

# Open File Envelope

## No. 694

**SML 125**

**ALGEBUCKINA – PEAKE CREEK AREA**

**PROGRESS REPORTS TO LICENCE EXPIRY/RENEWAL  
FOR THE PERIOD 1/10/1966 TO 30/9/1967**

Submitted by  
North Broken Hill Ltd  
1967

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Telephone: (08) 8463 3000  
Facsimile: (08) 8204 1880



**Government of South Australia**  
Primary Industries and Resources SA

DEPARTMENT OF MINES,  
169 RUNDLE ST., ADELAIDE

Please indicate approximate location of bore and

ALGEBURNA SIDING.

MT. MCGSTON

28°00'

NORTH BROKEN HILL LTD.  
D.M. 1339/66

NILPINNA

MT. YOUNGHUS AND  
MT. DENISON

NEALES

WARRINA R.S.

4 m

28°15'

SCALE 1" = 4 MILES.

EDWARD CK. R.

D.M. 1629/68

255

S.M.L. 125

S.M.L. 84.

NILPINNA H.S.

MT. FOX

136°00'

28°30'

CONTENTS ENVELOPE 694

TENEMENT: S.M.L. No. 125

TENEMENT HOLDER: North Broken Hill Ltd

REPORT:

|   |             |
|---|-------------|
| Report on Exploration Algebuckina-Peake and Denison Ranges<br>period 1st October to 31st December, 1966 | (pgs. 3&4)  |
| Peake and Denison Ranges Exploration Report for period<br>1st January to 31st March, 1967               | (pgs. 5&6)  |
| Peake and Denison Ranges Exploration Report for period<br>three months ended 30th June, 1967            | (pg. 7)     |
| Exploration Report period ended 30th September, 1967  | (pg. 8)     |
| Results of Analysis   | (pgs. 9-30) |

PLANS:

|   |         |
|---|---------|
| War Loan & Last chance Copper Mines     | (694-1) |
| Copper Top Mines Area                   | (694-2) |
| Peake & Lime Kiln Mines                 | (694-3) |
| Coppertop Hill Mines Area               | (694-4) |
| Coominaree Mines & Coppertop Mine No. 7 | (694-5) |
| Coppertop Mines No. 5&6                 | (694-6) |

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1201 472

NORTH BROKEN HILL LIMITED  
(Incorporated in the State of Victoria)

SPECIAL MINING LEASE NO.125      0003

ALGEBUCKINA - PEAKE AREA PEAKE AND DENISON RANGES

THREE MONTHLY REPORT ON EXPLORATION PERIOD 1ST OCTOBER  
TO 31ST DECEMBER, 1966.

A reconnaissance of the area was made in October by two Company geologists and a prospector guide, who had formerly resided in the area. Thirty three stream sediment samples were collected in the vicinity of some of the Copper Top and Peake mines to assist with orientation studies. Chip and grab samples were collected from several lodes and dumps respectively.

It is not possible yet to submit a plan showing sample points, as no detailed mapping has been carried out. Details of assays are as follow -

| Sample No. | Width<br>(feet) | Location   | % Cu. |
|------------|-----------------|--|-------|
| PDC.1      | 7               | Copper Top West workings.                                      | 1.10  |
| PDC.2      | 2-2/3           | Copper Top Mine in adit near shaft.                            | 1.55  |
| PDC.3      | 5               | Copper Top Mine in adit near shaft, 18ft. east of PDC.2.       | 0.02  |
| PDC.4      | dump            | 15ft. shaft in basic rocks south of Mt. Denison.               | 0.06  |
| PDC.5      | dump            | 30ft. shaft - same area.                                       | 0.14  |
| PDC.6      | dump            | 15ft. shaft - Peake Mines area.                                | 0.62  |
| PDC.7      | dump            | Same locality - chips from adjacent ferruginous gossan.        | 0.22  |
| PDC.8      | 2               | Limonite zone in granite gneiss at 30ft. shaft.                | 0.16  |
| PDC.9      | 15              | Open cut - Peake South group of mines - ferruginous quartzite. | 0.40  |
| PDC.10     | 7               | Similar formation, 300 yards to south-west.                    | 0.48  |

Subsequently two technical assistants established a camp at Little Bligh bore, east of Warrina and systematic stream sediment sampling was carried out in the above areas. A total of 942 samples was collected and submitted to McPhar Geophysics Proprietary Limited for analysis for Pb., Cu., Zn., and Ni., by atomic absorption spectrograph.



0004

The party was withdrawn early in December following the heavy rains. It is not intended to resume exploration of the area until late March 1967 after the hottest part of the summer period.

Broken Hill,  
19th December 1966.  
GWC/FB

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19/4/67  
0005 P. 2

NORTH BROKEN HILL LIMITED  
(Incorporated in the State of Victoria)

SPECIAL MINING LEASE NO.125

PEAKE AND DENISON RANGES

THREE MONTHLY REPORT ON EXPLORATION FOR  
PERIOD, 1ST JANUARY 1967 TO 31ST MARCH 1967

No field work was carried out during the period because of the hot summer conditions. All geochemical data collected to date was compiled on plans under the supervision of the Company's geochemist at our Albury office.

The following plans have been produced:

1. Cu, Pb, Zn and Ni overlays : Scale 1 inch =  $\frac{1}{4}$  mile.  
 $\frac{1}{4}$  mile interval stream sediment sampling -  
Mount Denison-Mount Younghusband area.
2. Cu, Pb, Zn and Ni overlays : Scale 1 inch = 400 feet.

400 feet interval stream sediment sampling:

Coominaree area (adjacent 2 mines)  
Coppertop Mine area  
Peake Mines area  
Lime Kiln area  
South-west of Mount Denison - 3 mines

Some notable copper anomalies have been obtained in several areas which will require further follow-up investigations. Results for the other elements have been uninteresting.

Future Programme

Early in April two field assistants will proceed from Broken Hill to the region to continue the geochemical sampling programme. Initially they will again be located at Little Bligh Bore or Old Peake Homestead.

Work will commence in the Peake area, principally on the areas of "Archaean" rocks. Sampling at intervals of 400 feet will be carried out over a mile radius of known mineral occurrences and established anomalies (e.g. Coppertop Hill area). Elsewhere the sampling interval will be  $\frac{1}{4}$  mile.

Subsequently the party will move southward to the Coominaree Mine area and then into Special Mining Lease No.131. Two senior geologists of the Company will also make a visit to the area during the period.

Broken Hill,  
10th April 1967.  
GWC/JL

*Expenditure removed to docket*

*DM 1339/66*

*JH TLO.  
22/9/72.*

Envelope 694.



NORTH BROKEN HILL LIMITED  
Incorporated in the State of Victoria)

0007<sup>P123</sup>

SPECIAL MINING LEASE NO.125

PEAKE AND DENISON RANGES

REPORT ON EXPLORATION FOR THE PERIOD THREE MONTHS ENDED  
30TH JUNE 1967

Over 1,000 samples were collected in the area, the majority coming from the vicinity of the old Peake Mine and smelter, and the Coppertop Hill area.

Initial plotting of results was done in the field. Final plotting, interpretation and calculation of thresholds were carried out at the Albury office by the Company's geochemist. The streams adjacent to the Peake Mines contain many stream sediment anomalies, and follow-up ridge and spur auger surveys are planned for the future.

In April, the Senior Exploration Geologist and Company Geochemist visited the area. Rock samples were collected for thin section preparation and chemical analysis to aid in geochemical orientation work. One additional relatively large old copper mine, not previously recorded on geological maps, was located about five miles due south of old Peake homestead.

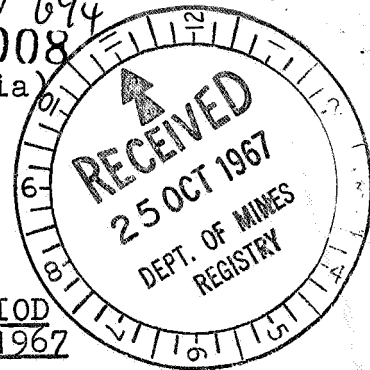
The field party in the area has been increased to four to expedite collection of samples.

Broken Hill,  
26th July 1967.  
GWC/LJ.

ENV 694  
NORTH BROKEN HILL LIMITED 0008  
(Incorporated in the State of Victoria)

SPECIAL MINING LEASE NO.125  
PEAKE AND DENISON RANGES

REPORT ON EXPLORATION FOR THE PERIOD  
THREE MONTHS ENDED 30TH SEPTEMBER 1967



Stream sediment sampling was carried out in the Mount Kingston and the Western Peake drainage areas of the S.M.L.

Ridge and spur geochemical surveys were conducted in the Peake Mine area.

The reconnaissance stream sediment survey has been fully completed. The field party has been withdrawn from the area for the summer months. Appraisal of the geochemical results will continue at the Company's Albury office, when areas for detailed work, grid surveys etc. will be selected.

The field party will return to the area early in 1968.

Broken Hill,  
19th October 1967.  
GWC/JL



GEOCHEMICAL LABORATORY

ENV 964  
253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 0009

Area:

Samples of:

Date 24/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 1     | 10      | 15      | 25      | <5      |         |         |
| 2             | 5       | 15      | 25      | <5      |         |         |
| 3             | 5       | 15      | 25      | 5       |         |         |
| 4             | 10      | 15      | 35      | 10      |         |         |
| 5             | 5       | 15      | 25      | <5      |         |         |
| 6             | 15      | 10      | 30      | 10      |         |         |
| 7             | 5       | 15      | 25      | 5       |         |         |
| 8             | 5       | 10      | 20      | 5       |         |         |
| 9             | 35      | 15      | 30      | 10      |         |         |
| 10            | 5       | 15      | 25      | 5       |         |         |
| 11            | 5       | 10      | 35      | 5       |         |         |
| 12            | 5       | 15      | 25      | 5       |         |         |
| 13            | 5       | 10      | 25      | 5       |         |         |
| 14            | 5       | 10      | 20      | 5       |         |         |
| 15            | 5       | 15      | 25      | 5       |         |         |
| 16            | 10      | 15      | 25      | 10      |         |         |
| 17            | 5       | 15      | 25      | 10      |         |         |
| 18            | 5       | 15      | 25      | <5      |         |         |
| 19            | 5       | 15      | 25      | <5      |         |         |
| 20            | 5       | 20      | 20      | 5       |         |         |
| 21            | 5       | 15      | 20      | 5       |         |         |
| 22            | 5       | 15      | 20      | <5      |         |         |
| 23            | 5       | 10      | 25      | <5      |         |         |
| 24            | 5       | 15      | 20      | 5       |         |         |
| 25            | 5       | 15      | 20      | <5      |         |         |
| 26            | 5       | 10      | 35      | 10      |         |         |
| 27            | 5       | 10      | 20      | 5       |         |         |
| 28            | 5       | 10      | 25      | <5      |         |         |
| 29            | 5       | 5       | 25      | <5      |         |         |
| 30            | 5       | 10      | 20      | <5      |         |         |
| 31            | 5       | 10      | 25      | <5      |         |         |
| 32            | 10      | 15      | 25      | <5      |         |         |
| 33            | 5       | 10      | 30      | 5       |         |         |
| 34            | 5       | 15      | 20      | 5       |         |         |
| 35            | 50      | 15      | 20      | 10      |         |         |
| 36            | 40      | 15      | 35      | 10      |         |         |
| 37            | 20      | 15      | 30      | 5       |         |         |
| 38            | 5       | 10      | 30      | <5      |         |         |
| 39            | 5       | 15      | 35      | 5       |         |         |
| 40            | 10      | 15      | 25      | 5       |         |         |
| 41            | 5       | 10      | 25      | 10      |         |         |
| 42            | 25      | 15      | 45      | 10      |         |         |
| 43            | 20      | 15      | 30      | 5       |         |         |
| 44            | 50      | 15      | 45      | 5       |         |         |
| 45            | 10      | 10      | 30      | <5      |         |         |
| 46            | 25      | 10      | 45      | 10      |         |         |
| 47            | 10      | 20      | 35      | 10      |         |         |
| 48            | 5       | 15      | 30      | 10      |         |         |
| 49            | 10      | 20      | 40      | 10      |         |         |
| 50            | 20      | 15      | 40      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO3 leach.

