

THE FORMATION AND EARLY HISTORY OF BEARD COLLIERY, GOWHOLE, NEAR FURNESS VALE, NORTH-WEST DERBYSHIRE, 1816-1818

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Abstract: The recent discovery in the Chatsworth House Archive (Chats. Dev. Coll. L/90/5) of documentation concerning Beard Colliery allows the compilation of a detailed account of the formation and early history of this colliery, near Furness Vale.

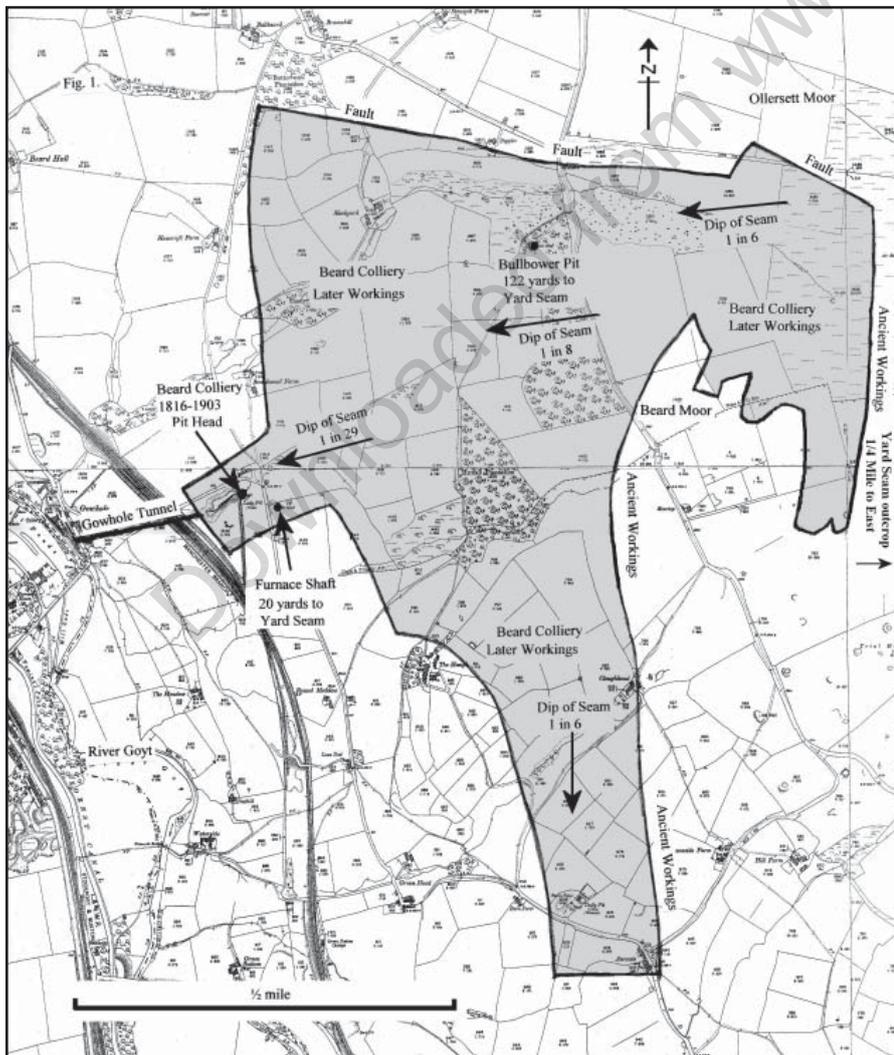
INTRODUCTION

One of the largest in the area, the Beard Colliery, located at SK 0137 8393, worked the Yard Seam beneath the steep hillside to the east of the River Goyt. This area had seen earlier mining activity, but this appears to have been concentrated in the seam further east towards its outcrop around Beard and Ollersett Moors (centred SK 033 855).

As mining progressed west from the outcrop the seam dipped beneath the surface and drainage problems would have been encountered by the miners. The earlier miners attempted to eliminate these by driving water levels or soughs to their coal pits, but how successful these were remains uncertain (Brumhead, 1987, 2003. Heathcote, 2006).

With the improvement in mining technology larger collieries were opened further to the west, in the vicinity of the River

Figure 1. Extent of Beard Colliery showing dip of the Yard Seam and site of Pit Head. Adapted from Abandonment Plan No 4470. Mining Records Office, Mansfield. (Maps courtesy of Digital Archives Association, Warrington. Derbyshire sheets VIII-3, VIII-4, VIII-7 and VIII-8)



Goyt's eastern bank, to exploit the Yard Seam reserves in previously unworked ground. Beard Colliery, together with the Waterloo Colliery (SK 0120 8115) (Leach, 1992; Heathcote, 2002) at Whaley Bridge, was one of these larger concerns. Our current state of knowledge suggests the Beard Colliery was one of the earliest documented coal mines within the area to use steam engines for winding and pumping, but further archival research could disprove this.

During its lifespan of 87 years the colliery changed names, with later ownership, and became known as the Beard and Bugsworth Colliery and later still as the Lady Pit. Throughout this paper, the original name of Bugsworth, not the more modern spelling of Buxworth, will be used because it is contemporary with the original mining documents seen by the author.

The Yard Seam on the eastern side of the Goyt Trough - an overview (Fig 1).

As noted above, the Yard Seam outcrops high on Beard and Ollersett moors. From here westwardly the seam dips increasingly steeply beneath the cover of gritstone and shale but closer to the valley floor on the banks of the River Goyt the dip of the seam flattens and the seam is at a much shallower depth beneath the surface. For example only $\frac{3}{4}$ mile west of the outcrop, at Bullbower Pit (SK 0205 8451), the Yard Seam is noted as being 122 yards beneath the surface within the shaft (Abandonment plan no. 4470, Beard & Bugsworth Colliery, c1903). A further $\frac{1}{2}$ mile west from this location, at the site of Beard Colliery pithead, the Yard Seam is noted, on the same plan, as being 33 yards in depth within the Furnace Shaft, and slightly further west and downhill, within the Lady Pit as 20 yards beneath the surface. For a more detailed assessment of the geology of the area noted see Stevenson and Gaunt (1971).

