

1st 1899
SW 566 313
HALAMANNING MINE, Marazion, Cornwall

See also HALAMANNING & CROFT GOTHAL MINES.

1st 189

SW 566 313

HALAMANNING & CROFT GOTHAL MINES,

Marazion, Cornwall

See also separately; also RETALLACK MINE, St Hilary

DBB (1963) 18. Old Cu mines, closed 1860 when
90 fms deep

Dewey (1923) Cu ores 1851-58, combined with RETALLACK
& 1832-36.

CMRM (1995) Mimetite (CROFT GOTHAL M., St. Hilary)

~~181~~ 1" 190

SW 70 34

HALLEBEZAC, Wendron, Cornwall. M 70
63

JC (1871), 55: Cassiterite; kaolin.

Not in Ding, Burt et al

1" 190

SW 71 45

HALLENBEAGLE MINE, St Agnes, Cornwall. A 36

→ (A 37)

JC (1871). 57: HALLENBEAGLE & EAST DOWNS, (Cu, Sn):
Chalcopryite; pyrite.

R. Selley (2009) BMSN 78 18-19 Quartz-chlorite;
anatase, a little woolframite.

R. Selley (2013) BMSN 90, 30-31. As above +
cassiterite

1" 190.

~~743~~ 738 338
SW 24 33

HALVOSSO QUARRY, Halvosso, ?Mabe Cornwall.

BM spec. Coll R.W. Barstow

Stokesite

from working HALVOSSO Q'y = KESSEL
DOWNS QUARRY, Halvosso, Cornwall.

OS gazz. Neither "Halvosso" nor "Kessel"
mentioned. "KESTLE MILL", SW 8459, (~2½
ml SE of Newquay)

OS 1" map shows "HALVOSSO" at 743 334, and nearby
quarries around 750 332

CMRM (1995) "KESSLE Q": Bertrandite; fluor-apatite. PTO

AG Couper & RW Barstow, "Stokesite crystals in Cornwall,
England" Min. Record (1977) 8 [4] 294-297. Several

xls stokesite found June, 1975, 3-5 mm, one $\rightarrow$ 7 mm, in 2
boulders from N wall. Clear c'less $\rightarrow$ v. pale pink steep
bipyram d'rh, singles & rad. groups on albite & o'clase;
some penetr. by brown-green tourmaline.

Quarry in 2-mica granite w. o'clase $\rightarrow$ 4 cm & segreg. biotite.
Has 2-10 cm vuggy qtz vein in N & a granite dyke 1 metre
exposed in middle E.; w. microl vugs w. pink o'clase, qtz,
muscov, tourm & occas. sea-green apat. Some fractures
in the granite have haematite. Peg. lenses
sporadic, w. o'clase, qtz (incl smoky), musc, tourm, albite,
elbester, pale-purple fluor, cassit, pyrite, rare ^{brown} red sphaler,
green $\rightarrow$ purple apatite xls $\rightarrow$ 5 mm.

Rev V. Holyer Priv Comm (9/89). Arsenopyrite; chlorite

LONG DOWNS Stithians Cornwall
1" 190 74 34

See also ~~Halvosso Q'y~~ ~~MARK~~

Halvosso Q'y Grn. (II)

RW Barstow, hint to JRK 11/75; spec. → JRK.

Stokesite ($\approx$ 3-4 specimens), colourless
clear xls $\rightarrow \approx 5$ cm. on ~~pegmatite~~ pegmatite - albite
+ orthoclase + muscovite + a little
cassiterite. Said to be from "Long
Downs" - a quarry? granite g's occur
to all round Long Downs.

[Signature]

RSN(1998), 33,9 "HALVASSO = KESSEL DOWN

Q", SW 739 338. Field trip. Pegm w.

apatite, smoky quartz, orthoclase ("perthite");
tiny cubes pyrite with chlorite; muscov
("gilbertite"); schorl; purple fluorite ($\rightarrow$ 5mm)
albite.

1." 186

SX 18 69

HAMMETT MINE, St. Neot, Cornwall K 91

JC (1871), 63. (Sn, wkg.) Cassiterite.

1" 189

SW 534 313

Wh. HAMPTON, St. Hilary, Cornwall.

See TREGURTHA DOWN MINE; Wh. RODNEY

1"187

SX 42, 66g

HANCOCK MINE, St Dominick, Cornwall

See also N. HOOE M. [DEVON]

Dines(1956) 682. Included in N. HOOE MINE.
On W bank of Tamar 540 yd N of N. Hoee
Engine Sh. Little known of workings
-lode probably not found

1" 185

SW 73 53

HANOVER COVE, St. Agnes, Cornwall
See also CLIGGA HEAD

CMRM (1995) Botallackite; "sparable"
casuhenite;

BMS Newsl. (1997) 46, 9: coll: Covellite (J. Hooper)

MGH Merry ('07) Spec's → RSIAB for ID (31/7/07)
[07-6, 7 + fragments]. Botallackite, superb
x1s, to 5mm on crumbly matrix
(FTIR 8/07). [Possibly world's best botallackite!]

1" 187

SX 450 695

K 129

HAREWOOD CONSOLS MINE, Calstock, Cornwall.

See also OKELTOR M

JC (1871), 65: (Cu, wkg.) Chalcopyrite.

AKHJ

450 695

BV Cooper, Priv Comm 4/78 Childrenite, on
small dump at 4465 6927 beside track
nr. Ferry Farm - between Harewood Consols
& OKELTOR M's.

1" 190 SW 69 43SW 70 43
Wh. HARMONY, St. Agnes, Cornwall. A 83

TMH (1868), 32: Magnetite; wolfram.

Dines (1956) 41, 367, 369. Cu mine. Part of
Harmony & Montague mine, itself part
of TRELEIGH WOOD M., of which it is
150 yd N of.

Wh. Harmony, Redruth, Corn.

See ~~Wh. Montague & Harmony~~; Treleigh Wood M
HARMONY & MONTAGUE MINE;

1" 190 SW 69 43 SW 70 43 R 51
HARMONY AND MONTAGUE MINE, Redruth, Cornwall

JC (1871), 53: (Wkg.) Magnetite; wolfram.

Dines (1956) 41, 367, 369. Part of
TRELEIGH WOOD M. A Cu mine.
Montague is on the W.

AKMJ (1962) 3 29 Mentioned with TRELEIGH
WOOD M. & others as "Wh MONTAGUE and
HARMONY".

DBB. W. Cornwall (1963) Wh. MONTAGUE, to NW
of TRELEIGH WOOD M. (= HARMONY MINE)

1" 189

SW 635 310

Wh. HARRIET, Camborne, Cornwall.

See also DOLCOATH MINE

Dewey (1923) Included in DOLCOATH setH[9v]

1" 186

Sx 399 699

HARROWBARROW MINE, St. Mellion, Cornwall.

? = Wh NEWTON etc.

Sx 38 65

CMRM (1995) Pyrargyrite

Old HARROWBARROW M., Corn

~~£~~ = Wh. FORTUNE (qv)

Wheal HATCHET, Camborne, CORNW.

See SOUTH ROSKEAR M

1" 186

SX 39, 626

HATT TRIAL, Botus Fleming, Cornwall

Hatt SX 398622 see also E. Wh. LEIGH (?=)

CMRM(1995) Stibiconite; stibnite.

1" 190

SW 720 508

Wh. HAWKE, St Agnes, Cornwall.

See also ~~Wh.~~ FRIENDLY MINES; W. Wh. KITTY

AKHT (1962) 2 Map, p29 (81838) shows Wh. HAWKE
at SW 720 508 near W. Wh. KITTY or Wh
FRIENDLY

1" 189
HAWKES POINT, St Ives, Cornwall $2\frac{1}{2}"$ SW 53 539385
or 535 387 (ARKJ). H4

~~226~~ (= WH. FANNY ADELA) [1956] 126 Dines: "Around an old shaft, 10 yds.
from cliff edge at the point, frags of rock with
chlorite, arsenopyrite, chalcopyrite, pyrite, blende."
Ni & Co ones said to have been raised.

6" geol. map shows Cu lode on shore W of Hawk's Point 536386

Trial shaft at CARRACK GLADDEN 534388

JC (1871) 49 FANNY ADELA (HAWKES POINT) (Sn, wkg).
Cassiterite

ARKJ (1961) 1 38. Position of "Hawkes Point" is

questionable. - OS maps → [539 384] but little
trace of mining there (a small tunnel in cliff
at ca 100' OD) - but locals call S part of
carrack gladden "Hawk's Point" [ca 535 387]
e more mining activity here - shafts,
dumps adits on beach. Tin e Copper.
Rights "E e N of Gunwin Cliff". A fair sized
dimp on an EW lode immed S. of Gunwyn
Farm house.

Some small bunches of gozzan near the
sea in a lode worked by an adit
at high water mark. Another lode worked more
At one time known as Wh. FANNY ADELA (some
time before 1868)

Wh. Hawkins, St. Stephen, Corn.

See St. Austell Consols.

11187 SX 435 725
HAWKMOOR MINE, Calstock, Cornwall. K 42

See little map, 5.

JC (1871), 65: (Cu, wkg.) Chalcoprynite. ✓

R.W.B. Rlym MMCT (1974) 5 [1] 7-8. Reputed to
be reopened shortly with Bedford
United mine [DEVON] across the river
e to be connected by a tunnel.

BV Cooper, Priv Comm 6/79. Scheelite ^(No x/s) / fluoresc
w. wolframite; quartz; siderite

1" 186

SX 148 745

HAWKSTOR CHINA CLAY PIT, Bodmin Moor, Corn.

OS 1" map shows "Hawkstor Works (China Clay)"

Seen 8/86. Derelict kaolin pit now used
for cement production. Shown
large spec. of quartz var. amethyst
coated with milky quartz, from
the pit.

1" 186
HAWK'S WOOD MINE, North Hill, Cornwall (I) Fl⁶
SX 268 756

See also BERIOW M. etc

AR Exhibit, MM 28 xxxvii Beryl ✓

A. Wright & B. Cooper Riv Comm 10/69. Allophane,
green, rippled coatings in adit at
SX 268, 7565 in Hawk's Wood. Also
occurs in other mines thereabouts.
Adit separate from Hawk's Wood copper
mine & above it. Cu mine at 2715-7555.
The 'allophane' has been X-rayed (BM). & is
v. fluorescent - blue in LW UV, green in SW UV !!

B. Cooper Riv Comm (spec) 9/71. Wolframite,
altering to fluoresc. scheelite, in

quartz Wolframite x/s quite large (3")
but embedded & ill-defined

B. Cooper, Priv Comm 2/79. Apatite.

BVC 4/79 Tourmaline + fluorite ("+ apatite" not
seen by RSWB)

Dines (1956) II, 588. Trials around BERROW M. On ~~step~~
E slope of granite in Hawk's Wood trenches & adits →
quartz strings w. wolfram, cassit, arsenopyr.,
tourmaline. ~274753

In MIDDLEWOOD, trial adit in granite. No min's recorded.
272741 Around KING BEAR FARM, $\frac{1}{2}$ ml S of Berrow M. → Quartz-
wolframite w cassit, veins in granite, tried.

HAWK'S WOOD MINE, North Hill, Cornwall (II)

"M.J. Minerals" Cat. (12/93) Orpiment, thin dusty
coating, with a few tiny red-brown crystals
of realgar embedded in the surface.
"HAWES WOOD WORKINGS, Cornwall"

1ⁿ 186

SX 34 69 K 106

HAYE VALLEY MINE, Callington, Cornwall.

JC(1871), 64: (Sn, wkg.) Cassiterite. ✓

1st 186

SX 2967 2968

Wh. HAYFORD, St. Cleer, Cornwall.

K 116

See Wh. GILL (K 67).

Wh Hazard, Lelant, Coon

See Wh. Providence

1st 189

SW 36 33

St. Just

Wheal HAZARD, Botallack, ^{St. Just} Cornwall (I)

See also CROWNSM. (?=); BOTALLACK M. W. COCK.

Roy Starkey, Priv Comm 11/81 "In Sam Weller's list".

Heulandite, nice blocky xls (1-2mm) plentiful on walls of adit, reached from beach at low tide.

RSWB 83-11 Ex NJW Hoppé: Heulandite small xls rich on matrix. "W. Hazard, Botallack Cliff, St. Just, Cornwall"

Dyer et al (2006), J. Russ. Soc. 9, 68-72.

"Clinoptilolite & heulandite from Wh. Hazard
St. Just, Cornw." Anal. etc. Photos.

Wh. HAZARD, Botallack, ^{St Just} Cornwall (11)

RSN (1992) 23

Wheal Hazard and ~~Wheal~~ Cock,
Botallack, Cornwall 22nd September 1991

In what must be a record turn-out for a field excursion (leader + one!!), we waited at Allen's Shaft headgear. No-one else materialised, so we proceeded down the cliff path past Crowns Engine Houses to the foreshore. After a short climb up to

the adit porthole and 'posting' ourselves through the narrow squeeze, we entered a wide stope (seaward of Engine Shaft), where some respectable heulandite was collected later, on our return.

After crossing Engine shaft, we continued along adit level to a collapse, where some small specimens of paratacamite were collected from the roof.

On the way back to Allen's Shaft, we climbed into a raise and found schorl (very rich), paratacamite and suspected brochantite (now confirmed).

It was then a race against time to return to the beach and climb the cliffs (with ropes) to meet the party for the afternoon trip. Once again, no-one else turned up. (I can only surmise that people were put off by the extremely bad weather forecast for the day).

Wheal Hazard, Botallack, Cornwall
20th September 1992

The unexpectedly beautiful day came as a surprise, as did the fact that only two members and one guest attended the meeting.

Immediate access to Wheal Hazard was impossible as the start time coincided neatly with the high tide. However, the brilliant sunshine meant that the short wait was very enjoyable, and the delay proved fortuitous as the following species were recorded from the beach and the rill of made-up ground below the engine house on Crown's Rock: hematite crystals on quartz crystals, chalcedony, malachite, garnet (4mm crystals), goethite, brochantite, connellite, stannite, paratacamite,

see
CROWNS

PTO

See CROWNS

mamillary goethite, epidote and goethite pseudomorphous after siderite. All of these were generally micro-thumbail size, and presumably the generous rain throughout the summer flushed them out of hiding into that rare collecting essential - bright sunlight. The ground near Crown's Rock was again covered by boulders leaving insufficient room for a sledge-hammer assault.

The entrance to Wheal Hazard was reasonably clear despite protestations from both members of the party that the neck of the adit was a very tight fit (perhaps they shouldn't be quite so cork-shaped anyway). This is due to regular incursions by a group clearing a collapsed stope in a currently inaccessible section of the workings. Their future success is likely to be determined by the lack of 'tipping area' for the dug material.

As usual the initial enthusiasm for collecting the abundant, but variable quality heulandite which is to be found lining the joints, became jaded quite quickly.

One area of interest coincided with a 'bad hanging' from the roof, but the standard of collecting was not improved despite the unconventional, but successful barring-down technique adopted by our guide. Try shot-putting 15lb boulders whilst standing on an unstable stope in the dark!

In the collecting area beyond Allen's Shaft, the usual material of connellite, chalcocite and tourmaline was collected. A side drive provided an interesting exposure of the granite-hornfels contact.

This modest trip proved unexpectedly profitable for those who attended, but unfortunately, due to the poor turn out on this and previous occasions, this location is unlikely to appear in the field programme again.

If members do wish to visit this locality, caution needs to be taken; firstly, the underfoot conditions in the heulandite chamber are appalling, and secondly the fallen boulders on the foreshore are both unstable and slippery.

C.H.Scheding

Wheal HAZARD, St. Just, Cornwall (III)

see J Russ Soc (2005) 8 [2] 81-84

CMRM (1995) Allophane; antlerite;
chalcophyllite; clinochase; cyano-trichole;
devilline; jarosite; kröhnkite; woodwardite.

BMS Newsl (1996) 45 13 [R. Bell] From "Wh.
HAZZARD BEACH" Axinite, garnet

1st 189

SW 53 31

Wh. HELENA, St. Hilary, Cornwall.

See also PROSPER UNITED MINE.

Wh Hendra, St Ives, Corn

See Wh Trenwith

1" 185, 186

SX 088 790

HELSBURY QUARRY, Michaelston, Cornwall

Dearman et al (1970). Geol. Ass. guide 10, 41

HELSBURY Q'y - S part being filled.

In N part, the lower of 2 quarries has
calc-flintas etc. with sporadic
axinite:

In the upper Q, a diabase
sill is sealed with axinite, grossular
& epidote

Wh HEN, St Just, Cornwall

See BOTALLACK M.

1" 189

SW 65 28(?)

WHEAL HELSTON, Helston, Cornwall

CMRM(1995) Pyromorphite

1" 185

SW

95 56

HENDRA St. Dennis, Cornwall.

SA 42

See also TRÉLAVOUR DOWNS

JC (1871), 60

Mica.

B. Cooper. Spec. pres to RSWB 4/70; coll. 16/6/68
Smoky quartz; "Hendra Clay Pit."

1st 185

Near 005 571
5x

HENSBARROW PIT St Austell Moor, Cornwall
See also GUNHEATH PIT (joined up)
~ 1988

{ (8/66) 5 52

RSWB (8/65) 4 202

Rotted kaolinised granite.

quartz, xls, good, colourless → pale smoky
and pale amethyst.

Fluorite, purple, on

joints (not of good x. shape). good
turquoise patches, veins, & in one
boulder, xls. [x-ray^R, BU]. Some of

the turquoise is greenish - rashleighite.
Much black schorl but good xls uncommon.

wavellite, almost white, & radiating
in joint, overlying patchy turquoise;
gibbsite, yellowish xls

C. Rogers (1968): Wavellite; amethyst

RSWB. Min. Record (1981), 12, [6], 349-353

Turquoise xls. to 0.25 mm ~~with~~ in
kaolinised granite, with yellowish
muscovite; black schorl; purple fluorite;
near-white radig wavellite sometimes on
massive turquoise-rashleighite.

RW Barstow Min Mag (1982), 46, 512. Variscite
xls to 3 mm on wavellite in qtz-peg. with
zinnwaldite on a loose boulder in
Hens. Pit. though possibly from neighbouring
Gupheath Pit from which detritus bulldozed
into Hensbarrow Pit recently.

1. 185

SX 0 5

HENS BARROW GRANITE STOCK, St Austell
Moor, Cornwall

DAC Manning, Proc Ussher Soc (1983) 5 [4] 411-6
Li-mica granite stock has disseminated
stannite, stannoidite, mawsonite also
bornite, vanlamoffite, turquoise,
nashleighite.

Wh. Henver, Redruth, Corn

See Rednamdrea M

1" 189

2½" SW53 593370 5936

WHEAL HERLAND, Guinear, Cornwall (I)

H
13

Includes DRANNACK, BOWLING GREEN, & PRINCE GEORGE mines; later known as ROSEWARNE & HERLAND UNITED. See also ROSEWARNE, et al. → (H61)

Cross courses have Silver; Mn & Fe oxides; Wolframite; Sbores; pitchblende. Cassiterite, arsenopyrite.
✓ wing, BM.

Rather mucky, but worth a visit - AWGK.

Rutley, 15th. Ed., p199, Smaltite; p.220, argentite; p.221 ruby silver (pyrangyrite).

RSWB 8/59 Loc 131 Vast dumps. Rhombs of zinnwaldite; ealeite.

galena; chalcopryite; quartz; chlorite; tourmaline?

JC(1871), 50. W. HERLAND: Argentite; bismite;
bismuth; bismuthinite; cassiterite;
chalcopryite; cerargyrite; limonite;
melanconite; arsenopryite; rock xl.
pyrargyrite; silver; smaltite;
wolfram.

Rudler (1905), 57. galena; argentite; native silver;
with bismuth and cobalt ore, in a cross
course between 110 & 142 fms.

Dewey (1923) Cu ores 1816-43
W. Phillips (1823) Nat silver with galena; silver glance, cubic;

WHEAL HERLAND, Gwinear, Cornwall (II)

MINERAL LOCALITIES No.1 Wheal Herland, Gwinear (Grid.Ref. SW591370)

RSN(1991)
22

Chris Scheding

Access is through the double gates at Drannack Lane which goes south from the Copperhouse to Carnhell Green Road, 300yds west of Gwinear church.

Cutting the country rock of killas with elvan dykes are seven ENE- WSW striking lodes which tend to be narrow and discontinuous. Mining extends for 1000yds laterally and to a depth of 152fms. Cassiterite is restricted to North Herland Lode which also contains chalcopryite, cuprite and pyrite and has a surface gossan. Manor Old Lode is parallel to North Herland Lode, splitting from it at 85fms and outcropping to the south. Herland Caunter Lode strikes approx. E-W. Several crosscourses are present, striking N28°W, having a dextral throw of a few feet and are clay filled or quartz filled, when they carry minor galena and stibnite. Mining in 1799 discovered a large payshoot at the intersection of a crosscourse with Manor Old Lode which subsequently produced 115tons of silver

ore comprised of arsenopyrite, galena, bismuth, cobaltite, smaltite, cerargyrite, pyrargyrite and capillary native silver.

The mine also produced Fe and Mn oxides, wolfram and antimony ores, and pitchblende and various uranites.

Production from 1816 to 1864 was 18,500 tons of 11% copper ore, and as Rosewarne and Herland United, produced 14,400 tons of 9.5% copper ore together with 175 tons of black tin, 110tons of sphalerite and 12 tons of arsenopyrite.

Minerals present include: argentite, bismite, bismuth, bismuthinite, cassiterite, chalcopryite, cerargyrite, pyrargyrite, arsenopyrite, smaltite, wolframite, cuprite, pyrite, galena, stibnite, cobaltite, pitchblende and various uranites, tenorite, Fe and Mn oxides and hydroxides.

Wh Herland

Wh. Herland, ~~Wh. Trevaskis~~ and ^{RSN}
~~Wh. Alfred~~ Saturday 6th April (1991) 22

Wh. Herland: Only around half an hour was spent at this site as the dumps appeared rather barren. The common sulphides such as chalcopyrite, pyrite and arsenopyrite were readily found, however. Two small pieces of native copper associated with what appeared to be tenorite were also found.

CMRM (1995) "Bismuth ochre"; hemimorphite;

1" 186

2½" Liskeard 218603 SX

HERODSCOMBE MINE, Duloe, Cornwall

R 69

1st 186 Lanreath 1st 186 212605 5X
HERODSFOOT MINE ^{Anr Liskeard?} (212604) Cornwall (I) K 14

See also S. HERODSFOOT MINE (K 83)
+ N. HERODSFOOT M.

LJS's Book, p. 77. Tetrahedrite, fine xls with brilliant
iridescent tarnish, formerly found.

BM Chalcopyrite, on calcite; v.g. calcite; bourbonite;
v.g. galena.

Penzance Mus: Tetrahedrite, v.g.

JC (1871), 63: (Pb Ag wkg.) Bourbonite; calcite; fahlerz;
chalcoprynite; galena; hornblende;
hornstone; pyrite.

Rudler (1905) 63 Superb bourbonite better than from
W. B. B., St Endellion P.T.O.

In this Pb/Ag mine the lode ran through Killas, 20°E
of N & the arg. galena occ'd in qtz veinstone, with
pyrite, blende, occas. bunches of rich Cu ore
& certain antimonial minerals, just below the
gozzan (& detrimental to the Pb).

p64 Tetrahedrite, "grand examples", assoc. w. the bournonite.
& often coated with minute xls of chalcopysite, iridesc.

p91 Quartz epimorph after baryte.

p93 Good calcite

Dunham, F(1952) 118 ~~#~~ Fluorite absent - gangue is quartz
with rare baryte & dolomite

RSW3 (8/66) 548. Around 213 604 - Quartz; galena;
decomp. pyrite; ? jarosite - "much yellow muck"

HERODSFOOT MINE, Lanreath, Cornwall (II)

Cryst. Vine Cat. (7/04) Anglesite, v. micro

W.H. Sands, Gems, 1972, 4th, [6], 7. Two shafts,
North (212605) and South (212599) on this vein,
on private land but farmers will prob. give permss.
Old eng. houses & shafts dangerous & fenced off.
Dumps overgrown but do produce xls, minute
but well-formed, eg "several minute galena
octahedra on stained quartz."

CMRM (1995) Ankerite; pyrrargyrite.

Russ. Soc. Newsletter 20 (1990)

Three members then continued to Herodsfoot Mine to check the state of the dumps which are being gradually removed by the farmer. The dump slope is now at a very steep angle which leads to excavations being constantly filled by slippage. No reasonable specimens were collected though the face of the dump appeared to be reasonably fresh. (1989, Nov.)

This completed this summer's schedule and those attending the trips found them both rewarding and entertaining. The behaviour of the members who gave no notice of their inability to attend one of the allotted trips is to be abhorred as it needlessly deprives another of our more enthusiastic members and is discourteous to the leader who may delay the start of a trip with a pointless wait.

RSN (1996) 28

Wulfenite(?) said
to have been found.

HERODSFOOT MINE, Lanreath, Cornwall (II)

Cryst. Vine Cat. (7/04) Anglesite, vq micro

W.H. Sands, Gems, 1972, 4, [6], 7.

Two shafts,

North (212605) and South (212599) on this vein,
on private land but farmers will prob. give permission.
Old eng. houses & shafts dangerous & fenced off.
Dumps overgrown but do produce xls, minute
but well-formed, eg "several minute galena
octahedra on stained quartz."

CMRM(1995) Ankerite; pyrrargyrite.

HERODSFOT M., Lanreath, Cornwall (III)

R.E. Starkey (2012) Min. Rec. 43, 411-486.

"The Herodsfoot mine, Lanreath, Cornwall, England"

Major well illustrated detailed article,
including history etc & ~~the~~ current
whereabouts of notable specimens.

Minerals pp 442-475. Anglesite (sparing);
ankerite, baryte (+ qtz ψ 's). bornonite (v. detailed).

(pp 444-460!); calcite; cerussite; chalcopryite
(eg on tetrahedrite); cuprite (?); dolomite;
erythrite (?; a micro-); fluorite (?); galena;
gypsum; leadhillite (rare). "limonite", linarite
(rare, micro-); malachite; marcasite; molybdenite
(1 spec.); pyrargyrite ($\rightarrow 0.5$ mm); pyrite; aragon (?)

Pyromorphite doubtful(?); pyrostilpnite
; a micro-; quartz; siderite; sphaerite
stibnite (rare); sulphur; tetrahedrite (st)
often encrusted w. Cu-pyrite; wolframite (?);
Pseudomorphs: Cu-py ps. bournon; gal +
Cu-py ps. bournon; pyrite ps. baryte; qtz ps b
qtz ps. bournon; bourn ps. galena; Cu-py ps
tetrahedrite; gal ps. bourn; pyrite ps. calc

1" 186

SX ~~2160~~ 2160

NORTH HERODSFOOT MINE, Lanreath, Cornwall

See also HERODSFOOT M., S. HERODSFOOT M.

CMRM (1995) Ferberite

1" 186

SX 22 50 OR ?
21 59

SOUTH HERODSFOOT MINE, Duloe, Cornwall. K '83

See also HERODSFOOT MINE (K14); N. HERODSFOOT M

JC (1871), 63: (PbAg, wkg.) Calcite; galena.

AKHJ ~~AT 22 51~~ AT 22 51

Burt et al (1987) AT 21 59

RSN(2006) 48 16-17. AT SX 213601. Chalcopy,
galena, siderite on exposed dump.
In woods open cut w vein exposed - a
good tetrahedrite on quartz found.

1" 185

HEWAS DOWNS MINE, St Austell, Cornwall

SW 97 50

~~See~~ Gt HEWAS UTD. MINE

1" 185

SW 976 502

SA 63

or CONSOLS
GET. HEWAS UNITED MINE, St. Austell, Cornwall.

JC (1871), 61: (Sn) Cassiterite; liroconite;
arsenopyrite.

W. Phillips (1823). Fibrous malachite.

AKMS (1964) 8 37 Co $\frac{1}{2}$ ml S of SE AUSTELL CONS. 3 main lodes
& numerous "side lodes", originally worked by
separate mines, eg GOLDEN PARLOUR; SILVER
KITCHEN. Golden P. immed N of Hewas Water, &
working for Sn in 1720. Tin ore & spar - "cavities...
with spar, Cornish Diamonds & Crystals shot in them".
Also copper ore. ~~Plan~~^{Map} facing p. 38, GT. HEWAS

CONSOLS formed in 1846, including also Wh. PROSPER
(= W. POLGOOTH) on the E; Wh. HUSBAND on S; &
Wh. ELIZABETH (= LITTLE VENTONWYN) on W.
Lead ore, tin.

Dines (1956) 546-8 = HEWAS DOWNS MINE. Latterly (1919)
included with KINGS DOWN (= HEWAS WATER MINE).
Main lode had cassiterite, arsenopyrite, galena,
& "arsenical Cu ores" [?]. Dumps have
tourmalinised killas, chlorite, quartz, Pyrite,
chalcopyrite, arsenopyrite, smaltite,
erythrite, dolomite,
C. Rogers (1968) biroconite
W. Phillips (1823) Wh. HUSBAND section: Olivenite
RSWB (8/66) 50 51. gone - now a housing estate (at 976502)

1" 185

SW 97 50

HEWAS WATER MINE, Sr Austell, Cornwall

See Gt. HEWAS UTD. MINE

Highburrow Shaft, St Agnes.
see wh. Clarence.

AKHJ 2 32.

S of Wh Clarence
N of E. Wh Kitty.

1" 174

SX 1293 SX ~~1293~~ 1293

HIGH CLIFF, ST. Gennys, Cornwall

CMRM (1995) Anthracite

1" 186

S X 30 85

HIGHER TRUSCOTT Mn MINE, St-Stephens-by-Launceston,

See Wh. TRUSCOTT

Cornwall

HIGHER YONDER TOWAN PIT, St. Austell, Corn.

= GUNHEATH PIT (q.v.)

1st 185

SX 00 57

HILL MINE, ST. Austell, Cornwall,

See ST. AUSTELL HILL MINE = BUNNY M

1" 186

LiHg map, 13.

1" 186 ~~40~~₂ 710 & SX 4171

HINGSTON DOWN CONSOLS MINE Calstock, Cornwall (I) 3

See also GUNNISLANE CLITTERS, HINGSTON D'N OY
(1910) - MM, 15, 258 - discovered in 1906.

AWGK, R&SC (1952) AR- Carminite, tufts of minute needles

BM: Scorodite; carminite, with quartz and blende;
pharmacosiderite; fluorite; covellite.

AWGK, MM 31 502 (1957). Carpholite. in S workings.

Hitchin Shaft: Dumps at ca. 412714: carminite; good xls of
scorodite; pharmacosiderite - AWGK.

JC (1871), 65 "HINGSTON DOWNS" (Cu, wkg.) chalcopyrite.

Dunham, F (1952) 119. worked latterly with adjacent

GUNNISLAKE CLITTERS. Has 2 lodes. "Main," with sulphides & some fluorite. Cu ores & arsenopyrite with cassiterite & wolfram in upper levels - lower, the sulphides die out. "South Lode" similar - in 1906 the 55 fm level on this lode extended from Hitchen's Sh. in fluorite - 14 tons produced in 1916 & 1917.

AR, MN 15 285 Carminite, with scorodite, minnetite, chalcopryite, blende, arsenopyrite, earthy covellite, pharmacosiderite, anglesite, quartz, fluorite.

AWGR Arthurite^{new mineral}; Hitchen's Sh.

C Rogers (1968) Scorodite; wolfram; Cu minerals.

HINGSTON DOWN CONSOLS MINE
Calstock, Cornwall. (II)

B. Cooper & S. Treseder (1973-4). "Childrenite" [V. info]
(1 spec to 3/74) on altered granite, fine xls.
Dumps of Bailey's Shaft (408 7/4)
[Loc "B"]

B. Cooper 6/78. The "childrenite" = quartz

R. Turner Bendatite with the carminite.
Priv 6/80 [Not found by R. Turner]

N. Hubbard, Priv. Comm. (4/82) Someone has
been trenching into dumps by Hitchin

Hingston Down Cons

Shaft but left much pale
brown powdery jarosite-like material
behind - "is a mixture containing
hidalguito". [See R.J. Davis & M.H. Hey
Min Mag (1964) 33 937 - "near
CMRM (1995) chalcophyllite but this is ^{hidalguito}
directly associated with
the arthurite.

RSWB 9/95 IR's of 82-47 ex N Hubbard
("hidalguito") & of a MM spec. (95-94 is off it)
show NO hidalguito, but = chenevixite. 95-94
also carries pale green needles (FTIR
= near mixite)

BMSN ('05) 70, 12-13 Coll. No 2421 (D. Hall) Cyanotrichite from
"Hingston Down".

1" 187 SX4071, 4171, 4072 408-410 718-720

HINGSTON DOWN QUARRY, Gunnislake, Cornwall (I)
See also HINGSTON DOWN CONSOLS MINE, etc.

Quarries (1963-4). Working.

RSWB. (IV) 197(1965). good black tourmaline; microcline; quartz; in joints, a little molybdenite; pyrite; chalcopyrite; good xls arsenopyrite, with blue alteration product(s?).

Bassett, Riv. Comm (8/66). Recently, arsenopyrite xls up to $\frac{1}{2}$ " long; good bornite-xls.; pyrite; chalcopyrite; fluorite, green to purple.

B. Cooper 10/76. Apatite ✓ white patches
in school.

B. Cooper, letter to RSWB 29/1/75 Anatase,
microscopic xls in the tourmaline
[Not found by B.C., who was told of it]

B. Cooper, spec → RSWB 9/2/78 [78-42] Anatase
excellent small sharp tabular xls ,
blue-black, scattered in "spongy" pink matrix
of felspar-mica-fluorite (small c'less tubes
tinged with purple), some c'less apatite

J. Gliddon etc. Fin Comm 8/79 Massive bornite currently
checked out by RSWB & JIW. West vein of massive
bornite + aspy + py on centre of E face, Vg School, S face

HINGSTON DOWN QUARRY, Gunnislake, Cornwall (II)

R. Taylors Cat. 44 (1989) Scorodite

RSWB & JW 8/79 (contd) Brochantite, small green
rectangular xls (IR) on pyrite with
bornite + chalcopyrite.

RW Barstow priv comm → DH (1978) Bismuth,
molybdenite, anatase, bertrandite,
arsenopyrite xls; pyrite.

[Mr. Lewis - manager]

BV Cooper Priv Comm 2/10/79 Brookite in the
felspar-anatase matrix [not seen by RSWB]

R Turner 6/80

Acc to Von Knorring Some of the mica is
paragonite

Very very fine bertrandite eg $> 1\frac{1}{2}$ cm spray (RWB).

Scheelite crystals - brown "octahedra" in
cavities - sharp, shining $\rightarrow \frac{3}{8}$ " said to be $\rightarrow \frac{1}{2}$ ".

Freestanding molybdenite xls with
powdery ferri molybdenite. Artserite
has been found in top bench -
now abandoned as cannot cut
further S-(boundary).

GR Ward, Proc Ussher Soc (1983) 5 [4] 485-6

Bertrandite equant tabular xls $\rightarrow < 7$ mm
e groups w. schorl, pale green fluorite,
chlorite chalcopurite, quartz.

HINGSTON DOWN QUARRY, Gunnislake, Cornwall (IT)

R. Taylors Cat. 44 (1989) Scorodite

RSWBe JIW 8/79 (contd) Brochantite, small green
rectangular xls (IR) on pyrite with
bornite + chalcopyrite.

RW Barstow priv comm → DM (1978) Bismuth,
molybdenite, anatase, bertrandite,
arsenopyrite xls; pyrite.
[Mr. Lewis - manager]

BV Cooper Priv Comm 2/10/79 Brookite in the
felspar-anatase matrix [not seen by RSWB]

HINGSTON DOWN Q'y, Gunnislake, Cornwall (III)

Hingston Down Quarry, Calstock,
Cornwall 23rd June 1991

Fifteen intrepid members turned out in the most appalling weather. The fact that an unusually high proportion did not turn up came as no surprise to those standing in the torrential rain. Following the briefest of formalities the group waded into the quarry, most heading at first for the arsenopyrite area.

Despite the conditions and danger of drowning or being squashed by sundry missiles falling from the benches, a reasonable selection of specimens were obtained. Most people found arsenopyrite crystals, albeit rather small ones. Molybdenite and cassiterite could also be found in the same area. Other minerals included cuprite and native copper (thin seams), opal, bornite, pyrite, chacopyrite and wolframite. Unfortunately, the strong sulphide lode is no longer accessible. Most people had departed by the early afternoon - only a few real dedicated and waterproof members remained. Alan Jeal explored some of the highest benches and was rewarded with samples of arthurite associated with occasional plates of metazeunerite.

Bill Eliasson

Rus. Soc. News 23 (1992)

Unknown mineral from Hingston Down
Quarry

Bill Eliasson has discovered a possible new mineral from **Hingston Down Quarry**. Steve Brown kindly communicated the following details:

The mineral occurred in a very small vein of mostly massive material, which turned out to be an intermix of bornite and wolframite with a very iridescent tarnish. Noted also in small 2 to 3mm crystals the same mineral has replaced and pseudomorphed scheelite.

Under analysis the new material proved to be monoclinic. Further work is now being done in Germany by Dr. Hans Freidrich Herrman, on the exact chemical composition.

This new material may well prove to be a new species. The locality of the find is now obscured and may not turn up again. However, Bill Eliasson and myself have some specimens should anyone wish to view it.

I suppose that as Bill found the original specimen, it will be called Eliassonite, as there is already a mineral called Billietite!!

The following items are extracted from the South West Branch Newsletter No. 10

RSN (1994) 24

Hübnerite and russellite from Hingston Down Quarry

The mineral recently found in Hingston Down Quarry has now been identified as hübnerite (MnWO_4). It occurred in a vertical vein on the east side of the quarry. This has now gone. The surrounding matrix is of sandstone-like material. One specimen has an octahedral crystal presumably a pseudomorph after scheelite. Generally the crystal formation is in the monoclinic system as prismatic crystals and in groups of parallel crystals. The colour is black to brown and some specimens are iridescent. In the surrounding matrix there are micro-crystals of russellite (Bi_2WO_6). This is a rare mineral first noted by Sir Arthur Russell in ore specimens from the Castle-an-Dinas mine near St Wenn. This might indicate that future exploration will uncover specimens of native bismuth and bismuthinite.

Bill Eliasson

South West Branch

27 March 1994 Hingston Down Quarry, Gunnislake, Cornwall (Grid Ref: SX 410 718)

Leader: Bill Eliasson RSN (1994) 24

Some 20 members turned out in horrible weather conditions. Hingston Quarry provides good exposures of an elvan dyke cutting granite. Unfortunately the vein which has recently yielded very good specimens of bipyramidal pseudomorphs of wolframite after scheelite was rather unproductive on this occasion, but specimens provisionally identified as ferritungstite and mpororoite were collected. Other species noted included arsenopyrite, bornite, wolframite, molybdenite, chalcopyrite, scheelite, lepidolite, arthurite, cuprite and scorodite. A toad (species unknown) was also seen, adding some life science interest, though not collected. The quarry is easy of access and offers excellent

future potential for collecting. Most members enjoyed a good, if rather damp day's collecting.

HINGSTON DOWN QUARRY, Gannislake, Cornwall (IV)

R. Soc. N. (1994) 25 1993 Mineral Occurrences at Hingston Down Quarry, Calstock, Cornwall

During the last twelve months, there have been several noteworthy additions to the recorded suite of minerals at Hingston Down Quarry.

April 1993

Acicular crystal sprays resembling cyanotrichite were recovered on a chalcopyrite/sphalerite matrix from the sulphide pod known as King's Lode. This proved to be likasite, the first British occurrence (NHM identification).

October 1993

A quartz-tourmaline vein swarm was revealed by blasting on the east face of the quarry. These veins, cutting iron-stained aplitic granite, carried tungsten mineralisation in rich bunches.

The dominant primary metalliferous mineralisation included wolframite (predominantly the iron-rich end member, ferberite), scheelite in

large and rich masses (rarely crystallised), minor cassiterite and uncommon molybdenite. Most notable were replacement pseudomorphs of ferberite after scheelite, represented in the form of the tetragonal bi-pyramid. In one singular specimen, the original scheelite crystal would have been approx 50mm. Other specimens showed acicular ferberite to 10mm, emergent from the pseudomorphs, some of which possessed striking iridescence. Scorodite also appeared as euhedral crystals coating the pseudomorphs.

Secondary minerals provided further interest, with bright yellow masses of ferritungstite (NHM identification, 9521F) being common.

In its first British occurrence, mpororoite (NHM identification, 9522F) occurred with the altered scheelite as white chalky masses.

