

Open File Envelope

No. 2314

EL 96

MOUNT SERLE

**PROGRESS REPORTS TO LICENCE
EXPIRY/SURRENDER FOR THE PERIOD
20/9/1973 TO 19/9/1974**

Submitted by
Aquitaine Australia Minerals Pty Ltd
1974

© 27/1/1978

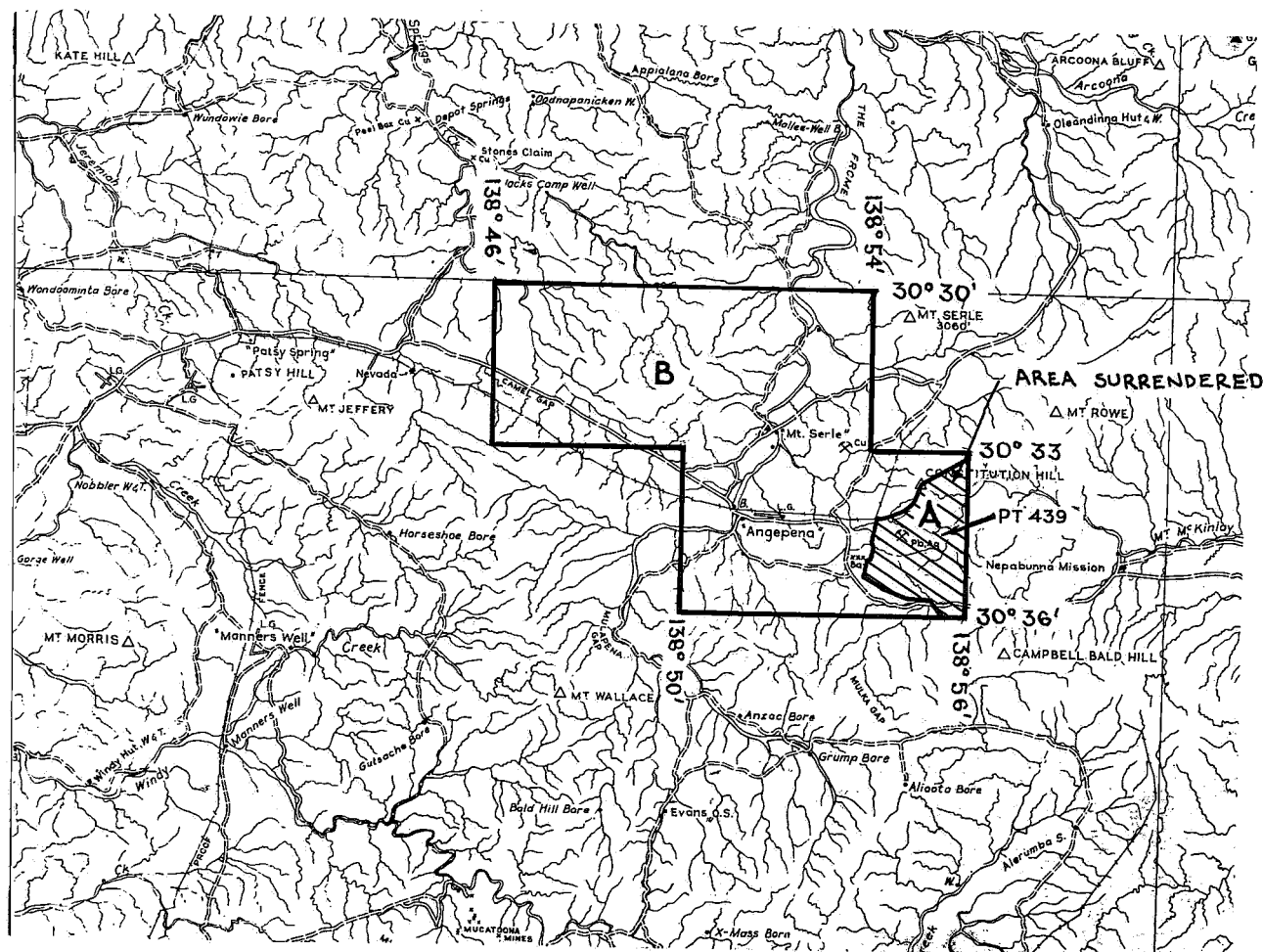
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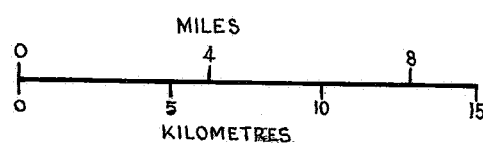
Telephone: (08) 8463 3000
Facsimile: (08) 8204 1880



Government of South Australia
Primary Industries and Resources SA



SCALE 1:250,000



AQUITANE AUSTRALIA MINERALS PTY. LTD.
 FOX MINING & EXPLORATION PTY. LTD.
 DOCKET DM 454/73 AREA 125 km²
 1:250000 PLANS .COPLEY

LOCALITY MT. SERLE - APPROX. 50 km. S.E. OF LEIGH CREEK.

