NORTH WEST VICTORIA HISTORIC MINING PLOTS (MARYBOROUGH)

1850-1980

Historic Notes

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MARYBOROUGH HISTORICAL NOTES (1)

1899

Maryborough gives its name to the largest of the Victorian mining districts. The only part of the Maryborough mining district, which has proved to be auriferous, is its southern portion. All the large mallee countries of Weeah, Tatchera, Karkarooc, and Mellewa, which are also included within its boundaries are, so far as is known, absolutely non-auriferous, although as these large plains are generally held to be the floor of an ancient sea it is possible that borings may yet prove the existence of alluvial deposits at certain depths. Gold-bearing wash has been found in the rich agricultural land about Swanwater, and loaming and trenching in the early days about Mount Jeffcott have shown the existence of gold in these districts approaching the mallee. There is no doubt that the long range of the Pyrenees, with its branching spurs more or less intersected with reefs, runs out in many lines into these widely extending plains.

MARYBOROUGH PROPER. A Great Alluvial Field:

As Bendigo furnishes the best illustration of a great reefing field, so Maryborough stands foremost as a great alluvial field. Of deep alluvial leads it may be said that they conform roughly to the course of the rivers of today, and were without a doubt the ancient waterways. As the rivers took their course through the valleys they acted like giant sluices, and where they passed through the auriferous gravels, concentrated the gold, bearing off the lighter material once more, to eventually form the great tertiary plains which are so conspicuous a feature of the northern area of the colony. The tributaries likewise acted as conductors and concentrators of the gold-bearing gravels, and where a junction was effected with the main system, especially if it occurred within the limits of an auriferous belt, a larger amount of gold was deposited. The gold-bearing areas through which the old rivers passed having a strike nearly north and south, and the rivers themselves having a similar trend, it followed that wherever the latter obtained a moderately straight run on an auriferous belt there would be found a greater quantity of gold then in those portions where it let the bold-bearing area; for as long as it kept within the auriferous limit the lead was not only enriched by the free gold concentrated by the previous action of the sea, but the rivers also contributed their quota by the disintegration of the reefs they intersected at right angles or along their course. Where the lead passed beyond the auriferous belt there would be deposited less gold than within it, and only the fine particles carried thither by the force of the current, but inside that area the probabilities of heavy accumulations of the precious metal were very great. 1

1854-6:

Mr E. O'Farrell, formerly Chairman of the Mining Board of the Maryborough Mining District, has communicated some information relative to the gold workings in his district. He says: On arriving at Simpson's Ranges, in June 1854, seeking for new fields, I and my three mates found a prospecting party at work at a place since known as the White Hills. At that time there were only thirty or forty men in addition to the prospectors, and these were engaged principally in stacking or surfacing. No water was available to wash the stuff at any place nearer than Bet-Bet and Deep Creek—distant three to five miles from the auriferous ground. The hill was not of great extent, and situate in a large flat almost surrounded by a blind creek. The sinking was very difficult, being through whit cement. One party bottomed on the edge of the creek and carried a drive towards the hill—where they picked out nuggets varying in weight from one to ten ounces. All the ground was soon marked off in claims, though the sinking was hard and difficult. It was only by the use of gads that we could get through the hard cement, the depth of which was from ten to thirteen feet. It occupied parties from fourteen to twenty-one days to sink through this stratum. The bottom was a splendid soft white pipeclay, and though the washdirt taken out at that time was only some six or nine inches, yet the nuggets which could be picked out paid the men well. The next scene of operations was a hill about one mile south of the first gold workings, and on the same flat; about two miles and a half from the site of the town of Maryborough. In its character it was similar to the first. The depth of sinking was from sixteen to twenty-four feet and through hard cement mixed with large white boulders. The washdirt taken out was only some four or six inches—but in it were found a large number of splendid nuggets thickly scattered over the white pipeclay bottom. In consequence of the distance from water there was little or no dirt washed from either of the hills. One load of forty small buckets washed by us yielded 3 oz. This was not considered at that time sufficiently remunerative, as we had to pay £2 for the carting of each load. Payable gold was discovered just at this time by another party, about three miles higher up, in shallow ground, about three feet deep; and to that we removed. Claims were marked out rapidly—a rush set in—and it was fed by parties returning disappointed from the shallow diggings at Avoca. Gold was found in almost every hole—and within a period of less than three months from the time when I first saw the prospectors' tent near the site of the town of Maryborough, there were at least thirty thousand miners on the ground. The rush after this time increased. The depth of sinking varied from four, six, eight, ten, fourteen, twenty, up to thirty-five feet, at which depth it began to bear the name of Blackman's Lead.

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Another branch of the same lead extending south towards Amherst—which was very rich, and in depth not exceeding seven or ten feet—was traced down the flat, where it narrowed from fifteen or sixteen claims of twenty-four feet each to a width of four or five claims towards the point of its junction with the Blackman's Lead. The value of those leads is well known, but I, myself, witnessed prospects from one shovelful of dirt taken out of the gutters of 18 or 20 oz. The same stuff washed on an average for about two feet in thickness as much as 24 and 36 oz of gold to forty small buckets. This was out of the Main Lead gutter-not by any means as rich as the Blackman's Lead, which yielded nuggets of all shapes and sizes. The sinking on both the leads was easy ... The washdirt at that time taken out varied from one foot to three feet in thickness—but since then the strata have paid puddlers and others, in many places, from the surface to a depth of twenty feet. It was thought that the ground at or below the junction of the two rich leads would be exceedingly valuable, but such was not the case. At the junction the ground was poor for nearly half a mile, and it was only where the lead took another bend and left the side of the range that the gold again became plentiful. This part was named Commissioner's Flat. Here the sinking became deeper, varying from fifty-five to sixty-five feet, the gold being scattered; the lead from fourteen to sixteen claims in width; the washdirt from two to five feet in thickness; and the average yield from four to ten ounces to the load of forty American buckets. About the year 1855 the miners left Maryborough to seek better fortune on the south side of the Dividing Range, at a place named Alma, where gold was obtained in an extensive flat at a depth of five feet. This place is about two and a half miles from Maryborough. Some of my acquaintances made as much as £500 and £800 out of claims measuring only twenty-four feet. The sinking increased from five to seventy-five feet, and finally the flat made a junction with the Balaclava and Portuguese Leads—two very valuable leads within five miles of Maryborough. These, like other leads in the district, were first opened on the surface, and were traced about two and a half miles; being in some places only three or four claims in width, and in others from twenty to thirty, widening towards the junction with the Alma Lead. The sinking on these leads, as well as the Adelaide Lead, Waterloo Flat, Inkerman, and Slaughter-yard Hill Lead was all of a similar character... The washdirt averaged from six inches to three feet in thickness, and the yield was from 1 oz to 4 oz to the load. While thousands were rushing about and sinking on the Alma, Balaclava, and other leads, hundreds betook themselves to prospecting the shallow gullies near Maryborough, most of which empty themselves into the Carisbrook or Deep Creek. The principal gullies are Madman's, Deadhorse, Flagstaff, Shellback, Oldman's, Mosquito, Blucher's, Smoky, Whitehorse, Arnold's, Ironstone, Golden Point, and Nuggetty-all of which were extremely rich, but for the most part only one claim in width. The depth of sinking varied from mere surfacing to twenty feet. In some of these gullies nuggets were got which weighed upwards of 700 oz. In all the sinking was easy, through clay and gravel, except in places where the ironstone cement was found. After the lapse of two years, during which period many rushes had occurred, Maryborough was almost deserted; but another new and valuable discovery was made at Chinaman's Flat, about one mile and a half from the spot where gold was first found at Maryborough. The locality was on the Bet-Bet or east side of the Dividing Range. Thousands again flocked to the spot. The large flat was found to extend towards the Bet-Bet for a distance of eight miles, and the country was discovered to be rich in quartz reefs as well as alluviums. The famous Leviathan Reef is now [1869) worked as successfully as when first opened. The gold in this lead, as in most others, was discovered on the surface, and gradually traced into deeper ground. The lead in some places was of great width, the sinking being principally through white clay or mullock, until within a few feet of the bottom, where it became a heavy wash of white gravel and boulders. The depth of washdirt at that time taken out was from two to five feet, and the average yield over 4 oz to the load. At a distance of five miles from its source the lead increased in depth to 130 feet, and much water was met with. This so far obstructed the operations of the miners as to prevent the exploration of the lead, though it is known that the washdirt is rich in gold. The same difficulty presented itself in following the course of the Alma, Balaclava, and other leads; and was not overcome until some of the Ballaarat miners settled in the district and introduced horse-whims. In many places even these were unequal to the work of keeping down the flow of water, and subsequently better machinery was introduced.²

1855-7:

VALE'S REEF—Situate between Avoca and Lower Homebush, three-quarters of a mile from the celebrated Working Miners' claim. It was discovered in the year 1855. The hill in which it occurs contains four separate and well-defined lodes, viz., Vale's reef, Eastern reef, Western reef, and Yankee Bill's reef. In 1857 machinery was placed on the ground, but the stone got poorer and poorer each successive crushing, until the claim was abandoned in 1859, the shaft then being 210 feet from the surface. It remained in that state until the end of 1878.³

E. O'Farrell, quoted in R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, pp. 96-8

Monthly Progress Report, November and December 1899, Geological Survey of Victoria

1855-9:

FRYING-PAN REEF, Avoca.—A southern extension of Vale's, probably. It was discovered about the same time as Vale's by four Germans who, it is said, obtained from 3 to 4 ounces to the ton for about four years. When the Ararat rush broke out, the Germans left for Ararat and, it is believed, died there.⁴

1856:

Township/Hogg's Reef, Avoca—The reef known as the Township or Hogg's reef is situate to the east of the township of Avoca, a distance of 20 chains. It was opened up in 1856 by a shoemaker named Hogg, who obtained as much as 4 ounces of gold to the ton from the stone. Crushings averaged 3 ounces to the ton, down to a depth of between 60 and 70 feet. From this depth the stone got poorer and poorer, and at a depth of 80 feet was abandoned. Since then it has been taken up by several parties, none of which could make it pay. Meanwhile, scores of shafts were sunk north and south of the prospecting claim, none of which proved remunerative. ⁵

1859:

LAMPLOUGH LEAD, Avoca—First rush to the lead in 1859. It was worked for a distance of nearly 3 miles to where it ran into the water and was abandoned.⁶

August 1859:

MARYBOROUGH DIVISION (D. O'Leary, Mining Surveyor).

The population is as follows:

Alluvial miners: 1,200 Europeans, 1,390 Chinese; Quartz miners: 450 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines, 5—87 horse-power; Horse-puddling machines, 240; Whims, 8.

Ouartz mining—Steam engines, 10—194 horse-power.

Approximate value of all mining-plant in the division, £31,420.

The dullness in mining operations which prevails throughout this division might fairly be attributed to two causes:

- 1. The Lamplough and Kingower rushes.
- 2. The scarcity of water.

Diggers have now in the vicinity of Maryborough to pay for water for domestic purposes at the rate of 4s per cask of 30 gallons, carted from the Deep Creek. Had they a good supply of water at their command, the diggers are few who could not have realised each successive Saturday a good week's wages. Scarcely a day passes without inquiries being made by the owners of puddling-machines as to the securing of their ground until the rain comes.

Quartz Mining—This branch of mining seems to have suffered less on account of the neighbouring rushes, and were it not for the desertion of a few unsettled miners, who have been able to secure their claims by registration, no change could be perceived. On England's hill (Cockatoo) a new reef has been discovered, and in the prospectors' claim there are five distinct lodes visible on the surface within a breadth of 300 yards, running parallel to each other. The surface quartz realises 3oz per ton... In the engine-shaft (for instance of Messrs Costick and Co. White Horse Reef, near Amherst, now sunk to a depth of 230 feet, there are three separate leaders. 7

August 1859:

AVOCA DIVISION (Robert English, Mining Surveyor)

The mining population is as follows:

Alluvial miners: 15,750 Europeans, 1500 Chinese

Quartz miners: 190 Europeans. The machinery is as follows:

Alluvial mining—Horse puddling machines, 71; whims, 2. Quartz mining—Steam engines, 4—34-horse power.

The approximate value of all the mining plant in the division is £15,800.

In consequence of another rich and payable lead having been discovered at the Lamplough Diggings, the neighbouring gold-workings, with the exception of St Arnaud and Four-mile Flat, in my division are almost abandoned by the mining population, those only who apparently are making more than a good living being stationary. Lamplough at present is the grand attraction; hundreds of miners are arriving daily from the more remote fold-fields. The yield of gold, together with the large extent of the already proven auriferous ground, indicates that the Lamplough presents every appearance of being the largest rush we have yet had in Victoria.

Monthly Progress Report, November and December 1899, Geological Survey of Victoria

Monthly Progress Report, November and December 1899, Geological Survey of Victoria

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Mining Surveyors' Reports, August 1859

An area of several miles of virgin ground lies between this, on the south-west, and the Amphitheatre, in a north-westerly direction, and to where the workings are at present trending there is a continuation of the same wide flat country, extending in length several miles, and in width from the Avoca River to the base of the Pyrenees; and now that a large population is in the district, should these diggings be systematically worked, several other contiguous small leads, as well as the Avoca Deep Lead, must, at a point not far from the Avoca township, effect a confluence. The original prospectors at the Lamplough still continue to find rich ground. The last washing that I ascertained from their ground was 9lb of gold from five loads of dirt. Further down the same workings, another claim yielded from some loads only a few dwts; whilst other loads from the same gave as many ounces, thereby proving the patchy character of the ground. The second lead, or workings, which has been the principal cause of the present favourable reaction at the Lamplough, is situate upon a tributary of Rutherford's Creek, having its rise in a belt of ranges, called the Green-hills. For a considerable distance the lead is found to pay 30 claims wide. I have visited some of the underground workings, and find that the miners are only driving around their boundary lines, or what is generally called fencing in their ground. Few are doing anything yet upon this lead, but putting in main drivers. [Mr English has furnished a plan of the 'Business Township', and the leads above referred to...]⁸

Sept. 1859: MARYBOROUGH DIVISION

The approximate number engaged in mining are as follows: Maryborough

Maryborough Main lead	170
Black Man's Lead	80
White Hills	200
Chinaman's Flat	60
Balaclava and Alma	220
Sundry small gullies	120
Quartz miners	110
Quartz crushers	8
TOTAL	968
Amherst	
Back Creek	7,500
Kangaroo and Long Gully	550
Daisy Hill	150
Adelaide Lead	250
Mount Greenock	100
Gibraltar, Golden Point & 4-Mile Flat	120
Small gullies	60
Quartz miners	90
Quartz crushers	44
TOTAL	8,864

There are 7 steam pumping-engines in this division, of the aggregate of 108-horse power, of which 6 are at work, and 1 idle. There are now 13 quartz-crushing machines, of the aggregate of 203-horse power, and of these 3 are in course of erection; and there are 445 puddling-machines, each of one-horse power, and of these there are 85 idle. Back Creek-On this gold-field during the present month there have been some further proofs of its claim to be considered a first-class gold-field, and now no doubt can be entertained of its permanency. Lately, gold has been discovered at three distinct points adjoining the recent workings, the result of which is the opening from those points of three separate leads under the frontage system. The first two proclaims, viz., the Black Lead and Union Lead, are situated in a beautiful valley, extending along the Back Creek in a westerly direction, one end of which is a likely basin, immediately on the west side of Scandinavian Lead. On the north side of this basin is the rich claim called Prince of Wales, in which a valuable gutter had been discovered, and traced in the direction of the basin; this, as well as other favourable indications, have induced the miners to have the Union Lead proclaimed under the frontage system. The Black Lead commences in the Flat, 20 chains southwest from Sault's Hotel. The claims, as bonded, are amalgamated. The washdirt in those claims varied from 5 to 6 feet in height, and in Nos 2 and 3 it pays at the rate of 4oz to the load. Nos. 8, 9, and 10, reach the Government Reserve, which encloses three claims, or 360 feet, along the supposed course of this promising lead. Here the miners are not at present allowed to sink, which has created much indignation. The third lead, called the Rocky Flat, is not at present so great a favourite. The prospectors are as yet the only party who has bottomed, and the yield of their wash-dirt in the shaft was a little over 1 dwt to the tub.

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On the three leads 64 claims have been already taken up, and each claim must, by our by-law, have six working men. It follows that 384 bona fide miners are now employed at Back Creek under the frontage system. Mount Greenock. At the base of this hill, on the north-side, there are about 100 miners busily employed mining in a paddock, the property of a Mr Ambrose, who it appears has arranged with the miners to receive from each 3s per week for surface damages. In the paddock, on the sloping side of the hill, there are several holes bottomed within a few feet of, and on a line with, the fence. Outside the fence there is a surveyed road, under which a gutter has been traced from the inside. This discovery created, as usual, a little rush outside the fence. In the meantime the Warden insisted that the road, though not yet open, should not be undermined; however, after some time, that gentleman allowed parties to sink on it, on the payment of £8 from the holders of each claim, as a security for repairs. During this process the 'insiders' lost no time in gutting the road, leaving the 'outsiders' nothing to sink for. As soon as they discovered that their wash-dirt had been converted into headings, they immediately lodged their complaints with the Warden. The case is still pending. I am unable to ascertain the quantity of wash-dirt, having no other source for information than the 'insiders' from whom I could derive information, and they have an object, of course, in concealing it's richness. At a considerable elevation above the fence and road there is an extensive tableland, extending northerly, with basaltic rock cropping out over the surface. There are here several prospecting holes being worked, and the prospectors entertain high hopes of the result of their labour. Quartz Reefs. Although the quartz miners seem steadily progressing, it would appear, during the present month, that this branch of mining has not been pursued with the usual energy. Those who have applied for leases are awaiting the result, while others hold on until the new quartz crushing-machines are in active operation, expecting that the charge for crushing will be much reduced.⁹

Sept 1859: AVOCA DIVISION

The population is as follows:

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Laropeans			
-	Avoca Main Lead	255	(150 Alluvial mining, 105 puddling)
	Four Mile Flat	150	(120 Alluvial mining, 30 puddling)
	Petre's Diggings	600	(Alluvial mining)
	St Arnaud	300	(180 Quartz, 100 Alluvial, 20 puddling)
	Mountain Hut	1,330	(1,300 Alluvial mining, 30 puddling)
	Amphitheatre	2,255	(2,200 Alluvial, 40 puddling, 15 sluicing)
	Green Hills	50	(Alluvial)
	Rutherford's Creek	80	(20 Alluvial, 6 Puddling, 14 Sluicing)
	Township Reef	5	(Quartz)
	TOTAL	5,025	(185 Quartz, 4,580 Alluv, 231 pud, 20 sluicing)
Chinese			
	Avoca Main Lead	800	(500 Alluvial mining, 300 puddling)
	Four Mile Flat	50	(Alluvial mining)
	St Arnaud	620	(550 Alluvial mining, 70 puddling)
	Amphitheatre	80	(60 Alluvial mining, 20 puddling)
	TOTAL	1,550	(1,160 Alluvial mining, 390 puddling)
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Total of Europeans and Chinese, 6,575.

Note—This table comprises only those actually engaged in mining. I estimate the total population at 8,500. The whole is the result of my own observation. On the Avoca main Lead, which is principally occupied by puddlers, I cannot note any material change. Those employed, I am credibly informed, are all doing remarkably well. They are carting away the alluvium from the surface to the bedrock, a depth of from 7 to 15 feet, and washing the whole by the slow and inefficient process of the horse-puddling machine. An excellent opportunity here presents itself to a company for a bona fide investment, a certain percentage on which might safely be calculated upon, by washing the whole of this lead (which is from five to eight chains wide, and proverbial for its rich deposits), with the improved process by steam. An abundant supply of water is available within a short distance, at the lower portion of this lead, where also a good lead of gold is known, still unworked. Individual enterprise has relinquished the working, in consequence of the superabundance of working. At the Amphitheatre, mining is in rather a retrogressive state, and the population is slightly on the decrease, partly in consequence of a rush having taken place to Fiery Creek. The rush on the Amphitheatre flat, caused by the finding of a 28oz nugget, does not appear to have been attended with favourable results, as none of the adjacent claims have been able to find any payable ground. At the Mountain Hut mining is in the same state as detailed in my last report. At Petre's diggings the population is slightly on the increase, the whole being able to earn a good livelihood. The sinking is easy and shallow, and the yield of gold from 1/2oz to 2oz per load.

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At St Arnaud mining is more of a settled nature than at any other place in the district, in consequence of the workings being principally in quartz. At the old alluvial workings, which are distant two miles and a half from the principal quartz mines, near the township, there is a number of Chinese employed, mostly in working horse puddling machines. They are taking the whole depth of the lead (alluvium 15 feet) down to the bedrock, and from what I could ascertain, the whole would pay 1dwt per load. ¹⁰

January 1860: MARYBOROUGH DIVISION

The mining population is as follows:

Alluvial miners: 1,150 Europeans, 1,330 Chinese.

Quartz miners: 430 Europeans. The machinery is as follows:

Alluvial mining—Steam engines winding, pumping, puddling, &c., 5—87 horse-power;

Whims at work and idle, 8; Puddling machines at work, 80; Puddling machines idle, 160.

Quartz mining—Steam engines pumping, winding, crushing, &c., 10—194 horse-power.

The little that has been doing in alluvial mining by those who have not, or perhaps could not follow the rushes, is mostly in the shallow sinking in the old leads and gullies scattered throughout the division, and which have been tried a dozen times over. In the face of this fact it might appear astonishing why the miners do not sum up courage enough to try the deep ground in several of those old leads which they know full well contain gold in no small quantities. There are the Alma, Chinaman, and Havelock Flat, wet leads, all proved highly auriferous, and which require only some efficient system of working to prove highly remunerative; but it is to be regretted the diggers cannot, without the assistance of some capital, embrace those opportunities, it being well known that seven-eighths of the mining population here have been struggling for a mere subsistence, nevertheless some attempts have been made by a few persevering diggers to discover those lost leads, attempts which have as yet proved ineffectual, no doubt on account of the limited means employed. Cockatoo-This is the only portion of the division in which any energy seems to prevail. The Caledonian Company, after contending for seven months against an immense body of water (5000 gallons per hour) has at length discovered payable gold in a gutter at the end of a drive 40 feet long. About a mile south of the shaft of the Caledonia Company, between the paddocks of Messrs Wells and Catchpole, a somewhat novel attempt is about being made by a party of miners to lift the water out of a chain of ponds in this portion of the Back Creek for sluicing purposes. First, it is contemplated (see tracing No.2) to lift the water from the creek at (a) by means of common lift pumps to an elevation of 39ft 6 in. at (b); from (b) to (c) the water will run in an open race by its own gravitation; and again, a similar process is to be resorted to at (c) as that employed at (a), to lift the water to (d), another elevation of 31ft 6 in. Should the project prove successful, the parties could command for washing purposes the surrounding gullies, and several rich surface patches recently discovered in this locality. Mining—This has, though still attracting considerable attention, received no fresh impulse. Another lease of 25 acres is about being obtained by a new company, called the Shamrock Reef Mining Association. The Shamrock runs through the middle of this block, which is situated between the Mariners' and Amherst road. It is a new reef just about being prospected, on the result of which will depend the future success of this mining association. 11

January 1860: AVOCA DIVISION

The mining population is as follows:

Alluvial miners: 15,900 Europeans, 1,300 Chinese.

Quartz miners: 200 Europeans.

Note—These tables are the result of my own observation (except the St Arnaud return, which was furnished by a miner from that place), and comprise only those engaged in mining. The total population of the district I estimate at 25,000. I have the honour to report that the general state of this district since my last presents no change worthy of note, excepting St Arnaud and the Lamplough Diggings. At Lamplough, the two leads are being steadily worked, but do not progress in new ground so rapidly as heretofore. The trend of the deep lead or working, has varied considerably, also in its width of working; not more than six chains wide now seem to be remunerative, and from the tortuous course the lead has now taken is very difficult to trace. A branch working from this, five and six chains wide in a north direction, heading into what is termed Wise's paddock, and now contiguous to the boundary of Mr Hodgkinson's pre-emptive section, is paying on an average one ounce and a half to the load.

A number of claims have also been taken by the miners upon this pre-emptive section. The conditions upon which they occupied the ground were, that seven shillings each claim of 40 feet,

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be paid; that area being secured to them or one month, unless they choose to sink, when one pound additional was charged; an arrangement which gave general satisfaction amongst the miners. Very few paid the pound for sinking, and those who did, have not succeeded in finding payable ground. Where the lead was expected to continue its course, it is generally believed now that the auriferous ground lies in a more northerly direction, passing through another portion of the pre-emptive section, which has recently been surveyed, and laid out in streets and building allotments for a township. Each of these leads or workings have considerably diminished in their width of workings; consequently the surplus miners have in various directions been prospecting, some in new ground, others trying the old contiguous workings. Several prospecting holes have been sunk in various parts of the flat between here and Avoca; in some of which gold has been found, yet not in sufficient quantity to induce them to continue. The bona fide mining population, these last few days has been leaving in small numbers, I believe principally for the Inglewood diggings. Lamplough at present is unquestionably over-populated, especially by those in business pursuits; there appears to be nearly one place of business to each miner's tent. Considerable quantities of wash-dirt remain upon the Deep Lead, awaiting, I presume, the wet season, carting being from five to eight shillings per load. The water for washing purposes near the diggings is nearly exhausted, although a plentiful supply is yet within three miles of Lamplough. The character of the gold obtained is very coarse and nuggetty. I was shown several nuggets last week (twenty in number) obtained from the Deep Lead by various parties, weighing from six to sixteen ounces each. Upon the first lead or working where the depth of sinking is about nine feet, auriferous drift is now being worked, varying in thickness from one to seven feet, yielding on an average one ounce to the load; and, I am of the opinion, that when the wet season sets in, a large area of ground on the upper portion of each lead, partially worked, will be found calculated to retain a large population of miners for some time to come, and from the extreme coarse quality of all the gold upon this field, together with the large quantity now being sold (I saw myself a parcel of two hundred ounces of gold which was taken from two claims last week), Lamplough may safely be classed amongst the permanent and payable gold fields of Victoria. 12

March 1860:

MARYBOROUGH DIVISION

The mining population is as follows:

Alluvial miners: 1,550 Europeans, 1,150 Chinese;

Quartz miners: 440 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines winding, pumping, puddling, &c., 3—65 horse-power (since last report one pumping engine has been removed to Inglewood);

Puddling machines at work, 140; Puddling machines idle, 100.

Quartz mining—Steam engines pumping, winding, crushing, &c., 10—194 horse-power;

Whims idle, 8.

The late rainfall has caused a decided improvement in alluvial mining. The puddling machines hitherto idle are now busily employed, and the mining population is increasing considerably. Gibraltar Hill, adjoining McCallum's Creek near its junction with the Back Creek, is again promising well. Two years ago this gold field was second to none in the division; the gold is coarse and nuggetty. Since then the lead has been lost, but again discovered. Quartz mining is progressing as usual, and two of the reefs have recently well sustained the opinions entertained of them. The quartz at a depth of 30 feet averages 5oz per ton. ¹³

March 1860:

AVOCA DIVISION

The total population of the district is as follows: Europeans, 13,910; Chinese, 850.

I have the honour to report that the general state of my division, since the late rains, has assumed a more lively appearance, consequent upon a water supply being available for quartz crushing and puddling purposes. Those operations for the last two months have been entirely suspended in the division, with the exception of three quartz crushing machines, in consequence of the continuous dry weather, and one of these three has been paying £8 per week or a supply of water from a wet claim upon the Avoca Lead, which shows the value of water upon the dry diggings, and that a copious supply upon a more extensive scale, whether by a Government scheme or private enterprise, could not fail to be highly remunerative. Lamplough, during the last few weeks, presents the appearance of one of the settled gold fields.

The late departures to the Inglewood rush have materially improved its condition by withdrawing a portion of its surplus population, such as unsuccessful miners, storekeepers, &c. It may safely be presumed that those now remaining are all making at least a good livelihood. The Deep or Main Lead is steadily progressing and trending in the direction of Avoca. The workings on it are

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now about two miles in length, and three claims wide, and yielding, from what I can ascertain, on the average an ounce to the load, with one foot thickness of wash-dirt, the depth of sinking being 70 feet. Although the contiguous ground is thirty feet deeper than these workings to the bed rock, it is proved that the run of gold is keeping the western reef, which is dry, and shows indications of remaining so for a considerable distance further. Several portions of the old ground, since the late rains, have been taken up, and the presumption is that with water at hand they will be remunerative—Population, miners, 7,000; total, 12,000. Avoca Lead is almost solely occupied by Chinese, the result of whose operations I can by no means ascertain—Population, miners, 30; Chinese, 700. At Four-mile Flat the miners also during the dry season have been storing the auriferous drift, which in places is five feet thick; although the yield per load will not average more than 4 or 5 dwt, yet with a permanent supply of water it would be highly remunerative—Population, miners, 150; Chinese, 50. St Arnaud's and Peter's Diggings—The latter place now is entirely abandoned, and the former, during the late dry season, has suffered much in consequence. For some time previous to the late rains, one of the two quartz crushing machines was idle for the want of water. Another quartz machine is in course of erection, and as several new payable veins have recently been opened, and there being a probability of remunerative leased lands shortly being worked, I apprehend there will be sufficient employment, day and night, for all the machinery for some time to come, provided a supply of water is available. A new vein, 20 feet to the west of the Old Gap workings has lately been opened—four claims working the prospecting—quartz paying 1oz per ton, and two feet thick. On Stewart's Reef a new vein, east 15 feet of the old workings, has been opened up by Messrs Raven and party, yielding from 3 to 7oz per ton, with 2 feet thickness of stone. A vein called Oakley's has also been discovered very near to and almost in a line with the latter-four claims working—yielding 1oz per ton. 14

April 1860:

MARYBOROUGH DIVISION

The mining population is as follows:

Alluvial miners: 1,600 Europeans, 1,100 Chinese.

Quartz miners: 500 Europeans. The machinery is as follows:

Alluvial mining—Steam engines winding, pumping, puddling, &c., 5—96 horse-power; Puddling

machines at work, 160; Puddling machines idle, 80.

Quartz mining—Steam engines pumping, winding, crushing, &c., 10—194 horse-power; Whims idle, 8.

Quartz mining—Four applications have been made for leases on the following reefs: Frenchman's between Maryborough and Carisbrook, 4 acres; Christmas, England's Hill, adjoining Cockatoo, 23 acres; Mariners', near Maryborough, 16 acres; Mariners', near Maryborough, 2 acres. In this division, since my last report, nothing has occurred in mining matters worth communicating. Gibraltar, recently referred to, has not yet come up to the opinion entertained of this gold field, and alluvial mining generally, though not on the decline, has not received any fresh impetus. The population remains almost the same as last month, except some reduction in the Chinese at Alma, which has been nearly made up by a corresponding increase at Havelock. Quartz mining—In this branch of mining there is no lack of energy. The result of the recent crushings from the different reefs that are being worked, clearly demonstrating that any investments made are sure to bring favourable returns. At the Mariners' Reef, in the leased ground of the Maryborough Mining Company, some very handsome specimens of quartz have been found at a depth of 63 feet. The company in consequence has resolved to sink on the supposed course of this new reef, a larger shaft 7 by 5 feet to a depth of 100 feet, at a cost of 30s per cubic foot. 15

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May 1860: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,800 Europeans, 840 Chinese.

Quartz miners, 540 Europeans. Quartz crushers, 50.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, puddling, &c., 5—96 horse-power;

Puddling machines, 170 at work, 70 idle;

Whims, 8 idle.

Quartz mining—Steam engines pumping, winding, crushing, &c., 13—230 horse-power.

(Three additional quartz crushers just erected are included, which will commence operations forthwith.)

Of the remaining quartz crushers there are now only four at work regularly: (1) 14 horse-power, 320 tons crushed monthly, average yield per ton 1-1/20z; (2) 15 horse-power, 360 tons crushed monthly, average yield per ton 1-1/2oz; (3) 25 horse-power, 380 tons crushed monthly, average yield per ton not known (crushing for owners); (4) 25 horse-power, 480 tons crushed monthly, average yield per ton 7 dwt (crushing for owners). Charge per ton for crushing, £1 10s under 10 tons, £1 5s 10 tons and over. Another reaction to Gibraltar has been the means of increasing the European population, and though sufficient has not transpired to warrant a belief in the success of this little rush, yet there are strong indications in its favour. Two years ago a large rush was on the same ground, which is situate on the east side of McCallum's Creek, and nearly due north 60 chains from the north end of the McCallum's Creek old lead, celebrated for its coarse gold and large nuggets. In the rest of the division nothing fresh has occurred. With respect to the remaining portion of the Maryborough Main Lead ... the alternate strata, as far as the First White Hill, are nearly similar to those already mentioned, but in proportion as the lead extends in the direction of Havelock it gets deeper. There is also a wide gutter, which has been occasionally discovered, varying in width from 12 to 30 feet, which the diggers pronounce no good. The sinking on the gutter is about 60 feet, and the wash-dirt on the reefs on either side of this gutter has paid better—several patches on the reefs turned out 12oz per load, while the average yield might be considered 1oz per load. The First White Hill, though shallow sinking, from 6 to 12 feet, paid very well, and the Second White Hill, still shallower, from 4 to 10 feet deep, paid much better, and it appears is now offering sufficient inducement to some Chinese who have been reworking it. Happy Jim's Gully—This gully near its junction with the main lead is 50 feet deep. The depth is composed of alternate layers of gravel and sand, from 5 to 8 feet thick to bottom—pipe clay. Here another butter has been traced, in some places 15 feet wide and 7 feet deep, but like its neighbour is no good—the payable wash-dirt being on the reefs here also. Approaching the creek several claims, each 40 feet square, paid from 12 to 14 lb of gold—washdirt from 6 inches to 2 feet thick. At the top of the gully the sinking is 20 feet thick—bottom hard sandstone. Havelock Flat, Wet Lead—The dullness which has so long prevailed here is certainly attributable to the strong undercurrent of water, which could not be overcome without the aid of machinery—to accomplish which strong efforts are about being made by a few local enterprising miners, who still retain no small share of confidence in this portion of the old lead. 16

June 1860: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,950 Europeans, 1,210 Chinese.

Quartz miners, 610 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines winding, pumping, puddling, &c., 5—96 horse-power;

Puddling machines at work, 165; Puddling machines idle, 75;

Whims at work, 0; Whims idle, 8.

Quartz mining—Steam engines pumping, winding, crushing, &c., 11—215 horse-power.

The following returns show the monthly crushing of the quartz crushers at work:

Maryborough Mining Co. Mariner's Reef, Maryborough, just commenced, 60 horse-power, 400 tons crushed monthly, average yield per ton not known. (This powerful crushing machine has at last commenced to work, and shows, as yet, only about one-fourth of what it can do when fully equipped; when completed, in a few weeks, there will be 48 stampers—now only 12.) H.S. Williams, Maryborough, 20 horse-power, 360 tons crushed monthly, average yield per ton not known, crush for themselves. Hansen, Mosquito Flat, 14 horse-power, 320 tons crushed monthly, average yield per ton 1-1/2oz, charge per ton for crushing, £1 10s under 10 tons, £1 5s 10 tons and over. Greenway, McCallum's Creek, 12 horse-power, 360 tons crushed monthly, average yield per ton 1-1/4oz. Sears, McCallum's Creek, 12 horse-power, 120 tons crushed monthly, average yield per ton 1-1/4 oz. Brown, McCallum's Creek, 20 horse-power, 100 tons crushed monthly, average yield per ton not known. Malesky, McCallum's Creek, 13 horsepower, 280 tons crushed monthly, average yield per ton not known. Daisy Hill Company, White Horse Reef, near Amherst, 16 horse-power, 720 tons crushed per month, average yield per ton 7 dwt, crush for Co. The Europeans, as well as the Chinese, are again on the increase this month; the former in consequence of the muster at the Gibraltar little rush, which is slowly but steadily progressing. Quartz mining continues as usual, and appears to have considerably engaged the attention of some of the miners. Three new payable reefs have been discovered—two near the Adelaide Lead, and one between Maryborough and Carisbrook. Out of one of the former, 12 tons recently crushed realised 56oz, while the first crushing out of the latter is equally favourable.¹⁷

June 1860: AVOCA DIVISION

The population is as follows:

Alluvial miners, 8,900 Europeans, 1,000 Chinese

Quartz miners, 255 Europeans.

Note—Two quartz crushing machines are in course of erection of the aggregate of 50 horse-power.

At Avoca Main Lead the ground is principally occupied by Chinese, consequently I have no means of ascertaining the quantity of gold obtained therefrom, but the opinion is that they are doing remarkably well. At Lamplough, the Deep Lead (with the exception of minor rushes in the immediate neighbourhood) offers sufficient inducements to remain. The lead appears still to adhere (as originally) to the southern reef, neither do the workings get into deeper or wet ground. It has been found payable more than two miles in length from the original prospectors' claim, and three claims in width, the average yield being an ounce to the load, with one foot thickness of wash-dirt. The Mountain Hut and Amphitheatre Diggings retain a very small number of miners, exclusively engaged in horse puddling machinery, and although the wash-dirt in general is of an inferior description, yet from the fact of that being nearly all surfacing, and at present having a plentiful supply of water the miners are enabled to make good wages. At St Arnaud, alluvial mining by Europeans is almost entirely abandoned, consequent upon there frequently being opened up new and payable surface quartz veins, thereby inducing the miners to prosecute that branch of mining in preference to alluvial. I beg to transmit plan of the present workings, with sections of strata to the schist formation of Four Mile Flat, or the more recent nomenclature of 'Homebush'. The miners on this working collectively, are doing well, and besides those engaged upon the Main Lead, numbers are scattered in the various adjacent gullies, where the sinking is shallow, and who also are making a good living. My impression is, that the run of gold will adhere to (what is prevalent in the whole of this district) the southern reef, diverging considerably in its present course, with the probability of trending near to where I have surveyed and laid off streets for business purposes forming the present township of Homebush. 18

July 1860: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,900 Europeans, 1,150 Chinese

Quartz miners, 300 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, puddling, &c., 5—96 horse-power;

Horse puddling machines, 240 (140 at work, 100 idle)

Whims, 8 (idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 11—215 horse-power; Whims, 2 (at work).

The following returns show the monthly crushings: - [6 machines at McCallum's Creek—owners not named—details similar to previous month.] Mariner's Reef Company, 60 horse-power, 480 tons crushed monthly, average yield per ton not known, crushing for company. [Total number of

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tons crushed at all machines in division for month, 2540 tons. Aggregate horse-power, 147.] At McCallum's Creek the owner of one crushing machine has reduced the charge for crushing to 15s per ton. Since my last report, in mining matters generally, there has been little fresh to communicate except some additional proofs of the permanency of Gibraltar. Here there are 150 men at work, and those whose shafts are bottomed are profitably employed. The sinking varies from 82 to 96 feet. The average yield in most of the claims is from 1-1/4 to 1-1/2oz to the load, and in many of which several small nuggets have been found, varying from 3-1/2 to 29-1/2oz. There is little water to contend with, as yet, but it appears on the increase as the shafts have been bottomed to the south. At present some claims have only from 800 to 1000 gallons in the twenty-four hours. Quartz Mining—In this favourite pursuit some strong symptoms of disappointment have been manifested, in consequence of several crushings not having realised anything near what had been anticipated. However, from the number of prospecting claims that have, almost daily, been taken up under the local bye-laws, it is quite evident there has been no lack of confidence on the part of the miners. ¹⁹

July 1860:

AVOCA AND ST ARNAUD DIVISIONS

The population is as follows:

Alluvial miners, 9,250 Europeans, 700 Chinese

Quartz miners, 325 Europeans.

The machinery is as follows:

Alluvial mining—Horse puddling machines, 100 (90 at work, 10 idle).

Quartz mining—Steam engines crushing, 4—38 horse-power

Whims, 2 (1 at work, 1 idle).

On the Avoca Main Lead I have no change whatever to report. The Lamplough Deep Lead is steadily progressing. Several other shallow workings upon adjacent hills, and many of the neighbouring gullies, are being prosecuted; but, from what I can ascertain, are only attended with wages results. The population at Lamplough is rather on the increase, principally from Inglewood. A new rush occurred a few days ago about eight miles from Lamplough, on the Lexton road; but in the absence of any payable ground (except the prospectors) having been Amphitheatre and Mountain Hut.—A rush to the discovered, it has nearly subsided again. former place is again talked of, whilst at the latter, I am credibly informed, a very payable quartz vein, situate upon a spur of the Pyrenees, has been opened. At St Arnaud new quartz veins of a payable character are frequently being discovered, but the thickness (in most cases) being only a few inches, my impression is that, in order to find a main thick payable reef, a considerable depth will have to be sunk, which can only be attained by having efficient steam machinery for that purpose. At Four-mile Flat the miners are all doing remarkably well. Several rich claims are being worked; and I am surprised this gold field (which indicates an extensive one) does not command more attention from the miners. Within the last few days several nuggets, varying from seventy-four to five ounces each, have been taken out. The break between the two workings (as shown in my plan of last month) is now connected, and paying well; and although the progress of this working further down the flat is at present at a stand, it may be attributed to the fact that those who presume to know its whereabouts are already remuneratively engaged further up the lead. Yet the continuation of this flat for several miles, which eventually connects itself with the Avoca River (being all virgin ground), I am convinced that, ere long, another large rush to this place will be the result.²⁰

August 1860:

MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,950 Europeans, 1,230 Chinese

Quartz miners, 340 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, puddling, &c., 5—96 horse-power;

Horse puddling machines, 240 (170 at work, 70 idle)

Whims, 4 (at work).

Quartz mining—Steam engines pumping, winding, crushing, &c., 11—215 horse-power Whims, 8 (at work).

Regarding mining matters generally, there is no cause to complain; the late heavy rains have supplied the deficiency so strongly felt by the puddlers, and though there is nothing of moment to communicate, yet appearances generally seem more favourable than usual. With respect to the plan of Chinaman's Flat Lead just forwarded, some explanation might not be deemed unnecessary. From (a), the top of the lead, to (c), the lead is shallow and altogether occupied by

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Chinese. At (1), two separate and distinct leads had been discovered. The one called the Red Lead, varying in depth from 60 to 80 feet, lost at (m). The other called the White Lead, varying in depth from 40 to 128 feet, lost at (s). Engine Claim—This portion of he lead is 115 feet deep, all old ground, except some occasional blocks. The company consists of fifteen men. Engine (old) 10 horse-power. Wash from 3 to 5 feet high of the headings, which average (per secretary's statement) 3 dwt per load. Weekly washing = 100 loads = 300 dwt = 15 oz = one ounce per week per man. At (s) the lead has been abandoned, the miners having been unable to work it without the aid of machinery. A pumping engine 20 horse-power would be sufficient to meet the emergency. Gibraltar—The little rush to this place is by degrees presenting a more important aspect. There are about 400 men busily employed, some working out their claims, while others persevere in sinking their shafts, a process now found very difficult to accomplish from the means at the disposal of the present occupants, for (as suggested in my last report relative to the increase of water in a southerly direction) it is now fully proved that in some of the claims eight men baling alternately with 20-gallon buckets cannot keep the water down. The run of gold has been traced in the direction of the McCallum's Creek old lead to a place called the Horseshoe Point, which had previously been rushed, but had been abandoned (thought at that time proved to contain gold in payable quantities) in consequence of the miners having failed to master the water with buckets. From these two successive experiments it is quite evident that a good pumping engine must be supplied to enable the miners to work the ground with any success. Quartz Mining—There have been two promising reefs discovered; one, in the leased ground of the Shamrock Reef Company, situate immediately on the west side of the Mariners, is being traced from the surface to a depth of 20 feet. The other reef (see plan of Chinaman's Flat Lead) is on the east side, and within 10.50 chains of the old lead, and running nearly parallel to it.²¹

August 1860: AVOCA DIVISION

The population is as follows:
Alluvial miners, 9,300 Europeans, 400 Chinese.
Quartz miners, 75 Europeans.
The machinery is as follows:
Alluvial mining—Horse puddling machines, 86 (80 at work, 6 idle).
Quartz mining—Steam engines crushing, 2—23 horse-power (1 at work, 1 idle).

On the Avoca main lead the Chinese have recently taken up a considerable portion of the deep old workings; the ground they occupy has only been partially worked, and known yet to contain patches of rich deposits, but in consequence of an immense quantity of water found... this part of the lead for nearly three years past has been quite abandoned, and, I presume, the present party (without efficient steam power) will not be able to work the same remuneratively. At Lamplough small rushes in the immediate vicinity are of frequent occurrence, together with numbers of prospecting holes being sunk, in some of which payable drift in the shallow ground is obtained, but cannot in any instance trace a lead of gold, or payable workings into the main flat or deep sinking. At Amphitheatre the rush which occurred lately is situate about four miles north of the township, and although a great portion of the miners have left it again, those remaining are doing very well; the auriferous drift (one foot thick) yields from loz to 1-1/2oz to the load. At the Mountain Hut alluvial mining is confined principally to horse puddling, at which, during the wet season, very good wages can be made. The quartz vein lately opened, from one crushing, has yielded loz 17 dwt to a ton; three feet thickness of stone; only six claims are working. Four-mile Flat still retains its population and the miners yet appear to be remuneratively employed...²²

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Sept. 1860: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,870 Europeans, 1,140 Chinese.

Quartz miners, 890 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, puddling, &c., 5—96 horse-power (3 at work, 2 idle)

Horse puddling machines, 240 (190 at work, 50 idle)

Whims at work, 4.

Quartz mining—Steam engines pumping, winding, crushing, &c., 12—225 horse-power (10 at work, 2 idle);

Whims at work, 12.

After having made a circuit of the mining portion of my division, I find little to add by way of additional information, except a new crushing machine (Wallis's) just erected on the extreme south of my division, near Amherst. It might not be uninteresting to offer a few remarks on the construction of this exceedingly simple, but it is to be hoped useful, invention. Now the velocity or speed of the ordinary stampers in use is about 55 blows per minute, while Wallis is satisfied his stampers will make from 180 to 200 blows per minute, thus each of the latter nearly doing the work of four of the former, and striking, at the same time, from 700 to 900 lbs per blow. The heads and beds are so arranged that they can be replaced in a few minutes. The stampers are circular which receive additional revolving force in coming in contact with the uneven surface of the quartz. The cost per ton for crushing, including wear and tear, labour, fuel, and other incidental expenses, it is estimated will not exceed 3s. There is no limit to the velocity or speed, but it has been practically ascertained that when it comes up to 250 blows the machine cannot be fed effectively. Alma and Balaclava have been the scenes of two small rushes, shallow at the former—only 3 or 4 feet deep, and yet from this surfacing small nuggets varying from 1 to 4oz have been found. At the latter place the sinking is deeper—28 feet, and one claim has presented a prospect of 3 dwt to a dish, which, it is needless to add, is creating a lively little rush. Flat ... was rushed some two years ago and then paid very indifferently, since then it has been abandoned—sinking varying from 40 to 50 feet.²³

Sept. 1860: AVOCA DIVISION

The population is as follows:

Alluvial miners, 9,250 Europeans, 460 Chinese.

Quartz miners, 160 Europeans.

The machinery is as follows:

Alluvial mining—Horse puddling machines, 90 (85 at work, 5 idle);

Whims, 8.

Quartz mining—Steam engines winding, pumping, crushing, &c., 3—33 horse-power (2 at work, 1 idle).

Price of crushing (per ton): quartz, 20s to 25s; cement, 20s.

On the Avoca proper, mining, both in alluvial and quartz, during the last month, has been prosecuted with renewed energy. At the Deep Lead a large party of (150) Chinese, working eight whims, besides several hand machines, have partially succeeded in overcoming the vast quantity of water with which they have had to contend in some of their claims; the result being that rich patches of auriferous drift reward their perseverance. These patches are found principally in blocks of ground, left most probably for support, instead of timbering, by previous occupants; the yield, per load, with several feet thickness of dirt, being an ounce on the average. Quartz mining also has assumed a most lively appearance. On the Township Reef a party named Hogg have for some time past been prospecting the hill to the west of the original workings, the ultimatum being the discovery of a payable lode, three feet thick, yielding near the surface down on the average an ounce to the ton. Thirty claims at present are working upon this supposed reef, most of which have seen gold near the surface, but I cannot vouch for it all being of a payable quality. At Lamplough I cannot note any material change in mining since my last. Several of the small rushes in the immediate vicinity appear to give remunerative employment to a large number of miners whilst water for washing purposes is easily obtained; but in the absence of any natural or artificial means for securing it in this dry part of the district, and that when the present supply is exhausted, I predict a considerable decrease in their numbers will result. Amphitheatre and Mountain Hut Diggings, with the exception of a slight decrease in the population at the last rush to the former place, present no noticeable changes. The whole of the miners remaining (numbering 2000) upon these workings appear to be earning good wages.

Four-mile Flat still retains its population; and although several of the first claims sunk have washed up, those parties are either prospecting further down the flat, with the hope of again striking the lost lead, otherwise remuneratively employed in the adjacent shallow workings. Considerable dissatisfaction prevails amongst the miners in this locality, in consequence of none of the many prospecting parties receiving Government aid having yet reported any payable new gold field, especially, as the configuration of this district, extending over a vast area of virgin ground, presents every indication of it being highly auriferous. I beg also to inform your Honourable Board, that with a view of compiling statistics relative to the annual quantity of rainfall in this dry part of the district, I have erected a rain-gauge at Avoca... ²⁴

November 1860: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,750 Europeans, 1,180 Chinese.

Quartz miners, 400 Europeans.

The machinery is as follows: - Alluvial mining—Steam engines employed in pumping, winding, puddling, &c., 5—96 horse-power (3 at work, 2 idle)

Whims at work, 4

Horse puddling machines, 241 (200 at work, 41 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 13—240 horse-power (10* occasionally at work, 3 idle)

Whims at work, 12.

(*Another quartz crusher just erected at Havelock Flat.)

Mining operations generally, during the month, seem unusually dull. In the alluvial throughout the old leads and gullies, the usual plodding prevails; whilst quartz mining, though not on the decline, appears to have nothing fresh to boast of. The number of quartz crushers is increased by one; the proprietors of which selecting Havelock Flat as the most favourable spot for its future labours. And it might be fairly assumed from the number of new reefs recently discovered in that locality, and in the absence of any other crushing machine in the immediate neighbourhood that not only one, but three or four would have sufficient employment. Heretofore, prospectors in this section of the division had been labouring under considerable disadvantage, in being compelled to have their quartz carted to Sandy Creek, or latterly to Maryborough, a distance of seven miles. This in itself has been sufficient cause to impede the working of many reefs (adjoining Chinaman and Havelock Flats) which from what has already been known, would bring favourable returns had there been crushing machines in the immediate vicinity. Trewithian Reef, recently discovered and situate some 40 chains NE of Mosquito Reef, is and has been for some weeks the best paying reef in this division. And Mr John (to whom the prospecting on this reef was granted) informs me that two men can take out 3 tons per week. ²⁵

November 1860: AV

AVOCA DIVISION

The population is as follows:

Alluvial miners, 9,000 Europeans, 450 Chinese

Quartz miners, 100 Europeans. The machinery is as follows:

Alluvial mining—Horse puddling machines, 93 (75 at work, 18 idle)

Whims, 8. Quartz mining:

Steam engines pumping, winding, crushing, 3—33 horse-power (2 at work, 1 idle).

A slight decrease in the number of miners has occurred in this division since last month, consequent upon reported new discoveries having been made in various other portions of this and the Ararat districts; those remaining in this division still continue to make a good living.

On the Avoca Main Lead, the Chinese Company working in the wet ground are reported to be doing remarkably well: a nugget, weighing nineteen (19) ounces, was obtained by them last week, and by their combined method of working the ground, I am of opinion, now, that eventually they will succeed in discovering the long lost Avoca Lead. On the Township Reef a number of claims lately have been abandoned, whilst others by perseverance have succeeded in striking a reef or vein, at depths varying from thirty (30) to seventy (70) feet. Lamplough (with occasional small rushes, either to the deep lead or to the immediate vicinity) still retains its population. At Woodstock, the miners have nearly all migrated, in consequence, I apprehend, of the deep rock sinking, and from the fact of the most auriferous looking portion being in purchased ground. A prospecting claim in this ground is now being sunk, with a view of allowing the miners to work upon reasonable terms, should it prove of a payable nature. This claim is already sunk thirty (30) feet in basalt, with indications of water at that level.

The latter circumstance may be the primary cause of the miners removing to other localities. The Amphitheatre at present appears to be the workings most in favour in my division, and within the

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last few days has received considerable additions to its population. At Four-mile Flat the number of miners have slightly decreased without any other noticeable change in mining. 26

January 1861: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,600 Europeans, 1,070 Chinese

Quartz miners, 390 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 5—96 horse-power (3 at work, 2 idle);

Whims, 4 (at work)

Horse puddling machines, 241 (190 at work, 51 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 13—240 horse-power (7 at work, 6 idle)

Whims, 14, including 2 new whims just erected (12 at work, 2 idle)

Approximate value of all mining plant in the division, £24, 855.

The population is settled, and no reaction in mining has occurred during the month.

Moonlight Flat—Herewith is forwarded a plan, &c., of this old lead, which also shows the old Balaclava and Polish Leads; the latter being connected with the plan of the Alma diggings already forwarded. Polish Lead-Paid well in its time, but now altogether abandoned. Balaclava—Employs at the lower end, only a few persevering puddlers. The top and thence to its junction with Moonlight is shallow—sinking only from 6 to 8 feet. Here there are a few diggers at work, who inform me, that they find gold four feet high from the pipeclay bottom, in small nuggets; no fine gold to be found here, the absence of which renders the average yield sometimes unsatisfactory, because several tubs of wash-dirt, when taken four feet high, may not have the 'colour' in them, while others turn out a few of those small nuggets. I saw when on the ground the result of five tubs, two small pieces of gold—might weigh about 7 dwt—without even a speck of fine gold amongst them. At A [on plan], Moonlight terminates; depth 70 feet and much water; cannot be worked without the aid of machinery. Here it would appear that there is only one lead, yet there are the traces of two distinct ones—Balaclava and Moonlight, side by side, as far as B; the latter being here from 15 to 25 feet deeper than the former. Caledonian Lead—Branches off at M, and created a lively rush some fourteen months back—the payable ground along which did not exceed in width 1 chain; and even within this narrow limit some claims paid very indifferently, while others which happened to have included some rich patches, realised as much as 200 ounces per claim. Quartz Reefs—Every fresh discovery in this branch of mining assists in demonstrating the proposition so often affirmed by practical men 'That quartz mining will eventually be the main stay of Maryborough.' There certainly have been some favourable indications in support of this proposition, and in addition to about fifty distinct reefs in this division already proved to be auriferous, there are two recently discovered which deserve special notice. At Havelock, adjoining the first White Hill, a new reef is discovered on surface called Park Hill Reef, the first ton of quartz out of which realised 12oz 6 dwt 18gr. The other reef, called Frederick's, is situate in the Little Range, between Maryborough and Carisbrook. The lode is 3-1/2 feet wide on surface, and dips as usual westerly. The stone paid to a depth of 30 feet only 12 dwt per ton, but now at a depth of 50 feet (where the lode is 5 feet thick), it averages 1 oz per ton. To raise two tons of stone per day out of this reef is an easy work for one man.²⁷

January 1861: AVOCA DIVISION

The population is as follows:

Alluvial miners, 20,000 Europeans, 550 Chinese

Quartz miners, 50 Europeans.

The machinery is as follows:

Alluvial mining—Horse puddling machines, 95 (75 at work, 20 idle)

Whims, 10.

Quartz mining—Steam engines winding, pumping, crushing (at work), 2—27 horse-power.

Approximate value of all mining plant, £6,300.

Price of crushing (per ton), quartz, 20s to 35 s; cement, 20s.

Mining Surveyors' Reports, November 1860

²⁷ Mining Surveyors' Reports, January 1861

The population at the new diggings (Mountain Creek) is yet daily increasing, and from the fact of payable ground having already been found extending over a large area, together with new discoveries of frequent occurrence, this portion of the district is now, beyond doubt, destined to become a very important and payable section, not only in alluvial mining, but also in quartz; and, although as yet only one payable lode has been made public, I am credibly informed that several others are only awaiting the new district bye-laws to be in operation (which are somewhat of a more liberal character than heretofore), ere they make their discoveries in quartz known to the public. Lamplough, and all the other sections of my division (in consequence of this rush), are now quite denuded of their European alluvial mining population. I beg to forward a plan of all these workings, connecting each, by actual survey, with McKinnon's pre-emptive section. A portion of these workings, I find, called Hind's Diggings, situate near the home station, are on the St Arnaud side of the present boundary line, consequently out of my division. Commencing at section 1, situate at the first diggings opened on Mountain Creek; the sinking is 12 feet deep, principally through brown gravel. Section 3 is situated at nearly the head of Red Bank Diggings, South, commonly called Grumblers' Gully; the sinking is 26 feet deep. Section 5 is the first prospecting claim on Red Bank, North, locally called New Year's Flat; the sinking is principally through loose white gravel, with a false bottom 8 feet from the bed rock. ²⁸

February 1861: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners: 1,660 Europeans, 1,050 Chinese

Quartz miners: 350 Europeans. The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 5—96 horse-power (3 at work, 2 idle);

Whims, 4 (at work)

Horse puddling machines, 241 (80 at work, 161 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 11 (5* at work, 6 idle)

Whims, 14 (10 at work, 4 idle).

*Of the 13 in last month's report, 1 being on the supposed southern boundary of the division, is found upon careful examination, to be in the Back Creek Division; and another, Mr Molesky's (McCallum's Creek) has been removed out of the division.

Havelock and Chinaman's Flats—In these two places, where the wet leads have been lost, claims have been secured by actual miners, who have already commenced to work, and by whom strong hopes are entertained that the lost leads will again be shortly discovered.²⁹

February 1861: AVOCA DIVISION

The population is as follows:

Alluvial miners, 17,500 Europeans, 600 Chinese.

Quartz miners, 150 Europeans.

The machinery is as follows:

Alluvial mining—Horse puddling machines, 95 (60 at work, 35 idle)

Whims, 10.

Quartz mining—Steam engines winding, pumping, crushing (at work), 2—27 horse-power.

Approximate value of all mining plant, £6,300.

The population in alluvial mining since my last month's report has slightly decreased, in consequence of several rushes near to Hind's Station having occurred, which I find are on the St Arnaud side of the boundary line, therefore cannot include the numbers in my report for the month. The population at these diggings is yet daily on the increase, the great attraction being the new rushes some few miles north of the present workings. At Mountain Creek the deep lead does not progress so rapidly as might be anticipated, the impediment being that at a depth of sixty-five feet in a strata of drift, overlying the schist formation, water has been struck. 30

Mining Surveyors' Reports, January 1861

²⁹ Mining Surveyors' Reports, February 1861

Mining Surveyors' Reports, February 1861

April 1861: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 1,850 Europeans, 960 Chinese.

Quartz miners, 440 Europeans. The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 6—108 horse-power

Horse puddling machines, 250 (160 at work, 90 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 11—215 horse-power (7 at work, 4 idle)

Whims, 18 (14 at work, 4 idle).

A small though lively rush has taken place on Gibraltar Hill, situate north-east of Hill's publichouse, and promising to connect the old workings at Gibraltar with McCallum's old lead. The sinking at this little rush is from 65 to 70 feet, 20 feet of which is trap rock... The depth of washdirt 2 feet, and the yield averages 11 dwt to the load. The depth of the bed-rock at McCallum's old lead is about 20 feet only, but from Gibraltar Hill (the site of the rush) to the bed of the small creek at the old lead... there is a considerable surface fall. Finch's Reef ... is not at present being worked, although the greater portion of it is leased. On this reef there is a water shaft sunk to the depth of 200 feet. On the supposed continuation of this reef is the Hit or Miss, on which two claims are being worked; the shaft of one is already 210 feet deep, the water level in which is 120 feet from the surface; stone crushed from a depth of 150 feet yielded 6-1/2oz per ton. The reef at 200 feet from surface is about six inches to two feet in thickness, but no crushing has lately taken place. A considerable rush is likely to take place in the neighbourhood of the Amherst Government Reservoir, portions of which will be in this and the Amherst Division. The cause of the rush is the fact that gold was found while excavating to the bed-rock for the purpose of constructing the reservoir, the embankment of which is situate about 10 chains south-east of the dividing line between these divisions. At present a considerable number of miners are on the ground awaiting the reply to a petition forwarded to the Government for permission to sink within the water area of the reservoir. The accompanying plan represents the relative positions of shafts Nos. 1 and 2 on the Mariner's Reef, together with the buildings erected for the purpose of working these claims. North-west of shaft No. 1 is an engine of four horse-power used for raising quartz and debris from shafts Nos. 1 and 2. South-west is a forty horse-power engine used for raising water from the depth of nearly 460 feet. South a capstan for raising and lowering the water piping represented in the section of No. 1 shaft which, for the purposes of ventilation &c., is a 'double' one (ie. divided into two by a line of wooden slabs in the centre. This shaft has been sunk for several years, and as it is slabbed from top to bottom the different strata cannot be ascertained by observation. The machinery on No. 1 claim is the property of the Maryborough Mining Association, the only advantage derived from which is the draining of this reef, the association for a considerable time past having done nothing else but keeping the pumping engine at work. The following table shows all procurable information from 1 to 7 inclusive:- No. 1, shaft 460 feet deep, still sinking; No. 2, shaft 425 feet deep, still sinking; Nos. 3 and 4, shaft 380 feet deep; No. 5, shaft 346 feet deep, 350 tons ready to crush; No. 6, shaft 340 feet deep, 200 tons ready to crush; No. 7, shaft 310 feet deep, 250 tons ready to crush. Quartz mining generally is progressing favourably. Thirteen new reefs have been discovered in various parts of the division, on which prospecting claims have been secured, while many of those previously discovered have given satisfaction, several of which deserve special mention. Amongst these is the leviathan Reef, situate immediately on the east side of Chinaman's Flat Old Lead. There are twelve claims being worked, which vary in depth from 60 to 150 feet. In claims Nos. 5, 6, and 7, at a depth of from 60 to 115 feet, the reef is from 3 to 8 feet chick; average yield 25 dwt per ton. From claim No. 6 five men can raise six tons per day. The Dundee Reef also deserves some notice, from the fact of its being forfeited leased ground. This reef, situate at the south end of Adelaide Lead, and recently leased by a Mr Lindsay and Company, had been pronounced not payable; but as soon as it was open to the miners, a party of four had not been long discovering a payable reef, which at a depth of 25 feet is 3 feet chick; average yield 1-1/2oz per ton. The party is now increased to twelve, who have secured an extended claim of 600 feet. Havelock Flat—The prospectors on Frontage Lead here, referred to in my last report, have bottomed their shaft (90 feet deep). Washdirt 2-1/2 feet thick, which averages, as yet, 10 dwt per load, a result which it appears has given some satisfaction, particularly as it has been discovered that the water (hitherto considered a great impediment) will not prove so troublesome as it had been anticipated, the whole of which can be made available for washing purposes.31

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May 1861: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 2,250 Europeans, 900 Chinese.

Quartz miners, 480 Europeans.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 6—108 horse-power (3 at work, 3 idle)

Whims, 10 (at work)

Horse puddling machines, 260 (170 at work, 90 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 11—215 horse-power (7 at work, 4 idle)

Whims, 20 (16 at work, 4 idle).

For several months there have not been more favourable indications, relative to mining generally, particularly in the north and south portions of the division. The Amherst rush (the commencement of which took place immediately adjoining the southern boundary) has extended northerly into this division, and though nothing of moment can be yet reported, nevertheless from the steady progress which the miners have been making in this direction, it is evident several fresh valuable discoveries will follow, not only in the numerous flats, but also in the low ranges, in many of which a number of promising reefs have already been discovered. Gibraltar—Is again rushed and presents a very lively appearance. The sinking is shallow, as yet, varying from five to fourteen feet, but getting deeper as it approaches the supposed run between the old workings of Gibraltar Hill and McCallum's Creek old lead—a blank now very likely to be filled up. The average yield is not less than 10 dwt to the load. Three tubs of wash-dirt taken from the bottom of one little shaft on Saturday last turned out 5ozs of coarse gold, and the wash-dirt out of eight others bottomed the same day paid from 3 to 5 dwts per tub. Havelock Flat—This portion of the division is at present the scene of a rush which promises to become important. Its position is about a quarter of a mile NE of the Carisbrook and Dunolly road, and near its junction with the Maryborough road... The sinking on the new lead promises to e less than 100 feet, as shown by vertical section of prospector's shaft, near the supposed junction of the Maryborough and Havelock old leads, a combination of which seems to have formed the new one. The prospects already obtained (in some instances 6ozs to the bucket), are sufficient to justify the belief of a good lead of gold being eventually traced in this locality. With respect to the quartz reefs in the immediate vicinity of Havelock, and shown on the plan, the most important at present, Arent Reef, 88 feet deep and 2 feet thick, has yielded 3ozs 3 dwts to the ton. It was discovered on the surface with the same thickness. Harper's Reef-Has been considerably worked, but is now altogether abandoned, except by one party. Clydeside Reef is not sufficiently proved to admit of description, and this remark applies equally to the two unnamed reefs represented north of the Clydeside, and Arent. However, it appears from the best procurable information, that the average yield from these as well as from Lucknow Reef has been about 1-1/2ozs to the ton. Of the three crushing engines represented and recently erected, the first and smallest, Hosking's, has only four stampers and Chilian mill, 8 horse-power. The second, Watkin's, works eight stampers, 10 horse-power; and the third belonging to the Perseverance Company, of 20 horse-power, drives eight stampers, which will ultimately be increased to twelve.³²

May 1861: AVOCA DIVISION (William Byrne, Mining Surveyor)

The population is as follows:

Alluvial miners, 8,000 Europeans, 758 Chinese

Quartz miners, 1,010 Europeans

The machinery is as follows:

Alluvial mining—Horse puddling machines, 55 (55 at work, 11 idle)

Whims, 9 (5 at work, 4 idle)

Quartz mining—Steam engines crushing, 1—14 horse-power Steam engines in course of erection, 3—39 horse-power

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There are at present at work 10 quartz reefs, the prospecting claims on which have been registered and in which payable gold has been struck. The want of crushing machinery in the Red Bank and Mountain Creek portions of the district has heretofore been much felt, owing to there being no proper means available of properly testing the value of the stone raised; I may state, however, that the machines now being erected by Messrs Nettleton and Company at Mountain Creek, and Messrs Simpson and Company at Red Bank, are expected to be in full working order in the course of [text missing]. The stone raised from the Pyrenees Reef has hitherto proved to be of a very rich character, the party working the spare ground claim between the prospect claim and No. 1 South, having obtained 124oz 17 dwt 12 grs of gold from 75 lbs weight of quartz, no returns of the yield from the other reefs have as yet been furnished. A small rush in the direction of New Year's Flat, and about 12 miles east of Navarre, has taken place, but has not turned out so well as anticipated, the depth of sinking averaging about 25 feet and the yield reported to pay fair wages, but no heavy finds have been discovered. I may mention that since the rushes to Murphy's Flat, Navarre and Amherst, the population here appears to have become much more settled, and owing to the richness of the quartz reefs already opened up, I can see little reason to doubt but that the diggings will be of a permanent character. ³³

1862-5:

Mr Joseph Smith, mining surveyor, has ... supplied the following information relative to the Sadowa Company's mine, at Rocky Flat, Talbot. The works were commenced in August 1862. The first company sank No. 1 shaft, which was found to be too shallow, but they, nevertheless, placed a small steam-engine on the ground. A drive was then put southerly ... but the shaft was abandoned and the company broke up. The second company was formed in June 1863, and they sank No. 2 shaft and procured a steam-engine of ten horse-power. Washdirt was found at a depth of 113 feet... This company ultimately ceased to work, and the claim was abandoned. A third company was then formed, and No. 3 shaft was sunk to a depth of 160 feet ... and gold was found, but not in quantities sufficient to satisfy the shareholders, which caused the company to despair, and the fine plant was sold for £1,000 to the present [1869), or fourth company. ³⁴

1863-5:

I need only now speak of Majorca. Here a prospecting shaft was bottomed in the beginning of March 1863, in the middle of a very extensive plain, known as McCallum's Creek Plain. The depth of the shaft was eighty-five feet, through stiff clay, gravel, and cement. The washdirt was white gravel, intermixed with heavy boulders, on a soft pipeclay bottom; its thickness being from two to five feet. It averaged in some places 3 oz to the load. 'Finally a rush set in, and before three months had elapsed there were more than 15,000 miners on the ground. The sinking became deeper as the work went on, and was so wet that whims had to be erected; and at one time, in 1865, over 170 might have been seen at work, both night and day...³⁵

March 1864: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners: 3,240 Europeans; 1,160 Chinese

Quartz miners: 62- Europeans

The total number of miners is thus distributed:

Maryborough, 1,200; Majorca, 1,550; Chinaman's, 700; Mosquito, &c., 550; Adelaide Lead, 200; Havelock, 160; Alma and Balaclava, 160; Different gullies, 500; Total, 5,020.

The machinery is as follows:

Alluvial mining—Machinery pumping, winding, &c., 5—110 horse-power

Whims, 60

Puddling machines, 270 (120 at work, 150 idle)

Quartz mining—Machinery pumping, winding, crushing, &c., 10—170 horse-power (7 at work, 3 idle)

Whims, 37 (30 at work, 7 idle).

Total value of all mining plant in the division, £45, 600.

Number of square miles of alluvial ground, which is being, or may have been actually worked upon, 49.

Number of distinct quartz reefs which have been actually proved to be auriferous to the present time, 115.