Signed *flgman*



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 2 0010

Area:

Samples of:

Date 24/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 51    | 10      | 15      | 30      | <5      |         |         |
| 52            | 25      | 20      | 50      | 10      |         |         |
| 53            | 5       | 15      | 25      | <5      |         |         |
| 54            | 10      | 15      | 40      | 5       |         |         |
| 55            | 25      | 20      | 45      | 10      |         |         |
| 56            | 5       | 15      | 40      | 5       |         |         |
| 57            | 5       | 15      | 35      | <5      |         |         |
| 58            | 5       | 15      | 30      | <5      |         |         |
| 59            | 10      | 20      | 45      | <5      |         |         |
| 60            | 10      | 15      | 45      | <5      |         |         |
| 61            | 10      | 20      | 45      | <5      |         |         |
| 62            | 5       | 15      | 35      | <5      |         |         |
| 63            | 10      | 15      | 45      | <5      |         |         |
| 64            | 10      | 20      | 40      | <5      |         |         |
| 65            | 10      | 15      | 45      | <5      |         |         |
| 66            | 15      | 20      | 45      | <5      |         |         |
| 67            | 15      | 20      | 35      | <5      |         |         |
| 68            | 10      | 20      | 35      | <5      |         |         |
| 69            | 10      | 15      | 35      | <5      |         |         |
| 70            | 25      | 15      | 30      | 5       |         |         |
| 71            | 15      | 20      | 45      | 5       |         |         |
| 72            | 20      | 15      | 35      | 5       |         |         |
| 73            | 15      | 20      | 50      | 5       |         |         |
| 74            | 25      | 20      | 35      | <5      |         |         |
| 75            | 40      | 20      | 40      | 5       |         |         |
| 76            | 50      | 20      | 45      | 10      |         |         |
| 77            | 80      | 20      | 40      | 10      |         |         |
| 78            | 25      | 20      | 35      | 10      |         |         |
| 79            | 10      | 15      | 35      | 5       |         |         |
| 80            | 55      | 20      | 45      | 10      |         |         |
| 81            | 10      | 20      | 30      | <5      |         |         |
| 82            | 40      | 20      | 40      | 10      |         |         |
| 83            | 15      | 15      | 40      | <5      |         |         |
| 84            | 40      | 20      | 40      | 10      |         |         |
| 85            | 15      | 20      | 50      | 10      |         |         |
| 86            | 40      | 15      | 45      | 10      |         |         |
| 87            | 20      | 15      | 35      | 5       |         |         |
| 88            | 25      | 15      | 40      | 5       |         |         |
| 89            | 20      | 20      | 40      | 5       |         |         |
| 90            | 40      | 15      | 40      | 10      |         |         |
| 91            | 35      | 15      | 40      | 10      |         |         |
| 92            | 45      | 15      | 45      | 10      |         |         |
| 93            | 45      | 25      | 50      | 10      |         |         |
| 94            | 55      | 20      | 45      | 10      |         |         |
| 95            | 35      | 15      | 40      | 10      |         |         |
| 96            | 105     | 20      | 50      | 10      |         |         |
| 97            | 40      | 20      | 40      | 5       |         |         |
| 98            | 35      | 15      | 45      | 10      |         |         |
| 99            | 20      | 15      | 50      | 5       |         |         |
| 100           | 45      | 15      | 45      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 26% HNO<sub>3</sub> leach.

Signed P. R. Lamson



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 3 0011

Area:

Samples of: Date 24/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 101    | 35      | 15      | 50      | 5       |         |         |
| 2             | 20      | 10      | 45      | 5       |         |         |
| 3             | 30      | 15      | 50      | <5      |         |         |
| 4             | 20      | 15      | 40      | 5       |         |         |
| 5             | 45      | 10      | 40      | <5      |         |         |
| 6             | 55      | 10      | 40      | <5      |         |         |
| 7             | 35      | 15      | 45      | 5       |         |         |
| 8             | 15      | 10      | 35      | <5      |         |         |
| 9             | 40      | 15      | 40      | 5       |         |         |
| 10            | 55      | 10      | 40      | 10      |         |         |
| 11            | 70      | 10      | 35      | 10      |         |         |
| 12            | 35      | 10      | 35      | 10      |         |         |
| 13            | 20      | 5       | 30      | <5      |         |         |
| 14            | 30      | 15      | 45      | 5       |         |         |
| 15            | 25      | 10      | 30      | <5      |         |         |
| 16            | 30      | 10      | 35      | 5       |         |         |
| 17            | 30      | 15      | 35      | 5       |         |         |
| 18            | 35      | 10      | 40      | 5       |         |         |
| 19            | 35      | 15      | 30      | <5      |         |         |
| 20            | 25      | 15      | 45      | 5       |         |         |
| 21            | 20      | 15      | 45      | 10      |         |         |
| 22            | 20      | 15      | 40      | 5       |         |         |
| 23            | 15      | 10      | 40      | 5       |         |         |
| 24            | 25      | 15      | 45      | 10      |         |         |
| 25            | 10      | 15      | 35      | <5      |         |         |
| 26            | 45      | 15      | 50      | 5       |         |         |
| 27            | 55      | 15      | 45      | 10      |         |         |
| 28            | 10      | 10      | 35      | <5      |         |         |
| 29            | 15      | 15      | 40      | 5       |         |         |
| 30            | 10      | 20      | 40      | <5      |         |         |
| 31            | 10      | 15      | 35      | <5      |         |         |
| 32            | 25      | 20      | 45      | 10      |         |         |
| 33            | 10      | 15      | 40      | 5       |         |         |
| 34            | 10      | 20      | 40      | 5       |         |         |
| 35            | 20      | 15      | 35      | <5      |         |         |
| 36            | 5       | 25      | 40      | 5       |         |         |
| 37            | 40      | 20      | 35      | 5       |         |         |
| 38            | 40      | 20      | 40      | 5       |         |         |
| 39            | 35      | 25      | 45      | 10      |         |         |
| 40            | 25      | 20      | 30      | 5       |         |         |
| 41            | 15      | 15      | 35      | 5       |         |         |
| 42            | 5       | 15      | 35      | 5       |         |         |
| 43            | 5       | 20      | 35      | 5       |         |         |
| 44            | 5       | 15      | 35      | <5      |         |         |
| 45            | 5       | 15      | 30      | 5       |         |         |
| 46            | 5       | 15      | 35      | 5       |         |         |
| 47            | 5       | 15      | 30      | 5       |         |         |
| 48            | 10      | 20      | 40      | 5       |         |         |
| 49            | 10      | 20      | 35      | 5       |         |         |
| 150           | 75      | 20      | 30      | 10      |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed *[Signature]*





GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD,

SHEET No. 4 0012

Area:

Samples of: Date 24/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 151    | 15      | 15      | 35      | 5       |         |         |
| 52            | 55      | 15      | 35      | 10      |         |         |
| 1000          | 10      | 15      | 30      | < 5     |         |         |
| 1             | 10      | 10      | 30      | 5       |         |         |
| 2             | 10      | 10      | 30      | 10      |         |         |
| 3             | 10      | 10      | 30      | 5       |         |         |
| 4             | 10      | 10      | 35      | 5       |         |         |
| 5             | 10      | 5       | 30      | 5       |         |         |
| 6             | 10      | 15      | 35      | 5       |         |         |
| 7             | 10      | 15      | 30      | 5       |         |         |
| 8             | 10      | 10      | 35      | 5       |         |         |
| 9             | 10      | 15      | 25      | < 5     |         |         |
| 10            | 5       | 15      | 30      | 10      |         |         |
| 11            | 10      | 15      | 25      | 5       |         |         |
| 12            | 15      | 15      | 30      | 5       |         |         |
| 13            | 10      | 10      | 30      | 5       |         |         |
| 14            | 5       | 15      | 35      | 5       |         |         |
| 15            | 10      | 15      | 30      | 5       |         |         |
| 16            | 10      | 10      | 30      | 5       |         |         |
| 17            | 10      | 15      | 30      | 5       |         |         |
| 18            | 20      | 15      | 45      | 10      |         |         |
| 19            | 10      | 15      | 40      | 5       |         |         |
| 20            | 10      | 20      | 30      | 10      |         |         |
| 21            | 10      | 15      | 25      | 5       |         |         |
| 22            | 5       | 20      | 40      | 10      |         |         |
| 23            | 10      | 20      | 45      | 10      |         |         |
| 24            | 10      | 15      | 35      | 5       |         |         |
| 25            | 10      | 10      | 40      | 10      |         |         |
| 26            | 10      | 15      | 30      | 5       |         |         |
| 27            | 10      | 15      | 45      | 10      |         |         |
| 28            | 10      | 20      | 30      | 10      |         |         |
| 29            | 5       | 15      | 30      | 5       |         |         |
| 30            | 10      | 15      | 35      | 5       |         |         |
| 31            | 15      | 15      | 25      | 10      |         |         |
| 32            | 10      | 10      | 25      | 5       |         |         |
| 33            | 10      | 10      | 25      | < 5     |         |         |
| 34            | 10      | 15      | 35      | 5       |         |         |
| 35            | 15      | 10      | 35      | 5       |         |         |
| 36            | 25      | 10      | 35      | 10      |         |         |
| 37            | 25      | 15      | 25      | 5       |         |         |
| 38            | 15      | 15      | 45      | 5       |         |         |
| 39            | 70      | 20      | 45      | 10      |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed *[Signature]*



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 1.0013

Area:

Samples of:

Date 25/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 153    | 15      | 15      | 40      | 5       |         |         |
| 4             | 15      | 15      | 40      | <5      |         |         |
| 5             | 10      | 15      | 30      | <5      |         |         |
| 6             | 5       | 15      | 35      | <5      |         |         |
| 7             | 10      | 15      | 45      | 5       |         |         |
| 8             | 15      | 10      | 40      | <5      |         |         |
| 9             | 20      | 15      | 45      | <5      |         |         |
| 60            | 10      | 15      | 40      | <5      |         |         |
| 61            | 20      | 10      | 45      | 5       |         |         |
| 62            | 10      | 20      | 50      | <5      |         |         |
| 63            | 10      | 20      | 40      | 5       |         |         |
| 64            | 10      | 15      | 50      | <5      |         |         |
| 65            | 10      | 15      | 45      | 5       |         |         |
| 66            | 10      | 15      | 40      | 5       |         |         |
| 67            | 15      | 15      | 40      | 5       |         |         |
| 68            | 10      | 15      | 35      | 5       |         |         |
| 69            | 10      | 15      | 45      | <5      |         |         |
| 70            | 5       | 15      | 35      | <5      |         |         |
| 71            | 5       | 10      | 45      | <5      |         |         |
| 72            | 5       | 15      | 35      | <5      |         |         |
| 73            | 5       | 10      | 25      | 5       |         |         |
| 74            | 20      | 10      | 35      | 5       |         |         |
| 75            | 20      | 15      | 40      | 5       |         |         |
| 76            | 20      | 15      | 40      | 5       |         |         |
| 77            | 15      | 15      | 40      | 5       |         |         |
| 78            | 5       | 15      | 35      | 5       |         |         |
| 79            | 5       | 15      | 35      | 5       |         |         |
| 80            | 20      | 10      | 50      | 10      |         |         |
| 81            | 30      | 15      | 55      | 10      |         |         |
| 82            | 15      | 20      | 45      | 5       |         |         |
| 83            | 25      | 15      | 50      | 10      |         |         |
| 84            | 30      | 15      | 40      | 5       |         |         |
| 85            | 25      | 15      | 45      | 5       |         |         |
| 86            | 20      | 15      | 40      | 5       |         |         |
| 87            | 20      | 20      | 35      | <5      |         |         |
| 88            | 70      | 15      | 50      | 5       |         |         |
| 89            | 25      | 15      | 45      | 5       |         |         |
| 90            | 20      | 15      | 45      | 5       |         |         |
| 91            | 15      | 15      | 45      | <5      |         |         |
| 92            | 10      | 10      | 45      | 5       |         |         |
| 93            | 5       | 15      | 35      | <5      |         |         |
| 94            | 5       | 15      | 35      | 5       |         |         |
| 95            | 5       | 10      | 40      | 5       |         |         |
| 96            | 5       | 10      | 30      | <5      |         |         |
| 97            | 20      | 10      | 35      | 5       |         |         |
| 98            | 20      | 10      | 40      | <5      |         |         |
| 99            | 15      | 15      | 35      | 5       |         |         |
| 200           | 15      | 15      | 40      | 5       |         |         |
| 1             | 35      | 15      | 55      | 10      |         |         |
| 2             | 15      | 15      | 40      | 10      |         |         |

Atomic Absorption Spectrophotometry,  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Hodge  
25/11/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 2.0014

Area:

Samples of:

Date 25/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 203    | 15      | 15      | 45      | 10      |         |         |
| 4             | 10      | 15      | 40      | 5       |         |         |
| 5             | 15      | 15      | 40      | 10      |         |         |
| 6             | 30      | 10      | 45      | 10      |         |         |
| 7             | 10      | 10      | 35      | 5       |         |         |
| 8             | 5       | 10      | 40      | 5       |         |         |
| 9             | 30      | 10      | 45      | 5       |         |         |
| 10            | 20      | 10      | 40      | 5       |         |         |
| 11            | 25      | 15      | 45      | 5       |         |         |
| 12            | 25      | 10      | 50      | 5       |         |         |
| 13            | 20      | 10      | 45      | 5       |         |         |
| 14            | 10      | 10      | 40      | 5       |         |         |
| 15            | 10      | 10      | 35      | 5       |         |         |
| 16            | 15      | 15      | 45      | 10      |         |         |
| 17            | 25      | 15      | 50      | 10      |         |         |
| 18            | 10      | 10      | 35      | 5       |         |         |
| 19            | 10      | 10      | 30      | 5       |         |         |
| 20            | 20      | 10      | 40      | 5       |         |         |
| 21            | 5       | 10      | 40      | 5       |         |         |
| 22            | 30      | 10      | 40      | 5       |         |         |
| 23            | 15      | 15      | 40      | 5       |         |         |
| 24            | 10      | 15      | 45      | 5       |         |         |
| 25            | 10      | 15      | 45      | 5       |         |         |
| 26            | 10      | 15      | 40      | <5      |         |         |
| 27            | 70      | 15      | 55      | 15      |         |         |
| 28            | 15      | 15      | 50      | 5       |         |         |
| 29            | 10      | 10      | 50      | 5       |         |         |
| 30            | 15      | 15      | 45      | <5      |         |         |
| 31            | 20      | 15      | 35      | 5       |         |         |
| 32            | 275     | 15      | 45      | 5       |         |         |
| 33            | 450     | 25      | 55      | 10      |         |         |
| 34            | 40      | 20      | 40      | 10      |         |         |
| 35            | 30      | 25      | 35      | 5       |         |         |
| 36            | 25      | 15      | 35      | <5      |         |         |
| 37            | 35      | 15      | 30      | 5       |         |         |
| 38            | 40      | 15      | 30      | 10      |         |         |
| 39            | 15      | 15      | 30      | 5       |         |         |
| 241           | 50      | 15      | 25      | 5       |         |         |
| 42            | 50      | 140     | 75      | 10      |         |         |
| 43            | 165     | 25      | 30      | 10      |         |         |
| 45            | 20      | 20      | 30      | 5       |         |         |
| 46            | 15      | 15      | 30      | <5      |         |         |
| 47            | 20      | 10      | 35      | <5      |         |         |
| 48            | 20      | 15      | 25      | 5       |         |         |
| 49            | 15      | 10      | 30      | 5       |         |         |
| 50            | 45      | 10      | 40      | 5       |         |         |
| 51            | 50      | 10      | 45      | 10      |         |         |
| 52            | 50      | 10      | 45      | 10      |         |         |
| 53            | 55      | 10      | 50      | 10      |         |         |
| 54            | 50      | 10      | 45      | 10      |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed S. J. Hodge  
25/11/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0015

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 3.

