

TIPPERARY

BM: "Queens Co. or Tipperary". Silver

BALLYGOWN SOUTH MINE, Silvermines, Tipperary, Ireland.

See also SILVERMINES, etc.

AR, MM 14 350. Close to, & just S of, village of Silvermines.
A little "calamine ore" raised in past. Dolomitised
limestone; has limonitic gozzan, with smallish
but brilliant hemimorphite xls in cavities & as
crusts, lumps, etc. Barite, xls & stalactitic.
Galena, partly altered to cerussite; blende;
pyrite; limonite. 'Smithsonite' has been
reported, but not found by AR.

HN Rhoden MM 32 135 KNOCKANROE (qv) & Ballygown South mines.
Pyrite; marcasite; arsenopyrite; blende;

galena; baryte; dolomite; cerussite; anglesite;
smithsonite; hemimorphite, clear xls in ochreous
matrix; siderite.

GR e S. Moreton () UKJMM12

Coronadite, Hydrohetaerolite, sometimes
mixed w. coronadite. - dull, grey crusts
→ ~ 1 mm thick

RSWB, JIW (5/98) Hemimorphite, baryte blades
in "limonite"

cent on R 87410

87 40

GORTDRUM MINE, Tipperary, Ireland (I)
See also OOLAHILLS MINE, Limerick

(Canad) Survey of Mines (1967) New Cu Ag mine, with
2 zones of ore. To start production - open
pit - summer, 1967. 3me N of Tipperary.

Duane M. J. (1981) PhD thesis, Trin Coll Dub. and
(1988) "Genesis, mineralogy & geochem of uranium
in the Gortdr. stratiform copper depos., Ireland

BM: Amalgam (AgHg) Gortdrum mine

R. Tayler's Catalogue 14 (1979-80)

Tyrolite

Green feathery crust w. minor
azurite on matrix. A similar
spec purch. ex RWB (coll RW Barstow?)
4/80 (RWB 80-64).

^{Mossy et al}
CJM (1971) Details; geol; mineralisation.
Epigenetic minerals; - Major: - chalcopryrite;
kennantite (mercurian); bornite; chalcocite;
ferroan dolomite; calcite, quartz, baryte.
Minor: pyrite, cobaltite, cinnabar,
arsenopyrite, marcasite, galena,
sphalerite, amalgam, Stromeyerite,
New Cu-Hg-S mineral.

Steed, GM
↓

MM 35 (1983) 83M/1944. Gortdrumite $(\text{Cu, Fe})_6\text{Hg}_2\text{S}_5$

87 40

GORTDRUM M., Tipperary, Ireland. (II)

Steed, G.M. (1975) PhD thesis, Univ. of London [As C.J. Morrissey, 1977]

Survey of Mines (Canadian) 1967.

3 mi N of Tipperary Cu, Ag. 2 zones of
one. to start producing 1967 (open pit)

S. Moretan (Priv.) 1/95 At 8740 Huge - acres
of dumps. Ask at old mine offices for
permission. Boulders of chalcocite,
micro xls cinnabar. fernanxite (up to 12 g/lot)
iridesce. bornite, chalcocite xls, occas. baryte,
malachite, azurite.

RSwob, JIW (5/98) Bornite; near-erythrite

(FTIR), another pink near-ish-erythrite;
devilline (microchem) with malachite,
gypsum & brochantite; tyrolite with
some CO_3 & SO_4 (FTIR); cinnabar incl. ^{good} xls,
some coating chalcopryrite xls on dolomite;
azurite (incl. blades $\rightarrow \sim 5 \text{ mm}$)

~~Fe-silver~~ silver amalgam (EDX)

JIW (Coll. 1/99). Native silver in cracks in
Fe-dolomite (~~ankerite~~?) ass. with a little
azurite, malachite, much iridescent
bornite; & excellent xls erythrite; small
aragonite needles; tyrolite; all from
one boulder
col 10/00 also lavendulan, posnjakite (both IR)

BALLYNOE MINE, Silvermines, Tipperary, Ireland

See GORTSHANEROE MINE.

CLONMEL, Tipperary, Ireland.

Laharran Q., "Conk"

Lud. Wavellite - like than from Devonshire" on
a bolder scale".

MA 4 51b (1929-31) Wavellite - deep green.

BM: "Clonmel, Waterford" Limonite; quartz

GORTDRUM M., Tipperary, Ireland (III)

Ryback & Moreton (1991) UKJMM 10 22-26.

At R 8741; opencast 1967-75, Cu-Hg-Ag.