Mining Surveyors' Reports, May 1861

R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, p. 215

E. O'Farrell, quoted in R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, pp. 98-9

Quantity of quartz crushed during the quarter:

Company	Where quartz obtained	Quartz crushed	Total yield of	gold
Houghton & Williams	Leviathan, Bluchers, &c.	1,500 ton	825 oz	
Ballarat Co.	Leviathan, North British, &c.	2,340 tons	585 oz	
Watkins and Co.	Leviathan, Trebelcock, &c.	564 tons	310 oz 4 dwt	
Hanson and Co.	Different reefs`	1,600 tons*	1,360 oz	
Greenaway and Wallace	e Sydney, Welcome & Prussian	1,150 tons	1,322 oz	
Johnston and Sons	Whitehorse, Ironstone	150 tons	150 oz	
Close Reef Co., Marine	rs'	Mariners'	260 tons#	78 oz
Quartz Tailings, Cement, &c.				
Greenaway and Wallace		1050 tons cement	787 oz 10 dwt	
Johnston and Sons		300 tons cement	133 oz	

^{*} Two months crushing; under repair in January. # Two weeks crushing; machine just erected

I have the honour to report that though there have been no important fresh discoveries during the last three months, yet the old gold workings generally seem to have given satisfactory and almost constant employment to those willing to work; but however favourable prospects may have been in the old workings, no inducement can prevent the unsettled portion of the miners from rushing off to the new rushes. The mining population, in consequence, is decreased considerably. In many of the old alluvial workings several nuggets have been found, varying from 10 to 192 ounces, the latter being the weight of one found in shallow winking of 8 feet in an old gully near Graham's store, White Hills. Majorca—A new valuable discovery has been made in one of the claims on this gold field. At a depth of 90 feet, a reef has been found and a trial crushing of one ton of the stone therefrom realised 21 ounces. The result of the next crushing, which will be in a few days, will, however, better prove the character of this reef. Notwithstanding the combined efforts of the numerous whims on the north and south ends of the Majorca workings, the water is found to be too troublesome. Some of the miners have therefore amalgamated their claims and enlarged them to the area of three acres, with a view of inviting the co-operation of some of the capitalists here to secure steam machinery; arrangements of this nature have been completed, and doubtless, a few months hence Majorca will present a more prosperous appearance than it does at present. Two good pumping engines on each end would drain the ground, which would also enable many of the poor miners to work adjoining claims. Chinaman's Flat—Chinaman's Flat continues in favour with those connected with the blocks already leased. An application for another lease of twenty acres has been made, extending northerly to near the boundary of Coxtown; the Hit-or-Miss, United, and Magnum Bonum Companies report nothing fresh; the two former realise their usual weekly returns of from £3 to £5 per man. ³⁶

March 1864: AVOCA DIVISION

The population is as follows: Alluvial miners: 1,065 Europeans, 520 Chinese

Quartz miners: 20 Europeans.

The total number of miners is thus distributed: Avoca, 650; Homebush, 200; Mountain Hut, 185; Amphitheatre, 285; Green Hill Creek, 50; Lamplough, 160; No. 1 Creek, 45; Fiddler's Creek, 30; Total, 1,605

The machinery is as follows:

Alluvial mining—Steam engines, 1—12 horse-power

Puddling machines, 85 (50 at work, 35 idle)

Winding, Pumping, &c., 1—12 horse-power

Toms, 30 (20 at work, 10 idle)

Quartz mining—Steam engines, 4—53 horse-power (3 at work, 1 idle)

crushing machines, 4—53 horse-power (3 at work, 1 idle).

Total value of all mining plant in this division, £5,000.

Number of square miles of alluvial ground, which is being, or may have been worked upon, 19. Number of distinct quartz reefs which have been proved to be auriferous to the present time, 7.

Quantity of quartz, cement and tailings crushed during the quarter:

Company	Where obtained	Quantity crushed	Total yield of gold
Harrison & Company	London Reef, Amphitheatre		
	& Redbank	40 tons quartz	14 oz
Harrison & Company	Tucker Bank, Avoca Lead	1,000 tons cement	200 oz
Harrison & Company	Avoca Lead	1,500 tons tailings	112 oz 10 dwt
Harris and Company	Lamplough Creek	2,400 tons tailings	180 oz
Bosanko & Company	Avoca Lead	400 tons cement	40 oz
Bosanko & Company	Avoca River	100 tons tailings	15 oz

In quartz mining I have no good news to report since the unsatisfactory results were known of a crushing of 30 tons from the London Reef, Amphitheatre, which gave on the average 5 dwts to the ton, instead of at least 1oz, which the party expected, and with the exception of one party of twelve men giving notice to prospect a reef at Fiddler's Creek, otherwise this class of mining is again falling into disrepute, and very few are engaged therein. In alluvial mining I am glad to state that there is considerable improvement, although I have nothing of interest to communicate in any other portion of the division, except Avoca Proper, where appearances somewhat indicate that the long-abandoned working in the wet portion of the ground, which is of large extent, will shortly become the scene of extensive, and, from prospects already obtain, remunerative mining operations; within the last few days quite a new impetus has been given to those who have secured ground on the wet portion of the lead (most of which is comparatively speaking unworked ground) by a party of twelve men, called 'Hocking's Company,' who have succeeded, after five months' labour, day and night, with a twelve-horse-power engine to pump their shaft dry, and obtained a prospect of 5 dwts to the bucket of dirt; this party took up four acres of ground under the mining bye-laws, and are now applying for a lease of ten acres, which will include the whole of any portion of ground vacant within a very considerable distance of the Wet Lead. Lambert and Company (leased ground) have already sunk their shaft 60 feet, and expect their machinery (37 horse-power) to be at work in six weeks' time. Pascoe's machinery is now partially on the ground, but the party have not yet commenced their shaft.³⁷

September 1864: MARYBOROUGH DIVISION

The total number of miners is as follows: Alluvial miners, 3,300 Europeans, 1,250 Chinese Quartz miners, 480 Europeans.

The total number of miners is thus distributed: - Maryborough, Main Lead, and Blackman's, 150; Cuddy's Flat, 120; Waterloo Flat and Bell's Gully, 70; Mosquito Flat and adjacent reefs, 500; Old Man's Gully and adjacent reefs, 250; Golden Point and Four-mile Flat, 150; McKenzie's Gully, 80; Havelock and adjacent reefs, 350; Chinaman's and adjacent reefs, 550; Majorca, including Gibraltar, 2,300; Adelaide Lead and adjacent reefs, 390; Alma and Balaclava, 120; Total, 5,030.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 8—146 horse-power

Whims, 102

Puddling machines, 293 (208 at work, 85 idle)

Quartz mining—Steam engines pumping, winding, crushing, &c., 10—170 horse-power, 170 stamp heads (9 at work, 1 idle).

Crushing quartz during the quarter; Houghton and Williams, from Blucher's, Fredericks, &c.; Ballarat Company, from Leviathan Reef; Close Reef Company, from Mariner's Reef; Hansen and Company, from different reefs; Houghton and Williams, late Seers and Sons, from Blucher's; Greenaway and Wallace, from Britannia, Sydney, &c.; Johnston and Sons, from Ironstone, Dorset, &c.; Watkins and Company, from Flagstaff, Telegraph, &c. Crushing cement during the quarter: Johnston and Sons, Majorca; Houghton and Williams, Majorca; Greenaway and Wallace, Majorca. Majorca—On this gold field, the tracing of the lead, in a northerly direction, has been checked, in consequence of the present inefficient system of working. IN the absence of machinery, in the deep and wet ground, the miners have evidently been unable to proceed any further. On the south end, including Gibraltar Hill, they find themselves in a similar position, and have, therefore, arranged to cut up this section in extended claims, varying in area from one to seven acres; there are, at present, nine claims taken up, area, 32 acres, 2 rods, 29 perches, on the southern boundary of which is the claim of the United Kingdom Gold Mining Company, employed profitably for the last three years; depth of workings, 114 feet; washdirt, 2 feet thick; weekly dividends, according to treasurer, amount to one ounce per man. Alma-For the last three years, workings of any magnitude have ceased on the Alma; the miners after having, as in other places, traced the leads into the deep and wet flat, had to abandon the ground. There are three of those leads, the Alma, the Balaklava, and the Grave Yard Lead, which appear to converge so rapidly that a junction in the Alma Flat may be expected. To test this supposed junction ground, a strong company is now being formed, having secured a lease of 58 acres; and with the assistance of efficient machinery will, doubtless, be enabled to discover the lost leads of the Alma. Two other leases of 30 acres each have been applied for. Chinaman's Flat—The alluvial workings and quartz reefs of this gold field hold a first-class position in the division. The Hit-or-Miss Company has been working at the 136-feet level; washdirt from 3 to 4 feet thick; weekly dividends sometimes as high as 84 ounces (19 shareholders). The United Company, next claim north, has been working at three different levels, viz., at 110, 130, and 150 feet, arising from the undulation of the bottom.

Washdirt and dividends similar to the Hit-or-Miss). (20 shareholders.) The Magnum Bonum, north of the United, has only bottomed at a depth of 159 feet; and this was no sooner accomplished than the stability of the staff seemed affected, after reaching the bottom drift, which resulted in the loss of several months hard work in a few minutes. The company, however, is about being re-organised with favourable prospects, and a fresh application is being made for an extension of ground. The course of the lead, as traced in the claim of the United, having been ascertained to trend in a north-easterly direction, it is now supposed that in place of it intersecting the Timor Creek Village Reserve, its probable course will yet continue on the east side of the Bet-Bet Creek. Quartz Mining—It is gratifying to be in a position to report that most of the quartz reefs being working in the division have, during the quarter, yielded satisfactory returns. Amongst those well-paying reefs the Leviathan deserves special mention, five claims on which keep the crushing machine of the Ballarat Company constantly at work. This reef, at the present level of 120 feet, is 25 feet thick. Average yield, 15 dwts, 4 grs per ton. 38

Sept. 1864: AVOCA SUBDIVISION

The total number of miners is as follows:

Alluvial miners, 946 Europeans, 510 Chinese

Quartz miners, 19 Europeans.

The total number of miners is thus distributed:

Avoca, 650; Homebush, 120; Amphitheatre, 290; Mountain Hut, 100; Green Hill Creek, 45; Lamplough, 120; No. 1 Creek, 40; Fiddler's Creek, 110; Total, 1,475.

The machinery is as follows:

Alluvial mining—Steam engines winding, pumping, crushing, &c., 7—146 horse-power (5 at work, 2 idle)

Puddling machines, 86 (70 at work, 16 idle)

Crushing machines, 4 (2 at work, 2 idle)

Toms, 27 (20 at work, 7 idle).

Quartz mining—Steam engines winding, pumping, crushing, &c., 2 (both idle)—18 horse-power, 20 stamp heads

Crushing machines, 2 (idle).

Quantity of quartz tailings and cement crushed during the quarter: Harrison and Co, from Tucker Bank, Avoca Lead, 600 tons yielded 60 oz; Harrison and Co, from Avoca Lead, 200 tons yielded 40 oz; Harris and Co, from Lamplough, 2,000 tons yielded 175 oz; Bosanke and Co, from Avoca Lead, 1,200 tons yielded 135 oz. In quartz mining I have no change to communicate this quarter, whilst alluvial is steadily improving. The Hit or Miss (Hocking and Co), Avoca Lead, after difficulty in draining their ground, have at length succeeded, and have also struck payable drift, yielding on the average 3 oz to the machine, which gives £5 to each of the shareholders (who are all working men) per week. Harrison and Co have suspended operations for the purpose of reorganisation with increased capital and appliances, which cannot fail in being remunerative, inasmuch as their last yield gave 18 oz of gold to about 90 tons of drift, besides obtaining a small portion of rich cement. The Avoca Gold Mining Co (Lambert's Lease) have been driving several weeks for the deep ground; they have now struck some of the old workings and expect to get payable drift in two or three days. The Avoca Gold Mining Association (Pascoe's Lease have bottomed their shaft and obtained a payable prospect; they are now sinking their well, and commence to open out immediately. This portion of the lead was very rich, and with such appliances will be a very payable investment. The Star Co (Homebush) is erecting machinery, and will be ready to commence mining operations soon. Several other applications under the Leasing Regulations are being made for ground in this locality. I have no doubt that the continuation of the Four-mile Flat Lead will be payable in the wet ground, and should one of these companies succeed, there are several miles of ground equally attractive and yet untried. The Amphitheatre Diggings give employment to a settled number of miners; frequent patches of new and payable ground are found (in most cases) upon some one or other of the many conically formed hills, which abound in this part of the district. It has also been stated to me, that a company is being constituted to more efficiently test the flat ground near Glenlogie Township, and in close proximity to the Avoca River. As this in deep and wet ground is the only outlet from the surrounding gold workings, which are of considerable extent, I think sufficient inducement is held out, in this part of the district also, for profitable investment. Fiddler's Creek maintains a population of a settled description, including the Chinese portion; the whole is making a good living. Another prospecting party have gone out for the summer months into that extensive tract of newly and unexplored country, lying between Lexton and the Amphitheatre. This part of the district certainly presents every appearance of being highly auriferous.³⁹

December 1864: MARYBOROUGH DIVISION

The total number of miners is as follows:

Mining Surveyors' Reports, September 1864

Mining Surveyors' Reports, September 1864

Alluvial miners, 3,400 Europeans, 1,500 Chinese

Quartz miners, 550 Europeans.

The total number of miners is thus distributed:

Maryborough, Main Lead, and Blackman's, 200; Cuddy's Flat, 80; Waterloo Flat and adjoining gullies, 90; Mosquito Flat and adjacent reefs, 550; Old Man's Gully and adjacent reefs, 300; Golden Point and Four-mile Flat, 200; Havelock and adjacent reefs, 250; Inkerman, 90; Majorca, including Gibraltar, 2,500; Chinaman's and adjacent reefs, 650; Adelaide Lead and adjoining reef, 400; Alma and Balaclava, 150; Total, 5,450.

The machinery is as follows:

Alluvial mining—Steam engines, employed in pumping, winding, &c., 9—158 horse-power (8 at work, 1 idle)

Whims, 102

Puddling machines, 300 (205 at work, 95 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 10 (9 at work, 1 idle)—170 horse-power, 170 stamp heads.

Total value of mining plant in the division, £47,000.

Quantity of quartz crushed during the quarter:

Houghton and Williams, from Blucher's, &c., 1,550 yielded 736 oz; Ballarat Company, from Leviathan Reef, 1,741 tons yielded 1,120 oz; Close Reef Company, from Mariner's, 1,200 tons yielded 300 oz; Hansen and Company, from different reefs, 2,250 tons yielded 2,700 oz; Houghton and Williams, late Seers and Sons, from Blucher's, Frederick's, 470 tons yielded 293 oz; Greenaway and Wallace, from Sydney Reef, &c., 400 tons yielded 360 oz; Johnston and Sons, from Finch's, Ironstone, 250 tons yielded 150 oz; Watkins and Company, from Leviathan, south end, 450 tons yielded 45 oz; Perseverance Company, from North British, &c., 1,250 tons yielded 500 oz.

Quantity of cement crushed: Johnston and Sons, Majorca, 750 tons yielded 525 oz; Houghton and Williams, Majorca, 470 tons yielded 340 oz; Greenaway and Wallace, Majorca, 1,550 tons yielded 1,240 oz.

During the last three months, mining operations have been regarded with somewhat unusual confidence, which might account for the considerable increase in the number of applications for mining leases. Amongst these Chinaman's Flat appears most conspicuous. In addition to the six leases already granted, there are four applications made for an area of 120 acres on the supposed continuation, northerly, of the Lead. On the Alma, at the supposed junction of the old leads, operations commenced in earnest. A shaft 8 x 3-1/4 feet in the clear is sunk to 70 feet; about 115 feet will reach the bottom. An engine of 25 horse-power is being erected. At all events, after some cross driving the party must ultimately succeed in discovering those lost leads or their junction. Majorca, though, has been rather dull. The lead is trending in a north-easterly direction, but it has not been traced with that diligence which might have been exercised. However, it is hoped that the refusal of Millar's application will enable the Europeans to discover the lead north of the Chinaman's ground. Application is made for a lease of twenty-five acres on the west side of the Majorca workings by a Ballarat party, for not only to test the ground, but to erect a powerful crushing machine, a deficiency much felt on Majorca, as the carting and crushing of cement cost no inconsiderable amount. Quartz mining—The old reefs have been attracting much attention; two leases on the old Portuguese and Bristol reefs have been applied for, and there has been a decided improvement in the yields from the old established reefs. From the returns of gold from quartz during 1864, and the average number of miners employed (525), it appears that each would have for his share during the year 57 oz 5 dwts 13 grs, while by a similar process, including Chinamen, an alluvial miner would have during the year 11 oz 14 dwts 9 grs. On the 7th November, 1864, Mr Mining Surveyor O'Leary forwarded a report to the Honourable the Minister for Mines, stating that in the parish of Bet-bet, on the west side of the Mount Korong road, and about 100 chains northerly from the junction of the Maryborough and Carisbrook road, a prospector named Grant discovered what might be termed a good payable prospect, ie. 3-1/2 ounces out of four loads of wash-dirt; in the prospect appeared a handsome nugget 1 oz 12 dwts. The depth of the prospector's shaft was 39 feet, bottom sandstone intersected with quartz veins. There was a fine flat available for a large rush, 250 men were shepherding and marking out claims. On the 19th November the Mining Surveyor referring to the rush above mentioned, furnished a tracing showing its position, and stated that the depth of sinking was 40 feet... There were no indications of any quartz reefs. Appearances on the ground were very dull. The prospectors' second washing gave 7 dwts to the load. Only three golden holes had been bottomed, and there was no certainty as to permanency.⁴⁰

December 1864: AVOCA SUBDIVISION

The total number of miners is as follows: Alluvial miners, 1,000 Europeans, 570 Chinese Quartz miners, 4 Europeans.

The total number of miners is thus distributed:

Avoca, 700; Homebush, 170; Amphitheatre, 272; Mountain Hut, 95; Green Hill Creek, 40; Lamplough, 120; No. 1 Creek, 45; Fiddler's Creek, 129.

The machinery is as follows:

Alluvial mining—Steam engines employed winding, pumping, crushing, &c., 7—146 horse-power (5 at work, 2 idle)

Puddling Machines, 99 (74 at work, 15 idle)

Winding and pumping, 5 (4 at work, 1 idle)

Toms, 35 (25 at work, 10 idle).

Quartz mining—Steam engines winding, pumping, crushing, &c., 1 (idle)—6 horse-power, 8 stamp heads

Crushing machines, 2 (1 at work, 1 idle)—18 horse-power, 20 stamp heads.

Total value of mining plant in the subdivision, £10,500.

Quartz crushed during the quarter: Bosanko and Company, from Hampshire Reef, near Avoca, 120 tons yielded 42 oz.

Cement crushed during the quarter: Bosanko and Company, from Avoca Lead, 1,300 tons yielded 151 oz.

I have the honour to state, that in quartz mining there is no change to report since last quarter, and although there does not appear to be much activity displayed at present in alluvial mining, yet, notwithstanding this temporary relaxation which prevails (owing, I presume, in a great measure to the Christmas festivities), this branch of mining, I can confidently state, is steadily improving. The Avoca Gold Mining Association (Pascoe's Lease), are now in full working operation, with five separate shifts below, and although they are constantly meeting with impediments by breaking into old workings filled with water and sludge, yet, the manager informs me, they are now, and have been for some time past, paying working expenses, the average yield of the drift giving four and a half (4-1/2) oz to the machine. The gold is of a coarse waterworn character, and small nuggets, varying from half to three and four ounces in weight each, are also frequently being met with; the workings, so far, have been in old ground, which was never supposed even to pay working expenses. The Avoca Gold Mining Company (Bland's lease) are getting dirt which gives a trifle over working expenses; the manager informs me that the average yield is four (4) oz to the puddling machine. This company have already done a considerable amount of work below, having in the first place sunk their shaft some distance from the lead, and opened out their drives at a depth very much below the auriferous drift, in that portion of the lead contiguous to the same. The Hit-or-Miss (Hocking's) Company have not been doing so well this quarter, the average yield of the drift being only two and a half (2-1/2_ oz to the puddling machine, and getting only three machines in a fortnight; they appear to lose a quantity of gold in their tailings, even more than they obtain, by a puddling process instead of using stampers, the drift being partially composed of a conglomerate, all of which in this portion of the lead, contains gold in paying quantities. Harrison's Company has entirely suspended operations, and when I visited the ground I could find no one in charge. The Star Company (Pascoe's, Homebush), are sinking a second shaft, having lost their first one at a depth of ninety-three (93) feet, being then thirteen (13) feet in a very loose fine gravel drift, which has always been found very troublesome in this portion of the district; the second shaft is expected to be partially on the reef west of the lead. The Amphitheatre portion of my district I expect will shortly engage the attention of a more enterprising class of miners than hitherto, for I am informed, immediately after the close of this year two or three parties (separately) purpose applying for ground in this locality under the leasing regulations; they also infirm me that a large tract of land, not more than from thirty to forty feet deep, although containing water, will give from three to twenty dwts. to the ton, with two and three feet thickness of wash-dirt. It has frequently been a matter surprising to me that this auriferous-looking part of the district should have remained so long uncared for by the more enterprising class of miners, and even the speculator; neither can there be a better test of the paying character of all these diggings than as at this place, we find every one apparently in easy circumstances; also, at land sales at Glenlogie I have seen more competition than at any other place. I have not the slightest hesitation in stating that these new companies, with efficient management, will succeed beyond their most sanguine expectations.⁴¹

March 1865: MARYBOROUGH DIVISION

The total number of miners is as follows:

Alluvial miners, 3,500 Europeans, 1,600 Chinese

Quartz miners, 600 Europeans.

The total number of miners are thus distributed:

Maryborough, Main Lead, and Blackman's, 200; Waterloo Flat and adjoining gullies, 90; Mosquito Flat and adjacent reefs, 600; Old Man's Gully and adjacent reefs, 300; Golden Point and Four-mile Flat, 200; Havelock and adjacent reefs, 250; In different gullies, 310; Majorca, including Gibraltar, 2,550; Chinaman's and adjacent reefs, 650; Adelaide Lead and adjoining reefs, 400; Alma and Balaclava, 150.

The machinery is as follows:

Alluvial mining—Steam engines, pumping, winding, &c., 9—158 horse-power (8 at work, 1 idle) Whims, 110

Puddling machines, 305 (180 at work, 125 idle).

Quartz mining—Steam engines, pumping, winding, crushing, &c., 10 (7 at work, 3 idle)—170 horse-power, 170 stamp heads.

Total value of mining plant in the division, £47,500.

Quartz crushed during the quarter: Houghton and Williams, from Frederick's, Flagstaff, 1,375 tons yielded 653 oz; Ballarat Company, from Leviathan Reef, 1,900 yielded 1,520 oz; Close Reef Company, from William's Hill, 2,160 tons yielded 486 oz; Hansen and Company, from different reefs, 1,860 tons yielded 1,209 oz; Houghton and Williams, late Seers and Sons, from Ironstone and Blucher's, 200 tons yielded 200 oz; Greenaway and Wallace, from Caroline Reef Britannia, 700 tons yielded 420 oz; Johnston and Sons, from Whitehorse, Ironstone, 720 tons yielded 684 oz. Cement crushed during the quarter: Greenaway and Wallace, Majorca, 1,300 tons yielded 1,235 oz; Johnston and Sons, Majorca, 300 tons yielded 135 oz; Houghton and Williams, Majorca, 900 tons yielded 585 oz. I have the honour to report, that in this division, during the quarter, more than ordinary attention has been paid by the miners and others to the securing of mining leases, having, it appears ascertained practically, that any further development of the old workings, must, if carried on successfully, be on some enlarged co-operative system. The scarcity of water has been sadly felt by the puddlers, and some of the quartz-miners; it is almost a pity that so many poor men should have been kept idle, while in the same places, what they so urgently require is in such abundance beneath a crust of about 200 feet thick. Majorca continues in much favour, and is certainly the most important gold field in the division. The south end, now in close contact with Gibraltar, contains a well-defined lead of gold, while the favourable continuation of the Hanoverian Lead on the extreme north, in a north-easterly direction, has fully confuted any doubts which might have existed as to the permanency of this gold field. Except a small rush in Chinaman's Flat immediately on the west side of the old workings, there is nothing fresh in that locality. The sinking is about 70 feet deep; washdirt 3 feet thick. Average yield obtained by prospectors 6-1/2 dwts per load. This little run, like others previously discovered, is sure to drift into the old workings. The shaft of the United Leads Company, Alma, is bottomed, but as yet without any favourable result. Cross drives have been opened, which are sure to intersect the deep ground. There is no change in alluvial mining in the rest of the division.⁴²

March 1865: AVOCA SUBDIVISION

The total number of miners is as follows:

Alluvial miners: 948 Europeans, 620 Chinese

Quartz miners, 12 Europeans.

The total number of miners is thus distributed:

Avoca, 600; Homebush, 150; Amphitheatre, 300; Mountain Hut, 95; Green Hill Creek, 40; Lamplough, 110; Fiddler's Creek, 200; No. 1 Creek, 85.

The machinery is as follows:

Steam engines employed winding, pumping, crushing, &c., 7—153 horse-power (3 at work, 4 idle)

Puddling machines, 90 (60 at work, 30 idle)

Winding, pumping, &c., 5 (3 at work, 2 idle)

Toms, 53 (20 at work, 15 idle).

Quartz mining—Steam engines winding, pumping, crushing, &c., 1 (idle)—6 horse-power, 8 stamp heads.

Total value of mining plant in the subdivision, £10,500.

I have the honour to report that during this quarter alluvial mining has assumed a somewhat depressing tendency; this has arisen in consequence of two of the companies on the Avoca Lead entirely suspending operations. Notwithstanding this apparent reaction upon our principal lead, it was well known, so far as the Clunes Company was concerned, that, unless they found some yet undiscovered run or lead of gold in new ground, the portion of the old lead within their boundaries had long before been thoroughly worked by the individual miner, upon several and successive occasions. Pascoe's Company, Avoca Lead, is now paying tolerably well, considering that their workings are yet principally in the old ground; the manager informs me that whenever they strike upon a block of new ground, no matter how small, a most favourable result is the washing up of that machine. They expect shortly to be working entirely in new ground, and as I have recently inspected their mine, I must say that their prospects are highly encouraging; the average return of gold per week for the quarter is 52 oz from 375 tons of dirt, being 624 oz gross for the last three months. At the Homebush Leases mining progresses very slowly. The Star Company, Pascoe's Lease Land, at length succeeded in getting through the drift with their fourth shaft, striking bottom at 80 feet; they have sunk 60 feet further in the rock, and purpose opening out at 130-feet level. The Golden Lake Company, Homebush, is sinking their fifth shaft, in consequence of the drift stratum; this drift appears to be the deepest and worst of any discovered yet upon any gold field; it is supposed to be 40 feet thick, and quite a quicksand.⁴³

Sept 1865: MARYBOROUGH DIVISION

The population is as follows:

Alluvial miners, 2,585 Europeans, 1,470 Chinese

Quartz miners, 650 Europeans. The population is of a settled character.

The total number of miners is thus distributed:

Maryborough, Main Lead, and Blackman's, 160; Waterloo and bullies adjoining, 85; Mosquito Flat and adjacent reefs, 570; Old man's Gully and reefs adjoining, 240; Golden Point and reefs adjacent, 190; Havelock Flat and adjoining reefs, 220; Majorca, including Gibraltar, 1,700; Chinaman's and adjacent reefs, 580; Adelaide Lead and reefs adjoining, 340; Alma and Balaclava, 170; In different gullies, 450; Total, 4,705.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 19—299 horse-power (18 at work, 1 idle)

Whims, 115

Puddling machines, 310 (165 at work, 145 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 10 (6 at work, 4 idle)—170 horse-power, 170 stamp heads

Whips, 25.

Total value of all mining plant in the division, £51,600.

Quartz crushed during the quarter: Ballaarat Company, from Leviathan Reef and Newtown, 2,419 tons yielded 967 oz; Penny and Company, from Alexandra, &c., 1,587 tons yielded 1,396 oz; Houghton and Williams, from Blucher's and Flagstaff, 1,320 tons yielded 1,056 oz (included a parcel of 21-1/2 tons realising 172 oz 4-1/2 dwts, obtained out of the Old Flagstaff Reef, at a depth of 200 feet); Close Reef Company, from Mariner's, Bristol Hill, &c., 1,121 tons yielded 160 oz; Watkins, from Lancashire and Yorkshire, 820 tons yielded 369 oz; Perseverance Company, from Leviathan, North British, 1,750 tons yielded 437 oz. I have the honour to report that mining operations in the different sections of the division have been steadily prosecuted. On Chinaman's Flat the Hit-or-Miss, United, and Magnum Bonum companies have been realising their usual favourable dividends; shares in the former have been freely exchanged for £100 each, while in the latter, now known as the Magnum Extended, shares could not be purchased since the favourable character of the deep ground has been proved. About 60 chains north from the shaft of the Magnum, in the ground of the Treasury Company, boring is being executed, the first bore reached the bottom at a depth of 157 feet, too shallow, yet when the difference of the surface levels between this point and the shaft of the Magnum (140 feet deep) is taken into consideration, the deep ground in the Treasury must be about 50 feet deeper. Some of the claims on the Leviathan Reef have been yielding good returns, though in working this reef the primitive method of whip and whim is still in use. From the prospecting claim, extending northerly, the reef is rich, but as far as it has been traced southerly it is very indifferent. The increase of water has enabled the puddlers throughout the shallow workings to carry on their business more extensively. There is no improvement on the Alma, it appears the course of the deep ground has yet to be discovered, which no doubt will be rendered less difficult now that the system of boring has been introduced. At Cockatoo, Wanlace and Co., with a small engine, have been profitably employed in their lease of 10 acres, they find good returns in a width of 300 feet.

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On Majorca south, from the claims of the United Kingdom Company and Himalaya, as well as from the adjacent extended claims, the returns have been better than heretofore. Operations are also being vigorously prosecuted by the Manchester, Cossey, Defiance, and Majorca extended companies. About a quarter of a mile south from the Mariner's a new reef has been discovered, named by the prospectors, the Norman Alfred, its average thickness at a depth of 75 feet in about 2-1/2 feet, the yield is 1 oz 6-1/4 dwts per ton; and about eight chains westerly from the Leviathan Reef, in the centre of the old alluvial workings, on Chinaman's Flat, another new reef has been discovered, named the Lancashire and Yorkshire. The cap was struck at a depth of 19 feet, and the reef is about 16 feet thick, average yield about 9 dwts per ton. Area of worked portions of leads, 3/4 mile; approximate area of the portions being worked of leads, 1/4 mile; area of all alluvial gullies which have been or are being worked, 1/8 mile; no creek or river beds have been or are being worked in this division; area of other shallow workings and cement, 1/8 mile; area of the schist or other rocks containing quartz veins which is being and which has been actually worked, 1/2 mile; area of leases, 3-1/20 miles—Total, 4-4/5 miles.

Sept. 1865: AVOCA SUBDIVISION

The total number of miners is as follows:

Alluvial miners, 975 Europeans, 850 Chinese

Quartz miners, 12 Europeans.

The total number of miners is thus distributed:

Avoca, 680; Homebush, 150; Amphitheatre, 400; Mountain Hut, 85; Green Hill Creek, 40; Lamplough, 170; No. 1 Creek, 97; Fiddler's Creek, 215.

The machinery is as follows:

Alluvial mining—Steam engines winding, pumping and crushing, 5—124 horse-power (3 at work, 2 idle)

Puddling machines, 87 (80 at work, 7 idle)

Crushing machines, 1; Winding, pumping, &c., 3 (2 at work, 1 idle)

Toms, 30.

Quartz mining—Steam engines winding, pumping and crushing, 1 (idle)—6 horse-power, 8 stamp heads

Crushing machines, 1 (idle)—6 horse-power, 8 stamp heads.

Total value of mining plant in the subdivision, £9,500.

Quartz crushed during quarter: Bosanko and Company, from Township Reef, Bet-bet, Vale's Reef, Fryingpan, 290 tons yielded 74 oz. Quartz tailings and cement crushed: Bosanko and Company, from Avoca Lead and Avoca River, 130 tons of cement yielded 52 oz, 1,200 tons of tailings yielded 180 oz. In quartz mining I have no change to communicate, and, with the exception of the Amphitheatre portion of my subdivision, alluvial mining is only very steadily progressing. The miners at the Amphitheatre appear to be doing better than in the other outlying portions of my subdivision; during the quarter I have registered seven prospecting claims (alluvial) near the Amphitheatre, principally upon some of the many conically formed hills which abound in that locality, the depth of sinking varying from 40 to 80 feet, and the yield, per load, averaging half an ounce. One party informed me that they had just finished working out a prospecting claim, registered eighteen months ago, in many parts of which the auriferous drift was payable five and seven feet thick, yielding on an average half an ounce to the load; it has frequently been a matter of surprise to me that this portion of the Pyrenees is not more thickly populated. The whole of the mining community is of quite a settled description, and many partially employed in cultivating their own land. The Avoca Gold Mining Association have just completed re-erecting their machinery, and expect to bottom their shaft in a few days; previous to removing their plant, they washed, from the 1st July to 7th August, 140 oz of gold; the prospect of this company (by removing their machinery) I am of opinion is highly encouraging, the plant now being upon virgin ground, which is of considerable extent at this end of the lease. At Homebush, mining progresses slowly, yet the Star Company has at length succeeded in obtaining a payable prospect, and the public appears to have great confidence in the ultimatum of this lease.45

⁴⁴ Mining Surveyors' Reports, September 1865

⁴⁵ Mining Surveyors' Reports, September 1865

March 1866: MARYBOROUGH DIVISION

The total number of miners is as follows:

Alluvial miners, 2,500 Europeans, 1,500 Chinese

Quartz miners, 650 Europeans. The population continues to present a settled appearance.

The total number of miners is thus distributed:

Maryborough, Main Lead, and Blackman's, 160; Waterloo and gullies adjoining, 80; Mosquito Flat and adjacent reefs, 580; Old Man's Gully and reefs adjoining, 240; Golden Point and adjacent reefs, 200; Havelock Flat and reefs adjoining, 210; Majorca, including Gibraltar, 1,800; Chinaman's and adjacent reefs, 550; Adelaide Lead and reef adjoining, 300; Alma and Balaclava, 180; In different gullies, 350; Total, 4,650.

The machinery is as follows:

Alluvial mining—Steam engines, employed in pumping, winding, &c., 19—299 horse-power; Whims, 115

Puddling machines, 310 (160 working, 150 idle).

Quartz mining—Steam engines pumping, winding, crushing, &c., 10 (9 at work, 1 idle)—170 horse-power, 170 stamp heads

Whips, 25.

Quartz crushed during the quarter: Ballarat Company, from Great Western and Leviathan, 1,150 tons yielded 402 oz; Hansen and Company, from Cleopatra, Alexander, &c., 1,710 tons yielded 1,197 oz; Houghton and Williams, from Blucher's, &c., 1,510 tons yielded 641 oz; Houghton and Williams, at Fredericks, from Fredericks, 50 tons yielded 12 oz; Mariner's Reef Company, from Mariner's (30 tons/160 oz*), Soldier's 568 ton/85 oz), Heading (300 tons/22 oz), and different reefs (400 tons/140 oz); Greenaway and Wallace, from Greenaway, &c., 550 tons yielded 605 oz; Johnston and Sons, from different reefs, 960 tons yielded 1,056 oz; Perseverance Company, from Yorkshire and Great Eastern, 310 tons yielded 124 oz; Watkins and Company, from Yorkshire, Victoria, 520 tons yielded 130 oz. *It will be observed that these 30 tons—realising 160 ounces—have been taken out of the Mariner's Reef, at a depth of 560 feet—average width of reef, 10 inches; and the company having decided on following it 100 feet, one of Chambers' selfacting hydraulic pumps has been secured for that purpose. Quartz tailings and cement crushed: Greenaway and Wallace, from Majorca and Cockatoo, 400 tons of cement yielded 320 ounces, 450 tons of tailings yielded 45 ounces; Johnston and Sons, from Majorca and Cockatoo, 300 tons of cement yielded 180 oz, 150 tons of tailings yielded 45 oz. I have the honour to report that during the quarter mining operations generally have been, as usual, steadily prosecuted. The mining resources of the division have been, and are now being, well tested, and appear to command more confidence in proportion to their development. Some reform, however, in mining in this division, is very essential, as, with few exceptions, there appears by far too strong an adherence to the old system. Majorca, judging from present appearances, is the most important section of the division. There can be no longer any doubt as to the existence here of a rich and well-defined lead. It has already been traced several chains in length, through the leases of the Himalaya, Manchester, Cossey, and Defiance companies, heading northerly towards the ground of the Cosmopolitan, Duke of Cornwall, and Lady Don companies. The recent fall of rain, though far from being sufficient to supply the wants of the puddlers, has however enabled many of them to renew operations. Quartz mining is progressing favourably. 46

March 1866: AVOCA SUBDIVISION

The total number of miners is as follows:

Alluvial miners, 920 Europeans, 850 Chinese

Quartz miners, 20 Europeans.

The total number of miners is thus distributed:

Avoca, 680; Homebush, 110; Amphitheatre, 400; Mountain Hut, 100; Green Hill Creek, 38; Lamplough, 160; No. 1 Creek, 90; Fiddler's Creek, 212; Total, 1,790.

The machinery is as follows:

Alluvial mining—Steam engines winding, pumping, and crushing, 5—124 horse-power (3 at work, 2 idle)

Puddling machines, 90 (50 at work, 40 idle)

Winding, pumping, &c., 4 (3 at work, 1 idle)

Toms, 27 (17 at work, 10 idle).

Quartz tailings and cement crushing during the quarter: Bosanko and Company, from Avoca Lead and Avoca River, 25 tons of cement yielded 12 oz, 150 tons of tailings yielded 18 oz. I have the honour to report that the only crushing machine in my subdivision (Bosanko and Co.'s) has been idle during the quarter (with the exception of 14 days), in consequence of the want of water, which has been severely felt this summer by the whole of the puddlers, especially those working on the upper portion of the Avoca Lead. The Chinese party noticed in my last report as having entered into arrangements to convey water by flume and open race from the Avoca Gold Mining Association's engine to their claims on the upper portion of the Avoca Lead, have completed their works, at a cost of £200; they pay the Avoca Gold Mining Association £5 monthly for the water, with which supply they work three puddling machines, and I am credibly informed with very satisfactory results. The Avoca Gold Mining Association's claim is now giving highly encouraging returns, last week's washing yielding 109 oz 13 dwts; and this, I am induced to believe, may be considered a fair average of what may be expected from the company for some time to come. At Homebush I am informed the Golden Lake Company have struck payable ground, but in the absence of the mining manager I am unable to state definitely. The Star Company, Homebush, is at a standstill; I believe the plant, &c., have been sold. 47

June 1866: MARYBOROUGH DIVISION

The total number of miners is as follows:

Alluvial miners, 2,473 Europeans, 1,450 Chinese

Quartz miners, 700 Europeans.

The total number of miners is thus distributed:

Maryborough, main Lead, and Blackman's, 140; Waterloo and bullies adjoining, 70; Mosquito Flat and adjacent reefs, 600; Old Man's gully and reefs adjoining, 200; golden Point and adjacent reefs, 215; Havelock Flat and reefs adjoining, 350; Majorca, including Gibraltar, 1,750; Chinaman's and adjacent reefs, 550; Adelaide Lead and reefs adjoining, 280; Alma and Balaclava, 170; In different gullies, 300; total, 4,625.

The machinery is as follows:

Alluvial mining—Steam engines, employed in pumping, winding, &c., 19—299 horse-power; Puddling machines, 315 (220 at work, 95 idle)

Whims, 115

Quartz mining—Steam engines, pumping, winding, crushing, &c., 10 (8 at work, 2 idle)—170 horse-power, 170 stamp heads.

Quartz crushed during the quarter: Ballarat Company, from Leviathan, 1,745 tons yielded 1,047 oz; Penny and Company, from Cleopatra, Alexander, Blucher, &c., 1,825 tons yielded 1,460 oz; Houghton and Williams, at Blucher's Reef, from United Kingdom and Blucher's, 1,410 tons yielded 740 oz; Houghton and Williams, at Frederick's Reef, from Frederick's, 360 ton yielded 81 oz; Johnston and Sons, from White Horse, Dorset, &c., 666 tons yielded 659 oz; Perseverance Company, from Leviathan, Yorkshire, &c., 1,380 tons yielded 621 oz; Watkins and Company, from Oxfordshire, Fagan's, &c., 540 tons yielded 81 oz. The recent copious falls of rain have created a market improvement throughout the whole of the old workings in the division; the puddlers particularly have been much benefited by the change. At Chinaman's Flat a considerable excitement lately prevailed amongst some of the miners, who, under the local byelaws, secured registrations of 60 acres of ground-applied for on lease by another party. The contest between the parties, who are all from the immediate locality, shows clearly the estimation in which they hold the unworked ground in Chinaman's Flat. Havelock Flat—Close to the south end of this flat, and about 2-1/2 miles from Maryborough, some payable ground has been discovered, in shallow sinking—about 12 feet; the gold found is principally coarse, in nuggets from 5 dwts to 6 oz. It is traced into a small paddock, private property, through which its course, as yet, is being slowly traced; but, as the place is wholly surrounded by old workings, some one of them must soon intercept 'the little run'. In quartz mining the yields from most of the old reefs continue to give satisfaction. It may be mentioned that three parcels from the Dorset, White Horse, and Adelaide Lead reefs have lately realised as follows: Dorset, 24 tons yielded 54 oz; White Horse, 48 tons yielded 123 oz; Adelaide Lead Reef, 4 tons yielded 13 oz. 48

⁴⁷ Mining Surveyors' Reports, March 1866

⁴⁸ Mining Surveyors' Reports, June 1866

June 1866: AVOCA SUBDIVISION

The total number of miners is as follows:

Alluvial miners, 1,232 Europeans, 783 Chinese

Quartz miners, 22 Europeans.

The total number of miners is thus distributed:

Avoca, 870; Homebush, 134; Amphitheatre, 412; Mountain Hut, 106; Green Hill Creek, 25; Lamplough, 156; No. 1 Creek, 84; Fiddler's Creek, 200.

The machinery is as follows:

Alluvial mining—Steam engines, employed in winding, pumping, and crushing, 5—124 horse-power (4 at work, 1 idle)

Puddling machines, 90; Crushing machines, 1 (employed principally in crushing cement and tailings)

Winding, pumping, &c., 4 (3 at work, 1 idle)

Toms, 25.

Quartz crushed during the quarter: Bosanko and Company, from Vales Reef and Fryingpan Reef,112 tons yielded 87 oz. Quartz tailings and cement crushed during the quarter: Bosanko and Company, tailings from Avoca River, 750 tons yielded 56 oz, cement from Avoca Lead, 40 tons yielded 10 oz. I have the honour to report that a manifest improvement is apparent in this subdivision, both in alluvial and quartz mining, more especially during the latter portion of the quarter. This most desirable change in the alluvial mining is attributable, in some measure, to the copious supply of water with which we have been favoured, but more especially from the unprecedented success which has at last attended the persevering efforts of the Avoca Gold Mining Association. The returns daily from this company exceed the expectations of the most sanguine, and have been the cause of inciting Ballarat capitalists to visit this gold field, several of whom have already made application, under the Gold Leases Regulations, for all the available Crown lands situate upon or near the supposed course of the lead; besides offering terms, considered highly advantageous, to those fortunate landholders who are also presumed to be upon or contiguous to the Avoca main lead. The returns of gold from the Avoca Gold Mining Co.'s claim for the quarter, which I took myself (per favour of the manager) from the company's books, amount to 1,476 oz 4 dwts. This company have been delayed five working days during that period, to replace their funnel. The Gold Lake Co., Homebush, is now in full work. The manager informs me they are driving both easterly and westerly, in order to find the main lead. They put through the whole of the dirt taken out, which averages 3 oz to the machine of 20 tons. They have only very recently completed the erection of their puddling apparatus, and expect to strike the main lead every day, as the quality of the gold obtained is of a very coarse and waterworn description. The quantity of gold obtained by this company, to date, is about 50 oz. An alluvial prospecting claim was registered within the last month, of 200 feet x 200 feet, in a locality which might eventually prove to be quite a new gold field, the locus-in-quo being the top of the Pyrenees ranges, near the source of No. 1 Creek; the prospect obtained was 5 oz of nuggets, no dirt being washed, in 15 feet sinking. About 30 miners are at work upon the ground, but in the absence of water to wash with it has somewhat subsided. The prospectors promised to let me know should there be likely to be a rush of any consequence or population demanding a special report. The other outlying portions of my subdivision are steadily progressing. In alluvial mining, all the puddling mills are now at work. In quartz mining also there is some improvement. An abandoned reef at Fiddler's Creek has recently been taken up as extended claims, under the District Bye-laws, the party claiming 90 feet per man, and purpose immediately erecting steam crushing machinery upon the ground; the reef being worked from 12 to 18 inches wide from the surface, yielded 18 dwts to the ton, from which returns (with machinery upon the ground and a bountiful supply of water), this company calculate upon satisfactory employment for several years to come. The various leaders or veins, upon both Vale's Reef and Fryingpan, are yielding from 15 dwts to 2 oz 10 dwts to the ton, a quantity of stone from these workings having been taken to Maryborough for crushing, there being a want of water for that purpose at Avoca.⁴⁹

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Sept. 1866: MARYBOROUGH DIVISION

The total number of miners is as follows:

Alluvial miners, 2,400 European, 1,500 Chinese

Quartz miners, 750 Europeans.

The total number of miners is thus distributed:

Maryborough, Main Lead, and Blackman's, 140; Waterloo and gullies adjoining, 70; Mosquito Flat and adjacent reefs, 600; Old Man's Gully and reefs adjoining, 200; Golden Point and adjacent reefs, 215; Havelock Flat and reefs adjoining, 350; Majorca, including Gibraltar, 1,750; Chinaman's Flat and adjacent reefs, 550; Adelaide Lead and reefs adjoining, 280; Alma and Balaclava, 170; In different gullies, 325; Total, 4,650.

The machinery is as follows:

Alluvial mining—Steam engines, pumping, winding, &c., 19—299 horse-power (17 at work, 2 idle)

Puddling machines, 320 (225 at work, 95 idle)

Whims, 120

Quartz mining—Steam engines pumping, winding, crushing, &c., 10 (9 at work, 1 idle)—170 horse-power, 170 stamp heads.

Quartz crushed during the quarter: - Mariner's Reef Co., from Mariner's Reef, 30 tons yielded 32 oz; Mariner's Reef Co., from Mariner's Reef, 35 tons yielded 189 oz; Ballarat Co., from Leviathan Reef, &c., 2,650 tons yielded 825 oz; Penny and Company, from Alexander, White Horse, &c., 1,750 tons yielded 1,268 oz; Greenaway and Wallace, from Sydney and Blucher, 450 tons yielded 270 oz; Johnston and Company, from White Horse, &c., 538 tons yielded 477 oz; Perseverance, from Great Western, &c., 2,160 tons yielded 486 oz; Watkins and Company, from Oxfordshire, &c., 520 tons yielded 104 oz. Quartz tailings and cement crushed during the quarter: Greenaway and Wallace, from Cockatoo, 400 tons yielded 140 oz; Johnston and Company, from Majorca, &c., 265 tons yielded 81 oz. Though mining operations generally in the division have much of the appearance of a settled character, yet the lack of energy and promptness, and the consequent failure of many of the recently formed mining companies, has principally been the cause of the dullness which at present manifestly prevails. This, however, does not extend to quartz mining, as the main lines of reef are being constantly worked with the usual favourable results. A new reef has been discovered on the western boundary of the borough of Maryborough; it has been traced to a depth of 80 feet, about 1 foot thick, and the first crushing realised about 1 oz to the ton. The alluvial claim of the Hit-or-Miss and United Companies, on the Chinaman's Flat, has been worked out, and the system of working the claim of the Magnum Bonum is about being altered. The next favoured ground on the flat, and extending still northerly, has been secured under the local bye-laws by 90 miners, who have arranged to work it on the co-operative principle. Majorca exhibits a dull appearance in mining matters at present, but strong hopes are entertained of a change for the better shortly. 50

Sept. 1866:

AVOCA SUBDIVISION (Mr William Byrne, Mining Surveyor and Registrar)

The total number of miners is as follows:

Alluvial miners, 1,232 Europeans, 800 Chinese

Quartz miners, 22 Europeans.

The total number of miners is thus distributed:

Avoca, 870; Homebush, 201; Amphitheatre, 412; Mountain Hut, 106; Green Hill Creek, 25; Lamplough, 156; No. 1 Creek, 84; Fiddler's Creek, 200; Total, 2,054.

The machinery is as follows:

Alluvial mining—Steam engines, pumping, puddling, and crushing, 8-165 horse-power Quartz mining—Steam engines, pumping, and crushing, 1-15 horse-power, 12 stamp heads.

Quartz crushed during the quarter: Bosanko and Party, from Vale's Reef, 96 tons yielded 38 oz; Bosanko and Party, from Maryborough Road Reef, 15 tons yielded 2 oz; Bosanko and Party, from Ironbark Reef, Four-mile Flat, 10 tons yielded 1 oz. Quartz tailings crushed during the quarter: Bosanko and Party, Tailings from Avoca River, 840 oz yielded 63 oz. The yield from the claim of the Avoca Gold Mining Association has been for the last quarter 2,331 oz, and that from the Golden Lake Company, Homebush, 400 oz. The greater portion of the latter has been obtained within the last few days, one machine alone yielding 36 oz. There is nothing new to report in quartz mining.⁵¹

Mining Surveyors' Reports, September 1866

Mining Surveyors' Reports, September 1866

December 1866: MARYBOROUGH DIVISION

The total number of miners is as follows:

Alluvial miners, 1,280 Europeans, 1,450 Chinese

Quartz miners, 800 Europeans.

The total number of miners is thus distributed:

Maryborough, Main Lead, 150; Waterloo and gullies adjoining, 80; Mosquito Flat and adjacent reefs, 550; Old Man's Gully and reefs adjoining, 150; Golden Point and reefs adjacent, 200; Havelock Flat and reefs adjoining, 250; Majorca, including Gibraltar, 850; Chinaman's Flat and adjacent reefs, 500; Adelaide Lead and reefs adjoining, 300; Alma and Balaclava, 150; In different gullies, 350; Total, 3,530.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 19—299 (17 at work, 2 idle)

Puddling Machines, 325 (180 at work, 145 idle)

Whims, 120

Quartz mining—Steam engines pumping, winding, crushing, &c., 10 (9 at work, 1 idle)—170 horse-power, 170 stamp heads.

Quartz crushed during the quarter: Mariner's Reef Company, from Mariner's Reef, 858 tons yielded 768 oz; Ballarat Company, from Leviathan Reef, 2,500 tons yielded 687 oz; Penny and Company, from different reefs, 2,100 tons yielded 1,312 oz; Greenaway and Wallace, from Blucher, &c., 890 tons yielded 623 oz; Johnston and Sons, from White Horse, Sydney, &c., 950 tons yielded 1,377 oz; Perseverance Company, from Great Western, &c., 1,830 tons yielded 434 oz. Quartz Tailings and Cement crushed during the quarter: Johnston and Sons, from Cockatoo, 290 tons yielded 108 oz; Greenaway and Wallace, from Cockatoo, 340 tons yielded 102 oz. In mining matters generally there has been no marked improvement during the quarter. The mining population has decreased considerably at Majorca and in the alluvial workings; in the rest of the division the decrease of the population is also being felt. Quartz mining is being carried on with the usual energy, and some confidence is reposed in the provisions of the new Mining Bye-Laws relative to co-operative mining, which will probably create a reaction in the alluvial workings. 52

December 1866:

AVOCA SUBDIVISION

The total number of miners is as follows:

Alluvial miners, 1,232 Europeans, 800 Chinese

Quartz miners, 22 Europeans.

The total number of miners is thus distributed:

Avoca, 870; Homebush, 201; Amphitheatre, 412; Mountain Hut, 106; Green Hill Creek, 25; Lamplough, 156; No. 1 Creek, 84; Fiddler's Creek, 200; Total, 2054.

The machinery is as follows:

Steam engines, pumping puddling and crushing: Alluvial mining, 8—165 horse-power; Quartz mining, 1—15 horse-power, 12 stamp heads.

Quartz crushed during the quarter: Bosanquet [Bosanko] and Co., from Jennings' Gully Reef, 100 tons yielded 30 oz; Bosanquet and Co., from Vale's Reef, 50 tons yielded 25 oz. Quartz tailings and cement crushed: Bosanquet and Co., 300 tons yielded 15 oz. Alluvial mining is progressing very satisfactorily in this division. The yield from the Association Company's claim still continues well. The New Holland Company has succeeded in draining the water below the chamber, and is now driving in wash-dirt. The Pactolus Company have put down the last bore to a depth of 160 feet, and are now about to sink a shaft. Mining operations at Homebush are being pushed forward vigorously. Both the Golden Lake and the Phoenix Companies being in wash-dirt, and the London and Watford engaged in boring, there is nothing new to report in quartz mining. ⁵³

1867:

Sadowa Company, Rocky's Flat, Talbot...[c. 1865]...the fine plant was sold for £1,000 to the present, or fourth company. After a further expenditure of £500 the works did not answer expectations, and it was feared that the claim would again be abandoned. But better counsels prevailed. The mine was let to tributers in May 1867, who energetically combated the water. They raised nearly half a million of gallons per diem, and ultimately got down to the washdirt, and were soon able to raise from 17-1/2 oz to 40 oz 12 dwts of gold per diem. 54

Mining Surveyors' Reports, December 1866

Mining Surveyors' Reports, December 1866

R. Brough Smyth, The Gold Fields and Mineral Districts of Victoria, Melbourne, 1869, p.

March 1867: MARYBOROUGH DIVISION

The total number of miners is as follows:

Alluvial miners, 1,225 Europeans, 1,150 Chinese

Quartz miners, 820 Europeans.

The total number of miners is thus distributed:

Locality		Europeans	Chinese	Total
	Alluvial	Quartz		
Maryborough and Main Lead	60		45	105
Waterloo and gullies adjoining	30		25	55
Mosquito Flat and adjacent reefs	45	400	60	505
Old Man's Gully and reefs adjoining	30	70	40	140
Golden Point and reefs adjacent	35	120	25	180
Havelock Flat and reefs adjoining	85	60	75	220
Majorca, including Gibraltar	350	65	200	615
Chinaman's Flat and adjacent reefs	290	95	70	455
Adelaide Lead and reefs adjoining	150	10	30	190
Alma and Balaclava	80		350	430
In different gullies	70		230	300

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding, &c., 19—299 horse-power (12 at work, 7 idle)

Puddling machines, 330 (140 at work, 190 idle)

Whims, 120 (90 at work, 30 idle)

Quartz mining—Steam engines pumping, winding, crushing, &c., 10 (6 at work, 4 idle)—170 horse-power, 170 stamp heads.

Quartz crushed during the quarter: Mariner's Reef Company, from Arrah-na-Pogue and Prussian Reefs, 92 tons yielded 124 oz; Ballarat, from Leviathan Reef and Co., 1,620 tons yielded 364 oz; Penny and Co., from Alexander and White Horse Reefs, 1,132 tons yielded 866 oz; Johnston and Sons, from Frenchman, Dorset and Co., 1,090 tons yielded 405 oz; Perseverance Co., from Leviathan and Victoria Reefs, 1,795 tons yielded 403 oz; Williams and Co., from Blucher, Morgan and Co., 1,046 tons yielded 255 oz. For several years back mining in this division, in almost every branch, has not had so dull an appearance as it at present unfolds. The cause may be attributed to excessive speculation; and, in many instances, it is to be regretted that claims favourably situated, and recently furnished with good machinery, have not been even prospected, but the latter either standing idle or sacrificed to the general pressure. ⁵⁵

March 1867:

AVOCA SUBDIVISION (Mr J.W. Raby, Mining Surveyor and Registrar)

The total number of miners is as follows:

Alluvial miners, 616 Europeans, 373 Chinese

Quartz miners, 18 Europeans.

The total number of miners is thus distributed:

Avoca, 328; Homebush, 211; Amphitheatre, 250; Mountain Hut, 56; Green Hill Creek, 10; Lamplough, 70; No. 1 Creek, 25; Fiddler's Creek, 57; total, 1,007.

The machinery is as follows:

Alluvial mining—Steam engines pumping, winding and puddling, 8—150 horse-power

Quartz mining—Steam engines pumping and crushing, 2 (1 at work, 1 idle)—25 horse-power, 24 stamp heads.

Quartz crushed during the quarter: Bosanquet and Co, from Fiddler's Creek, 150 tons yielded 38 oz; Bosanquet and Co., from Vale's Reef, 30 tons yielded 13 oz. Cement crushed during the quarter: Bosanquet and Co., from Avoca Lead, 100 tons yielded 25 oz. Alluvial mining is progressing very slowly in this division. The yield from the Association Company's claim continues well. The New Holland Company is now engaged in fixing larger pumps, as they were unable to keep the water down with their old ones. Mining operations have been pushed forward vigorously at Homebush. The Golden Lake Company has had good returns, and has paid off a debt of £1,800 within the last eight weeks. The Phoenix Company is doing pretty well. There is very little quartz mining in this division. 56

Mining Surveyors' Reports, March 1867

⁵⁶ Mining Surveyors' Reports, March 1867

June 1867: MARYBOROUGH DIVISION

Quartz crushed during the quarter: Mariner's Reef Co., from Soldier's Reef, Mariner's No. 1, Casing No. 1, 654 tons yielded 555 oz; Williams Brothers, &c., from Blucher's Reef, 950 tons yielded 546 oz; Ballarat Company, from Leviathan Reef, 1,776 tons yielded 444 oz; Beveridge Company, from Great Western Reef, 880 tons yielded 220 oz; Penny and Co., from different reefs, 1,210 tons yielded 932 oz; Johnson and Sons, from Britannia and Frenchman reefs, 1,056 tons yielded 501 oz. Except a slight decrease in the alluvial mining, caused by occasional encouragement from friends in New Zealand, the population is about the same as during the past quarter. The quart miners appear settled, and apparently contented. Chinaman's Flat-In the alluvial workings there are now only two companies at work, viz., the Magnum Bonum and the Band of Hope. The former recently purchased the claim of the Golden Gate party, adjoining, for £1,500, and then arranged with them to work the amalgamated ground on tribute for one-fifth of the gold. The returns have not been, as yet, very favourable, the sleeping shareholders for the past three months being able to place to their credit only 31 oz. The ground has been worked at two different levels of 120 and 160 feet. The Band of Hope is a new company, and only commenced opening out. Maryborough Main Lead-At the White Hills some payable ground has been discovered where the old lead had been lost, and where several small runs appear to converge from the adjoining gullies. Majorca, though dull in appearance, will doubtless revive when the workings of some of the companies in the northern section will reach the deep ground. The yields from the different reefs have been of a satisfactory character, and the handsome yield out of No. 1 Claim, Mariner's Reef, at a depth of from 550 to 600 feet (the reef being from 2 to 3 feet), is entitled to special attention: - 83 tons realised £1,680; 300 tons casing realised £281 14s. Cost of raising quartz: Sinking shaft 10 feet deeper for this purpose, £80; Raising quartz, seven men, 13 days, @£2 10s each per week, £37 18s; Pumping expenses for 23 days @ £3 per day, £69=£186 18s. Thus realising to the company in 23 days a profit of £1,774 16s.⁵⁷

June 1867: AVOCA SUBDIVISION

Quartz crushed during the quarter: Bosanquet and Co., from Vale's Reef, 100 tons yielded 50 oz. Bosanquet and Co., from Fiddler's Creek, 50 tons yielded 25 oz. Quartz tailings and cement crushed: Bosanquet and Co., cement from the Old Lead, 360 tons yielded 108 oz. Bosanquet and Co., tailings from the Old Lead, 100 tons yielded 7 oz 10 dwts. Mining business is very dull at present in this subdivision, owing to the Association Company's ground being worked out. The New Holland Company has not yet obtained payable dirt. The Phoenix Company's ground has been taken on tribute by Moor and Co. The Golden Lake Company is doing rather badly at present. There is nothing new to report in Quartz Mining. ⁵⁸

Sept. 1867: MARYBOROUGH DIVISION

Quartz crushed during the quarter: Mariner's Reef Co., from Soldier's and Batter Reefs, 1,153 tons yielded 201 oz; Williams Brothers and Co., from Blucher's Reef, 895 tons yielded 410 oz; Ballarat Co., from Leviathan and Yorkshire Reefs, 2,330 tons yielded 669 oz; Beveridge Co., from Great Western Reef, 1,180 tons yielded 265 oz; Penny and Co., from different reefs, 1,109 tons yielded 688 oz; Johnson and Sons, from Britannia, &c., 704 tons yielded 308 oz; Perseverance Co., Lancashire and Yorkshire Reefs, 2,550 tons yielded 637 oz. In the alluvial, the puddlers, during the most of the quarter, appear to have been busily employed, and to have been making what they term 'good wages'. The recent forfeiture of so many mining leases does not appear to have discouraged other applicants, for, in many instances, the old posts are scarcely knocked down when fresh ones are put in their places. Quartz mining is steady, though the yield appears much less than on other occasions. ⁵⁹

Mining Surveyors' Reports, June 1867

Mining Surveyors' Reports, June 1867

Mining Surveyors' Reports, September 1867

Sept. 1867:

AVOCA SUBDIVISION (Mr William Byrne, Mining Surveyor and Registrar)

Quartz crushed during the quarter: Pioneer Quartz Crushing, No. 2 Creek, from Burrowes and Co.'s Prospecting Claim, 160 tons yielded 52 oz; Pioneer Quartz Crushing, No. 2 Creek, from Fiddler's Creek, 82 tons yielded 24 oz; Pioneer Quartz Crushing, No. 2 Creek, from Crowhurst and Co., Fiddler's Creek, 45 tons yielded 36 oz; Bosanquet and Co., from Vale's Reef, 150 tons yielded 150 oz. Quartz tailings and cement crushed: Bosanquet and Co., tailings, 300 tons yielded 15 oz; Bosanquet and Co., cement, 150 tons yielded 30 oz. In alluvial mining there is very little to report. The New Holland Company is now erecting their new pumping machinery, and it is expected that in a few weeks this claim will be in full work. The Golden Lake and Phoenix Companies, Homebush, are now let on tribute, and are yielding very good returns. A new crushing machine has been lately erected at Fiddler's Creek, and the prospects of quartz mining in this neighbourhood are very good. Innumerable reefs exist in this locality, but owing to the enormous expense attendant upon carting stone to the mills at Avoca and Redbank, reefing has not hitherto paid. 60

December 1867:

MARYBOROUGH DIVISION (Mr P. Virtue, jun., Mining Registrar [Mr E.P. Virtue was the Mining Registrar of the Raywood Division at the same time])

Quartz crushed during the quarter: Leviathan Reef Co., from Leviathan Reef, 3,600 tons yielded 1,080 oz; Claussen and Penny, principally from the Mosquito, Blucher, and White Horse Reefs, 2,400 tons yielded 1,800 oz; Cundy and Co., public crushings, 2,520 tons yielded 630 oz. In alluvial mining, nothing of any moment has occurred during the quarter; a great many of the puddling machines have been idle through want of water. There has been a small rush at Inkerman, which has yielded poor returns, and is now nearly worked out. The Magnum Bonum Company, Chinaman's Flat, is looking very well, and the tributers have made good wages for some time past. The Band of Hope Company have not yet opened out; they have had encouraging prospects, and are in daily expectation of striking the lead. At Majorca, the Craigie Company has obtained good prospects, but are yet unable to open out: probably during the current quarter good yields will be obtained from this claim. The Cosseg still continues to give handsome returns. The Lady Don and Himalaya Companies have been sold, and are now in course of removal to other fields. About Cockatoo, mining prospects are healthy. The Northumberland Company is paying well, while many of the adjoining claim proprietors are pushing forward their works with spirit and energy. The Leviathan Reef Company is stopped for repairs. This company has recently been made co-operative, since which it has paid well, and with every prospect of continuance. There is any quantity of quartz to be obtained from the reef, and the stone looks exceedingly well. The Great Western, Lancashire and Yorkshire, Mosquito, Blucher, and White Horse Reefs, are paying well.⁶¹

December 1867: AVOCA SUBDIVISION

Quartz crushed during the quarter: Bosanquet and Co., from Vale's Reef, 69 tons yielded 86 oz; Crushing Co., Avoca, from Fiddler's Creek Reef and Fryingpan Reef, 35 tons yielded 16 oz. Tailings crushed: Bosanquet and Co., tailings from Avoca Creek, 610 tons yielded 30 oz; Crushing Co., Avoca, tailings from Avoca Creek, 200 tons yielded 20 oz.⁶²

March 1868:

MARYBOROUGH DIVISION

Quartz crushed during the quarter: Leviathan Reef Co., from Leviathan Reef, 1,400 tons yielded 272 oz; Cundy and Co., public crushing, 2,600 tons yielded 910 oz; Claussen and Penny, public crushing, 1,008 tons yielded 555 oz; Williams Bros & Co., Blucher's Reef, 520 tons yielded 416 oz; Mariners' Reef Co., from Battery and Soldiers' Reefs, 1,042 tons yielded 70 oz; Mariners' Reef Co., public crushing, 100 tons yielded 50 oz; Phoenix Company, Mariners' Reef, 100 tons yielded 63 oz. The mining interests of nearly the whole of this division have materially suffered during the last quarter, in consequence of the long continued drought. This cause, taken together with the discovery of gold in Queensland, and the lately increased demand for mining labour at Ballaarat, has had the effect of somewhat decreasing our mining population. Many of the alluvial mining companies at Majorca have had great difficulties to contend against during the quarter. It has been found that the rich leads of gold in that place have gone down below the water level, and the machinery on the ground is not powerful enough to drain the water efficiently, or to permit of successful mining operations. The Kong Meng* and Robin Hood companies had to suspend work for a time during the quarter. Several claims in the dry sinking have been abandoned altogether, and the machinery sold and removed.

At Chinaman's Flat, no finds of any importance in the old alluvial workings have come to light, and no fresh alluvial mines have been discovered during the quarter. The Band of Hope

⁶⁰ Mining Surveyors' Reports, September 1867

⁶¹ Mining Surveyors' Reports, December 1867

⁶² Mining Surveyors' Reports, December 1867

Company are now driving across the deep ground in the headings for the opposite reef, where they hope to obtain payable gold. A considerable amount of capital has already been invested in this mine, and there is no doubt but that, so soon as the main lead is struck, the operations of the company will be successful. As yet, no gold has been taken from it. The Magnum Bonum Extended Gold Mining Company recently sustained an accident to their machinery, but not of a serious nature, and which was speedily repaired. As this is the most important and valuable alluvial mine in the division, I herewith subjoin a few particulars regarding it. The company was originally started in May 1862, by eight shareholders who held sixteen shares between them, subsequently the shares were increased to 500. The capital already invested in the mine stands thus—amount of cash required and invested to start is, £11,570; value of gold obtained from the mine and invested in it, for the purpose of carrying on the works, £19,978, making the total capital invested £31,548. From ignorance of the nature of the ground the company sunk two shafts on the mine, at a cost of £5,000, which had to be abandoned. They were not constructed sufficiently strong, but the experience thus dearly gained, caused the third shaft, which was sunk to prove secure. Over two tons of iron were used in its construction, and great care and labour were found necessary to enable the company to pierce a fine wet drift of sand in the shaft, of about 40 feet deep; the total depth of shaft is 160 feet. After a large sum of money had been spent in opening the mine, it was found that the lead of gold crossed the boundary, and found its way into the Golden Gate, a small claim of five acres, and then re-entered the Magnum Bonum further down. This circumstance led to the purchase of the Golden Gate by the company for the sum of £500. The mine is now let on tribute of 20 per cent of the cross yield of gold. It is now in thorough working order, and there is every prospect and expectation of its proving the most productive mine in the division. The following is a statement of gold obtained from the principal alluvial mines in this division for the past quarter: - Magnum Bonum Extended, 864 oz; Cossey Company, 360 oz; United Kingdom Company, 240 oz; Robin Hood Gold Mining Company, 200 oz; Queen of the Isles, 160 oz; Kong Meng Company, 160; Prince of Wales, 150 oz; Northumberland Gold Mining Company, 140; Sundry (15) Whim Claims, 1,285 oz; Total, 3,559 oz. As regards quartz mining, I have to report that several prospecting reefs have been registered during the quarter. The Leviathan Reef Gold Mining Company was stopped for general repairs to machinery during two months of the quarter; they have not got to work, and are sinking the No. 6 shaft while the reef is being drained. The Mariners' Reef gold Mining Company has been idle since the early part of January; they propose to begin operations again shortly. Battery and Soldiers' Reefs are paying well. The Phoenix Quartz Mining Company is making progress. During the first month of the quarter the mine was unproductive, and operations were suspended, but recently work has been resumed, and stone obtained to the value of half-an-ounce to the ton. In closing this report, I would take the liberty to observe, that not only the main lead at Chinaman's Flat, but also the main lead at Maryborough, each having a course extending over several miles of country, are most probably rich in gold deposit below the water-level. This appears to be a plain inference, if the facts connected with mining operations at Majorca and Chinaman's Flat are taken into consideration. The gold now obtainable from the mines in those places is to be found below the water-level. Both the leads at Maryborough and Chinaman's Flat have lain comparatively idle for years. What is specially wanted for this division of the district, in order to develop its large mineral resources, to foster and promote its material progress and prosperity, is capital and enterprise, combined with a fair supply of skilled mining labour. Without more abundant and more powerful machinery than the division at present possesses, it would be quite impossible to work the deep ground referred to with economy, efficiency, or success.63

*Lowe Kong Meng: He was born in Penang, the son of a British Chinese merchant. They sent him to school in Penang, then to Mauritius to study English and French under private tutors. He mastered both languages, then worked as a supercargo on ships trading between Mauritius, Calcutta, Singapore, and through the Indian Ocean and the South China Sea. In 1853 at the age of twenty-two he bought his own ship, sailed to Australia, and set up as an importer in Little Bourke Street. He went into mining, especially in a deeper mine at Majorca, north of Clunes, and soon had six ships in his fleet. Some worked Trepang, some traded between Melbourne and Hong Kong where he established other businesses. 64

March 1868: AVOCA SUBDIVISION

Quartz crushed during the quarter: Bosanquet and Co.'s Crushing Machine, Avoca, from Vale's Reef, 50 tons yielded 100 oz; Bosanquet and Co.'s Crushing Machine, Avoca, from Vale's Reef, 30 tons yielded 90 oz; Dame's Crushing Machine, from Poverty Reef, 75 tons yielded 17 oz; Fiddler's Creek Co., from Luck's-All Reef, 47 tons yielded 19 oz; Fiddler's Creek Co., from Fiddler's Creek, 50 tons yielded 15 oz; Fiddler's Creek Co., from Butler's Reef, 56 tons yielded 8 oz. Cement crushed during the quarter: Bosanquet and Co.'s Crushing Machine, Avoca, cement from the Avoca Lead, 300 tons yielded 60 oz. In alluvial mining there is little to report. The Phoenix Company, Homebush, have ceased working, and abandoned their ground. Several parties of working miners are, however, bent on giving it a further trial, and are now putting down shafts. The tributers in the Golden Lake Company's ground, adjoining the above, are now engaged in prospecting it, and have made arrangements with the company for that purpose; but appear to have lately lost the run of the old lead. The New Holland Company is still progressing satisfactorily, but they have still a great body of water to contend with, which much retards their operations. There is nothing important to report in quartz mining.

