

BELL HOLE - THE HISTORY AND GEOLOGY OF A SMALL LEAD MINE NEAR FOXDALE, ISLE OF MAN.

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Abstract: Almost 600 metres north of Old (Central) Foxdale in the Isle of Man, is a small lead mine named Bell Hole. This article gives a brief history of its intermittent working from the eighteenth century to the twentieth century. Its geographical location and geology are described. Future potential, and survey and drilling work required are outlined.

INTRODUCTION

Situated on the Foxdale River in the Isle of Man, are a number of small trials on North South cross - veins of the well-known Foxdale shear. One of these, about six hundred yards north of the Old Foxdale mine, and on the east bank of the stream, is more conspicuous than most, partly because it was reworked several times on account of the belief that it contained a particularly silver rich north-south running cross-vein of the Foxdale shear. This article relates what is known of the geology and history of the mine, and its future potential.

LOCATION

The mine lies in the Foxdale - St. John's valley, about 6 km south of St. John's and close to Old (Central) Foxdale. The position of the mine relative to Old Foxdale is indicated in figure 1. An adit at grid point SC277786 discharged drain water into the Foxdale river. The engine shaft, about 100 metres to the east and up the hillside from the adit, served for haulage of ore to adit level. It was distant about 640 yards (about 590 m) north of old Foxdale, and worked the N-S running silver rich Maghie's vein. The relation of this mine and the associated vein to the other mines and the E-W main shear is indicated in the sketch plan of figure 2. This is based on information given by a map of the positions of shafts made by W. Skatchard about 1970.

EXPLORATION AND LAYOUT

Figure 3 summarises what is known about the mine's present state underground. During August 1960, several of us walked up the old railway line from near St. John's. Within sight of the Foxdale railway station (and terminus of the railway) and on the left hand (east) bank of the stream, a stone-arched hole was visible. On arrival at the hole, we found that it was too boggy to enter. A collapse some ten feet into the adit provided a hole in the roof through which poured a stream from the field above. A few further attempts to enter produced no further result. A further visit in 1966 confirmed that the adit was open but no entry was made.

The first Manx Mines Research Group (MMRG) made an entry in January 1970, led by W. Skatchard. The adit led in 47 fathoms, (about 100m) and split into 2 branches. The northerly running branch ran a further 20 fathoms to a roof fall which choked the passage. The southerly passage had

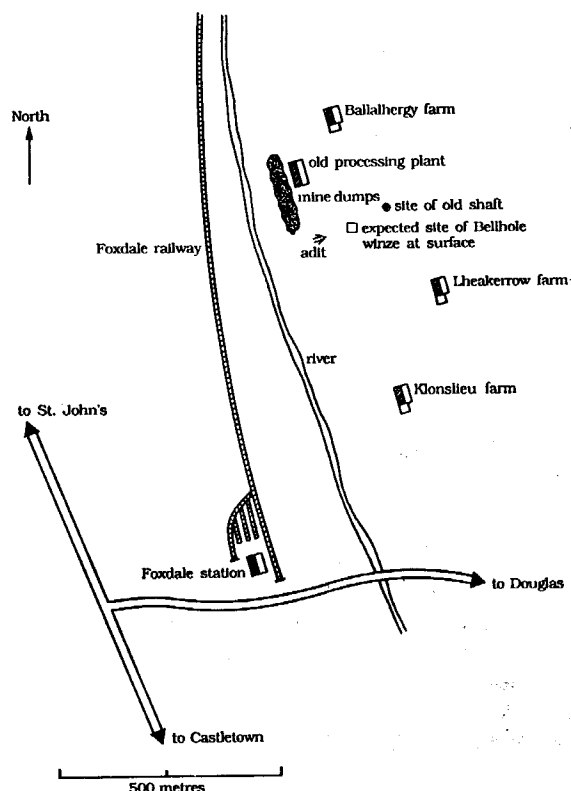


Fig 1 Location of adit and shaft of Bell Hole Mine in the Foxdale Valley.

a spoil catslide which blocked and flooded the passage to a depth of 4 feet. However, at this slide, extensive stoping above the passage was visible. Although a winze or shaft up through this stoping was postulated, no exploration upwards was made. During 1988, the third Manx Mines Research Group made an exploration which confirmed the findings of the 1970 visit, but provided no extra findings. (M. Dobson private communication, 1989).