December 1993

Associated with the same vein swarm as above (which I believe is continuous with the northern lodes of Hingston Down Consols) a further specimen of scheelite contained a cavity of lemon

yellow crystals belonging to the stibiconite-romeite group (NHM identification, 9630F), the first recorded British occurrence. In altered ferberite, jarosite (NHM identification, 9632F)

also occurred in creamy yellow waxy subhedral crystals.

Thanks are due to Mr G Bell, Manager ARC Hingston Down Quarry for access to the quarry, and to Dr R F Symes, Department of Mineralogy, Natural History Museum, London, for identification of the specimens.

Barry P Gamble

**25 April 1993 Hingston Down Quarry,
Cornwall** RSN(1994) 24

Fourteen members visited this quarry and enjoyed fine weather - unlike last time. Members were fortunate in finding King's Lode exposed and most spent some time collecting specimens of the complicated sulphides which occur in this lode.

Later in the day, other quarry benches were explored and specimens of arsenopyrite, molybdenite and fluorite found. Some micro specimens of

scorodite and pharmacosiderite were obtained from the second bench.

On the whole, it was quite a successful visit.

Bill Eliasson

Hingston Down Quarry, Gunnislake,
Cornwall [Grid Ref: SX 409 719] -
27 March 1994

SW, Leader: Bill Eliasson

RSN(1995)
26

Some 20 members turned out in horrible weather conditions. Hingston Quarry provides good exposures of an elvan dyke cutting granite. Unfortunately the vein which has recently yielded very good specimens of bipyramidal pseudomorphs of wolframite after scheelite was rather unproductive on this occasion, but specimens provisionally identified as ferri-tungstite and mpororoite were collected. Other species noted included arsenopyrite, bornite, wolframite, molybdenite, chalcopryite, scheelite, lepidolite, arthurite, cuprite and scorodite.

A toad (species unknown) was also seen, adding some life science interest, though not collected. The quarry is easy of access and offers excellent future potential for collecting.

HINGSTON DOWN QUARRY, Gunnislake, Cornwall (V)

CMRM (1995) Bismutoferrite; conichalcite;
marcasite; monazite-(Ce); stannite; stolzite;
tennantite; varlamoffite; cuprite, var. "chalcotrichite"

Hingston Down Quarry, Calstock, ^{RSN}
Cornwall [Grid Ref: SX 409 719] (195)
30 April 1995 21
SWB, Leader: Chris Jewson

A pleasant dry morning, with the promise of sunshine later, brought 23 members from far and wide. Anticipation was high, seemingly based on reports over the previous six months of all sorts of goodies to be retrieved from a sizeable sulphide occurrence associated with the Old Hingston Down Consuls workings. In the event this material was conspicuous by its absence.

The quarry is currently working 3 benches and is starting on the development of a 15m decline

which will lower the floor of the quarry. Although this is currently in its very early stage, it has cut the famous Kings Lode, thus promising some interesting sulphides.

All areas of the quarry are worth inspection, however the method of working means that access from bench to bench, entails either a long walk or a challenging ascent/decent of the scree slopes. I think most people had plenty of exercise.

By 10.30am the music of hammer on rock was building nicely. Chris Scheduling soon embarked on a virtuoso exercise of 'hope over reason' on a really big lump (the size of a garden shed). The rest of the party settled to thoughtful questing appropriate to their capabilities. An early find

was a face of microcrystalline cuprite, and numerous specimens were soon produced for all with the aid of Kelvin Phillips's special heavy hammer.

The day progressed with the steady retrieval of molybdenite, scorodite, arsenopyrite, chalcopyrite, quartz and 'peacock ore'. Two all-to-often ignored minerals also turned up as most attractive specimens; chlorite and mica. Wolframite was most noticeable by its virtual absence. Fluorite cubes were as common as hens' teeth, but there was plenty of purple/green massive fluorite for rockery pretties. Kelvin's hammer did some more good work, aided by its owner, producing several hand specimens of siderite with 12mm crystals. Roy Starkey was rewarded with an interesting assemblage of chalcopyrite and arsenopyrite on massive wolframite.

David Aubery-Jones defied perceived local wisdom by spending most of the day working into Kings Lode, where the new decline has cut into it. His efforts were amply rewarded with a couple of trays of pyrite cubes to 30mm, retrieved from the crumbling sulphide mass. Nothing like these have been seen from here for many years - well done, David.

For Chris Scheduling, hope did triumph over reason. He was rewarded with a superb 3.5mm euhedral black anatase with another of 2mm in close association. Individually these would have been very acceptable; for the location, and together, wondrous. To further confound the doubters he also turned up some unusual crystals which to date have defied identification. Well done Chris.

4/6/95
F [tourmaline. Pyrite, chalcopyrite and arsenopyrite are all much in evidence, with good molybdenite also appearing on some samples. Tourmaline as schorl and achroite, forms masses of acicular crystals interspersed with purple fluorite, and some fine quality examples were obtained from a vein by Steve Plant. Some of these had good plates of molybdenite. Spherical masses of greenish-grey crystals, probably scorodite, were found on some specimens. The author made a long climb to the top level to look for scorodite, which was duly found. In rock at this level scorodite appears in several habits - but all micros. It can appear as highly crystalline linings in small vughs of botryoidal form, as individual spheroids of crystal masses or as tiny whitish balls on a limonite-type matrix. The usual colour is greenish-grey, but it can be yellowish or white. Some wolframite was also collected at this level.

HINGSTON DOWN Q'y, Gunnislake, Cornwall (VI)

Q'y manager (Edgar Sutton) 9/9/96

Leimbachite "yellowish octahedra" in coarse grained arsenopyrite vein on upper level. Found by Mike Morry (?)

RSWB & JIW, 9/9/96 Found small trial pits in quartz-arsenopyrite vein (NNW-SSW) in SE corner of quarry on 2nd bench down from top. Pockets of massive arsenopyrite with excellent crystals to ~1cm in cavities at

edge of pod; also chalcopryite. green to blueish films of oxidation products.

Occasional (rare) individual brown-orange bipyramidal crystals and fragments (x's $\rightarrow$ $\sim$ 2 mm) of presumably the jeanbandyite found on arsenopyrite crystals.

MGHM Privtel comm 1096. Someone else found the jeanbandyite first. Some have a core of an even rarer species.....

RSN (1996) 29 30 March: Usual minerals + cuprite var chalcotrichite on nat. copper. Also "molybdenum" in mira; ?ferritungstite; arthurite (1 spec). Apatite
9 June: Usual + "two steel grey 7mm tetrahedral crystals not yet identified"

HINGSTON DOWN q'y, Gunnislake, Cornwall (VII)

J. Betterton et al (1996) UKJMM 16 13-15

Stolzite

BMS Sympos (1997) Hand spec: good rad'g (not
always compact) xls wavellite among qtz xls.

RSN (1997) 31, 11-12. Safety bank beside access road
across top of q'y mostly ex Hitchen's sh. dump & has
arthurite; also micro pharmacos; ? olivinite;
In main q'y, lump of molybdenite.

RSN (1999) 35, 22. Not much coll. Some
arsenopyr, scored. One v.g. arthurite. Nat acc?

BMSN(2000) 57 & "Unknown blue mineral"

RSN(2001) 39, 13-14 Visit. Not at its best - usual
minerals + "a superb arthurite" + "ferrimolybdenite"
[? ferrimolybdate or error for ferritungstite?]

HOLE BEACH, Tintagel, Cornwall

See LANTERDAN QUARRY

1" 189 SW 65 36
HOLMAN'S QUARRY, Troon, Cornwall.

Robson, RGSC (1947) 17 345 Notes on new exposures;
garnetiferous veinstone

C. Rogers (1968) HOLMAN'S MINE & Q'y: garnet xls.

1" 1865X360720

HOLMBUSH MINE, Stoke Climsland, Callington, Cornwall ~~22~~

See also KELLY BRAY MINE (K 107). CALLINGTON UTD,
Spec. Min. Res. Rep. 21 (1921). REDMOOR M.

GR 6/55 W. Devonian sediments just within Kit Hill aureole.
A N-S Pb lode intersects @ rt Ls the Sn bearing
Holmbush & Flop Jack lodes.

Much massive fluor, mainly green, & quartz
casts of huge cubes. Altered chalybite; some
galena; one spec. with microscopic colourless
apatite xls. (? francolite pro)

JC(1871), 64: HOLMBUSH & KELLY BRAY (K) (Cu, wkg). Chalcopyrite
RSN(2005) 47 35-36.

Dunham F(1952) 118. N-most mine of CALLINGTON UTD

RSW(1999) 35/14. Francolite on siderite w. pyrite.

W of Kit Hill granite. 2 EW lodes: Main or Holmbush
& Flapjack 200yds to S, crossed in W by a NS Pb
lode. HOLMBUSH LODE has quartz with
chalcopyrite, arsenopyrite & pyrite, fluorite
& siderite abundant locally. Fluorite not
recorded from Flapjack lode. Lead Lode has
quartz with galena, siderite, & fluorite.

B. Cooper 9/71 Spec → RSWB. Francolite (1R)
colourless needles on siderite lining
cavities in boxwork of quartz.

Rothwell & Mason (1992) UK Mines & Min's 11 30-40

A wulfenite-stolzite intermed on a spec. coll. by
AW&K in 1968 determined by XRD at BM(NFI)
CMRM (1995) pyrrargyrite, stannite.

1" 189

SW 69 12

HOLSEER COVE

Lizard, Cornwall

GMus, donation (1967) J. McA. Hart. Natrolite ✓

CMRM (1995) ^{1"} Analcime; illite;

1" 186 SX 29 63.
HONY MINE, Menheniot, Cornwall

See also Wh. MARY ANN, TREAWNY MINE.

Dunkham, F(1952) 120. On same lode, e N of, Wh.
MARY ANN.

1"187

SX 422 643

New South HOOE MINE, Landulph, Cornwall

AKMJ?

Wh Hope, Lelant, Cornw.

See W. Wh. Towan

1" 185
WHEAL HOPE, Perranzabuloe, Cornwall. (I) A 25
3W 786 548

BM: galena pseudo after pyromorphite!!

Henwood: "Blue lead ore" (= ("blue lead" = galena) (they) or linarite??)
v. infra

Collins (1871) p 58. Silver-lead Mine. Blende; galena; chalcopyrite.

Rudler (1905) 55. "Blue lead ore" = galena ψ after
pyromorphite, from "Wh Hope" near Truro.

M. Merry, spec $\rightarrow$ 2508 1/94 [94-12] galena ψ .
after pyromorphite or mimetite coated
with cream coloured crust apatite
(FTIR, 16/2/94 = near apatite)

Dines (1956) I, 450. $1\frac{3}{4}$ ml ENE of Rertanporth.

Includes South Wh. Budnick.

Engine Sh 550 yd S by W of Hendra farm [788553]
[ie sh. ~ 786 548]. Western sh, 100 yd W by S of
Eng. sh. Adit level 40 fms SW of Eng. Sh.

V. Rae, spec's → RSWB 3/94. IR 3/94 c'less xls interlayered
with matrix = c'less pointed xls encrusting
galena ψ morphs = quartz + anglesite.
Clear pinkish hex not yet ψ morphed or
partly = pyromorphite (As-free).
So the ψ -morphs are after pyromorphite
rather than mimetite; also pyrite
octahedra.

Wh. HOPE, Perranzabuloe, Cornwall (II)

MGH Merry, spec's $\rightarrow$ RSWB 11/94. Sphalerite
(XRD, microchem $\rightarrow$ $Zn^{2+}S^{2-}$), bright orange
grains (like orpiment!). Gibbsite
(IR) on one spec. from dump, as
chalcedonic-radiating v. pale orangey-
brown crust lining a vugh in
quartz

RSWB 21/7/95. Quartz including poor "amethyst"
galena sphalerite pyrite (including
octahedra & radiating fans). Much sidelite
w xl faces in vugs. $\rightarrow$ solid veining to several cm.

M. Rothwell. BMSN(1998)⁵¹13. BMS Coll 2006
Plumbogummite in stalactitic habit.

Wh Hope, Redmuth, Cornwall

See Wh. Gilbert

Wh Hope, St Agnes, Corn.

See Polkerry M

1" 189

SW 4

3

Wh. HOPE, Zennor, Cornwall

AKHJ (1961) $\perp$ 13

N-S lode.

lodes S &

In 1847 adit over 100 fms on

Position uncertain; poss. on

WICCA CLIFF [see WICKA M]

Not in Dines or
(1956)

Burt et al (1987)

Gt. Wh. HOSKIN, St Agnes, Cornw.

See W. FREDERICK

1" 189

Nr. SW 695 419

HOSKING'S Wh. SILVER, Redruth, Cornwall

AKHJ (1962), 3, 10-12

SILVER ADIT, date unkn.,

intersected Wh. GOODSPEED & other lodes; driven
SE from Silver Field, adjoining the brewery, to
E. CARNBREA MINE [SW 698 414]. intersected a
number of NE-SW lodes, one in a field behind
the Royal Standard Inn = Hosking's Wh. Silver,
started 1836. A S_n + Cu sett granted

1771 immmed. across the road in Park
Hoskyn (now the Fair Field)

1" 190

St Mewan SW 9951
near St. Austell.

SW 9 5

Wh. HUSBAND, St. Mewan, Cornwall.

See also Gr HEWAS UTD. MINE

W. Phillips (1823). Fibrous malachite; "Wh HUSBAND &
W. Wh VIRGIN [greenap]. Olivine "Wh. HUSBAND, St.
Mewan".

AKHJ (1964) § 38. To S of Gr. HEWAS UTD
MINE & included with it in 1846.

[see SW 9749 or 9750?]

1" 186

SX 303

693

Wh. IDA,

St. Ive,

Cornwall.

K 115

JC (1871), 64: (PbAg, wkg) galena.

Burt et al (1987) SX 303 693

Illogan, Cornwall

AR, MM. 16, 55 (1911). South Crofty mine. Phenakite identified on an unusual specimen found by Collins on a dump in 1870: on one side a mass of long white radiating phenakite prisms (up to $2\frac{1}{2}$ cm long!) on a matrix of dark-green chlorite contain, much arsenopyrite + cassiterite; also a little quartz + colourless fluor.

Rayner's Cat. (1960).

"South Frances, Barret, Illogan" - cassiterite.
East Pool mine - fluorite + quartz.

Lucas + Zaslowl, ~~ERG~~ GSC 1960, 19, 113. Uraninite
concentrate from S. Crofty mine, Cornwall.

1" 185 SW 92 59 6" Corn. LONE (1907) SA 24
INDIAN QUEENS or RUTHVOES ~~THE~~ MINE,
= RUTHERS M. St. Columb Major, Cornwall

Fe & Mn mine.

AR, MM (1946) 27, 221 Lode in killas near granite (minerals
not metamorphic). Ochre & pyrolusite.

CMRM (1995) Manganoite (RUTHERS M., St. C.)

1" 186

SY 27 81
INNY CONSOLS, South Petherwin, Cornwall

See also LEWANNICK HILL, TOLPETHERWIN

Nr. 737 530 ?

Wh Jacka, St Agnes, Cornwall

See Wh. Prudence

1" 185, 190 ~ SW 7 ~~4~~, 7 5
Wh. JAMES, "St. Agnes," Cornwall. A 38

JC (1871) 57: Torbernite; chalcoprynite.
Not in Burt et al (1987)

cf Wh JAMES, Withiel SX 006 653

1" 185

SX 0064, 0065

Wh JAMES, Withiel, Cornwall

= WITHIEL (UNITED) (IRON) MINE

of Wh. JAMES "St Agnes" of JC (1871) 57:

WHEAL JANE (nr. Truro) ^{1" 190 78, 43 SW} ^{or Kenwyn} (I) R 13
1 1/4 ml slightly E by N of Biscoe Bridge, N of WH BADDON [3 1/2 ml from Truro!]
See also W. WH JANE (R 73) N. JANE (R 74)
AWOR, RGSC (1952). Reputed Beraunite found by
P. & Q church to be Hisingerite (impure Fe
silicate).

LJS's Book, 140. Vivianite, many fine specimens, years ago.

BM: $\text{Fe}^{2+}\text{Fe}^{3+}\text{SiO}_5(\text{OH})_4$ Cronstedtite, black xls, ^{or radiating} on chalybite and quartz;
Ivdlamite, $\text{Fe}_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$  like pale
green gypsum but adamantine, with pyrite & chalybite.

JC (1871) 60. ($\text{Pb}^{\text{Ag}}\text{Sn}$, wkg). Annabergite; "beraunite" (see
above); blende; cerussite; chalybite; galena;
melanterite; niccolite; pentlandite;
magnetite

pharmacosiderite; pyrite; vivianite.

Rudler (1905) 70-71 Vivianite, with quartz,
arsenopyrite, pyrite, & siderite, &
ludlamite.

73: Cronstedtite, with siderite, pyrite, limonite,
chalcopysite, blende.

75 Pentlandite, at one time in some quantity

AR, MM (1927) 21 272 "Beraunite" from Wh Jane, first ment'd by
Greg, Phil Mag (1860) Ser. 4, 19 14. Dana 6th Ed gives,
incorrectly, loc as "Lostwithiel", ass. w. vivianite. Analogs.
by Church JCS (1870) 23 3 shows it to be a var
of hisingerite

WHEAL JANE, Kea

Cornwall (II)

Being reworked for Sn on a large scale.

RWB Priv Comm 7/82. The tin is very finely disseminated cassiterite.
Traces childrenite said to have been found (by ^{Geol. Surv.}) Excellent large xls sphalerite found in veins where lode cuts cross-courses.

Anon., Gems, (1973), 5, [2], 9-10. Working. (PTO)

Exceptional pyrite, including "rare tetragonal xl habit"; very good sphalerite; gold; very exceptional, beautiful, acicular xls. of wolframite on quartz/chalcedony matrix and crystalline galena (often showing the rarer xl. habits).

R.W.B. Plym MMCT (1974) 5 [1] 7-8. At 775 425. Many good spec's. Pyrite xls abund, some as nice bright cakes scattered on slender milky qtz xls. Sphalerite xls f. common → 2 ins some dusted w. pyrite & sitting among qtz xls. In a x-vein some v. unusual slender xls. wolframite assoc. w. galena xls, & ruby-red sphalerite. The wolfr. is scattered ~~in~~ & intergrown on the galena.
JRK ~1974 story of nat gold found on dump

Wh. JANE, Kea, Cornwall (III)

BV Cooper 8/78 (Tel.) ~~Childrenite said to~~
Childrenite-eosphonite said to have
been found. Later said Jobbins
~~BV Cooper~~ has a/the spec. in the
Geol Mus.

25/10/78. Spec. & letter from Jobbins (17/10/78).
Spec → RSWB (a fragment off ~~3~~ M.I. 34341)
"X-rayed → Chil-eos series. Anal. desired."
Pres. to G Mus by Mr. Beer who was given it
by another collector. Pale grey brown, tabular.
xls on vein-quartz.

SA Rust. "Wheal Jane" Min. Realm (1982) 2 [1] 9-20, Also
a PS in M.R (1982) 2 [2] p27 - ludlamite rediscov'd
xls $\rightarrow$ 1 cm, groups $\rightarrow$ 2 cm. ~~Ext~~ Levels now under
Mt Wellington workings [q.v.]

Hrstory, plans, maps, etc.

(xls rare)

Annabergite (Collins); arsenopy (vg micro xls); cassit; chalcantite
(xls $\rightarrow$ 5 mm; thick crusts, large stalac. - all in old mine workings),
chalcopy, children (RWB & BVC); chlorite, constedt; fluorite
(var. colours $\rightarrow$ 1 cm, occas green $\rightarrow$ 5 cm); galena; gold; hisingerite,
"iron oxides"; kaolinite; ludlamite; magnetite (Collins);
marcasite; melanterite (similar to chalcop); niccolite (Collins);
pentlandite (Collins); pharmacosid (GEL); pyrite (vg xls $\rightarrow$ > 4 cm,
various habits); pyrrhot; qtz; siderite; sphalerite (black xls
 $\rightarrow$ 1 cm, rarely 4 cm); stannite; vivianite; wolframite (vg xls
 $\rightarrow$ 1 cm, rarely $\rightarrow$ 3.5 cm; micro xls; unusual rods $\rightarrow$ 1 cm); wurtzite
Crane lustr sharp hex black xls $\rightarrow$ 4 mm - Moorshaft lode, No 7 level)
The "cacox" is prob. a mixture.

Wh. JANE, Kea, Cornwall (IV)

V.T. Rae; BV Cooper; S. Weller Priv Comms (10/84)

Ceruleite (IR-RSWB); scorodite, torkernite
in shaft e/or incline in W extension
near SW 75 41 or 75 42

