

Cornish Mineral Reference Manual

Peter Golley and Richard Williams

April 1995

First published 1995 by
Endsleigh Publications in association with Cornish Hillside Publications

© Endsleigh Publications 1995

ISBN 0 9519419 9 2

Endsleigh Publications
Endsleigh House
50 Daniell Road
Truro, Cornwall TR1 2DA
England

Printed in Great Britain by Short Run Press Ltd, Exeter.

Introduction

Cornwall's mining history stretches back 2,000 years; its mineralogy dates from comparatively recent times. In his *Alphabetum Minerale* (Truro, 1682) Becher wrote that he knew of no place on earth that surpassed Cornwall in the number and variety of its minerals. Hogg's '*Manual of Mineralogy*' (Truro 1825) is subtitled 'in wick [sic] is shown how much Cornwall contributes to the illustration of the science', although the manual is not exclusively based on Cornish minerals. It was Garby (TRGSC, 1848) who was the first to offer a systematic list of Cornish species, with locations in his '*Catalogue of Minerals*'. Garby was followed twenty-three years later by Collins' '*A Handbook to the Mineralogy of Cornwall and Devon*' (1871; 1892 with addenda, the latter being reprinted by Bradford Barton of Truro in 1969). Collins followed this with a supplement in 1911. (JRIC Vol. xvii, pt.2.). Finally the torch was taken up by Robson in 1944 in the form of his '*Cornish Mineral Index*' (TRGSC Vol. xvii), his amendments and additions were published in the same Transactions in 1952. All these sources are well known, but the next to appear is regrettably much less so. it would never the less be only just to mention Purser's '*Minerals and locations in S.W. England*' (1974). The work was never published, although there is a copy in the Royal Institution of Cornwall's Library at Truro, and is worthy of mention here as a tribute to that gentleman's colossal industry in researching its contents. Finally in 1984, appeared '*A Cornish Mineral Miscellany*' by one of the present writers - PG. (published privately). No locations were given, but addenda have been compiled with some regularity ever since!

The present work represents an up-to-date list of the minerals known to be found in Cornwall together with a reference for the occurrence of each species within the County. In a very few cases recourse has had to be made to personal communications, all of which have been verified. The entries listed in bold type are those whose occurrence in the county is beyond doubt. entries not in bold type, have been reported but are either of questionable occurrence. or require further analysis. The species are listed in capitals. a few minerals which were accepted as distinct species in the original editions of Hey (1950) or the supplements (1963 and 1974) but which no longer hold species status have been included. where appropriate, lower case. A total of 424 species are recorded as occurring in the county of which 36 were first recorded from Cornwall and 136 whose first British recorded occurrence was in Cornwall, a further 52 species are listed whose occurrence within the county requires confirmation. One mineral listed. Abhurite. occurs off the north coast of Cornwall.

It was decided at an early stage to restrict the number of localities cited in the case of the more common species, the selection has been a personal one, the number of localities cited for the commoner species should not therefore be looked upon as a reflection of the frequency of occurrence of the minerals involved.

The writers' gratitude is due to a great number of collectors whose information has been of great value and interest, special thanks are due to Barry Gamble, Maurice Grigg, Nick Elton Vincent Holyer, Jeremy Hooper, Mike Merry and Colin Sparrow. Thanks are also due to the late Mrs. J. Newport, Honorary Librarian of

the Royal Geological Society of Cornwall, who was most helpful and enthusiastic in assisting in the locating of references and also to the librarians of the Camborne School of Mines Library and The Cornish Studies Library, Redruth, who have enthusiastically assisted in reference searches. Particular thanks are due to Paul Lowe who suggested that the researches of the authors should be combined into this work and for his encouragement over the months that it has been in preparation. The authors are also greatly indebted to Dr. George Ryback for checking the original proof and for his many constructive suggestions.

Early in the preface reference was made to Garby; his charming apologia for what he omitted from his catalogue will more than suffice for the present work: 'That it is not very defective, the writer has not the presumption to hope' The present writers would greatly appreciate having any errors, omissions or new finds drawn to their attention.

Peter Golley
Okehampton,
Devon Cornwall,

Richard Williams
Camborne,

Main References and Abbreviations

CASSITERITE species whose occurrence in Cornwall is without doubt.

SEMSEYITE species whose occurrence in Cornwall is reported but requires confirmation

Likasite	mineral not listed in Hey 3 as a species
TL	Type locality (first described from this locality)
BI	First recorded in the British Isles at this site.
BM(NH)	British Museum (Natural History)
JRIC	Journal of the Royal Institution of Cornwall
TRGSC	Transactions of the Royal Geological Society of Cornwall
Am.Min.	American Mineralogical Magazine
Can.Min.	Canadian Mineralogist
Min.Abstr.	Mineralogical Abstracts
Mineral.Mag.	Mineralogical Magazine
Min.Rec.	Mineralogical Record
UKJMM	UK Journal of Mines and Minerals
Proc.Ussher Soc.	Proceedings of the Ussher Society
J.Russell Soc.	Journal of the Russell Society
CSM	Camborne School of Mines, University of Exeter
Hey 3	A. M. Clark (1993) Hey's Mineral Index, 3rd edition.
W.Borlase (1758)	The Natural History of Cornwall. Oxford.
J.H.Collins (1871)	A Handbook to the Mineralogy of Cornwall and Devon. London and Glasgow.
J.H.Collins (1892)	A Handbook to the Mineralogy of Cornwall and Devon. Second edition with addenda.
J.H.Collins (1911)	JRIC 18, 425-461. A list of minerals found in Cornwall with notes supplementary to the author's handbook.
J.Garby (1848)	TRGSC 7, 72-92. A catalogue of the minerals found in Cornwall with their localities.
Greg and Lettsom (1858)	R.P.Greg and W.G.Lettsom Manual of Mineralogy

of Great Britain and Ireland. London.

Hey2 M.H.Hey (1975) Chemical Index of Minerals, 2nd edition.

T.Hogg (1825) A Manual of Mineralogy. Truro.
Observations Relative to die Mineralogical and
Chemical History of the Fossils of Cornwall.

M.H.Klaproth (1801) Analytical Essays Towards Promoting the Chemical
Knowledge of Mineral Substances. Vol. 1. London
(translated)

M.H.Klaproth (1804) Vol.2. London (translated)

W.Phillips (1817) An Elementary Introduction to Mineralogy. London.

W.Phillips (1819) An Elementary Introduction to Mineralogy. London. 2nd ed.

W.Phillips (1823) An Elementary Introduction to Mineralogy. London. 3rd ed.

W.Phillips (1837) An Elementary Introduction to Mineralogy. London. 4th ed.
R.Allan

RGSC., 150th ann.vol. Present Views of Some Aspects of the Geology of
Cornwall and Devon. 150th Anniversary of the
inauguration of the Royal Geological Society of
Cornwall. Penzance 1964.

N&N E.H.Nickel and M.C.Nichols (1991) Mineral Reference Manual

EM W.L.Roberts. T.J.Campbell and G.R.Rapp (1990)
Encyclopaedia of Minerals 2nd.ed.

SLBM1&2 H.G.Macpherson (1983) Min.Mag. 47, 243-257. References
for, and updating of. L.J.Spencer's first and second
supplementary lists of British minerals.

SLBM3 L.J.Spencer (1958) Min.Mag. 31. 787-805. Third
supplementary list of British minerals.

SLBM4 P.G.Embrey (1978) Min.Mag. 42, 169-177. Fourth
supplementary list of British minerals.

SLBM7 G.Ryback. R.Nawaz and E.Farley (1988) Min.Mag. 52, 267
274. Seventh supplementary list of British Isles minerals (Irish)

SLBM8 G.Ryback and P.Tandy (1992) Min.Mag. 56, 261-275. Eighth
supplementary list of British Isles Minerals (English)

ABHURITE

$\text{Sn}_3\text{O}(\text{OH})_2\text{Cl}_2$.

X-rd by Dr.D.Green, Manchester University Museum No. Manch: Xrd 196. April 1995. B.Gamble specimen from encrustations coating ingots of refined Cornish tin. From the wreck of the SS Cheerful, 18 miles NNW of St.Ives. **BI**

ACANTHITE

Ag_2S .

F.W.Rudler(1905)

Handb.Collect.Mins.Brit.Isles 56. No record of naturally occurring acanthite in Cornwall is known to the authors, all localities given are for acanthite pseudomorphous after argentite.

Wheal. Ludcott, St Ive

New Trelawny Mine, St Ive

Wheal Herland, Gwinear

Wheal Ann, Phillack

Wheal Brothers\Wh.Duchy, Calstock

Wheal Mexico, Perranzabuloe

Wheal Basset\South Wh.Basset, Illogan

Dolcoath Mine\North Dolcoath, Camborne

Wheal Langford, Calstock

Mount Mine, Perranuthnoe

Greystone Quarry, Lezant (on silver)

Achroite, a colourless variety of tourmaline (Hey 3), a variety or synonym of elbaite (EM and N&N). J.H.Collins (1876) Mineral Mag., **1**, 55.

Roscommon Cliff, St.Just

Stenna Gwyn Mine, St. Stephen in-Brannel

Rock Hill Tin Works, St.Austell

Gunheath China Clay Pit, St.Austell

Goonbarrow China Clay Pit, St.Austell

ACTINOLITE

$\text{Ca}_2(\text{Mg},\text{Fe}^{+2})_8\text{Si}_8\text{O}_{22}(\text{OH})_2$.

W.Phillips (1819) 55-6.

Carrick Du Quarry, St Ives

Botallack

Mullion Coverack Cadgwith

Dolcoath Mine, Camborne

Wh.Maudlin, Lanlivery

Clicker Tor Quarry, Menheniot

Gt. Retallack Mine, Perranzabuloe

Delabole Slate Quarry

ADAMITE

$\text{Zn}_2\text{AsO}_4(\text{OH})$.

A.W.G. Kingsbury.(1958)Min. Soc. Notice No. 100.

Penberthy Croft Mine, St Hilary

Wheal Carpenter, Gwinear

Pengenna Mine, St Kew

Adularia, variety of Orthoclase q.v..

AEIRINE

$\text{NaFe}^{3+}\text{Si}_2\text{O}_6$.

J.J.H. Teall.(1888). British Petrography, 368.

Wolf Rock **BI**

AERUGITE

$\text{Ni}_9\text{As}_3\text{O}_{16}$.

R.J.Davis, M.H.Hey, and A.W.G.Kingsbury.(1965) Mineral.Mag. **35**, 72.

South Terras Mine, St Stephen-in-Brannel **BI**

Agardite

$(\text{Nd,Ca})\text{Cu}_6(\text{AsO}_4)_3(\text{OH})_6.3\text{H}_2\text{O}$.

J.E.Dietrich, M.Orliac and F.Permingeat (1969) Bull.Soc.Fr.Mineral Crist., **92**, 420-34. Specimen BM 81970, Nd rich, appears not to be Nd dominant.

Wheal Alfred, Phillack **BI**

Agardite-(Ca)

An incompletely characterised member of the mixite group.

X-rd by S. Weiss Munich University.

Penberthy Croft Mine, St. Hilary **BI**

Croft Gothal Mine, St. Hilary

Agardite-(Ce)

An incompletely characterised member of the mixite group.

Russell Soc. Newsletter (1991) **22**, 7.

Penberthy Croft Mine, St.Hilary **BI**

Wheal Alfred, Gwinear Agnesite see Bismutite

H.J.Brooke and W.H.Miller (1852) 591. Shown to be bismutite by A.M.Clark,

A.G.Couper, P.G.Embrey and E.E.Fejer (1986) Mineral.Mag. **50**, 731.

Wheal Coates St.Agnes TL

AHEYLITE

$(\text{Fe}^{2+},\text{Zn})\text{Al}_6(\text{PO}_4)_4(\text{OH})_4.4\text{H}_2\text{O}$.

P.J.Golley specimen, ex P.Seroka collection, acquired 1987. Requires analysis.

Goonbarrow China Clay Pit, St.Austell

AKAGANEITE

$\beta\text{-Fe}^{3+}\text{O}(\text{OH})$.

8SLBM C.Sparrow 1991.

Gravel Hill Mine, Perranzabuloe

ALABANDITE

MnS .

3SLBM (1958) C.E. Tilley. 1944. (Private Comm.).

Tintagel **BI**

Bodmin Wheal Mary

ALBITE

$\text{NaAlSi}_3\text{O}_8$.

Greg and Lettsom (1858) 113.

Lanterdan Quarry, Tintagel

Geevor Mine, St. Just

Trewavas Head, Breage

Tremearne Pegmatite, Breage

ALLANITE - (orthite)

J.S.Flett and J.B.Hill (1946) Geol. of the Lizard and Meneage, 59 and 112.

Man of War Gniess, The Lizard

Enys Head, The Lizard Kennack, Lizard

ALLANTTE-(Ce)

$(\text{Ce}, \text{Ca}, \text{Y})_2(\text{Al}, \text{Fe}^{3+})_3(\text{SiO}_4)_3\text{OH}$.

C. Sparrow (pers. comm. D.Kneebone). Russell Soc. SW Field Note. 1991. Geevor Mine, St. Just

ALLOCLASITE

$(\text{Co}, \text{Fe})\text{AsS}$.

P.G.Embrey and R.F.Symes (1987) Minerals of Cornwall and Devon. 39. Wherry Mine, Newlyn

ALLOPHANE

$x\text{Al}_2\text{O}_3 \cdot y\text{SiO}_2 \cdot z\text{H}_2\text{O}$. (N&N)

J.H.Collins (1871) pt. 2, 2.

Phoenix Mine, Linkinhorne

Garras Mine, St Erme (Schrötterite)

Port Quin Mine, St. Endellion

Hawkswood Mine, North Hill

Wheal Hazard, St. Just

ALLUAUDITE

$(\text{NaCa})\text{Fe}^{2+}(\text{Mn}, \text{Fe}^{2+}, \text{Mg})_2(\text{PO}_4)_3$.

M.Stone and M.C.George.(1983) Proc. Ussher Soc. 5, 428-31.

Tremearne Pegmatite, Breage **BI**

ALMANDINE

$\text{Fe}^{2+}_3\text{Al}_2(\text{SiO}_4)_3$.

A.R.Alderman (1935) Mineral.Mag. 42, 42-8.

Chycornish Carn, St. Just

Botallack, St. Just

Troon, Camborne

ALUMINOCOPIAPITE

$(\text{Al}, \text{Mg})\text{Fe}^{3+}_4(\text{SO}_4)_6\text{O}(\text{OH}) \cdot 20\text{H}_2\text{O}$.

CSM specimen erroneously labelled Coquimbite. Specimen X-rd by N.Elton and J.Hooper 1993

Dolcoath Mine, Camborne **BI**

ALUNOGEN

$\text{Al}_2(\text{SO}_4)_3 \cdot 17\text{H}_2\text{O}$

A.Russell, (1949) Mineral.Mag. **27**, 532.

Wherry Mine, Newlyn

Dolcoath Mine, Camborne (BM 1915,186)

AMBLYGONITE (Li,Na)Al(PO₄)(F,OH).

C.S.Exley and M. Stone (1964) RGSC., 150th ann.vol. 144-45.

Rinsey Head, Breage **BI**

ANALCIME

$\text{NaAlSi}_2\text{O}_6 \cdot \text{H}_2\text{O}$.

J.H.Collins (1871) Pt2, 5. Occurrence doubtful, 'said to have been found'.

V.A.D.Holyer (1972) The Lizard, **4**, 4.

Dean Quarry, St Keverne

Porthoustock Quarry, St Keverne

Holseer, The Lizard (altered to orthoclase)

Parc Bean Cove, Mullion Predannack Head, The Lizard

Pol Cornick, The Lizard

Kildown, The Lizard

Holseer Cove, The Lizard

Carn Barrow, The Lizard

Porthkerris Quarry, The Lizard

Botallack, St.Just

ANATASE

TiO_2 .

W.Phillips (1823) 258. ('Comte de Bournon cites a crystal on granite from Cornwall as being in his own collection'. Cornwall **BI**

Hingston Down Quarry, Calstock

Wheal Zion, Calstock

Prince of Wales Quarry, Tintagel

Wheal Remfry, St Austell

Delabole Slate Quarry

Looe Mills Quarry

Prince of Wales Mine, Calstock

ANDALUSITE

Al_2SiO_5 .

C.Le N.Foster (1876) Mineral.Mag. **1**, 73. (chiastolite)

Bosworgey Mine, St.Erth

Cligga Head, Perranzabuloe

Wheal Coates, St Agnes

Roskear Mine, Camborne Cheesewring Quarry, Linkinhorne

Roughtor, Camelford

ANDERSONITE

$\text{Na,CaUO}_2(\text{CO}_3)_3 \cdot 6\text{H}_2\text{O}$.

N.Elton and J.Hooper.(1992) Mineral.Mag. **56**, 124-25.

No 17 Level, Peeth Lode, Geevor Mine, St.Just **BI**

Andesine

(Na Ca)(Si,Al)₄O₈.

(N&N) J.S.Flett and J.B.Hill (1946) The Geology of the Lizard and Meneage, 15 & 40.

Polkernogo

In the Kennack gneiss

ANDRADITE

Ca₃Fe³⁺₂Si₃O₁₂.

A.Russell (1946) Mineral.Mag. **27**,227.

Treburland Manganese Mine, Altarnun

South Terras Mine, St Stephen-in-Brannel

Tretoil Mine, Lanivet

Botallack, St-Just (Hydro-andradite)

ANGLESITE

PbSO₄.

W.Phillips (1819) 258-9. (sulphate of lead)

R.K.Harrison and K.Taylor (1966) Bull.Geol.Surv.GT.Britain 25, 41. (Variety radian)

Trevinnick Mine, St Kew

Greystone Quarry, Lezant

Mellanoweth Mine, Hayle

Wheal Carpenter, Gwinear

Wheal Rose, Sithney

Wheal Penrose, Sithney

West Wheal Chiverton, Perranzabuloe

Pentire Glaze Mine, St.Minver

Polzeath Consols, St.Minver

Wheal Speed (**BI** radian anglesite)

Andrewsite, a discredited specie.

N. S. Maskelyne (1871) Chem. News **24**, 99.

P.J.Dunn (1990) Am. Min. 75, 1197-9. Shown to be a mixture of hentscheelite, rockbridgeite, chalcociderite and barboselite.

Phoenix United Mines, Linkinhorne

ANKERTTE

Ca(Fe,Mg,Mn)CO₃)₂.

Russell ms. BM(NH) 1949.

S.O.Agrell (1941) Mineral.Mag. **26**, 81-93.

Tolpetherwin Mine, South Petherwin

Wheal Boys, Endellion

Herodsfoot Mine, Lanreath

Eastern Cliff, Kennack

Trebullet Mine, Lezant

Port Quin Mine, Endellion

Tresungers Mine, Endellion

Poltreworrey Mine, Endellion
Greystone Quarry, Lezant

ANNABERGITE

$\text{Ni}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$.

W. Phillips (1819) 212. (Nickel ochre)
Fowey Consols/Lanescot, Tywardreath
Pengelly Mine, St Ewe Wheal Chance, St Ewe
Wheal Jane, Kea
St Austell Consols
South Terras Mine, St Stephen-in-Brannel

ANORTHITE

$\text{CaAl}_2\text{Si}_2\text{O}_8$.

E.H. Adye (1907) Modern Lithology, W. & A. K. Johnson Ltd. Edinburgh and
London. 47. (feldspar when fresh was probably anorthite)
Clicker Tor Quarry, Menheniot.

ANTHOPHYLLITE

$(\text{Mg}, \text{Fe}^{2+})_7\text{Si}_8\text{O}_{22}(\text{OH})_2$.

J.J.H. Teall (1888) Mineral. Mag. **8**, 116-120.
Pen Voose, The Lizard
Pistil Ogo, The Lizard
Polkernogo, The Lizard
Kenidjack Cliff, St Just
Botallack, St. Just

ANTIGORITE

$(\text{Mg}, \text{Fe}^{2+})_3\text{Si}_2\text{O}_5(\text{OH})_4$.

H. Midgley (1950) Mineral. Mag. **29**, 526-530.
X-rd confirmed BM(NH)
Countybridge Quarry, The Lizard
Clicker Tor Quarry, Menheniot

ANTIMONPEARCEITE

$(\text{Ag}, \text{Cu})_{16}(\text{Sb}, \text{As})_2\text{S}_{11}$.

R.E. Clayton, R.C. Scrivener and C.J. Stanley (1990) Proc. Ussher. Soc., **7**, 258-262.
Pentire vein system, St Minver **BI**

ANTIMONY

Sb.

R.A. Ixer and C.J. Stanley (1980) Mineral. Mag. **43**, 1029.
Pengenna Mine, St Kew **BI**

Antimony ochres

W. Phillips (1823) 332. (antimonial ochre) see bindheirnite and stibiconite
Wheal Boys, St Endellion **BI**
Trenute and Trebulet Mines, Lezant

ANTLERITE

$\text{Cu}_3\text{SO}_4(\text{OH})_4$.

A.W.G. Kingsbury.(1954) TRGSC.**18**, pt **4**.(for 1952) 338.

Old Gunnislake Mine, Calstock **BI**

Tresavean Mine, Gwennap

Wheal Hazard, St.Just

Botallack Cliff, St.Just

Apatite, in modern usage a group name, most, if not all, Cornish apatites are probably fluorapatite (q.v.).

APOPHYLLITE

$\text{KCa}_4\text{Si}_8\text{O}_{20}(\text{F},\text{OH})\cdot 8\text{H}_2\text{O}$.

A.Russell (1910) Mineral.Mag. **15**, 382. (apophyllite, found 1907)

Terrace Hill Quarry, Lostwithiel

Levant Mine, St. Just

Treburland Mine, Altarnun

ARAGONITE

CaCO_3 .

T.Hogg (1825) 125.

Levant Mine, St. Just

Greystone Quarry, Lezant

Geevor Mine, St.Just

Trematon Quarry, Saltash

Strangles Beach, Crackington Haven

Mawnan Cliffs, Falmouth

Port Isaac and Tintagel Cliffs

Wheal Owles, St Just

Wheal Edward, St Just

Arfvedsonite see potassium magnesioarfvedsonite.

Argentite see Acanthite - most, if not all Cornish natural silver sulphide specimens are pseudomorphs of acanthite after argentite.

ARGENTOJAROSITE

$\text{AgFe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$.

A. W.G.Kingsbury.(1964) Mineral.Mag. **35**, li.(1964) RGSC 150th Ann.Vol. 249.

Treore Mine, St Teath

Wheal Ludcott, St Ive

ARSENIC

As.

A.S.Cragoe (1924) Mining Mag. **30**, 344. (First confirmed record)

Burraton Combe Quarry, St. Stephensby-Saltash **BI**

Dolcoath Mine, Camborne

Geevor Mine, St.Just

Chiverton Mine, Perranzabuloe

Tolgus New Shaft, Illogan

Botallack Mine, St. Just (Allan's Shaft)
Wheal Cock, St. Just

ARSENOSIDERITE

$\text{Ca}_3\text{Fe}^{3+}_4(\text{AsO}_4)_4(\text{OH})_6 \cdot 3\text{H}_2\text{O}$.