June 1868: MARYBOROUGH DIVISION

Quartz crushing during the quarter: Penny and Claussen, public crushing, 1,121 tons yielded 1,222 oz; Cundy and Co., public crushing, 2,470 tons yielded 988 oz; Leviathan Reef Co., public crushing, 720 tons yielded 188 oz; Leviathan Reef, from Leviathan Reef, 1,728 tons yielded 364 oz; mariners' Reef Co., from Soldiers' and Battery Reefs, 1,610 tons yielded 282 oz; Phoenix Company, from Mariners' Reef, 599 tons yielded 98 oz; Williams Bros and Co., from Blucher's Reef, 390 tons yielded 253 oz; Williams Bros and Co., public crushings, 140 tons yielded 63 oz; Johnstone's Co., Public crushings, 397 tons yielded 232 oz. Mullock, quartz tailings and cement crushed: Johnstone's Co., Public crushing, 181 tons yielded 59 oz. The condition of mining affairs at Majorca is still considerably depressed and unsatisfactory. An increase of capital is now urgently required. The want of capital is the cause of the entire stoppage of work by several companies during the quarter. There is undoubtedly a fine field for capital and enterprise in the deep leads situated around the neighbourhood of Majorca. At Maiden's Hill, to the south of Majorca and Gibraltar, there is a very rich lead. This lead has been worked down to heavy water, but work will now have to be abandoned thereon, as steam machinery can alone enable miners to go successfully into the deep ground. One company lately sunk a shaft on the edge of the deep ground over the lead, and took 31 oz 17 dwts off the bottom. This company holds about 20 acres of ground on this spot, but they have no machinery, and are therefore unable to work it to any advantage. The Old Victory Company, at Majorca, has abandoned their deep ground, and so have the Kearsage Company, because of their total inability to cope with the water since the stoppage of the Manchester engine. The stoppage of these two companies will leave, for the present, one of the richest runs of gold at Majorca idle. This run is supposed to be identical with the lead belonging to the famous Cossey Company; the ground of the latter company has been worked for the last four years and a half, by a few enterprising Swiss and Italians. The United Kingdom Company (co-operative) has worked for about six years on the outside of the wellknown Gibraltar Lead. It is probable that the best days of this company are yet before the. It would seem as though a quartz vein, which runs through the ground of the United Kingdom Company, supplemented the lead at Gibraltar. I infer this, because that company has occasionally during their operations met with outside detached blocks of quartz, and some of these have turned out exceedingly rich. The lead at Harrison's Hill, near Carisbrook, and which is situated on private property, is now attracting considerable attention. This lead is 220 feet wide, and has an average depth of 70 feet, and appears to be very rich. The Phoenix Company (co-operative), who have a claim thereon, have had returns for the quarter amounting to 485 oz 13 dwts, but they are under a heavy tribute to the proprietor of the land. The Magnum Bonum Gold Mining Company (registered), at Chinaman's Flat, have been engaged during the quarter in blocking on the main lead in that place; they show very handsome returns. The Band of Hope Gold Mining Company, who were engaged last quarter in driving for the gutter, have at length struck the lead, and have obtained a very handsome prospect. The depth of their present shaft is 183 feet. The following is a statement of gold obtained form the principal alluvial mines in this division for the past quarter: - Magnum Bonum Extended, Chinaman's flat, 1,362 oz; Band of Hope Company, Chinaman's Flat, 11 oz; Cossey Gold Mining Company, Majorca, 510 oz; Kong Meng Company, Majorca, 120 oz; United Kingdom Company, Gibraltar, 216 oz; Prince of Wales Company, Four-mile Flat, 300 oz; Hope Company, Battery Hill, 16 oz; Sundry (15) Whim Claims, 1,148 oz; Total, 3,916 oz. The returns from several of the quartz reefs in the division during the quarter show signs of healthy and vigorous improvement. Some of the reefs in the neighbourhood of Mosquito are proving very valuable.

Tick and party, of Adelaide Lead Reef, raised a lot of stone which yielded 4 oz to the ton; and a party on Blucher's Reef had a late crushing of 160 tons of stone, which gave them a return of 307 oz. The New Flagstaff Reef Company had a trial crushing of 7 tons lately, which gave 1-3/4 oz to the ton. The Mariner's Reef Gold Mining Company (registered) is still idle, the stone being too poor to cover working expenses. The operations of the company are now confined to Battery and Soldiers' Reefs. These reefs are easily worked, being composed of a mixture of quartz and mullock veins. Depth of reefs 50 feet and upwards to the surface. They are worked on half tribute. It is worthy of mention that a party of seven Chinamen have a quicksilver cradle at work upon the tailings of the Leviathan Reef Gold Mining Company, and it has been reported to me that they are deriving an income from their operations of £35 a week. On the whole, the position of mining matters generally in this division is now established upon a more sound and prosperous basis than it has been for several years past.⁶⁶

June 1868: AVOCA SUBDIVISION

Quartz crushed during the quarter: Dame's Crushing Machine, Fiddler's Creek, from Donkey Hill Reef, 65 tons yielded 26 oz; Dame's Crushing machine, Fiddler's Creek, from Fiddler's Creek Reef, 142 tons yielded 35 oz; Dame's Crushing Machine, Fiddler's Creek, from Bullocky Reef, 42 tons yielded 25 oz; Dame's Crushing machine, Fiddler's Creek, from Luck's-All Reef, 38 tons yielded 13 oz; Bosanquet and Co.'s machine, Avoca, from Vale's Reef, 50 tons yielded 100 oz. Cement crushed: Bosanquet and Co.'s machine, Avoca, cement from Avoca Old lead, 300 tons yielded 75 oz. During the past month the New Holland Company has struck gold at a depth of 140 feet, and from eleven machines has obtained 260 oz. The water still continues troublesome, and the company is about to erect another engine. The direction of the lead being now well defined, the Pactolus Company is also about to commence work, and have called for tenders for the sinking of a shaft. The Golden Lake Company, Homebush, has obtained 295 oz during the past quarter. There is nothing new to report in quartz mining.⁶⁷

Sept. 1868: MARYBOROUGH DIVISION

Quartz crushed during the quarter: Mariners' Reef Co., from Battery and Soldiers' Reefs, 751 tons yielded 130 oz; Mariners' Reef Co., public crushings, 240 tons yielded 48 oz; Phoenix Co., from Mariners' Reef, 332 tons yielded 44 oz; New Flagstaff Reef Co., from Flagstaff Reef, 62 tons yielded 137 oz; Penny and Clausen, public crushings, 1,123 tons yielded 837 oz; Williams Bros., from Blucher's Reef, 780 tons yielded 468 oz; Johnstone's Co., public crushings, 361 tons yielded 218 oz; Cundy and Co., public crushings, 2,000 tons yielded 1,400 oz; Leviathan Reef, from Leviathan Reef, 2,060 tons yielded 464 oz. Quartz tailings and cement crushed: Johnstone's Co., public crushings, 386 tons yielded 93 oz. In alluvial mining there has been steady and substantial improvement throughout this division during the quarter. Several alluvial prospecting claims have been registered, and also sites for puddling machines. Those miners who are engaged in the occupation of puddling are making, on an average, good wages; and, as we have lately had a heavy fall of rain, their dams are now well filled, and their position made secure, for some months to come, as regards a full supply of water for mining purposes. Two small rushes have occurred at the White Hills during the quarter. The first was to a spot called Sweden Gully, near Simson's. The prospectors obtained a good prospect in the shallow sinking, but every effort has failed to trace payable gold down the flat. The second was occasioned by the discovery of a feeder running into the main load from the adjoining ranges. Average depth of sinking, about 25 feet; thickness of washdirt, from 18 inches to 2 feet. This rush will most probably give profitable employment to about 150 men for a considerable time. The prospectors washed eleven loads, which gave an average yield of about 9 dwts to the load. Two extended alluvial claims, situated at the north end of the Hanoverian Lead, Majorca, have been registered during the quarter. In both claims the depth of sinking will exceed 100 feet, and they will be worked by whim or steam machinery. The claim of the Columbia gold Mining Company is also situated on this lead, and promises to become very valuable, a prospect having been obtained of 13 oz. The Defiance Gold Mining Company has been idle during the quarter, but are nearly ready to begin work again. The Duke of Cornwall Gold Mining Company still remains idle, in consequence of requiring more powerful machinery than they at present possess. At the Alma and Chinaman's Flat mining matters have greatly revived, and are now showing signs of life and activity. The Golden Gate Company is busily engaged in erecting machinery at the old workings on the Alma Lead. They intend to crush the cement, which was left when the lead was worked ten years ago, and which is supposed to be very valuable. The Band of Hope Gold Mining Company has recently purchased extra and more powerful machinery, which is now in courts of erection. They expect to begin work in a week or two.

The Magnum Bonum Extended Gold Mining Co increased their returns. This Company declared a dividend last week of 10s per scrip. Gold obtained from the principal alluvial mines for the last

Mining Surveyors' Reports, June 1868

⁶⁷ Mining Surveyors' Reports, June 1868

quarter: Magnum Bonum Extended, Chinaman's Flat, 1,980 oz; Cossey Gold Mining Co., Majorca, 625 oz; Kong Meng Gold Mining Co, Majorca, 90 oz; Robin Hood Gold Mining Co, Majorca, 323 oz; Prince of Wales Gold Mining Co, Four-mile Flat, 200 oz; United Kingdom Gold Mining Co, Gibraltar, 511 oz; Phoenix Co, Harrison's Lead (private property), 900 oz; Sundry (14) Whim Claims, 1,259 oz. Of quartz mining, several prospecting claims were registered for the quarter. The White Horse Reef Co crushed a parcel of 258 tons, which averaged 17 dwts to the ton. A trial crushing of 1-1/2 tons from the claim of John McKay yielded 26 oz 1 dwt. At Frenchman's Reef several claims are proving valuable. The Ah-Hing Co crushed 75 tons, which averaged 1 o per ton. Depth of sinking 120 feet, width of reef 12 inches. Bertram and party also crushed three parcels from their claim. Deed's Reef, at German Gully, had two small crushings, which gave excellent results. This is a new reef, and has only been worked 20 feet deep. Width of reef, from 9 to 10 inches. The Mosquito Reef Co crushed 180 tons from their claim at Mosquito... Depth of sinking, from 180 to 200 feet. The Union Co crushed 180 tons from their claim... Depth of sinking, from 90 to 140 feet. Ellery and Passmore have turned out some good stone from their claim on Bristol Hill. From their last crushing of 11 tons they obtained an average of 3-1/4 oz. Depth of sinking, 212 feet. The attention of speculators is being drawn to Bristol Hill, on which there is a splendid opening for mining enterprise. A considerable number of quartz reef claims are now quite idle in the vicinity of Havelock. The reason is that there is no crushing machinery on the spot, to enable miners to get quartz crushed with facility, and at the lowest cost. There is no crushing machinery nearer than Burnt Creek, or Chinaman's Flat.⁶⁸

December 1868:

MARYBOROUGH DIVISION

Quartz crushed during the quarter: Mariners' Reef Co., from Mariners' Reef, 1,702 tons yielded 312 oz; Phoenix Co, from Mariners' Reef, 887 tons yielded 77 oz; Penny and Claussen, public crushings, 1,181 tons yielded 897 oz; Williams Bros and Co., from Blucher's Reef, &c., 1,040 tons yielded 832 oz; New Flagstaff Reef Co., from Flagstaff Reef, 20 tons yielded 33 oz; Leviathan Reef Co., from Leviathan Reef, 1,863 tons yielded 413 oz; Johnstone's Co., public crushings, 329 tons yielded 220 oz; Cundy and Co., public crushings, 2,026 tons yielded 1,013 oz. Quartz tailings and cement crushed: Penny and Claussen, public crushings, 82 tons yielded 10 oz; Johnstone's Co., public crushings, 391 tons yielded 92 oz. Unusual enterprise and activity have prevailed during the past quarter, and those interests are now in a prosperous state. The yield of gold from quartz reefs and alluviums is largely on the increase. The mechanical appliances and manual operations of the principal mines in the division are becoming more systematic and successful. Majorca—The Duke of Cornwall Co are engaged in erecting larger pumps. The Defiance Co is in contract with a tribute party; they were idle during the quarter. The Enterprise Co are tracing gold southward towards Mount Greenock; while the Robin Hood and Columbia Co's are taking the lead northward in the direction of Moolort Hill. On Fox's Plain a large quantity of land has been taken up, with the view of connecting the Sadowa Lead at Rocky Flat with the run at Cockatoo. The United Kingdom Co is prospecting a quartz reef, which they discovered on their alluvial claim. The Kong Meng Co has been pumping for the last six months: they only commenced to get out washdirt last month; the value of their plant is £3,000. The Homeward-bound Co struck the gutter and their returns for the quarter are 91 ounces. Craigie—The Britannia Co returns this quarter is 230 ounces. The Victoria Co bottomed since last report; they discovered a new lead running towards the north side of Maiden Hill; their returns are 159 ounces. The Happy-go-Lucky Co is working the reef ground of the Four-mile Lead; their returns are 72 ounces. The Try-again Co struck good gold six weeks since; their returns are 114 ounces. Carisbrook—The Phoenix Co, Scholes' Paddock, have lost time during the quarter through litigation; their returns are 960 ounces. Hudson's Co is working the same rich lead; their returns are 512 ounces. Alma-the whole of the Alma Flat has been taken up to its junction with Chinaman's Flat Lead. Chinaman's Flat—The Band of Hope Co have finished the erection of their new pumping engine of 35 horse-power. They are engaged in putting in two main drives and one horse drive through gravel and reef. They recently washed dirt, which gave a return of 67 oz 2 dwts 13 grs. Gold obtained from the principal alluvial mines for the past quarter: Magnum Bonum Extended, Chinaman's Flat, 2,410 oz; Band of Hope Extended, Chinaman's Flat, 67 oz; Kong Meng Gold Mining Co, Majorca, 210 oz; Robin Hood Gold Mining Co, Majorca, 190 oz; Cossey Gold Mining Co, Majorca, 356 oz; United Kingdom Gold Mining Co, Gibraltar, 279 oz; Prince of Wales Gold Mining Co, Four-mile Flat, 369 oz; Phoenix Co, Harrison's Lead (private property), 960 oz; Hudson's Co, Pott's Paddock, Carisbrook, 512 oz; Sundry (15) whim claims, 1,383 oz; Total, 6,736 oz.⁶⁹

December 1868:

AVOCA SUBDIVISION

Quartz crushed during the quarter: Bosanquet's machine, Avoca, from Vale's Reef, Avoca, 20 tons yielded 30 oz; Crushed at Daw's Machine, Fiddler's Creek, from Fiddler's Creek, West of England Reef, Hampshire Reef, and London Reef, 77 tons yielded 50 tons. Quartz tailings and

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cement crushed: Bosanquet and Co., Avoca, cement from Avoca Lead, 1,300 tons yielded 130 oz; Daw and Co.'s Machine, Fiddler's Creek, Cement, from Alluvial Lead, Fiddler's Creek, 20 tons yielded 5 oz. There has been a marked improvement in the mining prospects of this division. For both quartz and alluvial working large areas have been applied for under the leasing regulations. The Pactolus Company have accepted tenders for the erection of machinery, buildings, &c. The Golden Lake Company, Homebush, is erecting their new machinery, and there have been several large areas taken up by co-operative companies. The erection of larger and more powerful machinery at Fiddler's Creek is likely to give a great impetus to quartz mining in that neighbourhood. The reefs there are numerous, but none of any great richness has as yet been discovered; and in the expectation that the price of crushing will be reduced on the erection of new machinery, miners are getting out and laying up stone. ⁷⁰

March 1869:

MARYBOROUGH DIVISION:

The stoppage for a considerable period during the quarter of several of the principal alluvial and quartz mines in the division, for the purpose of repairing machinery and other necessary matters, together with the prolonged and exceedingly dry weather we have had, have caused a considerable decrease in the returns of both descriptions of gold. We have now, however, just had a splendid fall of rain, which will have the effect of immediately reviving mining industry throughout the division. ALLUVIAL MINING. Majorca—The Grand Junction and Minorca shafts are making progress. The latter is down 90 feet, but not bottomed. These shafts will develop a supposed new lead at Majorca, which can only be a junction of the Four-mile Flat and Cockatoo Leads, and probably the Rocky Flat Lead also. No other outlet exists for all the Amherst and Talbot Leads, except through the basalt formation at Majorca. The Gibraltar diggings are too shallow and dry to carry such deep and wet leads as these. Should this supposition prove correct, then a new stretch of miles of country will be opened from Cockatoo to Chalk's Plains, Carisbrook. The Enterprise Company are developing the lead from Maiden Hill backwards towards its source, which is probably the McCallum's old lead, German Gully. Sinking is now going on in advance of the Hanoverian Lead, in a 42nd section paddock, and all the available land near is held under lease. The Kong Meng Company are engaged upon the shallow ground of their claim, the deep ground being still too wet, although the most valuable; their returns are 363 oz. The Robin Hood Company has only thirty men at work on their claim, which is too small a force to work it efficiently; their returns are 381-1/2 oz. The United Kingdom Company has disposed of their claim and plant to the New Band of Hope Company; their returns are 192-1/2 oz. The Homeward-bound Company is at present unable to work the deep gutter because of the water; their returns are 70 oz. Craigie—The Britannia Company are now occupied in tracing through, under the creek, the Four-mile Lead, in the direction of Majorca; their returns are 121 oz. The Victory Company is drowned out; they badly want machinery; their returns are 63 oz. The Happy-go-Lucky Company is working what is supposed to be a feeder of the Four-mile Lead; their returns are 60 oz. The Try-again Company were drowned out during the late flood, and required a period of three weeks to bale out and repair; their returns are 76 oz. Carisbrook—The Phoenix Company, Scholes' Paddock, are working a lead which is supposed to be the Harrison's Hill Lead; their returns are 461 oz. The Returns from Hudson's Company are 132 oz. Alma—Four extended alluvial claims, comprising an area of 138 acres, have been registered during the quarter. The depth of sinking in three of these claims will exceed 100 feet, and, so soon as the ground has been satisfactorily prospected, their respective owners will at once procure powerful steam machinery. Chinaman's Flat-The Band of Hope Company have now got the whole of the appliances of their mine into excellent working order, but their operations during the quarter have been somewhat disturbed by litigation. The Duke and Timor Company are now pushing forward their new and extensive works to completion with celerity. The following is a statement of the gold obtained form the principal alluvial mines in this division during the quarter: Magnum Bonum Extended, Chinaman's Flat, 1,710 oz; Band of Hope Extended, Chinaman's Flat, 147 oz; Kong Meng Gold Mining Company, Majorca, 363 oz; Robin Hood Gold Mining Company, Majorca, 381 oz; Cossey Gold Mining Company, Majorca, 225 oz; United Kingdom Gold Mining Company, Gibraltar, 192 oz; Prince of Wales Gold Mining Company, Four-mile Flat, 258 oz; Phoenix Company, Harrison's Lead (private property), 461 oz; Hudson's Company, Pott's Paddock, Carisbrook, 132 oz; Sunburst Gold Mining Company, Gibraltar, 55 oz; Columbia Gold Mining Company, Majorca, 121 oz; Sundry (13) whim claims, 777 oz. QUARTZ MINING. A new reef containing stone, which will yield from 15 dwts to 1 oz per ton, has been opened at Rodborough, near Bucknall's, Deep Creek, in the limestone formation near Leap Rock.

The Sunburst Company, Gibraltar, have discovered a rich reef in their alluvial claim, 12 feet below the washdirt, and at 95 feet below the surface; width of reef 18 inches. From a crushing of 77 tons this company received a return of 106 oz. The United Kingdom Company, Gibraltar, have also discovered two parallel but distinct reefs in their alluvial claim, below the washdirt, and at 80 and 120 feet below the surface; width of each reef, 9 and 21 inches. From a crushing of 110

tons they obtained a return of 43 oz. Goldstone Company, Ironstone Reef, has been receiving splendid returns during the quarter. For want of machinery this valuable reef was abandoned for three years. From two crushings of 141 tons they obtained returns amounting to 232 oz 16 dwts 10 grs; width of reef, 18 inches; depth of sinking, 125 feet. The Britannia Company, Pegleg Gully, crushed 280 tons, which gave an average of 9 dwts per ton; width of reef, 15 inches; depth of sinking from 140 to 160 feet. A parcel of 93 tons of stone from White-horse Reef gave 154 oz; 73 tons from Frenchman's Reef gave 78 oz; 8 tons from Deed's Reef gave 96 oz; 160 tons from Union Reef, near Pegleg gully, gave 84-1/2 oz; 230 tons from Mosquito Reef gave an average of 16 dwts per ton; 160 tons from Blacksmith's Reef, Waterloo Gully, gave 17 dwts per ton; 145 ton from California Reef, Eaglehawk, gave 15-1/4 dwts per ton; and 280 tons from Britannia Reef, Pegleg Gully, gave 9 dwts per ton. 71

March 1869: AVOCA SUBDIVISION

Mining in this division has been very much retarded from want of water. The new rush at Fiddler's Creek, being particularly affected by the long continued drought, large piles of washdirt have been raised and stacked, and the value of their contents is only now obtaining solution. A heavy fall of rain occurred on the evening of Tuesday, the 30th march, and continued without intermission for twenty-four hours. The reservoirs were filled to overflowing, and the alluvial miners are busy washing up. Some of the returns, I am informed, have exceeded the expectations of the claimholders; and there is every prospect that the operations of the ensuing quarter will considerably increase the amount of gold obtained in this division. Quartz mining at Fiddler's Creek is gradually progressing, a considerable amount of prospecting being carried on. An injunction having been issued against Whiteman and Party to stop work, less gold has been obtained from their claim than was anticipated. The prospectors (Wright and Party) on the London Reef, Amphitheatre, have a considerable quantity of goo-looking stone raised and ready for crushing: the width of stone in this reef is about 5 feet. The New Avoca Company is erecting powerful machinery for the purpose of working a lease obtained by them on a continuation of the Lamplough Lead. The new Holland gold Mining Company has all their pumps at work, and is constantly washing. I have been unable to obtain the exact quantity of gold obtained by this company. The Golden Lake Company has bottomed their new shaft (150 feet deep), and is about opening out their main drive. Several extended claims have been taken up for the purpose of working wet grounds. Since writing the above I have ascertained that, from the claim of Gunn and Party at Fiddler's Creek, sixteen loads of washdirt yielded one oz to the load, whilst during the quarter a 10-oz nugget was obtained. The washdirt in this claim averages from 18 inches to $\overline{3}$ feet in thickness. The lead on which this claim is situate is almost entirely occupied by Chinese, from whom it is very difficult to obtain information. They have marked out a new lead nearly parallel with the old one. Claims on this new lead are selling for from £20 to £40 (unworked). In every instance the purchasers are Chinese.⁷²

June 1869: MARYBOROUGH DIVISION

The whole of the mining interests of this division at present exhibit signs of healthy and steady improvement. Ten prospecting quartz, five prospecting alluvial, and ten dam and puddling machine claims have been registered during the quarter. Several fresh and bona fide companies have also started into existence, and have either erected or are about to erect, additional and powerful steam machinery. ALLUVIAL MINING. Majorca—The discovery of a lead by the Grand Junction Company, which may prove to be the Majorca Extended, or, which is still more probable, a new and main lead, has opened out a fresh tract of country at Majorca, and has given a considerable impetus to every description of mining operations in that portion of the division. As an evidence of the value attached to adjacent land, I may state that a Ballarat company has purchased the title to 100 acres from the Perseverance Company, at Majorca, for the sum of £1,000. This land is situated ahead of the Grand Junction, where private property and 42nd section lots are held in successive blocks for a mile and a half. There appears to be no doubt that the New Craigie Freehold Company, and also the Minorca Company, will open the same rich lead backwards in the direction of Talbot; it also appears to be probable that the junction of the Cockatoo and Talbot leads will be found near Battery Hill, and that they will be followed past Majorca to the basalt plains near Carisbrook.

The Columbia, Robin Hood, and Kong Meng Companies are now following the Hanoverian Lead towards the same point. The latter company has struck splendid gold in much deeper ground than any hitherto worked at Majorca. Craigie—The Britannia Company are working the continuation of Four-mile Lead in private property. The Try-again Company is flooded out with surface water from the old lead. The Prince of Wales Company has been working poor ground during the quarter, and has lost much time through being heavily flooded with water. Carisbrook—The Dan O'Connell Company have erected steam machinery of 12 horse-power. They intend to trace, if

⁷¹ Mining Surveyors' Reports, March 1869

Mining Surveyors' Reports, March 1869

possible, the run of gold obtained by the Phoenix Company; their engine is ready for work, but the shaft has not yet been bottomed. The Enterprise Company has been unable to bottom their shaft; their machinery is not sufficiently powerful. They are now endeavouring to form a new company with the view of purchasing a heavier plant. The Phoenix Company lost their lead early in the quarter, but found it again a fortnight since. Alma—One extended alluvial claim of ten acres, situate at Moonlight Flat, has been registered during the quarter. The Seaham Company is busily engaged in erecting a 16-inch cylinder steam-engine of 25 horse-power; they have put down a bore of 93 feet deep on their claim, and have obtained a splendid prospect. The Alma Consols Company is now making excellent progress. Chinaman's Flat-The Band of Hope Company have still, during the quarter, been somewhat disturbed by litigation. The mine, however, is now fairly under weigh, and will doubtless continue to yield good returns; average depth of lead, 200 feet, and average width, 150 feet. The Duke and Timor Company met with a most severe accident a few weeks ago, which will delay the progress of their mine for several months. Having sunk their shaft to a depth of 125 feet, they no sooner struck the bottom than it violently burst up, and a conglomerate of drift, sand, mud, and water, rushed with surprising velocity up the shaft, to a distance of 40 feet. The men at work in the shaft had to fly instantly before the surging and ascending mass. The shaft was completely choked, and the water ascended to a level of within 40 feet from the surface. The company is now engaged in putting down a new set of lifts, for the purpose of overcoming the water; they have erected an 18-inch cylinder engine of 30 horse-power. The following is a statement of the gold obtained from the principal alluvial mines in the division during the quarter: - Magnum Bonum Extended, Chinaman's Flat, 1,532 oz; Band of Hope Extended, Chinaman's Flat, 780 oz; Kong Meng, Majorca, 276 oz; Robin Hood, Majorca, 337 oz; Cossey, Majorca, 126 oz; Prince of Wales, Fourmile Flat, 211 oz; Phoenix, Harrison's Lead (private property), 382 oz; Esperance, Pott's Paddock, Carisbrook, 60 oz; Columbia, Majorca, 233 oz; Britannia, Four-mile Flat, 142 oz; Tryagain, Four-mile Flat, 94 oz; Golden Gate, Timor Creek, Alma, 164 oz; Alma Consols, Alma, 477 oz; Sundry (9) whim claims, 515 oz; total, 5,335 oz. QUARTZ MINING. Many of the quartz claims in this division are rich in pyrites, but the total absence of machinery for operating upon it has proved a serious drawback to the proprietors. The claim of the New Flagstaff Company, near Maryborough, is extremely rich in this mineral. A few weeks ago three samples of sand from this claim were transmitted to the works of the Port Phillip Company, Clunes, to be operated on. The result of the assay has been so successful that the Flagstaff Reef Company has resolved to erect machinery on the spot to operate on the pyrites obtained from their claim. The Sunburst Company, Majorca, has crushed 55 tons, which gave an average of 1 oz 1 dwt per ton. This company is now raising from their alluvial claim really splendid stone at a depth of 100 feet from the surface. The company is about to be reorganised. Three tons from a prospecting claim at White-horse gave 10 oz and 12 grs; stone being raised from the surface; average width of reef, 6 inches. Ten tons from a prospecting claim at Waterloo Flat gave an average of 9 dwts per ton; depth of sinking, 12 feet; width of reef, 6 inches. Four tons from a prospecting claim at Adelaide Lead gave 9 oz 9 dwts; depth of sinking, 33 feet; width of reef, 18 inches. The Bristol Hill Company is at present actively engaged in making preparations for the efficient working of their claim.73

June 1869: AVOCA SUBDIVISION

The alluvial rush to Fiddler's Creek still continues; there are now fully 2,000 Chinese on the ground, and 400 Europeans. The lead has now been traced for a distance of two miles, and shepherded still farther. The sinking is from 108 to 130 feet, through layers of ferruginous clays, quartz gravels, and washdirt, resting on pipeclay bottom. The sinking is dry; the washdirt varies in depth from 3 to 8 feet. The width of the lead is from 200 to 300 feet; the yield of gold from 4 dwts to 1 oz. There are now erected thirty-five puddling machines, three whims, and thirty horse whips. The late heavy rains have given a considerable impetus to mining operations, most of the dams being fairly supplied. The principal claims are in the hands of the Chinese population, they having purchased most of the European claims. There is every probability that this will prove a good winter digging, and a great likelihood of the lead being traced, perhaps, to a junction with the old Avoca Lead. There are twenty-five stores, including five butchers' shops, drapery stores, &c.; there are also two public-houses.

In the Chinese quarter there are about thirty stores, a joss-house, and several places of amusement. The inspector of police selected a site for police camp, about a fortnight since; it is now in course of erection. A schoolhouse is also being built, and the place is assuming an air of permanency. In addition to alluvial mining, I may state that in this locality quartz mining is being prosecuted vigorously; the average yield is nearly 12 dwts to the ton. The quantity as yet procured is small, owing to the few employed in that branch of mining. A new quartz reef was

discovered last week about two miles north-east from Lamplough—the specimens very rich, but small in quantity—in fact, it is doubtful but that it may only be surface stone.⁷⁴

Sept. 1869: MARYBOROUGH DIVISION

ALLUVIAL MINING. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Magnum Bonum Extended, Chinaman's Flat, 2,737 oz; Band of Hope Extended, Chinaman's Flat, 1,363 oz; Kong Meng, Majorca, 224 oz; Robin Hood, Majorca, 345 oz; Prince of Wales, Four-mile Flat, 205 oz; Phoenix, Harrison's Lead (private property), 130 oz; Columbia, Majorca, 172 oz; Britannia, Four-mile Flat, 134 oz; Tryagain, Four-mile Flat, 121 oz; Morning Star, Majorca, 102 oz; Golden Gate, Timor Creek, Alma, 120 oz; Alma consols, alma, 470 oz; Sundry (7) whim claims, 395 oz; Total, 6,521 oz. QUARTZ MINING. Considerable attention is now being directed to the quartz reefs at Havelock; several leases of ground in that locality have recently been applied for. I understand that suitable machinery for crushing quartz will soon be erected there. This is a want, which has been severely felt for many years. The Leviathan and North German Companies have amalgamated their claims. The latter company had, before the amalgamation, just completed the erection of an entirely new plant, of the value of £2,000. The claim and plan of the Mariner's Reef Company have changed hands. The tributers now at work on Battery and Soldier's Reefs are making capital wages. The New Flagstaff Reef Company is prosperous, 5 tons 12 cwt quartz tailings were recently transmitted to Sandhurst by this company for manipulation by Koch's machine. The result gave a return of 37 oz of gold. Ten tons of pyrites were obtained form the same claim, and, when operated on, gave a return of upwards of 65 oz of gold.⁷⁵

Sept. 1869: AVOCA SUBDIVISION (Mr Hugh St H. Blair, Mining Surveyor and Registrar)

In alluvial mining Fiddler's Creek still continues to employ a large number of miners, chiefly Chinese. Many thousands of loads of washdirt are now on the surface, but puddling operations have been greatly impeded, and at the present time totally suspended, owing to the dryness of the season. As far as I have been able to learn, the yields from the upper end of the lead have been about 1 oz to the load; at the lower end the yield is about 4 dwts per load. I believe an average yield of 8 or 9 dwts is expected. The Golden Lake Company (Homebush) struck gold a few days back; depth of washdirt about 4 feet, by 150 feet in width. The New Holland Company is at present only engaged pumping, and is raising about 1,000,000 gallons of water per day. The New Avoca Company has about 3 feet of dirt in their drives, and has driven 300 feet without crossing the lead; and, owing to the great width of the lead, the gold is thin, and very much scattered. Quartz mining in this subdivision appears to be greatly neglected; and although there are many payable reefs known to exist, the total crushing plan of the division consists of two machines, one of eight head of stamps driven by a 10-horse-power engine, the other by a 12-horse-power engine. The subdivision appears to be greatly neglected; and although the power engine.

December 1869: MARYBOROUGH DIVISION

ALLUVIAL MINING. There was a small rush during the quarter to Lucknow, about a mile beyond Havelock, in the direction of Simson's station. Several claims on this rush have given good returns. The depth of sinking is from 50 to 80 feet, on a clay bottom, and the gold is coarse and nuggetty. The principal mines on Chinaman's Flat and the Alma continue to make progress, but the Band of Hope Co have been disturbed by litigation. This company and the Magnum Bonum each employ about 100 men. The Dan O'Connell Co, Carisbrook, bottomed two shafts on their claim, at a depth of 90 feet, and from each they obtained a prospect of 1-1/2 oz, and 1 oz 6 dwts of gold. The half of the claims on Majorca are idle for want of capital. Mining matters in that portion of the division are, consequently, in a very depressed state. Gold obtained from the principal alluvial mines in this division during the quarter: Magnum Bonum Extended, Chinaman's Flat, 2,173 oz; Kong Meng, Majorca, 200 oz; Robin Hood, Majorca, 620 oz; Prince of Wales, Four-mile Flat, 281 oz; Britannia, Four-mile Flat, 97; Try-again, Four-mile Flat, 72 oz; Morning Star, Majorca, 92 oz; Columbia, Majorca, 107 oz; Alma Consols, Alma, 679 oz; Golden Gate, Alma, 221 oz; Sundry (11) whim claims, 650 oz; total, 5,194 oz.

QUARTZ MINING. Several prospecting quartz claims, with good prospects, in different parts of the division, have been registered during the quarter. One of the boilers attached to the plant of the Mariner's Reef Company burst recently, which had the effect of stopping crushing operations there for a considerable time. Nearly all the claims on Blucher's Reef are now idle. This reef is 3,000 feet in length, and has hitherto produced payable gold from the surface to a depth of 250 feet. The stone improves in richness as the reef descends. Up to the present period the average yield of gold per ton taken from it has been 18 dwts. Defective and totally inefficient drainage is the sole cause of the stoppage of work on the reef. Many of the reefs at Mosquito, Craigie, and

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Mining Surveyors' Reports, September 1869

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Chinaman's flat are paying well. There has been a considerable increase of population at Chinaman's Flat, Lucknow, &c. ⁷⁷

December 1869:

AVOCA SUBDIVISION

The chief, distinctive feature of the quarter in this division is the discovery of an auriferous deposit at No. 2 Creek, which has given considerable impetus to mining operations and business generally. Owing to the scarcity of water in the neighbourhood, the quantity of washdirt puddled since the discovery has been exceedingly limited. The New Holland Company's plant is advertised for sale on the 31st instant, and also the freehold upon which the plant is situated. The inefficiency of the present machinery to overcome the influx of water has led to this result. I regret this the more, as the New Holland is one of the most valuable alluvial mining properties in this division. The company's ground is situate at the lower end of the once famous Avoca Lead, and commands from four to five thousand feet of its course. A new quartz reef has been discovered in the vicinity of Donkey Hill, with good indications; a prospecting claim has been registered. Everston's claim, on Vale's Reef (near Homebush), is giving excellent returns. The average yield of the lode, which is two feet thick, being 2 oz to the ton. The owner is about to erect machinery in order to test the lode 100 feet below the water-level.⁷⁸

1869:

The following is a list of the principal mining localities in the [Maryborough division]:—Maryborough, Havelock, Adelaide Lead, Moonlight Flat, Alma, Craigie, McCallum's Creek, Four-mile Flat, Chinaman's Flat, Mosquito Reef, Blucher's, White Hills, Balaclava, Inkerman, Bristol Gully, California Gully, Main Lead, Blackman's Lead, Golden Point, Majorca, Cockatoo, Harrison's Hill, Carisbrook, Mariner's Reef, Flagstaff Reef and Gully, Waterloo Gully, Old-man Gully, Gibraltar, Water Flat, Mosquito Flat, Griffith's Gully, Nuggetty Gully, Shicer Gully, Arnold's, Peg Leg Gully, Emu Gully, Smith's Gully.

1869:

The following is a list of the principal mining localities in the [Avoca Division]—Avoca, Homebush, Amphitheatre, Mountain Hut, Green Hill Creek, No. 1 Creek, Fiddler's Creek, Lamplough, Mountain Creek, Paddy's Gully, Four Mile Flat, Barber's Gully. 80

1869:

The Maryborough goldfields comprise the Four-mile Creek and its tributaries, many gullies and creeks lying to the east and trending towards the Deep Creek, and the Timor Creek lying to the west; all of them pouring their waters into the River Loddon. The auriferous alluviums in the valley of the Four-mile Creek extend continuously for nine miles, the breadth varying from five to forty chains; and numerous tributaries add to the available auriferous area. On all the hills auriferous quartz veins are seen cropping out at the surface, and the gullies having their sources near these have been very rich. This area has, from time to time, been the scene of many large 'rushes'. Thousands of men congregated on one lead and commenced operations—and then hearing of some remarkable discoveries ... immediately abandoned their claims to take up new ground in the adjacent creeks. The hills being low, and not very thickly timbered, the sinking not very deep and only in some places wet, the gold generally distributed—and supplies of stores, &c., readily obtainable—it has happened that this area has been more completely prospected and better developed than almost any other. This is easily seen when the map of the district is examined; and yet it cannot be said that all the gullies have been worked, or indeed opened—and as regards the deep leads they are scarcely touched at all. The Maryborough Main Lead, Chinaman's Flat, Blackman's Lead, Griffith's Gully, and many other localities within the watershed of the Four-mile Creek, have for a long period supported a large mining population; and Adelaide Lead, Inkerman, Alma Flat, and Balaclava, on the Timor Creek, are yet far from being exhausted.

The famous Leviathan Reef is now worked as successfully as when first opened. Mr E. O'Farrell, formerly Chairman of the Mining Board of the Maryborough Mining District, has communicated some information relative to the gold workings in his district...[Majorca]...Subsequently steam machinery was procured, and now no less than ten engines, varying from 15 to 50 horse-power are constantly employed in pumping, winding, and puddling. The lead, in its lower part, is 160 feet in depth, and is evidently extending towards the Carisbrook, Moolart, and Charlotte Plains, where so much is expected by all scientific men.' (The rush at Majorca was seen by the Honourable J.F. Sullivan, Minister of Mines, shortly after the workings were opened, and it presented at that time a scene of busy industry; where there was

35 80

Mining Surveyors' Reports, December 1869

Mining Surveyors' Reports, December 1869

R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, p.

R. Brough Smyth, The Gold Fields and Mineral Districts of Victoria, Melbourne, 1869, p.

more of order and decency and good behaviour than would be found probably in any mining locality in England, or on the Continent of Europe). The Amphitheatre and Mountain Hut diggings are on the sources of the River Avoca, and lie immediately north of a basin, having the western spur of the Great Dividing Range for its southern rim. The basin is composed of granite, and the dividing ranges follow nearly the lines of the boundaries of the rock formations. The Amphitheatre diggings are about four miles in length. In many parts the washdirt is two feet in thickness, and the yield has been as high as 1/2 oz to the load. Where there were large quartz boulders the gold was very fine. The Eighty-feet Hill and Canadian Hill attracted at one time a numerous population. The washdirt is from five to six feet thick, and 1 oz to the load has been got from it. The first three loads of washdirt from Canadian Hill gave 1 oz 18 dwts. At Mountain Hut the washdirt varies from three inches to twelve inches in thickness, and the yield was on the average 1/2 oz to the load. The depth of sinking is from four to twelve feet in the shallow parts, and in others as much as forty feet. In the deeper ground, where there is much shingle and waterworn quartz, the washdirt gave 1 oz to the load. Lamplough is situated on an eastern tributary of the Avoca River, and the diggings extend along the creek for some three miles. The old Avoca Lead, more than four miles in length, lies to the north-west; Four-mile Flat and Homebush are about two miles to the north-east of the latter; and many other small patches of worked ground lie in the neighbourhood. At Lamplough the rich ground occurred in patches. In one case 108 oz were obtained from five loads of washdirt. Barber's Gully, about two miles from Lamplough, on the Lexton Road, was opened in consequence of the discovery of rich washdirt on the surface near its source. At first from six to eighteen inches of the surface soil were washed, and this stratum gave about half an ounce of gold to the load. Four men were able to wash nine loads per diem, and sometimes they got as much as 12 oz per diem. Some patches gave as much as 2 and 3 oz per load. The trend was followed, and the depth of sinking increased gradually to thirty feet. Other gullies have been opened in the immediate neighbourhood.⁸¹

1869:

It is not possible to give much information relative to the deep leads in the Maryborough District, because but little has been done to develop them. The areas where they are known to occur are large; the drifts, as compared with some others, are rich, and the difficulties connected with the exploration of the gutters are not numerous nor great; but he local bye-laws, operating prejudicially for a longer period, have fairly deadened enterprise, and, though the restrictions place on capital are not now so severe as they were formerly, persons are slow to invest money in the valuable mines of this district. Its character, in fact, stands in the way of its advancement. 82

1869:

Sadowa Company, Rocky's Flat, Talbot. The gold is got by puddling and sluicing, and no mercury is used in extracting it. There are two puddling machines, each about sixteen feet in diameter; and the sluice-box is sixty feet in length and ten and a half inches in width. The average quantity of washdirt put through each machine, per diem of twenty-four hours, is 300 trucks or sixty tons, and the average yield of gold is 2 dwts 22grs per ton. The pumping engine is of twenty-five horse-power; the cylinder is sixteen inches, with a three feet stroke; the fly wheel is fourteen feet in diameter; and the pump is ten inches in diameter. The winding engine is of ten horse-power; the cylinder is ten inches in diameter, with eighteen inches stroke; and the fly wheel is eight feet in diameter. The quantity of water now raised per diem is about 200,000 gallons.

There are sixty men employed on the works.⁸³

R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, pp. 95-100

R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, p. 214

R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, pp. 115-6

1869:

Auriferous reefs are found in nearly every range in the eastern and southern portions of the Mining District of Maryborough. At Talbot, Amherst, Maryborough, Avoca, Homebush, Redbank, St Arnaud, Dunolly, Jericho, Kingower, Inglewood ... but, except in a few places, they have not been wrought with that energy which the rich yields might have called forth. There is one thick reef at Avoca, which has been traced for a distance of seven miles. From the Mariner's Reef, at Maryborough, stone has been got at a depth of 600 feet. The total quantity of quartz raised is stated ... to be 3,340 tons, and the total quantity of gold obtained therefrom, 33,400 oz. There are forty-four head of stamps worked by an engine of fifty horse-power. ⁸⁴

R. Brough Smyth, <u>The Gold Fields and Mineral Districts of Victoria</u>, Melbourne, 1869, pp. 334-5

MARYBOROUGH HISTORICAL NOTES (2)

March 1870: MARYBOROUGH DIVISION

In consequence of the protracted drought, the temporary stoppage of several of the larger companies, and the smallness of the average returns from quartz crushed, the yield of gold this quarter, from all sources, exhibits a considerable falling off. In this division, however, mining enterprise, in all its branches, was never more abundant, active, and prosperous than it is at present. ALLUVIAL MINING. During the quarter several prospecting claims have been registered, situate at Chinaman's Flat, White Hills, and the Main Lead. The prospects obtained from these claims have varied from 1/2 oz to the load to 1 dwt per tin dish. The depth of sinking averages from 25 to 30 feet. The claim last registered on the Main Lead, near the Camp Hotel, and which gave a prospect of 1 dwt to the dish, has led to some excitement, and about thirty claims have been marked out in that locality. Recently the Magnum Bonum Company had one of their engines much damaged by a fire, which also totally demolished the engine-house, and caused a delay in mining operations of nearly a month. The Band of Hope Company lost their lead during the quarter, and was compelled to sink their shaft 60 feet deeper; they are now putting in main drives. The Duke and Timor Company are busily engaged with the erection of their powerful steam machinery. The Craigie Estate Company, of Majorca, is supposed to have struck the run of deep ground which appears to form the outlet of the Rocky Flat and Mount Greenock Leads. Of course no positive opinion can yet be expressed on the subject; but the presence in their claim of a deep gutter containing gold proves that a new run of payable ground has been opened, and leads to the conclusion that miles of country between Rocky Flat and Carisbrook will soon become exceedingly valuable as a field for prospecting. A strong tribute party has been formed to work the Kong Meng and Columbia mines conjointly. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Magnum Bonum Extended, Chinaman's flat, 1,190 oz; Band of Hope Extended, Chinaman's Flat, 675 oz; Alma Consols, Alma, 1,079 oz; Golden Gate, Timor Creek, Alma, 266 oz; Robin Hood, Majorca, 354 oz; Prince of Wales, Four-mile Flat, 218 oz; Britannia, Four-mile Flat, 182 oz; Morning Star, Majorca, 126; Sundry (9) whim claims, 592 oz, Total, 4,683 oz. QUARTZ MINING. The New Flagstaff Company has worked out their present levels, and is now trying to reorganise the company, in order to sink a new shaft 500 feet deep. The Bristol Hill Extended Company has sunk two shafts on their claim—one on the western reef to a depth of 235 feet, and one on the eastern reef to a depth of 245 feet; the distance between the shafts is 660 feet. It is the intention of the company, so soon as the driving is finished, to erect powerful crushing and winding steam machinery. From Deed's Reef, the returns are 131 oz from 47 tons; the Hit-or-Miss Reef gave 46 oz from 17 tons; and one of the many reefs on Bristol Hill gave 125 oz from 100 tons. These are among the highest returns obtained during the quarter. 1

March 1870: AVOCA SUBDIVISION

A general depression in mining operations exists throughout this division, which in a great measure is attributable to the almost unparalleled drought, no rain having fallen in this division since the 13th of January last, consequently crushing and puddling operations have been very limited. There are still a large number of miners at No. 2 Creek, but until the wet weather sets in and supplies the miners with sufficient water for puddling purposes, it will be impossible to five reliable results. The Albion Company (Old Avoca Lead) has obtained some capital prospects from what they consider to be a new and distinct lead, and is now engaged erecting another steam puddling machine. The yields from quartz have in most cases been unsatisfactory.²

June 1870: MARYBOROUGH DIVISION

ALLUVIAL MINING. At the Alma, Chinaman's Flat, and Havelock, mining operations, in connection with several of the larger alluvial mines situate in those localities, have been pushed forward during the quarter with great rapidity. The proprietors of those mines are meeting with every encouragement and facility in the carrying out of their costly and extensive undertakings. But as a rule they have, in the first instance, taken the trouble fully to assure themselves of the correct value of their claims, by boring and sinking, with satisfactory results, on the deep leads by which they are traversed. Many of these claims will, in all probability, soon yield magnificent returns, and put an entirely new face upon mining prospects in this division. The owners of them are confident of ultimate success, and they are at present doing permanent good to the district, by giving steady and remunerative employment to a large number of men. The Gladstone Company, Alma, is now in the market for a suitable mining plant to enable them to begin work at once. The Seaham Company, Alma, obtained 30 oz 6 dwts as the result of their first fortnight's work.

The Band of Hope Company, Chinaman's, have been engaged nearly the whole of the quarter in opening out their mine. For the last fortnight's work they obtained 101 oz 8 dwt. The prospects of this mine are now splendid, and everything belonging to it is in first-class order. The Magnum

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Bonum Company, Chinaman's, still obtain handsome returns. At Havelock the Lord Clyde Company have, after long labour, just completed the proving of their ground. They propose to purchase and erect steam machinery at the earliest convenience. The Havelock Company has commenced operations on their claim, and has called for tenders for the erection of their mining plant. They hope to be in full working order in the course of a few months from this date. The small alluvial claims, in shallow sinking, on the Havelock Lead, have hitherto proved exceedingly rich, and the gold is of fine quality. I have no doubt whatever that the large claims in deep sinking on the same lead will also prove to be of the same character. A great proportion of the alluvial claims at Majorca has remained idle during the quarter; but I am informed on good authority that several of these will be started to work again immediately. The Minorca Company is prospecting for a new lead. A third engine is being erected on the claim of the Robin Hood Company, which has been let on tribute. The Enterprise Company, Battery Hill, is about to erect a heavier plant. The Dan O'Connell, Company, Harrison's Hill, have sunk a new shaft, 90 feet deep, and have obtained gold. The Phoenix Company, Harrison's Hill, have survived the severe and protracted litigation in which they were involved; have resumed work, sunk a new shaft, and obtained splendid prospects. This mine is on private property, and is undoubtedly one of the richest in the division. The late constant and heavy rains have flooded out several of the smaller and larger alluvial claims. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Magnum Bonum Extended, Chinaman's Flat, 1,761 oz; Band of Hope Extended, Chinaman's Flat, 101 oz; Alma Consols, Alma, 1,173 oz; Golden Gate, Timor Creek, Alma, 281 oz; Seaham Extended, Alma, 30 oz; Prince of Wales, Four-mile Flat, 254 oz; Britannia, Four-mile Flat, 145 oz; Morning Star, Majorca, 139 oz; Perseverance, Four-mile Flat, 105 oz; Sundry (11) whim claims, 468 oz; Total, 4,460 oz. QUARTZ MINING. The Bristol Hill Company is well pleased with their trial crushing of 129 tons, which gave 74 oz 15 dwts 12 grs. Two reefs on their claim are still untried. The North German Company have let their mine on tribute, and have only done a few weeks work during the quarter. One claim, situate at Mosquito, on Monk's line of reef, was registered last month. From a trial crushing of 3-1/2 tons, 10 oz, 3 dwts were obtained; depth of sinking, 40 feet. The Holstein Company, Craigie, has just finished the sinking of their new shaft. The following are among the highest returns obtained during the quarter: - 24 tons from the Lost and Found Reef gave 28 oz 10 dwts; 13 tons from Deed's Reef gave 115 oz; and 160 tons from the Ironstone Reef gave 269 oz.³

June 1870:

AVOCA SUBDIVISION

I have the honour to report that mining operations, in this subdivision, were, during the first portion of the quarter, greatly retarded owing to the great scarcity of water for puddling purposes. During the past month (June) rains have been heavy and continuous, and an abundant supply of water has been stored; and I have no doubt the returns of alluvial gold for the next quarter will be greatly increased. In quartz mining I have to report that three prospecting claim have been registered, and preparations are now being made to work some of the proved payable reefs in a systematic and proper manner. The crushing power of the district has been increased, Dawe and Co., having added another battery of four stamp-heads to their crushing plant.⁴

Sept. 1870:

MARYBOROUGH DIVISION

ALLUVIAL MINING. The Seaham, Band of Hope, Alma consols, and Magnum Bonum Companies are now obtaining large and steady returns, and paying excellent dividends. Several ordinary prospecting and extended alluvial claims have been registered during the quarter; and a considerable number of bona fide companies, who hold their properties under lease in this division, have either been formed or are now in course of formation. The Havelock Company has nearly completed the erection of their new mining plant. A shaft has been sunk on their claim to a depth of 88 feet, when the bed-rock was reached, and a fine example of shotty gold obtained. Tenders have been invited by the company for cutting a chamber and opening drives. The Prince of Wales Company intends fully to test the value of their ground by boring; and the same remark also applies to the Queen and Count Bismark Companies, both of whose claims are situated on the Alma Deep Lead. The Gladstone Company has purchased the plant, which belonged to the late Craigie Estate Company, and is now busily engaged in removing the same to their claim. The Seaham Company are erecting a winding-engine and large boiler, in addition to their present plant, which, when completed, will enable them to put on more hands, and work the ground to better advantage.

At Majorca mining operations have been exceedingly depressed during the quarter, but I anticipate a change for the better shortly. The Kong Meng, Columbia, Robin Hood, and United Kingdom Companies are now working their mines under the tribute system, which has been found to answer admirably. The Durham Company recently bottomed, and obtained a prospect of 2 dwts to the dish, while the Evening Star Company also struck the bottom recently, and

Mining Surveyors' Reports, June 1870

⁴ Mining Surveyors' Reports, June 1870

obtained a prospect of 3 dwts to the dish. The claims of both of these companies are situate on the Majorca Deep Lead; and it is now considered almost certain, from recent discoveries which have been made, that this lead will be found to continue as far as Carisbrook, if not beyond it. To this matter, therefore, a good deal of attention is now being directed by the mining community. The following is a statement of the gold obtained form the principal alluvial mines in this division during the quarter: - Magnum Bonum Extended (Chinaman's Flat), 1,389 oz; Band of Hope Extended (Chinaman's Flat), 1,295 oz; Alma Consols (Alma), 1,199 oz; Golden Gate (Timor Creek, Alma), 351 oz; Seaham Extended (Alma), 605 oz; Dan O'Connell (Carisbrook), 80 oz; Britannia (Four-mile Flat), 153 oz; Morning Star (Majorca), 127 oz; Hudson (Carisbrook), 113 oz; Fox's (Majorca), 109 oz; Sundry whim claims, 251 oz; Total, 5,673 oz. QUARTZ MINING. Cummin's Tribute party, who were engaged during the quarter on the North German Reef, Chinaman's, have been successful; they crushed 900 tons of stone, which gave 450 oz. The Sydney Hill Company, Craigie, after having worked their claim for six months without success, has just struck a payable reef at a depth of 200 feet. The Goldstone Company, Craigie, has crushed 252 tons, which gave 341 oz. Deed's Company, Majorca, crushed 10-1/2 tons, which gave 128-1/2 oz. The Mariner's Reef Company has crushed 441 tons from the North Mariner's Reef, which gave 390 oz 17dwts 12 grs. The Bristol Hill Company have crushed 417 tons, which gave 135 oz 13 dwts 6 grs; they are still driving at the 252-foot level, in order to reach the western shaft; the ground is extremely hard, and the progress slow. Several prospecting claims, situate at Adelaide Lead, Waterloo Flat, Golden Point, Eaglehawk, White Hills, and Havelock, have been registered during the quarter. A trial crushing of 10-1/2 tons from the Prince of Wales claim, Golden Point, gave an average of 19 dwts per ton.⁵

Sept. 1870: AVOCA SUBDIVISION

QUARTZ MINING. The quantity of quartz crushed and the yield of gold therefrom is very small. This may be attributed to the severe wet weather we have experienced during the entire quarter, preventing many miners from working. Mr T. Clapperton of Amphitheatre has nearly finished erecting a quartz-crushing plant at Fiddler's Creek; it consists of two batteries of revolving stamps, with front and back discharge, and is to be furnished with the latest improvements for saving gold. ALLUVIAL MINING. The miners at Fiddler's Creek are tracing the lead into deep ground, which is expected to yield well. At No. 2 Creek mining is still carried on with good results, although the wet weather has been a great drawback. There has been a small rush to the neighbourhood of Donkey Hill, but it does not appear to be turning out well. Within the last few days a new rush has set in to Yorkie's Gully (a tributary of No. 1 Creek); several holes have been bottomed, the average depth of sinking about 20 feet, the strata passed through consisting chiefly of hard cement; one party obtained 1 dwt 14 grs from twelve buckets, another obtained 1/4 dwt from a tin dish. The Golden Lake Company, Homebush, has been obtaining better yields, and it is now thought that they have struck payable ground. All things considered, the mining prospects of this division show a brighter and more encouraging tendency than they have done for some time.⁶

December 1870: MARYBOROUGH DIVISION

On no previous occasion have I been in a position to report so favourably as now respecting the material progress and stability of the general mining interest of this division. During the quarter several extended alluvial claims, situate at the Alma, and several prospecting quartz claims, situate on the Cambrian, Nelson, and Telegraph Reefs, have been registered. Trial crushings from some of the quartz claims gave an average of more than half an ounce of gold per ton. The European mining population of the division, especially at the Alma and Chinaman's Flat, has much increased. These places are now hives of mining industry. Mining property, house property, and property in land are steadily increasing in value. ALLUVIAL MINING—The mines at Carisbrook are now beginning to look up, and to manifest signs of prosperous development. The Phoenix Company has just completed the erection of their steam machinery, which will enable them to overcome the difficulties that formerly obstructed their progress. The Dan O'Connell Company has been chiefly engaged in main driving; the lead has been found at a depth of 100 feet. At Majorca, the newly organised Kong Meng and Columbia Company have only managed four washings since they begun operations, and these have given a return of 147 oz 10 dwts.

The Reform Company has found the lead, which was lost by the Defiance Company, at a depth of 120 feet, and has obtained the excellent return of 343 oz. A large number of valuable mines, in this portion of the division, and which have remained idle for years, have now been taken in hand by fresh companies, and are being worked with excellent prospects of success. At the Alma, the Golden Gate Company is about to erect an additional steam-engine and a 12-head battery. The Gladstone Company has erected two engines of 25 horse-power each, and has begun operations. The Queen Company, as the result of boring, has found ground at a depth of 115 feet, from which

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they obtained a prospect of gold; they have purchased machinery, and will at once proceed with its erection. The Count Bismarck Company has also found ground at a depth of 138 feet, from which they have obtained excellent prospects. The Duke and Timor Company, Chinaman's Flat, have sunk their shaft to a depth of 350 feet, and will at once proceed with the chambers and main drives. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Magnum Bonum Extended (Chinaman's Flat), 1,060 oz; Band of Hope Extended (Chinaman's Flat), 3,082 oz; Alma Consols (Alma), 1,567 oz; Seaham Extended (Alma), 1,260; Golden Gate (Timor Creek, Alma), 306 oz; Dan O'Connell (Carisbrook), 148 oz; United Kingdom (Majorca), 60 oz; Kong Meng and Columbia (Majorca), 147 oz; Reform (Majorca), 342 oz; Morning Star (Majorca), 103 oz; Baron Clyde (Majorca), 64 oz; Sundry whim claims, 205 oz; Total, 8,346 oz. Dividends paid during the quarter: Magnum Bonum Extended, £750; Seaham Extended, £2,400; Alma Consols, £2,850; Band of Hope Extended, £8,350. QUARTZ MINING—The reefs at Chinaman's Flat are now being worked to great advantage, and quartz mining throughout the division is in a prosperous state. The Bristol Hill Company has 30 men at work on their claim, but no steam machinery has yet been erected. Several claims on the hill are now idle, water having been reached at a depth of 250 feet, and at present there is no available means of drainage. Some of the highest returns for the quarter: - 90 tons from Bristol Hill, which gave 88 oz; 28 tons from Deed's Reef gave 179 oz 10 dwts; 120 tons from the Ironstone Reef gave 162 oz; 125 tons, crushed at Johnstone's, gave 198 oz; and 50 tons from the White Horse Reef gave an average of nearly 2 oz per ton. The North German Company has let their mine on tribute.⁷

December 1870:

AVOCA SUBDIVISION (Mr P. Simpson, Mining Surveyor and Registrar)

The Golden Lake Company, Homebush, has been obtaining very good returns during the greater part of this quarter. Several nuggets have been found, the largest about 54 oz in weight. During the last six weeks they have averaged over 60 oz per week. The Albion Company, Avoca lead, have suspended operations. On the other hand the New Holland claim, which has been so long idle, has been taken up again by a new company, the Melbourne and Avoca, who have been at work about a month. They are testing the ground in the deepest part, which their ample machinery should well enable them to do. The success of the Golden Lake Company is having its effect, and I think there will be great improvement in mining matters here. Messrs Clapperton just completed a fine crushing plant of ten head of stamps, at Fiddler's Creek.⁸

March 1871:

MARYBOROUGH DIVISION

There has been a considerable falling off in the returns from all sources during the past quarter, in consequence of several of the large companies having, throughout the whole of it, and for various reasons, suspended mining operations on their claims. In most of these instances however, work will speedily be resumed. Several of the new companies, whose claims are situate at the Alma, Chinaman's Flat, and Majorca, have been wholly engaged during the quarter in laying down and erecting steam machinery. There has recently been a considerable stir among our local mining population, occasioned by the discovery of a run of gold at Pigeon's Flat, a locality situate about five miles from Maryborough, in a north-easterly direction. The registered claim of the prospectors is about a mile distant from the nearest gold workings. From a washing of ten loads a return of nearly 15 dwts was obtained of coarse heavy gold. There is a large extent of new ground in this locality, all of which is likely to prove more or less auriferous; nearly two hundred claims have already been taken up. The present population is close upon 300. The average depth of sinking is 56 feet, through strata of sand, gravel, and pipeclay. ALLUVIAL MINING-At Majorca several whim claims have been idle during the quarter, as the owners have found it impossible to proceed with mining operations in the absence of steam machinery. The Kong Meng and Robin Hood companies have recently had to contend with a very heavy body of water, but this they are now successfully subduing; they look for excellent returns in the course of two months. The Enterprise Company has just finished the erection of their new and splendid steam machinery, and is quite ready to begin mining operations. It will be seen that the Dan O'Connell Company, Carisbrook, has obtained 325 oz for the quarter. The Phoenix Company, Harrison's Hill, recently begun to wash, and have obtained 30 oz.

At Chinaman's Flat, the Magnum Bonum Company has worked out the lead on their claim; they have abandoned the main shaft, and have removed the mining material therefrom. They are now sinking a new shaft to the east of the main lead, with the view of finding the outside run. The Duke and Timor Company are driving for the lead. The Prince of Wales Company is boring to prove their ground. The John Bright Company is making arrangements for throwing their shares into scrip, and also for the purchase of steam machinery. They had a trial washing from four sets of timber, which gave a return of 5 oz 2 dwts, but no further progress can be made without steam machinery. The depth of sinking is 140 feet. At the Alma, the Gladstone Company has opened their main drive to a depth of 150 feet. The run of gold in this claim is at a depth of 106 feet from

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the surface, but this run has not yet been reached from the lower workings. The Queen and Count Bismarck Companies are erecting steam machinery. The latter company has sunk their shaft to a depth of 50 feet. The Alma and Timor Junction Company, Havelock, have put down seven bores on their claim; these have been bottomed at depths varying from 96 to 112 feet. In the last bore a splendid prospect was obtained. The company will at once proceed to purchase and erect steam machinery. The following is a statement of the gold obtained form the principal alluvial mines in this division during the quarter: - Band of Hope (Chinaman's Flat), 2,289; Alma Consols (Alma), 919 oz; Seaham (Alma), 880 oz; Golden Gate (Alma), 209 oz; Dan O'Connell (Carisbrook), 325 oz; United Kingdom (Majorca), 110 oz; Kong Meng and Columbia (Majorca), 168 oz; Reform (Majorca), 170 oz; Morning Star (Majorca), 40 oz; Evening Star (Majorca), 68 oz; Cosmopolitan (Majorca), 143 oz; Sundry whim claims, 125 oz; Total, 5,448 oz; Dividends paid during the quarter: Seaham, £600; Alma consols, £600; Band of Hope, £3,900. QUARTZ MINING—The Bristol Hill Company are now fairly in the market for the purchase of steam machinery. The North German Company is about to make fresh arrangements for letting their mine on tribute. A large number of our most valuable quartz mines, having been sunk below the water-level, are idle, and must remain so, until they are provided with some proper means for drainage. Some of the highest returns for the quarter are: - 204 tons from the Ironstone Reef, which gave 247 oz; 12 tons from Deed's Reef gave 66 oz; and 80 tons from the Britannia Reef gave 76 oz.

March 1871: AVOCA SUBDIVISION

ALLUVIAL MINING—The Golden Lake Company, Homebush, are at present engaged in main driving only. They are driving east for the western edge of the lead. The lead, as far as is known, is about 50 feet in width, and not very deep. The Melbourne and Avoca Company are still engaged in pumping only. There is a small rush to Fryingpan Flat, but the gold has not been traced very far. The reefs at Fiddler's Creek have not been doing very well of late. In the Perseverance I understand they have struck good stone. ¹⁰

June 1871: MARYBOROUGH DIVISION

ALLUVIAL MINING—Considerable activity has prevailed, during the quarter, at the Alma, where several extended alluvial claims have been taken up and registered. One of these claims, named the Albion, has been bottomed on the Alma Lead, at a depth of 60 feet, and a prospect obtained of 17 dwts of gold. The alma and Timor Junction Company have at length succeeded in proving the reef, on each side of the Alma Lead, at an average depth of from 130 to 200 feet. At Havelock the principal companies are now busily engaged in pushing forward their mining operations, with every prospect of success. The Havelock Company has already obtained a return of 82 oz. They are now erecting two additional steam-puddling machines, which, when completed, will enable them to produce a much larger yield of gold. At Chinaman's Flat mining business generally is prosperous. The Duke and Timor Company have reached the washdirt at a depth of 250 feet from the surface. The Queen and Count Bismarck Companies have erected steam machinery. The claim of the Magnum Bonum Company has been worked out; the affairs of the company have been wound up. At Majorca, the Reliance company has put in their main drive 500 feet; they expect to wash this month; their prospects are good. The Kong Meng Company are main and cross driving. The Enterprise Company has bottomed on payable gold. The claim of the Morning Star Company is flooded out—the company is now erecting a 40 horse-power engine to enable them to work the deep ground. In addition to the returns from the principal alluvial mines in this portion of the division, I find that 467 loads of washdirt have been puddled by private parties, which gave an average of from 3 to 5 dwts per ton; also 15 loads gave 6 dwts per ton; and 22 loads gave 7 dwts per ton.

⁹ Mining Surveyors' Reports, March 1871

Mining Surveyors' Reports, March 1871

The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Band of Hope Extended, Chinaman's Flat, 1,612 oz; Alma Consols, Alma, 863 oz; Golden Gate, Alma, 456 oz; Seaham Extended, Alma, 1,720 oz; Havelock, Havelock, 82 oz; Kong Meng, Majorca, 318 oz; Phoenix, Majorca, 70 oz; United Kingdom, Majorca, 113 oz; Dan O'Connell, Carisbrook, 107 oz; Morning Star, Majorca, 90 oz; Reform, Majorca, 168 oz; Kosmos, Majorca, 194 oz; Britannia, Battery Hill, 65 oz; Evening Star, Majorca, 87 oz; Phoenix, Harrison's Hill, 132 oz; Total, 6,080 oz. Dividends paid during the quarter: Magnum Bonum Extended, £1,000; Band of Hope, £2,700; Golden Gate, £182; Seaham Extended, £2,850; Kong Meng, £158; Reform, £426; Kosmos, £504. Cundy's machine has been idle during the quarter. Messrs Johnstone and Sons crushed 79 tons quartz and cement, received from the Amherst Division, yielding, on an average, 10 dwts per ton, but this has not been included in the report. 11

June 1871: AVOCA SUBDIVISION

At the Golden Lake the tributers are driving and blocking out at a depth of 130 feet. The working of this mine has been to great disadvantage up to the present, owing to the distance of the main shaft from the workings, and of late also by the presence of a great body of sand extremely retentive of water. The amount of gold obtained in this mine during the quarter is 325 oz. A new lead has been discovered at Fiddler's Creek, about a quarter of a mile from the old one at the head. It was thought at first it might run parallel with it, but it now appears to be running into it at about 1-1/2 miles below the head. One or two prospects are shown in the tables. There are about 500 on the lead at present, but the population of Percydale has not, that I can make out, increased. At what is known as the Albion Company's Lease, the lessee is preparing to work the ground from both ends (the middle being worked out) with two whims. The steam machinery is still on the ground, but idle. The Melbourne and Avoca are still contending with the water, which employs almost all their machinery. A new shaft, 164 feet deep, close to the old one (No. 2) and connected with it, has been sunk, and extra pumping power will be employed, so that in about two months they expect to commence driving. Messrs Clapperton are erecting machinery for the purpose of working the Fiddler's Creek Reef. 12

Sept 1871: MARYBOROUGH DIVISION

ALLUVIAL MINING-The chief number of the mines at the Alma, Chinaman's Flat, and Majorca, are still only in the progressive stage. The great want at Majorca, for years past, has been heavy machinery to contend with water in the deep ground. This want, is now being supplied; and the splendid prospects which have recently been obtained from the Reliance and Kong Meng claims, at the north end of Majorca lead, and also from the Enterprise claim, at the south end of it, afford great encouragement to hope that the deep ground there will now be successfully developed. A feature in the Carisbrook and Majorca leads, is the abundance of fine gold which is found in them. The value of this description of gold which is contained in the sludge, may be partially estimated from the following facts: The Phoenix Co, Carisbrook, recently sold to a party of Chinese the sole right to their sludge, for a period of one year, for the sum of £1,000. The Dan O'Connell Co, Carisbrook, and the Enterprise Company, Maiden Hill, have also each sold a similar right, on the same terms for £270 and £750. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Band of Hope, Chinaman's Flat, 2,172 oz; Alma Consols, Alma, 1,452 oz; Seaham, Alma, 1,366 oz; Golden Gate, Alma, 777 oz; Havelock, Havelock, 144 oz; Kong Meng, Majorca, 133 oz; Phoenix, Majorca, 85 oz; United Kingdom, Gibraltar, 107 oz; Phoenix, Carisbrook, 710 oz; Cosmos, Majorca, 211 oz; Reform, Majorca, 122 oz; Britannia, Craigie, 65 oz; Northern Light, Majorca, 120 oz; Morning Light, Majorca, 58 oz; Total, 7,526 oz. Dividends paid during the quarter: Band of Hope, £2,550; Alma Consols, £2,400; Seaham, £1,200; Golden Gate, £943 oz. QUARTZ MINING—There has been a falling off in the returns of gold from quartz during the quarter, mainly due to the stoppage of several of the crushing machines. The North German Co is about to be reorganised. They propose to sink the shaft on the Leviathan Reef 100 feet beyond the present depth. The Bristol Hill Co has sunk their eastern shaft to a depth of 284 feet. Two reefs were discovered in the cross-cut from east to west, averaging in thickness 8 feet. The Mariners' Reef Co is now preparing to cut down their engine shaft to a depth of 1000 feet. The Telegraph Reef, situated between Maryborough and Carisbrook, is at present yielding most satisfactory returns. There are five claims on this reef, which is 18 inches thick; the depth of sinking is 160 feet, and the average yield of gold is 15 dwts per ton. 13

Sept. 1871: AVOCA SUBDIVISION

I have to report that the Melbourne and Avoca Company have overcome the water in their mine. This was done about six weeks ago. Eighty men are now engaged in driving; there are two main

¹¹ Mining Surveyors' Reports, June 1871

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drives east and west of shat, and five cross drives. They have driven about 350 feet east and 200 feet west; the eastern drive has been much retarded by a body of hard cement, but this is thinning out. Eastwards the width of the lead is supposed to be about 160 feet, and the thickness from 1 to 4 feet; westwards it is not yet known. All the washdirt treated up to the present has been from the drives, and has yielded about 200 oz. The amount of gold obtained by the Golden Lake Company this quarter if 495 oz. A lease has been applied for on the eastern side of the Golden Lake, on the supposition that the lead is trending that way. Within the last week or two a considerable rush has set in to Raggedy Gully, a gully about three or four miles westerly of Percydale. This gully has, I believe, been opened many years, but has never attracted more than a very small number of miners until now. The sinking is from 25 to 60 feet, and dry. The average prospect, from 4 to 8 dwts. In quartz mining there is not much being done. This is doubtless due to a want of capital for the proper testing of the mines, and not to the want of payable reefs. Messrs Clapperton have not long completed the erection of machinery of their lease at Fiddler's Creek. This is the only quartz mine in the subdivision on which there is steam machinery.

