CARN BREA MINING SOCIETY

NEWSLETTER

December 2024 No 92

2024 / 2025 OFFICERS AND COMMITTEE

CHAIRMAN	Kevin Baker	65, Weeth Road, Camborne	TEL: (01209) 624674
VICE CHAIRMAN	Jane Kneebone		TEL: 01637) 873135
MINUTES SECRETARY	Linda Beskeen	72, Albany Road, Redruth TR15 2HY	TEL: (01209) 204280
TREASURER	Jon Nurhonen	Palmistry, 8 Tolroy Road, St Erth-Praze, Hayle, TR27 6EZ.	TEL: (01736) 850643
MEMBERSHIP SECRETARY	John Jenkin	Fairport, 7 Trewirgie Hill, Redruth, TR15 2TB.	TEL: (01209) 314697
PROGRAMME CO-ORDINATOR	Maureen Gilbert		TEL: 07771 573244
INTERNET	Roger Jelbert	webmaster@cbms.org.uk	TEL. (01736) 711122
NEWSLETTER EDITOR	Tony Brooks	t.pbrooks@talktalk.net	TEL: (01209) 713506
NEWS SHEET EDITOR	Derek Stonley	derekstonley646@gmail.com	TEL (01503) 250485

COMMITTEE MEMBERS

Tony Brooks Lawrence Holmes Guy Travers,

BOTALLACK SUB COMMITTEE

Trustees

Tony Brooks (Chair) (01209-713506)

Kevin Baker (01209-614674), Lawrence Holmes (01872-278234)

Jon Nurhonen (01736-850643) David Burkitt (01872 270292)

SOCIETY WEB PAGE ADDRESS **www.cbms.org.uk**

KING EDWARD MINE MUSEUM WEB PAGE ADDRESS http://www.kingedwardmine.co.uk

SUBSCRIPTIONS :- If there is a red cross in this box your subscription may still be due

£18.00	Single membership
£25.00	Family membership
Junior	Free (under the age of 16 years)

Front cover drawing by David J Froggatt . Wheal Unity Wood, Magor's 70" Pumping Engine House. This engine house was built in 1872 to take the engine that originally worked at Wheal Prosper near Marazion. Previously this mine had raised some 30,000 tons of copper ore however, in 1872, it was re-opened for tin. The engine house received restoration work in 2005 following the removal of the ivy.

‘Jigger’ the Brownhills Miner

Compiled by Lawrence Holmes

A giant gleaming memorial named after a coal miner, who gave his life to the pits, was unveiled in May 2006. The stainless steel statue is in the middle of the roundabout in the middle of Brownhills.

Brownhills is in the West Midlands on the edge of an area known as ‘the Black Country’, an identity earned through the soot, smoke, and slag of its coal mines. In the middle of town, the stainless steel statue commemorates the local coal industry.

Plate 1 - The 40ft high statue to Jigger Taylor

The statue is called ‘Jigger’, after Jack ‘Jigger’ Taylor, a coal miner who was killed in a mining accident in 1951. He was from a family where most members worked ‘down the pit’. Census data shows that up to 80 percent of the Brownhills population worked in the mining industry at its peak in the 19th century. By the 1950s the 300-year mining history of the Black Country was coming to an end.

Jack started work underground aged 14 in 1929 and was known as ‘Jigger’ from an early job operating a pneumatic jigger pick.

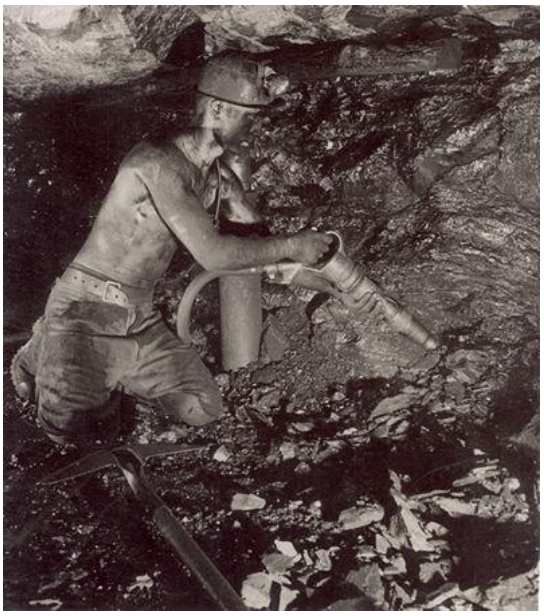


Plate 2 Miner operating a ‘jigger’

He was a happy go lucky man, according to his family and was known throughout Brownhills for his love of whistling or singing a tune. Jack Jigger Taylor lived in Bridge Street, Clayhanger, Walsall. He was working underground at Walsall Wood Colliery when the roof suddenly collapsed gravely injuring him. Rescue teams brought him out of the mine and he was taken to hospital. He died after an emergency operation failed to save him and is buried at St James Church in Brownhills. His death left his wife, Ivy, and children John, Jill and Valerie.

The memorial was commissioned by Walsall Council at a cost of £70,000. The piece was created in 2006 by artist John McKenna, a member of the Royal British Society of Sculptors, and at 40 feet tall (12m), its size has drawn some comparisons to the better known ‘Angel of

the North' in Gateshead, Durham. It was then decided to name the memorial and the Council launched a competition calling for suitable names. Jack Taylor's 13-year-old great-grandson, Jak Groves, of High Street, Clayhanger, won the competition and collected a £30 W H Smith token.

The one ton steel mining statue at the junction of High Street and Chester Road North in Brownhills was to be known informally as 'Jigger' in tribute to the 'dead miner' and to 'all those who lost their lives in the coal industry'. The memorial was also intended to be a celebration of the industry that built the town, and to serve as a reminder of the toll it often took on its workers and the Black Country communities.

Plate 3 - Jigger Taylor and wife Ivy with two of their children

Nicola Adams, Jack's mum, said "*I think Brownhills people should be proud of our mining heritage and we should never forget the sacrifices made by miners like Jigger Taylor who worked in cramped, damp and dangerous conditions, sometimes paying the ultimate sacrifice*".

Mining in Walsall Wood

The first pits in Walsall Wood were 'bell pits', built around the Salters Road area. There was also a limestone pit at 'Goblins Pit Wood', now known as Coppice Wood in Green Lane. Walsall Wood Colliery opened in 1874 and over the next 20 years the local population rose to 3,242.

The Walsall Wood Colliery was formed by a group of wealthy Walsall people with little or no previous mining experience. Shaft sinking commenced in 1874, after a lease had been obtained from the Earl of Bradford. At the time of sinking, the Walsall Wood shafts were the largest (15 feet in diameter) and the deepest (576 yards) in the Cannock Chase coalfield. The upcast shaft (No 2) sinking was started first and completed in record time. The two shafts sunk were both brick lined throughout and in the downcast shaft there was a lining of steel tubing reaching down for about thirty yards in order to counteract the action of loose sand. The cage, which took the men down the shaft, had two decks and carried 24 men. Any water which came into the shaft was piped into a sump at the bottom and each day, for two to three hours, the water had to be drawn up, using a large tank fastened to the cage.

The first recorded working faces were in the Deep Coal South seam in 1879, which was worked until 1949. During the life of the colliery 10 more coal seams were opened. In the late 19th century, the Company took over the Pelsall Coal and Iron Company whose engineer, a Mr

English, had been working on a design for a coal cutter. This was then developed and worked underground at Walsall Wood Colliery. At the time it was one of the first coal cutting machines in the country.