The visits by the MMRG in 1989 below surface at Bell Hole confirmed all previous findings. A few further details were noted. The vein in the north passage is about 50-75 mm wide and is of clay. The rock here is soft, unstable, and has numerous small collapses. The shaft noted above has stemming up it as far as can be seen. The field notes

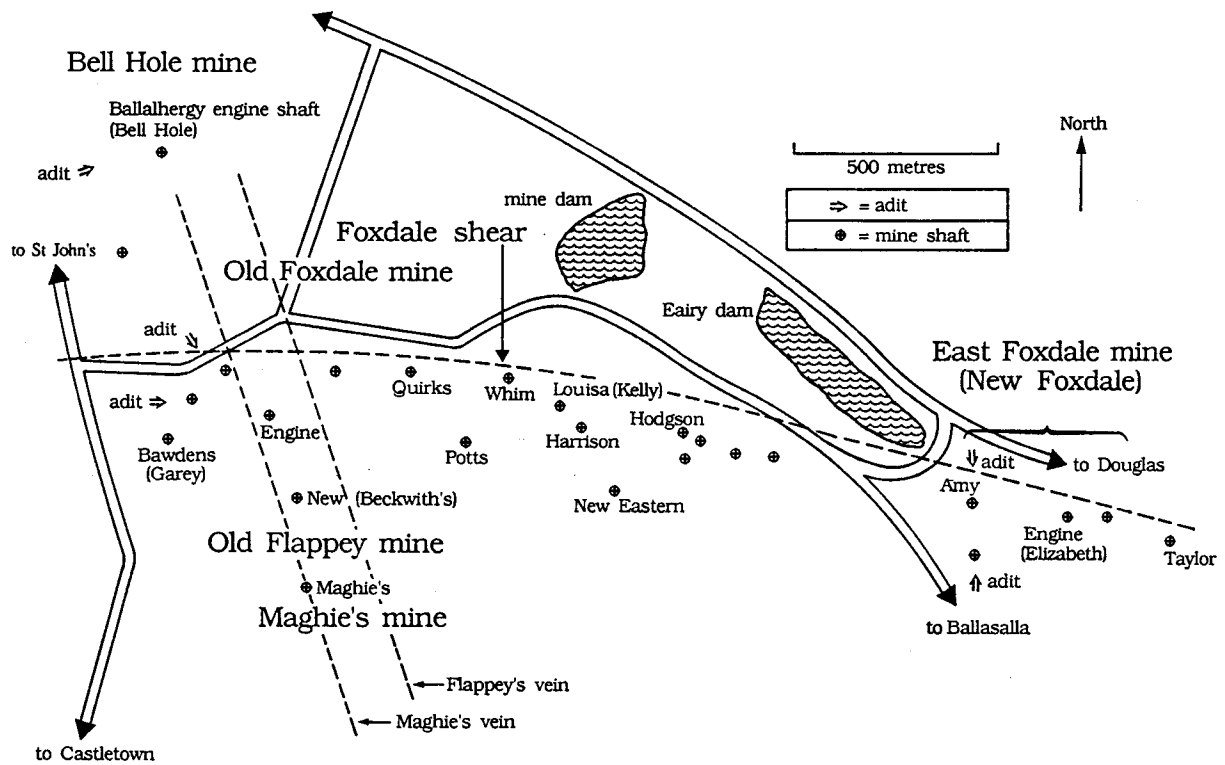


Fig 2 The relation of the Mine and its vein to other mines on the Foxdale Shear.

of MMRG., dated November 1971, note that the stemping goes up 75 feet (about 36 m) and the stemples are spaced 5 feet (2.4 m) apart. The shaft is sealed by two lengths of rail covered over with slate, and is filled to surface. It is possible to see the direction of strike of the vein by inspection of the stemping. The stope strikes north-south, and goes about 21.5 metres up the shaft, and extends below adit level. A smaller shaft, about 16 metres in from the entrance went up to surface, a distance of about 3 metres. It was semi-circular in shape, but is now filled in. It helped ventilate the adit.

An earlier visit in 1985-86 by the Laxey Mines Research Group (LMRG) gave somewhat more detail (Private communication, P. Geddes, 1989). The shale collapse on the northern branch blocked further progress. The end of the passage on the southern branch was a forefield (working face). The slide of shale at the T junction of all the passages was in fact material fallen from the shaft which went up through the stoping to surface. In fact, the only thing holding up the heap was an extremely decayed staging which had holes beneath, through which could be dimly seen the shaft continuing to lower levels! The plan of the mine may be seen in figure 3.

Further visits by MMRG in 1989 revealed the processing plant about 60 m north of the adit. Plates 1 and 2, and figure 4 show these remains. It appears that a small railway may have led along a mine tip which extends northwards 60m from the mouth of the adit to a wall on top of a small rock face. Presumably there was an ore slide down from there into the machine house below. The remains indicate that this machine house contained a concrete engine bed. It was surrounded on the other two sides by stone walls coming out from the rock face, and on the front by a

concrete upstand 15 mm wide with bolts fixed in. It would appear that this was a crushing plant inside a wood frame building. Outside this building is another machine bed shown in plate 1, which probably had on it the engine which drove the buddle seen in plate 2. This processing plant probably dated from the 1920's period of working. Directly outside the adit is a ruin which was probably the min office, store room, and changing area.

