CONTENTS ENVELOPE 8142

TENEMENT: E.L. 1519.

TENEMENT HOLDER: Jubilee Gold Mines N.L.

MT. MAGNIFICENT

ELA 140/1988

SOUTH AUSTRALIA

QUARTERLY REPORT
period ended 27.12.88

EL 1519.

PRELIMINARY GEOLOGICAL APPRAISAL NOTES

APRIL 1989

JUBILEE GOLD MINES N.L.

CONTENTS

APPENDICES

1. Introduction

The attached notes were prepared by Jubilee Gold Mines N.L. as part of a preliminary report on ELA 140/1988 Mt. Magnificent, South Australia.

It incorporates land title searches, an evaluation of the underground workings of the Mt. Monster Gold Mine by mining engineer B. Saunders, and geological mapping and sampling programme by geologist F. Fitton of Maprock Pty. Ltd. Additional mapping and interpretation was carried out by geologist A. Maynard and geophysicist J.G. Garvey.

2. Location and Access

ELA 140/1988 is approximately 60 km SE of Adelaide. The land is predominantly privately owned as small to medium farms. The land title situation is detailed in a number of searches in Appendix 2.

3. Geology

The geology is described by F. Fitton of Maprock in his report which is included as Appendix 1.

This report is preliminary only. At the time of writing there is some doubt as to the assay values and these are being rechecked by SGS, Sydney. The author is suspicious because all the gold values are either above 1 g/t or below detection level. This is an unusual spread.

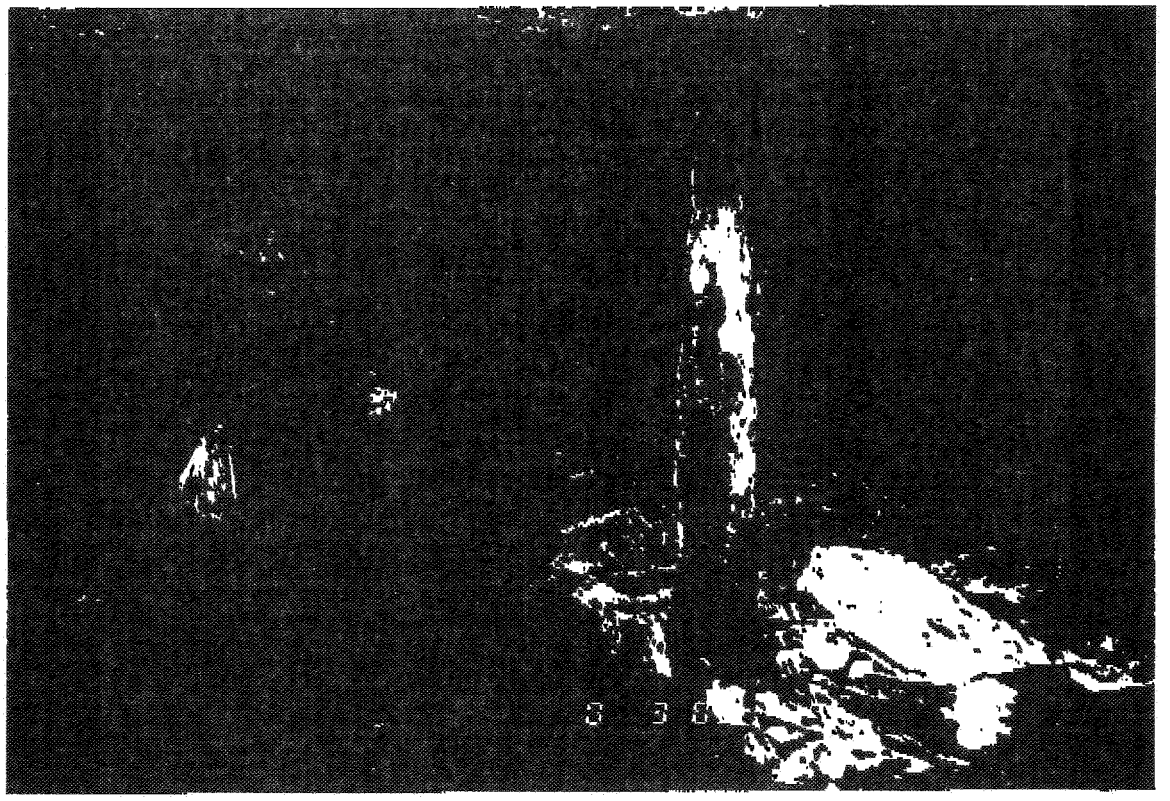
4. Mt. Monster Mine

The Mt. Monster mine which is flooded to a depth of 1.3 m throughout, was mapped. The workings are shown in the attached photographs.