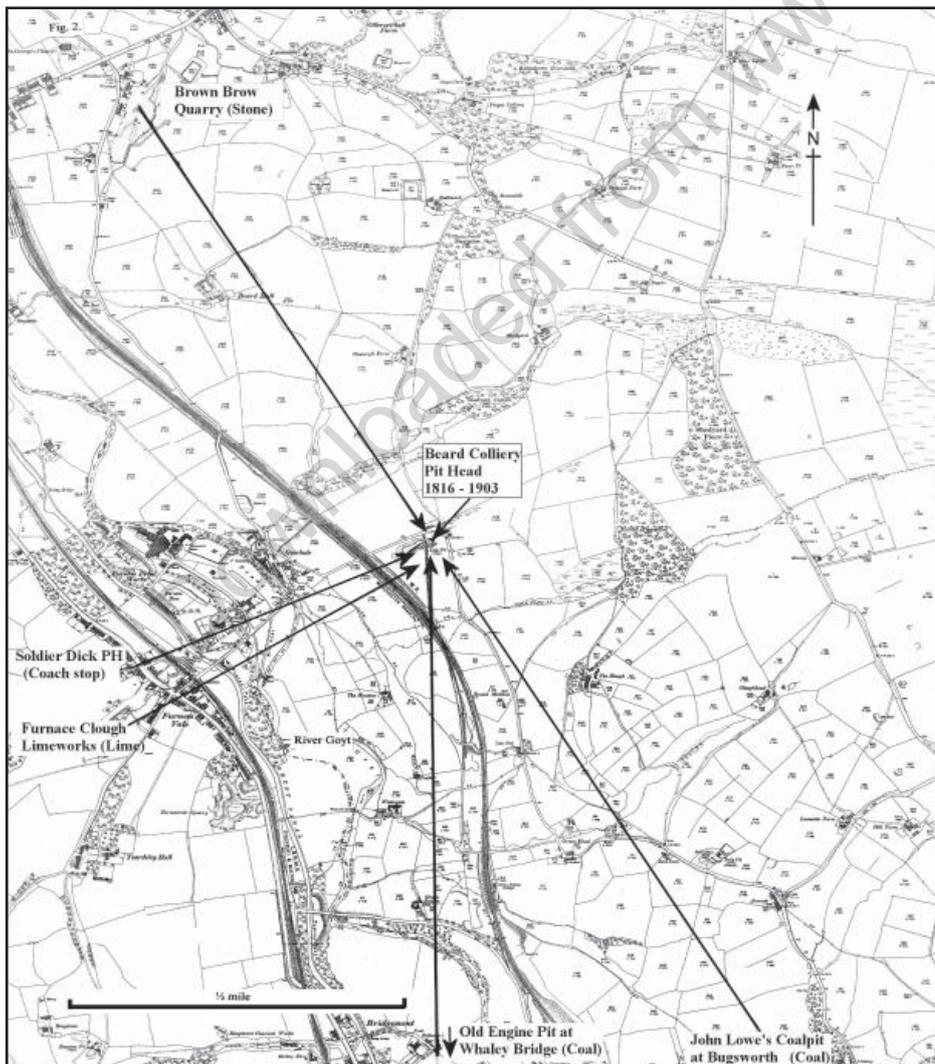
Location of the Colliery - the documentary evidence (Fig. 2).

When initially starting research the location of the Beard Colliery was problematic because of the lack of appropriate archival map evidence and our incomplete knowledge. However, documentary evidence now located indicates that the colliery was situated at SK 0137 8393 near Gow Hole on the eastern (Derbyshire) side of the River Goyt. It will be seen from evidence presented below that the shafts at the colliery were only shallow, suggesting that they were sunk into the Yard seam in close proximity to the eastern side of the River Goyt. Additionally, stone for the colliery buildings came from Brown Brow gritstone quarry, now disused, at SK 007 852, one mile to the north at Low Leighton near New Mills. Lime came from the Furness Clough limeworks, the exact location of which is unknown, approximately ¼ mile to the west and the coal for the engine/s came from Whaley Bridge 2 miles to the south. The coaches bringing/taking the more 'well to do' personnel from the colliery always stopped at the Soldier Dick public house (SK 0072 8352) on the turnpike road (later A6) at Furness Vale.

THE DOCUMENTARY EVIDENCE FOR THE EARLY ORIGINS OF THE BEARD COLLIERY: 1816-1818.

An excellent series of timesheets and detailed accounts, covering the years 1816-1818, gives an in-depth and very comprehensive account of the early days of the colliery during its formation (Chats. Dev. Coll. L/90/5). For clarity each element in the formation process will be described separately.

Fig. 2. Location of Beard Colliery Pit Head in relation to its suppliers at the time of formation in 1816-1818. (Maps courtesy of Digital Archives Association, Warrington. Derbyshire sheets VIII-3 and VIII-7)



Ownership, agent, sub-agent/overseer and manager.

The owner at the time of the formation of this colliery was Lord George Henry Cavendish (1754-1834). He was the third son of William the 4th Duke of Devonshire and the owner of the Beard estate. His agent was Philip Heacock of Buxton (S. Band *pers. comm.*). Answerable to Heacock was Jonathan Woodhouse the sub-agent and overseer at the colliery. Jonathan Woodhouse was an engineer and coal agent from Overseal near Ashby-de-la-Zouch, Leicestershire (Farey, 1811) and in 1818 he still resided here. William Dooley appears to have been the mine manager.

Initial inspection of the coal reserves

It appears that previous to any work being undertaken by this colliery, the coal reserves likely to be found were investigated. This is first recorded in December 1816

.... £5/2/- for inspecting the Coal in the Beard Estate... George Dickins

How this inspection was undertaken is unclear. It could mean that this man was in fact inspecting the prospects for any coal discovered or that he actually descended into adjacent workings to view the seam in person. It is known that George Dickin was a coal agent of Staveley near Chesterfield (Farey, 1811) and presumably he was employed for his expertise.

Test boring for the coal. September 1817-April 1818.