A.W.G.Kingsbury and J.Hartley.(1957) Mineral.Mag. **31**,499.

Penberthy Croft Mine, St Hilary

Arsenite synonym of arsenolite q.v.

ARSENOLITE

As_2O_3 .

Greg and Lettsom (1858) 369 (arsenite) A.Russell (1925) Mineral.Mag. **20**, 299--304.

Wheal Sparnon, Redruth

Burraton Combe Quarry, Saltash **BI**

Phoenix United Mines, Linkinhorne

Dolcoath Mine, Cambome (Came Collection specimen)

ARSENOPYRITE

FeAsS .

W.Phillips (1819) 163-4. (arsenical iron. mispickel)

Botallack Mine, St Just

Wherry Mine, Newlyn

Levant Mine, St. Just

Wheal Providence, Lelant (argentiferous)

Wheal Maudlin, Lanlivery

Dolcoath Mine, Cambome

Holmbush Mine, Callington

Wheal Penrose, Sithney

Hingston Down Quarry, Calstock

Barratt's Zawn, Endellion

Trebarwith Quarry, Tintagel

Gunheath China Clay Pit, St.Austell

Blackpool china clay Pit, St.Austell

ARTHURITE

$\text{CuFe}^{3+}_2(\text{AsO}_4, \text{PO}_4, \text{SO}_4)_2(\text{O}, \text{OH})_2 \cdot 4\text{H}_2\text{O}$.

R.J.Davis and M.H.Hey. (1964) Mineral.Mag. **33**, 937.

Hingston Down Consols Mine, Calstock **TL**

Hingston Down Quarry, Calstock

Gunheath China Clay Pit, St.Austell Cligga Head Mine, Perranzabuloe

ASBOLANE

$(\text{Co}, \text{Ni})_{1-y}(\text{Mn}^{4+}\text{O}_2)_{2-x}(\text{OH})_{2+2y+2x}\text{nH}_2\text{O}$.

W.Phillips (1819) 209-10. (Earthy cobalt)

South Terras Mine, St Stephen-in-Brannel

St Austell Consols

Wheal Gorland, Gwennap

Wheal Unity, Gwennap

Roscommon Cliff, St Just

ATACAMITE

$\text{Cu}_2\text{Cl}(\text{OH})_3$.

A.W.G.Kingsbury (1954) TRGSC. **18**, part **4** (for 1952), 400-1.

Penberthy Croft Mine, St Hilary

Botallack, St.Just

AUGITE

$(\text{Ca},\text{Mg},\text{Fe})_2\text{SiO}_6$.

J.H.Collins (1871) pt. 2, 84-5. (pyroxene, var. augite.) Botallack

Wheal Cock, St Just

In the Lizard gabbro, eg. Coverack Clicker Tor Quarry, Menheniot Chyandour

St Minver, in "minverite" (Titanaugite)

AURICHALCITE

$(\text{Zn},\text{Cu})_5(\text{CO}_3)_2(\text{OH})_6$.

A.W.G. Kingsbury.(1954) TRGSC **18**, pt.4 (for 1952), 395.

Penberthy Croft Mine, St Hilary

Greystone Quarry, Lezant

AUTUNITE

$\text{Ca}(\text{UO}_2)_2(\text{PO}_4)_2 \cdot 10\text{-}12\text{H}_2\text{O}$.

W.Gregor(1805) Phil.Trans.R.Soc.Lond. **95**, 33-48.

Stenna Gwyn Mine, St Stephen-in-Brannel

South Terras Mine, St Stephen-in-Brannel

Wheal Edward, St Just

Old Gunnislake Mine, Calstock

South Wheal Basset, Illogan

South Tolcame Mine, Camborne

AXINTTE

$\text{Ca}_2\text{Fe}^{2+}\text{Al}_2\text{BSi}_4\text{O}_{15}(\text{OH})$.

W.Phillips (1819) 33.

Botallack Mine, St.Just **BI**

Roscommon Cliff, St Just

Terrace Hill Quarry, Lostwithiel

Treburland Manganese Mine, Altarnun

Bodmin Wheat Betsy, Laniver

Wheal Ding, Lanivet

Trevascus Mine, Gwinear

South Terras Mine, St Stephen-in-Brannel

Axinite - in modern usage a group name, most specimens obtained in Cornwall were probably Ferroaxinite.

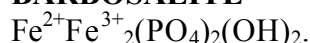
AZURITE

$\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$.

W.Phillips (1819) 230-1. (blue copper)

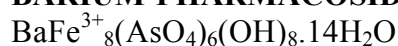
Wheal Gorland, Gwennap

Wheal Unity, Gwennap
Wheal Virgin, Gwennap
Ting Tang Mine, Gwennap
Carharrack Mine, Gwennap
Wheal Basset, Illogan
Phoenix United Mines, Linkinhorne
South Caradon Mine, St Cleer
Old Gunnislake Mine, Calstock
Gunheath China Clay Pit, St.Austell

BARBOSALITE

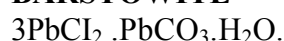
P.J.Dunn.(1990) AM-Min. **75**,1197-9.

Phoenix United Mines (Stowe's Section), Linkinhorne **BI** as constituent of "andrewsite" q.v.

BARIUM-PHARMACOSIDERITE

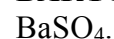
D.R.Peacor and P.J.Dunn (1985) Min.Rec. **16**,121-4.

"Cornwall" **BI**

BARSTOWITE

C.J.Stanley, G.C.Jones, A.D.Hart, P.Keller, and D.L.Lloyd (1991) Mineral.Mag. **55**, 119.

Bounds Cliff, Endellion TL

BARYTE

W.Phillips (1819) 142.

Ale and Cakes Mine, Gwennap

Mount Wellington Mine, Gwennap

Herodsfoot Mine, Lanreath

Wheal Mary Ann, Menheniot

Wheal Trelawny, Menheniot

Restormel Royal Iron Mine, Lanlivery

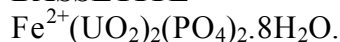
Wheal Ludcott, St Ive

St Austell Consols

Gravel Hill Mine, Perranzabuloe

Wheal Drea, StJust

Wheal Bassett, Illogan (radian and strontian)

BASSETITE

A.F. Hallimond (1915) Mineral.Mag. **17**,222-30.

Wheal Basset, Illogan TL

South Terras Mine, St Stephen-in-Brannel

BAYLDONITE

A.H.Church (1865) J.Chem.Soc., 2nd ser., **3**, 265.

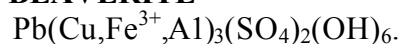
Cornwall TL

Penberthy Croft Mine, St Hilary (TL?)

Wheal Carpenter, Gwinnear

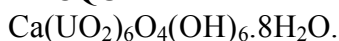
Wheal Gorland, Gwennap

Wheal Alfred, Phillack

BEAVERITE

A.W.G.Kingsbury.(1953) Mineral.Mag. **30**, xliv. (I 954)TRGSC **18**, pt.4 (for 1952), 394.

Penberthy Croft Mine, St Hilary

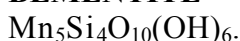
BECQUERELITE

P.C. Tandy & J.G. Francis. (Pers. Comm. to C.W.E.H.Smith, Geevor's geologist. 1986-7 BM(NH) X-rd 552 IF 'a mineral near becquerelite'.)

Geevor Mine, St.Just

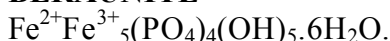
Wheal Edward, St.Just'near becquerelite' BM(NH) X-rd 5507F proved to be compregnacite q.v..

West Wheal Owles, St.Just (Cargodna Lode) reported but not confirmed.

BEMENTITE

A.Russell (1946) Mineral.Mag. **27**, 225

.Treburland Manganese Mine, Altarnun **BI**

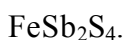
BERAUNITE

C.Sparrow (1989) Russell Soc. (South West) Newsletter **3**, 6. (specimen analysed by BM(NH))

Gravel Hill Mine, Perranzabuloe

Phoenix United Mines, Linkinhorne

Penberthy Croft Mine, St Hilary

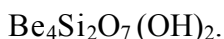
BERTHIERTTE

8SLBM BM(NH) identification, R.W.Barstow specimen.

Wheal Prosper, St Ewe **BI**

Wheal Boys, Endellion

Tresungers Mine, St.Kew

BERTRANDITE

H.L.Bowman (1910) Mineral.Mag. **16**, 47-50. (read 1904). Cheesewring Quarry, Linkinhorne **BI**

Gold-diggings Quarry, St Cleer

Kit Hill Great Consols, Stokeclimsland

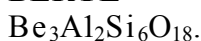
Wheal Metal,

Breage Maen Quarry, Constantine

Hingston Down Quarry, Calstock

Trolvis Quarry, Longdowns

Kessle Quarry, Longdowns

BERYL

Anon. (1825) Ann.Phil. ser.2, **10**, 383. Greg and Lettsom (1858) 125-6.

St Michael's Mount
Mabe, Constantine
Wheal Castle, St Just
Swit Quarry, Bodmin Moor
New Consols Mine, Lucket
Hawkswood Mine, North Hill
Goonbarrow China Clay Pit, St Austell
Gunheath China Clay Pit, St.Austell

BEUDANTTTE

$\text{PbFe}^{3+}_3(\text{AsO}_4)(\text{SO}_4)(\text{OH})_6$.

A.W.G. Kingsbury (1954) TRGSC. **18**, pt.4 (for 1952), 392.

Penberthy Croft Mine, St Hilary
Wheal Gorland, Gwennap
Treore Mine, St Teath Old Treburgett, St Teath
Trewethen Mine, St Kew
Wheal Carpenter, Gwinear
Trevaskus Mine, Gwinear

BIEBERITE

$\text{CoSO}_4 \cdot 7\text{H}_2\text{O}$.

J.Robson (1949) TRGSC **17**, pt.8 (for 1948), 472. (previously mistaken for erythrite.)

Penberthy Croft Mine, St Hilary **BI**
Wheal Alfred, Phillack **BI**

BINDIEIMITE

$\text{Pb}_2\text{Sb}_2\text{O}_6(\text{O},\text{OH})$.

Greg and Lettsom (1858) 373-4. (bleinierite)

Wheal Boys, Endellion
Greystone Quarry, Lezant
New Porth Beach, Falmouth
Pengenna Mine, St Kew
Trevinnick Mine, St Kew
Bodannon Mine, Endellion
Treore Mine, St Teath
Poltreworgey Mine, Endellion

BIOTITE

$\text{K}(\text{Mg},\text{Fe}^{2+})_3(\text{Al},\text{Fe}^{3+})\text{Si}_3\text{O}_{10}(\text{OH},\text{F})_2$.

P.K.Ghosh (1928) Mineral.Mag. **21**,436-439.

Trelavour Down, St Dennis
Gunheath China Clay Pit, St Austell and throughout the Cornish granites
Carn Bosavenn, St Just (lepidomelane)

BIRNESSITE

$\text{Na}_4\text{Mn}_{14}\text{O}_{27} \cdot 9\text{H}_2\text{O}$.

B.Young (1988) Mineral.Mag. **52**,415-17.

Treburland Manganese Mine, Altarnun **BI**
Penberthy Croft Mine, St Hilary

Greystone Quarry, Lezant (near birnessite or manjiroite)

BISMUTH

Bi.

W.Borlase (1758) Nat.Hist.Corn. 129-30.

Mr. Beauchamp's Cobalt Mine, Gwennap (Pengreep) **BI**

Botallack Mine, St Just

Penlee Quarry, Newlyn

Hingston Down Quarry, Calstock

St Ives Consols

Wheal Herland, Gwinear

Wheal Sparnon, Redruth

Dolcoath Mine, Camborne

Trugo Mine, St Columb

St Austell Consols,

Bismuth ochres

Bi₂O₃.

T.Hogg (1825) 25. (oxide of bismuth) The name was applied to both oxides and carbonates of bismuth.

Cost all lost Mine, Roche

Botallack Mine, St Just

Levant Mine, St.Just

Wheal Owles, St Just

Restormel Iron Mine, Lanlivery

Wheal Herland, Gwinear

BISMUTHINTE

Bi₂S₃.

W.Phillips (1819) 203-4. (Sulphuret of bismuth)

Botallack Mine, St Just **BI**

Levant Mine, St.Just

Fowey Consols Mine, Tywardreath

Dolcoath Mine, Camborne

South Crofty Mine, Camborne

Wheal Sparnon, Redruth

Trugo Mine, St Columb

Wheal Herland, Gwinear

Wheal Cock, St Just

Penlee Quarry, Newlyn

BISMUTITE

(BiO)₂CO₃.

J.H.Collins (1871) Pt.2, 1.

Wheal Coates, St Agnes (TL of "agnesite"q.v.)

Wheal Owles, St Just

BISMUTOFERRITE

BiFe³⁺₂(SiO₄)₂OH.

A.W.G.Kingsbury (1963) Mineral.Mag. **33**, xc.

South Terras Mine, St Stephen-in-Brannel **BI**
Hingston Down Quarry, Calstock

Bleinierite, synonym of bindheimite q.v..

BOLEÏTE

$\text{Pb}_{26}\text{Ag}_{10}\text{Cu}_{24}\text{Cl}_{62}(\text{OH})_{48}\cdot 3\text{H}_2\text{O}$.

8 SLBM. V.A.D.Holyer specimen,(Tolcarne Beach) National Museum of Wales, identified 1983. Also identified on BM(NH) specimen (Newporth Beach).

Tolcarne Beach, Newquay **BI**

New Porth Beach, Falmouth

Padstow Consols,

Porthilley Mine, St.Minver

BORNITE

Cu_5FeS_4 .

W.Phillips (1819) 222-3. (Buntkupfererz/purple copper)

Carn Brea Mine, Illogan

Dolcoath Mine, Camborne

Tincroft Mine, Illogan

Cook's Kitchen Mine, Illogan

Tresavean Mine, Gwennap

Botallack Mine, St Just

Pennance Consols Mine, Gwennap

Levant Mine, St. Just

St Ives Consols

BOTALLACKITE

$\text{Cu}_2\text{Cl}(\text{OH})_3$.

A.H.Church (1865) J.Chem.Soc. ser. **2**, **3**,212.

A.W.G.Kingsbury (1964)RGSC 150th Annv. 250.

Wheal Cock, St Just TL

Levant Mine, St.Just

Geevor Mine, St.Just

Cligga Mine, Perranzabuloe

Hanover Cove, Perranzabuloe

West Wheal Owles, St Just

Botallack Head, St Just

Padstow Consols Mine

Loe Warren, St.Just

Botryolite, variety of Datolite (q.v.) found in botryoidal form.

BOULANGERITE

$\text{Pb}_5\text{Sb}_4\text{S}_{11}$.

A.W.G.Kingsbury and J.Hartley (1956) Mineral.Mag. **31**,297,
"Port Gaverne"

Wheal Boys, Endellion **BI**

Pengenna Mine, St Kew

Old Treburgett, St Teath

Trevinnick Mine, St Kew
Tresungers Mine, Endellion
Treore Mine, St Teath
Poltreworgey Mine, Endellion

BOURNONITE

PbCuSbS_3 .

P.Rashleigh (1797) p1.19, p. 34

Wheal Boys, St. Endellion **TL**

Herodsfoot Mine, Lanreath

New Porth Beach, Falmouth

Credis Mine, Padstow

Treore Mine, St Teath

Pengenna Mine, St Kew

Tresungers Mine, Endellion

Swanpool Mine, Falmouth

BRAUNTTE

$\text{Mn}^{2+}\text{Mn}^{3+}_6\text{SiO}_{12}$.

J.H.Collins (1871) pt.2, 19. 'it is said to have been found in the manganese mines near Launceston'.

Reported from manganese mines near Launceston

BROCHANTITE

$\text{Cu}_4\text{SO}_4(\text{OH})_6$.

F.Pisani (1864) Cir.Acad.Sci. Paris. 59, 912-13.

Phoenix United Mines, Linkinhome

Sharptor Mine, Linkinhome

United Mines, Gwennap

Wheal Gorland, Gwennap

Gerrans Bay

Fowey Consols Mine, Tywardreath

Drakewalls Mine, Calstock

Penberthy Croft Mine, St Hilary

Gunheath China Clay Pit, St.Austell

Geevor Mine, St.Just

Levant Mine, St.Just

Bromian Chlorargyrite see Embolite

Bronzite, synonym of Enstatite q.v..

BROOKITE

TiO_2 .

W.A.Richardson (1923) QJGS **79**,547-76. (in the St.Austell granite)

Lanterdan Quarry, Tintagel

Prince of Wales Quarry, Trebarwith

Hingston Down Quarry, Calstock

BRUCITE

$\text{Mg}(\text{OH})_2$.

M.F.Brooke (1983) Gems vol.**15**, No.**2**, 26.

The Lizard

BRUSHITE

$\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$.

C. Sparrow (1989) Russell Soc. Newsletter S.W. **2**, 5.(recorded 1988)

Wheal Cock, St Just

BUSTAMITE

$(\text{Mn}, \text{Ca})\text{SiO}_3$.

A.Russell (1946) Mineral.Mag. **27**, 221-35.

Treburland Manganese Mine, Altarnun **BI**

BUTTGENBACHITE

$\text{Cu}_{19}\text{Cl}_4(\text{NO}_3)_2(\text{OH})_{32} \cdot 2\text{H}_2\text{O}$

C. Sparrow. Russell Soc. Field Notes. 1991. (reported BM(NH) X-rd analysis)

Botallack Mine, St Just

BYTOWNITE

$(\text{NaSi}, \text{CaAl})\text{AlSi}_2\text{O}_6$.

J.S.Flett and J.B.Hill (1946) The Lizard and Meneage Survey, 75. (mineral near Bytownite)

The Rill, The Lizard

CACOXENITE

$(\text{Fe}^{3+}, \text{Al})_{25}(\text{PO}_4)_{17}\text{O}_6(\text{OH})_{12} \cdot 17\text{H}_2\text{O}$

7 SLBM. BM(NH) specimens. collected by A.Russell in 1939.

Castle-an-Dinas Mine, St Columb
Phoenix United Mines, Linkinhorne
Greystone Quarry, Lezant
Gunheath China Clay Pit, St Austell
Wheal Jane, Kea (doubtful)

Calamine, synonym of smithsonite q.v..

CALCITE

CaCO_3 .

W. Phillips (1819) 113.

Levant Mine, St. Just (including manganocalcite)

Botallack Mine, St Just

Wheal Owles, St Just

Wheal Wrey, St Ive

Wheal Mary Ann, Menheniot

Delabole Slate Quarry

Greystone Quarry, Lezant

Port Quin Mine, St. Endellion

Porthoustock Quarry, St Keverne

Dean Quarry, St Keverne

Herodsfoot Mine, Lanreath

CALEDONITE

$\text{Cu}_2\text{Pb}_5(\text{SO}_4)_3\text{CO}_3(\text{OH})_6$.

A.W.G. Kingsbury. (1954) TRGSC. **18**, pt.4 (for 1952), 395.

Penberthy Croft Mine, St Hilary

Greystone Quarry, Lezant

Campylite, variety of mimetite (q.v.) named for its crystal shape.

CANCRINITE

$\text{Na}_6\text{Ca}_2\text{Al}_6\text{Si}_6\text{O}_{24}(\text{CO}_3)_2$.

R.K.Harrison, N.J.Snelling, R.J.Merriman, G.E.Morgan, and A.J.J.Goode (1977)

Geol.Mag. **114**, 249-64.

Wolf Rock **BI**

CARBONATE-FLUORAPATITE

(Francolite)

$\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3\text{F}$.

Greg and Lettsom (1858) 76-8, 473. (apatite, var. francolite)

R.S.W. Braithwaite and B.V.Cooper (1982) Mineral.Mag. 46, 119-26.

Fowey Consols Mine, Tywardreath

Holmbush Mine, Stokeclimsland (incl. "tavistockite" form)

Cargoll Mine, Newlyn

East Levant Mine, St. Just Gunnislake

Clitters Mine, Calstock

Old Gunnislake Mine, Calstock
East Gunnislake Mine, Calstock
Crinnis Mine, St Austell
Wheal Maudlin, Lanlivery
Wheal Cock, St. Just
Wheal Edward, St. Just

CARMINITE

$PbFe_{2+}(AsO_4)_2(OH)_2$.
A. Russell. (1910) Mineral.Mag. **15**, 285-7.
Hingston Down Consols, Calstock **BI**
Penberthy Croft Mine, St Hilary
Wheal Carpenter, Gwinear
Wheal Gorland, Gwennap
Treore Mine, St Teath Old Treburgett, St Teath
Pengenna Mine, St Kew
Gravel Hill Mine, Perranzabuloe

CARNOTITE

$K_2(UO_2)_2(VO_4)_2 \cdot 3H_2O$.
C.Gramaccioli.(1955) Natura (Milano), **46**, 30-2. (data insufficient to identify as carnotite)
South Terras Mine, St Stephen-in-Brannel **BI**

CARPHOLITE

$MnAl_2Si_2O_6(OH)_4$.
A.W.G.Kingsbury and J.Hartley (1957) Mineral.Mag. **31**, 502.
Kit Hill Consols, Stokeclimsland
Hingston Down Consols, Calstock
Stenna Gwynn Mine, St Stephen-in-Brannel

CASSITERITE

SnO_2 .
W.Phillips (1814) Trans.Geol.Soc.Lond. 2, 336-76, P1.15-26. (235 line drawings of cassiterite from Cornwall.)
J.H.Collins (1882-4) Cornish Tin Stones and Tin Capels.
Botallack Mine, St Just
Wheal Providence, St Ives
St Ives Consols
Great Wheal Vor, Breage
Wherry Mine, Newlyn
Dolcoath Mine, Camborne
Relistian Mine, Gwinear
Trevaunance Mine, St Agnes
Old Beam Mine, Bugle
Drakewalls Mine, Calstock

CASSITERITE, "Sparable tin" J.H.Collins (1882-4) Cornish Tin Stones and Tin Capels.

Dolcoath Mine, Camborne

Pednandrea Mine, Redruth
Wheal Owles, St Just
Phoenix United Mines, Linkinhorne
Wheal Gorland, Gwennap
Wherry Mine, Newlyn
Ventonwyn, St Stephen-in-Brannel
St Ives Consols
Hanover Cove, Perranzabuloe
Egloshellen Mine, St Stephen-in-Brannel

CASSITERITE, "wood" & "toads-eye" tin
K.F.G.Hosking, C.J.Stanley and G.S.Camm (1987) TRGSC **21**, 153-212.
Stream Works of Cornwall Garth Mine, Sancreed
Bojewan placers, Sancreed
Geevor Mine, St. Just
Great Wheal Vor, Breage
Wheal Metal, Breage West
Wheal Kitty, St Agnes
Wheal Coates, St Agnes
Rostowrack China Clay Pit, St Austell
Redmoor placers, Lanlivery
Gunheath China Clay Pit,
St.Austell Melbur China Clay Pit, St.Austell

CASSITERITE, others
"Quilted tin"
Seal Hole Mine, St Agnes (Rashleigh collection)
"Sealing-wax tin"
Rosehill Mine, St Ives
"Dog-tooth tin"
Garth Mine, Sancreed
"Ruby tin"
West Wheal Kitty, St Agnes.
Wheal Pendarves, Camborne
"Bird's Eve tin"
Redmoor placers, Lanlivery
"Dough tin"
Nancegollan Mine, Crowan
Pseudomorph after orthoclase Wh. Coates, St Agnes.
Balleswidden Mine, St Just

CELESTINE

SrSO₄.