Area:

Samples of:

Date 25/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 255    | 35      | 15      | 45      | 10      |         |         |
| 56            | 30      | 10      | 40      | 10      |         |         |
| 57            | 35      | 15      | 40      | 10      |         |         |
| 58            | 30      | 10      | 45      | 5       |         |         |
| 59            | 10      | 10      | 40      | <5      |         |         |
| 60            | 20      | 10      | 40      | <5      |         |         |
| 61            | 5       | 10      | 40      | <5      |         |         |
| 62            | 5       | 10      | 35      | <5      |         |         |
| 63            | 5       | 10      | 30      | 5       |         |         |
| 64            | 25      | 10      | 40      | 5       |         |         |
| 65            | 70      | 10      | 55      | 5       |         |         |
| 66            | 20      | 15      | 45      | 5       |         |         |
| 67            | 30      | 10      | 45      | 5       |         |         |
| 68            | 30      | 10      | 45      | 45      |         |         |
| 69            | 30      | 15      | 40      | 5       |         |         |
| 70            | 25      | 15      | 45      | 10      |         |         |
| 71            | 30      | 15      | 40      | 5       |         |         |
| 72            | 30      | 15      | 40      | 5       |         |         |
| 73            | 30      | 15      | 45      | 5       |         |         |
| 74            | 40      | 10      | 50      | 5       |         |         |
| 75            | 30      | 10      | 40      | 10      |         |         |
| 76            | 15      | 15      | 40      | 5       |         |         |
| 77            | 40      | 5       | 45      | 10      |         |         |
| 78            | 25      | 10      | 40      | 5       |         |         |
| 79            | 15      | 10      | 40      | 5       |         |         |
| 80            | 30      | 15      | 50      | 5       |         |         |
| 81            | 15      | 10      | 35      | <5      |         |         |
| 82            | 5       | 15      | 40      | 5       |         |         |
| 83            | 5       | 10      | 35      | 5       |         |         |
| 84            | 5       | 10      | 35      | <5      |         |         |
| 85            | 5       | 10      | 30      | <5      |         |         |
| 86            | 45      | 10      | 40      | 5       |         |         |
| 87            | 35      | 10      | 45      | 10      |         |         |
| 88            | 30      | 15      | 50      | 10      |         |         |
| 89            | 30      | 10      | 50      | 10      |         |         |
| 90            | 50      | 10      | 50      | 10      |         |         |
| 91            | 60      | 15      | 55      | 5       |         |         |
| 92            | 50      | 10      | 50      | 5       |         |         |
| 93            | 40      | 10      | 50      | 5       |         |         |
| 94            | 10      | 15      | 25      | <5      |         |         |
| 95            | 5       | 10      | 20      | <5      |         |         |
| 96            | 5       | 10      | 25      | <5      |         |         |
| 97            | 5       | 10      | 30      | <5      |         |         |
| 98            | 10      | 10      | 25      | <5      |         |         |
| 99            | 5       | 10      | 20      | 5       |         |         |
| 300           | 10      | 10      | 25      | 5       |         |         |
| 1             | 5       | 15      | 15      | 5       |         |         |
| 2             | 10      | 10      | 20      | 5       |         |         |
| 3             | 5       | 10      | 20      | 5       |         |         |
| 4             | 10      | 10      | 20      | 5       |         |         |

Atomic Absorption. Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed S2 Hodge  
25/11/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0016

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 4.

Area:

Samples of:

Date 25/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 305    | 10      | 10      | 20      | 5       |         |         |
| 6             | 50      | 10      | 30      | <5      |         |         |
| 7             | 15      | 10      | 25      | <5      |         |         |
| 8             | 30      | 10      | 25      | 5       |         |         |
| 9             | 10      | 10      | 25      | 5       |         |         |
| 10            | 5       | 10      | 25      | <5      |         |         |
| 11            | 5       | 10      | 20      | <5      |         |         |
| 12            | 10      | 10      | 20      | <5      |         |         |
| 13            | 5       | 5       | 20      | <5      |         |         |
| 14            | 5       | 10      | 25      | <5      |         |         |
| 15            | 35      | 15      | 35      | 15      |         |         |
| 16            | 2250    | 15      | 30      | 10      |         |         |
| 17            | 25      | 10      | 25      | 10      |         |         |
| 18            | 105     | 10      | 25      | 10      |         |         |
| 19            | 20      | 10      | 30      | 15      |         |         |
| 20            | 25      | 15      | 35      | 15      |         |         |
| 21            | 35      | 15      | 35      | 15      |         |         |
| 22            | 15      | 15      | 35      | 15      |         |         |
| 23            | 610     | 15      | 30      | 10      |         |         |
| 24            | 20      | 15      | 35      | 10      |         |         |
| 25            | 45      | 15      | 40      | 15      |         |         |
| 26            | 15      | 10      | 30      | 5       |         |         |
| 27            | 35      | 10      | 40      | 15      |         |         |
| 28            | 10      | 10      | 20      | <5      |         |         |
| 29            | 20      | 15      | 25      | 5       |         |         |
| 30            | 10      | 10      | 30      | 15      |         |         |
| 31            | 15      | 15      | 35      | 10      |         |         |
| 32            | 15      | 15      | 40      | 10      |         |         |
| 33            | 5       | 15      | 40      | 15      |         |         |
| 34            | 10      | 15      | 40      | 10      |         |         |
| 35            | 5       | 10      | 25      | 5       |         |         |
| 36            | 5       | 15      | 25      | 5       |         |         |
| 37            | 55      | 15      | 20      | 5       |         |         |
| 38            | 10      | 15      | 25      | <5      |         |         |
| 39            | 10      | 15      | 25      | 10      |         |         |
| 40            | 10      | 15      | 25      | 5       |         |         |
| 41            | 10      | 15      | 25      | 5       |         |         |
| 42            | 15      | 15      | 20      | 5       |         |         |
| 43            | 10      | 20      | 30      | 10      |         |         |
| 44            | 15      | 15      | 35      | 10      |         |         |
| 1040          | 10      | 15      | 35      | 5       |         |         |
| 41            | 15      | 15      | 30      | 5       |         |         |
| 42            | 10      | 10      | 25      | 5       |         |         |
| 43            | 10      | 15      | 35      | 5       |         |         |
| 44            | 10      | 15      | 30      | 5       |         |         |
| 45            | 5       | 10      | 35      | 5       |         |         |
| 46            | 10      | 10      | 30      | 5       |         |         |
| 47            | 20      | 15      | 45      | 10      |         |         |
| 48            | 10      | 10      | 25      | 5       |         |         |
| 49            | 20      | 10      | 35      | 10      |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed S. J. Hedger  
25/11/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0017

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 5.

Area:

Samples of:

Date 25/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 1050   | 20      | 10      | 35      | 10      |         |         |
| 51            | 15      | 10      | 30      | 5       |         |         |
| 52            | 10      | 10      | 25      | 5       |         |         |
| 53            | 10      | 10      | 35      | 5       |         |         |
| 54            | 10      | 10      | 25      | 5       |         |         |
| 55            | 10      | 10      | 30      | 5       |         |         |
| 56            | 15      | 15      | 30      | 5       |         |         |
| 57            | 10      | 10      | 20      | 5       |         |         |
| 58            | 10      | 10      | 25      | <5      |         |         |
| 59            | 10      | 10      | 25      | <5      |         |         |
| 60            | 10      | 10      | 25      | 5       |         |         |
| 61            | 5       | 15      | 20      | <5      |         |         |
| 62            | 10      | 15      | 25      | <5      |         |         |
| 63            | 10      | 10      | 35      | 5       |         |         |
| 64            | 15      | 10      | 30      | 5       |         |         |
| 65            | 10      | 15      | 30      | <5      |         |         |
| 66            | 15      | 15      | 30      | 5       |         |         |
| 67            | 20      | 10      | 30      | 5       |         |         |
| 68            | 45      | 15      | 50      | 15      |         |         |
| 69            | 15      | 10      | 30      | 5       |         |         |
| 70            | 45      | 15      | 50      | 15      |         |         |
| 71            | 15      | 10      | 30      | <5      |         |         |
| 72            | 15      | 15      | 30      | <5      |         |         |
| 73            | 120     | 10      | 50      | 10      |         |         |
| 74            | 15      | 10      | 45      | 5       |         |         |
| 75            | 15      | 10      | 30      | 5       |         |         |
| 76            | 15      | 10      | 25      | 5       |         |         |
| 77            | 15      | 10      | 25      | 5       |         |         |
| 78            | 15      | 10      | 35      | 5       |         |         |
| 79            | 55      | 10      | 50      | 20      |         |         |
| 80            | 35      | 10      | 40      | 15      |         |         |
| 81            | 30      | 10      | 30      | 5       |         |         |
| 82            | 25      | 10      | 35      | 5       |         |         |
| 83            | 25      | 15      | 50      | 15      |         |         |
| 84            | 10      | 15      | 40      | 5       |         |         |
| 85            | 15      | 15      | 35      | <5      |         |         |
| 86            | 15      | 15      | 45      | 5       |         |         |
| 87            | 10      | 15      | 50      | <5      |         |         |
| 88            | 10      | 15      | 30      | <5      |         |         |
| 89            | 10      | 15      | 45      | <5      |         |         |
| 90            | 15      | 10      | 40      | <5      |         |         |
| 91            | 20      | 15      | 45      | <5      |         |         |
| 92            | 10      | 15      | 50      | 5       |         |         |
| 93            | 35      | 15      | 55      | 5       |         |         |
| 94            | 15      | 10      | 30      | 5       |         |         |
| 95            | 10      | 15      | 40      | 10      |         |         |
| 96            | 15      | 15      | 35      | 5       |         |         |
| 97            | 15      | 10      | 30      | 5       |         |         |
| 98            | 15      | 15      | 35      | 5       |         |         |
| 99            | 10      | 10      | 35      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed 22.11.66  
25/11/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0018

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 6.

Area:

Samples of:

Date 25/11/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 1100   | 10      | 10      | 40      | < 5     |         |         |
| 1             | 10      | 15      | 35      | < 5     |         |         |
| 2             | 10      | 20      | 40      | < 5     |         |         |
| 3             | 10      | 20      | 35      | < 5     |         |         |
| 4             | 10      | 10      | 30      | < 5     |         |         |
| 5             | 10      | 25      | 20      | < 5     |         |         |
| 6             | 10      | 15      | 25      | < 5     |         |         |
| 7             | 15      | 20      | 35      | 5       |         |         |
| 8             | 10      | 20      | 40      | 5       |         |         |
| 9             | 10      | 20      | 30      | 5       |         |         |
| 10            | 10      | 15      | 30      | 5       |         |         |
| 11            | 10      | 15      | 30      | 5       |         |         |
| 12            | 265     | 30      | 25      | 20      |         |         |
| 13            | 170     | 20      | 25      | 10      |         |         |
| 14            | 85      | 20      | 20      | 10      |         |         |
| 15            | 80      | 15      | 15      | 5       |         |         |
| 16            | 20      | 15      | 30      | 5       |         |         |
| 17            | 75      | 15      | 20      | 5       |         |         |
| 18            | 45      | 15      | 30      | 5       |         |         |
| 19            | 70      | 10      | 20      | 5       |         |         |
| 20            | 35      | 15      | 30      | 5       |         |         |
| 21            | 15      | 15      | 20      | 5       |         |         |
| 22            | 20      | 15      | 40      | 5       |         |         |
| 23            | 35      | 10      | 25      | 5       |         |         |
| 24            | 30      | 15      | 25      | 5       |         |         |
| 25            | 40      | 10      | 25      | < 5     |         |         |
| 26            | 15      | 10      | 25      | < 5     |         |         |
| 27            | 45      | 15      | 20      | < 5     |         |         |
| 28            | 20      | 15      | 40      | < 5     |         |         |
| 29            | 25      | 10      | 40      | 5       |         |         |
| 30            | 20      | 15      | 30      | < 5     |         |         |
| 31            | 25      | 10      | 25      | < 5     |         |         |
| 32            | 20      | 15      | 35      | 5       |         |         |
| 33            | 15      | 15      | 35      | < 5     |         |         |
| 34            | 10      | 10      | 30      | < 5     |         |         |
| 35            | 30      | 15      | 35      | < 5     |         |         |
| 36            | 35      | 15      | 40      | 5       |         |         |
| 37            | 25      | 10      | 30      | 5       |         |         |
| 38            | 45      | 10      | 40      | 5       |         |         |
| 39            | 20      | 15      | 45      | 5       |         |         |
| 40            | 10      | 15      | 40      | 5       |         |         |
| 41            | 5       | 15      | 30      | < 5     |         |         |
| 42            | 5       | 15      | 35      | < 5     |         |         |
| 43            | 5       | 10      | 25      | < 5     |         |         |
| 44            | 5       | 10      | 30      | < 5     |         |         |
| 45            | 35      | 15      | 40      | 5       |         |         |
| 46            | 125     | 10      | 65      | 10      |         |         |
| 47            | 15      | 10      | 40      | 5       |         |         |
| 48            | 25      | 15      | 45      | 5       |         |         |
| 49            | 30      | 15      | 40      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed S. J. H. 130  
25/11/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 7