See Wh MAID gwennap
~~~~~

CMRM (1995) Anthracite, in thin joints; cacoxenite (?)  
("doubtful"); clinoclase ("ripidolite"); crandallite;  
crostvedtite (IM); quartz vars. "amethyst", "citrine";  
kennantite; <sup>not</sup> "gold report" a hoax; graphite;  
melanterite, var "pisanite"; Fe-sphalerite

1" 186

SX 17 64

EAST JANE MINE, Cardinham, Cornwall.

See CARDINHAM MINE  
= BODITHIEL M.



1" 190

SW 78 43

NORTH JANE MINE, Kenwyn, Cornwall. R 74

See also WL. JANE (R 13); W. Wh. JANE (R 73)

JC (1871) 60 (Sn, Pb, <sup>Ag</sup> 10 kg). Cassiterite ✓

1" 190

SW 77 42

WEST Wh. JANE, Kea, Cornwall

R 73

See also Wh. JANE (R 13). N. JANE (R 14)

JC (1871), 60 (Sn) cassiterite.

1<sup>st</sup> 190 SW 73 41, 73 42  
Wh. JEWELL, Gwennap, Cornwall. R 62  
See also W. Wh. JEWELL, (R 25), POLDICE, QUICK.

JC (1871), 56: blende; chalcocite; chalcoprynite;  
fluorite; melaconite; arsenoprynite;  
petroleum? pyrite; tennantite.

Rudler (1905), 64. Tennantite with quartz &  
chalcoprynite.

Dewey Cu (1923) 7. Chalcoprynite in slate,  
melaconite & chalcocite in granite  
p. 30. Included in POLDICE. Four Cu lodes.  
MAIN, E 20° N, 1-4 ft., ROW'S L, 10-18", MIDDLE, SOUTH.  
Cu ores sold "JEWELL & QUICK" 1815-1853.



W. Phillips (1823). Bornite, with Tennantite;

Truro Mus: Liroconite

1" 189 SW 534 307.  
Wh. JEWELL, Perranuthnoe, Cornwall.

See also TOLVADDEN MINE, Wh. JULIA.

Dines (1956), 180.

Cu mine in Killas; a little Pb.

There are no records (but it may have  
been called Wh. JULIA, which produced  
some Cu in the 1830's).

AWGK, Priv. Comm.  
dumps.

good pharmacosiderite on

RSWB 8/59

Loc 137.

galena with brochantite; pharmacosiderite,  
cerussite. ? chalcocite.

1" 185 ?

SW 7

5

?

A

63

EAST JEWELL MINE, Penzance; Cornwall.

JC (1871), 58: (Sn, Cu, wkg.). Cassiterite; chalcopyrite.

Not in Dines (1956) or Burt et al (1987)



1" 190

SW 726 422

WEST WHEAL JEWELL St. Day, Cornwall -

R 25

~~See also Wh. JEWEL (R 62)~~

Henwood: Between E. Wh. Damsel and Poldice Mines.

BM: Tennantite.

Dewey (1923) 32. Cu ores produced: 1831-52.

Wh Joy, St Agnes, Corn

See Blue Hills M.

1" 189 SW 53 30 ?  
Wh. JULIA, Perranuthnoe, Cornwall.

See also Wh. JEWELL 534306

Dines (1956) 180. Produced some Cu in the 1830's

? = Wh. ~~XXXXXX~~ JEWELL.



Julia M., Gwinear, Corn.

See Wh. Strawberry.

1" 189

SW 57 31

Wh. JUNKET, Godolphin Hill, Cornwall.

Local name for W. GODOLPHIN MINE (q.v.)

1" 190

SW 75 16

KARAK-CLEWS, St. Keverne, Cornwall. L 28

See also LIZARD etc.

JC (1871), 54: Diallage.

Teall, MM 8/116 (1888) "Malacolite" near headland  
of Karakclews [Hey = diopside]

? = CARRICK LÛZ



1" 189 SW 58 35 H 46  
WHEAL KAYLE, Guinear, Cornwall  
~~See also Wh. CARPENTER.~~  
Henwood.

JC (1871), 50: Wh. KAYLE, Phillack: Chlorite;  
chalcopyrite; galena; melaconite.

AKHJ (1963) 5 11. Immed. W of Wh. CARPENTER  
e on same lodes. Mostly black copper  
ore [melaconite] mixed with chlorite.

1" 190

SW 7 4 (parish)

KEA, Cornwall.

See Wh JANE, etc.

RR, MM 21 221. Refs to GEL (1858). Topaz- ~~SW~~  
Kea parish — needs confirmation.

Wh Keen, St Ives, Corn  
See Rosewall Hill M<sub>s</sub>



1" 186

SX 36 71

K 107

KELLY BRAY MINE, Callington, Cornwall.

See also HOLMBUSH MINE (K 22); CALLINGTON UTD ch.

JC (1871), 64. K.B. (Pb<sup>Ag</sup>, wkg): Chalcopyrite; galena.

— " — HOLMBUSH & K.B. (Cu, wkg): Chalcopyrite.

BMS Newsl. (1996) 45, 2. "Unusual" siderite  
from "KELLY BRAE" Cornwall.

1" 189

SW 5 3

Wh. KENDALL, St. Hilary, Cornwall

CMRM (1995)

Conichalcite

1<sup>st</sup> 189

2 1/2" SW 33 355325

St J 11

KENIDJACK CLIFF, St Just, Cornwall

visited Sept 1957, GR & RSWB. ~~Bo~~ Loc. <sup>Dump</sup> 115 <sup>At top of</sup>  
cliff above North Zawn. Botryoidal rhodochrosite  
assoc. with chalybite. (BOSWEDDEN M. area)

CMRM (1995) Anthophyllite; corundum;  
cummingtonite; diaspore (KENIDJACK CASTLE);  
spinel; cordierite;



1" 190 SW 73-74 16  
COVE SANDS  
KENNACK ~~SANDS~~ Eastern Cliffs, Lizard, St Keverne pt (I)  
~~See also KENNACK cave (A)~~

Bevins RF; Symes, RF, Horak JM & Holyer V MM (1987) 51 172-3

"Kennack Sands" E cliff

Hetaerolite ( $\text{ZnMn}_2\text{O}_4$ ) thin black aggregates up  
to 9 mm long in <sup>white?</sup> lizardite (also calcite) veins  
in serpentine at SW 7425 1665 (E cliff) Veins thin (up  
to 4 cm) planar, usually NE-SW, in serpentinised  
peridotite. Some small black opaque octa.xs.  
Anal., XRD. Haematite also found.  
[See RSWB 86-93]

MGM (Spec  $\rightarrow$  RSWB for ident; 8/95). Talc, soft white  
clusters of plates [FTIR 8/95 = Talc] ~~extra~~

~~sharp~~ on calcite crystals on  
calcite some deep pink in colour  
(FTIR [pink] = CALCITE; test for Mn  $\rightarrow$  traces only)  
with ~~pink~~ <sup>imbedded</sup> blades of a dark red-brown  
micaceous material (FTIR (8/95) ~~??~~ <sup>??</sup>  
layer lattice silicate pattern, but ~~unident~~).  
Lizardite

CMRM (1995) chromite; sepiolite; ~~thuy~~ (K. sands)

J. Hooper, Rus. Soc. N. (1995) 27 31-2

Mothramite, coll 1992 from E. CLIFF at  
KENNACK SANDS

1" 190

SW 73 16

(II)

KENNACK COVE, <sup>2 SANDS</sup> Ruam Minor, Cornwall. ~~WMA~~  
~~SAND KENNACK SANDS~~

JC(1871), 53: Schiller spar. [Hey = bastite]

$\frac{1}{2}$  21.2)  $\text{Mg(Fe)SiO}_3 \cdot \frac{4}{5}\text{H}_2\text{O}$

An altered enstatite w approx  
comp of serpentine.

CMRM(1995) Ankerite (E. CLIFF); dolomite (E. CLIFF)  
lizardite (E. CLIFF)

RSN(1997) 30. Best at low tide. Hetaerolite in the  
"lizardite-calcite sandwiches" (with haem. bands).  
Vesuvianite; haem. xls., chrysotile asbestos;  
"mountain leather" [? palygorskite]; poss. tremolite?



RSN(1997) 31, 16. ~~WILLMETH~~ "THE CAVERRACKS"

a serp. rocky outcrop expos. @ low tide, dividing sandy beach  $\rightarrow$  EOW. good amethysts in part.

E. CLIFF: Chrysotile "mountain leather";  
Calcite,  $\rightarrow$  5 mm clear Hs. Dolom massive, deep yellowish; siderite; Purple Vesuvianite  
and clear grossular in "rodingite" dykes.  
Hetaerolite, with Ca & haem.

RSN(1998) 33 14. Nothing new. Best = 6x4cm pebble with vesuvianite.

GR (1999) BMS Newsl 52, 14-15. AWGK's hydro-magnesite from "KENNACK SANDS"  $\equiv$  material from Devil's Hole, Alameda Co., California.

1" 190

SW 77 33

KERGILLIACK, Penan-ar-worthal, Cornwall. R 67

JC (1871), 57: graphite, in an elvan.

CMRM (1995) graphite (KERGILLIACK Q, Penryn)

1" 185, 190

SW 93/94 55?

KERNICK IRON LODE, St. Austell, Cornwall

KERNICK PIT 94 55

CMRM (1995) goethite.



1" 189

116

SW 67 47

KERRIACK COVE, Nancekuke, Illogan CornwallSee also Wh. SALLY, = Wh. LUSHINGTONR. Soc. N. & Hor.  
(1995) 26, 44Mahlmoodite from Kerriack Cove,  
near Portreath

Kerriack Cove nestles rather inaccessibly beneath the cliffs at Nancekuke between Portreath and Porthtowan, Cornwall (NGR SW 678470). An exciting path edges down the cliff, but it fades away before reaching the bottom and negotiation of the final few (vertical) yards requires a certain agility!

At the northern end of the cove, an E-W lode bearing quartz, sphalerite and chalcopryite was worked, mainly for zinc, as part of the Wheal Lushington sett. Workings within the Lushington group date from the early nineteenth century, but some development was carried out as recently as the 1920s. When Jeremy Hooper, Les Coggon and I visited the cove during 1992, this lode could still be seen in the cliff, but contained little of interest. However, towards the middle of the

cove, we found another E-W vein cutting the shelf of rock at the base of the cliff. This vein, up to 4 cm wide, carried mainly sphalerite, pyrite, green chlorite and quartz, with minor chalcopryite. The veinstone was vuggy and yielded a number of quite attractive thumbnails of small quartz crystals in chlorite.

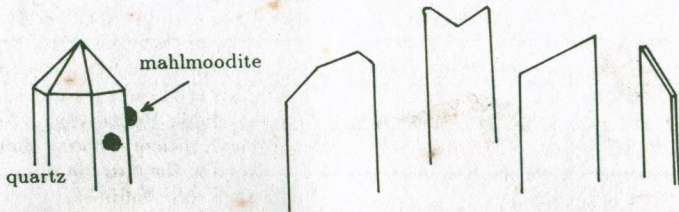
Examination of these finds under the microscope revealed very tiny, cream-brown spherules (up to 0.15 mm) scattered sparingly over the matrix. Energy dispersive x-ray analysis showed these spherules to be an iron zirconium phosphate which at the time matched no known mineral. The samples were put to one side for further investigation.

The specimens languished in their box until the middle of 1993 when an article appeared in *American Mineralogist* describing a new iron zirconium phosphate,  $\text{FeZr}(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$ , named mahlmoodite (Milton *et al.* 1993). The published description was a good match to our spherules from Kerriack Cove and samples were dispatched

to the Natural History Museum who confirmed that they were indeed mahlmoodite.

The only location for mahlmoodite besides Kerriack Cove is the type locality at the Union Carbide Vanadium mine, Wilson Springs, Garland County, Arkansas, USA. Mahlmoodite is very scarce at Wilson Springs and occurs as tiny cream spherules in vugs in vanadium ore.

The natural colour of the spherules appears to be creamy-white, but many at Kerriack cove are brown due to iron staining. Most of the spherules are rather compact, but a couple have a looser structure enabling the morphology of individual crystals to be seen. The crystals are lath-like, sometimes occurring in short stacks, with various oblique or pointed terminations as shown in the sketch.



Sketches of mahlmoodite spherules and crystals from Kerriack Cove

Mahlmoodite is a late formed mineral, and on a few specimens, is associated with minute tabular crystals of anatase.

A description of mahlmoodite from Kerriack Cove will appear in the March edition of *Mineralogical Magazine* (vol 59, no.1, pp 166-168).

#### References

Milton, C., McGee, J.J. & Evans, H.T. Jr. (1993)  
*American Mineralogist*, 78, pp437-40.

Nick Elton

17-20  
Lapis 5/2004,  
Deflower in  
5 ways: Mahlmoodite aus Cornw. (GB)  
Also brown hex monazite (GB) ~~monazite~~

JRK spec  
(5/04) ex keeps  
also has  
synchysite - ( )

1" 190  
KESSEL DOWNS Q'y, SW 73 30  
Halvosso, Cornwall

---

See HALVOSSO Q'y.



1" 190 SW 72 14  
KILDOWN, Ruan Minor, Cornwall. L 11

JC(1871), 53: Schiller spar. [Hey := bastite]

CMRM (1995) Analcite; pargasite (amphibole),  
at Kildown Point;

Cinnabar from Kildown Cove,  
Cadgwith, Cornwall

The mercury sulphide, cinnabar, has been found occurring in rodingite dykes within the Lizard serpentine.

The cinnabar occurs as bright carmine-red spots around 0.5mm associated with vesuvianite and grossular garnet. The first location was at Kildown cove, just north of Cadgwith. Further specimens of cinnabar, again occurring within rodingite formations, have also been collected from the

southern side of Poltesco, between Enys head and Kennack Sands. Identification of the cinnabar was obtained by energy dispersive X-ray analysis. This is the first recorded occurrence of cinnabar in Cornwall.

RSN(1996) 22,37  
Jeremy Hooper and Vincent Holyer

RSN(1997) 30, 17. At SW 727 146: Plenty of  
"diallage" (reddish-bronze hexag. xls); haem.  
serpentine, pink adularia [orthoclase],  
one find covellite.

1" 186

Sx 20 67

KILHAM MINE, St. Neot, Cornwall

Dines (1956) II, 614 1½ ml ESE of St Neot

= PENSILVÁ TIN M., = Wh. CORTON. In Killas  
Lode on W side of Fowey valley may = of St NEOT M.  
underlay sh. 240 y S of Kilham Fm; SHALLOW ADIT  
40 ft above river 85 y E by S of the sh., met 42 fm  
from entrance. Small steep; winze to DEEP ADIT  
close to river 80 yds S by W of SHALL AD.

Hanging wall of hard grey qtz w. chlorite &  
siderite, w. Cu As Fe Pb & Zn sulphides [i.e.  
chalcopy, arsenopy, pyr, gal, sphal]. Footwall  
brecc. Killas w. much pyrite. Cassit in hard part  
last cloned 1909



At BMS Conf 10/02 M. Stodworthy wants info on....

R. De Nul (Schoten, Belgium) Priv Comm 3/11/02. + 2 samples.

Tourmaline, tiny needles; small cubes, pyrite in UND OFF-WHITE to BROWN [Fe-stained] ROSETTES; quartz, galena, sphalerite, "white aggs. near galenite" [? cerussite]

RSWB, FTIR 29/11/02 off-white crumbly tiny rosettes (tiny sample) - MONAZITE + pyrite + quartz + ?

R De Nul also reports "magnetite & anatase (?)

M Stodworthy & M. Gale BMSN(2016) 97, 8-10

leanbaldyite, anatase, anglesite, serpentine (1; vis ID)  
sulphur, Pitanite. (+ above)

1" 190

SW 8 4

KILLIFRETH MINE, Kenwyn, Cornwall

CMRM (1995) stannite; "nat. tin (???)"

1" 190

SW 71 51

A 26

WHEAL KIND, St. Agnes, Cornwall,

~~See also Wh TREVAUNANCE; POLBERRO MINES.~~= Wh KINEHenwood: Vivianite.Collins (1871), p. 57. Tin mine. Apatite; chalybite; covellite;  
pyrrhotite; topaz; vivianite.AR, MM 21 221 = Wh. KINE. Adjoins TREVAUNANCE  
e latterly part of POLBERRO.Topaz with vivianite e siderite in tin lode  
according to W Phillips (1823) p 86.Topaz with apatite e calcite according  
to T Hogg (1825) "Manual of Mineralogy" p 156.



AKHJ 2 (1962) 26. Connects with Wh. TREVAUNANCE adit.

Cg 1820 "source of finest xls of vivianite ever found  
some 2" long &  $\frac{3}{4}$ " across, of beaut. pale blue colour"  
While supply lasted weekly sales held at mine, &  
bought up by private collectors & dealers.  
Part of POLBERRO MINE.

CMRM (1995) Covellite ("Wh. KINE"); pyrrhotite  
("Wh KINE");

Wh. Kine, St. Agnes, Corn.

See Wh. Kind.

Wh. King, St. Ives, Cornw.

See St. Aubyn Tregenna M.



1" 185

SX 05 89

KING ARTHUR'S CASTLE, Tintagel, Cornwall

See also K.A.'s. MINE

Row 8 (8/65) 4 213 Cliffs near the castle  
seamed with quartz veins, & some  
fine xls can be seen

1" 185

SX 05 89

KING ARTHUR MINE, Tintagel, Cornwall. E 22

See also K.A.'s CASTLE

JC (1871), 63: (Pb<sup>Ag</sup>)(wkg.) galena.

1" 189  
KING EDWARD MINE, SW 66 39  
Camborne, Cornwall

C 16

Rswa  $\frac{1}{2}$ " 8k



Kingsdown M., St. Austell, Corn.

See Gt. Hewas Utd. M.

<sup>186</sup>  
KIT HILL, Stoke Climsland, Cornwall. <sup>SX 37 71</sup> K(I)71  
also K.H. GT. CONSOLS (K 124); ~~N.H.~~ EAST K.H. (K 125); SOUTH KIT HILL (K 126)  
MM 17, 15 Bertrandite KIT HILL UNITED (K 135)  
MM 29, 817 Varlamoffite "Kit Hill Mine"

GR 6/55 The top of this granite hill, topped by a characteristic chimney-like monument, is scarred by old shafts & workings of the KIT HILL GT. CONSOLS MINE, (K 124) Elvan dykes; good cassiterite xls; wolframite; tourmaline.

JC (1891), 64: KIT HILL MINE (Sn, Cu, wkg) Cassiterite; chalcophynte.

AWGK MM 31 502 Carpholite - KIT HILL OPENCAST (M. Wirth, SX 374 713, BMSN '03, 26)

F. Wright, Priv Comm (1969) Nice, green pharmacosiderite on granite  
from 2nd dump on LHS, going up towards stack.  
(1) - Big dump (2) Little road (3) THE dump.  
In and around the quarry, good wolframite etc.

GMus, donation (1967) W.G. Griffin. "Nontronite" [They:  
var. of chloropal]

C Rogers (1968): Cassiterite, wolfram; tourmaline.

N. Hubbard, Priv. Comm., (4/82). Ferrimolybdenite  
crystals with molybdenite. Apatite.



KIT HILL, Cornwall (II)

RW Barstow Priv Comm. Beryl  
var lamprolite bertrandite cassiterite  
wolframite "etc". esp. from Consols  
at 375 714

1" 186

SX 3871

K 125

EAST KIT HILL MINE, Stoke Climsland, Cornwall

See also KIT HILL (K 71) et. al.

JC (1841), 64: (Sn, Cu, wkg.) Cassiterite, chalcopyrite.

MM 16 50 Bertrandite

1" 186

~ SX 376 714 K 124

KIT HILL Gt. CONSOLS MINE, Stoke Climsland,

See also KIT HILL (K 71) et. al.

Cornwall.

GR 6/55      good cassiterite xls., wolframite;  
tourmaline.

MM 17 16      Bertrandite

R. Turner 6/80      Beryl, white xls, has been  
found.

RW Barstow Priv Comm.      Beryl, vanadomoffite  
bertrandite      cassiterite, wolframite.  
~ 375 714



N. Hubbard (1983) BMS N<sup>o</sup> 7

1" 186

SX 3771 K 135

KIT HILL UNITED MINES, Calstock, Cornwall.

See also KIT HILL (K 71) et al.

TMH(1868), 35 (Cu, Sn) Adularia; cassiterite;  
schorel; wavellite; wolfram.

1" 186

SX 37 70 K 126

SOUTH KIT HILL MINE, Stoke Climsland, Cornwall.

See also KIT HILL (K 71), et al.

JC (1871), 64: (Sn, wkg.) Cassiterite.



1" 189

SW 50 36, 510 362

Wh. KITTY, Lelant, Cornwall.

H 52

See also Wh. SISTERS.

JC (1871) 48 (Sn, wkg) Cassiterite; mica.

WHEAL KITTY, St. Agnes, Cornwall (I) 1" 190 72, 510 cent on SW  
See also W.W. KITTY (A27); NEW KITTY (A29) PENHALLS M. WA COIT  
BLUE HILLS M. 7251; 7250  
7351 A 5

AWGX, RGSC (1952). AR's phenakite? Large dumps near  
Holgate Shaft engine house: Cassiterite, on which  
small yellowish xls of topaz. Phenakite,  
looking like qtz, & small whitish prismatic xls, but  
with characteristic vertical striations, in cavities  
in qtz-chlorite veinstone.

BM: Cassiterite var wood tin in qtz; stannite;

BM: Chalcopyrite from NEW KITTY MINE. (A )

W.W. KITTY - 1" 190 71, 510 (A27)

PTO

JC (1871), 57. Wh. KITTY: <sup>(wkg)</sup> (Sn): Blende; cassiterite;  
chalcopyrite; chlorite.

Rudler (1905) 62. Arsenopyrite, bold xls with  
brilliant reddish tarnish, with chalcopyrite  
coated with malachite & with siderite,  
glob. aggs, depos. on certain faces of the aspy.

AR MM 21 221 Topaz in limonite & quartz

MM 16 31 Wood-tin

Truro Mus: vg pyrite

C. Rogers (1968): Phenacite; wolfram; topaz; cassiterite; "etc."



Wh. KITTY, St. Agnes, Cornwall (II)

AKHJ (1962) 2 28-30 A vast complex of mines

on Goonlaze Downs; ~~including~~ = GOONLAZE  
MINES. From map on p29, etc, prob. includes:-

PENALS (PENHALLS) group, VUGATHUG, TREZUNNA,  
BALDEW (BALDUE), Gt. GOONLAZE, Wh. DELLICK (DELICK)  
Gt St. GEORGE, LOTS GOONLAZE, Wh GEEVER, Wh.  
COITES, Wh. VOR, CODNACOOSE, Gt & Little Wh. BOWEN,  
<sup>see wh cony</sup> Wh DOWER, LITTE Wh. DOWER, Wh VOTTAL (VOTTLE, BOTTLE),  
Wh. GROSE, Wh. GEER, S. GOONLAZE, possibly Gt. GOONBELL  
Wh. PINK. Wh DRAGON

~~W. VOTTLE~~ Wh. VOTTLE adit from Trevanance cove.

To E lodes merge with BLUE HILLS M.  
& mines interlocked to form one entity.

In 1815 Consolidated Tin Mines = BLUE HILLS  
M. included PINK, DELICK, GOONLAZE & NANPATNA  
also Wh JOY & Wh. GLYNN (=MADLY)

CMRM (1995). Blue Tourmaline

1" 190

SW 73 5,

EAST Wh. KITTY, St. Agnes, Cornwall

AKHJ (1962) 2 32 S of HIGHBURROW SM., S. of

Wh CLARENCE (BUDNICK). Wh. EDMUND on  
its east. Exact position unknown. E of  
Trevellas valley; claimed to be ~~on~~ on  
Wh. KITTY lodes.



1" 190

SW 718 503

NEW KITTY MINE, St Agnes, Cornwall. A. 29

See also Wh. KITTY (A5) etc.

BM: chalcopryite

1" 190 1" (190) 72 50 71g 50g SW  
WEST Wh. KITTY, St Agnes, Cornwall A 27

See also Wh. KITTY, (A5) etc.

JC (1871) (Sn, wkg). Formerly Wh. ROCK. Bismite  
cassiterite; Bismuthinite;  
stannite.

TMH (1868) 32 Wh. ROCK. (Sn) Stannite.

Rutley, 15th ed. p180. Stannite.

Rudler (1905) 20. Stannite - Wh. ROCK.

W. Phillips (1823) Stannite, with blende & pyrite - Wh. ROCK

AKHJ (1962) 2 28 = WH. ROCK + other old

W. Wh. Kitty.

mines. Stannite first discovered at Wh  
Rock in 1785 by Raspe. in a 3-5 in. vein  
60' from surface. Anal. by Klaproth 1787

C.M.R.M. (1995) "Wood" and "ruby" cassiterite, stannite  
(Wh. Rock, St. Agnes); varlamoffite (Wh Rock, St. Agnes)



1" 190

SW 7 4

KILLIWERRIS, Fowennap, Cornwall. R 63

NC (1871), 56: Chalcopryite; galena.

Not in Burt et al, (1987) or Dines (1956)

Knightor M., St. Austell, Corn.

See Ruby e Knightor M.

1<sup>st</sup> 1889

KNILL'S QUARRY  
MONUMENT, SW 51 38  
St Ives, Cornwall

C. Rogers (1968). Quarry at SW 516 387, N  
of K's Mon't:- Pegmatite, with andalusite;  
topaz.

CMRM (1995) Corundum (KNILL QUARRY);



1" 189

SW 68 13

KYNANCE COVE, Landewednack Cornwall. L 6  
NOT = the "Kynance Cove, nr GODREVY POINT (gr).

JC (1871) 53:

Agate; asbestos; calcite; diallage;  
hornblende; orthoclase;  
saussurite? serpentine; talc;  
steatite.

Ridder (1905) 102. "Pseudophite" (looking like flint), as  
veins in the serpentine  
[They = compact chlorite]

GS 1" map "Bastite"; fremolite serpentine  
(on islands)

Kynance Cove

CMRM (1995) Bytownite (THE RILL) ["near" bytownite] (?);  
mackinawite (THE RILL); magnoxite (THE RILL);  
platinum; quartz, var. "tiger's eye";  
saponite; vallerite (THE RILL);

1<sup>st</sup> 190

SW 89 50 (rillage)  
SA 39

LADOCK, Cornwall.  
8950

JC (1871), 60.

Cassiterite; gold; haematite;  
limonite; pyrite.

TMH (1868), 52. LADOCK STREAM wks, Truro: As above ~~minus~~ pyrite.

C Rogers (1968) gold. [LADOCK PLACERS - CMRM (1995)]



1<sup>st</sup> 185

SW 914-5 526

LADOCK IRON MINE, Ladock, Cornwall

R510B 19/7/95 Rubbish-filled pit on E side of  
farm track, near road, i.e. dump opposite (overgrown  
by impenetrable jungle). Boulders in walls,  
fields, tracks etc show quartz, some  
xls, some jaspers (haematitic); much  
goethite, massive to compact radiating  
some botry. surfaces seen

1" 186

SX 368 702.

LADY ASHBURTON MINE, Callington, Cornwall.

BC Riv Comm. 7/6/74. Near Callington.

Childrenite, tiny crystals, sparse, on  
iron-stained killas adjacent to  
quartz vein - spec. → RSWB. [74-139]

① Wh. Laity, Lelant, Corn

See Wh Providence

② Laity Sn lode, Lelant, Corn

See Wh. Merth.



Wh Laity, Rednuth, Cornw.

See Wh Gilbert

Wh. <sup>1" 189</sup> LAMBO, Gwinear, Cornwall.

Sw 59 35  
60 34

See also Wh. TREMAYNE, etc.

1" 190

SW 761 511

LAMBRIGGAN MINE, Perranzabuloe, Cornwall

AKHJ (1962) 2 48-49. Reopened 1927-1929 as

LAMBRIGGAN M. Earlier known as SOUTH  
ST. GEORGE M.

10 fm W level v. rich in blende - nearly 18' wide

20 level W also rich in blende, with lead ore

20 level E - blende, lead ore, copper ore

30 level W - blende also

Nearby are workings on other blende  
& galena lodes eg on E-W lode at



GOLLA FARM [758 514] and 5 shafts S of  
GOLLAWATER, by lane from Worthy Vale Farm  
to the ponds [ie near 756 505]

CMRM(1995) Nat. sulphur

1" 185  
LAMBS HOUSE QUARRY, Tintagel, Cornwall.  
<sup>5x</sup> <sup>0</sup> <sup>8</sup>

---

See also TINTAGEL, etc.

Truro Mus: v.g. quartz. ✓

1" 189 SW 45 23, 45 24  
LAMORNA COVE, St. Buryan, Cornwall St. 38

JC (1871) 47. Axinite; epidote; topaz; "pinite".

AR MM 21 221 Topaz, "lamorna" 1 specimen, with  
tourmaline, quartz, gibbsite, ? pyrite.



1" 189 or 190

SW 63, 64, 73 or 74?

LANARTH, Redruth, Cornwall.

CMRM (1995)    Lepidolite

6<sup>4</sup>  
6<sup>3</sup> 7<sup>4</sup>  
7<sup>3</sup>

1" 190

SW 7621

LANARTH, St. Keverne, Cornwall.

L 29

Jc (1871), 54: Manaccanite [Key - a var of ilmenite]

1<sup>st</sup> 189

SW 34 25

LANDS END, Sennen, Cornwall.

STJ 33

JC(1871) 46.

Schorl; flints

CHRM(1995) Microcline (L<sup>s</sup> END BIOTITE-GRANITE);  
Schorl (LOGAN ROCK); titanite (L<sup>s</sup> END  
GREENSTONE);



11185

SX 082 555

LANESCOT, St Blazey, Cornwall.

See ~~also~~ <sup>also</sup> FOWEY CONSOLS MINE, etc.

TMH (1868) 34. Bismuthinite, blende, stannite,  
pyrite, silver

Dewey (1923) 42 Included in FOWEY CNSLS [qv].  
(Taken over in 1836).

AWGX, ROSC (1964) Botry blende.

CMRM (1995) Anaabergete

Wh Lang, Morvah, Cornwall.

See Morvah Hill M

1" 1960

SX 38 69

Wh. LANGFORD, Calstock Cornwall

= BARING & LANGFORD = NEW LANGFORD = EAST CORNWALL SILVERM  
= EAST CORNW. SE. VINCENT = VINCENT GE. CONSOLS. = WH (SE) VINCENT

See Wh. SE. VINCENT

CMRAM (195) Acanthite



1" 186

SX 298 865

LANGORE, St Stephens by Launceston, Cornwall

AKHJ (1969) XV, 61-62 Workings in a  
around Langore hamlet include adit  
with manganese and manganiferous  
iron ores.

1" 185 SX 051 871  
LANTERDAN QUARRY, Tintagel, Cornwall E 7  
Part of WEST QUARRY.

~~Near Tree~~

AWGK - Albite + monazite + rutile. Near Trecknow; up  
the cliff.

Kudler (1905) 100. Monazite with rutile on  
albite. Anatase occurs "nearby"

AWGK, Rose (1964) Monazite, distinct, small xls,  
generally on albite, in joints or cavities  
in rather alpine veins in phyllite, accomp'd  
by rutile & anatase

V. Rae (1989) priv. comm. Is at 051 871. Rutile  
in V-shaped hollow just to seaward

of prominent rock pillar. The monazite found inland of the pillar. One superb v. rich monazite found loose near the rutile area.

Russell Soc Newsletter 20 (1990):

3rd June 1989 Hole Beach and Lanterdon Quarry, Tintagel, Cornwall. Colin Sparrow led a depleted party of 12 to this location where reasonable specimens of rutile (both free-standing crystals and the matted variety called 'sagenite') and albite were collected. Several small specimens of monazite were found with → Vic being fortunate in finding a superb specimen showing a good coverage of crystals up to 3mm in size. The Quarry started operations at least 200 years ago and is sited in an area of intense geological deformation. Resultant of overthrusting, a structural outlier of

upper Lower Carboniferous strata is present within the Upper Devonian country rock. Unusual for Cornwall, it is possible to collect fossils from this location with the spirifers being locally known as 'Delabole Butterflies'. Mineralisation of the area is by tectonic quartz veins and late stage/low temperature 'Alpine' style quartz/feldspar veining. The 'Alpine' style veins have produced albite, anatase, chlorite, monazite, moscovite, pyrolusite, quartz (rock crystal) and rutile. Brookite has been reported but not confirmed.

CMEM (1995) Quartz, rock xl & rutilated.



1" 186

SX 38

LAUNCESTON, Cornwall.

Rutley, 15th Ed., p. 162. Pyrolusite, "nr. Launceston"

[ Prob = Atway mine 3086  
or Trustobth mine 3085 or nearby ]

CMRM (1995) Braunite - "Manganese  
mines near Launceston" [v. supra];

186 5x 382 625  
Wh. LEE, Calstock, Cornwall

See Wh. LEIGH

1<sup>st</sup> 1899

SW 59 29 ?

LEEDS MINE, Breage, Cornwall. M 44

See also LEEDS EST AUBYN, Germoe, (M 57)

JC (1871), 54 : (Sn, wbg.) Cassiterite ✓



1" 189

SW 582 292

LEEDS & ST. AUBYN MINE, Germoe, Cornwall. M 57

See also LEEDS MINE, Breage (M 44); ST AUBYN MINE, Germoe

JC (1871) 55 (Sn, wkg.) Cassiterite ✓

Wh LEIGH Pillaton 186 SX 382 625  
Wh. LEE ~~Calstock~~ Cornwall. (I) K 130  
See also E. Wh. LEIGH

JC (1841), 65: Stibnite; cervantite; galena;  
"Wh LEE" jamesonite.  
"Calstock"

["cervantite" prob. = stibiconite]

AKHJ XIV (1967) p 56 Major Sb producer.  
Shaft dump & adit portal 180 yd S of Leigh  
Farm House. "Wh. LEIGH". 2 dumps by  
shaft ~ 120 yds to W. All dumps have  
yielded good spec's stibnite [Sir AR, MS  
in BM on "An Account of the Antimony mines  
of Gr Britain"]. 5 shafts also in valley

Wh Leigh

$\frac{1}{2}$  ml to E, N of Villaton Fm, on strike of  
Wh Leigh lode. Sir AR found fragments of  
stibnite on most E dump, adjoining pond  
750 yds NW of Halt House, in 1950. In catal  
of John Woodward's min. coll, pub. in 1729, ~~the~~ 2  
spec's of stibnite & stibiconite "found  
plentifully 24 ft deep, in a mine at Howton"  
[immed. W of Leigh Fm.]

BVC, spec  $\rightarrow$  RSWB 10/79 (79- ) Stibnite blades  
and fine sprays of needles, some altered  
to ?- stibiconite (creamy off-white) on & in  
matrix of quartz w. siderite rhombs  
CMRM (1995) Dickite; kermesite ("by colour"); nadorite; valentinite



Wh. LEIGH, Pillaton, Cornwall (II)

RSWB 5/00 Small dump in field at 381 625;  
of brown killas angular rubble with  
scattered vein-quartz lumps, many with  
stibnite incl blades  $\rightarrow$  2cm, with well-  
xtd clarkite (IR), brown rhombs oxidising  
siderite; much massive cream-coloured  
stibiconite (IR) into which the stibnite is  
altering. A little sphalerite; traces  
? malachite. One v.ugh with stibnite  
altering to stibiconite has a few tiny  
class plates baryte (IR) on the stibnite  
(under the stibiconite). Muscovite.

1" 186

SX 38 627

EAST Wh. LEIGH, Pillaton, Cornwall

See also Wh. LEIGH.

cf HATT TRIAL (?=)

CMRM(1995)    Senarmontite

1"190

Perranzabuloe SW 757 542

~~St Agnes~~ Cornwall A 22

WHEAL LEISURE  
~~See also wh. PERRAN; PERRAN Gt. ST. GEORGE MINE, etc.~~  
Henwood.

Rudler (1905), 46. Ore at one time raised at Wh. Leisure, nr. Perranzabuloe, consisting of grains of sand, shells, etc, cemented by copper-ore chiefly green carbonate, & known to have been formed in the course of 15 yrs by action of rainwater percolating through waste-heaps. (cf Carbis Bay stuff)

Dewey (1923) Cu ores produced.

Gt. WH. LEISURE 1832-36; 1852-1853.

Wh. LEISURE 1829-32; 1840.

PERRAN & Gt. WH. LEISURE 1854-1855



Dewey 1923, Discussed under <sup>"</sup>(PERRAN GT)<sup>"</sup> ST. GEORGE &  
DROSKYN". 3 lodes: SOUTH, CALLOWAYS, KERNICK'S,  
[discussed ~~under~~<sup>on</sup> PERRAN GT. ST GEORGE card]

AKHJ (1962) 2 36, 39 Cu mine. ~~AKHJ~~ Has been  
worked with PERRAN GT. ST. GEORGE.  
Native copper ✓

1" 190

SW 767 542

EAST(wh) LEISURE, Perranzabuloe, Cornwall

Dines (1956), I, 450-451.  $\frac{1}{2}$  ml E of Perranporth.  
Jewel's Eng Sh. 300 yd W of Pencrennow farm  
[ie. 767 541]. Taylor's sh. is 90 yd E by N of  
Jewel's Eng Sh., Peter's sh. 135 yd E by N of Taylor's;  
Pencrenna (=Pencrennow) sh., an adit shaft 130 yd  
E by N of Peter's. To W, 135 & 248 yd W by S of  
Jewel's and Morecombs & New Sh's. Adit lev.  
26 fm E of Jewel's Engine Sh. Copper ore  
recorded in 1833, 1851 & 1852.

Gt. Wh. Leisure, Perranporth, Perranzabuloe,  
Cornw.

See Wh. Leisure.



1" 185

SW 761 545

NORTH Wh. LEISURE, Perranzabuloe, Cornwall.

See also Wh. RAMOTH

Dines (1956), 448. In dunes  $\frac{1}{4}$  mi N of  
Perranporth. Cassiterite ("black tin")

AKHJ (1963) 7 At 761 545.

1" 190

SW 761 529

SOUTH Wh. LEISURE, Perranzabuloe, Cornw.

See also PERRAN Wh. JANE

AKHJ (1962) 2 46-47.

By 1836 a x-cut ~~is~~ a lode up to 2ft wide of blende, mundic [pyrite] & occasional stones of copper ore.

Further W in this level, a 9in leader of silver-lead found, but only for 6 feet!

In 1838 renamed TRURO CONSOLS but in 1860's reverted to old name. By then PERRAN Wh JANE opened on the S. part.

1" 189

SW 5<sub>4</sub> 37

LELANT, Cornwall

Uny Lelant = SW 54 37

BMSN(01) 52, 6, P. Hay coll. atacamite from  
"Lelant foreshore, Hayle estuary". Dark green  
crystalline aggregates.



1" 189  
LELANT CONSOLS

SW 50 35  
St Ives, Cornwall 42

See also LELANT  
Henwood.

? = W. Wh. TOWAN?

1" 186

SX 2484, 2485

LETTICOTT MINE, Lancoast, Cornwall K 96

JC (1871), 63: Manganite; psilomelane.

Prob = LIDCOTT M., 2484, 2485

1" 189  
LEVANT MINE, Pendeen, St. Just, Cornwall (I) STJ 14  
2 1/2" SW 33 372345 367 345

See also GEEVOR MINE SJ 10, E. LEVANT MINE, HIGHER LEVANT MINE,  
N. LEVANT MINE

BM: Chalcocite, dull black giant cube, after pyrite; giant  
quartz; vg goethite on amethyst; lots of v.g.  
calcite, including sheaf varieties; Tennantite.

Rutley, 15th. Ed, p. 210, Tetrahedrite.

Rudler (1905) 25. Francolite

|      |                    |        |          |
|------|--------------------|--------|----------|
| Also | HIGHER LEVANT MINE | 371341 | (STJ 55) |
|      | EAST LEVANT MINE   | 376340 | (STJ 53) |
|      | NORTH LEVANT MINE  |        | (STJ 54) |

Henwood: Chalcocite ("vitreous Cu ore"); native bismuth; "bismuth  
carbonate" - bismutite?; aragonite.



J.C. (1871) 47 (Sn, Cu, wkg) Amethyst; aragonite; bismuth;  
bismite; chalcocite; dolomite; fahlerz?;  
hornblende; cerargyrite; silver;  
pharmacosiderite.

AWGK, MM 32 921 (1961) In addition to normal  
qtz-chlorite veinstone, lodes sometimes enclose  
massive red garnet assoc. with chalcoprynite  
& pyrite (specimens formerly found on  
dumps adjoining Levant Zawn & Cockle Zawn)  
Dissem white scheelite & pink-fluorescent  
calcite occur in this garnet. Danaite  
occurs with & resembles the garnet, assoc. with  
a little chlorite, arsenopyrite, blende, traces fluor.

Dines (1956). 79.

Cont'd II

## LEVANT MINE, Pendeen, St. Just, Cornwall (II)

DBB (1963) 12-14. Sketch p. 13. Cu & Sn mine, major.  
First worked in the 1790's, if not before.  
Steady ~~the~~ Cu producer from ca 1820, Sn  
after 1852. Considerable Cu even in 1910  
closed after engine disaster in 1919, when  
over 350 fms deep, & over a mile out to sea.  
Limited activity inland above adit  
until 1930, when finally closed.

Dewey Cu(1923)6 Chalcocite in greenstone  
p12. Currently includes Wh. SPEARN & SPEARN  
CONSOLS, SPEARN MOOR, Wh. UNITY, LEVANT.

Only Levant now working. - details of  
lodes, shafts etc., & sections.

SOUTH LODE in upper parts: earthy haematite  
yellow & grey Cu oxes & cassiterite. Deeper, less  
haematite; cassiterite, quartz & Cu oxes, sometimes  
esp at 338 fm level - "spelter" (an intermixt.

of chalcopryite & cinnamon coloured garnet

N. LODE has, at 200 fm level chalcopryite with  
garnets. SITOR LODE - limonite & quartz with

chalcocite at depth.

OLD BAL LODE [Cont III]



LEVANT MINE, St. Just, Cornwall. (III)

Dewey (cont'd). Bismuth, bismuthinite, bismuth  
carbonate, malachite, native copper &  
silver, tetrahedrite, arsenate of iron,  
aragonite, goethite, garnet, gypsum,  
scheelite, cuprite, cassiterite, arsenopyrite.

RWB, JRK etc. (1969)

Superb botallackite (in <sup>24</sup> ~~60~~ fm lev?); connellite;

64 fm lev. { v.g. "cuboid" w. corner faces, paratacamite (XRD).  
v.g. small short prismatic atacamite xls, looking  
rather like the atacamite like libethenite  

! scarce & x-rds!  
dino

with fluffy malachite. Langite (1R).

W. Thompson, Priv comm (8/66) Native copper,  
chalcocite, malachite.

J.R. Knight, Priv. Comm. (11/71) Danalite found in  
exploratory cores. — "looking for tin  
silicates" — in a section "due to be  
mined shortly."

D. Hardman coll. Tennantite xls, Nat. copper, traces  
cuprite.

Anon., Gems (1973), 5 [2], 9-10. being actively explored. Very good  
cassiterites; native copper; chalcotrichite; botallackite;  
atacamite; paratacamite; apophyllite xls.

# LEVANT MINE, St. Just, Cornwall (IV)

RW Barstow. Plym MMCT (1974) 5 [I] 7-8. Reopened 1966 currently closed. Nat. copper, sheets  $\rightarrow 2\text{ ft} \times \frac{1}{4}"$  & dendritic masses filling joints in slate. 2ft sheet in old Skip Sh. at 180 fm level. Chrysotile occas. with the Cu as microds. Apophyllite in one cavity in v. m'orph calc-silicate greenstone hornfels on 130 fm level, xls  $\rightarrow \frac{1}{2}$  in, clear, perfect, assoc. w. fibrous tremolite. Calcite, ~~delicate~~ delicate white platy rosettes, on Quartz, ~~clear~~ clear, zoned xls to 4 ins lining cavity in narrow qtz-chlorite vein. Arsenopyrite, well-formed



x/s., cassiterite, small drusy x/s.; goethite,  
botry.; brochantite x/s.; axinite, "nicely xlsed";  
garnet, orange; heulandite micro-x/s;  
"rare basic Cu chlorides"

R. Turner 6/80      Lovely francolite found  
recently

T. Wolloxall (1987) "Rock Bottom" 2, 24-26. Loc,  
layout, history, photos.      Lodes N NW-SE,  
most import = OLD BAL, SOUTH, & NORTH LODES.  
Shaft & headframe at SW 368 345 now  
a service shaft to Geevor M.

Chalcocite some of world's finest x/s  $\rightarrow$  > 2.5 cm;  
botallackite, classic specimens  $\rightarrow$  4 mm, some of

# LEVANT MINE, St. Just, Cornwall (V).

best coll by RW Barstow in 1969 & 1976.