Mining Surveyor's Office Avoca, 21st October, 1871

SIR,

I have the honour to report that the rush to Raggedy Gully, alluded to in my last quarterly report, is still progressing, and the number of miners and others, at the present time, I think, be less than one thousand. This goldfield is situated partly in a gully (trending NNW) and partly on a flat almost entirely surrounded by hills (spurs of the Pyrenees), the only outlet, about half a mile north-east, through which Middle Creek runs, being that on to the Warrenmang Flats. It is between three and four miles south-easterly of Moonambel, and about the same distance westerly of Percydale, with both of which places there is easy communication. The nearest gold workings of importance are those of Donkey Hill, about one and a half or two miles east. The Old lead (which as been opened many years) is situated towards the head of the gully, and is about half a mile long. It is still being worked by a few. The sinking here is from 20 to 25 feet and dry, though shingle, gravel, and sandy clay. The gold is found in a kind of rough sandstone wash. Several small nuggets have been obtained here. The new lead which is about one mile in length, as worked over, runs close to and almost parallel to the old lead (which is probably a tributary of the former), as shown on accompanying sketch, for about two or three hundred yards. The prospectors of the old lead have a claim at the head of this. They are obtaining gold from 4 to 6 feet from the surface. The strata are surface soil, gravel, red clay, and white washdirt, with flat sandstone boulders; seventeen loads have averaged 11 dwts per load. At Messrs Duffy's claim, near the supposed junction of the two leads, the depth of sinking is 38 feet. There are two kinds of washdirt here, white and yellow, 5 feet in thickness. The former averages 6 dwts, the latter 3 dwts. Just below this the sinking is 45 feet and the average yield 4 dwts. About 200 yards further down the sinking is 52 feet, through coarse shingle 15 feet, blue and red clay 30 feet, cement 6 feet, on to a yellow washdirt. This is about 3 feet thick and yields from 4 to 5 dwts. About half a mile from the head of the lead the prospects improve, after crossing a gully formed by a low spur which intersects the lead at this point; a hole was sunk here, and half an ounce got off the bottom—the average yield being from 7 to 8 dwts. The lead is four or five claims wide here, or from 240 to 300 feet, the thickness 1 foot 6 inches, depth of sinking 68 feet and dry, through single, a great body (50 feet) of ref clay and close gravel. Towards the lower end the depth of sinking is 72 feet... up to this point the sinking is very dry; very little is yet known beyond. One or two holes have been sunk and bottomed at about 90 feet within the last few days, and the sinking has, I believe, become wet. The prospects are not so good as expected. It is noticeable, however, throughout this rush that no very extraordinary finds have been made (the earliest average from 7 to 10 dwts), and the cause of the rush seems to have been more the certainty of obtaining something payable, than anything so attractive, say, as the yields of the Prospectors' and a few other claims at Sandy Creek. The gold is of a rough quality; £3 10s is given for it on the ground. There are quartz reefs on the prominent spurs which form Raggedy Gully, particularly on those to the east, but judging from surface appearances (none have yet been worked) they are not promising. The nearest payable quartz reefs are at Donkey Hill. There are nine or ten stores erected, and several more in course of erection. I do not think there are more than 300 Europeans, but there are from 700 to 900 Chinese who are almost monopolising the lower end of the lead. This result is doubtless due to their untiring energy. No sooner is a hole, say 70 feet sunk, which proves profitless, than they set to work at another, and are, in the end, apparently successful. Water is scarce at present, although a dam on the main Middle Creek, which runs past the end of the lead, not quite half a mile from same, might, if the season were propitious, soon, I think, remedy this evil.

As regards the probable permanency of this goldfield. The success attending those who are working in Raggedy Gully has turned the attention of miners again to Sardine Gully, in which gold was found some years ago, and which is immediately to the east and almost parallel to the former. I have not yet heard of the result of the prospecting. Opposed to these two gullies is the only opening (alluded to above) in the ranges by which not only they, but country for six or seven miles to the west, including the Middle Creek goldfield, is almost entirely enclosed. Beyond this opening, about half a mile across perhaps, are the extensive Warrenmang Flats. Although the average yield up to the present time is not high, I cannot help thinking, from the formation of the country, that this rush is the most promising which has taken place in this district since the discovery of gold at Fiddler's Creek.

I have the honour to be, Sir,

Your most obedient servant, P. Simpson, Mining Surveyor

The Honourable the Minister of Mines, Melbourne. 14

December 1871: MARYBOROUGH DIVISION

ALLUVIAL MINING—At the Alma the Alma Consols Company are bout to sink another shaft; they have purchased a second plant. The Queen Company is down 133 feet, and has obtained capital prospects. The Count Bismarck Company has removed the machinery, which they originally placed on their claim, as they found it too light for their purpose; they have now purchased a 24-inch cylinder engine. With respect to the operations of the Golden Gate Tribute Company, Mr Harvey, the manager, informs me that the whole of the washdirt obtained from the claim is now put through a crushing mill, and, as the result of this process, the yield of gold is found to be quite thirty per cent: more than could be got from the usual method of puddling. At Chinaman's Flat the John Bright Company have bottomed at a depth of about 150 feet, and obtained a prospect of 3 oz 5 dwts. This claim adjoins the Band of Hope, and is likely to turn out exceedingly well. The Duke and Timor Company are down to 350 feet, and will, I have no doubt, very soon give a good account of themselves. The mines at Havelock are making very slow progress indeed. At Majorca the Reliance Company is still main driving, and has obtained good prospects. The United Kingdom Company has struck a new vein of gold in fresh ground. The Kosmos Company have obtained splendid prospects in deep ground. The Eldorado Company are supposed to have struck a new or branch lead, to the east of the Hanoverian Lead, which will probably be found to trend along Sandy Creek Flat. This company consists of only four working men. When this is taken into account, the yield of gold obtained (176 oz) is large. The principal alluvial claims in this portion of the division are not yet in full operation, the owners being chiefly engaged in main driving, but in every case good prospects have been obtained. In the course of another quarter several of these claims will have begun to pay. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Band of Hope, Chinaman's Flat, 1,865 oz; Alma Consols, Alma, 694 oz; Seaham, Alma, 1,164 oz; Gladstone, Alma, 276 oz; Golden Gate, Alma, 902 oz; Havelock, Havelock, 347 oz; Enterprise, Majorca, 133 oz; Morning Star, Majorca, 27 oz; Phoenix, Majorca, 53 oz; United Kingdom, Gibraltar, 154 oz; Phoenix, Carisbrook, 215 oz; Dan O'Connell, Carisbrook, 36 oz; Kosmos, Majorca, 164 oz; Reform, Majorca, 101 oz; Britannia, Four-mile Flat, 16 oz; Eldorado, Majorca, 176 oz; Total, 6,329 oz. Dividends paid during the quarter: Band of Hope, £4,050; Seaham, £1,200; Golden Gate, £1,461. QUARTZ MINING—Several of the crushing machines have been idle during the quarter, and so also have several of the larger and more important claims, else the yield of quartz gold would have been much larger than is now shown. But quartz mining in this division may be safely regarded as being yet only in its infancy. A large number of the reefs which have been proved to be good, but which are now lying idle, only require the aid of capital and skilled labour to make them pay handsomely. The Telegraph Reef is now producing excellent results. There are six registered claims on this reef, four out of which are in full operations, and are paying well. Forty-eight tons of quartz taken from the Charles Dickens Claim on this reef were recently crushed, and gave a return of 60 oz 12 dwts. Depth of sinking, 160 feet; width of reef, 18 inches. 15

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December 1871: AVOCA SUBDIVISION

The rush at Kimberley [Raggedy Creek?] is still turning out well; they are tracing the gold in two or three directions. From one claim, about the middle of the lead, where it is about six claims wide, 29 oz were obtained from thirteen loads. During the last two or three months one 17-oz nugget has been obtained at the same part of the lead, at a depth of 64 feet, and several nuggets from 3 oz to 6 oz. The greater part of the gold appears to be obtained from the upper and middle portions; at the lower end it is being traced more slowly, although there is not much water to be contended with at that part yet. There has been another small rush to the No. 1 Creek diggings. The sinking is from 20 feet to 40 feet; prospects generally poor. The amounts of gold obtained during the quarter by the Melbourne and Avoca and Golden Lake Companies are as follow, viz: - Melbourne and Avoca, 700 oz; Golden Lake, 574 oz. The former company has not had a very great measure of success of late, but there is a probability of a marked improvement very soon. The latter company is working their mine steadily, and has applied for more ground. There is hardly anything to note in quartz mining. The Fiddler's Creek Reef is let on tribute, and a prospecting claim has been registered on the Township Reef, which has been so long idle. ¹⁶

March 1872: MARYBOROUGH DIVISION

ALLUVIAL MINING—At the Alma and Chinaman's Flat all the deep mines, which are being fully worked, are still yielding excellent returns, and hold out splendid prospects to the shareholders. The Duke and Timor company, whose claim adjoins that of the Band of Hope Company, have had fresh difficulties to meet during the quarter, in consequence of the water in the claim proving more than a match for their machinery. More powerful machinery is required; but a second plant is ready completed, and a second shaft is now being sunk on the claim. The John Bright Company, whose claim also adjoins that of the Band of Hope company, has just opened out on washdirt, and, judging from the prospect obtained, this promises to be one of the richest mines in the division. The Gladstone Company will soon be in a position to pay dividends. At Havelock matters have not improved since my last report. Mr Ogle, the legal manager of the Havelock Company, informs me that the gold on the claim is so scattered, the lead or supposed lead having been proved to be about two thousand feet side, that the past operations of the company have severely tried the patience and exhausted the means of the shareholders. The claim is now let on tribute to a party of working men, who have engaged to pay the company 12-1/2 per cent. on the gross yield of gold. I understand that these men have already got into good ground. The Lord Clyde Company is nearly ready to begin work, and are sanguine of success. At Majorca all mining interests have greatly improved during the quarter. Several new claims have been taken up on Maiden Hill, near the claim of the Enterprise Company, in the hope of getting into ground easily workable without engine power. The claim of the Kong Meng Company is now flooded out, and much heavier machinery is required to cope with the water, which has now risen 30 feet in the shaft, and cannot possibly be kept down with 12-inch pumps and tanks baling at the same time. This heavy body of water seems for several reasons to point to a subsidiary lead, or heavy gutter, adjoining the Hanoverian Lead, and trending in the direction of Sandy Creek Flat. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - And of Hope, Chinaman's Flat, 3,043 oz; Alma Consols, Alma, 1,308 oz; Queen, Alma, 248 oz; Seaham, Alma, 2,161 oz; Gladstone, Alma, 871 oz; John Bright, Chinaman's Flat, 39 oz; Golden Gate, Alma, 831 oz; Havelock, Havelock, 29 oz; Kong Meng, Majorca, 20 oz; Enterprise, Majorca, 619 oz; Reliance, Majorca, 262 oz; Morning Star, Majorca, 515 oz; Cosmopolitan, Majorca, 277 oz; United Kingdom, Gibraltar, 64 oz; Phoenix, Carisbrook, 221 oz; Dan O'Connell, Carisbrook, 36 oz; Reform, Majorca, 164 oz; Republic, Majorca, 128 oz; Eldorado, Majorca, 170 oz; Fox, Majorca, 69 oz; Northern Light, Majorca, 43 oz; Total, 11,125 oz. Dividends paid during the quarter: Band of Hope, £6,150; Alma Consols, £1,200; Seaham, £4,050; Golden Gate, £1,551. QUARTZ MINING-Most of the larger claims have been nearly unproductive during the quarter, the owners having been engaged in making extensive alterations on them, with a view to more successful future operations. This remark particularly applies to the claims of the North German Company, the Mariner's Reef Company, and the Bristol Hill Company. The United Kingdom Company has found three rich reefs in their alluvial claim at Majorca, at a depth of 100 feet from the surface, and below the alluvial workings. These reefs are severally named the Sunburst, the Star, and the Eastern. A crushing of 28 tons of stone from the Sunburst gave a return of 79 oz 8 dwts, 30 tons from the Star gave 20 oz 7 dwts; and 42 tons from the Eastern gave 28 oz 5 dwts. The highest yield during the quarter was from the Ironstone Reef, Craigie. A crushing of 82 tons gave 400 oz 11 dwts 18 grs. 17

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March 1872: AVOCA SUBDIVISION

ALLUVIAL MINING—The Melbourne and Avoca Company's workings on the Old Avoca Lead are still progressing favourably. The amount of gold obtained during the quarter by this company is 1250 oz 4 dwts, most of which has been obtained towards the Association Company's ground. They are now engaged also in driving from the end of their workings out of No. 2 shaft (in the direction of the Avoca River) towards No. 3 shaft, which is being sunk to the necessary depth to meet the drive. On Messrs Smith's Lease, Avoca Lead, they are engaged from two shafts in driving and blocking out. The Kimberley rush has considerably fallen off, owing principally, I think, to a new rush which has set in within the last two or three weeks to Middle Creek, about half a mile east of last year's rush (now almost deserted). There are about 500 miners on the ground, the greater part Chinese. The sinking varies generally from 40 to 60 feet. The best prospect I have heard of is 7 dwts; twenty-eight loads have averaged 4-1/2 dwts. QUARTZ MINING—Very little is being done in this. Work is again suspended on the Fiddler's Creek and Township Reefs. 18

June 1872: MARYBOROUGH DIVISION

ALLUVIAL MINING—At Havelock the Havelock Company have at length struck payable gold, and there is now every prospect of their claim, and also that of the Lord Clyde Company, turning out exceedingly well. The latter company has now got their machinery in full working order; they have sunk their shaft to a depth of 63 feet, are now in drift, but find it hard to contend with the water, which is very heavy. The mines at the Alma and Chinaman's Flat are still progressing favourably. The Band of Hope Company are about to procure additional steam puddling machinery for their No. 2 shaft. The Duke and Timor Company are down to 350 feet with their shaft; they have invited tenders for their construction, on their claim, of a 72-inch cylinder Cornish beam engine, which will be the first of the kind made in this colony; the estimated cost of this engine is £3000. No gold has yet been obtained from the No. 2 shaft of the Alma Consols Company. The drives are being proceeded with, but the washdirt has not been struck. The erection of the large pumping engine of the Queen Company is completed. The plant of this company is now a most complete one. The plant of the Count Bismarck Company is rapidly approaching completion, but no washdirt has been struck. At Majorca several of the principal claims have yielded good returns during the quarter. The Enterprise Company has been main driving during nearly the whole of it. The Morning Star Company is now in good ground. The Cosmopolitan Company is opening up ground for blocking. The United Kingdom Company is main driving for a quartz lode; they have done nothing to their alluvial workings during the quarter. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Band of Hope, Chinaman's Flat, 1,860 oz; John Bright, Chinaman's Flat, 1,230 oz; Alma Consols, Alma, 1,546 oz; Queen, Alma, 553 oz; Seaham, Alma, 2,106 oz; Gladstone, Alma, 1,615 oz; Golden Gate, Alma, 659 oz; Havelock, Havelock, 23 oz; Enterprise, Majorca, 296 oz; Reliance, Majorca, 293 oz; Morning Star, Majorca, 666 oz; Cosmopolitan, Majorca, 267 oz; Reform, Majorca, 166 oz; Eldorado, Majorca, 196 oz; Republic, Gibraltar, 78 oz; Fox's, View Point, 96 oz; Dan O'Connell, Carisbrook, 28 oz; Phoenix, Carisbrook, 718 oz; Total, 12,401 oz. Dividends paid during the quarter: Band of Hope, £1,200; Alma Consols, £2,400; Seaham, £5,250; Gladstone, £3,150; John Bright, £1,800; Golden Gate. £461. QUARTZ MINING-The Mariner's Reef, North German and Bristol Hill Companies have been idle during the quarter. They are still actively engaged in making material improvements on their respective claims, with a view to the more complete and successful development of the mineral resources contained in them. The Leviathan Tribute Company has also been similarly engaged; they have sunk their shaft to a depth of 287 feet, and they intend to drive a level at 300 feet. The deepest ground already worked on the Leviathan Reef is 200 feet. A small crushing of 5 tons from the Nameless Reef prospecting claim, White Hills, gave 5 oz 5 dwt; 68 tons from the alluvial claim of the United Kingdom Company, Majorca, gave 97 oz 7 dwts; 121 tons from the Britannia Reef, Craigie, gave 142 oz 19 dwts 6 grs; and 62 tons from the Ironstone Reef, Craigie, gave 259 oz 5 dwts. 19

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June 1872: AVOCA SUBDIVISION

The Melbourne and Avoca Company are engaged blocking out towards Association Company's ground. They are also driving towards No. 3 shaft, near river, and are within 160 feet of it. The water has been very heavy, but is now easier. No. 3 shaft is down 116 feet. The amount of gold obtained by this company during the quarter has been 734 oz 10 dwts. The late tributers of the Golden Lake Company have just thrown up work. Machinery is about to be placed on the upper end of Smith's Lease, Avoca Lead. There has been another rush to the No. 1 Creek, but the prospects are poor. A more promising rush has just set in between one and two miles northwesterly of Raggedy Gully, and close to the Moonambel Gap. QUARTZ MINING—Pumping and crushing machinery is being erected on the London Reef, Amphitheatre. The Donkeywoman Reef, near the head of the Old Avoca Lead, has been again taken up. 20

Sept. 1872: MARYBOROUGH DIVISION

ALLUVIAL MINING—On the whole, considerable progress has been made in alluvial mining during the quarter; indeed mining of this class was never more prosperous here than at present. A large amount of new and powerful steam machinery has been erected in the division, especially at the Alma and Chinaman's Flat, and several of the newly undertaken deep mines at those places are being successfully developed, and are proving very rich. The district is steadily advancing in importance, and I have no doubt but that, ere long, it will attain to high rank as one of the principal mining centres of the colony. At the Alma, the Golden Gate Company has been prospecting during the quarter, which has made their returns smaller than usual. The Alma and Timor Junction Company have attained to a depth of 240 feet with their shaft; the water is light and the sinking easy. The company are about to purchase a second engine, which, when erected, will complete their plant. The possession of some extra capital by the mine-owners of Majorca would act as a powerful means of infusing additional life and vigour into their mining operations. Mining affairs in that portion of the division are now somewhat flat and stagnant; the deep leads at the north and south ends of the town are notably rich and inviting, and must inevitably, sooner or later, attract ample capital for their efficient and prosperous development. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Band of Hope, Chinaman's Flat, 3,282 oz; John Bright, Chinaman's Flat, 2,272 oz; All Nations, Chinaman's Flat, 46 oz; Alma Consols, Alma, 1,392 oz; Queen, Alma, 1,541 oz; Seaham, Alma, 2,030 oz; Gladstone, Alma, 1,443 oz; Golden Gate, Alma, 446 oz; Havelock, Havelock, 94 oz; Enterprise, Majorca, 98 oz; Morning Star, Majorca, 659 oz; Cosmopolitan, Majorca, 336 oz; United Kingdom, Majorca, 43 oz; Reform, Majorca, 104 oz; Fox's, McCullum's, 72 oz; Republic, Gibraltar, 55 oz; Phoenix, Carisbrook, 498 oz; Total, 14,414 oz. Dividends paid during the quarter: - Band of Hope, £5,550; Alma Consols, £1,200; Queen, £900; Seaham, £3,600; Gladstone, £1,500; John Bright, £4,500; Golden Gate, £198. QUARTZ MINING—Although the majority of the quartz claims in this division have given no returns during the quarter, they have not been idle; on the contrary, there has been unusual activity in this branch of mining; but the efforts made have been mainly directed towards the making of necessary alterations and improvements in the plant belonging to each of the principal mines. The Mariner's Reef Company are still engaged in the arduous and expensive work of cutting down their engine-shaft, and of increasing its dimension from 4-1/2 x 2-/12 feet to 11 x 4-1/2 feet, clear within timber. They expect to reach the 55-foot level in a few days, when they will open out. The Bristol Hill Company has now got their fine plant in order, and will soon have a crushing ready. The Leviathan Tribute Company has sunk the main shaft to a depth of 300 feet, which is 100 feet deeper than before. They now intend to drive cross-cuts to test the reef at that depth. Several prospecting claims have been registered during the quarter; and several new undertakings, with the view of bringing adequate capital and labour to bear upon some of the finest reefs in this division, have been successfully initiated. The trial crushings from the prospecting claims have, on the whole, yielded satisfactory returns. A crushing of 6 tons from the Welshman's claim, Kloger Reef, Havelock, gave an average of 1 oz 6 dwts per ton; a crushing of 3 tons 12 cwt from My Own claim, My Own Reef, Golden Point, gave a return of 5 oz; two crushings of 5 tons and 7 tons from the Last Chance claim, Mosquito, gave respectively a return of 25 oz and 16 oz 16 dwts 19 grs; a crushing of 5 tons 6 cwt from the Belltopper claim, White Hills, gave a return of 16 oz 19 dwts 12 grs; a crushing of 3 tons from the Waterloo Reef gave a return of 36 oz. I have received no fresh information respecting deepest quartz mines. The cement crushed, in the return, was from the Seaham alluvial claim, but passed through the mill of the Leviathan Tribute Company. This cement is the richest yet found in this division.²¹

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Sept. 1872: AVOCA SUBDIVISION

The Melbourne and Avoca Co, Avoca Lead, are progressing somewhat slowly due to the large body of water. Their new shaft, in place of the No. 3, near the river, is down about 92 feet. They have 45 feet to sink to meet the western drive, which has been extended to below this shaft. The difficulties in sinking appear to be being overcome. When this shaft is down a great change will be noticeable in the working of the mine. The Band and Lake Co, Homebush Lead, are prosecuting the work of erecting winding and pumping machinery. This will be included in next quarter's table. They have just begun to sink their main shaft. Work is again suspended on the Golden Lake Co's leases. Machinery for winding and baling is being erected on the Enterprise Co's claim (Smith's lease), Avoca Lead. The amount of gold obtained from the western end of this lease during the quarter is 196 oz. No account has been kept of the quantities of washdirt puddled. The Albion Co's machinery is now nearly all removed. The rush alluded to last quarter, about two miles beyond Raggedy Gully, has been abandoned. About a fortnight ago a nugget weighing about 17 oz was found by a miner in a red clay surface at Scotchman's Gully, Avoca Lead. The weight of pure gold was about 10 oz 6 dwts; the remainder principally quartz. Two nuggets, weighing together 13 oz (all pure gold), have since been found about this part of the lead. QUARTZ MINING—Machinery (including a battery of twelve stamps) is being erected on the London Reef, Amphitheatre. When the machinery is erected, they will commence to sink the shaft and crush the stone already on the surface at the same time. The great drawback to working this reef has been the distance to cart the quartz. Several leases have lately been applied for on a line of reefs intersected by the Fiddler's Creek Lead, and which will deserve the attention of capitalists. Barnes' Plinut [Plumb] Reef, No. 2 Creek—one of the best in this division—has been applied for on lease by the original holders, it being contemplated to form a company. Work has been resumed on the Fiddler's Creek Reef by the Percydale Gold and Silver Lead Mining Co. They are sinking an underlie shaft to 200 feet, and are down about 140 feet. At the Perseverance Reef, Percydale, some good stone has been obtained.²²

December 1872: MARYBOROUGH DIVISION

At Chinaman's Flat the Band of Hope Co have lost time, and their mining operations were obstructed during the quarter, through an unexpected and heavy flow of water into their mine from the Duke and Timor shaft. So far the pumps have just been able to subdue the water; but the matter may compel the company to suspend all further work until such time as the new machinery of the Duke and Timor Co has been erected which will probably not be sooner than a year from now. The mine of the John Bright Co stands exactly in a similar position to that of the Band of Hope Company in respect of the water, although they have not yet been troubled with it. These two companies employ two hundred and fifty men. At Havelock the Havelock Co have succumbed, as they could not find payable gold on their claim. The Lord Clyde Co will soon make a beginning. It is hoped that they will have better success than their neighbour. Their spirited enterprise, and the vast extent to which they have gone with their excellent plant, certainly deserve it. At Majorca mining matters generally have been depressed during the quarter; but a fresh and early start will be made at the mine of the Kong Meng Co with a new engine and two pumps; and I understand that there is no doubt but that the Reliance Co will soon resume work at their mine. At the Alma the Golden Gate Co have been idle during the quarter. They have worked out all the available ground of their mine; and as yet they are undecided whether or not they should make an attempt to prospect for fresh ground. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: - Band of Hope, Chinaman's Flat, 1,344 oz; John Bright, Chinaman's Flat, 1,799 oz; All Nations, Chinaman's Flat, 20 oz; Alma Consols, Alma, 1,789 oz; Queen, Alma, 1,187 oz; Seaham, Alma, 2,314 oz; Gladstone, Alma, 1,251 oz; Havelock, Havelock, 8 oz; Morning Star, Majorca, 499 oz; Cosmopolitan, Majorca, 328 oz; Reform, Majorca, 129 oz; Fox's, Majorca, 170 oz; Republic, Maiden Hill, 93 oz; Northern light, Majorca, 76 oz; Phoenix, Carisbrook, 284 oz; Total, 11,293oz. Dividends paid during the quarter: Band of Hope, £1,350; John Bright, £3,000; Alma Consols, £2,400; Queen, £1,200; Seaham, £3,000; Gladstone, £900. MINING—The Ironstone Reef, Craigie, is one of the richest in the division. This is shown by the following statement of quartz crushed from this reef, and gold obtained during the last four years. The return for the last quarter of 1872 is omitted. The quartz was raised from levels varying from 150 to 250 feet from the surface. 1869, 892 tons yielded 877 oz; 1870, 642 tons yielded 943 oz; 1871, 818 tons yielded 1,162 oz; 1872, 302 tons yielded 924 oz. quartz crushed at Johnstone and Son's machine, Craigie. Bennett and Sons, a tribute party, have just begun to work on the Mariner's Reef. They have had no returns yet. The Mariner's Reef Co hope to have their mine in full work immediately.²³

December 1872: AVOCA SUBDIVISION

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At the Melbourne and Avoca Company's claim work has been partially suspended for the last four weeks. They are still sinking the new shaft No. 3, near the river. At the Band and Lake Company's claim, Homebush, the erection of winding and pumping machinery has been completed. Their main shaft has been sunk to a depth of 190 feet. They are now driving west to strike the lead; water light. No work has been done on the Golden Lake Company's claim this quarter. The sale of the leases and mining plant is contemplated. The distance of the main shaft from the workings has militated against the success of this company. At Smith's claim, Avoca Lead, the amount of gold obtained this quarter is 85 oz. There has been a small rush to a place called the Bay of Biscay, between the Middle Creek old diggings and Kimberley. The whole of this lie of diggings, including Percydale, has been dull during the quarter. There is a small rush, also, to the head of the No. 2 Creek, but, by what I hear, the lead is narrow, and only a few as yet are getting payable gold. QUARTZ MINING-The Percydale Gold and Silver Lead Company, Fiddler's Reef, are working at a depth of 160 feet on the underlie. They have just added a buddle to their machinery for the purpose of separating and saving the mundic and galena; the former auriferous, the latter argentiferous. The vein of galena, &c., alluded to last quarter, has become less defined, being more distributed through the stone; width of reef at lowest level from 3 to 4 feet. At the Perseverance Reef, the lead ore in this stone is increasing with the depth; reef from 2 to 6 feet wide. At Barnes' Plum[b] Reef work has been resumed at the 150-foot level. A prospecting claim has been taken up on a new reef called the Monte Christo, near Avoca.²⁴

March 1873: MARYBOROUGH DIVISION

ALLUVIAL MINING—During the first half of the quarter mining operations in nearly all the principal alluvial mines in the division have been attended with unusual difficulties, and consequent depression; but, through the steady application of patience, perseverance, and capital, these difficulties are now being gradually overcome, and I entertain no doubt that the return of gold for the ensuing quarter from each of the gold-producing mines will be fully as large as usual. At Chinaman's Flat the Band of Hope Company have had to encounter a constant and very heavy flow of water and drift in their mine. This circumstance has greatly embarrassed their operations and consumed time. For several weeks the company could obtain no returns whatever. The Duke and Timor Company are now erecting a suitable engine-house on their claim. They are looking forward to the speedy arrival from England of the fine new engine, which they ordered some time ago. Very sanguine hopes are entertained by the shareholders as to the ultimate success of this mine; in fact, its success is looked upon as certain. The money already spent upon it is simply enormous. The claim lies close to that of the Band of Hope Company, and will, in my opinion, when the splendid machinery to arrive has been erected, and when everything connected with it is in full working order, prove one of the most valuable mining properties in the division. The John Bright Company has been working outside ground during the greater portion of the quarter. At the Alma, the Seaham Company has just erected a powerful battery with twenty stamp-heads, for crushing the plentiful and valuable cement, which is found on their claim. Hitherto they have had this cement crushed by the Leviathan Tribute Company. The Alma and Timor Junction Company have begun the erection of their steam machinery, which consists of one 24-inch and one 16-1/2-inch cylinder engine and a double set of lifts. The Heavy timber for the engine-beds is on the ground, and it is expected that the plant will be completed about the end of July. The Gladstone Company has been working poor outside ground during the quarter, but better prospects are now being obtained. The Queen Company has struck deeper ground; this has compelled them to put in new levels, and they are now just getting into full work. The Count Bismarck Company is gradually opening up their mine; they will not be in full work for some months to come. At Havelock, the Lord Clyde Company has at last made a beginning. The drives put in have touched the lead, from which a good and payable prospect has been obtained. I hope in my next report to be able to speak well of the prospects of this mine. At Majorca, the Golden Lake Company is sinking a shaft through basaltic rock, and is down about 80 feet. Should they succeed in bottoming, it will lead to the further prospecting of the run of deep ground, which has been found in the Minorca shaft. This ground has not yet been proved, nor can it be proved without the aid of powerful steam machinery, as the water is exceedingly heavy. The Kong Meng Company is now attracting great attention. A new engine of 35 horse power has recently been added to their plant, ad is nearly ready to start. The deep ground in this mine has already proved to be very valuable, as much as 3 oz 5 dwts to the set having been obtained. The following is a statement of the gold obtained from the principal mines in this division during the quarter: Band of Hope, Chinaman's Flat, 1,349 oz; John Bright, Chinaman's Flat, 1,436 oz; Alma Consols, Alma, 901 oz; Queen, Alma, 1,155 oz; Count Bismarck, Alma, 215 oz; Seaham, Alma, 1,348 oz; Gladstone, Alma, 726 oz; Morning Star, Majorca, 585 oz; Cosmopolitan, Majorca, 276 oz; Phoenix, Carisbrook, 223 oz; Reform, Majorca, 113 oz; Fox's, McCallum's, 76 oz; Total, 8,406 oz. Dividends paid during the quarter: Band of Hope, £900; John Bright, £2,100; Alma Consols, £1,200; Queen, £600; Seaham, £1,200; Gladstone, £900. QUARTZ MINING—The Blucher's Reef Company are, with great difficulty, pumping the water

out of their claim. They are now down to 330 feet, and in a few days they hope to be down to 360 feet; when this depth has been attained quartz will be raised. The North German Company has sustained a severe accident to their plant. In the early part of January a frightful explosion took place, which completely destroyed the boiler and stack. In consequence of this accident the mine has been idle during the quarter. Respecting the Mariner's Reef Company, the manager, Mr Hampton, writes to me as follows: - 'We have done nothing in quartz during the quarter. We started a drive southward from engine-shaft at the 530-foot level, but the ground being hard it was thought best to discontinue it, and sink the engine-shaft a further depth of 100 feet before opening out; and we are now engaged about that work.' Messrs Bennett and Son, who are tributers to the above company, have operated upon 1234 tons of sand during the quarter. This they have done by means of a buddle, pans, &c., worked by a steam-engine of 12 horse-power. From the sand they extracted about 36 tons of pyrites, which gave a return of 87 oz 19 dwts 6grs of gold. The Bristol Hill Company has crushed no stone during the quarter. This company do not crush for the public; and I may remark that many quartz miners have frequently reported to me that their interests are greatly injured and obstructed from the undoubted difficulty they experience in getting their quartz conveniently crushed, and at a moderate cost. Since the accident sustained by the North German Company there are now only two engines in the whole of the division, which crush for the public—one of these is situate at Mosquito and the other at Craigie.²⁵

March 1873: AVOCA SUBDIVISION

At the Melbourne and Avoca Company's ground the machinery has been removed from the abandoned (No. 3) shaft to the New No. 3 shaft, near river, which has been successfully sunk to a depth of 147 feet. Pumping at the No. 1 shaft has just been stopped, and the machinery will be removed therefrom. Work will probably be resumed in a few weeks from the No. 2 shaft in the western drives. The Golden Lake Company's leases and machinery have been sold. The purchasers intend forming a new company to work this ground. The Band and Lake Company, Homebush, have driven about 400 feet. The lead has not yet been struck. The Enterprise and Sons of Freedom Companies, Avoca Lead, have been steadily working during the quarter. Trevithick and Co. are driving in deep ground eastward. The rush at the head of No. 2 Creek fluctuates; only a small number are getting payable gold. A considerable number are shepherding, awaiting the results of prospecting in the deeper ground. As much as 1/2 oz to the load has been obtained, but the average does not exceed I think 3-1/2 dwts. The depth of sinking varies from 25 feet in the upper to 12 feet in the lower lead. The washdirt hitherto has been narrow, but thick in places. No new rush of importance has occurred in the Middle Creek line of diggings. That at Bay of Biscay, or Jackson's Creek, is slightly increased. QUARTZ MINING—At Barnes' Plumb Reef, No. 2 Creek, at a depth of 160 feet, they have driven about 80 feet north, or towards old workings, and are now engaged in stoping out. The stone looks well; width of reef from 2 feet 6 inches to 3 feet. Work is at present suspended on the Fiddler's Reef. Oate and Sons, Perseverance Reef, are working on the underlie at a depth of 60 feet. A company is being formed to work this claim in conjunction with a lease lately taken up between it and the Percydale Company's lease, Fiddler's Reef. Murdoch and Co., Sliding Rock, are driving from the face of the hill on the course of the lode. Width of reef, 2 feet 6 inches to 3 feet. At the Monte Christo Reef, near Avoca, there appears to be two or three lines of auriferous reef. Several claims have been taken up thereon. The prospector and others are getting out promising stone, only a trial crushing of which has been made. It will be seen that the average yield exceeds that of last quarter. The Try Again Company, London Reef, is taking out stone. ²⁶

June 1873: MARYBOROUGH DIVISION

ALLUVIAL MINING—During the quarter mining operations have been more prosperous than usual, and extraordinary activity has prevailed in nearly every portion of the division. Mining speculators and capitalists have been drawn here from all quarters, and every available inch of likely ground has been taken up and applied for under the leasing regulations. The yields of gold from the Alma Consols, the Seaham, and the John Bright mines are, I think, as far as this division is concerned, unprecedented. At Chinaman's Flat the Band of Hope Company still experience great difficulty in working their mine, owing to the stoppage of the pumps of the Duke and Timor Company. The engine-house of the Duke and Timor Company is rapidly approaching completion. The ground now being opened by the John Bright Company is looking exceedingly well, and there is every prospect of their mine continuing to maintain its characters as one of the best paying mines in the division.

At the Alma the Seaham Company is chiefly engaged in raising cement, to crush which a twenty-head battery is kept at work on the claim. The cement is very rich, and it is now proposed by the company to erect immediately an additional ten-head battery. The Gladstone Company has been

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main-driving during the quarter in the direction of the Seaham claim. The prospects of this mine are good. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: —Band of Hope, Chinaman's Flat, 1,423 oz; All Nations, Chinaman's Flat, 49 oz; John Bright, Chinaman's Flat, 2,371 oz; Alma Consols, Alma, 4,242 oz; Queen, Alma, 1,421 oz; Count Bismarck, Alma, 469 oz; Seaham, Alma, 2,054 oz; Gladstone, Alma, 155 oz; Total, 12,188 oz. Dividends paid during the quarter: Band of Hope £1,350; Alma Consols, £12,000; John Bright, £6,000; Queen, £650; Seaham, £3,350. QUARTZ MINING—The Blucher's Reef Company have 300 tons of stone at grass, which will be crushed forthwith. The Mariner's Reef Company is thoroughly overhauling their battery, and is also placing two new boilers in position, with the view of improving their plant, and enabling them to crush for the public. The Nelson Company, Golden Point, has crushed 106 tons of stone, which gave a return of 123 oz 15 dwts of gold. The Bristol Hill Company and the Leviathan Company have been idle during the quarter. ²⁷

June 1873: AVOCA SUBDIVISION

ALLUVIAL MINING-At the Melbourne and Avoca operations have been much retarded by water. They have been principally engaged in pumping, but an endeavour has been made to open up the ground towards the Avoca River. No. 3 shaft is down 165 feet, partly through reef, and it is their intention to sink it to a depth of 200 feet, then to put in a drive towards the river with a jump-up shaft, and so drain the mine. The washdirt treated has been from the ground between the No. 2 and No. 3 shafts. I have just heard of another washing up, with very good results. The Enterprise Company, Avoca Lead, has been employed principally in removing their machinery further south and sinking new shaft. Band and Lake Company's claim, Homebush-I have been disappointed of the manager's return, and so am unable to speak of the present prospects of this mine. They have, I believe, been engaged in prospecting unsuccessfully for the lead until very lately. Work has not yet been resumed on the Homebush (late the Golden Lake) Company's ground. A large rush has set in to the head of the No. 2 Creek during the latter half of the quarter. It occupies three gullies, containing tributaries of the No. 2 Creek. The average yield is from 3 to 4 dwts; washdirt thick. The Middle Lead is four claims at its greatest width. There is a good probability of this field supporting a number of miners for some time to come. The Middle Creek line of diggings is dull. Heavy rains have much retarded mining in this locality, and particularly at the Bay of Biscay. At the Sons of Freedom, Avoca Lead, work has been suspended. At Messrs Trevithick's claim, Avoca Lead, 30 oz of gold has been obtained during the quarter; quantity of washdirt puddled not ascertainable. They have been engaged principally in prospecting their ground, sinking a new shaft to the north-east of old one, and removing their whim thence. QUARTZ MINING-The United No. 2 Company, Barnes' Plumb Reef, are driving north at a depth of 150 feet; width of reef, 3 feet. The prospects are very good. Try Again, London Reef-No good yields have yet been obtained; but the company think well of the reef, and are making arrangements to sink their shaft a further depth of 50 feet. A company has been formed to work the Monte Christo Reef, near Avoca, and the prospectors' and the claims north and south of it have been applied for by them on lease.²⁸

Sept. 1873: MARYBOROUGH DIVISION

ALLUVIAL MINING—Several prospecting claims have been registered during the quarter. One of these, situate beyond Messrs Simsons' station, on the road to Eddington, occasioned a small rush, which will have the effect of thoroughly proving the ground in this portion of the division. There, there is a large extent of new country, and payable gold has been obtained from several claims. The depth of sinking varies from 15 to 24 feet. The splendid beam engine, 80 inch cylinder and 10 feet stroke, ordered in England by the Duke and Timor Co is now nearly all on the ground. The engine-house, a massive building, has been erected at a cost of over £2,000. The 22-inch pumps will now be fixed in the shaft, and the engine erected forthwith. The Alma and Timor Junction Co finished the erection of their fine plant, consisting of a 24-inch and a 16-1/2-inch cylinder engine; also winding and pumping gear, with two 15-inch lifts. The New Magnum Bonum Co also completed their plant. The Gladstone Co has scarcely done anything beyond prospecting their claim during the quarter.

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The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter—Band of Hope, Chinaman's Flat, 1,245 oz; All Nations, Chinaman's Flat, 197 oz; John Bright, Chinaman's Flat, 2,056 oz; Alma Consols, Alma, 3,318 oz; Queen, Alma, 1,298 oz; Seaham, Alma, 2,800; Gladstone, Alma, 199 oz; Lord Clyde, Havelock, 80 oz; Total, 11,197 oz. Dividends paid during the quarter—Band of Hope, £1,050; Alma Consols, £7,500; John Bright, £4,500; Queen, £600; Seaham, £5,700. QUARTZ MINING—This class of mining, which, owing to a variety of circumstances, has been so long depressed, is now showing clear signs of revival and prosperity. Several valuable prospecting claims have recently been registered. Of these, two trial crushings, of 22 tons of stone, from the Rob Roy claim, situate at Havelock, gave 45 oz of gold. The London claim, situate at White Hills, had also two trial crushings; 15 tons 19 cwt of stone gave 22 oz 2 dwts; and 9 tons gave 18 ox 9 dwts 18 grs. The depth of sinking averages from 15 to 30 feet, and the reefs are improving in width and character as they descend. The Bristol Hill Company is now engaged with a crushing of 400 tons, which they hope to have finished in a fortnight. Their plant is in fine order, and the prospects of the mine have greatly improved. The Mariner's Reef Co has not yet begun to crush stone from their own mine; but they are now crushing for the public. Messrs Bennett and Sons, whose plant is at the Mariner's Reef, formed a company for the treatment of pyrites, which should be highly successful.²⁹

Sept. 1873: MAJORCA SUBDIVISION (Mr John M. Murphy, Mining Registrar)

During the past quarter mining in this division has been very dull, although some very good yields have been obtained by the Morning Star, Cosmopolitan, and Reform Companies, working on the Majorca Old Lead. The Kong Meng and Columbia Tribute Co, on the Hanoverian Lead, have been main-driving, at great disadvantages on account of the very great quantity of water struck in the lower level, and have obtained most encouraging prospects; the company anticipate good yields during the coming quarter. The Reliance Tribute Co (late Robin Hood Co), north of the Kong Meng Co, are about erecting a new boiler in addition to their present plant, and will probably commence operations in two or three weeks' time. The New Talbot Tribute Co, Rocky Flat, working the late Sadowa Co's ground, McCullough's paddock (private), have had some very good yields; so has also had the Greenock Park Tribute Co (private property), on the Scandinavian Lead. There are very few isolated mining parties in the division, mining operations being almost exclusively confined to co-operative and registered companies. I have nothing whatever to report on quartz mining. The Prince Alfred Reef (Deed Brothers), German Gully, have had only one crushing of 36 tons during the quarter. 30

Sept. 1873: AVOCA SUBDIVISION

ALLUVIAL MINING—The Melbourne and Avoca Co, Avoca Lead, are still engaged in sinking the No. 3 shaft to a depth of over 200 feet. They have had a great deal of water to contend with. The Sons of Freedom Co have stopped work and disposed of their machinery. It appears that the water was too heavy for them to contend with. At Trevithick and Co.'s claim, lower down the Avoca Lead, the workings are comparatively dry. About a fortnight ago a nugget was found here containing over 21 oz of pure gold. The Band and Lake Co, Homebush, have been unsuccessful in their endeavours to strike the lead; and with the exception of pumping, work is at present suspended on their claim. The Homebush (late the Golden Lake) Co have been testing their ground by boring, and are about to sink a new main shaft to a proved depth of 152 feet, on the supposed course of the lead. The rush at No. 2 Creek has decreased, but continues to support a large number. The average yield is poor. Heavy rains have retarded mining along the Middle Creek line of diggings. The Chinese are getting good yields at the lower end of Kimberley. Average 4 dwts. QUARTZ MINING-There is a marked improvement in this subdivision as respects speculation in this branch of mining, and there appears to be a desire to more thoroughly test not only well-known reefs along the main line of the Pyrenees but also those near the township of Avoca. The United No. 2 Co, Barnes Reef, has been working until lately at the 160foot level. The United No. 2 North Co is working on the Barnes line of reef. Their shaft is sunk 100 feet, and stone is being taken out from the 50 and 199 foot levels. It is intended to erect shortly crushing machinery on both the Barnes and Perseverance Reefs. A company has been formed to work the Perseverance Reef by means of a tunnel, the contract for 450 feet of which has been let. The Monte Christo Co, Monte Christo Reef, is also about to erect a crushing plant near their lease. The Harrison Redan Co, Donkey Hill Reef, is taking out stone at 130-ft. A battery of eight stamps is being erected for the above claim and the adjoining one north.³¹

December 1873: MARYBOROUGH DIVISION

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The Band of Hope Company have been compelled to stop working their mine, in consequence of the unusually heavy flow of water, against which they have had to contend for some considerable time. The stoppage of this mine after a long career of singular prosperity has been very serious, as a lot of men were depending upon it for employment and support. I regret also to state that since the stoppage of this mine the pent-up water it contains is now surely finding its way into the neighbouring deep claims, and I am convinced that unless some successful means are immediately employed to cope with this formidable enemy, the most of the claims in question will be forced to submit at least to a temporary collapse. But I am credibly informed that the splendid steam engine of the Duke and Timor Company will begin the work of pumping their mine some time during January next, and should nothing occur to mar its operations, there can be but little doubt that it will have the effect of thoroughly draining the ground of all the surrounding mines. The Lord Clyde Company, after a protracted and gallant struggle, has also had to succumb, for reasons precisely the same as those, which caused the Band of Hope Company to succumb. Should this mine be worked at any future time, it will require to be worked by much more extensive and powerful machinery than that at present on the ground. I hear that it is in contemplation to form a large and wealthy company, for the purpose of procuring such machinery, and taking over all present interests in the mine. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: -Band of Hope, Chinaman's Flat, 972 oz; John Bright, Chinaman's Flat, 804 oz; Alma Consols, Alma, 1,926 oz; Queen, Alma, 889 oz; Count Bismarck, Alma, 372 oz; Seaham, Alma, 1,616 oz; Gladstone, Alma, 536 oz; Lord Clyde, Havelock, 15 oz; Total, 7,132 oz. Dividends paid during the quarter: —Band of Hope, £1,050; Alma Consols, £3,300; John Bright, £600; Queen, £300; Seaham, £1.950.³²

December 1873: MAJORCA SUBDIVISION

I have the honour to report that mining has been in a very depressed state in this division during the past quarter. The Kong Meng and Columbia Tribute Company, on the Hanoverian Lead, had to suspend operations, owing to an accident to the pumps. This has been an unfortunate occurrence, as the Reliance Tribute Company, to the north of them, cannot commence operations, their machinery not being sufficiently powerful to cope with the water pending the suspension of the Kong Meng Company. During the quarter the Reliance Tribute Company has completed the erection of their new boiler, and is now quite ready to commence work. The Minorca Company (registered) are sinking a prospecting shaft for the new lead westward of the Majorca Old Lead, and are very sanguine of success. The shaft is down about 70 feet. The Perseverance Company (co-operative) has obtained very good returns from Martell's Paddock, Cockatoo. The Greenock Park Tribute Company, Rocky Flat, has had fair yields during the quarter; but the other claims on the lead have not been so fortunate. Nothing to report on quartz mining. Deed Brothers had but one crushing of 20 tons during the quarter.³³

December 1873: AVOCA SUBDIVISION

I regret to report that work has been completely stopped at the Melbourne and Avoca Company's claim, Avoca Lead; but I think this will be only temporary, as great confidence is placed in this mine, as one that must eventually prove a great success. The Band and Lake Company, Homebush, are applying for a reduced area over their leased ground, preparatory to renewing work. The Homebush Company is removing their machinery to the new site of main shaft. At Trevithick's claim, Avoca Lead, work is suspended through influx of water, owing to the stopping of the Melbourne and Avoca claim. The rush at No. 2 Creek continues about the same. A lead is being traced down into wet ground. Average yields, 4 dwts. A small rush has taken place to the head of Middle Creek, near Frenchman's Gap. Depth of sinking from 20 feet to 50 feet. Yield from 2 to 5 dwts. Another rush has taken place south of and near the lowest part of No. 1 Creek. Depth in the prospector's claim 12 feet to 15 feet. Yield 7 dwts. QUARTZ MINING—At the Perseverance Reef they are still engaged in tunnelling. At the Monte Christo Reef the crushing machinery is nearly completed. At Barnes' Plumb Reef, machinery is also being erected. The Avoca and Pyrenees Company's mill is all but completed. At promising reef, called the Surprise, has been discovered during the quarter. Vale's Reef has been taken up on lease, and there is every probability of this well-known reef being systematically worked.³⁴

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March 1874: MARYBOROUGH DIVISION

ALLUVIAL MINING-In the middle of January a small but excellent rush took place at Adelaide Lead, about four miles distant from Maryborough. The ground is new and of considerable extent, and a large number of claims have turned out payable. The owner of the prospecting claim obtained a prospect of 2 dwts 15 grs to the dish. The average depth of sinking is 43 feet, and the width of gutter 9 feet. The Seaham, Gladstone, and All Nations mines are now satisfactorily let on tribute. The John Bright Company has been working a large amount of outside poor ground during the quarter, which explains the falling off in their return of gold obtained. At last the Duke and Timor Company have got their large pumping engine at work, and it is confidently expected that their own mine, and the adjacent deep alluvial mines, will in a short time be thoroughly drained. The following is a statement of gold obtained from the principal alluvial mines in this division during the quarter: —John Bright, Chinaman's Flat, 1,052 oz; All Nations, Chinaman's Flat, 25 oz; Alma Consols, Alma, 1,821 oz; Queen, Alma, 966 oz; Count Bismarck, Alma, 667 oz; Seaham, Alma, 672 oz; Gladstone, Alma, 426 oz; New Magnum, Alma, 193 oz; Total, 5,826 oz. Dividends paid during the quarter: —John Bright, £900; Alma Consols, £3,000; Queen, £600. QUARTZ MINING—Mining in this class is gradually and steadily improving. A number of prospecting claims, situate in various parts of the division, have been taken up and registered. Some of these have proved to be very valuable. The Holstein claim, at Golden Point, on Long Gully Reef, produced 50 tons of stone, which gave 50 oz of gold. The Ellesmere claim, at Arnold's Gully, near Mosquito Flat, produced 47 tons of stone, which gave 112 oz 5 dwts of gold. 35

March 1874: MAJORCA SUBDIVISION

I regret to state that mining has been in a very depressed state in this subdivision during the past quarter, and from present indications there is no prospect of immediate improvement. The Kong Meng and Columbia Tribute Company, and the Reliance Tribute Company still remain unworked; and since my last report, the Morning Star and Cosmopolitan companies, on the Hanoverian Lead, have ceased operations, having worked out the ground to the limits of their leases. The Minorca Company (registered), on the Majorca Old Lead, are about opening out at a depth of 135 feet, and during the past quarter they have sunk six prospecting shafts, varying in depth of 14 feet to 60 feet, to test the outlet of the deep ground. The company is very sanguine as to the ultimate result of their efforts. The Grand Junction Company (co-operative), working in Hooper's paddock (private property), McCallum's Creek, has obtained a very fair prospect, and, from present appearances, it is surmised that the Rocky Flat Lead is trending towards Majorca. Nothing of any importance to report in quartz mining, Deed Brothers having had only one crushing of 7 tons during the quarter. Stark and party had a trial crushing of 16 tons of quartz, from some old workings at the Welcome Reef, which gave them 10 dwts to the ton. They intend still further testing the ground. Owing to the depression in mining matters a great number of miners have left this neighbourhood during the past quarter. 36

March 1874: AVOCA SUBDIVISION

ALLUVIAL MINING—The large claims on the Avoca and Homebush Leads are still idle. Mining operations along the Pyrenees have been retarded through scarcity of water. There have been two small rushes, viz., to Lamplough Lead and Donkey Hill, but neither of them has turned out very well. The rush near Frenchman's Gap continues about the same. QUARTZ MINING—At the Perseverance Reef the tunnel has been driven an additional distance of 97 feet during the quarter. At Barnes' Reef the erection of winding and pumping engine has been completed, and battery commenced. At the Monte Christo Reef the crushing machinery has been erected and covered in. They only await a supply of water in their new dam to commence crushing. Two new reefs, at the head of the Avoca Lead and near Lamplough, have been discovered. The stone obtained therefrom is said to be very promising, but none has yet been crushed. The Avoca and Pyrenees mill has been stopped through the drought. Some excellent stone is said to have been lately obtained at Vale's Reef, which has just been taken up on lease. 37

Mining Surveyors' Reports, March 1874

Mining Surveyors' Reports, March 1874

³⁷ Mining Surveyors' Reports, March 1874

June 1874: MARYBOROUGH DIVISION

Nothing of any importance has occurred during the quarter, excepting the severe accident at the Duke and Timor mine. On the contrary, mining business generally has been in a state of unusual depression. This will be best understood from the fact that the only dividends declared were those by the John Bright Company, amounting to £300. The Duke and Timor Company are now opening up their mine from north to south, in order to effect its drainage as speedily as possible. The water in the mine is being raised at the rate of 750 gallons per minute. The Band of Hope Company have again begun operations in their mine, it having been satisfactorily ascertained by them that the drainage effected by the Duke and Timor engine was sufficient to enable them to do so with safety. The All Nations Company have let two blocks of their ground on tribute. The Queen Company have ceased to work their mine, and, s soon as the underground material is taken up, the pumps will be drawn; several blocks of ground on the claim have been let on tribute, and a portion of the mine will yet be worked by separate machinery. The Horsington Freehold Company, Alma, has been engaged during the quarter in testing their claim, and has obtained an excellent prospect from a bore of 114-1/2 feet in depth at the south end of it. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: —John Bright, Chinaman's Flat, 818 oz; Band of Hope, Chinaman's Flat, 210 oz; Unicorn, Alma, 16 oz; Alma Consols, Alma, 868 oz; Queen, Alma, 377 oz; Count Bismarck, Alma, 967 oz; Seaham, Alma, 590 oz; Gladstone, Alma, 626 oz; New Magnum, Alma, 635 oz; Total, 5,111 oz. QUARTZ MINING-The shaft on the western reef of the Bristol Hill Company's claim has been stopped, in consequence of the water being too heavy for winding; the depth of the shaft is 410 feet. The reef on the claim of the Montrose Company, situate near Maryborough, on the Avoca road, is turning out well. The company has 200 tons of stone at grass. Their last crushing of 60 tons gave one ounce to the ton. Shaw and party had a crushing of 37 tons from the Rob Roy reef, near Havelock, which gave a total yield of 102 oz 13 dwts 12 grs. No pyrites have been operated on during the quarter. 38

June 1874: MAJORCA SUBDIVISION

Mining in this subdivision still continues in a very depressed state, but it is anticipated that in a few weeks there will be an improvement. The Enterprise Company, Maiden Hill, has been let on tribute, and at present is actively employed pumping; operations in the mine will commence in about a month. The Gibraltar Company, Garden Flat, have commenced the erection of machinery, which is being removed from the Prince of Wales Company's claim, Cockatoo. Minorca Company, Majorca—During the past quarter the shaft has been sunk to a depth of 135 feet, a level opened out at 125 feet and put in 220 feet, by a series of bores ... thus apparently proving the existence of a run of payable gold in an altogether untried locality. Duke of Edinburgh Company, Walker's paddock (private)—Shaft sunk 82 feet; at about 30 feet a layer of cement was passed through, and a small piece of gold weighing 1 dwt was found in sinking. As heavy water in a very fine drift was struck at 80 feet, work is suspended at present, for the erection of machinery. The Kong Meng and Columbia Tribute and the Reliance Companies, Hanoverian Lead, are still idle, though it is well known that both companies possess payable ground. Outside capital is urgently required to develop the deep mines in this locality. 39

June 1874: AVOCA SUBDIVISION

ALLVIAL MINING—The large alluvial claims in this subdivision remain idle, and alluvial mining generally has been very dull during the past quarter. QUARTZ MINING—The Perseverance Company have driven their tunnel 325 feet through hard rock. Several promising leaders have been cut; one particularly; but none have yet been tried. They expect to cut the main lode about 125 feet further. Should a payable reef be struck here, which there is good reason to anticipate, it will, I think, have a very beneficial effect on mining in the Pyrenees. The reefs generally may be considered as being not much more than prospected. The Monte Christo Company's mill is the only one that has been employed during the quarter, and this principally with stone from their own mine. A new reef, the Pioneer, has been discovered in Paddy's Gully, Avoca Lead. The tables show the result of the first crushing. ⁴⁰

Mining Surveyors' Reports, June 1874

Mining Surveyors' Reports, June 1874

⁴⁰ Mining Surveyors' Reports, June 1874

Sept. 1874: MARYBOROUGH DIVISION

QUARTZ MINING-Very considerable excitement has been caused here through the recent discovery, by John and Edward Bright, of an exceedingly rich reef, situate at Pigeon Gully, between Newmarket and Maryborough, and distant from Maryborough about two and a half miles. In addition to the prospecting claim, other claims on the supposed line of reef have been taken up and registered. There are about 100 miners on the ground, who are anxiously waiting the result of further operations on the prospecting claim. The gold as yet obtained has been got from the surface to a depth of 3 feet, and is mixed with ironstone and cement. The width of the reef is about 6 inches. Of course there are conflicting opinions as to whether this is a well defined reef or merely a leader or spur from an adjoining reef. But since the discovery of Mariner's Reef, which, at the surface, gave a yield of 100 ounces of gold to the ton of stone, no such reef as that at Pigeon's Gully has been discovered in this district. The gold in the stone seems really to be as abundant as the stone itself; and the extraordinary yield of nearly 40 ounces of gold was obtained from four tin dishes of gold. A new company has been formed at Maryborough for extracting gold from pyrites. They have taken a portion of ground leased by the Mariners' Reef Company on a tribute contract, which gives the Mariners' Reef Company [?] per cent of the gross yield of gold obtained. The machinery, which is now being erected, is partly the invention of a Mr Vail, of Melbourne, who is also one of the managing directors of the company; it is entirely new to this district, and is likely to answer exceedingly well. It chiefly consists of two buddles, with self receiving and discharging apparatus for the sand; also a disintegrator, which is worked by means of a spindle in a cage, revolving on the axle in opposite directions with a velocity of nearly 100 strokes per minute. The company expects to be able to put 3 or 4 tons of sand through the machine in the course of an hour, and to be ready for work in about a fortnight. I deeply regret to report that the Mariners' Reef Company is likely to stop all work in their mine in the course of a few days. The company has deserved a better fate. It is estimated that, from first to last, £50,000 have been spent in the attempt to develop this mine, which is one of the deepest and most expensive in the district, and to render it remunerative to the shareholders. But the stone raised from the deep levels has not answered the expectations, which were formed respecting its quality; and, in fact, has not been sufficiently rich to clear expenses. It is most probable that the plant will be sold, and a fresh company organised. The Nelson Company, at Golden Point, has had 99 oz 19 dwt 12 grs from 140 tons of stone. The Montrose Company has 700 tons of stone at grass, and is now busily engaged with the erection of their new steam machinery. ALLUVIAL MINING-The Duke and Timor Company have just struck excellent wash-dirt, which has yielded half an ounce of gold to the truck. The future prospects of this mine are in the highest degree satisfactory. The Alma Consols Company have now stopped work, and have drawn the pumps, and let a portion of the mine on tribute. No blocking has been done in the Count Bismarck mine, nor will there be until the mine has been drained. The Junction Company, at Timor, have been engaged during the quarter in driving for the lead, and the distance driven in 550 feet. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: —John Bright, Chinaman's Flat, 1,300 oz; Band of Hope, Chinaman's Flat, 789 oz; Duke and Timor, Chinaman's Flat, 1 oz; Eastern, Alma, 129 oz; Unicorn, Alma, 34 oz; Alma Consols, Alma, 437 oz; Count Bismarck, Alma, 667 oz; Seaham, Alma, 690 oz; Gladstone, Alma, 668 oz; New Magnum, Alma, 314 oz; Total, 5,033 oz. Dividends paid during the quarter: —John Bright, £900; Band of Hope, £300; Seaham, £300; Gladstone, £300; Eastern, £30.41

Sept. 1874: MAJORCA SUBDIVISION

Mining matters in this subdivision are little improved since my last report. The Duke of Edinburgh Co, Walker's paddock (private) ceased operations for the erection of machinery. They purchased an engine (16-1/2 inch cylinder) and plant, which is now in the course of removal; it is expected that the company will commence operations in about two months. The Minorca Co's operations are suspended for the present. The Grand Junction Co, Hooper's paddock (private) is also at a standstill, waiting for the erection of machinery. The Russell's Freehold Co (private), south of the Grand Junction Co, are sinking a small shaft, hoping to strike the lead passing through the latter company's ground from Rocky Flat trending towards Majorca. The proprietors of the Enterprise Co, Maiden Hill, are pumping, and expect to hand the mine over to a new tribute party in a fortnight. The Kong Meng and Columbia Tribute Co, and the Reliance Tribute Co, Hanoverian Lead, are still idle. In quartz mining, the Deed Brothers let their mine on tribute to Cooper and party, who are now engaged sinking the shaft deeper. Messrs Ainsworth and Oliver have been prospecting on the line of Finch's Reef, and found some gold-bearing stone, and will have a crushing in a fortnight. There are good payable alluvial mines in this subdivision, only requiring capital to develop them. 42

Sept. 1874: AVOCA SUBDIVISION

⁴¹ Mining Surveyors' Reports, September 1874

⁴² Mining Surveyors' Reports, September 1874

The large alluvial mines, I regret to report, are still idle. The Melbourne and Avoca Company's mine and plant have been sold by auction. QUARTZ MINING—The United No. 2 Barnes' Reef Company have sunk their shaft 65 feet. A battery of six stamps has been erected, and it is intended to erect six more. Much more stone than appears in the tables would, I understand, have been crushed had not the supply of water for the battery failed. At the Perseverance Reef the tunnel has been driven 92 feet further, or a total length of 417 feet during the quartz; ground very hard. It is expected that the reef will be struck in about three weeks, and it is calculated there will be about 170 feet of backs for stoping from the tunnel level. The Monte Christo mine has been let on tribute. The claims on the Donkey Hill Reef are at present idle. The result of a crushing from Vale's Reef I have not yet received. 43

December 1874: MARYBOROUGH DIVISION

ALLUVIAL MINING-The New Magnum Company are now making splendid progress, and with every prospect of continuance. The John Bright Company was obliged to stop the underground works on their claim for a period of six weeks, in order to enable them to remove their plant to a fresh site. This accounts for the comparatively small yield of gold obtained by them. The Junction Company has been engaged in main driving during the quarter. The Horsington Company has now completed boring their ground, and is making arrangements to have their mine worked on the tribute system. The following is a statement of gold obtained from the principal alluvial mines in this division during the quarter: —John Bright, Chinaman's, 676 oz; Band of Hope, Chinaman's 114 oz; Duke and Timor, Timor, 203 oz; Eastern, Alma, 145 oz; Unicorn, Alma, 57 oz; Alma Consols, Alma, 73 oz; Count Bismarck, Alma, 1,080 oz; Seaham, Alma, 832 oz; Gladstone, Alma, 832 oz; New Magnum, Alma, 1,625oz; Queen, Alma, 230 oz; Total, 5,871 oz. Dividends paid during the quarter: —John Bright, £900; Eastern, £60; Seaham, £600; Gladstone, £300; New Magnum, £900. QUARTZ MINING—I would call special attention to the excellent yields obtained by the Nelson and Cambrian companies. The Cambrian Company has recently declared a dividend of £360. The Bristol Hill Company has been almost idle during the quarter.⁴⁴

December 1874: MAJORCA SUBDIVISION

Mining affairs in this subdivision have been very dull during the past quarter. The Duke of Edinburgh Company, Walker's paddock (private), have erected their engine, and have sunk the shaft and obtained a payable prospect at 107 feet. The Grand Junction Company, Hooper's paddock (private) are now erecting machinery which will be completed in about a month's time. The Reform Company, Russell's paddock (private) has suspended operations for the time being, owing to an overplus of water. The Maiden Hill (late Enterprise) Company have pumped the mine and opened out; they have had one washing which gave 6 oz to the machine; they anticipate good results very soon. The Kong Meng and Columbia Tribute Company, and the Reliance Company, Hanoverian Lead, are still lying idle. The Gladstone Company, McCallum's Creek, has ceased operations pending the purchase of machinery. Nothing to report in quartz working, Deed's Reef Tributers having suspended operations. I am sorry to say that mining is at very low ebb in and around Majorca at the present time. 45

December 1874: AVOCA SUBDIVISION

The machinery (reported last quarter as sold by auction) has been removed from the Melbourne and Avoca Company's mine. Alluvial mining along the Pyrenees is still extremely dull. No. 2 Creek still attracts the miners, principally Chinese. At Barnes' Reef the prospects are good. They have a well defined reef at the 226-foot level, averaging two feet in width. At the Perseverance Company's tunnel claim, a reef 8 feet carrying minerals, and supposed to be the Perseverance, has been struck at 458 feet. At 473 feet another reef has been struck, also supposed to be the Perseverance. They are about to drive north and south on the course of the lode, when the stone will be tested. The results of mining at the Barnes' Perseverance, and Monte Christo Reefs, are looked forward to with great interest as likely to very materially affect the prospects of the division. 46

⁴³ Mining Surveyors' Reports, September 1874

⁴⁴ Mining Surveyors' Reports, December 1874

⁴⁵ Mining Surveyors' Reports, December 1874

⁴⁶ Mining Surveyors' Reports, December 1874

March 1875: MARYBOROUGH DIVISION

ALLUVIAL MINING—The claim of the John Bright Company has been worked out, and steps re now being taken to wind up the company. The claim of the Band of Hope Company, included machinery, has been let on tribute, on an agreement, which binds the tributers to pay the company 13 per cent of the gross yield of gold obtained from the mine. The claim of the Queen Company, without machinery, has been let on tribute to four parties of tributers, on the following conditions: -No. 1 party pay 16 per cent; No. 2, 12 per cent; No. 3, 10 per cent; and No. 4, 10 per cent. The Duke and Timor Company struck the Chinaman's Flat deep lead during the quarter, and in six weeks obtained 1,045 oz 6 dwts of gold; the water in the mine is very heavy. All the gold returned this quarter by the Count Bismarck Company is being obtained from the ground situate at the north end of the shaft of their mine, while the ground at the south end is being opened out; but in about six weeks more both parts of the mine will be fully worked, although the water is very heavy. The Junction Company is engaged in main driving. The faces of the claim of the New Magnum Company are looking very well. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter-Duke and Timor, Chinaman's Flat, 1,560 oz; John Bright, Chinaman's Flat, 953 oz; Band of Hope, Chinaman's Flat, 178 oz; Eastern, Alma, 90 oz; Unicorn, Alma, 111 oz; Seaham, Alma, 432 oz; Gladstone, Alma, 778 oz; New Magnum, Alma, 1,623 oz; Count Bismarck, Alma, 1,252 oz; Queen, Alma—No. 1 Tribute, 133 oz; No. 2 Tribute, 51 oz; No. 3 Tribute, 53 oz; No. 4 Tribute, 149 oz; Total, 7,498 oz. Dividends paid during the quarter—John Bright, £600; Gladstone, £300; Eastern £60; New Magnum, £600. QUARTZ MINING-The London Chartered Bank have sold their claim on Blucher's Reef to the Great Extended Company, and the owners of adjoining claims have also sold their claims to the above company, who now possess nearly the whole of Blucher's Reef. The company is possessed of ample means, and has already begun in good earnest to work their mine. The main shaft is down to 150 feet, and has been so laid as will enable the company to strike the reef at a depth of 1,000 or 1,200 feet from the surface. The estimated cost of proving the reef to a depth of 500 feet is £6,000; but as the company intend to place a thoroughly efficient crushing plant, and also a plant for treating pyrites, on the claim, the estimated total cost of proving the mine, and providing for it suitable machinery, is £20,000. The working of this mine will confer a great benefit upon the district, and it is to be hoped that the courage and enterprise of the company will meet with entire success. The yields of gold from the Cambrian and Nelson claims has been very good, as they average more than an ounce per ton. It is intended to erect at once a crushing plant on the claim of the Cambrian Company, who during the quarter paid dividends amounting to £720. The all nations Company have established a crushing battery at Chinaman's Flat, which will doubtless prove a great public convenience. The claims of the Mariner's Reef Company and the Bristol Hill Company still continue idle.⁴⁷

March 1875: MAJORCA SUBDIVISION

During the past quarter there has been very little doing in mining in this subdivision; in fact, mining matters could hardly be at a lower ebb, for, with the exception of the Perseverance Company, Martell's paddock, Cockatoo, which have been paying good dividends during the past month, and a fair prospect obtained by the Duke of Edinburgh Company, Walker's paddock, McCallum's Creek, there is nothing of a cheering nature to report from this locality. The New Greenock Park Tribute Company, Rocky Flat, has entirely suspended operations for the present. The Gladstone Company, Rocky Flat, is still idle, pending the purchase of machinery. The Grand Junction Company, Hooper's paddock, McCallum's Creek, have successfully completed the erection of their machinery, and will commence active operations in the course of a few days. The Kong Meng and Columbia Tribute Company and the Reliance Company on the Hanoverian Lead are both lying idle. The tributers on Deed's Reef have relinquished mining operations completely. 48

March 1875: AVOCA SUBDIVISION (Mr Thomas McHugh, Mining Registrar)

Quartz mining has never looked better, and the division is on the eve of having its resources developed. Three tribute claims, each 100 yards on the course of the western lode, in the Monte Christo Company's property, have got prospects considerably richer than those obtained from the stone already crushed. Hitherto, it was feared, and not without some slight show of experience, that auriferous stone in the division would get poorer in proportion to depth. This theory has now been amply refuted in the case of the Monte Christo mine, and in the mines at Percydale. In the former the lode has widened from 9 inches at 26 feet to from 5 feet at its present depth of over 100 feet; while the stone is estimated to yield 1-1/2 oz per ton. There are four distinct lodes in the company's property, but the others have not been tested at any sufficient depth.

