DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

REPT.BK.NO. 86/92

HISTORICAL AND GEOLOGICAL REVIEW OF TEETULPA GOLDFIELD.

VOLUME 1 - BACKGROUND

GEOLOGICAL SURVEY

by

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and

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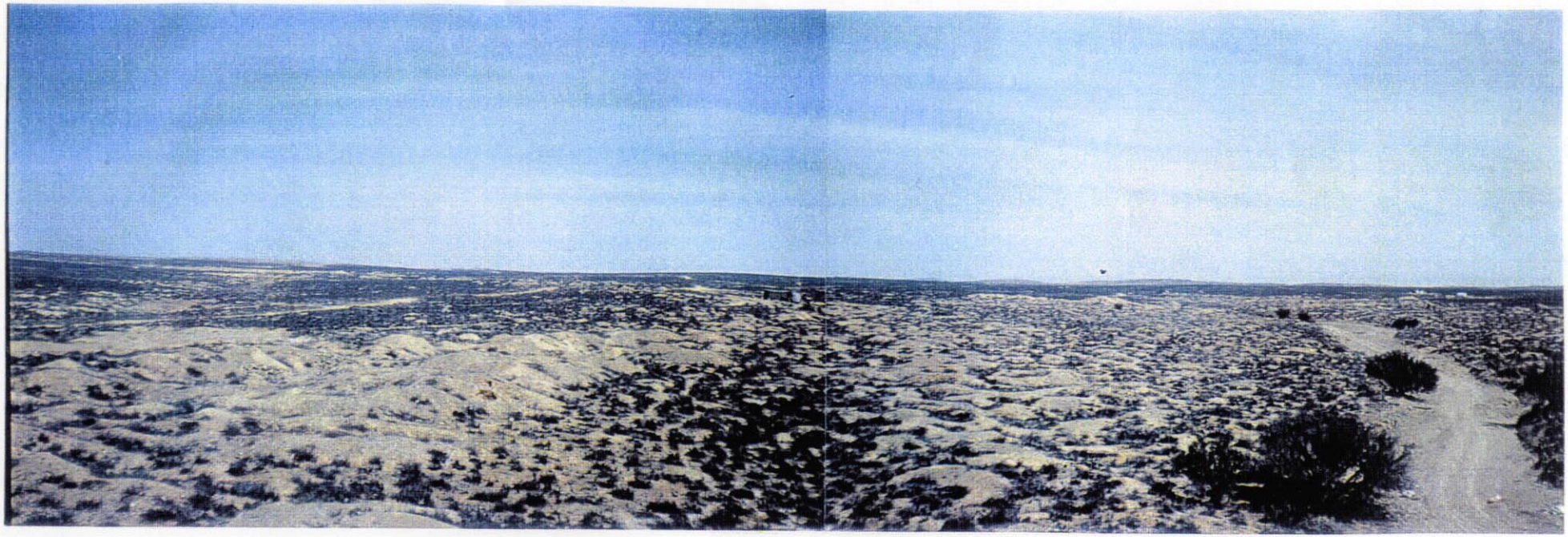
NOVEMBER, 1986

DME.87/86



FRONTISPIECE :

Panorama Looking South along Brady's and Goslin's Gullies, July 1986.
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SOUTH AUSTRALIA

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HISTORICAL AND GEOLOGICAL REVIEW OF THE TEETULPA GOLDFIELD

ABSTRACT

Alluvial gold was discovered at Teetulpa 100 years ago on 5 October 1886 by Thomas Brady and Thomas Smith. Soon after reef mining commenced. However, the reefs were narrow and low grade and only worked on a very small scale.

Teetulpa gold field is predominantly alluvial resulting from erosion of north-south trending quartz-sulphide reefs which cut across flaggy, well laminated, Upper Proterozoic siltstone of Tapley Hill Formation.

Gold was reportedly found in sandy wash near the base of the alluvium, main alluvial leads representing fossil valley stream bed accumulations slightly offset from the main drainage.

Within the first four weeks following discovery, the number of diggers on the field increased to 2 000 and at its peak the population was estimated at 4 000 - 5 000. Diggers were often poorly equipped and took little supplies with them.

This discovery provided a much needed stimulant to trade within the Colony with hardware shops, tentmakers and iron-mongers experiencing increased sales.

Mining was severely hindered by scarcity of water. Initially wash dirt was carted to Tonkin's Well 3 km east of the field. Later, a reticulated water supply was established with water being pumped to tanks at the southern end of Brady's Gully.

Production is unknown. In 1908, Brown estimated that the total value of gold from the field was £300 000. With gold worth 3/ounce in 1886-7 this is equivalent to 100 000 ounces (3.1 tonnes) The largest nugget, 'The Joker' weighed 29 oz 15 dwt (925.5 grams).

Following only one year of vigorous work, the field was practically abandoned with only sporadic production until the turn of the century. Further attempts at underground mining were made in 1911, 1913 and 1934 and several companies have carried out reconnaissance exploration since 1966. Small scale mining activities are in progress.

INTRODUCTION

In the early 1800's, South Australia was the main source of copper in Australia and pioneered metal-mining in the continent. However, the State has not been a major producer of gold. Recorded production is a little in excess of 15 tonnes representing about 0.25% of the Australian total and ranking last in the Commonwealth.

This review of the history and geology of Teetulpa goldfield has been prepared to mark the centenary of the discovery of gold in Brady's Gully on 5 October 1886.

The name Teetulpa is a native name that was applied to a hill in the locality. Cockburn (1984) recorded that the first white men to ascend the hill were J. and G. Williams, prominent pioneers of the North East pastoral district, who completed their climb on the 14 April 1853 and placed a record of the fact in a bottle left on the top of the hill.

Teetulpa gold field is a general name for a group of shallow alluvial workings that extend over an area approximately 5 km north-south and 4 km east-west (Frontispiece) and includes numerous underground workings which opened up north-south trending quartz-ironstone reefs.

Volume 2 of this review is an historical outline and description of the various alluvial gullies and reef workings, known records of ore treated from reef mining and gold bullion recovered by amalgamation and cyanidation at the private J.C. Bray Battery and at Government Batteries. All data have been metricated. Volume 3 is a summary of exploration activities between 1966 and 1986 and a review of the potential for alluvial and reef gold.

Information on alluvial production is scant. Historical details, which have been obtained mainly from newspaper articles of the day, describe amenities and services as well as such items as travel to the goldfield, gold washing, religion and commercial activities. Time has not permitted a thorough search of all archival data therefore the historical review is not complete.

LOCATION AND ACCESS

Teetulpa goldfield is centred approximately 320 km north-northeast of Adelaide and 40 km northeast of Yunta, a small township on the Barrier Highway between Adelaide and Broken Hill, (Fig. 1). The field is located on Four Brothers Pastoral Station, held under Pastoral Lease 2504, registered to Morialpa Proprietary Limited and comprising Pastoral Blocks 1209, 925 and sections 335 and 336, county Lytton, part of the Far North Planning Area, on OLARY 1:250 000 map sheet at Latitude 32°17' and Longitude 139°42'.

Situated approximately 35 km northwest of Mannahill and 25 km east of Waukaringa which, at one time, were on the main access routes to the field. Access is now via Yunta. Yunta is located 310 km by bitumen road north-northeast of Adelaide on the transcontinental rail line. Access to the goldfield is north on the well-maintained unsealed road to Arkaroola for 12 km, thence 28 km along the Mt. Victor road. Numerous tracks traverse the goldfield (Fig. 3) and while most of the workings can be reached using a conventional vehicle, a four-wheel drive vehicle ensures access over the entire field.

CLIMATE AND TOPOGRAPHY

Arid climatic conditions prevail over Teetulpa and the surrounding area with mean average rainfall about 200 mm, mostly generated by summer thunderstorms. Mean annual evaporation is 2 400 - 2 750 mm (CSIRO, 1977). Winter months are dominated by clear cool days and very cold nights while high summer temperatures and hot, dry northerly winds frequently produce duststorms.

Geomorphically, the topography of the goldfield is mature with undulating, low, rounded hills and broad shallow creeks and channels (CSIRO, 1977) which rarely flow, although some semi-permanent water seepages and springs exist e.g. Salt Creek. Underground waters are mostly saline.

The goldfield consists of several small valleys and their tributaries, the principals being Brady's Gully and Goslin's Gully, which flow in a northerly direction. Hospital Hill to the west of Brady's Gully is the highest of the low rolling hills surrounding the goldfield.

The major drainage, Salt Creek, east of Brady's and Goslin's Gullies traverses a broad saliferous flat into which the Brady's/Goslin's system drains.

VEGETATION

Low shrubland of bluebush *Maireana sedifolia* and saltbush *Atriplex vesicaria* dominate the vegetation cover over the Teetulpa goldfield which is devoid of trees (Plate 1 and 2). Small clumps of Acacias are regenerating on the worked alluvial material of the lower portion of Brady's Gully. The current mining operators and leaseholders have planted native trees and shrubs around their camp sites, all of which are thriving.

Whereas the goldfield is devoid of trees, areas of low open woodland are present on the surrounding plains and hills. Some of the drainage channels south of the goldfield support tall eucalypts whereas mulga and Acacias are present on the hill slopes.

Extensive livestock grazing is the main landuse.

ACKNOWLEDGEMENTS

Most of the information contained in this report has been obtained from newspaper articles of the day. However, the authors are indebted to Robert Clyne (Police Historian, S. Aust. Police) for providing details in the Law and Order section and to Mr Hugh Testrail for providing information on Rev. Thomas Testrail. Mr and Mrs D. Sandland of Four Brothers station kindly loaned historical photographs which have been used in the report and gave us encouragement to undertake the task. Miss P. Jackson

provided details of Miners Rights, also located a copy of the Teetulpa newspaper which is of considerable interest, and provided details of Thomas Dennis Jackson buried at Teetulpa.

South Australian Museum for the loan of gold specimens from Teetulpa and to Ted Madden (SADME) who kindly photographed the specimens. The State Library Archives for historical photographs.

R. Noble for plates 41 and 42 of gold nuggets from Teetulpa.

Mr & Mrs J. Sandland for the letter written by Dan Lynch (Appendix I) and displaying the dryblower used by the Stigwood Brothers on the goldfield in the 1930's.

Mr Chris Johnston for the loan of the book 'Bush Tracks and Goldfields' written by Lionel Gee.

Mortlock Library for providing a copy of the 'Teetulpa Goldfields Guide to the Diggings; Mining Regulations'. This has not been reproduced due to the poor quality of the original. However, a microfiche is available for perusal from SADME.

SADME Thebarton Depot staff who constructed operating models of typical mining equipment used on the field.

To all these persons the authors are indebted and appreciate the help and assistance.

REFERENCES

Cockburn, R., 1984. What's in a Name? Nomenclature of South Australia. Ferguson Publications.

C.S.I.R.O., 1977. Environments of South Australia - Eastern Pastoral - compiled by P. Laut, P.C. Heglighers, Gael Kuig, E. Loffler, C. Margules, R.M. Scott, and M.E. Sullivan.

PLATE 1. View looking north east down Brady's Gully, 1986.
Slide No. 35279

PLATE 2. Diggers at Brady's Claim in what was to become known as Brady's Gully, 1886.
Slide No. 35280

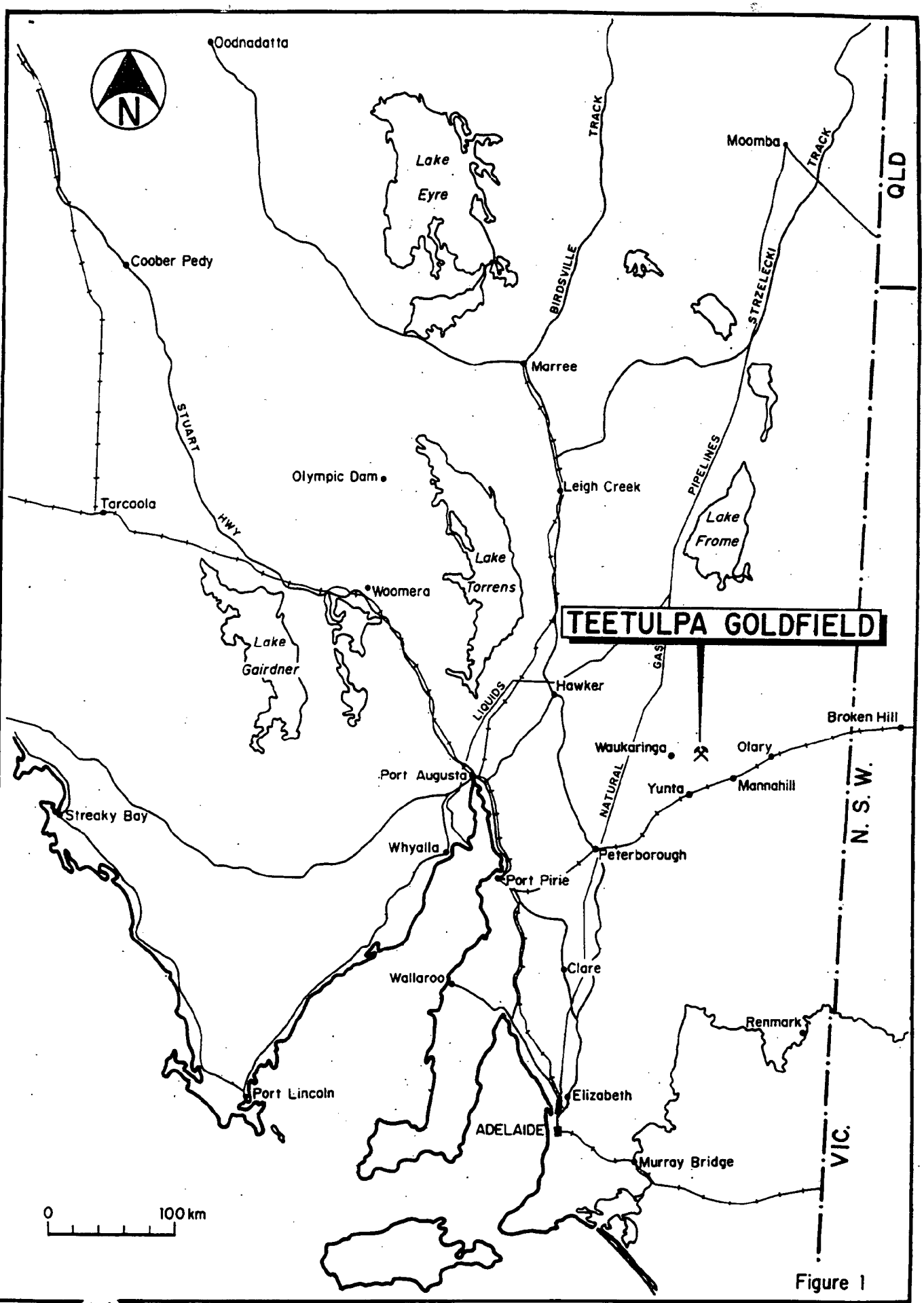

Figure 1

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

TEETULPA GOLDFIELD
LOCALITY PLAN

COMPILED C.M.H.	C.D.O. DATE
DRAWN A.F.	SCALE 1: 4 000 000
DATE 29-9-86	PLAN NUMBER
CHECKED	S 18940

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DISCOVERY

THOMAS BRADY, an elderly man from Lancelot, and THOMAS SMITH, a younger companion from the Broughton, started prospecting an area of Teetulpa Run at the end of September 1886. They camped at Tonkin's Dam and prospected the surrounding area. Gold was first discovered in the afternoon of 5 October 1886.

Brady, in an interview with a reporter visiting the diggings in October 1886 gave the following description of the discovery-

> *'It was Tuesday afternoon, October 5, that I found the first gold, just about the centre of the gully. We had then been searching about a week. We picked up about an ounce and a half,(1) and then we took out about four buckets of stuff, but could find nothing more by turning it over. Then we washed it, getting another half ounce,(2) or about 2 oz.(3) in an hour and a half. I was at Bendigo in 1852, and was the first to mark a hole in the California Gully. This place is not like the Bendigo gullies in appearance, but there are gullies not far from here exactly like those of the early Victorian diggings. I have been about six miles(4) north-east of this, and there I think it looks exceedingly well for gold. I am certain they will get it on the flats, and I believe no one ever saw so much gold got so soon without water as here. I believe many pounds worth of gold is being thrown away every day owing to inability to wash the dirt. None has been washed, except just here and there a little trial in a dish. The bottom of the gully is all slaty, just like where we got the first gold, and I believe it will yet be one of the finest fields in Australia. My son and Smith have picked up several nice nuggets, one about an ounce(5) and another about half that weight. All the gold I have seen is smooth and waterworn; a little quartz is jammed on to some of the pieces, but it is easily picked out. The first finds were made in the bottom of the gully, but now they are also picking it out of the sides'.*
>
> *(19/10/1886)*

---

(1) 46.7 grams
(2) 15.6 grams
(3) 62.2 grams
(4) 9.6 km
(5) 31.1 grams

A claim for the reward of £1 000 for discovery of a payable goldfield was applied for the next day. On 6 October 1886, the following letter was sent to Mr J.H. Howe (Commissioner of Crown Lands)-

October 6, 1886

To the Hon. The Commissioner of Crown Lands.
Dear Sir,
We, the undersigned, wish to inform you that we have discovered that we believe to be a real payable alluvial goldfield in the Teetulpa run, about 15(1) miles east of Waukaringa, and about 12(2) miles north of the Birthday Reef. We have this day sent in our Claim to the warden of goldfields for the reward. In two hours with two knives and four buckets of wash we got two ounces(3) of rough gold, one nugget weighing 5 dwt. 17 gr.(4), and several over a pennyweight(5). I believe that it will beat the old Bendigo. The greatest drawback is the want of water. There are miles of country of the best I believe in the three colonies.

yours respectfully,

Thos. BRADY, Lancelot; Thos. SMITH, Broughton.

(EXPRESS, 12/10/1886)

---

(1) 24.0 km
(2) 19.2 km
(3) 62.2 gram
(4) 8.2 gram
(5) 1.6 gram

On the afternoon of Monday 2 May 1887, Cabinet decided to pay Brady the £1 000 reward for discovery of Teetulpa Goldfield.

Brady and Smith were not the only parties in the area prospecting for gold. Other parties were also camped at Tonkin's Dam. One of these parties, that of George Summerhays, was looking at the reefs in the area. Most parties concentrated on Mannahill Goldfield and surrounding area, which had only been discovered at the close of 1885.

For the first two weeks after its discovery, the diggings were referred to as Waukaringa Goldfield. However, by late October, the name Teetulpa was in common usage.

EARLY DEVELOPMENT

During October 1886, the field developed at a rapid pace. Table 1 compiled from newspaper reports estimates the number of diggers on the field.

TABLE 1

ESTIMATED NUMBER OF DIGGERS ON THE FIELD

Date	Population (estimate only)
5 October	2 (Brady and Smith)
12 October	30
16 October	200
19 October	400
22 October	1 100
24 October	1 600
30 October	2 000

These figures do not include various parties who inspected the field e.g. politicians, nor the number of diggers who had departed, fifty reportedly returned to Adelaide on 23 October alone.

J.H. SIGGINS (Crown Lands Ranger) was the first Government official to visit the discovery. Below is his report to Mr Bedford Hack (Warden of Goldfields) as published in 18/10/1886.

> *'I have the honor to report that on the 8th instant I visited the alluvial goldfield of Brady and Smith, on Teetulpa run, and found that their statements were apparently correct, in as much as I saw them wash the dirt and obtain gold from it. The place where they obtained the gold is about 15(1) miles east of Waukaringa (approximately), and situated on Teetulpa run. The depth of sinking varies from 2(2) to 8(3) feet. I saw the quantity of gold they had obtained and saw it weighed 2 oz.(4) On the 11th instant I again visited the field and found over 100 men working there, the gully being occupied for at least 1¼(5) miles. I was also present when Smith unearthed four nuggets, which I estimate to weigh in the aggregate 2 oz(6), at a depth of about 2 feet 6 inches(7). On the 9th J. Quinlan discovered a nugget over 1 oz(8) and two smaller ones in 10 minues' work. On 12th instant J. Caldwell obtained a nugget roughly*

estimated to weigh 3 oz.(9). The washdirt is a sandy gravel on a slaty bottom. I will go out again tomorrow and report further. Tonkin's well is two miles distant from the field. - J.H. SIGGINS, Ranger'.

---

(1) 24.0 km
(2) 61 cm
(3) 2.4 m
(4) 62.2 gram
(5) 2.0 km
(6) 62.2 gram
(7) 76 cm
(8) 31.1 gram
(9) 93.3 gram

Bedford Hack (Warden of Goldfields) arrived at the field on 14 October to inspect the diggings. Mr. G.W. Sudholz (Director of Alma Gold Mining Company, Waukaringa) with Mr T. Warnes also visited the discovery and provided the following description of the diggings (EXPRESS 18/10/1886).

'Digging for gold, if I may so term it, is a simple task. The gravel and slate rock is easily worked with knives, and in fact any instrument composed of steel or iron. Directly the men got the scent of gold they produced a variety of tools, such as shear blades, and commenced turning up the gravel and cutting the slatey rock. Some of the men we saw had just commenced operating, and had not bottomed, but they were in the best of spirits. We followed the creek or depression where the first men had started work, and found over 50 finding gold, a quantity being taken out in our presence. We were told that about one pound had been secured, and certainly we saw about 12 oz.(1) taken out. We remained with the diggers, and the scene was one that will not easily be forgotten. Very pleased were we to see the interesting sight of dozens of men lying prone on the ground and picking the precious yellow metal out of the gravel and slate rock. Into the crevices of the rock the knives were inserted by some, whilst others were turning over the gravel. The gold we saw dug up was quickly obtained, and in some instances it is being secured almost from the surface, or from depths varying from 3 inches down to about 6 feet.(2) While on the field the warden of goldfields (Mr Hack) joined us, and with him we walked over the diggings. He informed us that he had arranged with the lessees of a dam (Tonkins) within a mile(3) of the spot to get water for domestic purposes. While we were there one of the diggers who had gone over to the next flat, which is one mile distant,(4)

returned stating that water had been discovered within 25(5) feet of the surface. This is a well, and contains water which will be exactly suitable for washing dirt, provided that an arrangement can be made with the lessee. There is a good supply, and young Mr Wade, of Teetulpa, who came on the ground, stated that water was found 25 feet (6) from the surface'.

---

(1) 373.3 gram
(2) 8 cm to 1.8 m
(3) 1.6 km
(4) 1.6 km
(5) 7.6 m
(6) 7.6 m

Mr Sudholz observed over 100 men on the diggings. He also visited the claim of Capt. Cocks (ex Manager, Alma mine) at the junction of Brady's and Goslin's Gullies. One of the Alma teamsters, a man named Byrne, found a 4 oz 13 dwt (169.5g) nugget on this claim just prior to Sudholz's visit.

Large numbers of the diggers took little in the way of supplies with them and little money to purchase supplies on the field, which, in any case, were difficult to obtain in the early days.

Below are two newspaper articles on the outfits needed.

'Mr. Johnson, M.P., having noticed that many intending diggers have taken an unsuitable or insufficient outfit, has supplied us with the following list of articles, which he considers are enough for men who intend to stay for some time on the field:- Two No. 1 miners' picks, weighing 4 lb. each, 2 short-handled shovels, 1 black iron dish for panning, 1 6 x 8 calico tent with fly, 1 small camp oven, 1 canvas water canteen, 1 large and 2 small tin billies, 3 tin plates, 3 pannicans, 2 sheath knives, 2 common forks, 1 iron bucket, 1 frying-pan, and 2 7 lb double blue blankets. This outfit can be obtained in Adelaide for £3 10s. at the outside'.

(21/10/1886)

On 17 November 1886, Mr W.R. Wigley, forwarded the following amusing letter:-

'No doubt some go gold digging who haven't a dollar to rattle on a tombstone," as the Yanks say, and by good luck drop on a rich patch and quickly make their little pile, but the old hands, if they can, prepare for a good sojourn

on new fields. A gentleman of vast experience of gold miners and their ways on the Victorian side, and whom they resort for their rig out on arriving here, told me that a party from the other side came to this establishment and wanted to see the boss. "Well boys," said the latter, "what's brought you over?" "Why", replies the spokesman, "we saw some of the gold, and that was quite enough for us. There's plenty more where that came from, and we mean to have some of it". When asked if they had seen the reports against the place he said, "Not we; them sort of chaps expect to find the gold up in trees; we don't." There's dry sarcasm, even in a gold miner, sometimes. This party is equipping for a twelve month. Talking about clothes, it is no use talking too much; you're bound to do you own washing, and water's scarce. I remember when it was so at Bendigo. We got very little washing during the week, and figuratively speaking, on Sundays had to boild the pudding, then wash ourselves and clothes all in the same water. My costume for nine months consisted principally of a common blue serge shirt and a pair of tailor-made moleskin continuations - the shirt worn outside in warm and inside in cold weather. I recommend two pairs of unwhisperables, because when washing my only ones in public I was the subject of derision from the leanness of my understandings, and it was a waste of time lying in bed watching them dry.'

(18/11/1886)

TRANSPORT

Following the discovery, diggers flocked to the field. Watching trains departing became a popular past-time in Adelaide. One such departure is described in a newspaper of 19/10/1886.

'On Tuesday morning the platform of the Adelaide railway-station was thronged by men starting for the diggings and their friends who had assembled to wish them good-bye and good luck. Altogether 110 men left for Petersburg en route for the field, 90 of these being booked from the Adelaide and 20 from the Port Adelaide stations. It is estimated that fully 1,000 person were present. The assembled throng included members of Parliament, ministers of religion, and representatives of the learned professions and the mercantile world. The greatest enthusiasm prevailed among the onlookers and the departing diggers.'

Government Geologist, H.Y.L. Brown, visited the field on 16 October and reported as follows -

> *'..... Mr Brown left Adelaide by the afternoon train for the north on Friday, October 15, in company with Mr Moule, M.P., and representatives of the daily papers. At Terowie a train was waiting to effect a junction with the Silverton railway, which is still in the hands of the contractors, Messrs. C. & E. Millar. Petersburg was reached about midnight, and after a tedious delay at this place the Silverton engine announced itself ready to start. The passengers from Adelaide, of whom there were not a few, entered the single carriage placed at their disposal in the hope of getting a little sleep, or at any rate repose, during the remainder of the night journey. In this they were grievously disappointed, and it is not too much to say that the passenger accommodation on the Silverton line is a disgrace to civilisation and to South Australia. One superannuated second-class carriage, with little double seats running half-way across, was all the accommodation provided from some 30 people, including a lady and two children. The two dim lamps which flickered overhead seemed undecided whether they should give up the struggle for existence or not; the windows required continuous attention to keep them from slipping down; while the door next the engine had lost its fastener long ago, so that every jolt of the train served to throw it open and let in an icy blast upon the sufferers, who were huddled on hard seats in all kinds of uncomfortable positions, seeking for a moment's oblivion in sleep and finding it not. For the 80-mile trip from Petersburg to Mannahill (the line is open to O'Leary, some distance further) £1 is charged. The Government is said to provide the miserable conveyance mentioned above, and to pocket half the receipts, and in the interests of ladies especially, and also of other travellers on this route, who will be constantly increasing in numbers, it is to be hoped some better arrangement will very soon be made. .....'*
>
> *(18/10/1886)*

Many travellers considered the fares too high.
.....

'According to a statement made in the House by the Commissioner of Public Works on the 20th passengers can be booked from here to Mannahill for 10s., but on reaching Petersburg passengers were informed by Messrs. Millar's clerk that the fare is £1. Many people with your paper, containing the Commissioner's statement, in hand refused to pay, and about 300 were left behind. Mr Baxter, the manager of the firm, refused in a very offhanded fashion to take less than £1, and he started the train with a few men without any consideration for the large number waiting. Many people had tickets, some of which were re deemed by Millar's clerk. Mr Baxter, on being shown the paper mentioned, answered "No d--d man gets on my trucks without paying a pound. D-- the Government."...'

(23/10/1886)

Many of the diggers, variously estimated at 300 to 600, who had been left behind in Petersburg (Peterborough) were Victorians. Diggers flocked to Teetulpa from the eastern states, with 109 arriving in Port Adelaide on 28 October on the steamers *Adelaide* and *Cheviot*. The rush continued in later months, with several hundred arriving on 29 November alone.

Transport problems were gradually alleviated. Millar Bros. ran their first ever Sunday train from Petersburg to Mannahill on 17 November 1886. Hill & Co., opened a daily coach service between Mannahill and Teetulpa on 20 November and the fiasco regarding fares was resolved between the Government and Millar Bros., on 23 November.

The Peterborough to the Border railway line was opened from end to end on 14 June 1887 although the contractor Mr A. Baxter had been making some profit on the side by running trains to Mannahill.

COMMERCIAL ACTIVITIES

With the opening of a temporary telegraph office at Mannahill on 20 October, telegraphic communications were established. By the end of December, a telegraph line had been constructed to the goldfield.

Development of the field provided a much needed stimulant to trade with hardware shops and tentmakers (Plate 3) experiencing a significant increase in sales and the momentum of this upsurge is evident in the article published on 20/11/1886.

> *'Without doubt the discovery of the field has given an impetus to trade which was sadly required, as the commercial pulse was very weak. The hardware houses have of course been principally affected, but the tentmakers have also received an increased amount of trade during the past few days. The iron-mongers have been actively engaged supplying picks, shovels, and all the etceteras that are required by men away from the domestic hearth. But the trade done is as nothing to what is expected should the good results gained on the field continue.....'*

The Express 18/10/1886 noted that diggers were being supplied by two storekeepers, one from Waukaringa and one from Mannahill. During the early development of the diggings, storekeepers were loath to bring in many supplies.

During October, bread supplies were erratic, 40 loaves of bread per day being supplied for up to 2 000 men. On 18 October, bread supply ceased and was unavailable until 23, when 300 three and one half pound (1.6 kg) loaves arrived and were sold within 30 minutes for 2 shillings each. Normal price was 3d per loaf. Mutton, eggs and tinned fish were sometimes obtainable.

A canvas township (Plate 3) soon sprang up on the eastern side of Brady's Gully, and was described by a visitor on 2/11/1886:-

> *'..... Upon a low hill which runs along the left hand of the road, a row of business establishments is being gradually formed. Here may be seen the most nondescript kind of stores, boarding houses, shanties for the sale of cool drinks, butchers' shops, hawkers' vans, forges (where the blacksmiths drive a busy trade pick-pointing), and last, but not least, a post office. All these establishments are enveloped continually in dense clouds of dust, which are raised by the stream of traffic, and carried over them by a wind which seems unvaried, and appears to blow always in the same direction. One consequence of this must certainly be that each customer of the provision stores will assuredly consume considerable more than his orthodox peck of dirt. On the opposite side of the gully,*

which has been named "Teetulpa-parade", there are a couple of stores, a green grocer, who may be heard bawling his wares, which seem to consist of new potatoes and oysters, the "Advertiser" Office, and several iron tanks, where fresh water is vended at the rate of 2d. a bucket. Here, too, an enterprising Wesleyan minister, the Rev. A.J. Bogle, has pegged out a claim on which he has pitched a small tent, on the front of which is nailed a signboard, painted by his own hands, which bears the legend, "Wesleyan Church'.

'..... At the back of Teetulpa-parade, stretching up the western hill, are a number of diggers' tents, while in this part of the gully itself for some distance north and south of the prospectors' claim, are situated the "golden holes".'

(5/11/1886)

Plate 4 shows a typical shelter and campsite established at Teetulpa in 1886.

'Teetulpa parade' was soon found to be gold bearing, and on 13 November 1886, the tents were removed. The Advertiser reported that 6 oz (186.6 g) of gold was recovered from under the former tent site of their reporter.

In mid November, business sites were surveyed and leased for £4 per year. This stopped overpegging by diggers unless they could prove gold existed on the site and could come to an agreement with the site holder over compensation.

The English, Scottish and Australian Chartered Bank commenced buying gold on the field in early November, and opened a branch on 22 November. The bank consisted of a tent and a safe.

By end of December, there were numerous stores, 23 butchers several blacksmiths, aerated water tents, restaurants, churches, telegraph office, post office, auctioneer, bank and hospital.

Butchering was carried out near Tonkin's Well, sheep being penned and watered there until needed. A description of one such butchers shop in early November 1886 described the premises as *'a brushwood shanty where the meat is plentiful, besprinkled with dust'*. Christopher Wade (lessee of Teetulpa Run) supplied sheep. During late December 1886, he raised the price of sheep from 7s 6d per head to 9s, and refused permission for butchers to

from 7s 6d per head to 9s, and refused permission for butchers to kill animals bought from other properties onto his lease. This was overcome by a Commonage Reserve being declared in 1887 for depasturing sheep and cattle for slaughtering purposes, thus allowing butchers to buy and kill animals from anywhere.

Hotels were not allowed on the field until 1887, sly grog tents reported in newspapers being rare. However in the first three months following discovery, at least 25 applications for Publican's Licences were lodged.

TABLE 2

LIST OF COMMERCIAL FACILITIES AT TEETULPA

Aerated Waters	Levine, R.F. Long
Auctioneers	Bignell and Co., A. Moss
Bank	E.S. & A.C.
Blacksmiths	Alford (Brady's Gully, Teetulpa Parade)
Breadseller	Haddy
Butchers	Adams (Brady's Gully), J. Murphy, William Samson, Tracey and Co.
Chemist	Grant
Hotels	Badmans (Brady's Gully), Phillips, Sayers, Terrys
Mining Agent	F.S. Townley
Pieman	
Post Office	Fosters Store, later P.O. in Brady's Gully
Restaurants	Teetulpa Cafe Restaurant
Stores	F. Berliner's (Rosengarter Manager), Bruce's, Campbell's (Goslin's Gully), Carr's (Brady's Gully), Dowling's, A.J. Foster's (store and Post Office became Sayers in 1887), Kennedy's (Windlass Hill), Lee and Phillip's, Moores (Windlass Hill), Wigzell's (Brady's Gully).

Note: Refer to Appendix H for additional commercial facilities.

Plate (5) shows the Pieman trading his wares and Plate (6) shows a Hop Beer and Aerated Waters establishment.

As well as the above activities, firewood was carted and sold (5s to 7s 6d per small load) as was water, both for drinking and washing purposes. Owners of horses and carts also made money from carting washdirt to Tonkin's Well.

A weekly newspaper, the Teetulpa News and Golden Age was sold on the field, first edition coming out on 1 December 1886, with T.R. Rigbye as editor. This paper was printed on the field, in premises in Brady's Gully. Volume 1 number 11 of this newspaper is included as appendix H.

Circuses and other travelling entertainment made Teetulpa a stop on their itinerary.

ALLUVIAL WORKINGS

Brady's Gully

This was the gully in which gold was first discovered (Fig 2) and was named on 18 October 1886 by Warden Hack. Brady and Smith were granted discovery claims, the equivalent of ten men's ground. New arrivals immediately pegged around the discovery claims, spreading mainly northwards down the gully (Plate 7).

At first, lack of water forced the diggers to 'fossick' over their washdirt, that is they scraped through with knives and picked out any coarse fragments (Plate 8). Dirt was then stacked for washing when water became available.

This 'fossicking' over the washdirt became a feature of the field even after supplies of washing water were obtained. Many diggers believed that if larger pieces could not be picked out, then the washdirt would not pay to cart and wash. One result of this 'fossicking' was the reports of so many nuggets being found, which in turn attracted diggers to the field.

Mr. Moule, M.P. made an estimate of 100 ozs (3.1 kg) of gold recovered to 19 October 1886. This would have consisted almost entirely of coarse pieces which had been recovered by 'fossicking'. Almost no washing had been carried out to this time. Largest recorded nugget to this date was 4 oz 13 dwt (169.5 g) found by Byrne. Diggers worked almost exclusively in Brady's Gully until discovery of Goslin's Gully.

Brady's reward claims, and, to a lesser extent, the Great Boulder Claims (adjoining to the west), were considered to be the richest claims in the gully. Largest nugget found at Teetulpa, 'The Joker', of 29 oz 15 dwt (925.5 g) was found by Horner, 18 m north of Brady's claims on 22 October 1886. Other large nuggets found include 21 oz 8 dwt (665.7 g) in March and 20 oz 4 dwt (628.4 g) in September 1887. Between October 1886 and March 1888, 75 nuggets weighing over 1 oz (31.1 g) are recorded. Their total aggregate weight was 12.6 kg.

Rich pockets of gold were occasionally struck, one yielding 19 oz 16 dwt 4 gr (616.2 g), including a 14 oz 16 dwt (461.4 g) nugget. Two miners working in the gully obtained £600 each in six months (approximately 196 oz, or 4.8 kg). Other small finds were recorded, including one of a 2 oz 3 dwt (66.9 g) nugget found on 30 December 1886, which was the first gold found by a woman at Teetulpa. This occurred on the Great Boulder Claims. Other unusual finds included the jawbone of a kangaroo, with teeth attached, at a depth of 4.9 m.

Plate 9 shows a general view of Brady's Gully.

Goslin's Gully

First report of this gully was by H.Y.L. Brown (Government Geologist) on 19 October 1886, who mentioned shotty gold being obtained. A telegram from Warden Hack to the Commissioner of Crown Lands on 9 November 1886 stated -

> *'Visited neighborhood of Mounts Victor and Victoria, but found no signs of any persons digging. Saw boundary rider, who knows nothing of people working in these localities. No tracks towards Mount Victoria past Ethridna Hill. Returned at 5, and found a rush of about 800 men in the south portion of Goslin's Gully, caused through a man named Hugh O'Keen, an old Bendigo digger, having obtained about 24 ounces(1) of coarse nuggety gold by dry fossicking. Largest piece about 4½ ounces(2). Two other men, Ryan and Collins, also got about 3 ounces(3). Saw the men who showed me the gold. This gully has been worked for the past three weeks with*

barely payable results. About 80 men washing at Tonkin's Dam. Results not known, but little work in Brady's on account of new rush. Over 100 miner's rights issued to-day'.

---

(1) 746.5 g
(2) 140.0 g
(3) 93.3 g

O'Keene's claim became probably the richest at Teetulpa (Plate 10). He and his partner P. Francis took a large amount of gold from their claim. Newspapers reported finds almost daily. On 6 December, O'Keene obtained 1 oz (31.1 g) from 1 tub of washdirt. A member of Parliament who was observing bought the next tub from O'Keene for £2, but obtained only 3 dwt (4.7 g). On 17 December 1886, O'Keene and Francis sold their claim for over £60 and left for Melbourne. O'Keene took with him £2 600 worth of gold. (approx. 675 oz or 21.0 kg).

John Ryan and 5 mates worked a claim south of O'Keene's, and also found rich pockets of gold. On 1 December, Ryan carted 5 loads of washdirt to Tonkin's Well, but only had time to wash 4 before dark. On returning the next morning, he found that his load had been stolen. Ryan left his partners on 6 December each partner receiving £51.

Large nuggets were reported from Goslin's Gully, with a 27 oz (839.9 g) nugget being the largest recorded and also the second largest found on the field. Between November 1886 and September 1888, 45 nuggets over 1 oz (31.1 g) were reported, their total aggregate weight being 5.7 kg. Plate 11 shows a general view of diggers working in Goslin's Gully.

Windlass Hill

Deep sinking north of Brady's claim was designated Windlass Hill in November 1886. Large nuggets were reported, largest being 25 oz 6 dwt 4 gr (787.4 g). Between December 1886 and October 1887, 15 nuggets over 1 oz (31.1 g) were reported, their total aggregate weight being 5.3 kg. During December 1886, Morgan struck a rich pocket, washing 20 oz (622.2 g) from 1 load and an estimated 24-28 oz (746.6 - 871.0 g) from a second. Another miner recovered £700 worth of gold in 6 weeks then sold his claim for £50 (est. 182 oz or 5.7 kg) (Plate 12 and Fig.3).

Dam Gully

Gold was first reported in dirt being excavated from the Government Reservoir in November 1886. Several loads were washed from here but yields were low. There were several rushes of men to the gully, the largest of 500 men occurring on 17 December 1886 when Stoneham unearthed the largest nugget recorded from the gully, 7 oz 5 dwt 19 gr (226.8 g). Between November 1886 and April 1888, 10 nuggets over 1 oz (31.1 g) were reported, their total aggregate weight being 1.2 kg.

Birthday Gully

Discovered ?June 1887. No recorded nuggets.

Poverty Gully

Name appears on Cleland's 1889 map, but no references found. Possibly called Groom's Gully in December 1886 after Ford Groom who picked up 1 dwt 13 gr (2.4 g) and 3 dwt 3 gr (4.9 g) pieces of gold resulting in a shortlived rush. The name may also derive from an unlocated area called Paupers Flat which was reported in newspapers during July and August 1887 due to the finding of 2 1 oz (31.1 g) and 1 oz 15 dwt (54.5 g) nuggets.

Ironclad Gully

Although this gully was discovered in late 1886, it was not named until mid 1887 when reef mining took place. It is a small tributary on the eastern side of the headwater of Brady's Gully. Only one nugget of 4 oz 10 dwt (140.0 g) was reported (July 1887).

Duffers Flat

This was an area west of the water depot, on the western side of Brady's Gully below the junction with Goslin's Gully. A 9 oz 17 dwt (306.4 g) and a 4 oz (124.4 g) nugget were reported in April 1887, along with smaller finds.

One Man's Flat

Section of Brady's Gully below Duffers Flat.

Campbell's Hill

Rise between Brady's Gully and Goslin's Gully. Yields of up to 2 oz (62.2 g) per load reported.

Cemetery Gully

Drainage channel running northwest from Cemetery. A rush here occurred in July 1887, but no results are known.

Deep Gully

Discovered in November 1886. Plate 33 shows Deep Gully drainage channel. Largest nugget found by Griffiths in June 1887, weighed 13 oz (404. g). Others weighing 6 oz (186.6 g), 3 oz (93.3 g) and 2 oz (62.2 g) were reported.

Strawbridge Gully

Discovered early 1886. Located approximately 1 km south of Goslin's Gully headwater. Rushed when Brown found a 15 dwt 16 gr (24.4 g) piece on 13 November, with 500 men working here on 18th. Only three nuggets reported, 5 oz 5 dwt 5 gr (163.6 gr) 3 oz (93.3 g) and 1 oz 10 dwt (46.7 g).

Brennan's Gully

Discovered 29 November 1886. A tributary of Strawbridge Gully. No nuggets reported. Named after prospector.

Flack's Gully

Discovered 6 December 1886. Southern continuation of Brennan's Gully. No nuggets reported.

Wakefield Gully

Discovered by McDonnell and Meyrick on 8 December 1886, when they discovered a 6 dwt 5 gr (9.7 g) piece. Junctions with Flack's Gully and Brennan's Gully. No nuggets reported.

Murphy Gully

Being worked August 1887. No other information.

Salt Creek

Discovered late April 1889 by two parties of prospectors subsidised by the Teetulpa Prospecting Association. Section of Strawbridge Gully draining into Salt Creek east of Morning Star mine. Evans and Mote discovered gold almost simultaneously as did R. Classon and mate. On 3 May, 100 men were prospecting here, this being almost the entire population of Teetulpa at this time.

Made Hills

Located about 4.0 km north of Brady's Gully. Worked from November 1886. Sinking deep (12.2 m), with traces of gold being reported.

Langford's Rush

Discovered 22 November 1886. Location unknown, but probably near Made Hills. Approximately 70.0 g of gold reported.

Low's Rush

On 9 December 1886, Low discovered a 1 oz 5 dwt (38.9 g) nugget on the rise between Strawbridge and Goslin's Gully. A rush set in but no more gold was found. Possibly a nugget which had been lost by some unfortunate digger.

Spectacle Gully

Unlocated. A 2 oz 10 dwt (77.8 g) nugget reported September 1887.

Stringer's Point

Unlocated. Reported October 1887.

Others

Newspaper reports between November 1886 and January 1888 record various discoveries which can not be located - a total of 82 oz 8 dwt 9 gr (2.6 kg) including a 16 oz - dwt 16 gr (448.8 g) nugget. Most of this gold probably came from known gullies such as Brady's or Goslin's.

GOLD WASHING

Rich washdirt was sometimes treated on the claim as this gave the diggers more privacy. However, unless expected to be rich, washdirt was taken to the water supply since the expense of obtaining and carting water to the claim was prohibitive. This limited the amount of dirt treated and forced diggers to pan in wooden or metal tubs to enable the water to be recycled.

Trial parcels and poorer wash-dirt were carted to Tonkin's Well and washed by a variety of methods, ranging from pans and cradles to rockers and small sluices. Fig. 8 shows a diagram of a typical rocker and plate 13 shows one in use at Tonkin's Well. Many of the early cradles were crudely built on site, often starting life as gin boxes and their efficiency is unknown.

A visitor to Teetulpa on 2 November 1886, provided the following description of gold washing:-

> *'Approaching the field by way of Mannahill-in the neighbourhood of which are many very likely looking gullies - the first spot reached, which presents a unique and interesting spectacle, is Tonkin's Well. This well of brackish water has been secured by the Government for the purpose of supplying water for stock and for gold-washing. The well is surmounted by a steam-engine, which pumps the water into a large square tank, from which on one side it runs into troughs for the cattle, and on the other it is baled by the diggers who come down to wash their dirt. Round this tank the interest centres .... The north side of the tank presents a scene of great excitment. To this the wash dirt is carted in all sorts of vehicles, a distance of two or more miles, much of it even being carried down on the backs of men, consumed with the thirst for gold. Here the land slopes from the tank to the bed of a dry creek. On the high ground a long row of cradles are kept rocking all day long. The slush from these cradles is carried down a sinuous drain, on the edge of which holes are dug at regular intervals for the purpose of receiving the discoloured water as it flows away. Each of these holes is surrounded by a crowd of eager-eyed men, stained with the yellow sludge and begrimed with dust, some of whom are, dish in hand, washing out their precious dirt; while others are watching to see what amount of success attends the operation. All together I counted over 200 men busily engaged puddling, craddling, and washing in every species of vessel the dirt which was supposed to contain the object of their desires.'*

Plate 14 shows the remains of the concrete and stone tank at Tonkin's well. Residue from the washings is stockpiled adjacent to the tank (Plate 15). Several photographs thought to have been taken by a photographer from Hindmarsh (Mr Adcock) between late November and the end of December 1886, show:

- general view to Tonkin's Well (Plate 16)
- washing at Tonkin's Well (Plate 17)
- dipping for water at Tonkins well (Plate 18)
- panning off (Plate 19).

Newspapers reported a group of diggers being photographed on 29 November 1886.

Once the water depot opened in Brady's Gully in 1887, the number of diggers using Tonkin's Well decreased dramatically. Between November and December 1886, an average of 200 - 300 men washed here daily and on one occasion in December the number was reportedly 700. Poor quality dirt previously stockpiled on claims and washed only when infrequent storms provided water was now treated at Tonkin's Well. Tailings at Tonkin's Well were retreated in March 1887. Plate 20 shows a general view of the Tank, washing residue and hut as it is today and Plate 21 shows the hut ruins.

Plate 22, shows the remains of a horse puddler located on the western bank of a dam wall in Goslin's Gully (Fig. 10 b). No records or reports have been located to indicate the date of construction of either the dam or the horse puddler.

WATER SUPPLIES

Although use of Tonkin's Dam as a domestic water supply only was arranged in early October 1886, and a trooper stationed there to discourage wastage, supply was insufficient for the field.

In attempts to solve the water supply problem, the Water Conservation Department sent Mr Strawbridge and Mr J.W. Jones to the field in mid October. Use of Tonkin's Well for watering stock and washing of dirt was arranged and washing commencing on 24 October, water being free. Tonkin's Dam was fenced and a caretaker appointed.

Salty water was produced from a well sunk on Salt Creek. A second well was sunk in Brady's Gully, near the junction with Goslin's Gully, and a Water Depot supplying water pumped from Tonkin's Well was later constructed near this well.

Four depots for retailing water were established (Plate 23). Fresh water from Tonkin's Dam sold for 3d per bucket, good Salt Creek water (slightly brackish) for 2d per bucket, and salt water from Tonkin's Well for 0.5 d per bucket. A bucket contained 2 gallons (9 litres).

On 1 November 1886, construction of a dam was commenced in Dam Gully, 50 men and 10 tip carts being used. This was completed on 24th, just in time to catch water from a storm on 25th.

Between 1886 and 1889, water supplies were also obtained from Bumbumbie Dam, Mount Victor Dam, 12 Mile Dam, Winninninnie Springs and the Eastward Ho mine at Mannahill.

During December 1886, Tonkin's Well was fitted with a 8 hp traction engine and a Tange lift pump, replacing the old engine and pump. Two mobile traction motors fitted with 600 gallon (2 700 litre) tanks were used to cart water, supplementing the horses and carts.

REEF MINING

Reef claims were pegged early in Teetulpa's history, H.Y.L. Brown (Government Geologist) reported several reef claims in Brady's Gully by late October 1886. Little work was done until 1887. Ore was crushed at Salt Creek Battery, Mannahill, interstate and at Government Batteries at Peterborough and Mount Torrens. Crushing on the field was carried out at the J.C. Bray Battery in Goslin's Gully (Fig. 2 and Fig. 10 b) between January and September 1888 (Plate 24). Tailings are stockpiled on site (Plate 25) and sample A1255/86 assayed 0.94 g/t Au (Appendix P).