0019

Area:

Samples of:

Date 25/11/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number                     | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|-----------------------------------|---------|---------|---------|---------|---------|---------|
| MSL 125 1150                      | 10      | 10      | 40      | 5       |         |         |
| 51                                | 50      | 10      | 40      | 10      |         |         |
| 52                                | 30      | 15      | 40      | 5       |         |         |
| 53                                | 45      | 15      | 45      | 10      |         |         |
| 54                                | 50      | 10      | 30      | 5       |         |         |
| SAMPLE MSL 125 1155 NOT RECEIVED. |         |         |         |         |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed S. E. Hodge  
25/11/66





GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL

SHEET No. 1 0020

Area: WARRINA

Samples of: SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 345   | 20      | 10      | 20      | 15      |         |         |
| 6             | 50      | 10      | 30      | 20      |         |         |
| 7             | 20      | 10      | 20      | 15      |         |         |
| 8             | 25      | 10      | 25      | 20      |         |         |
| 9             | 25      | 10      | 30      | 20      |         |         |
| 50            | 25      | 5       | 30      | 20      |         |         |
| 1             | 25      | 15      | 30      | 10      |         |         |
| 2             | 35      | 20      | 20      | 10      |         |         |
| 3             | 20      | 10      | 30      | 10      |         |         |
| 4             | 25      | 10      | 35      | 15      |         |         |
| 5             | 20      | 15      | 15      | 10      |         |         |
| 6             | 25      | 10      | 15      | 5       |         |         |
| 7             | 20      | 10      | 15      | 5       |         |         |
| 8             | 25      | 10      | 30      | 20      |         |         |
| 9             | 20      | 15      | 40      | 20      |         |         |
| 60            | 20      | 15      | 30      | 10      |         |         |
| 1             | 15      | 10      | 20      | 5       |         |         |
| 2             | 10      | 15      | 20      | 5       |         |         |
| 3             | 15      | 10      | 30      | 15      |         |         |
| 4             | 20      | 10      | 25      | 10      |         |         |
| 5             | 20      | 10      | 30      | 20      |         |         |
| 6             | 10      | 10      | 20      | 10      |         |         |
| 7             | 10      | 10      | 30      | 5       |         |         |
| 8             | 25      | 15      | 10      | 5       |         |         |
| 9             | 25      | 10      | 30      | 15      |         |         |
| 70            | 20      | 10      | 20      | 5       |         |         |
| 1             | 30      | 10      | 30      | 4       |         |         |
| 2             | 45      | 5       | 20      | 5       |         |         |
| 3             | 55      | 5       | 20      | 5       |         |         |
| 4             | 35      | 5       | 15      | 5       |         |         |
| 5             | 25      | 10      | 10      | 5       |         |         |
| 6             | 35      | 10      | 20      | 5       |         |         |
| 7             | 20      | 10      | 15      | 5       |         |         |
| 8             | 20      | 10      | 20      | 5       |         |         |
| 9             | 25      | 10      | 20      | 10      |         |         |
| 80            | 30      | 15      | 25      | 10      |         |         |
| 1             | 20      | 15      | 20      | 5       |         |         |
| 2             | 25      | 15      | 20      | 10      |         |         |
| 3             | 20      | 10      | 20      | 10      |         |         |
| 4             | 15      | 10      | 25      | 10      |         |         |
| 5             | 15      | 15      | 20      | 5       |         |         |
| 6             | 15      | 15      | 20      | 10      |         |         |
| 7             | 10      | 10      | 10      | 10      |         |         |
| 8             | 20      | 10      | 10      | 10      |         |         |
| 9             | 15      | 10      | 10      | 10      |         |         |
| 90            | 20      | 10      | 15      | 5       |         |         |
| 1             | 20      | 10      | 30      | 5       |         |         |
| 2             | 20      | 5       | 10      | 5       |         |         |
| 3             | 20      | 5       | 10      | 5       |         |         |
| 4             | 25      | 15      | 20      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
8/12/66



# GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.

PHONE: 23 2915

CABLE: "PHARGEO"  
ADELAIDE

Samples from: **NORTH BROKEN HILL LTD.**

SHEET No. **2**

**0021**

Area: **WARRINA**

Samples of: **SOIL**

Date **7/12/66**

## RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 395   | 10      | 5       | 30      | 5       |         |         |
| 6             | 5       | 10      | 25      | 5       |         |         |
| 7             | 10      | 10      | 25      | 5       |         |         |
| 8             | 10      | 10      | 20      | 5       |         |         |
| 9             | 10      | 10      | 20      | 5       |         |         |
| 400           | 10      | 15      | 20      | 5       |         |         |
| 1             | 10      | 10      | 25      | 5       |         |         |
| 2             | 5       | 10      | 25      | 5       |         |         |
| 3             | 15      | 15      | 20      | 5       |         |         |
| 4             | 10      | 10      | 15      | 5       |         |         |
| 5             | 15      | 10      | 25      | 5       |         |         |
| 6             | 10      | 5       | 20      | 5       |         |         |
| 7             | 5       | 10      | 20      | 5       |         |         |
| 8             | 10      | 10      | 30      | 10      |         |         |
| 9             | 10      | 10      | 15      | 5       |         |         |
| 10            | 10      | 10      | 15      | 5       |         |         |
| 11            | 10      | 10      | 25      | 5       |         |         |
| 12            | 5       | 10      | 20      | 5       |         |         |
| 13            | 15      | 10      | 30      | 10      |         |         |
| 14            | 5       | 10      | 40      | 5       |         |         |
| 15            | 5       | 10      | 20      | 5       |         |         |
| 16            | 5       | 10      | 20      | 5       |         |         |
| 17            | 5       | 10      | 25      | 5       |         |         |
| 18            | 5       | 10      | 20      | 5       |         |         |
| 19            | 5       | 10      | 10      | 5       |         |         |
| 20            | 5       | 5       | 20      | 5       |         |         |
| 21            | 5       | 5       | 10      | 5       |         |         |
| 22            | 5       | 10      | 10      | 5       |         |         |
| 23            | 5       | 10      | 20      | 5       |         |         |
| 24            | 5       | 10      | 25      | 5       |         |         |
| 25            | 5       | 10      | 10      | 5       |         |         |
| 26            | 5       | 5       | 20      | 5       |         |         |
| 27            | 10      | 5       | 30      | 10      |         |         |
| 28            | 5       | 5       | 15      | 5       |         |         |
| 29            | 5       | 5       | 20      | 5       |         |         |
| 30            | 5       | 5       | 20      | 5       |         |         |
| 31            | 5       | 5       | 20      | 5       |         |         |
| 32            | 5       | 10      | 20      | 5       |         |         |
| 33            | 5       | 5       | 20      | 5       |         |         |
| 34            | 5       | 5       | 20      | 5       |         |         |
| 35            | 5       | 5       | 20      | 5       |         |         |
| 36            | 10      | 10      | 25      | 5       |         |         |
| 37            | 5       | 5       | 10      | 5       |         |         |
| 38            | 5       | 5       | 20      | 5       |         |         |
| 39            | 5       | 10      | 20      | 5       |         |         |
| 40            | 5       | 10      | 15      | 5       |         |         |
| 41            | 5       | 5       | 20      | 5       |         |         |
| 42            | 5       | 5       | 15      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed

*P. Johnson*  
*8/12/66*



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 3

0022

Area: WARRINA

Samples of: SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 343   | 5       | 5       | 15      | 5       |         |         |
| 4             | 10      | 10      | 15      | 5       |         |         |
| 5             | 5       | 10      | 15      | 5       |         |         |
| 6             | 15      | 10      | 30      | 5       |         |         |
| 7             | 5       | 5       | 10      | 5       |         |         |
| 8             | 5       | 5       | 20      | 5       |         |         |
| 9             | 10      | 5       | 10      | 5       |         |         |
| 50            | 15      | 5       | 20      | 5       |         |         |
| 1             | 20      | 5       | 25      | 5       |         |         |
| 2             | 5       | 5       | 10      | 5       |         |         |
| 3             | 10      | 10      | 15      | 5       |         |         |
| 4             | 5       | 5       | 5       | 5       |         |         |
| 5             | 5       | 5       | 15      | 5       |         |         |
| 6             | 5       | 5       | 15      | 5       |         |         |
| 7             | 5       | 10      | 10      | 5       |         |         |
| 8             | 10      | 5       | 15      | 5       |         |         |
| 9             | 10      | 10      | 10      | 5       |         |         |
| 60            | 40      | 10      | 15      | 5       |         |         |
| 1             | 10      | 10      | 5       | 5       |         |         |
| 2             | 10      | 10      | 10      | 5       |         |         |
| 3             | 10      | 10      | 25      | 5       |         |         |
| 4             | 10      | 5       | 15      | 5       |         |         |
| 5             | 10      | 10      | 20      | 5       |         |         |
| 6             | 10      | 10      | 10      | 5       |         |         |
| 7             | 10      | 5       | 15      | 5       |         |         |
| 8             | 10      | 10      | 15      | 5       |         |         |
| 9             | 10      | 10      | 15      | 5       |         |         |
| 70            | 20      | 15      | 15      | 5       |         |         |
| 1             | 10      | 10      | 15      | 5       |         |         |
| 2             | 10      | 10      | 10      | 5       |         |         |
| 3             | 40      | 10      | 35      | 10      |         |         |
| 4             | 20      | 10      | 30      | 5       |         |         |
| 5             | 20      | 10      | 25      | 5       |         |         |
| 6             | 15      | 5       | 15      | 5       |         |         |
| 7             | 10      | 10      | 15      | 5       |         |         |
| 8             | 5       | 5       | 15      | 5       |         |         |
| 9             | 10      | 5       | 15      | 5       |         |         |
| 80            | 5       | 5       | 25      | 5       |         |         |
| 1             | 5       | 5       | 15      | 5       |         |         |
| 2             | 10      | 10      | 25      | 5       |         |         |
| 3             | 10      | 5       | 20      | 5       |         |         |
| 4             | 15      | 10      | 15      | 5       |         |         |
| 5             | 10      | 5       | 10      | 5       |         |         |
| 6             | 10      | 5       | 10      | 5       |         |         |
| 7             | 10      | 10      | 15      | 5       |         |         |
| 8             | 10      | 5       | 20      | 5       |         |         |
| 9             | 10      | 10      | 15      | 5       |         |         |
| 90            | 10      | 10      | 15      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
8/12/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0023

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 4

Area: WARRINA

Samples of: SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 491   | 10      | 5       | 15      | 5       |         |         |
| 2             | 10      | 5       | 15      | 5       |         |         |
| 3             | 10      | 5       | 15      | 5       |         |         |
| 4             | 5       | 5       | 15      | 5       |         |         |
| 5             | 25      | 10      | 15      | 5       |         |         |
| 6             | 10      | 10      | 20      | 5       |         |         |
| 7             | 10      | 10      | 10      | 5       |         |         |
| 8             | 10      | 10      | 10      | 5       |         |         |
| 9             | 10      | 10      | 15      | 5       |         |         |
| 500           | 10      | 5       | 10      | < 5     |         |         |
| 1             | 5       | 10      | 100     | 5       |         |         |
| 2             | 30      | 10      | 10      | 5       |         |         |
| 3             | 5       | 10      | 15      | 5       |         |         |
| 4             | 20      | 15      | 10      | 5       |         |         |
| 5             | 10      | 15      | 15      | 5       |         |         |
| 6             | 5       | 10      | 15      | 5       |         |         |
| 7             | 5       | 10      | 5       | 5       |         |         |
| 8             | 10      | 10      | 10      | < 5     |         |         |
| 9             | 10      | 10      | 5       | < 5     |         |         |
| 10            | 10      | 10      | 15      | 5       |         |         |
| 11            | 25      | 10      | 15      | 10      |         |         |
| 12            | 25      | 15      | 20      | 10      |         |         |
| 13            | 10      | 15      | 15      | 10      |         |         |
| 14            | 10      | 10      | 5       | 10      |         |         |
| 15            | 10      | 10      | 15      | 5       |         |         |
| 16            | 10      | 10      | 5       | 5       |         |         |
| 17            | 10      | 10      | 10      | 5       |         |         |
| 18            | 10      | 10      | 15      | 10      |         |         |
| 19            | 15      | 15      | 10      | 10      |         |         |
| 20            | 20      | 10      | 10      | 10      |         |         |
| 21            | 10      | 10      | 10      | 10      |         |         |
| 22            | 10      | 15      | 10      | 5       |         |         |
| 23            | 10      | 5       | 10      | 5       |         |         |
| 24            | 10      | 10      | 15      | 10      |         |         |
| 25            | 10      | 10      | 10      | 10      |         |         |
| 26            | 10      | 10      | 10      | 10      |         |         |
| 27            | 10      | 10      | 15      | 5       |         |         |
| 28            | 15      | 10      | 10      | 10      |         |         |
| 29            | 10      | 5       | 10      | 10      |         |         |
| 30            | 10      | 5       | 10      | 10      |         |         |
| 31            | 5       | 10      | 10      | 5       |         |         |
| 32            | 5       | 10      | 10      | 5       |         |         |
| 33            | 5       | 15      | 10      | 5       |         |         |
| 34            | 10      | 10      | 15      | 5       |         |         |
| 35            | 5       | 10      | 10      | 10      |         |         |
| 36            | 10      | 15      | 20      | 5       |         |         |
| 37            | 10      | 15      | 15      | 15      |         |         |
| 38            | 5       | 20      | 10      | 15      |         |         |
| 39            | 10      | 15      | 15      | 5       |         |         |
| 40            | 10      | 15      | 15      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
8/12/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 5

