhombs, cream color.
	Chalcopyrite	Auriferous.
	Epidote	Massive and granular.
	Magnetite	Small octahedrons.
	Orthoclase	
	Pyrite	Massive.
	Quartz	Crystalline
One mile north	Jamesonite	Found in small amount in milky quartz dike in granite.

Ochee Springs

This is probably one of the best localities in the State to study the effects of contact mineralization and the gradation of iron-magnesium minerals to the more calcic varieties along the contact of the green schist and limestone. Huge masses of steatite are present and in this locality there are numerous pits and cavities in the masses from which the Indians fashioned pots and bowls.

Minerals found	Remarks
Actinolite	Green, bladed in schist-limestone contact.

	Minerals Found	Remarks
	Ankerite	Brownish and black crystals in dolomite and limestone.
	Anthophyllite	In clove brown crystals near contact.
	Calcite	Small white crystals in the limestone.
	Chlorite	In green schist.
	Dolomite	Brownish with ankerite and siderite.
	Hematite	Sparingly in black crystals.
	Hornblende	Crystals in green schist.
	Limonite	Pseudomorphs after pyrite.
	Magnetite	With siderite.
	Pyrite	Cubes, octahedrons, and pyritohedrons in steatite.
	Siderite	In veins and pale brown crystals in dolomite.
	Steatite	Gray massive.
	Talc	Foliated, white and green in steatite.
	Tremolite	White, bladed, in limestone-schist contact.

Providence

Violet Hill	Actinolite	Green, radiating.
Manton Avenue	Ankerite	Rhombs in steatite.
	Apatite	Yellowish crystals in chlorite schist.
	Asbestus	White, in seams in schist.
	Boltonite	Sparingly in yellow crystals with talc.
	Calcite	Small crystals with talc and quartz.
	Chalcopyrite	Massive in limestone with malachite.
	Chlorite	In schist.
	Clinochlore	Small plates.
	Dolomite	Small transparent, colorless crystals in limestone.
	Enstatite	
	Epidote	Yellowish, elongated crystals with calcite in schist.
	Hematite	Black, lamellar, in limestone with chalcopyrite and malachite.
	Hornblende	Small black crystals.
	Limonite	Pseudomorphs after pyrite.
	Magnetite	Small octahedrons in amphibolite.
	Malachite	Botryoidal on chalcopyrite.
	Orthoclase	Pink with epidote.
	Pyrite	In cubes in limestone and schist.
	Pyroxene	Small crystals.
	Pyrrhotite	In small crystals in schist and steatite.
	Quartz	Chiefly as vein material.

Minerals Found	Remarks
Rhodochrosite	Same as rhodonite.
Rhodonite	Pink, with epidote and calcite.
Serpentine	Light and dark yellowish green with slickensided surfaces.
Steatite	Light gray.
Talc	White and pale green foliated with calcite.
Tremolite	White and fibrous.

PROCEEDINGS OF SOCIETIES

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences of Philadelphia, Oct. 7, 1926.

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the President, Mr. Vaux, in the chair. Twenty-eight members and three visitors were present.

The following officers were elected for the year 1926–27:

President, George Vaux, Jr.
Vice-President, W. T. Clay,
Treasurer, Henry E. Millson
Secretary, F. A. Cajori
Councilor, H. W. Trudell

Mr. Vaux addressed the Society on the English and French mineral collections that he visited during the summer. The speaker described the famous Rashley collection of Cornwall minerals in which are unusual specimens of liroconite, cerussite and copper; the collection of economic minerals in the rooms of the Geological Society and the collection at the British Museum. The private collection of Mr. Arthur Russell of Reading contains a remarkable collection of minerals of the British Isles. The Natural History collection in Paris was likewise visited.

Mr. Cienkowski described a trip which he took during the summer to North Carolina. Attractive and large garnets were found in the mica mines in the vicinity of Spruce Pine and radio-active minerals, samarskite and gummite, were found in feldspar quarries also in this locality. Specimens of the minerals found on this trip were exhibited by the speaker.

Mr. Vaux exhibited several gems including cut morganite, kunzite and aquamarine from Madagascar.

F. A. Cajori, *secretary*