JUBILEE GOLD MINES N.L.

April 1989

MT. MONSTER MINE DRAINAGE LEVEL



MT. MONSTER MINE MAIN STOPE

REFERENCES

WINTON L.J., CORNELIUS H.S., (undated) "The Mount Monster Gold Mine", S.A. Mines Department Report.

MILL J.H.A., 23 August 1988, "Brief Report on Field Visit to ELA 140/1988 Mt. Magnificent S.A.".

WELLS R., April 1978, "A History of Mines in the Areas Held Under Exploration Licences 349 and 350", by Uranerz Pty. Ltd.

BROWN H.Y.L., 1908, "The Mines of South Australia", fourth edition.

APPENDIX 1

Geology

F. Fitton

MAPROCK PTY LTD
Geological Consultants
85 Hubble Street,
East Fremantle 6158
Tel: (09) 339 4502

FF:cr
6th April, 1989

Dr. B. Saunders,
Jubilee Gold Mines N.L.,
1st Floor,
33 Ord Street,
WEST PERTH WA 6005

REPORT ON FIELD VISIT TO THE MT. MAGNIFICENT PROJECT (E.L. 1519) NEAR WILLUNGA S.A., MARCH 1989.

Summary

A three day geological reconnaissance trip was undertaken within E.L.1519 in the Willunga district of S.A., principally with the aim of determining the gold and mercury potential of the area.

Several old gold mines occur within E.L.1519 in addition to a reported historic mercury prospect. Rock chip sampling of all old workings and prospects was carried out in addition to surface geochemical traverses over potentially mineralised zones. A total of sixteen underground and surface samples were collected and assayed for Au, Ag, Hg, As and Bi. Twelve of these samples assayed greater than 1 g/t Au with a peak value of 4.2 g/t Au from a quartz sample from the main stope in the Mt. Monster Gold Mine - the most significant old mine within the E.L.

These reconnaissance gold values are considered most encouraging and I believe warrant further more detailed work in the area.

Introduction, Location and Access

E.L.1519 covers an area of 300 km^2 in the Willunga district of S.A. The E.L. covers a sequence of Lower Proterozoic, Adelaidean and Cambrian age rocks which form part of the South Mt. Lofty Ranges, roughly 50 km due south of Adelaide. The NW corner of the E.L. is located about 3 km SE of the township of Willunga and access is via the main Adelaide - Victor Harbour highway and thence via a number of minor sealed and gravel roads between Willunga and Strathalbyn.

The small township of Ashbourne is located in the extreme NE of the E.L.

E.L.1519 is covered by the "Willunga" and "Milang" 1:50,000 scale, S.A. Department of Lands topographic sheets and the G.S.S.A. 1:250,000 scale "Barker" geological sheet published in 1962. 1:25,000 scale coloured aerial photos flown in January 1988 were used during the current reconnaissance work.

Geology and Mineral Occurrences

The project area comprises strongly deformed and variably metamorphosed Lower Proterozoic to Cambrian age rocks forming the southern end of the Adelaidean Fold Belt (mobile zone) of S.A. The oldest rocks in the mobile zone are of Lower Proterozoic age and occur in the western third of E.L.1519. These rocks are actually mapped as Archaean on the G.S.S.A. "Barker" 1:250,000 geological sheet (1962) and comprise a strongly deformed sequence of feldspathic schists and gneisses, quartz-feldspar augen gneiss, psammitic schist, orthoquartzite and granite.

Several gold and one mercury mine are mapped within these "Archaean" rocks by the G.S.S.A., the most significant of which is the "Mt. Monster" gold mine on a tributary of Blackfellows Creek, 1250 m NW of Mt. Magnificent.