The first reference to this activity dates from September 1817 when ...Henry Randles Boreing for Coal in Beard. 37 days. £5/11/-.... At this date it is uncertain whether this man was boring from the surface or from within a shaft, although a month later the following items were sent ...Timber for three tubs 12/- Planks £2/0/- Timber for Headgears £1/12/-... suggesting that a shaft was to be sunk. At this date John Pearson of New Mills was paid £1/3/6 for the ...Carriage of Sundry Materials for the men employed in Boreing for Coal in the Beard Estate.... The timesheet for the period October 13th to November 6th records ...William Dooley Assisting the Boarers 22 days Thomas Barker Assisting the Boarers 9 days Joseph England & son Sinking the Boreing Pitt 22 days... confirming that at this date a shaft had definitely been sunk or was in the process of being sunk. A slightly later timesheet for December 1817 records ...James Hanbury Boreing 13 days John Boden Boreing 15 days John Pearson Boreing 6 days John Collier Boreing 6 days... and of most interest ...James Hanbury Heading the Thirl betwixt the Boreing Pitts 29 ½ yards 22 days... Therefore by December 1817 at least two shafts had been sunk a little over 29 yards apart and a tunnel (thurl), probably for both ventilation and access, was driven to link them at depth.

On December 9th 1817, Samuel Frearson, Blacksmith and Boiler Maker of Ripley sent ...43 Boring Rods & 2 Sharp Rods... along with other items to the colliery. During the above period (October-December) Stephen Pearson, Blacksmith of New Mills, repaired and sent many items to be ...used in the Boring for Coal in the Beard Estate...

(see appendix 3).

In early January 1818, Thomas Eyley sent additional ...*Boring Rods and Ropes for Boring for Coal upon the Beard Estate...* and at the end of March Immanuel Wild of Mellor supplied timber for the borers. During March and April, Stephen Pearson again repaired and supplied many items for use at the colliery (see appendix 3). In early April John Howard and Henry Richardson, carpenters, were paid £2/5/3 for sawyers work which included ...*Corb Wood, Alder Boards, Deal Planks...* possibly for lining the shafts or underground works (see appendix 2).

From the above evidence it is highly likely that initially boreholes were sunk vertically from the surface to ascertain the location and quality of the coal, and later, shafts were sunk and boreholes were driven horizontally again to ascertain in which direction the best coal reserves lay. According to Farey (1811) this was a common practice undertaken at many collieries.

Sinking the Trial Pits. October 1817-March 1818.

During the boring operations (see above) in mid October 1817 a timesheet records that ...*Joseph England & son were Sinking part of a Trial Pit 22 days £4/19/0...* A later timesheet for January 1818 notes ...*Edmund Stanfield 3 days, Peter Henshaw 3 days, Isaac Daykin 4 days, John Boden 4 days, William Dooley 4 days Sinking Trial Pits...* This suggests that at this date several pits were in the process of being sunk. The next timesheet for February notes ...*John Boden 5 days, Isaac Daykin 24 days, William Dooley 24 days Sinking Trial Pits.... William Dooley Filling 7 Trial Pits £1/0/-...*

It is not understood what form the trial pits took. Were they proper shafts or simply boreholes sunk from the surface. The last entry concerning William Dooley suggests that, because of the small payment made, that he was employed in filling surface boreholes.

Tunnelling to the Engine Pit. March-April 1818.

In early March 1818 Benjamin Twigg was paid £1/11/6 ...*to examine the Furnace Tunnel Measures for Lord G. H. Cavendish...* At the start of April the timesheet records ...*Isaac Daykin 22 days Tunnelling to Engine Pit, John Handforth Firing the Tunnel 15 days, John Howard, Carpenter Making Corbs, Caps and Posts for Tunnel 9 days, Henry Richardson, Carpenter Making Corbs, Caps and Posts for Tunnel 6 days, William Dooley Assisting at the Tunnel...* also included was ...*3lbs of Blasting Powder for Tunnel...* The following timesheet for the remainder of April notes ...*Isaac Daykin Driving Tunnel Cleansing Tunnel Tempering Clay 8 days, John Handforth Firing Tunnel 9 days & 1 night, Charles Gummerson Tunnelling to Engine Pit 1 night, Thomas Langworth Tunnelling to Engine Pit 2 nights, Eusibeus Twigg Firing Tunnel 2 nights, William Dooley Assisting in Tunnel 18 days...* The timesheet for the period May 1st to 16th records on May 1st...*Isaac Daykin Putting up 2 pair of Cuples in the Tunnel 1 day...*

It is possible that this tunnel was to become a part of the colliery ventilation system and the term *Furnace* could indicate that a 'fire basket' or perhaps a 'fire house' was to be installed/built in conjunction with this feature, although this remains unknown. The tunnel was driven using gunpowder suggesting that it was possibly excavated through rock and not within a seam. Timber was definitely used within the tunnel perhaps to make ventilation pipes or doors and the 'tempered clay' noted could have been to seal these items. It is clear that at this time the site of the future Engine Pit had been decided but had yet to be sunk (see below) and the tunnel was to be connected to this shaft at depth.

The abandonment plan (no. 4470) dating from 1903 when the Beard and Bugsworth Colliery closed shows a shaft known as the '*Furnace Shaft*' located a few yards to the west of Lady Pit lane at SK 0150 8398. It is possible that this shaft was sunk onto the tunnel dating from early 1818, and could be a reference to its origins as part of the colliery ventilation system. The shaft is still to be seen and today is surrounded by a high circular wall,

that could be part of the furnace house to draw bad air from the workings?

Alternatively, it is possible that both the '*Furnace Shaft*' and '*Furnace Tunnel*' are simply a reference to the former site of an iron furnace as noted by Farey (1811) in his list of such features which includes one sited at Gow Hole.

Sinking the Engine Pit. March-November 1818.