Paratacamite → 4mm; calcite, incl. v thin plates → 2.5cm, the "Levant paper" of miners.

Francoisite, light → dark brown flattened hex → 6mm; chalcopryite, <sup>1.5</sup>/<sub>2</sub>cm; rhodochrosite

small, pink saddle-shaped xls → 3mm, v. rare;

quartz, occas. clear xls → 5cm; bornite;

chalcedony; native copper; haematite;

prehnite; fennantite; tetrahedrite;

pyrrhotite; wittichenite; "many others".

RSWB IR spec over years: Old "paratac" IR is that of clinoatacamite, e.g. RSWB 69-304.  
(New to Brit.)

GEEVOR AND LEVANT MINES

Russ. Soc. AGM., 4/91

Geevor Mine was originally known as Wheal an Giver, the first mention of which was in the Angarrack Smelting House records. Geevor Mine now on care and maintenance, works a swarm of narrow fissure veins in the northern section of the St Just Mining District. The company has raised some 5 million tonnes of ore since 1911 which has yielded 50,000 tonnes of black tin concentrate. Production in 1984 amounted to about 250,000 tonnes of ore that yielded 1,500 tonnes of black tin.

In the years 1960-66 Geevor completed the sealing of a sea breach which kept the adjacent Levant Mine flooded. Following this, Levant was dewatered and is now flooded below the 302-fm level (the bottom level being the 350-fm level). In 1975-77 a subincline was sunk from the bottom of Victory Shaft with the aim of developing lodes at depth, linking the Geevor 18 level to the Levant 278-fm level, exploring ground below Levant and finally dewatering Levant to the 350-fm level. This subincline reached 21 level but never reached its goal of 24 level and thus the reported "riches" below the Levant 350-fm level have not been explored.



# LEVANT MINE, St. Just, Cornwall (VI)

|                          |                     |                          |
|--------------------------|---------------------|--------------------------|
| " ADULARIA "             | FLUORITE            | SCHEELITE                |
| ALLANITE                 | FRANCOLITE          | SIDERITE                 |
| ANDRADITE                |                     | " SPECULARITE " = HAEM.  |
| APOPHYLLITE              | GALENA              | SPHALERITE               |
| ARAGONITE                | GOETHITE            | STANNITE                 |
| ARSENOPYRITE             | GOLD (NATIVE)       | STOKESITE                |
| AXINITE                  | GROSSULARITE        |                          |
|                          |                     | TENNANTITE               |
| BECQUERELITE             | HEULANDITE          | " THURINGITE " = Ferrian |
| BISMUTHINITE             |                     | CHAMOSITE                |
| BORNITE                  | JOHANNITE           | TORBERNITE               |
| BOTALLACKITE             |                     | TOURMALINE               |
| BROCHANTITE              | KAOLINITE           | ?                        |
| BUTTGEBACHITE (who sez?) | " LIMONITE "        | " URANITE " (?)          |
| CALCITE                  |                     | WITTICHENITE             |
| CASSITERITE              | MAGNETITE           |                          |
| CHALCANTHITE             | MALACHITE           | ZIPPEITE                 |
| CHALCEDONY               | MALAYITE !          |                          |
| CHALCOCITE               | (MANGANESE) CALCITE |                          |
| CHALCOPYRITE             | MELANTERITE         |                          |
| CHLORITE                 | MOLYBDENITE         |                          |
| COFFINITE                | MONTMORILLONITE     |                          |
| CONNELLITE               |                     |                          |

Levant VI

COPPER (NATIVE)  
COVELLITE

DIGENITE  
DJURLEITE  
DOLOMITE

EPIDOTE

PARATACAMITE  
"PITCHBLLENDE"  
PYRITE  
PRYHOTITE !

QUARTZ

RHODOCHROSITE

CMRM(1995) "Bismuth ochre". "blister" chalcopyrite;  
helvine; nantokite(?);

S. Weiss et al (1994) Lapis 19-27-46  
Waylandite - Levant M

Rainer Bode(1983) Mag<sup>ma</sup> 14-17 Botallackite  
RW Barstow's disov. (illustr); also classic  
Botallack mine.

1" 189

SW 376340

EAST LEVANT MINE, St. Just, Cornwall StJ 53

See also LEVANT MINE (StJ 14), GEEVOR M.



1" 189

SW 33

371 341

HIGHER LEVANT MINE, St. Just, 36 34, 3733  
(Cornwall StJ55)

See also LEVANT MINE (StJ14), SPEARNE CONSOLS(=)

1" 189

SW 37 34

NORTH LEVANT MINE, St. Just, Cornwall. STJ 54

---

See also LEVANT MINE (STJ 14), GEEVOR MINE

JC (1871) 47: (Sn, wkg.) Cassiterite

DBB (1963) 12 worked from ca 1810. In 1905  
name changed to GEEVOR MINE

1" 186 SX 27 81 6" 16SW (1907)

LEWANNICK HILL Cornwall

K 58

ef. INNY CONSOLS; TOLPETHERWIN

AR, MM (1946) No rhodonite - though given as loc. for rhodonite in Spec. Rep. Mm. Res. 1 45 (1915)

Dines (1956) 713 4 ml WSW of Launceston,  
~ 1920, trial pits nr Lewannick - Two Bridges  
road said to have exposed pockets of  
oxide & silicate Mn ores - no production  
Sh. just E of rd 310 yd NNE of N bridge at  
Two Bridges & adit, mouth 140 yd SSW of  
the sh. opened ~ 1855 in search of Pb &  
Cu (A. Russell). No records. Seem to be  
trials on a lode of white quartz w. ankerite.  
(Inny Consols of AKHJ? & ? = TOLPETHERWIN)



1" 189  
LEWIS MINE, St Erth, <sup>2 1/2" SWS3 576335</sup> Cornwall  
= BOSWORG(E)Y M = Wh. NUT = Wh. MABLY

H 15

Spec. Min. Res. Rep. 21. Cu/Sn mine. ✓

CMRM (1995) Andalusite (BOSWORG(E)Y M., St. Erth).

1" 190

SW 738 501

Wh. LIBERTY, St. Agnes, Cornwall

See also Wh. VALLEY.

AKHJ (1962) 2 21-24. On E <sup>bank</sup> side of coombe valley

Copper ore. ✓

Adjoining, to W, is

Wh Frederick [∴ has AKHJ got map refs of

Whs LIB. & VALLEY interchanged?]

1" 186 # 6" 16NW (1907) SX 241 850  
LIDCOTT M<sub>n</sub> MINE, Lancastr, Cornwall R 60  
~~Prob = LETCOTT M. of JC (1871) 63~~  
AR, MM, (1946)

(NB) cf. BM: "Wh. Ludcott" - silver. [is LUDCOTT, NOT this one]  
qv

Dines (1956) 712 Worked opencast & undergd  
therefrom, 1820, 1875-1881. 8-10 ft chert  
bed dipping 35-40° NNW for 80 yd along  
strike on N side of Lanescot Down,  
traversed by 2-3" strings of conchy quartz,  
and is irreg. alt. → rhodonite, pale pink  
to maroon. Small xls pyrite and  
galena in alt. wall rock. Crack walls  
in chert impreg. w. pyrolusite &



coated w. wad. Rhodochrosite (AR, 1946)

J C (1871), 63: Lettcott M., Laneast:  
manganite, psilomelane

1" 190

SW 715 428

Wh. LILY, Redruth, Cornwall

See also Wh. CUPID; ~~Wh.~~ TREFULA M.

AKHJ (1962) 3 24 . Served by SHALLOW ADIT,  
from [nr. 713435] with Wh's CUPID & TREFULA.  
Mentioned in 1794 with a Wh. ROSE.

1" 186

Sx 32 81

LINNICK, South Petherwin, Cornwall

CMRM (1995) Jamesonite



1" 186 SX 26 (ton)  
LISKEARD, Cornwall.

Rutley, 15th Ed., p. 153, Anatase (cf LOOE MILLS HILL Q'y)

BM: Bournonite.

Rudler (1905), 87. Fluorite

p93. Good calcite, esp from HERODSFOTE & Wh. WREY [qv]

p94. Beaut yellow xls baryte from Pb mines  
in area, eg. Wh. MARY ANN, Menheniot.

CMRM (1995) Liskeardite (Type loc.)  
wurtzite;

1" 189  
LITTLE BOUNDS MINE, <sup>SW 3 3</sup> St Just, Cornwall <sup>SV</sup> 29

Henwood.

JC (1871) 47

Chlorite; schorl.

1" 189, 190

SW 64-80 11-25 (I)

LIZARD HEAD, Landewednack Cornwall L 7

See also PARC BEAN COVE, COVERACK PEN VOOSE, KARAKCLEWS  
CHYNHALLS POINT, MULLION ISLAND; DEAN Q'y, St Keverne.

↓ C (1871), 53 POLTESCO Calcite, hornblende, orthoclase;  
talc; magnetite See also POLTESCO BEACH

MULLION  
PEDNBOAR (PEDNBOR) POINT; Wh. DOWNAS; CROUADOWNS; BEAGLE'S HOLE

BM: Pyrophyllite, like whitish, irregular  
wavellite - "Lizard Point."

MA 15 331 Sepiolite - Mullion. MA 11 50. In serpentine,  
Rutley 15th Ed p 213: chrysocolla. Lizard.

LJS's book p 60: Native copper masses up to 3 tons,  
embedded in serpentine in the old  
Cu mines in the Lizard district.

MA 15 256. Fibrous saponite - Church Cove 6620 PTO



Mc Lintock, MM 15 407 (1910)

Dabolite

AR MM (1910)

Natrolite

AR MM 16 217 (1912)

Prehnite

Zussman et al Am Min. 42 135. Lizardite (a serpentine)

Nat 191 160 (1961) Lizard: age-determin's (musc + biotite K/A,  
350-390 m.y.).

Parkinson's Cat (1959).

Steatite, white to grey

foliated masses.

Serpentine (vars. bastite,  
olivine dumite & tremolite serpentine).

yellow-green fine grained massive.  
satin-spar in serpentine.

Epidote,

Calcite, var.

Ludler (1905) 102. Magnesite - white veins & patches in the serpentine  
steatite. Diallage from Crousa Downs. with saussurite.

LIZARD HEAD, Cornwall (II)

Anon., Gems, (1973), 5, [2], 9-10. Working quarries  
[cf Dean Q'y]. Excellent zeolites, notably  
heulandite, stilbite, natrolite (recently the  
first recorded doub. term. prism), analcite,  
prehnite; native Cu with silver; native  
Cu with cuprite & chrysocolla; various  
serpentines; actinolite; tremolite; chrysolite;  
amethyst with goethite; jasper; chalcedony.

M. Herry - 1992 - 6/92 - Chrysolite

Rev. V. Holyer, Priv. Comm. (9/89) Small  
black cubes found at several  
places = chromian magnetite  
[cf POLTESCO BEACH]

M. Merry Priv Comm 6/92. Chromite,  
large octah in serp matrix  
found. (Somewhere on Liz. Penins)  
[See also CADGWITH, Ruan Minor]



# LIZARD HEAD, Cornwall (III)

CMRM (1995) Allanite (orthite) (Enys Head; Kennack; Man of War gneiss); brucite (MFB Brooke, Gems (1983) 15 [B] 26, bytownite (The Rill - "near bytownite") clinoclone; hercynite; minnesotaite chromite in serpentine; labradorite (in Man O'war gneiss); natrolite (Potstone Point, and George's Cove); talc (Devil's Frying Pan; CADSWITH SW 7214); epidote (LANDEWEDNACK, 7112). ~~HOT POINT, 718123; HOUSEL BAY, 7011~~ hornblende (LANDEWEDNACK, 7112; HOUSEL BAY, 7011); prehnite (OGG DOUR) GS 1" map. Epidote (HOT POINT, 718123; HOUSEL BAY, 7011)

Lanlivery, Cornwall.

Rayner's Cat (1960).

Restormel iron mine - goethite ("wood iron").

Linkinhorne, Cornwall

AR, MM. 16, 55 (1911). Cheesewring quarry: phenakite found 1905 among debris on E side of quarry: 3 small colourless deeply striated prisms (largest  $2\frac{1}{2} \times 1\frac{1}{2}$  mm), lying on dark-green chloritic crust; with quartz, pale violet fluor + occasional plates of hertrandite, in a joint in coarse muscovite-tourmaline-granite.

AR, MM. 16, 55 (1911). South Phoenix mine. Phenakite found 1906 on lode material recently brought up from Rodder's shaft (close to + just N. of Cheesewring village, on E-W South Prosper tin



lode). 6 specimens with many long prisms (largest  $4\frac{1}{2} \times \frac{1}{2}$  mm), on typical white greasy-looking iron-stained quartz with veins of blue "peach", patches of black tourmaline + microscopic carsterite grains.

Rayner's Cat. (1960).

Cheesewring quarry: actinolite.

Min. Mag. 33, lxiv (proc. 1962).

AWOK exhibit: strengite, Wh. Phoenix.

1" 189

SW 65 26

LOE POOL, Sithney, Cornwall

See also Wh. ROSE; Wh. POOL

Truro Mus: vg cerussite; pyromorphite.

Dines (1956) 242

POOL M. (see Wh. POOL)

1" 189

SW 362 329

LOE WARREN, St. Just, Cornwall

(Not on OS 1" or 2½" SW 33 maps) <sup>See also</sup> NORTH ZAWN

Russ Soc Newsletter (1991) 21

**Kasolite**  $\text{PbUO}_2\text{SiO}_4 \cdot \text{H}_2\text{O}$  has been found from a very localised copper and uranium mineralised fracture/joint system in a zawn near Loe Warren, St. Just, Cornwall. The kasolite appears as a bright yellow tufted crystalline crust together with botallackite, brochantite and numerous other secondaries. (identified using SEM&XRD/Oxford University Museum).

The British Museum has confirmed Monica Price's <sup>RSN</sup> preliminary identification of kasolite from Loe Warren, St. Just. See S.W. Newsletter No.4 for details. <sup>(1991) 22</sup>

1994) Paper on superg U mineralisation here being written by Dr Nick J Elton, of ECC.

RSN (1997) 31, 12 ... wölsendorfite...



NJ Elton & JJ Hooper (1995) "Widenmannite from Cornwall  
England: the second world occurrence". Min Mag 59,  
745-749

At SW 362329 a patch of Pb-U-Cu minerals nr base  
of cliff, well above high tide level, at back of a zawn  
NE-SW line of sporadic uraninite for ~5 m across  
back of zawn, intersecting Cu veinlets @ SW end, with  
pyrite, chalcopyrite. Richly supergene area only 2-3 x 1/2 m  
Widenmannite  $[Pb_2UO_2(CO_3)_3]$ , clear pale <sup>greenish</sup> yell laths  $\nabla$ , in  
mats, stellate or spheroidal (coarse also white flaky, to 100  $\mu$ m  
x 10  $\mu$ m. XRD, IR. ~~show~~ (shows OH). Also unk  $[Pb_xU_{2-x}CO_3OH]$ ;  
dewindtite, torb-zeen interm's; kasolite, cerussite, malachite,  
ch'colla, cumengeite (rarely), botallackite, atacamite,  
connellite, laxendular, fluorapatite, chalcocite,  
"amorph Cu silicate"

N. Elton & J. Hooper. (1996) J. Russ Soc. 6, 98. "A further occ. of Widenmann.  
in Cornw, Eng."

1" 189

2½" SW 53 574391

H 24

WHEAL LOGGAN, Phillack, Cornwall

= LOGGANS M.

Lomax M., Cubert, Corn

See Penhale & Lomax M



1<sup>st</sup> 1899 SW 66 41? C 19  
LONGCLOSE MINE, Camborne, Cornwall  
~~See also S.CROFTY etc!~~

Fluorspar, 113 (1952). Now part of S.Croftly Mine (C11)

Dowey (1923) 25 Included in S.CROFTY MINE [qv]

Village SW 74 34

LONG DOWNS, Stithians, Cornwall

See also HALVOSSO Q, TROLVIS Q, CHYWOON Q

MGHM Spec's → RSOB for ident. 8/5/95,  
from "Longdowns": In vughs in granite:  
beaut pale blue transp apatite xls (FTIR)  
small blades stibite (or stibnite etc...)

BMSN (2000) 57 & "LONGDOWN Q" → anatase,  
monazite [? TROLVIS Q?]

1<sup>st</sup> 189

SW 64 24

LOOE BAR, Helston, Cornwall. M 82

TMH (1868), 41: Agate. "LOO BAR"

C. Rogers (1968). LOOE BAR:- agate ✓



1<sup>st</sup> 186  
LOOE MILLS HILL QUARRY, Liskeard. <sup>Sx 23 64</sup>  
Cornwall 70

Greg & Lettsom (1856): Anatase.

JC (1871), 63: Anatase ✓

722 511  
Loots Joonlaze M, St Agnes Cornw  
See wh. KITTY

1<sup>st</sup> 186

LOSTWITHIEL,

Cornwall.

SX 10 59 (town)

(I)

Rutley, 15th Ed., p. 144.

Axinite, "near lostwithiel"

p. 156.

Scheelite "at lostwithiel"

~~(BM, and) p. 159 Torbernite from "withiel" (?)~~

Dana 6th Ed'n. "Beraunite" but (AR, MM (1927) 21 272)  
is hisingerite, & loc is wrong too - should  
be Wh. JANE, Kenwyn. (or Lea). [qv]



Lostwithiel, Cornwall (II)

Rayner's Cat (1960).

Terrace Hill quarry - grossular

AR, Min. Mag. 1927, 21, 272.

Dana, 6<sup>th</sup>, gives hercynite - wrong loc.  
+ wrong mineral! - see Wh. Jane, Kenwyn.

Wh. LOUISA, Redruth, Corn

See Wh. Providence

Wh. LOUISA, Redruth, Corn

See Wh. Providence



1" 190

SW 74 42 ?

LOVELACE MINE, Gwennap, Cornwall.

See also CONSOLIDATED M's.

Dewey (1923) 35. Part of CONSOLIDATED M's.

TAYLOR'S LODGE: good gozzan. Oxides of copper,  
chalcopyrite, pyrite, quartz. ✓

1" 190

SW 7030

LOVELL CONSOLS, Wendron, Cornwall M71

See also E. Wh. LOVELL (M 72); NEW Wh. LOVELL (M 73);  
NORTH LOVELL (M 74); NEW E. Wh. LOVELL, Constantine (L48)  
GT. LOVELL M

JC (1871) 55 (Sn, wag.)

Dines (1956)

= NE Wh LOVELL + S. Wh. LOVELL. Part  
worked as S. Wh. TINCROFT

1" 189, 190

SW 69 31, 70 31

EAST Wh. LOVELL, Wendron, Cornwall M 72

See also LOVELL CONSOLS (M 71) etc.

JC (1871), 55: (Sn, Wkg) Cassiterite.



1" 189

SW 69 30

GREAT LOVELL M., Wendron, Cornwall.

See also LOVELL CONSOLS etc

1" 70

SW 70 30

NEW Wh. LOVELL, Wendron, Cornwall. M 73

See also LOVELL CONSOLS (M 71) etc.

JC (1871), 55 (Sn, wkg.) Cassiterite. ✓

1" 190

SW 70 31

NEW EAST Wh. LOVELL, Constantine, Cornwall.

L 42

See also LOVELL CONSOLS (M 71) etc.

JC (1871), 57: (Sn, wkg.) Cassiterite.



1" 190

SW 70 32

NORTH LOVELL MINE, Wendron, Cornwall. M 74

See also LOVELL CONSOLS (M 71) etc.

JC (1871), 55: (Sn, wkg.) Cassiterite. ✓

1" 190

SW 73 40

Wh. LOVELY, Gwennap, Cornwall.

See also TING TANG MINE, Wh. SQUIRE

Dewey (1923) 37. A Flat lode in TING TANG  
is continuation of the Wh. LOVELY & Wh. SQUIRE  
lode.

1" 189  
WHEAL LUCY, Phillack, Cornwall

2½" SW53

557389

H 32  
~~32~~



W. Wh. Lucy, Lelant, Corn

See W. Wh. Towan.



C. Rogers (1968): Fluorite; baryte; Ag ores

MGH Merry, Spec's → RSWB for ID; (11→12/94)

Wulfenite - clear orange bipyramid to opaque  
tabular, with pyromorphite (slightly  
arsenian, FTIR 12/94), clear xls. coll.  
u'ground.

4/95. Beudantite, greenish "sugary" crust (FTIR)

CMRM (1995) Argentójarosite; proustite; quartz  
("hacked")



1" 189

SW 531 353

LUDGVAN Wh. MARGARET, Ludgvan, Cornwall.

AKHT (1961)  $\perp$  43 Line of shafts, newworked 1849-  
1864. Tributaries here as late as the 1930s  
as COLLURIAN

1" 190

SW 720 517

Wh. LUNA, St. Agnes, Cornwall

See also POLBERRO M.

AKHT (1962) 2 28. Cavernous opencast  
above old harbour site

Map (8) 1838 on p 29 shows WEST LUNA here.

1"189

SW 6 4

LUSHINGTON, Illogan, Cornwall.

NOT ON OS 1" or 2 1/2"

See also WH. SALLY etc.

R. Selley (2014) BMSN 91 23. Cliff fall at Lushington,  
near Porth Towan. Visually ident are: erythrite,  
cobaltite, arsenopyrite, chalcopyrite, sphalerite,  
pyrite, nat. silver, carminite, scorodite,  
pharmacosiderite, olivine/libethenite,  
pyromorphite/mimetite, chalcophyllite,  
daytonite, langite, connellite, anatase,  
lavendulan, malachite, cerussite,  
beudanticite, brochantite + unidents



Wh. Lushington, Illogan, Corn.

See Wh. Sally

1" 185

SX 05

LUXULYAN, Cornwall. (Town 0558) SA 79

See also GREASY Q'Y, TREGARDEN Q.

JC(1871)62 Quarries near Luxulyan: Orthoclase; schorl.

BM: Blue transparent apatite, with yellow gilbertite; purple fluorite. (cf GREASY Q'Y)

Rudler (1905) 29. "Luxulianite" rock = pink orthoclase + schorl (tourmaline) + quartz.

CMRM (1995) Blue tourmaline (in "luxullianite");  
tourmaline (in "luxullianite")

1" 190

SW 7

3

MARBLE Cornwall

Vill 7532

L 45

See also CONSTANTINE (L 43)

JC(187), 57; in granite quarries. Fine orthoclase  
in the granite; occasionally schorl;  
very rarely beryl & topaz.



Wh Madly (Wh. Glynn) St Agnes, Corn

See Blue Hills M

1" 189

MADRON, Cornwall

SW 45 32, 45 33

Val: 45 32 StJ 67

JC(1871), 48:

Chalybite; incl. var. sphaerosiderite.

1" 190

SW 79 29

MAENPORTH, Budock, Cornwall.

L 47

JC (1871), 57: Rock xl; calcite; aragonite?



AE  
~~MEAN~~

1" 190 734312 SW

L 1

QUARRY, Constantine, Cornwall

See also CONSTANTINE (L 43)

Min. Mag. 17, 15, (1913). Bertrandite.

BM: vg. Apatite - Maen Quarry, Cornwall - on orthoclase

Rayners Cat (1960): Apatite with orthoclase; quartz,  
tourmaline ("MAEN QUARRY")

GR coll. Bluish prisms of apatite with quartz  
on felspar. Coll'd by AR, 1923.

RSWB (8/65) 4 204-5 Around 733 313. Only one  
peg. boulder seen, with schist, quartz,  
mica, felspar

1" 190

SW 765 377

MAGDALEN MINE, St. Gluvias, Cornwall

Bull GS 25 33. 500 yd SE of Roskrow Utd. M.

A group of SE lodes on a poss. extension  
of an lode of Rosk. Utd have magnetite ✓  
cassiterite ✓ with a little hornblende ✓.

Wh. Maggot, Jwinear, Corn.



1" 190 SW 742 422  
Wh. MAID, Gwennap, Cornwall.

See also ST. DAY UNITED MINE; POLDICE MINE,  
CARMARRACK, WHITEWORKS M.

Dewey (1923) 30. Included in POLDICE. Cu ores  
produced: "MAID & CARMARRACK" - 1821-36, 1845-52.

CMRM (1995) Shattuckite (?); zeunerite.

OS 6" map (SW 74 SW) AKHJ. SW 742 422

V.T. Rae, specs to RSWB (10/84) for ident. 84-307, 308.

Ceruleite, Cambridge blue ~ 1 mm radiating  
spherules matted thickly on grey rock.

"From dump of new shaft to Wheal Jane

at St. Day United mines". <sup>Confirmed</sup> Ident IR.

BV Cooper (10/84) Priv. Comm. Found the <sup>ceruleite</sup> ~~loc.~~,  
on a dump at 745 418, soon to be  
removed - "part of United mines, Carharrack,  
not St Day United mines" - W extension of  
Mt. Wellington mine. Also scorodite, torbernite  
BVC (1985) Coll also from u'ground, also v. fine poonjakite → IR (R5WB)

Sam Weller (10/84) Priv. Comm. ~~The~~ ceruleite  
first found by miner underground in  
Wh. MAID Incline, part of WHITEWORKS mine.  
Also scorodite.

BVC. 2/85 Priv Comm The Mine geologist says  
it is "Western decline, Wh. Maid section of Carnon Consolidated"  
~~Native silver found underground~~

1" 189

SW 53 31

Wh. MAID, St. Hilary, Cornwall.

See also PROSPER LTD. MINE.



1" 190

OS gazz:-

SW

76

25

MANACCAN, Cornwall.

L 35

JC (1871) 54: Manaccanite [Hey-a var of ibnerite],  
in the bed of a stream

Rudler (1905) 67 Menaccanite found near Menaccan  
as sand in a stream at Tregonwell  
Mill [SW 7625? ] and is a titaniferous iron ore

CMRM (1995). Platinum

1" 190

SW 8021, 8121

MANACLE POINT, St. Keverne, Cornwall. L 30

JC (1871), 54:

Serpentine; steatite.

MARAZION, Cornwall.

See also ST. MICHAEL'S MOUNT; MARAZION MINES, etc.

C. Rogers (1968): Beach pebbles: citrine; amethyst;  
chalcedony, carnelian; jasper; agate; flint;  
serpentine; felspar (porphyry).



1<sup>st</sup> 189

SW 52 31, 53 31

# MARAZION MINES, St. Hilary, Cornwall

28

~~See also PROSPER UTD. MINE etc; Wh. CRAB; Wh. VIRGIN; Wh. RODNEY~~  
Henwood.

JC (1871), 49: Blende; chalcopryite; felspar;  
hornblende; limonite; melaconite;  
pyrite; tourmaline.

Dines (1956), 173. Before 1860, PROSPER UNITED  
MINE (qv), under name of MARAZION MINES  
included Wh's. CRAB, VIRGIN, & RODNEY.  
Cu mines, also some Sn, As, Pyrite, Pb/Ag.

DBB. Combin. of mines reworked 1830-1841 as MARAZION  
MINES, then restarted for Sn & Cu in 1860 as  
PROSPER UTD (See this for further details).

Dewey (1923) Cu ones 1830-41

1" 189

SW 50 36

Wh. MARGARET, Lelant, Cornwall

H 53

See also W.Wh. MARGARET (H 54); Wh. SISTERS.

JC(1871), 48: (Sn, wkg.) Cassiteute.



E. Wh. Margaret, Helant, Cornwall

See Wh. Merth M

1" 189

SW ~ 50 36

WEST Wh. MARGARET, Lelant, Cornwall. H 54

See also Wh. MARGARET (H 53)

JC (1871), 48 (Sn, wkg.) Cassidente.

Wh. MARGERY, St Ives, Cornwall  
See also TRELYON CONSOLS; ST AUBYN TREGENNA M

DBB (1963) 9 Abandoned in 1870's When 175 fms deep

Dewey (1923) Cu ores 1854-70

C. Rogers (1965): Chalcopyrite; pyrite; sphalerite;  
- in quartz-chlorite boulders.

AKHS (1961) 28 Area now grounds of Treloyhan  
Manor. Lodes ~~discovered~~ followed beneath  
sea - adit on beach. In 1849  
combined with Wh. VENTURE as TRELYON  
CONSOLS [qv]



1" 1865x 279219  
MARKE VALLEY MINE, Linkinhorne, Cornwall K17  
At Upton cross 3ml WSW of Linkinhorne 

"Best loc. for Connellite."

v/s according to PE.

BM: Liskeardite, pale apple green matt botry; olivenite;  
scorodite, blue sph;

Rutley, 15th Ed., p.207, chalcopyrite;

JC (1841), 64: (Cu, wkg.) Chalcopyrite; cuprite!

Rudler (1905) 248: (W. Semmons, MM vi (1886), 160.) Connellite  
73: Liskeardite assoc w. ~~scorodite~~ scorodite & arsenopyrite

Dewey (1923) 51. Metam. slate over granite.

7 lodes & a X-course. Lodes include MARK'S;  
OLD SARUM or ROSEDOWN; FISHER'S; NEW; S.  
MARIA; COTTAGE.

Quartz; felspar; chalcopryite; pyrite;  
melaconite; limonite.

Cu ores produced 1844-90

CMRM (1995) Parnauite

1<sup>st</sup> 186

<sup>54</sup> <sup>38</sup> <sup>73</sup>  
WHEAL MARTHA, Stoke Climsland, Cornwall. K 79

---

Rutley, 15th Ed, p. 195 : Arsenopyrite.

TMH (1868), 51: (Cu) Pyrite.



Wh Mary, Lelant, Corn

See Wh Providence.

~~of~~ Wh Mary, St Ives

1"189

Near SW 693 442

Wh. MARY, Redruth, Cornwall

AKHJ (1962) 37. Wh DINNER, (worked some  
time with Wh. Laity) was on W end  
of Wh. MARY sett, also containing Wh.  
PARENT & Wh. ORPHAN.

1189

SW 501 398

Wh. MARY, St. Ives, Cornwall.

See also St. IVES CONSOLS; Wh. SISTERS.

See St IVES Wh. ALLEN

cf Wh MARY, Helant.



1" 186 2½" Liskeard 28x63y SX  
WHEAL MARY ANN, Menheniot, Cornwall (I) K 25  
See also Wh. TRELAWNY, HONY, MENHENIOT M's.

BM. Giant fluorite; vs barite.

Smoky quartz; ~~barite~~ Lead minerals

JC (18M), 65: (Pb<sup>Ag</sup>, wkg). Barite; calcite; pyrite; rock xl.

Rayners Cat. (1960) Fluorite

WEST MARY ANN MINE, at 2½" Liskeard 276636] ✓

Rudler (1905) 86. Fluorite cubes from Wheal Mary Ann, more than 1 ft along edge, deep blue, built up as aggreg of smaller cubes, & with certain faces partially coated with pyrite (and with quartz (p/88))  
p 87. Fine spec's of yellow & blue fluorite, echatopyrite ✓

p95. Baryte, beaut. spec's, brilliant lustrous, tabular,  
sharply defined, yellow xls; with pyrite

Dunham F(1952) 120-1 Lode N 5° E also worked  
in HONY & TRELAWNY M's to N. Lode up  
to 4' wide in soft grey slates, with  
quartz, chalcedony, fluorite, calcite,  
siderite, baryte, & galena. Fluorite  
early, then quartz & galena, then siderite,  
2nd gen. fluorite, 2nd gen. siderite; pyrite &  
calcite late, baryte in cavities.  
Fluor usually honey-yellow but occas  
purple, green, or blue. Occas. large xls.  
Worked 32 yrs from 1843. Dumps ca 5% fluor

WH. MARY ANN, Menheniot, Cornwall (II)

K810B (8/65) 4 200. Big dumps, around 287 636  
cemented by iron-oxides & gypsum from  
decomp pyrite. quartz, galena, fluorite,  
pyrite; qtz  $\psi$ -after octahed fluorite.

C Rogers (1968) Fluorite, honey-yellow, pale blue;  
chalced  $\psi$ -after fluor octah; pyrite; baryte;  
galena; sphalerite; siderite; gypsum.



John Mary Ann, Menhemel

W.H. Sands, Jems, 1972, 4<sup>th</sup> [6], 7. Three main  
collecting areas, 287639, 287636 & 286635. The  
287636 area tips now being opened up.

M.G. Merry, Spec → RSWB 5/94 [RSWB 94-46] [coll 5/5/94]

Wulfenite, small orange bipyramidal  
(equant) crystals with pale green  
pyromorphite on galena-quartz  
veinstuff.

CMRM(1995) Cerussite; marcasite; quartz (transp.);

1" 186

SX 276 636

WEST MARY ANN MINE, <sup>Menheniot</sup> or Liskeard, Cornwall.

See also Wh. MARY ANN

1<sup>st</sup> 190

SW 73 49

MATILDA MINE. St Agnes, Cornwall

See W. FREDERICK

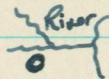


Wh Matthews, Towednack, Corn  
See Trevega Bal

HUEL MAUDLIN (Lostwithiel) Lanlivery, Cornwall

Rutley, 15th. Ed., p. 156, scheelite. ✓

Dines: Cu/Sn mine, ca 2.5 ml NW of Lostwithiel, appx on  
"Maudlin" of 1" OS map.



BM: Zoned chalybite  with quartz; wolframite after scheelite; cronstedtite  $\text{Fe}^{\text{II}}\text{Fe}_2^{\text{III}}\text{SiO}_5(\text{OH})_4$   
black, fibrous, radiating, with pyrite and chalybite.

JC (1871), 62 (Cu, Sn, wkg.) Chalcedony; cassiterite; garnet;  
chalybite; chlorite; covellite; cronstedtite; fluorite;  
jasper; melanderite; arsenopyrite; pyrite;  
pyrrhotite; scheelite; wolfram; opal.

CR Rogers (1968) garnet; scheelite; crosteditite ✓

Rudler (1905), 69. Now v. rare, well known zoned xls of  
siderite, on quartz

AR MM 21 221 Topaz with fluorite. 1 spec, in BM.

MM 11 263 Apatite after crosteditite

AWOK MM 32 921. Danalite, cassiterite, scheelite, pyrite,  
arsenopyrite, pyrrhotite, chalcopyrite,  
quartz, blende, galena, fluorite, garnet,  
chlorite, siderite, francolite, crosteditite,  
wolframite pseudo after scheelite

CMRM (1995) Actinotite; crosteditite - 2H and - 2M.

G Mus, donation (1967) EA Jobbins: Sphalerite, chalcopyrite,  
arsenopyrite ✓



1" 185

SW 8467

MAWGAN PORTH, Mawgan-in-Pydar, Corn.

Rev V. Holyer, Priv Comm 9/89  
Mawgan Porth worth visiting

1" 190

SW 78 27

MAWNAN, Cornwall.

L 44

JC (1871), 57. Cliffs on sea shore: Aragonite;  
calcite; chalcopryite; "oxide of zinc".

BV Cooper, spec → RSWB 8/87. (87401). Chalcopryite  
crystals coated w. brown Fe oxide on  
oxidised siderite xls. — "MAWNAN SMITH"  
OS 1": Mawonan Smith 778 287, inland  
from Mawonan itself at 787 273. Note  
Penpoll mine at 763 284 and  
Wh. Anna Maria at 758 282

Nor. 73<sup>5</sup> 52<sub>7</sub> ?

Wh Meadow, St Agnes, Cornwall

See Wh. Prudence



Mean Q, Constantine, Corn

See Maen Q

1" 189

SW 609 265

MEGILLIGAR ROCKS, Breage Cornwall

(I)

See also RINSEY COVE; TREMEARNE CLIFF

C. Rogers (1968): Pegmatite. Apatite; orthoclase;  
lepidolite; topaz; arsenopyrite

McGeorge, M Stone, E E Fejer, & R F Symes MM (1981) 236-238

Triplite partially rimmed with blue  
mixture containing vivianite. The triplite  
brown & closely assoc w. löllingite

in peg. & leucogran at top of main  
granite sheet. Amblygonite  
recorded from here (M. Stone & M.C. George,  
MM (1978) 42 151-152)

M. Stone & M.C. George (1983) Proc. Ussher Soc. 5 (4) 428-31

Pegmatite sheets of the roof complex of the Tregonning  
granite has several phosphates. El probe anal  
given ~~for~~ of apatite, amblygonite, triple,  
triphylite, alluaudite & natromontebrasite.  
Cell dimensions given for triphylite, alluaud. &  
vivianite.

Russ Soc AGM, 4/91 Superb apatite x/s (class = purple  
→ 2cm!) & oclase x/s displayed



# MEGILLIGAR ROCKS, Breage, Cornwall (II)

Russ Soc Newsl. (1991) 21

## **Field Meeting to Megiligar Rocks, 28th April. 1990**

The party met at 10.00am on a sparkling sunny morning at the lay-by above Tremearne Farm. Nick Talbot (leader) gave a brief description of the geology and mineralogy of the Tremearne sheets, illustrated with some specimens that he'd 'just happened to have picked up whilst walking the dog'. (On a serious note, Nick's specimens are some of the finest examples from that locality you're ever likely to see.) He did say that 'material like this doesn't turn up very often' to his credit. A pleasant stroll down to the beach saw us reach the 'reef' area just as the tide was dropping below the most interesting spots, revealing the complex of aplites, unusual granites and pegmatites exposed on the foreshore. The severe storms of the winter had left their mark with some areas, especially the best spot for löllingite and triplite, rather badly exposed.

The party gradually began to disperse across the area and some serious work started. The Megiligar regulars were turning up fluorite, apatite, löllingite, schorl, gilbertite and the various feldspars. After a rather brief spell of hammering by Nick, ably assisted by myself, some small cavities yielded several very good crystallised apatites, two being 10+mm prisms of a mauvish hue, one on feldspar matrix, the other, a single crystal with a small attached quartz. Both very good specimens.

Collecting, chatting and sunbathing continued well into the afternoon with some small blue-green topaz turning up later on. Members finally began to drift away to face the steep haul up to the cars, a productive and pleasant day being had by all. Thanks to Nick for leading the party and to Pete Seymour for his scheduling:- July weather in April and a perfect tide.

→ Exhib. at Russ Soc AGM Tauro (1991)

NB. Superb apatite xls, → 2cm, some purple, also v.g orthoclase

# MEGILLIGAR ROCKS, Breage, Cornwall (III)

R. Soc N. 23 (1992)

Megiligar Rocks, Porthleven, Cornwall  
28th April 1991

On a fine morning 12 members assembled at the layby above Tremearne, and after signing on formalities, proceeded down to Megiligar Rocks.

The tide was already well down below the best collecting exposures of the pegmatites, aplites and granites which form the reef-like outcrops of Megiligar Rocks at sea level.

The party quickly dispersed across the foreshore to try their luck. One small group soon found an area of coarse pegmatite which was producing deep-blue fluorite, unfortunately in etched and corroded fragments rather than complete crystals. Some reasonable pale-green apatite crystals and specks of molybdenite also turned up here.

Although not well exposed due to a covering of beach boulders, the well-known site for löllingite and triplite yielded small specimens for those who had not collected here before. Close by, a cavity produced a late brownish-green mineral, as yet unidentified, which occurred in hollow epimorphs after what may possibly have been rhombohedral and schiefer calcite. At another spot, some small but well-formed prisms of mauve apatite were found, but perhaps the most interesting occurrence of the day was discovered by Howard Miles, who on examining some of his material later, discovered a sub 0.5 mm crystal of hexagonal cross-section, H 8 and bluish-green colour, embedded in quartz. Though not formally identified, this gives all the indications of being beryl.

The incoming tide finally forced the more persistent individuals off the exposures to face the steep walk back to the cars, with hopefully some specimens and also an appreciation of this location not only for its mineralogical potential but also as a magnificent exposure of the complex lithology associated with the roof zones on the eastern contact of the Tregonning granite.

Nick Talbot

R. Soc N. 23 (1992)

Megiligar Rocks, Porthleven, Cornwall  
16th August 1992

We need a trip to Megiligar because it's one of those places that it is so easy to get to by oneself, but somehow I never get there. After 5 years of forgetting to buy a tide timetable, or being put off by the weather or the traffic, it was a pleasure to be standing on the beach with Nick Talbot - a world expert on Megiligar apatite with few equals. The fact that there were only a handful of us made it a relaxed amble with a chance to open our eyes to the beauty of the polished sheets of granite with the feldspar and tourmaline crystals showing a remarkable mosaic floor. As the tide ebbed, some heavy work started, although all suffered from that feeling of not being sure where to start. By the end of the day, a representative collection of löllingite, molybdenite, apatite and topaz had been found and we were well tutored in the secrets of slab cutting and the magic squeeze bottle.

David Roe

Lapis 5/04 Clear  
green tourmaline  
is (Li-free) schorlite.



1" 185

SW. 92 55

MELBUR CHINA CLAY PIT, St. Dennis, Cornwall

V.T. Rae, spec's → RSWB '89, '90. good "Pig's Eggs" - Kaolinite etc & after orthoclase

Russ Soc AGM 4/91

MELBUR CHINA CLAY PIT

KAOLIN PSEUDOMORPHS AFTER ORTHOCLASE

QUARTZ

CMRM (1995) "Wood" cassiterite; cristobalite;

MELLANOWETH MINE, Gwinear, Cornwall.

See Wh. ANGARRACK

1<sup>st</sup> 1899 2 1/2" SW 53 558362  
MELLANEAR, St. Erth, Cornwall

H9

Spec. Min. Res. Rep. 21. Minor Pb/Zn mine. Mainly Cu mine.

Dines: Dumps have qtz-chlorite veinstone with  
chalcopryrite; arsenopryrite; pyrite; blende;  
cassiterite. Abandoned ca 1890.

Henwood: Anglesite. (NB. well known from Mellanoweth - (H19) - RSWB)

JC (1871), 50: (Cu, wkg.) Chalcopryrite

Dewey Cu (1923) 1b. Main & N lodes, continuous  
with those at the ALFRED mines, with  
chalcopryrite, pyrite, blende, cassiterite.  
Aband 1889, at 100 fms.



1" 186

SX 08

51  
52  
SA 78

MENABILLY, Fowey, Cornwall.

JC (1871), ~~62~~: Molybdenite.

W. Phillips (1823) Molybdenite, near Menabilly.

MENABILLY Wh. RASHLEIGH SX 089 525

MENACCAN, Mr Helton, Cornwall

See MANACCAN.

Kudler (1905) 67. Menaccanite found as sand  
in a stream at Tregonwell Mill. & in a  
titaniferous iron ore.

1" 189, 190

SW 72

MENEAGE, Cornwall

Is NE part of Lizard Peninsula?

CMRM (1995) Gold (MUDIAN VEAN); olivine (in  
Meneage Serpentine);