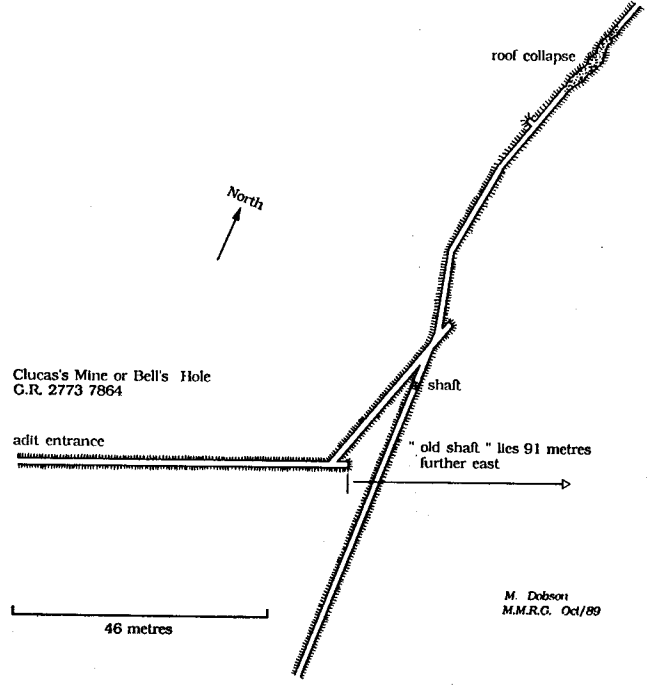


Fig 3 Plan of Bell Hole.



Plate 1. The machine bed for the budding apparatus, Bell Hole Mine.



Plate 2. Concrete kerbed buddle at Bell Hole Mine.

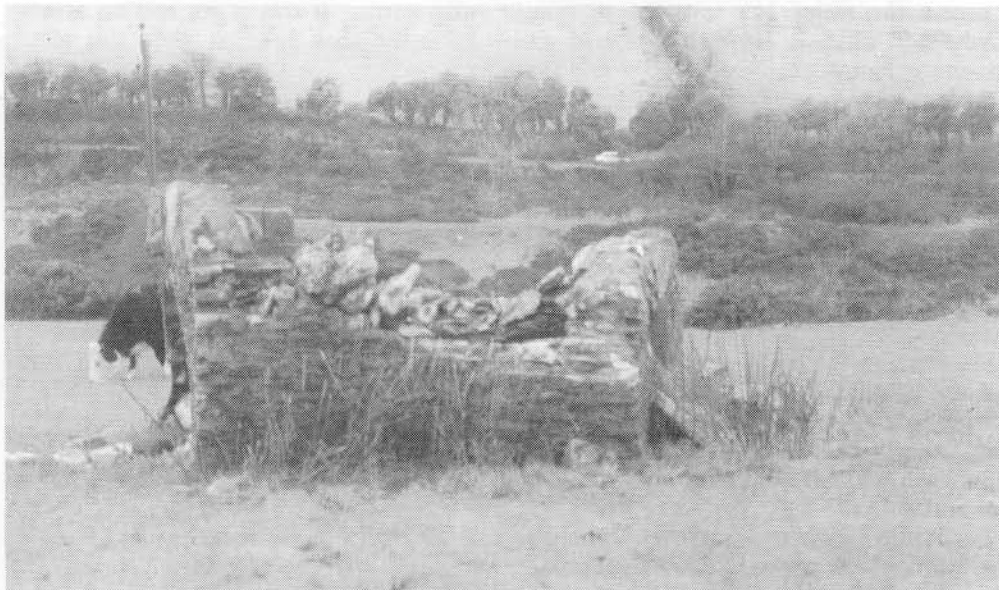


Plate 3. View of the top of "old shaft" looking west across Foxdale Valley.

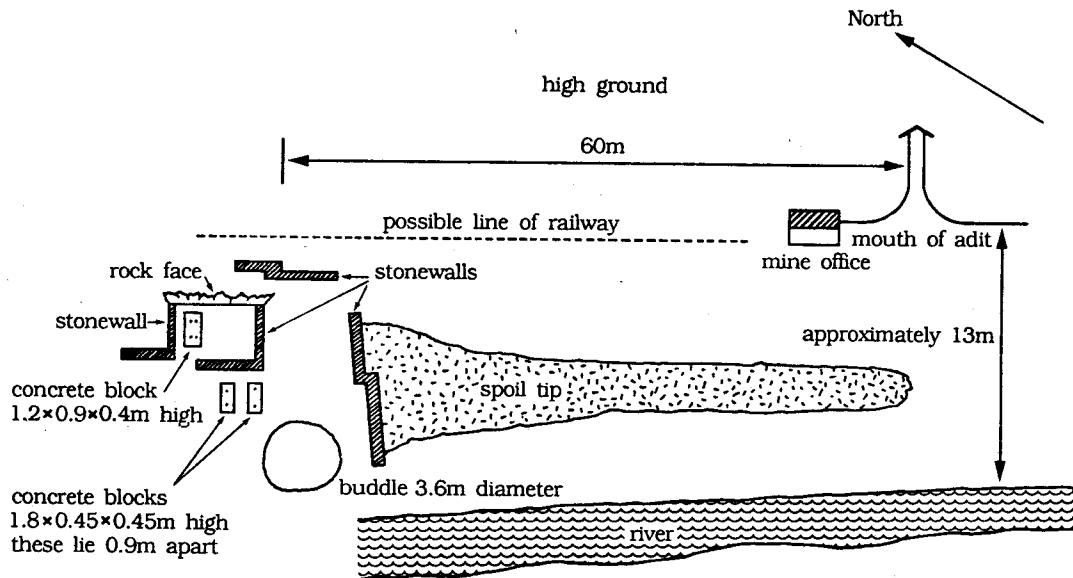


Fig 4 Plan of surface remains at Bell Hole Mine, Foxdale, I.O.M., in October 1989.

