

reefs. The channels separating the islands are often over 200 feet deep.

*List of Mineral Specimens.*

Reg. No.	Description.
8424	Koolan Island, Yampi Sound, South side of M.L. 130, quartzite showing ripple marks.
8425	Do. Quartzite showing markings (organic remains (?)).
8426	Do. Conglomerate composed principally of iron ore.
8427	Do. Iron ore.
8428	Do. Iron ore showing iridescence.
8429	Do. Magnetic iron ore from South side of M.L. 132.
8430	Do. From South side of M.L. 132, sandstone, underlying iron ore on the North side.
8431	Do. South side of M.L. 129, vesicular iron ore.
8432	Do. Sandstone accompanying iron ore.
8433	Do. Conglomerate.
8434	Do. South side of M.L. 129 at sea level, micaceous schist.
8435	Do. South side of arm of bay, opposite M.L. 128, shales sandstone.
8436	Do. Ochreous bed.
8437	Do. Sandstone, $\frac{1}{2}$ mile North of M.L. 130.
8438	Do. $\frac{3}{4}$ mile North of M.L. 131, iron ore.
8440	Sunday Island, North side, gneiss.
8441	Yampi Sound, one mile South of Water Point, dark schistose rock.
8442	Do. One mile South of Water Point, quartz reef in dark schist.

On returning to Derby he proceeded, as soon as pack-horses were available, to the Federal Downs where wolfram had been found, of which he brought some bulk samples to head office, and prepared the following report:—

*Wolfram Find near Federal Downs Station, West Kimberley.*

"In accordance with instructions I proceeded after my return from Yampi Sound, as soon as horses and equipment were available, to the Wolfram Find with an aboriginal guide. The locality is about 70 miles north-easterly from Derby. At Mount Marmion a day was occupied collecting fossils from a calcareous zone at the base of the hill in the Upper Carboniferous beds; these fossils together with some samples of the limestone bands, which appear likely to afford good cement-making material, will be despatched by dray later on to Perth. The deep bore at the 67-mile on the Derby to Lennard Road was then visited and reported on, and the journey to the wolfram was resumed. The precipitous limestone range which forms the north boundary of the clay and sandstone plain was passed through by the valley at the head of the watercourse which passes near the Hawkstone Peak, when diorite and garnetiferous micaceous and chlorite schist hills appear. These schists contain numerous quartz veins which trend mostly in the direction of their foliation about 275 degrees and dip 80 degrees southerly. The hills are mostly steep, and in one of these about 350 feet high, comprising M.L. 146, the wolfram occurs crystallised out in the quartz veins which range from 3 to 15 inches wide, the wolfram crystals projecting from the side of the vein into the quartz matrix. The ridge of the hill is about

a quarter of a mile long in the direction of the quartz veins. The principal patch of wolfram ore is towards the west end of the hill and on the south side.

"Samples were taken from various parts as well as bulk specimens totalling 163lbs. A sample of wolfram and quartz from here was submitted by Mr. J. F. Taylor, the lessee, and the laboratory report dated 9th October, 1907, stated that there was 68.5 per cent. of tungstic oxide.

The show of wolfram is fair and it may be found that the various veins unite at depth. No developmental work however had been done but tools were brought on the ground while I was there by Mr. Armitage, who is Mr. Taylor's representative. The approach to the lease is along the valley-flat right up to the outcrop.

An assay for gold also has been made in the Laboratory and the report states that 'none was found, but some specimens of a green mineral which proves on examination to be scorodite (arsenate of iron). It doubtless results from the weathering of arsenical pyrites, which mineral will probably be found below water level in the wolfram lode.'

"I then proceeded westerly to Mondooma, passing along the same belt of likely mineral country to near Trig. 12 where some promising schistose and pegmatite rock occurs, the latter containing tourmaline, staurolite, and kyanite, the last named being a translucent pale blue mineral which when clear and of good colour is cut as a gem and it is therefore well worth further attention.

"To the westward of Mondooma, the schists with quartz reefs re-appear for about 3 miles; beyond this is an extensive plain with a few scattered granite hills. until the white quartzite mountainous Wyndham Range is approached near Obagooma. This white quartzite is similar to that occurring at Yampi Pass.

"Several bores have been put down by the pastoralists to depths of 150 feet and more, on the line of springs that occur on the flat plain 10 to 18 miles south from Obagooma, and a copious flow of good artesian water has been obtained."

He next was occupied with preliminary work in connection with re-gauging the Artesian bore discharges, but this was eventually taken over by the Public Works Department, when a progress report was prepared. For facilitating water supply information the boundary of the granite hills was sketched from the Canning River to St. John's Brook south of Donnybrook, a distance of about 120 miles.

Inspections and recommendations were made for mineral reservations on the Oakabella Estate and on proposed mineral resumptions in the Northampton district also on reputed coal measures at Lynton, and reports and inspections on the possibility of artesian water supplies at Cookernup and Capel; also report on coal near Serpentine and on an alleged gold find near Highbury.

*Reputed Coal Indications at Lynton, Northampton District.*

"I have to report that I visited the Lynton District in company with Mr. J. W. Acton, prospector. I drove out by the Nonga Road and Chearry Well (The Gardens) and saw the square shaft sunk many years ago by Mr. Gregory. It is about the centre of Loc. 2395 and is in friable sandstone with thin ironstone beds. The shaft is nearly filled in now and the dump showed no indications of any other material, but coal is said to have been found in it. I consider the report to be manifestly absurd.