Another special feature of the Walsall Wood mine was the ventilating system. Until about 1950 there was a furnace near to the bottom of the upcast shaft.

This was kept burning continuously and fresh air was drawn into the mine through the downcast shaft and sent out through the other. This system worked extremely well and a replica of the furnace was made for a mining exhibition at Wembley in 1924. This is how it was described :-

Model of Ventilating Furnace at Walsall Wood Colliery

Lent by the Walsall Wood Colliery Co, Ltd. This model is especially interesting, as it represents a furnace actually at work at the present, which has been in continuous use since 1879. The Walsall Wood furnace has a grate 6ft.9in. long by 4ft. wide, is built of ordinary brick and lined firebrick. The roof is strong sandstone, hence fear of spontaneous combustion in the surrounding strata is remote. The mine is 550 yds deep, and is non-gassy. Its capacity is 100,000 cubic ft of air per minute, at a water-gauge of from 1.2 to 1.5 inches, depending on the temperature of air at the surface. The fuel used is about 1.16 pence per 100,000 ft. of air. In 1950 the furnace was removed and a ventilation fan installed in its place.

Between 1916 and 1949 the mine employed about 1000 people. . During the 1920s, fifty to sixty horses were used in the mine. They were rarely brought to the surface during the whole of their working life.

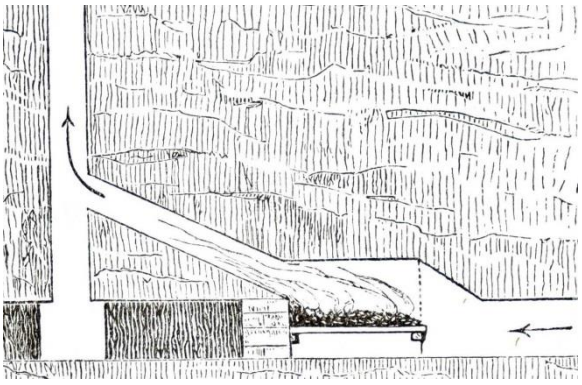


Plate 34- Furnace type ventilation system

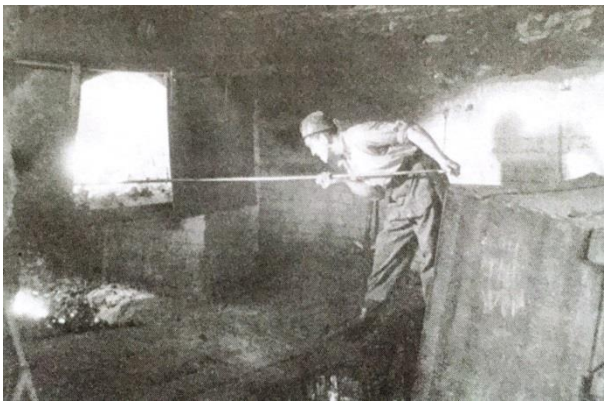


Plate 5 – Ventilating furnace at the bottom of No.2 Shaft

Coal from the mine was transported to various parts of the Black Country, either by rail to the South Staffordshire Railway line at Pelsall, or by horse drawn canal barges, since the coal could be loaded directly into the barges at the canal basin on the colliery site.

Single shift working was introduced at the colliery in June 1963, because of difficulties in working the limited reserves left. At that time 600 men were employed and 140 of them were transferred to other collieries in the area. The colliery was closed on 30 October 1964 due to the exhaustion of the economic reserves and the remaining men were transferred to other collieries.

Comparison

There are many miner's statue memorials. The highest Miner's memorial (plinth and statue) is at the Six Bells Colliery site at Abertillery, Gwent, Wales. The memorial is a massive 20m high although the statue is only 12.6m high. Cost was £200,000. The copper miner's statue at Kapunda, Australia is some 7m high. The tin/copper Miner's statue in the top of Lower Fore Street, Redruth, Cornwall is just 2m high (about 6ft 6in).

The 'Jack Jigger Pub' opened in May 2021. Offers good atmosphere with wide range of drinks and flat screen TV for all sports. Located at 67 High Street, Brownhills.

Plate 6 - The Pub 'Jack Jigger Taylor

NAMHO Conference 2024: Tin, Copper, Gold and….

Mark Lamport, CBMS Member

Having attended the last NAMHO conference held in Cornwall in 2000 (can that really have been 24 years ago?), which was widely regarded as having set the gold standard, I drove down to Cornwall from my home in South Devon on Friday 28th June with overalls and cap lamp and high expectations of NAMHO 2024. I was not disappointed! As previously, there was a packed programme of lectures over the weekend on a diverse range of topics and an extensive range of underground and surface trips which continued into the following week. Thankfully, the weather was kind to us over the weekend and no waterproofs were required.

The lead-up to the conference had been blighted by the original planned venue, Heartlands, unfortunately becoming unavailable necessitating a hasty Plan B. The new venue, the Kernow Resilience Hub in Pool, turned out to be a worthy substitute with plenty of onsite parking and a good-sized conference room with adjacent catering facilities and bar.

The list of delegates numbered about 130 and, in addition to the strong Cornish contingent, they had come from far and wide, including from Cumbria, Derbyshire, Kent, Shropshire, Sussex, Yorkshire and beyond.

As you would expect of a NAMHO conference in Cornwall, with its amazing and varied mining history, there was so much to see and do. Kevin Baker oversaw activities at the Hub, managing the audio-visuals for the presentations and doing a masterful job of keeping the conference speakers to time!

I was keen to make the most of the weekend and arrived at the Kernow Hub on the Friday evening to join the convivial group of conference delegates over a pasty and a much-needed pint. It was a great opportunity to catch up with CBMS members I had not seen for many years and to meet others for the first time. After supper, Dr Keith Russ gave a fascinating presentation on the work he has been

undertaking to digitise the plans of abandoned Cornish mines and present the shafts and workings as a digital 3-dimensional model superimposed on the present-day topography. The stunning visuals took us floating over the west Cornwall landscape looking down on the mine setts (fortunately annotated with their names) and the dense network of shafts and levels. I would recommend anyone who has not seen this model to visit his website: *abandonedminemodels.com* I found Keith's presentation particularly interesting as one of my first jobs when I worked in Cornwall in the 1980s involved laboriously digitising by hand the hundreds of mine plans which cover the intensively mined Chacewater-St Day area and using what would now be considered to be crude computer algorithms to convert the shaft locations and lode workings to Ordnance Survey co-ordinates. This was in the early days of development of GIS (geographical information systems) so we were breaking new ground at that time and it was an exciting project – but Keith has used modern technology to produce something far more comprehensive and impressive.

The lecture programme proper kicked off on the Saturday morning with a welcome from Kevin, as NAMHO Vice Chair, followed by the official opening of the conference by the Lord Lieutenant of Cornwall, Edward Bolitho, who then gave an interesting and amusing account of his family's heritage role and their involvement with Cornish mining over several centuries. Central to this was his family's interests in banking and smelting, and the somewhat incestuous relationship of these activities which were invariably not to the advantage of the mines or the miners.

One of the frustrations of this NAMHO conference for me was that there was just too much going on and it was not possible to attend it all. I had elected to join two underground trips and as a result missed a number of lectures I would very much like to have attended.