Although the evidence is now lost, Geddes stated that a 40 ft wheel (diameter 12.2 metres) at Old Foxdale pumped Bell Hole via 590 metres of flat rods. When Bell Hole (alias Balla Lhergy, or Clucas's mine) was abandoned, this wheel was taken to Beckwiths, further along the E-W Foxdale shear. No evidence of these flat rods or their runaway has been seen.

SURFACE REMAINS AT THE SHAFT HEADS

The surface remains at the expected position - about 36 metres higher than and 85 metres east of the adit are non-existent. Neither an on-site search, nor a check from vantage points across the valley has revealed anything. However, the "Old Shaft" which is 250 metres east of, and uphill of the adit, and in fact worked the Flappey vein (the most easterly of the two north-south cross-veins) can still be seen, in a field north west of Lheakerrow farm, at a grid reference of SC 279 787. This is shown in plate 3. From the maps, we could conclude that the stempling above the shaft in the branch-point of Bell-Hole adit did not reach the surface, even though the estimated height of the stemples (about 36 metres) would bring them out at the surface of the ground. Plate 3 indicates the closeness of the "old shaft" to the Foxdale valley, and the author of this article agrees with the Manx Mines Research group that the shaft top being sought in connection with the Bell-Hole Adit must lie in one of the patches of gorse which grow between the "Old shaft" and valley bottom. If Bell Hole is typical of other Manx mines, then one would expect at the head of the shaft a system similar to those used at Laxey, Glen Roy, other mines at Foxdale etc. At the larger mines, either water wheels or turbines drove winding drums, which hauled ore up to adit. At adit the ore was taken out in trucks. Some of the smaller mines used horse gins of the kind still to be found in outlying Manx farms. The horse

walked round a circle, turning a vertically mounted shaft, on which was mounted a winding drum. The rope was led over a pulley on a gantry at shaft top. This system was still in use in Derbyshire c.1900 (Kirkham 1968 p.73). A Manx example, found in a Manx story book printed around 1900, shows such a scene (Herbert 1909 fp.250). Careful examination of the picture shows that it was Ballacorkish mine near Colby, Isle of Man, as seen looking from the West, in an easterly direction. The source of the original for this picture, and hence the date of the surface remains portrayed is unknown. However, Jackson (private communication 1988) informed me that the artist, Donald Maxwell, used to paint the scenes as required and submit the results to the publisher who used the illustrations soon afterwards. If this is so, and no artistic license has been taken on that painting, then this picture and Kirkham's photograph give an idea of how the surface equipment at Bell Hole shaft top would have appeared round about 1900.

One is tempted to speculate that the references in Lamplugh to workings on Maghie's and Flappey's drained by an adit do refer to Bell Hole, but that the information recalled by Geddes concerning pump wheels and flat rods refers to the actual Flappey or Maghie mines, which were south of the Old Foxdale mine, and which definitely were pumped by flat rods from Old Foxdale. There, the flat rods ran for a distance of only about 270 metres at most. A plan exists in the files of W. Skatchard which shows this set of flat rods leading south from a wheel on the Old Foxdale mining area to Flappey's mine.

HISTORY OF WORKING

Lamplugh (1903 pp.500ff) does not mention the mine specifically, but does mention that the valley of the Foxdale river had in it a number of unsuccessful trials. Berger

(1814 pp.36,53) mentions that one of the N-S veins of the Foxdale system, Flapppy's, was worked around 1811. Hence "Old Shaft" probably dates from before 1814. Skatchard (1970) mentioned working in Bell Hole around 1830. Lamplugh (1903 p.552) indicated the positions of these early trials in his list of miscellaneous trials, on the 1869 6" O.S. sheet No. 9. Flapppy's and Maghie's mines are also described by Lamplugh (1903 p.510) but are closer than 650 yards from the central Foxdale workings, and are specifically noted as being worked by, and ultimately joined underground to the Old Foxdale mine. The 1869 Ordnance Survey 6" survey of the Isle of Man locates and names Bell Hole in the valley of the Foxdale river about 590 metres (640 yards) north of the Old Foxdale workings. Notably, Pigot's Directory (1837) makes no reference to it. Had the mine already closed by then? In the period from about 1840 to 1900, the mine must have been worked by the Old Foxdale company, because there seems to be no evidence in the records of its existence as a separate entity. However, it seems to have never been connected by tunnel to Old Foxdale mine. This mine is at a somewhat lower altitude than Old Foxdale (about 120 m above sea level). Several investigations of the mine have shown the small volume of water exiting from the mine. Hence a direct connection to drain the Old Foxdale mine seems unlikely, unless an originally extant passage has now been blocked by massive roof falls.