On March 13th and 14th 1818, Benjamin Twigg was paid £1/1/- for ...*Inspecting and to view and report of the neighbouring measures Colliery the Amount of Workmen's wages &c in order to bargain for sinking by Mr. Woodhouse & Heacocks orders...* In May, John Pearson of New Mills was paid £6/13/4 for ...*Leading Oak and Alder Timber...Post-wood from different parts of Beard Estate to the Engine Pit...* At the same time Thomas Barker was paid £25 for ...*Sinking the top of the Engine Pit at Beard Colliery 20 yards at 25/- per yard...* and Benjamin Brown and 11 other men were paid £42/5/4 for ...*Walling the Engine Pit at Beard Colliery...* From the end of July until the start of October ...*William Miles and Co...* were employed in ...*sinking the Engine Pit...* at a total cost of £27/7/-. The depth of sinkage during this period is given as 13 ¼ yards. This depth combined with the earlier sinking totals 33 ¼ yards at a cost of £52/7/- expended on the sinking. The bricks for lining the shaft were purchased from Jonas Schofield of Manchester on May 26th 1818 when 5000 of Bricks at £2/9/- per thousand...total £12/5/- were ordered. William Miles & Co. came from the Moira Colliery near Overseal (Farey, 1811), the residence of Jonathan Woodhouse the sub-agent and overseer at Beard Colliery.

It is clear from the above evidence that the bargain for sinking the shaft was made sometime between late April and the middle of May. The reference to the ...*neighbouring measures Colliery...* is obscure in its context. The colliery noted was obviously operational but it is difficult to assess which colliery the term refers to because the local area was the site of numerous coal mines of varying sizes. It is possible that it is referring to the Waterloo Colliery at Whaley Bridge which was opened on a larger scale by W. J. Gisbourne in 1815 (Leach, 1992). The northern boundary of this recently opened colliery adjoined the eventual postulated southern boundary of Beard Colliery so it is feasible to suggest that this is where Benjamin Twigg visited to acquire better knowledge of the seams and costs involved. It is known that the shaft walling men, with Benjamin Brown, stonemason, acting as the 'ganger' were only employed at the colliery for this occupation.

Farey (1811) gives a list of persons who gave information to him and one of these is ...*Thomas Barker, Coal Sinker and Borer, at Bollington Cross, near Macclesfield...* Was this the same man who did the initial shaft sinking at Beard Colliery?

The Pumping Engine. April-September 1818.

The engine castings and other sundry items were delivered to the colliery from Smith's Brothers of the Adelphi Iron Works near Chesterfield during April and May 1818 at a cost of £143/17/6. On May 2nd James Starkey was paid £1 for ...*setting out Engeon...* Sometime previous to this date a bill was paid ...*for the Carriage of an Engine from Cromford (Wharf) to Beard Weight 16 tons 9 cwt. £49/15/-...*

Nothing else is recorded concerning the pumping engine but it is probable that at this date it was of the beam type. The weight quoted suggests that the engine would be classed as medium in size suggesting that it was pumping from a shallow shaft which corresponds with the 33 ¼ yards noted earlier.

The Whimsey Winding Engine. May-December 1818.

The timesheet for the first two weeks of May 1818 records ...*William Dooley Assisting to unload the Whimsey and Getting the stone up to the foundation of the Whimsey...£3/1/-.* Sometime between mid May and mid July James Starkey was paid £30 for ...*putting up a Whymmsey with a new frame compleat...* The next timesheet in the series covering the period July 20th to

August 22nd states ...*Samuel Ellis Working Whimsey 23days £3/16/8...**Samuel Bullivant Working Whimsey 23days £2/17/6* and at this time £1 was spent for *Christening Whimsey*. The timesheet covering the end of August and the start of September states ...*Samuel Ellis Working Whimsey 14 days £2...**George Pearson Working Whimsey 14 days £1/16/-* and the following timesheet for 6th to 19th September notes ...*Samuel Ellis Working Whimsey 14 days £2...**Thomas Cadman Working Whimsey 14 days £1/16/-*. The remaining timesheets from September to December record that Samuel Ellis and Thomas Cadman were operating the winder continually, but in October Thomas Cadman's pay was increased to equal Samuel Ellis'.

It is clear from the above that the whimsey was delivered to the colliery in May and by mid July it was operational and working continuously for the remainder of the documented period. Samuel Ellis was the main operator with help from various other men. Two of the men, George Pearson and Samuel Bullivant, were not employed in any other occupation at the colliery suggesting that they left to seek employment elsewhere after only a few weeks.

Nothing is recorded concerning which type or size of engine this was. The only reference to it is given in December 1818 when John Bennett was paid £1/0/0 for *Cleaning flues of Whimsey Boiler*.

The Engine buildings. August 1818.

On August 5th 1818 Benjamin Brown, stonemason, was paid £71/4/6 for stone getting and masonry work at the Beard Engine. On the same day he was also paid £5/17/9 for...*Cutting Foundation for an Engine 235 ½ yards...*

It is unclear what this rather curious entry means. The foundations for this engine could have been for a more permanent sinking arrangement, perhaps at the main shaft or maybe at the Bye Pit. The yardage quoted could be for foundation trenches for both internal and external walls, if so, they would be for a large building. Alternatively, the figure could be for a large excavation where the engine was partially sunk below ground level.

Sinking the Bye Pit. August-November 1818.

The timesheet for the period August 24th to September 5th 1818 notes ...*William Miles & Co. Sinking Bye Pit...7/-* and the next in the series for September 6th to 19th records ...*William Miles & Co. Sinking Bye Pit...£26..* The timesheet for September 21st to October 3rd notes ...*William Miles & Co. Balance for Sinking 32 yards 2 feet at 24/- per yard in Bye Pit...£9/6/-*.

Thus the Bye Pit was just over 32 yards in depth and cost a total of £35/13/- to sink, with the work being started in late August/early September and being completed by late September/early October.

The Horse Gin. September-October 1818.