J.Garby (1848) TRGSC **7**, 81. Binner Downs Mine, Helston

CERULÉITE

Cu₂Al₇(AsO₄)₄(OH)₁₃.11.5H₂O.

A.Russell and G.F.Claringbull (1955) Min.Soc. Notice, No.90; Min.Abstr. **13**, 30.

Wheal Gorland, Gwennap **BI**

Wheal Maid, Gwennap

Penberthy Croft Mine, St Hilary

CERUSSITE

PbCO_3 .

W.Phillips (1819) 253-5. (acicular carbonate of lead).

Pentire Glaze Mine, St Minver

Wheal Rose, Sithney

Wheal Penrose, Sithney

Wheal Rose, Newlyn

Wheal Mary Ann, Menheniot

Port Quin Beach, St.Endellion

Greystone Quarry, Lezant

Trevinnick Mine, St Kew

Wheal Confidence, Newquay

Polzeath Consols, St.Minver

Penberthy Croft Mine, St.Hilary

CHABAZITE

$\text{CaAl}_2\text{SiO}_4 \cdot 6\text{H}_2\text{O}$.

A.Russell (1910) Mineral.Mag. **15**, 380-81. (read 12th Nov. 1907.) Specimens collected 1892-93.

Colcerrow Quarry, Luxulyan

Dean Quarry, St Keveme (incl. variety phacolite)

CHALCANTHITE

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$.

W.Phillips (1823) 313.(sulphate of copper)

Geevor Mine, St. Just

Wheal Owles, St Just

Ting-Tang Mine, Gwennap

Wheal Jane, Kea

Botallack Mine, St Just

St Ives Consols, St.Ives

Phoenix United Mines, Linkinhorne

CHALCOALUNUTE

$\text{CuAl}_4(\text{SO}_4)(\text{OH})_{12} \cdot 3\text{H}_2\text{O}$.

8SLBM BM(NH) identification, 1985, D.Clough specimen.

Penberthy Croft Mine, St Hilary

CHALCOCITE

Cu_2S .

J.Sowerby (1817) Brit.Mineralogy vol.**5**, tab. dxvlll (nail head).

Wheal Crenver, Crowan

Wheal Abraham, Crowan

Tresavean Mine, Gwennap

Levant Mine, St. Just

Geevor Mine, St.Just

Botallack Mine, St Just

Cook's Kitchen Mine, Illogan

Dolcoath Mine, Camborne

Spearn Moor Mine, St Just
Cam Brea Mine, Illogan

CHALCOMENITE

$\text{CuSeO}_3 \cdot 2\text{H}_2\text{O}$.

Russell Society Newsletter (SWX 1989) No.2, C. Sparrow. Russell Soc. Field Note.
1991. Identified by BM(NH) X-rd diffraction 1987. C.Scheding spec.
Botallack Mine (Wheal Hen section), St.Just

CHALCOPHYLLITE

$\text{Cu}_{18}\text{Al}_2(\text{AsO}_4)_3(\text{SO}_4)_3(\text{OH})_{27} \cdot 33\text{H}_2\text{O}$.

W.Phillips (1819) 236-7. (hexahedral arsenate of copper known only from Cornwall)

Wheal Gorland, Gwennap
Wheal Muttrell, Gwennap
Wheal Unity, Gwennap
Ting-Tang Mine, Gwennap
Old Gunnislake Mine,
Calstock West Caradon Mine, St Clear
Mulberry Mine, Lanivet
Penberthy Croft, St Hilary
Wheal Hazard, St.Just
Hingston Down Consols, Calstock
South Wheal Basset, Illogan

CHALCOPYRITE

CuFeS_2 .

M.H.Klaproth (1787) 27.
East Pool Mine, Illogan
Carn Brea Mine, Illogan
Dolcoath Mine, Camborne
Tincroft Mine, Illogan
Wheal Buller, Redruth
Wheal Towan, St Agnes
Levant Mine, St. Just
Geevor Mine, St.Just
Herodsfoot Mine, Lanreath

CHALCOPYRITE

var. Blister Copper

J.H. Collins (1871) pt.2, 28.
North Roskear Mine, Camborne
Tincroft Mine, Illogan
Wheal Basset, Illogan
Cook's Kitchen Mine, Illogan
Dolcoath Mine, Camborne
Levant Mine, St.Just
Geevor Mine, St. Just
Boscawell Downs Mine, St Just
Phoenix United Mines,
Linkinhorne South Crofty Mine, Illogan

CHALCOSIDERITE

$\text{CuFe}^{+3}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$.

N. S.Maskelyne (1875) J.Chem. Soc. **28**, 586-91.

Phoenix United Mines, Linkinhorne (Stowe's section) **BI**

Gunheath China Clay Pit, St Austell

CHAMOSITE

$(\text{Fe}^{e+}, \text{Mg}, \text{Fe}^{3+})_5\text{Al}(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH}, \text{O})_s$

G.Tschermak (1891) Sitzungsber. Akad. Wiss. Wien. **100**, Abt. **1**, 38. (Daphnite)

Penzance, Cornwall (TL of Daphnite - magnesian chamosite.)

Geevor Mine, St.Just (Thuringite - ferrian chamosite)

Phoenix United Mines, Linkinhorne

CHENEVIXITE

$\text{Cu}_2\text{Fe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_4 \cdot \text{H}_2\text{O}$.

Monsieur Adam and F.Pisani (1866) C.R.Acad.Sci.Paris. **62**, 690. Cornwall TL

Wheal Gorland, Gwennap (probable TL)

Wheal Unity, Gwennap

Phoenix United Mines, Linkinhorne

Old Gunnislake Mine, Calstock

Chiastolite, variety of andalusite (q.v.) containing carbonaceous inclusions which impart a cross like pattern on sectioned crystals.

CHILDRENITE

$(\text{Fe}, \text{Mn})\text{Al}(\text{PO}_4)(\text{OH})_2 \cdot \text{H}_2\text{O}$.

H.J.Brooke (1823) Q.J.Lit.Sci.Arts, **16**, 275.

Crinnis Mine, St Austell

Drakewalls Mine, Calstock

Prince of Wales Mine, Calstock

Redmoor Mine, Kelly Bray

Okeltor Mine, Calstock

Lady Ashburton Mine, Callington

Chloanthite arsenic deficient variety of nickel - skutterudite, see skutterudite.

CHLORARGYRITE

AgCl .

J.Sowerby (1809) Brit.Mineralogy vol.**3**, tab. ccxlv

Wheal Mexico, Perranzabuloe **BI**

Wheal Herland, Gwinear

Wheal Alfred, Phillack

Wheal Duchy, Calstock

Wheal St Vincent, Calstock

Wheal Mexico, Calstock

North Dolcoath Mine, Camborne, (South Entral Lode)

Dolcoath Mine, Camborne, (Bromian, see embolite.)

Perran Silver Mine, Perranuthnoe, (Bromian, see embolite.)

Botallack Mine, St Just

Levant Mine, St Just

Chloropal, synonym of nontronte q.v.

CHONDRODITE

$(\text{Mg,Fe}^{2+})_5(\text{SiO}_4)_2(\text{F,OH})_2$.

J.H.Collins (1871) pt.2, 32-3. (it is said to have been found)

Wheal Druid, Redruth

Chrome diopside, a chromian variety of diopside (q.v.).

CHROMITE

$\text{Fe}^{\text{e+}}\text{Cr}_2\text{O}_4$.

J.H.Collins (1871) pt.2, 33.

Kennack Sands and elsewhere in the Lizard Serpentine

CHRYSOCOLLA

$(\text{Cu,Al})_2\text{H}_2\text{Si}_2\text{O}_5(\text{OH})_4 \cdot n\text{H}_2\text{O}$.

W. Phillips (1819) 232-3.

Wheal Edward, St Just

Wheal Gorland, Gwennap

Wheal Unity, Gwennap

Ting-Tang Mine, Gwennap

Ghostcroft Mine, Mullion

Craddock Moor Mine, St Cleer

Phoenix United Mines, Linkinhorne

Sharptor Mine, Linkinhorne

Old Gunnislake Mine, Calstock

CHRYSOTILE

$\text{Mg}_3\text{Si}_2\text{O}_5(\text{OH})_4$

V.A.D.Holyer (1972) The Lizard 4, 4.

Pentreath Beach, The Lizard

Gwendreath Quarry, Kennack, The Lizard

Countybridge Quarry, The Lizard

Churchite, see Churchite-Y.

CHURCHITE-Y

$\text{YPO}_4 \cdot 2\text{H}_2\text{O}$.

G.F.Claringbull and M.H.Hey (1953) Mineral.Mag. 30,211-17. (proved churchite to be a yttrium phosphate)

Cornwall TL

Tretoil Mine, Lanivet (probable TL)

Wheal Pendarves, Camborne

CLAUDETITE

As_2O_3

C.Hintze (1904) Handb.Mineral. 1(2), 1229, 1233. (no data given, requires confirmation).

Wheal Sparnon, Redruth BI

CLINOCHLORE

$Mg,Fe)_5Al(Si_3Al)O_{10}(OH)_8$.

J.H.Collins (1871) pt.2, 31. (Chlorite/Prochlorite)

The Lizard District

Penlee Quarry, Newlyn

Wheal Jane, Kea (ripidolite)

CLINOCLASE

$Cu_3(AsO_4)(OH)_3$.

W.Phillips (1823) 318. (Oblique prismatic arsenate)

Wheat Gorland, Gwennap **TL**

Wheal Unity, Gwennap

Ting Tang Mine, Gwennap

Wheal Muttrell, Gwennap

Providence Mine, Lelant

Wheal Hazard, St.Just

CLINOZOISITE

$Ca_2Al_3Si_3O_{12}(OH)$.

J.Robson (1948) TRGSC 17, 468.

Camelford, in epidiorite

COBALTIE

$CoAsS$.

Greg and Lettsom (1858) 302-3 (first noticed in this country by Rashleigh, spec. in Greg's collection)

Wherry Mine, Newlyn **BI**

Wheal Cock, St Just

Botallack Mine, St Just

COERULEOLACTITE

$(CaCu)Al_6(PO_4)_4(OH)_8 \cdot 4-5H_2O$.

W.L. Roberts, T.J. Campbell & G.R. Rapp. (1990) Ency. of Mins. 2nd Ed., 185. Named 1871, thought to be identical with turquoise before 1958.

Phoenix United Mines, Linkinhorne **BI**

COFFINITE

$U(SiO_4)_{1-x}(OH)_{4x}$.

K.Taylor and R.K.Harrison (1958) Nature **181**, 363.

Roskrow United Mine, Ponsanooth **BI**

Geevor Mine, St Just

South Terras Mine, St Stephen-in-Brannel

COMPREIGNACITE

$K_2(UO_2)O_6 \cdot 8H_2O$.

N.J.Elton, J.J.Hooper and G.Ryback. (1994) Mineral.Mag. **58**, 339 - 41.

Wheal Owles, St.Just

Condurrite, a mixture of domeykite or 13 - domeykite with cuprite or melaconte.

CONICALCTTE

CaCuAsO₄OH

Pers. comm. J.Fuller BM(NH) 30/8/79 to P.Golley.

Wheal Kendall, St Hilary (R.W.Barstow spec:)

Hingston Down Quarry, Calstock

CONNELLITE

Cu₁₉Cl₄SO₄(OH)₃₂.3H₂O

A. Connell (1847) Proc.Roy.Soc.Edinburgh **2**,146.(Sulphato-chloride of copper)

Cornwall **TL**

Wheal Gorland, Gwennap (probable TL)

Wheal Providence (Rashleigh 1802 Vol.2)

South Tolcarne Mine, Cambome

Geevor Mine, St Just

Levant Mine, St Just

Wheal Hen, St Just

Wheal Edward, St Just

Botallack Mine, St Just

Wheal Unity, Gwennap

Marke Valley Mine, Linkinhorne

Old Gunnislake Mine, Calstock

Gunheath China Clay Pit, St.Austell

Penberthy Croft Mine, St.Hilary

COPIAPITE

Fe²⁺Fe³⁺₄(SO₄)₆(OH)₂.20H₂O.

F.Brooke (1984) Gems and Mineral Realm, **16**, No.2, 29-31. (member of the copiapite group of unknown composition)

Mount Wellington Mine, Gwennap

COPPER

Cu.

F.Hitchen and S.Drew (1824) Hist.Cornwall **2**, 503. (found by chance about 1720.)

Ghostcroft Mine, Mullion

Botallack Mine, St Just

Levant Mine, St Just

Wheal Gorland, Gwennap

Wheal Unity, Gwennap

Tresavean Mine, Gwennap

Crinnis Mine, St Austell

Fowey Consols, Tywardreath

Phoenix United Mine, Linkinhorne

Geevor Mine, St Just

Wheal Cock, St.Just

Gunheath China Clay Pit, St.Austell

CORDIERITE

(Mg,Fe)₂Al₄Si₅O₁₈.

C.E.Tilley and J.S.Flett (1930) summary of Progress, Geol.Surv. of Great Britain 24-40.

Kenidjack, St.Just
Botallack Head, St Just
St Michael's Mount, Marazion
Porthcurno,
Lizard Praa Elvan, (altered to pinite')
Tresayes Quarry, Roche, (altered to pinite')

CORKITE

$\text{PbFe}^{3+}_3\text{PO}_4\text{SO}_4(\text{OH})_6$.
G.S.Camm and M.Merry (1991) UKJMM **9**, 11.
Penberthy Croft Mine, St Hilary
Gravel Hill Mine, Perranzabuloe
Wheal Unity, Gwennap

CORNUBITE

$\text{Cu}_5(\text{AsO}_4)_2(\text{OH})_4$.
G.F.Claringbull, M.H.Hey, and R.J.Davies. (1959) Mineral.Mag.**32**, 1-5.
Wheal Carpenter, Gwinear **TL**
Wheal Gorland, Gwennap
Wheal Muttrell, Gwennap
Phoenix United Mines, Linkinhome
Penberthy Croft Mine, St Hilary
Wheal Cock, St.Just (Skip Shaft)
East Gunnislake Mine, Calstock
Botallack Mine, St.Just

CORNWALLITE

$\text{Cu}_5(\text{AsO}_4)_2(\text{OH})_4$.
F.X.M.Zippe (1846) Abhandl.bOhm.Ges.Wiss., 5th ser., **4**, 649.
Cornwall **TL**
Wheal Gorland, Gwennap
Wheal Unity, Gwennap
Wheal Carpenter, Gwinear
Penberthy Croft Mine, St Hilary
Phoenix United Mines, Linkinhome
Wheal Cock, St.Just (Skip Shaft)
East Gunnislake Mine, Calstock
Botallack Mine, St.Just

CORUNDUM

Al_2O_3 .
C.Reid and J.S.Flett (1907) The Geology of the Land's End District. 25.
Gunheath China Clay Pit, St Austell
Kenidjack, St Just
Knill Quarry, St Ives
Carbis Bay sands. (Sapphire)

COTUNNITE

PbCl₂.

A.Russell (1920) Mineral.Mag. **19**, 64.

Falmouth Harbour (wreck of the fireship 'Firebrand) **BI**

COVELLITE

CuS.

Greg and Lettsom (1858) 332-3.

Cam Brea Mine, Illogan

Mulberry Mine, Lanivet

Geevor Mine, St Just

Phoenix United Mines, Linkinhorne

Wheal Kine, St Agnes

Wheal Maudlin, Lanlivery

Mount Wellington Mine, Gwennap

Gunheath China Clay Pit, St.Austell

Penberthy Croft Mine, St.Hilary

CRANDALLITE

CaAl₃(PO₄)₂(OH)₅.H₂O.

(1988) 'Mineral News' UKJMM. **5**, 10. No author. (Camborne School of Mines sem photograph, specimen and photograph in the RIC collection, Truro.)

Wheal Jane, Kea

CRISTOBALIE

SiO₂.

M. Grigg. (Pers. Comm. 1992 C. V. Smale spec.)

Melbur China Clay Pit, St. Austell

Crandallite / Goyazite intermediate, see Goyazite.

CROCOITE

PbCrO₄.

D.Lloyd specimen, analysed by P.Tandy BM(NH) 1989.

M. Rothwell & J. Mason. U.K. Journal Mines & Minerals. **11**, 32. 1992. R.S.

Newsletter (SW) No. 3, 7.

Greystone Quarry, Lezant

CRONSTEDTITE

Fe⁺₂Fe³⁺(SiFe³⁺)O₅(OH)₄.

Anon., (1824) Edinb.J.Sci. **1**, 380.(Cronstedtite from Wheal Maudlin, Cornwall, in the cabinet of Mr.Allan.) T.Hogg (1825) 60.

Wheal Maudlin, Lanlivery

Wheal Jane, Kea

Penlee Quarry, Newlyn

CRONSTEDTITE Polytypes E.H.Nickel and M.C.Nichols 1991

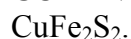
CRONSTEDTITE 1M Wheal Jane, Kea **TL**

CRONSTEDTITE 2H Wheal Maudlin, Lanlivery **TL**

CRONSTEDTITE 2M Wheal Maudlin, Lanlivery **TL**

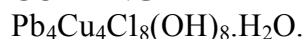
CRONSTEDTITE 6R Wheal Maudlin, Lanlivery **TL**

CUBANITE



J.C.Brown (1934) Neues.Jahrb.Min.Abt.A., Beil.-Bd. **68**, 321. Min.Abst. **6**,228.
East Pool Mine, Illogan **BI**

CUMENGÉITE



A. C. Dean (1982) J. Russell Soc. **1**,No.**1**, 40-41.

Newporth Beach, Falmouth **BI**

Tolcarne Beach, Newquay

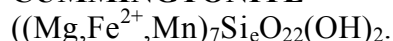
Great Western Beach, Newquay

Watergate Bay, Newquay

Padstow Consols

Porthilly Mine, St.Minver

CUMMINGTONITE



C.E.Tilley and J.S.Flett (1930) Summ.Progr.Geol.Surv. for 1929,2441.

Kenidjack, St.Just

Botallack, St.Just (in dolerite hornfels)

CUPRITE



W.Phillips (1811) Trans.Geol.Soc.Lond. **1**, 23-37. + figs.

Phoenix United Mines, Linkinhorne

Wheal Unity, Gwennap

Wheal Gorland, Gwennap

Fowey Consols, Tywardreath

Old Gunnislake Mine, Calstock

Dolcoath Mine, Camborne

Wheal Buller, Redruth

Wheal Basset, Illogan South

Wheal Francis, Illogan

South Caradon Mine, St Cleer

CUPRITE var. **Chalcotrichite**

South Wheal Francis, Illogan

West Wheal Bassett, Illogan

Unity, Gwennap

Wheal Gorland, Gwennap

Ting-Tang Mine, Gwennap

Wheal Pendarves, Camborne

Phoenix United Mine, Linkinhorne

Fowey Consols, Tywardreath

Old Gunnislake Mine,

Calstock Penberthy Croft Mine, St Hilary

Gunheath China Clay Pit, St.Austell

Hingston Down Quarry, Calstock

CUPROSKLODOWSKITE

$\text{Cu}(\text{UO}_2)_2(\text{SiO}_3\text{OH})_2 \cdot 6\text{H}_2\text{O}$.

8SLBM D. Hudson specimen, BM(NH) identification.

West Wheal Owles, St Just **BI**

Geevor Mine, St.Just (No. 17 Level, Peeth lode)

CUPROTUNGSTITE

$\text{Cu}_2\text{WO}_4(\text{OH})_2$.

8SLBM BM(NH) specimen, collected by A.W.G.Kingsbury in 1955.

Wheal Gorland, Gwennap **BI**

Old Gunnislake Mine, Calstock

Gunheath China Clay Pit, St.Austell

CYANOTRICHITE

$\text{Cu}_4\text{Al}_2\text{SO}_4(\text{OH})_{12} \cdot 2\text{H}_2\text{O}$.

A.W.G.Kingsbury (1952, publ. 1954) TRGSC 18, 393.

Wheal Gorland, St Day **BI**

Phoenix United Mine (Stowe's Section), Linkinhome

Basset Mine, Redruth

Mulberry Mine, Lanivet

East Pool Mine, Illogan

Wheal Hazard, St.Just

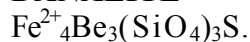
Tresavean Mine, Gwennap

CYRILOVITE

$\text{NaFe}^{3+}_3(\text{PO}_4)_2(\text{OH})_4 \cdot 2\text{H}_2\text{O}$.

F.Ince (1986) J.Russell Soc. **1**, No.4, 127-8.

Gunheath China Clay Pit, St Austell **BI**

DANALITE

H.A.Miers and G.T.Prior (1892) Mineral.Mag. **10**, 10.

"Redruth" **BI**

New Tolgus Mine, Redruth

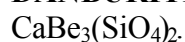
Levant Mine, St Just

Tretoil Mine, Lanivet

Wheal Maudlin, Lanlivery

Wheal Clinton, Falmouth

Botallack Head, St Just

DANBURITE

4SLBM A.W.G.Kingsbury specimen, collected 1951-2 BM(NH) spec.

Cheesewring Quarry, Linkinhorne **BI**

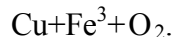
Daphnite, a magnesian chamosite, up to Mg: (Fe^{2+}Mg) = 0.2 and Si = 2.5 - 2.8. See chamosite.

DATOLITE

W.F.P.McLintock (1910) Mineral.Mag. **15**,407-14.

Parc Bean Cove, Mullion (includes var. botryolite)

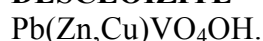
Clicker Tor Quarry, Menheniot

DELAFOSSITE

D.S.,Buist, A.M.M.Gadalla and J.White (1966) Mineral.Mag. **35**, 731-41.

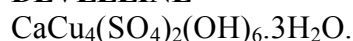
Cornwall **BI**

Tolvadden Mine, Marazion

DESCLOIZITE

N.Carruth specimen, X-rd S.Weiss (Munich) 1993.

Greystone Quarry, Lezant

DEVLLINE

F.Pisani (1864) C.r.Acad.Sci.Paris **59**, 813.

Cornwall **TL**

Penberthy Croft Mine, St Hilary

Wheal Providence, Gwinear

Wheal Tremayne, Gwinear

Ennis Wheal Virgin, St Hilary

Fowey Consols, Tywardreath

Geevor Mine, St Just

Perran Great St George Mine, Perranzabuloe

Wheal Hazard, St.Just

DIABOLÉITE



M.Merry specimen, collected 1994. identification reported by R.S.W.Braithwaite,
UMIST. Padstow Consols, Padstow

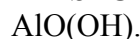
DIADOCHTTE



C.Sparrow (1989) R.S. Newsletter (SW) No.3

Gravel Hill Mine, Perranzabuloe Diallogite, synonym of rhodochrosite q.v..

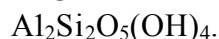
DIASPORE



C.E.Tilley and J.S.Flett (1929) Summ.Prog.Geol.Surv.GB pt.2, 28.