A distinguishing feature in reefs east of the Avoca River, as contrasted with those in the Pyrenees—only about eight miles distant—is the fine quality of the gold, on which the banks

⁴⁷ Mining Surveyors' Reports, March 1875

⁴⁸ Mining Surveyors' Reports, March 1875

advance without assay £2 2s per ounce, while the stone is singularly free from galena, lead, or other of the base metals. A belt of reefs on the Monte Christo line has been traced from the Warrior Company's property, Doctor's Creek, near Lexton, to Vale's Reef-a distance of seventeen miles; and not fewer than eight distinct lodes have been discovered within the last nine months between the Monte Christo Lease and the head of the dividing range eastward, a distance of about four miles. One of these, taken up within the last few days by a new party, yielded 4 dwts per load, and the others from a dwt up to that figure, from stone taken from the surface to a depth of a few feet only. It is the opinion of practical miners that these reefs, if tested at a given depth, would prove as valuable as the Monte Christo property. Two leases have been surveyed in the past week, one north and one south of this mine. The Perseverance Company's mine at Percydale is at present getting stone from the north level, which, it is estimated, will yield an ounce per ton. The reef is from four to seven feet in width; and owing to the facilities for working it by means of the tunnel, should it only go half what has been calculated on, it will pay the shareholders handsomely. The company is negotiating for the purchase and erection of a powerful battery. One hundred and fifty tons of stone are at grass. The No. 2 United Barnes' Company is sinking 100 feet deeper, which will make the total depth of the mine 374 feet. The crushing, as will be seen by my report, is highly satisfactory. I have seen specimens taken from the mine, in the last week, of extraordinary richness. The water has been baled from the old Fiddler's Creek Reef, and a strong party of men will commence working the mine next week. A few parcels of stone at Donkey Hill and elsewhere in the locality have been raised, but cannot be crushed in the absence of machinery. The Union Quartz Mining and Crushing Company, London Reef, near Amphitheatre, commenced working the mine last week. The reef is from two to six feet in thickness. A battery of six stamp-heads, already on the ground, has been put in repair. An auriferous quartz lode has been discovered recently, of the line of those already prospected, at a place called Barber's Gully, near to the Lamplough and Lexton road, and a prospecting claim has been registered thereon. No new alluvial ground has been opened in the division for the last three months, and persons who follow this class of mining are, for the most part, working in old ground. Owing to the exceptionally dry season, a large number of horse puddling machines have suspended operations.⁴⁹

June 1875: MARYBOROUGH DIVISION

QUARTZ MINING—Several of the principal mines still continue idle, which has proved a serious drawback to the average return of gold. The Nelson Company has done very little work during the quarter, consequently no returns from them. The Maryborough Consuls mine, at Leviathan Reef, Chinaman's Flat, after having been idle two years, is now being worked by efficient steam machinery; the water in the mine has now been reduced to the cap-piece of the drive at the 300-foot level. The new main shaft of the Great Extended Company is down 172 feet, but it will not be opened to drive for the reef till a depth of 500 feet has been attained; the pumping machinery is ready, and the ground is favourable. The Cambrian Company has lately purchased an additional engine and boiler for their mine; the batteries are rapidly approaching completion, and will be finished in about a month hence. The Alexandra Company has let their mine on tribute. No results have been obtained from the public crushing machine at Chinaman's Flat. ALLUVIAL MINING—There is nothing of importance to report in this class of mining; but it will be seen that excellent returns have been obtained from the Duke and Timor (2,107 oz), the New Magnum (2,301 oz), and Count Bismarck (1,681 oz) claims. ⁵⁰

June 1875: MAJORCA SUBDIVISION

During the past quarter very little change has taken place in the mining prospects of this subdivision. The Grand Junction Company, Hooper's paddock, have suspended operations, for the purpose of increasing their capital. The Maiden Hill Company has also stopped, the tributers having ceased working. There are no weight excellent mining plants lying idle in this subdivision; but there is reason to believe that with the necessary capital the majority of the mines here would be remunerative. Forbes' Freehold (private), near Cockatoo, has been let to two tribute parties, who are now busy sinking. The Kong Meng and Columbia Company, and the Reliance Company, on the Hanoverian Lead, are still idle, so is the Greenock Park Company, Rocky Flat. There are three parties working on the Gibraltar Lead, near Maiden Hill, but they are very reticent as to their yields for the quarter. ⁵¹

⁴⁹ Mining Surveyors' Reports, March 1875

Mining Surveyors' Reports, June 1875

Mining Surveyors' Reports, June 1875

June 1875:

AVOCA SUBDIVISION (Mr D. O'Leary, Mining Surveyor and Registrar)

No new alluvial ground has been opened during the quarter, and the miners engaged in this class of mining are, for the most part, employed in working old ground. A new reef called French's, situate between the Monte Christo and the head of the dividing range, at the crossing of the Maryborough road, has recently been opened. There are nine claims being worked by twenty-seven men. The width of the reef on surface averages 18 inches, and the crushings therefrom have yielded about 8 dwts per ton. Work was resumed on Donkey Hill on the 26th of June, but operations have been suspended on the London Reef, Amphitheatre, during the quarter. Prospects from the reefs at Percydale are reported to be of an encouraging character, and I have no doubt of being yet able to report favourably of the reefs of the Pyrenees. ⁵²

Sept. 1875: MARYBOROUGH DIVISION

There is nothing of any importance to report upon in respect to either class of mining in this division, as all mining operations during the quarter have been in a very depressed state. The Duke and Timor Company are now upon a splendid run of gold in the deepest part of their mine, and their future prospects seem at present to be excellent. The New Magnum Company are at present harassed and delayed with their work, through litigation, which has also had a serious effect upon a large number of men who were employed about the mine. The Junction Company is making good progress with all the works on their mine. The claim and machinery of the Mariners' Reef Company have lately changed hands, and the powerful crushing plan in connection therewith will likely soon be made available to the public. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: —Band of Hope, Chinaman's, 347 oz; Duke and Timor, Timor, 2,046 oz; Eastern, Alma, 49 oz; Unicorn, Alma, 102 oz; Alma Consols, Alma, 101 oz; Count Bismarck, Alma, 1,751 oz; Seaham, Alma, 381 oz; Gladstone, Alma, 870 oz; New Magnum, Alma, 1,370 oz; Queen, Alma, 247 oz; Total, 7,266 oz. Dividends paid during the quarter: New Magnum, £2,700; Gladstone, £600; Queen, £300.⁵³

Sept. 1875: MAJORCA SUBDIVISION

During the past quarter mining matters have slightly improved in this subdivision, though the principal mines are still idle, chiefly for the want of capital. Since the forfeiture of the Enterprise Company's lease two or three small claims have been taken up at Maiden Hill, and the parties are now testing the ground. A small alluvial rush took place towards Splitters' Creek, in this neighbourhood, but it did not result in anything payable; a few persons are still prospecting the ground. The Duke of Edinburgh Company, Walker's Paddock (private), were more successful during the past quarter than heretofore, and they hope that the run of gold that they are now on will continue. On the whole, mining is very quiet in this locality at the present time. ⁵⁴

Sept. 1875: AVOCA SUBDIVISION

In one instance during the quarter it was thought a rush of some magnitude would have taken place adjoining the old alluvial workings of Lamplough. On visiting the ground on the 13th September, about two hundred miners were there assembled, most of who were shepherding, but in a few days the discovery turned out to be simply 'a small patch.' In quartz mining there are now only two companies at work, the Monte Christo and the Perseverance; the former have several shafts sunk to a depth of about 100 feet, the quartz realising 6 dwts 22 grs per ton; and the latter are tunnelling through one of the hills of the Pyrenees, with very favourable prospects before them. The tunnel is now 498 feet long, 7 feet high, and 6 feet wide; it has already cut one reef 6 feet thick, out of which 237 tons of quartz, as a trial crushing, realised 49 oz 11 dwts. ⁵⁵

December 1875: MARYBOROUGH DIVISION

Quartz mining is now making progress in this division as will be seen by comparing the present return with that of last quarter, which shows a large increase in the yield of gold from that branch of mining. The division is now well supplied with public crushing machines, as, in addition to those formerly available, the Maryborough Consols Company, at Chinaman's Flat, is now prepared to crush for the public. The Bristol Hill Company have sold their plant and claim, on Bristol Hill, to Messrs Anderson Brothers, of Smeaton, who are making suitable arrangements to resume work on the mine. 56

December 1875: MAJORCA SUBDIVISION

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Mining Surveyors' Reports, December 1875

I have the honour to report that there has been a slight improvement in the quantity of gold obtained in this subdivision during the past quarter. The Duke of Edinburgh Company, Walker's Paddock (private) have obtained considerably more gold than heretofore, and have added a winding engine to their plant. It is thought that the company is now on a very good run of gold. I regret to say that the principal claims here remain still unworked owing to want of capital. There was a slight rush to McCallum's Old Lead, Garden Flat, but it resulted in the finding of a very small quantity of gold from the old workings; there are a few person still fossicking there. The Gladstone Company, McCallum's Creek, are still erecting their machinery, which they hope to have completed in a short time. The Prince Alfred Company (quartz) Deed's Reef, German Gully, have sunk their shaft to a depth of three hundred feet and are now driving for the reef.⁵⁷

December 1875: AVOCA SUBDIVISION

In alluvial mining general dullness has prevailed during the quarter. Only at the Homebush have any signs of animation appeared, where a fresh lease is applied for, in order to trace northerly the course of the lost lead in this goldfield. QUARTZ MINING—A new reef has been discovered on the summit of one of the Pyrenees, at the junction of the heads of Glenpattrick, Mountain Hut, and No. 1 Creek Diggings—prospector, Charles Coane. It averages in thickness at surface 6 inches, and at a depth of 50feet it averages 12 inches in thickness, with well defined walls, and having favourable indications of increasing thickness as the depth increases. A first crushing realised, per ton, 2 oz 5 dwts 6 grs. The stone out of the reefs cut by the tunnel of the Perseverance Company at Percydale is also promising to realise favourable results. ⁵⁸

March 1876: MARYBOROUGH DIVISION

ALLUVIAL MINING-In this class of mining there is not much of importance to report. The New Magnum Company still continues to pay excellent dividends, and their mine is looking well. The Junction Company has at last struck payable gold, and I hope soon to be able to report favourably of the progress of their mining operations. The plant of this company's mine has absorbed an immense amount of capital and labour to bring it to its present state of efficiency. The mine of the Duke and Timor Company has not yet answered the sanguine expectations which were formed respecting it, and which led the shareholders to purchase one of the finest and most expensive plants in the colony to work it efficiently. The water in the mine is very heavy, and the weekly yield of gold, during the past operations has barely been sufficient to cover working expenses. The following is a statement of gold obtained from the principal alluvial mines in this division during the quarter: —Band of Hope, Chinaman's Flat, 179 oz; Duke and Timor, Timor, 1,369 oz; Eastern, Alma, 27 oz; Alma Consols, Alma, 36 oz; Count Bismarck, Alma, 1,803 oz; Seaham, Alma, 384 oz; Gladstone, Alma, 468 oz; New Magnum, Alma, 468 oz; Queen, Alma, 247 oz; Timor Junction, Alma, 7 oz; Total, 6,518 oz. Dividends paid during the quarter—New magnum, £4,500; Gladstone, £300; Eastern, £90; Count Bismarck, £2,250. MINING—The Bristol Hill Company are still engaged in repairing and erecting machinery on their mine. They have done no underground work during the quarter, but they expect to make a fair beginning in about a month hence. The Maryborough' Consols are driving for the reef at a depth of 100 feet below previous workings, and the Great Extended Company are engaged in similar operations.⁵⁹

March 1876: MAJORCA SUBDIVISION

There is very little to report from this subdivision for the past quarter, as nearly all the alluvial claims are still standing idle for the want of capital to work them. The Duke of Edinburgh Company, Walker's Paddock (private), McCallum's Creek, is the only claim getting gold of any consequence. I am informed that they are now working some very good ground. The only item in quartz mining to report is that the Prince Alfred Company, Deeds Reef, German Gully, have struck the reef at 300 feet, and from a trial crushing of 10 tons obtained 2 oz to the ton; there is a prospect of the reef widening, and better results may be anticipated in a short time. ⁶⁰

Mining Surveyors' Reports, December 1875

Mining Surveyors' Reports, December 1875

Mining Surveyors' Reports, March 1876

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March 1876: AVOCA SUBDIVISION

In the alluvial mining, Homebush is the only portion of the division engaging attention. Three leases have been applied for, on the supposed course of the lead. Quartz mining has looked better during the quarter. At Percydale, at a depth of from 140 to 150 feet from a lode, varying in thickness from 2 to 7 feet, 474 tons of quartz realised from battery 197 oz 5 dwts, and, by means of the patent pulveriser attached, 52 oz 6 dwts 12 grs were saved from the same crushing, making a total of 294 oz 11 dwts 12 grs. About a half mile further south, at Fiddler's Creek, active preparations are being made to commence operations. 61

June 1876: MARYBOROUGH DIVISION

ALLUVIAL MINING-A small but important rush took place during the quarter at a place called Red Streak, situate at Chinaman's Flat, close to the ground leased by the Argus Company. The depth of sinking is close upon 100 feet, and the ground promises to be very rich; several claims have been marked off and registered. The prospectors (Pyke and party) have obtained from their claim the excellent prospect of 11 oz 12 dwts 15 grs; and they are now sinking a new shaft and erecting a whip. They have lost much time, however, in consequence of their claim having been made the subject of protracted litigation. At present I am unable definitely to report respecting the result of the operations on the other claims, excepting that the prospect obtained by Murphy and party is very satisfactory. I should state the return of gold obtained by the Gladstone Company is exclusive of that obtained from the slum. The slum has been sold to Chinamen for the sum of £53 per week. The claim of the New Magnum Bonum Company has been let on tribute at from 13 to 19-1/2 per cent on the gross yield of gold. Very fair yields have been obtained by the tributers. The following is a statement of gold obtained from the principal alluvial mines in the division during the quarter: —Band of Hope, Chinaman's Flat, 359 oz; Duke and Timor, Timor, 1,577 oz; Count Bismarck, Alma, 2,549 oz; Seaham, Alma, 249 oz; Gladstone, Alma, 410 oz; New Magnum Bonum, Alma, 482 oz; Queen, Alma, 185 oz; Koh-inoor, Chinaman's Flat, 11 oz; Total, 5,825 oz. Dividends paid during the quarter: -New Magnum, £300; Gladstone, £300; Count Bismarck, £3,250; Koh-i-noor, £35. QUARTZ MINING—There has been a considerable increase in the yield of quartz gold during the quarter, but I regret to state that several of the most important mines in the division still continue idle. The Bristol Hill Company has erected some capital additional machinery on their mine.⁶²

June 1876: MAJORCA SUBDIVISION

I have the honour to state that mining has somewhat improved in the subdivision during the past quarter. The Duke of Edinburgh Gold Mining Company, McCallum's Creek (Walker's paddock), are at present on a very good run of gold, and they anticipate having large returns to report very shortly. The Gladstone Gold Mining Company (Wells' paddock), McCallum's Creek, have commenced operations during the past quarter, and are now in active work, having erected a very superior plant, with all appliances. This claim is some distance from any known lead in the neighbourhood; therefore at present it cannot be named, the company having so recently commenced operations. The Prince Alfred Reef Quartz Mining Company, German Gully, has had a crushing, with fair results. I am confident that a small crushing plant would pay in German Gully, and be the means of causing other reefs in the neighbourhood to be tested. Mining operations are almost at a standstill in the immediate vicinity of Majorca. 63

June 1876: AVOCA SUBDIVISION

No. 2 Creek has been enlivened by a small rush during the quarter; there are at present about 150 men employed thereon. Work has been resumed in one of the lease blocks at Homebush. Quartz mining is improving. Since last report, a reef, abandoned for years, and known as the Hampshire Reef, was taken up by a party of six men, who, with a portable engine driving six heads of stampers, have been securing payable returns. The reef, 10 feet from the surface, is fully 16 feet thick, and, with the facilities for working it at a small expense, each man realises £6 per week. A party of tributers on the Monte Christo lease block are down 20 feet below the water-level, and present indications suggest a great improvement in the value of this mine. Twenty tons of quartz, from the Queensland lease on the summit of the Pyrenees, yielded 23 dwts per ton; and good results have been obtained from the reefs near Percydale. 100 tons from the Glen Mona Reef, in the Dividing Range, close to the Avoca and Maryborough road, yielded 4-1/2 dwts per ton, which pay good wages, in consequence of the width of the stone and the softness of the schist.⁶⁴

Sept. 1876: MARYBOROUGH DIVISION

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ALLUVIAL MINING—A small rush took place during the quarter at a place called Rifle Butts Hill, situate at Chinaman's Flat. The prospectors, Messrs Bryant and Gologher, obtained the excellent prospect of half an ounce of gold to the load from their registered claim. The depth of sinking is 40 feet, and the width of gutter 20 feet. About a mile of the lead has been taken up; a large number of men are on the ground, and several claims are yielding fair returns. But the principal event of the quarter has been the temporary stoppage of the works on the claim of the Duke and Timor Company, which had the effect of throwing a large number of men out of employment. This temporary stoppage was caused by the very heavy expense attendant upon working the mine efficiently and the insufficiency of the return of gold from it to meet that expense. At present the mine is let on tribute for one month, and I think that there is every prospect that the tributers will make their arrangement with the company pay. The mine is unquestionably the richest in the division, and the whole of the appointments in connection with it are complete, and of a high-class order. It is earnestly to be hoped that the pluck, energy, and patience displayed by the company will yet meet with an adequate reward. QUARTZ MINING—The Bristol Hill Company have now got their machinery all in order, and are engaged in cutting down the western main shaft to a greater depth. The Great Extended Company is engaged with the erection of buddles, and is making fair progress with the development of their mine. The Maryborough Consols Company have, after spending many thousands of pounds upon their claim, abandoned it, as they could not make it pay. There is nothing of any importance that I know of to remark with respect to the other mines in the division. 65

Sept. 1876: MAJORCA SUBDIVISION

During the past quarter mining in this subdivision has somewhat improved, more especially at Rocky Flat, where the Golden Gate Extended Company are now erecting machinery which will be completed in a week or two. At Gibraltar, near Majorca, several claims have been taken up under miners' rights, with a fair prospect of success. The Duke of Edinburgh Company (Walker's paddock), McCallum's Creek, have had very good returns for the past quarter; and the company feel so much confidence in the lead they are now working that they have purchased thirty acres of private property (Forbes' Freehold) adjoining their present claim. There seems no present prospect of the deep mines (the Kong Meng Company and the Reliance Company) on the Hanoverian Lead, north of Majorca, being worked. There is nothing special to report with respect to quartz mining. The Prince Alfred Reef Company, German Gully, has just completed the erection of a new whim capable of raising stone from a depth of six hundred feet. They are now driving for the reef. There are no metals or minerals other than gold obtained in this subdivision. 66

Sept. 1876: AVOCA SUBDIVISION

Owing to the scarcity of water in the early part of the quarter, mining has been very dull in this division; since the recent rains, however, a large number of the old puddling mills have resumed work. In a tributary of the Old Lamplough Lead, at the bottom of Mosquito Gully, a small run of gold of a coarse character has been discovered, and a few miners are there still profitably employed. At Homebush, in the claim of the 'Working Miners', 680 feet of the old drive in the deep level have been cleared out, and fresh timbers supplied where required; the driving continues still westerly. Quartz mining has been unusually dull, and work has been temporarily suspended in several reefs in the Pyrenees. The Perseverance claim is the only one at present in full work in that locality. On the eastern side of the Avoca river, the Monte Christo tributers are earning good wages; and the Glenmona Reef is also paying well. 67

December 1876: MARYBOROUGH DIVISION

ALLUVIAL MINING—In my last report it was stated that the mine of the Duke and Timor Company had been let on tribute for one month. I now regret to state the tributers were obliged to suspend operations at the close of their term, in consequence of the return of gold now proving sufficiently remunerative. The mine, under the new name of the Duchess of Timor, has been again let on tribute to a new party, on favourable terms. This party is now in possession; they have made a good start, and are likely to make their enterprise a success. The other alluvial mines in the division call for no special remarks. ⁶⁸

Mining Surveyors' Reports, September 1876

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December 1876: MAJORCA SUBDIVISION

During the past quarter, in this subdivision, mining matters have been very quiet, with the exception of two or three claims at Rocky Flat, which are worked by co-operative parties. The machinery from the Sadowa Company and from the Greenock Park Company, valued at £5,000, has been removed to the neighbourhood of Creswick. The Golden Gate Company has erected machinery, and is now sinking with some hopes of success. In the immediate neighbourhood of Majorca very little is doing in mining. The Prince Alfred Reef Company, Deed's Reef, is looking somewhat better than it was last quarter, the quartz yielding 1 oz 1 dwt to the ton. They are now raising quartz from a depth of 374 feet.⁶⁹

December 1876: AVOCA SUBDIVISION

The resumption of operations at the Homebush has resulted in proving in a satisfactory manner the payable character of the deep ground. At a distance westerly of 810 feet in the principal drive from the main shaft prospects have been found, by means of bores, in a width of 100 feet, estimated at half an ounce to the truck; and efforts are being made to secure an extension northwesterly of the leases on the supposed course of the lead. In quartz mining there is an unusual depression. Several of the mines in the Pyrenees, including the Perseverance Company, have suspended operations; but the Monte Christo continues to pay its tributers good wages, and the Glenmona Reef in the same line also pays well. ⁷⁰

March 1877: MARYBOROUGH DIVSION

ALLUVIAL MINING-For the first two months of the quarter the scarcity of water, consequent on the long-protracted drought, was severely felt, and had a most depressing effect on mining operations generally. An extended alluvial claim of six acres, situate at Chinaman's Flat, and two prospecting alluvial claims situate respectively at Flagstaff and Chinaman's Flat, have been registered during the quarter. The prospecting claim at Chinaman's Flat lies between the lease of the John Bright Company and Humbug Lead; the depth of sinking is 50 feet; and the prospect, so far, averages 6 dwts a load; the gold obtained is coarse and heavy, and a nugget weighing 1 oz 15 dwts has been found. There is a considerable area of new country in the vicinity of the claim, and a number of miners are present who will soon thoroughly test the character. The new tribute party of the Duchess of Timor claim are now doing exceedingly well; the average weekly yield of gold obtained from the claim reaches from 250 to 300 oz, and there is every prospect of this fine yield continuing for a long time to come. The quantity of water pumped per minute is 1,640 gallons. The claim of the Junction Company was recently sold at the instance of one of the banks. This property is now in the hands of a new company, who have named the claim the 'Try Again'. I believe this claim is rich, and that before long good yields will be obtained from it. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter: — Band of Hope, Chinaman's, 387 oz; Duke and Timor, Timor, 1,992; Count Bismarck, Alma, 110 oz; Seaham, Alma, 133 oz; Gladstone, Alma, 114 oz; New Magnum Bonum, Alma, 244 oz; Queen, Alma, 561 oz; St Osyth, Chinaman's, 43 oz; Total, 3,587 oz. QUARTZ MINING-Mr Reade, the proprietor of the All Nations battery, has written to me as follows-'Since last quarter's returns the battery was idle eleven weeks and four days for want of water. I have only ten days' crushing to report.' The Great Extended, at Blucher's, crushed 623 tons for 151 oz the result has disappointed the shareholders, who have now let the claim on tribute at 15 per cent on the gross yield of gold. Mr Edward O'Farrell has taken the Mariners' Reef claim on tribute. He proposes to sublet his interest in the claim to suitable parties of working miners.⁷¹

March 1877: MAJORCA SUBDIVISION

I have the honour to report that during the past quarter mining in this subdivision has been very dull, especially in alluvial. The Golden Gate Company and the United Miners' Company, Rocky Flat, have both bottomed their shafts, and are now engaged main driving with sanguine hopes of success. The Duke of Edinburgh Company, Walker's Paddock, McCallum's Creek, has been let on tribute, and are now driving for another run of alluvial ground. The Prince Alfred Company (quartz), Deed's Reef, German Gully, has had a couple of good crushings during the quarter, the quartz averaging over 4 oz 4 dwts to the ton. The Reliance Company, the Kong Meng and Columbia Company, and the Enterprise Company are still idle for the want of capital, although it is accepted that there is good payable rich ground in each of the claims. ⁷²

March 1877: AVOCA SUBDIVISION

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Owing to an exceptionally dry summer and consequent absence of water, alluvial mining in this division was all but suspended during last quarter; now, however, that the recent rains have filled the puddlers' dams, operations will be speedily resumed. At Homebush, in the Working Miners' claim, prospects continue favourable; the main drive in at the lower level is further extended westerly 319 feet. QUARTZ—Quartz mining has also suffered from want of water. In the Monte Christo mine, south of the township, the tributers have been sinking for the middle reef, and at a depth of 100 feet, are driving to cut it. There is nothing fresh from the Pyrenees reefs, no crushing having been done during the quarter. 73

June 1877: MARYBOROUGH DIVISION

QUARTZ MINING-This class of mining has rapidly improved and increased in importance during the quarter. Hitherto, in this division, alluvial mining has been in the ascendant, and by far the greater portion of the mining industry and capital expended in the division have been directly applied to the opening out and development of its alluvial mines. But as the alluvial mines are gradually becoming less productive, special attention is now being directed by practical miners and mining speculators to the well known and payable quartz reefs in the division. In consequence of the want of capital and suitable appliances on the part of those who discovered these reefs, the real character of the majority of them has only partially been tested. Of course this remark does not apply to the Leviathan, Bristol Hill, and Mariner's Reefs, which have all along received an unusual degree of attention, and the expensive operations on which have absorbed, without yielding a profitable return, an enormous amount of labour and capital. As a rule the reefs, which are now being worked, are paying well, and in course of time new reefs, of a productive character, will surely be discovered. So that the success and prosperity of this class of mining throughout the district may soon be expected to be quite removed from that kind of distrust and uncertainty which have, in the past surrounded and depressed it, and that it will be permanently established upon a sure, solid, and prosperous basis. The claim and plant of the Garibaldi Company, on the Britannia Reef, Craigie, was recently sold by the Curator of Intestate Estates to Mr Lowenstein, of Maryborough. A tribute party has been formed by Mr Lowenstein, to work the claim on reasonable terms; work has been begun, and is being actively carried on. The last crushing from the claim gave 4 dwts to the ton. After a long and gallant struggle with no common difficulties, the present prospects of the 'Bristol Hill' Company are excellent. From 382 tons of stone, a yield has been obtained of 119 oz 13 dwts. The 'Charles Dickens' Claim, on the Telegraph Reef, situated between Maryborough and Carisbrook, has produced the excellent yield of 147 oz 10 dwts from 120 tons. At Mosquito the reefs are looking unusually well. The Alexandra Company has crushed 300 tons for 195 oz 16 dwts; and the Cambrian Company has crushed 210 tons for 124 oz 5 dwts. The prospects of the Great Extended Company at Blucher's were never so good as they are now. From a crushing of 80 tons a yield was obtained of 48 oz 9 dwts, and excellent stone is now being brought to grass. The lode has been wrought for 100 feet without showing signs of exhaustion. No stoping has yet been done in the mine. A prospecting claim situate near Flagstaff, on the Lanarkshire Reef, has been registered. Since the registration, shares in this claim have been sold at a good figure. The reef looks exceedingly well. A ten men's ordinary claim has also been registered, situate immediately behind Prince's Park, Maryborough, on the Pasha Reef. ALLUVIAL MINING-I would call special attention to the excellent yields obtained from the Duchess of Timor Tribute (3,841 oz) and Count Bismarck (1,731 oz) mines. The Seaham mine has been let to four tribute parties. Two of these parties are now on good gold, and during the last few weeks the men employed have each made on an average £5 a week. The Gladstone mine has been let to six tribute parties, at an average tribute of 13-3/4 per cent on the gross yield of gold. The Try Again Company is at present engaged in draining the mine, but has been delayed through the breaking of the pump rods. The slum of the Duchess of Timor Tribute Company was recently sold to a party of Chinese for £1,200, the right to wash the same being confined to a period of twelve months. [Statement of gold from alluvial mines includes—Argus, Chinaman's, 61 oz]⁷⁴

June 1877: MAJORCA SUBDIVSION\

Mining during the past quarter has been depressed in the subdivision. The tributers of the Duke of Edinburgh Company (Walker's Paddock) relinquished their contract, therefore the company has remained unworked during the whole quarter. There is an endeavour being made to form a company, to be called the Golden Valley Company, to embrace the leased of the Columbia and Kong Meng Company, and also that of the Reliance Company, all on the Hanoverian Lead. The promoters seem sanguine of success; if so, a great impetus will be given to mining in this portion of the subdivision. Nothing of importance to relate respecting quartz. There has been but one crushing from Deed's Reef, German Gully, during the quarter. To

June 1877: AVOCA SUBDIVISION

Previous to the recent rains, alluvial mining was nearly suspended in the different old workings. At Homebush, in the Working Miners' claim, at a depth of 170 feet and 900 feet from the main shaft, the lead is now defined, and is 165 feet wide. QUARTZ MINING—A crushing of stone from a reef about two miles east of Avoca, and near the Maryborough and Avoca road, lately yielded 50 oz from a crushing of 5 tons, but these were of picked stone. The lode is narrow, and the stone is from a depth of 30 feet. The Glenmona Reef continues to give favourable yields. ⁷⁶

Sept. 1877: MARYBOROUGH DIVISION

QUARTZ MINING-In my last report special attention was called to the rapid and substantial improvement which had recently taken place throughout the division in the prospects of this class of mining; and I am now glad to be able to state that, as a rule, the quartz mines which are being worked are looking exceedingly well. The most of them are producing unusually good yields, and promise to be highly remunerative to the shareholders. The owners of the Professor Pearson claim have crushed 84 tons of stone during the quarter, which gave a return of 78 oz 9 dwts, or an average of nearly an ounce to the ton. This claim is situate at Chinaman's Flat, on the Great Western Reef, and was lately taken up and registered as a prospecting claim by Messrs Wilson and Dark. The depth of sinking is 50 feet. The mine of the Great Extended Company at Bluchers is now being prospected by a drive being continued to the north along the course of the lode. The Alexandra Tribute Company has been engaged during the quarter in putting in a cross-cut from a deep shaft lately sunk on their claim. They are now driving along the crown of the reef, which shows a large body of stone; and they have got nearly 200 tons of payable stone at grass. It will be noticed that this company has crushed during the quarter 250 tons of stone for the public. Mr William Noell, of Maldon, has completed satisfactory arrangements with Mr Isaac Lyons, of the Mariners' Reef Company, for the right to operate on and extract gold from the sand, debris of tailings, and quartz, now lying on the claim of the company at Mariners' Reef. The agreement between the parties is to continue for five years. The company get 10 per cent on the gross yield of gold; but Mr Noell has to provide at his own expense all necessary steam machinery and appliances for successfully treating the pyrites. He has also undertaken to provide sufficient labour to operate upon at least 100 tons of tailings every week. The steam machinery and appliances required are now in course of erection, and will soon be ready; their cost will be about £2,000. The Mariners' Reef Company crushed 1,000 tons of stone during the quarter for 200 oz of gold. They also crushed 500 tons for the public, which gave a return of 275 oz or an average of over half an ounce to the ton. They have a battery of 10 stamp-heads crushing by night and day. ALLUVIAL MINING-The Duchess of Timor Tribute mine has not been so prosperous as usual during the quarter. There was lately a slight hitch in the machinery, which caused delay, but only for a short time. The water is still very heavy in this mine and all the operations in connection with it are attended with great expense; but, in spite of all drawbacks, this is a firstclass property. The Band of Hope mine is worked out. The pumps have been drawn, and the machinery is about to be sold. A block of the lease has been let on tribute, and the ground will be worked by horse-power. Nearly all the gold obtained in the Queen Company's mine has been got by the No. 7 tribute party, and their success is due to their having erected machinery. The ground of this mine is far too wet to be successfully worked by horse-power. The water of the Try Again Company's mine at Timor has at last been baled out, and the mine was handed over to the tributers on the 4th September; and since that time the tributers have been busily employed in putting in new drives into the mine for the purpose of breaking into payable ground. A fine yield has been obtained by the Bismarck Company. In addition to declaring dividends during the quarter to the value of £5,850, this company has paid off £400 of a current liability and 100 guineas as a bonus to their mining manager, Mr G.F. Beaven. 77

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Sept. 1877: MAJORCA SUBDIVISION

During the past quarter mining in this subdivision has been very dull except at Rocky Flat, where one or two claims have been doing fairly. The Reliance and Kong Meng claims, on the Hanoverian Lead, are still unworked, although it was anticipated that the two claims abovementioned (amalgamated) would during the past quarter have been started under the title of the Golden Valley Company. The Prince Alfred Quartz Mining Company, Deed's Reef, has suspended operations for the purpose of erecting machinery. The Duke of Edinburgh Company (Walker's Paddock) remains still unworked. 78

Sept. 1877: AVOCA SUBDIVISION

In this division alluvial mining has been progressing very favourably during the quarter. At Homebush, the washdirt in the now defined lead continues yielding rich returns; 45 consecutive machines realising 1,046 oz 12dwts, which include several nuggets varying from 1/2 oz to 60 oz. The supposed course of the lead for a considerable distance has been secured under lease. On the Rutherford Creek several extended claims have been taken on the supposed continuation of the Lamplough old lead, where some very encouraging prospects have recently been found. Suitable machinery has already been erected on the prospecting claim. ⁷⁹

December 1877: MARYBOROUGH DIVISION

QUARTZ MINING—Six prospecting claims were taken up and registered during the quarter. These claims are now being opened out, with every prospect of success to the owners. They are situate at White Hills, Shell-back Gully, Golden Point, Donkey Gully, Mosquito, and Chinaman's Flat. A crushing of 21 tons from the claim at Golden Point gave a yield of 2 oz 17 dwts to the ton; while a small crushing from the claim at Donkey Gully gave a yield of 3 oz 2 dwts 6 grs to the ton. The Maryborough Consols mine, at Chinaman's Flat, has changed hands. It was lately sold by the London Chartered Bank to Mr James Logan, of Timor. This gentleman is now actively engaged in an attempt to float a company for the purpose of resuming operations in this mine. The machinery and all the appointments in connection with it are complete, and in firstclass order. The original cost of the plant was between £3,000 and £4,000. The Bristol Hill Mine is still progressing favourably. It is situate close to the town of Maryborough, and affords steady employment to a number of men. During the quarter 1,194 tons of stone from this mine were crushed... A large number of men are also now being employed by the Mariners' Reef Company, and the works of the company are a hive of mining industry. The Great Extended mine, at Blucher's, has been let on tribute. ALLUVIAL MINING—The protracted and severe drought of this season has told with much effect on this class of mining during the quarter. Scarcely any rain has fallen in this district for six months, and consequently the dams and water-holes, on which the miners place so much dependence, are now either wholly or almost dry. It is also a remarkable fact that the public reservoir has got so low that the borough council has judged it necessary to caution the public against a too extravagant use of water. The Duchess of Timor mine has again changed hands. The sale was effected by the London Chartered Bank, and the purchaser is Mr Martin Loughlin, of Ballarat. The purchase-money was £12,500. Mr Loughlin means to form a company in order to work the mine. The pumping machinery connected with the mine will be made powerful and efficient. The Count Bismarck mine continues to give capital returns. The Try Again Company is erecting new machinery on their claim at Timor. Their new issue of shares was quitted in the Ballarat market. The prospects of the company are excellent. None of the other mines in the division call for special remark. 80

December 1877: MAJORCA SUBDIVISION

During the past quarter mining in this subdivision has been very much depressed. The few miners working the old ground on the McCallum's old lead, Garden Flat, found their operations very much retarded during the last few weeks by the want of water for puddling. Nothing whatever has been doing in quartz mining. The Reliance and Kong Meng mines, Hanoverian Lead, still remain unworked for the want of capital to start them, although it is an accepted fact that there is plenty of gold in either claim to reimburse any parties that could start them afresh. 81

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December 1877: AVOCA SUBDIVISION

In alluvial mining Homebush is the only place at present engaging attention. In the Working Miners' claim the rich character of the ground in a northerly direction has been thoroughly proved, and attention is being directed southerly, where the washdirt is also 3 feet chick, and averages 18 oz to the machine. During the quarter 1,381 oz have been obtained out of this claim. On the north side boring has recently been carried on to ascertain the direction of the deep ground. The ground lately taken up on the Rutherford Creek, where the Lamplough old lead had been lost, has not yet been successfully worked, principally on account of ineffective machinery. In the old leads in the division a general dullness has prevailed, consequent on the unusual scarcity of water. 82

March 1878: MARYBOROUGH DIVISION

ALLUVIAL MINING-The much needed and copious rains which recently fell here have had a rapid and favourable effect upon all classes of mining operations in this division. The dams and reservoirs are now well supplied with water, and the serious hindrance to mining industry, which was caused by the long protracted drought, has been effectually removed. The principal event of the quarter has been the successful formation of the Woolbrook Company, whose mine is situate at Woolbrook, near Carisbrook, on the same ground as that which was formerly occupied by the Dan O'Connell Company. This company has purchased the whole of the machinery and plant, which formerly belonged to the New Magnum Company, and is now busily engaged with its erection. The prospects of the company are considered to be very good, as the ground has already been proved to be rich. Should the company succeed with the enterprise it will be the probable means of opening up a large extent of new auriferous country between Carisbrook and Majorca. The operations in the Duke and Timor (late the Duchess of Timor) mine have received more than one serious check during the quarter. A breakage occurred to a portion of the machinery, which led to a temporary suspension of work and other serious consequences. The shaft and damaged machinery have been repaired, and everything about the mine is now in good working order. The Try Again Company, Timor, has at length got on to payable gold; in consequence, shares in this company have advanced, and are now firmly held. This company deserves to succeed, for it has clung to its property under the most depressing circumstances, and has spared neither labour nor expense to develop the resources of the mine. The Count Bismarck Company has been less fortunate than usual during the quarter. It has experienced no accident of any kind, but the ground has been found to be variable and uncertain; hence the decline in the yield of gold from its mine. I hope to be able in my next report to send you better tidings regarding this mine, which has all along been managed with great ability. MINING—The splendid return from the mine of the Telegraph United Company has caused a great deal of stir in local mining circles. So good a return from this mine was quite unexpected. From a crushing of 164 tons a yield was obtained of 351 oz 11 dwts or an average of more than 2 oz 2 dwts per ton. The company has another lot of payable stone at grass, and will begin to crush in a week or two. The ground adjacent to the mine has been taken up, and the character of the Telegraph Reef will now be thoroughly tested. The Bristol Hill Company is prospecting its ground, and is also putting up another boiler and condenser. The Mariner's Reef Company is driving a brisk business in crushing for the public, but the mining operations of the company call for no special remark. Messrs Noel and Oswald have begun to treat the tailings and pyrites contained on the ground leased by the Mariner's Ref Company. As yet they have confined their attention to the tailings alone. From 1,000 loads they obtained 100 oz of gold. The Cambrian mine, at Mosquito, has passed into the hands of the Bank of Victoria. There is nothing which appears to me to call for special remark in relation to the other leading mines in the division.⁸³

March 1878: AVOCA SUBDIVISION

Mining generally has been very dull during the quarter; even Homebush, with its well-defined lead, has been very quiet. The lead has not been yet traced beyond the boundaries of the Working Miners' claim, but the wash at present in a northerly direction is reported as being 'very heavy and the best yet seen in the mine'. On the north side, in the Homebush Company's claim, the bores have reached a depth of 158 feet, with no indication to the bed rock. QUARTZ—In quartz mining there is nothing of importance to report. Operations in the mine of the Perseverance Tunnel Company, Percydale, which have been suspended for over eighteen months, have been resumed, with a good prospect of success, under the management of a new company. 84

June 1878: MARYBOROUGH DIVISION

ALLUVIAL MINING—During the quarter, two prospecting claims have been registered. One was registered by Luke Palmer. It is situate at the bottom of Mackenzies' Gully, Lucknow, in the

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direction of Simson's homestead, and distant four and a half miles from Maryborough. There is a considerable extent of new country in the vicinity. Depth of sinking, 22 feet; prospect obtained, 1 oz to the load. The other was registered by George Pyke. It is situate at the top end of Nuggetty Gully, to the east of the old lead at Chinaman's Flat, and distant four miles from Maryborough. Depth of sinking, 10 feet; prospect obtained, 8 dwts to the load. Eight extended claims have also been registered. Two of them are situate at Chinaman's Flat, and the rest at the Alma. Their aggregate area is 56 acres. The owners of them seem to be quite confident of success. In the neighbourhood of Carisbrook there are now several valuable progressive mines, and mining operations are being conducted on an extensive scale and with unusual energy. The Carisbrook Consols Company is making rapid progress. They have obtained, during the quarter, a yield of 50 oz. The levels in the old lead have been lost, so the company has decided to sink a new shaft. The company intends, as soon as possible, to erect steam machinery and they hope in a short time to have the mine in full working order. Shares in this property are being well held, and the proprietors are satisfied that the mine will soon pay dividends. The Goldbrook Company has made a good start. To enable them to work their mine efficiently, they have procured a 10-horse power portable engine, along with other necessary appliances. They hope soon to be in full working order. The Woolbrook Company has purchased the plant formerly owned by the New Magnum Bonum Company, and has nearly completed its erection. The pumps have been connected, and pumping begun. The water is heavy. They are now engaged in sinking the shaft. The mine held by the Bismarck Company is again rapidly coming to the fore. At present there is every prospect that this company will again soon be in a position to pay good dividends. Shares are being firmly held and are advancing in price. On the new issue it is probable that there will be one more call. The Duke is maintaining its prestige. It has produced, during the quarter, 1,515 oz. Of late its prospects are greatly improved. The mine is let on tribute. The St Osyth Co-operative Company is doing well. Their property is a valuable one and is paying handsomely. The Try Again Company has been compelled to stop because of the want of capital. This is much to be regretted. The shareholders have courageously stuck to the property as long as it was possible for them to do so. They spent £50,000 on the venture. The prospects obtained from the mine prove that it is highly auriferous. Under the name of the New Try Again, a fresh company is being organised to purchase the plant and work the mine. A large number of shares have been purchased, and the company will soon be floated. I have nothing of importance to report on the other alluvial mines in this division. [Statement of gold obtained during the quarter included a return from Carisbrook Consols, Carisbrook. QUARTZ MINING—Two prospecting claims have been registered during the quarter. The first was registered on the 17th April, by John Gray and Dionysus Campanaus; it is situate on Monk's Reef, Mosquito Flat. The second was registered on the 24th June, by Benjamin French; it is situated on French's Reef, between Amherst and Adelaide Lead, close to Faulkner's paddock. There is a large extent of likely country in the neighbourhood, which deserves to be well prospected; the distance from Maryborough is four miles. From a crushing of 15 cwt of stone, a prospect was obtained of 11 dwts 9 grs. The Mariner's Reef Company has not done much during the quarter. They are now engaged in sinking the No. 1 shaft to 728 feet. Messrs Oswald and Noell, of the Pyrites Works, report that their business during the quarter has been almost a total blank. The Bristol Hill Company is raising stone, but they will not crush before a month. The proprietors employ two tribute parties on the mine to prospect the ground. Some of the stone being raised is very rich. The deepest shaft in the mine is 509 feet. The Telegraph United Company crushed 125 tons for 126 oz 10 dwts, which is satisfactory. They recently made additions to their plant, and are engaged in sinking a new shaft. They paid during the quarter £300 in dividends. The Great Extended Company was compelled to stop work on their mine at Blucher's Reef. This is one of the bestdefined reefs in this district. The stoppage has thrown a number of men out of work. The decrease in the number of miners in this division has been caused by the stoppage of the Great Extended quartz mine, at Blucher's, and the Try Again alluvial mine, Timor; also by the shortening of hands in the Bismarck alluvial mine, at Lower Alma.⁸⁵

June 1878: MAJORCA SUBDIVISION

There is very little mining news of importance to report. The Kong Meng and Columbia and the Reliance Companies, having been promised £500 out of the Government prospecting vote, are about to be started again with every prospect of success. The Grand Junction Company, Hooper's paddock, commenced operations, and are now driving through the reef. The Duke of Edinburgh remains unworked. The most successful mine in this subdivision—the Perseverance Company, Martell's paddock, heretofore worked by whim—has been swamped out, which will necessitate the erection of machinery and consequent stoppage of mining operations for some time. Nothing to report with respect to quartz mining. ⁸⁶

June 1878: AVOCA SUBDIVISION

There has been no improvement in mining during the quarter. At Homebush, only the Working Miners' Company as yet is actively at work. The lead in a northerly direction is proved 100 feet wide, and is still extending in breadth. Operations are about being commenced in a few extended claims recently taken up under the bye-laws. 87

Sept. 1878: MARYBOROUGH DIVISION

ALLUVIAL MINING-On the whole there has been a considerable improvement in alluvial mining in this division during the quarter. This is shown by the returns. The large yield of 1,984 oz 16 dwts from the 'Duke' is encouraging, and proves beyond doubt the valuable character of the mine. It has also had the effect of strengthening confidence in the adjacent mining properties. The Count Bismarck Company has done very little work during the quarter. They were forced to suspend operations in their mine because of the heavy flow of water with which they had to contend. They are now erecting additional machinery of a powerful character. This will enable them to cope with the water, and speedily to resume operations. The mine is looking well. The Victoria Company, Timor, has succeeded with their enterprise. The company has been successful floated. Their mine was formerly owned by the Try Again Company. The mine and all its appointments are first class. The mines of Carisbrook are still making good progress. Three extended alluvial claims, having an aggregate of twenty-six acres, were registered during the quarter. One of them is held by a party of Chinese. The claims are situate at the Alma, Lower Alma, and Chinaman's Flat. [Statement of gold obtained during the quarter included Little Band of Hope, Timor]. QUARTZ MINING—Five prospecting claims of the first class and one cooperative claim of the second class were registered during the quarter. The Bulgarian claim, registered by Thomas Cock, promises to turn out well. The claim is situate near the White Hills. From a crushing of four tons of stone a yield was obtained of 7 oz 14 dwts 9 grs. Messrs Oswald and Nowell are still at work on the slum of the Mariners' Reef Company. The slum improves in value as they go on. It is now payable. They employ a staff of twenty-five men. There are three Chilian mills and seven cradles at work on the ground. At present the company do not possess the requisite machinery to enable them to treat the pyrites, but these are being stored, and will shortly be operated upon. The Mariners' Reef Company has resolved upon making extensive improvements in their machinery, with the view of further developing their mine. The Princess Royal, of Mosquito, crushed 40 tons for 56 oz 15 dwt. The Telegraph United Company crushed 366 tons for 352 oz 10 dwt. They are sinking their main shaft, and have done a great deal of dead work. The Bristol Hill Company continues to improve their plant. The appointments in connection with their mine are of the most valuable and efficient character.⁸⁸

Sept. 1878: MAJORCA SUBDIVISION (Mr P. Virtue, Jun., Mining Registrar)

There is not much improvement to report in mining operations in this subdivision. Two alluvial prospecting claims were registered during the quarter, situate at Specimen Hill and Garden Flat. From the claim at Garden Flat a prospect was obtained of 5-3/4 dwts to the bucket. The Grand Junction Company has erected steam machinery. They now employ twenty-four men, and have lately struck good gold. Their return for the quarter is 24 oz. The Logan's Paddock Company has not yet had a washing. Several of the old mines, which are valuable, still remain idle from the want of capital. I have no doubt whatever that the time is not far distant when the country round Majorca will receive closer attention that it does at present. The judicious application of foreign capital towards the development of even those mines, which have been proved to be valuable, would speedily remove the severe depression, which now exists. ⁸⁹

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Sept. 1878: AVOCA SUBDIVISION

During the quarter mining operations generally have been very dull. At Homebush, in the Working Miners' claim, very slow progress has been made. On the north-west side, in a flat known as Frying Pan, an extended claim of 12 acres has been registered, and as this flat is leading into the Homebush, it may contribute to the richness of the lead already discovered in the latter. QUARTZ MINING—The only place at present deserving special attention is the Pyrenees Tunnel, Percydale. About 500 feet from the mouth of the tunnel a party of four has been driving northerly, on the course of a cross-cut reef, 141 feet. 90

December 1878: MARYBOROUGH DIVISION

ALLUVIAL MINING—At the Alma, Chinaman's Flat, and Carisbrook, there has been a decided and general improvement in mining during the quarter. The holders of miners' rights have taken up a large portion of the ground formerly held under lease at the Alma, and which was forfeited. The men who have occupied the ground are practical miners, who will doubtless be able to work it to advantage, and with success. The operations of the Bismarck Company, at the Lower Alma, and of the Duke, at Timor, are upon a very costly and extensive scale, and prove conclusively that a large measure of confidence is still reposed in our principal alluvial mines. The Bismarck mine will soon be in full working order; the chief difficulty against which the company has now to contend is the water, which of late has become unusually heavy. The principal mines at Carisbrook—the Woolbrook, Goldbrook, and Carisbrook Consols—are progressing favourably. They employ a large number of men. The extensive operations carried on in those mines will doubtless result in developing the mineral resources of the district. The splendid nugget of solid gold, weighting 32 oz, which was found in the Carisbrook Consols, at a depth of 65 feet from the surface, has attracted much attention, and has afforded an additional stimulus to mining operations at Carisbrook. Should the country between Carisbrook and Craigie, and between Craigie and Majorca, prove auriferous, which I have no doubt it will, then an immense field of mining industry will be opened up in this district. I believe that mining here is as yet merely in its infancy and that already we are upon the threshold of a genuine revival of mining prosperity. Two additional prospecting claims, situate at Moonlight Flat and Humbug Gully, Chinaman's, and two extended alluvial claims, situate at the Alma and the Lower Alma, were registered during the quarter. The aggregate area of the extended claims is ten acres. The Dalmation Claim, at Moonlight Flat, was registered by Vincent Zurich. The Melbourne Prospecting Claim, at the top end of Humbug Gully, and which was found on a lost lead of gold, was registered by George Perry. Prospect obtained—2 dwts to the load; depth of sinking 22 feet. There is a considerable extent of new country in the neighbourhood of both claims. QUARTZ MINING-The Bristol Hill mine is still looking well, and Messrs Anderson Brothers, the enterprising proprietors, are sparing neither labour nor expense to make it a thorough success. From 1,150 tons of stone 536 oz 9 dwts of gold were obtained, or an average of nearly half an ounce per ton. Over seventy hands are regularly employed in and about the mine, and the amount paid in wages exceeds £150 a week. The mine lies close to the town, and most of the men employed in it live in the town. No quartz was raised from the Cambrian mine, at Mosquito, during the quarter, as the tribute party formerly engaged gave up their tribute, and the owners have not yet succeeded in finding another party to take their place. But the result of the several parcels of quartz which were obtained during the quarter from Mosquito, Blucher's, Chinaman's, Havelock, and the surrounding neighbourhoods, and crushed at the public crushing machines, proves beyond doubt that our quartz reefs are fairly productive. Thus, from 860 tons of quartz crushed for the public at the Cambrian battery, 617 oz 15 dwts of gold were obtained, or an average of 14 dwts 8 grs per ton; from 268 tons crushed at Messrs Penny and Clausen's battery, 156 oz 17 dwts were obtained, or an average of 12 dwts 18 grs per ton; while from 473 tons crushed at the All Nations battery, 292 oz 13 dwts 9 grs were obtained, or an average of 12 dwts 9 grs per ton. These facts speak for themselves. The Telegraph United Company, Telegraph Reef, has been chiefly engaged during the quarter in doing dead work. The main shaft has been sunk to a depth of 270 feet, and the men employed are now driving for the reef. The Queen Victoria Company, Mariners' Reef, is proceeding with the erection of their plant, and will soon be ready to begin work. Wardley and party, of Leviathan Reef, Chinaman's Flat, crushed 38 tons for a yield of 38 oz 10 dwts. I have been unable to procure any information from Messrs Oswald and Noell respecting their pyrites works at Mariners' Reef, but I understand that the result of their operations is similar to that of the preceding quarter. I have already reported on the splendid nugget, of nine pounds weight gross, found on the 18th October by Michael Fitzharris and party, in their claim at Havelock, at a depth from the surface of three feet. The nugget was mixed with quartz, but it gave 84 oz of pure gold.91

December 1878: MAJORCA SUBDIVISION

⁹⁰ Mining Surveyors' Reports, September 1878

⁹¹ Mining Surveyors' Reports, December 1878

Mining affairs in this subdivision have not much improved since the date of my former report. The most of the claims are either idle or unproductive. No work has been done in the Perseverance mine since the 12th of October. The company is now engaged in erecting machinery. Forbes' Union Company is sinking their shaft to a depth of 66 feet through hard rock. The Grand Junction Furnishing Company ceased to work their mine on 6th November, as the ground was proved to be not payable. The following is a statement of the gold obtained from the principal alluvial mines in this subdivision during the quarter: — Perseverance (Ellis and party), Majorca, 18 oz; United (Parfoot and Co.), Rocky Flat, 9 oz; Logan's Paddock, McCallum's Creek, 17 oz. 92

December 1878: AVOCA SUBDIVISION

In alluvial mining a small rush has taken place in the low ranges close to Lamplough, and about one mile north-easterly from the Clare Castle hotel. The depth of sinking is from 8 to 15 feet, and the washdirt from 2 to 3 feet thick; average yields from 6 to 7 dwts per load. The width of the 'run' is about 100 feet, and about seventy men have been at work. At Homebush, in the Working Miners' claim, prospects have been improving in both northerly and southerly directions, 962 oz 18 dwts have been obtained during the quarter. QUARTZ MINING-In quartz mining in the Pyrenees Tunnel, Percydale, driving is still being carried on, and the tunnel is now about 920 feet in length. There has been no change calling for special mention in the portion lately driven through. A new lease has been taken up on Barnes' Reef, and a new company is being formed to work the ground. 93

1878-80:

VALE'S REEF.—Situate between Avoca and Lower Homebush... the claim was abandoned in 1859, the shaft then being 210 feet from the surface. It remained in that state until the end of 1878, when it was taken up by a fresh company, who sunk the shaft a further depth of 80 feet. After working for eighteen months the company could not make it pay, the highest crushing being 7-/12 dwts to the ton. Since then it has been leased by several parties, who held it till they were compelled by the Mining Department to relinquish it, owing to non-compliance with the labour covenants.94

March 1879:

MARYBOROUGH DIVISION

No season of such excessive drought as this has been experienced in this district for a number of years. In consequence, the supply of water has been so diminished in the dams and watercourses as to operate most injuriously to the mining interests of the district. The pyrites works at Mariner's Reef and two of the crushing machines have remained idle during nearly the whole of the quarter; while the puddlers and fossickers have been put to great straits to earn a bare living. QUARTZ MINING—This class of mining still continues to make favourable progress. Excellent returns have been obtained from the mines at Bristol Hill, Telegraph, Blucher's, and Leviathan Reefs. Messrs Anderson Brothers are still making valuable improvements on their mine. They have recently accepted a contract from Conway and party for sinking the main shaft to a further depth of 120 feet, which, when completed, will make the total depth of the shaft 620 feet. The cost of sinking the 120 feet will be £6 10s a foot. The reef at Bristol Hill has been found to increase in thickness and in quality as it descends. The pyrites obtained from the mine is sent by rail to Clunes for treatment, with excellent results. Before long pyrites works will be erected on the spot. The Telegraph United Company is making excellent progress. About 40 tons of payable stone are at grass. The last crushing of 47 tons gave a yield of 110 oz or an average of 2 oz 6 dwts 19 grs per ton. Messrs Wardley and Park are working the Leviathan Reef mine with capital results. The want of water prevents them from crushing now, but they have 140 tons of stone at grass. Their last crushing of 149 tons gave a yield of 123 oz or an average of 16 dwts... The Queen Victoria Company, of Mariner's Reef, has completed the erection of their machinery, which has been entirely remodelled. They are now engaged in pumping the water out of their main shaft, which will probably occupy a period of five weeks, and then mining operations will be resumed. Mr John Carlyon is prospecting his ground held under lease near the Telegraph Reef. ALLUVIAL MINING—At Carisbrook, the mines are still making good progress, and most of them will soon pay dividends. At the Alma, the Bismarck is improving; and the other mines there would have given much better returns but for the want of water. At Timor, the Duke is making good progress, but the Victoria is still idle.⁹⁵

June 1879:

MARYBOROUGH DIVISION

⁹² Mining Surveyors' Reports, December 1878

⁹³ Mining Surveyors' Reports, December 1878

⁹⁴ Monthly Progress Reports, November and December 1899, Geological Survey of Victoria

⁹⁵ Mining Surveyors' Reports, March 1879

ALLUVIAL MINING—The usual prosperity of mining affairs in this division has been retarded in consequence of a serious accident, which occurred to the pumping machinery of the Duke mine. The accident has caused a temporary but prolonged stoppage of all operations in the mine, which has been flooded out; and it has thrown a large number of men out of work. A great number and variety of interests are closely connected with this mine, and its stoppage has inflicted severe injury, not only on Timor, but on the whole district. One prospect, one extended, and several ordinary claims were registered during the quarter. The prospecting claim was registered by Edward Smith on 18th June. It is situate at Linton's Gully, near Craigie. The depth of sinking is 15 feet; width of gutter, 4 feet; prospect, half an ounce to the load. The gold obtained is coarse and heavy, one piece weighing nearly two ounces. About twenty claims have been taken up, from one of which a prospect was obtained of 1 dwt from three dishfuls. The Count Bismarck Company is still using every effort to develop their mine, but their immediate prospects are not encouraging. The Royal Dane Company, Lower Alma, was engaged during the last six weeks in sinking a new shaft on their claim. They are down 60 feet, and in six or seven weeks hence they hope to be again on gold. The claim of the Little Band of Hope Company has been swamped out, through the stoppage of the Duke. The principal mines at Carisbrook are progressing. Excellent returns and dividends have been obtained from the Woolbrook. The Goldbrook have only washed three small machines during the quarter, each of which gave a yield of nearly ten ounces. The plant of the Victoria Company, Timor, has been sold. Comparatively little rain has fallen during the quarter, and the scarcity of water is generally felt. QUARTZ MINING—The Queen Victoria Company, Mariners' Reef, are still engaged in pumping. The Bristol Hill Company has let a portion of their mine on tribute. They are still sinking the main shaft. The Telegraph United Company crushed 200 tons for 280 oz. They have now 100 tons at grass, which will be sent to the mill in a few days. Wardley and party, Leviathan Reef, are engaged with a large crushing, which should yield satisfactorily. Three prospecting claims were registered during the quarter-one at Chinaman's and two at Craigie. The Argyle claim at Chinaman's was registered by Alexander McLean—depth 42 feet; width, 2 inches; prospect, one ounce per ton. The Palermo claim, at head of Long Gully, Craigie, was registered by Philip Dodaro-depth 12 feet... The Lone Star claim, at Eaglehawk, Craigie, was registered by Frederick Wangman—depth, 235 feet; width, 4 inches; prospect, 19 dwts per ton. 96

June 1879: MAJORCA SUBDIVISION

In a short time it is more than probable that mining affairs in this subdivision will revive and flourish. A substantial party of men from Ballarat have taken up and applied for a large lease on the Hanoverian lead, which has been proved to be one of the richest in the district. Forbes' Freehold has had no returns during the quarter, but the Perseverance have obtained 75 oz and have paid in dividends £17.97

June 1879: AVOCA SUBDIVISION

Homebush is the only portion of the division deserving special mention. From the Working Miners' claim 1,524 oz have been obtained during the quarter. The Homebush Company, adjoining the Working Miners, is engaged erecting machinery to work their ground. On the south end of the Working Miners' claim a party of miners has taken up 12 acres under the bye-laws, and have commenced operations. ⁹⁸

Sept. 1879: MARYBOROUGH DIVISION

ALLUVIAL MINING—Concerning the alluvial mines in this division, nothing of special importance has occurred during the quarter. They are progressing in the usual manner. Unfortunately the stoppage of the Duke still continues, and is likely to continue for a good many months to come. But active preparations are now being made by the proprietors to place another lift of pumps in the mine. Three prospecting and one extended claim were registered during the quarter. The prospecting claims are all situate in the neighbourhood of Adelaide Lead. The Prince William claim, at Slaughteryard Flat, registered by William T. Hall, gave a prospect of 1 dwt to the dish. Depth of sinking, 35 feet; width of gutter, 4 feet. The Shetland claim at Moonlight Flat, registered by David Nicholson, gave a prospect of 9 dwts to the load of coarse heavy gold, one piece weighing 7 dwts. Depth, 9 feet; gutter 15 feet wide. The adjoining claims on either side are yielding payable gold. The extended claim, registered by Messrs Grose and Pierce, has an area of 3 acres, and forms a portion of the old Band of Hope lease. The Royal Dane Company, Lower Alma, has been engaged in sinking a new shaft. They are now taking out washdirt.

The Count Bismarck have let their mine on tribute. The mines at Carisbrook are slowly progressing. The Goldbrook and Woolbrook have erected fair returns. The Young Phoenix

⁹⁶ Mining Surveyors' Reports, June 1879

⁹⁷ Mining Surveyors' Reports, June 1879

⁹⁸ Mining Surveyors' Reports, June 1879

Company has found the water so heavy that they will be compelled to erect steam machinery. The hope shortly to be in payable washdirt. No dividends have been paid during the quarter. UARTZ MINING—The plant and property of the Queen Victoria Company, at Mariners' Reef, have again changed hands. They are now owned by Mr George Godfrey, solicitor, Melbourne. The men employed in the mine are driving, and sufficient quantity of stone for a crushing will soon be obtained. The Bristol Hill Company is still actively engaged in developing their mine. Twelve men are engaged in sinking the main shaft. Six men are now driving the crosscut at 600 feet, and the crosscut at 500 feet is also being driven by six men, but for the purpose of cutting the eastern reef. During the quarter the company crushed 883 tons of quartz for 163 oz, and they treated 13 tons of pyrites for 31 oz 18 dwt 12 grs. The Leviathan Reef is turning out well. From 352 tons a yield of 222 oz 10 dwts was obtained by Messrs Wardley and party. One extended, one co-operative, seven ordinary, and five prospecting claims were registered during the quarter. These claims are situate at Craigie, Mosquito, Donkey Gully, Adelaide Lead, Havelock, and Chinaman's Flat. The prospects obtained from them averaged from 5 dwts to 1 oz per ton.

Sept. 1879: MAJORCA SUBDIVISION

Mining enterprise at Majorca is clearly in the ascendant, and the prospects of this subdivision are now brighter than they have been for several years. Two extended claims, containing an aggregate area of 38 acres, were registered during the quarter. A splendid nugget of pure gold, weighing over 93 oz, was discovered at Garden Flat by Messrs Rowe and Mulligan on 24 July. A cast of it was procured and forwarded to the Mining Department. The yield of gold from Forbes' Freehold during the quarter was 15 oz, and the yield from the Perseverance was 101 oz 6 dwts. The new Kong Meng Company has successfully floated their venture. I regard their property as being a very valuable one. The ground covered by their lease has already been proved to be very rich, and there is no question but that the company, with prudent management, has an exceedingly prosperous career before them. ¹⁰⁰

Sept. 1879: AVOCA SUBDIVISION

In both alluvial and quartz mining there has been during the quarter a considerable change for the better. At the small rush close to Moonambel there is a population of about 150, and the claims being worked have furnished payable yields. Homebush, however, is the principal goldfield; there the Working Miners claim for the last three months turned out 5,760 tons of washdirt, realising 2,323 oz. Now that the Homebush lead is well defined, and as there is no longer any doubt as to its rich character, five additional new leases, comprising an area of about 1,000 acres, have been applied for. A valuable plant has been erected on the ground of the Homebush Company, and the sinking of the main shaft is being actively carried out. The fortunate shareholders in the Working Miners have during the quarter received £3,450 in dividends. ¹⁰¹

December 1879: MARYBOROUGH DIVISION

QUARTZ MINING-Three ordinary, three prospecting, and three extended claims were registered during the quarter. The Elgin prospecting claim, which was registered by George Ross, is situate near Havelock, within the timber reserve, on the Oxonian Reef. The depth of sinking is 70 feet—width of reef, 5 inches. A trial crushing of 18 tons gave a yield of 5-1/2 dwt per ton. The three extended claims, which contain an aggregate area of more than 20 acres, are situate at Havelock, the Briton, and Parkhill reefs. The last-named of these reefs has already yielded a considerable quantity of gold. The yield of gold, this quarter, from the Telegraph United mine has been unusually large. A considerable quantity of stone is now at grass, and a parcel will be sent to the mill in the course of a fortnight. The Leviathan Reef Company has crushed 200 tons for 76 oz, or an average of nearly 8 dwts per ton. The Bristol Hill Company is still engaged in opening out their mine, but the returns from recent crushings have not been up to the usual average. The principal shaft has been sunk to a depth of 628 feet, which is precisely the same depth as that on Mariners' Reef. The Mariners' Reef Company is driving along the course of the reef. They have come upon payable stone, a crushing of which is now being sent to the mill. Two dividends, amounting to £300, were paid during the quarter by the Telegraph United Company. ALLUVIAL MINING-There is nothing, just now, of unusual importance to report in relation to the alluvial mines in this division.

Three extended claims have been registered during the quarter. These claims are situate at the Alma. They contain an aggregate area of 15 acres. The Gladstone have been idle some time during the quarter, but pumping operations have been begun, and the mine will soon again be worked with a sufficient complement of men. The Bismarck Company is now making better progress. The Carisbrook Consols have suspended mining operations, as the tributers failed of

⁹⁹ Mining Surveyors' Reports, September 1879

¹⁰⁰ Mining Surveyors' Reports, September 1879

Mining Surveyors' Reports, September 1879

success, the plant on the mine being now offered for sale. The Goldbrook have obtained 45 oz during the quarter. They have sunk their shaft to a depth of 123 feet, and employ 40 men. The Woolbrook have temporarily suspended mining operations; they are now engaged in removing their plant to another part of the claim, where it is their intention to immediately sink a new shaft. The mine of the Royal Dane Company looks well and continues to yield excellent results. The Young Phoenix Company has got their machinery on the ground, and will soon recommence mining operations. The Duke is still idle. [Statement of gold for the quarter includes returns from the Royal Dane, Lower Alma.] 102

December 1879: MAJORCA SUBDIVISION

No claims in this subdivision have been registered during the quarter. The two principal claims—the Perseverance and Forbes' Freehold—have yielded much better returns than usual. The Perseverance obtained a yield of 223 oz, and Forges' Freehold a yield of 282 oz 16 dwts. Eleven men are employed by the Perseverance and forty men by Forbes' Freehold. 103

December 1879: AVOCA SUBDIVISION

Alluvial mining has been improving during the quarter. Homebush continues to prove itself the best goldfield in the district. One claim there (the Working Miners) has turned out the handsome result of 3,424 oz, including several large nuggets. Work on the old Avoca lead is about being resumed by a new company just formed, and the deep and well-known rich ground on the west side will now be thoroughly tested. 104

 ¹⁰² Mining Surveyors' Reports, December 1879
 103 Mining Surveyors' Reports, December 1879

Mining Surveyors' Reports, December 1879

MARYBOROUGH HISTORICAL NOTES (3)

March 1880: MARYBOROUGH DIVISION

The unusual and splendid rains we have had during the last month of the quarter have afforded an ample supply of water for mining purposes throughout the whole of the division. The dams and water-holes are full, and the puddlers and fossickers are now able to wash their stuff and to proceed with their operations. We have not had such a season for a number of years. QUARTZ MINING—The Bristol Hill Company have had the good fortune to strike the reef in their western shaft, which shows gold freely. They are now working the eastern shaft, and have crushed 342 tons, which gave an average of 2 dwts to the ton. The Telegraph United Company have sold their mine and plant, and the purchasers have formed a new company to work the mine, under the name of the Telegraph Extended. The new company is progressing most satisfactorily. The shaft is being sunk deeper, and excellent prospects have recently been obtained. I think that something will shortly be done in a practical way to develop the Blucher's Reef, which has stood idle for a considerable time. This is undoubtedly one of the best-defined reefs in the division. It has already produced a large quantity of gold, but the difficulty and expense of working it have hitherto effectually operated against its successful development. There is nothing of special importance to remark in relation to the Leviathan, Mariner's, and other reefs in the division. Two prospecting claims were registered during the quarter—one at Snake Gully and the other at Flagstaff. ALLUVIAL MINING—Two prospecting claims were registered during the quarter. The first claim is situate at Craigie, near the Ironstone Reef. The ground is new, and the depth of sinking is 7 feet. From two loads of dirt a prospect was obtained of 1 oz 5 dwts. The second claim is situate at Moonlight Flat. From this claim a prospect was obtained of 1 oz to the load, of coarse, heavy gold; depth of sinking, 7 feet. The principal mines at Lower Alma and Timor are still idle. The Count Bismarck Company have stopped work, and drawn the pumps from their shaft. The Duke Company is still engaged in perfecting their pumping machinery. The Royal Dane Company has had their mine swamped by the heavy rains. They have not been able to do any work therein for several weeks. The Principal mines at Carisbrook are satisfactorily progressing. The Young Phoenix Company is driving for the old workings in the Phoenix lead. They have extended their drives 300 feet, and they hope to soon meet with success. The Carisbrook Company has removed their machinery from the Woolbrook shaft, and has erected it on another portion of their lease. They are now engaged in sinking the shaft. The Goldbrook Company has made splendid progress during the quarter.¹

March 1880: MAJORCA SUBDIVISION

The Perseverance Company obtained 132 oz during the quarter. The Forbes' Freehold obtained, up to the 10th March, 268 oz; but since that date the company have not obtained any gold, because they are fully engaged in sinking their shaft 50 feet deeper, in order to test the value of the deep ground in their mine. The Kong Meng is making satisfactory progress with all their operations. A quartz claim of 1,200 x 600 feet, situate at Cockatoo, was registered during the quarter by a party of twelve men.²

March 1880: AVOCA SUBDIVISION

Homebush continues to be the principal mining centre, the average width of the lead there being 150 feet at a depth of 165 feet. During the quarter 2,961 oz 7 dwts of gold have been obtained from the Working Miners' claim. Shafts in the adjacent claims are being sunk, and much anxiety is evinced as to the course of the lead northerly. There is nothing of moment to note in the other sections of the subdivision.³

June 1880: MARYBOROUGH DIVISION

ALLUVIAL MINING—Nothing of special importance in either class of mining has occurred during the quarter. Unfortunately, the mine of the Duke and Timor Company still remains idle, a circumstance, which has injuriously affected the general prosperity of the division. The mines in the immediate neighbourhood have more particularly been injured by the stoppage. How much longer the mine of the Duke and Timor Company is likely to remain idle is, at all events, problematical. Energetic measures are being used to bring the necessary repairs in connection with the plant to completion; but I fear that a start will not be made before the close of the year. Considerable activity continues to prevail in the mines at Carisbrook, but it will be some time before they are all in full work. The Young Phoenix Company has been driving during the last month of the quarter to find the lead, and they are now on the run of gold.