Problems were numerous with lack of explosives and other supplies retarding development. Labour was expensive and hard to obtain due to the lure of alluvial mining. One problem unique to Teetulpa was that of both alluvial and reef miners competing for the same ground. Reef claims could be overpegged by alluvial claims and vice versa, causing considerable hindrance to reefing in richer gullies, it being impossible to lay out plans for working when at any time an alluvial miner may peg and start mining under an engine house etc. A reef miner could also peg and work alluvial on his reef claim, but he was restricted to a normal alluvial claim and all of its restrictions.

Most reefing was carried out by small syndicates with very little capital. A few claims were floated into companies, eight of which were registered. Nominal capital varied between £5 000 and £82 000, the average being £28 000, with an average of 50% of the shares being issued as fully paid up to directors, leaving little for working capital. Most reef claims had ceased operation by late 1890.

C.A. Cleland surveyed Teetulpa and issued a report and plan in February 1889 (Fig. 2). This report provided the basis of the information in Table 3. Additional information has been added where possible for completeness. Figures 5, 6 and 7 show enlargements of portions of Figure 2.

PRODUCTION

Neither the amount of gold recovered from alluvial mining operations nor reefing operations can be stated accurately. Records are fragmented, accuracy of some reports dubious, and many finds were never reported. Even those on the field could only make informed guesses. Various 'eyewitnesses' estimated that only 10-20% of gold found was either reported or recorded. Brown (1908) stated *'It is difficult to estimate the amount of gold obtained on this field, but from first to last it may safely and moderately be put down at about £300 000 worth'*.

What is recorded is that the E.S. & A.C. Bank bought a quantity of gold. Between 22 November 1886 and 15 April 1887, 10 571 oz 16 dwt (328.9 kg) was purchased and subsequent to this until 24 September 1887, a total of 891 oz (27.7 kg), making a grand total of 12 617 oz 16 dwt (392.5 kg). This would have all been alluvial gold. Average price paid was £3 17s 0d per oz.

As well as the Bank, the Government purchased gold for the 1887 Jubilee Exhibition. Their exhibit contained 468 oz (14.6 kg) of alluvial gold and approximately 50 nuggets, of which 27 weighed 229 oz 18 dwt 7 gr (7.6 kg). Storekeepers bought gold on the field, but results are generally unknown. F. Berliner's store purchased 350 oz (10.9 kg) in 1886.

Jewellers bought gold both in Adelaide and at Teetulpa. During 1886, A.L. Brunkhorst purchased 72 oz (2.2 kg), Stevenson Bros. 30-40 oz (933.3 g & 1.2 kg), Wendt 22 oz (684.4 g), F.H. Snow and Vandome, Faulk and Co. bought unspecified amounts.

Tables 4 to 9 show monthly yields from various gullies as reported in newspapers. Nuggets are defined as being 1 oz (31.1 g) or larger.

TABLE 4

GOLD REPORTED FROM BRADY'S GULLY

Year	Month	GOLD RECOVERED oz	dwt	gr	grams	No. of nuggets	Comment
1886	OCTOBER	99	10	6	3 095.7	16	
	NOVEMBER	248	1	8	7 716.9	23	
1886/1887	DECEMBER	223	-	3	6 937.3	19	
	JANUARY	28	1	-	872.6	3	
	FEBRUARY						No reports
	MARCH	25	5	12	786.3	3	
	APRIL	2	-	-	62.2	1	
	MAY	-	14	-	21.8		
	JUNE	14	-	-	435.5	1	
	JULY	14	10	-	451.1	3	
	AUGUST	2	13	-	82.4	1	
	SEPTEMBER	23	14	-	737.3	2	
	OCTOBER	2	-	-	62.2	1	
	NOVEMBER						No reports
1887/1888	DECEMBER						No reports
	JANUARY	2	-	-	62.2	1	
	FEBRARY						No reports
	MARCH	1	3	-	35.8	1	

TABLE 5

GOLD REPORTED FROM GOSLIN'S GULLY

Year	Month	GOLD RECOVERED oz	dwt	gr	grams	No. of nuggets	Comment
1886	OCTOBER						No reports
	NOVEMBER	361	15	21	11 254.8	18	
1886/1887	DECEMBER	242	10	23	7 542.2	18	
	JANUARY	30	15	-	956.6	1	
	FEBRUARY						No reports
	MARCH	5	-	-	155.5	1	
	APRIL						No reports
	MAY	14	-	-	435.5	1	
	JUNE	4	-	-	124.4	1	
	JULY	34	16	-	1 082.6	2	
	AUGUST	8	6	-	258.2	1	
	SEPTEMBER	8	-	-	248.9	1	
	OCTOBER						No reports
	NOVEMBER						No reports
1887/1888	DECEMBER	-	18	-	28.0	-	
	JANUARY	2	7	-	73.1	-	
	JUNE	2	-	-	62.1	-	
	SEPTEMBER	4	3	-	129.1	-	

TABLE 6

GOLD REPORTED FROM WINDLASS HILL

Year	Month	GOLD RECOVERED oz	dwt	gr	grams	No. of nuggets	Comment
1886	DECEMBER	236	1	18	7 344.3	5	
1887	JANUARY	15	-	-	466.6	1	
	FEBRUARY						No reports
	MARCH	106	8	12	3 310.7	3	
	APRIL	14	9	-	449.5	2	
	MAY	24	-	-	746.6	1	
	JUNE						No reports
	JULY	34	-	-	1 057.7	1	
	AUGUST	2	10	-	77.8	1	
	SEPTEMBER	7	1	-	219.1	1	
	OCTOBER	16	12	-	516.4	-	

TABLE 7

GOLD REPORTED FROM DAM GULLY

Year	Month	GOLD RECOVERED oz	dwt	gr	grams	No. of nuggets	Comment
1886	NOVEMBER	-	5	2	7.9	-	
1886	DECEMBER	35	-	21	1 090.1	4	
1887	MARCH	21	3	-	657.9	3	
	APRIL	1	15	-	54.4	-	
	AUGUST	5	10	-	171.1	1	
1887	SEPTEMBER	4	10	-	140.0	1	
1888	APRIL	1	6	-	40.4	1	
1888	SEPTEMBER	7	-	-	217.8	-	
1889	FEBRUARY	20	-	-	622.2	-	

TABLE 8

GOLD REPORTED OTHER LOCALITIES AT TEETULPA

Year	Month	GOLD RECOVERED oz	dwt	gr	grams	No. of nuggets	Comment
1886	NOVEMBER	48	5	8	1 501.5	4	
1886	DECEMBER	49	19	11	1 554.6	4	
1887	MARCH	9	12	-	298.6	-	
	APRIL	19	12	-	609.7	2	
	MAY	1	1	12	33.4	-	
	JUNE	14	9	-	449.5	1	
	JULY	5	10	-	171.1	2	
	AUGUST	10	2	-	314.2	1	
	SEPTEMBER	4	-	-	124.4	2	
	OCTOBER	-	7	-	10.9	-	
1888	JANUARY	3	6	-	102.7	1	
1889	FEBRUARY	9	-	-	280.0	3	
	MAY	-	12	-	18.7	-	

TABLE 9

NUGGETS OVER (1 OZ) 31.1g FOUND IN BRADY'S AND GOSLIN'S GULLY BY DECEMBER 1887

BRADY'S GULLY

YEAR	MONTH	LARGEST NUGGET (g)	TOTAL NO.	TOTAL GOLD REC.	WT. OF NUGGETS
1886	OCTOBER	270.6	16	3 095.7	1 589.6
	NOVEMBER	925.5	23	7 716.9	4 526.8
1886	DECEMBER	331.3	19	6 937.3	2 992.8
1887	JANUARY	342.2	3	872.6	833.7
	FEBRUARY	-	-	-	-
	MARCH	678.2	3	786.3	743.5
	APRIL	62.2	1	62.2	62.2
	MAY	-	-	21.8	-
	JUNE	435.5	1	435.5	435.5
	JULY	280.0	3	451.1	420.0
	AUGUST	62.2	1	82.4	62.2
	SEPTEMBER	628.4	2	737.3	737.3
	OCTOBER	52.9	1	62.2	52.9
	NOVEMBER	-	-	-	-
1887	DECEMBER	-	-	-	-

GOSLIN'S GULLY

1886	OCTOBER	-	-	-	-
	NOVEMBER	357.7	18	1 147.7	1 999.5
1886	DECEMBER	124.4	18	7 545.2	1 212.2
1887	JANUARY	839.9	1	956.6	839.9
	FEBRUARY	-	-	-	-
	MARCH	155.5	1	155.5	155.5
	APRIL	-	-	-	-
	MAY	435.5	1	435.5	435.5
	JUNE	124.4	1	124.4	124.4
	JULY	108.9	2	1 082.6	155.5
	AUGUST	258.2	1	258.2	258.2
	SEPTEMBER	248.9	1	248.9	248.9
	OCTOBER	-	-	-	
	NOVEMBER	-	-	-	
1887	DECEMBER	-	-	28.0	-

REPORTS BY GOVERNMENT GEOLOGISTS

Soon after the discovery of gold at Teetulpa, H.Y.L. Brown (Government Geologist) was sent to inspect the field. He departed Adelaide on Friday 15 October accompanied by Mr Moule M.P. and several representatives of the daily press.

Below is a reprint of the first report by the Government Geologist:

Situation and Character

'The gold diggings are situated on the north side of the road leading from Tonkin's Well to Tonkin's Dam in the Tonkin's Well paddock of the Teetulpa run. The gold is being worked from the prospectors' claims for about a quarter of a mile downwards along the bed and alluvial flats of Bradys' Gully, which flows in a north-easterly direction from near Tonkin's dam into the Salt Creek on the north side of the north boundary-fence of Tonkin's Well paddock. The prospectors' claims (ten men's grounds) and the claims lower down for a distance of altogether 15 or 20 chains(1) are yielding coarse gold and nuggets, which are picked out by dry fossicking from the alluvial detritus of the gully, at variable depths. Sometimes the thickness of this detritus is only a few inches; at other places where there are deep places in the rock it amounts to several feet, while in others there is no alluvium - the bed rock being exposed. From this part of the gully rich deposits of gold are being obtained, and are systematically worked by the diggers in this manner, the surface of the bed rock being scarped, and its crevices explored by knives and other similar tools. Nuggets are frequently found. The largest I saw I should judge to weigh about 2½ or 3 oz.,(2) while others, varying from 10 to 15 dwts.(3) have been also found. It is impossible to obtain anything like an approximate return of the amount of gold which has been found by the several claimholders, who doubtless for wise reasons of their own are very reticent on the subject. I can, therefore, ofer no information on that point. Holes have been and are being sunk up the gully for a distance of half a mile(4) or more and down it for a longer distance, with as yet apparently no payable results. These efforts have not been systematically or energetically carried out, and it is quite possible that the run of gold may hereafter be traced in both directions. It is also likely that some of the numerous small branches into the gully may prove gold-bearing, and that surfacing and small runs of gold may exist

near and alongside the main run of gold near the gully. This can only be ascertained by a considerable amount of prospecting, which will probably be carried out before long. A branch gully running northwards into Brady's, called Goslin's Gully, was being prospected, and fair prospects of shotty gold obtained.

In the neighbourhood of these auriferous gullies there are numerous others of similar appearance traversing the country in various directions, which will doubtless be before long examined. It may be expected that some of these will be also found to contain payable gold.

The Auriferous Area

The gold being heavy has apparently not been carried far from the matrix. A few water-worn quartz stones are seen on the hills, but nothing else, so far, to indicate the presence of an old lead from which the gold could have been derived. The country consists of undulating ranges and saltbush downs and flats bifurcating into many branches near their heads. It is covered with a variable thickness of yellow loamy clay and quartz fragments, the latter being derived from the quartz reefs and blows which outcrop in great numbers. These quartz reefs have a general east and westerly trend or strike. The rocks are clay slates, calcareous clay, and sandy slates and limestones, also having a general east and westerly strike, and are similar to rocks of the same age found all over the district, except that there is an absence of the quartzite and sandstone bands which are often found in other parts of it. The area occupied by these rocks is very great, extending from the Burra northward to the Toolaby Hills; eastward beyond Mannahill; and westward to the neighbourhood beyond Eurelia, Bendleby, etc., to the Flinders Ranges. Portions of the country in the neighborhood of these ranges have previously been examined and reported on by me. In a report dated August 1, 1883 the country near Nillinghoo, Koonamore, and Waukaringa is pointed out as likely for alluvial gold.

The extent of country likely to be gold-bearing being so great, and the places where the usual indications of gold are to be met with being so numerous, much time will have to be expended in prospecting the various localities systematically before it can be proved where the payable gold exists. The fact of a rich gully having been found should

lead to an extensive system of prospecting by experienced diggers, who will doubtless be attracted by the news of the discovery.

Probability of Gold in Deeper Ground

The gullies in the vicinity of the diggings drain into the wide alluvial flats of Salt Creek, which is the main watercourse here, and it is along these creek flats that more permanent leads of gold are likely to be found. The general drainage of the country thence is northward towards the wide tertiary and mesozoic plains which surround Lake Frome.

In travelling from Waukaringa to Mount Victoria in 1883 I noticed in plains about 16 miles(5) south-west of Mount Victoria, and seven or eight miles(6) southwards of where the granite country commences (Report August, 1883) cappings of gravel similar to the pliocene gravels of the old leads. Should cappings of waterworn gravel be found on any of the hills it would be well to prospect them, and they may be portions of such old auiferous leads.

Quartz Reefs

Several claims have been pegged out near Brady's Gully on reefs which are supposed to be auriferous, and there is no doubt but that out of the number of veins found traversing the rocks some will prove auiferous. The fact of all the gold which has hitherto been found in reefs in the neighborhood (Birthday reef and the like) being very fine seems to show the probability of the coarse and nuggety alluvial gold having been derived from some other source, namely, mullock reefs or the other soft decomposed clay and calcareous veins like those found elsewhere. The existence of fine gold in the reefs, and coarse gold in the alluvium has, however, been noticed on most goldfields, and as yet not satisfactorily accounted for.

Water Supply

Water is at present procured for domestic use at Tonkin's dam, about one mile(7) from the diggings. The nearest surface water for washing purposes is in the Salt Creek, about five miles(8) south-westerly, and there is an abundance higher up along the course of the same creek. There is also a large supply of brackish water in Tonkin's well two miles(9) east, which, if arrangements are made with Mr. Wade, the owner of Teetulpa, can be utilised for washing purposes; the depth of this well

is about 60 feet,[10] *and the water is at present within 40 feet*[11] *of the surface. Wells could be sunk in the bed rock with the certainty of getting brackish water suitable for washing, and a fair chance of some of them yielding drinkable water. Dry blowing, as used at Mount Brown Diggings, New South Wales, and in Queensland, has not yet been tried. Phillip's dry gold separator has been recommended by Mr. J. Cosmo Newbery, of the Technological Museum, Melbourne, who is an authority on such matters. I have asked Mr. Newbery to forward particulars as soon as possible, in case it might be thought advisable to test the appratus at the diggings.*

Bright Outlook

Taking into consideration the nature of the surrounding country, the fact of gold having been found in similar rocks, and in other crystalline metamorphic rocks in the surrounding region, it is evident that gold is widely distributed here.

A rich patch of gold having been found in one place it is reasonable to expect that more will found, and a payable goldfield of considerable extent established.'

(S.A. Register 21/10/1886)

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(1) 100-134 m
(2) 77.8 or 93.3 g
(3) 15.6 to 23.3 g
(4) 0.84 m
(5) 25.64 km
(6) 11.2 or 12.8 km
(7) 1.6 km
(8) 8.04km
(9) 3.2 km
(10) 18.3 m
(11) 12.2 m

A second visit to the field on the 12 November 1886 was reported on 10 December as follows:

'I have the honour to forward a report on my second visit to the Teetulpa goldfield, which I undertook in accordance with your instructions. My first visit to the fields was made on October 16, 17, and 18, at which time Brady's Gully had proved to be payably auriferous for a distance of 15 to 20 chains,[1] *and Goslin's Gully was being prospected. On my second visit I arrived at the diggings on November 12, and found that in the interval considerable progress had been made, Brady's Gully having been opened up for a distance of over a mile*[2] *southward, and the same distance northward. Goslin's Gully for nearly the whole of its length; and*

various branch gullies and runs of gold in old covered up water courses alongside the present gully were being traced throughout alluvial flats. A fresh gully (Strawbridge's), was also being prospected, and payable gold discovered in it a few days afterwards.

Pliocene Leads - On going over the country northward of where Brady's Gully runs into the flats of Salt Creek, I observed a tableland of drift (known to diggers as "made ground"), similar to that of Barossa and Para Wirra, Echunga, and other parts of the main range. This appears to me to be a portion of the old valley which existed previous to the erosion of the present valley of Salt Creek, which drained the ranges in the neighborhood of the goldfield. It is therefore most likely that gold will be found by prospecting it. This I have pointed out to the warden. This old drift extends northwards towards Mount Victor dams, in which vicinity there are numerous gravel-capped rises indicating its presence. The lower beds of this tertiary drift are likely to contain water which may be of better quality than that found on the creek flats, &c.; this can be tested by sinking a few bores across the tableland down to the rock. It may also pass under some parts of the Salt Creek alluvial flats. Northwards of Mount Victor Dams the country consists chiefly of plains, with doubtless, alluvium of considerable thickness, and occasional low rises of calcareous slates and limestones with quartz and iron ore surfacing. Mount Victor (16 miles[3] in a N.N.W. direction) is a range about 3 miles[4] long, rising about 700 feet[5] above the surrounding country, composed of quartzite and quartzone sandstone resting on argillaceous and calcareous slates and limestone. The thickness of the quartzite is from 1 to 2,000 feet;[6] it dips S.S.W. at an angle of 10 to 15 degrees, and is traversed by a few quartz reefs. Near Bumbumbie huts and wells, 10 miles[7] east of Brady's Gully the boundary of granite, gneiss, and other metamorphic rocks commences. The wells here are sunk on springs in dark-blue crystalline limestone, and there is apparently a good supply of drinkable water; the elevation of these springs I judge to be high enough to allow water to gravitate through pipes to the lower portions of the present diggings should such a means of supplying water be considered necessary. The ranges near Bumbumbie consist of gneiss, mica, schist, granite, &c., which rocks are penetrated by granite dykes and masses, and probably by diorite, as pieces of this and other hornblendic rocks are seen in the creeks. The calcareous slates and

limestones dip away from the granite and metamorphic rocks at a low angle. Some of the slates contain boulders and pebbles of quartzite granite, &c., scattered through them, hard quartzite rocks are interbedded in them.

Places to Prospect - Having inspected many of the gullies in the neighborhood and for some distance around, I am of opinion that gold is likely to be found in any one of them, as the whole area shows indications of the probable presence of gold. Along the boundary between the granite and metamorphic and the slate country in the vicinity of Bumbumbie and elsewhere the gullies should be prospected. Made Hills - The conglomerate and gravel deposits on the wide side of Salt Creek, which extend for a long distance northward, should also be prospected. The alluvial of Salt Creek itself is, I consider, most likely to cover an auriferous lead. There is a large quantity of water in the drift here, which doubtless prevents prospecting at present. Near the Birthday Reef alluvial gold has been found in some of the gullies, but as there is an entire absence of water for washing, the discovery has not been followed up. At the Nectar and Non-Gammon Reefs within five miles(8) of Mannahill there are numerous gullies which apparently have not yet been tried for alluvial gold. Rich stone has been raised and crushed from some of the numerous veins which are found here, and alluvial gold may be expected to occur.

Nuggets - A large majority of the nuggets seen by me on this field show no signs of having been derived from quartz reefs. Most of them are partially coated, and have their hollows and interstices filled with travertine limestone, ferruginous limestone, rock, and iron oxide also often adhering. The veinstones found in the district consist chiefly of quartz; iron ore and limestone, either separately or combined, also occur, and from these latter, as previously reported, the gold appears to have been to a large extent derived. From the nature of these veins it is very likely that the gold in them could be liberated partially through the action of water by solution, without a great amount of denudation, in which case some of the gold may have been liberated from the veins, and remained in their vicinity without being washed down from the sides or tops of hills intersected by them. The presence of these decomposed dykes of igneous rock on which gold might have been derived, although not yet observed, is very probable. Auiferous

washdirt cemented with carbonate of lime is found here, being a hard rock with the gold not visible on the surface. Payable gold may sometimes be passed over if the cement be not carefully examined. There is a probability also of small nuggets becoming completely coated with the travertine limestone, and so being passed over. This material may be removed from the gold by placing it in a solution of hydrochloric acid (spirits of salt), or by heating in the fire, and converting the carbonate of lime into quick lime.

Quartz Reefs - A few of the numerous quartz reefs have been pegged out, and are being sunk upon. Gold can be seen in the stone, but not in sufficient quantity as yet to be considered payable. In connection with this it may be mentioned that I have obtained samples of quartz from five different claims of the Mannahill reefs (2 tons[9] from each claim), and forward them to be treated by the Newberry Vantin process, which is considered most applicable for fine gold, such as that occurring in the reefs'.

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(1) 100-134 m
(2) 1.6 km
(3) 25.6 km
(4) 4.8 km
(5) 213.4 m
(6) 304.8 to 609.6 m
(7) 16 km
(8) 8.0 km
(9) 2.03 tonnes

LAW AND ORDER

Police Department records (Clyne, pers. comm.) show that a Police Station was opened at Teetulpa during the 1886-1887 financial year. Staff consisted of 1 Sub-Inspector (Field), 7 Mounted Constables, 1 Foot Constable, 1 Native Constable and five horses. During 1888, staff was reduced to 4 Mounted Constables and the Native Constable. The station was closed on 14 August 1891.

Newspapers of the time make a number of references to Police presence on the field from the first few weeks after discovery. Apart from the trooper who was stationed on Tonkin's Dam in October 1886, others, including Police Commissioner Peterswald, visited to the field.

A Police camp is first mentioned on 16 November 1886 when the Warden and Police were reported to be camped in some trees

near Tonkin's Dam. Later, a Police Reserve was surveyed in Brady's Gully in the township.

Although records are fragmented, the following officers are known to have served at Teetulpa.

Sub Inspector Field	-	1886
Sergeant Major Campbell	-	1886
Trooper Holdsworth	-	1887
Constable Harris	-	1887
Corporal Reid	-	1888

Police Superintendent of the district in 1887 was Inspector Rollison.

Plate 26 shows the goldfields warden settling a dispute.

RELIGION

Arrival of the first miners and diggers to a goldfield was generally followed by the publican, storekeeper and then the Methodist Minister in that order. At Teetulpa, the Wesleyan Minister, Rev. A.J. Bogle, followed the first diggers and was the first man of religion on the field. He was followed soon after by a storekeeper and, initially, the publican was banned from the field.

Rev. A.J. Bogle arrived on the field on Saturday 23 October, 1886 and Rev. W.T. Wiltshire (Primitive Methodist) arrived the following day, both holding services on the Sunday. Bogle applied for a Miners' Right in the name of the Church and pegged a claim in what was to become Teetulpa Parade. He erected his tent on the claim and used it as a church.

The ground under the tent was found to be auriferous and Bogle moved his tent to the west on 1 December (Fig. 2). Bogle began to erect a more permanent building on 17 December using a wood framework, brush sides and tarpaulin roof (Plate 27). Construction was completed on 18 December and the first service held on Sunday 19 December.

On 6 November, Rev. W. Coller (Baptist) and Rev. W.T. Wiltshire held united services and a very orderly and attentive congregation of about 500 attended the afternoon service and 1 000 in the evening.

However, this was not always the case as Wiltshire reported that the Salvation Army services had met with continual interruptions and interjections.

The Anglicans used the Circus tent for their services. On 30 November 1886, a Gospel Temperance Society was formed to keep publicans off the field.

TABLE 10

LIST OF MINISTERS OF RELIGION AT TEETULPA, 1886

Name	Religion
Bogle A.J.	Wesleyan
Booth 'General'	Salvation Army
Coller W.	Baptist
Dunstan R.	Wesleyan
Fry A.S.T.	Wesleyan
Fry S.F.	Wesleyan
Maddigan	Primitive Methodist
Millekan W.A.	Wesleyan
Norton	Roman Catholic
Phillips 'Captain'	Salvation Army
Testrail - Thomas	Wesleyan
Wiltshire W.T.	Primitive Methodist
Whitington F.T.	Anglican

Rev. A.J. Bogle outlined some of his experiences at Teetulpa in a lecture he presented to a meeting presided over by Rev. J.B. Stephenson at the Kent Town Wesleyan Lecture hall. Following are some interesting excerpts:

> *'On Friday October 22 the Southern District meeting decided to send him to the goldfields to open a mission there and by the afternoon train the same day he started for the field. He had been absent twelve-days, having returned to Adelaide on Tuesday night, and during that time he had only had his clothes off once'.*

Bogle travelled in a break-van on the train from Petersburg arriving at Mannahill at 7 am on the Saturday. After cooking breakfast he visited the Mannahill Hotel and *'found the house crowded by all kinds of men, drinking and at various stages of intoxication'.*

Coaches and waggons departing from the field were congested. However, he was able to obtain a ride in a buggy. About 50 men assembled to listen to his service on Sunday morning. Every evening during his stay at Teetulpa he held a service and met five other ministers on the field.

Provisions were scarce when he first arrived. However, as food became more readily available he deduced that the diggers could live for about 8 shillings per week. Many of the diggers were farmers he observed and had driven to the field in their own conveyances taking an ample supply of stores with them.

> *'The absence of public houses from the diggings was an unmixed good, and he thought the action of the Warden in refusing permits for the sale of intoxicants had met with the general approval of the diggers, not merely the teetotallers, but of all classes. This was evidenced by the few signatures the man secured who was industriously circulating a petition to the warden asking him to allow a public-house to be erected'.*

Much of Bogle's time on the field was spent visiting and comforting the sick. He visited Waukaringa, staying overnight. However, his absence from the field meant that he missed the chance of performing the first wedding on the field, the ceremony being performed by a visiting minister.

Thomas Testrail was born at 'Trevarrick', Penwortham in 1859 and spent his boyhood at the family orchard. Later, he learnt the blacksmithing trade at Hoyleton. He began preaching in the Clare and Mintaro circuits and in 1887 at the mature age of 28, Thomas offered himself to the Wesleyan Methodist Conference of South Australia as a candidate for the ministry. Upon being accepted, he was immediately appointed to the newly opened Teetulpa goldfield. Thomas was active in caring for the sick and injured miners and *'his practical nature won him the rspect and indeed the golden opinions of the men on the fields'* (Testrail, 1979).

SOCIAL AND COMMUNITY

During the first few weeks of Teetulpa's history, there were no organised social activities. Like all new discoveries, diggers were mainly interested in surviving, obtaining gold and holding their ground from newcomers. Sunday was the day off, when chores around camp were done, entertainment consisting of visiting other diggers or attending church services.

Groups of important visitors who came to Teetulpa provided a form of free entertainment, with most groups having a large following of curious diggers. One of the first of these groups visited in late October 1886, and consisted of J.W. Downer (Premier), J.C. Bray (Treasurer), J.C.F. Johnson (Minister of Eduction), Police Commissioner Peterswald and W.A. Horn, owner of Winnininnie Station.

Miners were not as rowdy at Teetulpa as they were on many fields of comparative size, partly due to intoxicating liquor being banned by the Warden. Several sly grog shops were in existence by early November. However drunkenness was rare, its first appearance being on December 20 when the Warden fined a man for being drunk. A Gospel Temperance Society was formed on 30 November to keep liquor off the field.

On 23 November, the following article appeared in a newspaper and gives an interesting insight into Teetulpa's Society -

> *'..... I must say that the majority of the diggers keep close to their work all day, although at intervals they have a short respite along the gullies for a smoke and chat. Most of the men commence operations after breakfast, and as we are all aroused by the sun at 5 o'clock this is a tolerably early meal. At about 5 p.m. the toil of the day ceases, and then the goldseekers troop up the sides of the low ranges on either side of Brady's Gully, and ere the sun has sunk behind the hills the sweet scents of the cooking are wafted from one end of the gully to the other. The people of he city must not imagine that we are a rough lot up at Teetulpa. Certainly we live and dress roughly, and as one wanders about the men he is forced to come to the conclusion that many of the diggers are not always extremely nice in their choice of language. But later on one hears sweet music emanating from voices in hundreds of tents that tells at once of careful training of the*

vocal organs, and of the refinements of home influences Yes, in Brady's Gully at Teetulpa may be heard songs from the "Mikado", from the "Pirates", "Miaritana," and in fact selections from all modern musical compositions. Of course, we have 'Arry and his concertina, but even his music is preferable to that which comes from two trumpets blown with great regularity every night by two membes of that body of which "General" Booth is commander-in-chief. Then we have amusements which help to liven up the evenings. For instance, there is the "electric lady", and we have had a mechanical apparatus called, I believe the "Blacksmith's dream". But next week is to be one of great dissipation, for we have heard that Miss Carrie Nelson is to visit us; and then, too, we will shortly have a circus troupe here, so that we shall not lack for recreation, which by the way is badly needed by those who are gold getting. Properly speaking, I suppose, the Salvation Army does not come under the head of amusements, but none the less the proceedings of this body which meets nightly provide amusement for numbers who do not look on the serious side of life.....'

Although there was a good community spirit, as demonstrated by a Sick Miners Fund being set up by the diggers at an early date, there was no real community until wives started arriving in mid November. Many lonely diggers must have written home and to their friends, as Mr. Foster (Postmaster) was innundated with mail. On 9 November, he despatched 3 000 letters, this being only one days worth of mail.

While diggers of many nationalities mixed on the field all were accepted as fellow diggers, except for the Chinese. On 28 November, a meeting to ban Chinese was held. Below is a report of the meeting -

'To-day a largely-attended meeting was held on the east side of Brady's Gully to consider the presence of Chinese on the diggings. Several speakers addressed the meeting, and John Chinaman found no friend among the digger population. The question was fully debated, and it was decided that a committee should ask the Government to take what measures they deemed necessary to prevent Chinamen from coming on the field. A committee was also appointed to deal with the Chinamen already here. It is supposed that there are two or three on the diggings and these will no doubt be requested to shift. The feeling against the Celestials is very strong.'

Christmas Day 1886 was celebrated with some style, and incuded a Sports Day. A reporter saw the day as follows -

> *'Christmas passed off very quitely on the field, and those who looked for a time of boisterous mirth and confusion similar to that which prevailed on some of the Victorian diggings during the festive season in the old days were grievously disappointed. Work on the field was pretty generally suspended at noon or a little later on Friday, and after furbishing up their best suits and having tea the diggers assembled on Teetulpa parade and did the "block" in very much the same style as it is done in Rundle-street. Among those on the parade were a few ladies, who exicted considerable attention as they promenaded on the arms of their husbands. Some of the shops had mounted a few ever-greens and Chinese lanterns by way of Christmas decorations, but as a rule no attempt was made by the business people to imitate the example of their city contemporaries in this matter. A large amount of business was done in the early part of the evening, but the dusty road had little or no attraction for the people, who could neither see nor be seen to any extent save as they passed the doors where one or two lamps were hung over the entrances to places of business, and the place was quickly deserted. By 11 o'clock the town was as quiet as it usually is at this hour at night except that occasionally some happy mortal reeling home from a convivial gathering made the night hideous by trying to sing at the top of his voice some music-hall song or "Army" hymn. Christmas Day dawned hot and dusty, and the possibilities of spending a merry Christmas on the shadeless plain were small indeed. Despite this extensive preparations for a good old-fashioned Christmas dinner were pushed on all hands. In many cases two or three camps combined, and had one dinner between them, but in others the morning was spent in reading the daily papers, or on the shady side of the tent the stories contained in the Christmas number of the Chronicle were conned with evident pleasure. Shortly after noon a general move was made for the numerous restaurants on Post Office Hill. Here great preparations had been made, and relay after relay of guests sat down to the festive boards which in several cases were graced with the succulent sucking pig and the toughly toothsome turkey and rooster, a consignment of which arrived the previous day. These dainties were followed by enormous plum puddings, scores of them having been boiled in the largest sized galvanized iron*

tubs in the open air. The afternoon was enlivened by two or three fights, which were more laughable than serious, and resulted in nothing worse than bloody noses. About 2 o'clock a general move was made for the scene of the athletic sports on the west side of Brady's Gully or the shady hop beer booths, but the fortunate possessors of drives in the deep sinking spent the afternoon in these cool receses, emerging refreshed and cool at the setting of the sun.'

Another report described the Sports Day -

'A few days previously a meeting was held, when it was decided to hold a mixed meeting of horse races and athletic sports, and the following committee was appointed to carry out the arrangements - Messrs H. Rice, J. Fox, T. Letchford, J. Daniels, C. Driffield, and R.F. Long, hon. secretary. Mr. Long proved an energetic secretary and canvesser, as he secured money and trophies to the value of £20, so that a good day's sport was promised. Unfortunately there were no entries for the horse races, the owners of the thoroughbreds refusing to nominate their clinkers as they are saving them for the meeting which is on the tapis for New Year's Day. However, no less than 127 entries were received for the other events, so that we had a good afternoon's sport. The gathering came off on the flat at the north end of Brady's Gully, where Mr. W.A. Sinclair pegged out a fair course. The attendance was capital, there being present the "elite" of the district, the golden kings of Teetulpa, together with men of all stations in life now living together. There were several booths on the ground with cordials and aerated waters, and cherries and oranges could be purchased. A dray did duty as a grandstand, and best of all the sports were patronised by some of the ladies of the diggings. There was only one totalizator on the ground in which we could all back our "fancies", but with crack runners from Adelaide, Victoria, and New South Wales it was difficult to "spot a good thing". The tug-of-war was perhaps the most exciting event of the day.'

Results are shown below -

'On Christmas Day athletic sports were held near the Criterion Hop Beer Saloon, on the west side of Brady's Gully. The attendance was large, about 1,500 persons assembling on the ground despite the heat of the day and the absence of many diggers from the field. The hack race, for which nine started, excited considerable interest, being the first event run on the field. After a keen struggle Mr. Manning's Reary, with Cracknell up, got home first. The proceedings passed off without a hitch, and the gathering was orderly in the extreme. The committee intend to hold a similar gathering on New Year's Day, when several trophies, presented by Adelaide merchants, will be competed for. The following is the prize list.

Boy's Handicap Flat Race, 100 yards. - I. O'Kelly, D. O'Kelly, A. King.

Boy's Walking Match - J. O'Kelly, Albert King.

Men's Handicap Hurdles, 120 yards. - J. Barnett, Butler.

Sack Race - J. Perry, D. Kemp.

Running High Jump - J. Perry (5 ft. 1 in.), G. Crowder and T. Discombe tie.

Putting the Stone. - Ford (22 ft. 1 in.), Butler.

Tug of War - Brady's Gully v. Windlass Hill after a great struggle, in which one or two strong ropes were broken.

Walking Match. - D. Wilshion, G. Barlow, A protest entered, but left over.

100 Yards Flat Race - W. Dixon, Newberry.

Three-legged Race - W. Dixon and V. Richards, J. and P. Constable.

Old Men's Race - Kash, Merritt.

Hack Race - Mr. Manning's Reary (Cracknell), Mr. Harris's Baby.'

As the field progressed, other social activities were held including bazaars, concerts, balls, circuses, smoke socials and other events. A cricket match was held between Teetulpa and Waukaringa on 3 December 1887, which resulted in a win to Waukaringa in one innings. Plate 44 shows the old cricket pitch at Teetulpa, the location of which is on Fig. 10(b).

Various clubs and associations were formed, some like the Butchers Association of Teetulpa for business, others for charity e.g. Miners Benefit Association, Teetulpa Dramatic Club for social events and Teetulpa Miners Association for promoting the field.

CEMETERY

Bedford Hack (Warden) selected a cemetery site on 2 December 1886 due to the death of Albert Hamley, who was buried the same day. In October 1887, a fence was erected around the cemetery.

Total numbers buried at Teetulpa are unknown, however the authors counted 18 possible graves in March 1986 (Plate 28). Information is scant and often incomplete. Not all who died at Teetulpa were buried there, e.g. Charles Crewes was struck and killed by lightning while winding up the windlass on the Jubilee on 3 January 1888. He is buried in Terowie. Others who died away from the field, e.g. Thomas Dennis Jackson who died of cholera at Westward Ho. Mannahill on 14 July 1888 may be buried there. Plate 29 shows the headstone of Joseph Davies who died 14 June 1887.

TABLE 11

INFORMATION ON PEOPLE BELIEVED BURIED AT TEETULPA

NAME	COMMENTS
JOSEPH DAVIES	Died 14 June 1887 aged 62 years (Plate 29).
ALBERT HAMLEY	Died December 2 1886 aged 3.5 months of dysentery and convulsions. Son of Edward Hamley (Circus owner).
EMMA HIGGS	Died February 1887 aged 17 years of typhoid.
JOHN PUTT	Died December 1886 of typhoid fever after an illness of 3 days. Formerly of Lancelot. Attended by Dr. Richardson.

NAME UNKNOWN	Died 20 December 1886 from typhoid fever and pneumonia.
ROBERT McDONALD	Died 24 December 1886 from dysentery.
NAME UNKNOWN	Died December 1886 from a burst blood vessel.
WILLIAM REECE	Died 29 September 1887 of burns.
JOHN LYONS	Died 30 November 1887 after falling from a rope in the Ben Lomond on 20 Nov. 1887.
WILLIAM BURKE	Died 10 December 1887, of injuries received when dirt fell on him on 8 December while mining in Brady's Gully. Buried on 11 December.
THOMAS DEEGAN	Died 17 March 1888 from injuries received in an explosion on the Morning Star on 9 March.

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TABLE 3

INFORMATION ON INDIVIDUAL REEF WORKINGS

(MODIFIED FROM C.A. CLELAND, 5 FEBRUARY 1889)

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
ADELAIDE	See LONDONDERRY				
ADELAIDE JUBILEE	A	VERTICAL	14.6	NONE	Small north and south reef, underlying east 1 in 8.
	B	UNDERLAY, COSTEENS (5.2 m long)	4.9	NONE	As above
ALBION	See GREAT IRONCLAD				
ALLIANCE	A	UNDERLAY	26.2	NONE	Underlay east, 1 in 8. Small veins.
	B "BLUE STAR"	"	9.6	NONE	As above
	C	"	8.1	NONE	As above
	UNLABELLED	?	?	?	50 m Sth Shaft C
	UNLABELLED	?	?	?	115 m " " " on Junction of 2 lodes.
ARISTIDES	See GREAT IRONCLAD				
AURIFERA (HUNTER & CO.)	A	VERTICAL	11.9	NONE	Small lode underlaying 1 in 8 east.
	B	VERTICAL (9.1 m)	13.6		No. lode visible
		UNDERLAY (4.5 m, east)		NONE	
	C	VERTICAL	18.0	NONE	?61m lode containing free gold.
	UNLABELLED	?	?	?	30m north west of Shaft A.
BEN LOMOND	A	VERTICAL	19.8	NONE	Lode 36cm. Assay 224.7 g/t.
	B	VERTICAL	12.2	Drive at bottom 3.8m	Lode 36cm, principally Ironstone.
	C	VERTICAL (6.1m)	15.2	Drive 9.1 m on underlay, principally on east west reef.	As above.
		UNDERLAY (9.1m)			
	D "VANGUARD"	VERTICAL (27.4m)	36.6	Drive at 27.4m, North 8.5m	Lode at bottom 91cm, composed principally of iron, gossan and Pyrite.
		UNDERLAY (9.1m)		" " " , South 3.7m	
				" " bottom South 1.8m	
	E	VERTICAL	9.1	NONE	Lode 91cm
	UNLABELLED	?	?	?	20m north of Shaft A

Production
20.8 tonnes crushed at J.C. Bray Battery gave nil return.

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
BESSIE					
BESSIE EXTENDED			5.5	?	?
BISMARK REEF	See LONDONDERRY				
BLACKFELLOWS					
BLUE STAR	13 claims pegged in early 1887. The Blue Star Gold Mining Company, No Liability was formed on 20 September 1887, with a capital of £5,000. The Comet claim was aquired in October 1887.				
(Low & Co.)	"COMET"	VERTICAL	19.8	Crosscut at bottom 14m east.	Gold bearing lode (Shaft) 18-20cm. At 6.7m in crosscut 38cm lode of quartz and gossan.
	A	VERTICAL	6.1	NONE	East and west lode 46cm, good gold found.
	B	PIT	3.0		As above
	C	UNDERLAY	12.2	NONE	Lode 30cm on north side of shaft, 15cm on South
	D. "No. 2 UNDERLAY"	UNDERLAY	33.2	Crosscut at bottom 9.1m east	Shaft cut 3 east west lodes, bottom lode 51cm. Strong indications in face of crosscut of being near a north south lode. Also known as South or Main Shaft.
	E. "No. 1 VERTICAL	VERTICAL	18.3	Drive at 9.1m, South 9.1m	Lode 30-36m cut at 11.3m by fault, and thrown 3m west.
				" " 12.2m " 6.1m	Also known as North Shaft.
	UNLABELLED	?	?	?	65m north west of Shaft A
	"	?	?	?	90m north " " A
	"	?	?	?	75m north east of Shaft A
	"	?	?	?	115m west " " C
	"	?	?	?	120m west north west of Shaft C
	"	?	?	?	125m " " " " " C
	"	?	?	?	20m east " " C
	"	?	?	?	20m north " " D
	Production 5.1 tonnes yielded 325.1 g gold bullion at New Era Battery (63.7 g/t) (1887) 2.5 tonnes yielded (unknown) gold bullion at Ballarat (1887) Specimen of gold 3.1 g				

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
BLUE STAR CENTRAL	A	UNDERLAY	7.3	NONE	Lode 18cm
	B	UNDERLAY	5.8	NONE	" 61cm (approx.)
	UNLABELLED	?	?	?	110m north of Shaft B
BLUE STAR SOUTH					
BOUCAUT, W.	?	?	?	?	9.0 tonnes yielded 37.3g gold bullion (1894)
BRADY'S CLAIMS	A	VERTICAL	17.7	NONE	Lode 5cm
	B	VERTICAL	6.4	NONE	No Lode
(BRADY)	C	VERTICAL	17.7	NONE	Lode 20cm
	D	VERTICAL	15.7	NONE	No Lode
	E	UNDERLAY	15.5	NONE	Small lode. Soft sinking
	UNLABELLED	?	?	?	10m north of Shaft C
BRADY'S GULLY REEFING SYNDICATE		?	11.3	?	
		?	11.6	?	
	PRODUCTION 57.6g Gold from specimen.				
BRIGG'S REEF					
BURNEY, R.					
CAMP					
COLLEEN BAWN	A	VERTICAL	13.1	NONE	No lode
	B	VERTICAL	9.4	NONE	No lode
	UNLABELLED	?	?	?	65m South east of Shaft A
COMET	See BLUE STAR				
COMOPOLITAN (Field & Party)	A	UNDERLAY	13.1	NONE	North south lode 30cm. Shaft underlying east 1 in 6. North of Dam Gully
COMOPOLITAN	A	VERTICAL	16.5	NONE	Lode 30cm, underlaying east 1 in 8. South of Bradys Gully
	PRODUCTION 15.2 Tonnes crushed. No inforamtion.				
DAVEY'S REEF					

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
EAST IRONCLAD	A	UNDERLAY	10.1	NONE	Lode 18cm, quartz, calcite, iron oxide, pyrite. Free gold seen occasionally. Underlays east 1 in 8.
	B	UNDERLAY	11.7	NONE	ASSAY 93.2 g/t Au, 15.8 g/t Ag.
	C	UNDERLAY	17.4	NONE	Line of lode 8.5m west of Shaft B, 18cm thick. Copper showing in some stone. Crushing yielded 11.1 g/t. Underlay east, 1 in 8.
	D	UNDERLAY	8.4	NONE	
	UNLABELLED	?	?	?	50m South Shaft D
	"	?	?	?	120m " " "
	"	?	?	?	75m north east Shaft B
	"	?	?	?	80m east " B
EAST IRONCLAD EXT.	A	UNDERLAY	5.3	NONE	Lode 5-8cm
	B	UNDERLAY	4.0	NONE	No lode
EDINBOROUGH CASTLE NORTH		?	5.5	?	?
EDWARD PARRY	A	VERTICAL	5.8	NONE	Small north south lodes, underlay east 1 in 8.
	B	VERTICAL	3.5	NONE	As above
	C	VERTICAL	8.2	NONE	As above

EMPRESS VICTORIA

The Empress Victoria Gold Mining Company, Limited was formed on 24 April, 1888 to work 12 claims consisting of the Victoria, Victoria Extended and South Victoria. Two samples from here had been assayed in January 1888, - Ironstone quartz yielding 2,571.2 g/t gold and 134.3 g/t silver, and the second sample yielding 248.1 g/t gold and 11.1 g/t silver. These samples were so obviously selected that the assayer commented that due to the large amount of coarse gold seen in them that they were of little use.

EMPRESS VICTORIA	A	UNDERLAY	3.0	NONE	
	B	UNDERLAY	35.0	Drive at 9.1m, South 15.2m " " 21.3m, " 6.1m " " 35.0m, " 12.2m	Water cut 21.3m, 6,800 Litres/day
	C	VERTICAL	11.3	NONE	No lode.

Production

2.0 tonnes treated at Dry Creek (1888). No information.

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
ENTERPRISE	A	VERTICAL	22.9	Drive at bottom 2.7m South	Lode 61cm, 15cm Solid Pyrite on one side. 2.4m of water. (270 litres per hour).
	B	VERTICAL	13.7	NONE	Lode 61cm
	C	VERTICAL	5.6	NONE	Lode 46cm
	D	VERTICAL	8.8	NONE	Lode 46cm, shaft on Londonderry line of reef.
EVENING STAR	A	VERTICAL	16.8	NONE	Lode 30cm, underlay east 1 in 8.
	B	UNDERLAY	9.5	NONE	As above plus shaft underlay east 1 in 6
	UNLABELLED	?	?	?	20m west of shaft B
	"	?	?	?	80m east " " A

Production

4.1 tonnes yielded 112 grams of gold bullion. (27.3 g/t) (1888)
4.1 tonnes yielded 28 grams of gold bullion. (6.8 g/t) (1888)

GOLDEN STAR	UNLABELLED	?	?	?	?
	"	?	?	?	? -

GREAT IRONCLAD

In August 1887 the owners of the Ironclad, Albion and Bradys Gully Reefing Syndicate (Thompson's claim) decided to amalgamate as one. The Great Ironclad Gold Mining Company, No Liability was formed on 22 February 1888 to work these 4 claims. Nominal capital was £32,000.
A Government Subsidy of £250 was granted in June 1888.

GREAT IRONCLAD	A	VERTICAL	11.0	NONE	Lode 18-23cm. Underlay 1 in 8 to 1 in 10.
	B	UNDERLAY	3.4	NONE	As above plus shaft underlay 1 in 6 to east.
	C	UNDERLAY	9.6	NONE	As above
	D	UNDERLAY	12.3	NONE	As above-shaft underlay 1 in 8 to east.
	E	UNDERLAY	8.2	NONE	As above
	F	VERTICAL (12.2m)	21.3	NONE	As above
		UNDERLAY (9.1m)			Underlay 1 in 8 to east
	G	VERTICAL	9.6	NONE	As above
	H	VERTICAL	3.7	NONE	Exploration holes.
	J	VERTICAL	4.1	NONE	As above
	K	UNDERLAY	16.8	NONE	As above, underlay 1 in 8 to east.
	MOONTA	VERTICAL	27.4	Crosscut at 9.1m, South 4.3m	Lode 61-76cm. Highly mineralized iron oxide with pyrite, quartz, barite. Flucan in lode.
	L	VERTICAL	3.0	NONE	Continuation of Moonta shaft lode.
	ALBION	VERTICAL	18.3	Drive at 9.1m, South 8.5m	Lode 46cm
				" " 9.1m, North 3.7m	As above.

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
	M	UNDERLAY	9.5	NONE	Lode 10cm underlay east 1 in 8
	N	VERTICAL	3.8	NONE	As above
	P	UNDERLAY	8.8	Drive at 3m South 17.4m to costean	Quartz lode 10-15cm Rough gold in some specimens.
	Q	UNDERLAY	3.0		
	UNLABELLED	?	?	?	25m east of Shaft K
	"	?	?	?	50m east south east of Shaft P
	"	?	?	?	80m south east of Shaft P
	"	?	?	?	90m south east of Shaft P

Production

40.6 tonnes yielded 37.3 g gold bullion (9.2 g/t) (1888)

0.45 kg yielded 31.1 g gold bullion (1888)

GREAT IRONCLAD EXT	A	UNDERLAY	10.8	NONE	Two quartz veins 8-13cm thick, one on each wall Pyrite, Barite, Quartz. Underlay 1 in 8 east.
	B	UNDERLAY	6.7	NONE	As above
	C	UNDERLAY	14.2	NONE	As above
	D "KOHINOOR"	UNDERLAY	7.0	NONE	As above
	E "ARISTIDES"	UNDERLAY	12.3	NONE	As above
	UNLABELLED	?	?	?	10m north west of Shaft D
	"	?	?	?	20m " " " " D
	"	?	?	?	90m " " " " D
	"	?	?	?	25m south " " " D

Production

0.25 tonnes treated at Dry Creek yielded 12.4 g gold (49.6 g/t Au) and 7.8g silver (1888).

GREAT LIONEL

In 1913 several old shafts were covered by this lease. Shafts of 6.1m, 9.1m, 22.9m, 7.6m, 18.3m and 2.1 were reported. Samples assayed showed both gold and bismuth.