On September 1st 1818 Jonathan Pearson was paid £1/15/- for ...*fetching a Horse Gin from Goit Colliery to Beard Colliery...* The corresponding timesheet records ...*Samuel Tomlinson Making Gin-race...3 days at 3/-...9/-* and ...*William Miles & Co. for setting the Horse gin up...7/-...* On September 7th and 8th it is recorded...*Horse and Man turning Gin over Sinkers at 4/6 per day...9/-...*In late September and early October the timesheet records ...*William Miles & Co. For Shifting the Gin between Pits...7/-...*

It is therefore clear that the horse gin came from the Goit (Goyt) Colliery situated on the high desolate moorland to the west of Buxton. A plan of this colliery by Staley in 1818 shows the workings undertaken by this date (Barnatt and Leach, 1997). The gin was almost certainly situated on one of the shafts sunk into the Ringinglow (House Coal) Seam in the area of Thatch Marsh (centred SK 019 699) to the west of Axe Edge summit. By early September the gin was operational and was winding waste stone from the Engine Pit (see above) as it was deepened but by the end of the same month it was moved to wind from

the nearby Bye Pit (see above) as this shaft was continued to be sunk.

Working at the Sough. October 1818.

An isolated reference noted on the timesheet for the fortnight ending October 31st 1818 states ...*Samuel Tomlinson and John Swindells for working on Sunday at Sough. 1s 4d...* The location of the sough remains unknown, but it might be a feature that pre-dates the colliery. The single days work and low payment could indicate that the men were employed in inspecting the sough or perhaps doing a small piece of maintenance work within the sough. It is also possible that the *sough* was an entirely underground feature more commonly known as a water level or gate with no outfall at surface, with the water being pumped to the surface and discharged into a water course. Previous to this date Henry Finch was paid 2s 9d for *Opening the watercourse in Mr. Greatrix's meadow for pit water to get off*.

Materials for shaft walling and buildings. March - June 1818.

During March and April 1818 Jonathan Pearson of New Mills was paid £9/2/6 for carting materials to the Beard Colliery these included ... *Lime and Sand...Lime and Stone...Slicked Lime and Stone...Stone and Wood...Stone and Slate...Stone and Clay...* The stone used was obtained from the gritstone quarry, now disused, at Brown Brow, Low Leighton near New Mills (SK 007 852). From March until June John Wild of the Furness Clough Lime Works delivered 47 loads of lime at a cost of £2/10/11 to the colliery. The exact location of the limeworks remains uncertain. Eliza Poyser of New Mills supplied a small amount of roofing slates to the value of £1/3/- in April. From May until July Thomas Collier carted ...*sand, lime, 5000 bricks...*to the colliery for £8/2/2.

Coals for the Engine. June-December 1818.

Coal was supplied to Beard Colliery for the engine, but it is not stated whether this was for the pumping engine or the Whimsey engine. Initially John Lowe supplied 3 tons 16 cwt in the latter part of June 1818 at a cost of £1/6/7. The location of John Lowe's coal mine was at Bugsworth. The main supplier was Thomas Boothman, coal proprietor, of Whaley Bridge who from August until December supplied 229 tons 6 cwt at a cost of £70/12/2. The main carter was Thomas Collier with Jonathan Pearson carting for a short period only (August). The exact location of Thomas Boothman's pit at Whaley Bridge is not given, but it is known that slightly later in 1821 he was operating the Old Engine Pit (SK 0190 8046) at Ivy Bank on the southern outskirts of the town (Leach, 1992. Heathcote, 2002). It is highly likely that this is where the coal was obtained.

From the above it is clear that during the development of the colliery and before any coal was raised it was necessary to obtain coal from other sources to power the engine/s.

The Colliers clothing. August-September 1818.

The workmen at the colliery were supplied with their work clothes by the proprietor. During August and September 1818 Matthew Bovel was paid £10/9/6 for making ...*Flannel Trousers and Jacketts for the men employed in the Trials for Coals in the Beard Estate...*

The sinkers, headers and borers. October-November 1818.

The timesheets covering the period October 5th to November 14th note that Samuel Tomlinson, John Walker, Levi Slater, Michael Witacre, Ralph Clayton and George Jowett were employed in ...*Sinking, Heading and Boring...* It is unclear what these men were sinking, perhaps they were deepening the Engine and Bye Pits. If so, it seems peculiar that this is not specifically recorded as such. They were certainly driving levels and, presumably horizontally, test boring for the coal. Were they sinking an internal shaft into deeper ground, and for what reason? Samuel Tomlinson and John Walker were residents of Ashover near Chesterfield, Derbyshire. Were these men, like William Miles & Co. employed at the colliery for their mining expertise?

Boring Double Turns. November-December 1818.

Samuel Tomlinson, John Walker, Ralph Clayton and George Jowett were employed in ...*Boring double turns*...from November 16th until December 12th. A turn, according to Farey (1811), is an horizontal tunnel excavated to create an air flow to aid in the ventilation of the workings.

Working the Spring Pole. December 1818.

The timesheet for 1st-12th December records*John Swindells, Henry Shoebottom and George Bennett...Banking over borers and working Spring Pole*... The borers at this time are noted above. Farey (1811) gives a detailed description of the working of a Spring Pole, thus:

A spring-pole, usually a strong and straight Fir Tree, is then fixed by the butt-end, at its length's distance from the hole (shaft) either to strong stakes driven into the ground, or if large blocks of stone are conveniently at hand, such are piled on the butt-end, and others placed under the spring-pole, at a distance from the butt, allowing the small end which is over the shaft, to have a pretty wide range of elasticity. The rods are of square wrought iron, in four feet lengths, jointed together by a male and female screw...the principal operation is performed by a strong chisel or noger...screwed on the bottom of the rod...a wooden cross handle...a few feet length of chain, which being fastened by one end to the spring -pole...as will allow the spring-pole when straight, to suspend the rods and noger about a foot above the bottom of the bore-hole...a Man at each end of the wooden handle, near the bottom of the shaft, violently forcing or jumping down the rods, which the spring-pole as quickly raise again; a small part of a turn is then made by the Men walking round in the shaft, and then another jump is made, then a small turn and a jump...

Therefore a central hole is bored into the bottom of a shaft and charged and fired using blasting powder. Because the mode of working this apparatus is recorded in detail by Farey (1811) it is suggestive that it was in common use at other collieries at around this date. A similar system was probably used when sinking the other shafts at the colliery.

Significant dates for the formation of Beard Colliery. 1816 - 1818.

