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Morris, J.H., Parkes, M.A. (2001) 'Survey of Historic Mine Workings exposed in McQuaid's Quarry, Lemgare, Clontibret, Co. Monaghan' *Journal of the Mining Heritage Trust of Ireland*, **1**, pp. 57-60

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SURVEY OF HISTORIC MINE WORKINGS EXPOSED IN McQUAID'S QUARRY, LEMGARE, CLONTIBRET, CO. MONAGHAN

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Abstract: In early 2000, previously unknown underground mine workings were discovered by accident during routine operations in an opencast quarry in Lemgare townland, Co. Monaghan. Here we present our survey of these workings and then consider the historical context within which these workings were undertaken. Despite their proximity to what was then one of the largest lead mines in the district, at Coolartragh [also known as the Bond Mine], we deduce that the trial was probably undertaken by the Mining Company of Ireland during the course of their prospecting activities in Lemgare townland in the early 1840s. *Journal of the Mining Heritage Trust of Ireland*, 1, 2001, 57-60.

In early January 2000, John McQuaid, owner and operator of McQuaid's Quarry, Lemgare townland, Clontibret, County Monaghan (Fig. 1) contacted Pat Long and Noel Breakey of Monaghan County Museum to inform them of the discovery of underground mine workings during quarrying operations. Mr. McQuaid wished to ascertain whether the passage was of archaeological significance, before proceeding with the planned works, which had exposed the passage. The workings had been uncovered during the excavation of an access ramp for trucks, close to the entrance of the quarry and the quarry office. The excavation had cut into a section of underground passage, and collapsed the central part. The County Museum subsequently contacted the authors and invited us to the quarry to examine and survey the workings.

THE MINE SURVEY

The investigation showed that the tunnel extends for very limited distances NE and SW from two excavated areas either side of an inaccessible section of workings (Fig. 2). The section nearest the quarry office building averaged 1m in width and 1.9m in height, but only extends for c. 6m on an 0610 bearing, before a run in of loose rock material was encountered (Fig. 3). This had dropped down from the short shaft, which had been

backfilled, and a part of it could be seen at the back of the run in (Fig. 4). No significant mineralisation was seen in the tunnel, but the dimensions were typical of a hand worked mine adit.

The other section of accessible tunnel was equally short, ending in a blind working after about 6.5m on a bearing of 1910 (Figs 5, 6). The dimensions

Figure 1. Location of trial shaft and drive in McQuaid's Quarry, Lemgare townland, Clontibret, Co. Monaghan. Coolartragh (Bond) Mine Grid Reference H 787286. Base map reproduced from Geological Survey of Ireland field sheet, dated 1873. were similar inside, and the passage was clearly following a steeply dipping (approximately 70 degrees: Fig. 6) fault plane, with a thin fault breccia. Although the interior was largely plastered with a thin veneer of sticky clay, possibly washed down from overlying glacial tills, no mineralisation was apparent. One feature of interest mid way inside was a shallow scoop on the fault plane surface at about 60cm off the floor, with pick marks visible (Fig. 7). This was probably to place a candle for light.

The whole underground passage was almost certainly an unsuccessful mine trial, which had been abandoned after only a short distance. Why it is located here may only be surmised: it might reflect a trail on surface indications of minerals, of which no trace now remains; and/or development designed to test the continuity of nearby lead-silver lodes. Mr. McQuaid informed us that excavation and quarrying had lowered the ground surface by about a meter or so close to the quarry office building, and much more towards the crushing plant, located close to the furthest extremity of the mine workings. This satisfactorily explains why a tunnel was dug since it is presently so close to surface that it did not make sense to tunnel, rather than trench along the desired orientation .





Figure 2. Survey plan of trial shaft and drive. Dark grey area = mine workings; pale grey = quarried out sections.