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
GREAT WARRIOR	A	UNDERLAY	33.5	Drive at 6.1m, North 6.1m	Lode 13cm at surface, 38cm at bottom of shaft 2.4m of water. Gold found from surface to 12.2m. Stone poor to 32.0m, then Pyrite and free gold.
	B	UNDERLAY	8.5	NONE	Lode 10cm at surface. Little fine gold.
	C	UNDERLAY	7.0	NONE	Gold at surface. Lode 23cm, cut out at 1.5m.
	D	UNDERLAY	28.4	NONE	Lode 51cm at surface, gold in ironstone casing on quartz vein. Lode split at 15.2m and crosscut (?faulted) 1.5m. Gold seen in quartz and ironstone below 15.2m.
	E	UNDERLAY	23.5	NONE	Lode 30cm at surface, at bottom 76cm.
	F	UNDERLAY	15.5	NONE	Lode 15cm at surface, at bottom 46cm
	G	UNDERLAY	12.8	NONE	Lode 8cm at surface.
	UNLABELLED	?	?	?	10m east of shaft A
	"	?	?	?	65m southwest of shaft D
	"	?	?	?	70m " " " " D
	"	?	?	?	50m east " " E
	"	?	?	?	35m southwest " " F
	"	?	?	?	8m southeast of above shaft.
	"	?	?	?	85m " " " Shaft F
	"	?	?	?	105m " " " " F
NOTE:	Great Warrior an amalgamation of EDINBURGH CASTLE and WARRIOR				
HARDIMAN'S					
HOARE AND PARTY		?	7.6	?	?
HORSESHOE	See LONDONDERRY				
INTERNATIONAL	A	UNDERLAY	20.7	NONE	Lode 30cm. 30cm water in shaft. Underlay east 1 in 6.
	B	UNDERLAY	6.4	NONE	Small lode.
	C	UNDERLAY	6.6	NONE	Small lode.
	UNLABELLED	?	?	?	15m west of shaft A
	"	?	?	?	30m north west of shaft A

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS

IRONCLAD

Twelve claims, including the Great Ironclad, (1887). Later referred to as Scotchman and Ironclad (1909) Lykke Viking (1911) Tavern-Core (1913) and Great Ironclad (G.L. 1530) in 1934. During 1910-1911 a three head battery was erected, driven by a 8 H.P. oil engine. Crushings gave a return of 7.90 g/t gold with 3.99 g/t in tailings. Tonnages treated are unknown.

Production

31.1 g from specimen (1887)
15.6 g from specimen (1887)
15.1 Tonnes yielded 44.9 g gold bullion (LYKKES REEF) (2.97 g/t)
15.1 " " 620.4 g " " (SCOTCHMAN) (41.1 g/t)
18.3 " " 130.5 g " " (VIKING) (7.1 g/t)

ISLE OF AXHOLME	A	VERTICAL	7.6	NONE	Lode 30cm
	B	VERTICAL	4.7	NONE	Lode 8cm
	C	UNDERLAY	6.9	NONE	Lode 10cm
THE JAFFA	A	VERTICAL	17.4	NONE	Lode 38cm, underlay to west.

J.C. BRAY

See also Teetulpa Mining and Crushing Company, Limited. This mine was also the site for the J.C. Bray Battery. Workings consisted of one shaft (Main) sunk for 41.2m, and timbered to 39.6. Water was cut at 32.3m and flowed in at 454 Litres/hr. Production 40.6 tonnes crushed. No information. Unknown tonnage treated at Salt Creek (Mannahill) yielded. 20.5 g/t.

JUBILEE	A	VERTICAL	11.3	NONE	Lode 30-46cm - quartz, pyrite, clacite, manganese, iron oxide.
(Howard, Clayton & Party)	B	UNDERLAY	26.5	NONE	As above
	C	VERTICAL	14.6	NONE	Lode 30cm
	D	VERTICAL	6.4	NONE	No lode.

Production

5.1 Tonnes yielded 147.8g gold bullion at Salt Creek (Mannahill) (28.8 g/t)
5.1 " " 178.9g " " " " " " (35.1 g/t)
5.1 " " 27.2g " " " J.C. Bray Battery (5.3 g/t)

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
KOHINOOR	See GREAT IRONCLAD				
LACKLAN	?	?	13.7	?	?
LAWRIE AND PARTY	?	?	11.0	?	?
LION	A	VERTICAL	10.1	NONE	No lode
	B	UNDERLAY	5.2	NONE	No lode

LITTLE BRITISHER

Eight claims on an East-West reef. Discovered by Jerry Dwyer in January 1888.

Production

50.8 tonnes treated at J.C. Bray Battery. No information.

LONDONDERRY

The Londonderry Gold Mining Company, No Liability, was formed on 9 January 1888 to work 16 claims, including the Adelaide, Bismarck and Horseshoe, Nominal Capital was £16 000.

During 1934 G.L. 1784 covered these workings. Gold was found in ironstone casing of the lode, the quartz being barren.

LONDONDERRY	A "NORTHERN"	VERTICAL	13.1	Drive at 10.1m, South 2.7m	Lode ironstone, gossan, quartz. Gold panned from gossan.
	B "ADELAIDE"	VETICAL	20.1	Drive at 20.1m, East 5.5m Drive at 20.1m, West 2.7m	Lode 46cm West drive cut 18cm lode 61cm from shaft.
	C "HORSESHOE"	VERTICAL	6.7		
	D "LONDONDERRY	UNDERLAY"	35.4	Drive at 35.4m, North 4.3m	Water cut 35.4m, gold found in white quartz at 6.1 m, lode 51 cm. Assay at 18.3 m 61.6 g/t gold.
	E "LONDONDERRY VERTICAL"	VERTICAL	10.7		
	BISMARK NO.2	UNDERLAY	15.2	NONE	Specimen in quartz assayed. 68.0 g/t

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
	BISMARK NO.1	UNDERLAY	12.2	NONE	Assays from 26.9 - 63.2 g/t
	UNLABELLED	?	?	?	30m south of shaft A
	"	?	?	?	125m " " " A
	"	?	?	?	120m east " " B
	"	?	?	?	130m " " " C
	"	?	?19.8	?	35m south " " BISMARCK NO. 2

Note - Shaft D also known as MAIN SHAFT. One of the unlabelled shafts called New Shaft and is 10.1m deep.

Production

16.3 tonnes yielded 53.9g gold bullion by battery treatment only (Peterborough, 1934). Tailings contained 5.6 g/t gold. (yield 3.3 g/t Au).

MCLEAY AND CO.	?	?	9.1	?	Dam Gully
McEVOY	?	?	2.4	?	Strawbridge Gully
McNAMARA'S SYNDICATE	?	?	12.2	?	Bradys Gully
MANNING H.H.	?	?	?	?	Near Tonkins Well

MOONTA SYNDICATE

MORNING STAR

The Morning Star Gold Mining Company, Limited was formed on 6 February 1888 to work 4 claims. Capital was £30,000.

MORNING STAR	A "NO. 1"	VERTICAL	24.5	Crosscut at 14.0m, east 3.1m Drive at 24.5m, south 2.4m Crosscut at 24.5m, east 7.5m	Lode chiefly iron from surface to 14.0m, then changes to pyrite and quartz to bottom. Lodes cut in 24.5m x cut east at 1.8m and 2.4m
	B "NO. 2"	VERTICAL	18.9	Drive at 18.9m, north 8.2m Crosscut at 18.9m, west 7.0m	Lode struck in bottom of shaft, 1.8m thick, 10.2 tonnes yielded 11.1 g/t 6.1 " " 19.0 g/t (pyrite and quartz) 13.2 " " 1.6 g/t (Ferruginous quartz from upper part of lode).
	UNLABELLED ("NO. 3")	?	4.6	?	?

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS

Production

10.2 tonnes yielded 124.4g gold bullion (12.2 g/t Au) (only 50% ore, rest mullock)
6.1 " " 108.9g " " (17.8 g/t Au) (Pyrite ore)
13.2 " " 21.1g " " (1.6 g/t Au) (Ferruginous quartz)

MORNING STAR SOUTH

On 6 February 1888 The Morning Star South Gold Mining Company. Limited with a capital of £30,000 was formed to work 4 claims.

MORNING STAR SOUTH		VERTICAL	16.8	NONE	Lode very small west of Morning Star reef.

MYRTLE MAY

Four claims on top of Campbells Hill. Sold to J.C. Bray Company (? Teetulpa Mining and Crushing Co. Ltd. in January 1888). Shaft sunk 20.7m on a 76cm lode of iron, gossan and quartz.

NON PARIEL	A	VERTICAL	21.6	NONE	Lode 20cm
	UNLABELLED	UNDERLIE	21.3	Drive east ?m	Lode arsenopyrite, hematite and quartz. Water cut 21.3m
	UNLABELLED	UNDERLAY	5.5	?	Eastern dipping lode of ironstone, quartz and gossan

NOTE - There are two unlabelled shafts shown on Clelands plan, one 30m south of Shaft A and one 8m north of Shaft A. It is uncertain which is the 21.3 m or which is the 5.5m deep shaft.

OLIVER AND PARTY

PARNELL	A	UNDERLAY	9.8	NONE	Lode 30cm. Underlay 1 in 8 to east.
	B	VERTICAL (4.9m) UNDERLAY (22.6m)	27.4	NONE	Lode 30cm
	C	VERTICAL	15.7	NONE	Lode 30cm
	D	UNDERLAY	4.4	NONE	Small lode visible in places. Underlay 1 in 8 to east.
	UNLABELLED	?	?	?	?

Note - Although Cleland mentions Shaft D it is not named on his plan. There are two unlabelled shafts shown, one 45m east of Shaft C and one 105m southof Shaft C. Presumably one is Shaft D.

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
PRINCE CONSORT	A	VERTICAL	9.0	NONE	No lode
	B	VERTICAL	7.9	NONE	No lode
	C	VERTICAL	13.6	NONE	No lode
THE PUPS	A	VERTICAL	16.2	NONE	Lode 30cm much pyrite
ST. PATRICK	A	UNDERLAY	8.8	NONE	Lode 38cm at Surface. No colours.
	B	UNDERLAY	12.2	NONE	As above
SCOTCHMAN	A	UNDERLAY	8.1	NONE	Lode from 23-33cm. Underlay 1 in 7 east.
	B	UNDERLAY	7.0	NONE	As above
	C	UNDERLAY	4.0	NONE	As above
	UNLABELLED	?	?	?	10m east of Shaft A
Production					
61 tonnes yielded 1584.4g gold bullion (1888) (yield 25.9 g/t Au)					
SCOTIA SYNDICTE	6 Shafts, 1.8-3.7m deep.				
SOUTH VICTORIA	See EMPRESS VICTORIA				
SOUTHERN CROSS	A	VERTICAL (10.1m) UNDERLAY (15.2m)	25.3	NONE	Lode 38cm
	B	VERTICAL	9.1	NONE	Lode very small
STONEHAM'S REEF	?	?	36.6	?	Dam Gully
STRUCK OIL	A	UNDERLAY	38.1	?Crosscut North 4.0m at 6.1m, South 8.2m to cut lode.	Lode 46cm thick at bottom of Shaft, underlay to east 30cm in 15cm
	B	UNDERLAY	8.5	NONE	Lode 30cm underlay 30cm in 20cm
TEETULPA EXTENDED	?	?	22.9	?	?

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
TEETULPA KING	A	VERTICAL	7.3	NONE	No Lode
	B	VERTICAL	7.0	NONE	No lode

THE TEETULPA MINING AND CRUSHING COMPANY, LIMITED

Company formed on 3 August 1887, with a capital of £6,000. Six claims were held including the J.C. Bray. During the period from October to December 1887 the battery (named after John Cox Bray M.P.) was erected under the management of Mr. Cowell. Crushing commenced on 14 January 1888.

A 10 head battery constructed by Jones's Foundary of Adelaide, (the Stamp stems being made by Hawke and Co. Kapunda) working at 70 drops per minute was erected. Breakdowns were frequent. Crushed ore from each 5 head battery ran across copper amalgamation tables, 1.2m wide and 2.7m long, then across a canvas concentrating table. Concentrates were reground and amalgamated in 2 Watson and Denny Pans, supplied by James Martin and Co. of Gawler.

Power was supplied to the battery and pans by a 20H.P. Tangye horizontal engine. J. Martin and Co. supplied the boiler. During May, 1888 Mr. Nigel took over as manager.

Water was obtained from J.C. Bray shaft and the Water Depot and was recirculated as much as possible. A 16,000 gallon (72,700 Litre) cemented tank was used for head feed, tailings being dewatered in 3 cement settling pits.

Crushing of ore for other parties was undertaken at £1 per ton for lots over 10.2 tonnes (10 tons) a larger (negotiable) fee being charged for lesser tonnages. Crushing records are incomplete. Listed below are known results.

MINE NAME	TONNES CRUSHED	BULLION (GRAMS)	COMMENTS	YIELD g/t Au
BAND OF HOPE	?	?	MANNAHILL G.F. 63.6g/t recovery	?
BEN LOMOND	20.8	NIL		-
COSMOPOLITAN	15.2	?		?
EVENING STAR	4.1	112		27.3
" "	4.1	28		6.8
GREAT IRONCLAD	40.6	373.3		9.2
J.C. BRAY	40.6	?		?
JUBILEE	5.1	27.2		5.3
LACKLAND	?	?	CONCEALED	?
LITTLE BRITISHER	50.8	?		?
MATTYS REEF	5.1	155.5	WONNA G.F.	30.5
MORNING STAR	10.2	124.4		12.2
" "	6.1	108.9		17.9
SCOTCHMAN	61.1	1384.4		22.7
SUNBEAM	5.1	85.6	MT. VICTORIA	16.8
TEETULPA M&C CO. LTD	?	404.4	CEMENT	?
" "	?	62.2	"	?
" "	81.3	497.7	"	6.2
TEETULPA UNITED	10.2	46.7		4.6
UNLEY PARK	10.2	46.7		4.6
	370.5	3457.0		

Capital being insufficient to meet costs the company went into voluntary liquidation in October 1888.

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
TEETULPA MINING AND CRUSHING COMPANY	A	VERTICAL	52.9	NONE	Lode 46cm cut at bottom. Few colours of Gold. Water struck, but insufficient for battery.
TEETULPA MINING AND CRUSHING COMPANY	A	VERTICAL	10.7	NONE	Shaft North of the Jaffa, ex T.M.&C. Co Lode 38cm underlay to west.
TEETULPA UNITED (Abandoned)	A	UNDERLAY	17.5	NONE	Underlay 1 in 8 east. Lode 30cm. Same reef as as BLUE STAR
	B	UNDERLAY	2.3		Underlay 1 in 8 east, lode 30cm
	C	UNDERLAY	21.6		" " " " " 46cm
	UNLABELLED	?	?	?	60m west of Shaft C.
Production					
10.2 tonnes yielded 46.7g gold bullion, (yield 4.58 g/t Au)					
THREE STAR	A	VERTICAL	18.9	NONE	Lode 15cm
THOMPSON'S CLAIMS	See BRADYS GULLY REEFING SYNDICATE				
UNLEY PARK	10.2 tonnes yielded 46.7g gold bullion				
VANGUARD	?	?	37.8	?	1.6km south of township. Formerly Gladstone.
VICTORIA (Pilcher and Party)	?	?	24.4	?	Water cut at 21.3m. Parcel of ore taken from surface to 12.2m, and crushed at Eureka Battery, Woodside. Lode quartz with iron and arsenopyrite. Tailings assayed 27.3 g/t Au.
Production					
4.4 tonnes yielded 124.4g gold bullion (yield 28.27 g/t Au)					
Note See also EMPRESS VICTORIA					
VICTORIA EXTENDED	See EMPRESS VICTORIA				

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
VICTORY					
Worked by Frazer and MacFarlane until a Melbounre Syndicate bought the claims and floated The Victory Gold Mining Company, No Liability, on 7 March 1888.					
During early 1888 a crushing plant was purchased. This was described as either a Vautin and Newbery battery or as a D. Cox's Patent crusher. Both are described as dry crushing processes. Two Alve's amalgamators were to be used to recover gold. It is unknown if it was ever erected or used. All machinery was sold under writ in December 1888.					
VICTORY	A	UNDERLAY	10.1	NONE	Lode 30-36cm. Gold shows occasionally.
	B	VERTICAL	54.9	Crosscut at 35.4m, 10.4m to west.	Lode 38cm cut at 24.4m, consisting of quartz, baryte and arsenopyrite. Water cut at 48.8m, but disappeared.
VICTORY-CLAIMS APPLIED FOR	A	UNDERLAY	9.5	NONE	Lode 30cm, underlaying 1 in 6 to east.
	UNLABELLED	?	?	?	25m north of Shaft A
Production					
3.1 tonnes were treated at Ballarat. Results unknown.					
VICTORY WEST	?	?	?	?	Assay 41.09 g/t Au.
WALSH AND PARTY	?	?	10.1	?	?
	?	?	21.3	?	?
WARRIOR	?	?	33.5	?	Water cut 32.2m
WARRIOR EXTENDED	A	UNDERLAY	7.6	NONE	Shaft underlay 1 in 10 to east. Lode 23cm, north and south reef.
	B	VERTICAL	4.6	NONE	No lode
G. WHALLEY AND PARTY	?	?	9.1	?	?
	?	?	?	?	?
WHITE CROSS	A	VERTICAL	4.3	NONE	Lode 30cm
	B	VERTICAL	12.2	NONE	Lode 30cm
WHYLIE, LAURIE & CO.	?	?	12.2	?	Dam Gully

MINE NAME	SHAFT	TYPE	DEPTH (m)	DRIVING	LODES/COMMENTS
YATALA REEFING PTY. LTD.	BIG BLOW	?	11.6	?	Cut water
	KYTES	?	17.4	?	" "
	MILLS (WILLS)	?	15.2	?	Coarse gold. Assay 34.8 g/t Au.
UNNAMED	A	UNDERLAY	11.3	NONE	Between Great Warrior and St. Patrick. Lode 38cm at Surface. Little gold.
UNNAMED	A	UNDERLAY	16.2	NONE	About 400m North of Dam Gully. No Lode. Underlay 1 in 8 east.
UNNAMED	A	UNDERLAY	?	NONE	North of Scotchman. Underlay 1 in 6 east. Lode 23cm, tested without satisfactory results.
UNNAMED	A	VERTICAL	7.6	NONE	Claims North of Warrior. Lode 8cm.
	B	VERTICAL	5.5	NONE	No Lode
	C	UNDERLAY	5.3	NONE	Lode 8cm
	UNLABELLED	?	?	?	45m north of Shaft C
UNNAMED	A	VERTICAL (4.6m) UNDERLAY (4.3m) 1in 8 UNDERLAY (2.4m) 4 in 1 VERTICAL (7.6m)	15.9	NONE	South of Prince Consort. Lode 15cm.
UNNAMED	Z	UNDERLAY	11.6	NONE	South of St. Patrick. Small lode Ironstone.
UNNAMED	A	UNDERLAY	25.9	NONE	South of Teetulpa Mining and Crushing Co. Lode 46cm, underlay to west.
UNNAMED	A	VERTICAL	10.5	NONE	South of Three Star. Lode 30cm
	B	VERTICAL	7.3	NONE	Lode 30cm
	C	VERTICAL	9.6	NONE	Lode 15cm.
					Nothing payable in these shafts.
UNNAMED	A	?	?	?	225m north west Shaft A Great Warrior.
UNNAMED	UNLABELLED	?	?	?	167m north north west of Shaft D Blue Star.
UNNAMED	PIT	?	?	?	South of School Reserve.
UNNAMED	UNLABELLED	?	?	?	165m south of Teetulpa Mining and Crushing Co. Shaft A.
UNNAMED	UNLABELLED				4 Shafts on north south vein 1.5km west of Morning Star South.

APPENDIX A

GOVERNMENT OFFICIALS STATIONED AT TEETULPA 1886

APPENDIX A

GOVT. OFFICIALS STATIONED AT TEETULPA 1886

	CAMPBELL	-	SERGEANT MAJOR, POLICE
F.T.D.	CLINDENING	-	ASSISTANT WARDEN
	FIELD	-	HEALTH INSPECTOR
	FIELD	-	SUB INSPECTOR, POLICE
BEDFORD	HACK	-	WARDEN
J.W.	JONES	-	WATER CONSERVATION DEPT.
	McMINN	-	" " "
	MILLS	-	" " "
	STRAWBRIDGE	-	" " "

APPENDIX B

IMPORTANT VISITORS TO THE GOLDFIELD, 1886

APPENDIX B

IMPORTANT VISITORS TO TEETULPA 1886

	ADCOCK	-	PHOTOGRAPHER
W.H.	BEAGLEHOLE	-	M.P.
J.C.	BRAY	-	M.P. (TREASURER)
H.Y.L.	BROWN	-	GOVT. GEOLOGIST (S.A.)
	BURGOYNE	-	M.P.
	CASTINE	-	M.P.
	CATT	-	M.P.
ROBERT	CLARK	-	BALLARAT COURIER
	COGLIN	-	M.P.
W.	COONAN	-	M.L.A. (N.S.W.)
C.T.	COWLE	-	MANAGER E.S.&A.C. BANK (HEAD OFFICE)
J.W.	DOWNER	-	M.P. (ATTORNERY GENERAL)
F.L.	FURNER	-	COMMISSIONER OF PUBLIC WORKS
W.A.	HORN	-	MANAGER WINNINNNIE STATION
J.H.	HOWE	-	COMMISSIONER OF CROWN LANDS
J.C.F.	JOHNSON	-	M.P. (MINISTER OF EDUCATION)
	KNUCKEY	-	INSPECTOR OF POSTAL SERVICES
	McCRAE	-	BANK OF AUSTRALASIA
	MOULE	-	M.P.
REGINALD A.F.	MURRAY	-	GOVT. GEOLOGIST OF VICTORIA
H.	OLIVER	-	FREE THINKER
	PETERSWALD	-	COMMISSIONER OF POLICE
	RIGBY	-	TOWN & COUNTRY JOURNAL (N.S.W.)
J.H.	SIGGINS	-	CROWN LANDS RANGER
OWEN	SMITH	-	INSPECTOR OF PUBLIC BUILDINGS
G.W.	SUDHOLZ	-	DIRECTOR ALMA G.M.C.
CHRISTOPHER	WADE	-	LESSEE OF TEETULPA RUN

APPENDIX C

DIGGERS AT TEETULPA - 1886
FROM NEWSPAPER REPORTS

APPENDIX C

DIGGERS AT TEETULPA - 1886 - FROM NEWSPAPER REPORTS

A
ABRAMSKI - DR
ALDRIDGE, GEORGE F.
ALLE
AUSTIN
B
BARLOW, G.
BARTELL
BASSETT, F.L.
BATHER
BEAN, W.H.
BEASLEY, H.
BEEVOR
BELCHER, F.G.
BELT
BIGGINS, CHARLES
BONNAR
BOYLE, H.
BOUCAUT
BRADY, THOMAS (DISCOVERER)
BRENNAN
BRITTENDEN
BROAD, A. SCOTT
BROUGHTON
BROWN
BUDD
BURNETT, J.
BUTLER
BYRNES
C
CAHILL
CALDWELL, J.
CARED
CLIFFORD
CLISBY, R.
CLUTTERBUCK
COCK - Ex Alma Captain
COLLINS
COLWELL, J.
CONNOR
COMMBE, G.A.
COOPER, GEORGE
COOPER, R
CONSTABLE, J.
CONSTABLE, P.
CORNISH, ALFRED
COTTRELL, HENRY
COX, GEORGE
CRACKNELL
CRESSWELL (LIEUTENANT)
CROWDER, G.
CUMMINGS, JOHN
CUTHBERT, J.
D
DANIELS, J. (LT. ADELAIDE RIFLES)
DAVIS, HARRY
DeBURGH
DICK
DISCOME
DIXON, W. (NORWOOD FOOTBALL CLUB)
DOUGLAS
DRIFFIELD, C.
DUFFIELD, WALTER
DUNN, CHARLES M.
E
ELLIOTT

EVANS, KIRKHAM
EVANS, W.R.
F
FARMER
FORD
FOX, J.
FRANCIS, PHILIP P.
G
GADD
GALIA
GEORGE, ANDREW
GLASSON
GLOODIE
GOODENOUGH
GREEN, JOSEPH
GREEN, T. Jr.
GREEN, T. Sr.
GRENFELL
GROOM, FORD
GUESOON
H
HARRIS
HARTMANN, F.
HENNESSY
HENNING
HOARE
HOLDEN J.A.
HOOPER
HOPPERMANN
HORNER
HUNT, HARRY
I
INNES
J
JAMES, D.
JAMES, W.F.
JARIVS
JENKINS, J.G.
JOHNSON
JONES, LEWIS
K
KEALLY
KEMP, D.
KEVILLE, P.M.
KING, ALBERT
KIRBY, JAMES
KNAPMAN
KRICHAUFF
L
LANDES, G.N.
LANGFORD
LANE, E.J.
LAWSON
LEAVER
LETCHFORD, T.
LEWIS
LOW
LUCAS
LYNCH
M
MANNING
MARCH, H.
MARSH
MARSHALL, W.R.
MARTIN
McCONNERY

McDONALD
McDONNELL
McDOUGALL
McMAHON, M.
MELLIKAN, J.
MELVILLE
MERRITT, KUSH
MEYRICH
MORGAN
MORRIS, JAMES
MORRIS, R.T.
MORRISON, DONALD
MURPHY
MURRAY, ROBERT
N
NANKERVIS, HENRY
NANKIVELL
NEALES
NEIL, J.
NELSON, D.F.
NEUMANN
NEW
NEWBERRY
NUNES, PEDRO
O
O'CONNOR
O'KEENE, HUGH
O'KELLY, J.
OLDHAM
OLIVER, HENRY
OPPERMANN
OPPIE
P
PAECH, A.
PEARCE, WILLIAM
PENGELLEY, W.
PEPPERKORN
PERRY, J.
PERRYMANN Jr.
PERRYMANN Sr.
PFITZNER
PHILIPS, H.J.
PHILLIPS, J.R.
PHILLIPSON
PITT, R.B.
PRICE
PUTT, JOHN (DIED 13/12/1886)
Q
QUINLAN, J.
R
REED
REID, C.
RENFREY
RETALLACK
RICE, H.
RICHARDS, V.
ROBBINS
ROBERTS, CLIFFORD
ROEDER
ROSENBERG, D.
RUNDELL
RYAN, JOHN
RYAN, L.S.
S.

SAINT JOHN HALL, R.
SANDERS
SCOTT
SELLICK, G.
SHAW
SIM, WILLIAM
SINCLAIR, W.A.
SMITH (DISCOVERERS SON)
SMITH, DANIEL (DISCOVERS BROTHER)
SMITH (DISCOVERER)
SOUTHWELL
SPIERS
SPONG, G.
STEPNEY, ANDY
STEWART, R.
STONE
STONEHAM
SUMMERS
SWAN
T
TAYLOR, HENRY
TEMPLAR, H.
TETTS, JOHN
TREAGUS, JOHN
TRELOAR
U
UNWIN
V
VARREL
VANDOME, W.
VERRALL
VOSS
W
WAITE, W.H.
WARHOPE
WELLS, E.H.
WILDMAY
WILLIAMS, J.N.
WILLIAMS, OWEN
WILLIAMS, T.
WILSHION
X
Y
YOUNG, ARETAS
YOUNG, E.B.
YOUNG
Z
ZEUNER

APPENDIX D

SERVICE PERSONNEL AT TEETULPA - 1886

APPENDIX D

SERVICE PERSONNEL AT TEETULPA 1886

L.	BONNAR & CO.	-	COACH SERVICE (YUNTA - TEETULPA)
	BRUCE	-	STOREKEEPER
	CARR	-	"
	DOWLINGS	-	"
A.J.	FOSTER	-	" , POSTMASTER
	HADDY	-	BREADSELLER
J.	HILL & CO.	-	COACH SERVICE (MANNAHILL - TEETULPA)
	LAWRIE	-	MANAGER, E.S. & A.C. BANK
	LEVINE	-	STOREKEEPR
R.F.	LONG	-	AERATED WATERS
A.	MOSS	-	AUCTIONEER
J.	MURPHY	-	BUTCHER
	OLDHAM & SONS	-	COACH SERVICE (MANNAHILL - TEETULPA)
A.E.	PEATE	-	ASSISTANT POSTMASTER
	RICHARDSON	-	DOCTOR
	ROSENGARTER	-	MANAGER OF F. BERLINER'S STORE
W.	SAMSON	-	BUTCHER
G.H.	SMITH	-	ASSISTANT POSTMASTER
	TRACEY & CO.	-	BUTCHERS

APPENDIX E

GOLD BUYERS AND GOLD PURCHASED

APPENDIX E

GOLD BUYERS AND GOLD PURCHASED

BUYER	AMOUNT (KG)
F. BERLINER	10.9
A.L. BRUNKHORST	2.2
E.S. & A.C. BANK	392.5
F.H. SNOW	?
SOUTH AUSTRALIAN GOVERNMENT	14.6
STEVENSON BROTHERS	1.2
WENDT	0.7

APPENDIX F

ORE TREATED AT PETERBOROUGH GOVERNMENT BATTERY

APPENDIX F

ORE TREATED AT PETERBOROUGH GOVERNMENT BATTERY

MINE NAME	PARCEL NO.	TONNES TREATED	BATTERY GOLD IN GRAMS	TAILING ASSAY G/T (BATTERY)	CYANIDE GOLD IN GRAMS	TAILING ASSAY G/T (CYANIDE)	TOTAL GOLD RECOVERED (GRAMS)		YIELD G/T
FULLER, V.J.	570	-	12.6	-	-	-	12.6		-
IRONCLAD	364	4.4	371.7	1.6	-	-	371.7		84.5
LANGFORD	13	9.1	49.8	6.5	42.0	1.8	91.8		10.1
LAST CHANCE	58	11.2	53.1	4.9	37.8	1.5	90.9		9.9
LYKKES VIKING	419	18.3	130.5	1.8	-	-	130.5		7.1
" "	750	15.1	44.9	1.8	-	-	44.9		3.0
SCOTCHMAN	250	10.0	163.8	5.6	33.8	2.1	197.6		19.8
"	363	5.1	83.5	7.8	28.2	2.1	111.7		21.9
TOTALS		73.2	909.9		141.8		1 051.7	AVE	14.2

* SMELTED GOLD

APPENDIX G

AUSTRALIAN MINING DIRECTORY
COMPANIES OPERATING AT TEETULPA

The

Australasian

Mining Directory

By F. A. PULLEINE.

Giving Particulars concerning Registration, Capital, Shares, Calls, Uncalled Capital, Transfer Fees, Dividends, Directors, Officers, Area and Locality of Property, &c., of about 700 Companies and Syndicates in South Australia, New South Wales, Victoria, and the other Australian Colonies and New Zealand, brought down to the 1st day of July, 1888.

PUBLISHED BY F. A. PULLEINE, ADELAIDE;
GORDON & GOTCH, MELBOURNE;
W. H. LACEY, SYDNEY.

Agents—Sauer Bros., Rockhampton and Normanton, Queensland;
J. McCoy, Silverton, N.S.W.

1888.

The Blue Star Gold Mining Company, No-Liability.

Registered Office—47, Exchange, Pirie Street, Adelaide.

Memorial for incorporation dated Sept. 20, 1887, under the Mining Companies Act, 1881, South Australia.

Nominal Capital—£5,000, in 10,000 shares of 10s. each.

Shares—5,000 issued as fully paid up.
5,000 issued as paid up to 5s.

Calls not to exceed 6d. per share per month.
Uncalled capital on July 1, 1888—2s. per share.

Transfer registration fee—1s. per scrip.

Directors—Messrs W. R Sawers, Christopher Schlie, and W. Weller.

Solicitor—Auguste Davies, Esq.

Legal Manager—Arthur Hamilton Scarfe.

Area and Locality of Property—Situate at the head of Goslin's Gully, Teetulpa, South Australia.

The Empress Victoria Gold Mining Company, Limited.

Registered Office—Alfred Chambers, Currie Street, Adelaide.

Registered April 24, 1888, under the Companies Act, 1864, South Australia.

Capital—£82,000, in shares of £1 each.

Shares—62,000 issued as fully paid up
20,000 reserved for future issue.

Calls as required.

Transfer registration fee—1s. per certificate.

Directors—Messrs E Saint, W. Rogers, E. N. Wigg, T. Roberts, and Dr J Rees.

Solicitors—Messrs. Bonnin & Rowe.

Secretary—Thomas Smith.

Area and Locality of Property—Twelve quartz claims, situate on Teetulpa Goldfield, South Australia, lately known as the Victoria, Victoria Extended, and South Victoria.

GREAT IRONCLAD - Page 24

The Great Ironclad Gold Mining Company, No-Liability.

Registered Office—Unity Chambers, Currie Street, Adelaide.

Memorial for incorporation dated Feb. 22, 1888, under the Mining Companies Act, 1881, South Australia.

Nominal Capital—£32,000, in shares of £1 each.

Shares—8,000 issued as paid up to 15s.
21,100 issued as paid up to 2s.
2,900 reserved for future issue.

Calls not to exceed 6d. per share per month.
Uncalled capital on 1st July, 1888—5s. on Promoters' shares, and 17s. 9d. Contributors.

Transfer registration fee—1s. for each scrip.

Directors—Messrs. L. Grayson, M.P. (chairman), L. L. Furnor, M.P., and T. W. Ingram.

Solicitors—Messrs. Ayers, Ayers, & Gall.

Legal Manager—Herbert Alan Furnor.

Area and Locality of Property—Situate at Teetulpa, South Australia, and comprises three properties, each containing four quartz claims, being 11 acres, measuring 1,230 feet on line of reef by 400 feet wide. The claims were originally known as the Ironclad, the Albion, and Thompson's claims.

LONDONDERRY - Page 27

The Londonderry Gold Mining Company, No-Liability.

Registered Office—47, Exchange, Pirie Street, Adelaide.

Memorial for incorporation dated Jan. 9, 1888, under the Mining Companies Act, 1881, South Australia.

Nominal capital—£16,000 in shares of £1, with power to increase.

Shares—8,000 issued as fully paid up.

8,000 paid up to 10s. 6d.

With power for the Directors to issue 4,000 shares of a like description, half fully paid up, and half contributing.

Calls not to exceed 6d per share per month.

Uncalled capital on July 1, 1888—8s. 3d. per share.

Transfer registration fee—Nil.

Directors—Messrs. L. Wertheimer and S. R. Heseltine.

Solicitor—Auguste Davies, Esq.

Legal Manager—Arthur Hamilton Searle.

Area and Locality of Property—Sixteen mineral claims, situate north of Strawbridge's Gully, Teetulpa, South Australia, adjoining the Bismarck and Victoria Gold Mining Companies' Claims.

The Morning Star Gold Mining Company, Limited.

Registered Office—Grenfell Street, Adelaide.

Memorial for incorporation dated November 18, 1887, under the Mining Companies Act, 1881, South Australia.

Nominal Capital—£30,000, in shares of £1 each.

Old issue shares—20,000 now fully paid up.
New issue shares—10,000 paid up to 15s.

Calls not to exceed 1s. per share per month.
Uncalled capital on July 1, 1888—1s. 6d. per share.

Transfer registration fee—1s. per scrip.

Directors—Messrs. J. G. Jenkins, M.P., E. Davies, and J. H. Fry.

Solicitor—A. Bonnin, Esq.

Legal Manager—Caleb George Gurr.

Area and Locality of Property—About 27 acres of Mineral Land situate on Teetulpa Goldfield, South Australia.

The Morning Star South Gold Mining Company, Limited.

Registered Office—Grenfell Street, Adelaide.

Memorial for incorporation dated February 6, 1888, under the Mining Companies Act, 1881, South Australia.

Capital—£30,000, in shares of £1 each.

Shares—15,000 issued as fully paid up.
7,500 issued as paid up to 10s.
7,500 reserved for future issue.

Calls not to exceed 3d. per share per month.
Uncalled capital on July 1, 1888—9s. 7d. per share.

Transfer registration fee—1s. per scrip.

Directors—Messrs. A. H. Searle, J. Robertson, P. Newman, J. Trevaill, and G. Lanthois.

Solicitor—A. Davies, Esq.

Legal Manager—Caleb George Gurr.

Area and Locality of Property—Four quartz claims situate at Teetulpa, South Australia.

The Teetulpa Mining and Crushing Company, Limited.

Registered Office—7, Waterhouse Chambers, King William Street, Adelaide.

Registered Aug. 3, 1887, under the Companies Act, 1864, South Australia.

Capital—£6,000, in shares of £1 each.

Shares—1,170 issued as fully paid up.
4,460 issued as paid up to 5s.
370 reserved for future issue.

Calls not to exceed 1s. per share per month.
Uncalled capital on July 1, 1888—2s. per share.

Transfer registration fee—1s. per scrip.

Directors—Hon. J. C. Bray, Messrs. Wm. Burford, Thos. Rhodes, Jas. Hall, and C. P. Campbell.

Solicitors—Messrs. Bray & Hackett.

Secretary—A. G. Schroder.

Area and Locality of Property—Ten claims situate at Teetulpa, South Australia, upon a line of reef running north and south between Brady's and Goslin's Gullies, six of which were known as the "J. C. Bray."

The Victory Gold Mining Company, No-Liability.

Registered Office—4, Queen Street, Melbourne.

Memorial for incorporation dated March 7, 1888, under the Mining Companies Statute, 1871, Victoria.

Capital—£24,000, in shares of £1 each.

Shares—Nos. 1 to 20,000 issued as paid up to 5s.
Nos. 20,001 to 24,000 issued as fully paid up.

Calls not to exceed 6d. per share per month.
Uncalled capital on July 1, 1888—14s. 9d. per share.

Transfer registration fee—1s. per scrip.

Directors—Messrs. Alexander Fisher, H. B. Harrison, F. A. Burton, T. W. Lincoln, and C. Paterson.

Solicitors—Messrs. Cuthbert Hamilton, & Wynne.

Secretary and Legal Manager—James Burnett.

Area and Locality of Property—400 feet by 400 feet, at Head of Goslin's Gully, adjoining Blue Star and Jubilee Reefs, Teetulpa, South Australia.

APPENDIX H

COPY OF TEETULPA NEWS AND GOLDEN AGE
FEBRUARY 16, 1887
VOL. 1, NUMBER 11.

Teetulpa News

AND GOLDEN AGE.

Vol. I. No. 11.] Teetulpa, February 16, 1887 [Price 3d.

The Wreck of the "Cyprian."

The wreck which took place on the English coast, on Friday, October 14th 1881, was almost unparalleled in its sweep, suddenness, and in the sadness of the scenes it conjured up. Under the deceitful calm of a sullen October dawn, the fishing fleet set sail to pursue their calling—

For men must work, and women must weep,
For there's little to earn and many to keep.

But noon found them flying for dear life before the surges of a storm so sudden and severe that almost within a stone's throw of their threshold the treacherous crawling sea swept them into eternity within sight of their agonized families.

The story of the 'Cyprian's' short and sudden ending is a sad one. The wind, which had culminated in a gale on the Wednesday died away towards Thursday afternoon. At three p.m. a small knot of spectators standing on the Canada pier, Liverpool, were looking at a deeply laden schooner-rigged steamer which had come out of the Huskisson dock and was steadily making for the mouth of the estuary, outward bound. All conversant with such matters readily recognised by her funnel and rig the 'line' she belonged to. Those who watched the long low black hull, as it stood in relief against the singularly gloomy north-west sky, and then faded into the dimness of distance down the Crosby Channel, little thought then that the ill-fated ship was passing out on her last voyage. For though amongst the small crowd gathered there, were men well skilled in the signs of the skies, yet none conjectured that within a few hours the storm-fiend would rise so suddenly and wrathfully. The wind, which had been gradually backing towards the south, settled in rain, behind which the fierce and stormy south-wester, which had been crouching like a tiger ere it springs, burst forth with all the fury of a hurricane. Throughout the night the steamer doggedly pursued her path, the wild reef of the Skerries, and still wilder rock of the Stack being passed after midnight, and then the fight between the puny efforts of man and the powerful forces of nature began in earnest. Dawn found her battling bravely against such fearful odds, until the severe strain upon the motive power told its tale, and the struggle became hopeless. Gradually the disabled and doomed ship drifted down on that iron bound coast, the few brave souls on board fighting foot by foot for life against obstacles, which only those who have seen the stokehole of a steamer during a storm can realize. Dangerous as is the scene on deck, it is doubly so in the stoke-hole, with tubes bursting, 'plates' washing up with the force of the water pent up in the bilges, pumps choked, fires dying out, and the huge engine sobbing its strength away in short convulsive gasps. Such a scene when once witnessed, as it has been by the present writer, can never be erased from the memory. As the storm-swept coast comes closer, the last hope, letting go both anchors, is tried and fails; nothing can withstand the sweep of the resistless surges; then each man feels instinctively that the end is not far off. Clustered together on the bridge deck the supreme moment which cannot now be averted is awaited with awe and anguish. I have stood upon the bridge at such an awful moment as that which must have proceeded the 'Cyprians' doom. Thoughts of home and the loved ones there, come crowding up with the choking sensation of final separation. The surge-swept shore frowns gloomily down on them with its adamantine barriers of black rocks. Seaward, the eye cannot perceive the line which separates sea from sky, all is blurred and indistinct with blinding showers of spray blown from the crests of the seas which sweep in tumultuous glee towards the steamer now staggering under the weight of water she has encountered and endured. The grand diapason of the gale is heard in thunderous tones, the towering cliffs re-echoing and repeating, heightening the [illegible] of the scene. In this trying moment the rare unselfishness of the skipper shines conspicuous.

Amongst the crowd of human beings thus brought face to face with death there is one who is almost a parish amongst his fellows, a stow way. A world of meaning is conveyed to those initiated into the mysteries of maritime customs by that single term. The fate of a stowaway on board ship is oftentimes a hard one, a dog's life is in comparison an enviable one. Yet it is to one of this class that the brave and generous self-sacrificing skipper turns, when the ship is almost amongst the breakers and hope has vanished, and gives to the unpitied and unfortunate hd his life belt, saying, 'I can swim; this will be of greatr service to you.' This noble act cost the brave unselfish min his life.

The terrified lad, who was making his first experience of the sea in so trying a mood, was saved; the commander was drowned. In a story which has become classical in the records of noble deeds of Englishmen, it is told how the illustrious Sidney, the pride and glory of English chivalry, when wounded into death, being faint with thirst, asked for a drink of water. When about to apply the precious liquid to his lips, a soldier who was borne past on a litter, looked wistfully at it, which Sidney Sidney perceiving, with heroic self-denial placed the cup in the man's hand, saying 'Thy necessity is greater than mine.'

There might seem to be little in common between the golden age of Elizabeth, and the money-making nineteenth century, between a hero amongst heroes and a commonplace captain of a merchant steamer. But, side by side with Sidney's action, should surely stand the equally unselfish and still braver act of Strachan, skipper of the 'Cyprian,' who when all hope had fled, save what lay in the life-saving belt reserved exclusively for him, seeing the trembling and terrified stowaway standing close up to him as a protector, in that hapless hour thrust his life-belt upon him, saying 'I can swim; this will be of greater service to you.'

Stitching on a Button.

He had never tried it before, but he felt confident of his ability to do it. His wife had gone into the country, so he selected from that lady's work-basket the thickest needle he could find, and the thickest thread, and resolutely set himself to the task.

Spitting upon his fingers, he carefully rolled the end of the thread into a point, and then, closing one of his optics, he attempted to fill up the needle's solitary eye; but the thread either passed by one side or the other of the needle, or worked itself against the glittering steel and refused to be persuaded. However, the thread suddenly bolted through the eye to the extent of an inch, and, fearing to lose this advantage, he quickly drew the ends together, and united them with a knot about the size of a buckshot.

The button was a trouser one, but he liked the dimensions of its holes, and it was only going on the back of his shirt anyhow. As he passed the needle gently upwards through the linen, he felt a mingled pity and disdain for men bungling over such easy jobs; and as he let the button gracefully glide down the thread to its appointed place he said to himself that if ever he married a second time it should be for some nobler reason than a dread of sewing on his own buttons.

The first downward thrust had the same result, and holding the button down firmly with his thumb, he came up again with all that confidence which uniform success inspires.

Perhaps the point of the needle did not enter to the bone, but it seemed to him that it did, and his comment upon the circumstance was emphatic. But he was very ingenious, and next time he would hold the button by one edge and come up through the hole nearest the other. Of course he would. But the needle had an independent way of suiting itself as to holes, and it chose the other where the thumb was. Then the needle got sulky. It didn't care about holes, anyhow, if it was going to be abused about finding them, and the button might have been an imperforated disc for all the apertures which that needle could thenceforward be made to discover, without infinite poking and prodding. It always came through when it was least expected, and never when it was wanted.

Still, he persevered, and it was not until he finally discovered that he had stitched over the end of the button, and had sewn it on the wrong side of the shirt that he utterly broke down.

There's a grocer in the city, who is said to be so mean that he was seen to catch a fly off his counter, hold him up by the hind legs, and look in the cracks of his feet to see if he hadn't been stealing some of his best sugar.

"I'd jump at a proposal," said the lively Miss Lottie. "Lottie, my dear," replied her mother, "this is not leap-year."

A student, lately procured rooms at Temple Bar, which happened to be the same ones occupied by a very old lawyer some twenty years' previous. The rooms were very much the same as when occupied by the lawyer, very few things having been removed. One day the student's sister called to see him, and was hardly in the room before the old lawyer was announced. The student requested his sister to go into a room at the side. The lawyer upon entering glanced round. 'Ah!' said he, 'same old pictures, I see.' 'Yes, sir.' 'Same old couch,' said the lawyer. 'Yes, sir.' 'Same old table!' (rapping it with his knuckles.) 'Yes, sir.' Moving towards the room he exclaimed, 'Same old room, I suppose?' 'Yes, sir, but—' The lawyer opened the door and glanced in, then quickly turning to the student, said, 'Same old game, same old game.' 'Sir?' indignantly cried the student, 'that's my sister!' 'Same old lie, same old lie!' serenely answered the lawyer.

Worried father to his wife—"Don't forbid their staying out there and chatting, but paint the gate every day."

An American editor thus notices some poetical communications—'The effusions of 'Irwin' and 'Mac' are inadmissible. Reason: The rhythm sounds something like pumpkins rolling over a barn floor, while some lines appear to have been measured with a yard stick, and others with a ten-foot pole.

'I wish I was short-sighted,' said a little boy to his mother, the other day. "Why, my dear!" said his fond parent. 'Because I should not then be blamed for always taking the largest plums off the dish, for I should not be able to see the small ones, was the reply.

During a theatrical engagement Kemble and Lewis were walking one day along the street, when a chimney-sweeper and his boy came up. The boy stared at them with open mouth, and exclaimed, 'They be players!' 'Hold your tongue, you young dog,' said the old sweep, 'you don't know what you may come to yourself.'

A bad-tempered judge was annoyed by an old gentleman who had a chronic cough and after repeatedly desiring the crier to keep the court quiet, at length told the offender that he would fine him £100 if he did not cease coughing, when he received the reply—'I'll give your lordship £300 if you can stop it for me.'

The boarders of a tavern in Adelaide were greatly amazed by the extraordinary number of flies so frequently in the butter. One of the boarders took the tavern-keeper aside, and requested him, in a private way, that he would put the flies on one plate and the butter on another, so that the people could mix for themselves.

One of the curiosities some time since shown at a public exhibition professed to be a skull of Oliver Cromwell. A man present observed that it could not be Cromwell's, as he had a very large head, and this was a small skull. 'Oh, I know all that,' was the reply, 'but you see this was his skull when he was a boy.'

There's a chap up country with hair so red that when he goes out before day he is taken for sunrise, and the cocks begin to crow.

An officer, not remarkable for courage, came one day to Quin, the actor, and asked him what he should do after having had his nose pulled. 'Why, sir,' said Quin, 'Soap your nose for the future, and then they'll slip their hold.'

When last the Queen was about to be confined the Prince Consort said to one of his little boys: 'I think it is very likely, my dear, that the Queen will soon present you with a little brother or sister—which do you prefer?' The child (pausing): 'Well, I think, if it is the same to mamma, I should prefer a pony.'

A story is told of a graceless scamp who gained access to the Clarendon printing office, in Oxford, when the formes of a new edition of the Episcopal Prayer book had just been made up, and were ready for the press. In that part of the 'Forme' containing the marriage service, he substituted the letter 'k' for the letter 'v' in the word live, and thus the vow to 'love, honour, etc., as long as ye both shall live,' was made to read, 'so long as ye both shall like.' The change was not discovered until the whole of the edition was printed off. If the sheets thus rendered useless in England be still preserved, it would be a good speculation to have them neatly bound and forwarded to Indianna and Connecticut.

When two funerals meet at the cemetery, it is embarassing to hear one undertaker call to the other, "How's business, old boy?"

An Englishman in Paris went into a restaurant to get his dinner. Unacquainted with the French language, yet unwilling to show his ignorance, he pointed to the first line on the bill of fare, and the polite waiter brought him a plate of thin soup. This was very well, and what it was despatched he pointed to the second line. The waiter understood him perfectly, and brought him a vegetable soup. 'Rather more soup than I want,' thought he; 'but it is a Paris fashion. He duly pointed to the third line, and was supplied with some gruel kept for invalids. The bystanders now supposed that they saw an unfortunate individual who had lost all his teeth, and our friend, determined to get as far from the soup as possible, pointed in despair to the last line on the bill of fare. The intelligent waiter, who saw at once what he wanted, politely handed him a bunch of toothpicks. This was too much, the Englishman paid his bill and left.

QUEEN MAB.