E.L.No. 96

EXPIRY DATE 19.9.74

CONTENTS ENVELOPE 2314

TENEMENT: E.L. NO. 96

TENEMENT HOLDER: Fox Mining & Expl. Pty. Ltd.
Aquitaine Australia Minerals Pty. Ltd.

<u>REPORTS:</u>	Period ended 24/8/73	(Pgs. 3-7)
	" 19/12/73	(Pgs. 8-12)
	" 19/3/74	(Pg. 13)
	" 19/6/74	(Pg. 14)
	" 20/9/74	(Pg. 15)

<u>PLANS:</u>	Geological Map	2314-1
	Lead Anomaly Locations	2314-2
	" Results PL.2	2314-3
	" " " 6	2314-4
	Copper Anomaly Locations	2314-5
	" Results PL.1	2314-6
	" " " 5	2314-7
	Zinc Results PL.3	2314-8
	" " " 7	2314-9
	" Anomaly Locations	2314-10

E.L. No. 96 QUARTERLY REPORT

EX SML 708 'MT. SERLE' (RENEWAL PENDING)

For the period ending 24.8.73



Distribution:

Mines Department

AAP Manager/Archives

AAM Manager

S. Ognar

By: S. Ognar

September, 1973.

MG: 311

C O N T E N T S

1. ABSTRACT
2. GEOCHEMISTRY
3. GEOCHEMICAL RECONNAISSANCE SURVEY
4. RESULTS
 - 4.1 Copper
 - 4.2 Lead
 - 4.3 Zinc
5. CONCLUSIONS
6. EXPENDITURE

PLATES

- Plate 1 - Geological Map
- 2 - Copper anomalies location
 - 3 - Lead anomalies location
 - 4 - Zinc anomalies location
 - 5 - Copper results and sample locations
 - 6 - Lead results and sample locations
 - 7 - Zinc results and sample locations
-

1. ABSTRACT

A geochemical survey was carried out by an Amdel team and 680 soil samples assayed for Cu, Pb and Zn.

Results are very low for Pb and Zn, and an additional programme for Cu on a 2.5 km long copper anomaly with 80-400 ppm Cu, will be proposed for the next field season.

2. GEOCHEMISTRY

Following the programme proposed on the SML 708 Final Report May 1973 we carried out systematic soil sampling for a geochemistry survey on the selected area located South East of the Mt. Serle Homestead.

A base line of ^{whew!} 5,250 km was located with a theodolite (T1) and 20 cross lines pegged every 0.250 km. Sample spacing along the cross lines was 50 metres.

The area occupied by a massive round quartzite was not soil sampled.

This programme was carried out by a 3 man field team from Amdel.

3. GEOCHEMICAL RECONNAISSANCE SURVEY

Dr. Davy, from Amdel, visited a portion of SML 708 (19th May, 1973) to assess the difficulties of surveying and to carry out geochemical reconnaissance in the area. Nine samples of soil were taken, mainly adjacent to the proposed base line, for laboratory investigation. A more extensive examination was made of a detritus covered area in the south eastern part of the proposed grid to assess the difficulties of reaching the residual soil below the surface litter. In the conclusions of the report MP4884, R. Davy said the area is likely to have subdued geochemical relief.

Past intensive leaching with silification and ferruginisation appears to have affected rocks to considerable depths. Leaching is continuing on upper slopes of hills with siliceous sediments and, possibly, to a lesser degree, over carbonate sediments. In the valley bottoms, soluble cations are fixed on carbonate and clay and will only be redistributed further mechanically. It is considered that the -85 mesh fraction will be suitable for sampling purposes.

This fraction was adopted and 680 samples (including 54 hand augered samples) were assayed for Cu, Pb, Zn.

4. RESULTS

All results are reported on plates 5,6 and 7 for respectively Cu, Pb, Zn and anomalies plotted on plates 2, 3 and 4 which are at the same scale as the geological map (Plate 1).

4.1 Copper (Plate 2)

On this copper anomalies plate we can see a 2.5 km low grade anomaly (A) oriented north-east, south-west. The values are between 80 ppm to 400 ppm with some specks of + 600 ppm.

Half of the south western part covers the partly brecciated Wilkawillina Limestone (Cambrian) and the north eastern half is located on the eastern part of the Mt. Serle Anticline (Proterozoic) which is overlain by quaternary blanket. A possible repetition of this anomaly exists in the north flank of the anticline (B). Eveline Mine, which is an old copper mine, is located in this part and the copper mineralization seems to be mainly concentrated in a few quartz veins.

