

East Bosorne Mine

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Introduction

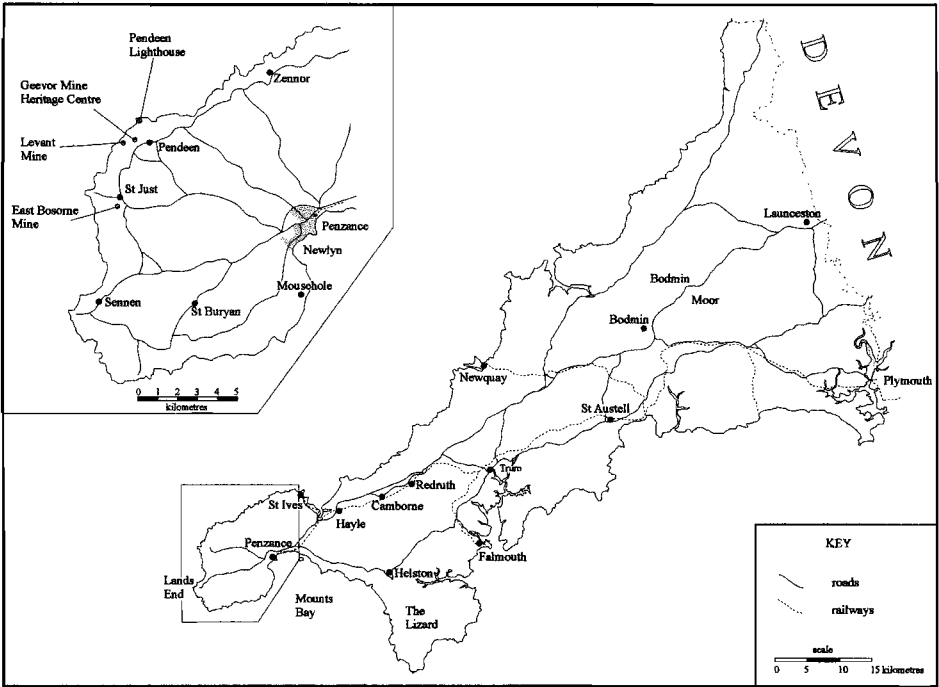
East Bosorne mine is located immediately to the south of St. Just-in-Penwith (figure 1) Mining in this area is known from at least late November 1852, when shares for Wheal Ellen are shown in the Mining Journal.¹ These shares are shown until February 1853 when they suddenly disappear.² The mine was held in 64 shares, which suggests it was only a small operation. In January 1853 a second Wheal Ellen, but in 1024 shares, appeared in the share list of the mining Journal.³ This was probably located near Breage, and shares for a mine at this locality were advertised for sale from February 12th 1853.⁴ A Wheal Ellen is shown on the first edition 25-inch Ordnance Survey map for the latter area.

It has been suggested by Sharpe⁵ that mining in the Bosavern-Carallack area dates back to 1786, and possibly even to 1507. A lease dated 1656⁶ mentions, among other things, 'one tynn worke ther called Whele fatt also the fatt Worke' and also for the lessees 'to adventure one dole in every tynworke now workinge, and hereafter to be wrought in any part of the lands and bounds of the higher Bosaverne'. Higher Bosavern lies to the south of Carn Bosavern, at SW373 308. However while early mining activities may well have been carried out within the area of the Wheal Ellen/East Bosorne sett the possibility of confusion with Balleswidden should be noted as the latter mine was at one time conducting operations on Carallack and Higher Bosavern Moor, about one kilometre to the east. Balleswidden adventurers were paying dues to the 'Carallack and Bosavern Lords' in 1812 for example.⁷ Sharpe⁸ implies that East Bosorne was a very small mine lying immediately west of Carn Canjack, centred around SW3630 3065. However the East Bosorne reports refer to many of the lodes which are shown on the plan of Wheal Ellen,⁹ and the two mines are therefore likely to be substantially the same (if not identical), covering an area of about 0.5km.² Certainly none of the lodes mentioned in the report are seen on this section of the plan of East St. Just United (the reworking of Bosorne and Bollowall United).¹⁰