1816 December. Inspecting the coal on the Beard Estate.

1817

September. Boring for coal on the Beard Estate.

October-November. Boring and Trial Pits being sunk.

December. Boring rods sent from Ripley. Thurl 29 yards long driven between Boring Pits.

1818

January. Boring rods delivered. Boring and Trial Pits being sunk.

February. Trial Pits being sunk.

March. Trial Pits being filled. Furnace Tunnel being inspected. Bargain made for sinking Engine Pit.

April. Tunnel being driven to Engine Pit. Engine castings sent to colliery.

May. Whimsey delivered to the colliery. Whimsey foundations made. Engine Pit being walled. Engine being 'set out'.

July-August. Whimsey at work. Engine Pit being sunk.

September-October. Whimsey at work. Engine and Bye Pits being sunk. Horse Gin delivered to the colliery. Making Gin Race and setting up the Horse Gin. Horse Gin being moved between Engine and Bye Pits. Second lift of pumps being installed in pit.

November-December. Whimsey at work. Men employed boring double turns.

Total cost for the formation and development of Beard Colliery. September 1817-December 1818.

From the available documentary evidence it is possible to

calculate the cost before any actual mining and coal raising was accomplished. The list below itemises separately each aspect of the expenditure required for the development of the colliery:

Sundries	£386/1/1
Engine Castings	£143/17/6
Masons work	£107/10/2
Boring for the Coal	£89/7/7
Coals for the Engine	£71/5/11
Labourers work	£62/18/2
Sinking Engine Pit	£51/11/0
Flat Ropes	£50/11/7
Carriage of Engine	£49/15/0
Walling Engine Pit	£42/5/4
Bailiff's wage	£42/4/0
Working the Whimsey	£41/18/2
Carpenter's work	£41/7/2
Sinking Bye Pit	£40/0/0
Carting goods to Pit	£37/18/7
Tunnelling to Engine Pit	£22/9/0
Boring Double Turns	£22/0/0
Heading	£17/4/0
Sinking Trial Pits	£13/3/0
5000 bricks	£12/5/0
Banksman	£12/2/6
Sinkers	£11/12/0
Colliers clothing	£10/9/6
Expenses	£10/8/6
Putting up Whimsey	£3/1/8
Slater's work	£2/8/6
Blasting Powder	£0/11/1
Glazier's work	£0/6/0

Therefore the total expenditure for the above period, by Lord George Henry Cavendish, totalled £1396/11/11. Astoundingly, in 2006, this amount equated to £77,214.71 using the retail price index (Officer, 2007. Information supplied by J. Mundy). It is most likely that the colliery continued to be set up well into 1819 and perhaps beyond, therefore the monies quoted are only part of the costs.

The years 1819 until the mid 1850s.

Documentary evidence covering the above period appears to be, at the time of writing, either missing or un-located. What was happening at the colliery during this time therefore remains unknown. It is known that the colliery was at work in the mid 1850s with Levi and Eli Hall as proprietors. They worked here until 1903 when the colliery was finally abandoned as unprofitable owing to the cheaper and much larger reserves of coal from the Yorkshire coalfields becoming accessible through the recently opened Cowburn railway tunnel. During this period the mine was known as the Beard & Bugsworth Colliery or more locally as the Lady Pit. This latter period in the collieries life as been discussed, previously, by Brumhead (1987, 2003) and more recently by Heathcote (2008).

The site of Beard Colliery today.

Unfortunately since the colliery closed in 1903 the site of the pithead as been 'landscaped' and the buildings, shafts and other surface features have all disappeared. The embankment of the later Hall's siding leading from the mainline Midland Railway to the pithead can still be seen. A little to the east of Lady Pit Lane, a high wall surrounds the Furnace Pit, a feature possibly connected to the earlier (1818) colliery ventilation system (see above). On the eastern bank of the River Goyt, at Gow Hole, the c1853 trammings/sough level can be seen discharging a large volume of water into the river (Brumhead, 1987. Heathcote, 2006).

Final remarks.

Although this colliery is only one of the many dozens within the area surrounding Whaley Bridge, New Mills and Bugsworth it is rare that detailed documentation concerning the actual

initial development of such a mine has survived. The site of this colliery is today quiet and peaceful with little to show of its former importance within the local economy. It is hoped that this paper will bring to a greater readership this aspect and build on our ever growing knowledge of the long abandoned coal industry in North West Derbyshire.

Acknowledgements

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15 documents covering the periods: October 13th to November 6th 1817, December 1st 1817 to February 26th 1818, March 17th to May 16th 1818, July 20th to December 26th 1818.

Correspondence, bills etc. for the Beard Colliery

A series of 50 documentary items covering the period December 1816 to December 1818.

Abandonment Plans. Mining Records Office, Mansfield.

No. 4470. Beard and Bugsworth Colliery in the Township of Beard and Bugsworth in the County of Derby. Yard Mine. c1903.

No. 4470. Plan of Workings in the Yard Mine under the Shed

Yard Estate at Beard belonging to Colonel Cavendish. c1863.

Maps. Digital Archives Association, Warrington.

Ordnance Survey. Second Edition. 1898. 25 inches to one mile. Derbyshire Sheet VIII - 3.

Ordnance Survey. Second Edition. 1899. 25 inches to one mile. Derbyshire Sheet VIII - 4.

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Ordnance Survey. Second Edition. 1899. 25 inches to one mile. Derbyshire Sheet VIII - 8.

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Appendix 1. Employees at Beard Colliery, Furness Vale, Derbyshire. 1816-1818.