One lecture I did manage to attend was the talk by Steve Tarrant (Manager of South Crofty) on the current development work at the mine. Steve was probably the youngest speaker at the conference but was a natural presenter, speaking clearly and knowledgably and providing a fascinating insight into the ongoing works and future objectives at South Crofty. I very much hope that this venture is successful and puts Cornwall firmly back on the metalliferous mining map.

For me the opportunity to get underground is hard to resist and from the many options on offer, varying from the straightforward to the technically challenging, I chose Holman's Test Mine on the Saturday morning and Cligga Mine on Sunday afternoon.

Holman's Test Mine

One could describe Holman's Test Mine as deeply hidden away in the countryside to the south of Troon and it certainly proved a challenge to find both with an OS map and GPS.

Having discovered from some internet research that Holman's Test Mine had been sold to a company which, amongst other uses, hires out the mine for Airquest gaming I joined this trip with fairly low expectations. However, in the event, this

tour, with only four of us on it, did not disappoint. Led by ex-CSM Jed Waldren and an ex-South Crofty miner, the air compressor was fired up and shortly afterwards we were each given the opportunity to add yet another hole to the workings, which already resemble a Swiss cheese, with a Holman airleg rock drill (see photo below of the author in action). What an experience and I was surprised that drilling a 3 foot hole in the granite sidewall took only a few minutes.

Photo : Helga Palmer.

We were also able to have a go at driving an Eimco front-loading rocker shovel. (see photo below).

Photo: Helga Palmer

This certainly gave me an insight into the extreme physical challenges of hard rock mining. Whilst exploring the mine we were able to examine various pieces of abandoned and very rusted equipment used by generations of CSM students.

Cligga Mine

Amongst Cornwall's coastal mines Cligga must rate as one of the most spectacular and unusual in a number of ways. This section of coast with its 300 feet high pink and ochre-coloured cliffs splashed with areas of bright green copper staining, and honeycombed with a network of old workings, is an incredible setting. The geology is unusual with the granite criss-crossed by swarms of steeply dipping greisen veins, similar to those at Hemerdon, and sharing a similar mineral assemblage, principally wolframite and cassiterite. Old men's workings visible in the cliff suggest that this is an ancient mine. It was worked on an extensive scale, primarily for tungsten, during the second world war but unfortunately the surface buildings and dressing floors from that period are now in a ruinous state. The mine was prospected by Geevor in the 1960's, and some underground work was undertaken, however, this was short-lived.

Led by Simon Bone, this was an excellent two-hour tour of the 300ft and 200ft levels and the most un-nerving part was descending the precipitous cliff path down to the beach– much more eroded and dangerous than when I scaled this path on a daily basis for about 4 weeks during my BSc Earth Sciences fieldwork project back in the summer of 1979.

We entered the mine at the 300ft beach adit level and followed this level, exploring cross-cuts from it, until we

reached Contact Shaft, so-named as it is located on the granite/killas contact. Lying within granite the workings are relatively stable, although there have been localised collapses where the granite has been weakened by kaolinisation. Some of the workings are extensive with stopes rising to connect with the higher levels and much of the timberwork and many of the ore chutes are still in fairly good condition. I last explored this mine back in 1979 and internally the mine was much as I remembered it but Simon showed us some areas that I had not seen before. We made our way through the mine, following the workings steadily upwards to reach the 200 foot level which finally emerges in the cliff face, from where another precipitous path took us back to join the route we had descended earlier.

After leaving Cligga Mine I drove home on the Sunday evening feeling that this had been a fascinating weekend, very well spent in the company of like-minded people, and I would like to express my thanks to the team of organisers led by Peter Jackson and Kevin Baker for their hard work to deliver such a successful and memorable conference.

Where was this?

by Tony Brooks

Answer: Prosper Shaft South Phoenix Mine

Plate 1

This relatively small tin mine, situated just north of Minions village, worked sporadically for tin up to about 1892. Parsons Shaft (SX 261715 follows the

curve of the Grace Dieu lode along the killas/granite contact for 110 fathoms being joined by the vertical Houseman' Shaft (SX 26157145 at 75 fathoms. Prosper Shaft (SX 26087129) was down to 50 fathoms on the underlie below adit (10 fathoms).

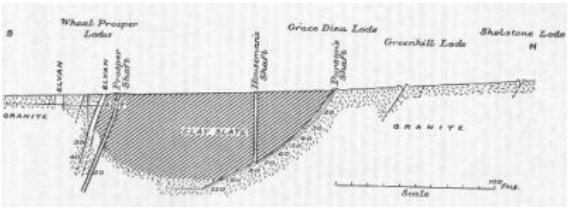


Fig 1. North-South Cross Section

Much of the information on the electrical installations at South Phoenix was originally researched by the late Eric Edmonds. So, something about his background might be of interest.
He was a graduate electrical engineer who spent his whole professional life working for the Cornwall Electric Power Company (CEPCo) and its successor that eventually became the South West Electricity Board (SWEB). One of his first projects was at Polberro Mine in March 1939. There had been an inrush of water, raising the total inflow to equal the electric pump capacity. As there was no sump, a loss of electric supply would soon result in the flooding of the station pumps and hence the mine. For a fortnight the position was critical and the Eric was sent out by CEPCo to stay on the mine and to be available to switch over the 11kV supply to come from Fraddon should it fail from Hayle.

One of his lifetime interests could be described as 'The study of the application of electricity to Cornish Mining in the first half of the 20th century'. No one else has done this. He collected an enormous amount on information on the subject much of which he wrote up on a mine by mine basis. Shortly before he died, he passed the bulk of this material over to me – which could be simply described as a car boot full of boxes and lever arch files! He did this as he knew that I was researching the same period and he suggested that I might be able to use some of his material in the book on 20th Century Cornish Mining that he knew that I was, and that I still am, working on.

In 1906 Cornish Consolidated Tin Mines Ltd. acquired the rights from the Duchy of Cornwall and proposed to mine tin by an all-electric operation, initially using 10 heads of Californian stamps. The Manager was John Daniel[1]. Working with him was M V Thomas.

It is not clear quite why they selected this mine to re-open. Whilst the site is isolated today, this was not always the case. The Liskeard & Caradon Railway, which had been linked to the main line in Liskeard in 1901, passed right through the site.

The power house (SX 26387141), a masonry building some 60 ft. x 30 f.t, like that at Botallack, was built centrally between the three shafts and the site of the proposed mill. In it were installed two 150 HP Westinghouse 3-crank 6-cylinder vertical tandem suction gas engines, direct-coupled to 105 kW 500v 3-phase alternators. Overhead lines were erected on wooden poles to the shafts[2]. The Salmon-Whitfield-Collet gas producers were unsatisfactory and were replaced by Dowson units. This delayed the use of electrical plant until the middle of 1908. [3]

A wooden headgear 60 ft. high was erected over Prosper Shaft and initially a steam hoist was used, housed in a wooden shed at right angles to the back stays, A double skip-was was built in the shaft and the skips emptied into a wooden bin built

[1] MJ 1906 23 June p.837, 1907 20 April, p533
[2] Trans RCPS 1907, p64 – Equipment of the Cornish Consolidated Mines Ltd.by R.D.Gill, gives details of engines, compressor and mill
[3] L&WCM 1908-11,p14, MJ 1908 11 July, p60

inside the back stays site. This perhaps influenced the decision.