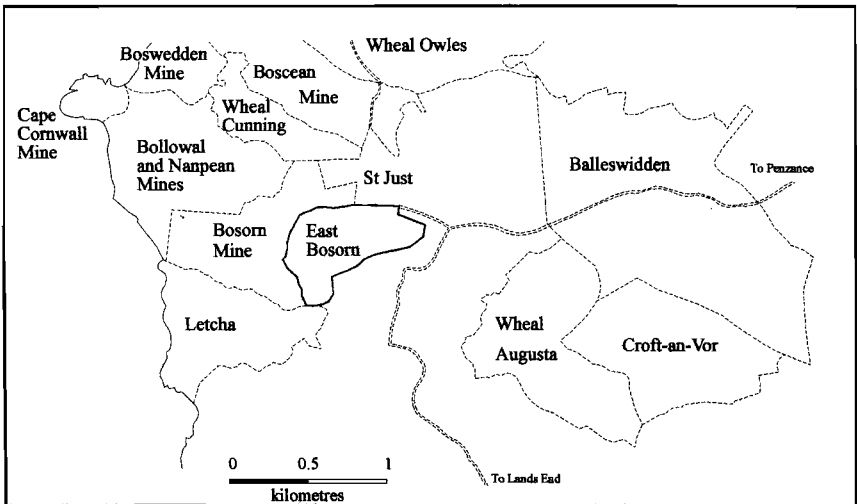
History

East Bosorne Mine first came to the general attention of the public in April 1853 when the company's prospectus was published in the Mining Journal.¹⁰ There are two possible reasons for the change of name. The first is the presence of a second Wheal Ellen, which, being in the Breage area, may have been considered as too much competition. The second reason is the return to eminence (or at least the public's perception) of Bosorne Mine, which had been absent from the Mining Journal (but probably still working) for

over a year. It is possible that a local name was deemed more likely to appear to local people than the former name. Figure 2 shows a plan of the sett and the hypothetical positions of the lodes.



Figures 1a and 1b.
Location maps for East Bosorne Mine.



The sett was described as **'very extensive**, extending on the course of the lode upwards of 400 fathoms'. The **lease of the sett** was for 21 years with dues of 1/22nd. It was proposed to raise a **capital of £6,000**, in the form of 6,000 £1 shares, to work the mine. Of this capital **£2,000 in £1 shares** was for the purchase of the sett and for the cost of working up to **February 1st 1853**. This itself implies a previous working of the sett, although how **extensively this** was done is not known. By the time of the publication of the prospectus the **mine** already had a London office, at 9 Finch Lane, Cornhill.

The mine was to be worked **'strictly on the cost-book principle.... which, if properly carried out, involves no liability, and admits no further risk'**. The remaining 4,000 shares were to be paid in installments of 2s.6d., at intervals of not less than three months. This capital was thought to be sufficient to work the property based upon the somewhat optimistic fact that **'Boscaswell Downs never cost her adventurers anything, the early returns of tin covering the entire cost'**. The opening costs of the other mines shown in the prospectus were:

Spearne Consols	£1,300
Levant	400
Wheal Owles	3,500
Bosorne	2,500

Water charges (*i.e.* pumping costs) were considered to be slight ('a mere bagatelle') and only a small engine would eventually be required. Added to this was the fact that 10 of the 13 mines in the parish were working at a profit. Unfortunately it seems likely that of the remaining three, two were in close proximity: Bosorne Mine adjoining to the west and Bollowall and Nanpean Mines to the north-west of Bosorne. Several dividend paying mines 'immediately adjacent' are named in the prospectus, together with their profits so far realised, however only one, Wheal Cunning was within a mile of East Bosorne. In common with other prospectuses for this area, a post-script at the bottom stated that no more applications for shares would be received after this date. Presumably the locals had already snapped up these bargains.