MENHENIOT MINES, Cornwall

See also Wh. MARY ANN etc.

1" 186 28<sub>8</sub> 63<sub>2</sub> 5X  
2862  
2863  
2864  
2963

9

BM: Giant Fluorite.

Rudler (1905) 88 Fluorite, with calcite & quartz.  
p 94. Dolomite. Sequence: 1) quartz, 2) fluorite,  
blue cubes; 3) 2nd generation quartz, v. small, clear  
sharp xls; 4) dolomite, opaque white rhombohedra,  
with curved & slightly pearly faces; 5) pyrite.

Dunham. F (1952) 118. Fluorite

1" 189

2½" SW S3 526357 / 5335

H 31

WHEAL MERTH, Lelant Downs Cornwall

TREVE THOE TIN MINE of RSWB ½" SL? (q.v.)

Sn mine.

AKHJ (1961) 1 42-43. In 1740 (ca) consisted of Wh's  
 BAG, BUCKET, LAITY Sn lode. Also nearby Wh's  
 STRAWBERRY, WEST POLDICE. In 1849 reopened  
 as F. Wh. MARGARET.

Tin, copper

1" 186

SX 063 640

WHEAL MESSER, Lanivet, Cornwall.  
See also TRETOIL MINE

R. Turner, 6/80 Down valley from  
TRETOIL MINE. Tips now have  
Tretoil mine material!

CMRM (1995) Levaite [but note above comment [R Turner 6/80]]



1" 189 610302 SW

M1

WHEAL METAL, Breage, Cornwall  
= WHEAL VOR

See also Wh. VOR PENHALE (M46); E. Wh. VOR (M 65); Gt. Wh. VOR (M 55)

AR, Min. Mag., 17, 15, (1913) Bertrandite (See Cheese-wring  
Quarry K4 (11))

BM: Acicular cassiterite.

Henwood: CARLEEN MINE = W part of Wh. VOR.

Dewey Cu (1923) 6 Cassiterite in slate, not in  
granite (of GT WORK MINE, other way round).  
A little melanconite in granite

W. Phillips (1823). Nat. copper.

Wn Metal (vor)

GC Goodridge, Geog Mag (1967) 686      Being re-evaluated  
but used as water source, so plans stopped

CMRM (1995)    "Wood" cassiterite;

Wh MEXICO, Calstock, Cornwall

See Wh BROTHERS (~~also DUCHY & CONSOLS?~~)



1" 185 or 190 SW 7 S ?  
MEXICO MINE, Perranzabuloe, Cornwall, A 24  
of DUCHY MINE, Callington.  
(BROTHERS)

Rutley, 15th. Ed., p. 220, argentite; p. 222, cerargyrite.

Collins (1871), p. 58. "Huel Mexico". Argentite; galena; silver;  
cerargyrite.

Rudler (1905) 57. Accord. to J. Carne, 1st discov of Ag in  
Cornwall ca 1788 in a mine in parish of  
Perranzabuloe, "which was in consequence dignified  
with the name of Huel Mexico".

W. Phillips (1828). Nat. silver, with galena; cerargyrite

CMRM (1995) Pyrargyrite

1" 189

SW 62 32

C 24

Wh. MILLET, Crowan, Cornwall.

JC(1871), 51:

(Cu, 10kg.)

Chalcopyrite ✓

1" 174

~~SX 4489, 4488, 4487~~ 99  
MILLOOK BEACH, St. Gennys, Cornwall 1900

CMRM(1995) Dickite



1" 185

SX 02 53?

MINEAR DOWNS MINE, St Austell, Cornwall. SA 64

JC(1871) (el: (wkg.) Cassiterite. ✓

1" 190

Nr. SW 746 503

Wh. MITHIAN, St. Agnes, Cornwall.

AKHJ (1962) 2 23-24 To E of Wh. LIBERTY [9v];  
position clearly indicated by shaft 1000 ft  
SE of village (cf Dines). To its E was  
GEORGE THE FOURTH M. (Prob. = Wh. GOSHEN).  
Copper ore, incl. metal. [~~nat.~~ nat. copper];  
mundic [pyrite]

1" 189

SW 63 38

Wh. MOLESWORTH, Camborne, Cornwall

---

See NORTH DOLCOATH MINE



Wh. Montague, Perranzabuloe, Cornwall  
See Perram Wh. Jane.

1" 189 ~~620~~

SW 69 43 ~~27~~.

Wh. MONTAGUE & HARMONY, Redruth, Cornwall.  
See ~~Wh.~~ HARMONY & MONTAGUE MINE

---

AKHTJ (1962) 3 29

WOOD M & others, as

Mentioned, with TRELEIGH

Wh. MONTAGUE & HARMONY

DBB W. Cornwall (1963)

9 TRELEIGH WOOD MINE (= HARMONY M.).

Wh. MONTAGUE, to NW

1" 189

SW 487 381

Wh. MONTAGUE, Towednack, Cornwall.

AKHJ (1961)  $\perp$  16 looked ca 1770 & mid-19th cent.

Tin ore. ✓ S of Wh. Spetnis



SW 4035, 4036, 4135, 4136, 4236  
MORVAH MINE, St. Ives, Cornwall H 36  
~~See MORVAH LTD MINE, MORVAH CONSOLS, MORVAH HILL M~~  
Henwood.

1" 189 SW 41 35  
MORVAH HILL MINE, Morvah, Cornwall.  
See also MORVAH UNITED MINE.

DBB (1963) 11. Inland of the main road, on  
slopes of Watch Croft, & drained by  
an adit from coast cliffs

AKHTJ 1 (1961) Part of MOR. LTD. M. Embraced a no. of  
v. ancient mines:— WHEALS WIDDEN, GOTH, GROUSE, LANE,  
FRISTON, GOLLEWA (? GALVER) & STRIPPAN. On slopes of  
of MORVAH HILL = GARDEN M. watch croft

JC (1871) 48 GARDEN M., Morvah— Sn mine ✓

1" 189 SW 407 359  
4036  
MORVAM CONSOLS MINE, Morvah, Cornwall

DBB (1963) 11 Close to cliffs, N of Morvah. Small  
tin mine.

AKHJ 1 (1961) 9 "New" in 1851. Eng. house on cliff N  
of Morv. church.



1" 189

SW 415 357

MORVAH UNITED MINE, Morvah, Cornwall, <sup>42</sup> <sup>36</sup> St J 66  
See also CARN GALVER; MORVAH HILL MINE.

JC (1871), 48: Chlorite; felspar; fluorite;  
haematite; mica; schist.

DBB (1963) 11 MORVAH & ZENNOR UTD MINE comprising  
CARN GALVER MINE, MORVAH HILL MINE, etc.  
Carn galver's runs by road, shaft 130 fms  
deep. Morvah Hill mine is inland of the  
road on slopes of Watch Croft, & like  
all these coastal mines, by an adit  
in the cliffs.

AKHJ (1961) 19 Analg of MORVAH HILL or GARDEN M. on

slopes of watch craft, with CARN GALVER or ROSEMERGY. M.  
 $\frac{1}{2}$  ml to NE [422 365]

Morvah e Zennor Ms, Morvah, Corn

See Morvah Utd M



Wh Mount, Lelant, Corn

See E. Providence M

1" 189

SW 52 30

MOUNT MINE, Perranuthnoe, Cornwall. A 77

~~MOUNTS BAY COWSOL~~ <sup>53 29</sup> SM

TMH (1868), 48: (Pb, Fe). Argentite; pyrrargyrite; pyrite

JC (1871), 49: "Mount Mine? Argentite" "MOUNT M.,  
Perranuthnoe"

[Perranuthnoe, 53 29]

Dines <sup>P442</sup> - only the one in Perranzabuboe, SW 7756  
- Perran Iron Lode. Has Ag; Ag minerals also found  
around Perranuthnoe - Prob =

MOUNTS BAY COWSOLS MINE

1" 189 52 30

PTO

MGH Merry, spec → RSWB 11/94. Pyromorphite,  
pale green xls (FTIR - As-free).

R. Selley (2014) BMSNGI 21 MOUNTS BAY CONSOLS  
vuggy chlorite, anatase, platy monazite,  
sparable cassiterite



MOUNT MINE, St, Blazey, Cornwall

See also PAR CONSOLS MINE

Dewey (1923) 44. Included in PAR CONSOLS.

1" 190 Near SW 763 417

MOUNT WELLINGTON MINE, Gwennap, Cornwall (I)

Anon., Gems (1973), 5, [2], 9-10. Being actively  
explored. Some very good quartz; pyrite;  
marcasite.

Dines (1956) I, 41, 277, 393, 426-8. Sn mine, where  
the County Adit empties into Carnon Valley  
 $\frac{1}{2}$  ml S of Twelve Heads [ie opposite Nangiles mine;  
& near Wh. Andrew]. Includes Wh's ANDREW;  
CLIFFORD & POLDORY sections of the UNITED MINES group  
& Wh. BRITANNIA or Wh. MOOR. History. Main  
workings in Wh. ANDREW (= MAGPIE) section of UTD. MINES.  
New MT. WELLINGTON Co. formed 1935, extended sett

to include much of LTD M's to  $1\frac{1}{2}$  ml W of the valley,  
also Wh. BRITANNIA. In 1939 Wh. JANE & W. Wh. JANE  
also included.

An elvan dyke which extends through Nangles  
& Jones is partly mineralised w. pyrite & traces  
cassiterite. The lode is a quartz, peachy,  
tourmalinised breccia. [chlorite]

Cassiterite; high pyrite content.

R.W.B., Plym MMCJ (1974) 5 [1] 7-8. At 760418. Newly prospected  
after ~~sean~~ temp. closure. Some v.g. pyrite xls - very  
bright mirror-faced cubo-octahedra. Several large  
cavities lined with good milky qtz xls dusted  
w. small pyrite xls.



# MOUNT WELLINGTON MINE, Gwennap, Corn. (II)

MA 81-2537. Kettaneh, Y.A. & Badham JPN "Mineralisation  
e paragenesis at the Mt. Well. M., Cornwall"  
Econ. Geol. (1978) 73, 486-495. 3 lodes, 4  
stages of mineralisation. Quartz, tourmaline,  
cassiterite

SA Rust "Mt. Well. mine" Min Realm (1982) 2 [2] 9-10.

Good pyrite xls  $\rightarrow$  2cm thickly encrusting elongated  
quartz xls; chalcopyrite, tarnished masses  
& crude xls  $\rightarrow$  3cm. Marcasite, small xls;  
barite; translucent grey-green xls  $\rightarrow$  1.5cm. sometimes  
also green chlorite

MT Wellington M

V.T. Ral; B.V. Cooper; S. Weller, Riv Comms (10/84)

Ceruleite (1R, RSWB); forbernite, scorodite  
in W. extension. See Wh MAID, Gwennap  
CMRM(1995) copiapite(?); covellite;

MOUNTS BAY CONSOLS, Perranuthnoe, Corn

See MOUNT MINE, Perranuthnoe



1" 196

SX 01 65 SA 35

MULBERRY (HILL) MINE, ~~SE~~ Lanivet, Cornwall. (I)

JC (1871), 59: (Sn, wkg.) Cassiterite.

AR MM 21 MULBERRY MINE. Cassiterite, topaz  
p221. Topaz, quartz, cassiterite, gilbertite,  
chlorite, arsenopyrite, scorodite,  
chalcopyrite, wolframite.

GS 1967. Specimen seen - from borehole -  
connellite, attractive brushes on matrix.  
"Similar material from open level in  
bottom of opencast" - Jobbins.  
Reopening a possibility.

sc goodridge, geog Mag (1967) 686 Being reconsidered (1967)

BV Cooper (Piv. Comm 11/69) Scorodite, cassiterite,  
wolframite, quartz, "thin green coatings"

#### 4 July 1993 Mulberry Pit, Cornwall

RSN (1994) 24

I have been wanting to visit Mulberry Pit for many years, perhaps as a result of reading glowing reports of expeditions undertaken by members of the Plymouth Mines and Minerals Club back in the 70's - when Mulberry Pit conjured up in my mind dreams of mineral wealth in the fabled and mysterious West. I had a preconceived notion that it was an old China Clay pit and had confirmed my prejudice on examination of the Ordnance Survey map that showed the features admirably and even suggested it should be OK to drive in to the old workings. In view of the reality I was somewhat relieved to find that a number of others shared this bizarre misconception. Even as we plunged through the woods to the entrance I was expecting it to open out into a standard pit and the first site of the chasm

that is the Mulberry Pit took my breath away. This is open cast tin mining done on a majestic scale and as it becomes overgrown it increasingly takes on the appearance of the natural chasms and canyons found in Utah and Nevada.

We were blessed with a superb leader in Tony Amos who had doggedly pursued permission for access and braved gun toting caravan dwellers surrounded by Rotweilers in the process. He had also decided that a rope down the scree entrance route would be beneficial to allow easier access (and exit!). Once at the bottom there is a certain challenge in traversing the scree face without being entangled in discarded 'white goods' and world weary Mark 1 Ford Escorts.

cont'd → (II)

# MULBERRY (HILL) MINE, Lanivet, Cornwall. (II)

Collecting was slow at first, partly due to the size and age of the pit and subsequent uncertainty as to where to commit the effort. After 2 hours this author was distinctly down-hearted (particularly having read of some recent micro-mount findings at Mulberry) and was involved in a deep conversation as to the wisdom of searching in the vicinity of corrugated iron sheets. The latter subject was causing depression as he had just learnt another Cornish collecting tip - 'Beware the red brown corrugated sheet, dwell the speckled band, of vipers asleep' - when he espied cassiterite and blue stains on a rock fall. This eventually yielded a nice 10 mm crystal of cassiterite, while the blue stains ~~proved to be scorodite~~ and some chalcophyllite on tourmaline. Alas the chalcophyllite is only visible at 30x magnification, but it is one of the few minerals worth pursuing at that power. Other members of the group attacked a recent digging in the rock face, whilst a few ventured underground a short distance and found similar material, while Nick Elton believes he found lavendulan and cyanotrichite.

CMRM (1995) Covellite;  
parnauite; stannite;  
varlamoffite

Mulberry Mine, Bodmin, Cornwall [Grid  
Ref: SX 019656] - 28 April 1996

SWB, Leader: Tony Amos, Reporter:  
David Moulding RSN (1996) 29

Mulberry Mine exploited a N-S trending tin stock work in hard silty sediments. The site now consists of a deep (120 feet) narrow opencut. Recent allochthonous (the trip reporter has been trying to use this word in a report for over 10 years!) deposits cover most of the floor of the pit, and include large oxidised examples of fordescortite and morrisvanite.

PTO



Twelve members including a visitor from Central Branch had elected to face the forbidding descent into the pit. This involves negotiating a steep loose shale scree which looks quite unpleasant. Luckily the fairies (or was it Tony?) had fixed a rope and we all reached the bottom safely.

Once down, the party spread out, some excavating quartz veins in the walls, others attacking boulders

and the more promising bits on the scree. Soon nice scorodite was being found and small but bright cassiterite plus plenty of rather dull wolframite and arsenopyrite. The best scorodite seemed to be associated with the wolframite, which might be a curious fact. One small area of copper mineralisation yielded brochantite, tiny amounts of chalcophyllite in 1mm hexagonal crystals and even smaller amounts of connellite. Afterwards Sheila Harper kindly demonstrated the advantages of using old telephone directories to wrap specimens. It's certainly a good way of using up old telephone directories.

After this it was time to haul ourselves plus specimens up the slope. This time the rope really did come in handy. In all, it was an enjoyable day.

BMSN (1998) 30 9

Cyanotrichite (R. Stankey)  
1983

RSN ('03) 42 30. Descrip

of pit & access (!?)

Tourmaline needles in qtz,  
cyanotrichite, ? langite,  
chalcophyllite, brochantite.  
cassit xls, wolframite  
etc.

1<sup>st</sup> 189  
MULLION, <sup>Lizard</sup> Cornwall (I)

SW 6<sup>7</sup> 19 (vcl)

See also PARC BEAN COVE; MULLION ISLAND;  
POL CORNICK; POLURIAN COVE; PRADANACK

Midgley, Clay Min Bull (1959) 4. 88. Sepiolite - Mullion  
CMRM (195) Actinolite; hornblende; tremolite;  
Wilson et al. (2008) J. Russ. Soc., 11, 87.

Scolecite from HENSCARTH, on N side of  
Mullion Cove; in veins in schist adjacent  
to serpentine. (XRD)

Mullion, Cornwall. (II)

Rayner's Cat. (1960).

Satolite + calcite.

Midgley, Clay Min. Bull. 1959, 4, 88.

Sepiolite from Mullion.



1" 189

SW 660 175  
Lizard

MULLION ISLAND, Mullion, Cornwall. L 17  
See also MULLION, etc

JC (1871), 54: Serpentine ✓

CMRM (1995) stilpnomelane

1" 189

SW 45 35

MULVRA HILL, Sanceed, Cornwall. STJ 64

SC (1871), 48: "Pinite"; fine xls. orthoclase.

1" 189

SW 483 388

Wh. MUSIC, Towednack, Cornwall

AKHJ (1961)  $\perp$  17. 2 adits into Trendine Hill,  
late 18th Cent.



1" 190

SW 704 470

Wh. MUSIC, St. Agnes, Cornwall.  
 See also Wh. ELLEN.

A 39

JC (1871), 58: (Cu) Copper; chalcocite; cuprite;  
chalcopryite; malachite!

W. Phillips (1823). Fibrous malachite; nat. copper.  
cuprite.

AKHJ (1962) 2 16-17 To S of Wh. Rock [TYWARNHAYLE M]  
 where roads from Truro & Redruth meet [ie near  
 703 470] is the "Navy Pit" a large circular  
 excavation in a stockwork of strings of grey  
 copper ore [? chalcocite] & native copper, & which  
 is part of Wh. Music. Wh Music itself

v. rich in parts but in soft ground, & dangerous.

In 1834 combined with its W neighbour  
OLD Wh. BASSET as Wh. ELLEN. - 12 N dipping  
lodes.

1" 190 SW 73.42  
or MUTTRALL  
WHEAL MUTTRELL, Gwennap, Cornwall.

SW <sup>part</sup> of wh GORLAND. See also wh. GORLAND; wh UNITY

R 1

Truro Museum: Pitchblende; malachite; good scorodite;  
good cuprite, azurite; chalcophyllite;  
clinoclase

BM: vg connellite, with cuprite;

MM 32 1 (1959). Green massive cornubite, with  
olivinite, malachite, etc, on rusty quartz.

Rudler (1905) 52. Liroconite seems to have been  
found only in whs. UNITY, GORLAND & MUTTRELL.

AKHJ, vi (1963) 13 (Map, p. 12). During the 1790's The N part



of Wh. GORLAND worked separately as Wh. MUTTRALL.

Connected to County Adit, here a 50 fms below surface.  
a e Sn, chiefly Sn. When subsequently merged  
with Wh. GORLAND, was developed to an inclined  
depth of 126 fms.

W. Phillips (1823). Azurite, sparingly; biroconite;  
clinoclase; cuprite ✓

Naked Sword Bounds M., Redsmith, Corn

See Pednandrea M

Wh Nancothan, Redsmith, Corn

See Pednandrea M



1" 189

SW 640 323

NANCEGOLLAN MINE, Crowan, Cornwall

Nancegollan 63 32, 64 32.

CMRM (1995) "Dough" cassiterite

? Scheelite marked on map  
at 640 323

1" 190

SW 765 420

NANGILES MINE, <sup>Bissae</sup> ~~Kea~~, Cornwall. R 72

JC (1871) 60 (Cu, Sn, wkg.) Chalcopyrite; gold?  
pyrite; sulphur?  
"NANGILES M., Kea, Cornwall"

MJ Mins Cat (1989) Wurtzite, metallic  
greyish-black mass w. dullish pyrite  
xls on base

1" 189

SW 35 23

NANGISEL COVE, Sennen, Cornwall. STJ 34  
NANJIZAL

JC(1871) 46.

✓ Amethyst; "pinité"; occasionally fine  
x's of orthoclase in the granite

1" 189

SW 35 23

"Mill Bay or Nanjizael"



Nanpatta M, St Agnes Corn

See Blue Hills M

1" 180  
NANSLOE nr. Helston  
Falmouth, Cornwall

SW 66 26

4

Rutley, 15th. Ed., p. 210, bourbonite.

TMH (1868), 41. NANSLOE, Helston: bourbonite

[See Wh. POOL

1" 189 Perranuthnoe SW 541 299  
WHEAL NEPTUNE, Marazion, Cornwall 29  
~~see also E. Wh. NEPTUNE~~  
Henwood.

Dewey (1923) Cu ores 1815-38

DBB (1963) "W. Corn" 22. Cu mine, worked before 1850



1889  
EAST WHEEL NEPTUNE, Perranuthnoe, SW Cornwall. 544 3005

See also Wh. NEPTUNE

AKHJ (1962), 4, 33 To the N of Wh. Neptune. Probably

= Wh. ARTHUR. Part = Wh. PRATTLE. "In the  
25 fm level," wrote Capt Matthew Francis, "the  
lode for several feet ~~was~~ wide was filled  
with chromates of metals, the colours  
brilliant, & varying from every shade of  
brown to bright yellow, interspersed  
with every variety of green. Many of  
the stones were frosted with nickel  
appearing like silver, which I believe

to be ruby copper, probably charged  
with silver. Independent of this .... copper  
ore... & in 15 fm level a course of grey  
copper... [!!!??!]

Another branch of the Wh. Neptune adit  
extended N to just S of goldsmithney  
village. Here a fine lode of copper in gozzan  
- Wh. CAROLINE.

Dines (1956) L. 181 = PERRAN CONSOLS. Descrip. of  
lodes. Copper ore. ✓

RSWB (8/66) 5 56 Dump, overgrown shaft, at 544  
3005. quartz, killas, grey slate

New Charlotte M., St. Agnes, Cornw.

See N. Towan M.



186 SX 38 73  
NEW CONSOLS MINE, Stoke Climsland, Cornwall

K 12

P.E. Min. Mag. 30, 259

some tocumaline, fluorite

Beryl; löllingite, intergrown with arseno-

-pyrite. The beryl in <sup>small</sup> dirty greenish white prisms in pegmatite

Vokes & Jeffery: Trans. Inst. Mining, 64 141; 332; 417 (1954).

Old Cu/As mine, reopened as Sn mine 1946-1949.

Cassiterite; arsenopyrite; pyrite; chalcopryite; blende.

Traces wolfram. Late siderite, & galena with some  
fluorite, pyrite, etc.

JC (1871), 64. NEW GT. CONSOLS, Callington: (Sn, Cu, wkg.)  
Cassiterite, chalcopryite.

1" 189

SW 59 28

NEW HENDRA MINE, Breage, Cornwall. M 45

JC (1871), 54: (Sn, wkg.) Cassiterite. ✓

1" 190

SW 799 303

NEWPORT BEACH, Falmouth, Cornwall (I)

N. Hubbard Priv. Comm (4/82). Alan Dean  
from Cardiff (poss. moved to Newport)  
found culmengeite (2 possibly  
boleite) small xls ( $\rightarrow 0.7\text{mm}$ ) but  
rich as coatings on a vein  
exposure at Newport beach,  
Falmouth.

OS 1" map shows "Newport Head" at  
799 301

R



RSWB 82-167: Pres Sam Weller; Coll Ian Dean 9/82.

Phosgenite f. micro nice xl with quartz on  
vein-gozzan.

MA 82M/3733 A.C. Dean, J. Russell Soc. (1982), 1, 40-41  
Cumengeite, with bornonite, galena,  
tetrahedrite, in mineralised vein  
cutting Mid. Devonian seds. at  
NEWPORT BEACH, 2 km SW of Falmouth.

AC Dean RF Symes JH Thomas PA Williams MM (1983) 47 235-6  
Cumengeite in one of a series of small quartz  
lenses explored by one of several shallow  
trial adits.  
at 739 303 galena, bornonite,  
(well x'd) (massive)

NEWPORT BEACH, Falmouth, Corn. (II)

→ well x'd → 2mm  
tetrahedrite, minor chalcopyrite, pyrite,  
pyrrhotite; "Fe(III) oxyhydroxides";  
cerussite, kindheimite, cumengeite,  
(malachite, atacamite,  
→ cerussite abundant → 8mm; some blue.  
Phosgenite, single xls → 3mm  
boelite, pseudoboelite expected, not observed.

AC Dean (1983) J. Russell Soc 1 (2) 19-20. Phosgenite,  
small glassy 2mm xls

Roy Starkey Priv Comm 2/85 Slide shows

nice "very tiny" sharp cubes of boleite  
"or pseudoboleite"



1" 185

Cont. on SW 81 61

## NEWQUAY, Cornwall (I)

See also NEWQUAY CONSOLS, CHIVERTON Wh. ROSE;  
NEW Wh. ROSE; TRELOGGAN M.; WATERGATE BAY.

Rev. V. Holyer Riv Comm ~~type~~ MS (1989). EW fault  
across headland betw. Tolcarne & gt Western beach  
[i.e. the one at 816 619?], lined by canes on both  
sides; mineralised in places & in nearby cliff.  
Sec'y mins only abundant where sea has had  
access to the mineralised fault.

Pyrite; galena; sphalerite; an unident Cu ore;  
Sec's in order of frequency: cerussite, tabular, twinned  
& acicular; phosgenite, small xls; boleite, small xls  
incl. near-perfect cubes; cumengite, v. small xls, with  
triang. faces vis. under microscope; pseudoboleite,

in centres of faces of boleite cubes; pyromorphite,  
prismatic & tabular; malachite; an  
unident min. forming white & green spheres.

CMRM (1995) Boleite (TOLCARNE BEACH);  
cumengeite (TOLCARNE & Gt. WESTERN beaches);  
phosgenite (TOLCARNE & TREGARDECK beaches);  
pyrophyllite ("BUDE-NEWQUAY COAST" [sic!]);

F. Sharp (1996) BMS Newsletter 43, 8. FLORY ISLAND, Newquay  
[SW 8305 632] (S. Harper (1995) BMSN. 42 2: Pyrolusite xls  
on siderite & killas). White powdery pyromorphite (also  
lump) with the pyrolusite; phosgenite, 1mm xls (~ 1m above  
high water mark).

## NEWQUAY, Cornwall (II)

M.F. Gale (1997) @ BMS sympos. Slags from  
"a Pb/Sb smelter" at ~~THE~~ GANNEL, Crantock"  
(OS 1" 185 SW 7860 7960 - [799610 - 797610]).  
have excellent xls cumengeite;  
also anglesite, cerussite, phosgenite.



1" 185

SW 801 619

NEWQUAY CONSOLS MINE, Newquay, Cornwall  
See also NEWQUAY etc.

AKHJ

"Newquay Consols" at 801 619

1" 186 Harrowbarrow SX 399 700  
Wh. NEWTON, near Callington, Cornwall.  
? = HARROWBARROW M. = Wh BARNARD =  
EAST Wh. BROTHERS  
Rudler (1905), 57. Fine stephanite.

RSN(104)45, 50 (Bill Mason) Visit. In garden of  
Steve & Liz Matcham. Arsenopyrite; x-lised  
nat silver, "argentite" [acanthite], pyrargyrite,  
stephanite.

Found; massive pyrite, arsenopy, chalcopy,  
gallena, siderite. No Ag minerals.

1"185

SW 823 619

NEW WHEAL ROSE, Newquay, Cornwall  
See also NEWQUAY etc.

AKHJ

"New. Wh. Rose" at 823 619



Wh Nicholas, Lelant / St Ives, Corn

See Vorvas M

1"189

SW 519 411

NORTH BATTERY TIN M., St Ives, Cornwall

AKHJ(1921) 122. Small mine on W of The  
Island, opened 1821. Ca 1840 attempt  
to work back of lode by a pit  
below high tide mark, on beach - locally  
known as Wh. SNUFF Sn mine ✓

1" 190

SW 7144

NORTH DOWNS MINE, Redruth, Cornwall. R 48

See also GREAT NORTH DOWNS MINE (R 47), Wh. PEEVOR

JC (1871), 53: (Cu) Blende; cassiterite;  
chalcopryite; fluorite; limonite;  
minetite? pyrite

Dewey (1923) 29 Included 'in PEEVOR LTD. MINES [See  
Wh. PEEVOR]. Formerly produced much Cu,  
a little recently.

W. Phillips (1823). Mimetite; good xls chalcopryite;

M. Merry Priv Comm 5/94 Pale green ~~partly~~  
rectangular



platy (FTIR = m(?) - zeunerite) with  
quartz galena uraninite &  
a pale yell  $\rightarrow$  less feathery  
alter. prod of the zeunerite  
[? m? - kahlenite perhaps, by ion-  
exchange?] The quartz is somewhat  
smoky [radiation damage?].

1" 190

SW 71 44

R 47

GREAT NORTH DOWNS MINE, Redruth, Cornwall

See also NORTH DOWNS MINE (R 48), W. PEEVOR.

JC (1871), 53: (Cu) Chalcopyrite ✓

Dewey (1923) 29. Included in PEEVOR UTD. MINES [See  
W. PEEVOR]. Formerly produced much Cu,  
a little recently.

GC Goodridge geol. Mag (1967) 686 Being reconsidered (1967)  
with W. Peevor

North United Gurnett's Head M,  
Zennor, Cornwall

See Gurnard's Head M



1"189

SW 35 5 327

NORTH ZAWN, St. Just, Cornw.

See also LOE WARREN

N.J. Elton & J.I. Hooper (1996) J. Russ. Soc. 6 [2], 98

"A further occurrence of widemannite in Cornwall, England"

Widemannite,  $\text{Pb}_2\text{UO}_2(\text{CO}_3)_3$  from a quartz-calcite-sulphate boulder at NORTH ZAWN ~ 800 m SW of previous occur. at Loe Warren. With sodium-zippelite (bright yell microxl), quartz, pyrite, gypsum, minor chalcopyrite, galena, sphal, ceruss, angles.

1" 189

SW 62 33  
Cornwall

OATFIELD MINE

---

See also CRENVER

Dines (1956) 194 Included in CRENVER  
AND ABRAHAM M. (The E part)

1" ~~187~~ 187 <sup>Sx. 444-7 689</sup>  
OKEL TOR, Calstock, Cornwall.

K 39

See also HAREWOOD CONSOLS M.

Little Map, 7

JC (1871), 65: (Cu, wkg.) Chalcopyrite.

OS 6in map: Cu, Sn, As mine OKELTOR MINE 444-7 689

B. Cooper 16/4/77 Loc "H." Childrenite, small brown crystals on killas.

Loc "J" 4/78 is small dump at 4465 6927 beside track nr. Ferry Farm, between OKELTOR & HAREWOOD CONSOLS M's.



OLD HARROWBARROW M., Corn

= Wh. FORTUNE (q.v).

Wh Orphan, Redsmith, Corn

See Wh Mary

1" 189

2½" SW 53 586326

OSBORNE SHAFT, Breage, Cornwall

M 22

= Wh OSBORNE



1<sup>st</sup> 1869

SW 53 31

OWEN VEAN MINE, St. Hilary, Cornwall M 80

TMM (1868), 41: Chalcotrichite; cuprite; copper.

W. Phillips (1823). Nat. copper.

= TREGURTHA DOWNS M (part 87).

NB Wh UNITY, Mullion SW 6717 also = OWEN  
VEAN MINE, & is likely to have Cu.

1" 189 <sup>2 1/2" SW 33 362 328</sup>  
WHEAL OWLES, St. Just, Cornwall (I) SKJ3  
See also W. Wh OWLES (St J4): Wh. EDWARD, etc. Wh. DREA Wh BOYS,  
Wh GROUSE, LOWER BOSCEAN M., PARKNOWETH M.  
Zippelite - Trevo Museum

Min. Abs. 12, 111. - uranopilite  $(\text{K}_2\text{O})_6 \text{SO}_4 (\text{OH})_{10} \cdot 5\text{H}_2\text{O}$  (Fronzel,  
Amer Min, (1952) 37 950).

AWGK Min. Mag. 31, 349 (1956) - atacamite ✓

Visited Sept. 1957 - see West Wheal Owles. St J4

AWGK, RASC (1952) Brochantite. ✓

BM: Giant vivianite; \* also fibrous-botry.

JC (1871) 48 Wh OWLES & EDWARD (Sn, wkg) Actinolite; apatite;

calcite; chalybite; rhodochrosite; pharmacosiderite;  
aragonite; autunite; chrysocolla; malachite; pitchblende;  
torbernite; vivianite.

Dines (1956) 69. Includes Wh. EDWARD, W. Wh. OWLES (=CARGODNA),  
Wh. DREA, Wh. BOYS, Wh. GROUSE, LOWER BOSCEAN,  
& PARKNOWETH mines.

The group of NW lodes run from  
Nancherrow Valley N of St Just, under Kenidjack  
village, to coast between Wh. Edward Zawn  
& Loe Warren. In granite overlain to NW by  
metam. killas & greenstone. Available plans  
(latest 1893) not reliable. Old mines.

Sn mainly from inland & Cu from



Wh. OWLES, St Just, Cornwall (II)

~~coastal~~ workings; also some Bie U ores  
assoc. with argentiferous galena in  
cross-veins (Pearce, Trans R.G.S. Corn. (1878) 9, 103).  
Also produced some crude arsenic.

Rudler (1905) 78 "Penwithite" hydrated Mn silicate,  
(J.H. Collins, MM (1879), 91; MM (1880) 89). [ = Neotocite ]  
80-81 Pitchblende (v infra)

DBB (1963) 15 At times included W. Wh. OWLES, Wh. EDWARD,  
Wh BOYS, Wh GROUSE, etc. In 1906 joined BOTALLACK  
AM Clark AJ Easton & M. Mount, Mm Mag. (1978) 42 279-280 (M 26-30)  
"Penwithite" = Neotocite

AM Clark & AG Couper, "End-member triploidite from Cornwall", Min Mag (1979) 43, 179-80.

Triploidite, <sup>pale orange-pink to orange-red</sup> small <sup>to 1 mm.</sup> glob. rad. aggs. on botryoidal surface of neotocite ("penwithite") in a cavity in an old specimen, BM 52182. Fe-free. 1st from Britain.

NJ Elton & JS Hooper J Russ Soc (1994) 5 114-5

Tuyamunite - Cardogna section of Wh Owles, SW 362 329 [XRD, EDAX] - earthy crust & canary yellow microxl aggr's on one wall of a backfilled ~~stage~~.  $\times 15 \rightarrow 10 \mu$ . buff aggs  $\rightarrow$  several mm. with qtz, Cu<sub>2</sub>P [~~the~~ Cardogna = W. Wh. Owles?] & Zeenerite

# Wh. OWLES, St. Just, Cornwall (III)

RSN (1992) 23

## Cuprosklodowskite from Wh.Owles

Wh.Owles and adjacent mines have long been known for the presence of secondary uranium minerals. Exploration of the Cargodna section of Wh.Owles last year led to the discovery of cuprosklodowskite, apparently from an isolated block of material on the floor of the stope. The habit of radiating aggregates of green acicular crystals is quite typical.

Ref: Ryback, G. & Tandy, P. (1992) Eighth supplementary list of British minerals (English)  
*Min.Mag.* 56 pp261-275

[~~the~~ cardogna = W Wh owles?] ]



Wh. OWLES, St. Just, Cornwall (IV)

CMRM(1995) "Bismuth ochre"; bismutite;  
"sparable" cassiterite; chalcanthite; djarlite;  
mixite; waylandite;

RSN('07) 50, 33. "sparable" cassit, connell,  
"feldspar" fluor, goeth, haem, sider,  
"achalcophyllite" [? = brook]

11/189

(=CAR<sup>G</sup> NA M). 2 1/2" SW 33 36 1/2 327

St J 4

WEST WHEAL OWLES, St Just, Cornwall (I)

See also Wh OWLES (St J 3) etc.

AWGK, RG-SC 1952 - Tallingite - blue, some enamel-like, some slightly fibrous and tending to botr. on surface.

Botallackite - pale bluish-green crusts of interlacing minute needles.

Paratacamite. Dark green, some xline, some enamel.

AWGK, 1958  
Hiv Comm.

Phenakite in vughs, N part of Loc 101, in phyllite-like stuff with feldspathic veinlets and chalcopryite spots, but best without chalcocite or Cu act. products. (cf spec. in GR coll, prev. AWGK).

Visited Sept 1957. Loc 101. Dumps above Wh. Edward Zawn at inclined shaft. Only qtz and some Cu mins.

P.T.O.

Loc 103. Dumps marked W. Wh. Owles on 6" map.

Crusty tallingite, <sup>on arsenopyrite</sup> altered chalcocite, etc. RSWB & GR

Visited Aug '58. N part of Loc 101 assiduously  
searched for phenakite, without success! RSWB, GR  
One spec. torbernite RSWB.

Rutley, 15th Ed., p. 179, cassiterite ✓

Dines (1956) 69. = ~~CARBONATE~~ MINE included in  
'Wh OWLES

DBB (1963) 15 At times part of Wh. OWLES. Disaster  
in 1893 by flooding. ~~Woods~~ left in situ &  
deep levels abandoned.



WEST Wh. OWLES, St. Just, Cornwall (II)

N. Elton, J. Hooper & J. Ryback (1994). 58, 339-41.

Compreignacite in situ from a backfilled  
slope on the ~~Caradoc~~ Cargodna lode at ~  
12 m above adit level, as thin crusts of  
transpar. bright yellow  $\leq 1$  mm highly  
reflective xls., with ceprosklodowskite  
and, less often, uranophane.

Twolloyal (1988) UK JMM 5 7-8, Metazeunerite

Ryback, G & Tandy, 1992, Min Mag 56 261-75  
Poss phosphuranylite? & salite?

Nelton JJ Hooper J. Russ Soc (1994) 5 114-5

In CARGODNA section of Wh. Owles  
tyuyamunite with quartz & chalcopyrite

K. Soc. N. (1994) 25  
**Compreignacite from Wheal  
Owles: a second world  
occurrence**

Compreignacite,  $K_2(UO_2)_6O_4(OH)_6 \cdot 8H_2O$ , is an extremely rare mineral, hitherto found only at its type locality in the Margnac deposit, Compreignac, France (Protas, 1964). Compreignacite has now been identified (by x-ray diffraction and energy dispersive x-ray analysis) on specimens collected recently from the Cargodna section of Wheal Owles, St Just and on an older (1971) specimen from the dumps around Wheal Edward incline shaft (Elton *et al*, 1994).

At Wheal Owles, compreignacite occurs in a variety of habits, most commonly as thin crusts of transparent bright yellow or golden yellow short prismatic crystals terminated by a pinacoid. Var-

ious prism forms are seen, but the faces are very often rounded giving the crystals an elliptical outline. The crystals may reach about 1mm in length, but are often intergrown. Crystals typically show fracturing parallel to the pinacoid, although this feature is rarely discernable with a stereo microscope.

Compreignacite is also found as tiny subhedral blocky crystals. The blocky crystals are often found scattered over quartz or friable matrices.

Associated minerals include cuprosklodowskite and uranophane, both of which form mats of divergent crystals on and among compreignacite crystals. Zeunerite, schoepite, brochantite, connellite and a Ce-rich agardite-type mineral are also associated with compreignacite.

References

Elton, N.J., Hooper, J.J. Ryback, G. (1994)

Compreignacite: a second occurrence, from St. Just, Cornwall. *Mineral. Mag.* 58, 339-341.

Protas, J. (1964) *Bull. Soc. franc. Mineral. Crist.*, 87, 365

Nick Elton

# WEST Wh. OWLES, St. Just, Cornwall (III)

## Nováčekite and Metanováčekite from RSN(195)26 Wheal Owles

Some incompletely characterised members of the nováčekite-saléeite series were reported from Cornwall (mainly Wheal Edward) in the 'Eighth Supplementary List of British Minerals' (Ryback & Tandy, 1992).

Recently, a single specimen of end member nováčekite,  $\text{Mg}(\text{UO}_2)_2(\text{AsO}_4)_2 \cdot 12\text{H}_2\text{O}$ , was found in the underground sections of West Wheal Owles, St Just (Elton *et al*, 1994). The nováčekite forms botryoidal crusts of interlocking plates and scales. Some of the crystals are euhedral (maximum size 0.1 mm) having the habits shown in the sketch. The nováčekite is bright greenish-yellow in colour and exhibits vivid yellowish-green fluorescence under long wave UV. The

nováčekite occurred in an isolated vug, not closely associated with any other supergene minerals, although zeunerite occurred nearby.

This is the second record of nováčekite in Britain, the first being at Needle's Eye, Dalbeattie, Scotland (Livingstone, 1993), and the first record of metanováčekite, although it does seem likely that the metanováčekite formed by dehydration of nováčekite subsequent to collection.

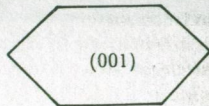
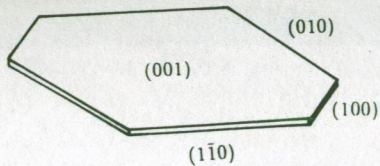
## References

- Elton, N.J., Hooper, J.J. & Jeal, A.E. (1994) *Mineralogical Magazine*, 58, pp513-514.
- Livingstone, A (1993) *Scottish Journal of Geology*, 29, pp87-101.
- Ryback, G. & Tandy, P.C. (1992) *Mineralogical Magazine*, 56, pp261-175.

Nick Elton

P.T.O.





Habits of nováčekite from Wheal Owles

W.



(N. Elton) (1995)

WEST Wh. OWLES, St. Just, Cornwall (IV)

CMRM (1995): Bequerelite (CARDOGNA LODGE:  
reported but not confirmed) (?).  
~~novaculite (St. Just?)~~ & ~~triguanite (Cardogna)~~

1" 185

SW

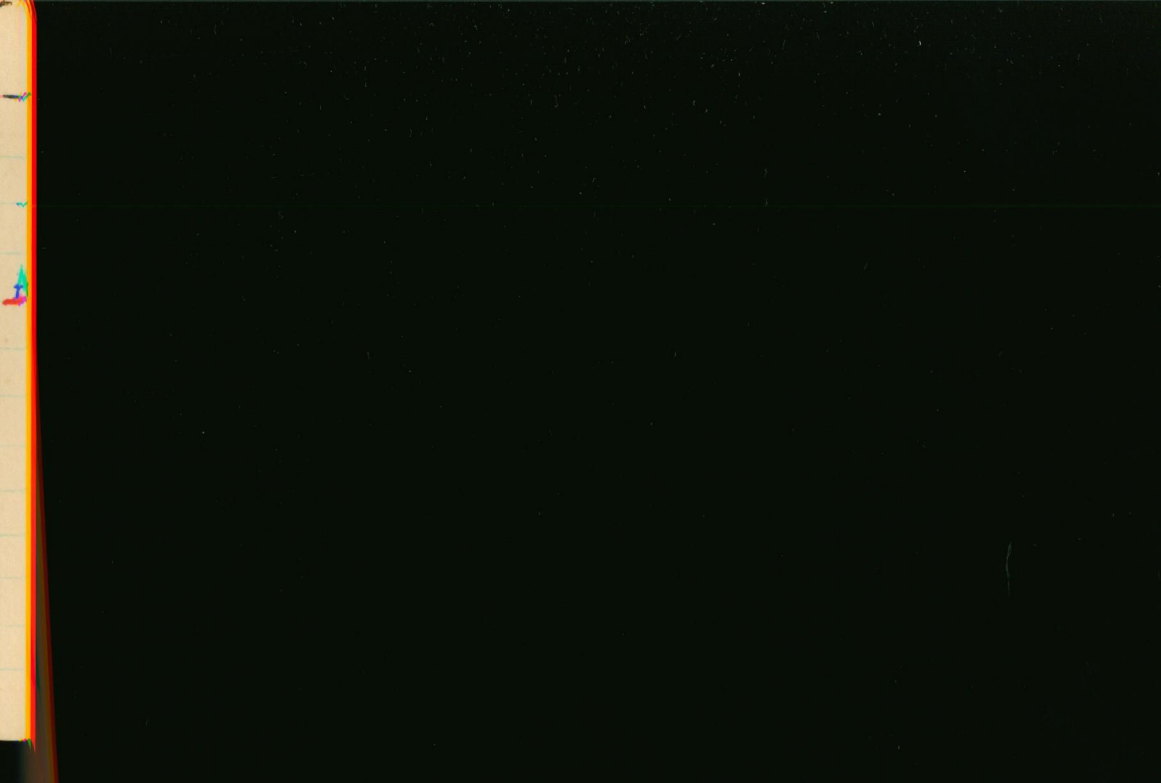
~~89 75 (F.R.A.)~~  
91 75 (town)

PADSTOW, Cornwall.

Kutley, 15th Ed., p. 145:      Stibnite "nr. Padstow"

F. Gallon Riv Comm (8/77) Acc. to locals, quartz  
crystals collected behind the swimming  
pool in Padstow, and near Trevoze [q.v.]  
86 75





1" 185

SW 89 77

PADSTOW CONSOLS MINE, Padstow, Cornwall

(I)

(1964)

AKHJ (IX) 12+14, 57. At SW 896773. = "Wh GALWAY"

At mine of 1824 = "TREVONE CONSOLS" of 1856  
= PADSTOW CONSOLS of 1860. Closed 1877.

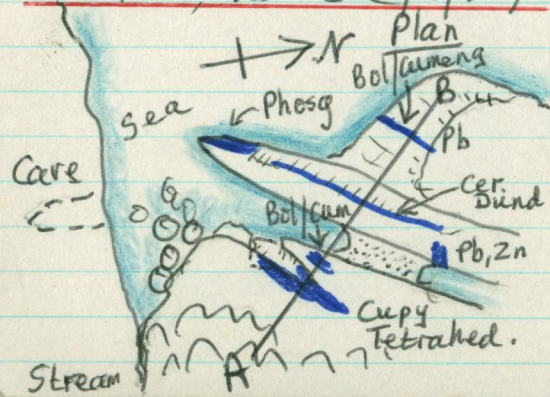
On OS map = "GUDDRABRIDGE"; = "CUDDRABRIDGE"  
of Dines. (49, 572) Copper & lead ores in  
cliff incl. beautiful purple & peacock  
copper ores, the lead assoc. with  
barytes and spar.

Dines (II) (1956), 572

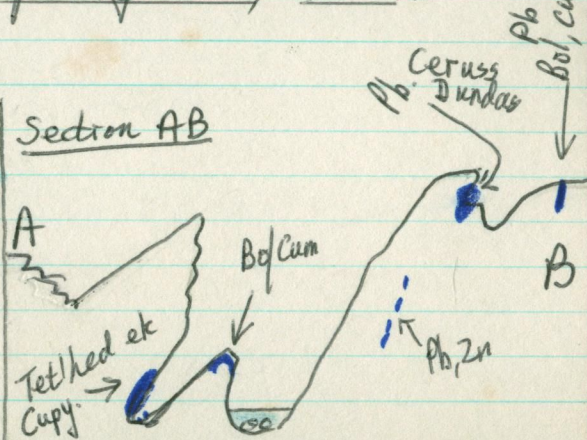
Lode outcrops in cliffs S  
of Gunver Head as crush belt with  
quartz, siderite, chalcopryite, galena.  
"cuddrabridge"

M. Merry, PIR Comm via V. Rae (1991) At base  
 of cliff veins outcrop near 894 770  
 with tetrahedrite, galena, dundasite, cerussite,  
boleite, cumengite, phosgenite, etc...

Visited, RSWB (1/8/91)



Section AB