NAME	EMPLOYMENT	NO. DAYS	DAY RATE	TOTAL
William Dooley	Boring	31	5-0d	£7-15-0d
	Inspecting	24	5-0d	£6-0-0d
	Boring/Inspecting/Scowering/Sinking	24	5-0d	£6-0-0d
	Sinking/Boring	24	5-0d	£6-0-0d
	Assisting at the Tunnel	22	5-0d	£5-10-0d
	Assisting at the Tunnel	18	5-0d	£4-10-0d
	Unloading the Whimsey	4	5-0d	£1-0-0d
	Getting stone for Whimsey foundation	10	4-2d	£2-1-8d
	Boring Trial Holes	14	5-0d	£3-10-0d
	Filling 7 Trial Pits			£1-0-0d
Joseph England & Son	Sinking/Boring/Heading	22	4-6d	£4-19-0d
	Sinking/Boring/Heading	22	4-6d	£4-19-0d
John Boden	Boring	10	3-0d	£1-10-0d
	Boring/Heading	24	3-0d	£3-12-0d
	Sinking	5	3-0d	£0-15-0d
James Hanbury	Heading/Boring	22 ½	4-6d	£5-1-3d
	Boring	14	4-6d	£3-3-0d
John Pearson	Heading/Boring	11 ½	3-0d	£1-14-6d
	Boring/Scowering	17	3-0d	£2-11-0d
	Driving Horse Gin	2	4-6d	£0-9-0d
John Collier	Boring	6	3-0d	£0-18-0d
	Boring/Scowering	15	3-0d	£2-5-0d
Edmund Stansfield	Boring/Sinking	9	3-0d	£1-7-0d
Stephen Pearson	Boring	6	3-0d	£0-18-0d
Peter Hanshaw	Boring/Sinking	9	3-0d	£1-7-0d
Henry Handforth	Boring	6	3-0d	£0-18-0d
Isaac Daykin	Boring/Scowering/Sinking	9	4-6d	£2-0-6d
	Boring/Sinking	24	4-6d	£5-8-0d
	Tunnelling	22	4-6d	£4-19-0d
	Tunneling/Beating a Garland in Pitt	17	4-6d	£3-16-6d
	Putting Cuples in Tunnel	1	4-6d	£0-4-6d
	Boring Trial Holes	14	4-6d	£3-3-0d
John Handforth	Firing the Tunnel	15	2-2d	£1-12-6d
	Firing the Tunnel	10	2-2d	£1-1-8d
Charles Gummerson	Tunnelling	1	3-6d	£0-3-6d
Thomas Langworth	Tunnelling	2	3-6d	£0-7-0d
(?) Twigg	Firing the Tunnel	2	2-2d	£0-4-4d
Samuel Ellis	Working Whimsey	23	3-4d	£3-16-8d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Banksman	1	2-6d	£0-2-6d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Samuel Bullivant	Working Whimsey	23	2-6d
William Miles & Co.	Sinking Engine Pit			£7-19-0d
	Sinking Engine Pit			£9-3-0d
	Sinking Bye Pit			£3-18-0d
	Setting up Horse Gin			£0-7-0d
	Sinking Engine Pit			£4-0-0d
	Sinking Bye Pit			£26-0-0d
	Sinking Engine Pit			£5-8-0d
	Sinking Bye Pit			£9-6-0d
	Shifting Gin between Pits			£0-7-0d
	For putting 2nd Lift of Pumps in 6 men beaten by water	7		£0-12-0d £6-6-0d

George Pearson	Working Whimsey	14	2-6d	£1-16-0d
Samuel Tomlinson	Making Gin race	3	3-0d	£0-9-0d
	Staying Pumps	3	4-0d	£0-12-0d
	Sinking	12	4-0d	£2-8-0d
	Sinking/Heading	12	4-0d	£2-8-0d
	Working at the Sough	1	8d	£0-0-8d
	Heading/Sinking/Boring	14	4-0d	£2-16-0d
	Boring double turns	12	5-0d	£3-0-0d
	Boring double turns	11	5-0d	£2-15-0d
Thomas Cadman	Working Whimsey	14	2-6d	£1-16-0d
	Working Whimsey	14	2-6d	£1-16-0d
	Working Whimsey	14	2-6d	£1-16-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
	Working Whimsey	14	3-4d	£2-0-0d
John Swindells	Banksman	13	2-6d	£1-12-6d
	Banksman	12	2-6d	£1-10-0d
	Working at the Sough	1	8d	£0-0-8d
	Banksman	13	2-6d	£1-12-6d
	Banksman	13	2-6d	£1-12-6d
	Banksman	13	2-6d	£1-12-6d
John Walker	Sinking	12	4-0d	£2-8-0d
	Sinking/Heading	11	4-0d	£2-4-0d
	Heading/Sinking/Boring	13	4-0d	£2-12-0d
	Boring double turns	12	5-0d	£3-0-0d
	Boring double turns	9	5-0d	£2-5-0d
Levi Slater	Sinking	12	4-0d	£2-8-0d
	Sinking/Heading			
Michael Witacre	Sinking	12	4-0d	£2-8-0d
Ralph Clayton	Sinking/Heading	11	4-0d	£2-4-0d
	Heading/Sinking/Boring	13	4-0d	£2-12-0d
	Boring double turns	12	5-0d	£3-0-0d
	Boring double turns	9	5-0d	£2-5-0d
George Jowett	Heading/Sinking/Boring	3	4-0d	£0-12-0d
	Boring double turns	12	5-0d	£3-0-0d
	Boring double turns	11	5-0d	£2-15-0d
Henry Shoebottom	Banksman	12	2-6d	£1-10-0d
	Banksman	13	2-6d	£1-12-6d
George Bennett	Banksman	7	2-6d	£0-17-6d
John Bennett	Cleaning Whimsey Boiler flues			£0-1-0d
Richard Baron	Walling Engine Pit	35 ½	2-6d	£4-8-9d
Matthew Goldstraw	Walling Engine Pit	21 ¼	3-6d	£3-14-4 ½d
John Collins	Walling Engine Pit	35 ¼	2-6d	£4-8-1 ½d
Richard Baron	Walling Engine Pit	24 ¾	3-6d	£4-6-7 ½d
Samuel Simpson	Walling Engine Pit	23 ¾	3-6d	£4-3-1 ½d
John (?)	Walling Engine Pit	30 ¼	2/4	£3-10-7d
Hugh Ashton	Walling Engine Pit	14 ¾	3-6d	£2-11-7 ½d
William (?)	Walling Engine Pit	20 ¾	3-6d	£3-12-7 ½d
Thomas Oldfield	Walling Engine Pit	25 ¼	2/4	£2-18-11d
Thomas Whittle	Walling Engine Pit	10 ¾	3-6d	£1-17-7 ½d
James Longden	Walling Engine Pit	6	3-6d	£1-1-0d
Benjamin Brown	Walling Engine Pit	32	3-6d	£5-12-0d
Thomas Barker	Sinking Engine Pit			£25-0-0d

Appendix 2. Ancillary workers at Beard Colliery, Furness Vale, Derbyshire. 1816-1818.