The works on the Carisbrook mine are rapidly approaching completion. Two prospecting claims and one extended claim were registered during the quarter. One of the prospecting claims is

Mining Surveyors' Reports, March 1880

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situate at Adelaide Lead, the other between Chinaman's and Havelock. From the former, a prospect of 1/2 oz to the load was obtained; depth, 5 feet; width of gutter, 7 feet. There is a large extent of new and promising country in the locality of this claim. The extended claim is situate at the Lower Alma, and has an area of six acres. QUARTZ MINING—The Mariner's Reef mine has been let on tribute to Mr P. Carolin for a period of five years. The Bristol Hill Company has connected the eastern and western shafts by a cross-cut at a depth of 500 feet. They have let the mine on tribute. The Telegraph Extended company is still engaged in sinking their shaft to a greater depth. Two prospecting claims were registered during the quarter; one at Flagstaff, the other between Craigie and Mosquito. The latter claim is owned by Martin Hogan, and it has a good show of auriferous quartz.⁴

June 1880: MAJORCA SUBDIVISION

The contractors who have engaged to erect the puddling machines at the New Kong Meng mine have begun work, and are making rapid progress. The chamber has been extended nearly 30 feet, and driving is going forward. The Forbes' Freehold Company has sunk their shaft 50 feet deeper. They have put in a lower level and a jump-up, and are now driving to test the deep lead. The Perseverance obtained 175 oz 4 dwts during the quarter.⁵

June 1880: AVOCA SUBDIVISION

In this subdivision the Working Miners' claim at Homebush is the only mine at present calling for special mention. The richness of the yields remains uninterrupted, 3,437 oz 5 dwts 21 grs of gold having been obtained during the quarter. A new plant, costing £1,350, has been procured for erection on the company's ground northerly, about 1,500 feet from the present workings. On the north-east side of the Working Miners is the Homebush claim, in which, after much trouble, the ground is now being opened out. 6

Sept. 1880: MARYBOROUGH DIVISION

A lease of 30 acres has recently been applied for by Mr William Cuddy, of Ballarat, on behalf of himself and a party of twenty men. The ground is situate south of the Maryborough reservoir, and contains a reef, which has already been proved to be highly auriferous. It has been taken up bona fide for mining purposes. The party is practical miners, and is possessed of ample financial means to enable them to work the ground efficiently. Five prospecting claims were registered during the quarter. These are situated at Havelock, Mosquito, and Craigie. The Oxonian claim at Eaglehawk, near Craigie, registered by Otto Petersen, gave a prospect of 2 oz to the ton. The Chance claim at Craigie, near the Britannia Reef, registered by Thomas Johns, gave a prospect of 10 dwts to the ton; depth of sinking, 14 feet; width of reef, 4 inches. There is a considerable extent of new country in the neighbourhood of this claim. The tributers of the Bristol Hill Company have ceased to sink the shaft deeper. They were engaged during the quarter in taking out stone from Passmore's and Eastern reefs. They have crushed over a thousand tons for an average of 6 dwts per ton, which has afforded them fair wages. There are thirty-seven men working as tributers in this mine. The Telegraph Extended has crushed 32 tons for 53 oz, or an average of 1 oz 13 dwts per ton. 383 tons were crushed at the Cambrian Battery, which gave an average of 18 dwts per ton. ALLUVIAL MINING-Mining operations in the alluvial mines have been unusually slack during the quarter. The Young Phoenix has sunk a new shaft, which they are working with a whim. They have done no blocking yet. The engine at the old shaft is used for pumping only. The Goldbrook are making excellent progress, and have obtained a large yield of gold during the quarter. The pumping at the Duke mine, Timor, still continues, and the water is gradually going down in the main shaft.⁷

⁴ Mining Surveyors' Reports, June 1880

⁵ Mining Surveyors' Reports, June 1880

⁶ Mining Surveyors' Reports, June 1880

Mining Surveyors' Reports, September 1880

Sept. 1880: MAJORCA SUBDIVISION

The New Kong Meng Company has completed the erection of the additions to their plant, and has commenced underground operations. The water in the mine is heavy, but the engines are sufficiently powerful to drain it. The shaft has been sunk to the required depth. The deep ground has been satisfactorily proved to be auriferous by the putting down of bores in several directions. At present there seems a fair prospect of the mine yielding valuable returns in the course of a few months; and there can be no doubt that the labour employed, and the capital expended on it, will materially benefit Majorca. The Perseverance obtained 195 oz 3 dwts, and the Forbes' Freehold 15 oz 3 dwts during the quarter.⁸

Sept. 1880: AVOCA SUBDIVISION

In alluvial mining in this division there are certainly strong indications of a favourable future. The New Holland claim, on the Avoca Old Lead, is again taken up, and powerful machinery secured to compete with the water which had overpowered the old company. At Homebush, the Working Miners Company still continue to obtain excellent yields, and the companies immediately north and south, it is believed, will shortly strike the lead. Boring has been carried on extensively in the leases further north for the purpose of tracing the lead. Several parties are obtaining profitable returns at the shallow rush near Sims', on the Maryborough road.⁹

December 1880: MARYBOROUGH DIVISION

ALLUVIAL MINING—The owners of puddling machines and the individual miner are now beginning to feel the effects of a scarcity of water, arising from the severe and protracted drought. At Carisbrook the mines are still progressing. The underground operations of the Carisbrook United Company are being pushed forward with energy, and with every prospect of success. The Goldbrook Company has obtained excellent returns during the quarter, and has paid handsome dividends. Rankin's party, in the Phoenix paddock, is obtaining good results from their mine, with a depth of sinking of 30 feet in dry ground. The Young Phoenix mine has been let on tribute to a party of Chinese. The Duke Company has had another unfortunate accident, which will probably cause some delay, through a breakage having occurred in one of the pipes of the 20-inch lift; this will be repaired as soon as possible. The water in the mine is being steadily reduced, and the company hope to have it quite drained in about a month. One extended claim of six acres, situate at Chinaman's Flat, has been registered during the quarter. [Statement of gold obtained during the quarter includes a return from the Berry Reform, Lower Alma.] QUARTZ MINING—There is but little to report at present in relation to this class of mining. The Telegraph Extended Company has struck the No. 1 block of stone at a much lower depth. this is the same block as that from which they formerly obtained more than 3 oz to the ton. The Bristol Hill Company has crushed 982 tons fro 263 oz. Most of the stone crushed was raised from Passmore's and the Eastern reefs, at a depth of from 300 to 580 feet. 10

December 1880: MAJORCA SUBDIVISION

The country around Majorca is being rapidly taken up for mining purposes. Several large leases have been applied for by speculators and others, who evince great faith in mining property at Majorca. The New Kong Meng Company has obtained excellent prospects during the quarter. They are still engaged in opening out the mine. The Forbes Tribute Company finds the water heavy, and difficult to contend against. The Perseverance Company has been working some poor ground during the quarter; their returns are 152 oz. 11

December 1880: AVOCA SUBDIVISION

In both alluvial and quartz mining there is a decided improvement. In almost every section of the subdivision there are signs of increased activity. Vale's Reef has again been taken up, and will receive a fair trial. It is situated in a central position, between the rich Homebush Flat and the New Holland, at Avoca; and as that locality is highly auriferous, it is proposed to prospect the ground between these two places, so as to complete the connection between them. From the Working Miners' claim, at Homebush, 11,516 oz of gold was obtained during the last twelve months. Quartz mining is reviving at the Pyrenees. From one of the reefs there, in Scandinavian Gully, 65 tons recently realised 41 oz 9 dwts; reef 8 ft thick, and depth of sinking 60 feet. ¹²

March 1881: MARYBOROUGH DIVISION

8	Mining	Surveyors	Reports,	September	1880
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⁹ Mining Surveyors' Reports, September 1880

Mining Surveyors' Reports, December 1880

Mining Surveyors' Reports, December 1880

Mining Surveyors' Reports, December 1880

ALLUVIAL MINING—The excessive drought that has prevailed during the quarter has most injuriously affected the mining interests of this division, and a permanent supply of water for mining purposes is a subject, which deserves serious consideration. Several of the claims at Chinaman's and elsewhere have returned no yields of gold in consequence of the want of water. But the recent rains we have had will, at least for the present, remove the difficulty, which has so long existed, and will enable miners to wash the stuff they have stored. One prospecting and four extended alluvial claims were registered during the quarter. The aggregate area of the extended claims is 18 acres; they are situate at Alma, Moonlight, and Chinaman's Flat. The prospecting claim is owned by George Pyke, and is situated at Chinaman's Flat. From 10 loads, a return was obtained of 3 oz 11 dwts 3 grs. The Duke has at last been drained of water in the shaft. The repairs to the damaged clack will soon be finished, and mining operations renewed with vigour. Proper precautions will now be taken to prevent a similar accident from occurring as that which has caused so much labour and expense, and which has for so long a time stopped operations in one of the finest mines in the division. The Carisbrook United is making good progress. The prospects recently obtained afford a good proof of the valuable character of the mine. Considerable delay in the operations of the mine has been caused through the water in the surface drifts leaking into the drives. The Goldbrook continues to maintain its character as a first-class mine. Fair returns have been obtained from it, and also from the Young Phoenix Tribute. [Statement of gold obtained for the quarter includes returns from Berry Reform, Lower Alma; Strauss Band, Chinaman's; Kohinoor, Chinaman's] QUARTZ MINING-Three ordinary and four prospecting claims were registered during the quarter. The prospecting claims are situate at Adelaide Lead, Blucher's, Havelock, and Blackman's Lead. The claim at Blackman's Lead, on the Long-looked-for Reef, is owned by John Austin James. The reef is new, and promises exceedingly well. Depth, 10 feet; width, 2 feet; prospect, 2 oz per ton. Thomson and party, whose claim is situate near the Mariner's Reef, had a crushing of 52 tons recently, from which they obtained a return of 204 oz, or an average of nearly 4 oz to the ton. This is one of the best yields that I have had to report for a long time. The Telegraph Extended crushed 133 tons, from which they obtained 252 oz 14 dwts. The works at Mariner's Reef have been idle during the quarter; no men have been employed. 13

March 1881:

MAJORCA SUBDIVISION

The Forbes Freehold mine has been relet on tribute, with every prospect of success. The New Kong Meng Company is making excellent progress; they now employ 70 men, and have extended the area of their claim, by purchasing from Messrs Rich and party the Minorca Extended Claim of eight acres which adjoins it. [Statement of gold obtained for the quarter includes returns from: Forbes Freehold Tribute, Narrigal; and Perseverance, Narrigal.]¹⁴

March 1881:

AVOCA SUBDIVISION

Mining generally continues to give encouraging prospects. The Working Miners' Company, at Homebush, still pays satisfactory dividends, and the lead northerly therefrom gives every indication of continued richness. The Golden Stream Company has now a considerable quantity of very powerful machinery on its property ready for erection, comprising two engines of 50-inch and 24-inch cylinders respectively. The two pumps are to be of 22-inch diameter, a proof that the company is fully determined to be able to cope with whatever water is likely to be met with. A representative of the company has informed me that the full cost of the machinery and improvements will amount to close upon £20,000. The starting of this claim will give a great impetus to mining in the locality. In quartz mining an important event was the purchase by the Union Jack Company of the claim of Hall and Inglis at Percydale. This company has now a compact and valuable property with every prospect of a satisfactory return for the outlay. The Vale's Reef Company has made arrangements for the enlargement of the shaft, and the work is progressing favourably. A reef has recently been opened up at Lexton, which gives promise of great richness; however, as its resources have not yet been fully ascertained, no decided opinion can be given as to its quality. Is

¹³ Mining Surveyors' Reports, March 1881

Mining Surveyors' Reports, March 1881

Mining Surveyors' Reports, March 1881

June 1881: MARYBOROUGH DIVISION

There is now an abundant supply of water throughout the division for mining purposes. The Duke Company is making rapid and satisfactory progress towards the completion of all the works, which are necessary to give the mine a fair start. Pyke's Kohinoor claim is now beginning to pay. Blocking is now being done at the south end. The gutter is 50 feet wide. The Berry Reform are sinking a new shaft, erecting a puddling machine, and opening up new ground. The Carisbrook United is making rapid progress with their new shaft, and with the other necessary works of the mine. Excellent returns during the quarter have been obtained from the Goldbrook. The works on the Young Phoenix Tribute have been stopped. QUARTZ MINING-Three prospecting, one extended, and four ordinary claims were registered during the quarter. The prospecting claims are respectively situate at Havelock, Adelaide Lead, and Delhi. That at Adelaide is owned by John Wilson, who crushed a parcel of 9 tons, for an average yield of 2 oz 3 dwts per ton; depth 50 feet. That at Delhi gave a prospect of half and ounce to the ton; depth, 25 feet. That at Adelaide Lead gave a similar prospect; depth, 30 feet. No returns have been received from Bristol Hill. The works are stopped, and the pumps drawn. Messrs Anderson Brothers, the owners, have experienced a heavy loss by the mine, which has never paid expenses. The works at the Mariner's Reef are still idle. The Telegraph Extended has crushed 80 tons, for the excellent yield of 160 oz. Thompson and party, of the Try Again Reef, have crushed 111 tons, for 221 oz 13 dwts; and Stamp and Co., from their claim at Golden Point, have crushed 31 tons, for 78-1/2 oz. These are among the best returns for the quarter. ¹⁶

June 1881: MAJORCA SUBDIVISION

In this subdivision mining operations are making progress. The returns from the Perseverance are excellent. The New Kong Meng has erected during the quarter a water-wheel of four-horse power. This wheel works seven cradles, for the purpose of extracting gold from the slum. The company employs one hundred men. Tenders have been called by the Forbes Union, for the purpose of letting their mine on tribute, but no satisfactory arrangement has yet been made. The following is a statement of the gold obtained from the principal alluvial mines in this subdivision during the quarter— New Kong Meng, Majorca, 811 oz; Perseverance, Narrigal, 230 oz. ¹⁷

June 1881: AVOCA SUBDIVISION

In alluvial mining, operations during the quarter have been progressing favourably; from the Homebush Lead the yields continue, as usual, most satisfactory. The extensive flat is still being prospected by boring in a northerly direction; and from the depth of the deep ground recently ascertained in the ground of the New Homebush Consols, it is very probable that the course of two leads will be discovered in this locality. The New North Homebush Company has been busy erecting expensive machinery, and the erection of the machinery of the Golden Stream Company on the Avoca Deep Lead is approaching completion. QUARTZ MINING—Some attention is being paid to this branch of mining; a crushing plant is about being erected on the old reef known as Vales', and for the purpose of tracing it north and south the ground has been secured for a considerable distance. The Union Jack Company has had a crushing, which yielded a good return, and at Barnes' Reef works are about commencing. The stone from the new reef near Sims', Maryborough road, recently crushed, also yielded satisfactory returns. ¹⁸

Sept. 1881: MARYBOROUGH DIVISION

QUARTZ MINING—In this class of mining there has been much more stir than usual during the quarter. A good deal of successful prospecting for permanent and payable reefs has been carried on throughout the division. The returns obtained from some of the principal claims now at work are very satisfactory. Special mention may be made of the yield derived by Thomson and party from their claim on the Try Again Reef. From a crushing of 98 tons they got 221 oz 13 dwts. From Stamp's freehold, at Golden Point, a crushing of 105 tons gave 165 oz. From Wilson's claim, at Havelock, on the Bulgarian Reef, a crushing of 20 tons gave 64 oz 5 dwts. These returns conclusively show that the prospects of quartz mining in this division are improving. Seven prospecting, four co-operative prospecting, and two extended claims were registered during the quarter. The prospecting claims are situated respectively at Havelock, Flagstaff, Adelaide Lead, Mosquito, and Shicer Gully. Taking these claims on the average, the prospects obtained are good. The claim registered by George Stapleton, on the Alexandra Reef, Mosquito, gave 33 oz 15 dwts from a trial crushing of 11 tons. Depth, 40 feet; width of reef, 6 in.

The co-operative claims are situate at Bluchers, Cuddy's Flat, and Blackman's Lead, on the Goldstone, Horseshoe, Lone Star, and Cornucopia Reefs. The extended claims are situate at 'Possum Gully and Maryborough. The Telegraph Extended closed their mine. The works at

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Mariner's Reef are idle, and so are the works at Leviathan Reef. ALLUVIAL MINING—The Duke Company made an excellent start, and that payable gold is being obtained. The pumps are working satisfactorily, and everything about the mine indicates a prosperous future. The right to wash the slum and tailings from the mine, for one year, was recently sold for £3,240. This is the highest price yet in this division for a similar right in connection with our alluvial mines. ¹⁹

Sept. 1881: MAJORCA SUBDIVISION

The Union Bank Quartz Company has sunk their shaft to a depth of 86 feet, but they could not go with the appliances at their command, as they found the water was too heavy. They have been compelled temporarily to suspend work, but, having nearly completed the erection of winding and pumping machinery, they hope to be able to resume work soon. In consequence of the machinery of the Perseverance claim getting out of order, work was suspended for several weeks to allow necessary repairs to be made. The Forbes Union wholly suspended work, and their machinery has been advertised for sale. Fair returns obtained by the New Kong Meng. The plant is in excellent working order.²⁰

Sept. 1881: AVOCA SUBDIVISION

There has been \ an unusual stir caused by mining speculators securing large areas for mining purposes in different sections of this subdivision. In alluvial mining the Working Miners continues, as usual, to prove very remunerative; the amalgamation recently brought about with the Homebush United Company will greatly facilitate the working of the lead. The starting of the Golden Stream Company may be one of the most important events in connection with mining that has occurred in this subdivision for a considerable period, this company having erected very powerful machinery to compete with the water expected in working the lead, which is supposed to be very rich. With reference to quartz mining, except that several mining leases have been applied for on the supposed continuation of some of the old reefs, there is nothing of note.²¹

December 1881: MARYBOROUGH DIVISION

QUARTZ MINING—Three prospecting, three co-operative, and three ordinary quartz claims were registered during the quarter. These claims are situate at Blucher's, Havelock, Chinaman's, and Mosquito. Lange and party crushed 116 tons for 156 oz 3 dwt, and Thomson and Party crushed 116 tons for 117 oz 6 dwts from their claims near the reservoir. Mr Stapleton, whose claim is on the Alexandra Reef, Mosquito, crushed 25 tons for 52 oz. What appears to be an excellent reef has lately been found on the Talbot road, close to the borough boundary. The prospectors have sunk a shaft 10 feet deep, and obtained quartz showing gold freely. Several claims in the neighbourhood have been marked out, but none of them have been registered as required by the bye-laws. ALLUVIAL MINING-The works in connection with the Duke Company are progressing, and the machinery is in good working order. The rise near No. 3 shaft, for the purpose of draining the ground, has been put up 26 feet. The contractors completed the winding plant at No. 3 shaft, and the erection of puddling machines is also progressing. The Berry Reform claim has been worked out and abandoned. The Carisbrook United Company is making good progress with their works. The Carisbrook Freehold Company suspended operations at their No. 13 bore, to a depth of 120 feet, in red granite. They have \begun and are making satisfactory progress with their No. 14 bore.²²

December 1881: MAJORCA SUBDIVISION

The Perseverance Company's mine was hindered for a considerable time, during the quarter, through a breakage in the machinery. The prospects of the New Kong Meng Company are improving. A portion of the mine has been let on tribute. The rise at the north end broke into shallow ground at 96 feet from the lower level. The men are now driving through a ridge of reef between the two leads. The water in the mine of the Union Bank Company is gradually subsiding, and the shaft has been sunk to a depth of 160 feet. The following is a statement of the gold obtained from the principal alluvial mines in this subdivision during the quarter:—New Kong Meng, Majorca, 835 oz; Perseverance, Narrigal, 160 oz.²³

December 1881: AVOCA SUBDIVISION

During the quarter both alluvial and quartz mining have been progressing favourably, except for a breakage, since repaired, in a portion of the machinery of the Golden Stream Company. The Working Miners United, at Homebush, continue to occupy a foremost position, having realised during the quarter the handsome result of 2,134 oz of gold, which have been sold in

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Maryborough, and therefore not credited to the proper division. The course of the lead northerly, in this locality, has not yet been satisfactorily defined, and will remain doubtful until some of the shafts now being sunk in that direction shall be bottomed. In quartz mining the reefs of the Pyrenees have been engaging more than usual attention. In the West of England Hill, near Percydale, a good payable reef is being worked from the summit, underlying westerly 24°, and, in order to facilitate its working, a tunnel has been opened out at the base of the hill, to intersect the reef at a depth of about 213 feet. ²⁴

March 1882: MARYBOROUGH DIVISION

QUARTZ MINING-The Cymbeline Proprietary Company has opened a reef in their mine situate north of Bristol Hill. From a trial crushing of 65 tons of stone, they obtained 43 oz of gold, or an average of more than 13 dwts per ton. The main shaft is down 118 feet, and the reef is being further developed at the lower level. The reef has been proved to a depth of 70 feet. A contract has been let to carry the main shaft down to 200 feet. The prospecting shaft, at the southern boundary is down 30 feet, and a similar shaft at the northern boundary is down 50 feet. In this shaft, at a depth of 40 feet, a reef 18 inches thick was passed through, but at present there is no water in the neighbourhood to try prospects. The stone looks well. There are about 35 tons at grass, which, it is expected, will produce the same average as the former crushing. Thirteen men are employed at the mine. The Mariners Reef Company is making substantial progress with all the works at their mine. A crushing of 230 tons, taken from the Soldiers and Marine reefs, gave a return of 189 oz, or an average of more than 16 dwts per ton. The average thickness of each of these reefs is two feet. Thirty-six men are employed at the mine. During the quarter there were registered, four prospecting, two co-operative prospecting, and five ordinary claims, situate in various parts of the division. ALLUVIAL MINING-The excessive drought that has prevailed during the quarter, has proved most injurious to the individual miner, and to the owners of puddling machines. The returns from the Duke are steadily increasing, and the prospects of the mine continue well. The John Bright cannot be worked, through an influx of water. The Golden Gate, at Craigie, is driving for the gutter, they expect to be in full working order in about a month hence, the prospect obtained from the bore is a splendid one. The Carisbrook United are pushing on their works vigorously, the bottom level has been extended 211 feet from the shaft, while the branch drive, at the intermediate level, has been extended 182 feet. The levels in the leading washdirt drives, from No. 2 and No. 3 rises were lost; this necessitated the putting up of another drive, and opening out at a deeper level, from which the gutter was reached; the wash looks very well.²⁵

March 1882: MAJORCA SUBDIVISION

The Union Bank Quartz Mining Company is making satisfactory progress with their mine. The eastern chamber is finished, and they expect to get the reef in a fortnight. The water in the mine is subsiding. The Perseverance Company washed less stuff than usual during the quarter. They have been engaged in putting in a lower level, and expect to get payable wash in a few days. The New Kong Meng Company has been for some time engaged in driving north in the Robin Hood Lead. The wash met with in the north drive has a better appearance, but is not yet payable. ²⁶

March 1882: AVOCA SUBDIVISION

There is little fresh to report in mining matters in this division during the quarter. Alluvial mining is still in a favourable condition, especially in the Homebush locality; and a large increase may be expected in the yield of gold when a few more of the progressive mines on the Homebush and Avoca leads are opened up. From the only two mines at present on gold in the vicinity of Homebush the following yields have been obtained during the quarter: The Working Miners United, 3,982 oz; The Old Working Miners, 1,192 oz. With regard to quartz mining, matters have not been quite so flourishing during the quarter. Operations have been suspended for a time at the West of England Hill and at the Union Jack mines, Percydale, as the first crushing at Vale's Reef did not turn out as satisfactorily as was expected.²⁷

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June 1882: MARYBOROUGH DIVISION

QUARTZ MINING—There has been a considerable improvement in this class of mining during the quarter, and the aggregate returns from the several mines are much larger than usual. Excellent progress is being made at the Mariner's Reef, Middleton's Reef, and Cymbeline mines. Efficient work will soon be begun at the Leviathan Reef, which has been so long idle. The claim of Wilson and party, at Havelock, has produced some capital stone during the quarter; from a crushing of 59 tons a yield of 138 oz was obtained. The Cymbeline Company crushed 140 tons for 70 oz. The deepest shaft in the division is that at Mariner's Reef, which is 628 feet deep. ALLUVIAL MINING—The main drive of the Duke Company has been considerably extended; all the works at the mine are in excellent order, and substantial progress is being made. The Duke Consols company is making important additions to their plant. The Duke No. 1 Company is engaged prospecting their ground. The Goldbrook Company is opening up new ground. No work has been done during the quarter at the John Bright Company's claim, as the water has been too heavy. [Statement of gold obtained during the quarter includes a return from: Keep it Dark, Chinaman's, 39 oz.]²⁸

June 1882: MAJORCA SUBDIVISION

Satisfactory progress is being made with the progressive mines in this subdivision. The Perseverance Company has been engaged most of the quarter in driving and prospecting. The New Kong Meng Company has let a portion of their mine on tribute to two tribute parties, who are working with every prospect of success. Good wash has been struck in the eastern drive. The Union Bank Quartz Mining Company is making excellent progress. A trial crushing of 15-3/4 tons gave a return of 8 oz 18 dwt. The stone was taken from the Sunburst Reef, which is about 2 feet thick, and has been proved to be gold bearing for a distance of 150 feet. The air shaft on the Star Reef has been sunk to the required depth, and there will soon be a trial crushing of stone taken from it. [Statement of gold obtained includes: New Kong Meng, Majorca, 75 oz.]²⁹

June 1882: AVOCA SUBDIVISION

In this subdivision, as a sort of counterpoise to the abandonment of the North Homebush shaft, at Homebush, it may be mentioned with satisfaction that the Golden Stream Company, Avoca, have succeeded, after great care and difficulty, in bottoming their shaft; on this event the shareholders and those having the management of the mine are to be congratulated. The North Homebush Company, having increased their capital, is engaged in boring for a suitable site for a new shaft. The Working Miners United Company continue to give satisfactory yields, 3,800 oz 19 dwts having been obtained during the quarter; while 1,062 oz were realised from the Old Working Miners ground. In quartz mining it is expected that desirable results will arise from the erection of machinery at Lexton, in connection with the Lexton Company's property; this work is now approaching completion, and there is every probability of rich returns from the stone, judging by that already tried. At Vale's Reef a fairly satisfactory crushing has been realised during the quarter. These are the only items worthy of mention. ³⁰

Sept. 1882: MARYBOROUGH DIVISION

QUARTZ MINING-Three prospecting claims were registered during the quarter. From the Welcome claim, at Havelock, a trial crushing was obtained, which gave an average yield of 1 oz per ton; depth, 11 feet; width of reef, 6 inches. From the Mayflower claim, Havelock, a trial crushing was obtained, which gave an average yield of 16 dwts per ton; sinking from surface; reef narrow. From the Arabi Pasha claim, at Golden Point, a trial crushing was obtained, which gave an average of 10-1/2 dwts per ton; depth, 40 feet; width of reef, 6 inches. At the Leviathan Reef the workings are progressing satisfactorily, and so are those of the Cymbeline and Middleton's reefs. A crushing from the claim of Wilson and party, near Middleton's, gave 1 oz per ton; and one from the claim of Todar's, of Doctor's Reef, gave 1 oz 13 dwts 8 grs per ton. Three tons of sand from the Duke, treated at the Cambrian battery, gave 141 oz of gold. ALLUVIAL MINING.—A considerable number of residence areas have been taken up during the quarter, under the provisions of the new Act, which came into force on the 1st April last. The affairs of the Goldbrook Company are being wound up. Nothing has been done by the Golden Gate Company. Work has been suspended by the John Bright Company, in consequence of an influx of water. The Keep-it-Dark Company is making substantial progress. The yields from the mine of the Carisbrook United Company and the Duke Company are excellent.³¹

Sept. 1882: MAJORCA SUBDIVISION

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The Union Bank Quartz Mining Company is now busily engaged in sinking a shaft and in the erection of a powerful battery. From several trial crushings, amounting in the whole to 53 tons, which were treated in Ballarat and at Maryborough, a yield was obtained of 26 oz 12 dwts, or an average of 10 dwts per ton. The New Kong Meng Company is making progress. In the eastern drive the wash continues about the same as usual. The yield of gold from the mine includes that obtained from the tribute holdings. The Perseverance Company has been working very poor ground during the quarter. The following is a statement of the gold from the principal alluvial and quartz mines in this subdivision during the quarter:—ALLUVIAL. New Kong Meng Co, Majorca, 366 oz; Perseverance, Narrigal, 83 oz; QUARTZ. Union Bank, Majorca, 26 oz. 32

Sept. 1882: AVOCA SUBDIVISION

In alluvial mining one of the principal items of interest is that the Golden Stream Company are engaged 'cutting down' their shaft, and up to the present are making very satisfactory progress. The Working Miners No. 2 have been engaged in boring operations, and a contract has been let for the sinking of the new shaft for the North Homebush Company. The following yields have been obtained from the claims on gold: Working Miners United Company, 2,624 oz; Old Working Miners Company, 1,108. It may be mentioned that the whole of this gold, together with some obtained from the quartz reefs in this locality, is sold in Maryborough. There is nothing of importance to note in quartz mining, with the exception of the fact that Boyd and Co. are supposed to have had a very satisfactory crushing from their reef on the Maryborough road, but no authentic details can be obtained as to the real return. A party has been formed to resume operations at the Perseverance tunnel, Percydale.³³

December 1882: MARYBOROUGH DIVISION

QUARTZ MINING-The Cymbeline Company are engaged in putting down a ladder-way, and dividing the shaft at the No. 5 level, where the crosscut has gone through about 12 feet of quartz. This body of stone is composed of four or five reefs of various widths, averaging from 18 inches to 4 feet. A crushing battery is required on the mine. The Mariner's Reef Company has let some other portions of their mine on tribute. The stone taken from the bottom level of the engine shaft has proved better than usual. The Goldstone Company, Craigie, has not yet cut the reef. The Middleton's Reef Company has had a small crushing, which gave 5 dwts per ton. Henry Lunn and party, whose claim is on the Richmond Reef, at Havelock, crushed 22 tons of stone for 69 oz of gold, being an average of more than 3 oz per ton. Four prospecting claims were registered during the quarter. From the Jupiter claim, owned by Messrs Cock and Shaw, on Harper's Reef, Havelock, a crushing of 40 tons 13 cwt gave 96 oz 3 dwts of gold. ALLUVIAL MINING.—The principal mines in the division have been, during the quarter, much more productive than usual and the returns of gold are excellent. The Duke Company has begun to pay dividends. The main reef drive of the mine has been extended; a new puddling machine has been erected, and all the works of the mine are in good order. Boring operations are being proceeded with at the Duke No. 1 mine, with a view of proving the ground. The Carisbrook United Company has begun to pay dividends. The prospects of the mine are good. [Statement of gold obtained for the quarter includes return from The Comet, Alma, 30 ozl³⁴

December 1882: MAJORCA SUBDIVISION

The Union Bank Company has done no work during the quarter; they have been engaged in opening up their mine and in erecting a 20-head battery. The Perseverance Company has worked out their mine, and has placed their plant in the market. The New Kong Meng Company have had much better success during the quarter, as is shown by their returns, which include the gold obtained from the several tribute holdings; the main drive is being extended; there is nothing of importance to report regarding the wash-dirt drives, and all the appointments of the mine are in good order. The following is a statement of the gold obtained form the principal alluvial mines in this subdivision during the quarter— Perseverance Company, Narrigal, 89 oz; New Kong Meng Company, Majorca, 1,135 oz.³⁵

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December 1882: AVOCA SUBDIVISION

Homebush still occupies a premier position, the returns of gold for the quarter being from—The Working Miners United Company, 2,968oz; The Old Workings miners Company, 941 oz. Strong efforts are being made to bottom a new shaft in the New North Homebush claim, now 65 feet deep. The water level is 60 feet from the surface, and it is difficult to compete with the great influx met with at that depth. Works have been suspended in the adjoining claims pending the sinking of this new shaft, and on its success the development of the lead will mainly depend. The works in the Golden Stream Company's mine have been steadily progressing. Operations have been resumed in the Pyrenees Tunnel, Percydale, and 56 tons of quartz recently crushed realised 29 oz of gold. 36

March 1883: MARYBOROUGH DIVISION

Mining, in both classes, has been slacker than usual during the quarter, owing to the holidays, and other causes. ALLUVIAL MINING—The Carisbrook United Company are engaged in cleaning up some old drives on the eastern reef, and in putting up a rise in that reef, from which payable prospects were formerly obtained. The work connected with the reef drives will be continued without delay, so as to get rid of the decomposed rock. The Duke Company is making satisfactory progress, and the yield from the mine continues well. All the machinery is in excellent order. The heading drives, in the north end of the mine, show promising prospects. From one and a half tons of cement, taken from the mine, and treated at the Cambrian battery, a yield was obtained from 46 oz 16 dwts of gold. The Duke No. 1 Company has put down their No. 2 bore 210 feet in hard cement. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter—Duke Company, Timor, 2,034 oz; Carisbrook United Company, Carisbrook, 1,211 oz; Keep-it-Dark Company, Chinaman's, 56 oz; Comet Company, Alma, 15 oz. Dividends—Duke Company, Timor, £3,740; Keep-it-Dark Company, Chinaman's, £193. QUARTZ MINING—Work has been suspended at Middleston's reef, as no payable gold could be obtained. The Goldstone Company, Craigie, is still sinking their shaft. At the Leviathan Reef, the stone has much improved in appearance, although the reef is somewhat smaller in the end. An ordinary claim of 1200 by 600 feet situate at Golden Point was registered during the quarter.³⁷

March 1883: MAJORCA SUBDIVISION

The Union Bank Co's mine contains three distinct reefs of varying widths, viz:—The Sunburst, 18 inches; the McIntyre's, 2 feet; and the Star, 3 feet. Forty-five men are employed, the battery is completed, and everything about the mine is progressing satisfactorily. There is nothing of importance to report regarding the alluvial mines in this subdivision. From a ton of sand, treated at the Cambrian battery, the New Kong Meng Co obtained a yield of 13 oz 15 dwts of gold. The following is a statement of gold obtained from the principal alluvial and quartz mines in this subdivision during the quarter—ALLUVIAL. New Kong Meng Company, Majorca, 355 oz; New Kong Meng, Tributers. QUARTZ. Union Bank Quartz Company, Majorca, 170 oz. ³⁸

March 1883: AVOCA SUBDIVISION

In alluvial mining the most important item of interest during the quarter is the fact of the New North Homebush Company having succeeded in sinking their shaft to the bed rock, a depth of about 213 feet through five different layers of clay, rock, and drift. Preparations are being made to sink a new shaft close up to the one just bottomed; dimensions in the clear through clay and rock 13; 6: x 13; 1:, thence to bed rock with iron cylinders 8' 6" in diameter. Further north in this flat another shaft is being sunk through similar strata, and present appearances are in favour of the deep ground being traced in a north-easterly direction. The Golden Stream Company is erecting two new puddlers. They expect to reach the washdirt before long. The only claim at present crushing is the Vale's Reef, the yields from which are moderate.³⁹

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June 1883: MARYBOROUGH DIVISION

The late continuous and splendid rains have afforded an ample supply of water for mining purposes, so that individual miners, as well as public companies, will experience no difficulty, through scarcity of water, for many months to come. The returns of gold, from all sources, show a considerable increase over those obtained during the first quarter of the year. QUARTZ MINING—The operations at the Leviathan Reef mine are progressing favourably. The drives have reached the Warrior shaft, and a rise at the 120-foot level has been put up 25 feet. The third battery is being placed in order. All the machinery is in excellent condition. The prospects of the mine are good, and it has begun to yield satisfactory returns of gold. The Goldstone Company, Craigie, is still continuing work at their mine, but payable stone has not yet been reached. The quality of stone obtained in the Mariner's Reef lease block is improving. MINING—The prospects of the Duke mine are improving, and the yield of gold obtained during the quarter is heavier than usual. At the north end of the mine the lead is looking well. All the works in connection with the mine are progressing favourably, and the machinery is in good order. The Duke Consols Company has sunk the main shaft to a depth of 205 feet. The water, which is heavy, is being easily kept under. A suitable site has been selected on which a winding shaft is to be sunk; this work will soon be begun. Work has been commenced on the Bismarck lease block, and the machinery plant is in course of construction. The Carisbrook United Company has extended the main reef drive; the ground is improving, and the prospects of the mine are good.⁴⁰

June 1883: MAJORCA SUBDIVISION

The Union Bank Company has suspended work on their mine. The machinery has been sold, and has passed into the hands of another company. The Napier Freehold Company is making progress with the works on their mine, and their prospects are good. The New Kong Meng Company has extended the intermediate level, and blocking is being carried on as usual. 41

June 1883: AVOCA SUBDIVISION

The Working Miners United Company continues to work rich ground, although considerable difficulty is experienced on account of the character of the drift. 116 oz of gold has been obtained during the quarter. The New North Homebush Company is persevering with their shaft. On the western side of Homebush, in an area recently taken up under lease in 'Frying-pan Flat', a rich find of alluvial gold has been lately made. In prospecting, in the Golden Stream mine three machines of washdirt realised 45 oz of gold. 42

Sept. 1883: MARYBOROUGH DIVISION

ALLUVIAL MINING-Since the 21st August, all the work in the washdirt of the Carisbrook United mine has been stopped, and reef-driving only is at present being carried on. The lead at the work end of the Duke Company's mine is looking well, and the pressure of water is much less than usual. The main drive has been considerably extended in hard ground. The machinery is in good order, and all the works on the mine are progressing satisfactorily. The various works now in hand on the Duke Consols Company are making satisfactory progress, and the future of the mine is apparently excellent. A splendid prospect has been obtained from the John Bright claim, and the future of the mine promises well. Two extended claims, situate at Lower Alma, of eight and twelve acres each, were recently registered. QUARTZ MINING-The Leviathan Reef Company have done a lot of good and substantial work during the quarter. The prospects of the mine are excellent, and it is probable that before long several additional batteries will be erected. All the appointments of the mine are in good order, and all the works in hand are being vigorously prosecuted. Four prospecting claims were registered during the quarter. The claims are situate at Chinaman's, Mosquito, Havelock, and Bristol Hill. From the 'Try Again' claim, Bristol Hill, owned by Williams and Hancock, a trial crushing of 46 tons gave a yield of 9 oz 6 dwt 6 gr, and a trial crushing from the 'Man of Keng' claim, Havelock, owned by Ward and party, gave a yield of 1 oz 5 dwt, from five tons of stone. 43

⁴⁰ Mining Surveyors' Reports, June 1883

⁴¹ Mining Surveyors' Reports, June 1883

⁴² Mining Surveyors' Reports, June 1883

⁴³ Mining Surveyors' Reports, September 1883

Sept. 1883: MAJORCA SUBDIVISION

The prospects of the New Kong Meng Company's claim have much improved during the quarter, as is shown by the yield of gold from the mine. All the appointments of the mine are in good working order. The blocking faces look as usual, and show good gold. The Napier freehold Company has let a contract to Wright and Mitchell for removing and erecting the whole of the pumping and winding machinery, which they recently purchased. The contractors are making good progress with the work. No mining has been done on the claim during the quarter. The Bucknall's Estate Company is engaged in testing their ground. The following is a statement of the gold obtained during the quarter from the principal mines in this subdivision:— New Kong Meng, Majorca, 1,938 oz; New Kong Meng No. 1 Tribute, 192 oz; New Kong Meng No. 2 Tribute, 207 oz.⁴⁴

Sept. 1883: AVOCA SUBDIVISION

At Homebush, on the western side in 'Frying-pan Flat', a new co-operative company has been started with very favourable prospects; recently, from two machines of washdirt, a prospect of 18 oz of gold was obtained. The Working Miners United Company has 122 men employed, but the water is still very heavy. Yield of gold for the quarter, 2,014 oz 18 dwt. The Golden Stream Company employs 50 men; they recently 'struck' rich washdirt; the water is troublesome. 45

December 1883: MARYBOROUGH DIVISION

ALLUVIAL MINING—There is nothing much to report regarding alluvial mining during the quarter. The Carisbrook United Co unfortunately lost the lead, and has done scarcely any reproductive work for several months. Every exertion is being made to find the lost lead, and at present the principal work that is being carried on is reef driving. The western side of the mine is being prospected, but so far without payable results. The bulk of the men formerly employed at the mine have been discharged. The Duke Co is making satisfactory progress. The leading drives of the mine are in excellent wash. One load of sand from the mine gave a yield of 37 oz of gold. The number of men regularly employed at the mine is 285. The John Bright Co made an excellent start. The prospects of the company are very satisfactory. The lead of gold now being worked is directly trending towards the leases of the Duke Consols Co, which are also making satisfactory progress. All the works and the machinery of the mine are in good order. Forty men are employed. Gold obtained from the principal alluvial mines in this division during the quarter—Duke Co, Timor, 3,044 oz; Duke Consols Co, Timor, 160 oz; John Bright Co, Lower Alma, 196 oz; Comet Co, Alma, 33 oz; Carisbrook United Co, Carisbrook, 15 oz. Dividends—Duke Co, Timor, £1,250; John Bright Co, Lower Alma, £618.

December 1883: MAJORCA SUBDIVISION

The New Kong Meng Co continues to make satisfactory progress. The leading drives are very wet. The reef drive is being extended, and promising round is being opened up on the reef wash. The Bucknall's Estate Company is carefully testing their ground by putting down bores. The Napier Freehold Co is bringing their plant to completion. Good prospects have been obtained from the bores, and the prospects of the mine are satisfactory. Dividend—New Kong Meng Co, $\pm 1,000.47$

December 1883: AVOCA SUBDIVISION

Mining has not been as lively as usual in this subdivision during the quarter. Noticeably the disposal of the fine plant of the Vale's Reef Co is to be regretted, and as it is to be removed, some considerable time is sure to elapse before the reefs in the vicinity of that company's mine will again receive attention. There have, however, been a couple of satisfactory yields from the crushings of two small co-operative parties. In alluvial mining, a promising rich lead has been discovered in Fryingpan Flat, on the western side of the Homebush workings. In driving across the led, it was found to be over 60 feet wide, with sinking 110 feet deep, and washdirt 3 feet chick; the trial washings yielded from 12 to 14 ounces of gold to the machine. The Working Miners' United Co continue to obtain fair returns, and the New North Homebush Co succeeded, after immense trouble, in safely finishing their celebrated iron shaft, and they are now in a position to drive for the gutter. ⁴⁸

⁴⁴ Mining Surveyors' Reports, September 1883

⁴⁵ Mining Surveyors' Reports, September 1883

⁴⁶ Mining Surveyors' Reports, December 1883

⁴⁷ Mining Surveyors' Reports, December 1883

⁴⁸ Mining Surveyors' Reports, December 1883

March 1884: MARYBOROUGH DIVISION

The yields from the alluvial mines show a slight increase over those for the preceding quarter, while the yields from the quartz mines show a considerable decrease. The Carisbrook United mine is again coming to the front, as is shown by the yield therefrom (430 oz). The Duke Company has decided on letting their mine on tribute. The Duke Consols Company has extended the main drive and the wash continues to look well. The John Bright Company has proved that the rich ground worked by them during the quarter trends towards the lease of the Duke Consols Company. ⁴⁹

March 1884: MAJORCA SUBDIVISION

The whole of the Napier Company's machinery has been erected in a satisfactory manner. The plant is substantial and complete. Excellent prospects have been obtained from the bores, and there is good reason to believe that the company has an excellent future before them. The Bucknall's Estate Company is still engaged in testing their ground. No. 11 bore is down 192 feet, in second rock. The lay off the main drive of the New Kong Meng claim has been extended 24 feet, and the chamber finished in deep ground at No. 6 level. The men are now driving in an easterly direction. ⁵⁰

March 1884: AVOCA SUBDIVISION

During the quarter the development of a new industry in the Pyrenees has been decided upon, namely, slate quarrying. While prospecting near Percydale, slate of superior quality was discovered, and a mineral lease of a large area has been applied for. The applicants feel confident that, while developing one industry, they will intersect some valuable reefs known to exist in the Pyrenees. There is nothing of importance to note in either alluvial or quartz mining. 51

June 1884: MARYBOROUGH DIVISION

QUARTZ MINING-Four prospecting and two co-operative prospecting claims were registered during the quarter. A trial crushing of ten tons of stone, taken from the Louis claim, situate at Flagstaff Reef, gave an average of 10 dwt per ton; and a similar crushing of five tons, from the 'King of Hanover and his White Horse' claim, situated at White Horse Reef, Mosquito, gave an average of 26 dwt per ton. The depth of sinking at the former claim is 20 feet, and at the latter 40 feet. Work at the Leviathan Reef mine is being vigorously carried on. All quartz below the 80foot level has proved unremunerative, and extensive prospecting below that level has, so far, failed to discover payable stone, so that all present mining operations are confined to working the flat leaders on that level. The cross-cut in the Warrior shaft has been put in 30 feet. Blocks of stone, about 20 feet wide, have been cut through. At the Goldstone mine, Craigie, work is progressing, but the ground is very hard and expensive. The shaft has been deepened. No gold has yet been obtained. The best stone obtained during the quarter was from Wilson's mine, Havelock. From a crushing of 40 tons, 47 oz 13 dwt was obtained, or an average of 1 oz 3 dwt ALLUVIAL MINING-The Duke Company have extended their main drive considerably. The Eastern reef is still in hard and expensive ground. A drive from this reef, trending in a northerly direction, has been put in, and payable prospects have been obtained. The returns from this mine are about the same as those obtained last quarter. The Duke Consols Company has been driving at the north end of their mine, and they expect soon to be in a position to block. The wash at the south end is opening up well, and is yielding payable returns. The tributers have not yet got into payable wash. The returns obtained from this mine are much better than those of last quarter. The Carisbrook United Company is still engaged in reef-driving. There is no change to report in the leading washdirt drives, which are being vigorously proceeded with. Three loads of sand from the Duke Company, which were treated at the Cambrian battery, gave the handsome yield of 106 oz 4 dwt of gold.⁵²

⁴⁹ Mining Surveyors' Reports, March 1884

Mining Surveyors' Reports, March 1884

⁵¹ Mining Surveyors' Reports, March 1884

Mining Surveyors' Reports, June 1884

June 1884: MAJORCA SUBDIVISION

Nothing of importance has occurred in this subdivision during the quarter. Prospecting and other work is being still carried on at the progressive mines, but no gold has yet been obtained from any of them. The yield of gold from the New Kong Meng Company has been considerably more this quarter than last, and the mine is, just at present, showing signs of improvement. A load of sand from this mine, which was treated at the Cambrian battery, gave 15 oz of gold. [Statement of gold obtained during the quarter includes a return for the Kong Meng No. 3 Tribute.]⁵³

June 1884: AVOCA SUBDIVISION

The Working Miners Company, at Homebush, have been as usual furnishing favourable returns, over 100 men being regularly employed. The Association Company, Fryingpan Lead, has just bottomed their shaft at a depth of 97 feet, and will commence to open out without delay. Prospects look better in the Golden Stream Company, and some enterprising miners have been securing the ground extending southerly, including the racecourse in that locality. There is nothing of particular moment to note in quartz mining. SLATE QUARRYING—Another mineral lease, of a large area, has been applied for in the Pyrenees by the company referred to in my previous report, thus showing further confidence in this new industry of slate quarrying. ⁵⁴

Sept. 1884: MARYBOROUGH DIVISION

QUARTZ MINING—One co-operative prospecting and four prospecting claims were registered during the quarter. These claims are situate at the Alma, Adelaide Lead, Havelock, and Upper Chinaman's. From the 'Gang Forward' prospecting claim, owned by Mr Daniel McArthur, a prospect was obtained of one ounce to the ton. Depth of sinking, 10 feet; width of reef, 8 inches. Several of the reefs at Havelock are looking well, and are giving good returns. The Leviathan Reef Company is still making progress with the development of their mine. The north drive in the old 'Warrior' portion of the mine is showing good gold, but the country is hard, and difficult to work. Sixty men are employed at the mine. There is nothing of special importance to report regarding the other reefs in the division. ALLUVIAL MINING—Alluvial mining in this division has not been so prosperous as usual during the quarter. Work has been stopped at the Carisbrook United mine, as gold in payable quantity could not be obtained. This will throw a number of men temporarily out of the work. Every effort was made to make the mine pay, but without success. The Duke Consols Company has resolved to let their mine on tribute. Good prospects are being obtained at the north drive, but there is no change to report at the south end of the mine. There has been a great improvement during the quarter in yield of gold from this mine. The John Bright Company is still working their mine with horse machinery. They have found the water heavy, but the prospects of the mine are satisfactory, and the yield of gold is increasing. The Craigie Sluicing Company, represented by Mr Adolphus Rosenow, have been chiefly engaged during the quarter in prospecting their ground, which is situate along the bed of McCallum's Creek. Fiftytwo holes were bored to a depth of from 6 to 18 feet. From 1-1/4 tons of washdirt, a return was obtained of 4 oz 18 dwt 3 gr. Half a load of sand from the Duke claim, which was treated at the Cambrian battery, gave a return of 12 oz of gold.⁵⁵

Sept. 1884: MAJORCA SUBDIVISION

The Bucknall's Estate Company has been engaged for the last two and a half years in boring their ground, and they are now waiting for a diamond drill. The Joint Stock Company is making good progress, and has obtained a fair yield for the quarter. The No. 3 rise has been opened out, and a drive put in to the north-east. An air shaft has been put up off this rise to the surface. The yields this quarter from the New Kong Meng Company's mine show a great improvement in the mine. The main reef drive has been considerably extended. All the wash faces are looking well. A ton of sand from the mine, which was treated at the Cambrian battery, gave a yield of 15 oz 13 dwt. [Statement of gold obtained during the quarter includes a return from Joint Stock Company, Gibraltar Lead, 341 oz.] ⁵⁶

Mining Surveyors' Reports, June 1884

Mining Surveyors' Reports, June 1884

Mining Surveyors' Reports, September 1884

Mining Surveyors' Reports, September 1884

Sept. 1884: AVOCA SUBDIVISION

There has been, during the quarter, strong evidence of a reaction in mining. Three mineral leases and four gold mining leases of large areas have been taken up lately. At Homebush, in the United Working Miners' claim, a rich prospect was obtained in the south drive last week. Some of the recently abandoned reefs have again been taken up, and the prospects in the Bung Bong reefs are reported to be most encouraging. 57

December 1884: MARYBOROUGH DIVISION

QUARTZ MINING—The reefs that have recently been opened out at Havelock are yielding good results. Wilson and party crushed 48-1/2 tons for 102 oz, or an average of 2 oz per ton. McFarlane and Co., owners of the 'Lily Hodgson' claim (200 x 600 feet), situate on Harper's Reef, crushed 8 tons 14 cwt, for 83 oz, or an average of 9 oz 10 dwt per ton. This claim was registered on 1st December last, and yield referred to is the best that has been produced in this division for many years. The depth of sinking is 13 feet, and the width of the reef is 10 inches. Mr J. Hendrickson, whose claim is situate on the New York Reef, Adelaide Lead, crushed 39 tons for 56 oz 10 dwt, or an average of 1 oz 8 dwt. All work, except pumping, has been abandoned at the Leviathan Reef claim. The pumping will be continued while boring with the diamond drill is being carried on. Five prospecting claims, situate at Waterloo, Mosquito, Havelock, and Maryborough, were registered during the quarter. The prospects of the owners are good. ALLUVIAL MINING—The lead of gold in the John Bright claim is improving, and the yield for the past quarter has been good. The lead is trending in an easterly direction. The pumps have been drawn at the Carisbrook United mine, and work has been entirely abandoned. The Duke Company have proved every part of their mine, except the west, without satisfactory results; but it is believed that there is payable gold in the western part, and operations are now being carried on there to test the matter. 58

December 1884: MAJORCA SUBDIVISION

There is nothing of importance to report regarding mining matters in this subdivision. The Joint Stock mine has been let on tribute. The Napier Freehold Company is engaged in deepening their shaft. The New Kong Meng Company is still making excellent progress, and the yields from the mine have been unusually good. It will be seen that a ton of sand from this mine, which was treated at the Cambrian battery, gave a return of 17 oz 18 dwt of gold.⁵⁹

December 1884: AVOCA DIVISION

Prospects in the Golden Stream Company have been improving, the return of gold for the quarter being 1,077 oz. At Homebush there is nothing important to note, though over 1,000 oz have been obtained from the United Working Miners' claim there. In the direction of the Pyrenees (except the slate quarrying, which has been carried on vigorously) mining operations have been very dull. In quartz mining a noteworthy fact is that the Bung Bong Company are about completing the erection of their machinery. They have some good stone ready for crushing from a reef in their claim 2 feet thick.⁶⁰

March 1885: MARYBOROUGH DIVISION (Mr Peter Virtue, Mining Registrar)

QUARTZ MINING—Four prospecting claims, situate at Golden Point, Adelaide Lead, and Havelock, were registered during the quarter. The prospects obtained are good, and, in each case, the adjacent country is extensive. The returns of gold obtained during the quarter from the mines at Havelock have averaged more than an ounce to the ton. Boring with the diamond drill still continues at the Leviathan Reef, but all other work has in the meantime been abandoned. LLUVIAL MINING—The Duke Co have met with better success this quarter than last, and every effort is being made to make the mine recover its former prestige. Payable ground continues to be opened up, and all the machinery is in good order. The Duke Consols Co extended their main drive, and opened two cross-cuts, going north and south from it. Nothing was done during the quarter at the Duke No. 1 mine, and there is nothing of special note regarding the other mines in the division. The following is a statement of the gold obtained from the principal mines in this division during the quarter—Duke Co (Timor), 296 oz; Duke Co (Tributers), 404 oz; Duke Consols Co (Tributers, Timor), 519 oz; John Bright Co. (Lower Alma), 110 oz. 61

March 1885: MAJORCA DIVISION

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Mining Surveyors' Reports, December 1884

Mining Surveyors' Reports, December 1884

Mining Surveyors' Reports, December 1884

⁶¹ Mining Surveyors' Reports, March 1885

The Napier Freehold Company is at present reef-driving. The contractors are busy, and are making excellent progress with the erection of the puddling machines. The Craigie Sluicing Company experienced some delay in the construction of their plant, in consequence of the non-delivery of the pumping apparatus at the appointed time. The works of this company will soon be in full swing. The New Kong Meng Company has had a very successful quarter, as is amply shown by their returns, and by the dividends they have paid. The main drive at the mine has been further extended, but no change worthy of remark has taken place in the other workings. A ton of sand from this mine, which was treated at the Cambrian battery, gave a return of 23-1/2 oz of gold. The following is a statement of the gold obtained during the quarter from the principal alluvial mines in this subdivision:—New Kong Meng (Majorca), 3,029 oz; New Kong Meng (No. 1 Tribute Party), 92 oz; New Kong Meng (No. 2 Tribute Party), 94 oz; New Kong Meng (No. 4 Tribute Party), 32 oz. 62

March 1885: AVOCA DIVISION

There is marked improvement in the yield of gold for the quarter from the Golden Stream Company. The return is 2,476 oz 16 dwt, being 1,399 oz 16 dwt in excess of last quarter, resulting in a dividend of £1,200 having been paid. The shareholders of the Avoca Freehold Company adjoining have also received a dividend of 6s per share, and other of 5s per share will be declared shortly. Although no dividends have been paid during the quarter in the United Working Miners' claim, Homebush, yet operations have been progressing favourably, the return of gold being 987 oz. It appears the gold from those two claims has been sold at Maryborough, so that the returns from the local banks are no proof of yields in the respective districts. ⁶³

June 1885: MARYBOROUGH DIVISION

ALLUVIAL MINING-There is nothing of special importance to report regarding alluvial mining in this division, as the quarter has been marked all through with unusual dullness, although the abundant rains we have had afforded an ample supply of water for mining purposes. A prospecting claim, owned by Graham and party, situate at Adelaide Lead, was registered during the quarter. The prospect obtained was an ounce to the ton of wash. A considerable number of residence sites were taken up and registered during the quarter. The recent progress made by the Duke Company shows a decided improvement in the prospects of the mine. Exertions are still being persevered in by the company to open up the mine thoroughly, which it is hoped will be successful. The Duke Consols Company has considerably extended the south drive. They have done, and are doing, careful and good work, with satisfactory prospects. The John Bright Company has done a lot of dead work during the quarter, which accounts for the falling-off in the yield of gold from their mine. This company confidently looks forward to the production of better yields in the future. UARTZ MINING-There has been a material improvement in this class of mining during the quarter, as, though the quantity of stone crushed was less than that crushed in the previous quarter, yet the gross yield of gold has been considerably more. I would call special attention to the yields obtained by the Messrs Wangemann from their claims at Golden Point. From a parcel of 5 tons, a yield was obtained of 14 oz 15 dwt, or an average of 2 oz 19 dwt per ton. The yields obtained by Banks and party from Christmas Reef, and by Messrs McFarlane from the Lily Hodgson claim at Havelock, are likewise deserving of notice.⁶⁴

June 1885: MAJORCA SUBDIVISION

The New Kong Meng Company has met with very fair success during the quarter, as the yield of gold and dividends have been good. The manager informs me that wash has just been struck about 650 feet from the main shaft, but he has not washed any dirt yet. A sudden dip in the eastern ground has rendered it necessary to open out deeper. The main reef drive has been considerably extended. The Napier Freehold Company is making satisfactory progress, but, in consequence of the ground being very heavy, it has been found necessary to stop the main drive, so as to allow it to drain. Payable wash has been found in the mine.⁶⁵

Mining Surveyors' Reports, March 1885

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Mining Surveyors' Reports, June 1885

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June 1885: AVOCA DIVISION

The yield from the Golden Stream Company this quarter is encouraging; though some difficulty is experienced in carrying on operations. The tributers of the company have also been fairly successful. The result this time from the Working Miners' Company is, I regret to report, less than usual, as the reef drive is being pushed on with, and scarcely half the usual quantity of wash-dirt has been operated on. The Association claim, at Fryingpan (near Homebush), has been let on tribute, and the party is sanguine of success. In quartz mining everything is very dull, the Bung Bong claim being the only one showing any vitality. It is to be hoped I shall be able to forward a good return from this claim next quarter. Slate quarrying is still being carried on in the Pyrenees with satisfactory results, an additional mineral lease having been applied for there. 66

Sept. 1885: MARYBOROUGH DIVISION

QUARTZ MINING-The returns of gold obtained last quarter from the mines in this Division show a decided improvement. The average yield of gold from stone crushed was 15 dwt 4.45 gr per ton, which is an unusually high average. I would draw special attention to the magnificent yield obtained by Mrs Shaw and party from the Nile prospecting claim, which is situate at Harper's Reef, Havelock. From a parcel of 14 tons 2 cwt of stone, they obtained 194 oz 5 dwt of gold, or an average of 13 oz 15 dwt 12 gr per ton. No such yield as this has been obtained since the early days of the Maryborough gold-fields. Messrs Rogers and Horgan, whose claim is situate at Mariners' Reef, on the Soldier's Reef, obtained 38 oz from 16 tons stone, which gives an average of 2 oz 7 dwt 12 gr per ton. This claim is included in the lease, which was recently granted to Mr Lowenstein. An examination of the other returns... conclusively shows that quartz mining in this Division is steadily increasing in importance. ALLUVIAL MINING—There is nothing of special importance to report with regard to this class of mining. The Duke Company and Tributers have made very good progress during the quarter, as is shown by their returns of gold. A tone of sand from the Duke mine, which was treated at the Cambrian battery, gave a return of 27 oz 10 dwt of gold. The Duke Consols Company has started a new drive, to go south from the main level, at which place the best prospects have hitherto been obtained. 67

Sept. 1885: MAJORCA SUBDIVISION

The Napier Freehold Company (Craigie) has only washed three machines of washdirt during the quarter, which gave a return of 27 oz 2 dwt, the wash being obtained at a depth of 170 feet from the surface. Preparations are being made to drop another set of pumps. The contractor has started to get the foundations ready for a third boiler. The prospects of the mine are good. The Joint Stock Company (Gibraltar), whose mine has been let on tribute, are persevering with their venture. The prospects of the mine have improved, and the returns this quarter are better than usual. The New Kong Meng Company is still prosperous. The returns obtained during the quarter by the Company and the Tributers are in excess of those obtained during the preceding quarter. Four tons of sand from this mine, which were treated at the Cambrian batter, gave a return of 45 oz 5 dwt of gold, or an average of more than 11 oz per ton. 68

Sept. 1885: AVOCA DIVISION

The total yield from the Golden Stream Company this quarter is 1,352 oz 7 dwt, and from the Working Miners Company 1,031 oz 15 dwt. At Percydale, slate quarrying is at present the favourite investment; and another lease of 214 acres has been applied for this purpose. The enterprising prospectors in the Pyrenees feel quite sanguine that while prospecting for slate they will succeed in intersecting several rich gold-bearing veins. These hopes, if realised, cannot fail to encourage others to invest capital in the district. Unfortunately, the yield from the last crushing of the Bung Bong Company was not at all satisfactory to the shareholders, and quartz mining generally is very dull.⁶⁹

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Mining Surveyors' Reports, September 1885

December 1885: MARYBOROUGH DIVISION

QUARTZ MINING-Work in this class of mining has been more active than usual during the quarter. This is shown by the present returns of gold obtained. The splendid yields which were obtained by Shaw and party from the Nile claim, Harper's Reef, Havelock, and by Falkiner and party from the Norwegian claim, Monte Christo Reef, Bet Bet, have created unusual interest in mining circles. Indeed, these returns are quite exceptional in the history of quartz mining in this division, and they point to the fact that this class of mining is only in its infancy, and that a vast amount of wealth still lies unexplored in the quartz veins and lodes which are so profusely scattered over the division. From a crushing of 8 tons 18 cwt of stone, Shaw and party obtained 295 oz of gold, or an average of 33 oz 2 dwt per ton; while from a crushing of 19 tons, Falkiner and party obtained 196 oz 19 dwt, or an average of 10 oz 7 dwt per ton. I would also call attention to the result of recent operations at Lowenstein's claim, Mariner's Reef: a crushing of 232 tons from this claim gave a return of 206 oz of gold, or an average of more than 17 dwt per ton. Five prospecting, two co-operative, and several ordinary claims were registered during the quarter. Most of these claims have been properly tested, and they bid fair when developed to be valuable. They are respectively situated at Maryborough, Alma, Blackman's Lead, Mosquito, Havelock, and Bet Bet. Carlyon and party, the owners of the Sir Henry Loch claim, situated at Berlin Reef, Blackman's Lead, crushed 69 tons 12 cwt, which gave a return of 70 oz 19 dwt of gold, or an average of more than 1 oz per ton. Mr Edward Fisher, owner of the Old Colonist claim, between mariner's Reef and Craigie, crushed a parcel of 7 tons, which gave an average of 1 oz per ton. Worsley and party, owners of the Keep-it-Dark claim, Bristol Hill, crushed a small parcel of stone, which gave an excellent yield. Messrs Seebach and McKeone, owners of the Lord Shaftesbury claim, Bristol Hill, crushed 18 tons, which gave a return of 23 oz 14 dwt, or an average of 1 oz 6 dwt 8 gr per ton. ALLUVIAL MINING-The claim of the John Bright Co has been worked out. The Duke Consols Tributers is making steady progress, and has obtained an increase in their returns of gold. Three tons of sand from the Duke mine gave a return of 43 oz 3 dwt. Fifteen tons of cement from the same mine gave a return of 13 oz 12 dwt. Both parcels were treated at the Cambrian battery. 70

December 1885: MAJORCA SUBDIVISION

The Napier Freehold Co has raised no washdirt during the quarter due to an accident to the pumps, which caused the mine to be flooded. The pumps were repaired, and the water removed. Active operations will be resumed immediately after the holidays. Two tons of sand from the New Kong Meng gave a return of 41 oz 11 dwt. The sand was treated at the Cambrian battery. The only dividend paid during the quarter was one by the New Kong Meng Co, Majorca, amounting to $\pounds 6,000.^{71}$

December 1885: AVOCA DIVISION

In this division only the Working Miners and the Golden Stream Companies furnish regularly, as yet, any gold returns. The respective yields during the quarter show Working Miners, 1,952 oz 9 dwt, Golden Stream, 936 oz 7 dwt, or about 500 oz in excess of the yield for last quarter. At Amphitheatre mining operations look more lively than hitherto, a few gold mining leases having been secured, and suitable machinery is being erected in order to test the ground. In quartz mining there is nothing of a marked character to note. ⁷²

March 1886: MARYBOROUGH DIVISION

QUARTZ MINING—There has been unusual stir in this class of mining during the quarter. This is because of the splendid yields obtained by Shaw and party from the Nile claim, at Havelock, on Harper's Reef. Seven additional ordinary claims situate on that reef were registered during the quarter, and a large quantity of ground has been marked out and leases applied for. From a parcel of 32 tons of stone, Shaw and party obtained a return of 426 oz 10 dwt of gold, or an average of 13 oz 6 dwt 13 gr per ton. Four prospecting claims were also registered during the quarter. These claims are situated at Flagstaff, Bluchers, and Havelock. From the Long Sought For claim, at Specimen Reef, Havelock, and owned by Samuel Williams and party, a crushing of 12 tons of stone gave a yield of 71 oz 10 dwt of gold, or an average of 5 oz 19 dwt 4 gr per ton. The stone was crushed at the Sydenham battery, near Dunolly. ALLUVIAL MINING—There is nothing of importance to report regarding the alluvial mines in this division. A considerable quantity of cement from the Duke mine was treated, with fair results, at the Cambrian battery.⁷³

March 1886: MAJORCA SUBDIVISION

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Steady and fair progress has been made with the works at the Napier Freehold, Craigie. The washdirt obtained at this mine during the quarter was got at an average depth of 170 feet from the surface. The New Kong Meng is still giving good yields. Three tons of sand from this mine were treated at the Cambrian battery, and gave a return of 82 oz 12 dwt of gold, or an average of 27 oz 10 dwt 16 gr per ton.⁷⁴

March 1886:

AVOCA DIVISION

The yields for this quarter in this division are not so satisfactory as those of previous quarters. A considerable reduction will be noticed in the return from the two principal mines, viz., the Working Miners' United and the Golden Stream. The New North Homebush are engaged driving north, and are also extending the other drives. During the last fortnight a few machines yielded over 18 oz of rougher gold than that previously obtained. The erection of extensive machinery in connection with the slate quarries at Percydale is approaching completion. The two other quarries in the Pyrenees are being opened up. A mining lease has been pegged out on Fiddler's Reef, Percydale, it being the intention of the applicant to establish smelting works there. The considerable reduction and the stable of the previous properties are being opened up.

June 1886:

MARYBOROUGH DIVISION (33)

The best yields of gold from quartz during the quarter were obtained by Shaw and party, and by Fricker and party, of Havelock. From a crushing of 8 tons 15 cwt, the former obtained 80 oz, or an average of 9 oz 2 dwt 20 gr per ton. From a crushing of 4 tons, the latter obtained 27 oz 15 dwt, or an average of 6 oz 18 dwt and 18 gr per ton. Nine prospecting and seven ordinary claims were registered during the quarter. The prospecting claims are situate at Bowenvale, Havelock, Adelaide Lead, Mariner's Reef, and Mosquito. Good prospects have been obtained from several of them. There is nothing of importance to report regarding the alluvial mines in this division. The machinery at Chalk's Freehold Company's mine, Carisbrook, is in course of erection. The shaft has been bottomed at 90 feet, and will be sunk to a depth of 270 feet.

June 1886:

MAJORCA SUBDIVISION (34)

A great improvement has taken place during the quarter in the prospects of the New Kong Meng Company. This improvement has given a great impetus to mining in general throughout the subdivision. The yields of gold from this mine have been unusually large, and the value of its stock has materially advanced in the market. The Cambrian Battery treated a ton of sand from the mine for a yield of 30 oz 15 dwt of gold. All the works of the Napier Company are going on satisfactorily, and a considerable quantity of gold has been obtained from the mine, whose prospects are very encouraging.⁷⁷

June 1886:

AVOCA DIVISION (36)

Nothing worthy of note has occurred in quartz mining during the quarter, with the exception of the fact that two quartz prospecting claims have been registered at Doctor's Creek, near Lexton. I understand that a mining lease has been applied for in the locality also. Fiddler's Reef, at Percydale, has been taken up under mining lease by a Ballarat gentleman, who intends treating the minerals to be obtained there by an improved process. It is to be hoped he may meet with success, as there is an ample field in the Pyrenees for similar operations. The Golden Stream Company has been reef-driving lately; this accounts for the limited return this quarter. The yield from the United Working Miners is not as rich as heretofore, but it is thought there will be a considerable improvement during the coming quarter. ⁷⁸

Sept. 1886:

MARYBOROUGH DIVISION

QUARTZ MINING—Shaw and party, the owners of the 'Nile' claim on Harper's Reef, White Hills, have sold out, and the purchasers have formed a company, called the Shaw's Reef Company, to work the claim. Steam machinery will be erected, and proper means taken to develop one of the richest reefs that has yet been found in this district. From a crushing of 71-1/2 tons the company obtained a yield of 570 oz, or an average of nearly 8 oz per ton. This splendid yield has caused a great deal of extra activity in mining business at Havelock, and I understand that other companies are in course of formation to work the ground in the neighbourhood of the claim of the Shaw's Reef Company.

