61 C.—3.

2,521 tons of quartz was crushed, for a yield of 795 oz. 16 dwt. bullion, valued at £2,386 16s. 8d.; and 1,000 tons of tailings treated by the cyanide process, for a yield of 1,215 oz. 10 dwt., value £797 10s. 6d.: total value, £3,184 7s. 2d. The low-level adit near the battery has been driven 332 ft., and is now 1,782 ft. in length. It is intended to connect this as early as possible with the level above in order to effect communication with the more distant portions of the mine, and obviate the necessity of carting the quartz from the other levels, which is found to be very expensive. The mill consists of twenty head of stamps used for wet-crushing and amalgamation, whilst three vats (two each of 25 tons and one of 50 tons capacity) are used for the cyanide process. Sixty men were employed. Mr. W. H. Argall, the general manager of the company, gives the following description of the mine-workings and of the machinery employed for treatment of the ore:—

Since the present company started operations the following work has been accomplished: At the battery, or main-adit, level a distance of 1,450 ft. of cross-cutting has been put in repair, and a further distance of 610 ft. has been driven on the line of reef. The lode where last passed through showed a width of 36 ft. at 638 ft. from the surface. I may mention that this adit or tunnel is being made large enough to admit of a horse or small locomotive being used, and when completed will be the main outlet for the whole of the mine. The principal work at present being carried on is at the Dunedin level, which is 119 ft. above the main adit. A cross-cut of 283 ft. has been put in, and both the City of Dunedin and the Star of California reefs have been intersected. On the City of Dunedin lode 1,188 ft. has been driven, and 66 fathoms of stoping done. The reef varies from 2 ft. to 16 ft. in thickness, the ore being of a free-milling nature. On the Star of California reef 73 ft. has been driven, the lode showing a width of 3 ft. The Wild Missouri, or On the Star of No. 4, drive is 70 ft. above the Dunedin low level. A considerable amount of work has been done in this drive. 1,021 ft. of cross-cutting is now opened up, together with 1,723 ft. driven on the line of reef (Californian reef). A block 200 ft. in length and 180 ft. in height has been stoped out. The reef varies from 1 ft. to 8 ft. in thickness, and may be considered of a complex character. On the Day Dawn line of reef two levels have been opened up. In No. 1, 249 ft. have been driven; No. 2, which tests the reef at a depth of 330 ft. from the surface, has been carried along a total distance of 507 ft., 307 ft. of which are on the line of reef. On this line 196 fathoms of stoping has been done, the lode all through varying from 2 ft. to 7 ft. in width. This ore is also of a complex nature. The battery consists of forty head of stampers, driven by an overshot water-wheel. At present only twenty head of these are in use. The mode of treatment of the ore is by wet-crushing and passing over amalgamating plates and blankets. The blanketings are then ground in berdans, of which there are six in use. The tailings are caught in buddles, and afterwards subjected to cyanide treatment. The cyanide plant consists of three steel vats, with necessary sumps, extractors, and afterwards and all statements. dissolving-tank, and solution-pump, capable of treating 100 tons per week. At the different levels there are fully 30,000 tons of ore in sight.

City of Auckland Mine (Area, 100 acres).—This mine comprises portion of the land formerly known as the Sylvia Mine. The old adit has been cleared for a length of 1,100 ft., and a shaft is

being sunk to test the reef at a greater depth. Seven men were employed.

Kaiser Mine (Area, 49 acres).—This mine is also a portion of the old Sylvia property. Prospecting operations were carried out on various reefs, but no gold was struck until the beginning of February last. The new reef, when cut, was 2 ft. 6 in. in width for the first 35 ft., and was composed of clean free-milling ore; for the next 20 ft. the reef is highly mineralised, containing galena, iron-pyrites, copper-pyrites, and zinc-blende. The quartz is sometimes rubbly and at other times solid. Two parcels of ore were treated—18 cwt. at the School of Mines, for bullion of the value of £5 15s.; and 15 cwt. by Fraser and Sons, Auckland, for a value of £6 7s. 10d. Six men were employed.

Vulcan Extended Mine (Area, 186 acres).—This land is situated at Upper Tararu, and includes the ground known as the Vulcan, which was worked by a company in the year 1870. A battery was on the ground when formerly occupied, and a large quantity of quartz crushed, which yielded profitable returns. The mine is now being prospected by the Thames Exploration Syndicate, which holds an option on the property. There are several known lines of reef traversing the land, all gold-bearing. Six men are employed in driving a prospecting tunnel and cross-cutting near the surface. A parcel of 1 ton of quartz was crushed at the Thames School of Mines, for a return of 4 oz. 11 dwt.; value, £11 17s.

Argosy Mine (Area, 183 acres).—This mine is situated on the ridge to the northward of Tararu Creek. A considerable amount of prospecting has been done, and four cross-cuts driven—No. 1, 95 ft.; No. 2, 40 ft.; No. 3, 140 ft.; and No. 4, 40 ft. Several gold-bearing reefs have been cut, averaging 2 ft. in thickness. The prospects are encouraging, and would warrant more exhaustive

exploration. Eight men were employed.

Prospecting operations were also carried on in the Golden Opportunity, Bonanza, Waratah, Temple Bar, Scottish Chief, Vulcan, Tararu Extended, Ake Ake, Conservative, Nuhaka, Clunes,

Star of Tararu, Mount Taylor, and Lomas.

Scandinavian Mine.—This mine was worked for a considerable part of the year by the Scandinavian Company. A crushing of 145 tons of quartz yielded 55 oz. 1 dwt. of gold; value, £154 2s. 9d. Negotiations are in progress to dispose of this mine to an English company. Seven men were employed.

Kuranui District.

Kuranui Mine (Area, 15 acres).—A considerable amount of work was done in driving at the 70 ft. level, and prospecting on the Oddfellows and other reefs. A parcel of 20 tons crushed yielded gold valued at £4 14s. 5d. Four wages-men were employed.

The Magazine and several other claims have been prospected.

Kuranui-Caledonian.—This mine comprises the Hazelbank and Comer's Kuranui. A tramway has been constructed from the Caledonian shaft to the battery formerly owned by Mr. Comer, and