Kenidjack Castle, St.Just

DICKITE



A.Russell (1948) Int.Geol.Cong. Guide **A.4**, 8.

Trenute/Trebulllett Antimony Mines, Lezant

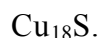
Dizzard Mine, Poundstock

Wheal Leigh, Pillaton

Tredinnick Mine, St Erney

Millook Beach, St Gennys

DIGENITE



W.R.Cook (1972) Min.Rec. **3**, 15.

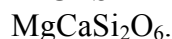
Cornwall **BI**

Botallack Mine, St Just

Wheal Hen, St Just

Gunheath China Clay Pit, St.Austell

DIOPSIDE



J.J.H.Teall (1888) Mineral.Mag. **8**, 118-9. (malacolite)

Mineral Mag **27**, 1946 (Russell)

Treburland Mn. Mine, Altarnun

Spernic Cove, Gwenter (malacolite in granulitic gabbro)

Bodmin Wheal Betsy, Lanivet, (variety Sahlite, Serjeant collection)

Coverack, The Lizard (Chrome diopside)

DJURLEITE

near Cu_{19}S .

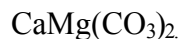
W.R.Cook (1972) Min.Rec. **3**, 15.

Cornwall **BI**

Wheal Owles, St Just

Dean Quarry, St Keverne

DOLOMITE



W.Phillips (1819) 127. (pearl spar)

Botallack Mine, St Just

Geevor Mine, St Just

Trevascus Mine, Gwinear

North Roskear Mine, Camborne

West Chiverton Mine, Perranzabuloe

Greystone Quarry, Lezant

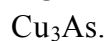
Eastern Cliff, The Lizard

Carleon Cove, The Lizard

Pentreath Beach, The Lizard

South Crofty Mine, Illogan (mangandolomite q.v.)

DOMYKITE α and β

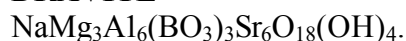


(constituents of 'condurrite' q.v.) Greg and Lettsom (1858) 328-9. P.G.Embrey (1958) Mineral.Mag. **31**, 979-80

Condurrow Mine, Camborne

Wheal Druid, Redruth

DRAVITE

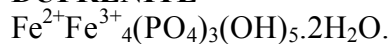


S.O.Agrell (1941) Mineral Mag. **26**, 81-93.

Dines Head, Padstow

Gunheath China Clay Pit, St.Austell

DUFRENITE



E.Kinch and F.H.Butler (1886) Mineral.Mag. **7**, 65.

Phoenix United Mines (Stowe's section) **BI**

Gunheath China Clay Pit, St.Austell

DUFRENOYSITE



G.Ryback (1994) J.Russell Soc., 5, 2, 71. R.D.S.Shrimpton spec. collected 1938;

X-rd by Dr. Nelson. Tiny needles in a vugh'

Wheal Boys, St. Endellion. **BI**

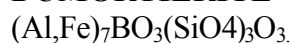
DUFTITE



G.S.Camm and M.Merry (1991) UKJMM **9**, 13.

Penberthy Croft Mine, St Hilary

DUMORTIERITE



A.W.Groves (1928) Mineral.Mag. **21**,

In the St.Austell granites

DUNDASITE

$\text{PbAl}_2(\text{CO}_3)_2(\text{OH})_4 \cdot \text{H}_2\text{O}$.

A.Russell (1944) Mineral.Mag. **27**, 7-8.

Wheal Rose, Sithney

Wheal Penrose, Sithney

Trevinnick Mine, St Kew

Greystone Quarry, Lezant

Port Quin Mine, Endellion

Padstow Consols,

Pengenna Mine, St Kew

Duporthite

Aluminosilicate of Mg and Fe^{2+}

J. H.Collins (1877) Mineral Mag. **1**, 226.

Hey 3. An asbestiform mineral requiring re-examination.

Duporth, St.Austell **TL**

DURANGITE

$\text{NaAlAsO}_4\text{F}$.

4SLBM BM(NH) spec. collected 1958 by A. W.G.Kingsbury.

Cheesewring Quarry, Linkinhorne **BI**

DYSCRASITE

Ag_3Sb .

Included in John Purser (1974) manuscript, RIC library, Truro. Dolcoath Mine, Camborne

EMBOLITE

Ag(Cl,Br).

G.T.Prior and L.J.Spencer (1902) Mineral.Mag. **13**,177. H.G.Macpherson (1983) Mineral.Mag. **47**, 249. (analysis given indicates this to be bromian chlorargyrite)

Dolcoath Mine, Camborne

Perran Silver Mine, Perranuthnoe

ENARGITE

Cu₃AsS₄.

C.Scheduling spec. confirmed BM(NH) 1989.

South Crofty Mine, Illogan (415fm level)

ENSTATITE

Mg₂Si₂O₆.

J.Garby (1848) TRGSC **7**, 72-79. (bronzite)

In the Lizard serpentinite Dean Quarry, St Keverne

Enysite

Near Cu₂Al₆SO₄(OH)₂₀.

J.H.Collins (1876) Mineral Mag. **1**, 14. P.Groth (1877) Zeits.Kryst.Min. **1**, 75.

Probably a mixture.

Trevaunance Cave, St.Agnes **TL**

EPIDOTE

Ca₂(Al,Fe³⁺)₃(SiO₄)₃(OH).

W.Phillips (1819) 34.

Crown's Rock, Botallack

South Tresavean Mine, Gwennap

Landewednack, The Lizard

Porthkerris Quarry, The Lizard

Pen Olver, Lizard

Tuckingmill, Camborne

Tolpetherwin Quarry, South Petherwin

The Crowns, Botallack (**BI** var. Stannian)

EPSOMITE

MgSO₄.7H₂O.

J.Robson (1949) TRGSC **17**,472.

Dolcoath Mine, Camborne

ERYTHRITE

Co₃(AsO₄)₂.8H₂O.

W.Phillips (1817) 210.

Botallack Mine, St Just

Wherry Mine, Newlyn

Dolcoath Mine, Camborne

East Pool Mine, Illogan

Wheal Sparnon, Redruth

Polgooth Mine, St Austell

South Terras Mine, St Stephen-in-Brannel

Penberthy Croft Mine, St Hilary
Ennys Wheal Virgin, St Hilary
St Austell Consols
Pentireglaze Mine, St. Minver
Roscommon Cliff, St. Just
Cligga Mine, Perranzabuloe

ETTRINGITE

$\text{Ca}_6\text{Al}_2(\text{SO}_4)_3(\text{OH})_{12}\cdot 26\text{H}_2\text{O}$.

P. Wallace (1992) Russell Soc. (S.W.) Newsletter **9**, **8**.
Tresavean Mine, Gwennap

EUCLASE

$\text{BeAlSiO}_4\text{OH}$.

A.W.G.Kingsbury (1958) Mineral.Mag. **31**, 815-7.
Cligga Head **BI**

EULYTINE

$\text{Bi}_4(\text{SiO}_4)_3$.

J.H.Collins (1881) Cat.Min.Mus.RIC., Div. 2-Met. spec. No.s 1588 and 1589. H.G.Macpherson (1983) Mineral.Mag. 47,249, Macpherson quotes pers. comm. from P.G.Embrey that neither of these specimens contain eulytine.

Restormel Mine, Lanlivery
Wheal Coates, St. Agnes

Falilore, synonym of tetrahedrite q.v..

FAUSTITE

$(\text{Zn,Cu})\text{Al}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$.

W.L.Roberts, T.J.Campbell and G.R.Rapp (1990) Enc.Mins. 2nd ed. 267-8.
Phoenix United Mines, Linkinhorne **BI**

FERBERITE

$\text{Fe}^{2+}\text{WO}_4$.

H.G.Dines (1956) Met.Min.Reg.S.W.England 607.

Penhale Mine, St Cleer

Wheal Arthur and Wheal Edward, Calstock

Calstock Consols, Calstock

North Herodsfoot Mine, Lanreath

Guiheath China Clay Pit, St.Austell

Hingston Downs Quarry, Calstock

See also Wolframite.

Ferrian turquoise see Turquoise.

FERRIMOLYBDITE

$\text{Fe}_3(\text{MoO}_4)_3 \cdot 7\text{H}_2\text{O}$.

A.W.G.Kingsbury specimens P.Tandy pers.conun.,30/4/1993 to P.Golley.

Kit Hill Consols, Stokeclimsland

Hingston Down Quarry, Calstock

FERRITUNGSTITE

$(\text{W,Fe}^{3+})(\text{O,OH})_3$.

B.Gamble spec. X-rd BM(NH) R.F.Symes1993.

Hingston Downs Quarry, Calstock **BI**

FERRO-HORNBLLENDE

$\text{Ca,Fe}^{2+}_4\text{AlSi}_5\text{O}_{22}(\text{OH})_2$.

J.Garby (1848) TRGSC 7, 77.

Botallack, St.Just

FERROAXINITE - see axinite Most Cornish axinites are probably ferroaxinite

Ferroberaunite

C.Sparrow (1989) Russell Society South-West Branch Newsletter. 3, 6.

(Analysed by S.Weiss, Munich University, not yet accepted as a species.)

Gravel Hill Mine, Perranzabuloe

FERROCOLUMBITE

$\text{Fez}^+\text{Nb}_2\text{O}_6$.

I.P.Hodkinson and A.M.Clark (1977) Mineral.Mag. 41, 131-2.

Gunlieath China Clay Pit, St.Austell **BI**

FERROKESTERITE

$\text{Cu}_2(\text{Fe,Zn})\text{SnS}_4$.

S.A.Kissin and D.R.Owens (1989) Can.Min. **27**, 673-88.

Cligga Mine, Perranzabuloe. **TL**

FERROSTRUNZITE

$\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{PO}_4)_6 \cdot 6\text{H}_2\text{O}$.

S.Weiss, (1989) Lapis **14**, No. **6**, 40-1.

Gravel Hill Mine, Perranzabuloe **BI**

Florencite (type ?)

$(\text{La,Ce,Th,Sc,Ca})\text{Al}_3(\text{PO}_4)_2(\text{OH})_6$

N. J.Elton EDX and XRD of M.Grigg specimen.Russell Society SW Branch Field Notes 1995.

Gunheath China Clay Pit, St.Austell

FLUELLITE

$\text{Al}_2\text{PO}_4\text{F}_2(\text{OH}) \cdot 7\text{H}_2\text{O}$.

J.Sowerby (1808) Brit.Min. **3**, 85-86. p1.243. (discovered about 1806 by the Rev. William Gregor, vicar of Creed). Incorrectly attributed to A.Levy (1824) Aim.Phil., 2nd ser., **8**, 243.)

Stenna Gwynn Mine, St Stephen-in-Brannel **TL**

Goonvean China Clay Pit, St Austell

FLUORAPATITE

$\text{Ca}_5(\text{PO}_4)_3\text{F}$.

W.Phillips (1819) 128-9. (apatite, phosphate of lime)

Botallack Mine, St Just

Gravel Hill Mine, Perranzabuloe

Gunheath China Clay Pit, St.Austell

Goonbarrow China Clay Pit, St.Austell

Old Gunnislake Mine, Calstock

St Michael's Mount, Marazion

Tremearne Pegmatite, Breage

Halvosso Quarry, Longdowns

Stenna Gwyn Mine, St Stephen-in-Brannel

Colcerrow Quarry, Luxulyan

Tregargus Quarry, St Stephen-in-Brannel

Megilligar Rocks, Porthleven (Manganapaite)

Trelavour Downs, St Dennis (Manganapatite)

Trolvis Quarry, Longdowns

Kessle Quarry, Longdowns

FLUORITE

CaF_2 .

W.Phillips (1819) 129-32. (fluor)

South Crofty Mine, Illogan

East Pool, Illogan

Wheal Jane, Kea

Pednandrea Mine, Redruth

Carn Brea Mine, Illogan
South Crofty Mine, Illogan
Wheal Gorland, Gwennap
Wheal Unity, Gwennap
Wheal Mary Ann, Menheniot
Wheal Trelawny, Menheniot
South and West Caradon mines, St Cleer
Trevaunance Mine, St Agnes
Cam Brea Mines, Illogan
Gunheath China Clay Pit, St.Austell
Hingston Down Quarry, Calstock
Wheal Buller, Redruth

FRANCEVILLITE

$(\text{Ba,Pb})(\text{UO}_2)_2(\text{VO}_4)_2 \cdot 5\text{H}_2\text{O}$.

4SLBM BM(NH) specimen, from V.P. Aspland (1936).

South Terras Mine, St Stephen-in-Brannel **BI**

Francolite synonym of carbonate-fluorapatite q.v..

FRANKLINITE

$(\text{Zn,Mn,Fe})(\text{Fe,Mn})_2\text{O}_4$

W.A.E.Ussher, G.Barrow and D.A.MacAlister, with J.S.Flett (1909) Geology of the country around Bodmin and St.Austell.

W.G.Kingsbury (1961) Mineral.Mag. **32**, 928. No trace found'.

Bodmin Wheal Mary, Lanivet

FREIBERGITE

$(\text{Ag,Cu,Fe})_{12}(\text{Sb,As})_4\text{S}_{13}$.

J.H.Collins (1871) pt.2, 45. (as polytelite, old unanalysed specimens are probably argentian tetrahedrite)

Wheal Sampson, Endellion

Old Treburgett Mine, St Teath

Silver Vein Mine, St Winnow

GALENA

PbS.

M.H.Klaproth (1787) 30.

Wheal Penrose, Sithney

Penberthy Croft Mine, St Hilary

Tresavean Mine, Gwennap

Poldice Mine, Gwennap

Wheal Mary Ann, Menheniot

Herodsfoot Mine, Lanreath

East Wheal Rose, Newlyn East

Greystone Quarry, Lezant

Greystone Mine, Lezant

Wheal Hope, Perranzabuloe, (also pseudomorphous after pyromorphite)

Chiverton Mines, Perranzabuloe

GALENOBISMUTITE

PbBi₂S₄.

R.Sparks specimen collected 1971, X-rd analysis by BM(NH)

Wheal Penrose, Sithney **BI**

GENTHELVITE

Zn₄Be₃Si₃O₁₂S.

A.W.G.Kingsbury (1961) Mineral.Mag. 32,929.

Treburland Manganese Mine, Altarnun **BI**

GEOCRONITE

Pb₁₄(Sb,As)₆S₂₃.

A.J.Criddle and C.D.Stanley eds. (1986) The Quantitative Data File for Ore Minerals 2nd. issue. BM(NH)

Treore Mine, St.Teath

GERSDORFFITE

NiAsS.

R.J.Davis, M.H.Hey and A.W.G.Kingsbury (1965) Mineral.Mag. **35**,

South Terras Mine, St Stephen-in-Brannel

GIBBSITE

Al(OH)₃.

H.G.Macpherson (1983) Mineral.Mag. **47**,250. (P.G. Embrey. BM(NH) spec.

1981.XSee Bannister (1950) Mineral.Mag. 29,12)

Wheal Gorland, St. Day **BI**

Bosahan Quarry, Constantine

GLAUCONITE

(K,Na)(Fe³⁺,Al,Mg)₂(SrAl)₄O₁₀(OH)₂.

J.H.Collins (1871) pt.2 51-2.

Wheal Coates, St Agnes

GOETHITE

FeO(OH).

Greg and Lettsom (1858) 251-2.

Botallack Mine, St Just

Parknoweth Mine, St Just

Carn Brea Mine, Illogan

Wheal Druid, Illogan

Wheal Beauchamp, Redruth

Wheal Buller, Redruth

Phoenix United Mines, Linkinhorne

Kernick Iron Lode, St Austell

Restormel Royal Iron Mine, Lanlivery

Wheal Cock, St. Just

Polzeath Consols, St. Minver

GOLD

Au.

W. Phillips (1819) 240-2.

Carnon Valley placers

Ladock placers

Redmoor placers,

Lanlivery St Ewe

Mudian Vean, Meneage

Wheal Gorland, Gwennap

Perran Gt. St George Mine, Perranzabuloe

Treore Mine, St Teath

Wheal Sparnon, Redruth

Botallack, St. Just

(Wheal Jane, Kea, reported occurrence a hoax.)

GOSLARITE

ZnSO₄.7H₂O.

W. Phillips (1819) 266. (Sulphate of zinc, white vitriol) Greg and Lettsom (1858) 429.

Tresavean Mine, Gwennap

Trethallan Mine, Gwennap

Wheal Castle, St Just

West Caradon Mine, St Cleer

Goyazite / Crandallite intermediate J.R.Hawkes et al,(1987) British Geological Survey Report **19**, 4. (see sheet 3.) Also on M.Grigg specimen, N.J.Elton EDX and XRD.

Gunheath China Clay Pit, St.Austell

GRAPHITE

C.

Greg and Lettsom (1858) 1-2.

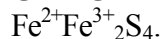
Wherry Mine, Newlyn

Wheal Alfred, Phillack

Tuckingmill

Kergilliack Quarry, Penryn
Wheal Jane, Kea
Dinas Head, Padstow
Botallack, St. Just

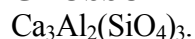
GREIGITE



A.J. Criddle and C.D. Stanley eds. (1986) The Quantitative Data File for Ore Minerals 2nd. issue. BM(NH) Lond. (from specimen in Kingsbury collection, BM(NH). 8SLBM Location in doubt, requires confirmation.

Treore Mine, St Teath **BI**

GROSSULAR



A.R. Alderman (1934) Mineral. Mag. **24**, 42-8.

Zawn a Bal, St. Just

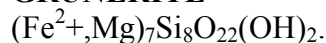
Tuckingmill, Camborne

GROSSULAR variety Stannoan

D.H.M. Alderton and N.J. Jackson (1978) Mineral Mag. **42**, 427-34.

The Crowns, Botallack, St Just **BI**

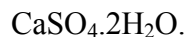
GRUNERITE



C.E. Tilley and J.S. Flett (1930) Summary of Progress, Geol. Surv. of Great Britain, 24-40.

Botallack, St Just

GYPSUM



J. Carne (1841) TRGSC. **6**, 48.

South Crofty Mine, Illogan

Geevor Mine, St Just

Wheal Mary Ann, Menheniot

Levant Mine, St. Just

HALITE

NaCl.

G.S.Camm and M.Merry (1991) UK Jnl.Mines & Mins., **9**, 13.
Penberthy Croft Mine, St.Hilary

HALLOYSITE

$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4 \cdot 2\text{H}_2\text{O}$.

J.Robson (1947) TRGSC **17**, 467. (probably halloysite)

Cook's Kitchen Mine, Illogan

Phoenix United Mines, Linkinhorne

St. Austell Granite

HASTINGSITE

$\text{NaCa}_2(\text{Fe}^{2+}, \text{Mg})_4\text{Fe}^{3+}(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$.

D.H.M.Alderton and N.J.Jackson (1978) Mineral.Mag. 431, M60

Wheal Cock, St.Just. (Potassian magnesian)

HAUYNE

$(\text{Na}, \text{Ca})_{4-8}\text{Al}_6\text{Si}_6(\text{O}, \text{S})_{24}(\text{SO}_4, \text{Cl})_{1-2}$.

E.H.Adye (1907) Modern Lithology, W.&A.K.Johnson Ltd. Edinburgh and London.
55-6.

Wolf Rock

HEDENBERGITE

$\text{CaFe}^{2+}\text{Si}_2\text{O}_6$.

J.S.Flett (1906) Mem.Geol.Surv., Geol. of Newquay (sheet 346) 27.

Great Retallack Mine, Perranzabuloe

Treburland Manganese Mine, Altarnun

Tregullan Mine, Bodmin

Treburland Manganese Mine, Altarnun (Manganhedenbergite)

HELVINE

$\text{Mg}_4\text{Be}_3(\text{SO}_4)_3\text{S}$.

A.W.G.Kingsbury (1961) Mineral.Mag. **32**, 924.

Bodmin Wheal Mary, (Wheal Ding section) Lanivet **BI**

Levant Mine, St Just

Wheal Cock, St Just

Bodmin Wheal Betsy, Lanivet

HEMATITE

Fe_2O_3 .

W.Phillips (1819) 169-72.

Restormel Royal Iron Mine, Lanlivery

Wheal Ruby, St Austell

Shallowater Mine, Bodmin Moor

Tincroft, Illogan .

East Pool Mine, Illogan

South Crofty Mine, Illogan

Boscawell Mine, St Just

Geevor Mine, St Just

Parknoweth Mine, St Just
Botallack Mine, St Just

HEMIMORPHITE

$Zn_4Si_2O_7(OH)_2 \cdot H_2O$.

H.G.Dines (1956)

D.Lloyd and R.W.Barstow (1983) *J.Russell Soc.* **1**,(2),23-4.

Fowey Consols, Tywardreath

Greystone Quarry, Lezant

Wheal Herland, Gwinear

HENTSCHELITE

$CuFe_2(PO_4)_2(OH)_2$.

P.J. Dunn (1990) *Am.Min.* **75**,1197-9. (constituent of 'andrewsite', q.v.)

Phoenix United Mines (Stowe's section) **BI**

Henwoodite, ferrian turquoise, see turquoise.

HERCYNITE

$Fe^{2+}Al_2O_4$

T.G.Bonney (1877) *QJGS.* **33**, 884-928.

Goonhilly Downs, The Lizard

In the Lizard serpentinite The Lizard (var. Picotite in dunitite)

HERDERITE

$CaBePO_4(F,OH)$.

A.W.G.Kingsbury (1958) *Mineral.Mag.* **29**,815-7.

Wheal Cock, St Just

Colcerrow Quarry, Luxulyan

HERZENBERGITE

SnS

Dr.A.Bromley, *Pers.com.* Associated with stokesite. Literature reference not yet located.

Halvasso Quarry, Longdowns **BI**

HETAEROLITE

$ZnMn^{3+}_2O_4$.

R.E.Bevins, R.F.Symes, J.M.Horak and V.A.D.Holyer (1987) *Mineral.Mag.* **51**, 172-173.

Eastern Cliff, Kennack Sands, The Lizard **BI**

HETEROMORPHITE

$Pb_7Sb_8S_{19}$.

4SLBM (recorded by W. Nevill in the printed catalogue of his collection, p20 1872, requires confirmation.) *Russel MS (NHM)* 1949

Wheal Boys, Endellion **BI**

HEULANDITE

$(\text{Na,Ca})_{2-3}\text{Al}_3(\text{Al,Si})_2\text{Sr}_{13}\text{O}_{36}\cdot 12\text{H}_2\text{O}$.

A. Russell (1910) Mineral.Mag. **15**, 377-79.

Levant Mine, St Just

Wheal Hazard, St Just

Carrick Du Mine, St Ives

Dean Quarry, St.Keverne

HIDALGOITE

$\text{PbAl}_3\text{AsO}_4\text{SO}_4(\text{OH})_6$.

R.J.Davis and M.H.Hey (1964) Mineral.Mag. **33**, 937. (X-rd near hidalgoite, requires confirmation)

Hingston Down Consols, Calstock **BI**

HISINGERITE

$\text{Fe}^{3+}_2\text{Si}_2\text{O}_5(\text{OH})_4\cdot 2\text{H}_2\text{O}$.

A.H.Church.(1870) J.Chem.Soc. **23**, 3-5.