Except for a 1-2 km wide zone of Adelaidean pelitic sediments, the eastern two thirds of E.L.1519 comprises Cambrian phyllites and greywackes of the Kanmantoo Group.

The Lower Proterozoic sequence hosting the gold and mercury occurrences forms the core of a regional anticline and is separated from Adelaidean sediments to the west by a major NE trending thrust. These older rocks are similar in age and lithologies to Lower Proterozoic sequences in the Pine Creek Geosyncline and Granites-Tanami region of the N.T. and possibly also to the Tennant Creek region.

All these provinces host important gold mineralisation as well as uranium in the Pine Creek district and copper at Tennant Creek. It is interesting to note a uranium mine symbol mapped on the 1:250,000 Barker sheet in similar age rocks near Myponga, about 12.5 km SSW of the SW corner of E.L.1519. In addition there are a large number of old base metal mines and prospects within Cambrian rocks within and to the NE of the project area. The most significant of these is the Kanmantoo Cu Mine worked by C.R.A. until the mid 1970's. The old "Great Bradford" Cu mine is located about 2 km SSE of Mt. Observation in the eastern part of the E.L. A gold occurrence in quartz veins is also shown on the Barker sheet within Cambrian rocks 5.5 km SW of Mt. Observation.

Recent Work on E.L.1519

Recent work on the project area consisted of:-

i) Mines Department of S.A. literature research of previous mineral exploration and government survey work.

ii) A review of the land tenure situation within the E.L.

iii) Acquisition of coloured 1:25,000 aerial photographs and relevant geological and topographic maps.

iv) A three day field inspection of the Lower Proterozoic rocks within the E.L. which included underground sampling at the Mt. Monster Mine, dump and surface sampling of the Burma Road Gold Prospects and surface sampling over the Willunga Mercury Prospect area.

Geochemical Survey (Refer to enclosed map)

A total of sixteen surface and underground rock chip samples were collected during geological reconnaissance of the Lower Proterozoic sequence in the western third of E.L.1519. These comprised four underground quartz reef samples from the old Mt. Monster Gold Mine, two mullock and four surface samples from the vicinity of the old Burma Road gold workings and six surface samples from a traverse across the area where the old Willunga Mercury Mine is plotted on the G.S.S.A. Barker sheet and on Uranertz's 1978 geological map. Despite a detailed ground search, no trace of any old workings could be found at this location although a farm dam occurs on a tributary of Meadows Creek very close to the plotted and reported location of the mine. The results are reported as Table 1 to this report and I regard them as generally quite encouraging particularly the gold values from float and sub-outcrop sampling of the Burma Road and Willunga Mercury Mine prospect areas. Of the six samples (WM1-6) collected from the Mercury Mine prospect, five returned gold values in the range 1.5-2.1 g/t Au across a strike width of about 750 m. Most of these samples were of float and sub-outcropping ferruginous, psammitic or quartz-eye schists containing only sparse quartz stringers. These rocks appear to be strongly deformed and moderately metamorphosed felsic volcanics and are similar to auriferous felsic volcanics from the Pine Creek Geosyncline in the N.T.

The potential for a large low to medium grade gold deposit in such rocks is considered good.

At the Burma Road Prospect gold values of 1.0 to 3.5 g/t were obtained from five out of six samples including two mullock samples from a dump adjacent to a 15 m deep shaft. All except sample BR1 were of variably ferruginous vein quartz and were mainly float. Again, I consider these results to be quite encouraging.

Underground sampling from the Mt. Monster Gold Mine was restricted to the main stoped zone and a 1 - 2 m wide ferruginous quartz vein about 15 m from the adit entrance, two quartz samples from an 8 - 10 m wide quartz lens in the main stope assayed 1.0 and 4.2 g/t Au, but the two assays from the vein near the adit entrance assayed less than 0.1 g/t Au.

1930's diamond drilling above and below the present stoped zone failed to intersect more than "trace" gold which tends to confirm the lenticular nature of the Mt. Monster mineralisation. Schistosities near the entrance to the adit and in the stoped area are moderate ESE and WNW respectively and it is possible the mineralised zone has the form of a saddle reef at the crest of a local anticline.