Two very low anomalies (80 - 100 ppm) are located on the Mt. Serle diapiric breccia (C).

4.2 Lead (Plate 3)

Some lead values up to 100 ppm exist around Eveline Mine. The other results are very low except for a few places where lead is up to 50 ppm.

4.3 Zinc (Plate 4)

Some values are up to 100 ppm and sometimes they are superimposed on the copper anomalous area.

5. CONCLUSIONS

Only copper values gave any encouraging results and we propose to prepare an additional programme of soil sampling on the north eastern part of the anomaly "A" (inside the Nepabuna mission fence) which can be done during the next field season.

6. EXPENDITURE

Expenditure recorded in our books for the period 1.6.73 to 31.8.73 amounted to \$557.54.

S. OGNAR

AQUITAINE AUSTRALIA MINERALS PTY. LTD.

PL. I.

ANGEPENA

EX SML 708 (BEING RENEWED)

QUARTERLY REPORT

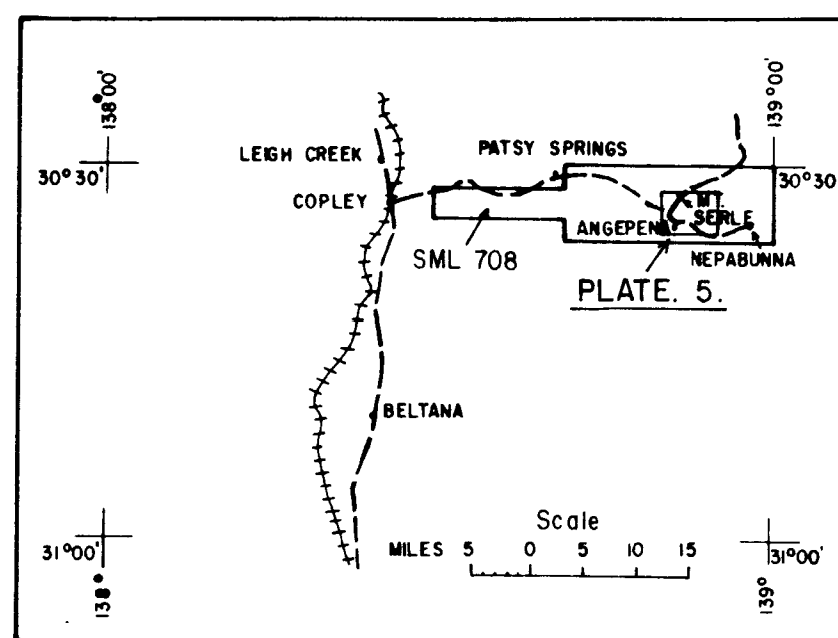
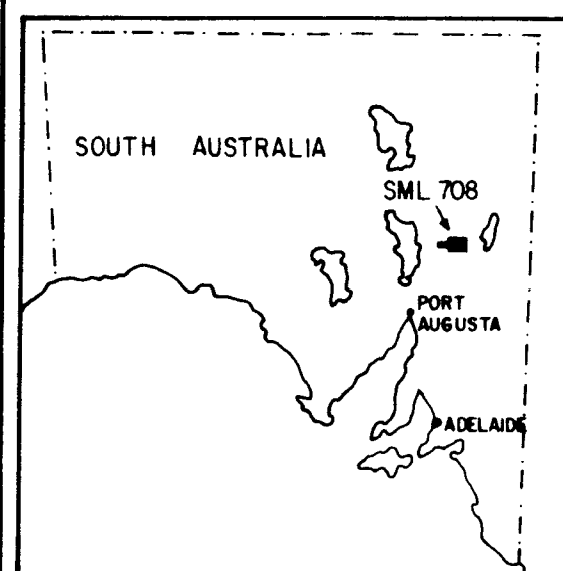
25/5/1973 - 24/8/1973

GEOLOGICAL MAP

ENLARGEMENT OF ANGEPEA SYNCLINE

AND

Mt. SERLE ANTICLINE



DATE 9/10/1973
 DRN. BY D. HAINES
 ORG. CKD. [initials]