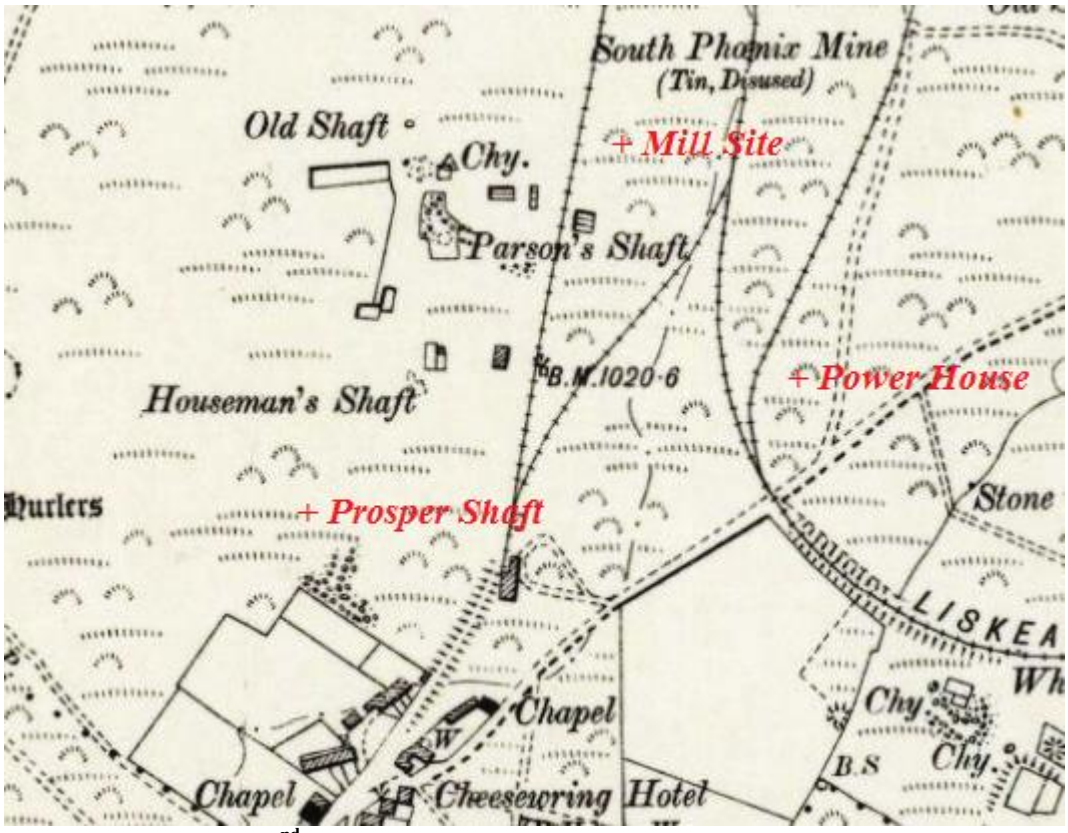


Fig 2. Site locations on 2nd Ed OS Map

Progress was swift and by April 1907 the mine had been: *Dewatered with steam pumps to the 30 fm level which is more than half way….. By the time our gas engines arrive at the end of June the mine will be unwatered, so that our battery will be running early in the autumn on regular ore. We intend to put up there any plant which is thoroughly good but somewhat new, and the working operations of which are to a certain extent unknown. In that way we are making it our experimental mine, so that in any of our main mines such as South Crofty, Botallack, or Clitters, we shall not go into experimental work, but anything worth a good trial will be sent to S Phoenix*.

Plate 2: The electric winder/compressor house is the large building close to the shaft on the right with the overhead power cable coming in from the right. The stack on the left was for the small steam hoist and steam pump that had to be used prior to the delay in commissioning the generating plant.

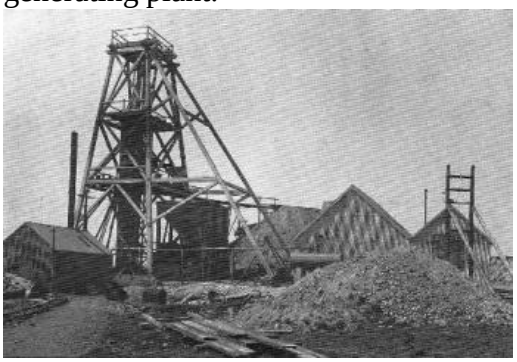


Plate 2. Prosper Shaft about 1907.

Note that the hoist ropes have yet to be fitted, and the air receiver outside the compressor house. The elevated tramway from the shaft to the waste dump, indicates that they were probably able to hoist tram wagons. The bin below it was, presumably, to take ore that would be trammed to the mill.

When the electricity supply was available an electric winder was brought into

service. This had been made by the Uskside Engineering Co., with two 4 ft. x

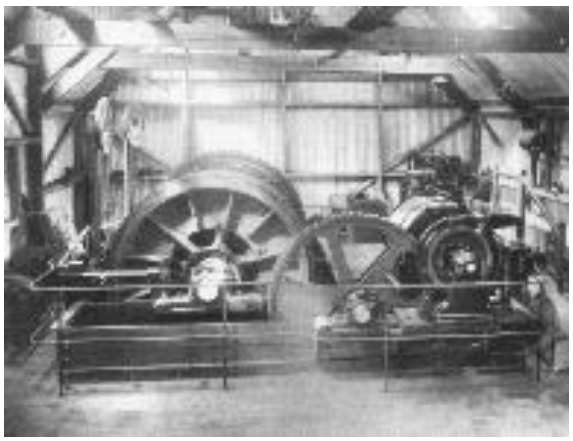


Plate 3. Prosper Shaft winder in course of erection. Note the lack of hoist ropes and the wire sling on the motor. Probably taken on the same day as Plate 2.

1 ft. 6 ins. Drums driven through double reduction gearing by a 60 HP motor.[4]
In the winder house was installed an Imperial Rand 2-stage air compressor, belt driven by an 80 HP induction motor. This compressor could work five rock drills. On Parsons Shaft they installed a 2-drum 60 HP winder to work a double skip-way.[5]

The original intention was to unwater the mine by means of two electric 3-throw plunger pumps, made by the Excelsior Engineering Co. and also with a turbine sinking pump by the Lancashire Dynamo Co. The unwatering was in fact completed with steam pumps and then the electric station pumps were installed in Prosper Shaft.

The mill and treatment plant was, it appears, to be built on a site a short way north of Houseman's shaft. The first ten heads of Californian stamps, mentioned previously, were to be driven by a 30 HP motor housed in a separate corridor on a similar layout as at Botallack and South Crofty.
In December 1907 it was announced that a start on the battery had been deferred until the following March. The lack of any electric power meant that mining was effectively at a standstill so it made sense to delay the mill expenditure pending some progress underground[6].

At the shareholders meeting held on July 10th 1908, it was reported that the mine has been equipped during the past year, but failure of the gas producers (since replaced at the maker's expense), has delayed the commencement of operations on a considerable scale. To date, the total expenditure on plant buildings, development, etc. has been £24,355. The Prosper lode has been unwatered by means of a steam pump and according to the *report the pay shoot has been partially developed, and shows high tin values.*

In order to force development work at the Hingston Mine it was decided to remove one of the 150 HP gas engines to Hingston from South Phoenix Mine, leaving the former with 300h.p. available which was thought adequate for all immediate requirements.[7]

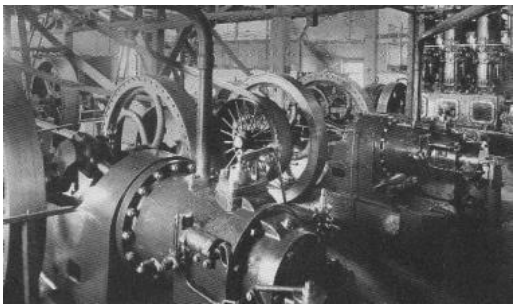


Plate 4. Hingston power house. The South Phoenix engine is in the background on the right

The other engine never moved and its remains were still in the building in the mid-1950s. Al work stopped towards the end of 1908.