She had light brown hair and brave blue eyes,
And a world of wealth in her smiles so dear,
With her burden of love around us she flies,
Singing to those who care to hear:—
"Close to my side and I'll make you forget
Troubles and losses and endless strife."
With a wand she touches their eyelids wet,
And the wayfarers go to the other life:
To that other life where they dream of joy
(All troubles and strifes undone);
Until like a child deprived of its toy,
They wake, and wail for the sleep that has gone.
Of beneficent fairies Queen Mab is the best,
She comforts the mourner and helps the lost;
A touch of her wand is the bringer of rest
And of peace to the wretched who need them most.
The mother watched by her loved one's cot,
And pressed her lips to the dying hand;
Mab yearned to soften the weary lot,
And gives her a glimpse of a happier land.
The convict who nearly has run his race,
Groaned at the thought of approaching fate;
But the fairy has stooped and kissed his face,
For he dreams that repentance is never too late.
And Mab is no longer a fairy queen,
But an angel spirit come down from above,
Bringing to heart-sick mortals I ween,
A sign of an endless vision of love.

MINE VAMILY.

Dimbled schleck mit eyes off blue,
Mout like it vas moisted mit dew,
Und leetle feet just peekin' droo—
Dot's dolinby.

Curly head, un full of glee,
Drousers all out at der knee—
He vas been tying horses, you see—
Dot's life Otto.

Von hundord sexty in der shade,
De order day in she vas veighed—
She beats me on I vas avraid—
Dot's mie Gretchen.

Bare-footed he und pooty stoudt,
Mit grooked leg dot vill bend oudt,
Fond of his bier und sourkrout—
Dot's mineself.

Von small yong baby, full off fun,
Von leetle pig-eyed roguish son,
Von frau to feet vhen vork vas done,
Dot's mine vamily.

NEXT March will bring on the general election of members for the Legislative Assembly, and steps should be immediately taken to have Teetulpa proclaimed a polling place, not only for this electorate but for all others, and should this not be done many people working on the diggings will be disfranchised. Perhaps some who are interested in the matter will call public attention to this; a letter addressed to the Colonial Secretary and signed by the recognised voters in the colony, residing on Teetulpa would have the desired effect.

DURING the past week a comparatively large amount of sickness has occurred of what is now considered one of the preventible diseases, viz., typhoid fever. The neglect of sanitary matters a cause of disgust only to most of us in the past, now claims its victims; the cooler weather of the last few days may help to check it somewhat, but unless greater care for the lives of their fellow-workers is shown by some who, let us hope do so only from thoughtlessness, an epidemic will be the result. Even in the immediate vicinity of the hospital many have so defiled the ground as to add to the sufferings of the sick, the want of pure air even there on the top of the hill, and very bitterly have the patients complained of this nuisance, certainly one case has suffered a relapse thereby. The hospital continues fully occupied, one case of rheumatic fever has been admitted, and one case of typhoid fever discharged cured during the week.

THE late rain has had the effect of considerably increasing the sickness on the field, followed as it has been by severe heat. Dr Richardson informs us that typhoid is very prevalent and the health of the field far from satisfactory. We much regret to announce the death of Miss Emma Higgs aged 17 which occurred this week, two daughters of the same family are also laid up with typhoid, but we are pleased to hear they are progressing satisfactorily.

MESSRS JONES and WILLIAMS have opened a hair dressing saloon next to the "News" Office in the main street, and have erected a most comfortable room for the lovers of a shower bath the which can be obtained at all hours of the day. The building contains all the latest appliances for the convenience of customers, and we hope to see a brisk business occur.

ON Sunday a [illegible] of gentlemen who had been out to report on a new rush, met with an accident on their return, the buggy seat carried away, and all thrown out except the driver. Fortunately no one was hurt, except Mr Phillips, both wheels passing over his right leg, severely bruising it, and in consequence is now confined to his room.

MESSRS GILBERT and HAYWOOD have opened a fruit mart opposite the post office, and are prepared to supply the public with the choicest fruits in season. The Mart is tastefully fitted up and delightfully cool and clean, and should command a large share of public patronage.

BY telegram received from Adelaide on Wednesday we learn that Warden Hack has advised the granting of six permits for sale of liquors on Teetulpa, this course will very considerably lessen the duties of the police who have had their time fully occupied of late in preserving order. [Since the foregoing was in type, the following have been granted permits:—Messrs Lee and Phillips, Badman, Terry and Sayers. Other permits are to be granted, but their names are not yet known.]

THE lovers of oysters will be pleased to hear that an oyster saloon and cafe has been opened next Phœnix Club, where a supply of the bivalves may be obtained. Mr Bulman has opened the above saloon at considerable expense, and hopes that his customers will rally round him in proper style. The advertisement appears elsewhere.

THE inhabitants of Teetulpa will be glad to learn that a permit has been granted to Mr G. P. Badman of the Continently Hotel, and he hopes that the residents and visitors will give him a call. He has accommodation for 100 persons, and likewise has a large banqueting room, capable of seating 150 persons.

THE 'Hill Restaurant' under the management of Mr G. F. Coles, and situated next Biddell's Hill Bakery, is now open for the reception of visitors and boarders The management wish to announce that first-class board can be obtained for 16s. per week, and patrons may rely on cleanliness and civility.

BANK PURCHASES DURING THE WEEK.—Saturday 118oz.; Monday 83oz.; Tuesday 81oz.; Wednesday 75 oz; Thursday 50oz.; Friday 43 oz. Total purchased to date, 6347ozs.

AT last a want which should be appreciated by a good many, has been taken up by Mr E. H. Hewett. Any parties on the gold-fields or elsewhere who may have been unfortunate enough to have lost any horses, by forwarding a full description of same to Mr Hewett, may rest assured that if the horse be alive, it will, in a short space of time, be restored to its owner. His advertisement appears elsewhere.

MINING NEWS.

The last crushing of stone from Jackson's reef, next Hope Co. was put through by McEvoy, Winham, and Terrell at their battery, and went 1oz 5dwt 11grs of smelted gold to the ton. This is an improvement on last crushing, the owners considering it a wise policy to calcine the stone before putting it through the stampers. We are informed by Mr Terrell that the new machinery will be in position in about a fortnight when they can crush from 40 to 45 tons a week. Everything is ready and no time will be lost in starting full work.

Several nice pieces of gold have been brought to the "News" Office, and there freed from the lime and ironstone. Fitzpatrick and Guild are again fortunate, having dry fossicked sundry good specks during the week, among others there being one of 1oz. 5dwts. 12grs. after cleaning. Mr Cummings also showed us one piece of 3oz. 3dwt. which he got in Goslin's Gully. There has not been much washing done at the depots, but what little was done did not give entire satisfaction. The rush reported as having taken place to the back of the Hospital has not as yet eventuated in the good results expected, but the number of holes going down may lead to new and important discoveries. Early on Thursday morning news was brought us of a rush to a place some three miles along the telegraph line towards Yunta, reports of a find of 5oz. of coarse gold obtained credence, and a few went out to look for themselves, and returning, reported that the supposed find existed only in the fertile imagination of some one who doubtless wished to create an excitement. Such conduct is most reprehensible and deserves severest censure. Nevertheless we live in hopes of soon hearing of something good, as a number of men are out prospecting. We have not been informed of the doings of the Prospecting Association, further than receiving news of the Government subsidy through Mr Warden Hack, of 10s. in the £ locally collected. This is again an evidence of the willingness on the part of the Government to do all in its power to assist in the development of the field, but some, like the daughters of the horse leech are continually crying, 'More, more.' No other colony has ever done half as much as South Australia has done for the diggers benefit, and it is surprising that a body of men bearing the honorable title of independent diggers, should allow themselves to continually seek extraneous aid. Some of the reefs are looking well, and some specimens from the 'Blue Star' are on view at our office. This claim was most favorably commented upon by Mr Thomas of Melbourne, a mining expert whose reports are worth taking notice of. The Victoria Reef, (late McMahons), has widened to 15in. at a depth of 17ft. 6in., and shows good gold in the stone which has changed from ironstone to strong quartz. The reef is dipping to the east, and has well-defined slate walls. The reef is disclosed in another shaft to the south, and is about 4ft. wide and further to the north, at 6ft. the stone is between good walls and looks well, and proves the existence of the lode through the length of the claim. A fortnightly progress report will be found in our columns of this and other leading claims, which we trust will be of interest to our readers.

WEATHER.

On Tuesday afternoon the sky to the southward presented every appearance of a heavy storm. About 3 o'clock huge clouds of dust were driven over the field by strong winds, and the welcome rain set in, and lasted in showers for about three hours. On enquiry we learn that the Salt Creek has been running a banker, the Government pumps at Winnininnie Springs washed away, and the country flooded for three miles. It is to be regretted that Teetulpa did not share in the downfall, as a days good rain would materially affect the field to its best advantage. The thermometer registed as follows at 2 p.m. during the week ending Friday, February 11th:—Saturday, 87°; Sunday, 76; Monday, 104°; Tuesday, 106°; Wednesday 102°; Thursday 105°; Friday, 106°

EPIDEMIC IN HORSES.

Mr Thomas Chalwin, Government veterinary surgeon visited Teetulpa on Tuesday with the object of inspecting and reporting on any cases of the prevailing horse disease. Mr Chalwin was accompanied by Mr McLeod, deputy chief inspector of stock. Although numerous cases of death have occurred between Manna Hill and Silverton, no disease has as yet disclosed itself on the field. Mr Chalwin informs us that the disease is enteric fever of a typhoid character and is highly contagious to both men and cattle, and that animals in good condition are the most susceptible. The cause of the outbreak arises in Mr Chalwin's opinion from drinking unwholesome water from the clay pans, and inhaling noxious vapours from decomposed animal matter. We are glad to state that acting on the advice of Mr Chalwin, the Stock Department through Mr McLeod have decided to adopt stringent measures by isolating all sick and infected horses with a view to check the further spread of the disease. The first sign of the complaint is readily noticed by a swelling of the horses hind legs and a dull leaden color of the interior of the nostrils, which in health would be of a bright arterial pink color.—Any animal displaying these symptoms should be immediately isolated and notice given to the Inspector of Police who will issue instructions for its treatment.

CORRESPONDENCE.

[The Editor does not necessarily endorse the opinions of his correspondents.]

TO THE EDITOR.

SIR,—On Friday evening next, the great favourite of the Oscar Smith Indian Tourist Party (Miss Nelly Harley) is announced to take a benefit. Miss Harley since she has been connected with the troupe on this goldfield has proved herself a universal favourite, and at all times has done all in her power to please the whole of the audience. Her benefit which is a well-deserved and fully earned one, is to be hoped will prove an unqualified success. As the beneficiare has on all occasions taken into consideration the feelings and tastes of her audience, who have shown their unqualified approval of her many and various characters on the platform. It is at all times understood that when a benefit is tendered a bumper house is expected, and if the working men of Teetulpa and surrounding places do not turn up to Miss Harley's benefit on Friday evening, then all that can be said is, that they are "devoid of gratitude," as Miss Harley was one of the principal helps at our recent benefit on Friday evening last, and whose appearance showed how great a favorite she has become with the public. Well friends and enemies, sailors and soldiers, blacksmiths and painters, carriers and conchmen, in fact a hearty welcome is extended to all and everyone on the field to roll up and give Miss Nelly Harley a first-class benefit on Friday night next. I intend to be there and hope that all who are able will follow my example.—Yours etc.,

A WELL WISHER.

SIR,—I noticed a letter over the signature of H. Wagner in the "Advertiser" of Wednesday the 9th inst. complaining of the shepherding of claims on Teetulpa. The writer has evidently had a great deal of spare time on his hands to have been able to notice the movements of the miners who, he alleges, sink a shaft and then proceed to another place and take up more ground and repeat this business ad lib. The whole allegation is stupidly absurd as men have something more to do on Teetulpa to earn a living than to moon about the diggings sinking shafts here, there, and everywhere, and never working them. If there is anything wrong in the amalgamation of claims, the Act is to blame, and Mr Wagner might exercise his ingenuity and spare time in drafting a new one.—Yours etc.,

T. BURGOYNE.

AMUSEMENTS.

Friday evening last the Britannia Hall, which has been occupied by the Oscar Smith Indian Tourist Party, was filled to overflowing by a large and highly appreciative audience, the occasion being a benefit given by above troupe to the Hospital. The first part of the performance, consisting of the usual circle, was gone through with the utmost precision, the songs being rendered splendidly by the performers. The second part of the entertainment was assisted by amateurs, who assisted in pleasing the numerous audience, Mr J. Kennedy who sang 'Our Jack's come home to-day,' met with a splendid reception, and some of the outside audience must have wondered whether 'Jack' had come home, or if he had just been going away, as almost the whole of the audience joined in the chorus with great spirit, and at the close of the song, an encore was demanded, but failed to secure a response The duet 'Larboard Watch,' by Messrs J. Kennedy and A. E. Wilson, was deservedly encored, and the last verse was repeated. 'Sailing,' by the latter gentleman was also encored, and repeated. The whole entertainment passed off very smoothly, and the Party whose praises have been sounded on several occasions in these columns, acquitted themselves in a most creditable manner. More than a passing word of praise is due to Miss Mabel Gray who acted as pianiste during the evening, and who accepted the position at the eleventh hour. The band, under the leadership of Mr Gagging also enlivened the proceedings by rendering several pieces during the evening. Taking the performance on the whole it was a decided success, and the Tourist Party, together with the management are to highly complimented on the results. We would draw special attention to the benefit to Miss Nelly Harley, which is to be tendered on Friday next, and we would urge upon our numerous readers to try and be present, and give her a bumper house, which she fully deserves.

The Spectre Helmsman.

In the summer of 1839 the ship Vulcan; under the command of Captain Isaac Johnson, was on her homeward bound passage from the Indies, with half a cargo of tea, and she stopped at Cape Negro, on the coast of Benguela, for a lot of ivory to make up her load. Having gone on shore at the Cape, the captain learned from the native contractor that he would have to go some fifteen miles up the cannibal River, as the elephant hunters had all the boats higher up the country, so that, consequently, they had not been enabled to bring the ivory down. Captain Johnson was somewhat disappointed at this cause of delay; but, without waiting to find useless fault, he determined to man his own boats, and proceed at once up the river. It required four trips to bring all the ivory down; but as they had opportunity to take advantage of the slight tides, the task was accomplished in four days. On the last trip the captain went himself, leaving the first mate in charge of the ship; and, on arriving at the small village where the ivory was stored, he was not a little surprised to find that nearly all the miserable huts were deserted. Several times Captain Johnson inquired the meaning of this; but the natives were either unable, or unwilling, to give any plain answer; and it was not until the last lot of tusks had been conveyed to the boats, and the natives had been remunerated for their labour, that the least clue could be obtained to the cause of this strange deception; and then, for the first time, the captain received the startling intelligence that the cholera was sweeping down the river! As soon as the fact became known to the seamen, they wildly huddled into their boats and made for their ship. The ivory was got on board, and, with all haste, the old Vulcan was got under weigh. It was nearly night when the ship got off, and, with a good breeze from the northward and eastward, she stood well on her course. The next morning, shortly after breakfast, while the crew had began to think that they had no occasion for further fear, a young man, named Walter Addison, was suddenly taken ill. Young Addison was the favourite, both of the officers and the crew, and as it was reported that he was thus ill, a general consternation seized upon all hands. The young man felt at first a giddiness and a sickly chill, and, in the course of two hours, he sank into an alarming debility, the countenance assuming a deadly paleness, and his skin bearing all the appearance of a corpse. Poor Addison suffered till noon, and then the startling announcement was made that he was dead. This was the first, but who would be the next? A panic had seized upon the men—the cholera was with them, and none dared remove the form of their dead shipmate from his berth. Night approached, and with it came an almost dead calm. The captain urged that the longer presence of the body would breed more dangerous contagion; but the only answer was a mournful shake of the head about him. At length, finding that all arguments were useless, he turned to the mate, and asked him if he would assist him in throwing the body of the dead man overboard. The mate at first hesitated, but in a moment he signified his consent, and himself and the captain went down into the forecastle. They dared not remain long enough with the corpse to have it sewn up, nor even to attach to it a sinking weight; but, throwing over it a single blanket, they managed to get it upon deck and lay it across the bulwarks of the starboard bow. A moment Captain Johnson hesitated—he opened his lips, breathed a prayer for the soul of the departed, and then, with a shudder ran over his frame, he let the cold form of young Addison slide into the blue waters! Instinctively he cast his eyes over the side as the deed was done, and by the pale phosphorescent light he could just see the corpse sink, then rise and sink again, and then with a heavy step and still heavier heart he walked aft. The first watch had been set, but the other watch dare not go below: and huddling themselves beneath the long boat, they sought the repose which they feared to seek where their companion had died; but each seemed to fear his neighbor, for none knew where the contagion might be. At eleven o'clock the slight breathings of the air, which seemed for the last few hours to have had no settled point began to gather more force from the north-west and westward, and ere long a good fresh breeze filled the ship's canvas, and started through the water. The wind continued to increase, and before midnight all hands were called to take in the top-gallant sails. At twelve o'clock the mid-watch was set, and all hands were, for a few moments, brought in contact with each other. No further symptoms of the dreaded pestilence had appeared and they began to take hope. It was half-past twelve o'clock. An old seaman named Bill Shippen had the helm, while the remainder of the watch were either in the gangway or else forward. The wind continued fresh but yet steady; and the old ship was close-hauled upon it, laying some two points off from her course. The ship's bell was suspended over the binnacle, and old Shippen reached over and struck the first half-hour after midnight. He had just resumed his position, and was gazing intently at the compass, when he felt a hand laid upon his shoulder; and on turning around, he beheld, by the struggling beams of the binnacle lamps, the pale, deathly features of Walter Addison. For an instant the sailor remained rooted to the spot, then let go the wheel and darted forward. In a moment the ship began to fall off; and as she brought the flat surface of broad canvas to the wind, she heeled over alarmingly; but soon the pale spectre, that had frightened the helmsman from his post, caught the wheel, and laid the helm hard down, and ere long the ship was once more to the wind. Shippen's cry had startled all hands from their their listlessness, for they thought the cholera-fiend had assailed him; but from his broken ejectulations they soonest learned what was the matter, and in a body they crowded aft, and by the dim light of the binnacle, they saw the spectre helmsman. Every knee trembled, and every tongue clove to the roof of its mouth. None dared to approach him, nor did any move back. The captain saw the corpse-like form that still held the wheel, and he, too, was riveted to the spot. 'Shipmates, relieve me from here, or I shall faint. I am cold and weak!' at length came from the lips of the seeming spectre, in faint, agonised tones. Captain Johnson hesitated an instant: and then he rushed forward, and laid his hand upon the trembling form before him. It was cold and wet, but he knew that it was a living man! One after another of the men gathered about, and ere long all knew that young Walter Addison still lived! The captain had him conveyed to the cabin, where everything that could be thought of was administered for his comfort; and it was not long ere he sufficiently revived to give an account of his strange escape from the cold deep grave to which he had been consigned. It seemed that young Addison had fallen into that death-like lethargy which not unfrequently results from sudden cholera, and which, as all who are acquainted with the disease must be aware, so nearly resembles death that even the best physicians have been deceived. The sudden immersion in the cold water had revived his dormant senses; and as the ship had but a slight motion at the time, he came to a partial realisation of his situation ere she had passed him, and by considerable exertion he managed to get hold of the rudder chains. He tried to call for assistance, but his tongue was so swollen that he found it impossible; and after remaining upon the chains long enough to get more strength, he worked his way up till he got hold of the lanyards of the cabin dead-lights. From thence he reached the lashings of the stern-boat; but here weakness again overpowered him, and after working his way into the boat he remained some time insensible, but at length he revived and came on board. He had tried to speak, but he could not. When the helmsman fled from the wheel, he had sense enough to see the ship's danger, and from the impulse of a sort of instinct, he seized the wheel and brought her to the wind. The morning dawned, and the next day passed—then another, and another—but the death fiend came not again! He had lost his first intended victim, and he left the ship in peace.

General News.

THE MARQUIS TSENG ON CHINA.—Those who knew the Marquis Tseng in this country (says the London Correspondent of the *Register*) will never forget his radiant face and the genuine amiability of his character. He is a statesman withal. The article he has written for the *Asiatic Quarterly Review* shows how much he has profited by his contact with western civilisation and modes of thought. The key to the article may be found in this passage:—"By the light of the burning palace, which had been the pride and delight of her Emperors, she(China) commenced to see that she had been asleep while all the world was up and doing; that she had been sleeping in the vacuous vortex of the storm of forces wildly whirling around her." In other words, China is now fully awake. According to the Marquis, she has been taught a lesson which Europe can hardly yet be said to have learnt. She is not of opinion "that it is only with blood that the stain of blood can be wiped out." On the contrary, she thinks that "the stain of defeat lies in the defects and mistakes which led to it," and that in order to wipe it out the best way is to institute the necessary reforms. For this reason China is now chiefly concerned with her coast defences and the reorganisation of her army. The Marquis denounces the cruel or inhospitable treatment which the Chinese experience in various civilised countries: and he also makes some significant remarks on the aggressive temper of the European inhabitants of the foreign settlements in China. No other Chinese statesman has ever produced so great an impression upon English public opinion as the Marquis, the reason that he employs English ideas as effectively as we do ourselves, and also that we have begun to attach a high value to the Chinese alliance.

THE DESTINATION OF STOLEN GOODS.—The Melbourne *Daily Telegraph* of February 3 writes:—"It is well known to the police that much of the proceeds of robberies in this colony is surreptitiously sent away to other colonies to be disposed of, as there the chance of identification is, of course, much less, and it would appear from information the detective police have received, within the past few days, that the South Australian thieves are pursuing the same practice of sending their plunder away. The detective police have received a very lengthy list of valuable property, principally jewelery, which has been stolen in Adelaide, and which, as the local police have failed to find any trace thre, they suppose has been sent to this colony for diposal. A full description of the property has been supplied, and any dealer coming in contact with it i requested to communicate with the police."

A DEFICIT IN TASMANIA.—The *Launceston Examiner* of February 2, discussing the political situation remarks:—"It is no use hiding about the bush and seeking to satisfy the public mind with vague assurances. Unless some suden revival in trade and revenue, such as was cause by a period of excitement in our mining industr a few years ago, should again manifest itself, the Ministry that meets Parliament next session will hee an unpleasant task to face. There will be an absolute deficit to make up at least £70,000 or £80,00; proposals to submit for retrenchment and cuttin down the Estimates for 1887-8 to make the revenuefor that year meet the expenditure; the history of the 'progressive railway policy' will be a sore subject; no more money can safely be borrowed this yea and therefore the public works must be confined to rgent requirements, and there will be no funds for special items to catch wavering voters. But, wor of all, increased taxation will be a necessity. The reimposition of the Custom Duties remitted in 1884 will not suffice to meet the case, and the extr £32,000 which doubling the present property tax wold produce, will look but a small sum against the lar deficiency which must be made up somehow or other. From whatever point the question is looked t, it is evident that the Ministry who will fairly face the position into which the finances of the colony hve been allowed to drift will be unpopular because its proposals must be unpalatable to the taxpayers, or in other words the great mass of the people. To all outward appearances Ministers recognise their responsibility, and are prepared to accept the undertaking. But those who can peep behind the curtain know that the Cabinet is not 'a happy family,' and that some of its members are far from desirous of meeting Parliament as Ministers next session. Mr. Dodds, who has been 'the mainspring' of the Coalition, has already slipped out of harness, and the Minister of Lands is sorely desirous of following suit, could he find a decent pretext. The Premier is too honourable to desert his colleagues so long as they require his aid, but he is weary of turmoil, and longs for rest. And so far from there being a rush for the vacant places, Ministers have up to the present made little or no progress in their efforts towards reconstruction of the Cabinet. The Treasurer will to-morrow visit Launceston to confer with several northern members, and ascertain how far their support can be depended upon in the coming session under certain circumstances. Past experience has probably led Ministers to believe that men who decline to pledge themselves to the their constitnents will be prepared, 'under certain circumstances,' to pledge themselves to always appear on the Ministerial side of the House on a division list, and we ar not prepared to say the hope is ill-founded."

Fire! Fire!

One evening, on board a Mississippi steam-boat, a boy of ten years lay asleep in a berth—a long, slim-legged boy. He was encased in quite a short shirt. It was the first time he had ever made a trip on a steamboat, and so he was troubled and scared, and had gone to bed with his head filled with imposing snaggings and explosion, and conflagration and sudden death.

About ten o'clock some twenty ladies were sitting around about the ladies' saloon, quietly reading, sewing, embroidering, etc.; and among them sat a sweet, benignant old dame, with round spectacles on her nose, and her busy needles in her hands.

Now: all of a sudden, into the midst of that peaceful scene, burst that slim-shanked boy in the brief shirt, wild-eyed, erect-haired, and shouting, 'Fire, fire, jump and run! The boat's afire, and there ain't a minute to lose!'

All those ladies looked sweetly up and smiled. Nobody stirred. The old lady pulled her spectacles down, and looked over them, and said gently,—

'But you mustn't catch cold, child. Run and put on your breast-pin, and then come and tell us all about it.' It was a cruel chill to give to a poor little fellow's gushing vehemence. He was expecting to be a sort of hero—the creator of a wild panic—and here everybody sat and smiled, a mocking smile, and an old woman made fun of his bugbear.

I turned and crept humbly away—for I was that boy—and never even cared to discover whether I had dreamed the fire, or actually seen it.—MARK TWAIN.

HE LOVED THE TRUTH.—The other morning a careless mason dropped a brick from the second story of a building on which he was at work. Leaning over the wall, and glancing downwards, he discovered a respectable citizen with his silk hat jammed over his eyes and ears, rising from a recumbent posture. The mason, in tones of apprehension, inquired if that brick hit anyone down there?" The citizen, with great difficulty extricating himself from the extinguisher into which his hat had been transformed, replied, with considerable wrath, "Yes, sir, it did; it hit me." "That's right," exclaimed the mason, in tones of undisguised admiration; "noble man! I would rather have wasted a thousand bricks than have had you tell me a lie about it."

A boarding house keeper won't take any but pretty girls and susceptible young men. Those who fall in love are seated together at the table, and of course lose their appetites. She is getting rich.

Mr. Falls, a well-known sportsman, happened one day to ride down a hound. The irascible but witty master of the Quorn attacked him in one measured language. 'Sir,' was the reply, 'I'd have you recollect that I am Mr. Falls, of Dungannon.' The answer was ready: 'I don't care if you are the Falls of Niagara, you shan't ride over my hounds.'

To the Residents of Teetulpa and our Readers.

The great success which has attended our efforts, will further induce us, from time to time, to improve the appearance of the *News*, and as a local medium of ventilating grievances and pointing out the wants of the field, is for the benefit of residents in general, we respectfully solicit continued support and recommendation from our friends. We have many difficulties to contend with on account of the heat and dust; but as the field becomes more settled our publication will be materially improved.

We shall feel obliged if the residents of Teetulpa will give us information as to news of interest to the diggers, etc., or point out any abuses which could be rectified. We shall in every case make inquiries where possible to ensure correct information being given in our columns, but as mistakes will occur, no matter how carefully a newspaper is edited, we do not hold ourselves responsible for any errors

We shall be pleased to insert short religious or charitable notices *free of cost*.

LEE & CO.,
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NOTICE TO CUSTOMERS.

We take this opportunity of assuring our customers that in the case of attempted prosecution for the sale of our Beer, we guarantee to take all responsibility, and pay all costs that may be so incurred.

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Makes Bread without yeast.
Sold in 1s. Packets, and in 25, 50, and 200lb. bags of all Storekeepers, and wholesale of the Maker.
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Groceries and Draperies supplied at the most reasonable prices.

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An Independent Mining Journal, giving all the news of the Barrier Silver Mining District—Price 8d.

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Goods carefully packed (no charge for packages) and delivered free on Trucks, Adelaide Station.

Refined Lime Juice, in jars 1 to 5 gall, 4/10d. per gallon, jars given in.
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Finest New Currants, 6d. lb.
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Tems, Board and Lodging 18s. per week, 3s. per day. Single Meals and Beds from 1s. each. Strong Room for valuables. Baths, Night Porter, etc. N.B.—Cab fare from Adelaide Railway Station 6d.
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SERVICES are conducted in the WESLEYAN CHURCH every Lord's Day by the REV. MR TRESTRAIL—Morning at 11 a.m., Evening at 7 p.m. Sunday School at 3 p.m.

MINERS' BENEFIT ASSOCIATION.

TENDERS will be received up to February 17th, 8 p.m., for the services of a Duly Qualified Medical Officer to attend the Members of the Association, numbering at present 78 with the prospect of a large increase. Tenders to state price for medicine and attendance at per head per quarter, addressed,

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GENERAL STOREKEEPER,

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Covered Spring Dray, 4 Horses, and lot of Harness.

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E. H. HEWETT is now devoting the whole of his time in searching for LOST HORSES. Any parties on the goldfields or elsewhere by forwarding full particulars, brands, etc. to Mr. Hewett (c/o Mr. Campbell storekeeper, Teetulpa,) may rely on securing his best services.

E. H. HEWETT,
Teetulpa.

'THE TEETULPA NEWS'

Which is at present published

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Will in future be published

EVERY WEDNESDAY.

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In fact

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Teetulpa News

WEDNESDAY, FEB. 15, 1887.

SHOULD the shallow alluvial ground soon give out, and at present it has every appearance of it, attention must necessarily be drawn to the discovery of deep leads or reefs, the latter are already receiving the notice their undoubted richness deserve, the former we are glad to hear will soon be made known to the public and the rejoicing thereat will be naturally great. Owing to the indomitable pluck and perseverance exhibited by Messrs Knight and Lassow we are in a position to announce that gold, whether in payable quantities or not has yet to be proved, has been found at a depth of 40ft. within a few miles of the township. This is the deepest shaft yet sunk in which alluvial gold has been found and is of vast importance, as should the discovery prove payable it will be the means of bringing back to us a large number of diggers who have sought fresh fields. There is one matter connected with this find to which we desire to draw attention and that is the difficulty under which prospectors labor for want of water. In the first place although water may be abundant in the neighbourhood in dams the property of the lessee of the run, such water is not available to the prospector and as in the present distance work must be either suspended by permission of the Warden or altogether abandoned. The Mout Victor dam, within two miles of which prospecting has been carried on, contains a large supply of water, and although the miner can and does obtain by permission of the lessee or owner sufficient for his individual wants, his horses, on which he mainly depends for conveying him to different part of the country, are not allowed the use of it, and it is obviously impossible for the Warden to recommed the resumption of a run or any portion thereof util distinct and undoubted proof is shewn that that portion of the field is payable, in which latter case the authorities would only be too eager to see that no obstacle whatever was thrown in the way of the prospector developing a hitherto unknown part of the field. Pending this desirable attainment however, the digger who may find himself, after weeks of hard work, placed in a position that compels him to suspend operations through want of water, though like the Ancient Mariner, 'there may be water, water, everywhere, but not a drop to drink,' can on reasonable grounds advanced, apply and obtain from the Warden suspension to allow of his making future proper provision for the working of his ground. Mount Victor dam being on Wininininnie Run does not come under the 'Commonage Regulaions' lately issued, and consequently is private property. Could arrangements be made by either the prospector or the Warden in charge or the Government, with the lesses or owner of this dam, we have little doubt that payable gold will be found in sufficient quantities to afford employment to a large number of people.

LOCAL NEWS.

A CHRISTIAN Mission service in aid of the sick and destitute of Teetulpa will be held every Sunday afternoon at 4 p.m. opposite Foster's store. Last Sunday's collection amounted to £1 15s. 8d. and it is to be hoped that all who are in a more fortunate position than their distressed brethren will contribute their mite. Service will be conducted by Messrs D. Burrows and R. Scorn. Rev. Mr. Trestrail is treasurer of the fund and will attend to all necessitous cases.

INSPECTOR FIELD, who has been suffering from ill health for some time, has departed for Melrose and has been succeeded by Inspector Rollinson. Mr Field has made many friends on the field and the regret felt at his departure is only lessened by the very welcome advent of Mr Rollinson who is a universal favourite not only with the public, but with his own men by whom he is greatly respected.

THE eclipse of the moon on Tuesday night was watched with some interest, but the scudding clouds very much interfered with the view.

THE Gospel Temperance services which are conducted every Saturday evening in the Wesleyan Church, are growing more popular every week. Last Saturday fully 150 persons attended, while songs and recitations were rendered by various members. The Rev. Mr. Trestrail who is one of the moving spirits in the cause, occupied the chair. The committee will be glad to welcome one and all to the meetings which are free, but a collection is taken up which goes towards the defraying of expenses. There will be another meeting held at the same place to-morrow night (Saturday) at 8 p.m.

A SAMPLE of most excellent fresh water discovered in a spring by Mr C. F. Kelleher, at Bumbumbie Creek has been brought into our office, and we can confidently say that from its taste and appearance it far surpasses any water yet brought on the field. The supply is not at present very large, but sinking will no doubt considerably augment it.

IT is satisfactory to observe from Inspector Field's report to the Central Board of Health that the constables stationed on the Teetulpa Parade have been very attentive to their duties, and when necessary had served notices for the removal of refuse, etc. We fully and gladly endorse Mr Field's minute, having invariably found the men stationed here most courteous and obliging, while they at the same time strictly attended to their duty.

SERVICES will be conducted on Sunday next in the Wesleyan Church by the Rev. Mr. Trestrail, morning at 11 a.m., evening at 7 p.m. There is a Sunday School at 3 p.m., at which a hearty welcome is given to both young and old, one class being set apart to the older members, at which a profitable hour is spent in the shape of form of debates from various passages of Scripture.

WE have been requested to draw attention of residents to a club, entitled 'The Pickwick Club', which has been started. The names of the various office-bearers are before us, and the amount of interest several of them have thrown into other movements, augurs well for its success. The rooms are to be at Bulman's Cafe, and the object of the Club is to provide reading and smoking rooms, and amusements of various kinds. The rules, &c., will be ready in a few days, when we have no doubt a large members list will be the result. We wish the new Club every success.

IN another column, Mr Walter Peters, general storekeeper, begs to draw the attention of the public to his advertisement. Amongst his goods will be found a well-assorted stock of women's and men's drapery and clothing, boots and shoes, grocery and ironmongery, etc. Mr Peters hopes by strict and personal attendance to business, to merit a fair share of public patronage.

IT will be observed that Messrs Rice, Simes and Co. have opened a large and commodious refreshment room at the rear of Lee and Phillips' and a most enjoyable evening can be spent in witnessing the panorama of the Bombardment of Alexandria with mechanical effects which has been painted by Mr Rice and his assistant. Mr Rice is also an accomplished musician and having a piano in his rooms nightly " discourses most excellent music." The place is well worth a visit, and a good night's fun can be obtained.

IT may be interesting to those individuals who make night hideous with their flash rowdyism to learn that their names are known and any repetition of their cowardly conduct will meet with the punishment it deserves. To war on a defenceless woman knowing her to be unprotected is the acme of cowardice and it will be well for these people to understand that their slaughtering must be confined to their own premises.

BY advertisement it will be noticed that Messrs Brown and Seaton's coffee and refreshment rooms, next Music Hall, are now open, where comestibles of all descriptions can be procured and made to order.

APPENDIX I

TYPED COPY OF HANDWRITTEN LETTER BY DAN LYNCH TO HIS MOTHER FROM THE TEETULPA GOLDFIELD.
(SUPPLIED BY MRS J. SANDLAND)

Letter written by Dan Lynch (aged 23 yrs) to his mother, from the Teetulpa Fields.

Teetulpa Goldfields.

Monday.

Dear Mama,

I have just finished making a damper and as there is now a post office here, I take the opportunity of writing you to let you know how I am getting on. As regards health, I am first class, I only hope all at home are as well, but I regret to say that I have not yet had any luck. I jumped a claim that I am now working in, but so far have not profited anything by it, having only seen the colour today. If the claim continues so tomorrow, I am going to try a place about 7 miles north from here known as Tonkin's Dam. The gold that so much noise was made about was found in one spot, and not as stated by the papers. There are some getting payable gold in the claims first taken up, but the field cannot be properly tested owing to the want of water for washing purposes. It is a grand sight here of a night to see all the tents and their camp fires all over the country, as far as you can see. There are fully 4,000 people in the grounds, there are now plenty of provisions and opposition in all lines. Mutton 4½d. lb., but you must take either hind or forequarter, they wont sell less. Bread was 4/- per 4lb. loaf, but is now reduced to 1/-, flour 2½d. per lb, candles 1/- fresh butter 1/3.

Up here you will meet all characters on the globe. As I was down at the dam yesterday having a wash I met Simmons (Silverson's Traveller). He is camped near me and is trying his luck. I also saw Walter Duffield. He makes two strokes with the pick, then looks at his hands and says to his mate 'What bad luck we got', and so says many more.

Yesterday while boiling the Billy came up to me and gave me a tract and said there would be a service and sermon at Brady's Gully at 7.30 and hoped I would be there <u>of course I went</u>. He asked me if there was a Christian young man on the field I could recomment to him, so I sent him to Dan Divine. I spent most of the day fetching wood which is very scarce up here. This is a terrible place for wind, it blows hard all night and day. There are a tremendous lot of horses and traps here, all night long you here the tingling of Bells and Hobbles, there is any amount of feed here for them. Tell Harris B. not to come, even if he were up here in business no-one has no money to spend and it is not likely to be a permament field. The people making most are the teamsters and coaches. When I came up there was two teams at Mannahill belonging to two men just finished wool carting , they brought out luggage and made so much more and cost nothing for horse feed being able to turn their horses out on the splendid feed that is on this run.

Tell Willie that so far I cannot send for him, in fact I am doubtful on making my own expenses. As there is a temporary post office here you can write, I expect mails will be twice a week. Let me know how Paillys is, everything at home and the hay. When you cut the cemetery piece stack it and don't sell a straw till I am down as hay will be dear next year, the areas crops are too short for hay.

Trusting yourself and all are well,
I remain,
Yours affecty.,
Dan.

Adress:
Teetulpa Diggins,

P.S. Leave Mannahill out as I am not certain what place they come by.

APPENDIX J

EXTRACT FROM 'BUSH TRACKS AND GOLD FIELDS' BY LIONEL C.E. GEE, DESCRIBING A VISIT TO THE FIELD SOME 16 YEARS AFTER THE BOOM TIME.
(PROVIDED BY CHRIS JOHNSTON)

BUSH TRACKS AND GOLD FIELDS

REMINISCENCES OF AUSTRALIA'S
"BACK OF BEYOND"

BY

LIONEL C. E. GEE, S.M.

A SOMETIME SOUTH AUSTRALIAN GOVERNMENT SURVEYOR
WARDEN OF GOLDFIELDS AND SPECIAL MAGISTRATE

FOREWORD BY

F. WOOD-JONES, F.R.S.

ELDER PROFESSOR OF ANATOMY AT THE UNIVERSITY OF ADELAIDE

ADELAIDE:
F. W. PREECE AND SONS
1926

THE DERELICTS OF A GOLDFIELD

TAKING alternate turns of duty with a colleague, I was in touch with the Teetulpa goldfield situated some 230 miles north-eastward from Adelaide), from its boom time, 1886-7, to the decline and fall off, which comes, alas! to all alluvial fields sooner or later. About 16 or 17 years after the boom time, I had to revisit the old field in company with a very interesting American gentleman, Mr. Cloyd Chapman, a member of T. A. Edison's staff, who was looking over some old and presumably worked-out Australian alluvial fields in dry districts, in connection with the possible utilization of a dry-blowing process invented by Mr. Edison.

The wonderful difference between Teetulpa as I saw it then, and as I had seen it in the old days, gave me much food for reflection as I wandered about the old workings. Up and down the gullies these old workings extended, heaps and mounds of red earth, holes partly filled in, shallow excavations and pits where dry-blowers had been at work; a dam made years ago by some men who had intended to work a puddling machine, and, now after many years, at last full of water; but the would-be puddlers had all, except one very old man, grown tired of waiting, and had drifted away to places where, mayhap, rain fell more regularly and prospects were better. Along the edge of the gully and dotted here and there, curious old tin shanties, and at long intervals an old man working a shaker or shovelling a little pile of earth near his clumsy, crude contrivance; they looked like stray ants on a huge abandoned ants' nest, storm-worn derelicts on a tossed sea of red earth; and memory went back to the time when 5,000 men hunted for gold with feverish activity over the same ground, and it is estimated that gold to the value of £300,000 was found. One of the shanties we find is a store, and a very rudimentary one. The storekeeper is an old man, spectacled, bald-headed, long-whiskered. He has been a very big man, but now the disproportion between his bulky head and upper body, and his shrunken lower limbs, gives one the idea of a vertical tadpole. Been here 17 years, he says; only about half a dozen old fellows left here now; they are all more or less "ratty." Most of them are getting destitute rations; is doing no business and can't get away, and has nowhere to go, even if he could get away; he hasn't much good to say concerning the other derelicts. Is inclined to be a sour and bitter old man, and no wonder, perhaps.

There is also a post office, another tin shanty, with patches of old boards here and there. It has once been a butcher's establishment, for a big butcher's block fills up the centre of the front shop, which otherwise is destitute of furniture. From the room at the back rolls out an old man, fat, puffy, oleaginous, wheezy in speech, and remarkably dirty in clothes and person. He has been here nigh on 17 years; mighty little gold getting now; can't get about much, been here too long to get away. He also wears spectacles; they cross his puffy face diagonally, and he peers distrustfully with an eye through the end of one of the glasses.

Out in the old workings, opposite the site of the vanished town, we see that they extend in this particular part of the diggings for a width of about an eighth of a mile, and along the broad gully for somewhat over a mile. On all sides save to the north are low, rounded hills, covered with saltbush. Clambering about is hard work; narrow pads lead up and down hillocks, and round the edges of excavations, in all directions. Suddenly we came on an old man busily engaged in sweeping up dirt from the crevices of the slate rock, which here, on edge, constitutes the bedrock of the gully. He is on his knees, and is using a hand-bush made of splinters of paling. A touch on the shoulder and he hurriedly springs upright, stares at the travellers, passes his hand over his eyes, takes off his battered old hat, grasps warmly the extended hand, shakes it, and then stands at "attention"—he has been a soldier; a broad, pleasant-looking face, with a short grey beard at the bottom, and curly white hair on top, kindly grey eyes set far apart.

"Lor, bless me, sir, it's years since I seen you, and may I be permitted to observe how well you're looking; greyer and stouter, may be, but otherwise quite young. Over 16, yes, 16 and a half years, since I came here. 'Barber Bill' in the main street just over there; that was me, a bob a shave, only one lather, and just trim up the 'air. I made good money then. Afterwards—that was my oven, that heap of stones over there where the telegraph station used to be—'Bill the Baker' they called me. I made good bread, and had plenty of customers; some was all right, some cleared out without paying; but things fell off, and I took to the gully. 'Old Bill the Blower,' now. Been here too long, and too old now to get away. I knock along somehow. I work brisk, I've always managed to get the tea and the bread, but sometimes you go mighty short about the sugar and other tack." And so he rambles on, this cheerful, hardy old battler, and in the unsteady glance of his honest, old eyes and his disconnected speech, I read the mark of the Australian solitudes—"white ants" they call it up north. He had some curious little stones he said he wanted to show us. So we went over to his little shanty to see them. Everything here is neat and clean, his tin pannican,

brightly polished, hangs against the wall, his cooking utensils are carefully stowed in a box in the corner; on the bunk are his carefully folded rugs—very old ones—and on the top of them a large comfortable-looking yellow cat.

"Can I do anything for you, Bill?"

"No thank you, sir, I'm only old and poor."

We wandered about and saw the rest of the derelicts. The ages would average well over 70 years. They all show unmistakeable signs of "white ants," and tell you in confidence that their neighbours are "a bit ratty." They each have their poor little troubles and worries, which they feebly and unresentfully pour out; but there are only two things wrong with them after all—they are old and they are poor.

My poor old boys! Everybody is poor, some way or the other; it is only a matter of degree, and money is only a small and unimportant part of real wealth. And as for being old, why! one need only be as old as one allows oneself to be. Years, my poor old chaps, have mighty little to do with age, if you only knew it.

So one traveller can only give brave, and very unconvincing, words which may cause a flicker of the dull spirit, if only for a moment, while the other traveller helps to stock up the tucker boxes.

For, indeed, next morning Mr. Chapman put the whole "gang of old lizards," as he called them in his cheerful, American way, on his pay roll for a few days, and with their help managed to get through the testing of 234 samples (headings, dumps, stuff from all over the gullies) of about 50 lb. each one, and then, on settling up each old fellow had, in addition to his little windfall of wages (and you could buy quite a lot of things for a few "bob" in those days) his share in the distribution of the contents of a well-filled ration box.

During this visit I told the interesting, and interested, American visitor many little yarns in connection with the "boom" time of this small, very rich patch of alluvial gold; the total area of rich ground did not exceed 250 acres, but as the area of claims granted was not allowed to exceed 30 feet square, one man one claim, there was room for a multitude of workers for a short time. The surrounding vast extent of country is precisely similar in every way, but so far no similar rich patch has been found in the district.

One of the yarns I told my friend was the story of my first case—that is my first case as a police magistrate. I was sent up to relieve my colleague, whose presence was required in Adelaide for a time, and just as he was getting into the buggy to start on his journey down country he called out, "By the way, you'll have to take the Dicky birds in the mornings." I didn't understand, and the old Inspector of Police to whom I appealed only laughed and said, "You'll soon find out all about it, me boy."

The residential camp for the Warden and the Police was situated about a mile away from the diggings, but at the diggings "township" there had been pitched a large tent, which was used as headquarters for the police on duty there, and also as Warden's Office, Courthouse, etc., and alongside there was a galvanized cell, which could be mounted on wheels, a combined prison cell and Black Maria. So next morning the Inspector and I drove down, and after some rather tedious settling of boundary disputes among claim holders, we arrived at the tent, and I took my seat at the end of a long table, where I found a pile of letters waiting for me.

"Have ye any Dicky birds?" said the Inspector to the Corporal in charge.

"Only old Mary," replied the Corporal. "She was very drunk last night; and as the boys were beginning to guy her, we ran her in."

He handed a charge sheet to me, and, on looking up, I saw that, ushered in by one of the troopers,a short, stout, grey-haired, rather pleasant looking little woman was standing at the other end of the table, smiling and bobbing curtseys at me. I read from the charge sheet:

"Mary Blank, you are charged on the information of the police that you were drunk and disorderly in a public place at Teetulpa on such and such a date, how say you? Are you guilty or not guilty?"

She bestowed a positively beaming smile on me, dropped a deep curtsey, and said, "Guilty, Your Worship." The Corporal made a brief statement of the facts of the case, and I knew from previous entries in the charge sheet what the usual penalty was. So I gave sentence.

"You are fined five shillings." Mary smiled again, curtsied again, and responded most cheerfully. "I haven't got five shillings, Your Worship."

"Won't your friends pay for you?"

"No, indeed, Your Worship"—this with vastly amused cheerfulness.

The usual alternative penalty was three days' imprisonment, but this, I felt, was impossible, in Mary's case, so I announced, "You are imprisoned until six o'clock this evening." And Mary was led smiling away.

Then I went for a tour round the workings and the gullies, and did not get back to the police tent till the middle of the afternoon. Here I found another pile of letters awaiting me, and as I was opening them I asked the Corporal, "How's Mary?"

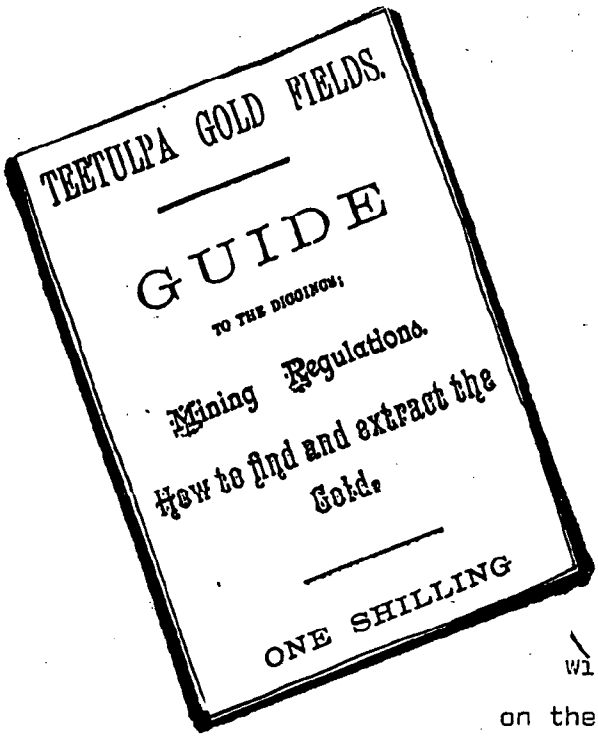
"Shes' gone," said he.

"Gone!" I exclaimed, with the air of an offended Rhadamanthus, "Why, I imprisoned her till six o'clock this evening."

"Yes," said the Corporal, "that was in default of payment of the fine. You know what a dusty, dirty place this is; we had plenty of dirty clothes, so we got a tub, some water and a bar of soap, and Mary set to work and washed the lot; she's a Bobby Dazzler at it. We paid her fine, gave her five bob for herself, and she's gone."

APPENDIX K

NOTES ON THE CENTENARY CELEBRATIONS HELD ON THE FIELD, SUNDAY 5 OCTOBER 1986.



TEETULPA GOLDFIELDS CENTENARY

SUNDAY OCTOBER 5TH 1986.

The celebrations to mark the centenary of the Teetulpa Goldfield will be held on the field which is situated on the Four Brothers-Yunta road approximately 5 km south of Four Brothers homestead. Tracks will be sign-posted.