Several ordinary and prospecting claims were registered during the quarter. These claims are situate at Adelaide Lead, Chinaman's, Flagstaff, and Havelock. ALLUVIAL MINING—A number of large claims have been taken up in the neighbourhood of Moolort, but nothing definite

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has yet been reported about them. Chalk's Freehold Company, whose claim is situate near Carisbrook have purchased a 30-head power steam engine for puddling, and three puddling machines for their claim, and have entered into a contract for their removal and re-erection on the ground. The following is a statement of the gold obtained from the principal mines in this division—Total alluvial, 2,527 oz; Total quartz, 570 oz; Total quartz and alluvial, 3,098 oz.⁷⁹

Sept. 1886: MAJORCA SUBDIVISION

The yields of gold obtained during the quarter from the New Kong Meng and the Napier Freehold mines have been far in excess of those, which were obtained from them at any former period. The high value of those mines has now been soundly established, and public attention has been specially drawn to Majorca as one of the most promising and lucrative of our gold-fields. The natural result is that there has been no such stir and activity as there are now in mining business at Majorca since the place was discovered. There has been a considerable influx of mining population, both as representing labour and capital, and every inch of available ground in the subdivision that is likely to prove auriferous has been taken up, or applied for, under the leasing regulations and the local bye-laws. Time alone can tell whether these ventures will succeed, or whether even a fair proportion of them will pass beyond the initial, or speculative stage. But, whatever else may happen, one good result is sure to follow, namely, that a lot of new ground will be carefully prospected, so that what was before the subject of doubt will be placed on the basis of certainty, and thus lead directly to the extension and prosperity of bona fide mining in the subdivision. The Napier Freehold Company employs 168 men, and the New Kong Meng, 240. The men are paid the best current rates of wages. Four tons of sand from the New Kong Meng, which were treated at the Cambrian battery, gave a yield of 168 oz 18 dwt of gold, or an average of 42 oz 4 dwt 18 gr per ton. The following is a statement of the gold obtained during the quarter from the principal alluvial mines in this subdivision:—New Kong Meng (Majorca), 4,745 oz; New Kong Meng (No. 2 Tribute), 82 oz; New Kong Meng (No. 3 Tribute) 63 oz; New Kong Meng (No. 5 Tribute), 40 oz; Napier Freehold (Majorca), 2,794 oz. 80

Sept. 1886: AVOCA DIVISION

In quartz mining the only noteworthy incident is the fact that Vale's Reef has again been taken up under mining lease. In alluvial mining, the prospects of the Working Miner's United look brighter than they have done for some time past. The yield this quarter is 1,168 oz, being larger than that for the last quarter, and generally the future of the mine may be expected to be more satisfactory than was anticipated lately. In the Golden Stream the yield is less than usual, being 147 oz. However the reef-drive is being extended in a northerly direction at he 260-foot level. The Amphitheatre Company obtained a good prospect during the quarter; on washing half a machine the result was 2 oz 12 dwt. The ground here has not been properly opened out yet. 81

December 1886: MARYBOROUGH DIVISION

QUARTZ MINING—This class of mining has been fairly prosperous during the quarter, and it is rapidly becoming one of the principal mining features in the district. Of course, the chief interest of owners and speculators has centred round those claims which have been taken up on Shaw's Reef, Havelock, but it will be a considerable time before even a fair proportion of such claims can be effectively tested. Very sanguine hopes are entertained respecting them, especially by those who are more directly interested. The best yields for the quarter were obtained by the Shaw's Reef Company, Havelock, and by Messrs Chadwick Bros., from their claim at Adelaide lead. From a crushing of 110 tons 14 cwt of stone the Shaw's Reef Company obtained 477 oz 15 dwt of gold, or an average of 4 oz 6 dwt 7 gr per ton. Messrs Chadwick Bros obtained 78 oz 8 dwt from a crushing of 74 tons 8 cwt of stone, or an average of 1 oz per ton. The total quantity of quartz obtained from the Shaw's Reef Company's mine since 1st August last is 182 tons, and the total yield of gold therefrom is 1,048 oz 7 dwt. The quartz was obtained at a depth of 100 feet from the surface. ALLUVIAL MINING—There is nothing of importance to report regarding this class of mining. The Duke Tributers have had a successful quarter, through the yield obtained by the company (1,332 oz) is smaller than usual. The yield obtained by the Duke Consols Tributers (495 oz) shows a substantial increase on the amount, which they got during the preceding quarter. Total alluvial yield, 2,260 oz; Total quartz yield,477 oz.⁸²

December 1886: MAJORCA SUBDIVISION

The yields of gold obtained during the quarter by the Napier Freehold (3,602 oz) and New Kong Meng (5,687 oz) Companies have been much larger than usual, and the splendid dividends which were paid by those companies within the same period fully prove the exceptionally high value of

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their properties. No such yields have ever before been obtained from any mine or mine in this subdivision. I may observe that the wash from the Napier has been taken, during the quarter, at an average depth of 67 feet from the surface. The owners of the several progressive mines in the subdivision are taking the necessary steps to bring them as speedily as possible into working order, with the view of developing their resources. Taking all things into consideration, I can with truth affirm that, as an important mining centre, the prospects of the subdivision were never brighter or more hopeful than they are at present. ⁸³

December 1886: AVOCA DIVISION

Quartz mining has been very dull in this division during the quarter, and in alluvial mining the only claim getting gold in any quantity is the Working Miners, Homebush. I am glad, however, to state that excellent results have been obtained by the tributers in the Golden Stream mine during the month of December. The company has been reef-driving lately, and, therefore, there was no gold yield this quarter. The main shaft has been sunk 60 feet deeper than the original level, and a reef drive put in 713 feet in a north-westerly direction. This drive is being continued, and it is anticipated that after a further extension of 300 feet the old workings will be reached. 84

March 1887: MARYBOROUGH DIVISION

ALLUVIAL MINING—The long-continued and excessive drought has been severely felt in some parts of the division by the individual miner, and a good downfall of rain is badly wanted. The mines at Timor have been fairly successful during the quarter. The returns of gold from the Duke and the Duke Consols are good. The progressive mines at Carisbrook are making way, and some of them will soon be in efficient working order. QUARTZ MINING—A new and payable reef has just been discovered in the neighbourhood of Adelaide lead; at present I am without precise or authentic particulars regarding it, but these I hope to be able to give in my next report. The Shaw's Reef Company got 284 oz from 255 tons of quartz. Steam machinery is in course of erection at the Shaw's Extended and Shaw's Rob Roy mines, Havelock. The Rob Roy Company, on Shaw's Reef, has made a satisfactory beginning; the reef has been struck and shows payable gold. Thirteen men are employed at the mine. 85

March 1887: MAJORCA SUBDIVISION

The New Kong Meng entered on some poor ground during the quarter, which materially affected the returns of gold. But now things have changed favourably, and the mine is regaining its former prosperity. The Napier Freehold has been prosperous, as is shown by the returns obtained and the dividends paid. The washdirt from the mine is at present being obtained at a depth of 75 feet from the surface. 86

March 1887: AVOCA DIVISION

In quartz mining in this division dullness still exists. In alluvial mining, however, I am glad to be able to report that the Working Miners United mine has yielded excellently this quarter, the return being 1,564 oz 19 dwt, as against 1,083 oz for the previous quarter. The yield has been obtained from a portion of the company's property 2,000 feet in a north-easterly direction from the main shaft, and at a depth of about 190 feet. The New North Homebush Company's operations have been confined to pumping lately, but, having been allotted £500 from the prospecting grant, work will be immediately resumed. [Rest of report missing] ⁸⁷

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June 1887: MARYBOROUGH DIVISION

QUARTZ MINING—The Shaw's Reef Company, Havelock, have had a prosperous quarter, the yield of gold obtained from their mine being upwards of 1,000 oz. The quartz raised was obtained from a depth of from 60 feet to 250 feet from the surface. Pumping machinery is being erected, and 68 men are employed at the mine. Shaw's Rob Roy Company, Havelock, has had a crushing of 40 tons of stone, which gave 27 oz 3 dwt or upwards of 12 dwt to the ton. They have been working in hard country during the great part o the quarter, but the prospects of the mine are good. Messrs Chadwick and party, of Adelaide Lead, crushed 74 tons and obtained 123 oz... which is an exceptionally good yield. A strenuous effort is now being made to form a company to work the Flagstaff Reef. Splendid returns were formerly obtained from this reef, and, if practical and efficient means are employed to develop its resources, I have no doubt that the proceeds will be satisfactory. An effort is also being made to form a company to work the reef at Bristol Hill, from which, during the last 20 years, a large amount of gold has been obtained. The following is a statement of the gold obtained during the quarter from the principal quartz mines in this division:—Shaw's Reef Company, Havelock, 1,033 oz; Shaw's Rob Roy Company, Havelock, 27 oz; Chadwick and party, Adelaide Lead, 125 oz; Shaw's No. 1 Company, Havelock, 25 oz; McFarlane's Reef Company, Havelock, 24 oz; Wilson and party, Havelock, 11 oz. Dividend:—Shaw's Reef Company, Havelock, £1,500. ALLUVIAL MINING—The Chalk's No. 1 Company, Carisbrook, are erecting pumping and winding engines, and are making fair progress with the works at their mine. The Chalk's Freehold Company, Carisbrook, is also pushing forward their works. There has been a considerable improvement in the returns from the Duke mine, at Timor, during the quarter. The following is a statement of the gold obtained during the quarter from the principal alluvial mines in this division:—Duke Company, Timor, 1,368 oz; Duke Tributers, Timor, 992 oz; Duke Consols Tributers, Timor, 123 oz. 88

June 1887: MAJORCA SUBDIVISION

The gold returns from the New Kong Meng mine have materially improved during the quarter (5,182 oz) and the prospects of the mine are excellent. The payable ground at No. 3 shaft is stretching out much farther to the west than was expected. The Napier Freehold Company is making steady and satisfactory progress. The average depth of the wash in the mine is 170 feet from the surface, but there is also payable gold at 155 feet from the surface. The East Kong Company have purchased a powerful plant to work their mine, and immediate arrangements will be made for its erection. The contractors are making good progress with the sinking of the shaft. The Kong Extended Company is now busily engaged with the works at their mine, and is erecting a new engine and boiler. Three tons of cement from the New Kong Meng gave a yield of 70 oz 12 dwts, or an average of 23 oz 10 dwt 16 gr to the ton. The amount paid in dividends by the New Kong Meng Company since June 1886 is £35,000, or 35s on each share held in the company. The total amount of dividends paid by the Napier Freehold Company is £22,500, or 22s 6d on each share held in the company.

June 1887: AVOCA DIVISION

I am glad to be able to report that prospects in this division have greatly improved during the last quarter. The operations, conducted under the superintendence of the 'Progress Committee' at Avoca, in connection with the prospecting grant, have resulted in the finding of gold in payable quantities in the shallow alluvial at Lamplough and Percydale. There is also material improvement in the prospects of the United Working Miners' Claim, the works in the eastern portion looking better than has been the case for some time. A large mining lease, comprising a considerable portion of the available ground to the north, has been applied for, in view of the improved state of affairs on the Homebush Lead. In quartz mining, there is nothing worth comment; this branch of mining being very dull at present. 90

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⁹⁰ Mining Surveyors' Reports, June 1887

Sept. 1887: MARYBOROUGH DIVISION

At no former period in the history of Maryborough has mining been so uniformly prosperous as it has been during the quarter just past. This prosperity has mainly been cause by the exceptionally rich yields of gold that have been obtained from the Shaw's Reef Company's mine at White Hills; by the great improvement which has taken place in the prospects o the Duke mine, at Timor; and, more especially, by the firm confidence which is now being reposed in the place as an important and permanent mining centre. As is usual in cases where prosperity attends the principal mining ventures in a district, speculators and capitalists from all parts of the colony have been attracted to Maryborough, and a large number of ventures have recently been floated on the market. It is to be hoped that a fair proportion of these will prove successful. QUARTZ MINING-The Shaw's Reef Company are about to sink the main shaft of their mine 150 feet deeper. Another boiler is being erected. The gold obtained from the mine, and the dividends declared during the quarter, affords ample evidence of the prosperity of the company, and of the value of their property. Shaw's Rob Roy Company, Havelock, is making substantial progress with the development of their mine. During the quarter they have been driving for the reef at the bottom level. They have also been sinking a winze from the 140-foot level. At 16 feet down a fresh make of stone was cut, showing heavy coarse gold. But, in consequence of the heavy flow of water, the company has as yet been unable to determine the extent of the new discovery. Work is now being pushed on to arrive at this knowledge. No stone from the mine has been crushed during the quarter. The McFarlane's Reef Company, Havelock, is now engaged in erecting pumping and winding machinery. The Blucher's Reef Company, near Maryborough, is in treaty for the purchase of machinery, and tenders are invited for its erection. Eight ordinary, and twenty-one prospecting claims were registered during the quarter. These claims are situate in various parts of the division, and some of them have given good prospects. The Great Victoria claim, situate at Moonlight, on the Victoria line of reef, and owned by Harry Rudrum and party, gave a crushing of five tons of stone, which yielded 5 oz 19 dwt of gold. This has led to a good deal of stir at Moonlight. The mining operations connected with the above claims will materially aid in developing the mineral resources of the division. The following is a statement of the gold obtained during the quarter from the principal quartz mines in this division:-Shaw's Reef Company, Havelock, 1,665 oz; Wilson and party, Havelock, 16 oz; Lunn and Party, Havelock, 9 oz; McConvil and party, Maryborough, 14 oz; Total quartz, 1,706 oz. MINING—The following is a statement of gold obtained during the quarter from the principal alluvial mines in this division:—Duke Company, Timor, 2,284 oz; Duke Company, No. 1 Tribute, 206 oz; Duke Company, No. 2 Tribute, 314 oz; Duke Company, No. 4 Tribute, 207 oz; Duke Company Consols Tribute, 203 oz; Total alluvial, 3,316 oz. 91

Sept. 1887: MAJORCA SUBDIVISION (Mr Charles Sainsbury, Mining Registrar)

There is nothing very special to report regarding mining in this division during the last quarter. The Kong Meng mine is still maintaining its yields of gold, and has even shown an improvement as compared with the previous quarter's returns. The Napier Freehold mine still gives excellent yields, the output of gold during the quarter being a substantial increase on the previous one. The East Kong Company have bottomed their shaft at a depth of 118 feet, with prospects indicating that the mine will be a valuable one. The contractors are making fair progress with the erection of machinery, but the further sinking of the shaft has been suspended in the meantime. Three tons of sand from the New Kong Meng were treated at the Cambrian Battery, and gave a return of 49 oz 5 dwt of gold, or an average of 16 oz 8 dwt to the ton. The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter—New Kong Meng, Majorca, including Tributers, 5,246 oz; Napier Freehold, Majorca, 4,697 oz. Dividends—New Kong Meng Company, £7,000; Napier Freehold Company, £8,000. Mr Robert Allan, under instructions from the Mining Department, has furnished a report on the Majorca mines, accompanied by a plan. The latter show the whole of the mining properties to the north of Majorca. The positions of all bores, shafts, and worked-out gutters are from actual survey, and the levels on surface and underground have been carefully correlated. Commencing at the southern end of the plan, there is shown the old McCallum's lead, which has been worked to the southern boundary of the Majorca United Company's ground, where it runs under the basalt. It is for the continuation of this lead, and also that shown as Fox's rush, that this company has been started, and there can be little doubt of the junction of these leads being found within the company's boundary. The Kong Extended, South Kong Extended, and Majorca No. 2 Company's have been started, with a view of working the continuation of the old leads known as the Emu, Cockatoo, and England's Hill, and, from surface indications, Mr Allan thinks they will be found to continue as per dotted lines on plan, and, after forming a junction, will continue on through the western side of Battery Hill, and pick up the old Four-mile Flat lead, and go thence in a north-easterly direction towards the Napier Company's shaft.

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The course of the main channel (at present being worked by the Kong Meng and Napier Companies), has been proved by boring operations, and the dotted line shows it probable trend through the Chalk's Freehold in a north-westerly direction, thence (after picking up the old lead known as the Goldbrook or Carisbrook lead) in a north-easterly direction through the Stewart's and Stewart's Extended Companies. A tributary lead has also been proved in the East Kong Meng, and in all probability another will be found coming in a north-westerly direction through the Kong Meng No. 1, and joining the main channel near the northern boundary of the Kong Meng Company. 92

Sept. 1887: AVOCA DIVISION

In alluvial mining at Homebush, in the ground of the Working Miners' United Company, in the early part of the quarter, the prospects continued to improve in opening up the ground easterly; as much as three ounces of gold to the set of timber having been obtained. In the latter part of July, unfortunately, a breakage occurred to the pumping engine, and, in consequence, the water rose...[rest of report missing]⁹³

December 1887: MARYBOROUGH DIVISION

QUARTZ MINING-Quartz mining in this division has been active and prosperous during the quarter. Several prospecting claims, situate in various parts of the division, were registered. From the Perseverance claim, at Shellback Gully, owned by James Roberts, a crushing of 9 tons gave 13 oz 14 dwt of gold. The Shaw's Reef and Rob Roy mines, Havelock, have produced excellent yields of gold. A large number of specimens, thickly studded with gold and worth several hundred pounds, were obtained at various points in the 160-foot level of the Rob Roy mine. A crushing of 136 tons of stone, taken from this mine, gave 266 oz 4 dwt 18 gr of gold. The works at the mine are in good order. Satisfactory progress is being made at the progressive mines in the division, which are situated at Havelock and Mosquito. A large amount of labour and capital are being employed at these mines, in the purchase and erection of costly steam machinery. The following is a statement of the gold obtained from the principal quartz mines in this division during the quarter—Shaw's Reef Company, Havelock, 1,447 oz; Shaw's Rob Roy Company, Havelock, 266 oz; Wilson and party, Havelock, 13 oz; Lunn and party, Havelock, 9 oz; Rice and party, Rifle Butts, 87 oz; Cornwall and party, Bristol Hill, 28 oz; Roberts, Shellback Gully, 13 oz; Sundry crushings, various parts, 76 oz; total, 1,942 oz. ALLUVIAL—The Duke Company have again come well to the front, as the returns from that mine will show. Several men employed at the mine were recently discharged. Their services will be dispensed with until the hose-drive is carried further. The works at the Chalk's No. 1, Carisbrook, are progressing satisfactorily. The main shaft has been sunk, through very hard country, to a depth of 161 feet. The walls of the pumping-engine house are completed, and the roof is now fixed. The East Duke Co-operative Party on the 7th December found a nugget weighing 65oz. A similar nugget was found in the same locality some years ago. Gold obtained during the quarter from the principal alluvial mines in this division—Duke, Timor, 2,211; Duke, No. 1 Tribute, 105 oz; Duke, No. 2 Tribute, 341 oz; Duke, Contractors, 65 oz; Total, 2,724 oz. Dividends: Shaw's Reef Company, Havelock (quartz), £4,000; Duke Company, Timor (alluvial), £1,500.94

December 1887: MAJORCA SUBDIVISION

The New Kong Meng Company is still giving excellent yields. There is, however, a slight decrease as compared with the previous quarter. The Napier Freehold is also maintaining its reputation for substantial yields, but there is a slight decrease in the output of gold. The East Kong Meng—The erection of machinery is completed; the further sinking of shaft will be resumed with the commencement of the year. The West Kong Meng is putting down a number of bores in their lease. The Kong Meng No. 1—No report received from the manager but I believe they have bottomed a shaft, and are driving, the ground being dry. The Kong Meng No. 2 have been putting down a number of bores. The South Kong Meng have just completed the erection of machinery, and will commence operations. The Majorca United Leads—The progressive work in this mine has been retarded on account of the troublesome nature of the ground and heavy water; a capital run of wash has been struck, with payable prospects. The Fincher Reef Quartz sunk their main shaft to 110 feet, and struck water. The company's engineer is engaged selecting suitable machinery. Prince Alfred Reef.—No work done during the past quarter. The Deeds No. 2 Quartz—A trial crushing from this reef of 2 tons of stone gave a yield of 9 oz 12 dwt, but the stone seems to have pinched out; prospecting still carried on.

December 1887: AVOCA DIVISION

⁹² Mining Surveyors' Reports, September 1887

⁹³ Mining Surveyors' Reports, September 1887

⁹⁴ Mining Surveyors' Reports, December 1887

⁹⁵ Mining Surveyors' Reports, December 1887

Homebush continues to occupy a premier position in this division, and from the recent amalgamation of the two principal claims there, namely, the 'Working Miners' and the 'New North Homebush', to be known in future as the 'Working Miners, Homebush', considerable facility will be afforded in tracing the lead northerly. The south portion of the old Working Miners is at present let on tribute to 50 men, who are now actively employed in prosecuting their work. It is proposed to work the amalgamated claim from the shaft of the New North Homebush, and a main drive is started southerly from this shaft at a level of 250 feet to reach the ground left by the Working Miners at the time of the breakage. It is confidently expected that the Homebush lead will be traced north-easterly, close to Fitzgerald's, at Wareek, where a diamond drill is now at work for the purpose of proving the course of the deep ground. A large area of 718 acres has been applied for northerly from the Working Miners, through which it is believed the lead will be traced. There is nothing fresh to report concerning the Golden Stream Company. ⁹⁶

December 1887:

WORK DONE THROUGH AID FROM THE PROSPECTING VOTE

Avoca Division—Golden Stream GM Company, Avoca lead, Avoca; depth 268 feet, surface boring to trace lead to the north and main driving; the boring was very effective as it showed the trend of the lead and encouraged the company to proceed with underground workings. On account of the heavy flow of water the wash has not been reached, but encouraging prospects are obtained from bores put up; the prospects and value of this mine have very much improved, due in a great measure to the assistance given from the vote. New North Homebush GM Company, Homebush, Homebush lead; depth 257 feet, main driving to the north and east. This company has lately amalgamated with the United Miners' Company. Had it not been assisted this mine would have been stopped; had it done so the mine next to it would have been compelled to do so also, as the increased flow of water would have been too strong to cope with. 97

March 1888:

MARYBOROUGH DIVISION

There has been considerable depression in mining operations during the quarter, and consequently the yield of gold from both alluvial and quartz mines has fallen off. Far too many mining ventures have been arranged and placed on the market, some of which have turned out to be absolutely worthless. The existing depression in mining business is just the usual reaction which inevitably follows a period of active speculation and abnormal excitement. OUARTZ MINING—In consequence of an accident to the machinery of the Shaw's Rob Roy, the mine has been idle during the quarter. An additional engine of nearly 30 horse-power and a large boiler have been purchased and added to the plant. The contractors are now busily engaged in erecting the new machinery. The yield of gold from the Shaw's Reef has been satisfactory, and the several works at the mine are in good order. A 20-in. cylinder pumping engine is in course of erection. When this engine has been erected the one now used for pumping and winding will be used for winding exclusively, and the sinking of the shaft will be resumed. The several progressive mines in this division situate at Havelock, Flagstaff, Blucher's, and Mosquito are receiving close attention, and good progress is being made with the preparatory works. The following is a statement of the gold obtained from the principal quartz mines in this division during the quarter:— Shaw's Reef Company, Havelock, 1,219 oz; Rice and party, Butts Reef, 42 oz; Eaglehawk Company, Golden Point, 19 oz; Dibbin and party, Havelock, 9 oz; Wilson and party, Havelock, 9 oz; Roberts and party, Surface Hill, 5 oz; total, 1,305 oz. ALLUVIAL MINING—The contractors for sinking the shaft of Chalk's No. 1, Carisbrook, have finished their contract. All the works at the mine are progressing well, and the company hopes to be able to start driving in the course of a week or so. The Duke Company is making active preparations to work the northern high ground in the mine, which will probably turn out rich. At the Duke No. 1 the beam engine and the stone for the engine-house have been delivered, and the building of the house will be begun forthwith. A large company is being formed for the purpose of working the deep lead, which is supposed to traverse the Charlotte Plains, near Carisbrook, and to be a continuation of the Kong Meng lead. Several bores recently put down gave highly favourable results. The following is a statement of the gold obtained during the quarter from the principal alluvial mines in this division:—Duke, Timor, 1,251 oz; Duke Tributers, 501 oz; Total, 1,753. Dividends: Shaw's Reef Company, White Hill, £2,000.98

⁹⁶ Mining Surveyors' Reports, December 1887

⁹⁷ Mining Surveyors' Reports, December 1887, Appendix K

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March 1888: MAJORCA SUBDIVISION

Mining in this division during the past quarter was continued with satisfactory results. The Kong Meng Company is maintaining good yields. The Napier Freehold is still giving fair yields. The East Kong Company are pushing on main levels. The South Kong Company are also doing similar work. The Majorca United Leads are extending main level and intermediate levels. Two tons of sand from the New Kong Meng were treated at the Cambrian battery, and gave a return of 25 oz 8 dwt The following is a statement of the gold obtained form the principal alluvial mines in this division during the quarter:— New Kong Meng, including Tributes, 4,443 oz; Napier Freehold Company, 3,441 oz; Chalk's Freehold Company (from drives only), 103 oz; Majorca United Leads, 23 oz; Total, 8,011 oz. Dividends:—New Kong Meng Company, £4,000; Napier Freehold Company, £2,000.

March 1888: AVOCA DIVISION

In the claim of the Working Miners, Homebush, and from the shaft of the New York, a drive has been driven southerly, since last report, a distance of 684 feet, for the purpose of opening out the well-known payable ground in that portion of the claim, already proved rich by the workings of the hydraulic shaft of the old Working Miners. In the progress of the drive some hard granite reef was met, and it was decided to put up a balance shaft, and drive over the 'hard country.' The manager expects in a few days to come heavily on gold. Work is progressing steadily in the Golden Stream, but there is nothing of moment to report; a good demand has been for eligible workmen at the claim during the quarter. On the eastern side of the Pyrenees, in the vicinity of Percydale, prospecting for silver has been commenced, and already three silver leases have been applied for. A prospect from one has been assayed and proved very satisfactory. ¹⁰⁰

June 1888: MARYBOROUGH DIVISION

The general tone of mining business here has been much better this quarter than last. There has been less speculation, and really substantial work has been done in the way of extending and making permanent bona bide mining works. This remark especially applies to the progressive quartz mines in the division. At several of these mines efficient steam machinery has been erected, and a large amount of capital invested. In a short time I hope to be able to report that the enterprise of the owners has been attended with success. QUARTZ MINING-The engine shaft of the Shaw's Reef Company has been sunk to a greater depth. In the early part of the quarter there was a great falling off in the yield of gold, but recently the prospects of the mine have much improved. Shaw's No. 1 North Company has erected a winding plant. This company was formed in July last. Since then they have erected the above plant, and have sunk a shaft to a depth of 216 feet, at which a strong flow of water was cut, and sinking had to be stopped. A cross-cut was then put in at 180 feet from the surface, and the reef struck at 13 feet east from shaft. The reef is now being worked to the north, and averages 18 inches in width, and shows fine gold throughout. The prospects of the mine are most encouraging. The Shaw's Extended Company, Havelock, have erected an 11-inch cylinder engine, 1-feet stroke, with boiler 18 by 5-/12 feet, also winding gear, having round wire ropes, and other necessary works. McFarlane's No. 1 Company, Havelock, has erected an 18-inch cylinder engine, with boiler 28 by 6-1/2 feet, also winding gear and other works. Sinking operations at the mine will be resumed next quarter. McFarlane's Reef Company, Havelock, are opening up their mine by cross-cutting and extending main levels and drives. Shaw's Rob Roy Company has erected an 18-inch cylinder engine, also a Cornish flue boiler. Work in the mien has been resumed. A truck-road has been laid at bottom level. The machine is working well. The Princess Alexandra Company has stopped sinking until pumps are lowered in the shaft, as the water is too heavy for the whip. The Princess Royal Company, Mosquito, has erected fresh machinery, and has begun sinking shaft. The following is a statement of the gold obtained from the principal quartz mines in this division during the quarter:—Shaw's Reef Company, Havelock, 743 oz; Cambrian battery, public crushings, 19 oz; Rice and party, Butt's Reef, 6 oz; Eaglehawk Company, Golden Point, 11 oz; Stapleton and party, Welcome Reef, 4 oz; Jenkins and party, Adelaide Lead, 34 oz; W. McLellan, Hamburg Reef, 4 oz. ALLUVIAL MINING—The following is a statement of the gold obtained from the principal alluvial mines in this division during the quarter:—Duke Company, Timor, 1,643 oz; Duke Tributers, Timor, 394 oz. 101

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June 1888: MAJORCA SUBDIVISION

There is a marked improvement in this subdivision as compared with the previous quarter, both the New Kong Meng and Napier Freehold companies showing a substantial increase in the output of gold. The Chalk's Freehold has been confined to prospecting and cutting up ground preparatory to blocking out. Majorca United Leads similarly employed. The East Kong Meng pushing on main and leading drives. South Kong Meng similarly employed. 102

June 1888: AVOCA DIVISION

Mining in both alluvial and quartz has been rather dull. In the Working Miners' mine at Homebush, operations have been confined to reef driving, and there is, therefore, no gold return from that claim for the quarter. Work is being persevered with in the Golden Stream, and though the expectations formed at the beginning of the quarter have not yet been realised, yet one of the tribute parties has obtained excellent results. A Ballarat company has commenced operations in silver mining, near the old Fiddler's Reef, at Percydale. It is to be hoped that success may attend their efforts, as there is a fine field for enterprise in this class of mining in the Pyrenees. ¹⁰³

June 1888: PROSPECTING OPERATIONS CARRIED ON

Golden Stream Gold Mining Company, Avoca (alluvial).—Progress has been slow on account of the heavy flow of water. The Working Miners' Homebush Gold Mining Company, Homebush (alluvial), are main driving to reach the ground left by the United Miners' Company, when the mine was flooded. The ground is known to be payable; good yields are expected; the shares are quoted at 9s each, 40,000. But for assistance from the Prospecting Vote this company would have collapsed. Boring for Alluvial—The Maryborough Main Leads Company, Havelock, put down four bores; payable prospects of gold was obtained from two of them, at a depth of 128 feet and 134 feet respectively. Chalk's No. 4 Gold Mining Company have commenced to bore on their lease at Carisbrook. Prospecting Associations—The following associations have been at work during the quarter [including] Maryborough, Avoca. 104

Sept. 1888: MARYBOROUGH DIVISION

Considerable depression has been experienced during the whole of the quarter both in quartz and alluvial mining. Many of the new ventures which were undertaken have proved less successful than was anticipated, and some of them have been abandoned. As yet, there has not been sufficient time to test the quality of the majority of the quartz mines which are now in progress. During the quarter the Princess Royal Company have been sinking a shaft. They obtained a crushing from the south drive at the 240-foot level. They are now sinking, and driving north for a fresh block of stone. The Princess Alexandra Company has suspended work at present, pending progress of operations at the Princess Royal. Work at the Cleopatra has been chiefly confined to extending the drives on the course of the lode at the 250-foot level, and in opening up the mine generally. The company expects to be constantly engaged in crushing stone during the next quarter. The Havelock Reef Companies has been driving north and south on the course of the lode. They have had three crushings, but the reef is not at present payable. The McFarlane's Reef Company is erecting a 10-head crushing plant. The Shaw's Rob Roy Company are still driving on the course of the lode; the quartz obtained is poor, but of a very promising character. The North Shaw's Company recently struck rich stone in the south cross-cut, at the 180-foot level. The lode is from 8 to 10 inches wide. They are now opening a level at 100 feet. The Shaw's Reef Company has sunk their shaft 30 feet deeper during the quarter. The Blucher's Reef Company has been idle during the quarter. The following is a statement of the gold obtained from the principal quartz mines during the quarter—Shaw's Reef Company, Havelock, 534 oz; Princess Royal Company, Mosquito, 16 oz; Cambrian battery, public crushings, 34 oz; McFarlane's Reef Company, Havelock, 57 oz; Wilson and party, Havelock, 6 oz; Jenkins and party, Adelaide Lead, 12 oz; Coleman and party, Gladstone Reef, 13 oz; Total, 674 oz. ALLUVIAL MINING—Chalk No. 1 Company have erected their mining plant, but at present the winding machinery only is in use. The Golden Park Company, Carisbrook, has been idle during the quarter. Gold obtained from the principal alluvial mines:—2,160 oz. Dividend:—Shaw's Reef Company, White Hills, £500.¹⁰⁵

¹⁰² Mining Surveyors' Reports, June 1888

¹⁰³ Mining Surveyors' Reports, June 1888

¹⁰⁴ Mining Surveyors' Reports, June 1888

Mining Surveyors' Reports, September 1888

Sept. 1888: MAJORCA SUBDIVISION (Miss Constance Sainsbury, Mining Registrar)

The New Kong Meng and Napier Freehold mines continue to be prosperous, as shown by the returns obtained and dividends paid. Gold obtained form the principal mines of this subdivision, viz—New Kong Meng Company, Majorca, 4,488 oz; New Kong Meng Tributers Company, Majorca, 63 oz; Napier Freehold Company, 4,318 oz; Chalk's Freehold Company, 525oz; United Leads Company, 163 oz; East Kong Meng, 27 oz; Total, 9,587 oz. 106

Sept. 1888: AVOCA DIVISION (Mr H.C. Bate, Mining Registrar)

The workings of the Golden Stream Company have not yet met with the success anticipated. It is confidently believed, however, that the shareholders will yet be repaid for their outlay. 107

December 1888: MARYBOROUGH DIVISION

All mining business has been unusually dull. Several companies have stopped work at their mines, as sufficient encouragement did not present itself to warrant them in continuing the employment of labour. Other companies have abandoned their enterprises and have wound up their affairs. The individual miner has also fared badly, as he has had to face the extreme difficulties arising out of an exceptionally dry season. The Chalk's Number One Company (alluvial) is only using their winding machinery, the machinery is ready for use, so soon as washdirt is reached. The following is a statement of the gold obtained during the quarter from the principal alluvial mines in the division—Duke Company, Timor, 1,188 oz; Duke Tributers, Timor, 261 oz; Total, 1,449 oz. In quartz mining, Shaw's Rob Roy Company, Havelock, from which great thins were expected, have come to grief, as no more payable gold could be obtained. The plant has been sold, and the company is now being wound up. The position of McFarlane's Reef Company has improved during the quarter, gold having been obtained to the extent of 267 oz 19 dwt. The North Shaw's Company, Havelock, will start to crush in a few days. The prospects of the company are good. The Shaw's Reef Company, Havelock, is about to sink their main shaft deeper. The present depth of the shaft is 450 feet. While the 8-inch pumps were being drawn out of the shaft to be replaced by 10-inch pumps, a lamentable accident occurred, resulting in the death of two men. The following is a statement of the gold obtained during the quarter from the principal quartz mines in the division—Shaw's Reef Company, Havelock, 661 oz; McFarlane's Reef Company, Havelock, 267 oz; Cleopatra Company, Mosquito, 23 oz; Princess Royal Company, Mosquito, 25 oz; McFarlane's No. 1 Company, Havelock, 25 oz; Shaw's No. 1 North Company, Havelock, 10 oz; Dibbin and party, Waverley Reef, 15 oz; Coleman and party, Gladstone Reef, 22 oz; Hampton and party, Butt's Reef, 32 oz; Todaro and party, Cross Reef, 23 oz; McLellan and party, Humbug Reef, 6 oz;, Total, 1,114 oz. 108

December 1888: MAJORCA SUBDIVISION

Mining operations in this division are not so elastic as they were, in consequence of a few of the mines, which were of a prospective character, failing to discover gold in payable quantities. The Kong Men Company is still maintaining good yields. The Napier Freehold mine is also maintaining its reputation, both in the output of gold and in declaring dividends, whilst Chalk's Freehold is showing a marked improvement. The Majorca United Leads Company have failed, as yet, in obtaining gold in payable quantities, and the mine is now worked by a Tribute Company. ¹⁰⁹

December 1888: AVOCA DIVISION

For the present, mining is at very low ebb in this division. No dividends are being paid, and the only alluvial mining (other than that carried on by the Golden Stream and the Working Miners' Companies) is that known generally as fossicking. There is, at present, no quartz mining. 110

Mining Surveyors' Reports, September 1888
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 Mining Surveyors' Reports, December 1888

March 1889: MARYBOROUGH DIVISION

I regret to report that mining in this division during the quarter has been exceptionally dull; in fact, I do not remember so dull and uninteresting a period during the last twenty years. Several causes have operated to bring about this bad state of things. Many of the mines, which recently were taken up as speculative ventures, and which involved a large expenditure of labour and capital, were found, on trial, to be worthless, and several of the mines which are gold-producing are not giving enough gold to meet current expenses. The utter collapse of the land boom in Melbourne also operated very injuriously on mining interests, as many of our substantial mining investors were interested in that unfortunate business, and suffered accordingly. The prolonged and excessive drought o this summer has also been seriously felt. In quartz mining there is nothing to report of any consequence. Mr Ivor Davies, of the Cambrian battery, has crushed no stone during the quarter; and the returns I have received from mine-owners and managers, as to work done and gold obtained, have been returned marked mostly 'nil'. In alluvial mining there is also but little to report. The prospects of the Duke Company were so low during the quarter, that the directors called a meeting to consider the advisability of letting the whole of the mine on tribute; but the opportune grant of £2,000 to the company by the Mining Department will, it is hoped, enable it to overcome its difficulties. 111

March 1889: MAJORCA SUBDIVISION

Mining in this subdivision continues of a satisfactory character. 112

March 1889: AVOCA DIVISION

Mining still continues at very low ebb in this division. There is a little quartz working now being carried on at the Eureka claim, near Percydale, at Christmas Reef, Bung Bong, where prospecting has been done during the past quarter by Allen Van Tuin and the Messrs Ritchie and Abbott. Affairs are not at present progressing well at the Golden Stream Company's workings, Avoca, and it is feared that the company will shortly cease operations, a course of action which would be a serious blow to the mining industry in Avoca. 113

June 1889: MARYBOROUGH DIVISION

It affords me much pleasure to report a decided improvement in both classes of mining in this division during the last quarter. Indeed, the improvement is so great as to form a pleasing contrast to my report for the preceding quarter. The returns of gold from quartz mines deserve special notice, as they are much beyond the usual average, and, so far as present appearances go, they bid fair to continue. I would call special attention to the splendid and exceptional yield of gold obtained by Messrs Lunn and party from their registered prospecting claim, situate at Havelock, on the Monte Christo Reef. From 17 tons of stone a yield was got of over 375 oz., or an average of more than 22 oz per ton. With one exception, I do not remember, during my experience, so fine a return as this. There are other exceptionally good yields from several of the other quartz mines in the division, which are recorded in the proper place; these speak for themselves, and are quite encouraging. QUARTZ MINING—McFarlane's No. 1 Company.—The plant and claim of this company have been purchased by the McFarlane's Reef Company, by whom all work at the mine during the past quarter has been done. McFarlane's Reef Company—This company have sunk their main shaft to a depth of 100 feet; chamber opened, and cross-cut driven to reef 48 feet... Considerable difficulty has been experienced by this company in draining their mine. North of Shaw's Reef Company, this is the only mine in the vicinity that is not idle; in fact, the owners are now doing prospecting work for the mine-owners in the surrounding district. This explains, in some measure, the difficulty there is in contending with the heavy inflow of water. North Shaw's Company—No work has been done during the past quarter, labour covenants having been suspended by the Mining Department. Shaw's Extended Company.—This company have been amalgamated with the Shaw's Reef Company, and all work during the quarter has been done by the latter. The following is a statement of the gold obtained during the quarter from the principal quartz mines in the division:—Shaw's Reef Company, White Hills, 611 oz; Lunn and party, Havelock, 17 tons for 375 oz; Hampton and party, Butts Reef, 53 tons for 121 oz; Sievers and party, Imperial Reef, 8 tons for 22 oz; Campaneas and party, Portuguese Reef, 3 tons for 17 oz; Total, 1,148 tons. ALLUVIAL MINING—Chalk's No. 1 Company, Carisbrook.—The lower main level has been extended nearly 260 feet; total distance from shaft, 1,295 feet. A Roots' blower has been erected, and the ventilation of mine completed.

Duke Company, Timor—This company have undergone a series of ups and downs during the quarter. The forfeiture of a large number of shares in the company threatened, at one time, the

¹¹¹ Mining Surveyors' Reports, March 1889

Mining Surveyors' Reports, March 1889

¹¹³ Mining Surveyors' Reports, March 1889

complete stoppage of the mine. However, several residents succeeded in placing all the forfeited shares locally, and the mine is on a good footing again. Mr A. Lowenstein is now the legal manager. Duke Company, Timor, and Tributers, 653 oz.^{114}

HISTORY OF THE DUKE CO'S MINE, TIMOR (By Mr Clarence Smith, Mining Surveyor) This company has been engaged for the last 20 years in working the auriferous alluviums of Lower Chinaman's Flat and portion of the Bet Bet Valley, the latter being also fed by the Alma Lead, which traverses the valley of Timor Creek to its source (a distance of about eight miles), the said Timor Creek having for its tributaries the rich alluvial gold workings of Adelaide Lead, Moonlight, and a number of other gullies, all more or less auriferous. The Duke Company is the only one which has attempted to work the Bet Bet Valley, although there is sufficient ground to employ a dozen other plants with first-class machinery similar to the Duke Company's. The ground at present blocked out on the Bet Bet does not exceed 700 feet in width by about 2,500 feet in length, so that there is plenty of room for mining operations for generations to come. The best wash was struck in the year 1884, when £15,250 was paid in dividends during the year. On referring to the manager's book, I find the yield of gold for the month of March, 1884, to be 1,273 oz 14 dwt from 200 machines, or 6 oz 7 dwt 9 gr to the machine. This was one of the moderately good months; but the gold has fallen off considerably since that time, the yield for the month of June last being only 223 oz 15 dwt for 35 machines, or 6 oz 7 dwt 20 gr to the machine. It will be seen by this that the yield per machine is actually more now than it was in 1884, notwithstanding that the washdirt is about the same thickness as then (from 1 to 2 feet); and it seems to me that if more men were put on the mine would pay better, as the same expense would be incurred for pumping whether 100 men were employed or 400, so that the average cost per miner, or per ounce of gold, would decrease, s the number of miners were increased. The expense for timber and fuel, &c., at present amounts to about £10,000 per annum, and it appears to me that the number of men employed cutting wood is out of all proportion to the number of miners employed below; this question, however, is for the company only to consider. I have no doubt, at the same time, that the falling off in the yields is brought about by the shareholders not responding to the calls, and the general depression in the mining exchange, thereby crippling the hands of the directors as to employing more miners. There are three shafts in use, the first being the pumping shaft, which is 90 feet to the bed-rock, and 360 feet to the bottom of the well. No. 2 shaft, used for winding, about 200 feet to the north of pump shaft, is 350 feet to the working level, and 360 feet to the bottom of well. No. 3 shaft is the one now in general use for winding, and is situated about 1,000 feet north of No. 2. Underground work was stopped during the year 1872 while powerful machinery was being obtained from England. The ground has been blocked out for a distance of 1,500 feet north of No. 3 shaft. The number of men now employed is about 200 all told, including about 100 on wages, tributers, and woodcutters. The principal claims which have paid dividends along the Alma Lead, all of which are now worked out and abandoned, are:-The Golden Gate, south-west of Alma; the Alma Consols, north of Alma; the Seaham Company, Gladstone Company, Queen Company, the New Magnum Bonum, and the Bismarck Companies; all having paid well, four companies having paid very handsome dividends. About five miles of country have been worked by the above seven companies, and smaller intermediate claims. The claims of note along the Chinaman's Flat Lead are the old Magnum Bonum, which was let on tribute, being considered at the time too poor to operate upon with wages men, but subsequently four of the tributers cleared £10,000 each; the Band of Hope and John Bright Companies leading on to the Duke, also paid remarkably well. With such encouragement from the tributary streams, the Duke Company undertook the task of testing the main Bet Bet Valley; some idea of the extent of the work in hand may be gathered from the fact that 2,000 gallons of water have to be discharged per minute to keep the drives in working order. Balance shafts are employed to send down the trucks from the intermediate levels, and they are then conveyed along the main drives by horse power. At No. 1 shaft the pumping machinery consists of one beam engine with 80-inch cylinder, 10-foot stroke, and two sets of 22-inch lifts; the housing is of granite and brick from 3 to 5 feet in thickness. At No. 2 shaft there is one winding engine, 18-inch cylinder, 3-foot stroke; one puddling engine of the same size driving two machines; one battery engine, 14-inch cylinder, 30-inch stroke, and twenty head of stampers; one Tangye engine, 12-inch cylinder and 24-inch stroke. The whole of the above are supplied with steam from six boilers, each 6ft 6in. by 27 feet. At No. 3 shaft there is one winding engine, 18inch cylinder, 36-inch stroke; one puddling engine, 14-inch cylinder, 28-inch stroke, driving three machines; one blowing engine, 12-inch cylinder, 24-inch stroke; one Tangye engine, 12-inch cylinder, 24-inch stroke; one portable engine with circular saw, 10-inch cylinder, 20-inch stroke.

The above engines are supplied with steam from three boilers, 6ft 6in. by 27 feet each, with the exception of the portable engine. The cost of the entire plant is estimated at £25,121. Most of the ground is worked on tribute, that is, so far as the washdirt drives and blocking out are concerned. The company puts in all the prospecting drives, supplies all the material, timber, &c., and keeps the mine free of water; the gold is then divided equally between the company and tributers. There are five tribute parties at work at present, some being worked from No. 3 shaft, and others from balance shafts, worked by water power supplied by the company. Nearly the whole of the inhabitants of the towns of Timor and Bowenvale depend upon the Duke Company's mine for support, and Maryborough also derives some benefits therefrom. Lines of coaches run nearly every hour of the day to and from Maryborough. A powerful plant has also been erected by the Duke No. 1 Company within the last two years, about a mile and a quarter lower down the Bet Bet. Several bores were first put down to discover the deep ground, after which a shaft was sunk, but nothing further has been done to develop the ground for want of capital; in fact, the plant really belongs to the Duke Company, who hold a mortgage on the same. A large amount of money spent in bubble companies in the district has, in my opinion, considerable injured legitimate mining. In conclusion, I have much pleasure in stating that the Duke Company is carried on in a business-like manner, both skill and energy being employed to overcome difficulties which, to some, would appear insurmountable. The task of keep this company afloat appears to be a difficult one, but under the present management, new ground is to be opened out, which, it is expected will repay the shareholders for all former losses. 115

June 1889: MAJORCA SUBDIVISION

The yields from the mines in this subdivision are satisfactory, notwithstanding the serious loss occasioned by the exceptional prevalence of north winds, which affects the purity of the air in the underground workings. The New Kong Meng and Napier Freehold Companies are still giving satisfactory yields, the slight falling-off, as compared with the previous quarter, being attributable to the foul air met with in the deeper portions of the underground workings, necessitating the stoppage of work in these parts for some time. The Chalk's Freehold has also a slight decrease, which is in a measure accounted for by the necessity for pushing on leading drives. The Majorca United Leads are in somewhat better country, though still poor, and they are at present extending their main drive. ¹¹⁶

June 1889: AVOCA DIVISION

Excepting the Working Miners' Company, at Homebush, no mine in this division can claim to have been very successful in its operations during the past quarter. The Golden Stream Company, from which so much had been expected, ceased operations, and generally mining affairs have not a very hopeful aspect. The first part of the quarter was too dry for the successful prosecution of ordinary alluvial mining, and the latter part was attended by great floods, which were also a block to the alluvial miner. ¹¹⁷

Sept. 1889: MARYBOROUGH DIVISION

QUARTZ MINING-In this class of mining there has been considerable activity during the quarter. Ten prospecting claims, situate respectively at Golden Point, Mosquito, Havelock, Chinaman's Flat, Bowenvale, and Maryborough, are taken up and registered. So fare, the prospects obtained from these claims have, on the whole, been satisfactory, and a fair proportion of them will likely prove permanent and payable. A small rush took place recently at Cemetery Hill, Bowenvale, in consequence of two men, named Jones and Ballantine, having struck a reef at that place, at a depth of 10 feet from surface. The reef is 6 inches wide, and shows gold freely, but sufficient stone for a crushing has not yet been raised. A number of claims have been taken up in the neighbourhood, and on the supposed line of reef. At Adelaide Lead, Shaw and party registered a claim on the Cosmopolitan reef, from which good results are expected. This ground was formerly held under a registered certificate by Bullingham and Tonks, as an alluvial claim. These men found a nugget here, weighting several ounces, the gold being solid and waterworn; but when they found a reef of an apparently payable character, they sold advantageously to Shaw and party. No crushing has yet been reported, but the prospects are really good. I may mention that Shaw was the original owner of the famous Shaw's Reef claim at Havelock. He is a very experienced quartz miner. Shaw's Reef Company, Havelock—The mine has been let on tribute to the present level of 400 feet, and for a length of 600 feet north, and 600 feet south of the main shaft.

The two best crushings during the quarter were those of Taylor and party, of the Butts Reef, Maryborough, who got 38 oz from 43 tons of stone, and Lunn and Mottram, of Monte Christo

¹¹⁵ Mining Surveyors' Reports, June 1889

¹¹⁶ Mining Surveyors' Reports, June 1889

Mining Surveyors' Reports, June 1889

claim, Havelock, who got 28 oz from 3 tons of stone. A new reef was discovered during the quarter in the Caledonian Quartz Prospecting claim, situate on the Caledonian Reef, near Leviathan Reef, about 1-1/2 miles from Maryborough. The reef is a new one, bearing one point west of north, with a dip of 9 feet in 40, and was discovered on the surface by mere chance. The discoverers, Messrs Alfred and Thomas Snowden, were passing the locality with a dray, when one of the wheels of the dray turned up a good specimen of quartz showing good gold. The above claim was pegged out and registered on 10th July last, and the reef taken out to a depth of 20 feet, amounting to 13 tons of quartz, which was treated at the Duke Battery, Timor, and gave a yield of 16 oz 10 dwt, or an average of 1 oz 5 dwt per ton. A second shaft has been sunk near the first one to a depth of 40 feet, at which depth the reef has been struck. The owners have about 6 tons at grass from this reef... They obtained £4 2s 6d for their gold, and have divided £8 per week between them since commencing work. There is plenty of new country in the neighbourhood. A man named Wm Dark has a claim south of Snowden's, from which he has got the colour, but he has suspended work for the present, as he expects some assistance from the prospecting board. The reef north of Snowden's has been prospected by a party, but with no satisfactory results. ALLUVIAL MINING-Duke Company, Timor.-The gold from the mine has all been obtained by tribute parties, who work separate blocks on tributes varying from 15 per cent to 50 per cent on the gross yield.... The company's operations are at present confined to reef driving and prospecting at intermediate levels, to secure, if possible, the continuation of the Chinaman's Flat lead. The company is assisted by the tribute parties, who do valuable prospecting work, besides giving aid in the cost of pumping. Duke Company (tributers), Timor, 782 oz.¹¹⁸

Sept. 1889: MAJORCA SUBDIVISION

There is a slight falling off in the yields of gold...which is attributable in the first instance to all underground work having been suspended at the No. 1 Kong Meng shaft, and the abandonment of the Majorca United Company's lease. There are at present no mines of a prospective character at work in this subdivision, operations being confined entirely to the New Kong Meng, Napier Freehold, and Chalk's Freehold mines. 119

Sept. 1889: AVOCA DIVISION (Mr John Bacon, Mining Registrar)

Everything connected with mining in this division is very quiet. In alluvial, the only company employed is the Working Miners' Homebush Company... The ground has been uneven and much disturbed, but the manager hopes, by means of prospecting drives which are being pushed on to the east and west, to get into more settled ground, and obtain better returns. On the various leads in the division there are a number of miners working, abut as they are principally fossicking in ground already worked, they do not get much return for their labour. Quartz mining is almost at a stand-still. Two parties of miners are working on two reefs, but only with windlass and rope, and the difficulty of getting the quartz crushed makes it almost impossible to test the reefs sufficiently. One party, however, is trying to arrange to buy the Monte Christo battery and engine or to get new machinery near their claim; but being only working men without capital, I fear they will not be able to do either. 120

December 1889: MARYBOROUGH DIVISION

On the whole, mining business has generally been quiet, but there is an evident and a laudable desire, on the part of the individual miner, to prospect new ground in the division for the discovery of gold-bearing quartz reefs and alluvial deposits. It is clear, from what has been done in this direction, that the mineral resources of the division are far from being exhausted, and that these will be brought to light and developed in the course of time. QUARTZ MINING—Shaw's Reef Company.—This company has had unusual difficulties to contend with during the quarter. While making preparations to sink the shaft deeper, in consequence of the adjoining creek getting flooded, surface water broke into an old abandoned shaft, and then found its way into the company's workings and filled the shaft with sand and débris. These are now being removed, but it will be the end of January before the shaft is clear and sinking resumed. The higher levels are being worked by tributers, who also will be able to work again by that time. McFarlane's Reef Company—This company has been working at cross-cut in No. 1 shaft for western reef at bottom level, and is now 22 feet in slate formation.

Seven prospecting claims were registered during the quarter. These are situated at Alma, Sweden Gully, Adelaide Lead, Shellback Gully, Golden Point, and Maryborough. The depth of sinking in two of the claims is from the surface, and in the others it ranges from 10 to 44 feet. The reefs discovered are mostly narrow, and the prospects obtained vary from half an ounce to 1-1/2 oz of

¹¹⁸ Mining Surveyors' Reports, September 1889

Mining Surveyors' Reports, September 1889

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gold per load. The following is a statement of the gold obtained during the quarter from the principal quartz mines in the division—Shaw's Reef Company, White Hills, 322 oz; McFarlane's Reef Company, Havelock, 138 oz; Snowden and party, Leviathan Reef, 40 tons, 36 oz; Hughes and party, Chinaman's, 70 tons, 24 oz; Wilson and party, Havelock, 13 tons, 23 oz; Hutchinson and party, Havelock, 12 tons, 26 oz; Jenkins and Lane, Adelaide Lead, 28 tons, 23 oz; Bryant and party, Havelock, 10 tons, 20 oz; Jürgens and party, Golden Point, 28 tons, 19 oz; Dibbin and party, Havelock, 5 tons, 22 oz; Lunn and party, Havelock, 4 tons, 11 oz; Total, 668 oz. LLUVIAL MINING.—Duke Company.—Mr Lauder, the mining manager, informs me that, during the last three months, work has chiefly been confined to reef driving. He says that he expects, during the next quarter, to be very near the wash, and that there is a fair probability of being on payable gold. Gold obtained from the mine during the quarter was 872 oz 14 dwt. ¹²¹

December 1889: MAJORCA SUBDIVISION

New Kong Meng Company.—Blocking and driving on the eastern side of the lead has been carried on during the past quarter, the ground on the whole rather poor. A large amount of money has been expended in prospecting for new leads without any good results. The western lead will be tried at an early date. Napier Freehold Company—Blocking and driving has been continued during the quarter. Chalk's Freehold Company—The operations at this mine have been confined to opening up and blocking on a very wide spread of alluvial wash, with strong indications of improvement. ¹²²

December 1889: AVOCA DIVISION

The Working Miners' Company, at Lower Homebush, is still working, but the mining manager states that the ground has been poor, and they are doing a great deal of prospecting in the hope of picking up the run of rough gold which proved so rich in part of their ground, but at present they have not been successful. They have a great width of deep ground trending north-east with a little fine gold in it, but not enough to pay. The manager hopes to get the rough gold on one side or the other of the deep ground. Individual miners are working on the old leads, but are getting very little gold. 123

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MARYBOROUGH - HISTORICAL NOTES

March 1890:

MARYBOROUGH DIVISION (new reporting format)

The Duke Company has continued energetic prospecting in the Maryborough division, but, although good samples of gold have been obtained, the company has not yet reached the payable lead so long anticipated, and so persistently sought for. The total amount of gold won by the company for the three months is 925 oz 8 dwt. The company are making every effort to bring their operations to a successful issue, and it is to be hoped that the energy displayed, backed up as it is by liberal assistance from the Prospecting Vote, may ultimately result in developing a lead that will be of something more than mere local or individual interest. In quartz mining the most important item recorded was the yield of 400 oz from 32 tons of stone crushed by the tributers of the North Shaw's company's mine. ¹

June 1890:

MARYBOROUGH DIVISION

The event that has attracted more than usual interest in the Maryborough division is the success that has at last attended the energetic mining operations of the Duke Company, at Timor. Not only the company but the district generally is to be congratulated on the discovery of the long sought-for lead—a discovery which, if it prove to be all that is anticipated, must exercise a beneficial influence on the mining industry of the colony, and may, I think, be considered as almost a solitary instance of a grant from the Prospecting vote producing such results as can be termed of national importance. The following extract from the report of the manager will doubtless be found interesting—"The Company has concentrated all its efforts on the eastern portion of the ground. Very promising washdirt has been struck in the eastern reef, at about 250 feet from the surface, which is 100 feet shallower than the deep ground. Two small machines of dirt washed from it produced 15 oz of gold. It is thought that the Chinamen's Flat lead has found its outlet to the north, by being swept on the high eastern reef". Another machine of dirt was washed on the 30th June which gave a return of 35 oz.²

Sept. 1890:

MARYBOROUGH DIVISION

The prospects of miners (quartz and alluvial) in the Maryborough division have greatly improved during the past three months. The following report in connection therewith has been furnished by Mr Beckett, clerk to the Prospecting Board—1—HOWITT'S HILL ALLUVIAL RUSH—It is situated at the head of Emerald Flat and about two miles south of Redbank. There are 15 claims being worked and yielding payable gold; about 40 miners are obtaining wages. The ground is not rich, the best return being 7 dwt to the load; the average is 5 dwt, but as the ground is only 25 feet deep, and dry, it gives wages. About 100 oz of gold has been obtained since it was opened about three months ago. As the flat is wide, the sinking very hard, and the lead narrow, from 20 feet to 100 feet wide, it is developing slowly. 2—THE NEW REEF AT CHINAMAN'S FLAT—This reef is opening up well. Dark and party, the prospectors, have crushed 117 tons for a yield of 120 oz, the lode, 4 feet thick, looking as rich as ever. They have driven 50 feet to the south and 30 feet north; the lode averages 4 feet wide, and as another party, 400 feet further south, have discovered the lode, and quite as rich as the prospectors, it is proved of considerable length. There are six claims to the south of the prospectors and one to the north taken up, and three of the parties are sinking shafts. The position of the reef is half-a-mile south of the Leviathan reef, but not on the same line, being to the westward of it. The discovery is a valuable one, and likely to lead to important results.³

December 1890:

MARYBOROUGH DIVISION

From the alluvial and quartz mines the returns are much in excess of those of the preceding quarter, and the mining prosperity of this division is gradually undergoing a revival. A large number of claims have been secured on the line of the Leviathan reef, situated about two miles from Maryborough. Messrs Barry and Judd and Sharpe and Dark have obtained good yields from this reef during the quarter. A great deal of animation in mining circles has been caused through the Shaw's Reef Company striking payable gold at the 500-ft level. The Duke Company has been voluntarily wound up, and a new company organised under the title of the Grand Duke Company, who will continue the operations of the former company. In the neighbourhood of this claim a large area of ground has been applied for.⁴

Mining Surveyors' Reports, March 1890

Mining Surveyors' Reports, June 1890

Mining Surveyors' Reports, September 1890

⁴ Mining Surveyors' Reports, December 1890

March 1891: MARYBOROUGH DIVISION

In the Maryborough division the Grand Duke Company have produced very good results. A fourth shaft has been sunk in the northern portion of the mine, and a winding and pumping plant is being erected. When the machinery is in full working order a much larger output of gold is anticipated.⁵

June 1891: MARYBOROUGH DIVISION

In alluvial, the Grand Duke Company continues to get fair yields, and the adjoining claims on the Duke line are doing progressive work. In quartz mining, at the claim of Messrs Judd and Barry, on the Great Western line, another reef was struck in the footwall while stoping at the 146-foot level, the average from the crushing being at the rate of 1 oz 5 dwt per ton. Messrs Sharpe and Dark have also been getting good returns on the same line of reef, and all the available ground on the adjoining area has been taken up.⁶

June 1891: MAJORCA DIVISION

A marked improvement has been shown during the quarter in this division. The Napier Freehold and Chalk's Freehold Companies have done a considerable amount of work with a view of further testing the mines, and sinking and driving have been continued with success by the Prince Alfred Co-operative party. A nugget weighing about 52 oz was also discovered by two miners near some old workings, and was sold in Maryborough.⁷

Sept. 1891: MARYBOROUGH DIVISION

In quartz mining another co-operative party on the Great Western Reef, adjoining Judd and Barry's claim, struck the reef, and crushed 90 tons, which yielded 30 dwt of gold to the ton. Laurie and party also struck the same reef, but the stone taken out is not so promising as in the former claim. The whole of this line of reef for a distance of two miles has been pegged out, and parties are engaged in searching for the reef on their respective blocks. A very rich reef has been discovered at Adelaide Lead, and a number of parties are working profitably at this locality. Increased energy has been imparted into quartz-mining operations on account of the discovery of several payable quartz reefs, and there is every indication of the yields from this source being greatly increased in the near future. Mr D. Beckett furnished the following report on quartz reefing at Maryborough—'There is a revival of quartz mining at Maryborough, due in a great measure to the valuable discovery of Messrs Dark and Sharp at the head of Chinaman's Flat, about two miles north-west of Maryborough. This reef, which is supposed to be a continuation of the Leviathan line, was opened in April of last year by assistance received from the Prospecting Vote. The lode was struck at a depth of 84 feet from the surface, and followed to the water-level, 146 feet, where the stone improved. The average width of the reef is 4 feet. Since opening the mine in May 1890, the party has crushed 1,900 tons of quartz for a yield of 21,50 oz of gold. This was obtained by eight men. The claim, 600 feet in length, is held under the mining by-laws. The next one south, held by Judd and party, comprising four shareholders, is equally rich. During the year they have been at work they have crushed 2,244 tons of quartz, yielding 2,600 oz of gold. No. 2 south, Snowdon and party, have lately struck the reef, and obtained from 96 tons a yield of 153 oz of gold. No. 3 south has also found the lode, but has not yet had a crushing. The length of the reef already traced is about 1,200 feet. There are nine leases granted on the line and four others applied for, besides ten claims held under the by-laws. As to the value of the discovery, it may be stated that Dark and Sharp and Judd and party have lately been offered £20,000 for the two claims. 'Another important discovery has been made at Williams' Gully, a tributary of the Adelaide Lead, about six miles south-west of Maryborough. The prospectors (Shaw and party) found the reef at a depth of 30 feet 4 feet wide, yielding over an ounce of gold to the ton of stone. The last crushing yielded 1 oz 4 dwt to the ton. The adjoining claim north, held by Murphy and partners, and known as the Shannon Co's mine, is equally rich, with a large body of stone. During the last few days they unearthed splendid specimens, showing gold freely. No crushing was effected, but there are 50 tons of stone ready to be put through. Bartlett and party, south of the prospectors, have also struck the lode. The line is taken up for a considerable distance, and promises to be a valuable and extensive field. 'At Lexton, in the Avoca Division, a new reef has been discovered by Kerslake Brothers, who are raising payable stone, but, owing to the distance from crushing machinery, none has been crushed. A number of claims are taken up on the line, and two leases applied for.'8

Sept. 1891: MAJORCA DIVISION

Mining Surveyors' Reports, March 1891

Mining Surveyors' Reports, June 1891

Mining Surveyors' Reports, June 1891

⁸ Mining Surveyors' Reports, September 1891

Operations at the Napier Freehold Company's mine have been chiefly confined to the putting down of a series of surface bores in the western part of the claim. The Chalk's Freehold Company have done a considerable amount of work during the quarter in extending lower level drives in the bed rock, also putting up bores and inserting tubing for draining the wash. The quarter's yield shows that 2,953 oz of gold was raised, the whole of which was the result of alluvial operations.⁹

Sept. 1891: AVOCA DIVISION

Prospecting drives have been carried on at the north end of the Working Miners' Company's mine through a very extensive field of wash, but the prospects have not been altogether satisfactory, although an improvement is expected as the work proceeds. A dividend of 6d per share was paid by this company during the quarter. The only other work being done in alluvial workings is by fossickers, who meet with very indifferent returns. 10

1899: THE MAJORCA AND CARISBROOK LEADS

On the western side of the Victorian Gold Estates, with an intervening gentle ridge of Silurian between the two channels, is the Majorca-Carisbrook lead. The Majorca Lead has its source at Daisy Hill or Talbot diggings, from whence it flows slightly north-east, picking up side-washes or tributaries in its course until at the Kong Meng mine, near Majorca, it forms an imposing stream 1000 to 1200 in width, and here water-difficulties were first encountered. The early struggles of this company are well-known, an how the gradual concentration of the shallower washes into the deep channel improved its quality to such an extent that the next 90 chains of the lead produced gold to the value of over £650,000 and paid about £210,000 in dividends and royalty. The lead swings east from the Napier Freehold into Chalk's Freehold and when being worked ran poor, but on crossing a belt of quartz veins again improved and yielded fair profits. It then turned north, and has been worked with varying success through the Chalk's No. 1 Co property to the southern boundary of Chalk's No. 3 Consolidated Co, where it is now being successfully opened, and it is here joined by an important tributary, the Carisbrook lead. This lead was traced from the surface of the Silurian to the south-west, and was formed by the degradation of the Blucher's and Mosquito lines of reefs. It proved exceptionally rich from its source and through the Goldbrook and Carisbrook United mines, but the run of gold being traced by the latter under private property, in the centre of the town, work was abandoned at that point. The lead, after having made a snake-like bend almost describing the letter S, was again picked up by the Chalk's Junction Co. This company has had an exceedingly successful career, having returned to shareholders £25,000 on an outlay of £5000, and has apparently a good lease of life yet before it. The lead was traced to the boundary of Chalk's No. 3 Consolidated, and by that company worked to its point of junction with the Majorca lead. There, as is usual, the wash was somewhat scattered, but the present workings reveal a well-defined run of gold, the width of which has not yet been determined. An instance of the uncertainties of mining is shown by the workings of the Chalk's No. 3 Consolidated. The adjoining company (Chalk's No. 1) had taken out all the known payable ground and a meeting of shareholders was called to wind up the affairs of the company. An effort was made to have a prospecting drive put in to the east and test that slope of the lead, but it was defeated, and an instruction given to draw the pumps out of the shaft. Meanwhile the drives of Chalk's No. 3 Consolidated were drawing nearer, and demonstrating beyond doubt that a run of ground did exist to the east of any known workings in the No. 1 mine, and this became so clear that the order for withdrawing the pumps was countermanded, shares rose from a mere quotation to 2s 6d, and there is an excellent chance of this company having a long stretch of payable ground on the eastern terraces. The trend of the Majorca-Carisbrook lead northwards through the property of the Chalk's No. 3 Consolidated Co has been determined by drives and bores, and also the existence of tributary leads entering the main channel, both from the east and the west. The former is a channel yet untried, and nothing is known of it save that it carries a strong body of wash with gold, and, as its course is through a highly auriferous belt of country, it is reasonable to assume that it will contain payable gold. The western tributary, known as the Racecourse lead, has been tested in a small way, and carries a heavy black wash, heavily charged with pyrites and coarse gold. Finding its property too large to handle with one company, the Chalk's No. 3 Consolidated decided to float the northern portion of the mine, (about 1200 acres), on the London market. This will be known as the 'Victorian Moolort Gold Estates,' and as there is a fine shaft sunk the required depth, and a magnificent pumping plant erected, there should not be much trouble in opening the lead here. Sweeping north-east, the lead enters the New Havilah, thence through the Charlotte Plains Proprietary to the Junction Deep Leads of Victoria, to probably join the main trunk lead to the north-east of this property...

CHINAMAN'S FLAT LEAD

A low range of Silurian hills divides the Maryborough and Carisbrook leads, and through this range a well defined line of lode strikes, and contains the Mosquito, Blucher's, Flagstaff, and

⁹ Mining Surveyors' Reports, September 1891

Mining Surveyors' Reports, September 1891

Shaw's reefs, which have yielded handsome returns, and this has undoubtedly been the source of much of the alluvial richness of the district. To the west of the town of Maryborough we find the great 'master' lode of the field, which outcrops boldly in Mariner's Reef and Bristol Hill, and has been worked with great success at Leviathan Reef. From this lode springs the famous Chinaman's Flat lead, gold having been traced from the grass roots to where it is now being mined by the North Duke Co. It trends, roughly speaking, north, with some sinuosities, for about five miles, and then swings north-east to join the main trunk lead, apparently in the neighbourhood of Eddington. This channel of wash proved highly payable in the old Duke Co.'s lease, when very deep ground was found and the water became exceedingly strong. This deep ground, which yielded well and carried wide stretches of wash, for a long time hindered the development of the lead, but by boring further along the channel it was clearly proved that it was a crabhole, and that the bedrock was resuming its normal level, and led to the conclusion that the deep ground was the result of a junction of two or more leads. As was expected the Alma lead, a rich tributary, joined the Chinaman's Flat lead at this point, the deep ground being the result of the scour of the meeting of the two streams. In its northerly flow, long stretches of rich ground have been obtained, but there has been a very strong flow of water, with occasional rich patches of gold, from the western side of the Bet Bet Valley, and this has led to much speculation as to the probable entrance of the Homebush and Madame Hopkins leads. The Bet Bet Valley is so geologically confined by the granite hills to the west and by the Silurian ranges immediately adjoining that the outlet for such a large system as the Homebush-Madame Hopkins lead is exceedingly narrow, and has not yet been satisfactorily proved. The great flow of water in the Duke mine warrants the assumption that an additional channel draining a large area has joined the main channel at this point. Boring in the Bet Bet Valley to the south-west proved the existence of well-defined channels of wash, carrying gold, for many miles, and the future may prove that this is the connection between the Chinaman's Flat and Homebush channels. The lead is now being worked by the North Duke Company in its north-easterly extension, and will shortly be opened by the Duke United Company. The present operations point to a strong flow of water having come in from the south-west or the Bet Bet Valley, and swept the original channel of washdirt towards the eastern slope of the lead. The North Duke is working a western run of wash to the south-west, but finds there is a gradual concentration of the golden dirt towards the eastern reef, and this augurs well for the future of the Duke United. This company, after having much difficulty with its shaft, is now driving towards the gutter, and should in a very short time be in a position to test the washdirt. Bores have clearly defined the course of the lead almost to its confluence with the Maryborough main lead, and further on to the [illegible] of the Burnt Creek lead, the whole of the territory to the township of Eddington having been secured.

MARYBOROUGH MAIN LEAD

The Maryborough main lead takes its origin from the same source as the Chinaman's Flat lead, but flows to the north-east, a low range of Silurian hills dividing the two deep channels. It was originally known as Blackman's Lead, and returned immense quantities of gold in the early days, until at Havelock, some six miles from Maryborough, deep ground and water were met. The result of Government and private boring proved the lead to extend in a well-defined channel to its junction with the Timor (Chinaman's Flat) lead, and the further development of its richness is now being carried on by the Main Leads Company, which will shortly be in a position to test the washdirt. A serviceable plant has been erected, and the completion of the shaft will shortly be effected. The prospects are exceptionally good, as the lead is bounded on either side by low Silurian ranges, which have been, and are being, successfully exploited for quartz lodes, and the effects of the denudation of these must have added to the richness of the main channel.

HOMEBUSH LEAD.

Some miles west of Maryborough we reach the Homebush Lead, and, closely adjoining, the Madame Hopkins line of country. The Homebush Lead has been worked from the shallow ground, until in the Working Miners' Homebush Company it dipped underfoot, and further development was suspended until a new shaft was sunk. Four large companies have worked 9900 feet of the lead for a total gold yield of about 102,500 oz, valued at £410,000. The quantity of ground worked was 58,300 fathoms, yielding an average of 1 oz 15 dwt 4 gr per fathom. The capital called up by the companies was £52,000, and the amount paid in dividends £129,500. This lead is remarkable amongst deep alluvial channels in Victoria in this respect—it has carried from first to last a heavy run of nuggetty gold, pieces 50 oz to 100 oz having been frequently met, the general sample of the gold being of an exceptionally coarse character. When the washdirt dipped away in the last workings a blind shaft was sunk to test the dirt, and 11 dwt of rough gold obtained from a single bucket of dirt, showing that the lead maintains its auriferous character.

This property is now held by a strong English and colonial syndicate, and boring is in progress to prove the outlet of the lead, about which there has been much discussion, but the results of the present boring and the general features of the Bet Bet Valley point conclusively to this being the outlet of the lead. It was strongly contended at one time that the lead flowed to the west of the Silurian ranges, immediately to the north of the property, near Natte Yallock, and joined the main Avoca lead running down the Avoca Valley, but the boring done by the syndicate, and the Government bores in the Bet Bet Valley, have shown that there is ground sufficient deep to allow of the Homebush lead running in that direction, and the water encountered in the western workings of the Grand Duke and North Duke mines points to the influx of a large feeder at this

THE MADAME HOPKINS LEAD

Immediately to the north-east of the Working Miners' there is a large holding of 4300 acres, which is in course of flotation on the London market, Mr A.E. Langford having taken it home with that object in view; and south of this property is the New Madame Hopkins, an English and colonial-owned company, from which much is expected. Through this leasehold flows an almost untried deep lead, extending from Mount Mitchell, Caralulup, and Lillicur. It has been thoroughly tested by diamond-drill bores, and the results have been most satisfactory. The New Madame Hopkins has an excellent main shaft on the eastern side of the most northerly line of bores, and a splendid plant is now in course of erection. A branch line from the Maryborough and Avoca railway, which runs through the property, is being constructed for facilitating this work. By the bores a channel over 1500 feet in width was proved...