At a general meeting of adventurers, held on May 9th in London, Henry Nicholson was appointed secretary at a salary of £5.5s. per month; Thomas Carthew the purser, at £3.3s. per month; and John Carthew the inspecting agent, at a salary of £1.1s. per month.¹² Thomas Carthew, George Carne, Thomas Clarke, and Chester Cheston were appointed lessees and trustees of the mine. The appointment of John Carthew as inspecting agent seems to have been a forgone conclusion as he was already working on the mine. A letter from him stated that the almost obligatory good lode containing tin had already been discovered, and that he hoped to cut the Well Lode in the latter part of the following week. This lode is also mentioned in many reports of the adjacent Bosorne Mine, having been the object of a long (and fruitless) search. Five men at least were already employed on the mine and these were bringing up a lobby to take off water for a shaft in order that he could clean up in Wheal Cunning Lode. The Chairman (Thomas Clark) stated that he had the utmost confidence in the ultimate success of the mine, which was in virgin ground. However the veracity, or at least the accuracy, of this statement is doubtful, as old workings appear to have been continually discovered and re-opened during the life of the mine.

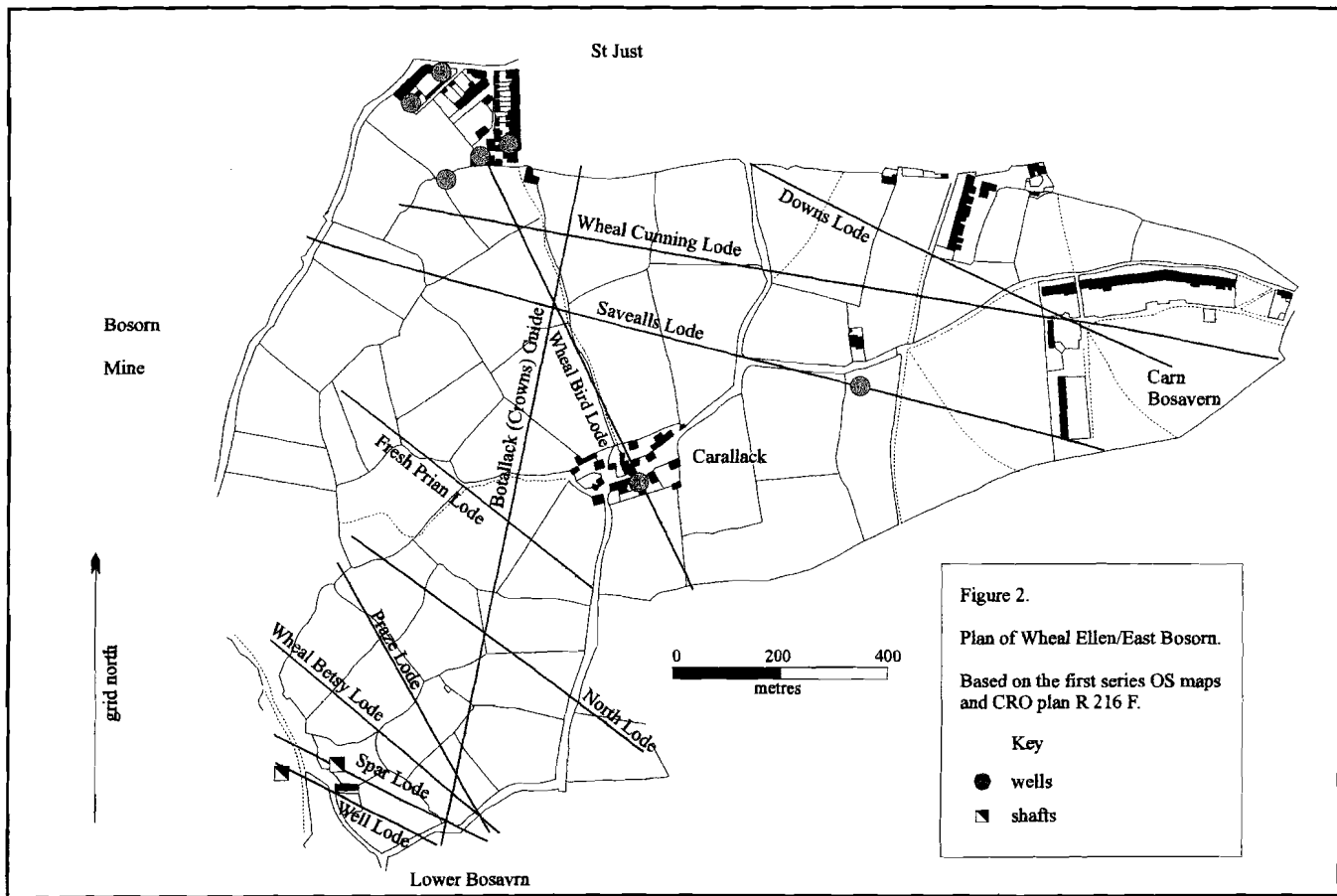


Figure 2.

Plan of Wheal Ellen/East Bosorn.

Based on the first series OS maps and CRO plan R 216 F.

By mid-May a 10-inch wide lode had been discovered in old workings on Wheal Cuning Lode,¹³ worth 10s. per sack. Although water was causing problems, the appearances were 'much better than our most sanguine expectations ever anticipated'. This is a typical expression used by John Carthew throughout his life, and one may come to the conclusion that if he were not an habitual liar he was at least an habitual over-optimist. The strike of the lode was being checked in order to determine where to sink an engine shaft; clearly the mine was going to be worked vigorously. In clearing out an old shaft the following week a 12-inch wide lode was discovered which had been valued at £12 per fathom. On May 25th a cross-cut from the lode was discovered¹⁴ and it was decided to clear this up quickly as possible. Several mining agents had been invited to inspect this lode, and all appeared to have been impressed: 'they will all say it is the best lode they have ever discovered so close to surface'. The lode was said to be improving at the bottom and was now worth £3 per sack.