The celebrations will be held exactly 100 years after Thomas Brady discovered gold there in October 1886. Within 10 days of his discovery, 1500 men flocked to Teetulpa.The largest nugget found at Teetulpa weighed almost 30 ozs.

This is an open invitation to anyone who is interested in attending.It will be a very low-key affair :-

10.30 a.m. - Assemble/Welcome
11.00 a.m. - Tour of the field
12.00 - Barbecue lunch and tea and coffee provided. Bring your own liquid refreshments.
1.00 p.m. - Ric Horn from the Department of Mines will present historical material. Demonstration of early mining equipment.
3.00 p.m. - Rev.Ian Robertson has kindly agreed to conduct a short service at the cemetery.

Due to the lack of trees/shelter, it would be advisable to come prepared for a day in the 'great outdoors'. Apart from the main alluvial diggings, there are numerous reasonably deep shafts in the area which you should warn your children about prior to arriving at the field.
In order to assist with catering, could you please advise us if you are intending to come? We look forward to seeing you there.

Dot and David Sandland.

TEETULPA GOLDFIELD CENTENARY

David and Dot Sandland, pastoral lessees of Four Brothers and the prime movers behind the centenary celebrations, were gracious hosts to 85 guests on Sundry 5th October, 1986 at the Teetulpa Goldfield.

Exactly 100 years ago to the day gold was discovered in Brady's Gully by Thomas Brady from Lancelot and Thomas Smith from Broughton. Centenary celebrations were held in Dam Gully, a reasonably flat area near the alluvial workings, which had the advantage of being close to the main road for access and within sight of the spot in Brady's Gully where gold was discovered.

David Sandland erected a shed and tarps for shelter and for the dispensing of food and drink and a static display by the South Australian Department of Mines and Energy, consisting of aerial photographs of the field, modern and historic plans and a large selection of old photographs, circa 1886-1887, with selections from newspapers of the day including one of the newspapers published on the field. To help give a flavour of authenticity to the day, the South Australian Department of Mines and Energy, through their representatives, Ric Horn, Principal Geologist, Metallic Minerals, and Bill Fradd, Field Assistant, demonstrated alluvial mining equipment typical of that used on the field in 1886.

Mid morning saw the clouds building up and the first signs of the storms that were to follow. A tour of the field with a convoy of vehicles stopping at various points of interest was conducted by Ric & Bill, however, rain shortened the tour at Tonkins Well where the ground had turned extremely slippery and vehicles became bogged.

Following a BBQ lunch and hot drinks supplied by David and Dot, the rain eased long enough for a demonstration of alluvial mining equipment although the dry blower and dry shaker could not be used because of the wet dirt. A cradle, pans and sluice were operated, attracting much attention and minute specks of gold were recovered. John and Beth Sandland displayed an original

dryblower used on the field by the Stigwood brothers in the 1930's

Mid afternoon saw the storm clouds building again and amid thunder, lightning and some rain Rev. Ian Robertson from Clare conducted a service at the Teetulpa Cemetery which has been cleaned up, a new fence constructed around it and a sign erected at the gateway.

After the service Ric Horn gave a talk on the history of the goldfield and events leading to the discovery on a cold, wet and stormy day 100 years earlier. Visitors were permitted to stroll across the ground previously mined and now being reworked by several miners who hold mineral leases over the area. Those who stayed on enjoyed another BBQ for tea and sat around the fires celebrating the centenary in appropriate style.

Everyone agreed that despite the inclement weather the day was most enjoyable. Dr Reg Sprigg and his wife Griselda flew down from Arkaroola to attend but were forced to cut short their visit due to the rain. Reg had worked on the field mining some of the reefs in 1933.

David and Dot Sandland who shouldered the many responsibilities of organising and conducting the event are to be sincerely thanked for their efforts.

Ric Horn and Bill Fradd, SADME, have compiled an Historical and Geological Review of the Teetulpa Goldfield and this should be available early in November, 1986. New plans of the goldfield have been compiled and include alluvial areas, reef workings and existing lease boundaries. These are available from the Dept. of Mines and Energy, 191 Greenhill Road, Parkside.

Scripture Reading: I Peter 1:13-19

"Therefore, prepare your minds for action; be self con-controlled; set your hope fully on the grace to be given you when Jesus Christ is revealed. As obedient children, do not conform to the evil desires you had when you lived in ignorance. Just as he who called you is holy, so be holy in all you do; for it is written: "Be holy, because I am holy". Since you call on a Father who judges each man's work impartially, live your lives as strangers here in reverent fear. For you know that it was not with perishable things such as silver or gold that you were redeemed from the empty way of life handed down to you from your forefathers, but with the precious blood of Christ;

.....

Address: Rev'd. Ian Robertson

Hymn: O God, our help in ages past,

O God, our help in ages past,
Our hope for years to come,
Our shelter from the stormy blast,
And our eternal home;

beneath the shadow of thy throne
Thy saints have dwelt secure;
Sufficient is thine arm alone,
And our defence is sure.

Before the hills in order stood,
Or earth received her frame,
From everlasting thou art God,
to endless years the same.

A thousand ages in thy sight
Are like an evening gone;
Short as the watch that ends the night
Before the rising sun.

Time, like an ever-rolling stream
Bears all its sons away
They fly forgotten as a dream
Dies at the opening day.

O God, our help in ages past,
Our hope for years to come,
Be thou our guard while troubles last
And our eternal home.

.....

Closing Prayer

Benediction

CENTENARY SERVICE

1886 - 1986

TEETULPA GOLDFIELDS

OCTOBER 5th. 1986

3.00 pm

" .... the genuineness of your faith,
more precious than gold ... "
I Pet. 1:7

Introduction:

Scripture Sentence: Psalm 90:1 - 2.

"Lord, you have been our dwelling place
throughout all generations.
Before the mountains were born
or you brought forth the earth and the world,
from everlasting to everlasting you are God".

Prayer

Responsive Reading: Psalm 103:1 - 19.

M. Praise the Lord, O my soul;
C. ALL MY INMOST BEING, PRAISE HIS HOLY NAME.

Praise the Lord, O my soul,
AND FORGET NOT ALL HIS BENEFITS -

Who forgives all your sins
AND HEALS ALL YOUR DISEASES,

Who redeems your life from the pit
AND CROWNS YOU WITH LOVE AND COMPASSION,

Who satisfies your desires with good things
SO THAT YOUR YOUTH IS RENEWED LIKE THE EAGLE'S.

The Lord works righteousness
AND JUSTICE FOR ALL THE OPPRESSED.

He made known his ways to Moses
HIS DEEDS TO THE PEOPLE OF ISRAEL:

The Lord is compassionate and gracious
SLOW TO ANGER, ABOUNDING IN LOVE.

He will not always accuse,
NOR WILL HE HARBOUR HIS ANGER FOREVER;

He does not treat us as our sins deserve
OR REPAY US ACCORDING TO OUR INIQUITIES.
For as the heavens are high above the earth,
SO GREAT IS HIS LOVE FOR THOSE WHO FEAR HIM;

As far as the east is from the west,
SO FAR HAS HE REMOVED OUR TRANSGRESSIONS FROM US.

As a father has compassion on his children,
SO THE LORD HAS COMPASSION ON THOSE WHO FEAR HIM;

For he knows how we are formed,
HE REMEMBERS THAT WE ARE DUST.

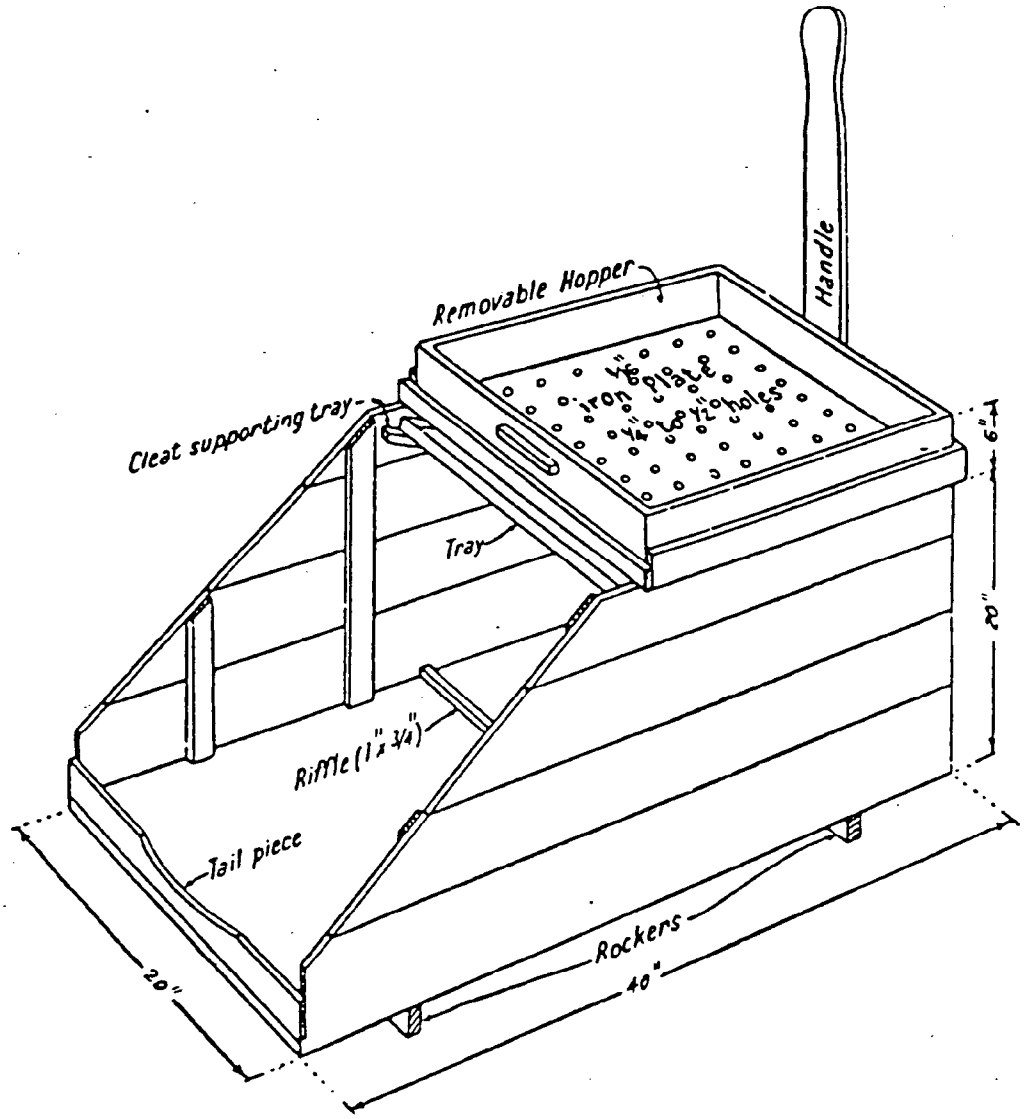
As for man, his days are like grass,
HE FLOURISHES LIKE A FLOWER OF THE FIELD :

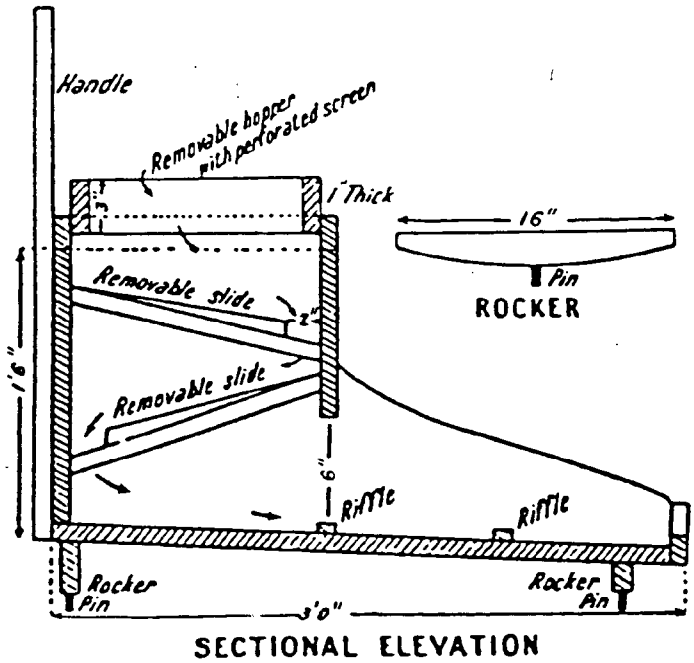
The wind blows over it and it is gone,
AND ITS PLACE REMEMBERS IT NO MORE.

But from everlasting to everlasting the Lord's
love is with those who fear him,
AND HIS RIGHTEOUSNESS WITH THEIR CHILDREN'S CHILDRE

With those who keep his covenant
AND REMEMBER TO OBEY HIS PRECEPTS.

The Lord has established his throne in heaven,
AND HIS KINGDOM RULES OVER ALL.





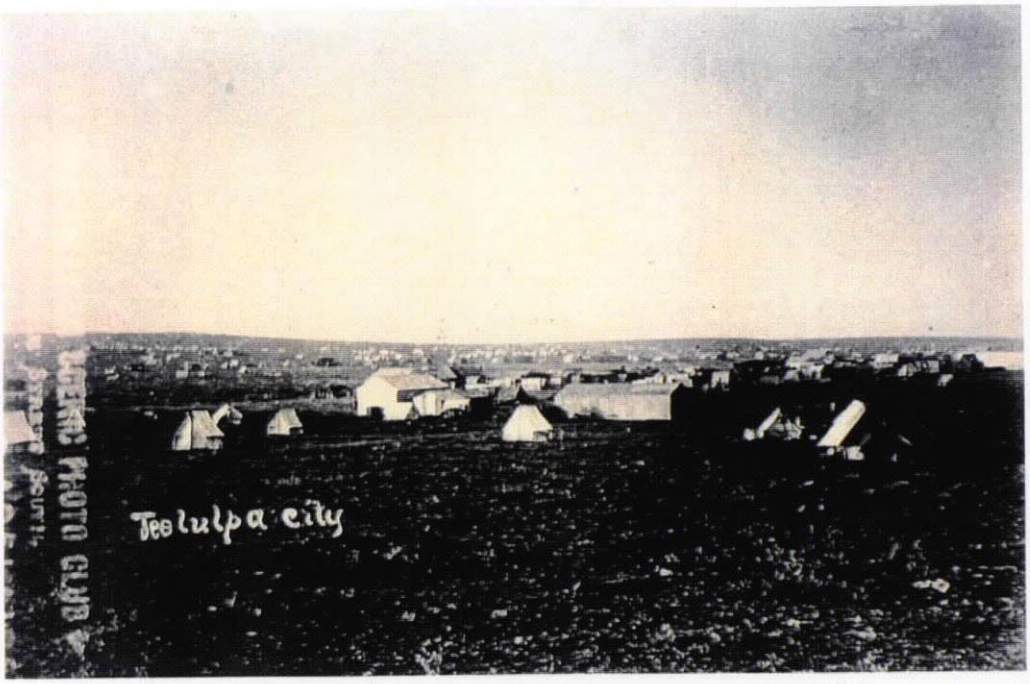
SECTIONAL ELEVATION

Figure 8

DIAGRAM OF A GOLD WASHING CRADLE

SADME Plan N° S 18942

4202



FRONTISPIECE:

Teetulpa City, 1886.
Slide No. 35276

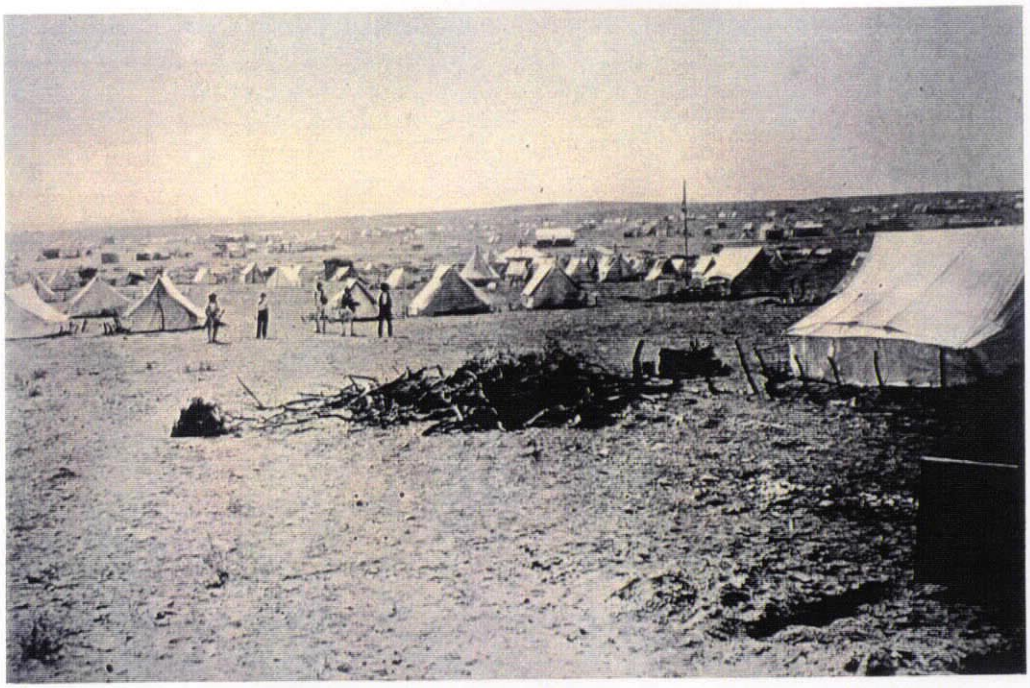


PLATE 3. Tents on the Teetulpa Goldfield, 1886. Note the firewood stockpile. All wood had to be brought to the goldfield.
Slide No. 35281

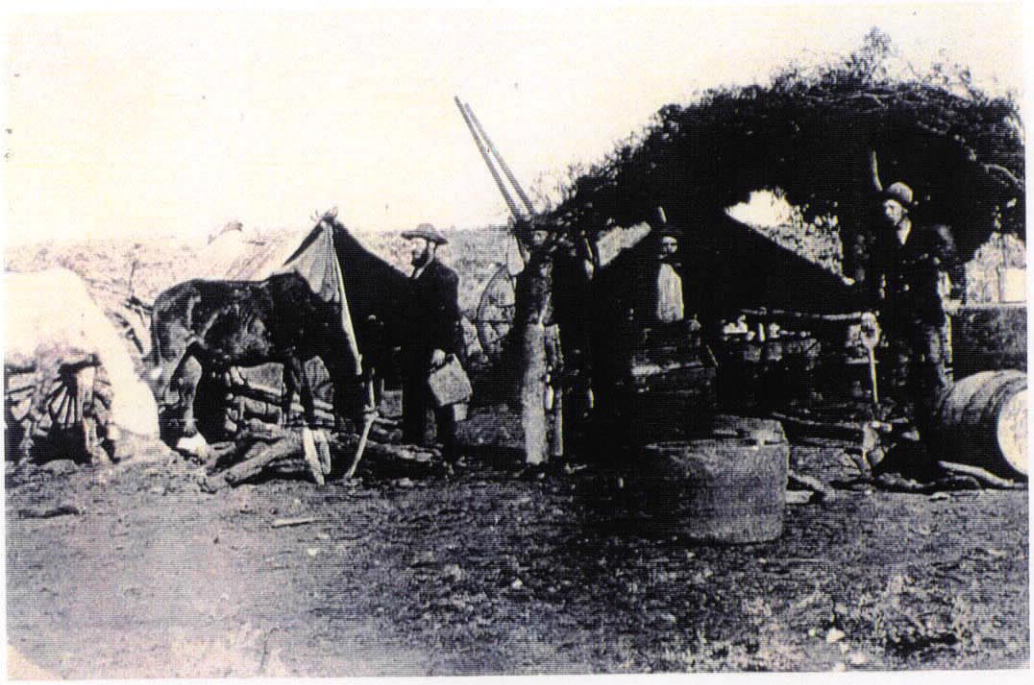


PLATE 4. Typical shelter and Campsite at Teetulpa, 1886.
Slide No. 35282

PLATE 5. The Pie Man trading his wares, Teetulpa, 1886.
Slide No. 35283

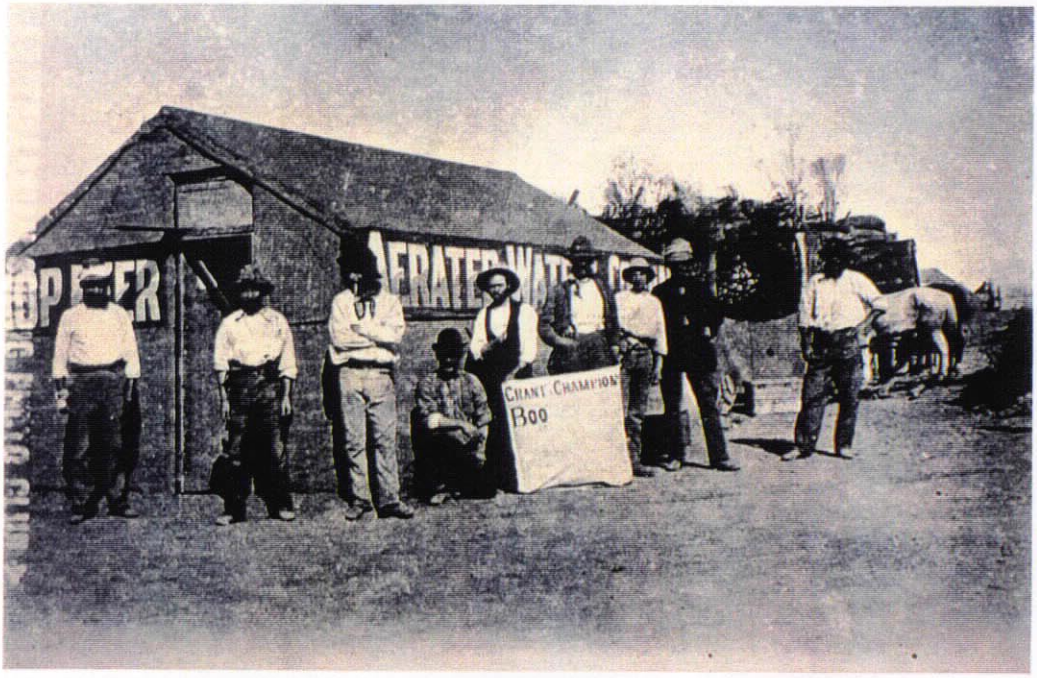


PLATE 6. Hop Beer and Aerated Waters Establishment, Teetulpa, 1886.
Slide No. 35284

PLATE 7. Brady's Gully Diggings, 1886.
Slide No. 35285

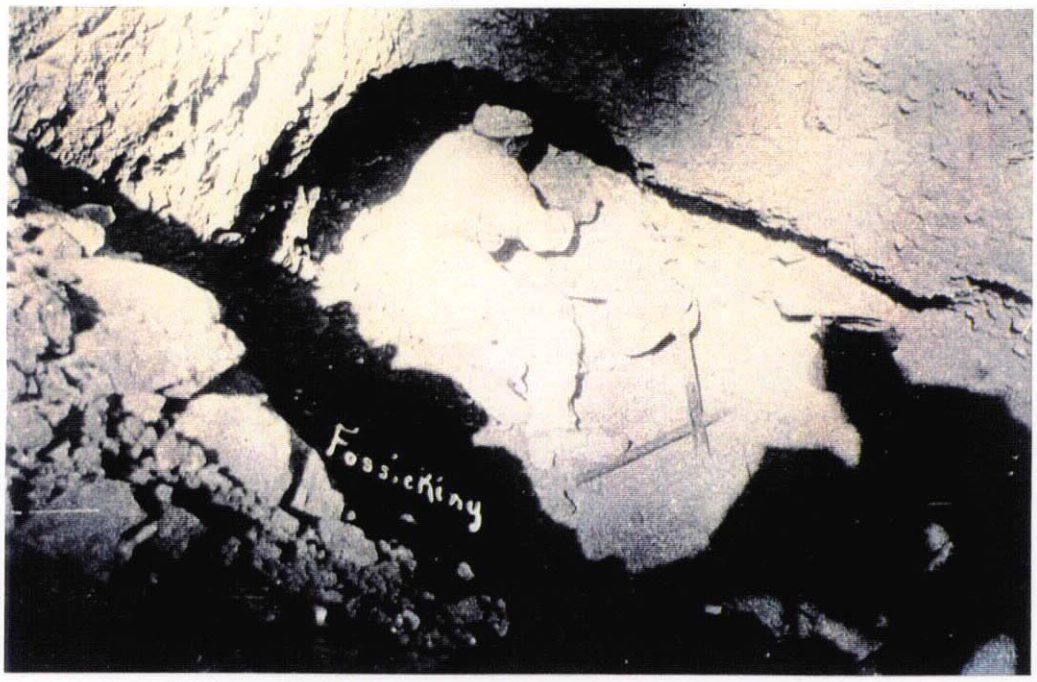


PLATE 8. Fossicking Over The Wash Dirt, Teetulpa, 1886.
Slide No. 35286

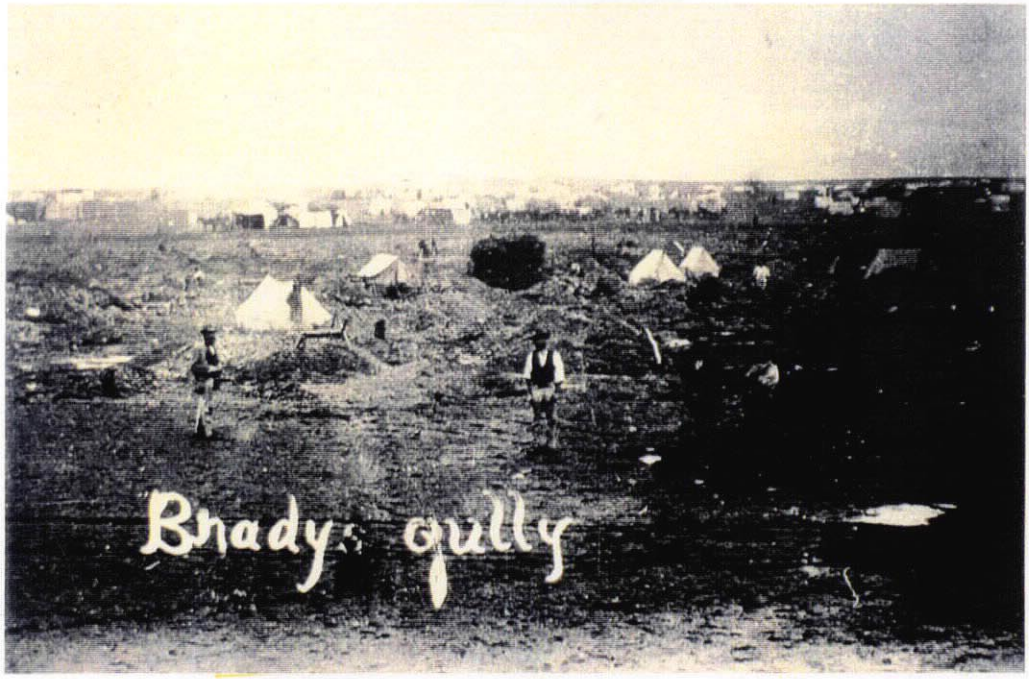


PLATE 9. General View of Brady's Gully, Teetulpa, 1886.
Slide No. 35287

PLATE 10. O'Keenes Claim in Goslin's Gully, Teetulpa, 1886.
Slide No. 35288

PLATE 11. A General View of Diggers Working in Goslin's Gully. A 27 Ounce (839.9 g) nugget was the largest recorded in this locality.
Slide No. 35289

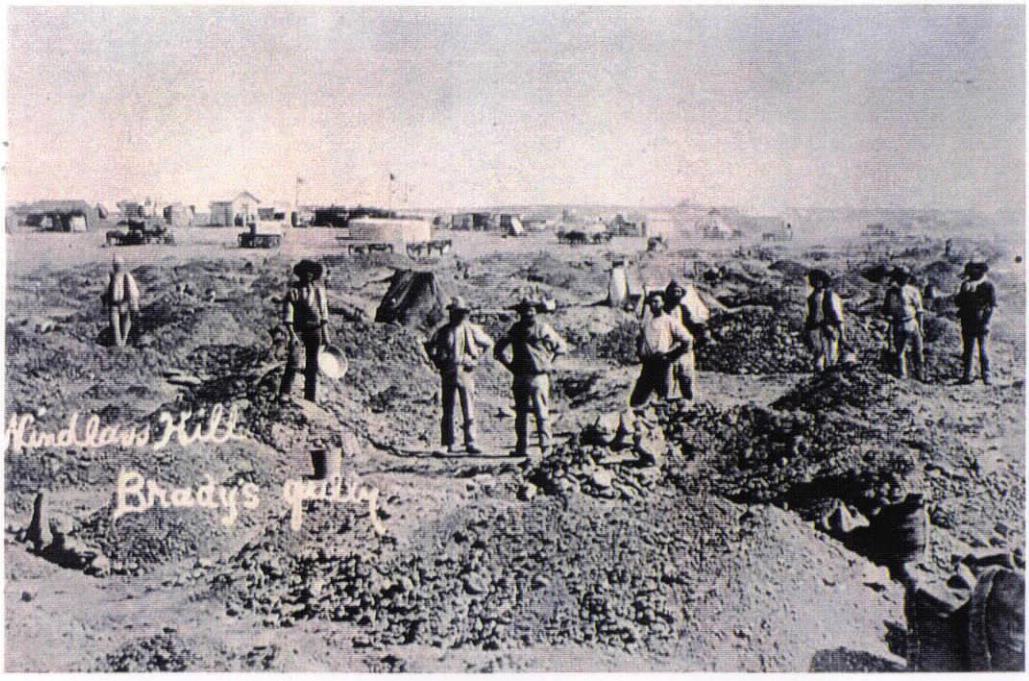


PLATE 12. Windlass Hill Diggings in Brady's Gully, Teetulpa, 1886.
Slide No. 35290

PLATE 13. Cradles and Rockers in use at Tonkin's Well, Teetulpa, 1886.
Slide No. 35291

PLATE 14. Remains of Cement Rendered Stone Tank at Tonkin's Well, 1986.
Slide No. 35292

PLATE 17. Washing at Tonkin's Well, Teetulpa, 1886.
Slide No. 35295

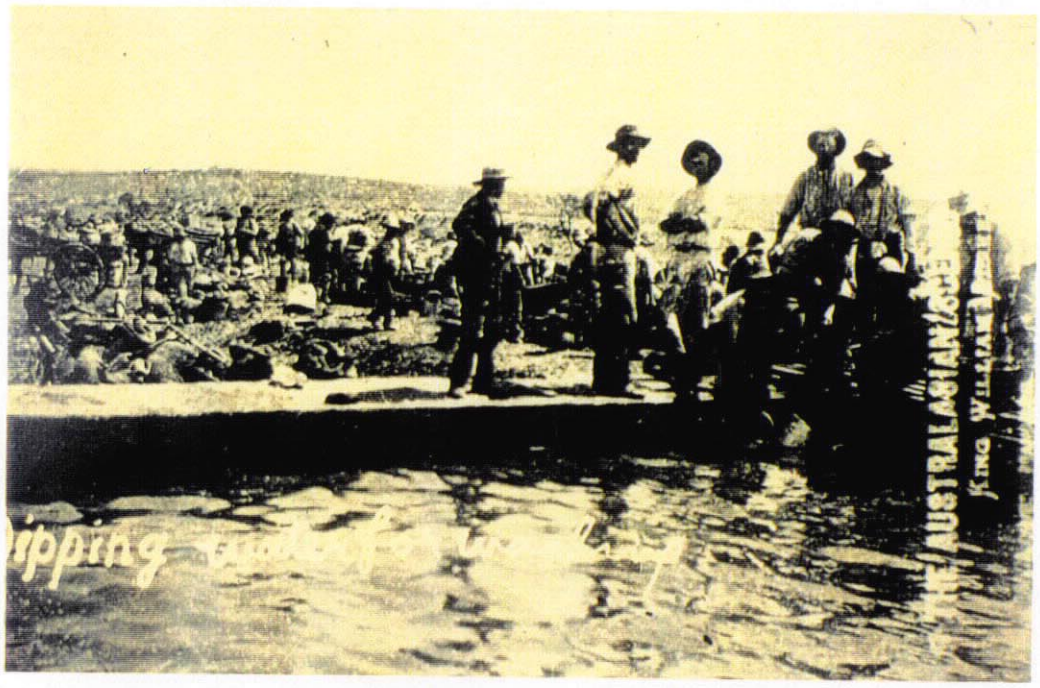


PLATE 18. Dipping for Water for Washing Auriferous Dirt, Tonkin's Well, Teetulpa, 1886.
Slide No. 35296

PLATE 17. Washing at Tonkin's Well, Teetulpa, 1886.
Slide No. 35295

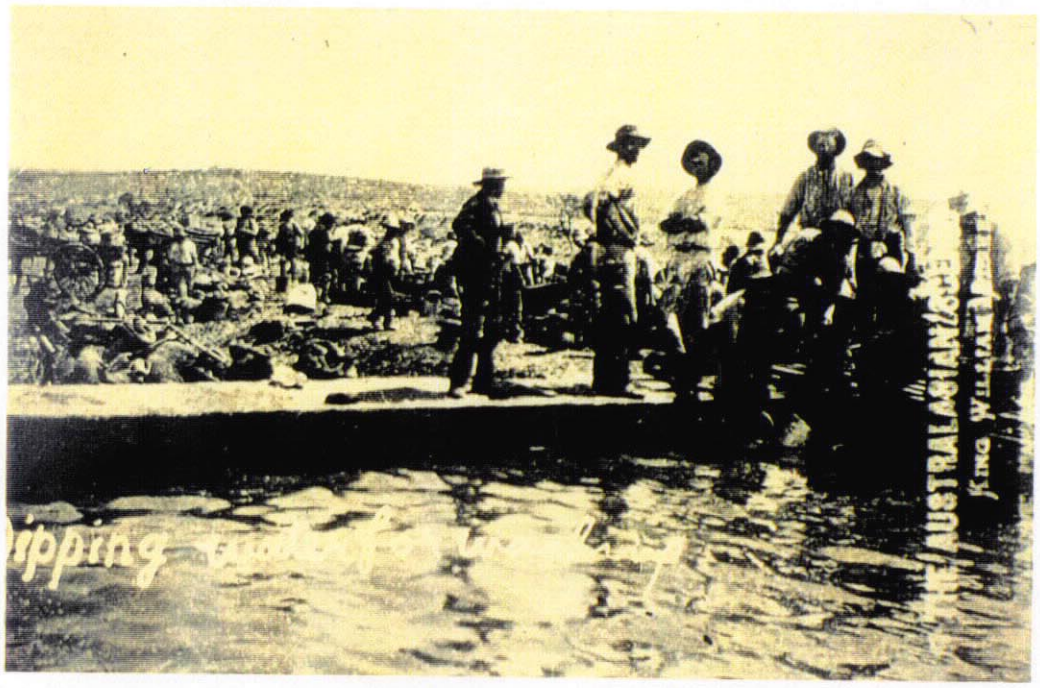


PLATE 18. Dipping for Water for Washing Auriferous Dirt, Tonkin's Well, Teetulpa, 1886.
Slide No. 35296

PLATE 19. Panning Off, Teetulpa, 1886.
Slide No. 35297

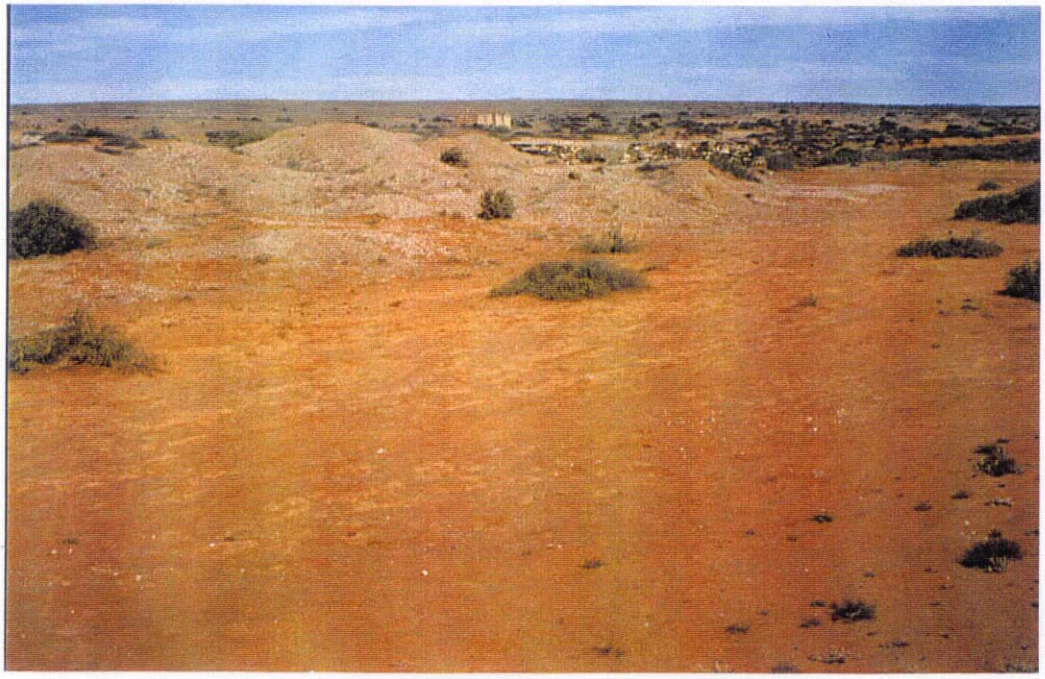


PLATE 20. General View Looking Southeast to Tank, Washing Residue and Hut at Tonkin's Well, 1986.
Slide No. 35298

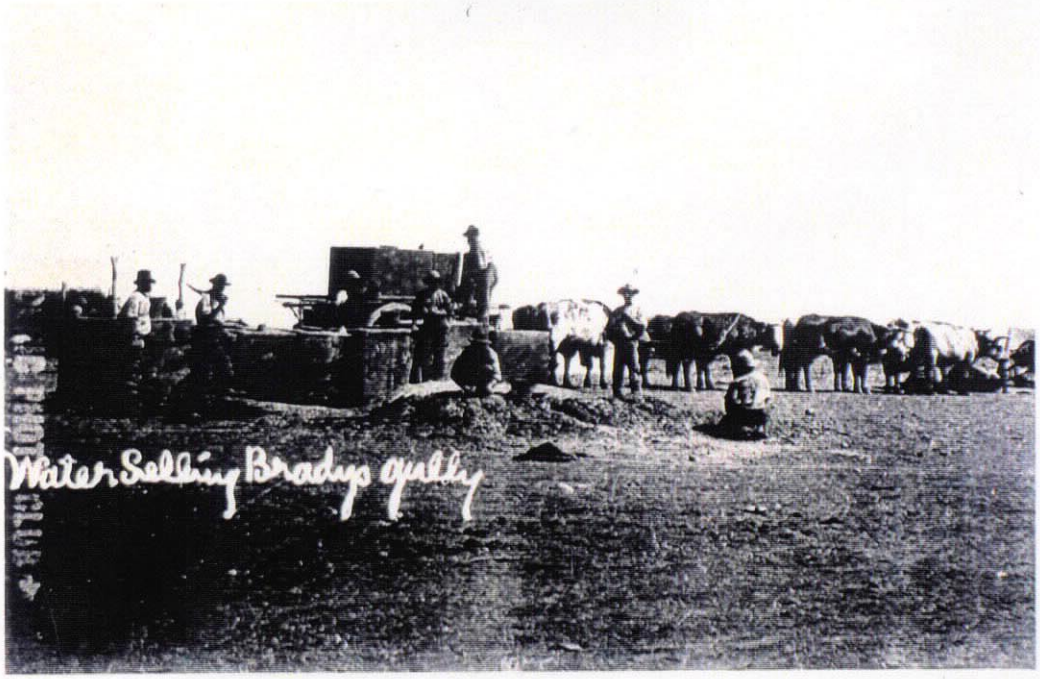


PLATE 23. Water Selling Brady's Gully.
Slide No. 35301

PLATE 24. Site of the J.C. Bray Battery in Goslin's Gully, July 1986.
Slide No. 35302

PLATE 25. Tailings Stockpiles at the J.C. Bray Battery, Goslin's Gully. July 1986.
Slide No. 35303

PLATE 26. Warden Settling a Dispute.
Slide No. 35304

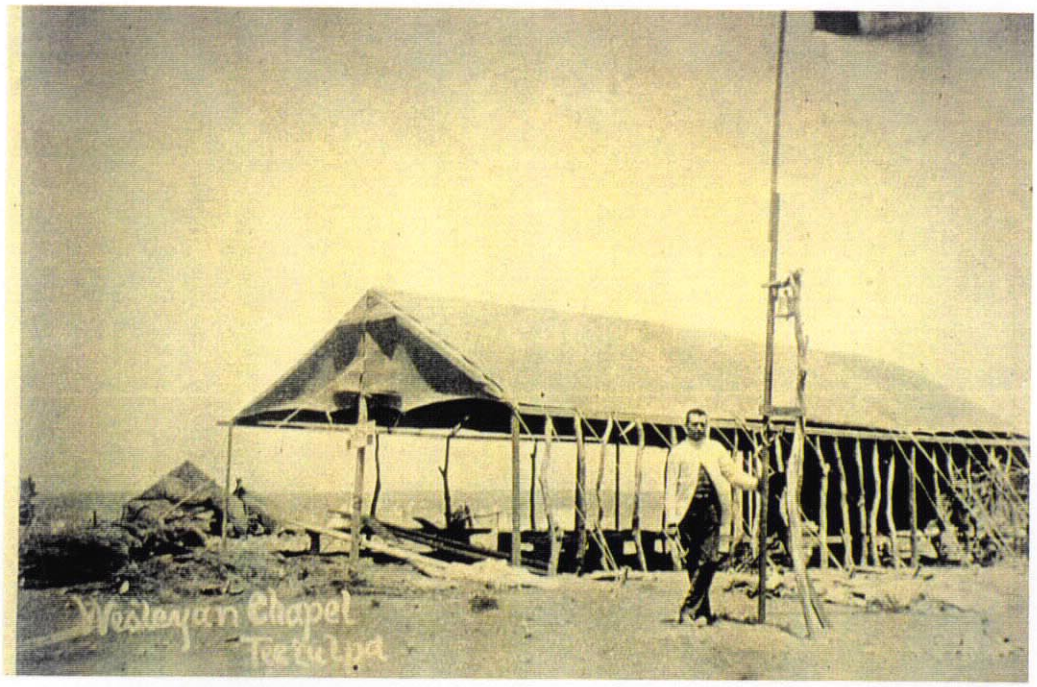


PLATE 27. Wesleyan Chapel, Teetulpa.
Slide No. 35305

PLATE 28. Cemetery Site at Teetulpa. July 1986.
Slide No. 35306

PLATE 29. Head Stone of Joseph Davies. Died 14 June 1887.
Slide No. 35307

PLATE 30. View of Tonkin's Well, Tank and Washing Residue, Salt Creek in Foreground.
Slide No. 35308

PLATE 31. View from Wells Hill Looking N.W. Toward Tonkin's Dam, July 1986.
Slide No. 35309

PLATE 32. Government Dam in Dam Gully, July 1986.
Slide No. 35310

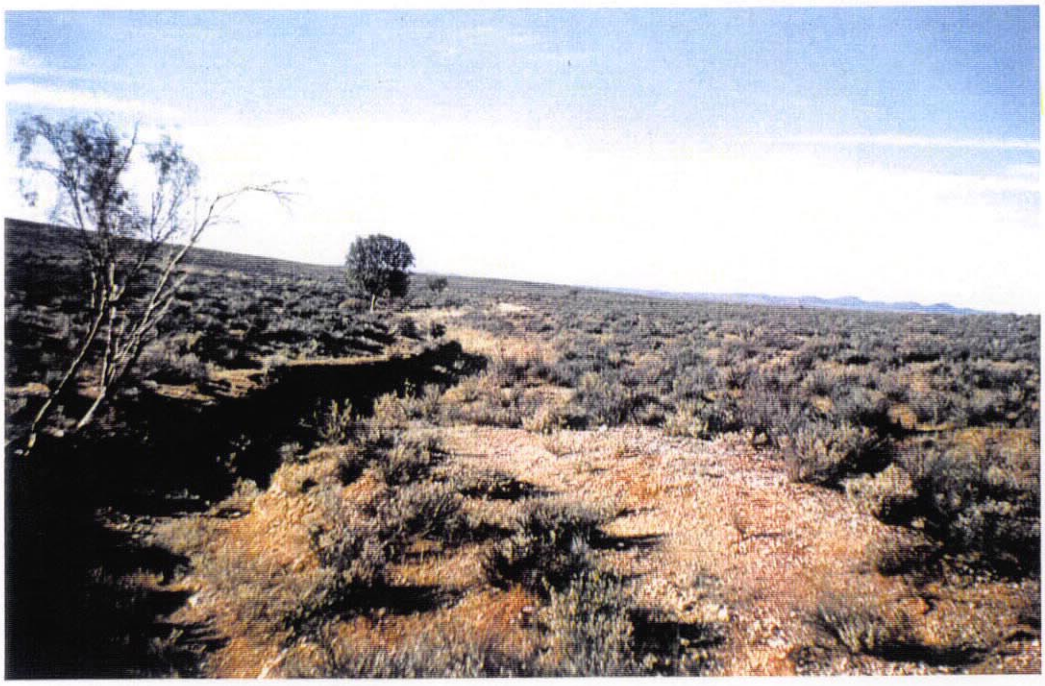


PLATE 33. Creek Channel and Alluvial Workings in Deep Gully, July 1986.
Slide No. 35311

PLATE 34. View Looking South Toward Hospital Hill, Teetulpa, July 1986.
Slide No. 35312

PLATE 35. Gold Nugget from Teetulpa. 69 grams and 3.5 cm across.
Slide No. 35319

PLATE 36. Gold Nuggets from Teetulpa. From Left to Right, 9 g, 25 g, 18 g, Centre Nugget measures 2.4 m across.
Slide No. 35320

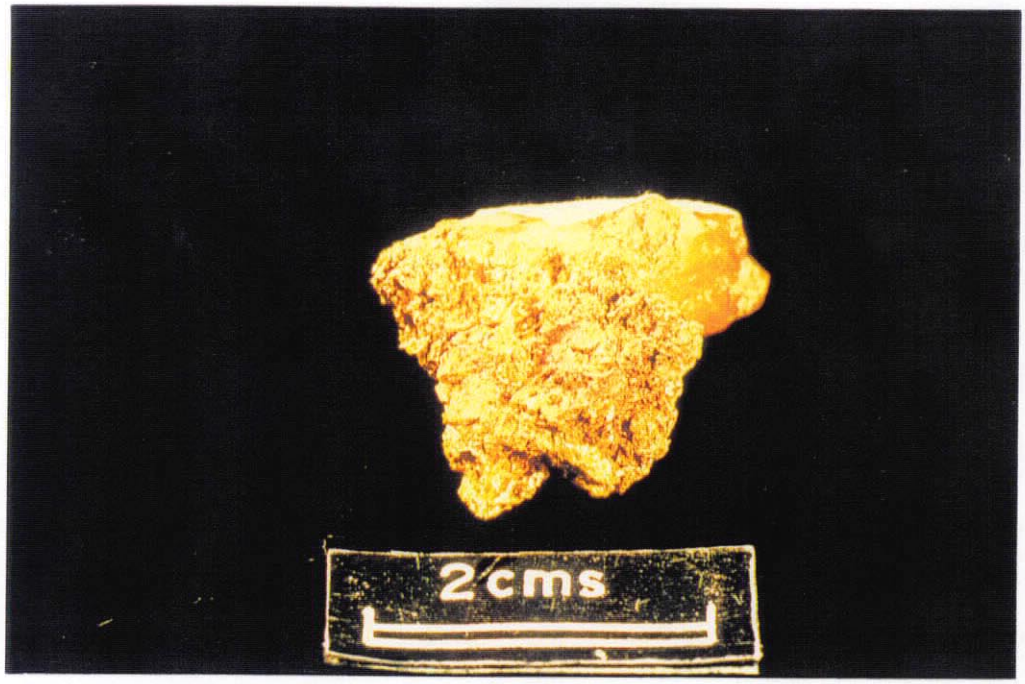


PLATE 37. Specimen of Gold from Teetulpa, Courtesy of S.A. Museum.
Slide No. 35321

PLATE 38. Enlargement of the Gold Specimen in Plate 37 above.
Slide No. 35322

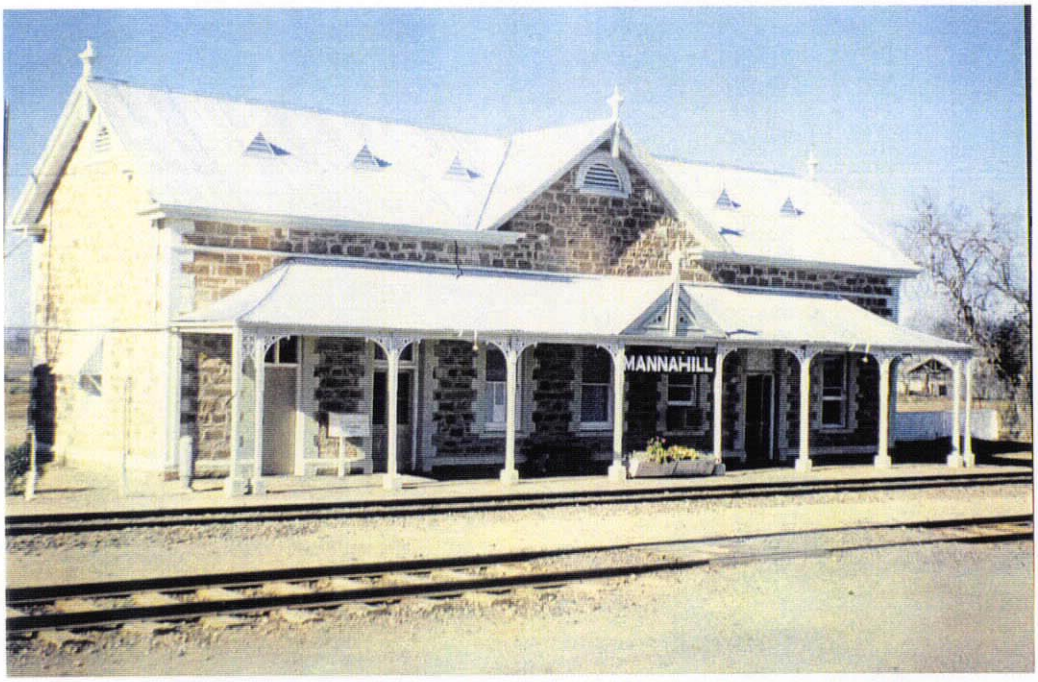


PLATE 39. Mannahill Railway Station - Starting Point for the Trek to the Goldfield by Many Diggers. Now a National Trust Building. Slide No. 35323

PLATE 40. Remains of Badman's Hotel Located on the Southern side of Brady's Gully.
Slide No. 35528

PLATE 41. Remains of House on the western side of Goslin's Gully.
Slide No. 35529

PLATE 42. Photograph of Lionel C.E. Gee, Goldfields Warden and Special Magistrate.
Slide No. 35530

PLATE 43. New Rush, Brady's Gully. Typical miners of 1886 (Archives, State Library of S. Aust.).
Slide No. 35531

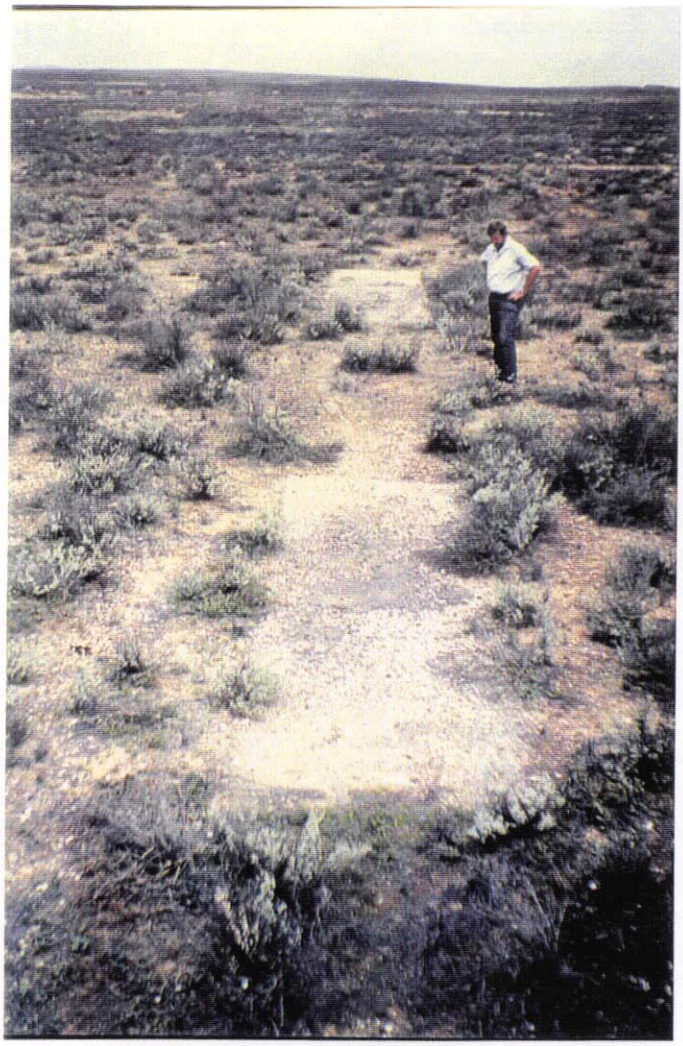


PLATE 44. Old Cricket Pitch at Teetulpa Goldfield.
October 1986.
Slide No. 35569

PLATE 45. SADME Alluvial Gold Treatment Equipment Display at Teetulpa Goldfield Centenary. Rocker in foreground, Long Tom, Dry Blower and Dry Shaker.
October 1986.
Slide No. 35570

PLATE 46. Long Tom Sluice in operation at Teetulpa Centenary. Rocker at Lower Right. October 1986. Slide No. 35571

PLATE 47. Feeding alluvial material to the Long Tom, Teetulpa Centenary. October 1986. Slide No. 35572

PLATE 48. Portable sluice box used at Teetulpa Centenary Celebrations. October 1986.
Slide No. 35573

PLATE 49. Dryblower used by Stigwood Brothers at Teetulpa in the 1930s, on display at Teetulpa Centenary. October 1986. Courtesy Mr and Mrs J. Sandland.
Slide No. 35574

PLATE 50. Some of the participants in Teetulpa Centenary Celebrations during the SADME conducted tour of the Goldfield. October 1986. Slide No. 35575

Figure 6

TEETULPA GOLDFIELD

ENLARGEMENT SHOWING REEF WORKINGS · SOUTH EASTERN AREA

(Modified after Cleland, 1889)

Compiled C.M.H., Drawn A.F. 19-8-86, Scale approx. 1:2500

SADME Plan N° 86-539

4202

TEETULPA UNITED
VICTORY
VICTORY
VICTORY
ISLE OF AXHOLME
"NORTHERN"
LION
JUBILEE
BLUE STAR CENTRAL
LONDONDERRY
"ADELAIDE"
PRINCE CONSORT
"HORSESHOE"
"BISMARCK" N°2
"BISMARCK" N°1
BLUE STAR
"COMET"
WHITE CROSS
ENTERPRISE
EMPRESS VICTORIA
NONPAREIL
THREE STAR
HUT
OFFICE
OFFICE
HUT
HUT
HUT
GULLY
STRAWBRIDGE'S GULLY
MURPHY'S GULLY
T.N.
M.N.