## PADSTOW CONSOLS, Padstow, Cornwall (II)

RSWB (8/91) Contld. Explored exposures at foot of cliff at SW 894 770 where stream meets here, as does the footpath. See plan & section on card (I). Where indicated, found minerals.

- ① Tetrahedrite vein under overhang. Much tetrahedrite (on & under quartz crystals) incl. some good crystals to ~5 mm; also massive chalcopyrite; some thin coatings conellite (?) + some green material.
- ② Pb vein under crest of spur has much cerussite in small crystals, patches

of gozsan rich in dundasite, 2-3 mm  
white radiating sphaerules & coatings,  
galena, a little sphalerite, pyrite,  
phosgenite, platy crystals to ~5 mm  
near sea level! Small blue/  
green patches contain bipyramidal  
cemengite crystals. Yellow massive  
bendatite, ~~assoc~~ with colourless mimetite, <sup>vs small brown</sup> ~~xl's~~ jarosite?

- ③ Narrow lead vein ~~on~~ slaty platform  
near point "B" has galena, cerussite  
etc, and patches of cemengite,  
bipyramidal to flattened rhombic-  
looking crystals, with green  
and rarely, cubes of boleite(?).
- ④ Elsewhere small amounts of cemengite etc.

# PADSTOW CONSOLS, Padstow, Cornw. (III)

Like Wilton (1991-2) Minerals as RSWB (8/91)  
+ good anglesite, spear-shaped crystals in  
black altered galena; from (→ 1-2 mm)  
lead vein (3), in quartz matrix. Dundasite  
& excellent phosgenite up to ~ 3 mm also  
from this veinlet. Good cumengeite also  
from another coll. found a cumengeite &  
easily visible to the naked eye

M.G.H. Merry Priv Com 6/92 Spec → RSWB.  
Aragonite, white knobby coating with  
<sup>greenish</sup> - blue ~~green~~ patches. Ident RSWB (FTIR)

BMSN(2004) 68, 31. Boleite



Padstow Cornwall

MGHM Spec → RSWB 8/94. Native sulphur  
with cumengeite; sky (Cambridge) blue  
needles → FTIR = 'diaboleite' "On the  
island; NOT near sea level"  
8/5/95. Azurite (FTIR) one small  
patch of xls in gozzan

CMRM (1995) Botallackite;

RSWB & MGH Merry (1996) J. Russ. Soc. 6 [2], 99.  
"Diaboleite from Gunver Head, Cornwall, Engl."

R. Starkey (1998) BMSN 50, 9-13. The Wallace family & others  
from 1993: boleite, cumengeite, phosgenite, &  
chalcophyllite [?].

1" 185

SX

Obx 53y  
07 53j

PAR CONSOLS MINE, St Blazey, Cornwall. SA 74

See also MOUNT MINE

JC (1871), 61: (Cu, Sn, wkg.) blonde; cassiterite;  
chalcopyrite; chlorite.

Dewey (1923) 44 Includes old MOUNT MINE & others.  
Cu to 250 fm level, Sn below. See output  
B 41-bq.

1" 185 SX 06 52  
SOUTH PAR MINE, St Blazey, Cornwall.

See also E. CRINNIS M., PAR CONSOLS.

Dewey (1923) 44 E. CRINNIS & S. PAR. See E. CRINNIS for  
details



PARC BEAN COVE, Mullion, Lizard, Cornwall <sup>14 189 SW</sup> 66 15 L 2  
See also POL CORNICK; MULLION, etc. (I)

AR Min. Mag. 16 217 (1912) Prehnite with Datolite &  
Natrolite. + crust on h'kl. schist

BM: Datolite, white xls on hornblende schist.

Rayners Cat. (1960) Datolite + calcite.

WFP McIntock MM 15 407. Datolite, excellent xls, plentiful.  
Loc. covered at high water. Datolite  
at junction of serpentine & schist  
as veins occas. swelling into geodes.  
assoc. with calcite & rarely, natrolite

RSWB (8/65) 4 207. At 667 1585. Visited at low tide. At foot of "path", caves with vein of white calcite - apparently datolite-free, unreachable at high tide. Just to N, in cliffs, veinlets with small pink xls orthoclase [BM x-ray] with traces Cu stains, chrysocolla, chalcocite.

CMRM (1995) Analcime; stilbite [? error for my o'clase??]

Parc Bean Cove, Mullion, Cornwall.

(II)

AR, Min. Mag. 1912, 16, 217.

[This is the same loc. as that for datolite, Min. Mag. 1910, 15, 407]. Prehnite found 1910 in unusual tabular + prismatic xls forming a crust on dense blackish-grey hornblende-schist. Xls are greenish-white, somewhat corroded; also stalactitic + botryoidal white crusts, apparently consisting also of prehnite, with bunches of up to  $1\frac{1}{4}$ -cm



long natrolite xls on the surface.

Wh. Parent, Redruth, Corn

See Wh. Mary

1" 186

5x 16-87 70-1?

PARK (CHINA CLAY) PIT, St Neot, Bodmin Moor, Corn.

Visited 18/8/86, with Des Warren (of Fowey)

On RHS of road to S from 169746. Working ECC pit - gives "grade C" kaolin. Near E. Colliford. Working for <sup>greenish</sup> some years - "no tin or copper". Traces only of Murquhous - <sup>flashlight</sup> ~~soon!~~ Quartz veins  $\rightarrow$   $\sim$  20 cm in kaolinised granite crossed by thinner quartz - black schorl veins, the schorl fine grained. The main quartz veins milky, some amethyst distrib irreg throughout pit  $\rightarrow$  often two symm parallel bands of colour in a vein. Occas terminated



qtz xls, some amethyst often tipped  
by smoky. Some thin veins of  
"pure"-looking kaolin.

Sam Weller's Catal. (1986, summer, p14).

Turquoise, small sharp pale-blue to  
greenish-blue xte aggregates lining vuggy  
kaolinised granite matrix surface  
- "PARC ST. NEOTS PIT, BODMIN MOOR".

Wh. PARK, St Agnes, Cornw.

See POLBERRO M.

Wh. Parkis, Towednack, Corn

See Trevega Bal



1" 189 SW 366 328½

PARKNOWETH MINE, St. Just, Cornwall

STJ 27

~~See also Wh. OWLES, etc. BOTALLACK MINE, etc.~~

Sn Mine

~~JC~~ JC (1871) 48: Cassiterite; chlorite; schorl;  
vivianite

C. Rogers (1968): goethite; specular haematite

Park Reskymmer (= Skimmer) M, Redruth, Corn

See Pednandrea M

PARK VALLEY SILVER-LEAD MINE,  
Landulph, Cornwall

See TAMAR MINE [Cornwall]



Wh. Paul(l), Redruth, Cornwall.

See Wh. Captain

Wh Pedlar, Redruth, Cornwall

See Wh. Gilbert

1" 190

Cont on SW ~~42~~ 703 420PEDNANDREA MINE Redruth, Cornwall (I) R 27

See also W. SPARNON

BM: Erythrite.Kewwood: chalcedony.

JC (1871), 53: (Sn, Cu, wkg.) Amethyst; chalcedony;  
cassiterite; fluorite var chlorophane;  
chlorite; clinoclase; fluorite; galena;  
olivine; pharmacosiderite; psilomelane?  
pitchblende; scorodite; smaltite; ward?  
wolfram; zippeite.

Foster, MM 1 74 (1877): löllingite ("leucopyrite")



St Pauls Sch. Coll SPS 92 Azurite xls, with malachite.

Dines (1956) A mine under Redruth town, active early 18th cent., reopened 1854-1891. Several lodes in metam. slate overlying W flank of Carn Marth granite boss. Sn, Cu, some As.

Kudler (1905) 97 vs chalcodony ✓

W. Phillips (1823) Amethyst,

AKHJ (1962) 3, 13-19; Surface Plan, p 15.

Historical <sup>account</sup>

Chimney was 145 ft high. A conglom. of small, ancient workings:- On W, SUIT & CLOAK, adjoining N side of Trearuffe Hill, worked on back of what was [ie nr 700420]

# PEDNANDREA MINE, Redruth, Cornwall (II)

later called Pednandrea South Lode. E of the Rly. Stn. came Wh. NANCOTHAN; PARK RESKYMER (=SKIMMER) [ie nr ~~701~~ 701-2 420]; & nr junct. of St. Day Rd. & Back Lane E, [nr. 703 421] NAKED SWORD BOUNDS, adjoining which, & abutting on cemetery, BLUE WORK M; & at X-ing of St Day Rd / Sandy Lane, Wh. BUGGINS [706 421]. To the S were Wh's BRAGG & HENVER, and POLPONE (on N side of present reservoir [709 419]). DOPPS M. worked N. Lode (Sn ore). ~~Wh. an DRUMP~~ Wh. an DRUMP composed adit driven ca 1706 into DOPPS, shafts along which still visible in fields to S of Drump Rd - portal in Plain an quarry - water of which conveyed by a boat to Gwennap mines. GEW (= ~~Wh. an~~ GWEALAN TOP) was adjacent to DOPPS

Rednandrea

By 1765, with Wm. SPARNON, had produced much tin,  
copper, mimetic <sup>pyrite</sup> & some lead. Both idle in 1778  
Working again at turn of century. Closed  
1806. Reopened 1824 for a short time. Successive  
workings to 1891.

CMRM(1995) Anthracite; "sparable" cassiterite;

R. Selley (2004) BMSN 68, 13. BLUE WORK M.: -

Dug 7 trenches off Graham Road. Quartz,  
tourmaline, cassit incl. "sparable". Vughy  
chlorite/cassit. A few anatase plates  
on tourmal-qtz. Pharmacosiderite,  
Scorodite, both good, in gozzan.

R. Selley (2013) 20, 31-32. Good xls cassiterite, micro-  
purple fluorite, anatase, apatite [BMSN]



1" 190

SW 771 161

Lizard

PEDNBOAR POINT, St. Keverne, Cornwall. L31

Je (1871), 54: Hornblende

Russ Soc Newsletter 20 (1990)

At PEDN BOAR, Lizard, chalcedony including  
pseudomorphs after calcite scalenohedra  
up to ~ 3 cm.

SA MINE 2 1" 189 SW 520 403  
51 40  
PEDN OLVER A POINT, St Ives, Cornwall  
See also Wh. APPLIN; BAHAVELLA M. [NOT = PEN OLVER (Lizard)]

C. Rogers (1968): Actinolite; hornblende.

On beach to N - agate (pale, pebbles)

PEDN OLVER POINT. [OS 1" - PEDN OLVA PT]

AKHJ (1961) L 23-4 Wh APPLIN - BAHAVELLA lode  
outcropped in Pedn Olva cliff - adit  
(v.v. old), 5 ft above high water mark,  
resumed 1820, 1822. Other 11<sup>2</sup> lodes in  
cliff eg a v. short adit to N. From main

adit, winzes to lode of iron oxide &  
yellow copper ore [limonite?; chalcopysite].  
In 1860, tried by shaft, as NORTH Wh.  
PROVIDENCE.

~~60' map garnet-sillimanite schists~~



1" 190 70<sub>3</sub> 44 5 SW

WHEAL PEEVOR, Redruth, Cornwall (R) 19

~~See also NORTH DOWNS M; GREAT NORTH DOWNS M, Wh. BRIGGAN,~~  
Wh. PLENTY, Wh. BOYS.

Dewey (1923) 29. Included in PEEVOR UTD. MINES.  
(working). Slate over granite. Many  
lodes in the sett, which consists of Wh. PEEVOR,  
N. DOWNS M, GT N. DOWNS M, Wh. BRIGGAN, Wh. PLENTY,  
Wh. BOYS. Crossed by Gt Cross Course which  
throws down on the E the Cu-ground of N. DOWNS  
against the Sn-ground of Wh. PEEVOR.

MAIN LODE: E 14° N. Pyrite, chalcopryite,  
limonite, blende, granular quartz.  
TENPENNY LODE: E 30° N Pyrite, chalcopryite,  
quartz, earthy iron ores. 2' wide.

CAUNTER L: E28°N 1-2 ft. Pyrite, chalcopyrite  
with earthy iron ore & slaty clay  
Mines not worked below 110 fm level  
below adit (50 fms).  
Outputs of Cu ore 1808-1870. Also 1792-1799.

GC Goodridge (1967) Geol Mag 686. With Gt. N. Downs mine,  
being reconsidered. Photo of work at W. Wh.  
Peever

J. Williams, Trans Geol Soc, Series i, Vol IV (1817) 139-145  
"Account of some remarkable disturbances in the Veins of the  
Mine called Huel Peever, in Cornwall" One tin vein,  
One copper vein ("John's Gossan") EW, 40 fm S of tin vein.  
Cu vein has qtz, gossan, chalcopy, pyr, chlorite.

Wh. PEEVOR, Redruth, Cornwall. (II)

R Selley ('07) BMSN, 74, 25-27. 6 sh's capped,  
incl. SIR FREDERICK'S sh. Qtz/tourmaline;  
cassit (mostly mass, some xls  $\rightarrow$  4 mm, some  
"sparable" xls  $\rightarrow$  2 mm) in qtz/tourm. Monaz.  
xls  $\rightarrow$  1 mm; anatase xls  $\rightarrow$  1 mm as deep blue  
plates in chlorite. Mass galena sphat,  
pyr, ars-py. All now landscaped.



The Pell Mine, St. Agnes, Conn.

See Polk herro M

1" 185

SX 05 52, 06 53

SA 75

NEW PEMBROKE MINE, <sup>Blazey</sup> St. Austell, Cornwall.

See also PEMBROKE MINE (SA 29); OLD PEMBROKE MINE (SA 76).

JC (1871), 61: (Cu, Sn, wkg.) Cassiterite; chalcopyrite.

1" 185  
PEMBROKE MINE, St. Austell, Cornwall SA 29  
See also NEW PEMBROKE MINE (SA 75); OLD PEMBROKE MINE (SA 76)

Henwood

JC (1871), 61: (Cu) chalybite; chalcopysite;  
chalcocite; copper; kaolin;  
melaconite; pyrite.

Dewey (1923) 45. Divided by the "Gt Cross-course". On W,  
from S-N, lodes are RED, MAIN, MITCHELL'S,  
MIDDLE. E of X-course, PEMBROKE LODGE.

Quartz; chlorite; chalcopysite; pyrite;  
chalcocite; nat. copper; melaconite;  
siderite; sphalerite.

P10



Output of Cu ore: 1815-39; 1862-67.

"PEMBROKE & E. CRINNIS", 1852-59.

1" 185

SX 05 52

OLD PEMBROKE MINE, St. Blazey, Cornwall. SA 76

See also PEMBROKE MINE (SA 29); NEW PEMBROKE MINE (SA 75).

JC (1871), 61      (Cu, wkg.)      Chalcopyrite.

Penals M, St Agaes. Cornw

See Penhalls M



1<sup>11</sup> 189

PENBERTH, St. Burian, Cornwall

SW

40 23

STJ 37

JC(1871) 47

Cassiterite var. wood-tin. ✓

1" 189

2½" SW 53 555325

PENBERTHY CROFT MINE, Sh. Hilary, Cornwall (I) M4

See also ENNYS Wh. VIRGIN

Rare mins. collected from dumps of this mine and the adjoining Ennys. Wh. Virgin, by AWGK (1948 onwards).  
M5

Robson; RSGC; <sup>(1949)</sup> Min. Mag., 31, 797, (1949): Jordanite,  $Pb_{14}As_7S_{24}$ ; Bieberite,  $CoSO_4 \cdot 7H_2O$ , previously mistaken for erythrite.

AWGK, RSGC, (1952). Devillite, hydr. Cu + Ca sulphate, minute feathery xls in vughs in qtz-chlorite-dolom. veinstuff. Very pale blue or greenish-blue. Beudantite, basic Pb + Fe sulphate + arsenate, yellowish → brownish patches (sometimes cuboid xls) in qtz-chlorite-Aspyr veinstuff + other sec. Pb. mins. Plumbogummite, basic Pb + Al Phosph. greenish-yellow, assoc. w. pale brownish mimetite prisms, on qtz-chlorite. Beaverite, Pb + Cu + Fe + Al sulphate. Canary yellow earthy masses.

Caledonite; Carminite  $Pb Fe_2 (AsO_4)_2 (OH)_2$ , carmine to lilac red, x-line  
 crust in vughs in qtz veinstone + mimetite, beaverite, plumbogjarosite or  
 beudantite, sometimes <sup>dark green microbotry</sup> Bayldonite, Connellite, basic  $Cu SO_4 + Cl$ ,  
atacamite, looking just like malachite (Min Mag. 31, 349, (1956)).  
Paratacamite; Pseudomalachite; Cornwallite; Libethenite,  
 well x-lined with pseudomalachite. Olivenite; Brochantite.  
Chlorargyrite  $AgCl$ , minute globules. Aurichalcite; Tallingite!

AWOK, Min Mag. 31 ~~500~~ 500, (1957). Arseniosiderite,  $Ca + Fe$   
 arsenate, assoc. w. scorodite & decomp Aspyr. Phosgenite,  
 two pale yellow prisms one  $8 \times 2 \text{ mm!}$  in vugh in decomp.  
 gozzany qtz-galena <sup>with anglesite</sup>, Rosasite,  $(Cu, Zn)_2 CO_3 (OH)_2$ , with  
malachite and Silver in much decomp. veinstone.

TMH (1868), 41: Pyromorphite [Is this ~~pyromorphite~~ mimetite?] (x-ray, anal?)

Visited Sept. 1957. RSWB & GR. Locs 116, 117, 118. New? Mansfieldite  
Aluminous jarosite  
RSW 3 8/59 Loc 116 Covellite | | <sup>116 (best)</sup> Bayldonite Jarosite  
 | | <sup>117</sup> beudantite; ? mimetite <sup>118</sup> linarite, cerussite



PENBERTHY CROFT MINE, St. Hilary, Cornwall (II)

Dines (1956) 186. Includes Wh. FANCY.

C. Rogers  
Priv. Comm. (1965)? Langite, light blue hexag-looking xls.

AWGK, MM 32 431 Benduntite, carminite.

JRK, RWB 1969. Liskeardite, tending to be  
mixed w. scorodite

AWGK Bayldonite, ca 1949 - Dawe's shaft dumps

RSWB (8/65) 4 208. Dumps around 556 325 - poor  
linarite with galena; brochantite; good  
scorodite, w. pharmacosiderite; bayldonite;

PENBERTHY CROFT MINE, St. Hilary, Cornw. (III)

RW Barstow (1975) Priv Comm (to JRK).

Wroewolfeite

B.V. Cooper, Priv Comm to RSWB 29/1/75. Told by RW Barstow that childrenite found here by a Mrs. Frame. The lady found & contacted. Had found 1 specimen on dump at 559 325 in 4/74. 3 chips off given to BC, ~~2~~ from which 2 → RSWB. The "childrenite" assoc. with pharmacosiderite cubes, had xl faces of scorodite (Dana), and  $\mu > \text{CH}_2\text{I}_2$ . ∴  
Scorodite [Mrs. J. Frame, "Penlea", Mullion, Cornwall.  
Orig spec. 3x2" rich pharm, a little scor; a band of "chil" at one end]

RW Barstow, MM(1983) 47 240-1

loroewolfeite on dumps in E section, as small light blue scales & poorly-formed xls rarely > 2mm on joints & cavs in weath'd brecciated slate & dolomite veins stuff w. threads of chalcopysite. Seems that calcium carbonates play some part in formation (cf RSWB)

David P. Clough's list, Priv. Comm. 5/85  
(2, Polgarth, The Coombe, Newlyn, Penzance, Cornw.)  
As above, plus: - Adamite, agardite,  
(Less V-bayld; jaros, Phjaros, ~~silver~~)



PENBERTHY CROFT M., St. Hilary, Cornwall (IV)

ankerite, aragonite, azurite, boelite,  
bornite, calcite, cassiterite, cerussite,  
chalcophyllite, chrysocolla, corbite,  
cummingtonite, cuprite, fluorite,  
goethite, hornblende, langite,  
malachite, mansfieldite, melanterite,  
mixite, arsenic, copper, orthoclase,  
parnauite, pyrite, scheelite,  
siderite, smithsonite, sphalerite,  
stannite, tenorite, tourmaline,  
varlamoffite, wolframite.

V. Rae spec → RSUB 8/89. Erythrite (IR)

Mike Merry, V. Rae, et al (1990) coll underground,  
from shaft access: superb bayldonite  
(see RSWB 90-30) with minor cerussite,  
much phos-mimetite\* on quartz-"limonite" gozzan.  
Little else found apart from a little  
linarite. [IR 9/90. green glob (3 samples) all = bayldonite]

C Rogers, coll 1985, pres → RSWB 8/90. Devilline (slightly Zn-an)  
"aurichalcite-like" on quartz. IR: Dev - Serp.  
Microchem (Amm tetthioxy Hg(II) →  $Cu^{2+}$ , traces  $Zn^{2+}$ )  
RSWB 90-45.

M Merry Pres Com 1990. (Tel). Vanadinite  
(does he mean V in analyses??)

\* IR = strongly phosphatian mimetite ≠ "campylite". Off-white curved xls

PENBERTHY CROFT M., St. Hilary, Cornwall (V)

Mike Merry, samples → RSWB for testing, 12/90  
Vanadian duftite (duftite-mottamite)  
[IR, SEM/ED], linarite. The bayldonite under  
the V-duftite is slightly vanadian, the  
"normal" bayldonite isn't [SEM/ED]. Corkite  
[SEM/ED]. Unident  $(\text{Cu})(\text{SO}_4)(\text{OH})(\text{H}_2\text{O})$   
mineral ( $\psi$ ?-hex blue xls in limonite-  
gozzan; IR = unident.) one specimen, not  
much material on it [IR in KBr - OH &  
 $\text{H}_2\text{O}$  prob. concealed by moisture in KBr?]  
[SEM/ED Cu, S only]

MM → RSWB 8/94 Nat. sulphur in rotted  
galena (rich); brochantite



M. Merry, Priv. Comm. (11/3/94) Segnitite  
[Fleischer, Addendum 1993:  $PbFe^{III}_3H(AsO_4)_2(OH)_6$ ,  
trig., greenish to yellowish brown. 77 656-9 (1992)]  
Looks like bendaurite — checked by  
XRD in Germany. 5/95 Cornwallite — somewhat  
phosphatian (FTIR)

between Trevaskis and Penberthy but for the good  
offices of a kindly soul who led the way, giving  
impeccable signals at all junctions.

We were soon joined by the rest of the party and  
proceeded to the dumps east of the road. Here we  
were joined by a herd of large and curious bovine  
persons (bullocks?) who clearly associated the  
human species with the provision of food. As I  
stood gazing at a potential specimen, with a collect-  
ing bag dangling from my hand, I was startled by a  
hefty nudge from one of the creatures trying to eat  
the bag! These distractions notwithstanding, col-  
lecting went on apace, with the usual mixture of  
serious excavation by the heavy gang and dilettante  
pottering by myself.

After a while we transferred our attentions to the  
other side of the road, and as the afternoon wore on,  
people began to drift away until only a handful of  
diehards were left. However, we were rewarded  
with several more finds and eventually by feeble  
but welcome sunshine. I personally found the  
smallest specimen of the day during this period -  
nicely crystallised malachite, 3x2x1mm! The list  
of minerals found and recognised on the spot  
consisted of arsenopyrite, azurite, bayldonite (a  
first time for some of us), beaverite(?), cerussite,  
chrysocolla, connellite, erythrite, linarite,  
liskeardite, mixite, pharmocosiderite,  
pyromorphite, scorodite and smithsonite(?). Prob-  
ably others will come to light during further scru-  
tiny.

RSN(1994) 24  
(1966) NSD

# PENBERTHY CROFT MINE, St Hilary, Cornwall (VI)

Penberthy Croft, St Hilary, Cornwall [Grid Ref: SW 554 325] - 18 June 1994

SW, Leader: David Roe *RSN(195)26*

The thought of yet more micro size bayldonite or pyromorphite from Penberthy Croft was not enthusiastically anticipated by this writer who had been more than satiated on the previous Russell Society field trip. This had been wonderfully productive (by 1994 standards) and there was a feeling of *déjà vu* plus a glum anticipation of summer traffic and British summer weather.

The journey to this far flung part of the British Isles was in fact painless due to unseasonably light traffic. The ambience was improved even further by a glorious Cornish day - warm and breezy - and Penberthy Croft on the top of a hill with sea to the north and south was a good place to be. The rumour that one tip had been dug recently by the farmer stirred interest as did the whisper of the sight of the elusive mixite.

to strike a boulder and expose some water white mimetite of stunning clarity and purity when observed under the lens and then, bless 'em, they found a cracking sample of duftite that was aesthetically mouth watering under x30 magnification.

As the old rock hound said 'Show me someone who didn't enjoy that day at Penberthy and you have shown me someone tired of life'.

\*There is a good reason for taking a bucket of water to Penberthy Croft - it is very earthy and if this is not washed off at an early stage it contaminates the samples. There is also a brown clay that can be difficult to remove. For a number of years I have been using 'Calgon' on difficult to clean samples as this seems to lift clay materials. It has proved very good with pyromorphite but be warned... it does contain an aggressive phosphate which can ruin more sensitive samples. I am still not 100% convinced about a rare blue/purple mineral as yet unnamed found at one quarry in Leicestershire which only seems to be found after



washing the matrix in Calgon. Bayldonite seems to thrive on being soaked for a couple of days in Calgon followed by a gentle agitation with a paint brush and a good rinse improves grubby material splendidly. (DR)

\*\*Yes, I wondered about a 'Calgon' connection with that famous Leicestershire mystery mineral until the Oxford University Museum was presented with two grubby iron-stained and thoroughly un-'cleaned' specimens with the aforementioned mineral certainly in evidence. (MTP)

\*\*\*We've also recently been presented with a nice specimen of mansfieldite from Penberthy Croft (thank you, Sheila!). I wonder how many people have got specimens of this rather uncommon species but haven't noticed it yet. Look out for pure white soft massive to rather pearly microcrystalline masses. White minerals do tend to be overlooked when there are pretty blues and greens to be collected! (MTP)

It soon became clear that there were three types of collector in the party. Firstly, the browsers, who moved quietly over the tips occasionally picking up the odd pebble and tapping it delicately. Secondly there was the elderly badger types who selected a spot in the tip and then gently and slowly excavated a small hollow. Thirdly there was a group who might be described as excitable young bucks clanking with the shovels, hammers, crowbars, picks and buckets of water\* that hung from them. These were used to vigorously excavate pits, but the digging was continually interrupted by wild cries as they rushed to yet another potential bonanza 20 metres away, or to the other side of the tip and then on to the other side of the road. As the morning wore on their shouts and calls faded into the distance.

As peace descended the browsers were occasionally heard to murmur '...lustrous dark green clusters of bayldonite...' or '...lime green doubly terminated duftite looking like arrow heads...'. The badgers would occasionally stop and breathe in the sweet balmy summer air and query whether



# PENBERTHY CROFT M., St. Hilary, Cornwall (VII)

the lighter green crystals often found in walnut size lumps of goethite were chalcosiderite rather than bayldonite. As they split the more ochreous rocks they mused whether it was the peculiar quality of light, a light that has so enthused artists at nearby St Ives, that enabled them to distinguish malachite from the blue green sprays of mixite and the more fluorescent lime green sprays of agardite or whether advanced chemical tests would be needed. Occasionally young bucks would be seen in the distance, wildly postulating a sure-fire mineralsite just over the horizon, but the browsers ignored them and concentrated on examining dull brown green encrustations and pronouncing them beudantite, pocketing a white smudge for further analysis to confirm the aluminium phosphate mansfieldite, and feeling quietly confident in the addition of erythrite to the list. Some showy aurichalcite was then found on quartz and closer examination showed small, but plentiful, octahedra of cuprite. The same specimens often disclosed langite also, admixed with some chunky blue crystals that were suggestive of wroewolfeite - but these have yet to be confirmed. The usual discussions were carried

out over that most difficult to identify mineral, liskeardite, but there was little dissention on the olivenite sprays, massive linarite and occasional show of brochantite.

All were eventually blessed that day - breathless and cursing effusively, the noisy element returned

*Harrogate Show 8/15*

Penberthy Croft, St Hilary, Cornwall [Grid Ref: SW 554 325] - 21 November 1995

SWB, Leader: Sheila Harper, *RSN*

Reporter: Kelvin Phillips *(1996) 28*

Leaving Steve Hebdige in the mini bus with a good book to thwart would be car thieves (the Longlanes lay-by is said to be a dodgy place for the lonely vehicle...) the intrepid leader set off to see

PTO

Sheila was at her favourite site of late, the cutting where wonderful arsenates are always, and easily found. Mimetites jump into your hand, and with a quick scrape, bayldonite appears at your boot. Two weeks earlier, some olivenite had turned up of dimensions not requiring the use of a X200 hand lens in an area where cornwallite was common, and the 'dump-formed secondaries' all had enormous langites on them.

The ground was damp and all the greens and blues should have shone out like beacons. Ah well, one very nice mimetite covered specimen *did* turn up. There were also a few small bayldonites and mimetites, a cornwallite or two, some pharmacosiderite, plenty of arsenopyrite, chalcopyrite, and even galena.

'El Captain' went to lunch and came back to find the lads playing cricket. A few days ago some clinker type material had been bought to her attention which contained native copper, those langites and very nice brochantite, even connellite.

'Let us find the clinker site' she said, in desperation. We did find some blue and green gunge, useful for spraying potato blight!

BMSN (1990) 28 4  
Woodwardite with  
Birnessite [BMS 772]

RSN (1993). Dumps E of  
road 27/3/93. Usual min's

PENBERTHY CROFT MINE, St. Hilary, Cornwall (VIII)

CMRM (1995). Beraunite; birnessite;  
chalcoculmrite; cornubite; cuprite var  
"chalcotrichite"; halite; leadhillite;  
philipsburgite; "pitticite"; serpierite (?);  
tyrolite; vanadinite;

S. Weiss et al (1994) Lapis 12 27... Philipsburgite,  
segnite

J. Betterton et al. (1996) UK JMM 16 13+5. From Pen-Cr.  
Monazite-(La), schulenbergite, mattheddleite,  
millerite, anabase.



BMS Newsl 45, 2    Mansfieldite; hidalgoite  
(XRD) (looking like Cumb. plumbogummite)

↓ Betterton et al UKJMM (1996) 17, 17-18  
Tenorite, black earthy ~~water~~ in cuprite.  
Hidalgoite; arsenolite.

R. Starkey (1998) BMSN 50, 9-13. "Mottramite" [v. infr.]  
(D. Clough, 1987); birnessite (J. Betterton, 1991);  
jeanbandyite ("jeanbandeite") (J. Betterton, 1996);  
Mansfieldite (P. Wallace, 1996)

BMSN (1998) 51 14 jeanbandyite coll by J. B. in 1994.  
The "mottramite" is duftite.

PENBERTHY CROFT M., St. Hilary, Cornw. (IX)

Anon.

Russ Soc N<sup>o</sup>letter (1999), 35, 7. Laurionite,  
coll. P. Wallace, ident D. Green XRD. Publ in  
UK J. M.M. (1998), 19

RSN (1999) 35, 14 Field notes: "A nice linarite,  
several erythrites"

BMSN (2000) 55, 10. J. Betterton → BMS Coll.

2198: cornwallite; 2199: hidalgite; 2200: calcite; 2201:  
ps-malach; 2202, siderite; 2203, birnessite;  
2204: agardite-(Ce); 2205, Agardite-(Ce, Nd);  
2206: dragontite; 2207, carmenite.

BMS News (2000) 56, 6-7 BMS Coll ex J. Belterton 2201-7  
2213-6. Pseudomalachite, siderite, birnessite,  
agardite-(Ce), agardite-(Ce, Nd), aragonite,  
carminite. Pyrite, quartz/siderite, brochantite,  
goethite.

J. Belterton (1996 a-z) 1998 UK JMM's: Monazite-(La), anataze,  
Schulenbergite, mattokkedite, monaz-(Ce), tenorite, bismuthinite,  
stumpnomelane. (2001) calcite

MMerry spec → RSWB 9/00: bright blue compact ( $\text{Ce}_3\text{Zn}$ )  
red. blades, altg to white, looking like ( $\text{Ce}_2$ )  
serpentine — IR: OH chevron (unident)  
= New polymorph. of herbertsmithite ex Laurion & Julius-hütte, Harz  
MM → RSWB 02/01. IR Libethenite, w. malachite



PENBERTHY CROFT M., St. Hilary, Cornwall (X)

BMSN(01)59 12. Peter Wallace found parnauite

J. Betterton (Contribs by D. Green, J. Mason; photos D. Green) (2000)

"Famous Min. Locs: Penb Cr. M, St. Hilary, Cornwall, Eng." UKJMM

20, 7-37. Photos. of spec's; maps, hist, geol etc.

Mineralisations. Critical discuss of species present & reported. (Adam dubious); agardite (La); alloglasite; anatase; angles; anker; annaberg; arag; (arseniosiderite dubious); arsenolite; arsenopyr; (atacam. dubious); aurichalc; azur; bayld; (beaver dub.); (beraun dub.); boudant; (bieber dub.); birness; bismuthin; bismutite; brochant; Ca; calledon; vq carmin; cassit; (cerule dub.); ch'alum; ceruss, (chalcocite unert.); ch'phyl; chalcopyr;

(chlorarg dub.); clinochlore; chr'colla; connell; Nat Cu; cork;  
cornub; cornwall; covell; cuprite; cytrich; devel; dolom;  
duft; erythr; Eapat; galena; goeth; gyps; halve;  
halloys; hidalgo; Chr'blende (uncert); jaros; jeanband;  
natanite intergrowths; (Jordan uncert); lang; laurion; lead-  
hill; libeth; linar; liskeard; mal; ~~map~~ mansfield;  
matthed; miller; mimet; mix; monaz-(la); ("mottam" =  
V-duftite); oliven; oclase; (paratac dub.); parnau; pharm-  
acos; phil-burg; phosg; (pitticite dub.); Pb-gummite;  
(plum-jaros dubious); ps-mal; pyrite; pyromorphite;  
qtz; (rosas dub.); scheel; schulenberg; storod; segnitite;  
(Serpier uncert); sider; Nat Ag; smiths; sphal; stannite;  
stelpnomel; nat S; tenor (Tyrol uncert.); varlamoff;  
woodward; wraewolfe; "unknowns PC1, PC2".

PENBERTHY CROFT M., St. Hilary, Cornwall (XI)

Moulding et al (2008) J. Russ. Soc. 11, 88-90.

Stolzite xls to 0.5 mm, exceptional to 1.1 mm  
Buff  $\rightarrow$  pale  $\rightarrow$  dk brown bipyram. On a  
specimen 50 x 50 x 35 mm of quartz-chlorite  
veinstone from DUCKETT's SHAFT dump at  
SW 556A 3241 (EDS; XRD). Photos.

RsioB et al (2009) J. Russ. Soc. 12, 3-9 and  
Andersen & Moulding (2009) J. Russ. Soc. 12, 10-14  
AWGK's "adamite" false. Zoned xls  
of zincolivine descr. equal.



Russ. Soc. NewsL (2013) 63, 16-18

RSWB spec's ex M. Merry Apple green rad. blades,  
outer mostly  $\text{SiO}_2$  hydrated. Small cores  
analyse as  $\text{Cu}_5(\text{OH})_7\text{Cl}_3 \cdot 5\text{H}_2\text{O}$ .

Grey, Kampf et al Min Mag (2015) 79, 1849-1858

"Beltstonite,  $[\text{Al}_6(\text{AsO}_4)_3(\text{OH})_9(\text{H}_2\text{O})_5] \cdot 11\text{H}_2\text{O}$ , a new  
mineral from the Penberthy Croft ...."

Tufts of thin white rectang. laths  $< 20 \mu\text{m}$   
[See Bravins et al (2016) ref. for "96 valid species"]

Grey, I.E. et al. Min. Mag (2016) 80, 1149-1160

"Penberthycroftite,  $[\text{Al}_6(\text{AsO}_4)_3(\text{OH})_9(\text{H}_2\text{O})_5] \cdot 8\text{H}_2\text{O}$ , a second  
new hydrated alumin. arsen. min'l from the Penb. Croft mine,  
St. Hilary, Cornw." Tufts of white v thin rectang laths  $< 20 \mu\text{m}$ .





|                           |                              |                                  |                                      |
|---------------------------|------------------------------|----------------------------------|--------------------------------------|
| <a href="#">Home Page</a> | <a href="#">Log In</a>       | <a href="#">Message Board</a>    | <a href="#">The Mindat Directory</a> |
| <a href="#">Register</a>  | <a href="#">Search Pages</a> | <a href="#">Mineral Chatroom</a> | <a href="#">The Mindat Store</a>     |

## Penberthy Croft Mine (Wheal Fancy), St Hilary, Mount's Bay District, Cornwall, England, UK

[Display](#) [Photos](#) [Maps](#) [Search](#)

Penberthy Croft mine is situated approximately one mile from the village of Goldsithney in the parish of St. Hilary, Cornwall, England, NGR, SW 555 324. The locality is a prolific source of rare and unusual secondary minerals of which the Cu-Pb-Fe arsenates are the best known. Penberthy Croft is the first, or joint first recorded site for jeanbandyite, natanite and segnitite in the British Isles. Penberthy Croft is the type locality for the copper lead arsenate mineral bayldonite.

**The land is owned by the St. Aubyn Estate. Permission for site visits and bona fide research must be made prior to any visit through the Agent for the St. Aubyn Estates. The address is Manor Office, Marazion, Cornwall, TR17 0EF, England. Telephone: +44 (0) 1736 710507.**

### History:

The mine is quite ancient and records of output give approximately 3000 tons of copper ore toward the end of the 18th century. Mixed copper and tin mining took place at depth at a later date, the lodes being stoped out to a depth of 53 fathoms below adit level. The mine closed around 1840. There being no further activity until recent years when at a time of high tin prices the dumps were sampled to evaluate their cassiterite content. The mine became listed as a SSSI by English Nature for its mineralisation in 1993.

### Geology:

The sett is situated in Devonian metasediments consisting of lower-grade-greenschist facies (killas) slates between the Land's End and Godolphin granite masses. The slates belong to the Mylor Slates Formation and are a series of dark coloured rocks with a slaty cleavage and well-developed foliation. They are generally characterised by a series of siltstones and mudstones, with occasional impersistent sandstone sequences. A series of interbedded metabasic rocks strikes east-west within the sett. The main Penberthy lode strikes east-west and dips to the south. The lode is associated with a rhyolite porphyry elvan dyke and cross course structures, and is probably related to a shear zone. There are in addition five other named lodes within the sett.

### Mineralisation:

The mineralisation is of a multi-stage, polymetallic and hydrothermal character. The deposit consists of several, but distinct overlapping assemblages: Minor, burial-related quartz-albite-anatase-monazite veins of a pre-tectonic, metamorphic origin; main-stage high-temperature hypothermal-mesothermal Sn-Cu-As-W veins; later lower-temperature epithermal Pb-Zn sulphide mineralisation; and a late-stage, low-temperature Fe-Mn mineralisation. Subsequent supergene oxidation and weathering of lodes resulted in formation of complex gossans with oxide and supergene enrichment zones. Post-mining formation of other minerals both underground and on the dumps has resulted in a very large variety of mineral species in a small area. These in order of approximate abundance include arsenates, arsenate-sulphates and phosphates. The greatest diversity in terms of species has been located in five main areas of the old dumps: Three in the western and two in the eastern section of the workings. Most minerals here are found as good quality subhedral to euhedral microcrystals with occasional miniature specimens. Brecciation, fracturing, silicification, chloritization and carbonatization are abundant. The mineralisation formed over a very wide period of time extending from the Upper Palaeozoic through to the Cenozoic.