AUTHOR CKD. S. OGNAR.
 DEPT. MIN. GEOL.
 BASE MAP 9800

ADMTS. _____

LEGEND

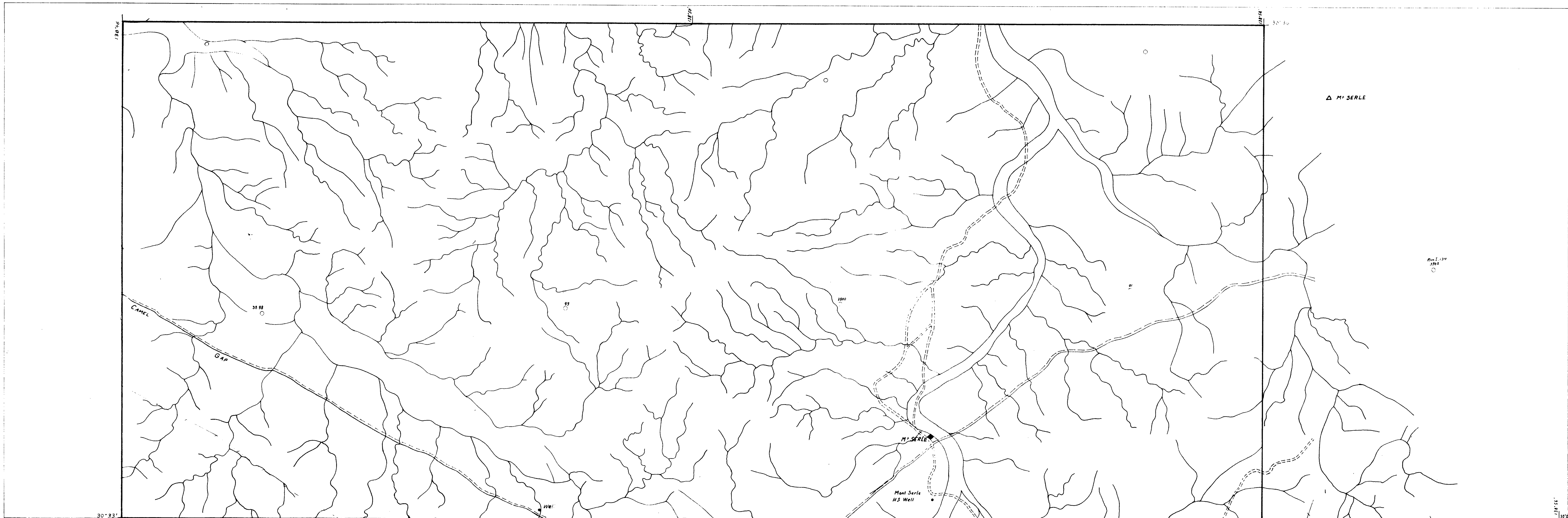
QUATERNARY		RECENT QUATERNARY		POUND QUARTZITE
		POORAKA FORMATION		WONOKA FORMATION
LOWER CAMBRIAN		NARINA GREYWACKE		BUNYEROO FORMATION
		GRAPARINA SHALE		BRACHINA FORMATION
		WILKAWILLINA LIMESTONE & BRECHIC FACIES		NUCCALEENA FORMATION
		PARACHILNA FORMATION		TREZONA FORMATION
		FAULT		BALCANOONA FORMATION FERUGINOUS ROCK & DOLOMITE
		INFERRED FAULT		TAPLEY HILL FORMATION
		ANTICLINE AXIS		? FILTON FORMATION
		SYNCLINE AXIS		DIAPIRIC BRECCIA (WILLOURAN)
		DIP and STRIKE		
		QUARTZ VEIN		
		DIGGINGS and TRENCHS		
		MAIN ROAD and TRACKS		
		FENCES		
		HOMESTEAD		

AREA WHICH MUST BE
 INCLUDE IN THE NEXT
 EL. APPLICATION

SOIL SAMPLING LOCATION
 P1 and P2



ENV 2314-1



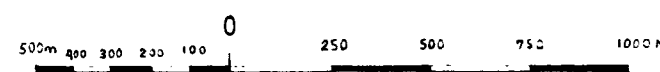
10327 MG 311 PL.3.

AQUITAINE AUSTRALIA MINERALS PTY. LTD.