SCALE

CHNS 5 4 3 2 1 0 5 10 CHNS

METRES

100 50 0 100 200

Track
Contour lines
Pits
Shafts
Costeaning pits
Reefs
Alluvial diggings

Figure 5

TEETULPA GOLDFIELD

ENLARGEMENT SHOWING REEF WORKINGS · SOUTH WESTERN AREA

(Modified after Cleland, 1889)

Compiled C.M.H., Drawn A.F. 15-8-86, Scale approx. 1: 2 500

SADME Plan N°. 86-538

4202

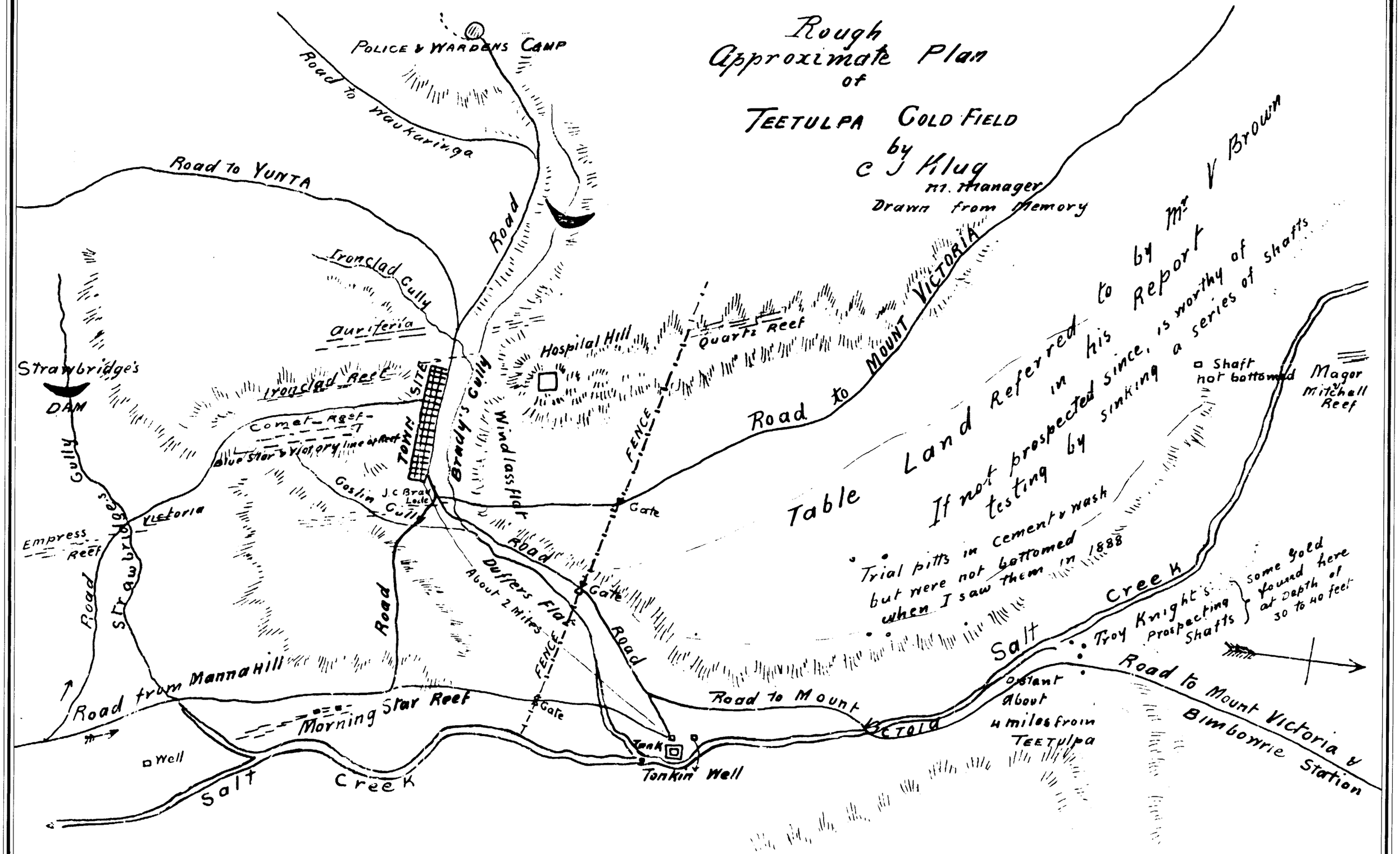


Figure 4

TEETULPA GOLDFIELD

ROUGH APPROXIMATE PLAN BY C.J. KLUG, MINE MANAGER

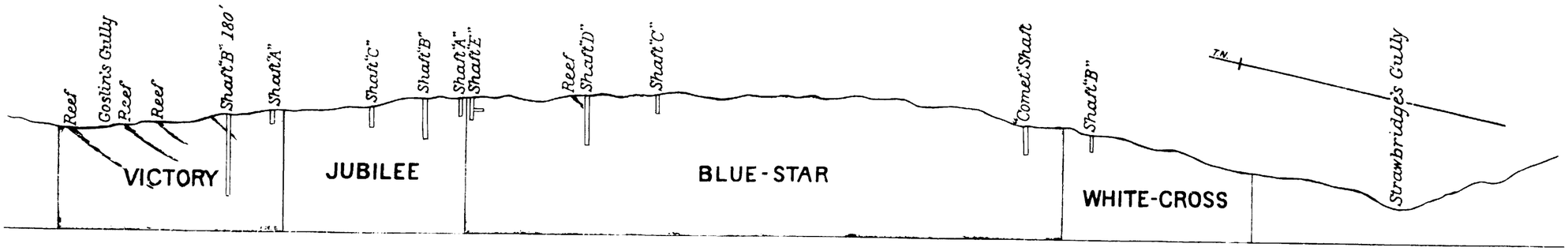
(Drawn from memory)

Reproduced from SADME Plan Nº 246

SADME Plan Nº 86-537

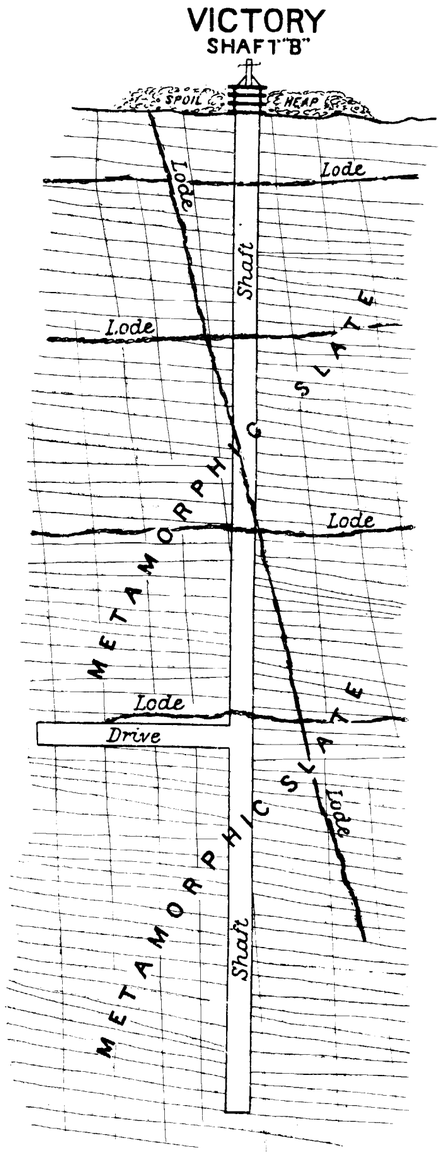
4202

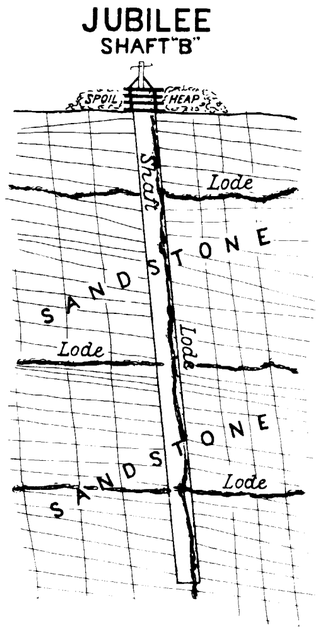
TEETULPA GOLD-FIELD

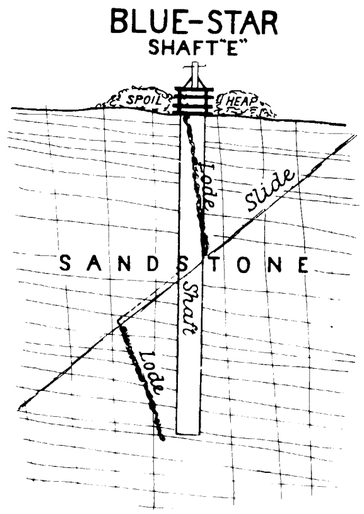


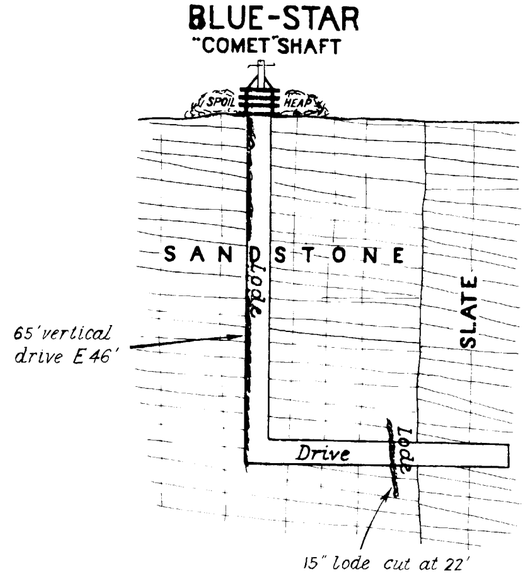
APPROXIMATE LONGITUDINAL CROSS SECTION AND SURFACE ELEVATION

Scale: 200 Feet = 1 Inch.









VERTICAL CROSS SECTION

Scale: 20 Feet = 1 Inch.

NOTE

The lodes and nature of stone as shewn on these shafts gives a fair general idea of the whole of the field - The red lines denote the veins and strike of the stone - The average cost of sinking on this field has been £3 per foot.

Surveyed and drawn by C.A. Cleland

C.A. Cleland Esq

Figure 3

TEETULPA GOLDFIELD

SECTIONS SHOWING REEF WORKINGS
GOSLIN'S GULLY TO STRAWBRIDGE'S GULLY

Reproduced from original plan surveyed and drawn
by C.A. Cleland Feb 5 1889, SADME Plan N° 319

SADME Plan N° 86-536

4202

TEETULPA
GOLD-FIELD

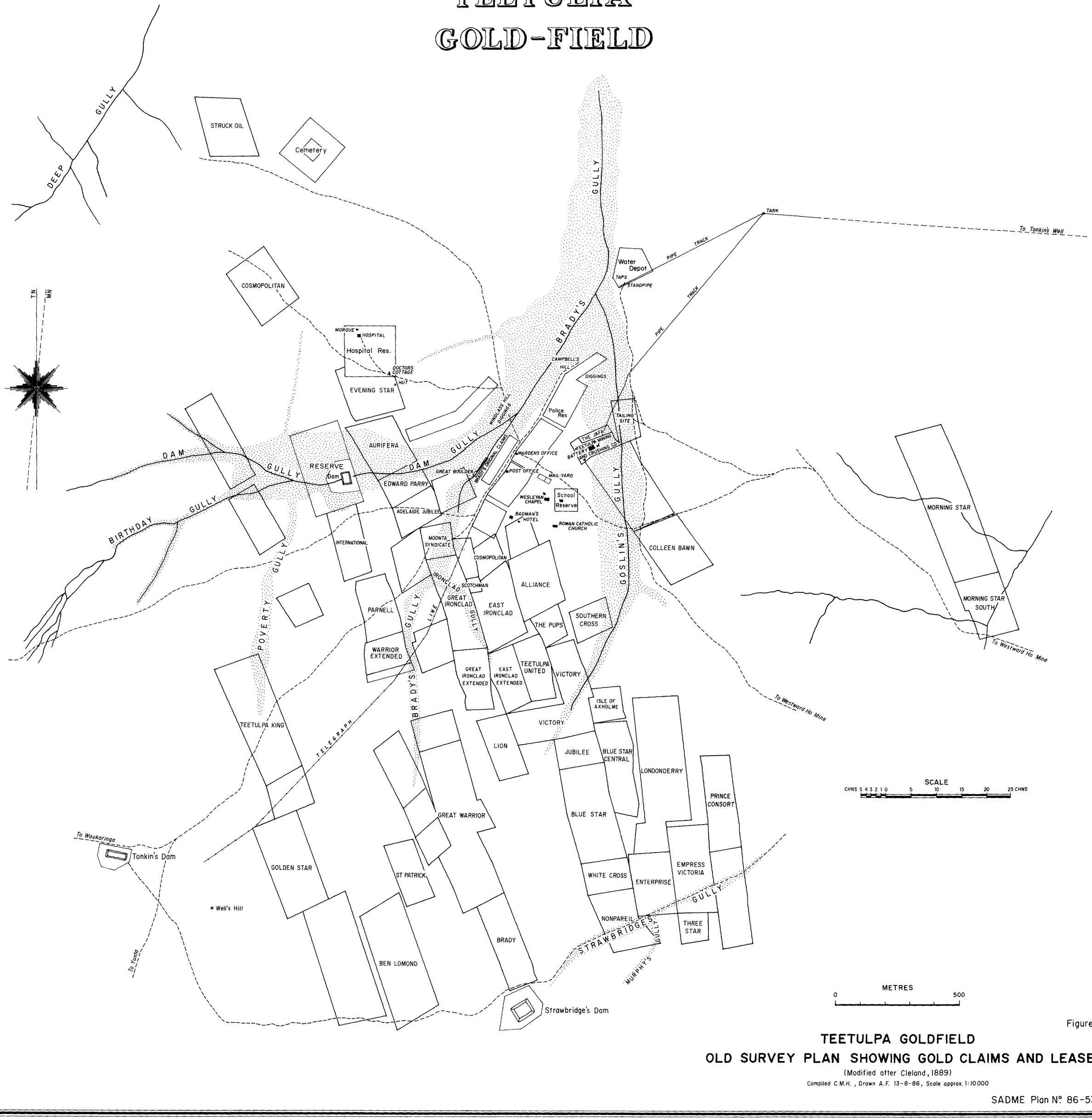


Figure 2

TEETULPA GOLDFIELD
OLD SURVEY PLAN SHOWING GOLD CLAIMS AND LEASES

(Modified after Cleland, 1889)

Compiled C.M.H., Drawn A.F. 13-8-86, Scale approx. 1:10000

SADME Plan N° 86-535

4202

T.N.
M.N.

COSMOPOLITAN
A

MORGUE
HOSPITAL
Hospital Reserve
DOCTOR'S COTTAGE
HUT
EVENING STAR
B
A

Water Depot
TAPS
STANDPIPE
PIPE
TRACK
SUNK FOR WATER
PIPE
TRACK

BRADY'S GULLY
CAMPBELL'S HILL
DIGGINGS
WINDLASS HILL DIGGINGS
Police Res.
"TAILING" SITE
THE JAFA
TEETULPA MINING AND CRUSHING CO.
COTTAGE
BATTERY
COTTAGE
(2) SETTLING POOLS

AURIFERA
RESERVE
Dam
PUMP
PIPE
DAM
GULLY
EDWARD PARRY
ADELAIDE JUBILEE
GREAT BOULDER CLAIMS
BRADY'S ORIGINAL PROSPECTING CLAIMS
WARDEN'S OFFICE
POST OFFICE
MAIL-YARD
WESLEYAN CHAPEL
School
SCHOOL
Reserve
BADMAN'S HOTEL
ROMAN CATHOLIC CHURCH
GULLY
GOSLIN'S
COLLEEN BAWN

INTERNATIONAL
MOONTA SYNDICATE
GULLY
COSMOPOLITAN
HOUSE
HUT
LINE
SCOTCHMAN
ALLIANCE
POVERTY GULLY
BRADY'S IRONCLAD
GREAT IRONCLAD
"MOONTA"
EAST IRONCLAD
TELEGRAPH
GULLY
M&N "ALBION"
PARNELL
THE PUPS
SOUTHERN CROSS
WARRIOR EXTENDED
GREAT IRONCLAD EXTENDED
EAST IRONCLAD EXTENDED
TEETULPA UNITED
VICTORY

Track
Contour lines
Pits
Shafts
Costeaning pits
Reefs
Alluvial diggings
Business sites

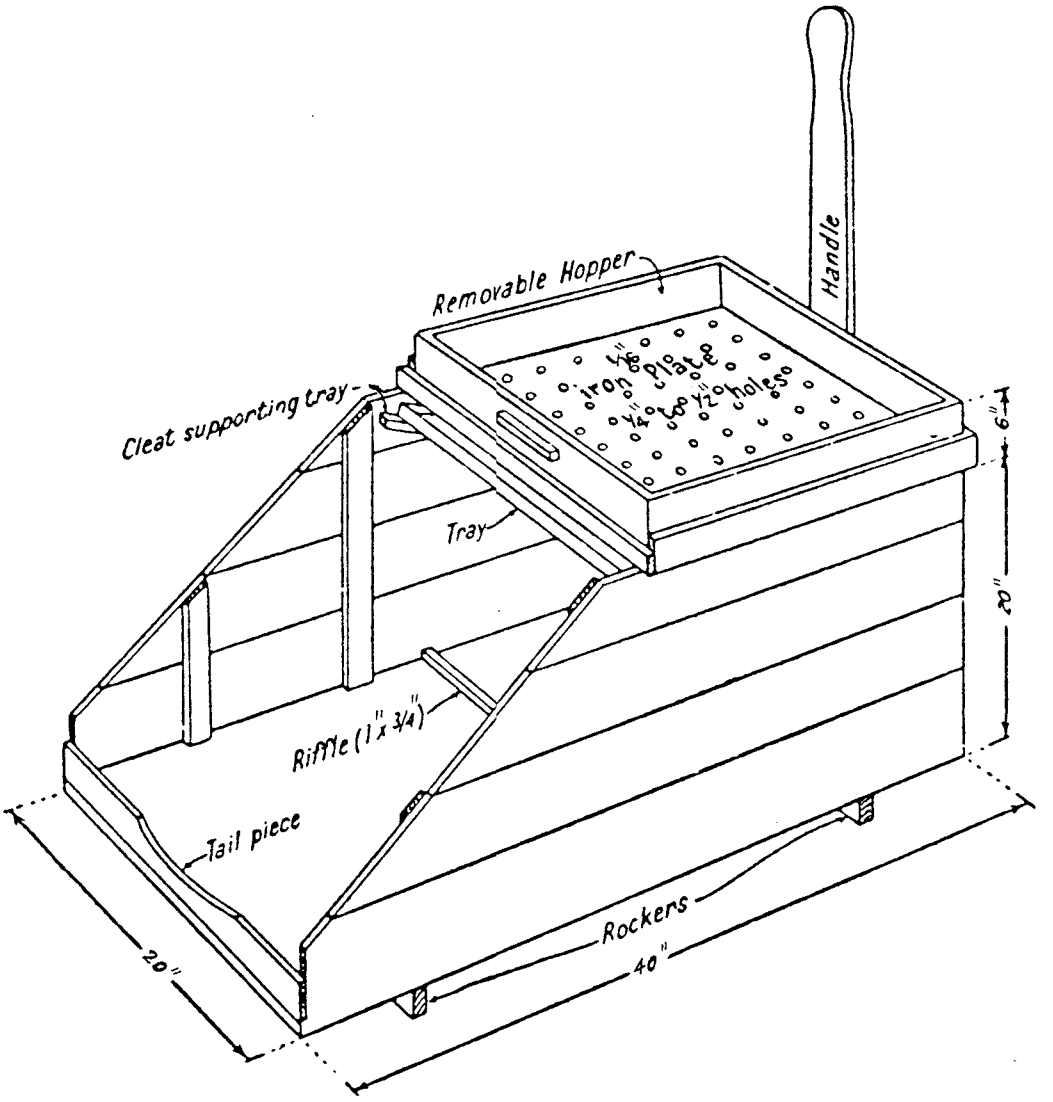
SCALE
CHNS 5 4 3 2 1 0 5 10
METRES
100 50 0 100 200

Figure 7

TEETULPA GOLDFIELD
ENLARGEMENT SHOWING REEF WORKINGS · NORTHERN AREA
(Modified after Cleland, 1889)
Compiled C.M.H., Drawn A.F. 26-8-86, Scale approx. 1:2500

SADME Plan N° 86-540

4202



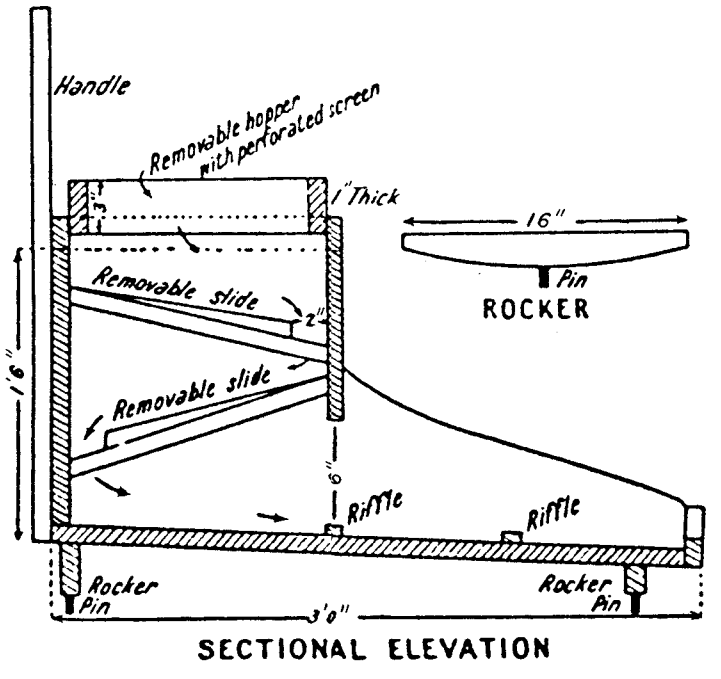


Figure 8

DIAGRAM OF A GOLD WASHING CRADLE

SADME Plan N° S 18942

4202

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

REPT.BK.NO. 86/92

HISTORICAL AND GEOLOGICAL REVIEW OF TEETULPA GOLDFIELD.

VOLUME 3 - GEOLOGY

GEOLOGICAL SURVEY

by

C.M. HORN
PRINCIPAL GEOLOGIST

and

W.P. FRADD
FIELD ASSISTANT
MINERAL RESOURCES BRANCH

NOVEMBER, 1986

DME.87/86

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GEOLOGICAL SETTING

Brown (1908) reported that there were *'two sets of reefs or veins in this district - one traversing the bedrock E. and W., and the other striking in a meridional direction'* comprising quartz, calcite, iron (gossan), hematite and pyrite, occasionally with traces of chalcopyrite, galena and bismuth.

Most of the mining at the time had been on the north-south reefs. Brown stated that the gold was difficult to see due to the ferruginous nature of the lode material and the fineness of the gold. However, he did note the discovery of a pocket of lode containing *'a wiry filamentous gold of a peculiar and remarkable character'* in the Victoria claim in Strawbridge's Gully (Fig. 3). Sprigg (1968) recorded that *'a feature of the alluvial fields was the frequent encrustation of nuggets by limestone and iron oxides'* and reported having been shown a nugget thus coated by Mr. Sam Cobiac (then owner of Teetulpa Station) in 1935.

Structurally, the goldfield lies near the keel of the gently west plunging Waukaringa Syncline, toward the eastern closure (Fig. 2). Flaggy, well laminated, blue-grey to green siltstone of the Upper Proterozoic Tapley Hill Formation host the quartz-sulphide reefs.

Workings are mainly located on a dominant set of reefs which strike 340° and dip 70°-80° to the east. These reefs average 30 cm and are up to 1.0 m wide. Pitt (1979) reported on the well-developed quartz crystals in the veins indicating that the fractures containing the veins were tensional. Seymour (1983) has identified the structural control of these veins as folding of the limbs of the syncline combined with cross-folds along 340° axes.

A second set of essentially east-west veins of massive white quartz 1-2 metres wide, devoid of any sulphide mineralisation and non-auriferous have been identified by Seymour as being *'controlled by axial plane cleavage and often emplaced along moderate angle reverse faults'*.

In addition to the above, a third type of vein is evident on the field. Greyish-coloured quartz veins striking 070°-080° with gentle to moderate southerly dips, often concordant with bedding, carry sulphides and have been opened up to shallow depths by the old miners.

Teetulpa goldfield is predominantly an alluvial field developed by erosion of the quartz-sulphide veins. The main alluvial channel represents a fossil stream bed with a modern drainage that meanders across accumulations of poorly-sorted silty gravel of the old channel. Isolated on the sides of the present day valleys are stranded ancient stream channels, such as Windlass Hill (Fig.10a).

CURRENT MINERAL TENURE

Table 12, lists Mineral Claims (MC) and Mineral Leases (ML) at Teetulpa at 30 June 1986 which cover a total area of 88.99 ha mainly confined to Brady's Gully. Four operations have established camps on site (Plates 51 to 54).

Four of the tenement holders are either operating or in the process of constructing small sluice boxes (Plates 55 and 56) and are winning small amounts of gold as well as the occasional nugget. Production is unknown.

ML 5200 is located about 3 km south of Four Brothers homestead and covers portion of the lower reaches of Brady's Gully. The other leases are 2-4 km south of ML 5200.

EL 1322 centres on the Teetulpa Goldfield and covering 726 km^2 is held by Western Mining Corporation (WMC) and is due to expire on 23 March 1987. Existing mineral claims and leases are excluded from the area of EL 1322. Abutting the southern boundary is EL 1334 centred on Wattle Dam and Bore and includes ML 4689 over Royal Charlie goldmine. EL 1334 due to expire on 11 May 1987, covers an area of 159 km^2 and is also held by WMC.

TABLE 12

MINERAL TENURE AT TEETULPA GOLDFIELD AS AT 30/6/86

Claim Lease Number	Registered Owner and Address	Goldfield Location	SADME Ref.	Section	Area (ha)	Comment
ML 4978	M.N. Schmidt, 18 Hameister Ave, LOXTON, 5333	Brady's Gully	T132	355	2.44	Sluice on site
ML 5038 ML 5039	M.D. Raymond 7 Eager St., PORT AUGUSTA, 5700	Brady's Gully	T178	355	20.0 5.0	Sluice on site
ML 5142	D.H. Mainwood, Mt. Bold Rd., BRADBURY	Ironclad	T313	335	6.93	
ML 5200	M.R. Fry & D.L. Seymour CRAFERS, 5152	Lower Brady's Gully	T399	1209	20.00	
ML 5337 MC 1937	P.A. Dennis, 12 Symor Ct., PARAFIELD GDNS.5107	Brady's Gully	T829	335	10.49 4.35	Sluice on site. MC1937 now applic. for MPL
ML 5358	E.C. Rogers, P.O. Box 80, GOOLWA, 5214	Brady's Gully	T830	335	5.00	Sluice on site.
MC 2011	E.C. Rogers	Brady's Gully	T879	335	14.78 88.99	hectares

MC = Mineral Claim
ML = Mineral Lease
MPL = Miscellaneous Purposes Licence

PRESENT DAY MINING ACTIVITY

Apart from fossickers who frequent the field there are four persons who have established treatment plants on their leases and are actively engaged in sluicing operations.

Plate 55 shows Burmese metallurgists, geologists and mining engineers inspecting plant being operated by M. Raymond on ML 5039. Mr Raymond was the first of the four persons to establish plant and is currently expanding to cater for a bigger throughput of material. A water shaft on site has been rehabilitated and a permanent camp site established (Plate 53).

Mr P.A. Dennis has constructed and operates a small sluice on ML 5307 which covers Dam Gully just upstream from its confluence with Brady's Gully and has established a camp site (Plate 51) in adjoining MC 1937. A shaft reported by Cleland (Surveyor, 1889) to be 27.4 m deep on Parnell's line of reefs within MC 1937 is being used for water. The reef workings of Edward Parry and Adelaide Jubilee are within the tenements held by Mr Dennis.

Plant has been constructed by Mr M. Schmidt on ML 4978 in Brady's Gully near Brady's original claims. A camp site has also been established (Plate 52).

Mr E. Rogers has pegged Brady's Gully and Campbell's Hill workings, has constructed plant and established a camp site within ML 5358 (Plate 54). Small quantities of material are treated through a sluice on the eastern bank of the main drainage in Brady's Gully.

M.L. 5142 in Iron Clad Gully is not being worked. Since the completion of a Halco drilling program in 1982 there has been no further work in ML 5200 in the lower portion of Brady's Gully about 2 km north of the main alluvial workings.

There are no current tenements covering Goslin's, Strawbridge or Deep Gully.

EXPLORATION ACTIVITY 1966-1986

Table 13 summarises exploration activities over the goldfield and adjacent area during 1966 to 1986. Most of the work has been confined to literature surveys and geological mapping, with only limited geochemical sampling and a small amount of geophysical survey work. With the exception of the WMC work no drilling or detailed sampling of the reefs have been carried out and systematic sampling or drilling of the alluvium and areas of potential gold bearing alluvium have not been undertaken, except for 38 shallow Halco drillholes along two lines approximately 400 metres apart by Aminco and Associates in 1982, within ML 5200 at the northern end of Brady's Gully, 0.8 km north of existing workings. Assay data for these holes are not available, and the holes did not penetrate the full depth of alluvium due to a hard silcrete layer.

TABLE 13

SUMMARY OF EXPLORATION ACTIVITIES, 1966-1986

Company/Organization	Year	SML/ EL	Aer. Photo	Lit. Study	Geol. Map	GEOCHEMISTRY			Costeans	I.P.	DRILLING	
						Soil/ Stream	Rock (Surf)	Rock (U/g)			Pec.	Rev.Cir.
R.M.C. Minerals Pty. Ltd.	1968	156							X-?		X-?	
Property and Minerals Expl. Pty. Ltd.	1971	488					X-?					
SADME	1976	-					X-1					
SADME	1978	-				X-32						
CRA Exploration Pty. Ltd.	1981	530		X			X-4					
Aminco & Associates Pty. Ltd.	1982	MC 1604				X-/					X-38	
Jarmand Minerals Pty. Ltd. and CSR Ltd.	1982	1098		X	X 1:2500		X-29			X (RRMIP)	X-2	
Amax Aust. (Gold Pty. Ltd.	1984	-		X								
Western Mining Corporation	1986	1322	X									X-16
SADME	1986	-		X	X 1:2500		X-16	X-43				

N.B. X-29 = Numbers of samples costeans drillholes etc.

RMC Minerals Pty Ltd. 1968 - SML 156

SML156 expired on the 15/2/68 but was renewed until 15/2/69 and cancelled by the Minister on 14/2/69 for failure to submit reports on the exploration activities, which included bulldozer costeaning of several areas that had been intensely worked in the past and lines of percussion drillholes to test the thickness, lateral extent and grade of the auriferous gravels. No results are available.

Property and Minerals Exploration Ltd. 1971 - SML 488

Investigations comprised inspections of area of past mining activity and outcrop regarded as favourable for mineralisation. Some samples were collected and analysed for copper and gold without locating any significant mineralisation. Kopcheff (1971) concluded that the field had not been thoroughly explored using modern exploration techniques and alluvial mining methods and he recommended further exploration. However, the lease was relinquished.

South Australian Dept. of Mines and Energy - 1976-1978

In 1975, a joint SADME-AMDEL (Australian Mineral Development Laboratories) project was commenced to study the nature and genesis of gold deposits in the Adelaide geosyncline. A number of samples were collected from various goldfields, including Teetulpa, by B.J. Morris (Senior Geologist, SADME).

Only sample P1869/76 from Teetulpa Goldfield was examined but several polished and thin sections were cut from this. The vein material appears to have originally consisted of quartz, carbonate, fine grained muscovite and pyrite. However, carbonate has been extensively oxidized to goethite boxworks and then replaced by quartz, and pyrite has largely been replaced by goethite/hematite. The vein quartz contains abundant but irregularly distributed fluid inclusions and shows evidence of strained extinction and development of sub-grain boundaries. No native gold was observed nor expected as the sample assayed only 0.12 ppm Au. Arsenic (1 500 ppm), bismuth (70 ppm) and copper (100 ppm) were anomalously high (Henley, 1977).

Appendix L provides a description, petrography and geochemistry and Appendix M summarises fluid inclusion data reported by Collins (1978).

Stream sediment in northerly-draining creeks between the Teetulpa and Waukaringa goldfields was sampled by J.J. Martins (Field Assistant) and W.P. Fradd in 1978. Sampling did not extend to Teetulpa goldfield and it is not known whether the technique used, satisfactorily detected anomalous amounts of gold. About 3 kg of the 20# size fraction was collected and concentrated by panning to about 50 grams. The heavy fraction was then assayed by AMDEL for gold using an Atomic Absorption technique. Martins (1978) concluded that reef gold at Teetulpa is localised and controlled by intersecting quartz-ironstone reefs. No anomalous gold or silver were detected.

C.R.A. Exploration Pty. Limited 1981 - EL530

Samples of mineralised veins were collected and analysed for a range of elements to determine pathfinders. Orientation soil geochemistry and auger sampling were conducted over several areas of known mineralisation. Four samples of quartz-ironstone veins assayed <0.1, 0.1, and 0.6 g/t Au whereas quartz vein with minor pyrite assayed 3.5 g/t Au, 350 ppm Cu, 330 ppm Co, 280 ppm Ni, 42 ppm Bi, 1600 ppm As and 1 ppm Ag (Mayer, 1981). Teetulpa was relinquished from the EL on completion of the orientation survey without any further sampling.

Amax Australia (Gold) Pty. Ltd. 1984 - EL 1164

Although Teetulpa goldfield was not included, available data was reviewed and the goldfield was covered by an aerial orientation survey. Wyatt (1984) concluded that the gold bearing veins are largely discordant and of fissure-filling type with no clear relationship to stratigraphy and since the goldfield was outside EL 1164, no further work was undertaken.

Jarmand Minerals & Exploration Pty. Ltd. and CSR, 1982-1985 - EL 1098 & 1226

A tape and compass grid was established and geological mapping at a scale of 1:2 500 was completed over a small portion of the field. Scintrex Pty. Ltd. carried out a Rapid Reconnaissance Magnetic Induced Polarisation (RRMIP) survey which

delineated a number of steeply dipping conductors which coincide with surface expressions of quartz-sulphide veins (Seymour, 1983).

Twenty nine chip-channel and composite grab samples were collected and analysed. Results are given in table 14, and the location of the samples are shown on Figure No. 10(a)(b)(c) and (d).

In January 1983, CSR Limited entered into an exploration joint venture with Jarmand Minerals with respect to EL 1226 (formerly EL 1098). Two percussion holes were drilled to test the Tindelpina Shale - Wilyerpa Formation contact. However, the target was not reached (Curtis, 1985(a)).

CSR Limited (Curtis, 1985(b), considered that the presence of stratabound gold in the Umberatana Group at several stratigraphic levels indicated potential for Telfer-stype deposits in the Adelaide Geosyncline. Gold mineralisation at Teetulpa was interpreted as post deformational and epigenetic. Doming was proposed with subsequent fracturing and bedding plane slippage of a pyritic sedimentary sequence to provide channel ways for gold bearing solutions which could have migrated laterally from the fracture zone into the dome and the more porous sandy beds of Wilyerpa Formation.

Photogeology, regional stratigraphic patterns and reprocessed aeromagnetic data supported the existence of a domal structure cross cut by the auriferous Teetulpa Fracture Zone (Fig. 2) south west of Four Brothers Homestead. However, drilling neither confirmed nor disproved the predicted four Brothers Anticline and did not intersect anomalous metal values. No investigations were carried on the goldfield proper and EL 1226 has now been relinquished.

TABLE 14

ANALYTICAL RESULTS OF CHIP-CHANNEL AND COMPOSITE GRAB SAMPLES COLLECTED BY JARMAND MINERALS AND EXPLORATION PTY. LTD.

Sample No.	Location	Au	Cu	Pb	Zn	Ag
8283	Parnell - west side of Brady's Gully.	<0.05	10	< 4	8	<1
8284	As Above.	<0.05	26	< 6	220	1
8285	" "	<0.05	32	< 4	290	1
8286	" "	<0.05	55	6	170	1
8287	Southern extension of Parnell Lode.	<0.05	34	< 4	50	<1
8288	Warrior Extended - northern workings - west side of Brady's Gully.	0.15	410	8	150	<1
8289	As Above.	<0.05	44	8	110	<1
8290	International mine - south of Government Dam in Dam Gully.	<0.05	32	6	26	1
8291	As Above.	<0.05	24	6	30	1
8292	As Above.	<0.05	30	8	46	1
8293	J.C. Bray Shaft - Adjacent to old battery site.	0.55	460	14	30	5
8294	Workings south of old battery site - adjoining J.C. Bray Lode.	0.95	3800	130	200	6
8295	As Above.	0.30	1300	75	320	2
8296	Workings north of old battery site - J.C. Bray Lode.	0.10	1500	22	640	2
8297	Pits on east side of Goslin's Gully.	0.10	28	28	22	2
8298	Workings near bore at Strawbridge's Gully - Three Star?	10.30	510	10	14	7
8299	Blue Star - main shaft.	<0.05	3300	< 4	16	2
8300	Blue Star - western reef workings.	3.80	90	< 4	34	1
8301	As Above.	0.10	80	< 4	46	<1
8302	Jubilee	0.75	680	< 4	65	5
8303	Location unknown	16.50	730	24	85	3
8304	Great Warrior line of reefs - Northern workings - Eastern lodes.	0.95	75	16	36	2
8305	As Above.	0.20	55	14	65	1
8306	Great Warrior - western lodes.	0.15	36	< 4	26	<1
8307	Great Warrior - Southern workings - Eastern? lode.	<0.05	120	32	32	1
8308	Great Warrior - Warrior Extended? Eastern lodes.	0.45	250	50	30	3
8309	Great Warrior - Warrior Extended? Western lodes.	<0.05	30	< 4	110	1
8310	As Above.	<0.05	12	< 4	28	<1
8311	Parnell International Line of lode.	<0.05	14	< 4	6	<1

NOTES Analysis by Com Labs Pty. Ltd.
Results in parts per million (ppm)
Method of Analysis - AAS.

Location of samples shown on Figure No. 10 (a) (b) and (c) - Geology of Teetulpa Goldfield.

WMC 1986 - EL 1322

Aerial photography has been completed at 1:10 000 by SA Department of Lands.

A grid has been established and rock chip samples collected. A geophysical survey has been undertaken over part of the grid. Sixteen reverse circulation percussion holes have been drilled but results are unavailable for publication.

SADME INVESTIGATIONS 1986

During 1986, the authors visited the goldfield on two occasions, 16-18 July 1986 and 18-22 August 1986, to collect samples and to verify the mapping interpreted from colour airphoto enlargements at a scale of 1:2 500. All shafts were inspected and checked against details provided by Cleland (1889). Limited geological mapping was undertaken to supplement maps prepared by Seymour (1983), and ground truthing of lode structures and veins interpreted from the airphoto enlargements was completed. All lease pegs were examined and those not current were removed.

SAMPLING

A total of 58 samples either from lode structures, or where the lodes were not accessible, a grab sample of lode material from the dump, were collected and submitted to AMDEL for analyses. Sample A1255/86 was collected from tailings. All samples were assayed for gold by fire assay/Solvent extraction/ AAS on a 50 gram charge. Samples were also analysed for a range of elements including Cu, Pb, Zn, Co, Ni, Cr, Fe, Mn, Ag, Mo, V, As, Cd, Sb, Te, Th, Ti, Hg, Sr, W, Ba, Be, Ce, La, Nb, Sc, Ti, Y, Zr, Ga, Ge, In, Sn. Samples are described in Appendix N, and results are presented in Appendix O. Sample locations are shown on figures 10(a)(b)(c) and (d)

RESULTS

Of the 58 samples of lode material collected, 29 assayed more than 0.1 g/t Av. Anomalous gold content showed good correlation with copper values although the peak copper value of 1.16% Cu for sample A1231/86 only assayed 0.045 g/t Au.

Arsenic values were elevated where gold values were above 0.1 g/t Au and showed a strong correlation with both gold and copper.

High silver values also correspond with high gold values eg.:

A1251/86 Au = 34.0 g/t, Ag = 6 ppm
A1438/86 Au = 20.2 g/t, Ag = 31 ppm
A1451/86 Au = 7.2 g/t, Au = 5 ppm

Cobalt and nickel values are generally elevated (up to 400 ppm Co and 670 ppm Ni) with anomalous gold values although this is not always the case as the highest Cobalt value of 2 020 ppm in A1432/86 corresponds to a gold value of 0.043 g/t Au and the highest nickel value of 1 020 ppm Ni in A1434/86 corresponds to a gold value of 0.045 g/t Au.

Anomalous gold values generally correspond with low barium (Ba) values.

Mercury values are suspect. Samples were submitted in two batches (AMDEL reports AC274/87) and AC812/87). Mercury values in AC274/87 range from <5 ppm up to 100 ppm Hg with a strong correlation between anomalous gold values and anomalous mercury. However in report AC812/87, results were all <5 ppm Hg although several high gold values (sample 1438/86 - 20.2 ppm Au) were reported.

In summary, arsenic, copper, silver, cobalt and nickel are considered useful pathfinder elements and should be included in future assays of Teetulpa samples. Table 15 summarises the range and average values for these indicator elements.

TABLE 15

COMMON INDICATOR ELEMENTS-RANGE AND AVERAGE VALUES

	Au g/t	Cu ppm	As ppm	Ag ppm	Co ppm	Ni ppm
High	34.0	11 600	26 200	31	2 020	1 020
Low	<0.005	6	10	<1	<5	6
Av.	1.94	797	2 253	1.3	161	168

TABLE 16

1986 SADME OBSERVATIONS

MINE NAME	SHAFT	TYPE	DEPTH (m)	THICKNESS	DESCRIPTION	STRIKE	COMMENTS
ADELAIDE JUBILEE	A 7B	VERTICAL COSTEAN	12.0	15-20 cm	White quartz - ferruginous.	338°	Not on Edward Parry line of lode.
AURIFERA	A		6.0	20 cm	Quartz with ferruginous selvages.	330°	Bedding plane veins visible in shaft. Siltstone dips 25° south. Sample A1234/86.
	B		BACKFILLED				Edge of Dam Gully.
	C	UNDERLAY	7.5	10 cm	Ferruginous quartz, dips east 77°.	332°	Possibly same vein as shaft A on.
	UNLABELLED	UNDERLAY		5 cm	Ferruginous quartz, dips East 75°.	335°	Parallel lode to shaft A. Bedding strikes 265° - shows complete overfolding? Sample A1233/86.
BED LOMOND	A	UNDERLAY	15.0	15 cm	Dips to East 85°. Appears to flatten down shaft.	330°	
	B	UNDERLAY	3.0	20-25 cm	Ferruginous ironstone. Dips east 60°.	332°	Sample A1241/86. Approx. 9 m south of shaft is white quartz vein striking 75° may cut ferruginous ironstone vein.
	C	VERTICAL	2.5				
		UNDERLAY	13.5	30-50 cm 10 cm	White quartz. Ironstone shear.		Drive on underlay 13.5m to south following ironstone shear on west wall and contact with east west quartz vein. Siltstone bedding dips 38° north, folded over at vein. Sample A1242/86 ironstone shear. Sample A1242/86 ironstone shear. Sample A1243/86. Flat quartz vein, both at bottom of underlay.
	D 'VANGUARD'		36.6 m	40 cm	Ferruginous quartz vein. Quartz on footwall 10-15 cm, ironstone core, 10 cm quartz on footwall.	335°	Water in bottom of shaft.
	E	UNDERLAY	3.0		Strong ironstone vein. Dips east 80°.	335°	
	Z	UNDERLAY	4.0		Ironstone vein dips east 80°.		
BLUE STAR	'COMET'		15.8		West vein, dips east 85°.	338°	Sunk on western side of lode structures.
					East vein, converging to north.	332°	4.0 m apart.