**A major comprehensive mineralogical study was recently completed on this important locality by Betterton (2000) and was published in the UK Journal of Mines & Minerals, 20, 7-37.**

### Note on the mineral list:

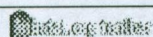
Reference to adamite at Penberthy Croft is from Kingsbury. Given the doubts about the provenance of other Kingsbury specimens (Ryback et al. 1998, 2001), investigated this and discredited the occurrence.

### Mineral List

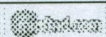
|                   |                       |                      |                         |
|-------------------|-----------------------|----------------------|-------------------------|
| ✓ Agardite-(Ce)   | ✓ Chalcoalumite       | ✓ Jarosite           | ✓ Pseudomalachite       |
| ✓ Agardite-(La)   | ✓ Chalcophyllite      | ✓ Jeanbandyite       | ✓ Pyrite                |
| ✓ Allocasite      | ✓ Chalcopyrite        | ✓ Langite            | ✓ Pyromorphite          |
| ✓ Anatase         | ✓ Chrysocolla         | ✓ Laurionite         | 'Pyromorphite Subgroup' |
| ✓ Anglesite       | ✓ Churchite-(Y)       | ✓ Leadhillite        | ✓ Quartz                |
| ✓ Ankerite        | ✓ Clinocllore         | ✓ Lepidocrocite      | ✓ Redgillite            |
| ✓ Annabergite     | ✓ Connellite          | ✓ Libethenite        | ✓ Scheelite             |
| ✓ Aragonite       | ✓ Copper              | ✓ Linarite           | ✓ Schulenbergite        |
| ✓ Arseniosiderite | ✓ Corkite             | ✓ Liskeardite        | ✓ Scorodite             |
| ✓ Arsenolite      | ✓ Cornubite           | ✓ Malachite          | ✓ Segnitite             |
| ✓ Arsenopyrite    | ✓ Cornwallite         | ✓ Mansfieldite       | ✓ Siderite              |
| ✓ Atacamite       | ✓ Covellite           | ✓ Mattheddleite      | ✓ Silver                |
| ✓ Aurichalcite    | ✓ Cuprite             | ✓ Millerite          | ✓ Smithsonite           |
| ✓ Azurite         | ✓ var: Chalcotrichite | ✓ Mimeteite          | ✓ Sphalerite            |
| ✓ Bayldonite (TL) | ✓ Cyanotrichite       | ✓ Mixite             | ✓ Stannite              |
| ✓ Beudantite      | ✓ Devilline           | ✓ Monazite-(La)      | ✓ Stilpnomelane         |
| ✓ Birnessite      | ✓ Dolomite            | ✓ Mottramite         | ✓ Sulphur               |
| ✓ Bismuthinite    | ✓ Duftite             | ✓ Natanite           | ✓ Tenorite              |
| ✓ Bismutite       | ✓ Erythrite           | ✓ Olivenite          | ✓ Varlamoffite          |
| ✓ Bornite         | ✓ Fluorapatite        | ✓ var: Leucochalcite | ✓ Woodwardite           |
| ✓ Brochantite     | ✓ Galena              | ✓ Orthoclase         | ✓ Wroewolfeite          |
| ✓ Calcite         | ✓ Goethite            | ✓ Parnauite          | ✓ Wulfenite             |
| ✓ Caledonite      | ✓ Gypsum              | ✓ Pharmacosiderite   | ✓ Wurtzite              |
| ✓ Carminite       | ✓ Halite              | ✓ Philipsburgite     |                         |
| ✓ Cassiterite     | ✓ Halloysite          | ✓ Phosgenite         |                         |
| ✓ Cerussite       | ✓ Hidalgoite          | ✓ Plumbogummite      |                         |

101 entries listed. 95 valid minerals. 1 type locality (valid mineral).

The above list contains all mineral locality references listed on mindat.org. This does not claim to be a complete list. If you know of more minerals from this site, please register so you can add to our database. This locality information is for reference purposes only. You should never attempt to visit any sites listed in mindat.org without first ensuring that you have the permission of the land and/or mineral rights holders for access and that you are aware of all safety precautions necessary.



New Locality Added: Manganese occurrence, Tera,  
From Wolfgang Hampel, 2nd Jul 2012 11:26:02



Share

0

Like 0





---

**References**

---

G Ryback, A D Hart & C J Stanley - Journal of the Russell Society, Vol 7, Part 2, 2001

This page is currently not sponsored. To sponsor this page [click here](#).



<sup>1" 186</sup>  
<sup>6" 29 SW (1907)</sup>  
PENCREBAR MINE, Callington, Cornwall <sup>SX 350 683</sup> K 64

Mn mine.

AR, MM (1946)

C. Rogers (1968) Overgrown Mn mine

David Ward (1974) Spec → RSWB [74-100]  
Rhodonite altering → black

CMRM (1995) Pyrolusite.

1" 189

SW 5

3 (?)

Wh. PENCROM, St Ives, Cornwall.

H 58

JC (1871), 49: (Sn, wkg.) Cassiterite.

1" 189 SW 646 384 C 29

PENDARVES (UNITED) MINE, Camborne, Cornwall  
See also GRENVILLE, CLOWANCE I

JC (1871), 51: (Sn, wkg.) Condurrite; copper;  
cassiterite; fahlerz.

G.C. Goodridge, Geol Mag (1967), 686 Beire reevaluated....  
Pendarves estate, a large block of virgin  
ground, explored by a Canadian company.  
Diam. drilling encouraging. Project amalgam  
with Grenville Ltd & Clowance mine projects

H. Conke. Spec → RSWB 12/72 [72-508], Coll. H.C.

Cuprite var chalcotrichite, PENDARVES M.  
Anon., gem (1973) 5 [2], 9-10. Excellent cassiterite Hs;



native copper [JRK - "Brillo-pad" type]; chalcotrichite;  
wolframite. Working.

RWB. Aym MMCT (1974) 5 [1] 7-8. New tin mine: -  
cassiterite, good bright dark brown to  
black xls, usually encrusting matrix. When  
~~the early~~ first opened up, one lode had  
handsome native copper in filiform  
masses ("Brillo Pads"). Chalcotrichite  
beaut retic meshworks on dark brown  
gozzam came for a short while from  
one of the deep levels

RSWB 28/7/80 Schorlite; wolframite  
cassiterite, quartz, incl epimorphs after cuprite octaheds

PENDARVES UTD. M., Camborne, Cornwall

(II)

N. Hubbard, Priv. Comm. (4/82). R. Barstow  
has excellent churchite xls from  
Pendarves.

RW Barstow & M. Cooper MM (1982) 46, 402-3  
"Churchite from Wheal Pendarves, Camborne,  
Cornwall"

Churchite, rarely, rad. tufts of silky-white  
xls  $\rightarrow$  6mm(!) lining vughs & scattered on  
joints in gozzany quartz-limonite weinsuff  
w. haematized granite in Tryphena lode,  
drive No. 204 E on No. 2 level. Also baryte,

Pendarves

pyrite (decomp); native copper; cuprite; incl  
chalcotrichite; scorodite; pharmacosid;  
olivinite; connellite; malachite; apatite  
var. francolite.

CMRM(1995) "Ruby" cassiterite; chertchite-(Y);  
humboldtine

BMSN('07) 74, 17. In chlorite: cassit, anatase;  
qtz w langite



1" 189

SW 380 359

PENDEEN CONSOLS MINE, St. Just, Cornwall. StJ.

56

JC (1871) 48. (Sn, Cu), Cassiterite

DBB (1963) 12. Immed. beside lighthouse. Last  
restarted 1854. When abandoned,  
224 fms deep & 300 yds out to sea.

BMS Newsl. (1997) 46, 7. Coll: Cornwallite (R. Belson)

RSN ('07) 50, 33. Connell, "atac/paratac", pyr,  
chalcocite, traces baryte brook, lang,  
"chalcantile" (? chalcantite)

1" 189

SW 36 34 ?

PENDEEN COVE, St. Just, Cornwall. StJ.57

JC (1871) ~~48~~ 48. S of cove: Steatite, in small veins  
in slate.

1" 190

SW 82 31

PENDENNIS POINT, Falmouth, Cornwall

CMRM (1995) Arfvedsonite (K-Mg); phlogopite;  
riebeckite (P. dyke); titanite (sphene) (P. dyke)



1<sup>st</sup> 185

SX 02 79

PENDOGGET MINE, St. Kew, Cornwall.

E 15

JC(1871), 62:

Anglesite;

stibnite;

jamesonite

1" 190  
PENDOWER, Veryan, Cornwall. 6" 65 SE (1907) SW 90 38 SA 19

AR, MM (1946). Pendower beach: cliff has beds of  
earthy black pyrolusite.

Pengelly Fms 965 494 & 980 485 | 1" 190 SW 98 48

PENGELLY MINE, St. Ewe, Cornwall. SA 49

See also with CHANCE ~~mine~~ (SA 30)

JC (1871) 60: Annabergite; chalybite; millenite;  
niccolite.

TMH (1868), 33. PENGELLY CROFT MINE, St. Austell: chalybite;  
niccolite; pyrite; chalcocyanite

38 PENGELLY M., St. Ewe. Annab. siderite, niccolite, millenite

Rudler (1905) 75 Niccolite formerly raised at the  
Pengelly mine, m. St. Ewe.

W. Phillips (1823) Niccolite

AKHJ (1964) 8 No mention



Dines (1956) 546: Old mine, site lost; prob ca  $\frac{1}{4}$  mi

S of Hewas Water, & E of Pengelly Fm.

Gregor (1818) states that Ni ore raised from  
a 7 in EW vein at 25 fms.

Millerite; annabergite; chalcopryite;  
siderite; stibnite.

AKHT (1967) XIII, 56-7 In wood adjoining  
Pengelly Farm. "Kupfernickel" ~ 25 fm  
below surface in 7" E-W lode [1818]  
Restanded 1845 - Ni & Cu ores raised.

1" 189

SW 6

2 ?

6128

W. of Helston

PENGELLY CROFT MINE, Breage, Cornwall M 23

Rutley, 15th. Ed., p. 156, scheelite. ✓

JC (1871), 54: (Sn) Cassiterite; scheelite. ✓

<sup>sp.</sup> TMH (1868) 33 PENGELLY CROFT M., St. Austell. [gr]  
34 PENGELLY CROFT M., Breage:- (Sn), granite  
cassiterite, scheelite ✓

1" 185

<sup>Kew</sup> SX 0579

PENGENNA MINE, ST. ~~Teath~~ <sup>Kew</sup> Cornwall, E 16

See also OLD TREBURGETT MINE, = TREWETHEN M.

JC (1871), 62: (Pb, wkg.) galena (St. Kew).

AWGK MM 32 432

PENGENNA (TREWETHEN) MINE, St. <sup>Kew</sup> ~~Teath~~

$\frac{3}{4}$  ml SW of Old Treburgett Mine, St. Teath.  
Sb minerals in upper part, galena in depth.  
Beudantite, carminite, mimetite,  
scorodite.

AWGK MM (1965) 424 Meneghinite, massive &  
compact, just like the jamesonite.

CMRM (1995): "Adamite"; antimony; bindheimite; boulangerite;



bournonite; dandrasite; tetrahedrite; ~~hydroxide~~;  
beudantite (TREWETHEN M., St. Kew);  
lepidocrocite (TREWETHEN M., St. Kew);  
minette (TREWETHEN M., St. Kew); siderite  
(TREWETHEN M., St. Kew).

RSWB et al (2009) J. Russ. Soc. 12, 3-9      AWGK's  
"adamite" discovered by GR

1" 190

SW 749 387

PENGREEP ADIT, Stithians, Cornwall.

= "Mr. Beauchamps cobalt mine" (CMM)

AKHJ (1963) 6, 29. Adit into hill immed. S  
of Pengreep fish-ponds, where richest cobalt  
found in England found in 1754 (won a prize)  
According to Bonlaw, also bismuth, as much  
as cobalt. Bi thrown away until 1755.  
Pryce (ca 1775) says Co in a branch or  
leader of the lode, 3' wide. Did not hold  
in depth & got very wet.

Reopened 1958 by Atom Energy div  
of G.Surv., but believed nothing I got.  
AKHJ examined soon after abandonment. Adit  
ca 300' long, no trace of mineral apparent

Pengraep adit.

in the back or bottom of the level. A  
little beyond end of adit, shaft burrows  
visible at surface.

Bull 25 33 (1966) 1 ml NNW of Roskrow Utd. M.  
Collins JH Tr. R. G. S. Com 14 1-683 (1912) . p 341-2  
reports Co-Ni-Bi mineralisation.

CMRM (1995) Nat. bismuth



1" 185  
PENHALE MINE, Perranporth, <sup>SW</sup> Cornwall 76 58 A 10  
at Ligger Pt. RSWB  $\frac{1}{2}$ " 11.e  
Shown on GR's  $\frac{1}{2}$ " Cornwall map. See also PENHALE & LOMAX (A-71)

JC (1871), 58: (Pb) galena.

MJ Mins Cat (1989) Lepidocrocite, goethite  
1

1" 185

SW 76 58 A 71  
Cubert

PENHALE & LOMAX MINE, ~~Perranzabuloe~~, Cornwall

See also PENHALE MINE (A 10); WH GOLDEN, Perranporth.

JC (1871), 59: (Pb, wkg.) Blende; galena.

CMRM (1995) Linarite (PENHALE M., Perranzabuloe)

1" 185 St Brock SW 963 723  
PENTHALE MINE, Wadebridge, Corn.

N. Carruth Cat. 12/89. Linarite, micro  
Xls on killas. "Richly scattered" fairly  
expensive so should be quite good.

Dines 573 (1956). Quartz, siderite, with  
galena, chalcopyrite, "antimony ones" are  
said also to be present.

V. Rae (1991) <sup>spec → RSWB</sup> vg pyromorphite (RSWB IR = As-free)  
"PENGENNA M., Wadebridge"

V. Rae (Priv Comm undated ~1990) Linarite, Mostly  
unconfirmed  
pyrom, ceruss, erythr, copper, pseudomal.



1" 186

SX

23 69

PENHALE MINE, St. Cleer, Cornwall.

54 24 68

CMRM (1995), Scheelite

1" 185 SW 75 59 SW 75-76 58-59

PENHALE POINT, Ferranporth, Cornwall

See also Wh. GOLDEN.

Rev. V. Holyer (1989) Priv. Comm. galena on  
beach at Penhale point [N. side?]; rarely  
phosgenite. [NOT in his MS]

<sup>1" 185</sup> PENHALLS MINE, <sup>1" 190 726514</sup> Str. Agnes, Cornwall

A 7

See also Wh. KITTY

Shown on GR's  $\frac{1}{2}$ " Cornwall map.

JC (1871), 58: (Sn, wkg.) Cassiterite.

AKHJ (1962) 28 Map p29 = PENALS. Part of  
GOONLAZE MINES themselves part of the  
Wh. KITTY complex



PENHAVER POINT, Roseland, Cornwall

See GREAT PENHAVER POINT

<sup>1" 186</sup>  
PENHAWGER <sup>Sx 29 67</sup> ADITS, Liskeard, Cornwall <sup>K</sup> 68

1<sup>st</sup> 190

SW 74 43

PENKEVIL MINE, St. Kea, Cornwall.

See also ~~CREEG~~ BRAWSE MINE

Dewey (1923) 30. Cu ores produced "CREEG BRAWSE &  
PENKEVIL" - 1815-32, 1845-1902

JC (1871) 59 (Cu, Sn, working). Cassiterite, chalcopysite,  
pyrite - "CREEG BRAWSE & PENKIVELL"

*JK*



SW 74 43

PENKIVELL MINE, St. Koo, Cornwall. R 71

See PENKEVIL MINE

JC(1871), 59. See CREEGBRAWSE MINE (R 70).

<sup>BEACH and</sup>  
PENLEE QUARRY, Newlyn, Cornwall.

See GWAVAS QUARRY

1" 190  
PENNANCE MINE, (SW 713 406 <sup>R</sup> 32.  
Redruth Gwennap  
Cornwall

Henwood. "Redruth"

JC (1871) 56 "Gwennap". (Cu, wkg). chlorite;  
chalcopryrite; erubescite.

CMRM (1995) Bornite (PENNANCE CONSOLS,  
Gwennap)



1" 190

SW 9 3

PENNARE POINT, Velyan, Cornwall. SA 40

JC(1871), 60: Aokeston; hornstone; steatite.

? = Nare Head SW 91 37 near "Pennare  
Wallas".

<sup>11 190</sup> PEN OLVER, Lizard, Cornwall <sup>SW 7111</sup>  
NOT = PEDN OLVA, St Ives

GS 1" map Garnet-sillimanite schist  
CMRM (1995) Epidote

WHEAL PENROSE, Sithney, Cornwall (I)  
See also Wh ROSE

2 $\frac{3}{4}$  ml. SW of Helston Stn.

Spec. Rep. Min. Res. 21: galena; pyromorphite; quartz;  
chalybite; cerussite; vughs with scorodite & pyromorph

BM: Colourless pyromorphite.

JC (1871), 55: Anglesite; calcite; cerussite;  
chalcopryrite; chalybite; galena;  
limonite; linarite; mimetite;  
pyrite; "plumbic ochre"; pyromorphite.  
[Hey = massicot or litharge]

RSWB (8/65) 4 206-7: Dumps @ 633 252: cerussite



in limon-goethite lined vughs; traces  
malachite, & native copper

C. Rogers (1968) Siderite; galena; quartz

DBB (1963) "W. Com" 21 Lead mine, traditionally Roman.  
Active 16th 17th 18th Cents. Closed 1844 at 124 fms.

B. Cooper (told RSWB 3/74): Arsenopyrite pretty  
little micro star-twins, loose in clay.

CMRM (1995) Dundasite; galenobismutite; sphalerite

MinDat (2009) G. Curtis, coll '09 Brookite 1.5 mm striated  
xl with anatase

Wh. PENROSE, Sithney, Cornwall (II)

R. Selley (2014) BMSN 91, 22. A hole by the  
corner of a bungalow on the lode...  
much crusty pyromorphite.

PENSILVA TIV M, St Neot, Cornw.

See KILHAM M.



1" 190 E SW 710 397  
PENSTRUTHAL MINE, Gwennap, Cornwall. R37.  
~~See also Wm. BULLER; TRESAVEAN etc;~~

Henwood: cuprite.

Collins (1871) p. 56. "Penstruthal & Huel Buller [R. 3]". Copper & Tin Mine.

Dewey Cu (1923) 7. Chalcopyrite in granite  
rather than in slate (Henwood)

34. Discussed under TRESAVEAN [7v].

PENSTRUTHAL & PENST. CONSOLS produced Cu ore  
1825-36, 1845-79.

1" 190

SX01 47

PENTEWAN, St. Austell, Cornwall.

SA65

JC (1871), 61:

Stream tin; gold.

Wh. Penttcker, Redruth, Corn

See Wh. Sparrow



1" 185

SW 93 80

PENTIRE MINE, St Minver, Cornwall

See also PENTIREGLAZE M.

CMRM (1995) Antimonpearceite (P. vein system);  
meneghinite (P. vein system); polybasite (P. vein  
system);

Clayton RE, Scrivener RC & Stanley CJ. (1990)  
Proc. Ussher Soc. 7, 258-262

1" 185  
PENTIRE GLAZE MINE (St Endellion) (I) E 5  
St Minnow SW 94 79  
~~18 p. 185~~ ~~18 p. 185~~ PENTIREM, POLZEATH CONS. Cornwall  
 $\frac{1}{2}$ " RSWB  
BM: VG Cerussite on dolomite; also with goethite.  
Rutley, 15th. Ed., p. 185, cerussite  
JC (1871), 62: Stibnite; cerussite; cervantite; pyrolusite.  
Rudler (1905) 56. Cerussite  
RSWB (8/65) 4 211 Small overgrown dumps at  
939800 - small amt cerussite needles,  
small xls native sulphur in rotted galena

## Russell Soc. Newsletter 20 (1990)

**22nd October 1989 Pentire/Pentireglaze Mine, Polzeath, Cornwall.** Chris Scheduling led a party of 7 down the cliff on an extremely wet and windy morning. Pete Seymour entertained the rest of the party with his version of abseiling in which you face away from the cliff. Entering on the 36th fthm level just above sea level, we then climbed the stopes to 26 fthm level. Thanks to the work over many years by two members on the trip, a fair amount of the once extensive workings are now accessible.

The geology consists of Middle to Upper Devonian green and purple slates which have been intruded by contemporaneous and pene-contemporaneous 'greenstones' in the form of pillow lavas and sills. The main veining is predominantly of quartz, strike N23°E, and has a steep northerly dip. Inland where the veins intersect massive greenstones, they bifurcate and become joint orientated. Metallic mineralization is low temperature and late stage consisting of antimony and, less importantly, lead and copper and iron sulphides. The lodes are very vuggy and have been secondarily

enriched producing cerussite, pyromorphite, (and mimetite?) and the comparatively rare linarite. Black manganese oxides are very prevalent as surface coatings which act as a very insubstantial base for the attractive, if precariously perched 'jack straw' cerussites. A minor hangingwall vein is of some note as the calcite, as scalenohedra up to 7cms in size, has been pseudomorphed by quartz producing attractive epimorphs. Members managed to collect some attractive cerussite and pyromorphite (and mimetite?) but as usual transport of these fragile specimens promoted some difficulties. Actual micro-crystalline specimens of linarite proved very elusive though some massive material was collected.

This underground trip was probably the most strenuous attempted by the branch and attending members will value their specimens appropriately. The miserable souls put off by the morning's weather should regret missing a trip which was thoroughly enjoyed by all and left everyone with a feeling of some accomplishment. Collecting continued on the return trip as the cliff top fields were littered with field mushrooms.



# PENTIRE GLAZE MINE, St. Endellion, Corn. (II)

Russ. Soc. A.G.M. 4/91 Spec. for auction:  
superb lavendulan, blue spherules  
( $\approx 2\text{mm}$ ) rich on  $\approx 4\text{cm}^2$  of matrix

P. Lowe Mineral Cat. 1 (1990) Mimetite, silvery-  
white fine prismatic xls on quartz

CMRM (1995) Anglesite; erythrite; olivenite;  
like the nite; mimetite (campylite ~~?~~);

RSN (2000) 36, 22-3. Visit, u'ground. SW 941 799. "Slightest  
remnants" ceruss., pyrom (tiny delicate white xls). In

lower parts, water-logged "lavendulan" has  
been found. Visitors surprised at limited  
extent of workings.

1" 189

SW 69 12

PENTREATH BEACH, Lizard, Cornwall

CMRM (1995) Chrysotile; dolomite; talc;

R. Tayler, Coll. 12/2016. PENTREATH CLIFFS:

Talc, mamill crust on dolomite (RSWB 17-3)



1" 190

SW 71 12

PEN VOOSE, Landewednack, Cornwall.

See also LIZARD, etc.

Teall, MM 8, 116 (1888). Hornblende in gabbro-schist.  
✓ anthophyllite at a disturbed junction  
of gabbro & serpentine.

1" 190 SW 73 49  
PENWINNICK MINE, St. Agnes, Cornwall A 21

Hen wood.

AKHJ (1962) 2 24. To W of wh FREDERICK

1" 189  
WHEAL PENWITH, <sup>SW</sup> St. Just, <sup>3</sup> Cornwall <sup>3</sup> SFJ 31

Henwood: Cu carbonates, ✓✓

[Not in Dines (1956) or Burt et al., (1987)]



Penwortha Consols, Perranzabuloe, Corn.

See Perran Wh. Jane

1" 189

SW 42, 43.

PENZANCE, Cornwall

See also PENZANCE MILL M.

CMRM (1995) Mg-chamosite ("daphnite") [Type loc]

1" 189

? SW 42 or 43 StJ 70

PENZANCE MILL MINE, Penzance, Cornwall.

TMH (1868), 48: Cassiterite; arsenopyrite



1" 185 SW 7558 - 7956(?)  
PERRAN<sup>120m</sup> LODGE, Pennanzabuloe, Cornwall.

See also DUCHY ~~PERU~~ MINE, PENHALE, GRAVEL HILL,  
GT RETALLACK M.

Rudler (1905) 65. Extensive Fe workings on the gt  
Perran Lodge or the DUCHY PERU LODGE, in  
Pennanzabuloe. Lode extends for several  
miles in a direction ca WNW  $\pm$  ESE, in part  
120 ft wide! Courses through Killas & consist  
principally of a brecciated quartzose veinstone  
with much siderite, assoc with large  
quantities of blende & a little copper ore.

S. Henley (1971) [See GT RETALLACK M] Neddenbergite, sphalerite, siderite,  
serpentine, quartz.

1" 189 Ag 2½" SW53 539301  
PERRAN MINE, Perranuthnoe, Cornwall  
nr. Marazion

M 10

Min. Mag. 67, 385, (1907) Silver ore.

B.M.: chlorargyrite, AgCl.

Rutley, 15th. Ed., p. 221, Ruby silver (pyrargyrite).

Rudler (1905) 58 A deposit of silver ore, chiefly  
cerargyrite now (1904) being worked in a  
N-S vein.

CMRM (1995) Br-chlorargyrite; embolite;

1" 190 <sup>Perranzabuloe</sup> SW 752 542  
Wh. PERRAN, Perranporth, Cornwall.

See also DROSKYN MINE, etc., Wh. LEISURE, PERRAN  
Gt. St. GEORGE MINE

Dewey (1923) Cu ores produced 1834-1842  
PERRAN & Gt. Wh. LEISURE, Cu ores, 1854-55

AKHTJ (1962) 2 36, 40 N lodes of P. Gt St. GEORGE  
groups. - Tin & copper found



1" 190

SW 749 514

PERRAN Wh. ALFRED, Penzance, Cornwall

AKHJ (1962) 2 45-46 As Wh PROSPER in 1819 working  
Cu ore. ✓ In 1851-52 taken over by Prince  
Albert Co. as PERRAN Wh. ALFRED.  
Copper lodes; also a silver-lead lode. ✓

PERRAN CONSOLS, Penanuthnoe, Cornwall.

See EAST Wh. NEPTUNE

1" 185

~SW 76 55 A 65

PERRAN CONSOLS, Perranzabuloe, Cornwall.

See also PERRAN wh. VYVYAN (A ); PERRAN (ST. GEORGE (A1) wh. PERRAN,  
PERRAN LTD.

JC (1871) 58 PERRAN CONSOLS (WAVLOW [A66]) (Sn, wkg.)  
Cassiterite.



1" 190

SW 745 537

Perranzabuloe

PERRAN GT. ST. GEORGE MINE, Perranzabuloe, Cornwall (I)

See also CLIGGA HEAD, GOOD FORTUNE MINE, DROSKYN  
MINE, WEST GT. ST. GEORGE MINE, WH. PERRAN

JC (1871) 58. GT. ST. GEORGE MINE, Perranzabuloe, (Cu),  
Blende, calamine [smithsonite], chalcocite,  
chalcopysite, copper, limonite,  
melaconite.

p. 59. PERRAN ST. GEORGE MINE, Perranzabuloe. (Cu,  
working). Blende, chalcocite, chalcopysite,  
copper, limonite, melaconite.

AWGK, MM 31 (1956) 349. PERRAN ST. GEORGE MINE:

Atacamite, closely resembling malachite  
in colour and habit.

Dewey (1923) 18. GOOD FORTUNE is part of ST. GEORGE &  
DROSKYN.

At the GT. ST. GEORGE MINE, are 3 lodes:

SOUTH LODGE: 2-5 ft, bears E 5° N, of earthy brown  
iron ore, black & vitreous Cu ore, & iron & copper  
pyrites with quartz, [ie. limonite, melaconite,  
chalcocite, pyrite, chalcopyrite, quartz]

CALLOWAY'S LODGE, E-W 1-2½ ft. Has copper  
pyrites, iron pyrites & quartz, with purple and  
vitreous copper ore. [ie. chalcopyrite, pyrite, quartz,  
bornite, chalcocite]

[Cont'd II

PERRAN GT. ST. GEORGE MINE, <sup>Perranzabuloe</sup> Perranporth, Cornwall (II)

Dewey (cont'd):

KERNICK'S LODGE, E20°N,  $\frac{1}{2}$ -12' wide. quartz,  
chalcopyrite, black [melakonite] and vitreous  
copper ore [chalcocite], pyrite & blende.

p. 19 Cu ore produced:

GT. ST. GEORGE & DROSKYN, 1815-1840  
PERRAN SE. GEORGE, 1845-1860.

C. Rogers (1968): Bornite; covellite; smithsonite;  
atacamite.



AKHT (1962) 2 36-41 Orig. worked for tin.

Copper mine. First mentioned in 1589

Some native copper. The deep adit had its outfall in Wheel East Cove,  $\frac{1}{2}$  ml E of Cligga Head, & branched at Wh. EAST shaft & said to have extended to Wh. LEISURE

Lodes noted for v rich bunches of grey & black Cu ore often mixed w. native copper. A specimen in BM from a "pillar" of this rich ore found in 1830.

Worked with Wh. LEISURE

SA Rust, Min. Realm (1982) 1 [5] 31-4 "Connellite". Connellite now also from above deep adit of Droskyn Lode, at Perran St. George mine.

# PERRAN GT. ST. GEORGE MINE, Perranzabuloe, Corn. (III)

Russ. Soc. Newsletter 20, (1990)

16th September 1989 Perran St. George Mine, Perranzabuloe, Cornwall. This underground trip was to be led by Tony Bennett who was to be accompanied by two other members. However, a strong swell had built up by strong north-westerly winds and the mountainous seas sweeping into the narrow gulley at the sea cave entrance meant that the trip had to be abandoned. Although collecting is not that productive, the workings are quite extensive and a resumé of the mine's history follows.

Perran St. George was a copper mine situated on the north Cornwall coast about 1 mile west of Perranporth. Mining is believed to have started in the western Perranporth district in the sixteenth century, but the main exploitation began in the early nineteenth century. In 1825, Perran St. George was acquired by the

English Mining Association and later worked in conjunction with several neighbouring mines.

Perran St. George became a wealthy producer of copper in the mid 1830's but further development was curtailed in the early 1840's as a result of major legal disputes. The mine was reworked at various periods during the nineteenth century, but the history of these workings has not been well recorded. An attempt was made to reopen the mine in the early twentieth century, but this failed because the Nobels Explosives works had already been built on the site.

The group of mines to the west of Perranporth were copper producers working lodes which generally trended ENE and were steeply dipping. The main lodes at Perran St. George were Hawks (flat), Lemon and Good Fortune and the deepest workings reached a depth of 430ft. The lodes were renowned for consist-

ing of rich bunches of grey and black copper ore and some native copper, as well as containing tin and some lead, pyrite and zinc minerals. At one time Perran St. George was a well known collectors' location for connellite, paratacamite, langite and brochantite.

Although most of the shafts have been capped, a section of the old workings is still accessible by means of the main drainage adit. This adit has its portal at the back of a large sea cave in Wheal East Cove and can only be reached for about two hours on either side of a spring low tide. The adit was driven inland along the St. George Crosscourse for a distance of 1900ft and intersected the main lodes.

CMRM (1995) Devilline;  
gold

MM (2008) Spec → RSWB for ID.  
FTIR: Almandine, 2-3 mm  
dk brown rhomb-dodec in  
soft matrix

T. Bridges et al (2005) J. Russ Soc. 8 [2], 81-84  
Antlerite ex MGH Merry; light green  
v. fine powdery.



1" 190

SW 757 526

PERRAN Wh. JANE, Perranzabuloe, Cornw.

See also S. Wh. LEISURE,

AKHJ(1962) 2 46-47 Started 1852 on S

part of S. Wh. Leisure; comprising TRURO  
CONSOLS & Wh. MONTAGUE. Cut Prince Albert  
loose → Sn. Restarted 1863 as

PENWORTHAM CONSOLS.

1" 190

SW 74 53

PERRAN Wh. MARIA, Penanzabuloe, Cornw.

AKHJ (1962) 2 36. = TRESLOW sett, E of GOOD  
FORTUNE M. Lodes traced from here  
 $\frac{3}{4}$  ml E to Wh. FRIENDSHIP.

[NB Treslow Fm 751533 is  $\frac{3}{4}$  ml E of good Fortune  
Mine (AKHJ's position). Wh. Friendship acc. to AKHJ's  
position, is  $\frac{1}{2}$  ml S of Treslow Fm. & is  
either  $\frac{1}{2}$  ml S of P. Wh. M. or  $\frac{1}{2}$ - $\frac{3}{4}$  SE of it]

PERRAN ST. GEORGE MINE, <sup>Perranzabuloe</sup> Perranporth, Cornwall

See PERRAN GT. ST. GEORGE MINE



1" 190

SW 754 538

PERRAN UNITED MINES, Perranzabuloe  
Perranporth, Cornwall.

See also Wh. PERRAN, PERRAN CONSOLS, DROSKYN MIN.,  
Etc. PERRAN GL. ST. GEORGE MINE

Dewey (1923) Cu ores produced 1853-1857

AKHJ (1962) 2 36

Cu mine.

1" 190

SW 773 492 (?)

PERRAN Wh. VIRGIN, Perranzabuloe, Cornwall

See also Gt. CALLESTOCK M.

AKMJ (1962) 2 50-51

A few fields N of 6th MS from Redruth on A 30. [No such MS on 2½" map - 6½ MS at 771 487, with "Mine" at 773 492, N of it]. Dates from 1845

Lead ore - E-W and a N-S lode. 2302 Ag/ton  
Soon ran out in depth, but returned  
1871 at CHIVERTON UTD. - Then reverted to  
"P. Wh. Virgin". Closed 1874. Some copper ore.

JC (1871) 58 Pb, working - galena - "CHIVERTON  
UNITED MINE".



1" 190

SW 751 495 A 67

PERRAN WH. VYVYAN, Perranzabuloe; Cornwall.

See also PERRAN CONSOLS (A 65); PERRAN ST. GEORGE (A 1).

JC (1871), 58: (Pb, wkg.) Galena.

AKHJ (1962) 2 47, 49- Dines puts this  
mine at <sup>WEST SHEPHERDS</sup> ~~PERRAN WH. VYVYAN~~ site [758<sup>519</sup> ~~758~~] but  
E.H. Brenton's map of 1869 shows it immed  
E of St. W. CHIVERTON M. & on same lods. Confirmed  
by a note written by manager of St. W. Chiverton.  
Silver-lead ore 80 oz/ton in 1824  
Wh GOSHEN was a full  $\frac{1}{2}$  ml to the N

1" 190

SW 77 38

PERRANARWORTHAL, Cornwall

CMRM(1995) Orpiment

1" 190 Perranzabuloe.

SW 75 54

PERRANPORTH, Cornwall.

(1)

Parkinson's Cat. (1959) Blende, yellow-green xline,  
with galena & quartz; cassiterite,  
coarse xline.

Rayners Cat (1960) Blende; arsenopyrite



Perranporth, Cornwall.

(II)

Rayner's Cat (1960).

"Great Retallack Mine, Perranporth" - arsenopyr.,  
hedenbergite

"Perranporth" - arsenopyrite + blende.

Wh. Perseverance, Redruth, Cornw.

See Clyjah M.

Penn M., Pennanzabuloe, Conn.

See Ducky M.



1 "186 258725 2672 (I) 5  
WHEAL PHOENIX (STOWE'S) MINE, Cheesewring, Linkinhorne, Cornwall (I)  
See also E. Wh. PH. (K 120); W. Wh. PH. (K 121); S. Wh. PH. (K 122); CARADON 2 PH. (K 123) (I)  
N. Wh. PH.

AWGK RGSC (1952) STOWES MINE is western part of WHEAL PHOENIX. Eastern part of Wh. PHOENIX is the CLINACOMBE section. WEST WHEAL PHOENIX is a separate mine, to the W., beyond WITHYBROOK MINE<sup>(KS)</sup>, but after 1876 was worked with Phoenix as part of "PHOENIX UNITED"  
GR- CLINACOMBE = CORNWALL UNITED

"looks like scorodite"  
pseudomalach; Cornwallite; olivenite; rashleighite (Fe turquoise); turquoise (henwoodite); brochantite; hisingerite (impure Fe silicate); chalcociderite\*; dufrenite; ~~henwoodite~~ rockbridgeite<sup>⊕</sup> (Fe phosphate), dark green, fibrous  
BM: chalcociderite, dark green, on goethite

AR Min. Mag. 16, 55, (1911) Phenacite on and in small quartz xls at SOUTH WH. PHOENIX, Linkinhorne. (K )

\* "Only known Cornish Loc of chalcociderite." ⊕ MM 31 429 (1957) - AWGK] P.T.O.

RSW coll. (Ex A.R.) Cuprite var chalcotrichite

BM; Libethenite on matt brownish botry dufrenite;

Fe turquoise is xl-botr. hisingerite rather like  
goethite.

giant matt cuprite; "andrewsite", grey green spherules;  
copper xls;

pseudomalachite; chrysocolla, coating cuprite.

GR (1955) Chalcosiderite; goethite - GR.

AWGK MM31 429 (1957) Dufrenite; rockbridgeite. } Stowes Shaft.

Cacoxenite; brochantite.

Clinacombe dumps: Copper; massive & cryst; cuprite; brochantite  
pseudomalachite; "a good loc" - GR ("More siliceous than Stowes")

SOUTH PHOENIX MINE (HK) AR, MM (19N) Phenakite.

(Cont'd II)

Wh. PHOENIX, Linkinhorne (Cont'd) (II)

K5(II)

JC(1871) 64: (Cu, Sn, wkg.) Cassiterite;  
chalcopyrite; cuprite; chalcotrichite;  
copper; chrysocolla; malachite;  
olivine.

[Discred 1990 See IV]  
Rudler (1905) 53. "andrewsite", small blueish-green  
globular with radiating structure (cf. T. Andrews,  
JCS [2] xiii (1875), p 582. ref is ~~to~~ C. Le Neve Foster,  
TRGSC ix (1875) 163. Chalcosiderite, (Maskelyne,  
JCS [2] xiii (1875) 586. Henwoodite (MM i (1877), 11).  
p. 42. Cuprite xls "which in beauty & brilliancy  
rivalled gem-stones".  
p 71 Dufrenite



MM 321 (1959) Cornubite, bright-green glassy or  
porcellaneous with pale green drusy  
cornwallite on quartz, or with  
olivine & stained felspar on rotten  
granite.

Miers MM 8 207 (1889) xl morphology of cuprite.  
E Kinch & FH Butler MM 1886 [7765]

Kinch MM 8 112 (1888) Dufrenite, dark olive-green  
radiating, in globules.

Much of the "dufrenite" is altered to goethite (Awok)  
AWGK "Rockbr from Corn & Dev" MM (1957) [31] 429. Rockbridge

AWGK MM 33 lxiv. (1962) Exhibit - strengite  
H. Corke Riv Comm 12/70. Alumochalcocisiderite, pale green globular

Wh. PHOENIX, Linkinhorne, Cornwall (III)

RSWB (8/65)<sup>4, 201</sup> Dumps at 265 724-5. Malachite  
in gozzan; langite<sup>IR</sup>; brochantite; blue-green  
rashleighite, one blue x line turquoise

(BM x-ray) [v. infra]

(8/66) 5 48 Old dumps near 261 722 just E  
of track - much "typical" matrix - some  
chalcosiderite.

H. Conke coll in 1968 yellow radg ~~off~~ glob. in "typical"  
matrix. RSWB IR - "unk". Ident w. KIDWELLITE. v. infra

C. Rogers (1968) Chalcopyrite; chalcosidinite;  
chalcocite; chrysocolla; copper;  
malachite; azurite; cuprite; olivine.

Ken Roberts (Plymouth). Specs → RSWB for ident; 5/74.  
Chalcocite, grey massive; goethite, micro  
xls; libethenite, good xls in crust  
lining vughs in kaolinised granite.  
Chrysocolla; cuprite. All from  
"Phoenix United", currently being  
bulldozed.

RSWB Min. Record (1981), 12, [6], 349-353. X-line  
turquoise-rashleighite



Wh. PHOENIX, Linkinhorne, Cornwall (IV)

RSWB & H Conke Min. Mag (1980), 43, 952-3

Kidwellite<sup>(12)</sup>, glob aggs < 1 mm on quartz-goethite, with chalcociderite.

Min. Rec. (1988) 19, 337. Tan, scaly micro crystals waylandite. (N. Hubbard)

PJ Dunn (1990) Am Min, 75, 1197-1199. "Andrewsite" discredited; = hentschelite + rockbridgeite.

CMRM (1995) Allophane; arsenolite; barrosalite (part of "andrewsite"); beraunite; "sparable" casiterite; chalcanthite; chamosite; chenixite; coeruleolactite [?error]; covellite; cyanotrichite; faustite [?error]; halloysite; pharmacosiderite; tenorite;

Wn Phoenix

"blister" chalcopyrite;

# Wh. PHOENIX, Linkinhorne, Cornwall (V)

RSN (1992) 23

Wheal Phoenix, Linkinhorne, Cornwall  
23rd August 1992

Phoenix was not a good trip. No blame can be attached to Bill Eliasson, the luckless leader, for it was not his fault that a species of lichen unknown elsewhere in the galaxy decided to land on the mine tailings and make it their home. The representatives of our future king were extremely nervous of excavations and had nearly withdrawn permission in the previous 48 hours. Nor was Bill to blame for the front that swept across at 10am

precisely and introduced us all to underwater mineral collecting. It may be that the Force 8 gale blew away all the crystals or maybe they decided to stay at home, but aside from traces of native copper, pseudomalachite and olivenite, it was decidedly not a good trip. Maybe the next time the Phoenix will be reborn mineralogically.

David Roe

Bill commented as follows:

Eight members turned up in appalling weather (on my birthday incidentally!), but found very little apart from micro specimens of cuprite and pseudomalachite. Phoenix has been so picked over that it needs a bulldozer and a high pressure hose to find anything, and I would not recommend it for future field trips.

RSN (104) 44, 28 Visit. Usual  
+ a torbernite

BMS Newsl. (1997) 46, 7. Coll: Rozenite(?); Stowes Sh.  
(P. Wallace)



RSWB et al (2009). J. Russ. Soc. 12, 3-9

Zincolivenite, green glob  $\rightarrow$  0.4 mm &  
blocky tiny xs  $\rightarrow$  0.1 mm w. azurite

1" 186

Around SX 27<sub>6</sub> 72<sub>6</sub>

EAST Wh. PHOENIX, Linkinhorne, Cornwall. K 120