Some documents exist, which give some clue about the period from 1840 to 1900. In the Manx Museum, Douglas, Isle of Man, Plans No's LMS59 and 60 have a date 4/2/73 written on them. Because of overwriting by the initials WK the date could possibly be 4/2/33. However, this is unlikely, since WK stands for William Kitto, the Manager of Foxdale Mines from 1869-70 onwards. The Foxdale Mines Assay Book (Manx Museum 5689) covers the period 1857 to 1911. Ballalhergy (Bell Hole) is mentioned twice:

15 Oct 1870: ore assayed at 13 oz 1 dwt 8 grammes of silver per ton (approximately 350 ppm wt/wt)

12 Jan 1910: stone assayed at 20 oz 8 dwt 8 grammes of silver per ton (approximately 600 ppm wt/wt)

These puzzling weights are as read in the book. Carruthers and Strahan (1923 pp.89ff) mention that from 1903 to 1908 the Bell Hole mining company reopened workings on the Foxdale cross-courses on Maghie's and Flapppy's lodes. These were unwatered by an adit driven in from an adjacent valley. Is this Bell Hole, and are these the same workings as described by Lamplugh (1903 p.510)?

A gap appears in its history until about 1918. Presumably the records of Bell Hole were lost when the Bell Hole mining company ceased in 1908. However, after the closure of Old Foxdale mine in 1911, Bell Hole, like several other mines on the Foxdale Shear, was worked intermittently by small private groups. Dr. L.S. Garrad of the Manx Museum, Douglas, Isle of Man (private communication, 1970) related a conversation she had with a Mr. Jones, lately of Castletown, Isle of Man. He, and about six others worked the mine by hard labour after the first world war, but "made only a pittance from it". Further documents held by the Manx Museum show that the mine was leased from H.M. Woods and Forests Department on an annual basis from 1916 to 1921 by the Bell Hole Mining Company of

Cumberland. Its directors were:

William Walter Cassons
Joseph Hartrods
Joseph William Pattison
John Arthur Jackson
Richard Hurtley
James Bateman Kitchen

In 1916 a winze was sunk to 30 fathoms (about 55 metres) without any success, and it was intended to reopen the old adit. It is not clear from these notes which part of the adit was being reopened, or where the winze was. However, these details most probably represent a deepening of the main shaft and reopening of the collapse in the north passage.

A document in the Manx Museum dissolved company file 459 describes a company numbered 2390, and named as Foxbell Mining Co., and notes its foundation date as 29/3/1924. This is later than the era of Mr. Jones et al and their post-first world war working of the ore lode. Nor does Mr. Jones' name appear in the list of those involved in the new company. (See Appendix for the main details of the document. The predominance of business men from the English Midlands, and the lack of any Manx or "Old Foxdale" names in the list of directors is noteworthy. The final dissolution date is 28/4/1933. Almost nothing exists about its history of working. Plates 4 and 5 show the Incorporation certificate and articles of association from this period of working.

A conversation with Mr. A. Bawden, presently of the Rolls Office, Douglas, Isle of Man, in September 1968 revealed that the adit 650 yards north of the Old Foxdale mines was Bell Hole, and that its other name was Ballalhergy (named after the adjacent farm). In 1967 a garage was being built for the Gatfields of Marathon Road, Douglas. The builder, Mr. Kenn, had recently bought Lhea Kerro farm on which land the adit and shaft of Bell Hole are situated. He related to them that an old miner, unnamed, had told him that Bell Hole was mined after the closure of the mines at Old Foxdale. A further conversation with Dr. Garrad (private communication, 1968) showed that the miner wanted to keep the mine open because he believed that there was plenty of good ore left. Not enough money had been made to allow further capital outlay on repairs to machinery, so it had to shut. The mention of machinery would suggest that these remarks refer to the 1924-1933 period of working, rather than the manual mining and haulage period of post 1918.

Since 1933, no work appears to have been done. An old rumour that hauntings in the mine made the men reluctant to work there, was told to P. Geddes (private communication with Laxey Mines Research Group, 1989) a few years ago, but the tale has not appeared elsewhere in recent times.

INVESTIGATIONS STILL REQUIRED

To date, a thorough search of Manx newspapers held at the Manx Museum has not been done, but this should reveal more about the history of the mine. The early period of working may well be described in the writings of Sir W.W. Smyth, and the more recent period of those of Sir. C. le Neve Foster, and, later, the mines inspector T.F. Evans. Examination of the reports of the mines inspectorate from 1845 onwards has so far revealed nothing about Bell Hole.

It would appear from this, that Bell Hole was a small scale operation throughout its history, and was rarely, if at all, visited by inspectors as part of their tours of the Old Foxdale Mines.