BLUE STAR	A	VERTICAL	4.0	40 cm	Strong quartz vein, becomes gossanous at 2.0 m. Dips east erratically, generally 80°.	330	locality. 2.0 m ... narrow vein striking 45°, dipping south east 20° - almost parallel to cleavage - cuts across bedding and through main vein. Above this cross vein the main vein breaks up into several quartz rich veins, while below the cross vein the main vein forms one distinct iron rich vein. Sample A1250/86. Mainly ironstone, some quartz.
	B				[illegible] dips south about 80°, roughly parallel to bedding which is fairly contoured in places.		
	C		9.3 m		Quartz ironstone dips east.	325°	
	C-I		2.0		Ironstone quartz vein, dips east 78°.	345°	18 m east shaft C. Copper carbonate seen in dump.
	D 'No.2 UNDERLAY'						Not on a vein - vein 4m to east, strikes 340°, dips east 80°. Same vein as Jubilee shaft A.
	E 'No. 1 VERTICAL'						
	F		6.8 m		Milky white quartz, dips west 80°.	333°	Possibly same reef as Comet Shaft.
	G	PIT	1.0	10 cm	Quartz ironstone, dip vertical. Sth wall quartz, north wall ironstone.	340°	On top of hill, midway between 2 cross quartz reefs which have general strike of 80° and are 25m apart. Sample A1251/86 of ironstone.
	H	PIT	1.5		White quartz. White quartz.	337° 37°	On intersection of veins striking 337° and 37°. In spotted siltstone.
BLUE STAR CENTRAL	A	UNDERLAY	3.0		White quartz filled shear with inclusions of country rock. Dip east 75°.	355°	Quartz filled shear showing scissor action. Bedding on eastern side dips 10° north, bedding on western side dips 10° south.
	B	UNDERLAY	4.0	30-40 cm	White quartz, dips 75°.	356°	On south wall lode splits at bottom.
BRADY	A		10.0		2 veins, dip steeply east. Western vein more ferruginous - both show displacements on bedding veins.	332°	Bedding dips north 20°. Cleavage 70° south. Sample A1244/75 - Ferruginous quartz, with with manganese oxide from dump on north side of shaft.
	B		1.5				Shaft collapsed. On same lode as shaft C.
	C	PIT					

BRADY	D					335°	Lode 15 m west of ... Shows 0.5 m displacement on bedding on south wall 2 m down.
	E			20 cm	Ferruginous quartz, shows several displacements along strike up to 3 m.	333°	Bedding appears flat. Bedding dips south 25°. Not same lode as in D-10 m into footwall.
COLLEEN DAWN	M					111°	Siltstone country rock.
					the ironstone.		
COSMOPOLITAN (Field & Parry)	A			20 cm	Ferruginous material, siderite & limonite, and copper carbonate	320°	Shafts backfilled with rubbish. Several shallow pits along strike for 65 m. Sample A1231/86.
				50 cm	Quartz vein, dips south and parallels bedding at 20° south.	270°	Ferruginous material from dump.
COSMOPOLITAN	A		2.0	20-30 m	White quartz, minor ironstone. Dips east 80°.	335°	Shaft collapsed. Sample A1437/86 from dump. Quartz, siderite, limonite.
EAST IRONCLAD	A	UNDERLAY	11.0		Dips to east.		Lode stoped out and backfilled. 5.0m wide, 12.0 mlong.
	B	OPEN CUT		5 cm			Bedding or cleavage vein.
	C		9.0	3 cm	White quartz vein dips south 45°.		Bedding strikes 282°, dips 45° south. ?Different lode than in Shaft C.
	D		9.0		Narrow quartz vein in east wall, dips east 80°.	336°	Open cut 11.0 m to south and 5.0 m to north.
	E	UNDERLAY	3.5	30 cm	Lode split-ferruginous quartz on footwall, thin white quartz on hanging wall, dips east 80°.	333°	
	F		3.3	2.5 cm	White quartz, ironstone, dips east 80°.	340°	
	G		8.0	20 cm	White quartz, dips at 80°.	342°	Sample A1438/86 of dump of gossanous material with sulphides and copper carbonate. On Cosmopolitan line of workings.
EAST IRONCLAD EXT.	A		3.0	5 cm	Lode dips east 80°.	342	Vein faulted to west on ?bedding plane.
	B		2.0	5 cm	Quartz dips east 80°.		In gully. Bedding strikes 240°, dips south 20-25°. Cleavage 70°, dips south 40°. Micaceous siltstone.
EDWARD PARRY	A			10 cm		342°	
	B			10 cm		342°	Same lode As A.
	C			10 cm		342°	Parallel lode 6 m to the east.
EMPRESS VICTORIA	A	PIT	1.0		No lode.		
	B			50 cm	White quartz with ferruginous patches, dips east 80°.	348°	Deep shaft with water in bottom.
	C		4.0		No lode.		Tapley Hill Formation siltstone, flat dip.

ENTERPRISE	A or B	VERTICAL	11.0		Narrow veins dip to west near surface but roll over to east about 4m down.	347°	
	C	UNDERLAY		10 cm	Quartz ironstone, dips east 80°.	360°	Dolomitic siltstone strikes 85°, dips 10° north. Sample A1422/86.
	D		1.0	10 cm	Lode in north wall, quartz ironstone. Dips east.	345°	Collapsed. Sample A1241/86.
EVENING STAR	A	VERTICAL		5 cm	Very ferruginous vein, dip vertical. Several small vertical stringers adjacent.	333°	Shaft filled with rubbish.
		COSTEAN			Quartz veins along bedding.		9 m north of shaft, 8m long.
		COSTEAN					8 m south of shaft, 15 m long.
	B		8.0	15 cm	Ferruginous quartz vein.	335°	Partially collapsed. Siltstones dip south 20°. Sample A1232/86.
					Quartz vein dips east 75°.	346°	Downhill from shaft B.
GREAT IRONCLAD	A		4.5				Partially collapsed, lode visible near bottom.
	A-1		5.5		No lode.		Partially collapsed, 10m from shaft A on a bearing of 25°.
	B						Filled. Some dump evident only.
	C	UNDERLAY	8.2	25 cm	Lode on western wall, dips 78° east. Ferruginous quartz.	332°	Some backfill. Drive at bottom connects to shaft D. Bedding in shaft dips north 10°, strikes 65°. Cleavage dips south 35°, strikes 65°.
		COSTEAN					Costean to north for 12 metres.
	D						Sample A1245/86 from bottom of shaft at face of 1m drive south.
	E		3.5	16-26 cm	Quartz vein dips east 75°.		Bedding dips south 18° strikes 80°. Bedding plane veins. Some slightly discordant, cut by main lode and displaced about 1m.
	F		10.0	30-40 cm	White quartz, dips 80°.	345°	Sample A1246/86 of abundant ferruginous material from dump.
	G		3.5	5 cm	Footwall vein (3m between veins).		Shaft collapsed. Pit 3m x 4m.
				9-12 cm	Hanging wall vein ferruginous quartz, dips east 75°. Bedding plane quartz veins in eastern wall.	338°	Sample A1247/86 of H.W. vein. Bedding strikes 80°, dips south 10°, dolomitic siltstone - some sandy beds.
	H						Collapsed.
	J						Collapsed.
	WATER SHAFT	VERTICAL					To east of Shaft F. In use.
	K						Collapsed.
	M	VERTICAL	5.0				Drive off bottom of shaft to south.
		OPEN CUT			White quartz dips south 25° parallel to bedding.	270°	Open cut to north of shaft.
				10-20 cm	Lode dips east 80°.	330	Bedding strikes 95°, dips south 25°.

GREAT IRONCLAD	N		4.0				
		OPEN CUT		2-5 cm	Hanging wall of cut, dips east 80°, ferruginous quartz.	336°	Cut 20m long. Sample at bottom A1440/86. Siltstone strikes 90° dips south 22°. Cleavage strikes 75°, dips south 55°.
	P		3.0	15-20 cm	Ironstone vein dips east 80°. Two flat lying south dipping quartz veins parallel to bedding - dip 23°.	340°	Drive south 4.0m. Sample A1441/86 from face of drive. Numerous fine quartz ironstone stringers parallel to bedding. Siltstone and sandy siltstone strike 226°, dip south 23°. Sample A1442/86 of flat lying quartz vein, 0.25-1.0m back from face. Two joint systems evident (1) 233° dip north 70° (2) 315° dip east 75°.
	ALBION		15.5	30-50 cm	Quartz ironstone, dips east 80°.	337°	Drive to south.
	UNNAMED		3.0	50 cm	East west quartz vein. Hanging wall 10 cm ferruginous quartz & country rock. Cross cutting vein contacts here. Centre 30 cm white quartz with minor iron oxide. Footwall 10cm limonite and quartz.		50-60m south of Albion. Drive south on underlay parallel to bedding. Sample A1443/86 (footwall), A1444/86 (centre), A1445/86 Hanging wall and crosscutting vein. Bedding. strikes 105°, dips south 30°.
GREAT IRONCLAD EXT.	A		8.0	3-5 cm	Hanging wall.		Several narrow joints visible in north face.
				2 cm	Footwall.		
	B		3.3 m		No lode visible.		Part of a 25m long open cut. Bedding strikes 65°, dips south 20°. Crossbedding sandy siltstone and sandstone.
	C			10 cm	Ironstone and quartz, dips east. 75°.	340°	
					Quartz vein.	73°	8m north of shaft.
					Quartz vein.	75°	10m north of shaft.
	UNNAMED		1.5	5 cm	View on eastern wall, dips east 80°.	334°	Eastern shaft. 100m south of C.
	UNNAMED		3.0	10 cm	Quartz ironstone dips east 80°. Vein narrows with depth.	346°	Central shaft. 100m south of C. Sample A1446/86.
				5 cm	Flat lying bedding plane vein. Cut by main reef, dips south 20°.		Sample A1448/86.
	UNNAMED	PIT	1.0	15 cm	Ironstone vein, dips east 80°.	340°	Western shaft. Sample A1447/86.
	D		5.0	10 cm	Western vein quartz ironstone mainly ironstone on hanging wall, dip east 75°.	345°	Sample A1450/86.
				10 cm	Eastern vein, dips 75° east. Crosscutting quartz vein appears cut off by main lode, dips north 40-45°.	340°	Sample A1449/86 from bottom of shaft. Vein forms a blow on surface to east of shaft.
	E		8.0		Quartz ironstone-pyrite limonite pseudomorphs, dips east 80°.	335°	Sample A1451/86 of dump material. Bedding strikes 95° dips south 30°.

INTERNATIONAL	A	UNDERLAY	16.5	30 cm	Quartz, siderite & pyrite.	340°	Southern shaft.
	UNNAMED	PIT	1.0				10m north shaft A.
	B		5.0	20-30 cm	Quartz vein.	340°	
	C		4.0	10 cm	Quartz vein, dips east 80°.	340°	Shaft C is shown on Clellands Plan as A.
	UNNAMED		1.5	25 cm	Quartz ironstone, dips east 80°.	340°	25m from shaft C on a bearing of 215°. Sample A1235/86, 15m west of Shaft C.
	UNNAMED	PIT					
ISLE OF AXHOLME	A		1.5	40 cm	White quartz, dips east 80°. No lode.	345°	
	B		1.0				
	C		3.5	2 cm	Lode dips east 75°.	348°	Siltstone - dolomitic siltstone strikes 100°, dips south 5°.
J.C. BRAY	UNNAMED		5.0	30-40 cm	Ironstone with some quartz limonite on footwall dips west 80°.	320°	Northern shaft- collar collapsed.
	UNNAMED			12.0	Ferruginous lode-jasper, limonite and minor quartz dips west 80°.	322°	Sample A1435/86 B. Central shaft - collar collapsed. Sample A1436/86 from dump.
	'J.C. BRAY'				Vein dips west 80°.	316°	Collar collapsed.
JUBILEE	A			40 cm	Ironstone and gossan becoming quartz rich to south dip east 80°.	336°	Sample A1253/86.
	B		14.0	15 cm	Quartz vein, dips east 80°.	333°	Possibly not same vein as in A.
	C		8.0	25-30 cm	Quartz vein - dips west at top, at 2.0 m becomes east 80°.	333°	Drive to south at 4.0 m. Same lode as in B. Sample A1254/86 from dump.
	D		2.0		Possibly east-west vein.		Shaft collapsed.
LION	A		6.0		On narrow shear zone, dips steeply east.	334°	Partially backfilled.
	B		4.0		On narrow shear zone, some quartz on eastern wall, dips east 80°.	336°	Partially backfilled. Different structure to A.
LONDONDERRY	A'NORTHERN'		4.0	25 cm	Quartz ironstone vein, dips east 80°.	346°	Collapsed. Sample A1430/86 from northern face.
	UNNAMED	PIT	1.0	10 cm	Ferruginous quartz, siderite, limonite. Cleavage quartz in east wall.		Sample A1429/86. Dolomitic siltstone. Micaceous siltstone strikes 95° dips south at 10-15°.
	B'ADELAIDE'		17.0	10 cm	2 quartz veins, dips east 80°. Several gossaneous splits in hanging wall at bottom of shaft.	350°	Bedding strikes 80°, dips south 5-10°. Sample A1428/86 from bottom.
	C'HORSESHOE'		1.5	50 cm	Quartz vein with ironstone on hanging wall, dips east 80°.	351°	Dolomitic siltstone, sandy siltstone. Strikes 55°, dips south 10°. Sample A1424/86.
	UNNAMED	PIT		5-10 cm	Ironstone vein in footwall of quartz vein. Cleavage controlled quartz vein, dips south 20-25°. Slightly offset by main reef.	81°	Sample A1423/86. Soth of pit.
	'BISMARK NO.1'		4.0	20-30 cm	Quartz vein, dips east 80°.	357°	Partially collapsed. Sample A1426/86 at bottom of shaft.
	'UNNAMED	PIT	1.0	30 cm	Quartz ironstone vein.		Sample A1425/86.
	BISMARK NO.2'		12.0	30-40 cm	Quartz vein,dips east 80°.	351°	

LONDONDERRY	D'LONDONDERRY'		19.0		Quartz ironstone vein with manganese, dips east 80°. About 4m down vein cut and displaced. 1 m to east. White quartz vein (east-west) dip south 20-25°. Not cut.,	345° 351°	10m north Londonderry shaft. 20m south Londonderry shaft. Micaceous siltstone, strike 90°, dip north 60°, cleavage strike 90°, dip south 60°. Sample of ferruginous, manganese, quartz from dump - A1427/86.
	UNNAMED	PIT					
MORNING STAR	A				Ironstone lode.		Sample A1449/86 - mainly siderite [illegible] and quartz.
	B				No lode visible.		In grey siltstone.
MORNING STAR SOUTH	A				No lode.		Water in shaft. In grey siltstone
PARNELL	A		5.4	40 cm	Ferruginous quartz, dip 80° east.	338°	On top of hill.
	B		27.4	40 cm	Quartz, ironstone, siderite, dips 80° but shallows at depth.	330°	Water at 20m. Used as water shaft. Sample A1237/86.
	UNNAMED		2.0		Ferruginous quartz vein, dips east 75°.	340°	32m from B on a bearing of 335°. Sample A1236/86 - massive ironstone with quartz fragments from centre of vein (over 30cm).
	C		12.5	to 50 cm	Vein dips 80°, narrows with depth, thin at north face all way down, thick at top of south face (50cm) but thins with depth.	337°	
	UNNAMED	PIT	2.0		Dips to east 80° (main lode). Dips south but cut off by main lode.	335°	10 m south of C.
PRINCE CONSORT	A		4.0		No lode.		In micaceous siltstone. White quartz vein 10m north of shaft, up to 2m wide, strikes 87°, dips south 60°.
	C		10.0		Ironstone, dips 85° east.	342°	
	X		2.5	30 cm	Quartz, siderite, calcite, dips east 80-85°.	343°	Sample A1433/86
PRINCE CONSORT SOUTH	A		7.0		Quartz, calcite, siderite, dips east 75°.	348°	In micaceous siltstone.
ST. PATRICK	A		5.0		Quartz, dips east 80°.	332°	
	B		6.0		Quartz, dips east 80°.		
SCOTCHMAN	A		4.0	15 cm	Quartz vein with limonite stringers cross cutting vein, dips south 20° along bedding.		Cleavage strikes 67°, dips 55°. Sample A1439/86 on bottom from western face.
	C		7.0	10-15 cm	White quartz, dips E 80°.	334°	

TEETULPA MINE	A						Collapsed.
	B		3.6	20-30 cm	Sharp contact on footwall, sheared hanging wall. Vein dips E 80°; narrows at depth.	331°	
TEETULPA UNITED	A		12.5		Quartz vein, slightly ferruginous, dips east 75-80°.	330°	$CuCO_3$ in dump material.
	UNNAMED	PIT	1.0			338°	Possibly shaft B. On same vein as A.
	C	UNDERLAY	18.5	40-50 cm	Quartz, dips east 80°.	336°	
VICTORY	A						Filled with rubbish. Large dump, some quartz and sulphides.
	B		3.0	15 cm		341°	30 m east of A.
	A	PIT	4.0	5-10 cm	Quartz ironstone, dips 80°. Vein cuts through east-west vein, ?parallel to bedding.	334°	Partially filled. 25m north of A. Silt-stone strikes 80°, dips south 20°.
WHITE CROSS	A			6 cm		336°	Collapsed.
	B		9.5		Dips east 25°.	342°	On south wall 2m down vein is displaced 50cm to west, no displacement on north wall. Folding of siltstones evident on east wall 23m west of B. Same structure as Corner shaft (Blue Star) is on.
		PITS				330°	
UNNAMED (SOUTH OF COLLEEN BAWN)			2.5		Quartz, ironstone, limonite, siderite, dips east 80°.	335°	Sample A1434/86 20cm limonite on footwall. Sample 1433/85A - quartz ironstone and limonitic hanging wall.
					White quartz vein.	80°	5 m south.
UNNAMED (SOUTH OF STRAWBRIDGE GULLY)			4.5		Bedding plane quartz vein Several north-south fractures. Quartz ironstone, dips 80° east.		Sample A1431/86 of ferruginous dump material.
			4.0	1.0		335°	Collapsed. Siltstone strikes 64° dips south 40°. Sample A1432/86.
					White quartz vein.	90°	North side of dump.
STRUCK OIL	A			50 cm	White quartz, some siderite, manganese oxide and ferruginous material. Dips east 80°.	340°	
	B		6.0	20 cm	Quartz vein cuts main lode. Vein dips 80° to east.	263° 345°	20 north of A. Partially collapsed. Sample A1230/86 from dump. Quartz, siderite, manganese, pyrite and arsenopyrite, quartz crystals.
WARRIOR EXTENDED	A		5.6	15-20 cm	White quartz, two bedding plane veins in shaft.	347°	
	B		2.5	10 cm	Ferruginous quartz, dip vertical.	348°	Collar collapsed.

							Lode parallel to A.
WARRIOR EXTENDED	C						
UNNAMED (SOUTH OF WARRIOR EXTENDED)	A		2.6	20-30 cm	Ferruginous quartz, dips east 80°.	340°	Partially collapsed. Sample A1238/86.
					Vein ?Parallel to bedding dips southeast 40°.	50°	Sample A1239/86.
GOLDEN STAR	A						Collapsed. Ferruginous quartz in dump. Bedding strikes 35°, dips south 20°.
	B		2.5	10 cm	Dips east 80°.	335°	Costean 11m north, 13m south.
UNNAMED (SOUTH OF GOLDEN STAR)	UNNAMED		2.0		White quartz.	330°	Northern shaft.
	"			30 cm	Vein on eastern wall, dips east 80°.	330°	
	"		2.0	30 cm	Vein dips east 60°.	330°	Sample A1240/86.
	"	PIT		50 cm	Vein dips east 55°.	331°	Bedding dips 10° north.
UNNAMED (BETWEEN WARRIOR EXT. AND GREAT IRONCLAD)	UNNAMED		3.0	10 cm	Quartz ironstone on east wall, dips east 75°.	340°	Northern end.
	"		5.0	20 cm	Quartz vein, dips E 75°.	338°	Not same vein as above.
	"		10.0	30-40 cm	Ferruginous quartz, dips east 80°.	342°	Sample A1248/86 from dump.
	"	PIT	1.5		Ferruginous shear.	340°	Southern end.

MAPPING

Lode structures and geology exposed in workings were recorded during the sampling program (Table 16). A sketch of a typical auriferous vein is shown in Fig. 11.

In general, the auriferous veins i.e. the 340° set, are post deformational and usually cut and displace the east-west syndeformational veins, e.g. in shaft E on the Great Ironclad line of workings. However, in Shaft A, 34 m east of the 'Comet' shaft at Blue Star mine, about 2.0 m below the surface a narrow barren white quartz vein striking at 045°-225° and dipping south at 20°, parallel to cleavage, cuts through the main auriferous vein (Fig. 12). Above the barren vein, the main vein splits into several quartz-rich veins with inclusions of sheared country rock compared to one distinct vein below with quartz on the hanging wall and ironstone/gossan on the footwall.

POTENTIAL

ALLUVIAL

Brady's, Dam, Birthday, Poverty, Goslin's and Strawbridge gullies have been extensively worked in the past. Records of alluvial mining activities are incomplete and the grade unknown. Other smaller drainages such as Iron Clad, Brennan's, Wakefield, Flacks and Deep gullies have also reported gold production.

Estimates of the volume of alluvial material from air photo interpretation and ground checks for the main gullies in table 17 are based on an average thickness of 1 m over the entire channel.

TABLE 17

VOLUME ESTIMATES ALLUVIAL MATERIAL

Site	m^3
Brady's Gully	379 000
Goslin's Gully	85 000
Dam Gully	224 000
Birthday	56 000
Poverty	14 000
Strawbridge	100 000
Murphy	6 000
Brennan's	6 000
TOTAL	870 000

However, in places, the potentially gold bearing gravels and sediments are up to 3.0 m thick. Therefore the figures in table 17 are conservative.

Reports of a recent parcel of 6 tonnes of material being sluiced and returning 7 grams of gold are encouraging, (pers. comm.). This yield is considerably higher than that generally being obtained. Based on the estimated past production of 3 110 000 grams of gold recovered, the average recovered grade must have been of the order of 3.6 g/m^3.

Considering the poor recoveries in the past and assuming that approximately half as much gold remains in the alluvial material, the potential is 870 000 m^3 averaging 1.8 g/m^3 Au. This would need to be confirmed by a thorough bulk sampling program, however, indications are that this is not an unrealistic appraisal and that an economic alluvial deposit still exists at Teetulpa.

REEF

Past production from the quartz ironstone reefs has been insignificant. Available records indicate that grade is variable. Ore treated by J.C. Bray Battery yielded about 9.3 g/t Au bullion while ore treated by the Peterborough State Battery yielded 14.2 g/t Au bullion. Details of production from individual mines extracted from Table 3 show that 3 725.3 grams of gold bullion were recovered from 229.5 tonnes, for a yield of 16.2 g/t Au. Sampling by Jarmand Minerals (Seymour, 1983), gave values ranging from <0.005 to 16.50 ppm (table 14). Samples

collected by SADME (APPENDIX N and O) ranged from <0.005 to 34.0 g/t.

Blue Starr (samples A1250/86-A1252/86) and Jubilee (samples A1253/86-A1254/86) with 0.42-34 and 1.82-3.62 g/t Au respectively confirmed the grade of ore treated from these mines. Blue Star/Jubilee line of reefs is considered to have the best potential for open cut ore. Blue Star western reef workings have been excavated on a number of narrow parallel veins but several veins have not been tested (Fig. 10d). This is also the case to a lesser extent in the Jubilee mine area.

In the Ironclad-Scotchman-Great Ironclad area (ML 5142), the density of auriferous reefs, with many untested, is considered a potential target for a low grade open cut. Veins are often narrower (10-30 cm) than in the Blue Star area. However, numerous small quartz ironstone stringers parallel to bedding and stringers along the dominant jointing (233°) enhance the likelihood for a stockwork system of veins.

Possible development of Telfer-style stratabound mineralisation as proposed by Curtis (1985) remains untested and presents a target at Teetulpa and in areas surrounding the goldfield, particularly northwest and southeast along the Teetulpa Fracture Zone (Fig. 9).

CONCLUSIONS

Teetulpa Goldfield comprises alluvial and quartz reef workings with most production from the former.

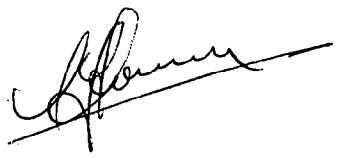
Arsenic, copper, silver, cobalt and nickel are pathfinder elements.

Costeaning, bulk sampling and assaying are required to confirm the inferred 1.8 g/t Au in 870 000 m^3 of alluvial material.

Several areas of Tapley Hill Formation siltstone contain swarms of north-south cross cutting quartz-sulphide quartz veins. Further investigation is required at potential open cut sites at;

- Blue Star-Jubilee
- Ironclad-Scotchman-Great Ironclad.

and the possible Telfer-Style stockwork mineralisation associated with the Teetulpa Fracture Zone.



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APPENDIX L

DESCRIPTION, PETROGRAPHY & GEOCHEMISTRY OF SAMPLE P1869/76 FROM TEETULPA. AMDEL PROGRESS REPORT NO. 2. GS1/1/176.

APPENDIX L

Description, Petrography & Geochemistry of Sample P1869/76.

Sample: P1869/76, Y46 (0.12 ppm Au)

Description:

Teetulpa Goldfield. Quartz vein and iron oxide from shaft near top of Brady's Gully (half way between bore and Government dam). Vein is 10 cm wide and strikes approximately 145° with a dip of 30° to the east. The sample is taken from 2' below the surface.

Hand Specimen:

This sample consists of fragments up to 9 cm in size of vein quartz intergrown with brown iron oxides. The quartz is white and locally vuggy and in some fragments contains disseminations of euhedral goethite pseudomorphs after pyrite. In some fragments it is fractured and veined by goethite and it is locally intergrown with fragments of country rock and patches of mica. The iron oxide occurs mainly as massive to slightly porous brown material in a band which is marginally intergrown with the vein quartz. However, fragments up to 1 cm or so in size occur within the vein quartz.

Thin Sections (three thin sections were cut from this sample):

TS37658A:

This section consists of coarsely-crystalline vein quartz intergrown with replaced carbonate. The crystals of vein quartz are up to a centimetre in size and are prismatic in form. They show well-developed strained extinction and development of sub-grain boundaries and locally are intergrown with traces of calcite. The replaced carbonate, which consistutes about half the section, is now composed of a network of goethite in secondary quartz. It appears that the original carbonate contained some iron, which formed the typical rhombohedral boxwork textures on oxidation, and that subsequently all the carbonate was leached out and replaced by secondary quartz.

TS37658B:

This section consists of vein quartz intergrown with calcite and goethite-hematite pseudomorphs after sulphide in contact with quartz-sericite country rock. The vein quartz resembles that in A, but is locally intergrown with carbonates of similar character to that in A (now composed of goethite and quartz) and the vein quartz itself also contains goethite boxworks after carbonate. Narrow veins of calcite and dolomite transect areas now composed largely of opaque or semi-opaque material. The opaque material locally shows a cubic outline indicative of original pyrite.

TS37658C:

This section consits of vein quartz intergrown with replaced carbonate and a large area of fine-grained muscovite which is stained with iron oxide. Original carbonate appears to have been almost completely replaced by goethite and quartz and boxwork textures defined by goethite occur within the vein quartz crystals as well as separate from them. Fluid

inclusions are abundant but irregularly distributed in the vein quartz. Some fine-grained secondary quartz is intergrown with the area of muscovite.

Polished Sections (three polished sections were cut from this sample):

PS25701:
This section consists almost entirely of vein quartz which is intergrown with a minor proportion of micaceous ?country rock. Traces of goethite pseudomorphs after carbonate are present locally. No gold was observed despite scanning at a magnification of X100.

PS25702:
This section contains about 50% quartz and 50% iron oxides. Most of the iron oxides occur as hematite/goethite pseudomorphs after pyrite crystals up to 3 mm in size and these pseudomorphs show evidence of fracturing and cemntation by later quartz. However, it is not clear whether the fracturing occurred before or after oxidation of the pyrite. The remainder of the iron oxide occurs as goethite pseudomorphs after carbonate with a typical boxwork terrace. A few veins of quartz transect the main mass of quartz which has a relatively fine-grained texture. No native gold or relict sulphides were observed despite scanning at a magnification of X100.

PS25703:
This section contains about 85% vein quartz and 15% silicified pseudomorphs after carbonate. The original presence of carbonate is indicated by angular filamental goethite boxworks with the typical carbonate cleavage traces, but the carbonate appears to have been completely replaced by silica subsequently. Traces of hematite are intergrown with the goethite locally. Traces of pyrrhotite are present in grains up to 120 μm in size in the quartz. No native gold was observed despite scanning carefully at a magnification of X110.

ANALYTICAL DATA (ppm) ON HAND SPECIMEN

Element	Detection Limit	Teetulpa Goldfield P1869/76
Au	(0.005)	0.12
Ag	(1)	X
Ag	(0.1)	X
As	(50)	1500
Ba	(200)	X
Bi	(1)	70
Cd	(3)	X
Cr	(20)	70
Cu	(1)	100
Mn	(10)	700
Mo	(3)	10
Ni	(5)	50
Pb	(1)	20
Sb	(30)	X
V	(10)	80
Zn	(20)	80

X = Not detected at detection limit quoted
n.a. = Not analysed.
* = By fire assay; all other determinations by emission spectrography

(+) = Not actually observed but inferred to have been present from textural evidence.

APPENDIX M

FLUID INCLUSION DATA FOR
SAMPLE P1869/76. AMDEL PROGRESS REPORT NO. 4.
(GS 1/1/182)

APPENDIX M

Fluid Inclusion Data for Sample P1869/76

The quartz in this case was very coarsely crystalline and relatively strain-free. Fluid inclusions were abundant, and though mostly not large, reached lengths of 40 and 70 m in two cases. The inclusions showed a tendency to lie along 3 directions, which in places corresponded with fracture planes, and which may have been inherited from carbonate (rhombohedral boxwork textures). Many inclusions were 2-phase, some also with cubic solids (halite?) Homogenisation temperatures possibly fell into two ranges: 189° to 299°C and 353° to 479°C. However, apparent decrepitation (possibly of a CO_2-rich inclusion) occurred as low as 175°C, and in another as high as 510°C, with bubble-like structures still preserved in several inclusions at about 520°C. The solid phases had generally started to dissolve by about 180°C, this being completed around 218°C. For a system in equilibrium, this would represent 20-30 wt.% NaCl. During the freezing cycle evidence of the presence of CO_2 became apparent, and although the phenomena observed were not completely understood, there appeared to be a phase change involving CO_2 at -46° to -50C. It is suspected that two types of inclusion were represented: (i) smaller, more regular, commonly with negative crystal shape and containing saturated aqueous solution; (ii) larger, less regular, with aqueous solution enriched or even saturated in CO_2, in which ice melted at -15°C.

Summary of Fluid Inclusion Data

Nature of Quartz	Homogenisation Temperature, °C: ?Primary Inclusions	?Secondary Inclusions	Description Temp, °C	Freezing Data	Comments
Very coarse, rel. Strain free. Abundant Inclusions	189 to 299; 353 to 479; up to 520?		175? up to approx 510	Ice melts -15°C	NaCl solids in some cases dissolving 180°C to 218°C; Others CO_2 rich.

APPENDIX N

DESCRIPTION OF 1986 SADME CHANNEL, CHIP AND GRAB SAMPLES OF REEFS.

Sample Number	Description	Mine Name	Sample Interval (cm)
A1230/86	Random chips from dump around main shaft. Quartz-Siderite-Manganese with pyrite/arsenopyrite.	Struck Oil	Grab
A1231/86	Grab sample from main shaft dump - ferruginous material-siderite/limonite.	Cosmopolitan	Grab
A1232/86	Ferruginous quartz vein strikes at 335° in siltstones.	Evening Star (Shaft B after Clelland)	15
A1233/86	Ferruginous quartz vein in shafts on lode parallel to main reef.	Aurifera (Unnamed Shaft)	5
A1234/86	White quartz vein with ferruginous H/wall and F/wall in 6.0 m deep shafts - Vein strikes at 330° - Main lode.	Aurifera (Shaft A)	20
A1235/86	Quartz ironstone vein-parallel lode to main lode in Shaft C.	International (Unnamed Pit)	25
A1236/86	Massive ironstone - with quartz fragments in centre part of the vein.	Parnells (Shaft B)	30
A1237/86	Quartz-ironstone-siderite. Vein approx. 40 cm wide strikes 330° and dips 80° to east.	Parnells (Main)	Grab
A1238/86	Ferruginous quartz vein strikes 340° dips 80° to E. Slickensides on HW contact of main lode.	Unnamed Shaft between Warrior Extended and Great Warrior.,	30
A1239/86	Mainly white quartz vein in east wall of shaft - strikes 050° dips 40° SE and is displaced by main lode.	As Above	20
A1240/86	Shallow shaft on milky white quartz vein with minor ferruginous staining - strikes 330° and dips 60° E. Bedding dips 10° to N - siltstone.	South of Golden Star	30
A1241/86	Ferruginous ironstone vein with quartz fragments strikes 332° dips 60° E. Approx. 9 m south of shaft is a white quartz vein striking at 075°.	Ben Lomond Shaft B	20-25

A1242/86	Approx. 2.5 m deep vertical thence drive south 13.5 m has followed a narrow shear (ironstone) on west wall at contact with a white quartz vein striking at 080° - Siltstones dip 38° to N.	Ben Lomond Shaft C	10
A1243/86	White quartz vein in east wall of drive above, up to 50 cm wide.	Ben Lomond	30
A1244/86	Adjacent to Strawbridge Dam - Two narrow veins strike 332° dip steeply east - Western vein is more ferruginous. Siltstones dip north at 20°.	Brady Shaft A	Grab
A1245/86	Lode on west wall strikes 332° dips 78° to E - Quartz vein very ferruginous/limonitic on Footwall - Drive south off bottom of shaft connects with Shaft D - Siltstones dip 10°N strike 065° - well cleaved.	Great Ironclad Shaft C	25
A1246/86	Strong white quartz vein strikes 345° dips 80° E - ferruginous quartz on dump.	Great Ironclad Shaft F	Grab
A1247/86	Two quartz veins 3.0 m apart strike 338° and dip 75° E. Eastern vein 9-12 cm wide with slickensided hanging and footwall contacts. Siltstone strikes 080° dips 10°S minor sandy interbeds and quartz veinlets along bedding.	Great Ironclad Shaft G	10
A1248/86	East of Warrior Extended - Lode 30.40 cm thick ferruginous quartz strikes 342° dips 80° e. Fines from stockpile on northern side of shaft.	East of Warrior Extended Shaft C	Grab
A1249/86	Central Shaft - Ironstone with quartz fragments and abundant siderite - no visible sulphides.	Morning Star	Grab
A1250/86	About 34 m east of "Comet" Shaft. White quartz vein becomes gossanous about 2.0 m down shaft. Vein strikes 330° dips 80° E. A narrow quartz vein striking 045° and dipping SE at 20° cuts through main vein about 2.0 m down shaft.	Blue Star Shaft A	40

A1251/86	Quartz ironstone vein strikes 340° dips vertical - Shaft is midway between two strong white quartz reefs 25 m apart and striking at 080°.	Blue Star Shaft G	10
A1252/86	Ferruginous quartz vein strikes 325° dips 80°E. Siltstones in east wall dip north at 25°.	Blue Star Shaft C	15
A1253/86	Ironstone (gossanous) vein becoming quartz rich south along strike. Vein strikes at 336° dips 80°E. On same lode structure as for Blue Star.	Jubilee Shaft A	140
A1254/86	Shallow shaft - quartz ironstone lode with east west milky quartz vein. Material from dump on west side of shaft.	Jubilee Shaft D	Grab
A1255/86	Tailings and slimes from stock-piles at J.C. Bray Battery site. Possibly up to 700 tonnes present.	Old J.C. Bray Battery	Grab
A1256/86	Southern end of workings. Two parallel quartz reefs. Main vein (western) strikes 335° dips and is intersected by white quartz vein which dips south at 25°. Main vein ferruginous quartz.	Great Ironclad (Western Shaft)	40
A1421/86	Narrow quartz ironstone in north wall of shaft strikes 345° and dips steeply east. Micaceous siltstone country rock flat lying.	Enterprise Shaft D	10
A1422/86	Quartz ironstone vein strikes 360° dips 80° E. Siltstones strike 085° dips 10° to north.	Enterprise Shaft C	10
A1423/86	Quartz vein strikes 351° dips 80° E - ironstone/gossan on hanging wall of vein. Sample collected on narrow 5-10 cm ironstone vein 50 cm in footwall of main vein.	Londonderry Shaft C (Horseshoe)	10
A1424/86	As above - sample collected on main vein - mainly white quartz ferruginous on handing wall.	Londonderry Shaft C (Horseshoe)	30
A1425/86	Pit between No. 1 and No. 2 shafts - quartz ironstone vein 30 cm wide.	Bismark	30

A1426/86	Quartz vein 20-30 cm wide strikes 357° dips 80° E. Sample from bottom of shaft.	Bismark No. 1	30
A1427/86	Ferruginous/manganese/quartz from dump - strong vein strikes 345° dips 80° E. About 4 m down cut by east-west vein and displaced about 1 m.	Londonderry Shaft D	Grab
A1428/86	Gossan and quartz veinlets striking 350° dips 80° E.	Londonderry Shaft B (Adelaide)	10
A1429/86	Ferruginous quartz - siderite - limonite 10 cm wide in dolomitic and micaceous siltstone striking 095° dip S 10-15°. Cleavage controlled quartz vein in east wall of shaft.	Londonderry Pit on north side of drainage	10
A1430/86	Quartz ironstone vein strikes 346° dips E 80° on northern wall of shaft.	Londonderry Shaft A "Northern"	35
A1431/86	Shaft A 4.5 m deep - several north/south shears (ferruginous) but no distinct lode structure. Bedding plane quartz vein in shaft - sample from dump.	Unnamed South side of Strawbridge Gully	Grab
A1432/86	Shaft B 4.0 m deep - strong quartz ironstone vein 1.0 m wide with inclusions of siltstone country rock. Vein strikes 335° dips 80° E. Siltstone strikes 064° dips 40° S. Barren white quartz vein strikes 090° from north side of dump and outcrops 50 m to east.	Unnamed As above	1.0
A1433/86	Strong vein of quartz/siderite/calcite strikes 343° dips 80-85°E.	Prince Consort Shaft X	30
A1434/86	Strong quartz/ironstone/siderite vein - limonitic on footwall - sampled on footwall.	Colleen Bawn South	20
A1435/86 (A)	Ironstone/limonitic hanging wall of main vein with fragments of quartz included.	As Above	30
A1435/86 (B)	Ferruginous and siliceous ironstone with some quartz fragments included - limonitic on footwall. Vein strikes 320° and dips W at 80° - is 30-40 cm wide.	J.C. Bray Battery Lode (Northern Shaft)	Grab

A1436/86	Jasper and ferruginous quartz vein strikes 322° dips 80° W limonite and minor quartz on footwall.	J.C. Bray Battery Lode (Central Shaft)	Grab
A1437/86	Quartz/limonite/siderite material from dump - lode 20-30 cm wide consists mainly of white quartz and ironstone. Strikes 335° dips E at 80°.	Cosmopolitan Shaft A	Grab
A1438/86	On same line of workings as Cosmopolitan - 8 m deep shaft underlays to East. Vein 20 cm wide strikes 342° dips 80° E. White quartz/ironstone. Dump material contains sulphides and copper carbonates noted.	East Ironclad Shaft G	Grab
A1439/86	Quartz vein with limonitic stringers. Sampled at bottom of shaft (4.0 m) taken below east west quartz vein which dips 20° to S along bedding.	Scotchman Shaft A	15
A1440/86	Western line of reefs. Shaft 4.0 m deep with 20 m long open cut. 2.5 cm quartz ironstone vein sampled vertically at bottom of open cut.	Great Ironclad shaft N	5
A1441/86	3.0 m deep shaft with drive south 4.0 m. Ironstone vein strikes 340° dips 80° E. Gossan material sampled at face in drive.	Great Ironclad Shaft P	20
A1442/86	Two flat lying white quartz veins dipping parallel with bedding and numerous ironstone stringers. Strike 086° dip S at 23°. Sample of footwall vein 1.0 m back from face on west wall.	Great Ironclad Shaft P	25
A1443/86 A1444/86 A1445/86	Approx. 60 m south of "Albion" shaft on same line of lode. Vein strikes 337° dips E at 80°. Siltstones strike 105° dip S at 30°.	Great Ironclad Unnamed Shaft "R"	
	1443/86 - F/wall ferruginous quartz at country rock.		10
	1444/86 - Massive white quartz with minor iron oxides.		30
	1445/86 - H/wall ferruginous quartz and country rock at contact with east west quartz vein.		10

A1446/86	Central shaft of three unnamed shafts 100 m south of shaft C - Quartz ironstone vein strikes at 346° dips E 80° and narrows with depth.	Great Ironclad Extended Unnamed	10
A1447/86	Western pit 1.0 m deep on ironstone vein 15 cm wide striking at 340° dips E at 80°.	As Above Unnamed	15
A1448/86	Flat lying bedding plane vein cut by main vein in same shaft as above (1446/86). Dips 20° S.	As Above	5
A1449/86	Two ironstone veins in shaft 5.0 m deep - dip 75°E. H/wall vein 10 cm wide at bottom of shaft.	As Above Shaft D	10
A1450/86	F/wall vein 10 cm wide mainly quartz/ironstone strikes 345°. North dipping east/west quartz vein is cut by main vein.	As Above Shaft D	10
A1451/86	Located 50 m south of shaft D (Clelland) quartz ironstone vein with limonite pseudomorphs after pyrite. Vein strikes 335° dips E at 80°. Siltstones strike 095° dip 30° S.	Great Ironclad Extended Shaft E	Grab

NOTE Shafts listed refer to map prepared by Clelland (see Figures 5, 6 and 7).

APPENDIX O

CHEMICAL ANALYSES OF 1986 SADME SAMPLES
(LOCATIONS SHOWN ON FIGURES 9(a)(b)(c)(d)).
AMDEL REPORTS AC274/87 AND AC812/87.

SADME CHANNEL AND GRAB SAMPLES

Assay numbers A1230/86 - A1256/86 extracted from AMDEL Report AC274/87. Part I and II.

Assay numbers A1421/86 - A1451/86 extracted from AMDEL Report AC812/87.

Analytical Methods and Deetection Limits:

Au - (0.005 ppm) - Fire Assay/Solvent Extraction/AAS.

Cu	Pb	Zn	Co	Ni	Cr	Fe	Mn	Ag	Mo	V	As	Cd
(2)	(5)	(2)	(5)	(5)	(10)	(5)	(5)	(1)	(1)	(20)	(20)	(1)

Atomic Absorption Spectroscopy

Sb	Te	Th	Tl	Hg	Sr	W
(4)	(10)	(4)	(10)	(5)	(2)	(10)

X/Ray Flourescence

Ba	Be	Ce	La	Nb	Sc	Ti	Y	Zr	Ga	Ge	In	Sn
(200)	(1)	(300)	(50)	(20)	(3)	(100)	(10)	(10)	(10)	(1)	(10)	(1)

Semi-Quantitative Spectrographic analysis

Ric Horn - Mineral Resources

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1/16/0 - AC 274/87

29 August 1986

NATA CERTIFICATE

PART REPORT 1

A'16/86

The Director General
SA Department of Mines & Energy
PO Box 151
EASTWOOD SA 5063

TEETULPA

REPORT AC 274/87

YOUR REFERENCE:	EX 556, 12/03/227
REPORT COMPRISING:	Cover sheet Page 1 Pages G1 - G2 Page X1
DATE RECEIVED:	21 July 1986
Approved Signatory:	Martin R. Hanckel

Manager, Chemistry Services

for Dr William G. Spencer
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ANALYSIS

g/tonne

SAMPLE MARK	GOLD Au	SAMPLE MARK	GOLD Au
A 1230/86	3.59	A 1244/86	0.130
31/86	0.045	45/86	0.144
32/86	1.47	46/86	0.755
33/86	0.170	47/86	0.700
34/86	8.74	48/86	0.370
35/86	0.200	49/86	0.080
36/86	0.030	50/86	0.440
37/86	0.045	51/86	34
38/86	0.010	52/86	0.420
39/86	<0.005	53/86	1.82
40/86	0.090	54/86	3.62
41/86	<0.005	55/86	0.940
42/86	0.060	56/86	0.365
43/86	0.030		

Tailings

Method: A7/2

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Analysis code A1/1,2 Report AC 274/87 Page G1

NATA Certificate Order No. 12/03/227 Results in ppm

Sample	Cu	Pb	Zn	Co	Ni	Cr	Fe
A 1230/86	960	26	72	340	670	45	19.1%
A 1231/86	1.16%	<5	17	94	88	<10	8.62%
A 1232/86	370	<5	11	225	145	15	28.5%
A 1233/86	2760	10	16	34	110	15	7.22%
A 1234/86	2800	26	16	74	88	25	15.4%
A 1235/86	66	28	17	305	580	25	10.4%
A 1236/86	23	<5	84	10	28	30	8.90%
A 1237/86	42	<5	275	375	145	25	8.68%
A 1238/86	20	<5	26	24	56	45	5.28%
A 1239/86	38	<5	8	<5	16	35	1.29%
A 1240/86	450	46	15	82	130	30	19.1%
A 1241/86	6	<5	11	14	20	<10	9.08%
A 1242/86	96	475	300	325	465	25	27.4%
A 1243/86	40	6	36	58	150	40	7.20%
A 1244/86	72	<5	58	66	135	30	7.02%
A 1245/86	380	24	24	175	155	15	20.7%
A 1246/86	19	<5	12	22	36	<10	13.6%
A 1247/86	135	<5	84	335	165	35	8.78%
A 1248/86	200	170	255	225	100	30	8.66%
A 1249/86	120	<5	14	16	64	15	6.40%
A 1250/86	750	<5	68	175	455	30	32.8%
A 1251/86	420	6	105	400	325	85	36.1%
A 1252/86	3500	<5	11	64	90	20	7.70%
A 1253/86	4660	<5	135	140	480	35	35.4%
A 1254/86	1460	<5	17	160	305	30	18.3%
A 1255/86	230	34	45	34	58	25	3.44%
A 1256/86	100	8	33	120	72	30	15.3%
Detn limit	(2)	(5)	(2)	(5)	(5)	(10)	(5)

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Analysis code A1/1,2 Report AC 274/87 Page G2

NATA Certificate Order No. 12/03/227 Results in ppm

Sample	Mn	Cd	Ag	Mo	V
A 1230/86	7300	1	<1	13	100
A 1231/86	8150	<1	<1	4	<20
A 1232/86	1240	<1	<1	3	<20
A 1233/86	3320	<1	<1	8	<20
A 1234/86	2980	<1	2	8	75
A 1235/86	1440	<1	1	7	<20
A 1236/86	2540	<1	<1	23	30
A 1237/86	1.54%	2	<1	14	45
A 1238/86	2220	<1	<1	6	30
A 1239/86	620	<1	<1	3	<20
A 1240/86	500	<1	1	6	35
A 1241/86	1.10%	<1	<1	12	45
A 1242/86	1.14%	<1	<1	12	110
A 1243/86	880	<1	<1	1	<20
A 1244/86	4.32%	<1	<1	5	70
A 1245/86	5150	<1	<1	10	160
A 1246/86	1.40%	<1	<1	37	25
A 1247/86	2.49%	<1	<1	20	140
A 1248/86	3.13%	1	1	11	180
A 1249/86	5800	<1	<1	1	30
A 1250/86	2460	1	<1	24	190
A 1251/86	640	2	6	12	170
A 1252/86	2.21%	<1	1	6	<20
A 1253/86	6350	<1	<1	11	210
A 1254/86	5350	<1	1	3	45
A 1255/86	1520	<1	<1	2	60
A 1256/86	700	<1	<1	3	65
Detn limit	(5)	(1)	(1)	(1)	(20)

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Analysis code X1 Report AC 274/87 Page X1

NATA Certificate Results in ppm

Sample	As	Sb	Te	Th	Tl	Hg	Sr	W
A1230/86	1700	<4	<10	6	<10	6	130	35
A1231/86	200	<4	<10	<4	<10	<5	185	15
A1232/86	2.62%	30	<10	<4	<10	100	415	30
A1233/86	970	8	<10	<4	<10	<5	90	10
A1234/86	3140	22	<10	<4	<10	26	78	480
A1235/86	375	10	<10	<4	<10	<5	180	20
A1236/86	440	12	<10	<4	<10	<5	360	10
A1237/86	590	<4	<10	<4	<10	<5	135	20
A1238/86	110	12	<10	<4	<10	<5	255	10
A1239/86	10	<4	<10	<4	<10	<5	84	<10
A1240/86	195	10	<10	<4	<10	<5	70	<10
A1241/86	34	6	<10	<4	<10	<5	195	30
A1242/86	920	20	<10	<4	<10	12	110	15
A1243/86	62	4	<10	<4	<10	<5	12	10
A1244/86	110	20	<10	<4	<10	<5	245	25
A1245/86	3760	12	<10	<4	<10	26	190	20
A1246/86	52	<4	<10	<4	<10	<5	165	25
A1247/86	2180	4	<10	<4	<10	16	445	35
A1248/86	2040	26	<10	6	<10	<5	275	10
A1249/86	36	<4	<10	<4	<10	<5	120	<10
A1250/86	7850	14	<10	<4	<10	52	710	20
A1251/86	8400	24	<10	<4	<10	88	210	20
A1252/86	1300	18	<10	<4	<10	34	375	<10
A1253/86	1.07%	22	<10	10	<10	72	210	25
A1254/86	2760	10	<10	<4	<10	10	125	20
A1255/86	430	6	<10	<4	<10	20	155	<10
A1256/86	2840	22	<10	<4	<10	44	70	25
Detn limit	(2)	(4)	(10)	(4)	(10)	(5)	(2)	(10)

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1/16/0 - AC 274/87

2 September 1986

NATA CERTIFICATE

REPORT COMPLETE

A'18/86

The Director General
SA Department of Mines & Energy
PO Box 151
EASTWOOD SA 5063

REPORT AC 274/87

YOUR REFERENCE:	EX 556, 12/03/227
REPORT COMPRISING:	Cover sheet Handwritten Pages 1 - 2
DATE RECEIVED:	21 July 1986
Approved Signatory:	Martin R. Hanckel

Manager, Chemistry Services

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SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Job No. AC 274/87

Results in ppm. x = not detected at limits quoted.