0024

Area: WARRINA

Samples of: SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL 125 541   | 5       | 15      | 25      | 5       |         |         |
| 42            | 10      | 15      | 10      | 5       |         |         |
| 43            | 5       | 10      | 15      | 5       |         |         |
| 44            | 5       | 15      | 15      | 5       |         |         |
| 45            | 10      | 15      | 20      | 5       |         |         |
| 46            | 5       | 15      | 10      | 5       |         |         |
| 47            | 5       | 15      | 15      | 10      |         |         |
| 48            | 5       | 15      | 5       | 5       |         |         |
| 49            | 5       | 15      | 20      | 10      |         |         |
| 50            | 10      | 20      | 25      | 10      |         |         |
| 51            | 10      | 10      | 10      | 5       |         |         |
| 52            | 5       | 15      | 10      | 10      |         |         |
| 53            | 15      | 15      | 15      | 10      |         |         |
| 54            | 15      | 10      | 20      | 5       |         |         |
| 55            | 10      | 10      | 10      | 10      |         |         |
| 56            | 15      | 10      | 25      | 5       |         |         |
| 57            | 15      | 10      | 20      | 5       |         |         |
| 58            | 10      | 10      | 20      | 5       |         |         |
| 59            | 15      | 10      | 20      | 10      |         |         |
| 60            | 10      | 10      | 20      | 10      |         |         |
| 61            | 25      | 10      | 20      | 10      |         |         |
| 62            | 5       | 10      | 20      | 10      |         |         |
| 63            | 5       | 10      | 20      | 10      |         |         |
| 64            | 5       | 10      | 20      | 10      |         |         |
| 65            | 5       | 10      | 30      | 5       |         |         |
| 66            | 5       | 15      | 25      | 5       |         |         |
| 67            | 10      | 15      | 30      | 5       |         |         |
| 68            | 10      | 10      | 15      | 5       |         |         |
| 69            | 10      | 15      | 30      | 5       |         |         |
| MSL125 1155   | 15      | 10      | 25      | 5       |         |         |
| 56            | 10      | 10      | 15      | 5       |         |         |
| 57            | 10      | 10      | 10      | 5       |         |         |
| 58            | 10      | 10      | 10      | 5       |         |         |
| 59            | 5       | 10      | 10      | 5       |         |         |
| 60            | 10      | 10      | 15      | 5       |         |         |
| 61            | 10      | 10      | 10      | 5       |         |         |
| 62            | 10      | 5       | 15      | 5       |         |         |
| 63            | 25      | 15      | 20      | <5      |         |         |
| 64            | 15      | 15      | 15      | <5      |         |         |
| 65            | 10      | 15      | 20      | <5      |         |         |
| 66            | 10      | 15      | 20      | <5      |         |         |
| 67            | 10      | 10      | 20      | <5      |         |         |
| 68            | 10      | 15      | 20      | 5       |         |         |
| 69            | 10      | 15      | 20      | 5       |         |         |
| 70            | 10      | 15      | 15      | <5      |         |         |
| 71            | 10      | 15      | 15      | 5       |         |         |
| 73            | 10      | 10      | 25      | 5       |         |         |
| 74            | 10      | 15      | 25      | 5       |         |         |
| 75            | 10      | 10      | 30      | 5       |         |         |
| 76            | 10      | 10      | 20      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
8/12/66

Entered  
22.12.66  
B.L.M.



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0025

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 6

Area: WARRINA

Samples of:SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 1177   | 5       | 15      | 20      | 5       |         |         |
| 79            | 5       | 15      | 15      | <5      |         |         |
| 80            | 15      | 15      | 20      | 5       |         |         |
| 81            | 5       | 15      | 15      | <5      |         |         |
| 83            | 5       | 15      | 30      | 5       |         |         |
| 84            | 10      | 10      | 20      | 5       |         |         |
| 85            | 5       | 10      | 20      | 5       |         |         |
| 86            | 5       | 10      | 25      | <5      |         |         |
| 87            | 10      | 5       | 20      | 5       |         |         |
| 88            | 5       | 10      | 15      | 5       |         |         |
| 89            | 20      | 10      | 20      | 5       |         |         |
| 90            | 5       | 10      | 25      | 5       |         |         |
| 91            | 5       | 10      | 20      | 5       |         |         |
| 92            | 5       | 10      | 20      | 5       |         |         |
| 93            | 5       | 10      | 20      | 5       |         |         |
| 94            | 5       | 10      | 30      | 5       |         |         |
| 95            | 5       | 15      | 25      | 5       |         |         |
| 96            | 5       | 10      | 20      | 10      |         |         |
| 97            | 5       | 10      | 20      | 10      |         |         |
| 98            | 5       | 10      | 25      | 5       |         |         |
| 99            | 5       | 10      | 35      | <5      |         |         |
| 1200          | 5       | 10      | 20      | 5       |         |         |
| 1             | 5       | 10      | 30      | 5       |         |         |
| 2             | 5       | 10      | 25      | 5       |         |         |
| 3             | 5       | 10      | 25      | 5       |         |         |
| 4             | 5       | 10      | 25      | 5       |         |         |
| 5             | 10      | 15      | 25      | 10      |         |         |
| 6             | 10      | 15      | 20      | 5       |         |         |
| 7             | 25      | 15      | 30      | 10      |         |         |
| 8             | 20      | 10      | 25      | 10      |         |         |
| 9             | 50      | 15      | 30      | 5       |         |         |
| 10            | 15      | 10      | 10      | 5       |         |         |
| 11            | 5       | 15      | 10      | 5       |         |         |
| 12            | 5       | 10      | 15      | 5       |         |         |
| 13            | 5       | 10      | 20      | 5       |         |         |
| 14            | 5       | 10      | 25      | 5       |         |         |
| 15            | 5       | 10      | 30      | 5       |         |         |
| 16            | 5       | 10      | 25      | 5       |         |         |
| 17            | 5       | 10      | 20      | 5       |         |         |
| 18            | 5       | 10      | 25      | 5       |         |         |
| 19            | 5       | 10      | 25      | 5       |         |         |
| 20            | 5       | 10      | 20      | <5      |         |         |
| 21            | 5       | 10      | 20      | <5      |         |         |
| 22            | 5       | 10      | 20      | 5       |         |         |
| 23            | 5       | 10      | 25      | 5       |         |         |
| 24            | 5       | 10      | 25      | 10      |         |         |
| 25            | 5       | 10      | 10      | 5       |         |         |
| 26            | 5       | 10      | 10      | <5      |         |         |
| 27            | 5       | 10      | 10      | 5       |         |         |
| 28            | 5       | 15      | 10      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
8/12/66

MISSING  
1172  
1178  
1182



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

0026

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 7

Area: WARRINA

Samples of: SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 1229   | 5       | 10      | 10      | < 5     |         |         |
| 30            | 5       | 10      | 10      | 5       |         |         |
| 31            | 5       | 10      | 10      | < 5     |         |         |
| 32            | 5       | 10      | 15      | 5       |         |         |
| 33            | 5       | 10      | 10      | 5       |         |         |
| 34            | 5       | 10      | 15      | 5       |         |         |
| 35            | 5       | 15      | 15      | 10      |         |         |
| 36            | 5       | 10      | 20      | 5       |         |         |
| 37            | 5       | 15      | 10      | 5       |         |         |
| 38            | 5       | 15      | 10      | 5       |         |         |
| 39            | 5       | 10      | 20      | 10      |         |         |
| 40            | 5       | 10      | 15      | 5       |         |         |
| 41            | 5       | 15      | 15      | 5       |         |         |
| 42            | 5       | 10      | 10      | 5       |         |         |
| 43            | 5       | 10      | 15      | 10      |         |         |
| 44            | 5       | 15      | 15      | 5       |         |         |
| 45            | 10      | 10      | 20      | < 5     |         |         |
| 46            | 5       | 15      | 15      | 5       |         |         |
| 48            | 5       | 15      | 15      | 5       |         |         |
| 49            | 10      | 15      | 10      | 5       |         |         |
| 50            | 5       | 15      | 20      | 5       |         |         |
| 51            | 10      | 15      | 10      | 5       |         |         |
| 52            | 10      | 10      | 20      | 5       |         |         |
| 53            | 10      | 10      | 20      | 5       |         |         |
| 54            | 10      | 10      | 20      | < 5     |         |         |
| 55            | 5       | 10      | 25      | 5       |         |         |
| 56            | 5       | 10      | 10      | 10      |         |         |
| 57            | 5       | 5       | 25      | 5       |         |         |
| 58            | 10      | 10      | 35      | 5       |         |         |
| 59            | 10      | 15      | 40      | 10      |         |         |
| 60            | 5       | 10      | 15      | 5       |         |         |
| 61            | 10      | 10      | 25      | 5       |         |         |
| 62            | 10      | 15      | 20      | 5       |         |         |
| 63            | 5       | 10      | 30      | 10      |         |         |
| 64            | 10      | 15      | 20      | 10      |         |         |
| 65            | 10      | 15      | 20      | 10      |         |         |
| 66            | 10      | 15      | 30      | 15      |         |         |
| 67            | 10      | 15      | 25      | 5       |         |         |
| 68            | 10      | 10      | 30      | 5       |         |         |
| 69            | 5       | 10      | 20      | 10      |         |         |
| 70            | 5       | 15      | 35      | 10      |         |         |
| 71            | 5       | 15      | 30      | 10      |         |         |
| 72            | 5       | 15      | 30      | 10      |         |         |
| 73            | 5       | 10      | 15      | 5       |         |         |
| 74            | 10      | 10      | 15      | 10      |         |         |
| 75            | 5       | 15      | 20      | 10      |         |         |
| 76            | 10      | 10      | 10      | 10      |         |         |
| 77            | 10      | 15      | 10      | 10      |         |         |
| 78            | 15      | 15      | 20      | 10      |         |         |
| 79            | 5       | 15      | 10      | 10      |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach

Signed P. Johnson  
8/12/66.



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 8 0027

Area: WARRINA

Samples of: SOIL

Date 7/12/66

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 1280   | 5       | 10      | 10      | 5       |         |         |
| 81            | 10      | 15      | 25      | 10      |         |         |
| 82            | 5       | 10      | 10      | 10      |         |         |
| 83            | 5       | 10      | 10      | 10      |         |         |
| 84            | 5       | 10      | 20      | < 10    | 5       |         |
| 85            | 5       | 10      | 25      | < 5     |         |         |
| 86            | 5       | 10      | 25      | 5       |         |         |
| 87            | 10      | 15      | 25      | 5       |         |         |
| 88            | 5       | 15      | 15      | < 5     |         |         |
| 89            | 5       | 10      | 15      | < 5     |         |         |
| 90            | 5       | 10      | 20      | 5       |         |         |
| 91            | 5       | 10      | 20      | 5       |         |         |
| 92            | 10      | 10      | 15      | 5       |         |         |
| 93            | 5       | 15      | 15      | < 5     |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
8/12/66.





GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: **NORTH BROKEN HILL LTD.**

SHEET No. 1 0028

Area: **ALBURY**

Samples of:

Date **7/12/66.**

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| PD 1          | 2       |         |         |         |         |         |
| 2             | 1       |         |         |         |         |         |
| 3             | 1       |         |         |         |         |         |
| 4             | 1       |         |         |         |         |         |
| 5             | 2       |         |         |         |         |         |
| 6             | 1       |         |         |         |         |         |
| 7             | 1       |         |         |         |         |         |
| 8             | 1       |         |         |         |         |         |
| 9             | 1       |         |         |         |         |         |
| 10            | 1       |         |         |         |         |         |
| 11            | 1       |         |         |         |         |         |
| 12            | 2       |         |         |         |         |         |
| 13            | 2       |         |         |         |         |         |
| 14            | 3       |         |         |         |         |         |
| 15            | 1       |         |         |         |         |         |
| 16            | 1       |         |         |         |         |         |
| 17            | 1       |         |         |         |         |         |
| 18            | 2       |         |         |         |         |         |
| 19            | 2       |         |         |         |         |         |
| 20            | 1       |         |         |         |         |         |
| 21            | 1       |         |         |         |         |         |
| 22            | 1       |         |         |         |         |         |
| 23            | 2       |         |         |         |         |         |
| 24            | 1       |         |         |         |         |         |
| 25            | 1       |         |         |         |         |         |
| 26            | 1       |         |         |         |         |         |
| 27            | 1       |         |         |         |         |         |
| 28            | 1       |         |         |         |         |         |
| 29            | 1       |         |         |         |         |         |
| 30            | 1       |         |         |         |         |         |
| 31            | 1       |         |         |         |         |         |
| 32            | 1       |         |         |         |         |         |
| 33            | 4       |         |         |         |         |         |
| 34            | 1       |         |         |         |         |         |
| 35            | 1       |         |         |         |         |         |
| 36            | 2       |         |         |         |         |         |

CX CU BY GPRC TC 25.