Hg extr ex Hg-tennantite, some cinnabar, incl. beaut
gemmy xls $\rightarrow$ 1 mm in Fe-dol veinlets in l'stone. Also

Bright xls tennantite tetrahedra $\rightarrow$ more complex;
ch'py xls $\rightarrow$ 3 mm. Qtz & Ca xls $\rightarrow$ 6 mm.

Azurite xls $\rightarrow$ 2 mm, botry malach., powdery cinnab.

Tyrolite lustr. rad. blades $\rightarrow$ 7 mm (best in
Br. l'stes) found "when the mine was working".

Local conc's of U. Type loc. for gortdrumite.

BMSN(01) 59, 12. Steve Burchmore had ^{mic}cinnabar; acicular
chalcopy (like millerite) & nice lavendulan with wate-clear
xls of unident.

RGWR & JI Wilson (2003) J. Russ. Soc., 8(1) 35-36

JOHN RYLANDS UNIVERSITY LIBRARY OF MANCHESTER

Copies

Periodicals

MINERALIUM DEPOSITA. - VOL.23, 1988. - 235778

Location: **Main library**Copies at this location: **1**Shelfmark: **Per.Earth Sci. (Blue 2) MINERALIUM**

Barcode	Loan Type	Date	Reserves	Notes	Links
D8NAK	REFERENCE	Not on loan	0		

Deansgate Book Loan Service

If the *only* location for the above item is 'Deansgate' and the loan type is 'Available', you may use the **DBLS online loan request form** to request the loan of the item. This service is available to final-year undergraduates, graduate students, and members of staff of the University of Manchester only. For full details see the **DBLS Web page**.

[Place reservation](#)[Locations list](#)[References List](#)[Title details](#)[\[Return to search menu\]](#)TalisWeb software by **Talis Information Ltd.**

Duane, M.J. (1988) Min. Dep. 23 [1] 50-57

Colloform
 Petchbl/uranin, brannerite
 Calcian "Sec U mins"
 Gaspitchb
 poss
 coffin?

Tipperary
 GORTDRUM M.

GORTEENADIHA MINE, Silvermines, Tipperary, Ireland.

See GORTNADYNE MINE.

GORTNADYNE or GORTEENADIHA MINE,

Silvermines, Tipperary, Ireland.

See also SILVERMINES, etc.

AR, MM 14 350 V. extensive Cu & Pb mine.

Chalcopyrite in breccia. In places
argentiferous tetrahedrite abundant, &
found on dumps assoc. with large masses
white baryte good specs. white acicular
cerussite ("cat-tooth-ore"), often stained with
malachite & azurite. galena; blende; pyrite;
hemimorphite.

HN Rhoden MM 32 128 Bracketed with Shalloe mines (qv)
Linarite; hemimorphite; pyrrhotite; arsenopyrite;

siderite; pyrite; blende; chalcopyrite;
tetrahedrite; gudmundite; marcasite;
bournonite; goethite; sericite;
galena; baryte; ankerite; chalcocite;
covellite; malachite; azurite.

TRH (1868) "Gortnadyne M's., Henagh". Pb/Cu. Baryte; blende;
cerussite; galena; pyrite; chalcopyrite

GORTSHANEROE or BALLYNOE MINE, Silvermines, Tipperary, Ireland.

See also SILVERMINES, etc.

AR, MM. 14, 350. Chalcopyrite; galena; baryte.

In a nearby stream Mr A. Gages found "a deposit of baryte said to contain spots of pyrite & orpiment (J. geol. Soc. Dublin (1860) viii, 243).
"orp." probably = greenockite (see also MM 27 3 (1944)).

MA 82/M/2586 Pyrite tubes 0.1-20 mm diam.
in sedim. baryte deposit

HOLLY FORD MINES, Cappaghwhite, Tipperary, Ireland.

N-F (1959), 12: Chalcopyrite-quartz-baryte veins.

TMH (1868): Malachite; chalcopyrite

KILLEEN MINE, Newport Tipperary, Ireland.

N-F(1959), 12: Chalcopyrite-quartz-barytes veins.

BM. Dolomite; tetrahedrite

KNOCKANROE MINE, Silvermines, Tipperary, Ireland.

See also SILVERMINES, etc.

= Sulphur mine??

HN Rhoden MM 32 135 Bracketed with BALLYGOWN S. MINE.

Pyrite; marcasite; arsenopyrite; blende;
galena; baryte; dolomite; cerussite;
anglesite; smithsonite; siderite; hemimorphite;
clear xls. in ochreous matrix.

