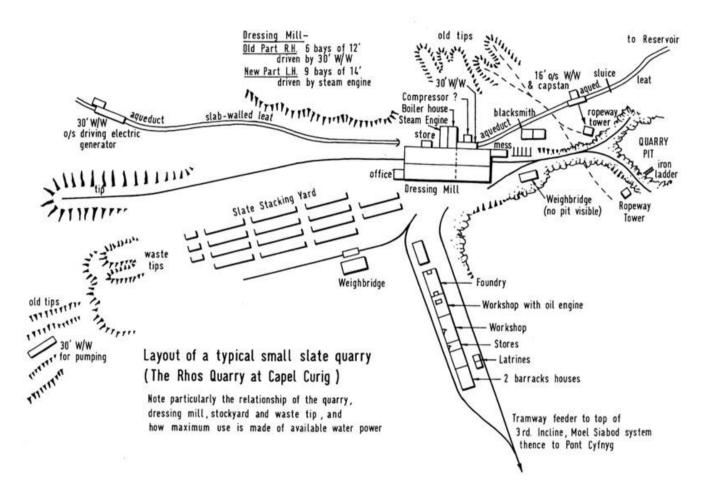
## 4) <u>Capel Curig and the Lead mining district</u>

The 1802 road of the Capel Curig Turnpike Trust deviates from the present A5 at Pont Ty-Hyll - by the "Ugly House" of c1475 (756575), to run south of the river past Cae'r Llugwy and then cross it by the older bridge, Pont Cyfyng. Just before this bridge there is a group of workmen's cottages, with a loading dock on the left-hand side of the road: this marks the foot of a series of inclines and a tramway which once extended over two miles to serve the slate quarries at Rhos and Moel Siabod.

The Rhos concern was by far the larger of the two, and closed down as recently as 1952. Our plan shows the arrangements here:



All the tramway tracks have been removed, but the inclines are still easily recognisable from the remains of the summit drum houses visible from the adjacent bridle path. The main workings of the Rhos quarry are beyond these, and to the left (760563).

Looking down onto the tip levels, a massive slab-walled pit which once housed the 30 ft diameter pumping waterwheel is prominent (centre of photo).....

On the main quarry level above, the barracks, smithy, weighbridge and dressing mills stand



gauntly in ruins (pictures next page). The newer dressing mill was steam powered; the base of the engine and the boiler house adjacent are clearly visible. The line shafting of the older mill was powered by another 30 ft x 6 ft waterwheel, which also drove a compressor. The leat for the wheel may be traced on its descent in the hillside above; on the way down it powered also a 16 ft diameter wheel which appears to have driven an overhead haulage cableway operating in the quarry pit itself.



The tailrace from the dressing mill waterwheel, an impressive piece of dry stone walling (picture right), may be followed south-eastwards onto an aqueduct by the site of a third 30 ft wheel, this being used to drive a electricity generator in the adjacent hut.

Dressed slate and slab left the quarry by a tramway running past the second group of buildings, which comprised the pay office, foundry, workshops, stores and two barracks with latrines. The site is well preserved and it is still easy to identify the various buildings and to visualise the workings of the quarry complex as a whole.

The main tramway from the drum house at the head of the third incline up from the road formerly ran on to the workings of the Moel Siabod quarry about a mile beyond, but its course over the boggy terrain is now decidedly indistinct from the surrounding countryside for most of its length.

The quarry pit is flooded but some of the buildings remain;

the dressing mill with a waterwheel located unusually at the back (at right angles to its leat), the barracks, smithy and weighbridge may be identified. The hand-trimming sheds are conveniently situated on the hill edge, so that the waste may be tipped out directly. The roofs of these crude shelters are interesting, being enormous slabs of rock wedged together at their apex.....



Returning to the village, the Capel Curig Turnpike Trust's tollhouse survives near the junction of the Llanberis and Nant Ffrancon Pass roads (721581). By the hotels, descendants of Lord Penrhyn's original enterprise, may be seen the stables and a replica stagecoach, though this latter is strangely painted with Cornish destinations.