Signed P. Johnson  
7/12/66



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 2

Area: WARRINA

0029

Samples of:

Date 14/12/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 620    | 10      | 10      | 20      | < 5     |         |         |
| 21            | 5       | 15      | 25      | 5       |         |         |
| 22            | 5       | 10      | 30      | 5       |         |         |
| 23            | 5       | 10      | 25      | 5       |         |         |
| 24            | 5       | 20      | 20      | 5       |         |         |
| 25            | 5       | 15      | 20      | 5       |         |         |
| 26            | 5       | 20      | 25      | 5       |         |         |
| 27            | 35      | 20      | 25      | 10      |         |         |
| MSL125 1294   | 5       | 10      | 25      | 5       |         |         |
| 95            | 5       | 10      | 30      | 10      |         |         |
| 96            | 10      | 15      | 30      | 5       |         |         |
| 97            | 5       | 20      | 30      | 5       |         |         |
| 98            | 5       | 10      | 25      | 10      |         |         |
| 99            | 5       | 15      | 30      | 10      |         |         |
| 1300          | 5       | 10      | 20      | 5       |         |         |
| 1             | 5       | 15      | 30      | 5       |         |         |
| 2             | 5       | 10      | 30      | 5       |         |         |
| 3             | 5       | 10      | 25      | 5       |         |         |
| 4             | 5       | 15      | 30      | 5       |         |         |
| 5             | 5       | 5       | 25      | 10      |         |         |
| 6             | 10      | 10      | 25      | 5       |         |         |
| 7             | 5       | 15      | 20      | 10      |         |         |
| 8             | 5       | 10      | 30      | 5       |         |         |
| 9             | 10      | 5       | 25      | 5       |         |         |
| 10            | 5       | 20      | 20      | 5       |         |         |
| 11            | 5       | 10      | 20      | 5       |         |         |
| 12            | 5       | 20      | 30      | 5       |         |         |
| 13            | 5       | 10      | 20      | 5       |         |         |
| 14            | 5       | 15      | 25      | 5       |         |         |
| 15            | 5       | 10      | 25      | 10      |         |         |
| 16            | 5       | 10      | 25      | 5       |         |         |
| 17            | 5       | 15      | 30      | < 5     |         |         |
| 18            | 10      | 5       | 30      | 5       |         |         |
| 19            | 5       | 10      | 25      | 5       |         |         |
| 20            | 10      | 10      | 30      | 5       |         |         |
| 21            | 5       | 20      | 45      | 5       |         |         |
| 22            | 5       | 10      | 20      | 5       |         |         |
| 23            | 5       | 15      | 30      | < 5     |         |         |
| 24            | 40      | 15      | 30      | < 5     |         |         |
| 25            | 5       | 15      | 20      | < 5     |         |         |
| 26            | 5       | 10      | 20      | < 5     |         |         |
| 27            | 5       | 10      | 25      | < 5     |         |         |
| 28            | 5       | 5       | 25      | 5       |         |         |
| 29            | 5       | 10      | 30      | 5       |         |         |

Atomic Absorption Spectrophotometry  
following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson  
14/12/66.



GEOCHEMICAL LABORATORY

253 SOUTH TERRACE  
ADELAIDE, S.A.  
PHONE: 23 2915  
CABLE: "PHARGEO"  
ADELAIDE

Samples from: NORTH BROKEN HILL LTD.

SHEET No. 1

Area: WARRINA

0030

Samples of:

Date 14/12/66.

RESULTS OF ANALYSIS

SAMPLES ARE RETAINED FOR SIX MONTHS PRIOR TO DISPOSAL, UNLESS SPECIFIC INSTRUCTIONS TO THE CONTRARY HAVE BEEN RECEIVED.

| Sample Number | Cu, ppm | Pb, ppm | Zn, ppm | Ni, ppm | Mo, ppm | Sn, ppm |
|---------------|---------|---------|---------|---------|---------|---------|
| MSL125 570    | 15      | 10      | 30      | 5       |         |         |
| 71            | 10      | 15      | 30      | 5       |         |         |
| 72            | 10      | 10      | 25      | 10      |         |         |
| 73            | 5       | 10      | 20      | 5       |         |         |
| 74            | 5       | 5       | 20      | 5       |         |         |
| 75            | 5       | 10      | 25      | 5       |         |         |
| 76            | 5       | 5       | 20      | 5       |         |         |
| 77            | 5       | 10      | 30      | 5       |         |         |
| 78            | 10      | 10      | 20      | 5       |         |         |
| 79            | 10      | 15      | 30      | 5       |         |         |
| 80            | 5       | 10      | 30      | 5       |         |         |
| 81            | 5       | 10      | 30      | 5       |         |         |
| 82            | 5       | 5       | 20      | 5       |         |         |
| 83            | 5       | 10      | 25      | 5       |         |         |
| 84            | 5       | 10      | 30      | 5       |         |         |
| 85            | 5       | 10      | 25      | 25      |         |         |
| 86            | 5       | 10      | 25      | 5       |         |         |
| 87            | 10      | 10      | 25      | 10      |         |         |
| 88            | 10      | 10      | 30      | 5       |         |         |
| 89            | 10      | 10      | 20      | 10      |         |         |
| 90            | 10      | 10      | 25      | 10      |         |         |
| 91            | 10      | 10      | 20      | 5       |         |         |
| 92            | 5       | 5       | 20      | 10      |         |         |
| 93            | 10      | 10      | 25      | 5       |         |         |
| 94            | 5       | 5       | 20      | 5       |         |         |
| 95            | 10      | 5       | 20      | 10      |         |         |
| 96            | 10      | 10      | 30      | 10      |         |         |
| 97            | 10      | 10      | 20      | 10      |         |         |
| 98            | 5       | 15      | 30      | 5       |         |         |
| 99            | 5       | 10      | 25      | < 5     |         |         |
| 600           | 5       | 5       | 20      | 5       |         |         |
| 1             | 10      | 10      | 20      | 5       |         |         |
| 2             | 5       | 15      | 20      | 5       |         |         |
| 3             | 5       | 15      | 20      | 5       |         |         |
| 4             | 10      | 20      | 20      | 10      |         |         |
| 5             | 5       | 5       | 20      | 5       |         |         |
| 6             | 5       | 10      | 20      | 5       |         |         |
| 7             | 5       | 5       | 20      | 5       |         |         |
| 8             | 10      | 10      | 20      | < 5     |         |         |
| 9             | 5       | 5       | 30      | < 5     |         |         |
| 10            | 10      | 25      | 30      | < 5     |         |         |
| 11            | 15      | 20      | 40      | 5       |         |         |
| 12            | 10      | 10      | 20      | < 5     |         |         |
| 13            | 10      | 10      | 25      | < 5     |         |         |
| 14            | 5       | 10      | 25      | 5       |         |         |
| 15            | 10      | 10      | 30      | 5       |         |         |
| 16            | 10      | 10      | 20      | 5       |         |         |
| 17            | 15      | 20      | 25      | 5       |         |         |
| 18            | 10      | 10      | 20      | 5       |         |         |
| 19            | 10      | 10      | 25      | 5       |         |         |

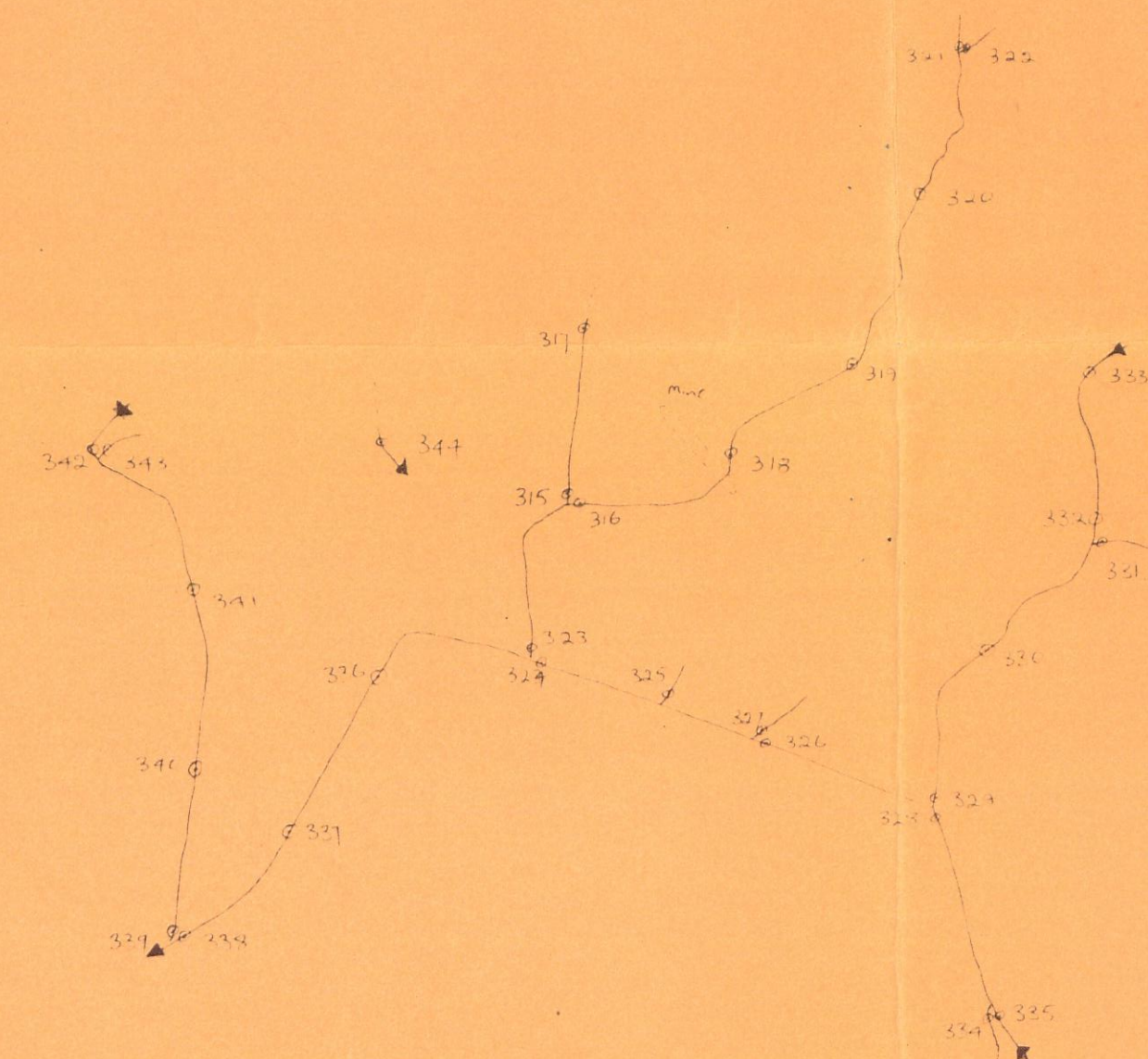
Atomic Absorption Spectrophotometry  
Following a hot 25% HNO<sub>3</sub> leach.

Signed P. Johnson.  
14/12/66.