GEOLOGY OF BELL HOLE

Inspection of the mine dumps at the the entrance of the adit on the 1960 and 1966 visits indicated that the country rock was a shiny grey slate, but no metal ores, not even iron-stained quartz, were found. This is most unusual, since most of the productive mine sites of the Isle of Man have produced quartz (known as "spar" on the Island), iron ores such as goethite, limonite, and the various sulphide minerals. One wonders about the old miner's remark about plenty of lead ore. Skatchard (field notes, 1971) was of the opinion that this tip was devoid of ore minerals probably because it consisted of old material reworked during the 1920's. However, general opinion amongst those interested in Manx mining since about 1960 is that the North-South vein could enrich southwards towards its intersection with the East-West Foxdale shear, and in depth. Lamplugh (1903 pp.510 ff) discusses the two cross-veins. These are Maghie's - the western vein, and Flapppy's - the eastern vein. Bell Hole is on Maghie's vein. The direction of Flapppy is south 22° east which would run from east of Bell Hole through Old Foxdale - Lamplugh mentions that the intersection of Flapppy with the east-west shear at Old Foxdale mine was not easy to study, partly because some of the older workings near the junction were by then inaccessible. This early working suggests near-surface deposits rich in ore at or near the intersection of the two sets of veins. Some evidence about the appearance of Maghie's vein has been gained from the interior of Bell Hole. The clay vein in the north passage was noted, as was the extent of stoping both above and below adit in the vicinity of the shaft. MMRG in a subsequent visit in 1971 also noted that the roof of the adit contained calcite growth, in most cases pure white flowstone, and "straw" stalactites. Although manganese and iron staining were visible in the calcite, it was found only in two areas in the north branch of the adit. No-one has recently visited Flapppy's, because "Old shaft" is filled with rubbish to about 20 ft from surface, and no adit has been located near there.

Most of the mines in the Isle of Man followed veins on one of the three main systems. Only one of these systems was highly productive. Each system had a characteristic mineral assemblage. The Bell Hole mine, and others near it, such as Flapppy's and Maghie's appear to be on the most productive veins. However, more study of vein characteristics, such as mineral assemblages strike and dip of veins etc., is still required to confirm the situation. Most of the productive mines, like North Laxey and Great Laxey, in the northeast of the Island, some of those on the Foxdale shear in the centre of the Island, and Ballacorkish and Bradda Head in the south of the Island were on north-south veins of quartz, calcite and barite, containing sulphide ores of zinc, copper, and silver-lead. Many of the other mines had lesser quantities of ore, richer in dawk (iron oxides) in east-west veins. A third group of mines showed barren quartz-pyrite veins which usually ran NW-SE or at right angles to that direction.

A more thorough inspection, both of the mine and its dumps to obtain an idea of the strike and dip of the vein,

and the mineral assemblage associated with the Bell Hole mine is required. This would allow comparison with the productive mines on the other north-south running veins, such as Ellerslie farm (Bishop's Barony), North Laxey, and Great Laxey, and contrast with other mines on the east-west running part of the Foxdale system. One might then be able to estimate the probability that the Flapppy and Maghie veins were emplaced contemporary with, and similar in character to, the above north-south mentioned systems. Some evidence already exists, and is discussed below. Geddes (LMRG) pointed out (private communications 1987, 1989) that there are remarkable similarities amongst the ores from certain mines on the north-south veins, probably due to silver content. That of Bradda is more shiny, tarnish resistant, and of a different crystal grain texture than the others. Bradda mine is on a north-south vein in the south west corner of the Island. The lead ore there sometimes has crystals of copper ore superimposed on it, but there is no sign of an intermixing - solid solution mineral phase. Another north-south vein of importance - Great Laxey - again had copper ores separate from the lead ore, but had lead ore of a more grey but still bright appearance. This tended to be more massive less crystalline and less tarnish resistant than that of Bradda. However, there were some good galena crystals. The zinc ore at Laxey was often crystalline, and a few perfect crystals of millimetre dimensions, of the sphalerite form were seen by Hollis during the 1970's. The silver assays of these mines produced values as high as those of Bell Hole, hence similarities of origin between Bell Hole and the other systems of North-South veins is likely. Additionally, on the dumps of North Laxey mines, perfect calcite rhombs, and tiny crystals of hexagonal quartz have been found, similar in shape and texture to the larger ones found at Great Laxey. Some evidence exists to show that the Bell Hole trial is too far away from the main ore lodes. The clay in the north passage of Bell Hole has been noted, as has the presence of flows of calcite, iron and manganese. Such "flowstones" have been observed on numerous previous explorations of several mines, usually at a distance of up to 200 metres from the sulphide zones. Examples exist at South Bradda, the main adit at Great Laxey, the Old Day adit of Beckwith's mine, Foxdale, and in a trial on the south-east side of Douglas Head. In all these cases, there was no sulphide ore at the iron-manganese staining, but the sulphides were found in the near vicinity. Such experience fits the pattern of Bell Hole, where extensive stoping exists not far from the flowstones. We note that the flowstones occur north of the stoping at Bell Hole.