LACKAMORE MINE, Newport, Tipperary, Ireland.

NF(1959), 12: Chalcopyrite - quartz - barytes veins

TMH(1865): Malachite; melaconite; chalcopyrite

SHALLEE COUGHLAN MINE, Silvermines, Tipperary, Ireland

See SHALLEE EAST MINE

SHALLEE EAST or SHALLEE COUGHLAN MINE,

Silvermines, Tipperary, Ireland.

See also SHALLEE MOUNTAIN; SILVERMINES, SHALLEE WEST MINE, etc.

AR, MM 14 350 Extensive opencasts, galena; barroisite; argentiferous tetrahedrite; cerussite; the latter two in small quantities

HN Rhoden MM 32 ~~128~~ 128, ~~Pyrite~~ ~~stn~~ "Shallee Mines"
pyrrhotite; arsenopyrite; chalcopyrite;
siderite; pyrite; blende; tetrahedrite;
gudmundite; marcasite; bournonite;
boulangerite; goethite; sericite; galena;

barite; ankerite; chalcocite; covellite;
malachite; azurite

SHALLEE MOUNTAIN, Silvermines, Tipperary, Ireland

See also SHALLEE E & W MINES; SILVERMINES etc.

TMH (1868): Pyromorphite, malachite, galena.

SHALLEE WEST or SHALLEE WHITE MINE,
Silvermines, Tipperary, Ireland.
See also SHALLEE E. MINE; SHALLEE MTN., SILVERMINES etc.

AR MM 14 350. galena; baryte. W limit
of Silvermines mines.

HN Rhoden MM 32 128 "Shallee Mines": Pyrrhotite
arsenopyrite; siderite; chalcoppyrite; blende;
pyrite; tetrahedrite; gudmundite;
marcasite; bournonite; boulangerite;
goethite; sericite; galena; baryte;
ankerite; chalcocite; conellite;
malachite; azurite.

SHALLEE WHITE MINE, Silvermines, Tipperary, Ireland

See SHALLEE WEST MINE.

SILVERMINES, Tipperary, Ireland. (I) [Limerick].
See also specific mines [v. infra]; SHALLEE MOUNTAIN; OOLAHILLS.

AR MM 14 350 Mines along N base of Silvermines Mts,
5½ ml S of Nenagh. Mines for ca 5 ml along
E-W fault. Absence of vugs means
x-lised minerals rare in area, except the
hemimorphite & baryle at Ballygown South Mine
(q.v.). Mentions BALLYGOWN SOUTH MINE; SULPHUR MINE; GORTSHANERDE or
BALLYNOE MINE; GORTNADYNE MINE; SHALLEE E & W MINES - q.v.

TMH (1868) Erythrite at "Silvermines, Nenagh" Also
baryle; blende; calamine; ceussite; galena; malachite;
pyrite; yellow ochre.

HNRhoden MM 32 135 KNOCKAN ROE MINE; BALLYGOWN S;
SHALLEE; & GORTNADYNE MINES discussed.

N-F(1959) 13, 17. Some discussion. 11. E-W fault carries Cu mineral-
ization for part of its length, though Pb, Zn & baryte
with negligible Cu in other parts.

TMM(1868) Baryte; blende; calamine (= smithsonite)
cerussite; erythrite; galena; pyrite;
malachite; yellow-ochre.

BM: Cerussite.

Survey of Mines (1967) (Canada): To be working by Jan. 1968
BM specimens, new, (1972). Quartz, long clear prisms;
blende, pale brown excellent xls, with dolomite,
calcite.

SILVERMINES, Tipperary, Ireland (II)

RW Barstow (4/80) selling "self-collected" spec's:-

Superb, ~~brilliantly~~ lustrous, sharp
semi-transparent brownish yellow xls
sphalerite → ~1 cm, mostly ~5 mm, with
very fine, very sharp, lustrous cubo-
octahedra galena to several cm across on
~~with~~ → rock often richly sprinkled
with tiny but pretty iridescent pyrite
crystals, also minor baryte, tetrahedrite,
bornonite. [From MOGUL MINE, N of the main road]

CJM (1971) Details; geol; mineralisation.

Epigenetic minerals: ^{of ore zone} major:- sphalerite
(low Fe), galena, pyrite, marcasite,
dolomite, calcite, chert; minor:-
Tennantite-tetrahedrite, chalcopyrite,
pyrrhotite, arsenopyrite, bourbonite,
boulangerite, quitermanite, löllingite,
baryte, quartz, clay minerals.

