

Limonite.—Reyburn's Lime Co., Ltd., operating on an area near Kamo, Whangarei, produced 835 tons of limonite, valued at £2,630 6s. 8d., during the year. This was mainly used by gasworks for purification purposes, and by farmers.

Okaihau Quarries, Ltd., extracted 383½ tons of limonite, valued at £1,036 3s. 1d., from an area situate at Okaihau, North Auckland. The mineral was largely disposed of to farmers.

It is understood that the limonites referred to above contain cobalt in minute quantities, and that this is a missing element in the so-called cattle-sick country of Taupo. Satisfactory results are said to be obtainable by using the limonite, both as a fertilizer and as a constituent of cattle-licks.

Silica.—Small quantities of silica were got from the following named places in the Wanganui district: Gilbert's Mine produced approximately 100 tons of an estimated value of £125, which was used by J. B. Gilbert and Sons, Ltd., in their pumice and sandsoap business. Tucker's Mine produced about 3 tons, valued at £3 15s.

Fuller's Earth.—Approximately 53 tons of this material were obtained from a property situate at Kamo, Whangarei, held by the executors in the estate of the late Alexander Crawford. The product was sold to Messrs. Thos. Borthwick and Sons (N.Z.), Ltd., the value being approximately £154.

Diatomaceous Earth.—Seventy-six cubic yards, valued at £69 14s., were obtained from Mr. S. C. Crawford's property at Kamo, Whangarei, and sold to the Auckland Gas Co. and the Neuchatel Asphalte Co.

Sulphur.—No work was done on any of the sulphur deposits during the year.

ACCIDENTS.

It is pleasing to record that no fatal and only one serious non-fatal accident occurred in the mines and quarries of the district during the year. The victim of the serious accident referred to was W. H. Owen, employed at the Wealth of Nations Mine, Tairua, who was chopping wood for a tramway when a chip struck him in the eye and resulted in the loss of same.

LABOUR DEPARTMENT'S GOLD-MINING SCHEME: SUMMARY OF RESULTS OF SPECIAL INVESTIGATIONS.

Sylvia Crosscut, Thames.—This crosscut had already been driven some 447 ft. by subsidized men when on the 8th April, 1938, the Labour Department took over with the object of driving a further 375 ft. to intersect the Sylvia Reef on its southern trend. A reef 6 in. wide and assaying 3½ dwt. of gold was cut at a distance of 475 ft. from the portal. The main reef showed 7 ft. of quartz, intermixed with country rock at 725 ft. The crosscut was continued a few feet past the reef, when it was decided to drive south on the reef to see if values would improve. To date a distance of 15 ft. has been driven, but values are still low.

Commissioner Crosscut, Thames.—In 1936 the Labour Department, in conjunction with the Mines Department, commenced prospecting-work in the Commissioner Claim, Thames. The work proposed was the driving of a crosscut to take the place of the old Balmoral crosscut and the reopening of the old main drive to the north from its intersection with the new crosscut. It was considered probable that several payable reefs would be intersected in the crosscut, and the Waiotahi Reef at the end of the ground was supposed to contain values of 10 dwt. of gold to the ton. The work was done under contract, and the crosscut was driven a distance of 720 ft. before breaking into the level on the Waiotahi-Cambria Reef. This old level was picked up, on the line of reef, and retimbered for approximately 480 ft. The country at the end of the ground proved to be faulted and the reef small and low in value. The drive was pushed on another 20 ft., and 60 ft. of crosscutting east and west was done, but nothing of value was located. A winze was sunk on the reef, under where the values occurred overhead, to a depth of 23 ft., but it proved to be unpayable. The only encouraging result located during the operations was the cutting of two reefs, both 3 in. in width, in the main crosscut, and they assayed respectively £21 and £24 to the ton.

WEST COAST INSPECTION DISTRICT (G. W. LOWES and A. W. TURNER, Inspectors of Mines).

QUARTZ-MINING.

Marlborough County.

Lode mining in this district is now almost extinct; the Golden Bar treatment plant has been dismantled and the licenses have been surrendered. Intermittent attention has been given to some quartz lodes in the district by prospecting, and, while nothing of a distinctly payable nature has been located, some of the occurrences are border-line propositions and worthy of further investigation.

Buller County.

Mokihinui District.—Lady Agnes Workings: A total of 360 ft. was driven on the new low level, 116 ft. of the length being in reef up to 36 in. in width; consistently low values prevailed, and the mine was abandoned.

Swansea Lode: This lode is situated north of the Red Queen on the opposite side of the Mokihinui River, and was worked in the earlier period of the Buller County's mining history. The old level was cleaned out for sampling purposes, but the work was not completed owing to the necessity for concentration on the Red Queen lode, which had been located by crosscutting from the main level.

Red Queen Mine: A level midway between the old workings and low level was driven on an ore-channel believed to be the continuation at depth of the narrow lode worked from several higher levels. A crosscut put out to the east from 64 ft. located the true channel, which was driven on for 126 ft. on a lode which contained specimen quartz in several places and payable values for the greater part of its length. A low level 513 ft. in length driven many years ago was cleared out, and a crosscut in the same direction cut the lode at 35 ft. The leader was 7 in. wide and carrying visible gold, and when developed will undoubtedly open up to the usual width of 12 in. to 18 in. exposed in upper level. The development of the low level, if widths and values equal to those on the top level are realized, will give a substantial tonnage of payable rock. The unworked backs equal approximately 160 ft. on dip of ore-body.

Swastika Lode: From the upper level of the Red Queen Mine a crosscut was extended 132 ft. to the east, with the object of locating a larger low-grade ore-body exposed on the surface. The crosscut was evidently not far enough south to achieve its purpose, and the crosscut in the low level which intersected the Red Queen lode is being continued and a distance of 56 ft. driven in favourable country.

Lyell District.—Reid's Reef—No. 1 Level: Driving was continued to where the reef pinched out at 197 ft. An attempt to sink a winze was frustrated by drainage difficulties; consequently, another level was started to prove the possible downward continuation of the ore-body.

No. 2 Level: A distance of 265 ft. was driven without locating the lode, which had been subject to strong faulting between the levels. A crosscut was put out at 174 ft. from portal and at a distance of 35 ft. entered into what was considered to be the ore-channel before development of this section ceased.

Alpine Mine.—No. 7 Level: The main crosscut and level, 2,614 ft. in length, were cleared out and retimbered where necessary. Ventilation of the mine was provided for by installing a fan, Pelton wheel, and the necessary conduits for conveyance of air to the workings.