The area to the north-east of Capel Curig, towards Llanrwst, has been extensively mined for lead ore for some three hundred years: it is recorded that in the period 1611-15 the land owner Sir John Wynn sent samples of ore from his estate to a friend, Sir Thomas Challoner, for analysis. The outcome was to result in the commencement of organised work in the mines of the area in 1619-20. Excellent examples of some of the different periods of operation since then are to be seen in the five or six larger mines, out of a total of about twenty-one formerly operating, which still possess substantial remains. One, its name and history now long forgotten, has a dramatic situation beside the turbulent Afon Llugwy only half a mile east of the famous Swallow Falls (772577; through the gate just west of the Telford milestone pictured right).

The main working level is high on the opposite bank, and emerges straight onto the remains of a timber trestle bridge leading into the top story of the crushing mill. The



building is typical of its type, in stone and corrugated iron, and there are outdoor settling tanks just to the east, by the river. Four further mines of varying period and character are situated adjacent to the minor forestry road (driveable) running northeast from the "Ugly House" to Llanrwst. The oldest of them is undoubtedly the Hafna mine (780601), which is recorded as being reworked by one Edward Lloyd of Cefn from 1819. The foundations of its crushing mill are terraced into the hillside above the road, but most of the visible remains here are from later reworkings - bases of an oil engine, crushing machinery etc. An old inclined plane ascends through the mill site, built in arched brickwork, and near the top stands an old chimneystack. Above this, an adit entrance built of timber and partially collapsed is probably from an older working.

Cyffty mine (774588) has little to show in the way of surface remains as most of these were needlessly demolished as recently as 1966. At this mine water power was supplemented by a Cornish type pumping engine in a characteristic engine house, but no less than three waterwheel pits may still be traced. The site was "tidied" by Gwynedd County Council under a Job Creation Scheme in 1977. The ruin of another large engine house once containing two horizontal machines survives at nearby Betws mine, with stone and brick chimney intact (779593).....



Parc Mine (788603) was one of the largest, most productive and most recent worked of the North Wales lead mines, as a sight of the vast ugly slurry tips alongside the road will testify. It was closed first in 1905, re-opened in 1919 and closed again, before a final reworking occurred in 1952-3 as the Llanrwst Lead Mines Co. Ltd. After 1963 the crushing mill was used by the Pengwern and Gwydyr Granite Co. for crushing granite obtained elsewhere, until 1967 when the surplus machinery was sold. The former workings also have recently been used for experiments in connection with automatic ore treatment processes.

As would be expected therefore, although there is evidence of a complex array of buildings, levels and tipping areas, most of what is to be seen is from the era of steel, concrete and corrugated iron - the first and last largely now vanished in the hands of scrap dealers. The Forestry Commission road climbing up past the crushing mill was formerly the main tramway incline, near the top of which, some 150 yards above the mill, is an entrance to further workings which may be entered for distances of up to half a mile or so - inside the tunnels, the 2 ft gauge tramway track and points survive. These tunnels have recently been used by university experimenters requiring a constant temperature, stable environment.

The modern working methods used at Parc mine may be contrasted with those traceable at Aberllyn, which despite its title of lead mine was worked principally for zinc ore, in the period 1869 - 1904. The ore processing mill was situated near (796577) and was water-powered, latterly by turbine. Examination of the site as at present shows it to consist of about seven levels arranged down the hillside, the mined ore being tipped in at the top, and passing downward through the various stages by gravity. Primary jaw crushers were situated at the top and below them the bases of round frames and "buddles" will be noted. Separation tanks and drying floors comprise the lower part of the structure, in which oil flotation equipment was latterly used for separating out the ore. The concentrate was taken away to South Wales for smelting.

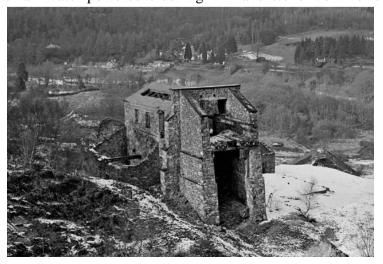
At the top of the mill an adit entrance is found, which drained the workings above and supplied water for the mill turbine. Further working levels are spaced out up the hillside, from which the ore descended to the mill by means of the wooden chutes. At the topmost level is found the smithy and other buildings, with a reservoir (Llyn-y-Parc) supplying water to the crushing mill via a sluice and leat, beyond. This mine is thus a compact example of how use was made of the assistance of gravity in the mining operations where the terrain allowed.