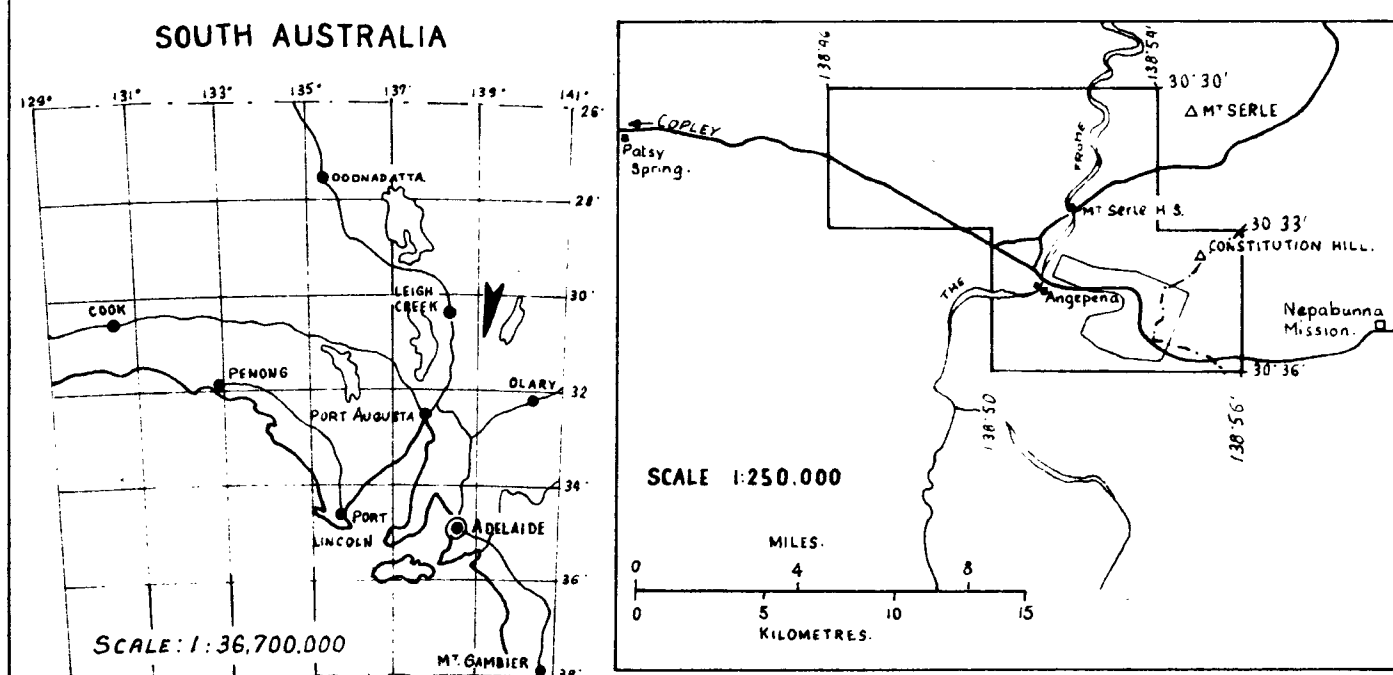
ANGEPENA
EX SML 708 (BEING RENEWED)
QUARTERLY REPORT
25/5/1973 - 24/8/1973

LEAD ANOMALY LOCATIONS

SCALE IN METRES:

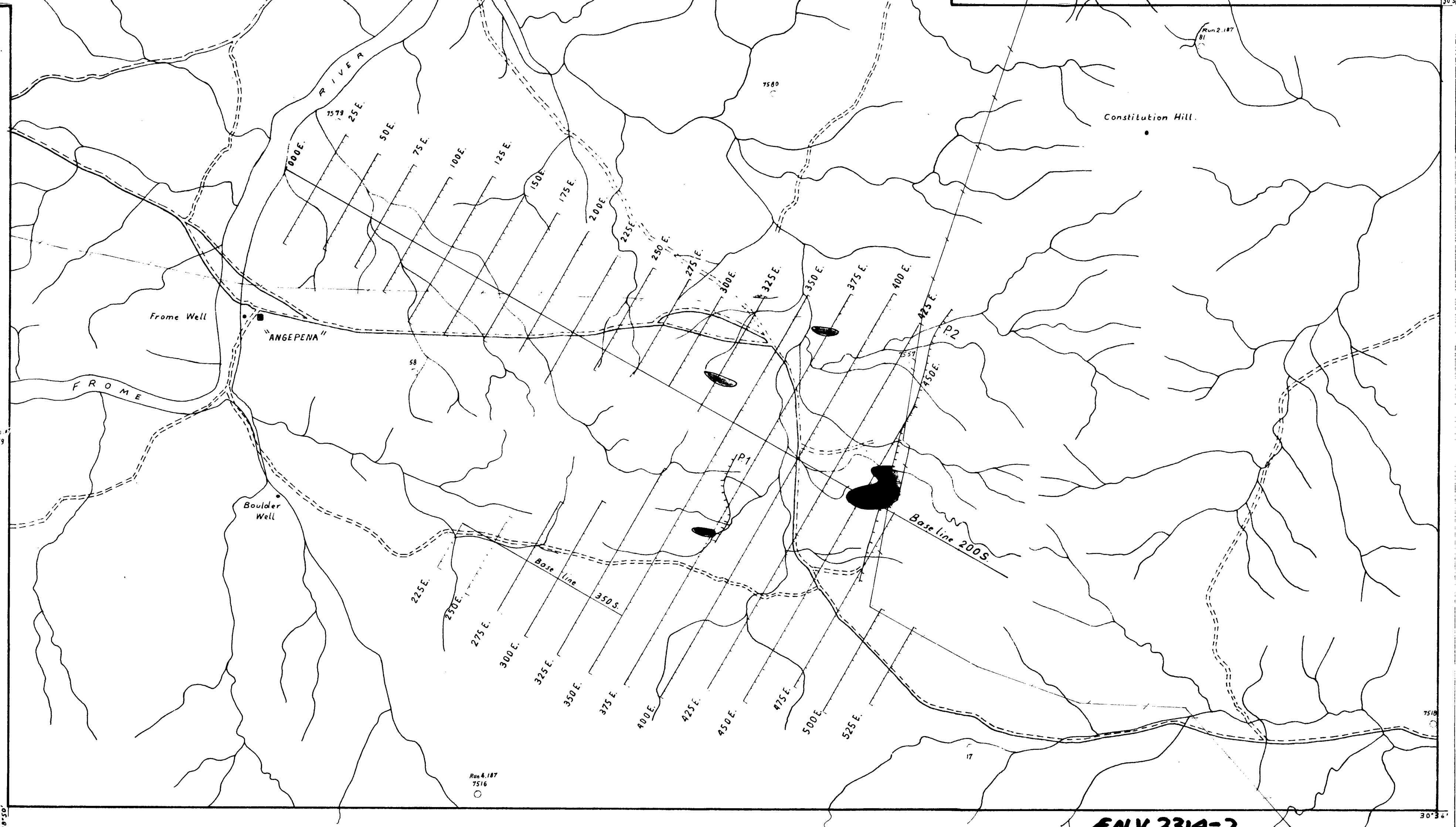


SOUTH AUSTRALIA



DATE: 2/10/1973
DRN. BY: S. GEMAR
ORG. CRD. 10327
AUTHOR: S. GEMAR
DEPT. 10327
BASE MAP: 10327

- LEAD ANOMALIES INCLUDING VALUES FROM > 50 ppm TO > 100 ppm
- BASE LINE AND CROSS LINES
- AREA REFERRED IN TEXT
- CREEKS AND STREAMS
- PHOTO CENTRES OF S.A. SVY. 187 (SCALE 1:4800)
- HOMESTEAD

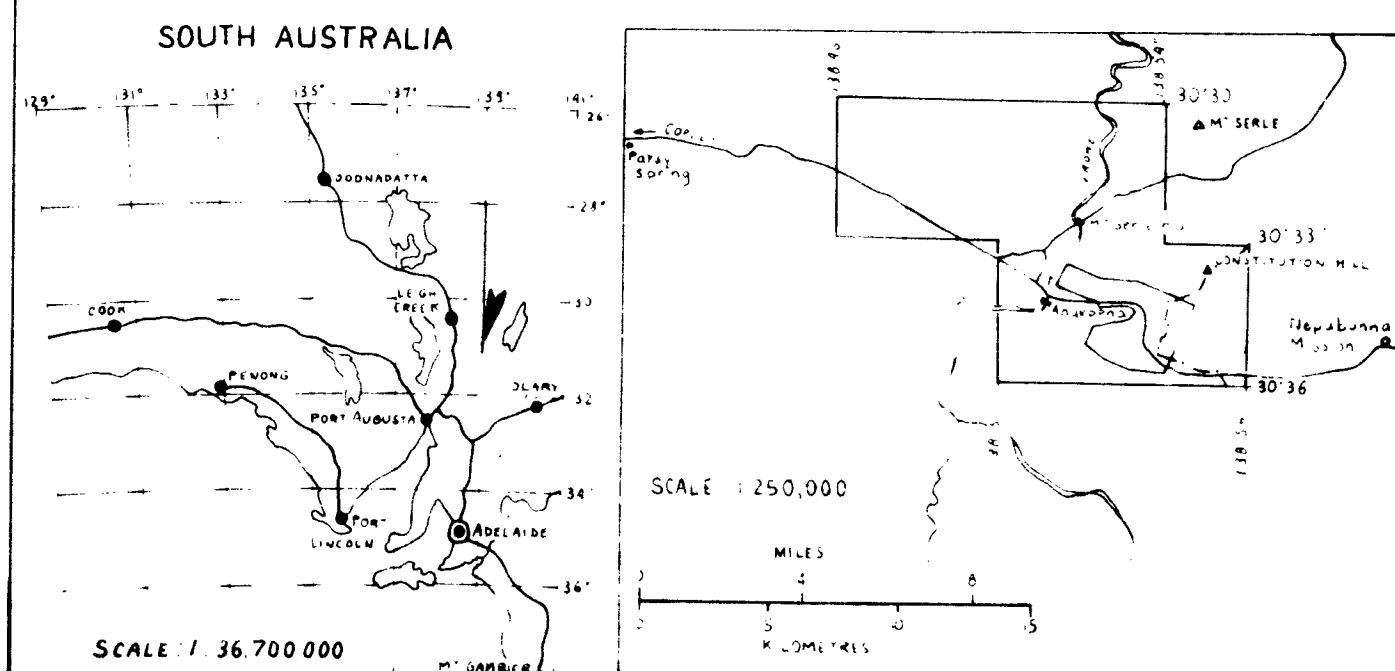
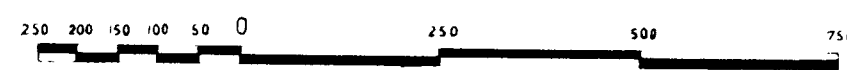