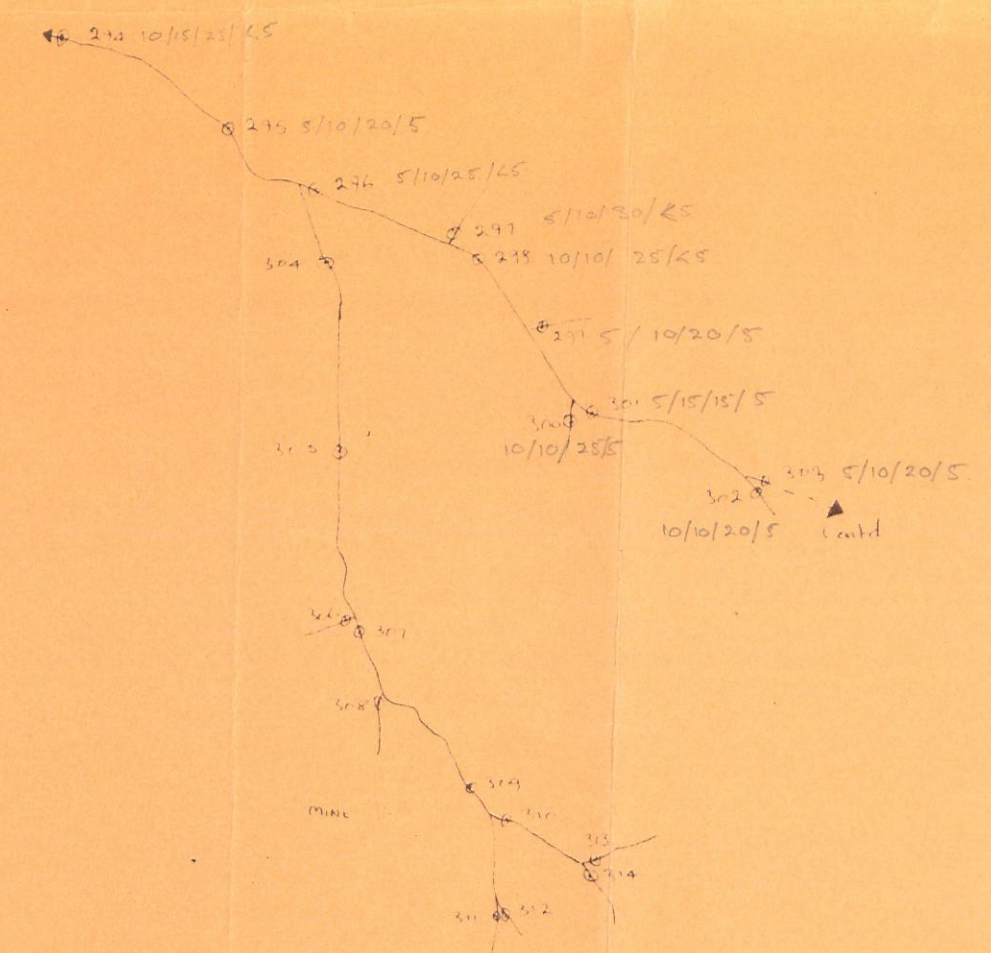




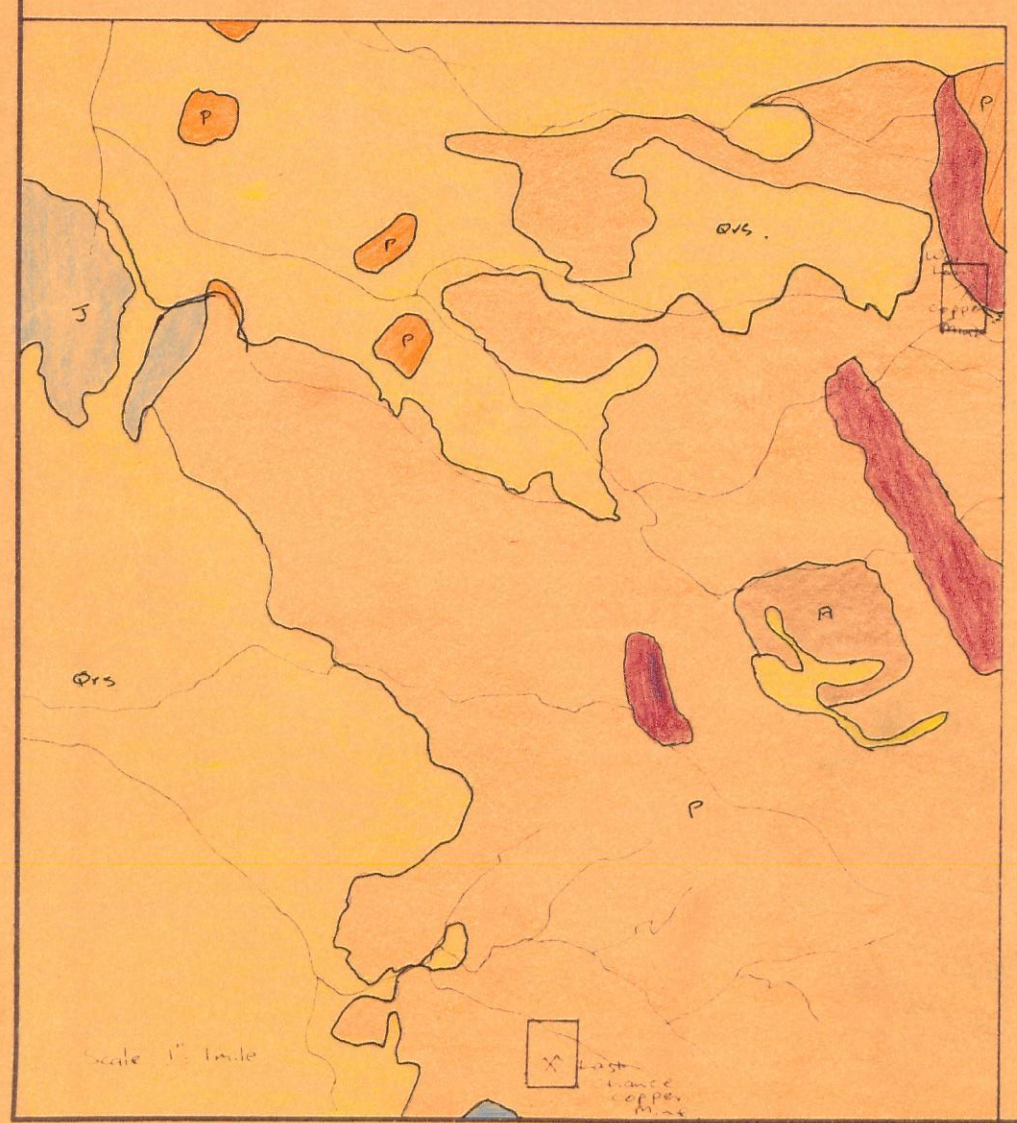
WAR LOAN COPPER MINE.



LAST CHANCE COPPER MINE.



BOORTHANNA ref. no. 601. zones G.S.S.A.



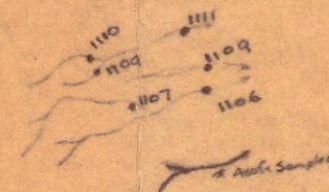
|                                      |              |          |                    |
|--------------------------------------|--------------|----------|--------------------|
| NORTH BROKEN HILL LIMITED            |              |          |                    |
| BROKEN HILL, N.S.W.                  |              |          |                    |
| EXPLORATION DEPARTMENT               |              |          |                    |
| WAR LOAN + LAST CHANCE COPPER MINES. |              |          |                    |
| 400 ft SAMPLING INTERVAL.            |              |          |                    |
| DRAWN                                | G. R. STRONG | 18-11-66 | No. 694<br>ENV 693 |
| TRACED                               | G. R. STRONG | 3-1-67   |                    |
| SCALE                                | 1" = 400'    |          |                    |

ENV. 694-1





▲ COPPERTOP HILL



▲ MT DENISON



NORTH BROKEN HILL LIMITED

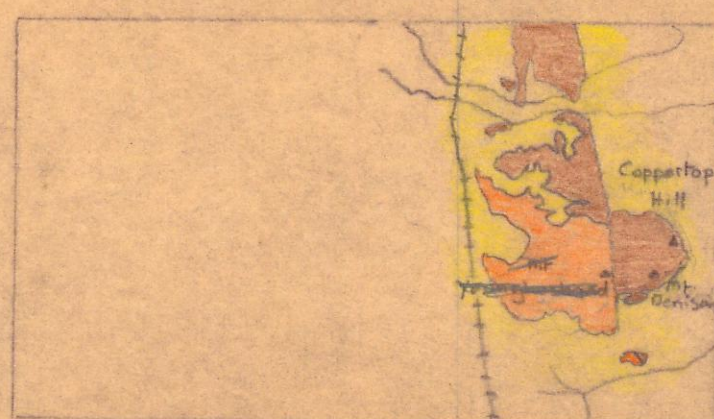
EXPLORATION DEPARTMENT

PEAKE - DENISON AREA SML 125

COPPERTOP MINES AREA - 1/4 mi sampling interval

|        |             |
|--------|-------------|
| DRAWN  | G.R. & B.H. |
| TRACED | G.R. & B.H. |
| SCALE  | 1" = 1/4 mi |

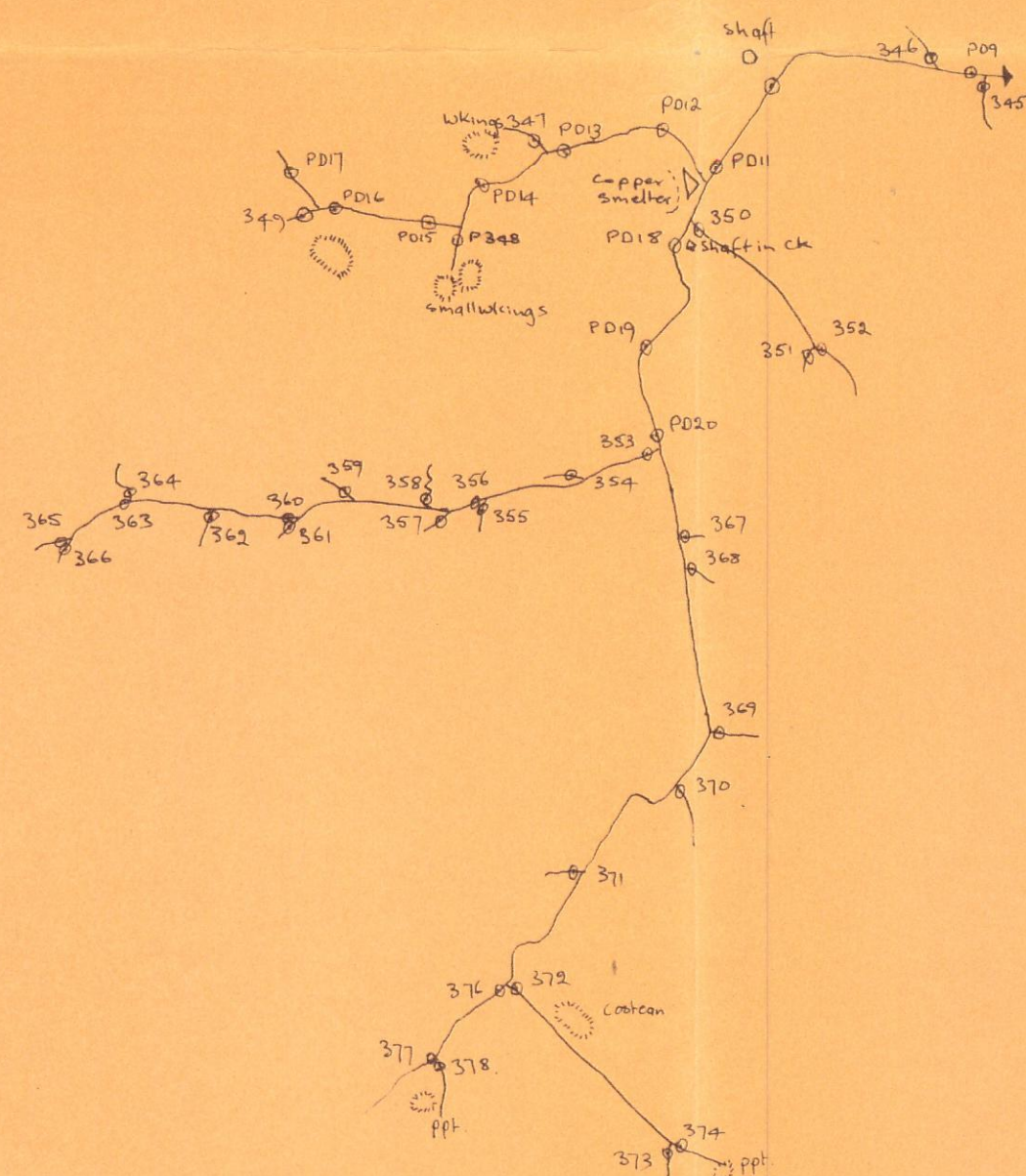
NILPINNA 1/4 mi. 500' Zone 5 G.S.S.A.



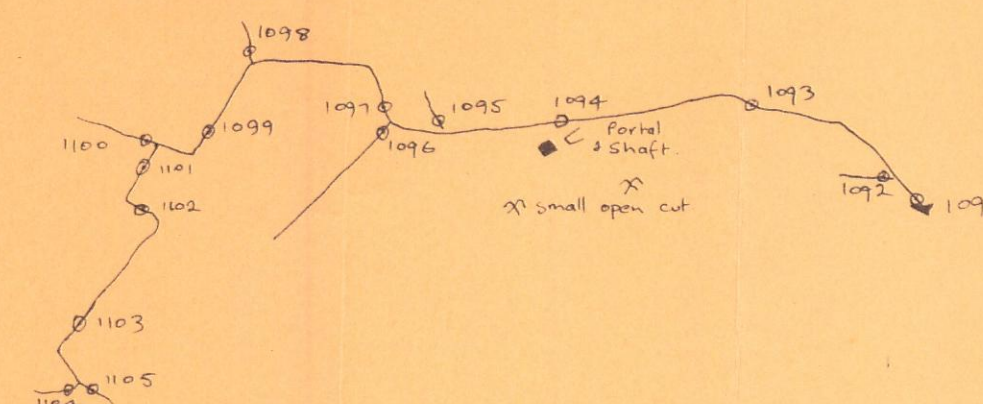
1:16000



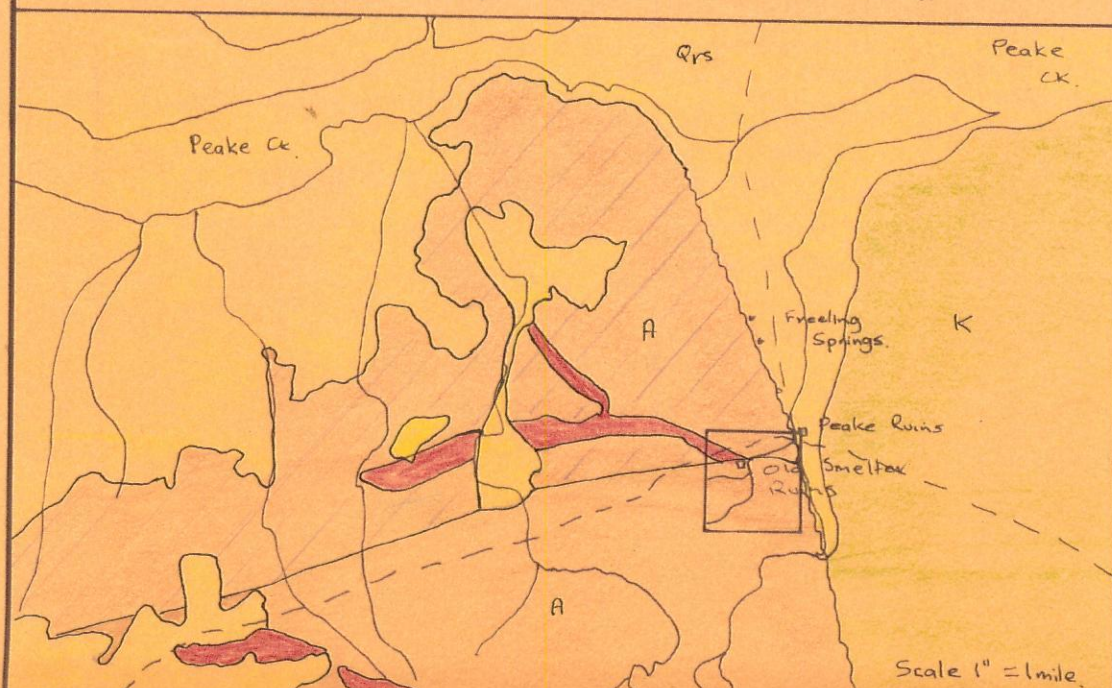
# PEAKE MINES & SMELTER.