[4] GKN Birwelco (Uskside) Ltd. letter dated 29.8.75 with copy of Uskside Order No. 869 dated 15.8.04.
[5] CRO DD.LCVI Manor of Rillaton Report 7.11.07 and Foster Brown Report 9.2.08.

[6] **MJ 1907 21 Dec p768.**
[7] **CPMN 8.10.1908**

As regards the mill, it had been planned to erect a plant on site but it appears not to have been erected. [8] All plant and machinery already installed was soon dismantled and so this short working ceased. At its peak in 1908 it employed 74 people. One wonders why it was ever started at all.

The almost new Uskside winder was sold to the Hills Plymouth Colliery Group and went to one of their pits in South Glamorgan. The power house was converted in the mid-1950s into a pair of semi-detached houses.

The Site Today

Plate 5. General site layout
1, Prosper Shaft, 2. Houseman's engine house, 3. Count House and Carpenters Shop, now a private house. 4. Parson's Shaft, 5. Mill, 6. Power House.

Prosper Shaft

Plate 6
In 2024 the foundations of the main buildings at Prosper Shaft, Plate 6, were still standing, as were the loadings for the air receiver (A),the compressor motor (B), the air compressor (C), the electric winder loadings (D) the supports for the ore bin (E). The foundation of one of the headframe back stays can just be seen beyond the building at (F). The fenced shaft lies behind the bin supports

Houseman's Shaft.
This was not utilised during the 1906 opening. Around 1919, the engine house was converted into a private house. In the 1990s, the engine house , by then derelict again, was converted into a 'free to enter' interpretation centre as part of the Minion Moors Project. Sadly, it has been closed for some time. Currently, July 2024, the good news is that Cornwall Heritage Trust is exploring the possibility of re-opening

Parsons Shaft

There is no sign of the headframe or hoist foundations

The Mill

Plate 8 Mill looking west. (photo Gareth James)

Some of the foundations of the treatment plant building still stand.

The only evidence we have of the mill is the field evidence and the statement that Californian stamps were to be installed. It is possibly the plant was not erected. The absence of concrete machinery. foundations, cement floors, a calciner and buddles supports the fact that it was never complete

[8] **L&WCCM, January, 1909, MM 1909.**

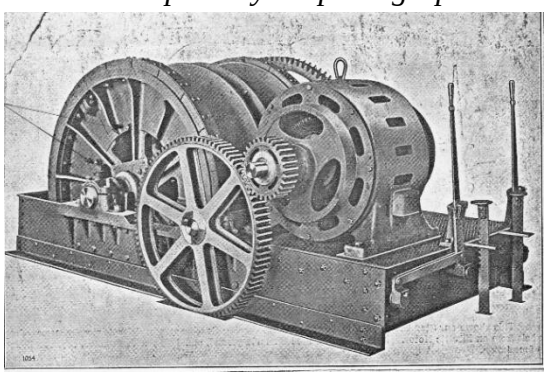
There was, I think, a tramway from Parson's Shaft passing just east of Houseman's Shaft and then alongside the present track, which then was the railway, towards the mill site. This cannot be seen on the Google Earth image (Plate 5). However, it can, I believe be seen on the LiDAR map of the area. For those not familiar with LiDAR see an article on this later in this newsletter.

The Uskside winder.

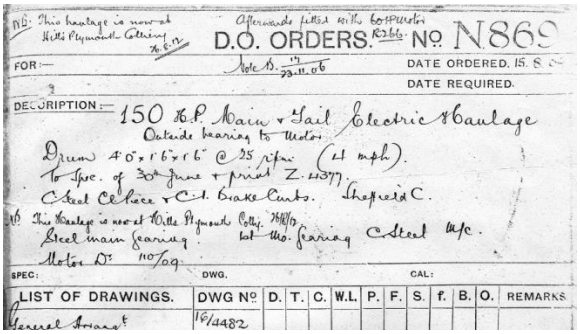
There is a bit more to this that is covered by the statement: . *Two electrically driven winding gears are being erected, one of 60 B.H.P., supplied by the Sandycroft Foundry Co. and one of a smaller size supplied by the Uskside Engineering Company.*

Eric Edmonds, as part of his research, in 1975 contacted GKN Birwelco (Uskside) Ltd. Summarising the reply: *The winder shown in your Photostat is certainly and Uskside machine although, at first, I was doubtful until I found the enclosed "pull" off an old block.*

I have also searched the few records that we have and the only winder or haulage I can trace having been made for your area is N869 and I enclose a copy of the D.O. Order dated 15th August 1904. There are one or two features on this which would seem to tie up with your photograph.



This is the only Haulage in this period which we know was supplied with an outside bearing to the motor and the note re fitting the 60 HP motor at the top of the page, order No. R266 would have been dated either December 1906 or January 1907. In fact, this would correspond with the date you gave for supply to South Phoenix Mine.



D.O. ORDERS. R266 Nº N869

FOR — Note No. 17 23.11.06

DATE ORDERED. 15. 8

DATE REQUIRED.

DESCRIPTION — 150 H.P. Main & Tail Electric Haulage

Outside bearing to Motor

Drum 40"×16"×16" @ 25 r.p.m. (4 mph).

To Spec. of 30th June + print Z.4377.

C.Steel Cs Race + C.I. Brake Curbs. Shefield C.

This Haulage is now at Wills Plymouth Colly. 7/11/19

Steel main gearing but Mo. Gearing C.Steel M/c.

Motor Dº 10709

SPEC: DWG. CAL:

LIST OF DRAWINGS.	DWG Nº	D.	T.	C.	W.L.	P.	F.	S.	f.	B.	O.	REMARKS
General Arrang.t	16/4482											

It looks like this was a Main & Tail winder designed to be used underground in a coal mine, often where the gradient was too steep or uneven for pony haulage. In a coal mine, the way that it would have worked is as follows. The tail rope runs out to the end of the haulage and round a sheave wheel. This rope is connected to the train of wagons. The head rope is connected to the front of the train and thence back to the winch. Full wagons are drawn to the winch and once emptied are drawn back by the tail rope. This must not be confused with the endless rope system. Here the rope runs in a continuous loop and single wagons are hooked on as required. To make this work either a double haulage or twin haulages are required. I presume that South Phoenix bought this winder, maybe because, with a shallow shaft, it did not need a full size winder.