See also Wh. PHOENIX (K 5), et. al.

JC (1871), 64: (Cu, wkg.) Chalcopyrite!

1" 186

SX 25 71

NEW Wh PHOENIX M., Linkinhorne, Cornwall  
See also SILVER VALLEY M., Linkinhorne

Dines (1956) II 598 Set includes SILVER VALLEY M.



1" 186

SX 273 734

NORTH WH. PHOENIX, Linkinhorne, Cornwall.

See also WH. PHOENIX, etc.

A. Wright & B. Cooper, Priv Comm 10/69 On S slopes of  
Notter Tor, above Darley at SX 273 734.  
The bi fluorescent allophane from "N. Wh. Ph."  
being sold by H. Corke /69 was collected  
by them & really came from HAWKS  
WOOD M. [q.v], but can be found in  
various mines hereabouts.

1" 186 SX 2671 K122

SOUTH Wh. PHOENIX, Linkinhorne, Cornwall.

See also Wh. PHOENIX (K 5), et. al.

AR, MM 16, 55, (1911) Phenakite, on & in small  
quartz xls., found 1906 on lode stuff  
recently raised from Rodder's Shaft,  
close to & just N of Cheeseoring village  
on E-W SOUTH PROSPER Sn lode.

✓ Vls long prisms to  $4\frac{1}{2} \times \frac{1}{2}$  mm on white  
greasy looking Fe-stained qtz w. veins of blue  
"peach" [chlorite], patches black tourmaline  
& microsc. cassit. grains

1" 186

SX 252 722 K 121

WEST WH. PHOENIX, Linkinhorne, Cornwall.

See also WH. PHOENIX (K 5), et al.

AWGK, RSC (1952): To the W of WH. PHOENIX, beyond  
Withybrook Mine (K 8), but after 1876 was worked  
with PHOENIX as part of "PHOENIX UTD."

JC (1841), 64: (Cu, wkg.) Chalcopyrite.

BM (NH) 44672 ~~Elvan~~ (89-65). "Pseudomalachite"  
IR (GR) & BM X-ray = Pseudomal (an RSWB IR  
gave? "γ-pseudomal" - error probable)



1<sup>st</sup> 1886

5X ~ 26 72

PHOENIX UTD. MINE, Linkinhorne, Cornwall

---

See Wh. PHOENIX etc

SW 7251

Wh Pmb, St Agnes Corn

See Blue Hills n e Wh Kitty

Jones 466

1" 190

SW 724 428

Wh. PINK, St Day, Cornwall.

See also Wh. GORLAND etc.

AKHJ, vi (1963) p12. Shown on map of Wh. GORLAND as being adjacent to, and to the W thereof.

AKHJ, 3 (1962) 27-28 . E of Wh. ~~WIMBORNE~~ CUPID, etc.

In 1817 cassiterite described as tin of the purest kind embedded in white clay, mixed with sand — much timbering required.

Recorded in 1819 as being on the Great Adit & not worked deeper than Adit.



1" 190 SW 719 5125?  
WEST PINK MINE, St. Agnes, Cornwall

A 20

Henwood: Stannite ("Tin pyrite")

AKHT (1962) 2 28 . Includes the "forgotten"  
"CUANOWN" or CUANHOAN (correct Cornish spelling)  
mine from which Philip Rashleigh got  
copper specimens in 1780's for his coll.  
Cuanhoan still working in 1811 on  
same lodes as Wh. PARK, SEAL HOLE & TREVAUNANCE  
on the W. Later joined Wh. PRIMROSE  
as Wh. FRIENDLY.

"189

SV 91?

PIPER'S HOLE, St. Mary's, Scilly

CMM (1995) "Pigotite"

1"

SW 61?

PISTIL OGO, COVE,

Lizard, Cornwall

CMRM (1995) Anthophyllite; Kyanite;  
sillimanite; staurolite



1" 186

SX 337 738

PITT FARM, Stoke Climsland, Cornwall.

Sir A. Russell, Notes, in BM Lib: Apatite.  
from wall close to farmyard.

Wh. PLEASANT, Calstock, Cornw.

---

= PRINCE OF WALES M<sup>o</sup>. (q.v.)

1" 190 70,452  
WHEAL PLENTY, Redruth, Cornwall

R 18

See also Wh. PEEVOR.

Dewey (1923) 29. Included in PEEVOR UTD MINES [See  
Wh. PEEVOR]



1" 190 713513 SW

A 6

# POLBERROW MINE, St. Agnes, Cornwall

~~See also W. POLBERROW MINE (A 40), BUNGAY MINE, wh. KIND,~~  
~~Shown on GR's  $\frac{1}{2}$ " Cornwall map. SEAL HOLE MINE, wh DREATH~~  
~~TURNABORE M.~~

JC (1871), 58: (Sn, wkg). Cassiterite; chalcopyrite; copper.

TMH (1868), 33: POLBERRO CONSOLS (Sn). Min as above

RWB (8/66) 5 58 ✓ large area of dumps, some  
being shifted. u/s

C. Rogers (1968): - Cassiterite [coll. C.R.]; apatite;  
Vivianite. [? see wh KIND]; fluorite.  
Extensive, rather barren dumps.

CMRM (1995) Topaz

AKHJ (1962) 2 25. The Polbetto group or "Ball" contained:-

The PELL, Wh. AN CLEATH (CLAY), PULSTEAN mines (1602), also  
GE. PRATT, DOLGA or CARNMEAL, TURNAVORE, BALNOON,  
PUCKRELL, Wh. SQUIDLER, Wh. PROSPER, Wh. PARK,  
Wh. HOPE, Wh. SPERRIES, Wh. KINE (KIND), & SEAL  
HOLE. The PELL cliff adit started ca 1660.

TREVAUNANCE ADIT driven in 1720's → 1740. SEAL  
HOLE ADIT important, started in a cave at the  
foot of the N cliffs. (18th Cent) - reached Wh. CLEATH  
in 1780, also PELL lode (10 inches of "tin"), i.e. ca 2000'  
inland.

An elvan dike with "tin" veins passes through  
a part of the sett. [see Henwood]

1" 185

SW 701 598

WEST POLBERROW MINE, St. Agnes, Cornwall. A 40

See also POLBERROW MINE (A 6); Wh. DREATH

JC (1871), 58: (Sn, Cu). Cassiterite; chalcopryrite;  
fluorite.



1" 190

SW 717 504

POLBREEN MINE, St. Agnes, Cornwall. A 41

JC (1871), 58: (Sn) Cassiterite.

1" 189 SW 6615  
POL CORNICK, Mullion, Cornwall

See also PARC BEAN COVE

AH Clark, AmMin. 55 283 (1970) . Talc-calcite-

minnesotaitite veins cutting serpentinised  
peridotite at Pol Cornick,  $2\frac{1}{3}$  ml SW [?SSW]  
of Mullion, have valleriite in part  
interlaminated with (i) an iron-poor chlorite  
(ii) an unident pale green Cu-Fe sulphide with  
major Al & Mg, variable Si (ca 2-8 weight %)  
(iii) the "fibrous" iron sulphide with Mg, Fe<sup>3+</sup>, OH, "of Jambor." (?)  
Also, as grains in the vicinity of the

valleriite, magnetite & native copper  
as sparse dissems of rounded grains.  
CMRM (1995) Analcime; natrolite; unnamed  
fibrous Fe sulphide.



<sup>Gwenap 1190 74, 429 SW</sup>  
POLDICE MINE, ST. DAY, Cornwall. (I) R 10  
See also ST DAY UTD, W. POLDICE, GORLAND, JEWELL, QUICK, UNITY,  
CREEGBRAWSE, St. Kea, MAID,  
Shown on GRs  $\frac{1}{2}$ " Cornwall map.

Kenwood: Wolfram.

RSWB, 1959. Loc 120.

Chenevixite;

unknown basic  
RSWB 59-54 sulphate  
(1R 1476. Blue microcrad. sphens)  
~~Chenevixite~~

JC (1871), 56: (Sn, wkg.) Bitumen; cassiterite; copper;  
chalcopyrite; galena; pyrite;  
sulphur? wolfram; wolframite.

KCD (1952) 117. In 1870 St. DAY UTD + others combined  
as POLDICE MINE, including earlier Poldice mine.

CMRM (1995) Tetrahedrite; tungstite ("tungsten ochre")

Dewey (1923) 30 The POLDICE MINES, (working), including  
POLDICE, WEST POLDICE, GORLAND, JEWELL, QUICK, UNITY,  
CREEK BRAWSE MAID, DAMSEL. In metam. slate  
on granite (which reaches surface at Wh. GORLAND).  
200 fms deep in 1870 - not worked deeper since.  
Lodes, all with Cu ores: GE ORE, KITTY BILLING'S,  
QUICK'S, GARBY'S, HOLMAN'S LODES.

Cu ores produced 1838, 1845-73 - "POLDICE".  
"UNITY & POLDICE" - 1815-1832.

RSWB (8/65) 4 205 Dumps around 737430 barren. Green fluor  
Dumps nr 739430, vast. Some minute chalcophyllite  
xls, assoc. w. pale blue micro botry ?? ceruleite  
coatings nor chalcoalumite  
[65-319]

POLDICE M., St. Day, Gwennap, Cornwall (II)

R. Selley (2004) BMSN 68, 12. gemmy, zoned cassit  
xls on qtz. Clear fluor cubes, xline monazite  
blue tourmal needles & pleasing chlorite  
plates. Anatase, sparable cassit, wolframite,  
? bertrandite. Anat = dk blue plates.



1" 190

SW 7342

WEST POLDICE MINE, Gwennap, Cornwall.

~~See also POLDICE MINE etc.~~

See Wh. UNITY WOOD.

W. Poldice M, Helant, Cornu  
cf W Poldice str lves (?=)

See Wh. Merth

1" 189

SW 5235 e/or 5335

WEST POLDICE MINE, St Ives, Cornwall 43

Henwood.

cf wh MERTH Lelant Downs (?=)

JC(1871) 49 Actinolite; cassiterite; hornblende.



5<sup>th</sup> 190  
POLDORY MINE, <sup>SW 74 41</sup> Gwennap, Cornwall R 30  
~~See also ST DAY UTD. M's.~~

Henwood: W part of St Day United (R6), with  
Wh. Fortune (R22)

~~(Is this Poldice Mine, R. 10??)~~

W. Phillips (1823). Nat. copper; bornite;

Dewey (1923) 35. Part of (ST DAY) UNITED MINES.  
On GREAT LODE, ca 6 ft wide. Richest  
Cu ground in upper levels & down to  
212 fms below adit in places. A good  
deal of barite assoc. with the Cu in the  
deeper workings. Lode  $27^{\circ}$  N of E  
Also ST. SOUTH L., GELLARD'S NES L's, MUNDIC LODE.

V. Rae et al (1990). Dumps being  
bulldozed for council tip, exposed  
veins, some with excellent  
cassitérite crystals eg 90-42 → R50B  
(Others coll. R50B) - has also a white apatite  
xl; quartz gangue.

1" 189

SW 66 38

POLGINE MINE, Camborne, Cornwall

W. Phillips (1823): Cuprite. ✓

Dines (1956) 337 Wh GINE or POLGINE is  
part of GRENVILLE UNITED



GREAT) 1" 185  
POLGOOTH MINE(S) SX 001 504 SA 26  
See also ST HEWAS LTD.  
Henwood.

IC (1871), 61: (Sn, Wkg.) Amethyst; calcite;  
cassiterite; chalcopryite; chlorite;  
dolomite; erythrite; pyrite;  
smallite.

Dewey<sup>(as)</sup> (1923). Small output of Cu ores until  
recently from SOUTH POLGOOTH.

W. Phillips (1823) Amethyst, dolomite var. Pearl spar,  
erythrite,

NOT mentioned in AKHJ (1964) §.

Dines (1956) 548-560. = OLD POLGOOTH; GREAT POLGOOTH;

POLGOOTH LTD; POLGOOTH & TRENGONTREES,  $1\frac{1}{4}$  ml

SSW of St. Austell.

A number of quartz-chlorite ✓ lodes with sporadic cassiterite & small amounts of sulphide ores, in interlacing pattern, over a strip of country up to 500 yds wide, for a mile W from Newmill [or New Mills, 007 500].

Pyrite; chalcopyrite; tourmaline; arsenopyrite; smaltite; erythrite; dolomite.

C. Rogers (1968): Erythrite ✓ (CMRM, 1995 also)

Burt et al, 1987. SX001504 = POLGOOTH TIN MINE, POLG, LTD, GREAT POLG., NEW POLG., NORTH GT. POLG., OLD POLG..

1" 185

SW 981 501

WEST POLGOOTH MINE, St Austell, Cornwall

---

See GE. HEWAS LTD MINE.

See also POLGOOTH MINE.

= Wh. PROSPER [qv]



1" 190

POLKERN OGTO

SW 75 22

Lizard, Cornwall

cf POL CORNICK (?=)  
(Mullion 189 6615)

SW 75 22

CMRM (1995) Andesite, in Kennack gneiss;  
anthophyllite; cordierite; kyanite;  
sillimanite;

POLKERRIS POINT, Corn.

~~See~~ PORTHERRIS POINT

1<sup>st</sup> 189 SW 61 30  
POLLADRAS DOWNS, Helston, Cornwall 30

Henwood.



1" 186 SX 26 82 (village)  
(POLLAPHANT) Lammceston, Cornwall. K 99  
POLYPHANT

JC (1871), 64: Calcite; serpentine; steatite.

1" 185

SX 03 51

Wh. POLMEAR, St. Austell, Cornwall. SA. 66

JC(1871), 61: (Cu & pyrite, wbg.) chalcopyrite;  
pyrite.

Wh. Polpone, Redmuth, Corn

See Pednandrea M



1" 190

SW 72 15

POLTESCO, Ruan Minor, Lizard, Cornwall.

See also LIZARD HEAD etc

Serpentine quarries.

V. Roe, spec → RSWB(9/89) Chromian magnetite  
small black cubes in serpentine  
- POLTESCO BEACH

Two of the party, David Rowe and Stephen Hipkin accompanied Jeremy to Poltesco near Cadgwith. Here they found quite well formed hematite crystals and radiating hematite, together with magnetite crystals and radiating tacl. Their reward was the fine weather when it arrived in the late afternoon!

R. Soc.: N. (1994). 25

CMRM (1995)

Dolomite (CARLEON COVE)

RGN(1996) 29 37. Cinnabar, on S side of Poltesco,  
between Enys Head and Kennack Sands.

1" 185

SX 013 794

POLTREWORGEY M., St. Endellion, Cornwall

N. Hubbard, Priv. Comm (4/82). Zinkenite  
has been found at Poltneworgey  
with stibnite, jamesonite, kermésite.

CMRM (1995) Ankerite; bindheimite,  
boulangerite; kermésite (? - by colour);

1" 189

SW 66 18

POLURIAN COVE, Mullion, Cornwall. L. 18

= POLURRIAN COVE

Jc (1871), 54:

Chrysocolla; copper; cuprite;  
hornblende; malachite; pyrite;  
serpentine; steatite.



1" 186

SX 269 819?

POLYPHANT QUARRY, South Petherwin, Cornwall

Polyphant SX 26 82 See also TOLPETHERWIN

Is this at Two Bridges, SX 2782? The Q at 269 819 with Jamesonite?

CMRM (1995) Magnetite

1" 185

SW 938 791

POLZEATH CONSOLS M., St. Minver, Corn

CMRM (1995) Anglesite; cerussite; goethite;  
linarite; malachite; wulfenite;

1" 190

SW 75 37

PONSANOOTH, St. Gluvias, Cornwall

E. H. Davidson, in Dines<sup>HG</sup>, "U in Cornu". Mining Mag.,

42 213-6 (1930).

Torbennie lining  
fissures & joints in a pegmatite in a  
quarry, now abandoned, immed. S  
of Ponsanooth.



WHEAL POOL, Wenden. Cornwall  
1" 189 65 26 5 SW

M2

See also LOE POOL

E. Side of Loe valley,  $\frac{7}{8}$  ml. S of Helston.

Spec. Min. Res. Rep. 21. Pb/Zn mine

AR MM 21 221. Cerussite at Wh. Pool near  
Wh Rose, Sithney.

MM ~~4~~ Spec's  $\rightarrow$  RSWB for ident, 4/95: 95-17, 18; gozzany  
vein quartz matrix with scattered colourless  
stubby hex. x/s mimetite (FTIR; P-free),  
light brown to yellow microxl. coatings  
berdanite (FTIR) with tiny red needles  
(some in spher eggs & some on the mimetite)

xls.) of carminite (FTIR).

Truro Mus. LOE POOL: vg cerussite; pyromorphite

<sup>1189 672414 SW</sup>  
EAST POOL MINE, Illogan, Cornwall (I) C 4  
Shown on RSWB's  $\frac{1}{2}$ " map. See also N. POOL (C 37), wh AGAR,  
good fluorite.  
OLD POOL M;

Min. Abs. 6, 228, Cubanite,  $\text{CuFe}_2\text{S}_3$  in veins of Sn ore.

BM: Wolframite; quartz; chalcopryrite; arsenopyrite;  
stannite; yellow earthy tungstite; bismuthinite.

"Fluorspar", 115 (1952) "E. Pool & Agar" Minerals similar to S. Crofty  
Rayners Cat (1960). Fluorite; quartz (9v)

JC (1871), 52: (Cu, Sn, W, wkg.) Ametyst; blende;  
chalcedony; chalcopryrite; chalcocite;  
chalybite; chlorophane (Hey-var of fluorite);



copper; cuprite; erythrite; felspar; galena;  
leucopyrite (Hey - löllingite); langite; silver?  
malachite; smaltite; rock xl; wolfram.

Kudler (1905) 30-31 Wolframite, tungstite  
Langite

61: Stalactitic pyrite

69. The siderite contains rare elements. eg In, Rb, Co, Ni, Bi

Dewey (1923) 24. E. POOL & AGAR (with CARN BREA). Working.

Copper ore, cassiterite, wolfram.

Cu ores in quantity down to ca 140 fm below adit  
Often with fluorite & arsenopyrite.

Lodes: NEW SOUTH; ENGINE; MIDDLE; SOUTH (or  
GREAT) with many branches, eg RED, COPPER, GINGERPOP;

EAST POOL MINE, Illogan, Cornwall (II)

also ROGERS, TREMBATH. MAIN or ENGINE lode series  
comprises CAUNTER, ENGINE, PALMER'S, PRYCE'S Lode.  
SOUTH, GREAT, & ROGERS are one lode, displaced  
by fault. DOBREE'S & NORTH lodes are upper  
branches of ROGERS.

93,090 tons Cu ore sold 1835-1903.

MJ Mins Cat (1989) Isostannite, w. chalcopy.  
CMRM (1995) Cyanotrichite, pyrrhotite; "hacked"  
quartz; uraninite; haematite

1<sup>n</sup> 189

SW 67 42

NORTH POOL MINE, Illogan, Cornwall. C 37

See also F. POOL MINE (C 4). Old POOL MINE;

Jc (1891), 52: (Cu). Chalcedony; chalcopryite.



1" 189

SW 65 41

OLD POOL MINE, Camborne, Cornwall.

See also Wh. SETON; N. POOL M.; E. POOL M.

Dewey (1923) 22      Included in Wh SETON, [qv]

Porkellis mine, Wendron, Corn.

See Basset & Gylls M

Porkellis Utd M } also ↑

Porkellis Moor M }

1" 185

PORT GAVERNE

SX00 80

Cornwall.

CMRM (1995) Boulangerite



1" 190

SW 79 23

PORTHALLA

St. Keverne, Cornwall. L 33

= PORTHALLON

JC (1871), 54:

Hornblende; Ilmenite; limonite.

1" 189 or 190  
PORTHCURNO

SW 61, 71 or 72?  
Lizard, Cornwall

CMRM(1995) Cordierite

BM (ex AWGK) Gold, "PORTHCURNICK BEACH"  
(raised beach deposit), Portscatho, Cornwall<sup>all</sup>  
But the spec.  $\equiv$  material from Kanowna,  
Kalgoorlie, W. Australia (GR(1999),  
BMS Newsl. 52, 14-15)

1" 185

SW 93 75

PORTHILLEY MINE, St Minver, Cornwall

CMRM (1995)    Boleite; cumengeite;



1" 190

SW 80 22

(POLKERRIS) POINT, St. Keverne, Cornwall. L32  
~~PORTHERRIS POINT~~

JC (1871), 54: Hornblende; serpentine.

OS" 190 No "Polkerris" but PORTHERRIS POINT  
at SW 80 22

CMRM (1995) Analcime (PORTHERRIS Q.);  
epidote (PORTHERRIS Q.)

P. Monk (1983) BMSN'l 7 PORTHERRIS Q's

RGN (1998) 33, 14 PORTHERRIS Q., SW 806 229  
Hornblende schists; adularia [o' clase].  
Parking fee now £2

1" 189

PORTHLEVEN,

Cornwall

(I)

SW 6

2

Parkinson's Cat. (1959).

✓ Manganapatite, green x-line in micro-perthite.

✓ Microcline, white to pale brown x-line, with  
micro-perthite.

✓ Sericite, silvery plumose masses on microperthite

✓ Tourmaline, brilliant slender black-brown  
prisms in pegmatite.

Porthleven, Cornwall (II)

Rayner's Cat. (1960).

Tremprue Cliffs - apatite + gilbertite.  
? = Tremearne Cliff



1" 190

PORTHOUSTOCK, St. Keverne, Lizard, <sup>Q'y</sup> SW 805 217 Cornwall.

Brit. Caver 32 24 (1959). "P'roustock Cave, near  
Trenoweth, Lands End, Cornwall" [sic! but  
obviously cave near Porthoustock, St Keverne,  
Lizard, at 8021]. Quotation from Barnes  
"Look Towards The Sea" (London, 1959): "The cave  
at P'roustock... may well have reached  
St. Keverne... now blocked by a collapse..."

CMRM (1995) PORTHOUSTOCK Q'y: Analcite; calcite;  
hornblende; pectolite; prehnite

RSN(1997) 31, 15-16 gabbro, epidiorite; in  
working. Q. Pectolite in / as part of, gabbro  
analcime, calcite, albite (v. small white  
xls w. matrix. calcite). PORTHOUS. QUARRY.

RSN(1998) 33, 10-11. P. Q'y, SW 805217. Pectolite;  
calcite (pink, lustrous, scaleno. often termin. by  
rhomboh.). marcasite lustrous adularia  
[orthoclase], prehnite ~~allite~~ xls.

RSN(2005) 47, 36. WEST OF ENGLAND Q, Calcite  
dog-tooth; marcasite; analc; natrolite; orthoclase  
(adularia). . Also RSN(2006) 48, 14

" 185

SW-SX 9980-0080

PORT ISAAC, St. Endellion, Cornwall, E 12

JC(1871), 62: Stibnite; cerroanite; jamesonite.

(Bristol)  
D.M. Hobson, Min Mag (1972) 38 767-768

"Boulangerite from Port Gaverne, north Cornwall."

Small amount boulangerite identified  
from Port Gaverne (SX 002809) by X-ray,  
[arc?] spectrosc & polished sections. Mixt. of  
massive (60%) + fibres to 1 mm + small  
inclusions sphalerite; in a quartz vein  
in a slate.

"Only recorded occ. in Cornw. is an



Port Isaac

undescribed spec. used by AWGK & J. Hartley  
(MM (1956) 31 296) as an X-ray standard, from  
near Endellion.

[cf "Boulangerite from Doyden Point, Port Quinn"  
see PORT QUINN CLIFFS; cf "Boulangerite  
or semseyite, Trevinnick Mine, St Teath -  
see TREVINNICK MINE, St Kew. cf 66-264  
"Semseyite, Wh. Emily, Devon."]

CMRM (1995) Aragonite (P.I. CLIFFS); nat. sulphur  
(P.I. cliffs)

1" 185 Cent on SW 970 805

PORT-QUIN ~~MINES~~, St. Endellion, Cornwall. E 13(I)

See also PORT QUIN MINE "

JC (1871), 62: Jamesonite. "Port Quin Cliffs"

B. Coopers & A. Wright, gift to RSWB 10/70

Boulangerite - said to have been checked  
at Bristol Univ. from DOYDEN POINT,  
PORT QUINN [SW 96 80]

cf PORT ISAAC (Port gaverne)

cf 66-264 "Semseyite, Wh. Emily, Devon.  
(all very similar in appearance)

W. Eliasson, Riv comm & specs → RSWB 11/85 [85-188]

Vein exposure on beach, has galena,

jamesonite, chalcopyrite, tetrahedrite,  
azurite [effervescent], malachite.

Rev. V. Holyer (1989) Priv. Comm MS. ~~Jamesonite~~ <sup>jamesonite</sup> carrying

One xl phosgenite ident. in a vein which cuts slates on the side of the cove.

→ Poss. bolivite or ceemengeite in the pillow lavas at the "back" of the cove but xls v. small & true verification has not been possible.

RSWB (9/89). ~NE-SW vein exposures at 969-970 805-6 in Port quin bay/cove traced in caves on both sides of bay; richer-



## PORTQUIN, St. Endellion, Cornwall (II)

looking on W side. Veins are of milky quartz with ~~amorphous~~ siderite (IR) patches, (xls of both  $\rightarrow$   $\sim$  5mm in vugs), patches of chlorite (compact) assoc. with better mineralisation; a little mica ("sericite" muscovite). Galena, granular to massive; jamesonite needles; pyrite incl. tiny cubes; chalcopyrite; sphalerite; ~~the~~ silvery-grey massive material with iridescent tarnish, brittle, not sectile, looks like bornite but could be tetrahedrite. Yellowish alt. prod. of jamesonite prob. = bindheimite. Rarely green globular = ~~malachite~~ malachite (IR)

## Port Quin

CMRM (1975) Cerussite (beach); Kermesite ("colour"-beach); meneghinite ("Port Quin vein system"); nadorite (beach); valentinite (beach);

SW 9780

R Taylor 8/11. Beach exposure near REEDY CLIFF, Port Quin has aragonite xls. Sample of white compact fibrous massive porcellanous  $\rightarrow$  RSWB for ident.  $\rightarrow$  efferv HCl, brick red flame; floats in bromoform in which an arag. xl sinks. calcite

851

1" 185 SW 97 79  
PORT QUIN MINE, St. Minver Highlands, Cornwall 6  
See also PORT QUIN  
Antimony mine.

AR, MM, 27, 8, (1944): Dundasite.

Small Sb mine in field 750 yds S of Port Quin, half way between road & stream.

Small dump at shaft on high ground, & farther E, a level from valley side ~1857

Abundant jamesonite on dump (& bindheimite). Small xls anglesite & senarmontite in vughs in bindheimite. Also galena; blende; chalcopryite; tetrahedrite; malachite; cerussite; quartz; chalybite; limonite; & 2 spec. dundasite.



Pontquin mine

CMRM (1995) Allophane; calcite; meneghinite ("P.Q.  
vein system"), ankerite

1<sup>st</sup> 189

SW 65 45

PORTREATH, Cornwall.

CMRM (1995) Chalcedonic quartz (PORTREATH  
BEACH).

1" 189

SW 38 34

Wh. POWLE, St Just, Cornwall.

See also BOSCASWELL DOWNS MINE

DBB (1963) 12: In later times part of

BOSCASWELL DOWNS MINE



PRAA

Cornwall

---

See PRAH SANDS

1" 189

SW 66 16

(N)

PRADANACK, Mullion, Cornwall. L 19  
(E)

JC (1871), 54: Hornblende.

CMRM (1995) Analcime; prehnite; hematite

1" 189

SW 5728, 5827, 5828

PRAH SANDS, Breage, Cornwall

CMRM (1995) Cordierite ~~(PRAH SANDS)~~ altered to  
"pinitite" ("PRAH ELVAN")



GT. PRATT MINE, St Agnes, Cornwall

See POLBERRO M.

Wh. PRATTLE, Perranuthnoe, Cornwall

---

See E. Wh. NEPTUNE

1" 189 SW 35 32, SW 322 325  
PRAZE and YANKEE BOY MINE, St Just, Cornwall

---

See also BOSWEDDEN MINE, etc.



1" 185

SX 06 55

PRIDEAUX WOOD MINE, Lanlivery, Cornwall, SA 80

JC (1871), 62: (Sn) cassiterite

Rudler (1905) 16. Wood tin var of cassiterite

Dines (1956) 2 538. Copper & tin ores; chlorite,  
tourmaline. bismuthinite "said to have  
occurred"

WHEAL PRIMROSE <sup>1"190</sup> SW 719 514 SE Agnes, Cornwall. 19

BM: v6 quartz 4" - "Wh. PRIMROSE"

Rutley, 15th Ed., p.180, stannite. "Wh. PRIMROSE".

AKHJ(1962) 2 28, Map p29. S of Wh. LUNA. [qv]  
also a small section on coast on E side  
of Trevaunance Cove

SW 51 38

Wh. Prince, St Ives, Corn

See St Aubyn Tregenna M



Prince Albert (consols) M., St Agnes, Com

See Prince Royal M

1" 189

SW 59 36

H 67

PRINCE GEORGE MINE, Guinear, Cornwall.

See also Wh. HERLAND (H 13)

JC (1871), 50: Chrysocolla; malachite ✓

1" 190

SW 749 522

PRINCE ROYAL MINE, St Agnes, Cornwall

AKMJ(1962)2 42-45

At Carnbargus - a Sn

sett, granted in 1770 under name of TREASURE  
TROY - an adit. Reworked as Prince

Royal M in early 19th Cent. Part  
tried for Cu in 1830 as PRINCESS ROYAL.

In 1851 amalgamated as PRINCE ALBERT &  
PRINCESS ROYAL Ms (Pr. ALBERT was to the E of  
Princess Royal). Sn. Resumed as PRINCE ALBERT



CONSOLS m 1862.

copper ore

Black tin [cassiterite] e

1<sup>st</sup> 186

Centred on SX  $\frac{401}{39}$   $\frac{705}{70}$  / K 108 (I)

PRINCE OF WALES MINE, Calstock, Cornwall

See also. P. & W. SOUTH MINE (K 110); WEST P. & W. (K 109);  
PRINCESS OF WALES (K 111) = WH PLEASANT

JC (1871), 65: (Cu, Sn, Wsg.) Chalcopyrite

B. Cooper & S. Treseder (1973) Childrenite (ident  
RWB (1R)) small xls on killas some in small  
\* vugs in quartz-chlorite veinstuff.  
Area well searched - only found in one  
small patch, near 4013 / 7054. [Loc. "A"]

R.W.B. Plym M.C.T. (1974) 5 [1] 7-8. A little ~~scorodite~~  
wolframite escorodite recently (Dumps  
to new adit - priv. comm)

B. Cooper 10/76. Traces on secondaries —  
shown to RSWB — dump growth  
brochantite, trace linarite.

Dines (1956) 24, 27, 54, 623, 636, 641-644

M. Rothwell (coll. 1985) Bismutite, at SX 401706  
(XRD, BMCNM); small brown X<sub>9</sub> w. scorodite &  
tourmaline, from dump.

CMRM (1995) Anatase; molybdenite;  
schulenbergite.

RSN (1997) 30: Cuprite, nat Cu, broch., scorod., mal., pyr.  
pharmacos. [all micros — Ken Savage]



## PRINCE OF WALES MINE, Calstock, Cornwall (II)

D.I. Green, J. Betterton, R. Bell & T. Neall. (2001) J. Russ. Soc. 7 [2] 86-87. "Ramsbeckite...."

Ramsbeckite<sup>(XRD)</sup> xls to 0.5 mm in cavs in act'g  
sphaler. ~~seen~~, ~~also~~ on one spec, also w. abundant  
feathery aggs schulenbergite (XRD).

RSN('04)45, 51 (Bill Mason) Visit. Produced copy  
with cassiterite, pyrite, arsenopy, galena,  
"silver ore"

Found prob ramsbeckite & schulenbergite.  
Nat copper sheets w pale blue coatings in  
Killas bedding planes (earlier this year). Did  
not find previously reported anatase, etc.

1" 186

SK 38 70

K 109

■ WEST PRINCE OF WALES MINE, Calstock, Cornwall.

See also P.Q.W (K 108); P.Q.W SOUTH (K 110); PRINCESS of  
WALES (K 111)

JC (1841), 65: (Cu, wkg). Chalcopyrite.

1<sup>K</sup> 186

SX 4

7 (?)

K 110

PRINCE OF WALES SOUTH MINE, Callington, Cornwall.

See also P. of W. (K 108); WEST P. of W. (K 109); PRINCESS of W. (K 111)

JC (1841), 64: (Cu, wkg.) Chalcopyrite.



1" 185

SX 07 86

PRINCE OF WALES QUARRY, Trebarwith,  
Cornwall

R. Turner 6/80 Prince of Wales quarry, at  
Trebarwith, a few ml. S of Tintagel,  
has anatase, little blue xls with  
adularia & nice micro chlorite xls.  
[orthoclase]

CMRM(1995) Monazite-(Ce).

Princess Royal M, St Agnes, Corn

See Prince Royal M

1<sup>st</sup> 186

SX 37 70 K III

PRINCESS OF WALES MINE, Callington, Cornwall.

~~See also~~ PRINCE OF WALES MINE (K 108) ~~et al.~~

JC (1871), 64: (Cu, Sn, wkg.). Cassiterite; chalcopryite.



1" 189

SW 591 271

Wh. PROSPER Breage, Cornwall.

M 47

See also RINSEY COVE

JC (1871), 54: (Cu, Sn) Chalcotrichite; cuprite;  
fahlerz; mimetite.

Dewey (1923) "Wh Prosper? Ludgvan" Cu ores 1832-35,  
1845-49.

DBB "W. Corn." (1963) 21. Reworked 1860's. Engine house.

Wh. Prosper, Perranzabuloe, Corn

See Perram Wh. Alfred

Wh. PROSPER, St. Agnes, Cornw.

See POLBERRO M.



1" 190

SW 981 501

Wh. PROSPER, St. Austell, Cornwall

= WEST POLGOOTH. See Gt. HEWAS UTD. MINE  
See also POLGOOTH MINE

AKHJ (1964) § 38. To E of Gt. HEWAS UTD MINE, &  
included with it in 1846.

W POLGOOTH 981 501 (Burt et al 1987)

1" 190

St Ewe 9745

SW 99

47

WHEAL

PROSPER,

St. Ewe, Cornwall.

N. Hubbard, Priv. Comm. 5/82.

Berthierite has been found at  
Wheal Prosper, St. Ewe.

W("Bill") Eliasson, Priv. Comm 4/1/86 Spec of

? berthierite sent for testing

From Wh Prosper. Lanhadron Barton, investing  
of W.E & RW Bartow ~ 1982 - "dug a trench  
across a lane & unearthed a seam". Mentioned  
by A. Russell.

AKHT (XIII) (1967) 56. Worked in the 1820's. Antimony

ore found within 8 ft of surface in large blocks  
eg "30 cwt (of which 20 cwt pure Sb)". Examined by  
Sir A.R. 1949-50 → adit ~ 18 ft to shoot drives  
E & W on ill-defined lode, with a very small  
amount of stibnite w. stibiconite & blende

CMRM (1995) Kermesite (? - ident by colour)



Wh PROSPER, St. Hilary, Cornwall.

See PROSPER UNITED MINE

1" 190 759430 SW  
WHEAL PROSPER, Truro, Cornwall

R 23

Dines.

1" 189

2½" SW 53 540325

PROSPER UNITED MINE, St. Hilary, Cornwall (I) M<sup>8</sup>

See also Wh. PROSPER; TREVARTHIAN DOWNS M.; Wh. HELENA; Wh. CRAB;  
Wh. VIRGIN; Wh. RODNEY; MARAZION MINES. TREGURTHA DOWNS

Spec. Min. Res. Rep. 21. Minor Pb/Zn mine. Wh. MAID  
See also WEST FORTUNE M. (to W). Wh. FRIENDSHIP.

"AWGK has found good stuff here, esp. W. part".

JC (1871), 49. Wh. PROSPER: Melanterite.

Dines (1956), 173 Included Wh. PROSPER,  
TREVARTHIAN DOWNS & Wh. HELENA. Before  
1860, under name of MARAZION MINES, the  
group also included Whs CRAB, VIRGIN,  
& RODNEY. Cu mines, also some Sn,  
As, argentif, Pb, & pyrite.



JC (1871) 49 "Marazion mines" - blende, chalcopysite,  
felspar, hornblende, limonite, melaconite,  
pyrite, tourmaline

DBB (1963) 16-17. Wh's MAID, VIRGIN, RODNEY,  
PROSPER, FRIENDSHIP combined 1830-41 as  
"MARAZION MINES". Restarted for Sn & Cu in  
1860 as PROSPER LTD. Closed 1873. Once  
included was TREGURTHA DOWNS M.

Dewey (1923) Cu ores 1863-72

also langite (RSWB 7/93  
FTIR, 13/9/93) (W. FORTUNE)

W. Phillips. W. PROSPER. Olivenite } cuprite; nat. copper.  
V. Rae (1990) Spec → RSWB (90-39) } Rocheantite with  
hydrozincite, Zn-devilline (IR) } in mud!  
(W. FORTUNE)

# PROSPER UNITED MINE, St. Hilary, Cornwall. (II)

RSWB & MM, 14/7/95 Dumps scattered about  
near SW 536 324, where MM said a  
Pb-X-course crosses main E-W Cu-lode  
Dark grey killas; quartz veins & stuff, some-  
times gozzany, with chalcopryrite, galena,  
arsenopyrite; goethite ("limonite");  
native copper (sheets and irregular xline  
crack-fillings); cuprite, including octa-  
hedra to ~1mm coated with brochantite;  
malachite; mimetite (clust rods to  
several mm & pale yellow micro-rosettes  
of needles); pharmacosiderite (small

pale greenish to brownish ceibes in  
thin crusts) with pale bluish micro-xline  
crusts ? scotodite. Thin yellow  
microxline crusts of ? — — (12 = qtz + ?)



1" 189

SW 64 31

Wh. PROSPIDNICK, Sithney, Cornwall. M 61

JC (1871), 55: (Pb) Chlorite; pyrite; wolfram.

1" 189  
WHEAL PROVIDENCE, Gwinear, Cornwall SW 59 35 H 20

See also Wh. TREMAYNE etc. cf Wh. PROVIDENCE, Relant, also Gwinear.

AWGK, R&SC, (1952): Devillite,  $\text{Cu}_4\text{Ca}(\text{SO}_4)_2(\text{OH})_6 \cdot 3\text{H}_2\text{O}$ , minute, very pale blue, or greenish blue, feathery xls in vughs in qtz-chlorite-dolomite. Tellingite with brochantite.  
Connellite, tufts of dark blue needles, with chalcophyllite in gozzany quartz.

(NB. Truro Museum - Beautiful Connellite (Wh. Providence, Illogan))

JC (1871), 50: Cassiterite; chalcocite; melaconite; chalcopyrite.

DBB (1963) 18 = Wh. TREMAYNE [q.v.].

Dewey (1923) Cu ores 1820-47

AKHJ (1961) 119 Dines confuses WEST PROVIDENCE M  
(gwinear) with TYRINGHAM CONSOLS M (St. Ives)  
re output.

CMRM (1995) Pseudomalachite



1889

SW 66 40 (?)

C1

WHEAL PROVIDENCE, 911ogan, Cornwall

~~of Wh PROVIDENCE, Gwinear; Lelant~~

Truro Museum: Beautiful Connellite. See ~~H 20~~

~~[Ex infra]~~ See Wh PROVIDENCE, Lelant

Dines (1956) 317. Small mine (= S. Wh. TINCROFT)  $\frac{1}{4}$  ml

S by W of Carn Brea Station. Worked before 1867.

Small amounts of Sn & Cu ores raised

Truro Mus. Azurite

WHEAL PROVIDENCE, <sup>Lelant 11' 189 2 1/2" SW 53 522385</sup>  
St. Ives, Cornwall (I) H5

See also E. PROVIDENCE; S. PROVIDENCE; Wh. SPEED (H 55) CARBIS BAY.  
(H 56) (H 27) N. PROVIDENCE = PEDN OLVA M.

Dines: Mins. recorded: Cassiterite; chalcopryrite; cuprite;  
(1956), 122 melanconite; malachite; azurite; clinoclase;  
liroconite; copper; arsenopyrite; pyrites.

Pitchblende and torbernite in E part (in killas?)

In 1907, dumps reworked for U.  
1 1/4 mls S of St Ives. Includes Wh. Speed & other small mines. Granite & killas.

Bull. Geo. Survey No. 10, 74, (1955). Pebble bed in Carbis Bay  
at high water mark derived from old mine  
dump from Wh. Providence, containing pitchblende  
(Diagram given. Dump is at 52539 1/2 - Loc 139 PRO)

Dunstan's Shaft 523,385

Little Wh. Speed Shaft 520,5385

RSLOB, 1959 v/s.

Henwood: Chalcotrichite ✓

RSWB, 1959, loc 138. Massive cuprite; altered cuprite  
xls with malachite; goethite; black tourmaline.

Loc 139 "Pitchblende" dump above railway. Arsenopyrite;  
chalcopryrite; torbernite on rose quartz.

Carbis Bay beach: pebble bed not visible (sand covered?).  
Much Cu staining round adits above beach.

JC(1871) 49. PROVIDENCE MINES [See also WH. SPEED, H.]. (Sn, Cu, wkg.)  
chalcedony; cassiterite; chalcocite; chalcotrichite;  
chlorite; clinochase; connellite<sup>[infer]</sup>; liroconite;  
copper; pitchblende; arsenopyrite; pyrite;  
torbernite; schorl.

DBB '63, 9 Formed 1832 from older workings (orig. Elizabethan  
' for Cu). Closed 1877 when at 200 fms. [Cont'd (II)]



Wh. PROVIDENCE, <sup>Lelant</sup>~~St Ives~~, Cornwall (II)

Dewey Cu (1923) 6. Chalcocite & chalcopyrite in  
greenstone. p 17 "Providence mines" Cu ores. 1836-55  
(no parish given)

AWOK, RGSC (1964) The "Wh. Providence" connelite almost  
certainly came from Wh. GORLAND [A. Russell]  
but the "Wh Providence" meant is almost  
certainly the Lelant one, though mistakenly.

C. Rogers (1965) : Pink feldspar; schorl; fluorite, green  
& purple; copper sulphides; "peacock ore";

sphalerite; cassiterite xls., pyrite;  
limonite; quartz xls; pitchblende

AKHJ (1961) 1 30-32 Included Wh's WEST, CRACK (E & W);

COMFORT, SPEED, HAZARD, MARY, ROSE. in "UNITED MINES" of 1815. In 1832 PROVIDENCE M's included Wh's SPEED, LAITY, COMFORT, PROVIDENCE, CRACK, GRACE & GOOD FORTUNE.

Copper & tin ores

Known as TREGOZY in 1757-9.

GE PULDADOW produced in 1769 in Carninney  
Atkin et al., MM 47 393-6 (1983) Tristramite, new  
U min., of rhabdophane group - "Wh. Providence" Cornwall

Wh. PROVIDENCE, Lelant, Cornwall (III)

CMRM (1995). Molybdenite (Wh. MARY, Lelant)  
Smithsonite (Wh. MARY, Lelant)



1" 190

SW 706 428

Wh. PROVIDENCE, Redruth, Cornwall

AKHJ (1962) 3 28. ~~4~~ Tin from the site  
referred to in 1810, "Wh. Providence" in 1819 - black  
tin. Advertised 1825 as a tin & copper mine  
on same lodes as Rednandrea. Re-tried  
1860 as Wh. LOUISA. In granite

Wh Providence, St Agnes, Cornw

Prob = Wh. Prudence. [qv]

See Wh Clarence.

1" 189

SW 52, 387

EAST PROVIDENCE MINE Lelant, Cornwall. H 56

See also Wh. PROVIDENCE (H5)

JC (1871), 48 (Sn, wkg.)

AKHJ (1961) 1 32-33. Worked separately from Wh. PROV.  
3 adits - Wh. SMITH adit, Wh. MOUNT adit from side  
of Carbis Water valley, Wh. SPREE adit from  
sea level.



North Wh Providence, St Ives, Cornwall

See Pedn Olva M

1" 189

2½" SW 53 522 376

SOUTH PROVIDENCE MINE, Lelant, Cornwall. H 27

See also Wh. PROVIDENCE (H 5)

JC (1871), ~~49~~ 49 (Sn, wkg.).

OS 2½" map: "S. Wh. PROVIDENCE" at above loc.

1° 19' 0" 73° 52' 8" SW  
WHEAL PRUDENCE, St. Agnes, Cornwall

A 2

By Hanover Cove.

? = WH. PROVIDENCE - N of WH. CLARENCE (BUDNICK).

AWGK, Min. Mag., 31, 349, (1956) Atacamite

JC (1871), 58: (Wkg.) Blende; chalcopryte.

Dewey (1923) 19. Killas with an elvan in lower workings  
Many lodes, mostly nearly vertical eg. According  
to Henwood:

N. LODGE: E 35° N, 6"-2'. Quartz, slate, chalcopryte,  
pyrite, some blende & cassiterite

S. LODGE: E 30° N 1½-10'. Quartz, slate, pyrite,  
chalcopryte, blende, some cassiterite



CAUNTER LODGE E 20°S, dip S 5-10°, 1' = 1'6". quartz  
with chalcoprynite.  
Cu ores output: 1821-1865

C. Rogers (1968); Atacamite

AKHTJ (1962) 2 32 - Copper ore, - brilliant  
Cu stains in cliffs - where also many  
adits.

Combined, from Hanover Cove Swards: - Whs, JACKA,  
COCK & MEADOW.

1" 190

Nr. SW 712 438

Wh. PRUSSIA, Redruth, Cornwall.

DBB W. Cornwall (1963)  
near [712 438]

Shown on map, p 34

1"189

SW 555 277

PRUSSIA COVE Breage, Cornwall

Eq Monazite

C. Rogers (1968): Siderite xls; quartz xls.



Puckrell M., St. Agnes, Corn.

See Polberro M.

gt. Puldadow M, Lelant, Corn

See Wh Providence

PULSTEAN MINE, St. Agnes, Cornwall

See POLBERRO M.



1<sup>u</sup> 190

SW 71 51

Wh. PYE, St. Agnes, Cornwall.

A 42

JC (1871), 58: Cassiterite.

Dines, 471 Part of POLBERROM  
(1956)

SW 515 389 ?

Wh. QUEEN, St Ives, Cornwall

---

See ST AUBYN TREGENNA M

1" 190

SW 73 42

Wh. QUICK, Gwennap, Cornwall.

See also POLDICE MINE etc., JEWELL.

Dewey (1923) 30. Included in POLDICE.

Cu ores produced: "JEWELL & QUICK" - 1815-1853.