ENV 2314-2

MT. SERLE
EL 96
QUARTERLY REPORT
20-9-73 — 20-12-73

LEAD RESULTS AND SAMPLE LOCATIONS

SCALE IN METRES:



DATE 9/10/1973	AUTHOR CKD S. OGNAR	ADMTS. 15.1.74
DRN BY S.A.	DEPT MIN. GEOL.	
DRG. CKD.	BASE MAP 10330	

Hand Auger Pb Results 80S BASE LINE
Depth in Metres 15
100 5
0-87 20

CROSS LINE

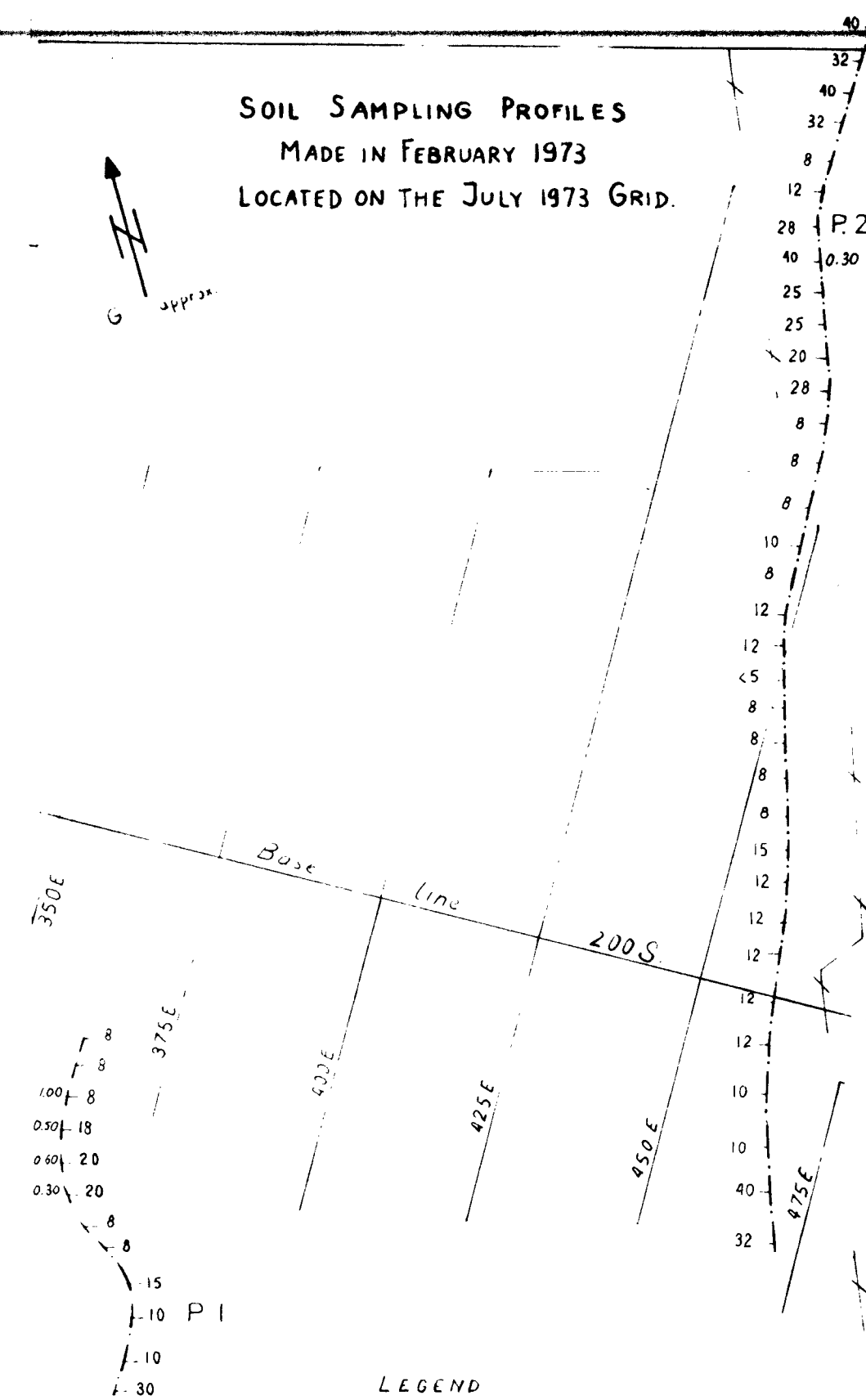
SOIL SAMPLING MADE IN FEBRUARY 1973

> 50 ppm Pb. RESULTS
100 " " "

Field work limit made in December 1973

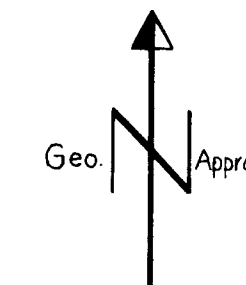
Anyepena H.S.