Wheal Jane, Kea **BI**

Wheal Gorland, Gwennap

Phoenix United Mines, Linkinhorne

Penlee Quarry, Newlyn

HORNBLLENDE

$\text{Ca}_2(\text{Mg,Fe}^{2+})_4\text{AlSi}_7\text{AlO}_{22}(\text{OH})_2$.

W.Phillips (1819) 53-4.

Landewednack, The Lizard

Cadgwith, The Lizard

Housel Bay, The Lizard

Porthoustock, The Lizard

Dean Quarry, St Keverne

Mullion, The Lizard

St Terras Mine, St Stephen-in-Brannel

Great Retallack Mine, Perranzabuloe

Botallack, St Just

Penberthy Croft Mine, St.Hilary

HÜBNERITE

MnWO_4 .

Kingsbury collection BM(NH)

Wheal Gorland, Gwennap, (from the north dumps)

Hingston Down Quarry, Calstock

HUMBOLDTINE

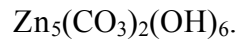
$\text{Fe}^{2+}\text{C}_2\text{O}_4\cdot 2\text{H}_2\text{O}$.

8SLBM BH(NH) identification 1986 on D.Baker specimen.

Pendarves Mine, Camborne **BI**

Hydro-andradite, hydrous andradite, (replacement of SiO_4 by $(\text{OH})_4$.) see Andradite.

HYDROZINCITE



(1992) P.Golley visual identification using ultra violet, on sphalerite from

Greystones Quarry, Lezant

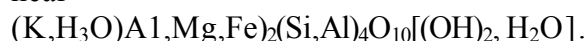
Old Treburgett Mine, St Teath

Hypersthene synonym of Enstatite q.v.

Idocrase synonymn of Vesuvuanite q.v.

Illite

near



J.R.Butler (1953) Geochim. Cosmochim. Acta **4**, 157-78.

Holseer Cove, Lizard

In the St.Austell Clays

ILMENITE



W.Gregor (1791) Obs.Mdm.Phys. Paris.

38, 68-9. (Menackanite)

Tregonwell Mill Stream, Manaccan **BI**

Porthallow, The Lizard Gwendra, The Lizard

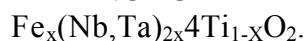
Buttern Hill Placers, Altarnun

Wheal Vincent,

Altarnun Downgate Mine, Callington

Dinas Head, Padstow

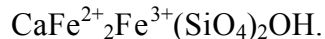
ILMENORUTILE



D.A.C.Manning (1953) Proc.Ussher Soc. 5,441.

Gunheath China Clay Pit, St Austell

ILVAITE



4SLBM BM(NH) specimen collected by A.W.G. Kingsbury.

Wheal Messer, Lanivet **BI**

Indicolite, variety of tourmaline of a blue or bluish black colour. T.G.Bonney (1877) Mineral Mag., **1**, 219.

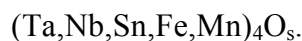
Luxulyan in 'luxullianite'

Wheal Kitty, St.Agnes

Widespread in 'peach' capels

Isopyre, a supposed new mineral, later shown to be impure opal q.v.

IXIOLITE



8SLBM BM(NH) identification 1987, X-rd pattern identical with or close to that of ixiolite, requires chemical confirmation. N.Talbot specimen.

Tremearne Pegmatite, Breage **BI**

JAMESONITE

$\text{Pb}_4\text{FeSb}_6\text{S}_{14}$.

W.Haidinger (1825) in F.Mohs, Treat. Min. **1**, 451. and **3**, 26.

The type locality is Cornwall, however an earlier description of the mineral was made on material from a Hungarian locality.

Cornwall **TL**

Wheal Boys, Endellion

Bodannon Mine,

Endellion Treore Mine, St Teath

Pendogget Mine, St Kew

Trevinnick Mine, St Kew

Pengenna Mine, St Kew

Tolpetherwin Quarry, South

Petherwin Linnick, South Petherwin

Port Quin Mine and Beach, Endellion

JAROSITE

$\text{KFe}^{3+}_3(\text{SO}_4)_2(\text{OH})_6$.

G.Ryback specimen as yellow powder on gossan, collected at Penberthy Croft Mine 1958, identified using IR, 1961, pers.comm. to the authors. C. Sparrow. (Pers. Comm.) Identified by X-rd M.Price Oxford Unvy. Museum. 1991.

Gravel Hill Mine, Perranzabuloe

Botallack Cliff, St.Just

Wheal Hazard, St.Just

Wheal Cock, St.Just (Skip Shaft)

JOHANNITE

$\text{Cu}(\text{UO}_2)_2(\text{SO}_4)_2(\text{OH})_2 \cdot 8\text{H}_2\text{O}$.

J.Garby (1848) TRGSC **7**, 86.

South Wheal Basset, Mogan **BI**

Geevor Mine, St Just. (Peeth lode no. 17 level)

JORDANITE

$\text{Pb}_{14}(\text{As,Sb})_6\text{S}_{23}$

J.Robson (1948) TRGSC **17**,457. A.W.G.Kingsbury (1954) TRGSC **18**,(pt.4 for 1952) 386-406. (doubtful occurrence)

Penberthy Croft Mine, St Hilary

JOSËITE

Bi_4TeS_2 .

Kingsbury collection BM(NH) (confirmed 26/1/1988 by R.F.Symes per.comm. to P.Golley)

Penlee Quarry, Newlyn

JOSËITE-B

$\text{Bi}_4\text{Te}_2\text{S}$.

Kingsbury collection BM(NH) (confirmed 26/1/1988 by R.F.Symes per.comm. to P.Golley) Penlee Quarry, Newlyn

KAERSUTITE

$\text{NaCa}_2(\text{Mg,Fe}^{2+})_4\text{TiAl}_2\text{Si}_6(\text{O,OH})_{24}$.

D.R.C.Kempe (1968) Mineral.Mag. **36**, 874-6.

In "minverite", St.Minver

KRANKITE

$\text{FeAsO}_4 \cdot 3.5\text{H}_2\text{O}$

8SLBM BM(NH) identification 1984 A.L.Ellis specimen.

South Terras Mine, St Stephen-in Brannel

KAOLNITE

$\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$.

W.Phillips (1819) 44. (porcelain clay)

Widespread in the areas of St Austell

St. Just

Breage

KASOLITE

$\text{PbUO}_2\text{SiO}_4 \cdot \text{H}_2\text{O}$.

Russell Soc. Newsletter (undated C1990) **4**, 2.

Loe Warren, St Just

KERMESITE

$\text{Sb}_2\text{S}_2\text{O}$.

Russell ms 1949 BM(NH) Identified by colour only, requires confirmation.

Wheal Prosper, St Ewe

Tredinnick Mine, St Erney

Wheal Leigh, Pillaton

Poltreworgey Mine, Endellion

Cutlinworth Farm, Landrake

Port Quin Beach, St.Endellion

Trebullet Mine, Lezant

KESTERITE

$\text{Cu}_2(\text{Zn,Fe})\text{SnS}_4$.

S.A.Kissin and D.R.Owens (1975) Can.Mineral **13**, 309.

St Michael's Mount **BI**

Cligga Mine, Perranzabuloe

KIDWELLITE

$\text{NaFe}^{3+}_9(\text{PO}_4)_6(\text{OH})_{10} \cdot 5\text{H}_2\text{O}$.

R.S.W.Braithwaite and H.Corke (1980) Mineral.Mag. **43**, 952-3.

Phoenix United Mines, Linkinhorne **BI**

KRÖHNKITE

$\text{Na}_2\text{Cu}(\text{SO}_4)_2 \cdot 2\text{H}_2\text{O}$.

R.J.Bowell (1992) J.Russell Soc. vol.4, pt.2, 50.

Wheal Hazard, St.Just

Kupfernickel, synonym of nickeline q. v..

KURAMITE

Cu_3SnS_4 .

8SLBM BM(NH) specimen and analysis C.J. Stanley. (Pers. Comm. 1989).
Gunheath China Clay Pit, St Austell **BI**

KYANITE

Al_2SiO_5 .

J.S.Flett and J.B.Hill (1945) Lizard Survey 14.
St.Erth.

Polkemogo, with sillimanite in cordierite rock

Pistil Ogo, with sillimanite and staurolite

Labradorite

$(\text{Ca},\text{Na})(\text{SiAl})_4\text{O}_8 \cdot (\text{N}\&\text{N})$

J.J.H.Teall (1888) Mineral.Mag. **8**, 116-20.

Man O'war Gneiss, The Lizard

Dean Quarry, St Keverne

Coverack Cove, The Lizard

LANARKITE

$\text{Pb}_2(\text{SO})_4\text{O}$

C. Sparrow Russell Soc. Newsletter 3, (undated C1990) X-rd M. Price, Oxford University Museum.

Gravel Hill Mine, Perranzabuloe

LANGITE

$\text{Cu}_4\text{SO}_4(\text{OH})_6 \cdot 2\text{H}_2\text{O}$.

N.S.Maskelyne (1864) Phil.Mag., ser.4, **27**,316.

Cornwall **TL**

Fowey Consols Mine, Tywardreath

Drakewalls Mine, Calstock

Wheal Edward, Calstock

Copper Hill Mine, Redruth

Wheal Bassett, Redruth

East Pool Mine, Illogan

Dolcoath Mine, Camborne

Geevor Mine, St.Just

Phoenix United Mines, Linkinhorne

Sharptor Mine, Linkinhorne

LAUMONTITE

$\text{CaAl}_2\text{Si}_4\text{O}_{12} \cdot 4\text{H}_2\text{O}$.

BM(NH) X-rd 7593F, very near laumontite, from Geevor Mine, G.Ryback pers.comm. to the authors.

Geevor Mine, St.Just

LAURIONITE

PbClOH .

A.Russell and A.Hutchinson (1922) Geol.Mag. **59**,182.

Wheal Rose, Sithney **BI**

LAVENDULAN

$\text{NaCaCu}_5(\text{AsO}_4)_4\text{Cl} \cdot 1.5\text{H}_2\text{O}$.

N.Hubbard specimen, collected 1988/9

Cligga Mine, Perranzabuloe

Pentire Glaze Mine, St Minver

LEADHILLTTE

$\text{Pb}_4\text{SO}_4(\text{CO}_3)_2(\text{OH})_2$.

A.Russell (1920) Mineral.Mag. **19**, 648.

Wreck of the fireship 'Firebrand', Falmouth Harbour

Greystone Quarry, Lezant

Penberthy Croft, St.Hilary

LEPIDOCROCITE

γ -Fe₃O(OH).

C. Sparrow (1989) Russell Soc. SW Newsletter **3**, 6. BM(NH) specimen from Great Retallack. C. Sparrow. Pers. Comm. 1991. X-rd identification M.Price, Oxford University Museum.

Great Retallack Mine, Perranzabuloe

Gravel Hill Mine, Perranzabuloe

Trewethen Mine, St Kew

LEPIDOLITE

$K(Li,Al)_3(Si,Al)_4O_{10}(F,OH)_2$.

Greg and Lettsom (1858) 223-5.

Tremearne Pegmatite, Breage

St Michael's Mount

Tregonning Hill, Breage

Lanarth, Redruth

Gunheath China Clay Pit, St Austell

Lepidomelane variety of biotite (q.v.), ferrian biotite.

LEUCOPHOSPHITE

$KFe^{3+}_2(PO_4)_2OH.2H_2O$.

X-rd 14/6/86 M.Price Oxford University Museum, M. Grigg spec, also BM(NH) X-rd 6103F (1986) from Gunheath, D.Lloyd spec.?.

Gunheath China Clay Pit, St Austell,

Wheal Gorland, Gwennap

Leucopyrite, synonym of löllingite q.v..

LIBETHENITE

Cu_2PO_4OH .

W.Phillips (1819) 235. (phosphate of copper)

Old Gunnislake Mine, Calstock **BI**

East Gunnislake Mine, Calstock (arsenatian var)

Phoenix United Mine, Linkinhorne

Gunheath China Clay Pit, St Austell

South Wheal Frances, Illogan

Basset Mines, Illogan

Penberthy Croft Mine, St Hilary

Pentireglaze Mine, St Minver

Wheat Cock, St.Just (Skip Shaft)

LIEBIGITE

$Ca_2UO_2(CO_3)_3.11H_2O$.

H.T.Evans and C.Frondel (1950) Am.Min. **35**, 25111.

Wheal Basset, Redruth **BI**

LIKASITE

Barry Gamble specimen, confirmed BM(NH) September 1993.

Hingston Down Quarry, Calstock **BI**

LINARITE

J.H.Collins (1871) pt.2, 64. (found in 1866)

Wheal Penrose, Sithney

Garras Mine, St.Erme

Penhale Mine, Perranzabuloe

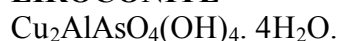
Pentire Glaze Mine, St Minver

Greystone Quarry, Lezant

Wheal Carpenter, Gwinear

Penberthy Croft Mine, St Hilary

Polzeath Consols, St.Minver

LIROCONITE

J.L.de Bournon (1801) Phil.Trans., 169-91.

Cornwall **TL**

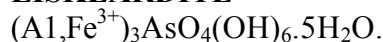
Wheal Muttrell, Gwennap

Wheal Gorland, Gwennap

Ting Tang Mine, Gwennap

Wheal Unity, Gwennap

Wheal Cock, St.Just (Skip Shaft)

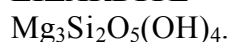
LISKEARDITE

N.S.Maskelyne (1878) Nature. **18**, 426. Liskeard,

Cornwall **TL**

Marke Valley Mine,

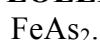
Linkinhorne Penberthy Croft Mine, St Hilary

LIZARDITE

E.J.W.Whittaker and J.Zussman (1956) Mineral.Mag. **31**, 107-26. Eastern Cliff,

Kennack Sands, The Lizard **TL**

Common in the Lizard seipentinite

LÖLLINGITE

J.H.Collins.(1871) Pt.2, 62. (Leucopyrite)

New Consols Mine, Luckett

Castle-an-Dinas Mine, St Columb

Penlee Quarry, Newlyn

Cligga Head Mine, Perranzabuloe.

Tremeame Pegmatite, Breage

Lonchidite, arsenical marcasite, see marcasite.

LUDLAMIITE

$(\text{Fe}^{2+}, \text{Mn}, \text{Mg})_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$.

F.Field and N.S.Maskelyne (1877) *Phil.Mag.* **3**, 52-7.

Wheal Jane, Kea **TL**

Lunnite, synonym of pseudomalachite q.v..

MACKINAWITE

(Fe,Ni)₉S₈.

D.H.Green (1964) J.Petrol. **5**, 134-38.

The Rill, Kynance Cove **BI**

MAGNESITE

MgCO₃.

J.Garby (1863) TRGSC **7**, 81.

The Rill, Kynance Cliff, The Lizard

The Lizard area, in serpentinite

Wheal Grambler, Gwennap

MAGNETITE

Fe²⁺Fe³⁺₂O₄.

W.Phillips (1819) 167-8. (oxydulated iron).

Botallack Mine, St Just

The Lizard

Gwenter

Treluswell, Penryn

Wheal Jane, Kea

Tregurtha Downs Mine, St Hilary

South Terras Mine, St Stephen-in-Brannel

Tretoil Mine, Lanivet

Trewen Quarry, South Petherwin

Polyphant Quarry, South Petherwin

Dean Quarry, St Keverne (Titanian magnetite)

MAHLMOODITE

FeZr(PO₄)₂·4H₂O.

N.Elton(1994) Russell Soc.SW Branch Newsletter **13**, 10-11.

Mineral Mag. **59**, 166-168.

Kerriack Cove, Illogan **BI** (2nd world occurrence)

MALACHITE

Cu₂CO₃(OH)₂.

W.Phillips (1819) 231-2. (green copper/malachite)

Wheal Gorland, Gwennap

Wheal Unity, Gwennap

Ting-Tang Mine, Gwennap

Carharrack Mine, Gwennap

Dolcoath Mine, Camborne

Wheal Buller, Redruth

Wheal Basset, Illogan

South Caradon Mine, St Cleer

Phoenix United Mines, Linkinhorne

Old Gunnislake Mine, Calstock

Polzeath Consols, St.Minver

Gunheath China Clay Pit, St.Austell

Malacolite, Synonym of diopside q.v..

MALAYAITE

CaSnSiO₅.

G.Van Marcke de Lummen (1985) Proc. Ussher Soc.
The Crowns, Botallack

Manganapatite, variety of fluorapatite (q.v.), original occurrence contained 6.7% MnO.

Mangandolomite, variety of dolomite (q.v.), a manganiferous dolomite.

Manganhedenbergite, variety of hedenbergite (q.v.), manganiferous hedenbergite (6.5% MnO).

MANGANITE

Mn³⁺O(OH).

W.Phillips (1819) 183. (Grey oxide of manganese)

Botallack Mine, St Just

Wheal Bucketts, Redruth

Lidcott Mine, Laneast

Trevena Mine, Tintagel

Restormel Royal Iron Mine, Lanlivery

Ruthers Mine, St Columb

Wheal Cock, St-Just (Skip Shaft)

Manganocalcite, variety of calcite (q.v.) with over 30% MnCO₃.

MANGANOCOLUMBITE

(Mn,Fe²⁺)(Nb,Ta)₆O₆

M.Grigg specimen identified X-rd N.Elton 1994.

Gunheath China Clay Pit, St.Austell

MANSFIELDITE

AlAsO₄.2H₂O.

pers.conmi. D.Clough. to P.J.Golley, identified BM(NH).

Penberthy Croft Mine, St Hilary

MARCASITE

FeS₂.

W.Phillips (1819) 165-7. (radiated iron pyrites/white iron pyrites)

Cooks Kitchen Mine, Illogan

Tincroft Mine, Illogan

South Crofty Mine, Illogan

Wheal Clifford, Gwennap

Wheal Unity, Gwennap

Fowey Consols, Tywardreath

Wheal Jane. Kea

Mount Wellington Mine, Gwenmap

Wheal Mary Ann. Meiheniot

Hingston Downs Quarry, Calstock

Cook's Kitchen Mine, Illogan (Lonchidite)

Tincroft Mine, Illogan (Lonchidite)
Mannatite, iron rich variety of sphalerite q.v..

MAWSONITE

$\text{Cu}_6\text{Fe}_3\text{SnS}_8$.

D.A.C.Manning (1983) Proc.Ussher.Soc. **5**,411-16.

Gunheath China Clay Pit, St Austell **BI**

MELANTERITE

$\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$.

J.Garby (1848) TRGSC **7**, 84. (sulphate of iron, green vitriol)

South Crofty Mine, Illogan

Wheal Jane. Kea

Fowey Consols, Tywardreath

Ting-Tang Mine, Gwennap

United Mines, Gwennap

Geevor Mine, St. Just

Wheal Jane, Kea (pisanite)

Wheal Coates, St Agnes (pisanite)

Menackenite, synonym of ilmenite q.v..

MENEGHINITE

$\text{Pb}_{13}\text{CuSb}_7\text{S}_{24}$.

A. W.G.Kingsbury (1965) Mineral.Mag. **35**,424-6.

Pengemia Mine, St Kew **BI**

Pentire vein system, St Minver

Portquin vein system, Endellion

MESOLITE

$\text{Na}_2\text{Ca}_2\text{Al}_6\text{Si}_9\text{O}_{30} \cdot 8\text{H}_2\text{O}$.

T.M.Hall (1868) The Mineralogist's Directory. 43.

A.Russell (1910) Mineral.Mag. **15**, 3834. (of doubtful occurrence)

The Cliffs between Botallack and Wheal Cock, St.Just

METANOVÁČEKITE

$\text{Mg}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 4-8\text{H}_2\text{O}$.

N.J.Elton, J.J.Hooper and A.Jeal (1994) Mineral Mag,-. **58**, 513-4. Possibly formed by dehydration of nováčekite subsequent to collection'

West Wheal Owles, St.Just **BI**

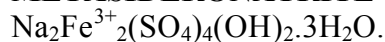
Meta-Saléeite

$\text{Mg}(\text{UO}_2)_2\text{P}_2\text{O}_7 \cdot 8\text{H}_2\text{O}$.

(the lower hydrate of saléeite) P.J.Golley specimen, identified by optical spectrometer and X-rd 17/3/1970 by D.Atkin, Institute of Geological Sciences.

South Terras Mine, St Stephen-in-Brannel **BI**

Wheal Edward, St.Just

METASIDERONATRITE

8SLBM BM(NH) identification 1985, R.E.Starkey specimen.

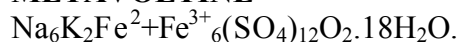
Trerubies Cove, near Delabole **BI**

METATORBERNITE

A.Hallimond (1920) Mineral Mag. **19**, 43.

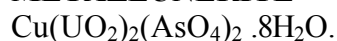
Most specimens labelled torbernite (q.v.) are metatorbernite.

Old Gunnislake Mine, Calstock (natural metatorbernite) **BI**

METAVOLTINE

8SLBM BM(NH) identification 1981, G.Ryback specimen.

Wheal Edward, St Just **BI**

METAZEUNERITE

A.W.G.Kingsbury (1952) TRGSC, **18**, 386.

Wheal Gorland, Gwennap

Geevor Mine, St.Just

Wheal Edward, St.Just

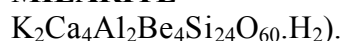
MICROLINE

W.A.Richardson (1923) QJGS **79**, 547-76.

in the St.Austell Granite

In biotite granite, Lands End

In Li-mica granite, Tregonning Hill

MILARITE

SLBM4 A.W.G. Kingsbury specimen collected 1951-2.

Cheesewring Quarry, Linkinhorne

MILLERITE

J.Garby (1848) TRGSC **7**, 72-92. (sulphuret of nickel)

St Austell Consols

Gerrans Bay

Fowey Consols, Tywardreath

Pengelly Mine, St Ewe

Wheal Chance, St Austell

Wheal Spamon, Redruth

Greystone Quarry, Lezant

MIMETITE

W.Gregor (1809) Phil.Trans.Roy.Soc.Lond. **99**,195-205. (established presence of chloride in mimetite)

Wheal Unity, Gwennap
Wheal Alfred, Phillack
Wheal Carpenter, Gwinear
Wheal Rose, Sithney
Wheal Penrose, Sithney
Penberthy Croft Mine, St Hilary
Wheal Boys, Endellion
Trevinnick Mine, St Kew
Trewethen Mine, St Kew
Wheal Gorland, Gwennap
Croft Gothal Mine, St. Hilary
Pentire Glaze Mine, St Minver (crystal form suggests also variety Campylite,
R.Love specimen)

MINNESOTAITE

$(\text{Fe}^{2+}, \text{Mg})_3\text{Si}_4\text{O}_{10}(\text{OH})_2$.

A.H.Clark (1970) Am.Min. **55**, 283-4.

The Lizard

MITRIDATTTE

$\text{Ca}_2\text{Fe}^{+3}_2(\text{PO}_4)_3\text{O}_2 \cdot 3\text{H}_2\text{O}$.

J.R.Hawkes et al (1987) British Geological Survey **19**, 4. (see sheet 3).

Gunheath China Clay Pit, St.Austell

MIXTTE

$\text{BiCu}_6(\text{AsO}_4)_3(\text{OH})_6 \cdot 3\text{H}_2\text{O}$.