An analysis of tension cracks which appear almost normal to shear zones has recently appeared in two articles (Hancock 1985, and Sanderson et al 1984). This analysis would appear particularly appropriate to an understanding of the east-west Foxdale shear and several faults which run nearly at right angles to it. The shearing motion of two bodies contiguous along a crack, in opposite directions produces frictional drags. These, if non-uniform, can lead to tensions in regions of low friction, in places along the surface which form the crack lying in the direction of the shear motion. A new system of cracks may then appear, at an angle to the crack along which the original shearing took place. The precise angle between the original crack system and the newly formed set of cracks is a complicated function of the degree of friction in the shear zone, the Young's Moduli and Poisson's ratio of the rocks being sheared, and their ultimate fail shear stress. The ultimate result is typified well in the Isle of Man. At Foxdale a

shear or "crush" zone, well documented by Lamplugh (1903) runs all the way from the west coast to the east coast. The eastern end is less dramatic than the west end, but it ends in the cliffs at Douglas Bay, where there were several small mines (Hollis 1989). On the west side of the Island, two remarkable overthrust faults are visible - one in the cliffs about 100 metres north of the point where the Glen Maye stream runs into the sea, the other in the cliffs about 200 metres north of a reef of rock known as the Niarbyl. These overthrust faults represent the western end of the shear zone, at the point where east-west shear, accompanied by some north-south compression, in the centre of the island has been accommodated at the coastline by the northern rocks riding over those which lie to the south.

The tension tears which formed at nearly right-angles to the east-west shear formed the Flappey and Maghie veins. The nature of such tension tears is such that they are widest near the shear zone, and rapidly become less significant away from the shear. Thus one would expect the most significant ore deposits to lie in the large cracks closer to the shear zone. At Foxdale, this analysis had been borne out by experience. Old Foxdale was the richest mine. Flappey's and Maghie mines south of the shear were older than central Foxdale, but were eventually mined in their lower levels by tunnels from Old Foxdale. The Bell Hole and Old shaft mines, north of the shear zone produced either sporadic pockets of lead ore, or ore of a low quality or in narrow veins, whose value was always on the borders of economic viability.

The conclusion to be drawn from this analysis, and from the appearances of the veins as seen underground in the mines is that the further north or south one goes from the shear, the less likelihood there is of orebodies. The scale and positions of past workings suggests that this distance is only 0.6 to 0.7 km. Therefore Bell Hole is at the extreme northern end of its tension fault, and would be unlikely to contain much ore further north. Ore is more likely to exist in the region between it and Old Foxdale.

FUTURE POTENTIAL

The proximity of the rich orefield of Old Foxdale, and the similarity of character of the vein at Bell Hole to those of such mines as North Laxey, Great Laxey, and Bishop's Barony (Ellerslie Farm) has led some, including the miners at Bell Hole, to believe that good ore is still to be had at Bell Hole. The assays of silver also compared well with those of Great Laxey which were about 40 oz/ton, about 1100 ppm wt/wt. Also, it is true that in many mines of the British Isles and elsewhere there have been significant oreshoots at such intersections of several vein systems. However, we must consider the evidence of Bell Hole. First, Lamplugh (1903) did not indicate any particularly strong deposit at any mines away from the intersection of the veins; second, Bell Hole did fail in 1933, even though good ore was said to be present; third, why did the two other attempts, in 1903 and 1918, also fail? One is led to the conclusion that the vein was uneconomic over the region surveyed by those companies, and that early working at Flappey's and Old Foxdale removed the best ore at the intersection of the two sets of veins. Fourth - the shear stress analysis discussed above implies richer ore nearer to the Old Foxdale mine than the Bell Hole workings.

FUTURE EXPLORATION

A drilling program to explore the ground between Bell Hole and Old Foxdale, and also south of Old Foxdale would reveal the true situation. It has been found that in the Isle of Man orebodies generally "run out" at less than 600 metres below surface, so one needs to drill to intersect the lode at less than that depth. The hade of the vein needs to be considered before setting the angle of the drill rig. An exploration of Bell Hole, and study of such documents as still exist is needed before the drilling program is set up. To justify any mining operation in face of the present poor demand for zinc and lead products, an orebody extending most of the distance to Old Foxdale and to a considerable depth would be required. A drilling program consisting of bores about 200 m apart, aiming to intersect the lode about 100-150m below surface should intersect any worthwhile orebody. A similar exploration of the region extending southwards from Old Foxdale to Flappey's mine would be worthy of exploration as part of the same programme.

CONCLUSION

Bell Hole contained sufficient ore for "small time" working, on a north-south vein which intersects the main east-west shear at Foxdale. However, the repeated opening and closing of the mine is an indication that the vein was insufficiently productive to carry the mine through times of depressed ore prices. A comparison of its mineral assemblages with those in the group consisting of Great Laxey, Bradda Head, North Laxey, Bishop's Barony, or else the group consisting of Old Foxdale, Central Foxdale, Beckwiths, is required to find the system from which this vein originates. A drilling program involving four bores between Bell Hole and Old Foxdale to a depth of 150 metres would indicate the presence of a worthwhile oreshoot.