In early June reports from the mine were still very optimistic: 'This mine is improving very much; we have opened a shaft about six fathoms further west, and the men are more than paying cost. Several miners have been examining the tutwork to-day, and all say it cannot be surpassed in Cornwall for the depth. I wish you or some one else would come and see it. From present appearances, I may say that when we get into full work we shall be able to raise as much tin as we like'.¹⁵ Later in June the men were 'spilling', driving through broken ground in an old level, on Wheal Bird Lode.¹⁶ Output from the main lode, presumably the Wheal Cuning Lode, was increasing daily. John Carthew was so enthusiastic about the mine that he recommended erecting a steam-engine even at this early stage of operations. By the end of June at least 200 sacks of tin had been accumulated at the mine.¹⁷ The men were driving east on West Bosorne Lode, which was 2½ feet wide. The water problem was exacerbated by recent heavy rain, and one extra man was being used on the pump. It would therefore not be possible to go any deeper without a steam-engine. Between 200 and 300 sacks of tinstuff had by now accumulated on surface.

The second meeting of the adventurers took place on July 8th¹⁸ at which time the accounts showed: call of 2s.6d. per share, £500; mine cost for four months, £176.13s.10d.; leaving a balance in favour of the adventurers of £323.6s.2d. Some members of the mine's committee had visited the site and found that a shaft on the north side of the sett (possibly on Wheal Cuning Lode) had been sunk 4½ fathoms on a good lode of tinstuff. They considered that the appearance of the sett fully confirmed the agents reports, and valued the tinstuff lying at surface to be worth £70. The committee decided that an order for a 24-inch engine with 16 stamp-heads be made, estimated to cost £850. Other necessary equipment would cost about £700. A Mr. D. Rucker was added to the management committee, which was 'authorised to enter the necessary contracts to prosecute the working of the mine with vigour'.