4SLBM BM(NH) specimen collected by A. W.G.Kingsbury.

Wheal Owles, St Just **BI**

Wheal Edward, St Just

Penberthy Croft Mine, St Hilary

Wheal Carpenter, Gwinnear

South Terras Mine, St. Stephen-in-Brannel

Old Gunnislake Mine, Calstock

MOLYBDENITE

MoS_2

W.Phillips (1819) 185-6. (sulphuret of molybdena)

Wheal Unity, Gwennap

Wheal Gorland, Gwennap

Wheal Unity, Gwinear

Wheal Mary, Lelant

Penlee Quarry, Newlyn

Kit Hill Mine, Stokeclimsland

Prince of Wales Mine, Calstock

Hingston Down Quarry, Calstock

Drakewalls Mine, Calstock

Cligga Mine, Perranzabuloe

MONAZITE-(Ce)

(Ce,La,Nd,Th)PO₄.

H.A.Miers (1885) Mineral.Mag. **6**, 164.

Lanterdan Quarry, Tintagel **BI**

Hingston Down Quarry, Calstock

Carmenellis granite (accessory)

Prince of Wales Quarry, Tintagel

MONTMORILLONITE

(Na,Ca)_{0.33}(Al,Mg)₂Si₄O₁₀(OH)₂.nH₂O.

J.Garby (1848) TRGSC **7**, 76. (fullers earth)

Great Retallack Mine, Perranzabuloe **BI**

Dean Quarry, St Keverne

MORINITE

NaCa₂Al₂(PO₄)₂(F,OH)₅.2H₂O.

N.J.Elton, J.J.Hooper and L.Coggan, in preparation.

Gunheath China Clay Pit, St.Austell

MOTTRAMITE

Pb(Cu,Zn)VO₄OH.

G.S.Camm and M.Merry (1991) UKJMM. **9**, 13. (Mottramite - Duftite intermediate)

Penberthy Croft Mine, St Hilary

N.J.Hooper X-rd. of V.A.D.Holyer specimen.- mottramite.

Dean Quarry, St.Keverne

MPOROROITE

WAIO₃(OH)₃.2H₂O.

B.Gamble spec. X-rd BM(NH) R.F.Symes 1993.

Hingston Down Quarry, Calstock **BI**

MUSCOVITE

KAl₂(Si₃Al)O₁₀(OH)₂.

Greg and Lettsom (1858) 114-7.

Common throughout the Cornish granite

Gunheath China Clay Pit, St Austell

Trelavour Down, St Dennis

NADORITE

PbSbO₂Cl.

A.Russell (1927) Mineral.Mag. **21**, 272. (read in 1923).

Bodannon Mine, St Endellion **BI**

Trevinnick Mine, St Kew

Portquin Beach, St.Endellion

Treore Mine, St Teath

Wheal Leigh, Pillaton

NANTOKITE

CuCl.

P.Seroka specimen, purchased 1963. Also reported by R.W.Barstow.

Levant Mine, St.Just

NATROLITE

Na₂Al₂Si₃O₁₀.2H₂O.

J.Carne (1846) TRGSC **6**, 48. (needlestone)

Chynalls Point, St Keverne

Parc Bean Cove, Mullion

Pol Cornick, The Lizard

George's Cove, The Lizard

Potstone Point, The Lizard

Dean Quarry, St.Kevetne

NATROMONTEBRASITE

(Na,Li)AlPO₄(OH,F).

M.Stone and M.C.George (1983) Proc.Ussher Soc. **5**, 428-31.

Tremearne Pegamatite, Breage **BI**

NATRON

Na₂CO₃.10H₂O.

R.J.Bowell (1992) J. Russell Soc. **4**, pt.2, 51. (previous records doubtful)

Botallack, St Just

NEOTOCITE

(Mn,Fe,Mg)SiO₃.H₂O.

J.H.Collins (1878) Mineral.Mag. **2**, 91. and(1879)**3**,89.

Wheal Owles, St Just **BI** (penwithite)

Geevor Mine, St. Just

NEPHELINE

(Na,K)AlSiO₄.

S. Allport (1871) Geol.Mag. **8**, 247.

Wolf Rock **BI**

NICKELINE

NiAs.

W.Phillips (1819) 211. (Kupfernickel)

Wheal Chance, Tywardreath

Pengelly Mine, St Ewe

Fowey Consols, Tywardreath
St Austell Consols
Roskrow United Mine, Ponsanooth

NICKEL-SKUTTERUDITE

(chloanthite)



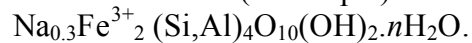
Wheal Ann, Phillack (RIC spec.)

St Austell Consols

Fowey Consols, Tywardreath

Dolcoath Mine, Camborne

NONTRONITE (Chloropal)



A.H.Church (1866) Chem.News. **14**, 71.

Carclaze China Clay Pit, St Austell

Carn Grey, Breage

Tremearne Pegmatite, Breage

NOSEAN



S.Allport (1874) Geol.Mag. **1**, 462. also, QJGS. **30**, 529.

Wolf Rock **BI**

NOVÁČEKITE



N.J.Elton, J.J.Hooper and A.Jeal (1994) Mineral Mag. **58**, in press.

Wheal Owles, St.Just **BI**

see also Unnamed Hydrated Uranyl Arsenate.

Oligoclase (Na,Ca)Si,Al)₄O₈,
J.Robson (1964) RGSC 150th Annvs. Vol. 123.
In the Cornish "greenstones" In biotite-granite

OLIVENITE

Cu₂AsO₄.OH.
M.H.Klaproth (1787) 29.
Wheal Gorland, Gwennap **TL**
Wheal Unity, Gwennap
Ting-Tang Mine, Gwennap
Carharrack Mine, Gwennap Phoenix
United Mines, Linkinhorne
Marke Valley Mine, Linkinhorne
Old Gunnislake Mine, Calstock
South Terras Mine, St Stephen-in-Brannel
Penberthy Croft Mine, St Hilary
Pentire Glaze Mine, St.Minver

OLIVINE

(Mg,Fe)SiO₄.
J. H. Collins (1911) JRIC **18**, 2, 451.
In the Meneage serpentine The Lizard

OPAL

SiO₂.nH₂O.
W.Phillips (1819) 9. (A specimen of fire opal from High Rosewame Mine was in WP's collection raised about 1780.)
Rosewarne Mine, Gwinnear
Carclaze China Clay Pit, St.Austell
Slip China-stone Quarry, St Dennis
Gunheath China Clay Pit, St Austell
Botallack Mine, St Just
Wheal Gorland, Gwennap
Wheal Damsel, Gwennap
Wheal Maudlin, Lanlivery
Wheal Buller, Redruth
Stenna Gwynn Mine, St Stephen-in-Brannel
Rocks China Clay Pit, St.Austell
Wheal Carne, St Just (TL of Isopyre)

ORPIMENT

As₂S₃.
J.Sowerby (1819) British Mineralogy No. 547.
Perranarworthal (Gregor specimen)
Burraton Coombe Quarry, Saltash (Sir A.Russell specimen)

Orthite, synonym of allanite q. v..

ORTHOCLASE



W.Phillips (1819) 89. (adularia)

Trewavas Head, Breage

Botallack Mine, St Just

Balleswidden Mine, St Just

St. Michael's Mount

Kynance Cove, The Lizard

United Mines, Gwennap

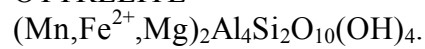
Tresayes Quarry, Roche (the "Glass Mine")

Wheal Coates, St Agnes

Colcerrow Quarry,

Luxulyan Gunheath China Clay Pit, St Austell

OTTRELITE



W.M.Hutchins (1889) Geol.Mag. **6**, 214. (optical determination.) A.J.Brearley

(1988) Mineral.Mag. **52**, 394-96, quoted T.J.Primmer thesis showing this is merely chloritoid with <1.1% MnO and not ottrelite.

Tintagel (In the Woolgarden phyllites)

Palygorskite, see pilolite, many but not all pilolites are palygorskite.

PARACOSTBITE

CoSbS.

A.J.Criddle and C.D. Stanley eds.(1986) The Quantative Data File for ore Minerals. 2nd. issue. BM(NH) Lond. (specimen analysed was from the Kingsbury collection BM(NH) and may be from another locality, requires confirmation)
Wheal Cock, St Just **BI**

PARALAURIONITE

PbClOH.

A.Russell and A.Hutchinson (1922) Geol.Mag. **59**,182.

Wheal Rose, Sithney **BI**

Daymer Bay, Padstow

PARATACAMITE

Cu₂(OH)₃Cl.

F.A.Bannister, M.H.Hey and G.F.Claringbull (1950) Mineral.Mag. **29**,280-7.

Botallack Mine, St.Just

Levant Mine, St.Just

Geevor Mine, St. Just

West Wheal Owles, St Just

Wheal Cock, St Just

Cligga Head, Perranzabuloe

Penberthy Croft Mine, St Hilary

Wheal Hazard, St.Just

Botallack Cliff, St.Just

PARGASITE

NaCa₂(Mg,Fe²⁺)₄Al(Si₆Al₂)O₂₂(OH)₂.

D.H.Green (1964) 150th Ann. RGSC, 100.

Kildown Point, The Lizard

Wheal Cock, St.Just

Botallack, St.Just

PARNAUITE

Cu₉(AsO₄)₂SO₄(OH)₁₀.7H₂O.

8SLBM BM(NH) identification 1981

A. Russell collection specimen BM(NH).

Wheal Gorland, Gwennap **BI**

Penberthy Croft Mine, St Hilary

Wheal Unity, Gwennap

South Tolcarne Mine, Camborne

Mulberry Stockworks, Lanivet

Marke Valley Mine, Linkinhorne

PECTOLITE

NaCa₂Si₃O₈OH.

A.F. Seager(1971). TRGSC. **20**, (for 1967-8),97-113.

Dean Quarry, St Keverne

Porthoustock Quarry, St Keverne

PENTLANDITE

(Fe,Ni)₉S₈.

Greg and Lettsom (1858) 296-7. (Eisennickelkies)

Wheal Jane, Kea

Wheal Falmouth, Kea

Penwithite, synonym of neotocite q.v..

Phacolite, a habit variety of chabazite Q.V..

PHARMACOSIDERITE

$KFe^{3+}_4(AsO_4)_3(OH)_4 \cdot 6-7H_2O$.

W.Phillips (1811) Trans.Geol.Soc.Lond. 1, 23-37 + figs. (arseiate of iron)

Cornwall **TL**

Carharrack Mine, Gwennap

Wheal Gorland, Gwennap

Wheal Unity, Gwennap

Terras Iron Mine, St Stephen-in-Brannel

Penberthy Croft Mine, St Hilary

Old Gunnislake Mine, Calstock

Carn Brea Mine, Illogan

Old Beam Mine, Bugle

Botallack Mine, St Just

Phoenix United Mine, Linkinhorne

Gunheath China Clay Pit, St.Austell

PHENAKITE

Be₂SiO₄.

J.Sowerby (1809) vol.4, 53-4. p1.331. (white tourmaline, said to be found in a mine at St.Just)

A. Russell (1911) Mineral. Mag. **16**, 55-62.

Cheesewring Quarry, Linkinhorne **BI**

South Phoenix Mine, Linkinhorne

South Crofty Mine, Illogan

Wheal Gorland, Gwennap

Wheal Cock, St Just

Wheal Edward, St Just

Wheal Kitty, St Agnes

PHILIPSBURGITE

(Cu,Zn)₆[(As,P)O₄]₂(OH)₆.H₂O.

8SLBM BM(NH) identification 1989, N.Hubbard specimen.

Wheal Carpenter, Gwinear

Penberthy Croft Mine, St Hilary

PHLOGOPITE

KMg₃AlSi₃O₁₀(F,OH)₂.

H.G.Dines(1956) Met.Min.Reg.SW.Engld. pt.2, 522.

Castle-an-Dins Mine,
St Columb Pendennis, Falmouth

PHOSGENITE

$\text{Pb}_2\text{CO}_3\text{Cl}_2$.

Greg and Lettsom (1858) 421-3.

Wheal Confidence, Perranzabuloe (A.Russell considered this specimen to be from
Wheal Rose, Sithney)

Wheal Rose, Sithney

Penberthy Croft Mine,

St Hilary Bounds Cliff, Endellion

Tolcarne Beach, Newquay

Tregardock Beach, Newquay

Daymer Bay, Padstow

Newporth Beach, Falmouth

Wheal Golden, Perranzabuloe

Padstow Consols

PHOSPHOSIDERITE

$\text{Fe}^{3+}\text{PO}_4\cdot 2\text{H}_2\text{O}$

C. Sparrow (1989) Russell Society South West Branch Newsletter. No **3**, 6. X-rd
identification M.Price Oxford University Museum.

Gravel Hill Mine, Perranzabuloe

PHOSPHURANYLITE

$\text{Ca}(\text{UO}_2)_3(\text{PO}_4)_2(\text{OH})_2\cdot 6\text{H}_2\text{O}$.

8SLBM BM(NH) specimen, collected by R.W.Barstow. X-rd pattern near that of
phosphuranylite, chemical confirmation required.

Wheal Edward, St Just BI

Picotite, magnesium chromian hercynite.

Picrolite, synonym of antigorite q.v..

PIGEONITE

$(\text{Mg},\text{Fe}^{2+},\text{Ca})_2\text{Si}_2\text{O}_6$.

S.O.Agrell (1939) Mineral.Mag. **25**, 305.

In the adinoles at Dinas Head, St.Merryn

Pigotite

An Al bearing organic compound. J.F.W.Johnston (1840) Phil.Mag. 3rd. ser., **17**,
382. Said to be have been formed by the action of wet vegetation on granite. see
Hey 3.

Cornwall **TL**

Cripp's Cove, Treen

Piper's Hole, St.Mary's, Isles of Scilly

Pilolite (palygorskite ?) near $\text{Mg}_4\text{Al}_2\text{Si}_{10}\text{O}_{27}\cdot 15\text{H}_2\text{O}$

Oxford University specimen collected by A. W.G.Kingsbury.

Tolpetherwin Quarry, South Petherwin

Pisanite, variety of melanterite (q.v.), cuprian melanterite.

Pitchblende, variety of uraninite, name given to massive uraninite (q.v.).

PITTICITE

Amorphous Fe³⁺ hydrous arsenate sulphate

Greg and Lettsom (1858) 277-8.

Wheal Sparnon, Redruth

Penberthy Croft Mine, St Hilary

Botallack Mine, St Just

Dolcoath Mine, Camborne

PLAGIONITE

Pb₅Sb₈S₁₇

R.E.Clayton, R.C.Scrivener and C.J.Stanley (1990). Proc.Ussh.Soc., 7, 258-262.

Bounds Cliff vein system, Endellion.

PLANCHEITE

Cu₈Si₈O₂₂(OH)₄.H₂O.

8 SLBM BM(NH) specimen collected by A.W.G.Kingsbury 1958.

Gunheath China Clay Pit, St Austell

PLATINUM

Pt.

G.McPherson and T.Lamb (1921) Geol.Mag. **58**, 512-14.

Manaccan, The Lizard

Kynance Cove, The Lizard

PLUMBOGUMMITE

PbAl₃(PO₄)₂(OH)₅.H₂O.

A.W.G. Kingsbury.(1954) TRGSC. **18**, part4 (for 1952), 393-4.

Wheal Gorland, Gwennap

Penberthy Croft Mine, St Hilary

Buttern Hill Placers, Altarnun

Wheal Alfred, Gwinear

PLUMBOJAROSITE

PbFe³⁺₆(SO₄)₄(OH)₁₂

A.W.G.Kingsbury and J.Hartley (1960) Mineral.Mag. **32**, 423-32.

Penberthy Croft Mine, St Hilary

Wheal Carpenter, Gwinear

POLYBASITE

(Ag,Cu)₁₆Sb₂S₁₁.

C.A.Joy (1853) Inaug. - Diss. Gottingen. R.E.Clayton, R.C.Scrivener and

C.J.Stanley (1990) Proc.Ussh.Soc., 7, 258-262

Pentire vein system, St Minver

Polytelite, synonym of freibergite q.v..

POSNJAKITE

$\text{Cu}_4\text{SO}_4(\text{OH})_6 \cdot \text{H}_2\text{O}$.

J.R.Knight and R.W.Barstow (1970) Mineral.Mag. **37**, 740.

Drakewalls Mine, Calstock **BI**

Fowey Consols Mine, Tywardreath

Greystone Quarry, Lezant

Potassium magnesio-arfvedsonite

A.Hall (1982) Mineral.Mag. **45**, 257-66.

Described in 8SLBM as a new amphibole, no record found of acceptance as a species, no reference in Hey 3.

Pendennis Point, Falmouth

PREHNITE

$\text{Ca}_2\text{Al}_2\text{Sr}_3\text{O}_{10}(\text{OH})_2$.

J.Carne (1822) TRGSC. **2**, 310.

Porthoustock Quarry, St Keverne

Dean Quarry, St Keverne

Ghostcroft Mine, Mullion

Roscommon Cliff, St Just

Predannack Head, The Lizard area

Ogo Dour, The Lizard area

Prochlorite, synonym of ripidolite, variety of clinochlore (q.v.)

Protolithionite, lithium iron variety of zinnwaldite q.v..

PROUSTITE

Ag_3AsS_3 .

H.G.Macpherson (1983) Mineral.Mag. **47**,255. (BM(NH) specimen 36442. P.G.

Embrey 1981, Pers. Comm.).

Wheal Ludcott, St Ive **BI**

Przibramite, variety of sphalerite (q.v.), with up to 2% Cd.

PSEUDOBOLÉITE

$\text{Pb}_5\text{Cu}_4\text{Cl}_{10}(\text{OH})_8 \cdot 2\text{H}_2\text{O}$

8SLBM V.A.D.Holyer specimen in the National Museum of Wales, (X-rd identification 1983 by P.A.Williams).

Tolcarne Beach, Newquay **BI**

PSEUDOMALACHITE

$\text{Cu}_5(\text{PO}_4)_2(\text{OH})_4 \cdot \text{H}_2\text{O}$.

M.F.Hedde (1855) Phil.Mag. **10**, 39. (lunnite)

Cornwall **BI**

Old Gunnislake Mine, Calstock

East Gunnislake Mine, Calstock

Wheal Carpenter, Gwinear

South Tolcarne Mine, Camborne

Phoenix United Mine, Linkinhorne
Penberthy Croft Mine, St Hilary
Wheal Providence, Gwinear
Gunheath China Clay Pit, St.Austell

Psilomelane a group name for hard massive black manganese oxides. J.H.Collins (1871) pt.2, 82.

Wheal Bucketts , Redruth
Pednandrea Mine, Redruth
Wheal Tolgus, Redruth
Restormel Royal Iron Mine, Lanlivery, (romanechite?) Dana 7th ed., 1, 699.

PUMPELLYITE - (Mg)

$\text{Ca}_2\text{MgAl}_2\text{SiO}_4\text{Si}_2\text{O}_7(\text{OH})_2\cdot\text{H}_2\text{O}$.

R.P.Barnes and J.R.Andrews (1981) Proc.Ussher Soc. **5**, 139-46.

Great Penhaver Point, Roseland
Penlee Quarry, Newlyn

PYRARGYRITE

Ag_3SbS_3 .

W.Phillips (1819) 217-18. (Red silver)

Wheal Ludcott, St Ive
Wheal Herland, Gwinear
North Dolcoath Mine, Camborne
Dolcoath Mine, Camborne
Wheal Mexico, Perranzabuloe
Holmbush Mine, Stokeclimsland
Wheal Duchy, Calstock
Wheal Alfred, Phillack
Silver Vein Mine, St Winnow
Harrowbarrow Mine, St Mellion
Herodsfoot Mine, Lanreath

PYRITE

FeS_2 .

W.Phillips (1819) 164-6.

Botallack Mine, St Just
Levant Mine, St.Just
Great Wheal Fortune, Breage
Great Wheal Vor, Breage
Wheal Prospidnick, Sithney
Dolcoath Mine, Camborne
Tincroft Mine, Illogan
Wheal Jane, Kea
Wheal Unity, Gwennap
Wheal Kitty, St Agnes

PYROLUSITE

MnO₂.

J.Garby (1848) TRGSC 7, 84.

Restormel Royal Iron Mine, Lanlivery

Treburland Manganese Mine, Altarnun

Pencrebar Mine, Callington

Lidcott Mine, Laneast

Wheal Truscott, Launceston

Greystone Quarry, Lezant

Tremore Quarry, Lanivet

PYROMORPHITE

Pb₅(PO₄)₃Cl.

W.Phillips (1819) 256-7. (phosphate of lead)

Wheal Alfred, Phillack

Wheal Hope, Perranzabuloe

Penberthy Croft Mine, St Hilary

Wheal Rose, Sithney

Wheal Penrose, Sithney

Wheal Helston

Garras Mine, St Erme

Trevinnick Mine, St Kew

Pentire Glaze Mine, St Minver

Watergate Bay, Newquay

Whipsiderry Beach adits, Newquay

Gunheath China Clay Pit, St.Austell

PYROPHYLLITE

Al₂Si₄O₁₀(OH)₂.

T.J.Primmer (1985) Mineral.Mag. 49, 365-74.

Bude - Newquay coast.

The Lizard (BM(NH) specimen)

PYROSMALITE

(Fe²⁺,Mn)₈Si₆O₁₅(OH,Cl)₁₀.

P.G.Embrey, footnote in P.E.Brown (1959) Mineral.Mag. 32,244.

Treburland Manganese Mine, Altarnun

PYROSTILPNITE

Ag₃SbS₃.

8SLBM BM(NH) identification and specimen, collected by A.W.G.Kingsbury 1959.

St Teath **BI**

PYRRHOTITE

FeS.

J.H.Collins (1871) Pt.2, 85.

East Pool Mine, Illogan

Botallack Mine, St Just

Wheal Jane, Kea

Wheal Kine, St Agnes
St Austell Consols
Wheal Maudlin, Lanlivery
Great Onslow Consols, St Breward

QUARTZ

SiO₂.

Jars (1781) 3, 86.

(Wheal Sparnon, Redruth, cuttable quality)

QUARTZ Rock Crystal

SiO₂.

Botallack Mine, St Just

Wheal Diamond, St Just

St Michael's Mount

Wheal Alfred, Phillack

Dolcoath Mine, Cambome

North Roskear Mine, Camborne

Wheal Sparnon, Redruth

Wheal Mary Ann, Menheniot

Lanterdan Quarry, Tintagel

Delabole Slate Quarry

QUARTZ Citrine

SiO₂:

Botallack Mine, St Just

St. Michael's Mount

Carn Gloose, St Just

Wheal Jane, Kea

Wheal Buller, Redruth

Restormel Royal Iron Mines, Lanlivery

QUARTZ Smoky Quartz

SiO₂.

Trewellard, St. Just

North Roskear Mine, Cambome

Wheal Buller, Redruth

Rostowrack China Clay Pit, St Austell

South Terras Mine, St Stephen-in-Brannel

Colcerrow Quarry, Luxulyan

QUARTZ

Rose Quartz

SiO₂.

St. Michael's Mount

Wheal Bucketts, Redruth

QUARTZ Green quartz

SiO₂.