ACKNOWLEDGEMENTS

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APPENDIX

Company records for Bell Hole:

Bell Hole File, Manx Museum, Douglas, Isle of Man.
Dissolved companies file, Manx Museum No. 2390, Dated 29/3/1924.

The preamble gives the following information:

Its name is the Foxbell mining company, and it is situated in the Isle of Man. An agreement was made between J. Brindley (MIME), 5 Summerfield Road, Wolverhampton. and Alfred George Jeffs, 89 Tettenhall Road, Wolverhampton to acquire rights in the IOM, particularly Bell Hole mine, and quarry ore, buy and sell mine plant, purchase, freehold, etc. of mine land and buildings. The Agreement was to take a 1 year lease on Bell Hole, and to issue 5000 debenture shares.

The Articles of Association show that this was a limited company and that the number of Directors never less than 2 or greater than 7. Structure at closure was A.F. Jeffs, J. Brindley, F. W. Pinson, Douglas Gordon, Comyn Glenhurst. The Managing director was Comyn Glenhurst. The Capital outlay started at 5000 and increased to 10000 on 26/6/1925. Shares at 16 June 1925 were bought by:

J. Brindley	250 shares
Frederick Williamson Pinson	750 shares
Douglas Comyn	1125 shares
Alfred George Jeffs	1125 shares

Other shareholders later bought:

Ed Vaughan	500 shares
Horsley Fields Wolverhampton (Manufacturer)	
Davis Green	250 shares
Lockerbie Wilkinson Ltd Tipton, Staffs (Manufacturer)	
John Ed Thomson	500 shares
Buckley (Managing Director of a public Co.)	
George Ed. John Luke	500 shares
Wolverhampton (Merchant)	
William Jordan	500 shares
West Hagley, Workington (Gentleman)	
Fredrick Simeon Turner	250 shares
The Woodlands, Dixon's Green, Dudley.	

By 1929, only £5750 of shares were sold.

Costs in four years of operation at Bell Hole:

Plant	£2000
Buildings	£500
Labour	£2000

Shares sold by 1929	£5750
Reserve left	£1250

Operations completed up to 1926: two new shafts sunk. Some plant sold.

Operations completed up to 1929: No details are given.

Date of Dissolution: 28 April 1933.

Author's Note, February 1990:

These two new shafts have not been located. Are they south of Old Foxdale? Are they in fact winzes in already existing workings?

The names of veins were spelt on old documents in many different ways: For example Magee, Maghie, Maghee, all refer to the same mineral lode.

ISLE OF MAN.
PRIVATE COMPANY LIMITED BY SHARES.
Memorandum of Association
OF
Foxbell Mining Company Limited.

1. The name of the Company is "Foxbell Mining Company Limited."

2. The Registered Office of the Company will be situate in the Isle of Man.

3. The objects for which the Company is established are, either in the Isle of Man or elsewhere:—

- (1) To enter into and carry into effect (with or without modification) an agreement already prepared and expressed to be made between John Brindley, of number 5, Summerfield Road, Wolverhampton, member of the Institute of Mining Engineers, of the one part, and Alfred George Jeffs, of number 89, Tettenhall Road, Wolverhampton, Merchant, for and on behalf of the Company, of the other part.
- (2) To acquire mines, mining rights, and any interest therein in the Isle of Man or elsewhere, and in particular to acquire the mine known as Bell Hole Mine, situate in Foxdale in the Isle of Man; to search for, win, get, quarry, reduce, amalgamate, dress, refine and prepare for market, ore or other mineral substances and precious stones; to carry on the trades or businesses of iron makers, steel makers, steel converters, colliery proprietors, coke manufacturers, miners, contractors, smelters, engineers, tin plate makers, and iron founders, in all their respective branches; and generally to carry on any metallurgical operations which may seem conducive to any of the Company's objects.
- (3) To carry on any other business which may seem to the Company capable of being carried on in connection with any business which the Company is authorised to carry on or calculated directly or indirectly to enhance the value of, or render profitable, any of the Company's properties or rights.
- (4) To buy, sell, manufacture, repair, alter and exchange, let or hire, import, export, and deal in all kinds of plant, machinery, apparatus, articles and things which may be required for the purposes of any of the said businesses, or commonly supplied or dealt in by persons engaged in any such businesses, or which may seem capable of being profitably or conveniently dealt with in connection with any of the said businesses.
- (5) To purchase, take in exchange, or on lease, rent, hire, occupy or otherwise acquire, any freehold or leasehold property or lands, machinery, plant and stock-in-trade, and any easements, licences, rights, privileges, and generally any real or personal property which may seem necessary or convenient for the purposes of the Company, and as to any purchase of land or buildings, and the goodwill of any business carried on therein, either in consideration of a gross sum or of a rent charge, or partly in one way and partly in the other, and to erect on any land purchased, leased or otherwise acquired, buildings of any description whatever, and to furnish and fully equip the same, and to purchase machinery, utensils, materials, and plant, for carrying on any trade or business for the time carried on by the Company.