VALUE OF GOLD YIELDS

The following gives the records, so far as they have been preserved, of the value of gold returns, stated in figures of value, from the deep alluvial mines in the Maryborough division:

MARYBOROUGH, CARISBROOK, ETC., LEADS

	r
Perseverance	7,433
Rip Van Winkle	7,527
Brunswick	7,929
Royal Standard	10,660
South Greenock	12,841
Mount Greenock Estate	16,400
Nicholls' Freehold	26,650
Robert Nichol	2,500
Darling	16,400
Calley's Tunnel	24,600
German Tunnel	32,800
Oriental	32,800
Perseverance	36,900
Talbot lease	41,000
Black Bull	41,000
All Nations	61,500
Hoffnung	102,500
Union	83,992
Sadowa	205,565
New Kong Meng	377,321
Napier Freehold	278,746
Chalk's Freehold	216,352
Chalk's No. 1	134,426
Chalk's No. 3 Consolidated	27,431
Chalk's Junction	60,000
Carisbrook United	33,870
Woolbrook	10,832
Goldbrook	52,730
TOTAL	£1,962,705

HOMEBUSH LEAD

Working Miners')

Working Miners' United) Working Miners' Homebush) £410,000

ALMA AND CHINAMAN'S FLAT LEADS	
Alma Consols	£118,422
Seaham	121,433
New Seaham	1,389
Gladstone	57,585
Queen	43,042
New Magnum Bonum	51,785
Bismarck	117,083
Try Again)	
South Duke)	2,247
Old Magnum Bonum	25,615
John Bright	69,013
Band of Hope	128,319
Mammoth)	
Duchess of Timor Tribute)	
Old Duke)	
Duke and Timor)	495,752
Duke	284,724
Grand Duke	105,345
Young Duke	4,890
Central Duke	7,915
North Duke	130,000
TOTAL	£1,764,559
GRAND TOTAL	£4,137,284 ¹¹

REEF SYSTEMS

The reef systems of the Maryborough district may be divided into two main belts, the great backbone of the district being the Mariner's Reef, Bristol Hill, and Leviathan lines, from which spring the Chinaman's Flat and Timor alluvial systems. East of the town of Maryborough is a well-defined belt of quartz lodes, constituting the minor zone of the district. The enormous returns obtained from the shallow workings in the early days gave them celebrity all over the colony, but the results since have not confirmed it. The shoots of gold in most cases proved to be short, and the lodes narrow and irregular on the minor or eastern zone, but on the western and main belt of the district the gold has proved to carry down in regular and large bodies.

THE WESTERN BELT

This line begins at Mariner's Reef, outcropping in a gentle rise south of the gown of Maryborough, thence running to the west of the town, developing an outcrop at Bristol Hill, and after that dipping until at the Leviathan mine, the lode is found 80 feet below the surface, outcropping in the alluvium. The Mariner's Reef has been worked from time to time since 1857, the principal workings being from the bold outcrop on the south along the lode to the north. When first opened the line was worked in 24-feet block claims, and the shoot ran from No. 10 at the blow to the No. 1 shaft, which was sunk to a depth of 627 feet, and the golden stone traced 200 feet to the north of the shaft. The ore shoot dipped north, pitching from the surface at the outcrop in the south end to the bottom of the No. 1 shaft at the north, and the yields varied from 1 oz to 80 oz per ton. The lode varied in width from 20 inches to 30 feet, and when last worked at the lower levels proved from 8 feet to 14 feet through, its quality being poorer than where previously worked. The stone was of a nice nature, blue and white in appearance, and highly charged with pyrites, which were found to contain 4 oz to the ton. The hill is held under lease, which covers two other lines, known as Soldier's Hill and Cole's reefs, which have both proved highly remunerative in the past. Attempts have been made to raise capital, but without success. It is proposed to extend the drive south at the 627-feet level, to pick up the shoot of gold. The following are the yields from below the 360-feet level, the results from the upper levels, which are stated to be extremely rich, being unobtainable: No. 1 claim, 340 tons yielded 1727 oz; No. 2 claim, 161 tons yielded 396 oz; No.s 3, 4, 5, and 6 claims, 124 tons yielded 552 oz. The following are taken from Brough Smythe's 'Goldfields of Victoria'— 600-feet level, 176 tons yielded 704 oz; 570-590-feet level, 65 tons yielded 221 oz; 550-600-feet level, 83 tons yielded 429 oz; 600-feet level, 30 tons yielded 251 oz. Total amount, as given by the mining surveyor—3340 tons, for a yield of 33,445 oz gold, an average of 10 oz per ton. The next outcrop of the lode is at Bristol Hill, close to Maryborough. Here the lode was worked with excellent results, some exceptionally rich patches being obtained. The reef has been mined to a depth of 620 feet, but the quality fell off and work was abandoned. It was last exploited by Messrs Anderson Bros., who spent a considerable sum testing the mine. The results indicate that at deeper levels good stone will be encountered, the indications where work was left off being most favourable.

THE LEVIATHAN GROUP

Following the line above described in its northerly extension we pass the Arrah-na-Pogue mine (the returns from this portion of the line having been very rich), and going to the north reach the well-known Leviathan group of mines. The Leviathan line was worked in the early days, and yielded gold to the value of half a million, obtained from three or four mines adjoining each other. Immediately to the west was discovered in 1890 a lode which since proved to be a continuation of the great line of the Maryborough district, and has given handsome returns. The lode was discovered through the aid given by the Government Prospecting Board. Two prospectors obtained a small grant, which enabled them to sink a shaft, and the lode was encountered; since then, gold to the value of £113,000 has been obtained from the reef. All ground in the neighbourhood was taken up by co-operative parties, and the reef yielded well. At a depth of 350 feet, finding the water too strong for the available appliances, a disagreement occurred between parties as to drainage costs, and the result was the amalgamation of all the mines, forming a leasehold now known as the Leviathan United Company, with an area of 153 acres, and a length along the line of lode of 5,750 feet. The result of the co-operative parties' operations is as follows: Sharp and Barry, 38,000 tons yielded 22,992 oz; Snowden's, 11,000 tons yielded 5,260 oz. The lode known as the Great Western has a strike of north 29 deg. west, an easy underlay west, and the shoots of payable stone pitch south. Its size varies from 3 to 5 feet, and in places up to 15 feet in width. The stone is kindly in appearance, and the gold well distributed through the body of it. It has been worked in places to a depth of 355 feet, and maintains its character. The payable shoot has been sufficiently developed to prove that the lode is a 'master' one. The Leviathan United property has been sent to London for flotation and in a few months should be in full working order. We know of no other venture possessing such exceptional potentialities, and predict a good future for shareholders. Again going northward, we find the same line of lode outcropping at the March Reef, close to the North Duke Co's mine (alluvial. Here the reef was worked for some time with success, and now remains undeveloped through local indifference to quartz mining. A further extension of the 'master' line is exposed at the Windmill Reef, between Timor and Dunolly. Here the lode is proved to be between 4 and 5 feet wide, and is of low-grade, but shows an improvement in depth. The Windmill Reef Co. has erected a neat, serviceable plant, including a 10-head battery of latest make, quite suitable to the present requirements of the mine. From here the extension of this great line has not been connected, but it should prove to connect with the Queen's Birthday line at Goldsborough, where phenomenal yields were obtained. Further north is the township of Moliagul.

THE EASTERN BELT

The Eastern Belt, as the minor line of quartz in the district is styled, lies about two miles east of the town of Maryborough. Blucher's Reef was opened in 1857 by Mr C. Von Malesky, and was originally worked by parties of four and six men, holding claims of about 200 feet in length along the line of lode. The water level was reached at 186 feet, and to that depth the stone was exceptionally good, returning as much as 50 oz to the ton. The claims fell into the hands of Messrs Williams, two local mining men, and the reef was operated by them to a depth of 440 ft, at great disadvantage on account of the mine being worked on the lode, the underlay of which is about 1 in 3. The present main shaft, 11 feet x 4 feet, is situate about 400 feet to the west of the surface line, and if continued down should cut the reef at a depth of 1000 feet. It was commenced over 25 years ago, when it was sunk to a depth of about 100 ft. It then stood for a considerable time, until the Great Extended Quartz Mining Co. was floated, Messrs E. Morey, Bailey, and Edwards, of Ballarat, being interested. Winding, pumping, and crushing machinery was erected, and the main shaft sunk to 450 feet. The company suspended operations, and let the mine on tribute, but with no good result, the tributers to having the capital required to sink the shaft and crosscut to the reef at a lower level. Subsequent companies carried the shaft down and prospected the reef at the 720-ft level, but with poor results. The country around this spot very closely resembles the formation in the South German Reef mine at Maldon, the walls being of indurated slates and sandstones, and the ore containing large quantities of pyrites. Since the cessation of work a private cyanide plant has successfully operated on the tailings. At the lowest level the lode was small and highly mineralised, but proved to carry considerable quantities of concentrates. The mine was abandoned at an interesting stage owing to the shareholders failing to respond to calls to continue shaft-sinking, although improved country had been met with in the last 20 feet sunk. To the north the line was worked by the Flagstaff Reef Co, and yielded from 1 oz to 7 oz to the ton. Continuation northwards brings us to the famous Shaw's Reef. This reef was discovered in the alluvial wash by Mr William Shaw, a well-known miner in this district, and after a number of sensational crushings, some of the quartz being literally held together with strings of gold, the property was sold to Mr B.J Fink and floated into a no-liability company, which declared in dividends £18,000. Further ahead are the McFarlane's and other reefs, which have yielded well but have not been tested to any depth. 12

Nov/Dec 1899: REPORT ON AVOCA MINING DISTRICT (By H.S. Whitelaw)

This district was long ago condemned by reefers. There is no reason whatever to condemn the field, unless it is that a field can be said to have been well prospected, when the average depth of the shafts put down is under 100 feet from the surface. As soon as the yields showing a fallingoff, which happened generally at about 80 feet from the surface, the reef was abandoned, and a fresh one sought. There were plenty of them to be found, especially in the Pyrenees Ranges, that would go an ounce to the ton, and it was far easier and more profitable to work from the surface down through soft country for an ounce to the ton than to work at a depth in hard country for half the amount of gold. Barnes' reef, 1-1/2 miles south from Percydale, was worked to a depth of 300 feet, and that is by many feet the greatest depth attained anywhere in the district. Barnes' Reef is the only reef in the Pyrenees worked below water level. Until a shaft has been put down 500 or 600 feet from the surface, and then opened out on the reef, the field cannot be said to have had a fair trial. Comparatively speaking, the ground has only been scratched. The wash in the leads [in the parish of Glenmona] is composed chiefly of ironstone, and a majority of the reefs that have paid anything like handsomely had a gossan capping. A good sample of an ironstone reef was Ward's; one lump of gold taken from this reef weighed 145 oz, and in the Fiddler's Creek lead, immediately below the reef, a 5-lb nugget was found.

HALL'S REEF (DYKE).

Discovered and worked 30 years ago by a party of sailors, with good results. What is now known as Hall's Reef is a slate formation of a peculiar green colour; through it are disseminated grains of oxidised iron ore. Gold in this rock was discovered by Mr Jno. Hall, of Percydale, about three years ago. The gold is exceptionally fine, but nevertheless heavy. Prospects from parts of the claim have averaged as high as 4 ox to the ton, but the stone, of course, was picked. Taken altogether it is estimated to yield a trifle under 10 dwts to the ton, which would pay handsomely. Leases have been taken up and granted north and south of Hall's.

LUCKS ALL REEF.

On the same line as Hall's reef. The first 1,000 tons taken from this reef averaged 1 oz to the ton. At 60 feet from the surface the stone yielded only 5 dwts to the ton, and at 70 feet the claim was abandoned.

DAVIS' REEF.

On Hall's line. The quartz only was worked to a depth of 50 feet. The yields averaged from 6 dwts to 1 oz to the ton, which would not more than pay expenses; the reef being on top of Donkey Hill, 800 feet above the township.

FIDDLER'S REEF.

First opened about 30 years ago by Barnes and party. For 30 feet from the surface it averaged over 4 oz to the ton. At that depth the ironstone gave place to quartz, containing a large amount of iron pyrites and galena, and traces of copper and antimony. At 100 feet from the surface the reef was abandoned, after working six or seven years. Mr Copeland was the next to take it up. He sunk a new shaft 150 feet deep, and struck the reef. Machinery requisite for treating the peculiar class of ore was erected on the ground, and the reef worked another four or five years with barely payable results. The last crushing yielded 4 dwts to the ton. Just before abandoning the reef Mr Copeland started to sink the shaft a further 50 feet, but before he had got down 10 feet a slab of rock was met with that wouldn't shoot.

PERSEVERANCE REEF.

To work this reef, which is an extension north of Fiddler's reef, a tunnel was driven 500 feet into the hill to intersect it. The company worked the reef for 3 years. The tunnel was abandoned owing to the reef pinching thinner and poorer.

WARD'S REEF.

East of Fiddler's reef a few chains; was only 4 inches thick at the surface, being all ironstone and gold. It was first worked over 25 years ago. The first month's work gave Ward and his three mates £182 apiece. The gold was all in one patch, one piece before being smelted weighing 145 oz. This piece was shown in Avoca, the charge to see it being 6d a head, the proceeds to go to the hospital; something like £5 was realised. The reef was only worked to a depth of 30 feet.

WEST OF ENGLAND REEF.

First called Hancock's Reef. Situate south 40 chains from Percydale. The first 12 months the reef... averaged 2-1/2 oz to the ton. At 50 feet, when yielding 1 oz to the ton, it was sold to Copeland and Co., who worked it nearly another 50 feet. The stone gradually got poorer and harder. The last crushing yielded 4 dwts to the ton.

BULLOCKY REEF.

A beautiful looking reef of laminated quart 12 inches wide. It was opened up about the same time as the West of England, that is, about 15 years ago, and worked with varying results to a depth of 70 feet from the surface. In the higher levels 200 tons of stone yielded 500 oz of gold, but after 50 feet was reached the stone got very poor.

UNION JACK REEF.

A few chains east of Luck's All Reef. The shaft was sunk 100 feet, and there was a large amount of water to contend with. For about three years the returns averaged over an ounce to the ton. The company had a good pumping plant, and a 12-head battery on the ground. Heavy water compelled the shaft to be shut down.

BARNES' REEF.

The deepest shaft in the district was put down on this reef about 25 years ago, the greatest depth attained being 300 feet. For nearly four years the stone averaged 2 oz of gold per ton, but after that, and a depth of 200 feet had been reached, each crushing was poorer than the one before, till at about 300 feet the reef wouldn't pay. There was a very large amount of galena all through the stone below 100 feet from the surface.

COMPENSATION REEF.

On the north boundary of the parish east from Hall's line. The reef, which was about 12 inches wide, was worked to a depth of 30 feet, and yielded from 6 dwts to 1 oz to the ton. Had there been a battery on the ground, or anywhere near at hand, no doubt more work would have been done. The stone had to be carted 4 miles to e crushed.

DARLING REEF.

West a few chains of the Compensation reef; was worked to 70 feet from the surface. Yields varying from 1/2 oz to 1-1/2 oz to ton. Like the Compensation Reef stone it had to be carted too far to be crushed.

HANNAN'S REEF

Between Darling reef and Honeycomb reef on the north boundary of the parish. The shaft was abandoned at a depth of 70 feet. Some stone near the surface averaged over 1 ounce to the ton; anything under that would not pay, for the same reason that the Darling reef would not pay, the want of a battery.

HONEYCOMB REEF.

On Hall's line on the north boundary of the parish. The reef was called Honeycomb from its peculiar vesicular appearance. The shaft was 150 feet deep, and the stone all through averaged 5 dwts to the ton till just before it was abandoned, when it would only give 1 dwt per load.

POVERTY REEF.

700 loads crushed, averaged 3 dwts per load. Depth, 30 feet.

BANNISTER'S REEF.

Was worked to a depth of about 30 feet. Average yield, 3 dwts per ton.

HANCOCK'S REEF.

Worked by Hancock Brothers eight or nine years ago to a depth of about 130 feet. Some crushings yielded as high as 1-1/2 ounces to the ton, but after 100 feet was reached the stone became more and more mineralised, galena predominated, and the gold was lost.

FIDDLER'S CREEK, OR PERCYDALE LEAD.

In the shallow workings this lead was called 'Fiddler's Creek' lead after some old fiddler, and after the lead passes Percydale it was given the name of 'Percydale Lead'. From beginning to finish, or rather to where it was last worked, the lead was patchy. On an average there were about 4 feet of washdirt, but under the main road of Percydale there were 15 feet of dirt. Twelve Chinamen got into this dirt, and, after working a few months, they all went home to China. It was never ascertained what they got exactly, but Chinamen do not go home on nothing. The gold all along the lead was of excellent quality, and coarse. The largest nugget found was slightly over 5 lbs weight. Several 10-oz and 20-oz lumps were found. A shaft... was sunk a few months ago below where the lead was last worked. After a deal of trouble with the water the shaft bottomed on about three pennyworth of gold, and then was left; no driving was done. The wash all through would average 4 dwts per load.

NUMBER TWO LEAD.—Sinking 4 feet to 100 feet. Washdirt about 2 feet thick, would average 4 dwts to the load. About two months ago, Rodwell and Sons bottomed a shaft on 3 dwts of gold, which caused a rush to the place. Several holes were bottomed, but were not thought good enough, and Mr Rodwell has the lead to himself. He informs me that he is making a bit above wages. The lead is worked for about 2 miles to where it ran into the water. Nuggets of every size up to 10 ounces were common, but the lead was never extraordinarily rich.

NEW NUMBER TWO LEAD.

South From No. 2 proper. It was essentially a wages lead, although good nuggets were occasionally found would average 3 dwts per load. Ten or twelve men are making wages on different parts of the lead.

TOWNSHIP REEF.

The reef known as the Township or Hogg's reef is situated to the east of the township of Avoca, a distance of 20 chains. It was opened up in 1856 by a shoemaker named Hogg, who obtained as much as 4 ounces of gold to the ton from the stone. Crushings averaged 3 ounces to the ton, down to a depth of between 60 and 70 feet. From this depth the stone got poorer and poorer, and at a depth of 80 feet was abandoned. Since then it has been taken up by several parties, none of which could make it pay. Meanwhile, scores of shafts were sunk north and south of the prospecting claim, none of which proved remunerative. This line of reef is now abandoned. VALE'S REEF.

Situate between Avoca and Lower Homebush, three-quarters of a mile from the celebrated Working Miners' claim. it was discovered in the year 1855. The hill in which it occurs contains four separate and well-defined lodes, viz., Vale's reef, Eastern reef, Western reef, and Yankee Bill's reef. In 1857 machinery was placed on the ground, but the stone got poorer and poorer each successive crushing, until the claim was abandoned in 1859, the shaft then being 210 feet from the surface. It remained in that state until the end of 1878, when it was taken up by a fresh company, who sunk the shaft a further depth of 80 feet. After working for eighteen months the company could not make it pay, the highest crushing being 7-/12 dwts to the ton. Since then it has been leased by several parties, who held it till they were compelled by the Mining Department to relinquish it, owing to non-compliance with the labour covenants. FRYING-PAN REEF.

A southern extension of Vale's, probably. It was discovered about the same time as Vale's by four Germans who, it is said, obtained from 3 to 4 ounces to the ton for about four years. When the Ararat rush broke out, the Germans left for Ararat and, it is believed, died there. The reef was not touched till a few months ago, when a prospector of Homebush went down the shaft and caused a stir in Avoca by fetching up a bucketful of specimens of nice laminated stone studded with coarse gold, and estimated to yield somewhere about 7 ounces to the ton. Unfortunately, there were only a couple of hundredweights of stone there, which had been left for safety's sake apparently. However, McEwan and Co. cleaned out and sunk the shaft to a depth of 150 feet. McEwan was the successful tenderer for the sinking of the Working Miners' new shaft a month or so ago; as a consequence the Frying-pan is abandoned.

ALLAN'S REEF.

About three miles south of Avoca township. The reef was discovered about ten years ago, by the man whom it was named after, and worked by him to a few feet below water level (120 feet). Ten pennyweights to the ton would more than pay, but good pumping machinery is necessary to deal with the water. The stone is perfectly white, and very soft. Mr Allan says he lives in hope of one day starting the old reef again, as he is assured that it will pay below water level.

MONTE CHRISTO REEF.

One mile south from Avoca township. Although only lately worked, the yields given me are very contradictory. At and near the surface, the reef averaged about 1-1/2 oz to the ton. Below 50 feet most of the gold was in the iron pyrites, which occurs abundantly in pockets in the reef at 100 feet, at which depth the reef was abandoned. The pyrites would yield 1 oz to the ton, which would only just pay for treatment. There is 10-head battery on the ground.

BUNG BONG REEF.

From 4 to 6 feet in width. Some years ago a patch of 60 oz was taken from the reef, and several other smaller but good patches were taken from the surface at different places along the line. Nothing payable has ever been got below 50 feet. The reef is still being worked, by a foreigner, at about 30 feet from the surface. The stone that he is getting out averages 4 dwts per ton.

AVOCA LEAD.

Worked for 4-1/2 miles. In the shallow sinking the dirt was marvellously rich, 1-lb nuggets being expected in every claim. Ten and 12-lb nuggets were of common occurrence. The last claim worked on the lead was the Golden Stream, which the Avoca people contend should still be working. The shaft was shut down about five years ago, either through mismanagement or the influx of water, or both, but not because the gold had run out, as it is said the last machine washed contained 10 oz. Most of the machinery is still on the ground, rusting and rotting. The pumping plant was an exceptionally fine one. There were two 21-in. and one 18-in. lifts in the shaft. Farther up the lead, about three-quarters of a mile, the Morning Star is working. The shaft is down 90 feet. Excellent returns have been got for the last two months, and it looks like a paying concern for some time to come.

LAMPLOUGH LEAD.

First rush to the lead in 1859. It was worked for a distance of nearly 3 miles to where it ran into the water and was abandoned. There are a few old fossickers still on the lead, and they say they are making wages. The richest part of the lead was the patch known as the Prince of Wales patch, just about the junction of the New Avoca lead. The patch occurred in an elbow in the lead, and the machines averaged 45 oz. The peculiarity of the gold was its colour; it was as black as soot. Some beautiful specimens of quartz and gold combined were obtained in the lead. Up to the very last this lead paid well, but after the sinking was 70 feet the water proved too much for the men, and the lead has been abandoned, with the exception of the few fossickers mentioned. The different miners that I have seen that worked on the lead in the good days say that there is nothing surer than that the Lamplough lead would pay if it were only drained. The Avoca Progress Committee made an attempt to drain the lead, but it was a very feeble attempt. They obtained £300 from the Government on the £1 for £1 principle, and started to sink a shaft in the old workings. When they gave it up the shaft was not as deep as some of the shafts the men had put down to work the lead.

HOMEBUSH LEAD.

Worked for a distance of 7 miles. The last claim working was the Working Miners' United, which suspended operations in order to sink a new shaft. The new company is the Working Miners' Homebush. The shaft is already down through the basalt, of which there is 61 feet, and shortly the company will take over the shaft from the contractors and sink it to the bottom, with cylinders, a total depth of 278 feet. The dimensions of the shaft are 23 feet by 18 feet. The Homebush country is recognised by miners as the most difficult and dangerous to work in the colony, owing to the frequent bursts of sand and water. The old Working Miners' shaft was sunk by divers at a cost of nearly £60,000. The gold in the lead is all in big lumps, and an immense amount must have been taken out. The old company paid £34,000 in dividends. In the shallow workings the ground has been turned over and over again, and is still being worked.

FRYINGPAN LEAD.

Has been, and is still, a good one. At present there are over 100 men working on it, all making good wages. The sinking is about 60 feet, and there are 2 feet of washdirt. The gold is coarse, and ounce specks are being found every week. A shaft is being put down just on the north parish of Glenmona, and no doubt a lot of gold will be got. This shaft is the farthest the lead has been worked north.

IRONBARK LEAD.

The Ironbark rush took place about fifteen months ago, men coming from all over the colonies to it. The lead was wide and short, and the rush did not last long, although a big amount of gold was got during the six months it was worked. The lead runs under the basalt to enrich the Madame Hopkins Lead. The basalt is pegged out in big leases.

LINGER-AND-DIE LEAD.

The Linger-and-Die was never remarkably rich like the other leads, and the gold was very fine flour gold, almost too fine to be saved. Another thing against the lead was the 15 feet of cement, which makes the sinking very hard. The cement has been proved to contain gold, but not in payable quantities.

NEW AVOCA LEAD.

Fossickers can still make tucker on this lead, but no more. Several large nuggets were found years ago when the Lamplough was working, but it was only a wages led all through. ¹³

1903: MARYBOROUGH

Within the boundaries of my portion of the Maryborough gold-field quartz mining is, with one exception, confined to working small tonnage reefs, by a few co-operative parties, the majority of which get their stone crushed at the local public crushing batteries. The Maryborough Leviathan mine is situated at the extreme source of Chinaman's Flat lead, which was one of the two rich tributaries that fed the present Duke United lead system. The company holds about 108 acres under lease, embracing nearly 1 mile on the line of reef. Active work, including sinking to greater depth, has been carried on during the year. The stone milled aggregated 20,513 tons, yielding 6,117 ounces. A total of 170 men are employed, of whom 140 are working in the stopes between the 360 and 560 feet levels, and in the crosscut at the 700 feet level. The old battery of 30 head of stampers has just been reinforced with new up-to-date one of 20 heads, which equipment comprises a high-pressure boiler, and tandem compound engine, fitted with Corlis's valve gear. The stampers weigh 1,250 lbs each; and the other modern improvements include a rock breaker, a belt ore conveyer, and automatic feeders; also 3 Wilfley tables. The ordinary crushing capacity of the new stampers is about 4-1/2 tons per head per day, as against only 2-1/4 with the old ones. The fifty heads are now milling about 3,000 tons monthly. At the North Duke Company, which mine is about worked out, 10,629 fathoms of wash were treated, yielding 6,761 ounces of gold. The number of men employed is 140, of whom 112 are working below ground. Up to the present £179,996 has been disburses in wages, firewood, and timber, and £32,750 in dividends. Had the mine been equipped with the present up-to-date high-pressure boilers, compound engines, electric motor haulage, and improved ventilating appliances, the profits would certainly have been much greater. At the Duke United Mines Limited steady, profitable work on a substantial scale has been carried on. During the year 14,941 fathoms of wash have been panelled out, yielding 12,809 ounces of gold. The number of men employed is 239, of which 190 are working underground. During the latter part of the year an electric lighting and haulage plant has been installed, also new machinery, and an additional blower, in connection with ventilation. The dynamo is 22-1/2K, driven by an 'Atlas' self-contained automatic engine, and the locomotive, which weighs 5,400 lbs, is 10-1/2 feet long by 2-1/4 feet high, and 2 feet 10 inches in width, and is of the two-motor type, having two sets of wheels, with a motor mounted on each set. The extra power of the motor locomotive admits of the dirt being conveyed to the shaft by a very lengthy train of trucks, travelling at the low rate of about 6 miles per hour, thus reducing the wear and tear on the permanent way rails to a minimum.

 $^{^{13}}$ Monthly Progress Report, November and December 1899, Geological Survey of Victoria

The ventilation plant comprises a 'Tangye' high-pressure, high-speed engine, and two No. 4 'Roots' blowers the beaters of which may be driven up to 300 revolutions per minute if required. The old air pipe service of 11-1/2 inches in diameter has been replaced by one of 17-1/4 inches diameter, from the blower to the plat, and along the greater portion of the main level. This substantial improvement in the ventilating appliance has not yet had sufficient trial to determine whether good ventilation will be maintained under adverse atmospheric conditions. At the Duke and Main Leads Consols work has been confined exclusively to extending the lower and intermediate levels, and draining the lead by means of bores. Twenty-four men are employed, 16 of who are working underground. The pumps comprise two 18-inch plunger workings, placed on the 6-feet stroke, and going at a speed of about nine strokes per minute. The air-pipe system which connects with a No. 4 'Roots' blower is 17 inches in diameter, and extends throughout the lower level. The drainage operations at the Mai Leads North mine, adjoining, will greatly assist the unwatering of this section of the lead system. Work at the Main Leads North mine has been limited to panelling out sufficient ground in the Main Leads gutter, which is a tributary of the Duke United lead, to meet the current expenses of extending the lengthy lower main level into the deep lead system, and draining the ground... The plunger pumps of 15 and 16 inch diameter, respectively, are working on the 6 feet stroke, and going at a speed of nine strokes per minute. During the year 3,675 ounces of gold were won. An average of 90 men was employed, 70 of them underground. MAJORCA. At Majorca, the Rotary Hydraulic Sluicing Company are still making improvements to their patent gold recovery plant, and hope to eventually surmount the difficulties met with from time to time. If success is ultimately achieved, the invention will prove as valuable to the mining industry as that of cyanide and dredging. Other than fossickers, alluvial mining is confined to one whim party. Quartz mining, nil. 14

1904: MARYBOROUGH.

At the Maryborough Leviathan Company's mine, steady work has been carried on throughout the year on a large body of low-grade stone... In comparing the old mill of 30 head of stampers with that of the new one of 20 head a striking disparity is shown in the quantity treated and its cost. The old battery averaged only 2.11 tons per stamp per day of 24 hours, at a cost of 2s 3'4d per ton, whilst the crushing capacity of the new battery averaged 4.41 tons per head of stamps per 24 hours, at a cost of 1s 10'2d per ton, all tonnages being 27 cubic feet per ton. An average of 142 men was employed, of whom 113 worked underground. A few co-operative parties are working in various places on small tonnage shoots of stone with indifferent success. The local crushing batteries, of which there are three, are a great convenience to this class of prospectors. In respect to the alluvial mines, energetic work, on a substantial scale, is in progress, with profitable results at the three mines where panelling and blocking out the gutter is in operation. The Duke United Mines Limited treated 13,959-1/2 fathoms, or 122,483 tons, for a yield of 12,120 ounces of gold. The average number of men employed is 198, of which number 160 wrought underground. At the Main Leads North mine, brisk work has been carried on, with very profitable results. The number of men employed is 173, of whom 142 worked underground. At the Burnt Creek mine steady progress is being made. The number of men employed is 178, of whom 127 work below ground. At the No. 2 shaft, a powerful and up-to-date winding and pumping plant has been erected, and a capacious shaft, to admit of double cages, sunk to the depth required. At the Duke and Main Leads Consols mine work has been exclusively confined to driving in reef and unwatering the overhead water-laden wash and drifts by means of tubed drainage bores preparatory to rising and driving at wash level. The Golden Valley Syndicate has erected useful steam winding plant, sunk a shaft, and one a lot of prospecting by driving at wash level on a head that was profitably worked in the early days.

MAJORCA.

At Majorca, operations at the Rotary Hydraulic Sluicing Company are still in an experimental stage of development, the latest additions being a powerful steam shovel. The plant is now complete, and the manager informs me it is capable of treating 6,000 yards of gravel weekly as soon as water is available. Alluvial mining is confined to one whim party, known as the Black Swan Syndicate, which is doing fairly well. At Mount Cameron, the Mount Cameron Company enlarged and timbered an old shaft, and erected machinery, and sunk the shaft to a depth of 225 feet. The mine is now shut down, and I am informed that the plant is about to be removed elsewhere. The only other workings are that of Hendra and party, on Beveridge's Estate, some three miles distant. This party has done a good deal of quartz prospecting down to a depth of about 60 feet, with disappointing results.

AVOCA.

At Avoca, mining is restricted to the treatment of tailings by the cyanide process.

PERCYDALE

At Percydale mining is practically at a standstill, as work at the Percydale Syndicate mine has been confined to surface prospecting alone, and only one cyanide plant is working there. ¹⁵

1905: MARYBOROUGH

The Maryborough Leviathan Company (English) has done a large amount of prospecting in shaft-sinking and cross-cutting, but the results ... have been very unsatisfactory. There are several cooperative parties at work, and the results with them have been rather disappointing. MAJORCA.

Several co-operative parties have been continuously at work in this locality, principally in alluvial, with varying results.

HAVELOCK AND BET BET.

At the Duke United and Main Leads North mines the companies are at present passing through a poor zone of wash, but they are both confident that in the near future success will again attend their efforts. At the Duke and Main Leads Consols and the Burnt Creek No. 2 mines good prospecting work is being carried on, and it is expected that during the present year both these mines will be in a position to operate on the wash, and become dividend-paying. ¹⁶

1906: MAJORCA AND TALBOT.

The Black Swan Co-operative party during the first half of the year obtained very satisfactory results, but unfortunately during the latter half the lead became poor, with the result that the men at work have not been able to make wages. Smith and party have done a large amount of developmental work on the same lead, but success has not yet crowned their efforts. Holmes and party have also been vigorously prospecting along this lead, and to show the favourable opinion held of the lead by this party, they purchased a boiler and Tangye pump, and had the same erected to cope with the water. Rocky Flat Company has done good progressive work during the past year, the shaft having been sunk 170 feet. This company is evidently in a very fair way to pick up the lost lead across the Rocky Flat. The Last Hope mine, which is situated between Talbot and Majorca, has just been floated into a company. A 16-inch cylinder horizontal engine with winding gear complete, and a Cornish boiler 26 ft x 6 ft 6 in. has been erected, and is capable of working to a depth of 1,500 feet. A good shaft has been started 11 feet x 4 feet with three compartments.

HAVELOCK AND BET BET.

In the Duke United mine, owned principally by English investors, work has been confined principally to developmental work to the north. It is the intention of the company, should a payable lead be developed in the northern ground, to sink a new shaft, so as to facilitate working, besides providing better ventilation. The advantage of this can be seen when it is known that to reach their work after having been lowered by the cage to the plat, the men have to travel very nearly 10,000 feet, taking nearly three-quarters of an hour. As regards handling the wash and debris, an electric motor is employed below to draw the trucks, which is a great economy as compared to horse or men trucking. The Duke and Main Leads Consols Company has been persevering to overcome the water difficulty during the year, and is evidently draining the lead... The ordinary pumping plant, consisting of two 18-inch diameter Cornish pumps, which are capable of lifting 3,000,000 gallons of water per day, proved inadequate to deal with the water, with the result that an electric plant with pumps was installed, capable of dealing with an extra million and a quarter gallons. This company during the period under review purchased the mine and plant of the Main Leads North Company, and have commenced work on payable wash on the boundary. The Burnt Creek Gold Mining Company has been doing good prospecting work... This company has a fine plant, consisting of a compound tandem pumping engine, winding engine, Capstan engine, and an engine to drive the Root's blower (No. 4). It has also two Cornish pumps, one 22-inch plunger and one 21-inch plunger, which are continuously at work, on the large amount of water in the mine. 17

¹⁵ Mines Department Annual Report, 1904

Mines Department Annual Report, 1905

Mines Department Annual Report, 1906

1907: MAJORCA AND TALBOT.

A large amount of prospecting and developmental work has been done in these localities during the year by companies and co-operative parties, but nothing permanent has been discovered. HAVELOCK AND BET BET.

Progressive work has been carried on by different companies in this part of the district during the year, and the water difficulties gradually overcome. From prospects taken from the various bores, it is expected payable ground will soon be operated upon by the Duke and Main Leads and Burnt Creek Companies. The Duke United Company has not, unfortunately, succeeded in striking the payable wash anticipated, but it is believed, if persevered with, payable ground will be met with. ¹⁸

1908: MARYBOROUGH.

In quartz mining the most important prospecting work done has been at the Mariners' Reef Mine. Early in the year this company was granted a loan of £1,000 under the Mining Development Act for sinking and driving. The Mariners' Hill was noted in the past for its rich gold returns, and it is hoped this company will succeed in picking up the continuation of the payable ore at deeper levels. A number of small parties, employing 51 men, have been working in the district with varying results, and have treated 2,915 tons of ore for a yield of 992 oz 12 dwts of gold, while several other parties have been and are still carrying on prospecting work with hopes of success. In the alluvial division the Duke and Main Leads Consols Company has been energetically opening up a large area of payable ground. At the No. 1 shaft 6,042 fathoms of washdirt have been taken out for a yield of 4,916-1/2 oz of gold. While at No. 2 shaft 8,434 fathoms were taken out, yielding 5,232 oz 14 dwts of gold, making a total of 10,149 oz 4 dwts of gold from 14,476 fathoms of washdirt. An average of 250 men has been employed. Electric motors have just been installed below to take the place of horses, and no doubt will prove more suitable and convenient in removing large quantities of dirt. Fuel-saving appliances have been added to the plant, namely, Watkinson's patent independent fired steam super-heater, one fuel economiser, and Patterson's patent exhaust heater and water purifier. The Burnt Creek Company, Middle Bridge, has been pushing on developmental work, opening up and gradually draining large areas of wash. It appears to have beaten the water, which was very heavy, expensive and troublesome, and in conducting underground operations needed careful handling. 1,801 fathoms of washdirt were blocked out for a yield of 1,608 oz 15 dwts of gold. The additions to plant were one compound puddling engine, and one No. 4 Root's blower and engine. At Havelock three co-operative parties are working at a depth of 106 feet, and 2,185 feet of ground has been opened up in sinking and driving, yielding 493 oz 17 dwts of gold, and there is still a large area of ground to work. MAJORCA AND TALBOT.

Mining in these localities is practically at a standstill. The Last Hope Party erected a plant consisting of winding, pumping, and battery, did a little work below, and then stopped. The Rocky Flat Company, after working several months in opening up a good deal of ground, also closed down. It is said payable wash was located. Several small parties have been prospecting and working the shallow alluvial with varying results. AVOCA.

Two parties ... were prospecting in the Pyrenees and Avoca old lead. A little gold was got, but not payable. At Percydale, near Avoca, the Percydale Proprietary Co sunk a shaft to 200 feet. 19

1908: THE WAREEK ALLUVIAL RUSH, NEAR MARYBOROUGH

The Wareek alluvial rush was opened by Messrs Dellar and Craig, who found gold in an old abandoned shaft on the cross roads at allotments Nos. 15A and 19B of VIA, parish of Wareek, county of Talbot. It is about 8 miles west of Maryborough (via Alma). On the attached sketch plan are shown the prospectors', Nowell's, and Diamond's claims, and the 70-ft shaft reported not bottomed; and also the Moonlight Flat lead, the nearest alluvial workings of importance, which are situated 1-1/2 miles south-east of the rush in allotment C4. The deepest shaft on the rush is 51 feet and was sunk by Diamond and party. One and a half grains to the dish are reported to have been obtained off the bottom. Developments at lower levels, if attended with success, will be of the utmost importance to future quartz mining at deep levels in the Maryborough district. This mine has done good work, having proved gold-bearing quartz several hundred feet deeper than hitherto known in this district, and its machinery and plant are especially well equipped for deep sinking.

KIRK'S REEF, MARYBOROUGH.

Kirk's Reef is situated ... about one mile NE of the town of Maryborough.²⁰

1909: MARYBOROUGH.

¹⁸ Mines Department Annual Report, 1907

¹⁹ Mines Department Annual Report, 1908

Records of the Geological Survey, Vol. II, Part 4, 1908.

The Duke and Main Lead Consols Company continues to open up large areas of washdirt, which has proved payable. An average of 225 men was employed. The underground haulage, by electric power, of the washdirt to the main shaft has been completed. Three electric locomotives are in use taking the place of horse-power, and are busy engaged conveying long trains of trucks to the shaft. This plant greatly facilitates the output of washdirt. One electric motor for puddling purposes and one No. 4 Berdan pan has been added to the treatment plant. One Root's blower has been added to the ventilating plant. At the Duke and Main Leads Consols No. 2 shaft. 5,498 fathoms of washdirt taken out and treated for a return of 3,986 oz of gold; an average of 100 men was employed. The Burnt Creek Company has extended the main reef drive 1,600 feet ... 6,566 fathoms of washdirt have been taken out and treated for a yield of 4,957 oz of gold; an average of 110 men were employed. Two puddling machines have been added to the treatment plant, and one No. 4 Root's blower for ventilating purposes. In the shallow alluvial ground, leading into the deep leads, fifteen parties have been engaged, employing 62 men. A large amount of ground has been operated upon, and 2,542 fathoms of washdirt won and treated for a return of 1,252 oz of gold, and also 1,904 tons treated by cyanide for a yield of 530 oz of gold. Several of these parties have erected small cyanide plants in connection with their mines for the purpose of treating the slum from the puddling machines, which is carefully stacked, and which was formerly lost into the creeks or scattered over the surface. The value of the slum varies from 3 to 10 dwts per ton. A good deal of the old alluvial and poor ground is being reworked over, in some cases, third and fourth working. A little free gold is got in the machines, but the chief revenue is the fine gold won from the slum. The surface, old holes, shafts, and creeks, in and around old diggings, are being fossicked and cleaned up wherever the sand and slum can be found in payable quantities. In this way a large number of men are profitably employed. The cyanide process, within the last few years, has been simplified, and with a little training the knowledge of its working has become general, which, in many ways, is good for the miner, as throughout the year they have the advantage of dividing their working time between underground and surface work, so that if working conditions below are not good, through bad air or increase of water, the time can be spent on a cyanide plant. A large amount of gold is being won in this district by cyaniding, and this is likely to continue for many years. At the No. 2 Duke Shaft two large cyanide plants are in operation, treating bout 645 tons per week, and employing 18 men. In quartz mining the Mariner's Reef Company has been prospecting. A number of small parties have been engaged throughout the district, employing 58 men, and have treated 2,214 tons for a return of 638 oz of gold. Quartz mining in the Maryborough district, at present, greatly depends on the Mariner's Reef Company, which, if successful, will be the means of starting many other reefs worked in the early days, and said to have carried payable gold to water level.

TALBOT AND MAJORCA.

A few fossicker's working in shallow ground, obtained a little gold both from alluvial and quartz. At Majorca, the Rocky Flat Alluvial Company has done a large amount of developmental work, and opened up large areas of nice washdirt, but poor in gold. The Last Hope Quartz Company worked to a limited extent, but closed down.

AVOCA AND HOMEBUSH.

At Avoca both alluvial and quartz mining is at a standstill, and what little is being done is confined to the old shallow ground, with results, on the whole, poor. At Homebush an improvement has taken place, and indications point to a revival both in alluvial and quartz mining. The Old Working Miners' ground has been taken up, and boring for a site for a new shaft is in progress. It is said good gold was left in the extreme workings of the old mine, but the shaft was not deep enough to command the deep ground. There are large areas of alluvial ground in the locality. In regard to quartz mining in the Excelsior Mine, owned by Messrs Shiell and Wilson, two well known prospectors, a good payable reef has been opened up. A main shaft has been sunk 100 feet. A winding plant is about to be erected and the shaft sunk a further depth of 100 feet. The ore treated was 2,165 tons for a yield of 1,239 oz of gold. A cyanide plant is in course of erection for treating the sand. A lease south of this mine has been pegged out by a Ballarat company, and a main shaft is to be sunk early in the coming year. Nicholls and Party recovered about 200 oz of gold from a line of indicator country south of the township, and two other parties working in the same belt obtained a few payable crushings. 21

1910:

MARYBOROUGH:

In the alluvial group the Duke and Main Leads Company has had a fairly successful year. 25,317 fathoms were treated for a yield of 16,056 oz 12 dwts of gold. Value £66,755; paid in dividends, £15,000. At the Burnt Creek mine progress has been slow owing to the unevenness o the ground and the large amount of water to deal with ... 5,592 fathoms treated for a yield of 3,332 oz of gold. Value £13,765. The Duke Extended Company sunk the main shaft to 241 feet ... and is now erecting a pumping plant preparatory to boring up and draining the wash. At Havelock eighteen parties are working the reef washes, employing 73 men... 2,797 fathoms of wash treated for a yield of 1,650 oz of gold. Value, £6,765. Five of these parties have cyanide plants for treating the slum, which is carefully stacked by all the men working in the district. The parties who have not cyanide works on their mines sell the slum in lots of 10 to 100 tons. The wash won by several of the parties would barely pay were it not for the fine gold contained in the slum, and in some cases the soft reef bottoms are worked for the fine gold. This may be almost termed a new branch of mining, as all material, such as soft reef country and old creek beds and workings are paid a good deal of attention to in this district. It has developed into an important industry, and is a big support to alluvial mining, for even with companies it will pay to work ground poor in free gold, but carrying fine gold that can be got by cyanide outside the machines, and is the means of large areas being worked that would otherwise be left untouched. No improvement has taken place in lode mining. The Mariner's Reef Company... An enterprising number of shareholders in the company have formed a syndicate, which purchased a 10-head battery, and turned it over to the company at a rental of four shillings per month. The company is about to erect it, and when completed will operate on the stone opened up. It is expected to give a small margin of profit, which will help the company to a more energetic course of prospecting. A number of small parties, employing 65 men, have been working in various parts of the locality, and treated 2,036 tons for a yield of 1,175 oz of gold. Messrs Summers and Worrall, who were loaned £100 by the Department, succeeded in striking payable stone. They have refunded the money to the Government, and the mine is still giving good returns.

AVOCA AND HOMEBUSH.

At Avoca mining has been confined to dredging, which, after several trials by companies and tributers, has ceased, the ground not being payable. At Homebush, the Excelsior Mine, owned by Wilson and Shiell, has had a very successful year. Ore treated: 3,270 tons yielded 1,765 oz of gold; by cyanide, 6,830 tons for 279 oz of gold; from concentrates, 19 oz. Total, 10,100 tons—2,063 oz. Value, £8,190. Employing 34 men. The Excelsior West Company, adjoining, sunk its main shaft to 225 feet. The Working Miners' Company started to sink a main shaft, 14 feet by 8 feet. Sunk 45 feet, when work ceased for want of funds. This is a mine that should be pushed on. It is known gold was left which, under present conditions, with cyanide treatment for fine gold, will pay, and no doubt would open up a big field and employ a large number of men.²²

1911: MARYBOROUGH

The Duke and Main Leads Company's mine continues to open up well, and, from all appearances, there are many years of profitable work ahead. Total treated, 22,137 fathoms, for a yield of 11,791 oz gold, average, 10 dwts 15 grs per fathom ... employing 250 men. At the Burnt Creek mine. 1,884 fathoms taken out for a yield of 1,540 oz ... 90 men were employed. The quality of the wash dirt in this mine is improving. The Duke Extended Company completed the erection of pumping plant, consisting of one 26-in. cylinder compound condensing engine and second boiler, 29 feet by 6 ft 6 in. Seventeen small parties have been working the shallow ground at Havelock, employing 81 men ... 3,133 fathoms of wash treated for a yield of 1,000 oz of gold, while 6,108 loads of slum from the puddling machines have been treated by cyanide for a yield of 1,117 oz of gold, or a total of 2,117 oz of gold, value £4 2s 6d per oz. The wash is poor in free gold, hence was left by companies in the first working, but is rich in the fine gold contained in the wash, headings, and reef under wash. The slum from the machines is carefully stacked, and, when dry and having passed through an oxidising stage, is treated by cyanide. In quartz mining, progress has been slow, the Mariners' Reef Company being the only company working in this locality. The ore bodies carry a fair percentage of minerals; this contains most of the gold, but the concentrating plant, not being suitable for its recovery, the gold went out in the residues. Three concentrators have been added to the battery, and a series of canvas tables, which have improved the returns. Still, it is said the residues contain 3 to 4 dwts of gold per ton. A further series of tables is to be laid down, and later cyaniding may be considered. With the past record of the Mariners' Hill, and the present outlook of the mine, it is possible quartz mining may be given new life in this district. The company has treated 1,995 tons for a yield of 313 oz 13 dwts of gold. A number of small parties, employing 47 men, have been prospecting throughout district ... they have treated 1,071 tons, for a yield of 257 oz 14 dwts of gold. Weihens Reef, at Majorca, has been formed into a company; it is proposed to sink a main shaft to 300 feet. A good deal of gold was won from this line of reef many years ago.

AVOCA AND HOMEBUSH.

At Homebush, the Excelsior mine, owned by Wilson and Shiells, has had a successful year. It is reported this mine has been sold for £6,000 to a Melbourne company. The West Excelsior has been stopped the greater portion of the year, awaiting developments in the adjoining mine. The Working Miners Company is about to restart sinking the main shaft. A few small parties have been working in the district, getting a little gold. 23

1912: MARYBOROUGH.

In the alluvial roup the Duke and Main Leads Company has had a fairly successful year. 16,816 fathoms yielded 10,172 oz of gold, and the average number of men employed was 215. The Burnt Creek Company has had an improvement. 9,511 fathoms gave a return of 7,003 oz of gold, an increase over 1911 of 5,468 oz average number of men employed, 174. The Duke Extended Company has made good progress. The additions made to plant were one high pressure boiler, one No. 4 Roots blower, with 11-inch air-pipes in shaft. At Havelock, fourteen parties have been engaged working reef washes, with an average of seventy-five men ... 3,787 fathoms treated for a yield of 2,713 oz of gold. Most of these parties have small cyanide plants for treating the slum from the puddlers, which varies from 3 dwt to 10 dwt of gold per ton. The Mariners Reef Company ... treated 3,740 tons for an average of less than 5 dwt of gold per ton. The Weihens Reef Company at Majorca sunk its main shaft to a depth of 297 feet. The Talisman Company has been engaged unwatering the old shaft with a view of opening up the old workings, where it is said prospects are good. The undertaking has so far proved an expensive one. After several months bailing, the water is lowered to 150 feet only.

AVOCA AND HOMEBUSH.

An indicator find by Messrs George and Marshall on the old lead proved to be a small patch, but was not followed to any depth. At Homebush, Messrs Shiell and Wilson, who own the Excelsior mine, have had payable returns. It is now intended to sink the main shaft a further 100 feet, and install rock drills, when a more vigorous system of developmental work will be carried on.²⁴

1912:

Messrs Nicholl and Stratman's Dreadnought claim is situated in B. Pyman's allotments 2 and 3, parish of Rathscar, in the township area of Lower Homebush. The workings at present are small and consist of an underlay tunnel following the gold-bearing cross vein as it cuts the indicator beds. A shaft is now being sunk at a point above and a little to the north of the north face in the tunnel, and later on a shaft further north is to be sunk as the claim develops. Mariner's Reef, Maryborough. The lease (No. 5486) is 49 a 2 r 29 p in area, and in addition toe the main Mariner's reef, includes the Mariner's North, Gympie, Soldier's Hill, and Cole's lines of reef, all of which have at times been worked profitably, but to no great depth. Within the lease on Soldier's Hill there are two mining claims, Hawkes and Peel, and Hawkes and Roxburgh, to the south. The main reef has been worked for over 1,000 feet north and south, and was apparently a very large reef formation of low grade quality underlying a very rich smaller make known as the Little reef, which lies to the north partly on top of the big stone, but in the same reef channel. Report states that this Little reef has yielded as much as 60 oz to the ton from No. 8 claim south, in a patch. The main shaft, which has just been repaired, was sunk 632 feet to the bottom of the well. Some of the rich crushings taken from between 380 feet and 610 feet on the Little reef may be here stated from the Advertiser record—2/8/1861, 55-1/2 tons yielded 232 oz; 17/6/1861, 38 tons yielded 118 oz; 18/7/1861, 59 tons yielded 303 oz; 12/11/1866, 30 tons yielded 251 oz; 29/4/1867, 45 tons yielded 327 oz. Since Mariner's reef was last worked, the cost of mining has diminished and improvements have been made in the treatment of ores, so with the aid of cyaniding and the sale of auriferous concentrates, low-grade quartz, which would barely pay then, might now be profitably mined. In recent years the old Mariner's tailings have been profitably cyanided; and records show that the old pyrites concentrates were worth 3 oz to 4 oz per ton of concentrates. It may be said that Mariner's reef is well worthy of further development at the present bottom level and at deeper levels. It was for this purpose the present company was formed, the winding plant erected, and the main shaft cleaned out and repaired to 632 feet.²⁵

²³ Mines Department Annual Report, 1911

Mines Department Annual Report, 1912

Records of the Geological Survey of Victoria, Vol. III, Part 2, 1912, pp. 148-53

1913: MARYBOROUGH.

Mining on the whole has been quiet, due in a great measure to the want of capital and labour to carry on energetic work. In the alluvial mines the Duke and Main Leads Company. Wash treated, 10,845 fathoms for a yield of 6,375 oz of gold; the number of men employed was 140. The Burnt Creek Company closed down in the latter part of the year. The reason given is that developmental work was not sufficiently advanced to allow the ground to drain and be worked to advantage. The plant has been sold off, and with slum value a dividend of a few shillings per share was declared. This mine has been noted for its good gold values in the slum from puddlers; the various heaps sold at prices from £2,000 to £2,700 per heap. The Duke Extended Company. 624 fathoms were treated for 683 oz of gold. Good progress has been made by the several small parties working the reef wash at Havelock, but while it is not rich in free gold, varying from 2 dwt to 8 dwt per load, it is rich in fine gold, and with the cyanide process pays fairly well. It is estimated during the past seven years £40,000 worth of gold has been won by the various parties working in this locality. The Mariners Reef Company ... with gold values of 2 to 5 dwt of gold per ton, stopped all work at a time when the mine was in a most interesting stage of development. It is generally considered that with a good battery treating 1,000 to 1,200 tons per month, this mine would clear working expenses with a fair prospect of improving in values. Williams and Rewell, of Maldon, have been pushing on prospecting work in the Talisman mine against big water difficulties, which to their credit they have about beat.

AVOCA AND HOMEBUSH.—At the Excelsior mine, at Homebush, the main shaft was sunk to 300 feet, and the lode with the shoot of gold valued at about 1/2 oz per ton was picked up on its course. The Central Excelsior Company is sinking the main shaft, and expects to cut the lode at 500 feet. The West Excelsior Company is prospecting and driving at the 200-ft level on the same line of reef as the Excelsior is working on. ²⁶

1914: MARYBOROUGH.

Mining continues dull in this part of the district, due mostly to a lack of prospecting by the individual miner, and to companies not having the capital to develop the mines and leases held. It is generally considered, with up-to-date large mills treating big quantities, and present-day concentration and recovery by cyanide and filter-press appliances, many of the large ore formations throughout the district would at least pay working expenses, and thus increase employment, with a fair chance of striking dividend-paying ore. In the alluvial group, the Duke and Main Leads Company has had a fair year; fathoms of wash treated, 10,817, for a yield of 7,061 oz of gold; average per fathom, over 13 dwt ... number of men employed, 141. The Duke Extended Company has not met with the success that was expected early in the year... fathoms of wash treated, 2,892; yield of gold, 2,582 oz; number of men employed, 80. Several small parties continue to work the shallow reef washes at Havelock, and, although the wash is of low grade (2 to 4 dwt per fathom), the slum carries fair values, and is treated by cyanide with payable results. Lode mining has been very quiet, and confined to a few co-operative parties, operating on shallow and small formations.

AVOCA AND HOMEBUSH.

At Homebush, the Excelsior Co has been doing developmental work, but progress, due to breakages in plant and the ore falling off in value, has been slow. Work ceased early in the year. The company is re-organising, and expects to resume work shortly.²⁷

1915: MARYBOROUGH.

In alluvial mining the Duke and Main Leads Company ... treated 11,652 fathoms for a yield of 8,827 oz of gold; average per fathom, 15 dwts; number of men employed, 140. The Duke Extended Company ... treated 4,708 fathoms for a return of 2,967 oz of gold; number of men employed, 97. A few small parties working shallow reef washes have in some cases with cyanide returns made about wages. Lode mining has been confined to small parties. The Victor Gold Mines at Bet Bet started early in the year, but only worked a few months; sunk the main shaft 116 feet ... [for] 659 tons, which gave a return of 208 oz of gold; and 1,043 loads treated by cyanide for 229 oz of gold; number of men employed, 25. The syndicate carrying on this mine started with the intention of testing the Bet Bet reef, but after working out the payable stone on the eastern reef stopped all work.

Mines Department Annual Report, 1913

²⁷ Mines Department Annual Report, 1914

AVOCA, HOMEBUSH, AND AMPHITHEATRE.

Mining at Avoca is at a standstill, with the exception of a few men fossicking the old alluvial gullies and a little reef prospecting, one party of two men making good wages during the year. At Homebush the Excelsior mines are still closed down, and a portion of the old plant sold off. The plant on the new shaft has been bought by a syndicate with a view of sinking and testing the lode at deeper levels. At Amphitheatre, a few fossickers are engaged in different localities and getting a little gold.²⁸

1916: MARYBOROUGH.

In alluvial mining the Duke and Main Leads Company, Bet Bet, paid several dividends... fathoms treated, 11,700 for a yield of 9,049 oz of gold; men employed, 122. The Duke Extended Company, Bet Bet... fathoms treated, 3,302; yielding 2,501 oz of gold; men employed, 59. AVOCA AND HOMEBUSH.

Mining is confined to individual miners and parties, a little gold both from quartz and shallow alluvial being won. 29

1917: MARYBOROUGH.

In the alluvial group, the Duke and Main Leads Co has \dots treated 7,910 fathoms for 5,972 oz gold. Number of men employed, 75. The Duke Extended Co; obtained 691 oz of gold. Number of men employed, 34. The Talbot Alluvial Co \dots treated 74 fathoms for 73 oz 18 dwts. 30

1918: MARYBOROUGH AND DISTRICT.

Alluvial mining was actively carried on by the Duke and Main Leads Consols Company, at Bet Bet, until the close of the year, when operations were suspended, and the mine and plant sold. The company during its existence worked a length along the lead of 4 miles, 2 miles on either side of the shaft, and from the gold produced paid about £80,000 in dividends. The Duke Extended Company. At present the gold being won is sufficient to meet working expenses. AVOCA AND DISTRICT.

Mining here is confined to small parties, who have had a very small reward for their enterprise.³¹

1936:

The Norbury's Lillicur, Bung Bong, and Homebush shafts are at present at the sinking stage, dealing with much water and drift. The Lamplough Gold Mines, at Avoca, are developing. These mines are well equipped, having recently installed electric winding, pumping, and ventilating engines of modern type, together with the necessary workshops; the power being generated on the mine by a pair of 275-hp crude oil engines. In the Maryborough district the Havelock Central Mine is now in a position to become producing shortly. Quite a number of prospectors are working in the district, mostly with the assistance of Government grants, and in several cases efforts are being made to open up new fields. In a number of cases payable crushings have resulted from these efforts. A notable case is the recent discovery by Messrs Elliot and Dyer, who, assisted by Government rants, have opened up what is apparently a new reef estimated to be worth many ounces to the ton. ³²

1937:

The Clutha Developments Company, Gold Dumps Ltd., has completed the erection of an admirably arranged and extensive cyanide plant which is now in continuous operation and is treating 500 tons of slums daily with a high percentage of extraction and profitable results. The Gold and Tin Development Company has re-opened the old Talisman mine at Craigie. 33

Mines Department Annual Report, 1915

²⁹ Mines Department Annual Report, 1916

Mines Department Annual Report, 1917

Mines Department Annual Report, 1918

Mines Department Annual Report, 1936

³³ Mines Department Annual Report, 1937

July 1937:

MARYBOROUGH DISTRICT (J. Cock, Inspector)

With the continuance of returns from the present leading producers, and the production stage being reached by Clutha Developments [Carisbrook], Avoca Developments, and Upper Redbank Alluvials, it is reasonable to anticipate that gold returns will increase during the remaining portion of the year. Talbot Alluvials Limited ceased active operations at their extensively equipped No. 1 shaft at Caralulup. Work was unprofitable on account of several factors, chief among which were swelling ground in the reef drives, inadequate drainage of the wash before being blocked out, and periodical bursts of water and drift from old workings. Dredging lease applications in the Alma, Avoca, Amphitheatre ... districts have been inspected. Several have been permitted to proceed and boring operations are in progress. Clutha Developments, Carisbrook. Completing an extensive cyanide plant at the Napier Freehold dumps. Hog's Reef, Avoca. Main three compartment shaft to 90 feet. From Prospector's shaft at 100-ft level, trial crushings from reef 5-1/2 feet wide yielded 47-1/2 oz from 108 tons. Mystic Peak, Bung Bon. Has worked continuously on a fairly flat make of stone about 2-1/2 feet in thickness with values going underfoot. One hundred and thirty tons have been crushed for 76 oz of gold.³⁴

January 1938:

Noteworthy developments include the re-opening of the Old Talisman Mine at Craigie by Gold and Tin Development Company NL. The Clutha Development Company's cyanidation plant at Carisbrook is now operating continuously. Encouraging prospects for future success exist in the claim of Rodwell and party ... situated at Amphitheatre. Chivers Alluvial, Havelock. Extending wash drives and preparing for bulk extraction of alluvium. Clutha Developments, Carisbrook (Gold Dumps Pty Ltd). Has completed the installation of an extensive and very efficient cyanide plant at the Napier Freehold Dumps, and is profitably treating 500 tons of slum daily. Hog's Reef, Avoca. Main shaft extended to 125 feet. Stone crushed from drives approximated to 5 dwt per ton, and a recent crushing from stopes over the 120-ft level yielded 41 oz of gold from 73 tons of ore. Mystic Peak, Bung Bong. Crushed 180 tons of stone for 60 oz of gold, exclusive of sands. 35

July 1938:

Modern plants are in operation treating old alluvial slums at Carisbrook (Gold Dumps Ltd) and Bet Bet (Maryborough Gold NL), while several small cyanide plants in the district are treating various dumps with payable results. Gold Dumps Ltd., Carisbrook. This modern filter-press cyanidation plant [photograph included] is achieving excellent results. With a rated capacity of 500 tons per day, the plant actually handles tonnages of over 900 tons per day in favourable ground. From 1st January to 21st May, 62,225 short tons were treated for 1,716 fine oz of gold. A hold-up occurred on 21st May, when the cylinder head of the engine driving the agitators, pumps, and alternator was damaged. An initial dividend of 1s per share was paid in June. Hog's Reef, Avoca. (A detailed report appears in this issue). Mystic Peak, Bung Bong. Operations suspended. Stuart Mill Alluvial, Stuart Mill (Avoca). Engaged in the erection of sluicing plant and construction of dams. A quantity of wash has been extracted mechanically and stacked for treatment as soon as water is available. Talisman, Craigie. Engaged in cleaning out and reconditioning the old shaft, which is now repaired to 294 feet. A Pomona pump, driven by a Diesel engine, is delivering 20,000 gallons of water per hour from the old workings. The temporary poppet legs are arranged so that a permanent set can be built around them without interrupting the hauling. [Photograph]³⁶

1938:

The dry conditions have caused the Maryborough Municipal Council to reopen the Princes Royal Mine for the purpose of obtaining underground water to supplement the town supply. The shaft was reconditioned to 150 feet and a 6-inch 'Pomona' pump installed. Negotiations are in progress for the purpose of making secure certain dangerous abandoned shafts at Bowenvale and Goldsborough. Two fatal accidents occurred during the year, but conditions generally in the mines are good and regulations are being reasonably observed. 37

January 1939:

Stuart Mill Alluvial, Stuart Mill. Erection of slicing plant completed but shortage of water has delayed commencement of operations. Talisman, Craigie. Ceased operations and plant sold.³⁸

Mining and Geological Journal, July 1937

Mining and Geological Journal, January 1938

Mining and Geological Journal, July 1938

Mines Department Annual Report, 1938

Mining and Geological Journal, January 1939

January 1940: MARYBOROUGH DISTRICT (N. Bolitho, Inspector)

Parties at Dunolly and Havelock obtained yields exceeding 1/2 oz per ton. Two nuggets weighing, respectively, 25 oz and 10 oz were unearthed by a plough at Majorca, and the area is to be exploited. Old mines at Avoca, Amherst, Majorca, and Dunolly are being reopened. Chivers Alluvial, Havelock. Extraction of wash by panelling and blocking out has been continuous. As the gold is very fine the major portion has been obtained by cyanidation. Gold Dumps Pty Ltd, Carisbrook. In six months, to the 30th November 1939, the plant treated 65,828 tons for a yield of 1,907.5 oz fine gold. Gold Dumps Pty Ltd declared dividends amounting to £10,800 during 1939. Hog's Reef, Avoca. It is intended to install new machinery and to sink the main shaft a further 100 feet.³⁹

Sept. 1940:

Chivers Alluvial, Havelock. Wash extraction and reef driving have been carried out and 1,000 tons of wash has been treated for a yield of 112 oz of gold. Gibraltar Alluvial, Majorca. The shaft has been sunk to 80 feet, where driving has revealed 4 feet of wash with payable values. Treatment and haulage plant to be erected. Gold Dumps Pty Ltd, Carisbrook [also at Ballarat East and Berringa]. The plant has treated 88,400 tons for a return of 1,635 oz 17 dwt of gold. 40

March 1941:

The largest output of ore was from the Hogs Reef mine at Avoca, where vigorous developmental work has also been carried out. The Chivers alluvial mine at Havelock maintained a regular payable production. Chivers Alluvial, Havelock. Extensive reef and wash drives have been extended, and treatment of 900 tons of wash has yielded 115 oz of gold. Gibralter [sic] Alluvial, Majorca. A considerable amount of wash has been treated by cyaniding, but with unprofitable results. Gold Dumps Pty Ltd, Carisbrook. From 1st August 1940 to 31st January 1941, the plant treated 92,592 short tons for a yield of 2,622.45 oz gold. Hog's Reef, Avoca. A recent crushing of 125 tons yielded 29 oz 4 dwt and the average yield from 836 tons crushed during the period was 3.7 dwt per ton. ⁴¹

Sept. 1941:

Large ore reserves have been proved at Hog's Reef mine, Avoca, but the average values are low, and the treatment plants will have to be extended if work is to be profitable. Chivers Alluvial mine at Havelock has yielded 78 oz of gold from 540 tons of wash... Electrically driven haulage and treatment plant has been installed at the Gibraltar Alluvial mine, Majorca, and the company is now in a position to treat about 100 tons of wash per day, including cyanidation. Chivers Alluvial, Havelock. Developmental work has been carried out, and the amount of wash treated was consequently reduced. Gibralter Alluvial, Majorca (Mine Manager, W. Ying). Erection of plant is almost completed, and power lines will be linked in the near future. Gold Dumps Pty Ltd, Carisbrook. From 1st February to 31st July 1941, the plant treated 76,339 short tons of material for a gold yield of 2,315 oz of gold.⁴²

March 1942:

Gibraltar Alluvial, Majorca. Work has been chiefly confined to the opening up of the alluvial lead preparatory to extracting increased quantities of payable wash. New plant has been recently installed to handle this. Gold Dumps Pty Ltd, Carisbrook. Operations were delayed for 39 working days during the change-over from the Chalk's Freehold to the Chalk's No. 1 dump. Hog's Reef, Avoca. The milling of ore has been considerably restricted during the past three months owing to the faulty construction of the crushing plant. This is now being reconditioned, and regular milling of payable ore should be resumed shortly. ⁴³

July 1948:

Central Victoria Dredging, Amphitheatre and Newstead. The dredge, which has been operated in the Newstead district for the past ten years by Victoria Gold Dredging NL, is being dismantled. It will be remodelled for deeper dredging and re-erected at Amphitheatre. Administrative buildings and staff dwellings have been completed at Amphitheatre, and two boring plants are being operated in this locality in an effort to discover further dredging areas. 44

January 1949: Central Victoria Dredging. At Amphitheatre, work is well advanced on the reassembling of the Victoria Gold Dredge, which has been brought from Strangways. 45

Mining and Geological Journal, January 1940

⁴⁰ Mining and Geological Journal, September 1940

⁴¹ Mining and Geological Journal, March 1941

⁴² Mining and Geological Journal, September 1941

⁴³ Mining and Geological Journal, March 1942

⁴⁴ Mining and Geological Journal, July 1948

⁴⁵ Mining and Geological Journal, January 1949

July 1949:

Central Victoria Dredging. Amphitheatre Dredge: It is anticipated that the reconstruction of this dredge will be completed by January 1950, but advice has been received by the company that the State Electricity Commission will be unable to supply power until April 1950. Also, there will be a delay in the delivery of water pipes, which are to be used in conveying water from the Avoca deep leads. These are expected in March 1950, and the first dredging operations will probably be carried on with water drawn from the Avoca River. 46

July 1950:

Majorca Gold, Majorca. Work commenced at this mine during the last few months and a level is now being re-timbered at 80 feet from the surface. Electrically-operated winding gear is now being installed.⁴⁷

January 1951:

Majorca Gold, Majorca. Development work being carried out in this alluvial mine has opened up large reserves of gold-bearing wash for treatment, when surface treatment plant has been completed. Good progress is being maintained in the erection of surface plants.⁴⁸

January 1952:

Central Victoria Dredging. The Amphitheatre Dredge commenced operations on 12th June, 1951, and to the end of the year had dredged 485,196 cubic yards for a recovery of 1,522 oz of fine gold, equivalent to a grade of 1.51 grains of gold per cubic yard dredged. During the first few months the dredge was operating on shallow ground at the side of the main lead. Majorca Gold (Alluvial) Mine, Majorca. Further development work has been undertaken and large reserves of wash have been opened up. Treatment of gold-bearing wash, which to date has been on a very small scale, has given very promising results. When the surface treatment plant will be completed in the near future, the mine should yield payable returns.⁴⁹

January 1953:

Central Victorian Dredging. The Amphitheatre Dredge was closed down during portion of the period under review pending completion of installation of a mechanical clay extractor to improve the emptying of the buckets. During the year 1952, 806,497 cubic yards were treated for a return of 3,485 fine ounces of gold, the average being 2,07 grains per cubic yard. Majorca (Alluvial) Mine, Majorca. Further development work has been undertaken and large reserves of wash have been taken up. The treatment plant has been completed but the small quantities of gold-bearing wash so far worked have not been up to expectations.⁵⁰

July 1953:

Central Victoria Dredging. At the Amphitheatre Dredge the difficulties caused by the clayey nature of the ground were overcome by the installation of a clay-digger. Operations were continuous. In the first half of the current year 531,472 cubic yards were dredged for a recovery of 2,238 fine oz of gold, equivalent to a grade of 2 grains per cubic yard.⁵¹

December 1954:

Central Victorian Dredging. The Amphitheatre Dredge operated continuously throughout the year and treated 1,278,728 cubic yards of material for a yield of 3,515 fine oz of gold, representing an average grade of 1.4 grains per cubic yard.⁵²

June 1955:

Central Victoria Dredging, Amphitheatre. Continuous operations have been carried out, with average results. The dredge treated 558,213 cubic yards of material, yielding 2,344 fine oz of gold—an average grade of 2.0 grains per cubic yard. (see also page 20). 53

December 1955: Central Victoria Dredging, Amphitheatre. Continuous operations were maintained. Towards the end of the year gold values improved—average grade 1.9 grains per cubic yard. 54

⁴⁶ Mining and Geological Journal, July 1949

⁴⁷ Mining and Geological Journal, July 1950

⁴⁸ Mining and Geological Journal, January 1951

⁴⁹ Mining and Geological Journal, January 1952

⁵⁰ Mining and Geological Journal, January 1953

⁵¹ Mining and Geological Journal, July 1953

⁵² Mining and Geological Journal, December 1954

⁵³ Mining and Geological Journal, June 1955

⁵⁴ Mining and Geological Journal, December 1955

June 1957: Central Victoria Dredging Co., Amphitheatre. This has been the only dredging plan operating in Victoria in the period under review. Fair results were obtained from the continuous operations until, on 28th April 1957, the dredge sank owing to an unknown cause. It has since remained out of action. ⁵⁵