# Apsley and Phoenix Field Trip Report

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Saturday13th September saw eight members meet at the O'Connell Hotel, O'Connell, to start the day. The day was warm and sunny; we drove on the bitumen road all the way to the "Apsley Vale", then half a kilometre across grass track to the car parking area behind the old sheds. It looked like animal farm as the geese, sheep, goats and cattle gathered around munching and watched us as we parked. We unhooked the gate and made our way through thickets of barbed, thorny scrub before finding the rough badly rutted track to the rehabilitated mine site

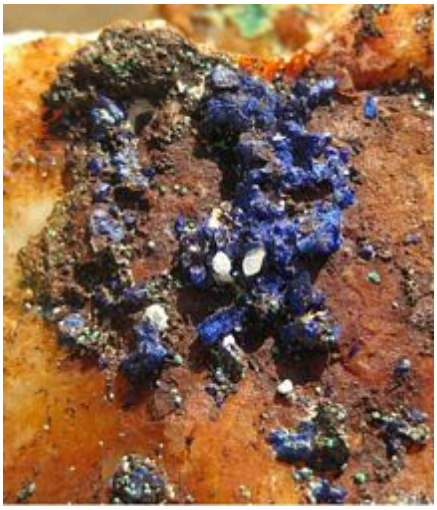

**Figure 1: Apsley azurite crystals FOV 20mm**

Crossing one crest, nearly stepped into an unfenced deep mine shaft. Must have been the only mine shaft we missed on our earlier exploratory expedition to Apsley in June. We had an overview of the mine site based on a map of mineral sampling printed from DIGS. Some of the party went further up the slope to the crest of the hill where two fenced shafts existed. In this area most members found a variety of minerals and garnets.

Apsley was a series of underground mines worked from 1875 to 1898 then intermittently to 1920. Working a skarn alteration deposit of pods of massive sulphides within disseminated mineralisation hosted in fine grained actinolite garnet and chlorite garnet skarn in a narrow sequence of metasediments within acid volcanic. The main gangue was quartz while the host-rock was schist skarn and chlorite schist.

Minerals to be found at Apsley include:

Actinolite, ***Azurite***, Biotite, Cavellite, Chalcocite, ***Chalcopyrite***, Cuprite, ***Galena***, Limonite, ***Malachite***, Manganese, Molybdenite, Pyrite, Pyrrhotite, Sericite, Silver, Sphalerite.

Saturday night had all the party enjoy dinner at The Oberon RSL.

Sunday morning saw us assemble and start near the junction of Beaconsfield Road and Soldiers Hill Road. The first stop was at the South Wisemans Creek Rehab site.

**Figure 2: Wisemans Creek South.**

**In search for pyrite cubes.**

A morning stop: Chips of azurite and malachite found above the road while down alongside Wisemans Creek was an area that had pyrite cubes 1-2mm square encrusted in laminated tuff. One group of specimens measures 4-5mm square, a rare find.

This area looked very bare until the first cube was found.

From here we continued onwards by car to the farm gate where the party moved to the cars with higher clearance. Three cars now continued along an overgrown bush track through three gates southwards for some three kilometres to reach the Phoenix mine site.

The party now moved into the main mine shaft area. It formed a pyramidal mound some 5 meters high capped with a steel grate covering the main shaft which went down 100 meters. Many specimens were collected here. The rehabilitated area went for some 700m north of the mine following a creek line. Again azurite and malachite were the main minerals found while the occasional specimens of arsenopyrite and some heavy minerals were also found. The highlight of the day was the discovery of a large boulder that had limonite cubes encrusted throughout its surface. It was the only boulder of this type found at the site. The sledge hammer was applied well and all the party collected some reasonable sized specimens.

**Figure 3: Phoenix Mine Limonite cube 4mm x 5mm square in situ.**

A small group explored two mine shafts further south but both proved barren.

Phoenix also had its own smelter and the party spent some time on the slag heap collecting multi composite glazed bricks of various hues and slag specimens of various shapes and flow formations together with glass-like chunks. The slag heap covered about half an Olympic pool area and was about 4 meters deep. The east side of the hill had been rehabilitated and grass and plants were growing successfully. Probably the only mine site where rehabilitation actually worked. Some good specimens of arsenopyrite and chalcopyrite were found in the grass.

The Phoenix Mines is an underground mine worked from 1895 to 1918. It was a massive sulphide mineralization, reported from the dump, pyrite and low base metals in silicified sericitic and chloritic fine grained tuff.

Major minerals included **arsenopyrite, azurite**, chalcocite, **chalcopyrite, galena, limonite**, **malachite**, lead carbonate, **pyrite**, sphalerite and tetrahedrite. The main gangue was barite, sphalerite and siderite while the host rock was tuff.

Three expeditions to the Oberon area had been conducted in 2014 with Glen Brown, Marion Ai Chiew Ong, Steve Pietrzak, Haley Bambridge and Peter Beddow, we all had a great time evaluating various sites. We have only covered a fraction of the mines and mineral occurrences in the Bathurst – Rockley – Oberon area. We will visit a few more isolated sites in the coming years. One of the main field trips in 2015 will be to the commercial quarries at Cows Flat.

All the sites visited by the Society are on private property and are working farms. The owners of both properties are part of the large Cash family in the district. There is a link to the Cash who had the Cash Essington mine we visited earlier in the year.