Towards the end of the month the easterly continuation of Wheal Cuning Lode had been discovered by costeaning.¹⁹ The lode was 12 inches wide and sparry (*i.e.* containing quartz), and had been sunk on for 2 fathoms. The Praise Lode, also worked in Wheal Cuning, had also been discovered. This was 24 inches wide, sparry and carrying tin. Three weeks later the men were driving east from the Wheal Betsy adit to intersect a guide or cross-cut (cross-course),²⁰ probably the southerly extension of the Botallack (Crowns) Guide. This adit is possibly the one in the eastern side of Carn Canjack at approximately SW3643 3065. North Wheal Cuning Lode was apparently being worked at this time. A

new lode had been cut the previous week, 'about 10 inches wide, and producing very good stones of tin' and was the sixth lode to be discovered since the mine opened. The reporting agent, Thomas Candy, thought that the prospects of the mine would be good if it were worked with a steam-engine. At this point the mine's share prices were moved to the 'ores sold' section of the Mining Journal, although no output is known for 1853.

On August 31st another lode was discovered.²¹ This was three feet wide, very kindly, and was found by men clearing out yet another old shaft 'in a field south from Clark's Shaft'. The lode was still being cleaned up the following day, and it was hoped to report more fully on it at a later date. In mid-August it was necessary to stop sinking the shaft (presumably the engine shaft) because of water problems.²² The men were put to work on the spar lode, east of Wheal Betsy adit level. This was 40 fathoms behind their present end, that is, the current working face. Men were still cross-cutting east from the shaft in the anticipation of cutting another lode. In the meantime John Carthew had been shopping for equipment for the mine:

'a purchase of 44-inch smith's bellows, an anvil, vice, sledge, 16 smith's tongs, a hearth eye for the bellows, a cast-iron trough, about 2cwts., and some smith's hammers, for 6l 10s., which I paid this day, and the materials brought to the mine. I consider this a very chap bargain, as the materials were to be sold by auction, but the day of the sale being very wet and no one attending, they were sold by private contracts by the person belonging to them at once, as he leaves immediately for Australia; therefore he was compelled to let them go cheap - they are well worth from 12l to 14l' [the Mining Journal habitually used the symbol 'l' for '£'].

Nicholas Holman was awaiting specifications for the engine, and other work was being carried out in preparation for installing it. Towards the end of November the foundations for the smiths' and carpenters' shops and count-house were well underway, after which the men would begin on the foundations for the engine and boiler house.²³ The stamps were expected on the mine within two weeks. On December 12th the men commenced building the smithy and carpenters' shops and the engine-house foundations were to be completed the following day.²⁴ George Eustice, the Hayle engineer, was expected at the mine the following day to measure out for the engine-house. At Tregaseal, Messrs. Holman were now building the engine. However, stamps were being used by this time, and were presumably being driven by a small water-wheel.

In January 1854 tin was sold to the value of £73.19s.6d., comprising 17cwt. 1qtr. 13lbs. at £83.10s. per ton and 3qtr. 20lbs. at £32 per ton.²⁵ This was bought by Bolitho and Sons, and the value of the tin per ton was considered 'an extraordinary fact' for such a young mine. A meeting of adventurers was held on March 13th 1854 at which time the accounts showed, due by adventurers for calls, £612.7s.6d., at bankers £14.8s.1d.²⁶ The report for the end of March reads:

'The front part of the engine-house is raised to the bob-end, and the masons are getting on well with the sides. We have completed sinking and clearing up the engine-shaft, and to-day we have been taking away ground, to let go the water from our flat-rod shaft, which we shall prepare for clearing and collaring up

with all possible dispatch. The sawyers, carpenters, smiths, &c. are all busily employed, and every one engaged in the different works are doing their best.
T.C. March 27.²⁷

This appears to be the last reference for East Bosorne mine which appears in any newspaper. Despite the optimism felt about the mine it was clearly not producing much tin, even if it was fetching reasonable prices. Another possible reason for the mine's demise is given in the West Briton a few days later: 'Price of Tin - It is stated that in consequence of the considerable fall which has taken place in the price of tin several of the mines near Penzance and St. Just will be stopped working.'²⁸ The price of black tin in 1854 was £64 as against £68²⁹ for 1853 but this does not seem to be a large drop and it appears to have had little effect on other mines in the area (although Bosorne mine closed in October this year, but almost certainly not purely because of a drop in the price of tin). The Mining Journal gives no additional information on this mystery. A production figure of one ton of black tin is given in both the West Briton and the Mining Journal two weeks later,³⁰ but this only refers to the total production for the quarter January-March 1854, to the nearest ton.