S. Moreton (Priv., 1/95) MAGCOBAR open cast
~~at~~ near 8371 dominates - worked the
BALLYNOE baryte deposit (one of the ten

SILVERMINES, Tipperary, Ireland

(III)

biggest in world).

MOGUL M. on N side of road at 8271 is where Barstow obt'd vq sphalerite etc. - little remains except pyrite

BALLYGOWN SOUTH M. 840710 still yields micro thumbnail hemimorphite xls in limonitic matrix & OLD WORKINGS along S side of road W of the village, as far as Shallee (8071) give micro STN's of Pb Zn Cu - secondaries

- RHODEN, H. N. (1959a) Structure and economic mineralization of the Silvermines District, County Tipperary, Eire. *Transactions of The Institute for Mining and Metallurgy*, **68**, 67-94.
- RHODEN, H. N. (1959b) Mineralogy of the Silvermines district, County Tipperary, Eire. *Mineralogical Magazine*, **32**, 128-139.
- RUSSELL, A. (1907) Note on the mines and minerals of the Silvermines district, Co. Tipperary. *Mineralogical Magazine*, **14**, 350-353.
- RUSSELL, G. E. (1990) *Silvermines: The Mine and the Company*. McKerns Printing Works, Limerick.
- RYBACK, G., and MORETON, S. (1993) Microminerals from Ireland; Part 3: The East (Leinster, Cavan and Monaghan) with a post-script on western Ireland. *UK Journal of Mines and Minerals*, **12**, 36-41.
- TAYLOR, S. (1984) Structural and paleotopographic controls of lead-zinc mineralization in the Silvermines orebodies, Republic of Ireland. *Economic Geology*, **79**, 529-548.
- TAYLOR, S., and ANDREW, C. J. (1978) Silvermines orebodies, County Tipperary, Ireland. *Transactions of the Institute for Mining and Metallurgy*, **B87**, 111-124.
- WEAVER, T. (1819) Memoir on the Geological Relations of the East of Ireland. *Transactions of the Geological Society of London*, **5** (1), 242-243.
- WYNNE, A. B. (1860) Some remarks upon the mining district of Silvermines, County of Tipperary with map. *Journal of the Geological Society of Dublin*, **8** (3), 244-250.
- ZAKRZEWSKI, M. A. (1989) Members of the freibergite-argentotennantite series and associated minerals from Silvermines, County Tipperary, Ireland. *Mineralogical Magazine*, **53**, 293-298. 

REFERENCES

ANDREW, C. J. (1986) The tectono-stratigraphical controls to mineralization in the Silvermines area, County Tipperary, Ireland. In ANDREW, C. J., CROWE, R. W. A., FINLAY, S., PENNEL, W. M., and PYNE, J. F. (eds.). *Geology and Genesis*

of Mineral Deposits in Ireland. Irish Association for Economic Geology, Dublin.

BOLAND, M. B., CLIFFORD, J. A., MELDRUM, A. H., and POUSTIE, A. (1992) Residual base metal and barite mineralization at Silvermines, Co. Tipperary, Ireland. In BOWDEN, A. A., EARLS, G., O'CONNER, P. G., and PYNE, J. F. (eds.). *The Irish Minerals Industry 1980-1990*. Irish Association for Economic Geology, Dublin. 247-260.

BOYCE, A. J., COLEMAN, M. L., and RUSSELL, M. J. (1983) Formation of fossil hydrothermal chimneys and mounds from Silvermines, Ireland. *Nature*, **306**, 545-550.

COWMAN, D. (1988) The Silvermines—sporadic working 1289-1874. *Tipperary Historical Journal*, 96-115.

COWMAN, D. (1992) Silvermines—a unique mining history. *Irish Association for Economic Geology Annual Review*, 81-82.

GAGES, A. (1860) On the formation of orpiment in a mass of sulphate of barytes found interstratified in the Carboniferous limestone near Silvermines, County of Tipperary. *Journal of the Geological Society of Dublin*, **8** (3), 243-244.

GASPARRINI, C. (1978) Unpublished Report. Minmet Scientific, Toronto, Canada.

GIESECKE, C. L. (1832) *A Descriptive Catalogue of a New Collection of Minerals in the Museum of the Royal Dublin Society, to which is added an Irish Mineralogy*. Graisberry, Dublin, 268 p.

KINAHAN, G. H. (1886) Economic Geology of Ireland. *Scientific Proceedings of the Royal Dublin Society*, **5**, 200-317.