I do not consider the 1930's drilling adequately tested the potential of the Mt. Monster Mine as there may be a series of en-echelon mineralised quartz lenses.

The Hg, Ag, As and Bi assays from all sixteen samples collected are low with all Hg assays in the range 0.015 to 0.084 ppm. In fact the lowest results were obtained from the traverse over the Willunga Mercury Mine prospect. Because of environmental considerations low Hg and As assays could be advantageous, particularly in such a closely settled rural area.

Conclusions

Encouraging Au assays - particularly from the Willunga Mercury and Burma Road prospects warrant further more detailed work within E.L.1519.

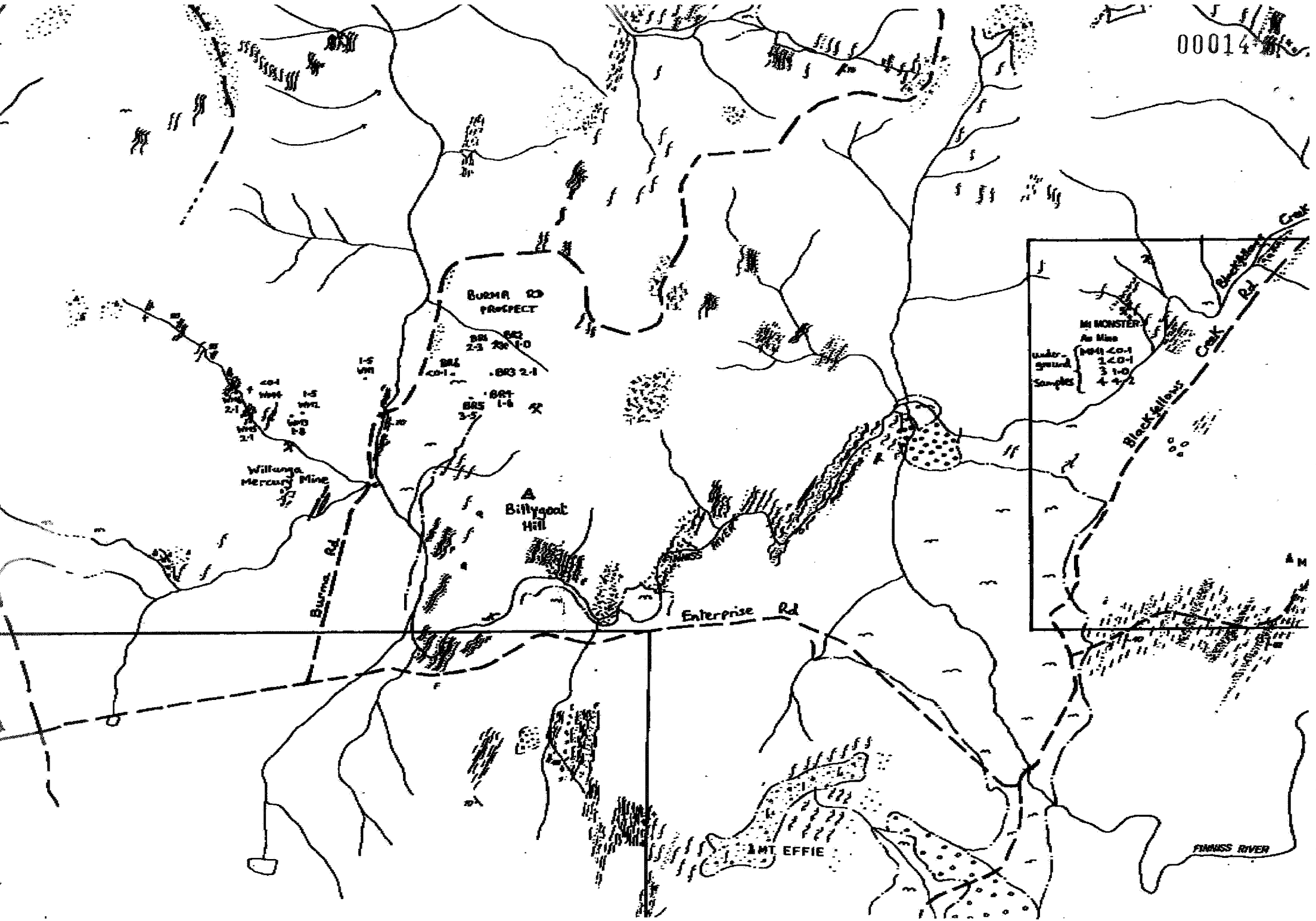
In addition, the base metal potential of the Cambrian sequence in the eastern two thirds of the E.L. should be investigated.