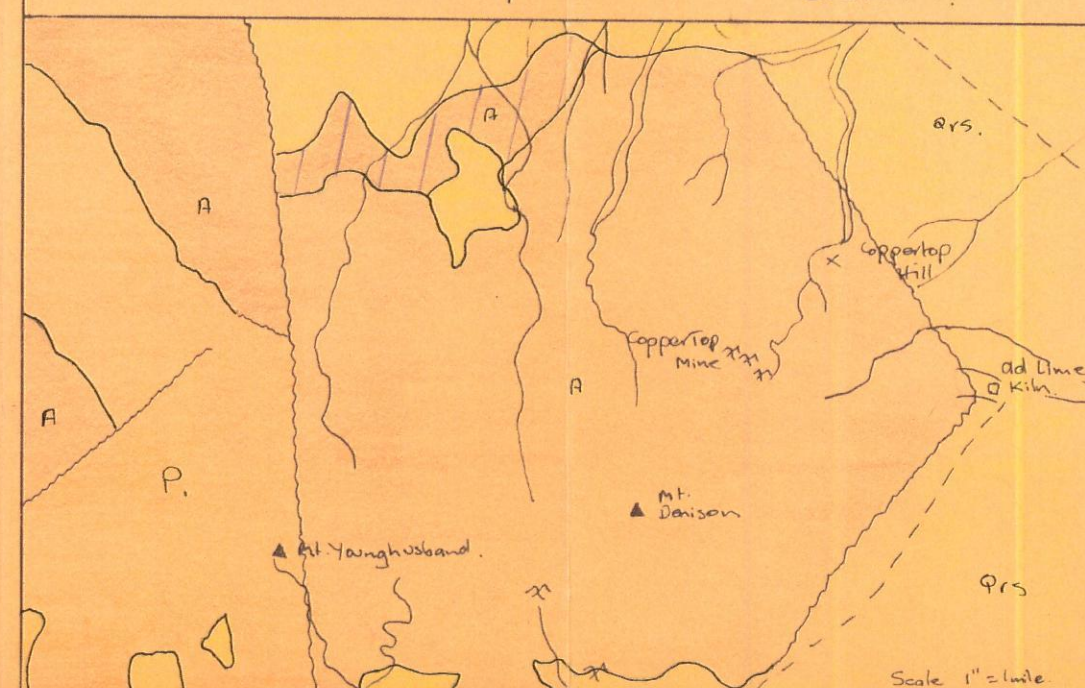
# LIME KILN MINE.



NILPINNA ref. no. 581 Zone 5 G.S.S.A.



NILPINNA ref. no. 581 Zone 6 G.S.S.A.



NORTH BROKEN HILL LIMITED  
BROKEN HILL, N.S.W.

## EXPLORATION DEPARTMENT

PEAKE + LIME KILN MINES.

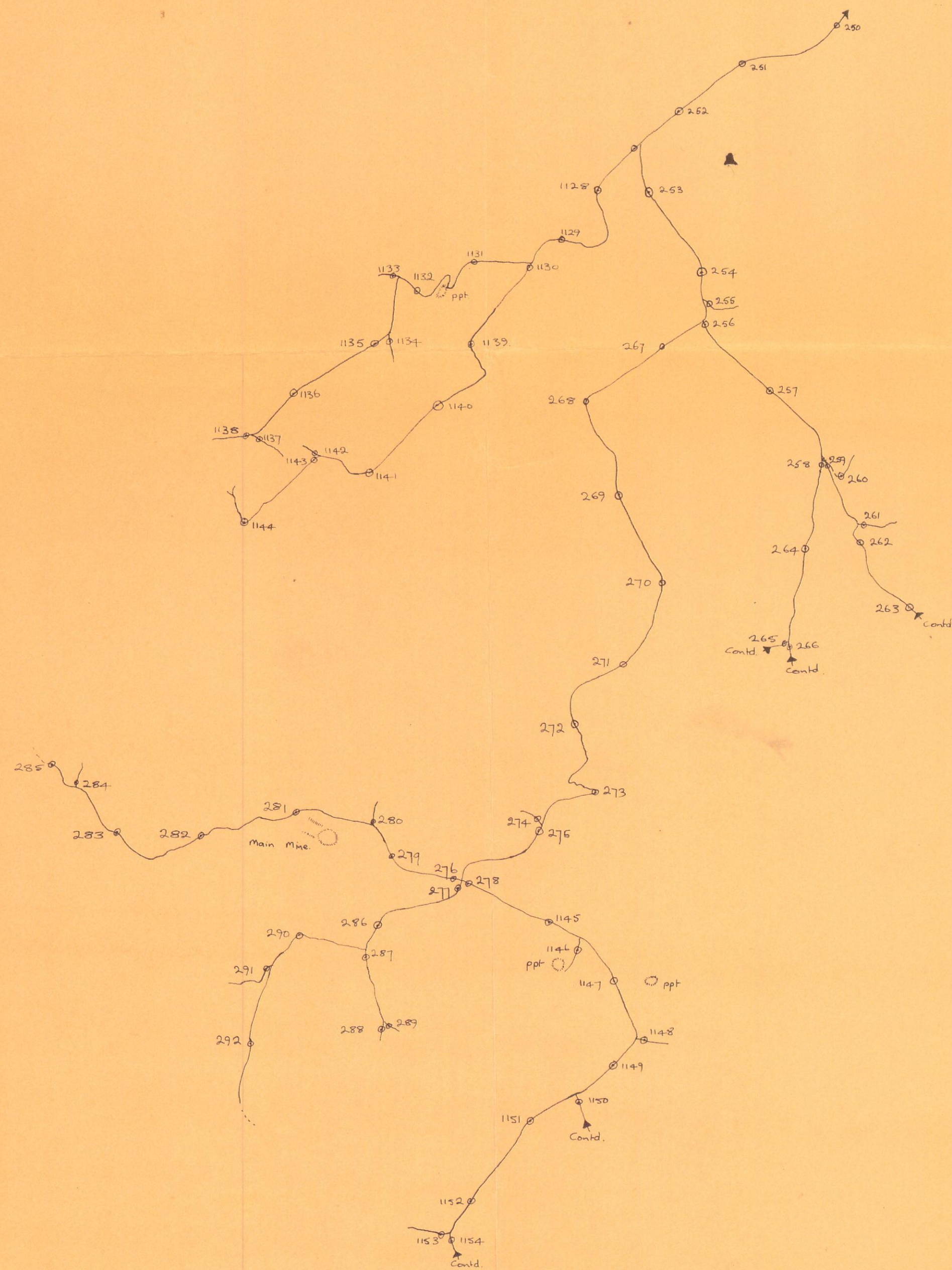
400 ft. SAMPLING INTERVAL.

|        |                        |
|--------|------------------------|
| DRAWN  | G.R. STRONG 22-11-1966 |
| TRACED | G.R. STRONG 30-12-1966 |
| SCALE  | 1" = 400'              |

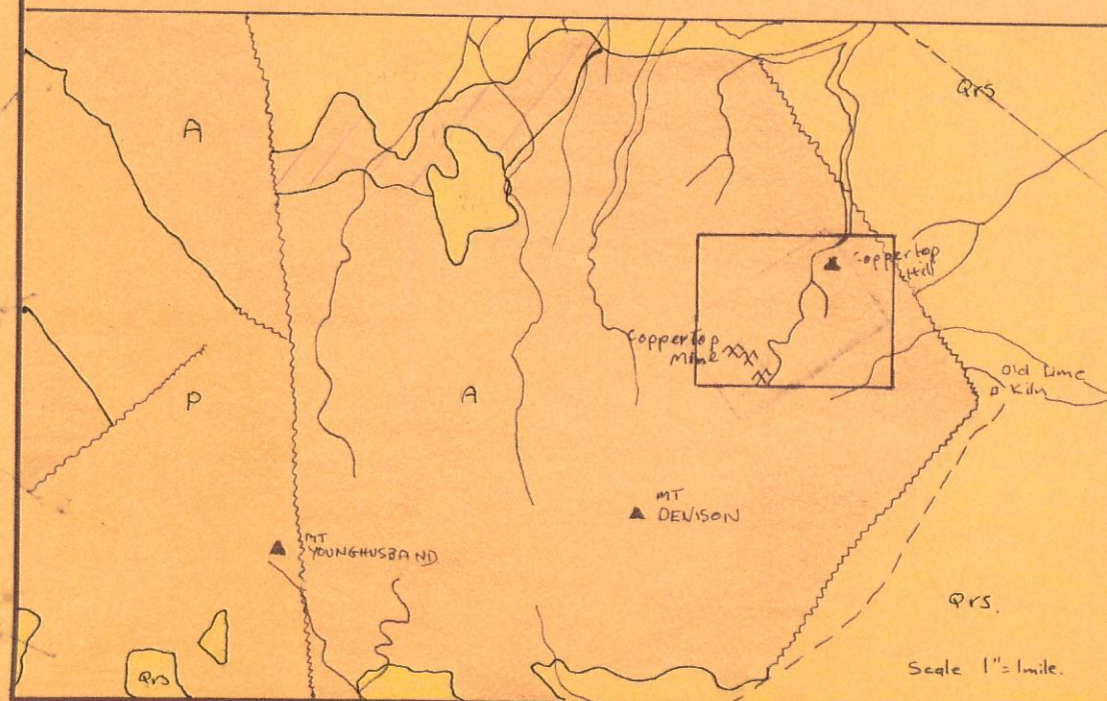
No.

694  
ENV 693





NILPINNA ref. no. 581 Zone: 5 G.S. S.A.



**NORTH BROKEN HILL LIMITED**  
BROKEN HILL, N.S.W.

## EXPLORATION DEPARTMENT

COPPERTOP HILL MINES AREA.

400 ft. SAMPLING INTERVAL.

|        |                        |
|--------|------------------------|
| DRAWN  | G.R. STRONG 17-11-1966 |
| TRACED | G.R. STRONG 29-12-1966 |
| SCALE  | 1" = 400'              |

No.

ENV 694A



- \* No 240 - sample of copper lode from creek, trending 229°
- \* No 244 - sample of copper lode from creek, trending 229°



A hand-drawn map on a piece of paper, showing a network of paths or roads. The map is labeled with numerous numbers, likely representing points of interest or distances. The numbers are arranged in a sequence that follows the paths, starting from the top left and moving generally downwards and to the right. The numbers include 105, 104, 103, 102, 101, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1. The map also features a dashed circle labeled "Main Mine Not." and a dashed line labeled "Mines Area.".

A hand-drawn geological map of the Copper River area, Alaska. The map is oriented with North at the top. It shows several geological units labeled with letters: 'A' (appearing in two locations), 'P', 'Grs', 'J', and 'K'. Key features include 'Mt. Denison' marked with a triangle, 'Copper River No. 1' and 'Copper River No. 2' marked with 'X's, 'Copper River No. 11' marked with a triangle, and 'Mt. Panglossband' marked with a triangle. A dashed line represents the 'old river bed'. A scale bar at the bottom left indicates 'Scale 1"=1 mile'.

|        |              |          |
|--------|--------------|----------|
| DRAWN  | G. R. STRONG | 12-11-66 |
| TRACED | G. R. STRONG | 1-3-67   |
| SCALE  | 1" = 400'    |          |

No.

ENV 693

ENV. 694-5



MINE No. 5

MINE No. 5

MINE No. 6

**NORTH BROKEN HILL LIMITED**  
BROKEN HILL, N.S.W.

**EXPLORATION DEPARTMENT**

COPPERTOP MINES No. 5+6

400 ft SAMPLING INTERVAL

|        |             |            |
|--------|-------------|------------|
| DRAWN  | B.L. MYLES  | 15-11-1966 |
| TRACED | G.R. STRONG | 20-11-1966 |
| SCALE  | 1" = 400'   |            |

No.

ENV. 693

ENV. 694 - 6

NILPINNA ref. no. 581 zone: 5 G.S.S.A.