Further lead mines with interesting remains and no less an interesting, if ill-starred history are situated around Llyn Geirionydd, and may be approached either by an unclassified but driveable road from the south, or by the tourist road (narrow and gated, and best avoided in the summer) from Trefriw Village.

The mine at (767602) has been called variously New Pandora (at its best, 1877 - 82), Foxdale, Willoughby, and Welsh Foxdale at different times, indicating a fundamentally unstable and unprofitable enterprise which is reputed at least once to have been "seeded" with good ore found elsewhere, in order to attract speculator's money to a struggling concern. Two distinct periods of working are apparent in the remains; of a small water-powered crushing mill and stone workmen's

houses, and of numerous concrete floors and bases for machinery around the newer shafts. A tramway, now indistinct, ran from the mine, alongside Llyn Geirionydd (an adit and shell of a pumping engine house may be seen adjacent to the car park and picnic area) and terminating on the hillside (767621).

From here, an aerial ropeway carried the ore to another large mill, which survives in good condition in the valley below. This is Klondyke Mill (picture right), no doubt so named to suitably inspire the would-be investor, which also



served the nearby Klondyke Mine. The entrance to these workings, dating from 1919, may seen on the riverbank be opposite, and may be entered A more direct with care. approach to the mill is via the Crafnant Valley road, from which the building is a prominent landmark (762624); one can park and take the path through the campsite and across the footbridge. The mill was latterly powered by an 82 hp turbine, water from using Llvn Geirionydd.



The workings in this area were administered by the Crafnant and Devon Mining Syndicate from 1918 - 1932 before they finally failed. Whilst the mounds of waste material might testify to a one-time healthy industry, the profit yielded never remotely balanced the large volume of capital sunk into the provision of the lavish equipment employed in the area.

On the way back down the Crafnant Valley, a small mill will be noted on the left-hand side of the road, with a derelict 11 ft diameter waterwheel (772632).

Keith A. Jaggers November 1978

## **Updates – November 2011**

The small community and slate loading dock at **Pont Cyfyng** is largely unchanged, but the inclines and tramway are now quite indistinct. However a rough track climbs up parallel to the Rhos Quarry, where the buildings are ruinous but still interesting to explore. This road continues on to the Moel Siabod Quarry, in similar condition.

The Tollhouse at **Capel Curig** survives as a private residence, and the hotels still cater for the many visitors to the area, but their former stables are much less evident nowadays after much extension and conversion work. The stagecoach opposite the Ty'n y Coed Hotel is now under cover, and carries names more appropriate to the Holyhead Road.

The lead mine sites can be easily identified on Google satellite images by the raw brown colour of the spoil tips, poisoned ground upon which little vegetation will grow. The old one above the river near to Swallow Falls is of little interest now, but a drive along the minor road past the others towards Llanrwst is still worthwhile. The best-preserved example is the **Hafna Mine**, where the remaining surface structures have been conserved, with good access provided. Here and at other sites along the road, good parking and picnic areas have been created, with information boards detailing nature trails and associated history. There is now very little to see on the surface at Parc Mine, and access to the site is not so easy as formerly. Of course, casual underground exploration in these safety-conscious times is completely out of the question, although organised visits can sometimes be arranged, in the company of expert guides, appropriately equipped and insured. The website <u>www.mine-explorer.co.uk</u> contains many excellent images recorded by members on excursions into most of the mines in the vicinity, and is heartily recommended as an alternative.

The former tramway route from Geirionydd Mine, along the lakeside towards **Klondyke Mill** is now a good single-track road, and the old trackbed diverges from this off to the left just beyond the north end of the lake. The main Klondyke crushing mill survives, though not nowadays quite so dominant as seen from the Crafnant Valley road, due to intervening vegetation growth.

The small former mill beside the road towards Trefriw is still extant, complete with its waterwheel, but remains ruinous.