Yours faithfully,

F. Fitton B.Sc.(Hons) M.Aus.IMM.
Principal

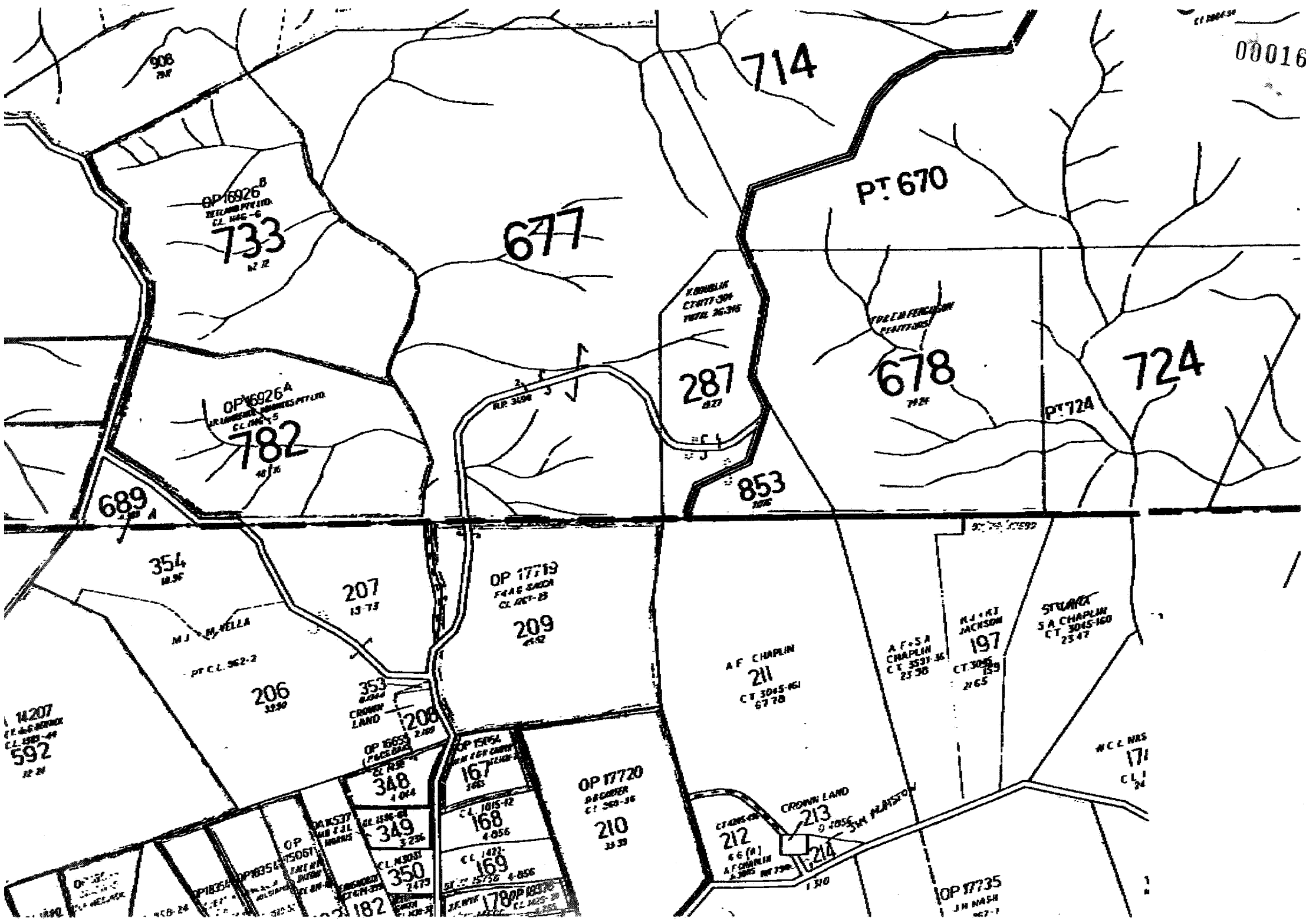
TABLE 1
MT. MAGNIFICENT PROJECT, S.A., GEOCHEMICAL ASSAYS