Rostowrack China Clay Pit, St Austell

Restormel Royal Iron Mine, Lanlivery

QUARTZ Blue Quartz

SiO₂.

North Roskear Mine, Camborne

QUARTZ

Rutilated Quartz Lanterdan Quarry,
Tintagel Delabole Slate Quarry

QUARTZ

pseudomorphs after Beta Quartz
SiO₂.

J. Drugman (1928) Mineral Mag., 21, 366-82.
Wheal Coates, St Agnes
Belowda Beacon,
Roche Belowda China Clay Pit, Roche

QUARTZ

Hacked Quartz
Rostowrack China Clay Pit, St Austell
Wheal Trelawny, Menheniot
Wheal Ludcott, St Ive
East Pool Mine, Illogan

QUARTZ Amethyst

SiO₂.
Wheal Bellon, St Just
Wheal Uny, Redruth
Wheal Jane, Kea
Rostowrack China Clay Pit, St Austell
Goonbarrow China Clay Pit, St Austell
Wheal Buller, Redruth

QUARTZ Milky Quartz

SiO₂.
"passim"

QUARTZ "Tiger Eye"

SiO₂.
P.J. Golley specimen, collected by V.A.D. Holyer
Kynance Cove, The Lizard

QUARTZ Orange Quartz

SiO₂.
Wheal Buller, Redruth

QUARTZ "Floatstone"

SiO₂.
Wheal Alfred, Phillack
Pednandrea Mine, Redruth
Relistian Mine, Gwinear

QUARTZ Babel Quartz

SiO₂.

Great Work Mine, Breage

QUARTZ

Cryptocrystalline (chalcedony, jasper, flint)

Trevascus Mine, Gwinear

Pednandrea Mine, Redruth

Botallack Mine, St Just

Wheal Maudlin, Lanlivery

Penlee Quarry, Newlyn

Marazion Beach Portreath Beach

Loe Bar, Helston

Rinsey Head, Breage

North Roskear Mine, Camborne (including "Haytorite")

RAMMELSBURGITE

NiAs₂.

R.J.Davis, M.H.Hey, and A.W.G. Kingsbury (1965) Mineral.Mag. **35**, 72-83.

South Terras Mine, St Stephen-in-Brannel

Roskrow United Mine, Ponsanooth

Rashleighite, an intermediate between turquoise and chalcocyanite.

M.H.Hey, F.A.Bannister and A.Russell (1938) Mineral.Mag. **25**, 54.

Castle-an-Dinas Mine, St Columb Major **TL**

Bunny Mine, St.Austell **TL**

Gunheath China Clay Pit, St Austell

REALGAR

AsS.

A.Russell (1944) Mineral.Mag. **27**, 3.

Burraton Coombe Quarry, Saltash **BI**

Redondite, messbach-type variscite, q. v..

REICHENBACHITE

Cu₅(PO₄)₂(OH)₄.

8SLBM R.S.W.Braithwaite and G.Ryback, Mineral.Mag. in press. Old

Gunnislake Mine, Calstock **BI**

Restormelite

Aluminosilicate of Na and K. A.H.Church (1870) J.Chem.Soc. 23, 165.

Hey 3, 591. A doubtful or unidentified mineral.

Restormel Royal Iron Mine, Lanlivery **TT**

RHABDOPHANE

(Ce,La)PO₄.H₂O.

W.G.Lettsom (1878) Zeits.Kryst.Min. **3**, 191.

also (1878) Phil.Mag. **13**, 527.

Cornwall **TL**

RHABDOPHANE-(Nd)

(La,Ce)PO₄.H₂O.

J.F.W.Bowles and G.E.Morgan (1984) Mineral.Mag. **48**, 146.

Fowey Consols Mine, Tywardreath

RHODOCHROSITE

MnCO₃.

J.H.Collins (1871) pt.2, 41. (diallogite)

Botallack Mine, St Just

Wheal Owles, St Just

Levant Mine, St. Just

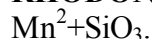
Treburland Manganese Mine, Altarnun

Lidcott Mine, Laneast

Simm's Lode, Geevor Mine, St.Just

Trebarwith Strand, Tintagel

RHODONITE



J.Sowerby (1817) British Min. Vol. **5**, 253-4. p1.536.

Treburland Manganese Mine, Altarnun

Pencrebar Mine, Callington

Lidcott Mine, Laneast

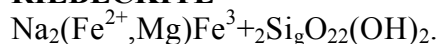
Atway Mine, Launceston

Greystone Wood Mine, Lezant

Tor Wood Mine, Pillaton

Greystone Quarry, Lezant

RIEBECKITE

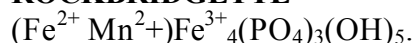


A.Hall (1982) Mineral.Mag. **45**, 257.

Pendennis Dyke, Falmouth

Ripidolite, variety of clinochlore (q.v.), ferroan clinochlore.

ROCKBRIDGETTE



A.W.G.Kingsbury (1957) Mineral.Mag. **31**, 429.

Phoenix United Mines, Linkinhorne **BI**

Gravel Hill Mine, Perranzabuloe

Rockbridgeite / Frondelite

J.R.Hawkes et al,(1987) British Geological Survey Report **19**, 4. (see sheet 3.) Also on M.Grigg specimen, N.J.Elton EDX and XRD.(Predominant specie not noted).

Gunheath China Clay Pit, St.Austell

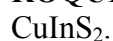
ROMÉITE



B.Gamble specimen, X-rd. BM(NH) 1994 - a member of the stibiconiteromdite group.

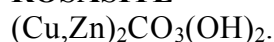
Hingston Down Quarry, Calstock

ROQUESITE



A.J.Criddle and C.D.Stanley eds.(1986) The Quantitative Data File for Ore Minerals, 2nd issue. BM(NH) Lond. The first indium mineral from the British Isles. Geevor Mine, St.Just **BI**

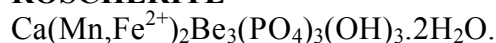
ROSASITE



A.W.G.Kingsbury and J.Hartley Mineral.Mag. **31**, 501-2.

Penberthy Croft Mine, St Hilary

ROSCHERITE



A.M.Clark, E.E.Fejer, A.G.Couper, O.von Knorring, R.W.Turner and

R.W.Barstow (1983) Mineral Mag. **47**, 81-3.
Gunnislake Clitters Mine, Calstock **BI**

Rubellite, variety of tourmaline of a pink colour, substantially free from Fe or Mg (Hey 3), variety of elbaite (EM). J.Purser (1974) RIC Library, Truro.
Wheal Harmony, Redruth

RUSSELLITE

Bi_2WO_6 .

M.H.Hey and F.A.Bannister (with note by A.Russell) (1938) Mineral Mag. 25, 41-55.

Castle-an-Dinas Mine, St Columb **TL**

Hingston Down Quarry, Calstock

RUTHERFORDINE

$(\text{UO}_2)\text{CO}_3$.

C.C.James (1947) TRGSC. 17, 256-68.

South Terras Mine, St Stephen-in-Brannel

RUTILE

TiO_2 .

J.H.Collins (1871) pt.2, 89. Lanterdan Quarry, Tintagel (var. Sagenite q.v.)

Lanterden Quarry, Tintagel

Delabole Slate Quarry

Dinas Head, Padstow

Greystone Quarry, Lezant

SADANAGAITÉ

$(K,Na)Ca_2(Fe^{2+},Mg,Al,Fe^{3+},Ti)_5(Si,Al)_8O_{22}(OH)_2$

G. Van Marcke de Lummen (1985) Proc. Ussher Soc. **6**, 211-17.

Botallack Mine, St-Just **B1**

SAFFLORITE

$(Co,Fe)As_2$.

1820 Specimen X-rd by Dr.S.Weiss, Munich University

Wheal Spamon, Redruth

Sagenite, variety of rutile (q.v.), name given to complex reticulated twinned intergrowths of acicular rutile crystals.

SALÉEITE

$Mg(UO_2)_2(PO_4)_2,10H_2O$.

Confirmed by X-rd on P.J.Golley specimen from South Terras Mine by D.Atkin, Institute of Geological Sciences 17/3/70. Listed in 8SLBM on other specimens as incompletely characterised.

South Terras Mine, St Stephen-in-Brannel **BI**

Wheal Edward, St Just

Wheal Basset, Illogan

Roughtor Consols, St Clether

SANIDINE

$KAlSi_3O_8$.

C.E.Tilley (1959) Geol.Mag. **96**, 503-4.

Wolf Rock

Sahlite, synonym of salite, Fe bearing variety of diopside q.v..

SAPONITE

$Ca_{0.25}(Mg,Fe)_3(Si,Al)_4O_{10}(OH)_2 .nH_2O$.

W.Borlase (1758) Nat.Hist.Comwall. (Soap Stone)

The Lizard **BI**

Kynance Cove

Scapolite - Wernerite ?

J.Robson (1964) RGSC 150th Annv. 124.

Tater-Du greenstones with zoisite and axinite.

SCHEELITE

$CaWO_4$.

W.Phillips (1819) 191-2.

Pengelley Croft Mine, Breage **BI**

Wheal Cock, St Just

Levant Mine, St.Just

Carrick Dhu Mine, St Ives

Wheal Maudlin, Lanlivery

Penhale Mine, St Cleer

Old Gunnislake Mine, Calstock
Hingston Down Quarry, Calstock
Hawkswood Mine, North Hill
Treburland Mine, Altamun

SCHMIEDERTTE

$\text{Pb}_2\text{Cu}_2(\text{Se}^{4+}\text{O}_3)\text{Se}^{6+}\text{O}_4(\text{OH})_4$.

N. Carruth Dealers List. Aug-Sept. 1991 (BM(NH) confirmed). Russell Soc.
Newsletter (SW) No. 6, 17.
Greystone Quarry, Lezant

SCHORL

$\text{NaFe}^{2+}_3\text{Al}_6(\text{BO}_3)_3\text{Si}_6\text{O}_{18}(\text{OH})_4$.

W. Phillips (1819) 96.

Logan Rock, Land's End
Roche Rock, St. Dennis
and throughout the Cornish granites.

SCHRÖCKINGERITE

$\text{NaCa}_3(\text{UO}_2)(\text{CO}_3)_3(\text{SO}_4)\text{F} \cdot 10\text{H}_2\text{O}$.

N.J. Elton and J.J. Hooper (1992) Mineral. Mag. **56**, 124-25.
No. 17 level, Peeth Lode, Geevor Mine, St. Just **BI**

Schrötterite, variety of allophane much richer in Al than normal allophane

SCHULENBERGITE

$(\text{Cu}, \text{Zn})_7(\text{SO}_4, \text{CO}_3)_2(\text{OH})_{10} \cdot 3\text{H}_2\text{O}$

8SLBM BM(NH) identification, J. Betterton specimen.

Prince of Wales Mine, Calstock

SCOLECITE

$\text{CaAl}_2\text{Si}_3\text{O}_{10} \cdot 3\text{H}_2\text{O}$.

R.W. Barstow specimen, Plymouth Museum. Specimen in P. Golley collection.
Dean Quarry, St Keveme

SCORODITE

$\text{Fe}^{3+}\text{AsO}_4 \cdot 2\text{H}_2\text{O}$.

W. Phillips (1819) 239-10. (martial arseniate of copper)

Carharrack Mine, Gwennap

Wheal Muttrell, Gwennap

Wheal Unity, Gwennap

Wheal Gorland, Gwennap

Tincroft Mine, Illogan

Crinnis Mine, St Austell

South Terras Mine, St Stephen-in-Brannel

Hingston Down Consols and Quarry, Calstock

Penberthy Croft Mine, St Hilary

Old Gunnislake Mine, Calstock

Gunheath China Clay Pit, St. Austell

SEGNITITE

$\text{PbFe}_3\text{H}(\text{AsO}_4)_2(\text{OH})_6$.

X-rd identification, M.Merry specimen, by .S.Weiss, Munich University 1993.

Penberthy Croft Mine, St Hilary **BI**

SEMSEYITE

$\text{Pb}_9\text{Sb}_8\text{S}_{21}$.

Sir A. Russell mss 1949 BM(NH), also B.V.Cooper specimen in P.J.Golley collection.

Wheal Boys, Endellion

SENARMONTITE

Sb_2O_3 .

T.Davies (1867) Geol.Mag. 4, 192. (visual identification)

Endellion. **BI**

Treore Mine, St Teath

Port Quin Mine, St.Endellion

Bodannon Mine, Endellion

Bounds Cliff, Endellion

East Wheal Leigh, Pillaton

SEPIOLITE

$\text{Mg}_4\text{Si}_6\text{O}_{15}(\text{OH})_2 \cdot 6\text{H}_2\text{O}$.

S.Caillere (1949) Bull.Soc.Franc.Min.Cryst. Vol.72, 5. also S.Caillère and

S.Hénin (1949) Nature **163**, 962.

Kennack Sands, The Lizard

SERPIERTTE

$\text{Ca}(\text{Cu,Zn})_4(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$.

C. Sparrow pers.comm.

Penberthy Croft Mine, St.Hilary

SHATTUCKITE

$\text{Cu}_5(\text{SiO}_3)_4(\text{OH})_2$

Reported with cerulite.

Wheal Maid Decline, Gwennap

SIDERITE

FeCO_3 .

W.Phillips (1819) 178-9. (Spathose iron) + figs

Wheal Maudlin, Lanlivery

Great Onslow Consols, St Breward

Crinnis Mine, St Austell

Fowey Consols, Tywardreath

Dolcoath Mine, Camborne

Tincroft Mine, Illogan

South Crofty Mine, Illogan

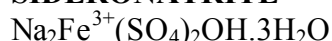
Strangles Beach, St Gennys

Old Treburgett Mine, St Teath

Trewethen Mine, St Kew

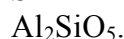
Wheal Drea, St. Just
Greystone Quarry Lezant

SIDERONATRITE



8SLBM BM(NH) identification 1985. R.E.Starkey specimen.
Trerubies Cliff, near Delabole

SILLIMANITE



C.E.Tilley (1937) Geo.Mag. **74**,14 (in schist), 143 (in granite).
Polkemogo, The Lizard
Cheesewring Quarry, Linkinhorne
Pistil Ogo Cove, The Lizard

SILVER

Ag.

M.Hitchens (1801) Phil.Trans.Roy.Soc.Lond. **91**, 159-64., also Phil.Mag. **10**, 77-80.

Levant Mine, St. Just
Botallack Mine, St Just
Wheal Herland, Gwinear
Wheal Alfred, Phillack
Wheal Ann, Phillack
Dolcoath Mine, Camborne
Wheal Mexico, Perranzabuloe
Crinnis Mine, St Austell
Wheal Ludcott, St Ive
Wheal Spamon, Redruth
Penberthy Croft Mine, St.Hilary
Wheal Duchy, Calstock
Wheal Maid Decline, Gwennap

SKUTTERUDITE



R.J.Davis, M.H.Hey and A.W.G.Kingsbury (1965) Mineral.Mag. **35**,72-83.

Wheal Herland, Gwinear
Roskrow United Mine, Ponsanooth
Wheal Spamon, Redruth
East Pool Mine, Illogan
Dolcoath Mine, Camborne
St Austell Consols
Polgooth Mine, St Austell
Wheal Trugo, St Columb
South Terras Mine, St Stephen-in-Brannel
Wheal Ann, Phillack (RIC spec.) (Chloanthite)
St Austell Consols (Chloanthite)
Fowey Consols, Tywardreath (Chloanthite)
Dolcoath Mine, Camborne (Chloanthite)

Smaltite, arsenic deficient variety of skutterudite q.v..

SMITHSONITE

$ZnCO_3$.

J.H.Collins (1871) Pt.2 21. (calamine)

Fowey Consols, Tywardreath

Wheal Mary, Lelant

Perran Great St George Mine, Perranzabuloe

Greystone Quarry, Lezant

SODIUM-ZIPPEITE

$Na_4(UO_2)_6(SO_4)_3(OH)_{10}.4H_2O$

8SLBM N.J.Elton and J.J.Hooper (1993) Mineral.Mag. 57, 352-54. All specimens of 'zippeite' examined by the above authors so far have proved to be sodium zippeite.

Geevor Mine, St.Just **BI**

SPANGOLITE

$Cu_6AlSO_4(OH)_{12}Cl.3H_2O$.

H.A. Miers (1893) Mineral -Mag. **10**, 274.

Wheal Gorland, Gwennap **BI**

West Caradon Mine, St.Cleer

Spathose iron, synonym of siderite q.v..

SPESSARTINE

$Mn_3Al_2(SiO_4)_3$.

A.Russell (1946) Mineral Mag. **27**, 22135.

Treburland Manganese Mine, Altarnun

SPHALERITE

$(Zn,Fe)S$.

M.H.Klaproth (1778) 31.

Wheal Jane, Kea

Wheal Boys, Endellion

Greystone Quarry, Lezant

Trevaunance Mine, St Agnes

Fowey Consols Mine, Tywardreath (cadmiferous - Przibramite)

Wheal Brothers, Calstock

Wheal Rose, Sithney

Wheal Penrose, Sithney

Botallack Mine, St Just

Wheal Alfred, Phillack

Great Wheal Chiverton, Perranzabuloe (Marmatite)

Wheat Jane, Kea (Marmatite)

Sphene, synonym of titanite q.v..

SPINEL

MgAl_2O_4 .

C.E.Tilley (1935) Mineral.Mag. **24**, 181-202.

Kenidjack, St Just

STANNITE

$\text{Cu}_2\text{FeSnS}_4$.

M.H.Klaproth (1787) Obs.Min.Chem.Hist.Fossils. Cwll. 21-3.

Wheal Rock, St Agnes **TL**

Botallack Mine, St Just

Carn Brea Mine, Illogan

East Pool Mine, Illogan

Wheal Jane, Kea

Stenna Gwynn Mine, St Stephen-in-Brannel

Bunny Mine, St Austell

Mulberry Mine, Lanivet

Holmbush Mine, Stokeclimsland

Wheal Primrose, St Agnes

Killifreth Mine, Kenwyn

Hingston Down Quarry, Calstock

STANNOIDITE

$\text{Cu}_5(\text{Fe,Zn})_3\text{Sn}_2\text{S}_{12}$.

D.A.C.Manning (1983) Proc. Ussher Soc. **5**,411-16.

Gunheath China Clay Pit, St Austell **BI**

St. Michael's Mount

Cligga Head Mine, Perranzabuloe

STAUROLITE

$(\text{Fe}^{2+}\text{Mg,Zn})_2\text{Al}_9(\text{Si,Al})_4\text{O}_{22}(\text{OH})_2$.

Tilley (1937) Geol.Mag. **74**, 300-9.

Pistil Ogo Cove, The Lizard

STEPHANITE

Ag_5SbS_4 .

T.Davies (1866) Geol.Mag. **3**, 432.

Wheal Ludcott, St Ive **BI**

Wheal Boys, St.Endellion

Wheal Newton, Calstock

STEVENSITE

$(\text{Ca,Na})_x \text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$

Author not named.; (1994) Sept., Russell Soc. Newsletter, , **25**, 16. X-rd,

J.J.Hooper. Pseudomorphous after pectolite.

Dean Quarry, St.Keverne Trevassack. The Lizard

STIBICONITE

$\text{Sb}^3+\text{Sb}^{5+}_2\text{O}_6(\text{OH})$.

A.Russell (1949) mss. BM(NH)

Wheal Boys, Endellion

Wheal Prosper, St Ewe
Trenute Mine, Lezant
Trebullet Mine, Lezant
Wheal Leigh, Pillaton
Hatt Trial, Botus Fleming
Cutlinwith Farm, Landrake see also romtéite.

STIBNITE

Sb_2S_3 .
N.Grew (1681) Cat.Roy.Soc.Lond. 334.
Wheal Boys, Endellion
Poltreworgey Mine, Endellion
Dizzard Mine, Poundstock
Wheal Prosper, St Ewe
Wheal Leigh, Pillaton
Hatt Trial, Botus Fleming
Tredinnick Mine, St Erney
Cutlinwith Farm, Landrake
Trenute Mine, Lezant
Trebullet Mine, Lezant

STILBITE

$NaCa_2Al_5Si_{13}O_{36}.14H_2O$.
J.Carne (1822) TRGSC **2**, 310.
The cliffs between Wheal Cock and the Crowns Rock, St Just
Dean Quarry, St Keverne
Colcerrow Quarry, Luxulyan
Parc Bean Cove, Mullion

STILPNOMELANE

$K(Fe^{2+}, Mg, Fe^{3+})_8(Si, Al)_{12}(O, OH)_{27}$.
D.H.Green (1964) RGSC 150th Annv. 99.
Mullion Island Cove, Mullion

STOKESITE

$CaSnSi_3O_9.2H_2O$.
A. Hutchinson (1899) Phil.Mag., sec.5, **48**, 480.
Roscommon Cliff, St Just **TL**
Halvosso Quarry, Longdowns

STOLZITE

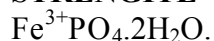
$PbWO_4$.
C.Jewson specimen collected Nov. 1993. X-rd D.I.Green Manchester
University Museum.
Hingston Downs Quarry, Calstock

STRASHIMIRITE

$Cu_5(AsO_4)_4(OH)_4.5H_2O$.
8SLBM BM(NH) identification 1985, D.Lloyd specimen.
Wheal Gorland, Gwennap **BI**

Wheal Unity, Gwennap

STRENGITE

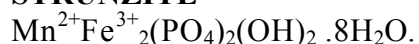


8SLBM BM(NH) specimens collected by A.G.W.Kingsbury and exhibited at the Min.Soc. meeting in 1962, Mineral.Mag., **33**, Ixiv.

Phoenix United Mines, Linkinhorne **BI**

Gravel Hill Mine, Perranzabuloe

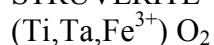
STRUNZITE



8SLBM BM(NH) identification 198697, M.Merry and C.Sparrow specimens.

Gravel Hill Mine, Perranzabuloe **BI**

STRÜVERITE



pers. comm. C. Sparrow reported BM(NH) identification

Tremearne Pegmatite, Breage

SULPHUR

S.

W.Borlase (1758) Native in a mass of antimony from a mine in St. Kew Parish'

J.H.Collins (1871) pt.2, 99.

Carnon Valley

Lambriggan Mine, Perranzabuloe

Port Isaac Cliffs

Gravel Hill Mine, Perranzabuloe

Pentire Glaze Mine, St.Minver

SVANBERGITE



A.W.G.Kingsbury (1964) RGSC 150th Annvs. Vol. 249.

Wheal Coates, St Agnes **BI**

TALC

$\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$.

W.Phillips (1819) 92P

Pentreath Beach, The Lizard

Kynance Cove, The Lizard

Devil's Frying-pan, The Lizard

Kennack, The Lizard

Tallingite, discredited species, see A.W.G.Kingsbury (1950) Mineral Mag. **29**, 280-6. Established that tallingite and connellite were the same species.

Tavistockite, discredited species, see P.G.Embrey and E.E.Fejer (1969) Mineral Mag., **37**, 123-7. Proved to be a mixture of kaolin and carbonate fluorapatite (q.v.). Stenna Gwyn 'tavistockite' is wavellite.