HISTORICAL CONTEXT

The mine trial is about 480m east, on an 0800 bearing, of the Coolartragh [Bond] mine, and the trend of the mine workings are roughly perpendicular to the inferred 3250 - 3500 trend of the lead-silver lode which was mined at Coolartragh, and at the Tassan Mine, the largest in this district, about 2km to the south (GSI Field sheets, 1873; Morris, 1984). Manuscript copies of original, Geological Survey of Ireland 6" to 1 mile field sheets, dated 1873, though based upon the 1857 edition of the Ordnance Survey 6" map series, show both of the latter mine sites, as well as two shafts at the site of the mine trial described here (Fig.1). The location of the northernmost of these two shafts is indicated at almost precisely the position of the back filled shaft described above. Not only does this serve to confirm this specific historic record, but clearly suggests that the GSI geologists recorded and located their information with considerable accuracy. A manuscript note beside these shafts, records the following information: "Sites of shafts about 6 fathoms [36 feet, c. xxm] deep. Worked about 30 years ago". The field sheets are dated 1873, which would suggest that these shafts were excavated about 1843.



Figure 3. View looking NE towards northern section of trial drive. Quarry office in background



Figure 4. View looking NE inside northern drive section, with backfilled shaft in background.



Figure 5. View looking SE towards southern section of workings. Note modern rock crusher plant above.

It would be reasonable to presume that this trial development was undertaken in connection with mining at the nearby Coolartragh Mine, as the earliest recorded production from this mine is for the period 1845 - 1847, and again in the mid - 1860s (Hunt, 1848; Cole 1922/1998; Morris, 1984). The inferred c.1843 age of the trial shaft and workings corresponds very well with the initial phase of operations at the mine, upon which Cole (1922/1998) notes that a total of about seven shafts had been sunk.

However, only 3 of these occur in the immediate vicinity of the mine (GSI Field sheet, 1873), while 4 more shafts occur as an isolated group, engraved as "Old Lead Mines" on the 1857 6" base map, about 800m north of the Coolartragh Mine. This latter group, of which there is now no surface trace at all, are sited on the northward, 3500 projection of the "Tassan – Coolartragh" lode, suggesting that they were developed to test the northward extension of that lode.

It may similarly be inferred that the trial shaft and workings described here, was also developed as an exploratory development. The orientation of the first 10m or so of workings are roughly perpendicular to the 3500 course of the Tassan – Coolartragh lode, strongly suggesting that the development was initially designed to explore for similarly orientated lode mineralisation to the east of the known lode. In contrast, the distal, southern part of the workings swing very quickly to c.0200 to follow the fault noted in the mine survey above.

However, it is important to note that this trial shaft and workings are located in Lemgare townland, not Coolartragh (Fig. 1). Then, as now, prospecting and mining licence/lease boundaries were based primarily upon townlands, and it would therefore be reasonable to assume that this trial development was undertaken by whatever company held the prospecting and mining rights for Lemgare townland in the 1840s. The Mining Company of Ireland (MCI) is a very strong possibility. Successive half yearly reports of the MCI from June 1840 to June 1841 inclusive, note and describe developments then being undertaken upon the "Lemgar (sic) Lead Mine". This almost certainly relate to a deposit about 1,300m to the east of this trial development in Lemgare townland, where Morris (1984; Grid Reference H804281) describes remains, then visible in 1984, to include the site of an adit portal and 2 large pits, undoubtedly the remains of 2 of 3 shafts noted at this site by Egan (1877) and shown on the 1873 GSI field sheet.



Figure 6. View looking SE inside southern workings to termination



Figure 7. Candle notch in fault defined, NW footwall of southern section of workings.

This circumstantial evidence very strongly suggests that the prospecting rights in Lemgare townland were held by the MCI in the 1840s, and, importantly, the reports further note that the company was actively exploring several deposits in the locality at that time. It is therefore reasonable to suggest that this trial development was one of those undertaken by the MCI in the early 1840s, as part of their exploration works within their lease area.

ACKNOWLEDGEMENTS

We express our appreciation to Monaghan County Museum for informing us of this discovery, and, in particular, to Mr. John McQuaid for facilitating our visit, even to providing us with arc lights. His enthusiasm and interest in the discovery, as well as his interest in the development of nearby mines, was most encouraging. We also express our appreciation to the late Mr. Conor MacDermot for providing us with a digital camera to use in the survey, from which the photographs above are derived, and also for assisting with the draughting of Figure 2.

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