PROSPECT NAME & SAMPLE NO.		LITHOLOGICAL ROCK TYPE	ASSAYS (p.p.m.) Au	Ag	Hg	As	Bi
MCKAY MONUMENT GOLD MINE							
15m in from adit entrance.	MM1	WEAKLY FERRUG. QUARTZ	<0.1	<0.1	0.084	1.0	<0.5
	MM2	WEAKLY FERRUG. QUARTZ	<0.1	<0.1	0.024	0.5	<0.5
Main stoped zone.	MM3	WEAKLY FERRUG. QUARTZ	1.0	<0.1	0.066	2.0	<0.5
	MM4	STRONGLY FERRUG. QUARTZ	4.2	0.3	0.065	4.0	<0.5
HUBER HEAD PROSPECT							
From Mullock Heap.	HH1	HEMATITIC and QTZ VEINED SER-CHL-QTZ SCHIST	2.3	<0.1	0.040	5.0	<0.5
	HH2	MASSIVE WHITE QTZ	1.0	<0.1	0.030	1.0	<0.5
Float Samples	HH3	WEAKLY FERRUG. QTZ	2.1	<0.1	0.028	1.0	<0.5
	HH4	QTZ-SER-LIMONITE SCH. (w.brecc.qtz stringers)	1.6	<0.1	0.033	3.5	<0.5
	HH5	MOD. LIMONITIC QTZ	3.5	0.1	0.027	4.0	<0.5
	HH6	WEAKLY FERRUG. QTZ	<0.1	<0.1	0.026	1.0	<0.5
WILLUNGA MERCURY MINE AREA							
Float	WM1	HEMATITIC (PARTLY LAT.) PSAMMITIC SCHIST WITH SPARSE QTZ VEINLETS	1.5	<0.1	0.038	4.0	<0.5
Float	WM2	WEAKLY LIMONITIC QTZ	1.5	0.4	0.030	1.0	<0.5
Sub outcrop	WM3	MOD. HEMATITIC QTZ-SERICITE SCHIST	1.8	0.1	0.040	16.0	<0.5
Sub outcrop	WM4	FERRUG. PSAMMITIC SCHIST WITH GOSS. VEINS AND SPARSE QTZ STRINGERS	<0.1	<0.1	0.015	18.0	<0.5
Sub outcrop	WM5	HEMATITIC QTZ-EYE SER-MUSC. SCHIST (AUGEN SCHIST)	2.1	<0.1	0.023	1.0	<0.5
Rubbly outcrop	WM6	SER-QTZ-HEM-LIM-CHL. SCHIST WITH SCATTERED QTZ EYES	2.1	0.1	0.022	<0.5	<0.5


Burma Rd Prospect
Willunga Mercury Mine
Billygoat Hill
Burma Rd
Enterprise Rd
Mt Monster
Au Mine
Underground Samples
Blackfellows Creek
Blackfellows Creek Rd
Mt Effie
Finniss River

APPENDIX 2

Land Titles Search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211
A F CHAPLIN
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213
214
CROWN LAND
OP 17735
197
S A CHAPLIN
592

JUBILEE GOLD MINES NL

14th December, 1988.

Phil Nicolaou,
L.T.O.,
25 Pirie Street,
ADELAIDE 5000.

Dear Sir,

Furthur to our telephone conversation today, please supply title searches on the following locations :

KUITPO hundred : 290, [illegible]570 and 287

MYPONGA hundred : 209 and [illegible]

I enclose a cheque for $36.00

Yours faithfully,

Brian Saunders,
DIRECTOR.

APPENDIX 3 IS MISSING