TANTALITE

$\text{Fe}^{+2}\text{Ta}_2\text{O}_6$

J.R.Hawkes et al,(1987) British Geological Survey Report **19**, 4. (see sheet 3.)

Also on M.Grigg specimen, N.J.Elton EDX and XRD.

Gunheath China Clay Pit, St.Austell

TENNANTITE

$(\text{Cu},\text{Fe})_{12}\text{As}_4\text{S}_{13}$.

W.Phillips (1819) Q.J.Lit.Sci.Arts, 7, 95.

Cornwall **TL**

Dolcoath Mine, Camborne

North Roskear Mine, Camborne

Cook's Kitchen Mine, Illogan

Tincroft Mine, Illogan

Wheal Jewell, Gwennap

Tresavean Mine, Gwennap

Trevascus Mine, Gwinear

Relistian Mine, Gwinear

Carn Brea Mine, Illogan

Wheal Jane, Kea

Levant Mine, St.Just

Geevor Mine, St.Just

Hingston Down Quarry, Calstock

TENORITE

CuO .

W.Phillips (1819) 230. (black copper)

Wheal Trefusis, Redruth

Botallack Mine, St Just

Great Wheal Fortune, Breage

Relistian Mine, Gwinear

Wheal Gorland, Gwennap

Ting-Tang Mine, Gwennap

Dolcoath Mine, Camborne

East Crinnis Mine, St Austell

Fowey Consols Mine, Tywardreath
Phoenix United Mines, Linkinhorne
Old Gunnislake Mine, Calstock

TEPHROITE

$\text{Mn}^{2+}_2\text{SiO}_4$.

A.Russell (1946) Mineral.Mag. **27**, 221-35.
Treburland Manganese Mine, Altamun

TETRAHEDRITE

$(\text{Cu,Fe})_{12}\text{Sb}_4\text{S}_{13}$

W.G.Maton (1797) Obs.Nat.Hist.Westn.Counties Engl. **1**, 245. (Fahlore)
Herodsfoot Mine, Lanreath
Poldice Mine, Gwennap
Crinnis Mine, St Austell
Trevascus Mine, Gwinear
Botallack Mine, St Just
Levant Mine, St.Just
Tresavean Mine, Gwennap
Padstow Consols
Wheal Anna Maria, Constantine
Trelill Quarry, St Kew
Pengenna Mine, St Kew

Tetrahedrite, argentian , see freibergite

Thuringite, a variety of chamosite (q.v.), ferrian chamosite.

TIN

Sn

R.D.Penhallurick (1986) Tin in Antiquity 35-36.

The only known specimen of tin from Cornwall is No. 100 in the copper ores section of the Rashleigh collection, RIC, Truro. It contains both tin metal and native copper, however it is doubted whether the tin is of natural occurrence.

Killifreth Mine, Kenwyn

Titanaugite variety of augite (q.v.), titanian augite, occasionally Al may be absent.

TITANITE

CaTiSiO_5 .

N.J. Jackson (1974) Proc. Ussher Soc. **3**, 186-8.

Grylls Bunny, Botallack, St. Just

Land's End Greenstone

Trelissick Dyke, Falmouth

Pendennis Dyke, Falmouth

Botallack (stannian)

Titanomagnetite variety of magnetite (q.v.), titaniferous magnetite.

TOPAZ

$\text{Al}_2\text{SiO}_4(\text{F},\text{OH})_2$.

P.Rashleigh (1797) Spec. of Brit. Mins. select. from the Cabinet of P.R. pt. 1, pl. 5, fig.2.

St Michael's Mount

Cligga Head, Perranzabuloe

Tremearne Pegmatite, Breage

Great Wheal Fortune, Breage

Wheal Kitty, St Agnes

Polberro Mine, St Agnes

Castle-an-Dinas Mine, St Columb

Beam Mine, St Austell

Goonbarrow China Clay Pit, St Austell

Gunheath China Clay Pit, St Austell

St Mewan Mine, St Mewan

Belowda China Clay Pit, St.Austell

TORBERNITE

Most Cornish specimens are metatorbetnite q.v.

$\text{Cu}(\text{UO}_2)_2(\text{PO}_4)_2 \cdot 8-12\text{H}_2\text{O}$.

W.Gregor (1805) Phil.Trans.Roy.Soc.Lond. 95, 331-48.

Stenna Gwynn, St.Stephen

Wheal Edward, St Just

Gunheath China Clay Pit, St.Austell

Wheal Trenwith, St Ives

Wheal Basset, Illogan

Wheal Buller, Redruth

Wheal Gorland, Gwennap

Wheal Unity, Gwennap

Fowey Consols, Tywardreath

Blackpool China Clay Pit, St Austell

South Terras Mine, St Stephen-in-Brannel

West Wheal Owles, St.Just

Tourmaline Previously a species, now a group name, the following locations are recorded for tourmaline, and probably refer to the mineral schorl. See also the tourmaline group minerals and varieties Achroite, Dravite, Indicolite, Rubellite, Schorl and Verdelite.

$(\text{Na},\text{Ca})\text{Li},\text{Mg},\text{Fe}^{2+},\text{Al})_3(\text{Al},\text{Fe}^{3+})_6\text{B}_3\text{Si}_6\text{O}_{27}(\text{O},\text{OH},\text{F})_4$

W.Phillips (1819) 35-7.

Roscommon Cliff, St Just

Botallack Mine, St Just

Ding-Dong Mine, Madron

St Michael's Mount

Great Work Mine, Breage

Tremearne Pegmatite, Breage

Luxulyan (in Luxullianite)

Gunheath Chin Clay Pit, St Austell

Carclaze China Clay Pit, St Austell

Dorothy China Clay Pit, St Austell

TREMOLITE

$\text{Ca}_2(\text{Mg},\text{Fe}^{2+})_5\text{Si}_8\text{O}_{22}(\text{OH})_2$.

W.Phillips (1819) 49-50.

Goonhilly, The Lizard Mullion, The Lizard

Predannack Head, The Lizard

Kynance Cove, The Lizard

Duporth Beach, St Austell

TRIDYMITE

SiO_2 .

H.Fox (1895) TRGSC **11**, 687-724.

In rhyolitic pumice in the metamorphic aureole of granite (Falmouth)

Dinas Head, Padstow

TRIPHYLITE

$\text{LiFe}^{2+}\text{PO}_4$.

M.Stone and M.C.George (1983) Proc. Ussher Soc. **5**, 428-31.

Tremeame Pegmatite, Breage **BI**

TRIPLITE

$(\text{Mn}^{2+},\text{Fe}^{2+},\text{Mg},\text{Ca})_2(\text{PO}_4)(\text{F},\text{OH})$.

M.C.George, M.Stone, E.E.Fejer, and R.F. Symes (1981) Mineral Mag. **44**, 236-8.

Tremearne Pegmatite, Breage **BI**

TRIPLOIDITE

$(\text{Mn}^{2+},\text{Fe}^{2+})_2\text{PO}_4(\text{F},\text{OH})$.

A.H.Clark and A.G.Couper (1979) Mineral.Mag. **43**, 179-780.

Wheal Owles, St Just **BI**

TRISTRAMITE

$(\text{Ca},\text{U}^{4+},\text{Fe}^{3+})(\text{PO}_4,\text{SO}_4).2\text{H}_2\text{O}$.

D.Atkin, I.R.Basham and J.F.W.Bowles (1983) Mineral.Mag. **47**, 393-6.

Wheal Trewavas, Breage TL

Trequeen

Wheal Buller, Redruth

Wheal Damsel, Gwennap

Wheal Providence, Lelant

Wheal Alice, Lelant

TRÖGERITE

$(\text{UO}_2)_3(\text{AsO}_4)_2.12\text{H}_2\text{O}$.

J.Robson (1954) TRGSC. **18**, (for 1952) 406-10. Listed without source.

South Terras Mine, St Stephen-in-Brannel BI

Tungstic Ochre

Synonym of tungstite and ferritungstite. A. Russell. Mineral Mag. **25**, 1938.

East Pool Mine, Illogan

South Crofty Mine, Illogan

Poldice Mine, Gwennap
Tolvadden Mine, Illogan

TURQUOISE

$\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 5\text{H}_2\text{O}$.

A.Russell (1952) Mineral Mag. **29**, 909-12.

Gunheath China Clay Pit, St Austell

Castle-an-Dinas Mine, St Columb Major

Bunny Mine, St.Austell

Phoenix United Mines, (Stowe's Section), Linkinhorne - "henwoodite"

TYROLITE

$\text{CaCu}_5(\text{AsO}_4)_2\text{CO}_3(\text{OH})_4 \cdot 6\text{H}_2\text{O}$.

BM(NH) X-rd 1984, confirmed 24/10/84 by J.Fuller.

Old Gunnislake Mine, Calstock

Penberthy Croft Mine, St Hilary

Carn Brea Mine, Illogan

TYUYAMUNITE

$\text{Ca}(\text{UO}_2)_2\text{V}_2\text{O}_8 \cdot 5-8\text{H}_2\text{O}$

N.J.Elton and J.J.Hooper (1994) J.Russell Soc. 5, 2, 114-5.

X-rd BM(NH)9053F and energydispersive X-ray, occurs with zeunerite and uranophane.

Cargodna Section, West Wheal Owles, St.Just **BI**

Unnamed - hydrated uranyl arsenate

A.G.Damley, T.H.English, O.Sprake, E.R.Preece and D.Avery (1965) Mineral.Mag. **34**, 167. (Al analogue of nováčekite)
Wheal Bray, Altarnun.

Unnamed copper analogue of canfieldite.

Cu_8SnS_6 .

D.H.M.Alderton (1991) Jour.Russell Soc. **4**, pt. 1, 17-20. (analysis 16).
Gunheath China Clay Pit, St.Austell

Unnamed copper aluminium phosphate

S. Weiss (1987) Lapis vol. 12, **3**, 26.
South Caradon Mine Adit, St.Cleer

Unnamed Iron sulphide (fibrous)

An incompletely characterised mineral. A.H.Clark (1970) Am.Min. **55**, 283-4.
Pol Cornick, Mullion, The Lizard (occurs with valleriite)

URANINITE

UO_2 .

W.Phillips (1819) 201.

Wheal Edward, St Just

Botallack Mine, St Just

Geevor Mine, St.Just

Wheal Trenwith, St Ives

Dolcoath Mine, Camborne

East Pool Mine, Illogan

Roskrow United Mine, Ponsanooth

Wheal Bray, Altamun

South Terras Mine, St Stephen-in-Brannel

Old Gunnislake Mine, Calstock

URANOPHANE

$\text{Ca}(\text{UO}_2)_2[\text{SiO}_3(\text{OH})]_2 \cdot 5\text{H}_2\text{O}$

N.Elton confirmed occurrence at West Wheal Owles in pers. comm. to the authors.

P.Oldfield specimen,

Wheal Edward, BM(NH) X-rd near uranophane (+).

West Wheal Owles, St.Just

Wheal Edward, St Just

URANOPILITE

$(\text{UO}_2)_6\text{SO}_4(\text{OH})_{10} \cdot 12\text{H}_2\text{O}$.

Chemical analysis by Novdcek, 1935, quoted by C.Palache, H.Berman, and C.Fron del (1951) Dana's Syst.Min., 7th edn., vol. **2**, 582.

C.Fron del (1952) Am.Min. 37, Cornwall **BI**

Wheal Owles, St.Just

Wheal Edward, St Just

Geevor Mine, St. Just (No. 17 Level, Peeth Lode)

URANOSPATHITE

$\text{HAl}(\text{UO}_2)_4(\text{PO}_4)_4 \cdot 40\text{H}_2\text{O}$.

A.F. Hallimond(1915) Mineral.Mag. **17**,230.

Wheal Basset, Illogan TL

URANOSPINTTE

Visually identified specimens from Wheal Edward, St. Just and Wheal Basset, Illogan analysed by X-rd. by N.J. Elton have proved to be metatorbernite

VALENTINITE

Sb_2O_3 .

A.W.G.Kingsbury (1957) Mineral.Mag. **31**,499.

Trevinnick Mine, St.Kew

Wheal Leigh, Pillaton

Port Quin Beach, Endellion

Bodannon Mine, Endellion

Treore Mine, St Teath

VALLERIITE

$4(\text{Fe,Cu})\text{S}\cdot 3(\text{Mg,Al})(\text{OH})_2$.

A.H.Clark (1970) Am.Min. **55**, 283-4.

Pol Cornick, Mullion, The Lizard

The Rill, Kynance Cliff, The Lizard

VANADINITE

$\text{Pb}_5(\text{VO}_4)_3\text{Cl}$.

S.Camm and M.Merry (1991) Lapis **16**, 9, 38.

Penberthy Croft Mine, St Hilary

VANDENBRANDEITE

$\text{CuUO}_2(\text{OH})_4$.

R.W.Barstow specimen, P.Golley collection.

Wheal Edward, St Just

VARISCITE

$\text{AlPO}_4\cdot 2\text{H}_2\text{O}$.

R.W.Barstow (1982) Mineral.Mag. **46**, 512.

Gunheath China Clay Pit, St Austell

Hensbarrow China Clay Pit, St Austell

Treore Mine, St Teath (Redondite, q.v.)

VARLAMOFFITE

(Hey 3, considers this a variety of cassiterite, although other authorities do not agree.)

$(\text{Sn,Fe})(\text{O,OH})_2$.

A.Russell and E.A.Vincent (1952) Mineral.Mag. **29**, 817-26.(the mineral, now known as varlamoffite, was first noticed by Russell at Cligga Head Mine, Perranzabuloe in 1906, and mentioned in a paper read to Mineral.Soc. 1937)

Cligga Mine, Perranzabuloe **BI**

Penberthy Croft Mine, St Hilary

Wheal Rock, St Agnes

Bunny Mine, St Austell

Mulberry Mine, Lanivet

Kit Hill Mine, Stokeclimsland

Hingston Down Quarry, Calstock

Gunheath China Clay Pit, St.Austell

Verdelite, variety of tourmaline of a green colour.

J.H.Collins (1911) *JRIC*, 18, 159-60.

Wheal Unity, Gwennap

Dorothy China Clay Pit, St.Austell

VESUVIANITE

$\text{Ca}_{10}(\text{Mg,Fe})_2\text{Al}_4\text{SiO}_{34}(\text{OH})_4$.

J.Robson (1948) *TRGSC*. **17**, 466.48

Treburland Mn. Mine, Altarnun

Botallack

VIVIANITE

$\text{Fe}^{2+}_3(\text{PO}_4)_2 \cdot 8\text{H}_2\text{O}$.

A.G.Werner (1817) *Letztes MineralSyst.*, 41.

St.Agnes, Cornwall **TL** (almost certainly Wheal Kine)

Wheal Kine, St Agnes

Parknoweth Mine, St.Just

Botallack Mine, St Just

Wheal Edward, St Just

Wheal Owles, St Just

Wheal Jane, Kea

Wheal Falmouth, Kea

Wheal Gorland, Gwennap

VOCHTENITE

$(\text{Fe}^{2+}, \text{Mg})\text{Fe}^{3+}[(\text{UO}_2)(\text{PO}_4)]_4 \cdot 12-13\text{H}_2\text{O}$.

P.C.Zwaan, C.E.S.Arps and E.de Grave (1989) *Mineral.Mag.* **53**, 473-8.

Wheal Basset, Illogan **TL**

Voltzite

E.S.Dana (1868) 5th edn. 50. C.Fondel (1967) *Amer.Min.* **52**, 617. Shown to be a mixture of sphalerite or wurtzite and an organometallic compound of zinc.

Cornwall, probably at Redruth.

WAVELLITE



W.Gregor (1805) Phil.Trans.Roy.Soc.Lond. **95**, 331-48.

Stenna Gwynn Mine, St Stephen-in-Brannel

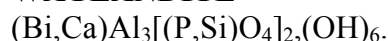
Castle-an-Dinas Mine, St Columb

Gunheath China Clay Pit, St Austell

Old Beam Mine, Bugle

Wheal Remfry China Clay Pit, St.Austell

WAYLANDITE



A.M.Clark, A.G.Couper, P.G.Embrey and E.E.Fejer (1986) Mineral.Mag. **50**, 731-3.

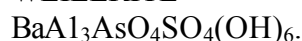
Restormel Royal Iron Mine, Lanlivery **BI**

Phoenix United Mines (Stowe's section), Linkinhorne (a mineral near waylandite)

Wheal Owles, St Just

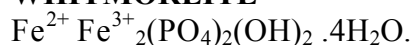
Gunheath China Clay Pit, St.Austell

WEILERITE



R.W.Barstow collected BM(NH) specimen BM 1975,42, X-rd identification 'near weilerite', requires chemical examination. Wheal Unity, Gwennap

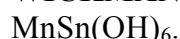
WHITMOREITE



X-rd identification, M.Price Oxford University Museum 4/8/87 M.Grigg spec.

Gravel Hill Mine, Perranzabuloe **BI**

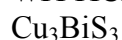
WICKMANITE



N.Hubbard (1989) Mineral.Mag. **48**, 388.

Wheal Cock Zawn, St Just **BI**

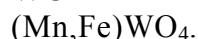
WITTICHENITE



C.Scheding specimen identified by P.Tandy BM(NH).

Geevor Mine, St.Just

WOLFRAMITE



W.Phillips (1819) 190-1.

An intermediate member of the hubernite-ferberite. series, frequently used as a group name,Hey 3. Cornish wolframite is probably Ferberite q.v..

St Michael's Mount

Wheal Fanny, Redruth

Cligga Mine, Perranzabuloe

Wheal Jane, Kea

Drakewalls Mine, Calstock

East Pool Mine, Illogan

Pednandrea Mine, Redruth
Dolcoath Mine, Camborne
Cook's Kitchen Mine, Illogan
Goonbarrow China Clay Pit, St.Austell
pseudomorphous after scheelite at Wheal Maudlin Mine, Lanlivery and recently
at Hingston Down Quarry, Calstock

WOLLASTONITE

CaSiO_3 .

J.H.Collins (1911) JRIC, **18**, 460. 'recorded by Mr. A.Russell in greenstone with
blende'.

North Roskear Mine, Camborne
Clicker Tor Quarry, Menheniot
Treburland Manganese Mine, Altarnun Bodmin
Wheal Mary, Lanivet

WOODWARDITE

$\text{Cu}_4\text{Al}_2\text{SO}_4(\text{OH})_{12} \cdot 2-4\text{H}_2\text{O}$.

A.H.Church (1866) J.Chem.Soc. **19**, 131.

Cornwall **TL**

South Caradon Mine, St Cleer
Wheal Cock, St Just
Wheal Hazard, St.Just

WROEWOLFEITE

$\text{Cu}_4\text{SO}_4(\text{OH})_6 \cdot 2\text{H}_2\text{O}$.

R.W. Barstow (1983) Mineral.Mag. **47**, 240-1.

Penberthy Croft Mine, St Hilary
East Gunnislake Mine, Calstock

WULFENITE

PbMoO_4 .

Oxford University X-rd 1992
Greystone Quarry, Lezant
Wheal Golden, Perranzabuloe
Garras Mine, St Erme
Redmoor Mine, Callington
Polzeath Consols, St.Minver
Wheal Mary Ann, Menheniot

WURTZITE

$(\text{Zn,Fe})\text{S}$.

J.Noelting (1887) [Inaug. Diss, Kiel, 21] (1890) Abstract in Z. Kryst. Min. **17**, 220.

Liskeard

BI

Wheal Unity, St.Day **BI**
Gunheath China Clay Pit, St.Austell
Wheal Ellen, St.Agnes
Wheal Jane. Kea.

XANTHIOSITE

$\text{Ni}_3(\text{AsO}_4)_2$.

R.J.Davis, M.H.Hey and

A. W.G.Kingsbury (1965) Mineral.Mag. **35**, 72.

South Terras Mine, St Stephen-in-Brannel **BI**

XENOTIME-(Y)

YPO_4 .

N.L.Jefferies (1984) Proc. Ussher Soc. 6, 35-41. (in the accessory mineral assemblage).

Carmenellis granite, inclusions in biotite

In beach sand, Carbis Bay, St.Ives

ZEUNERITE

$\text{Cu}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 10\text{-}16\text{H}_2\text{O}$.

C.C. James (1947) TRGSC. 256-268.

Wheal Gorland, Gwennap **BI**

South Terras Mine, St Stephen-in-Brannel

Roughtor Mine, St.Clether

Wheal Maid, Gwennap

Wheal Edward, St.Just

ZINKENITE

$\text{Pb}_9\text{Sb}_{22}\text{S}_{42}$

R.W.Barstow specimen in BM(NH) incompletely identified.

Poltreworgy Mine, St.Endellion

ZINNWALDITE

$\text{KLiFe}^{2+}\text{Al}(\text{AlSi}_3)\text{O}_{10}(\text{F},\text{OH})_2$.

F. Sandberger (1885) Unters. uber Erzange, Zweites Heft. 168-69.

(Protolithionite)

Hensbarrow Clay Pit, St.Austell (Protolithionite)

Great Work, St Just

Gunheath China Clay Pit, St Austell

ZIPPEITE

$\text{K}_4(\text{UO}_2)_6(\text{SO}_4)_3(\text{OH})_{10} \cdot 4\text{H}_2\text{O}$.

T.Robertson and H.G.Dines (1929) Mining Mag. Sept. 147-53.

Old Gunnislake Mine, Calstock

South Terras Mine, St Stephen-in-Brannel

Carharrack Mine, St Day

Wheal Buller, Redruth

Wheal Edward, St.Just

ZIRCON

ZrSiO_4 .

N.J. Jeffries (1984) Proc. Ussher Soc. 6, 35-41.

As a microscopic accessory in the Carnmenellis granite

Carbis Bay

Micro crystals in Delabole slate

ZOISITE

$\text{Ca}_2\text{Al}_3(\text{SiO}_4)_3(\text{OH})$.

J.Robson.(1948) TRGSC. 17. 466.

Warren's Quarry, Camelford

Tolpetherwin Quarry, South Petherwin

Dinas Head, Padstow

ZWIESELITE

$(\text{Fe}^{2+},\text{Mn}^{2+})_2\text{PO}_4\text{F}$.

8SLBM BM(NH) identification 1987, N.Talbot specimen.

Tremearne Pegmatite, Breage **BI**

Bitumens / Hydrocarbons

Anthracite

Average composition C 92-94%, H 34%, O 3-4.5%, N up to 1%. J.H.Collins (1871) Pt. 2, 35. (coal) Widemouth Bay

High Cliff, St Gennys

Pednandrea Mine, Redruth

Roscrow United Mine, Ponsanooth

Wheal Jane, Kea (found in thin joints in killas 1971)

Wheal Duchy & Peru, Perranzabuloe

Bitumens

Average composition C79-86%, H912%, S11/2-10%, J.H.Collins (1871) pt.2, 16-7.

Wheal Jewell, Gwennap

Wheal Unity, Gwennap

Carharrack Mine, St Day

North Treskerby Mine, Redruth

North Roskear Mine, Camborne

South Crofty Mine, Camborne

Poldice Mine, Gwennap

Cook's Kitchen Mine, Illogan

Uraniferous hydrocarbon R.K.Harrison and K.Taylor (1966) Bull. Geol. Surv. 25,41-8.

Wheal Speed.