Light Detection and Ranging LiDR Map

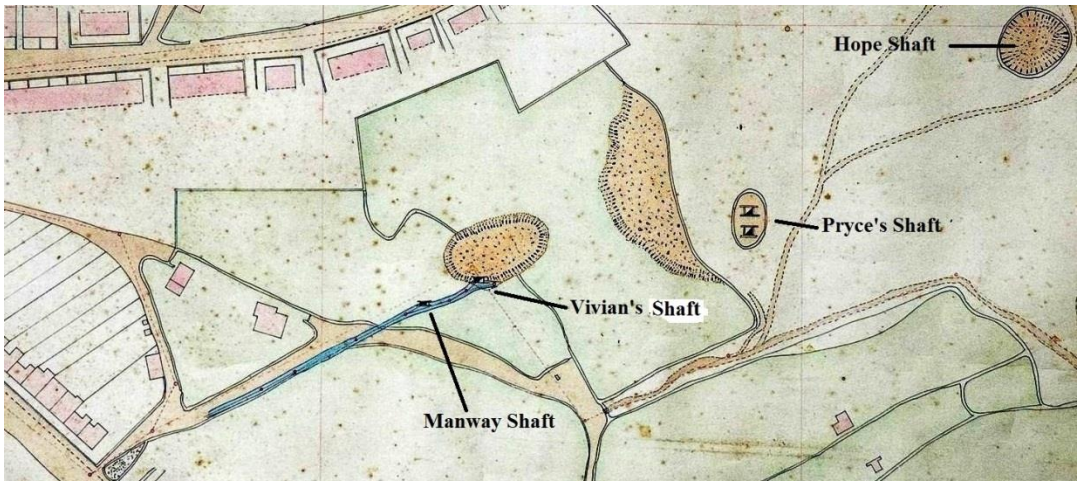
It works well for features like mine dumps, quarries etc., it is not good for buildings,

Go to website - maps.nls.uk
Click on - Geo-referenced Maps
Close - the help box that obscures the drop-down menus
Select a Modern Place Name, and select from drop down list
In the lower box Choose an historic map overlay - suggest OS 25 Inch 1892-1914
Click and hold on to the map and centre the point that you want to look at – could be KEM and enlarge the area.
Click on - Change background map at the top of the picture. At the bottom of the drop-down list select - LiDAR DTM 50cm-1m – Eng, Scot, Wales
The green LiDAR mapping will now appear with the OS map as an overlay, with the two plots geo-referenced to each other. Use the slider, bottom left, to switch from OS to LiDAR

Map of Condurrow
By Tony Brooks

At a recent auction, one of the lots was a large bundle of mine plans and diagrams – mostly fairly recent Wheal Jane.
However, it did include a survey described as*: 'Great Condurrow Mine' late 19th century hand drawn survey with scale and north compass, large tears to the edges, rolled, comparatively in good condition, graphite survey to verso, 77cm x 131cm*

Fortunately, the auctioneer included an image of this Condurrow survey in his catalogue. It is not 19th century as the survey is centred around our part of Great Condurrow and includes some of our present underground workings. In the bottom right hand corner, it is faintly marked 6/35. I take this to mean June 1935. This makes sense as the extent of the underground workings is about what we would have expected. It is too large to include here so I have cropped it to include the area around our mine, and I have labelled the shafts.



Hope and Pryce's shafts are on the Condurrow Main Lode and our Vivian's (hoisting shaft) and Manway shafts, on Landower Lode, are the present accesses into our mine.

The surface traverse lines and also the survey stations on the underground mine, shown here in blue. Whilst this survey does not tell us anything that that we do not know it does confirm some assumptions that we have made. As we thought, there was no accessible underground development east of the hoisting shaft at this time and there are no buildings on surface around the shaft. I suspect that there may have been a hand windlass for lowering rails, timber etc. As far as we know the first buildings: the current mess room that was the first compressor house, the winder house, the fan shed and the headframe were all erected in the late 1930s.

I did go to the auction house to have a look at this survey in the hope that there might have been the surveyor's name on the back. I think that the survey was done by a student which would have been marked and thus I would have expected to have to be named. There was no name. Interestingly, it had been reused at some time as there is a part survey on the back with the survey stations inked in but the rest just faint pencil. There was a scribbled pencil caption, which I failed to make a note of, that said something like *Mount Wellington and valley.*

I expect that the underground mine was surveyed and later drawn on a larger scale - this would have included a plan and longitudinal projection. It would have been nice to j=have the section as that would us what workings then existed above and below the main level. Still, this is the earliest survey that we have seen so far and thus it is useful. .

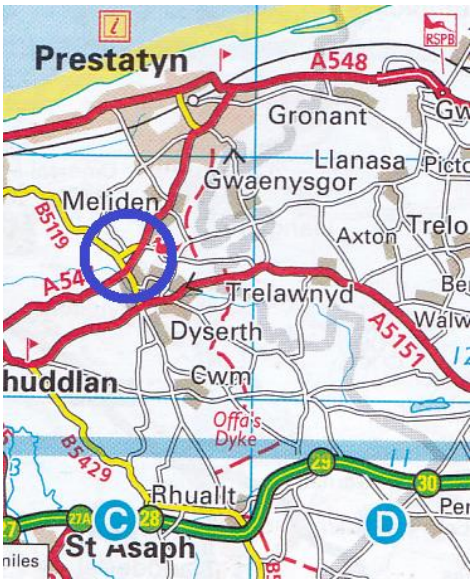
Clive Shaft engine-house

Talargoch Mine compiled by

Tony Brooks

Whilst we in Cornwall hardly remark when a beam engine house is stabilised, this is not the case elsewhere. I came across this description of the work done on an engine house in North Wales

The engine-house at Clive Shaft, beside the A547 road between Meliden and Dyserth (NGR SJ 056801), is one of the few remaining buildings associated with the Talargoch lead mine. It is the best-preserved Cornish-type engine-house in Wales.



The mine, one of the largest in north-east Wales, was worked from 1632 to 1884. The workings were on three near-vertical veins which ran from the outskirts of Dyserth village to near Meliden church. The main buildings, the last of which was demolished in the 1960s, were below

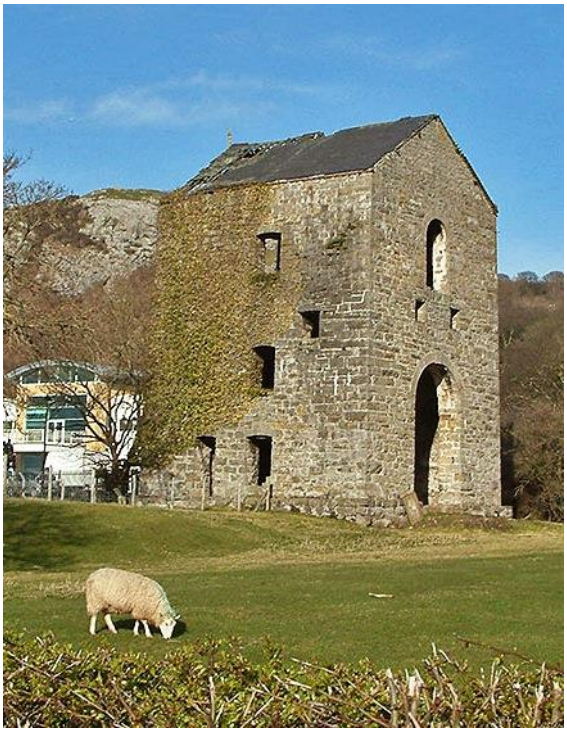
Graig Fawr, to the north of Clive engine-house. The deepest shaft, Mostyn Shaft, was on the east side of the main road, opposite Meliden church, and was over 1,200 feet deep.

In the nineteenth century, as shallower workings were exhausted, the mine company spent enormous sums on pumping engines to keep the workings free from water. The Clive Shaft engine-house was erected in 1860 to house the largest of these engines. The engine had a 100in cylinder and 10ft stroke. The shaft was about 750ft deep, and the pumps raised water up to adit, about fifty feet below the surface.