SILVERMINES, Tipperary, Ireland (IV)

Table 1. Minerals identified from the Silvermines district
 (from Taylor and Andrew, 1978; Andrew, 1986;
 Gasparrini, 1978; Taylor, 1984; Weaver, 1819;
 Boland *et al.*, 1992; Ryback and Moreton, 1993;
 Kinahan, 1886; Giesecke, 1832; Russell, 1907;
 Rhoden, 1959a and 1959b; Zakrzewski, 1989).

Primary Sulfides

Acanthite/Argentite	Ag_2S
Chalcopyrite	CuFeS_2
Galena	PbS
Marcasite	FeS_2
Pyrite	FeS_2
Pyrrhotite	Fe_{1-x}S
Sphalerite	$(\text{Zn}, \text{Fe})\text{S}$

Primary Sulfosalts

Argentotennantite	$(\text{Ag}, \text{Cu})_{10}(\text{Zn}, \text{Fe})_2(\text{As}, \text{Sb})_4\text{S}_{13}$
Argyrodite	Ag_8GeS_6
Arsenopyrite	FeAsS
Boulangerite	$\text{Pb}_3\text{Sb}_4\text{S}_{11}$
Bournonite	PbCuSbS_3
Freibergite	$(\text{Ag}, \text{Cu}, \text{Fe})_{12}(\text{Sb}, \text{As})_4\text{S}_{13}$
Gersdorffite	NiAsS
Gudmundite	FeSbS
Jordanite	$\text{Pb}_{14}(\text{As}, \text{Sb})_6\text{S}_{23}$
Löllingite	FeAs_2
Miargyrite	AgSbS_2
Proustite	Ag_3AsS_3
Pyrargyrite	Ag_3SbS_3
Smithite	AgAsS_2
Tennantite	$(\text{Cu}, \text{Ag}, \text{Fe}, \text{Zn})_{12}\text{As}_4\text{S}_{13}$
Tetrahedrite	$(\text{Cu}, \text{Fe}, \text{Ag}, \text{Zn})_{12}\text{Sb}_4\text{S}_{13}$
Xanthoconite	Ag_3AsS_3

P.T.O.
 S. Moreton (1999) Min. Rec. 30, 99-106

Secondary Metalliferous Minerals

Anglesite	PbSO_4
Azurite	$\text{Cu}_3^{2+}(\text{CO}_3)_2(\text{OH})_2$
Cerussite	PbCO_3
Chalcocite	Cu_2S
Coronadite	$\text{Pb}(\text{Mn}^{4+}, \text{Mn}^{2+})_8\text{O}_{16}$
Covellite	CuS
Erythrite	$\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$
Goethite	$\text{Fe}^{3+}\text{O}(\text{OH})$
Hematite	Fe_2O_3
Hemimorphite	$\text{Zn}_4\text{Si}_2\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$
Hydrohetaerolite	$\text{Zn}_2\text{Mn}_3^{3+}\text{O}_8 \cdot \text{H}_2\text{O}$
Linarite	$\text{PbCu}^{2+}(\text{SO}_4)(\text{OH})_2$
Malachite	$\text{Cu}_2^{2+}(\text{CO}_3)(\text{OH})_2$
Pyromorphite	$\text{Pb}_5(\text{PO}_4)_3\text{Cl}$
Silver	Ag
Smithsonite	ZnCO_3

Gangue Minerals

Ankerite	$\text{Ca}(\text{Fe}^{2+}, \text{Mg}, \text{Mn})(\text{CO}_3)_2$
Barite	BaSO_4
Calcite	CaCO_3
Chlorite Group	$\text{A}_4\text{Z}_4\text{O}_{10}(\text{OH}, \text{O})_8$
Dolomite	$\text{CaMg}(\text{CO}_3)_2$
Illite	$(\text{K}, \text{H}_3\text{O})(\text{Al}, \text{Mg}, \text{Fe})_2\text{-}$ $(\text{Si}, \text{Al})_4\text{O}_{10}[(\text{OH})_2, \text{H}_2\text{O}]$
Muscovite (sericitic)	$\text{KAl}_2(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH}, \text{F})_2$
Quartz	SiO_2
Siderite	FeCO_3

SULPHUR MINE, Silvermines, Tipperary, Ireland.

See also SILVERMINES, etc.

= Knockanroe mine??

AR MM 14, 350. Adjoining, & a little to S of
BALLYGOWN SOUTH MINE (qv) Pyrite; galena;
blende. Little of mineralogical interest.