Detection limits in brackets.

SAMPLE NO.	Ba (200)	Be (1)	Ce (300)	La (50)	Nb (20)	Sc (3)	Ti (100)	Y (10)	Zr (10)	
†1230/86	1200	1	x	x	x	x	3000	30	100	
31	x	x	x	x	x	x	1000	40	60	
32	x	x	x	x	x	x	2000	10	80	
33	x	x	x	x	x	3	15000	20	80	
34	x	x	x	x	x	3	8000	20	100	
35	1200	x	x	x	x	x	6000	15	60	
36	1400	1	x	150	x	x	3000	20	60	
37	1200	4	x	x	x	x	2000	30	40	
38	x	1	x	x	x	x	1000	10	40	
39	x	x	x	x	x	x	1500	x	20	
40	x	x	x	x	x	x	1500	25	60	
41	x	x	x	x	x	x	1000	40	60	
42	x	1	x	x	x	x	2000	50	80	
43	x	x	x	x	x	x	x	15	40	
44	1800	1	x	x	x	3	10000	25	100	
45	x	2	x	x	x	5	15000	20	150	
46	x	x	x	x	x	3	x	25	100	
47	1400	5	x	x	x	6	30000	20	100	
48	1600	1	x	x	x	x	6000	15	80	
49	x	x	x	x	x	x	x	50	60	
50	2000	2	x	x	x	x	1500	40	100	
51	x	2	x	x	x	x	x	10	80	
52	2600	x	x	x	x	x	2000	20	80	
53	x	3	x	x	x	x	1000	15	80	
54	x	x	x	x	x	x	2000	25	100	
55	x	x	x	x	x	3	1600	15	80	
†1256/86	x	1	x	x	x	3	3000	40	100	

Concentrations reported of economic interest should be redetermined by an

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SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Job No. AC 274..87

Results in ppm. x = not detected at limits quoted.

Detection limits in brackets.

SAMPLE NO.	Ga (1)	Ge (1)	In (10)	Sn (1)						
1230/86	x	x	x	x						
31	x	x	x	x						
32	x	x	x	x						
33	10	x	x	1						
34	1	x	x	x						
35	1	1	x	x						
36	x	1	x	x						
37	x	x	x	x						
38	x	x	x	x						
39	1	x	x	x						
40	x	x	x	x						
41	x	x	x	x						
42	x	x	x	x						
43	x	x	x	x						
44	x	x	x	x						
45	10	1	x	3						
46	x	x	x	x						
47	10	x	x	3						
48	x	x	x	x						
49	x	x	x	x						
50	x	x	x	x						
51	x	x	x	x						
52	x	x	x	x						
53	x	x	x	x						
54	x	1	x	x						
55	3	x	x	x						
1256/86	1	1	x	x						

Concentrations reported of economic interest should be redetermined by an

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1/16/0 - AC 812/87

10 September 1986

NATA CERTIFICATE

A'20/86

The Director General
SA Department of Mines & Energy
PO Box 151
EASTWOOD SA 5063

TEETULPA

REPORT AC 812/87

YOUR REFERENCE:	EX 566, 12/03/228
REPORT COMPRISING:	Cover sheet Page 1 Page X1 Pages G1 - G2 Handwritten Pages 1 - 4
DATE RECEIVED:	25 August 1986
NOTE:	2 samples received marked A1435/86. They are now marked A and B. Sample A was lighter in colour than sample B in natural state.
Approved Signatory:	Martin R. Hanckel

D. Patterson
for

Manager, Chemistry Services

for Dr William G. Spencer
General Manager
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ANALYSIS

g/tonne

	SAMPLE MARK	GOLD Au		SAMPLE MARK	GOLD Au
28	A 1421/86	0.050	48.	A 1441/86	1.37
29	1422/86	0.010	49.	1442/86	0.70
30	1423/86	0.020	50.	1443/86	0.20
31	1424/86	<0.005	51.	1444/86	0.51
32	1425/86	0.012	52.	1445/86	0.43
33	1426/86	8.1	53.	1446/86	0.13
34	1427/86	0.035	54.	1447/86	<0.005
35	1428/86	0.012	55.	1448/86	<0.005
36	1429/86	0.060	56.	1449/86	<0.005
37	1430/86	0.008	57.	1450/86	0.027
38	1431/86	0.31	58	1451/86	7.2
39	1432/86	0.043			
40	1433/86	<0.005			
41	1434/86	0.045			
42 A	1435A/86	0.020			
42 B	1435B/86	<0.005			
43	1436/86	0.25			
44	1437/86	<0.005			
45	1438/86	20.2			
46	1439/86	15			
47	1440/86	0.125			

Method: A7/2

amdel

Analysis code X1 Report AC 812/87 Page X1

NATA Certificate Results in ppm

Sample	Sb	W	U	Th	Hg
A1421/86	6	10	<4	<4	<5
A1422/86	6	10	6	<4	<5
A1423/86	14	<10	4	<4	<5
A1424/86	6	10	6	<4	<5
A1425/86	8	<10	<4	6	<5
A1426/86	6	10	<4	<4	<5
A1427/86	4	<10	<4	<4	<5
A1428/86	6	15	<4	<4	<5
A1429/86	<4	<10	<4	<4	<5
A1430/86	6	30	6	6	<5
A1431/86	32	15	<4	<4	<5
A1432/86	28	20	6	<4	<5
A1433/86	6	20	<4	8	<5
A1434/86	10	<10	22	<4	<5
A1435/86A	12	<10	<4	<4	<5
A1435/86B	6	30	8	<4	<5
A1436/86	4	25	<4	<4	<5
A1437/86	4	<10	<4	<4	<5
A1438/86	16	15	<4	<4	<5
A1439/86	12	10	<4	<4	<5
A1440/86	6	<10	<4	10	<5
A1441/86	40	10	<4	8	<5
A1442/86	4	<10	<4	<4	<5
A1443/86	8	20	<4	<4	<5
A1444/86	10	15	<4	<4	<5
A1445/86	8	10	<4	<4	<5
A1446/86	4	15	<4	<4	<5
A1447/86	4	15	<4	<4	<5
A1448/86	6	15	<4	<4	<5
A1449/86	4	<10	<4	<4	<5
A1450/86	18	15	<4	<4	<5
A1451/86	24	25	16	4	<5
Detn limit	(4)	(10)	(4)	(4)	(5)

amdel

Analysis code A1/1,2 Report AC 812/87 Page G1

NATA Certificate Results in ppm

Sample	Cu	Pb	Zn	Co	Ni	Cr	Cd
A1421/86	640	58	600	145	360	10	<1
A1422/86	170	<5	47	18	52	20	<1
A1423/86	140	<5	125	10	94	<10	<1
A1424/86	300	<5	25	8	26	<10	<1
A1425/86	105	<5	25	<5	14	<10	<1
A1426/86	590	<5	26	115	130	15	<1
A1427/86	670	620	340	150	235	10	1
A1428/86	14	<5	19	10	18	<10	<1
A1429/86	48	16	11	500	300	<10	<1
A1430/86	435	<5	100	230	280	10	<1
A1431/86	155	88	135	155	145	<10	<1
A1432/86	380	30	215	2020	220	10	1
A1433/86	6	<5	10	22	20	<10	<1
A1434/86	195	215	255	390	1020	30	<1
A1435/86A	750	<5	78	220	76	35	<1
A1435/86B	19	<5	94	58	96	30	<1
A1436/86	1420	<5	165	58	155	45	<1
A1437/86	18	<5	12	6	6	<10	<1
A1438/86	2220	16	14	290	610	10	<1
A1439/86	210	<5	6	22	30	35	<1
A1440/86	435	10	35	12	28	35	<1
A1441/86	455	12	43	185	125	65	<1
A1442/86	235	<5	16	28	52	55	<1
A1443/86	52	<5	27	64	42	35	<1
A1444/86	120	<5	26	110	56	65	<1
A1445/86	37	<5	13	34	22	50	<1
A1446/86	64	<5	16	10	30	10	<1
A1447/86	15	<5	14	8	10	<10	<1
A1448/86	82	<5	8	12	40	35	<1
A1449/86	1500	<5	15	14	38	<10	<1
A1450/86	3260	690	16	160	310	<10	<1
A1451/86	150	<5	11	420	40	<10	<1
Detn limit	(2)	(5)	(2)	(5)	(5)	(10)	(1)

amdel

Analysis code A1/1,2 Report AC 812/87 Page G2

NATA Certificate Results in ppm

Sample	Fe	Mn	Ag	Mo	V	As
A1421/86	21.3%	3100	<1	5	170	310
A1422/86	16.1%	2520	<1	35	170	420
A1423/86	21.1%	5000	<1	9	75	840
A1424/86	4.80%	1280	<1	10	<20	210
A1425/86	5.54%	475	<1	6	30	230
A1426/86	11.7%	4200	2	16	35	1920
A1427/86	11.0%	8.90%	<1	16	80	520
A1428/86	3.88%	4880	<1	8	<20	110
A1429/86	7.54%	2800	<1	4	<20	1040
A1430/86	23.5%	1540	<1	9	170	340
A1431/86	26.5%	5050	<1	12	290	580
A1432/86	14.5%	1.77%	1	17	450	1920
A1433/86	6.48%	6800	<1	5	<20	130
A1434/86	27.7%	1600	1	32	80	1780
A1435/86A	24.6%	1.63%	<1	9	300	350
A1435/86B	9.98%	2260	<1	15	140	220
A1436/86	28.2%	2220	<1	7	290	330
A1437/86	7.90%	8600	<1	<1	25	190
A1438/86	18.3%	1640	31	5	<20	3540
A1439/86	4.29%	1480	<1	1	25	2120
A1440/86	6.74%	2000	<1	7	85	200
A1441/86	43.0%	1060	<1	9	100	4760
A1442/86	5.72%	6600	<1	4	60	660
A1443/86	13.0%	830	<1	6	80	2920
A1444/86	7.72%	190	<1	5	50	1840
A1445/86	5.88%	215	<1	4	<20	1000
A1446/86	16.6%	1.77%	<1	17	25	200
A1447/86	17.7%	1580	<1	7	35	380
A1448/86	2.07%	990	<1	3	<20	65
A1449/86	10.7%	1.22%	<1	2	<20	420
A1450/86	12.8%	2420	2	2	<20	550
A1451/86	31.9%	500	5	6	<20	2.36%
Detn limit	(5)	(5)	(1)	(1)	(20)	(20)

amdel

SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Job No. AC.812/1

Page ...1...

Results in ppm. x = not detected at limits quoted.

Detection limits in brackets.

SAMPLE NO.	Ba (200)	Be (1)	Ce (300)	Sc (3)	Sr (50)	Ti (100)	Y (10)	Zr (10)		
A 1421/86	x	x	x	3	50	2000	50	50		
22	x	x	x	15	150	5000	50	70		
23	2000	x	x	6	400	1500	20	50		
24	x	x	x	3	200	2000	15	20		
25	x	x	x	3	200	2000	15	50		
26	x	x	x	x	x	4000	15	50		
27	4000	x	x	x	50	2000	40	40		
28	x	x	x	3	x	3000	20	20		
29	x	x	x	x	50	1000	15	20		
30	x	1	x	20	x	30000	70	70		
31	x	1	x	3	x	1500	30	50		
32	2000	1	x	3	50	4000	50	50		
33	x	x	x	6	1000	1000	30	50		
34	x	x	x	3	2000	2000	30	50		
35A	8000	2	x	3	50	3000	50	50		
35B	x	x	x	3	x	1500	30	30		
36	x	1	x	3	x	2000	40	50		
37	x	x	x	3	50	1000	30	30		
38	x	x	x	x	50	1000	20	50		
39	x	x	x	x	50	1500	10	20		
40	2000	x	x	6	1000	20000	30	50		
41	x	x	x	x	x	4000	20	50		
42	4000	1	x	6	50	20000	20	50		
43	x	x	x	10	50	8000	40	50		
44	x	x	x	x	x	1000	10	40		
45	x	x	x	x	x	2000	15	50		
A1446/86	x	x	x	3	1000	13000	30	70		

Concentrations reported of economic interest should be redetermined by an

amdel

SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Job No. AC.812..18

Results in ppm. x = not detected at limits quoted.

Detection limits in brackets.

SAMPLE NO.	Ba (200)	Be (1)	Ce (300)	Sc (3)	Sr (50)	Ti (100)	Y (10)	Zr (10)		
A1447/86	x	x	x	13	150	5000	130	150		
48	x	x	x	x	x	2000	110	115		
49	x	x	x	16	150	4000	140	150		
50	x	x	x	x	x	6000	130	150		
51	x	x	x	13	150	10000	120	150		

Concentrations reported of economic interest should be redetermined by an

amdel

SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Job No. AC 312..12

Results in ppm. x = not detected at limits quoted.

Detection limits in brackets.

SAMPLE NO.	Ga (1)	Ge (1)	In (10)	Sn (1)	Bi (1)					
A1421/86	x	x	x	x	10					
22	2	1	x	1	x					
23	x	x	x	x	x					
24	1	1	x	x	1					
25	x	x	x	x	x					
26	x	x	x	x	30					
27	x	x	x	x	20					
28	x	1	x	x	x					
29	x	x	x	x	6					
30	5	x	x	1	2					
31	x	x	x	x	20					
32	1	x	x	x	40					
33	x	x	x	x	x					
34	x	x	x	x	60					
35A	1	x	x	x	1					
35B	x	x	x	x	6					
36	x	x	x	x	3					
37	x	x	x	x	x					
38	x	x	x	x	150					
39	1	x	x	x	30					
40	10	x	x	1	100					
41	x	x	x	x	80					
42	6	1	x	2	6					
43	2	1	x	x	10					
44	1	1	x	x	30					
45	1	1	x	x	30					
A1446/86	x	x	x	x	1					

Concentrations reported of economic interest should be redetermined by an

amdel

SEMI-QUANTITATIVE SPECTROGRAPHIC ANALYSIS

Job No. AC.812.1

Results in ppm. x = not detected at limits quoted.

Detection limits in brackets.

SAMPLE NO.	Ga (1)	Ge (1)	In (10)	Sn (1)	Bi (1)					
A1447/86	x	x	x	x	x					
48	1	x	x	x	x					
49	x	x	x	x	x					
50	x	x	x	x	150					
51	2	x	x	2	20					

Concentrations reported of economic interest should be redetermined by an

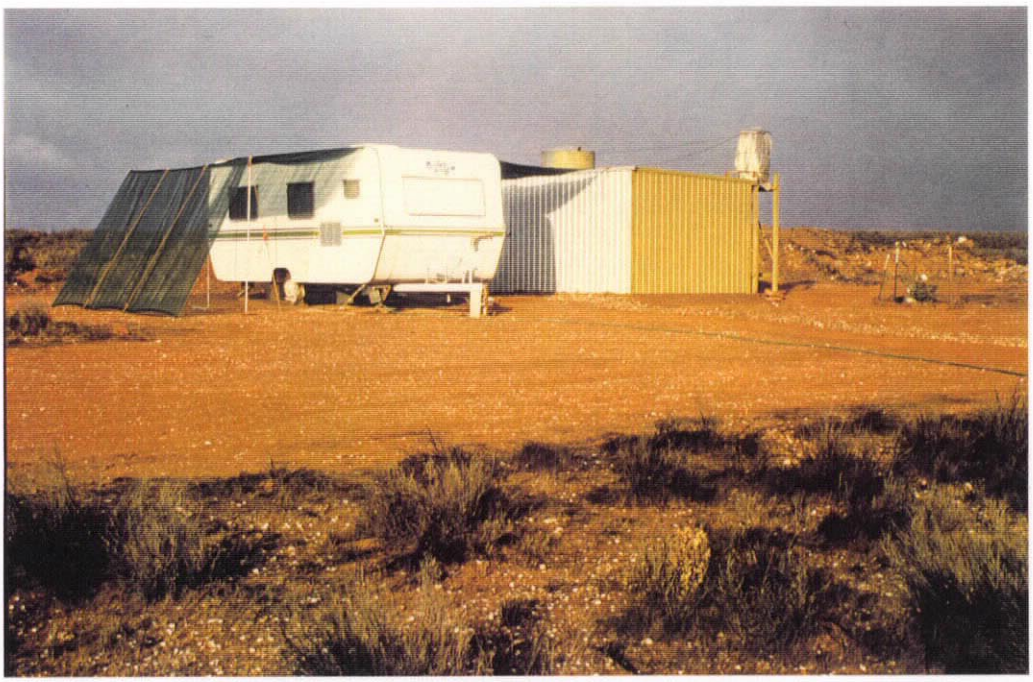


PLATE 51. Camp Site - P. Dennis (MC 1937) July 1986.
Slide No. 35313

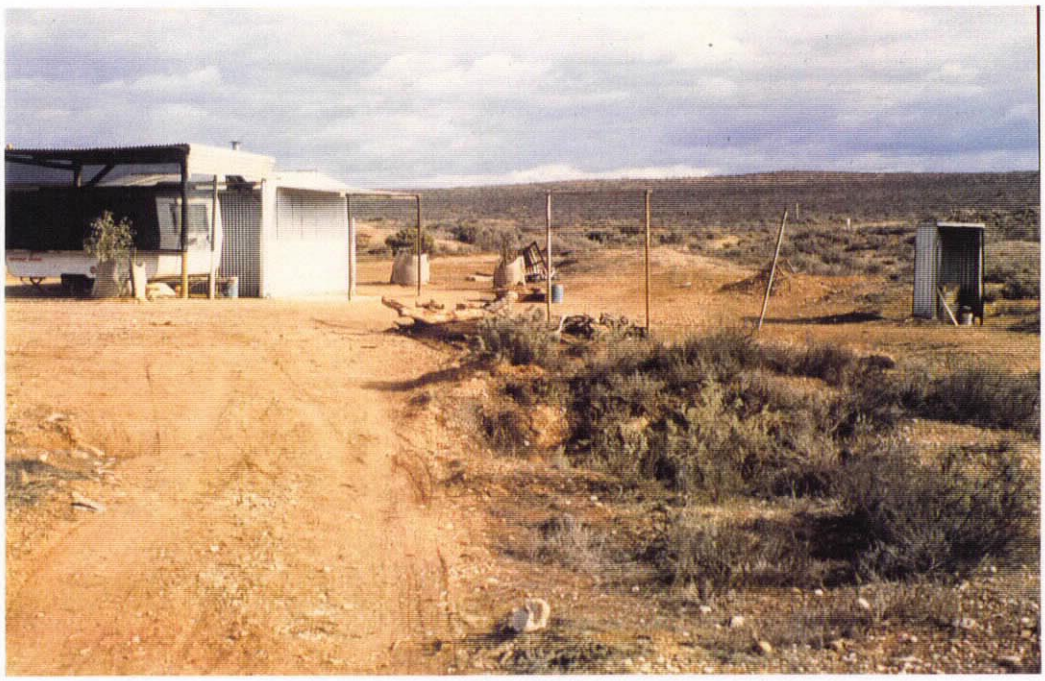


PLATE 52. Camp Site - M. Schmidt (ML 4978) July 1986.
Slide No. 35314

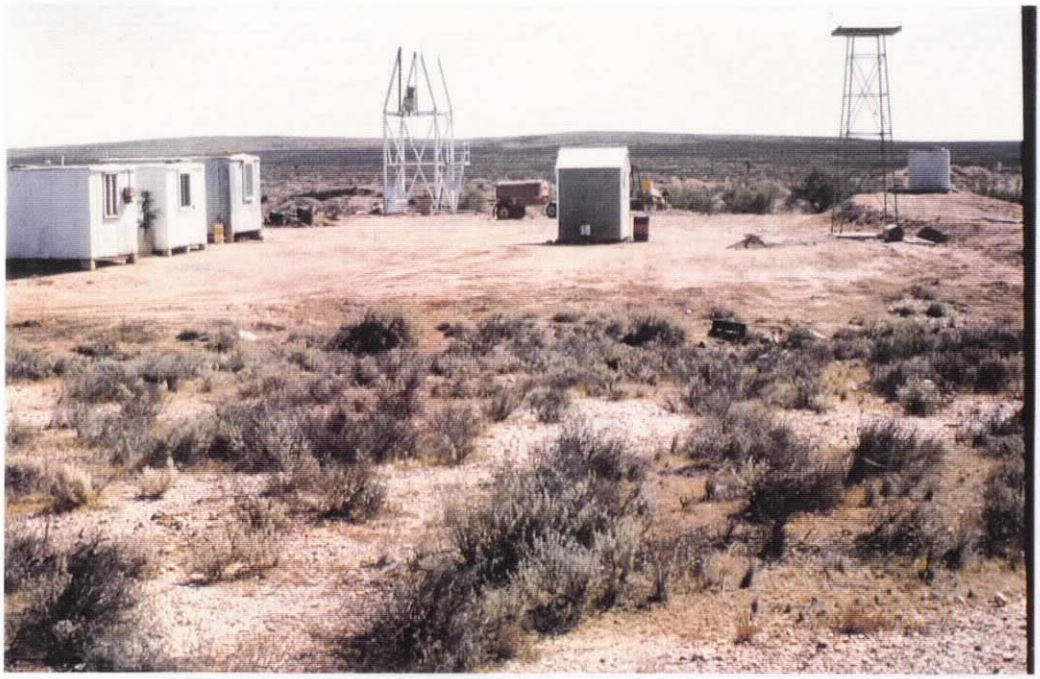
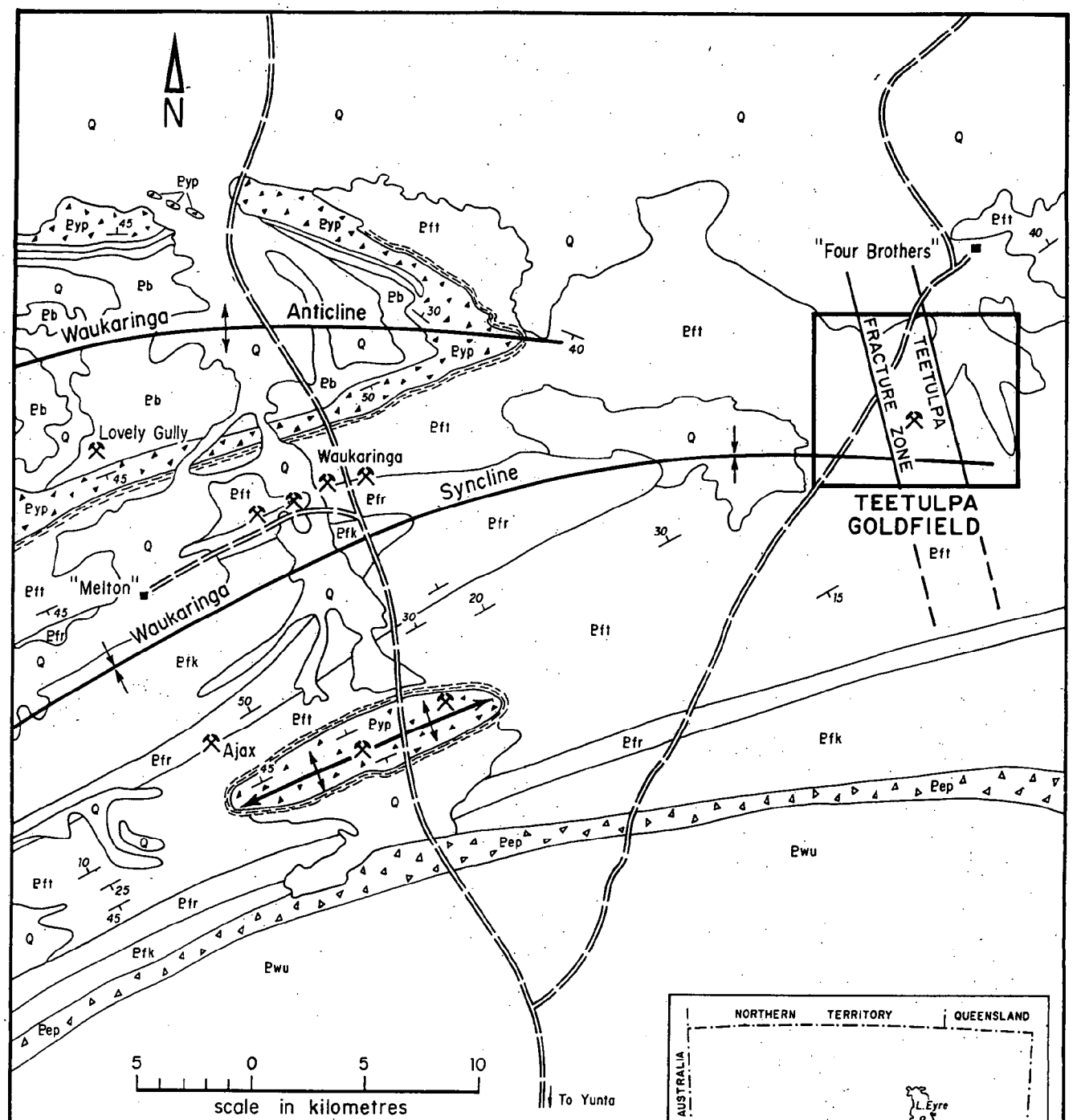


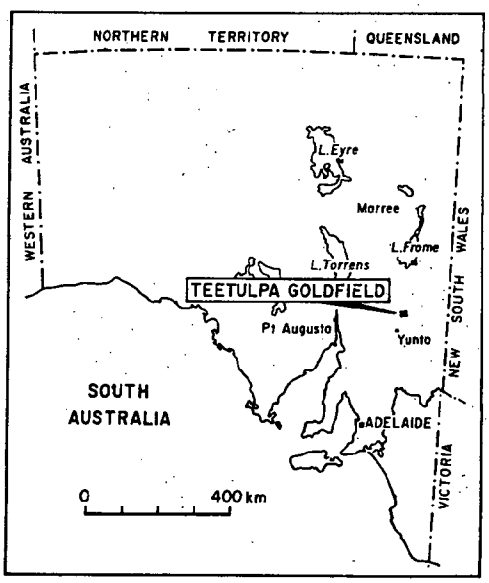
PLATE 53. Camp Site - M. Raymond (ML 5039) July 1986.
Slide No. 35315

PLATE 54. Camp Site - E. Rogers (ML 5358) February 1986.
Slide No. 35316

PLATE 55. Inspection by Burmese Mining Personnel of M. Raymonds Plant Operating in ML 5039, May 1985. Slide No. 35317

PLATE 56. E. Rogers Sluicing. February 1986. Slide No. 35318





Compiled from Orroroo and Olary 1:250000 map sheets.

Figure 9

DEPARTMENT OF MINES AND ENERGY
SOUTH AUSTRALIA

TEETULPA GOLDFIELD
REGIONAL GEOLOGICAL PLAN

COMPILED C. M. H.	C.D.O. DATE
DRAWN A.F.	SCALE 1: 250000
DATE 29-9-86	PLAN NUMBER S 18941
CHECKED	

4202

STRUCK OIL
Cemetery
DEEP GULLY
COSMOPOLITAN
HOSPITAL HILL
EVENING STAR
AURIFERA
DAM GULLY
Area of extensive alluvial workings
Government Dam
EDWARD PARRY
ADELAIDE JUBILEE
INTERNATIONAL
PARNELL
WARRIOR EXTENDED
GREAT IRONCLAD
EAST IRONCLAD
GREAT IRONCLAD EXTENDED
THE PUPS
TEETULPA UNITED
ALLIANCE
BRADY'S GULLY
CAMPBELL'S HILL DIGGINGS
Water Depot
Old Dam
GOSLIN'S GULLY
COLLEEN BAWN
COLLEEN BAWN SOUTH
MORNING STAR
ISLE OF AXHOLME
LONDONDERRY
VICTORY
LION
JUBILEE
BLUE STAR
BLUE STAR CENTRAL
PRINCE CONSORT
EMPRESS VICTORIA
ENTERPRISE
WHITE CROSS
NONPAREIL
THREE STAR
STRAWBRIDGE'S GULLY
BIRTHDAY GULLY
POVERTY GULLY
TEETULPA KING
MC 2123
Tonkin's Dam
GOLDEN STAR
GREAT WARRIOR
ST. PATRICK
WELLS HILL
BEN LOMOND
BRADY
SOUTH GOLDEN STAR
STRAWBRIDGE GULLY
Strawbridge Dam
MC 2121
MURPHY'S GULLY
BRENNAN'S GULLY
Area of alluvial workings
MN
SHEET INDEX
A
B
C
D
Track
Fence
Drainage line
Boundary of alluvium
Alluvial pits
Trench
Pit
Shaft
Quartz ironstone lode
Quartz vein
Strike and dip of bedding
Strike and dip of cleavage
Strike and dip of veins
Sample location (after D.L. Seymour)
SADME sample location
50 0 50 100 150 200 250
scale in metres
DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA
TEETULPA GOLDFIELD
GEOLOGICAL PLAN AND LOCATION OF WORKINGS
COMPILED C.M. Horn
DRAWN A.F
DATE 25-9-86
PLAN NUMBER 86-541
S.A. Dept of Mines and Energy

STRUCK OIL

A1230/86

DEEP GULLY

DEEP GULLY

Cemetery

To Four Brothers Homestead

COSMOPOLITAN

$CuCO_3$

A1231/86

HOSPITAL HILL

Ruin

EVENING STAR

A1232/86

AURIFERA

A1234/86

A1233/86

WINDLASS HILL DIGGINGS

MC 2011

DAM

Area of extensive alluvial workings

Government Dam

GULLY

EDWARD PARRY

ADELAIDE JUBILEE

ML 5337

ML 5039

GULLY

MPL (Application)

INTERNATIONAL

A1235/86

290,1,2

ML 4978

COSMOPOLITAN

Ruin

Tailings

Battery site

A1245/86

A1246/86

A1247/86

Water shaft

EAST IRONCLAD

ML 5142

BRADY'S

PARNELL

311

A1237/86

GULLY

BIRTHDAY

GULLY

POVERTY

SHEET INDEX

A	B
C	D

50 0 50 100 150 200 250

scale in metres

N

TEETULPA GOLDFIELD

GEOLOGICAL PLAN AND LOCATION OF WORKINGS – SHEET A

Figure 10a Plan Nº 86-541A

S.A. Dept of Mines and Energy

4292

workings

alluvial

extensive

of

ML 5038

Tailings

Water Depot

Area

GULLY

MC 2011
ML 5358

BRADY'S

CAMPBELL'S
HILL DIGGINGS

pits

Numerous

282

297

296

A1435/86 (B)

A1436/86

75

80

293

Main Shaft

Old cricket pitch

Ruins

J. C. Bray Battery

Tailings

A1255/86

Ruin

294.3

GULLY

Badman's Hotel ruins

Horse Puddler

Old Dam

Ruin

alluvial workings

GOSLIN'S

Extensive

85

78

COLLEEN BAWN

Ruin

60

ALLIANCE

abundant outcrop
siltstones

55

MORNING STAR

A1249/86

grey siltstone
no lode

SHEET INDEX

A	B
C	D

50 0 50 100 150 200 250

scale in metres

N

TEETULPA GOLDFIELD

GEOLOGICAL PLAN AND LOCATION OF WORKINGS – SHEET B

Figure 10b Plan Nº 86-541B

S.A. Dept of Mines and Energy

4202

BIRTHDAY GULLY

GULLY

POVERTY GULLY

TEETULPA KING

PARNELL

A1236/86

Ruin

GREAT IRONCLAD

A1439/86

A1248/86

A1256/86

Moonta

E' EAST IRONCLAD

IRONCLAD GULLY

A1440/86

Albion

A1441,2/86

A1443,4,5/86

Ruin

ML 5142

GULLY

WARRIOR EXTENDED

A1238/86

A1239/86

GREAT IRONCLAD EXTENDED

A1447/86

A1446,7/86

A1449,50/86

A1451/86

BRADY'S

Tonkin's Dam

GOLDEN STAR

WELLS HILL
(Cairn built by H. Krichau in 1886)

GREAT WARRIOR

ST PATRICK

Vanguard

BEN LOMOND

SOUTH GOLDEN STAR

A1242,3/86

A1240/86

BEN LOMOND

A1241/86

STRAWBRIDGE GULLY

SHEET INDEX

A	B
C	D

50 0 50 100 150 200 250

scale in metres

N

TEETULPA GOLDFIELD

GEOLOGICAL PLAN AND LOCATION OF WORKINGS – SHEET C

Figure 10c Plan N° 86-541C

S. A. Dept of Mines and Energy

4302

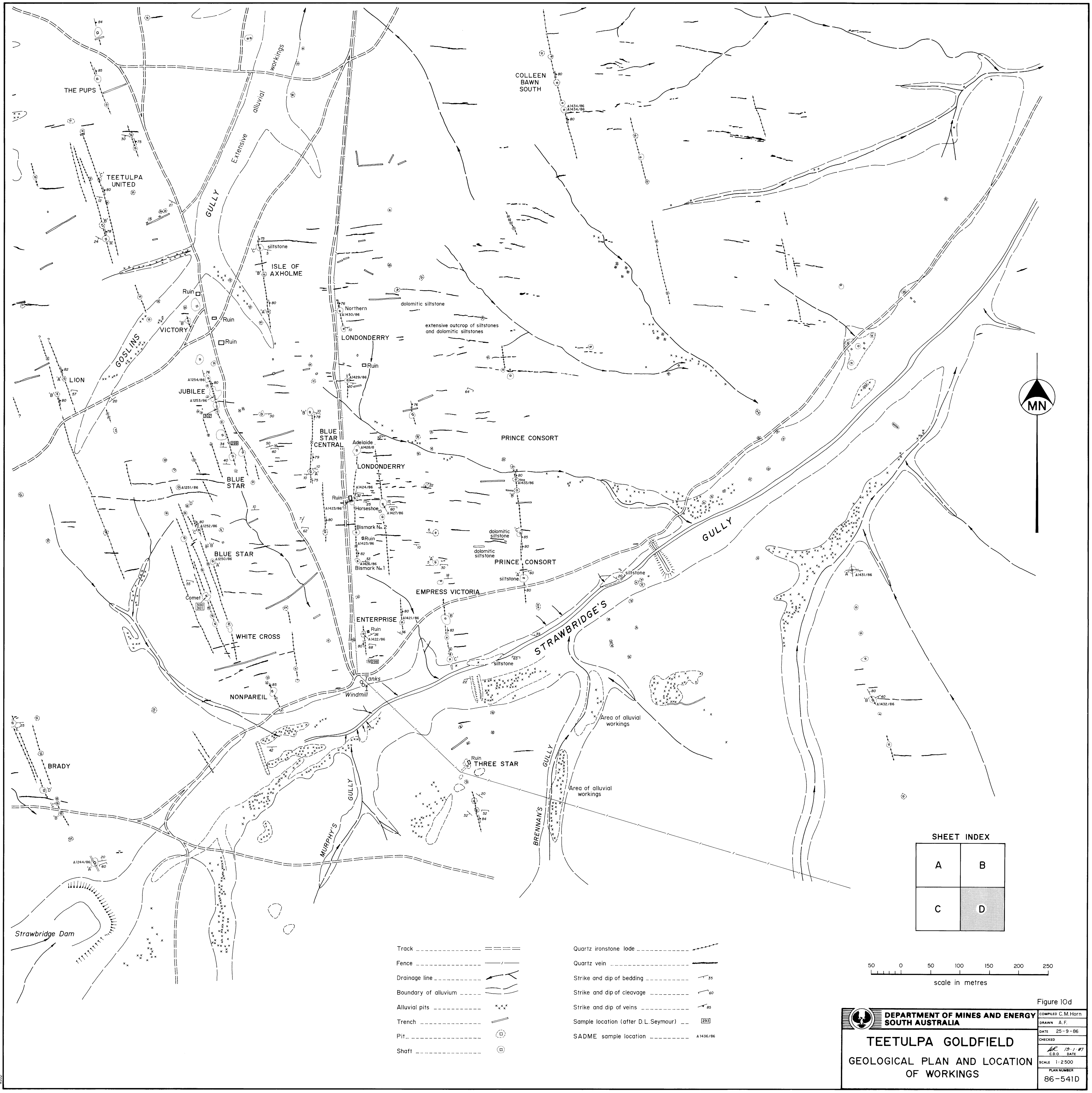
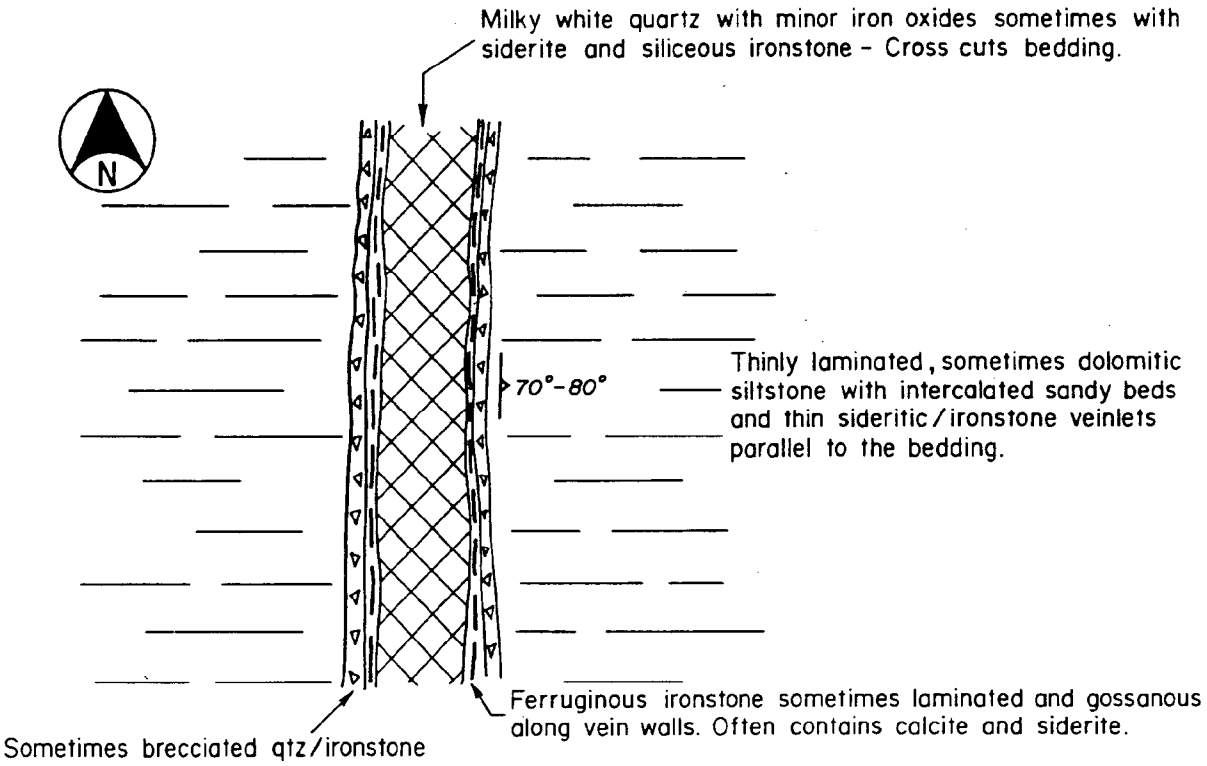
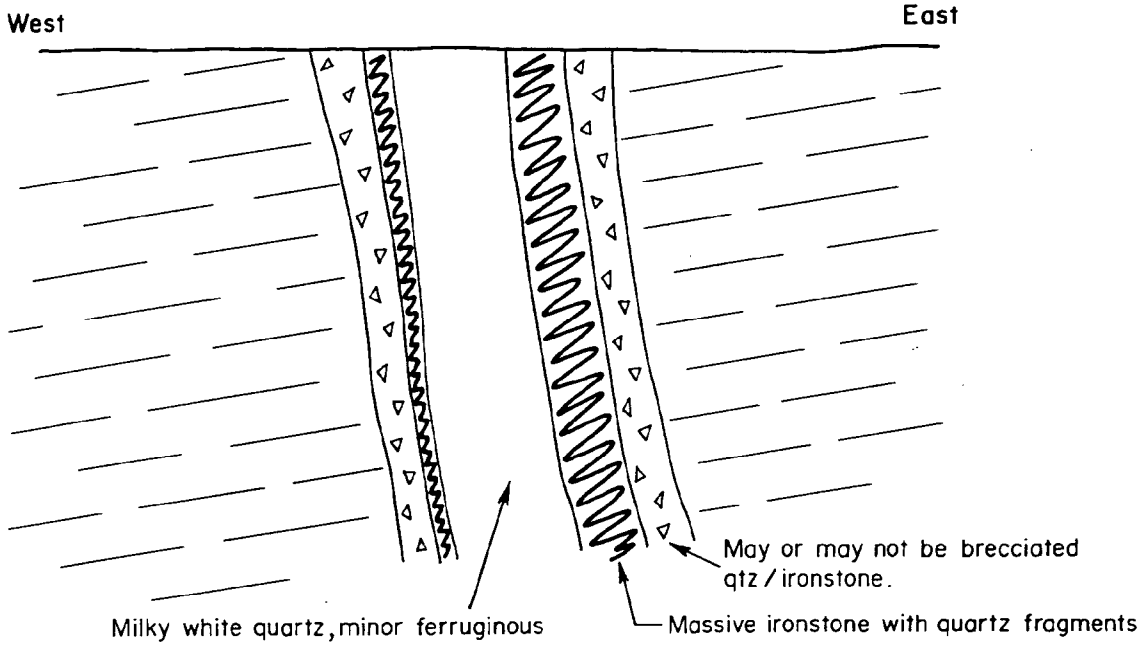

THE PUPS
TEETULPA UNITED
GULLY
Extensive alluvial workings
COLLEEN BAWN SOUTH
ISLE OF AXHOLME
siltstone
Ruin
VICTORY
GOSLINS
LION
JUBILEE
Northern
LONDONDERRY
dolomitic siltstone
extensive outcrop of siltstones and dolomitic siltstones
BLUE STAR CENTRAL
Adelaide
LONDONDERRY
PRINCE CONSORT
BLUE STAR
Horseshoe
Bismark No 2
Bismark No 1
BLUE STAR
PRINCE CONSORT
Comet
EMPRESS VICTORIA
ENTERPRISE
WHITE CROSS
STRAWBRIDGE'S GULLY
Tanks
Windmill
NONPAREIL
Area of alluvial workings
THREE STAR
BRADY
MURPHY'S GULLY
BRENNAN'S GULLY
Strawbridge Dam
MN
SHEET INDEX
A
B
C
D
Track
Fence
Drainage line
Boundary of alluvium
Alluvial pits
Trench
Pit
Shaft
Quartz ironstone lode
Quartz vein
Strike and dip of bedding
Strike and dip of cleavage
Strike and dip of veins
Sample location (after D.L. Seymour)
SADME sample location
50 0 50 100 150 200 250
scale in metres
DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA
TEETULPA GOLDFIELD
GEOLOGICAL PLAN AND LOCATION OF WORKINGS
COMPILED C.M.Horn
DRAWN A.F.
DATE 25-9-86
SCALE 1:2500
PLAN NUMBER 86-541D

Figure 10d



PLAN VIEW

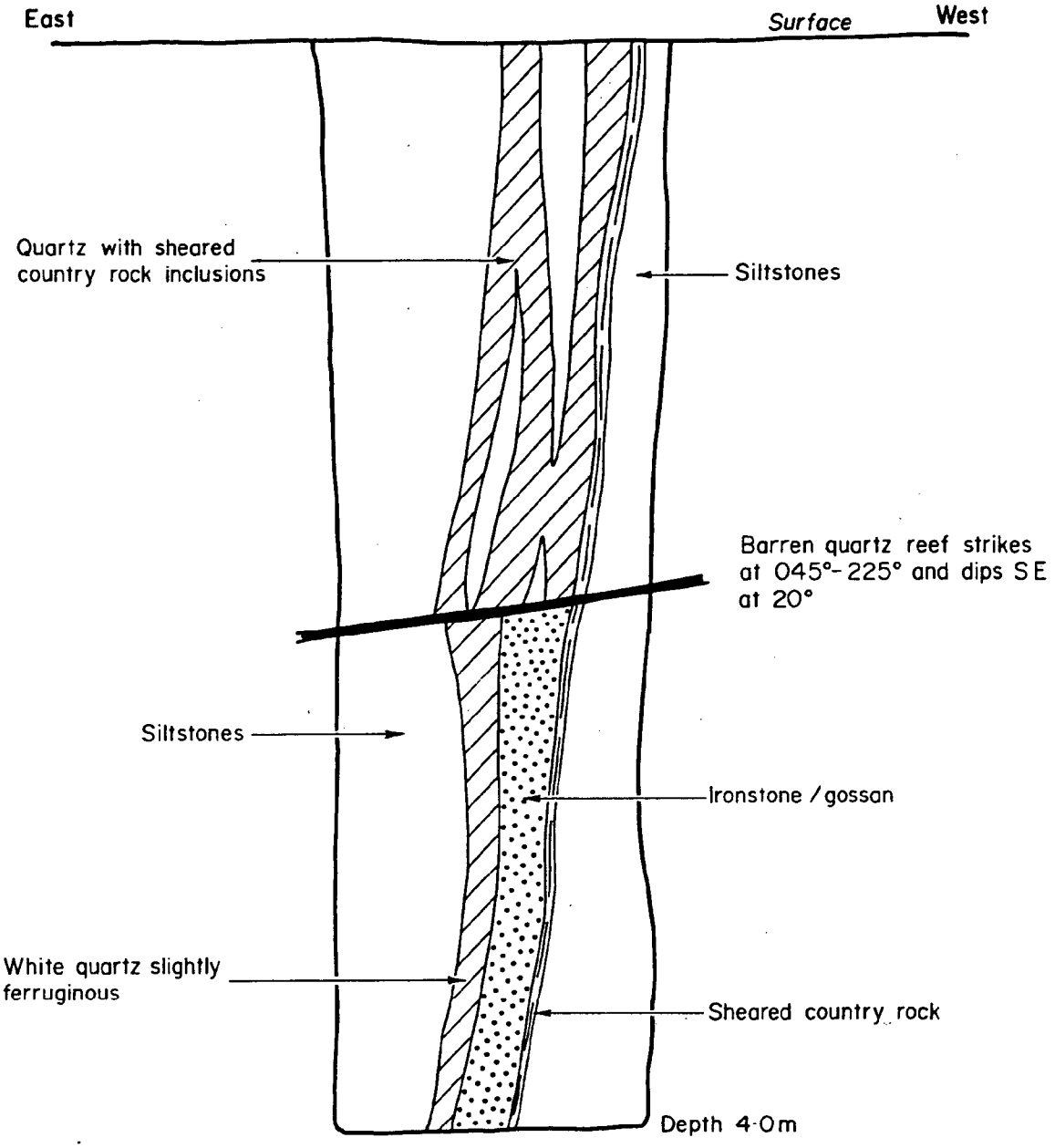


SECTION

Fig. 11

DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA	COMPILED C. M. Horn	C.D.O. 19·1·87 DATE
TEETULPA GOLDFIELD SCHEMATIC GEOLOGICAL PLAN AND SECTION OF VEINS	DRAWN A.F.	SCALE Schematic
	DATE 12-11-86	PLAN NUMBER S 19000
	CHECKED	

4202



South wall

Lode strikes at 330° dips E

Fig. 12

DEPARTMENT OF MINES AND ENERGY SOUTH AUSTRALIA	COMPILED C. M. Horn	C.D.O. 19·1·87 DATE
TEETULPA GOLDFIELD BLUE STAR MINE SHAFT A SKETCH OF SOUTH WALL	DRAWN A.F.	SCALE 1:25
	DATE 12-11-86	PLAN NUMBER S 19001
	CHECKED	

4201