There were seven egg-end boilers, 40ft long and 5ft 6in in diameter, in a building on the side of the house away from the road .Water for the boilers was supplied by a wooden aqueduct which ran about 700ft in an easterly direction to a watercourse built to bring water to the mine. This was fed by the river about a mile east of Dyserth.

Location of Clive Shaft

When the mine closed in April 1884 the engine was sold, with the rest of the plant and machinery, by auction. The Clive engine was re-erected at Westminster Colliery, Gwersyllt, near Wrexham, where it remained until it was broken up and scrapped in 1925. The original engine-house at Talargoch was abandoned, although unusually the roof was left on it. Standing as it does beside a busy main road, it is a well-known local landmark,



Before restoration

In 2010 funding was identified by Cadw and Denbighshire County Council who applied for a £100,000 grant from the WREN Heritage Restoration Fund. WREN is a not for profit company that awards grants to community, conservation and heritage projects within a ten-mile radius of landfill sites, from funds donated by Waste Recycling Group (WRG) to the Landfill Communities Fund. Cadw and Denbighshire CC also put forward a percentage of the funding for the project.

In January 2012, specialist historic building contractor Recclesia Ltd moved

onto site and began to sort carefully through the years of detritus, vegetation, collapsed masonry and disintegrated historic building fabric. Fortunately, the building was structurally sound. The bob wall top was excavated and underneath a century of growth the original timbers and mounting brackets for the beam were discovered. The metalwork was largely intact and was quickly protected, but the timber mounting beams were rotten beyond saving and new oak beams were added onto the sides of the bob wall to help ensure that the visual impression of the original layout was not lost.

Bob wall in the foreground

Above the bob wall the roof had failed entirely, timbers were very badly rotten, about two thirds of the slates were missing and the oak wall plates and masonry wall heads had failed entirely. All of the roof timbers were examined and tested and marked up for replacement or repair. Rather than replacing whole sections, new sections were spliced into the old in the same timber types. The biggest exception to this was the bottom chord of the bob wall truss, which was some 30 feet long and 18 inches square in section and required complete replacement. The roof itself was re-slated using a combination of the original salvaged slates and reclaimed slates to match.

Remains of the original roof timbers

Replacement roof timbers

The finished roof

The Clive Engine House is one of a very few engine houses to have been plastered out internally, and a significant proportion of the plaster had survived on the walls. Further, the layout of the remaining plasterwork showed the location many fixtures. In order to preserve the legibility, painstaking work was carried out to conserve as much of the lime plasterwork by micro-pinning, grouting and weather-shedding remaining perimeter of each area,

Society's 50th Anniversary 17th September 2024

Compiled by Lawrence Holmes

Planning for this event began in June 2023 with a sub committee comprising Kevin Baker, Jon Nurhonen and Lawrence Holmes. It was agreed that the celebration would have two parts. First was the production of an Anniversary Tin Token designed by Kevin Baker and second was a 'Celebration Event' at King Edward Mine on the 17th September 2024. This was exactly 50 years after the original inaugural meeting held at Tolgus Tin on 17th September/1974.

Kevin designed the token which was produced by Blue Hills Tin using 100% Cornish Tin from Trevaunance Cove, St Agnes. The token is 50mm in diameter and 3mm thick. It weighs approx. 2oz On one side is the CBMS logo, the words '*Carn Brea Mining Society'* and '*1974 – 2024'*. On the reverse centre are the words *'50 Years Anniversary CBMS Tin Token'*. Round the lower edge are the names of the Society meeting venues over 50 years, '*Tolgus – Pool – King Edward Mine'*.

The Token has been produced at no cost to the Society. The mould has been funded by a sponsor and people simply paid £15 per token production costs. A boxed token has been given to founder member Mike Cooper, another to David Froggatt for help with Newsletter and one went to Rosemary Barber for making the superb Anniversary Cake. To date some 30 Tokens have been sold.

Some 35 members and guests attended and the event was held in the Survey Office at King Edward Mine. Just after 7-0pm Society Chairman Kevin Baker, welcomed everyone. He briefly mentioned the Funeral service of former Society Chairman Tony Rule. He then asked founder member Lawrence Holmes to give a '50th Address'.

Lawrence reminded everyone that the Society had been formed on Tues 17/9/1974 and the 50th event was being held on 17/9/2024. He said 50 years represented for CBMS, 500 meetings, 140 committee meetings and 47 AGMs. He had seen many different faces in that time and gave as examples Dave Smith (first sub group underground Chair), Pete Swanborough (introduced first sweatshirt and Steve Polglase to Society), Percy Bonds and the wonderful committee food, and the last example was mining surveyor and Chairman Derek O'Sullivan.

He commented on the policy of changing Chair every two years. It had not been easy but had resulted in many good Chairmen. Six past Chairmen were present.

He thanked the people who had helped the Society by giving talks and leading field trips including Tony Bennett, Mike Shipp and Kingsley Rickard.

He dealt with Society Projects at length and related them to people present in the room. First was The Botallack Engine Houses Restoration Project and second was Condurrow Mine. Included were engine house and mine preservation and memorial plaques. Some were successful and some not so. He thanked all people connected with projects large or small. Within 'projects' he mentioned NAMHO and Conferences. The Society had hosted two very well received NAMHO Conferences in 1987 and 2000, the latter being the biggest and most successful in the annals of this national mining history organisation, and starting a tradition of a combined conference and field trips meeting, which continues to be the format.

Lawrence said the success of the Society was mainly due to the effectiveness of the Officers and committee which had ensured a good 50 years with high membership. These people came from the wonderful and at times surprising 'ordinary' members of the Society. He thanked them all.

His last few words referred to the other two founder members, Mike Cooper and Richard Williams. He said 'I am grateful for your inspirations and early work – so we didn't do too badly !'.

After Lawrence's address the sparkling wine was poured out and passed around to everyone. The lovely Anniversary cake made by Rosemary Barber was admired by all.

Former Chairman David Blight gave a short address and then proposed the Toast to the 'Carn Brea Mining Society'. To end the formal part of the evening Chairman Kevin Baker thanked the steering committee, Rosemary for making the cake, and the CBMS for funding the food for the event. Kevin presented Rosemary with a Tin Token as a gesture of thanks for making the anniversary cake. Jon Nurhonen then thanked Kevin for designing and producing the Tin Token.

Just before 8-0pm hot pasties were served to be followed by saffron buns. There was the anniversary cake and orange juice, tea or coffee to drink. Steve Polglase and friend began playing their guitars and singing. But this was the important time to chat ! It was amazing to see the small groups of people all talking away in the survey office. Newer members mixed with older members and people we had not seen for many years became more familiar. Former members such as Bruce Grant and Peter Benbow we had not seen for some time. It was a good day.

Tribute to Tony Rule

By Lawrence Holmes

Tony Rule of Helston passed away peacefully on Saturday 24 August 2024 at Blackwood House Care Home, Camborne, after a long illness, Tony was aged 82 years. He was suffering from Alzheimer's.

On the 12 September 2024, the funeral cortege passed through Coinagehall Street in Helston to allow people to pay their final respects. The Funeral Service was then held at Treswithian Downs Crematorium, Camborne at 11.00am. The Chapel at the crematorium was full with family and many friends. John Jenkin, Kevin Baker, Lawrence and Chris Holmes, David Blight and Peter Benbow represented the CBMS.

The Rev Danny Reed conducted the service, and sons Simon, Martin and Philip said prayers and contributed the Eulogy. The departing music was 'Cornwall my Home'.