NAME	EMPLOYMENT	NO. DAYS	DAY RATE	TOTAL
John Howard	Carpenter	6	3-4d	£1-0-0
		9	3-4d	£1-10-0d
		16 ½	3-4d	£2-15-0d
		10 ¼	3-0d	£1-10-9d
				£1-2-9d
		12	3-0d	£1-16-0d
		12	3-0d	£1-16-0d
		8	3-0d	£1-4-0d
				£0-16-0d
				£0-1-2d
		3	3-0d	£0-9-0d
		6	3-0d	£0-18-0d
				£1-16-2 ½d
				£0-1-10d
		10	3-0d	£1-10-0d
		£2-5-3d		
2	3-0d	£0-6-0d		
		£18-2-8 ½d		
Henry Richardson	Carpenter	13 ½	3-4d	£2-5-0d
Peter Hague	Carpenter	1 ½	4-6d	£0-12-0d
John Swindells	Labourer	3	4-0d	£0-12-0d
Thomas Stafford	Labourer			£0-2-6d
Thomas Potts	Slater	2	4-0d	£0-8-0d
		2	4-0d	£0-8-0d
James Starkey	Carpenter			£13-7-7d
		1	5-0d	£0-5-0d
		2	5-0d	£0-10-0d
		3	5-0d	£0-15-0d
		2	5-0d	£0-10-0d
Thomas Ellis	Carpenter	5	3-4d	£0-16-8d
		5	3-4d	£0-16-8d
		5	3-4d	£0-16-8d
Robert Salkild	Carpenter	1	3-0d	£0-3-0d
		5	3-0d	£0-15-0d
		3	3-0d	£0-9-0d
John Mellor	Slater	2	3-6d	£0-7-0d
Joseph Mellor	Slater	2	3-6d	£0-7-0d
Benjamin Brown	Stonemason			£71-4-6d £5-17-9d £31-7-11d
William Middleton	Glazier			£0-6-0d
Jonathan Stuart	Carpenter	9	3-4d	£1-10-0d

Appendix 3. Suppliers of materials etc. to Beard Colliery, Furness Vale, Derbyshire. 1816-1818.

NAME (LOCATION, IF KNOWN)	MATERIALS SUPPLIED
Peter Bennett	Nails
(?) Willcock	Rope
Jonathan Pearson	Boards, Stone, Slate, Clay, Lime, Sand, Coal, Sniging Timbers
Samuel Frearson (Ripley)	Boring Rods, Chisels, Wimble Head, Scower, Dogs, Clays
Samuel & Thomas Irlam	Sinking Hopet, Rails, Chains, Tunneling Picks
Samuel Gratrix (Furness Vale)	Deal Boards, Ash Planks, Iron Pipes, Pine Baulk, Ox Frame, Nails, Joint Pins, Hooks, Rings, Bolts, Hoops, Gudgeons, Filbows, Wrenches, Pasteboard, White Lead, Bags, Water Bucketts, Chisels, Cotters, Spring Cotters, Seville Oil, Bands, Jack Rod, Staples, Jack Pump Rod, Candles, Ferrils, Iron Spikes, Mungrills, Clog Nails, Revits, Screw Clamp, Holdfasts, Sheet Lead, Elbow Pipe, Spike Nails, Sheet of very strong paper, Lever, Oil Can, Wedges, Drill, Hammers, Punches, Valve Iron, Levits, Linseed Oil
Stephen Pearson (New Mills)	Dog Piece, Iron Plates, Cotter, Screws, Chisels, Turn Tree Irons, Can Hooks, Nails, Auger Head, Staples, Hasps, Springs, Rod Iron, Hooks, Links, Gauges, Diamond Punch, Scourer, Chain, Dog Hook, Bolts, Sockets, Latch Iron, Turn Cotters, Scutch Hook, Catch Irons, Gudgeon, Tub Ears, Fire Iron, Scraper, Hoop for Jigger, Wedges, Iron for Wheelbarrows, Hammers, Coal Picks, Cliveys and Screws for Beam, Kettle Ring, Sinking Picks, Latch Carrier, Proker, Skeerer, Rake, Cramps, Stemmer, Pricker, Shift Wrench, Ring Socket Links, Pump Rod, Fire Grate, Iron for Whimsey, Large Washer, Tail Pin
Thomas Eyley	Borings Rods, Ropes
Immanuel Wild (Mellor)	Timber
Abraham Marshall (New Mills)	Stone Pick Shaft, Boards, Hammer Shafts, Wood, Nails, Ashler Barrows, Wheelbarrows, Wedging Pick
John Wild (Furness Clough Lime Works)	Lime
Eliza Poyser (New Mills)	Nails, Large Gimblett, Wiskett, Laths, Slates, Tar, Fine Oil, Ball of Twine, Plate Lock, Plate Lock Fancy Key, Large Coal Shovel, Iron Pot, Pitch, Sole Leather,
John Jackson (Ilkeston)	Flat Ropes
William Fearnis	Bucketts, Kitt, Sump Tubs
B. Needham (Burton on Trent)	Pitt Ropes
George Heafield	Wrought Iron Sinking Barrel
John Howard & Henry Richardson	Corb Wood, Alder Boards, Deal Planks, Window Frames,
Thomas Barker	Water Barrels
Jonas Schofield (Manchester)	Bricks
William Taylor (Whaley Bridge)	Norway Poles, Pine Balks, Oak Trees
John Lowe	Coal
Thomas Boothman	Coal
Matthew Bovel	Workmen's Clothing
John Thomason	Leather
Benjamin Brown	Stone
Smith Bros. (Chesterfield)	Engine Castings & Sundries