Present remains

Mining remains within the East Bosorne sett are unknown, and even the most inquisitive visitor might be forgiven for thinking that no mine had ever operated here. The site of the engine house, presumably never finished, has not been found and even local people appear aware neither of its existence nor of the mine's. Some ruins at SW3646 3065 are the remains of two buildings for unknown purposes, one possibly being accommodation as it contains a fire place. These lie just south of Spa Lode Shaft (approximately SW3747 3765) which is shown on the plan of East St. Just United;³¹ neither is sturdy enough to represent an engine house. Of the many shafts which formerly lay within the sett none can now be identified. In Carallack a well SW3674 3090) lies very close to the assumed outcrop of Wheal Bird Lode and may therefore have started life as a shaft. A second well lies on the lode at SW3656 3118, although forming a line with two other wells in Regent Terrace, 50m to the north east. A third well, at SW3654 3124, lies along the projected line of the lode. Both of these lie just outside the sett boundary however.

Summary

The life of East Bosorne mine amounted to about one year, a short period even by the standards of most Cornish mines. By the time Symmon's map of the St. Just district appeared in 1857, just three years after the mine closed, all traces of the sett had disappeared and not even the lode positions were marked. One is therefore given to wonder if the mine existed at all. In 1864 Balleswidden Mine was working a new sett called Bosavern and Carallack,³² which at that point was losing money. However it is unlikely that this refers to the East Bosorne sett as references to this section of Balleswidden Mine mention levels at depths between 90 and 120 fathoms,³³ far too deep to refer to East Bosorne mine.

East Bosorne was demonstrably a poor operation, resulting in the production of just under one ton of black tin which sold for £73.19s.6d., at a production cost (excluding the purchase price of the sett) of £4,000. The most important aspect of the history of East

Bosorne mine is that it demonstrates just how quickly this type of small, ephemeral, mining operation was able to be floated, and just how quickly it was able to fall under adverse conditions, despite the glowing descriptions given in prospectuses and reports, and their ability to draw in capital from shareholders. Sadly, it also demonstrates how quickly and easily the mining speculator was able to be parted from his money.

REFERENCES

1. Mining Journal 27.11.1852.
2. Mining Journal 26.2.1853.
3. Mining Journal 29.1.1853.
4. Mining Journal 12.2.1853.
5. Sharpe, A., 1992. *St. Just: An Archaeological Survey of the Mining District*. Cornwall Archaeological Unit, Truro, 2 vols. Volume 2 p.183.
6. CRO document AD 613/4.
7. Noall, C., 1973. *The St. Just Mining District*. D. Bradford Barton Ltd. p.19.
8. Sharpe *op. cit.* Volume 2 p.67.
9. MRO R216F.
10. MRO R66C.
11. Mining Journal 30.4.1853.
12. Mining Journal 14.5.1853.
13. Mining Journal 21.5.1853.
14. Mining Journal 28.5.1853.
15. Mining Journal 4.6.1853.
16. Mining Journal 25.6.1853.
17. Mining Journal 2.7.1853.
18. Mining Journal 16.7.1853.
19. Mining Journal 30.7.1853.
20. Mining Journal 20.8.1853.
21. Mining Journal 3.9.1853.
22. Mining Journal 22.10.1853.
23. Mining Journal 26.11.1853.
24. Mining Journal 17.12.1853.
25. Mining Journal 27.1.1854.
26. West Briton 24.3.1854.
27. Mining Journal 1.4.1854.
28. Barton, D.B., 1965. *A History of Tin Mining and Smelting in Cornwall*. D.B. Barton Ltd., Truro.
29. West Briton 7.4.1854.
30. West Briton 21.4.1854.
31. MRO R66C.
32. Noall, C., *op. cit.* p.29.
33. Noall, C., *op. cit.* pp.26-27.