Tony was born on 8 July 1942, and grew up, along with his younger brother Arthur, in Falmouth. His family lived at Goldenbank, with his father a boiler maker at Falmouth Docks. Growing up during the Second World War, Tony's first memory was of the Luftwaffe bombing the adjacent fuel store at Swanvale, exactly a week before D-Day.

When Tony headed off to Westminster and Avery Hill colleges in 1961 to learn his teaching trade, he and Mary were already engaged, having met at a local youth club party at Budock Village Hall a year earlier. Tony took up a job at St Michael's Primary School in Helston in 1964, before going on to become deputy head at nearby Nansloe Primary, where he stayed until 1969.

Tony and Mary were married in April 1965 at Budock Church and the couple moved to Helston, setting up home in what was then the new Gwealdues estate. The couple threw themselves into 'Helston life', becoming closely involved with St Michael's Church and latterly Helston Methodist Church. Flora Day inevitably came to be a significant part of Tony and Mary's life. The year 1981 proved

memorable, when Tony and Mary danced the Midday Dance, and their three sons all danced in the Children's Dance, a Flora full house.

In 1969, Tony accepted the role of head teacher at Wendron C of E school, becoming, at 27, the youngest head teacher in Cornwall at the time. He spent half of his life in that role. Many local people still regard 'Mr Rule' as being synonymous with 'Wendron School'. Before he left, he also set in motion a project that would ultimately see the building of a new school. This opened in 2003.

Tony retired from Wendron School in 1996 aged 54 years. In retirement Tony became heavily involved with the White Cross Mission to Romania (with CBMS member John Jenkin and his late wife Pat), directly helping some of the most disadvantaged children in Europe. Tony found time to relish a late second career gardening for local people, and he joined the Treverva Male Voice Choir, which included a tour to New Zealand in 2007.

Tony Rule 8 July 1942 - 24 August 2024.

Just before he retired Tony rekindled his passion for Cornwall's mining heritage. He joined the Carn Brea Mining Society in September 1992 and quickly joined the committee. He was the Treasurer from 1997 to 2000. With a talent like his Tony was elected Vice Chairman from 2001 to 2003 and he was Chairman from 2003 to 2005. After stepping down as Chairman, Tony was on the general committee from 2005 to 2015.
Tony helped tremendously with all the work involved with the NAMHO 2000 Conference in Truro and he and Mary attended numerous Christmas Committee parties. Tony was granted Honorary membership of the Society on 5 June 2019. A final honour for a great man.

But by 2010 it was clear all was not well with Tony's health and he was diagnosed with Alzheimer's. Tony will be sadly missed by his wife Mary, brother Arthur, sons Simon, Martin and Philip, and all his family and friends.

Throughout all his time on the CBMS Tony was admired for his calmness and ability to remain unflustered. He had a dry sense of humour and an ability to cut to the chase. His smile was infectious and kind. Rest in peace Tony.

Obituary

Alan Frank Kneebone 1943-2024

Frank, as he was known to us, was born and brought up in St Columb. He was educated at St Columb Major CP School, Tretherras Secondary Modern School and Cornwall Technical College. His occupation was a Radio and Television engineer (retired) and hence his skills were Electronic Engineering, mechanics and

mining history.

He had two main interests outside his work: Amateur Radio, his call sign was G6CEP, where he was Vice Chairman of The Newquay and District Amateur Radio Society, and Mining.

His early interest in mining was no doubt triggered at an early age by the nearby Castle an Dinas Mine, which operated up to 1957. He would have gone to school with children of the miners.

In 1980 he joined the Carn Brea Mining Society and was on the committee for over 40 years, holding several posts including two spells as chairman.

When the King Edward Mine (KEM) project was started in 1987, he was one of the first volunteers. For something like 30 years he travelled down from Newquay every Sunday morning. There was a time, in the early 1990s, when volunteer numbers dwindled to three and the future of the project was very much in doubt. It was with his, and the late Willie Uren's continued support and enthusiasm that we kept going. The result is that KEM is now a successful, award winning museum and heritage centre

Later, when the Society purchased Great Condurrow Mine in 2009, he joined the volunteer team there. His commitment to these projects was outstanding. At a conservative estimate he travelled over 70,000 miles, from and to Newquay, be it for Carn Brea, KEM and Condurrow. .For this work he received a highly commended Cultural Volunteer's award from Volunteer Cornwall in 2012.

Frank, on the left. outside the compressor house

In 2016 he was barded at St Keverne , for his work for Mining Heritage. His bardic name was Friend of Condurrow.

He is survived by his wife, Jane, whom he married in 1977, and his son Michael.

For his funeral, which was held in St Michaels Church in Newquay, Jane, asked for members of the Condurrow team to provide a Guard of Honour, complete with hard hats and lamps. Every member of the Condurrow team (16) turned up, apart from one who was in London. We have never had that many on a Thursday morning at the mine. Something special for a special person!

Spirit of Dartmoor Tin

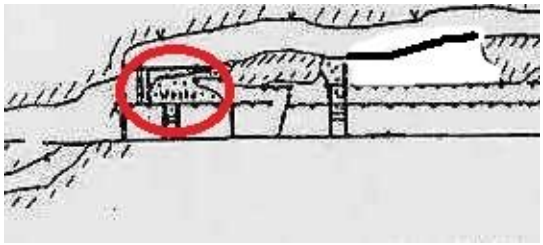
By Neil Mercer and Peter Russell

3 volumes, each 1 ft square. 1816 pages and 3680 photographic images. Each volume is bound in black with silver edges to represent metallic tin.
Limited edition of 100. £3000.00 each, e-copies £250.00 each.

Progress at Great Condurrow

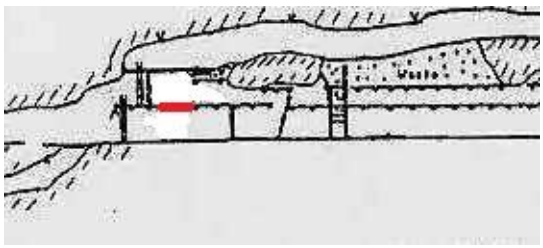
By Tony Brooks

In the last issue I reported that we needed to clear some broken rock from above a bulkhead over the main level, which was showing signs of collapse.



The geology of the mine, east of the ladderway, is structurally complex. It is, in places, fractured with intrusions of dyke type material. During periods of heavy rain this area of the mine is subjected to significant inflows of water. It is WET. Generally, the rest of the mine is relatively dry, except the hoisting shaft. There is no sign of mineralisation so why this stope was mined is not known

Clearing the broken rock was a wet, muddy exercise. That now has been completed. Not only were there two rotten bearers, but the chute box was also falling apart. There is no reason for a chute to be there – perhaps it was built by students as a practical exercise.



The chute has been removed and the bulkhead replaced with new timber to provide a head cover. The whole of the bulkhead back from the ladderway to where there is solid dry ground, has been covered with a heavy duty DPC plastic.

Apologies about the quality of the picture – it was very wet.

For the first time, since we took over the mine in 2009, the water now runs down the walls rather than down our necks.

Programme 2024/25

3rd Dec 24 'The Angry Earth' with geologist Tony Bamford

21 Jan 25 Member's medley led by Jane Kneebone. To include NAMHO by Kevin Baker

18 Feb 'Railways in West Cornwall before Dr Beeching.' By David Thomas

01 Mar Deadline for News sheet,

04 Mar Committee at 10.30 at KEM

18 Mar TBA

15 Apr AGM followed by films