SOIL SAMPLING PROFILES MADE IN FEBRUARY 1973 LOCATED ON THE JULY 1973 GRID.



LEGEND

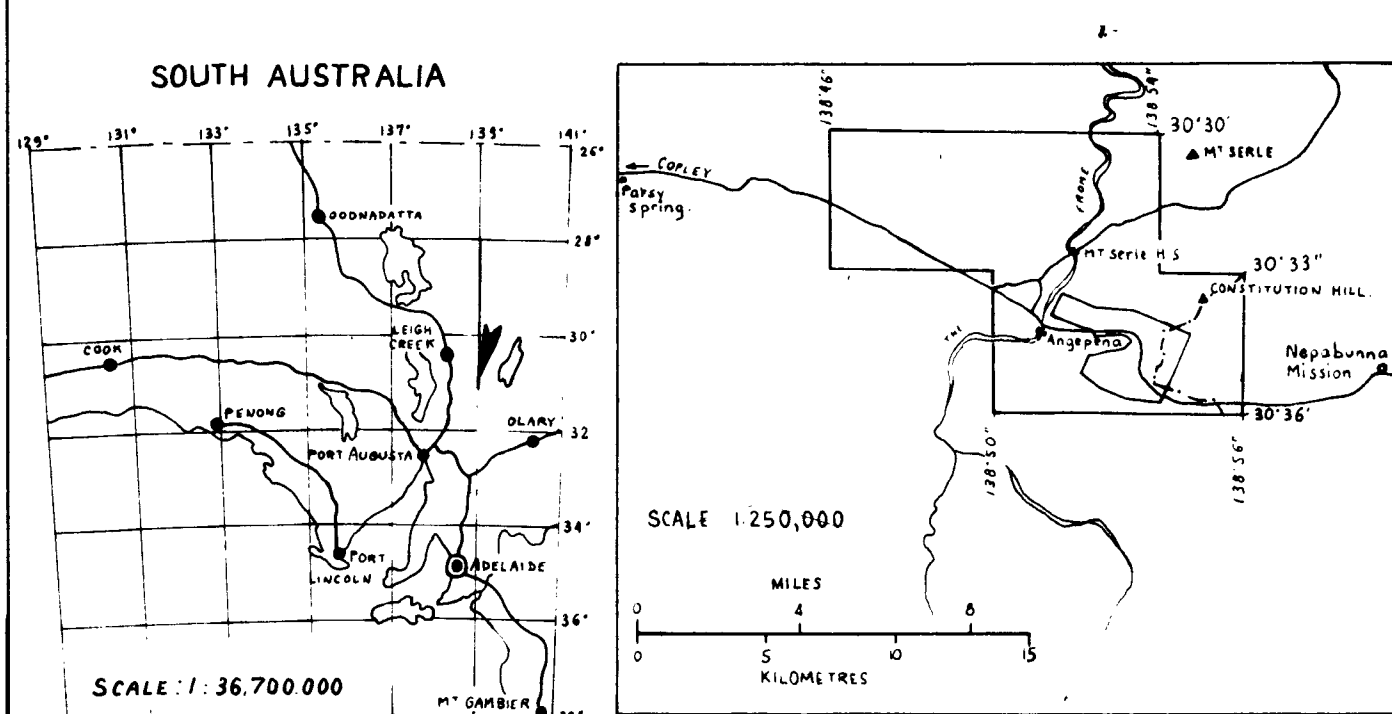
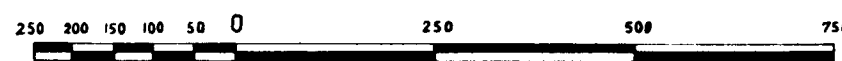
- x — Nepabunna Mission fence
+ + + P1 (profile 1) P2 (profile 2)



ANGEPENA
EX SML 708 (BEING RENEWED)
QUARTERLY REPORT
25/5/1973 - 24/8/1973

LEAD RESULTS
AND SAMPLE LOCATIONS

SCALE IN METRES:



DATE 9/10/1973
DRN. BY S.A.
DRG. QKD.

AUTHOR QKD. S. OGNAR
DEPT. MIN. GEOL.
BASE MAP 10330

ADMTS.

Hand Auger Pb Results
Depth in Metres 15
102 6
0-87 20

80 S BASE LINE
CROSS LINE

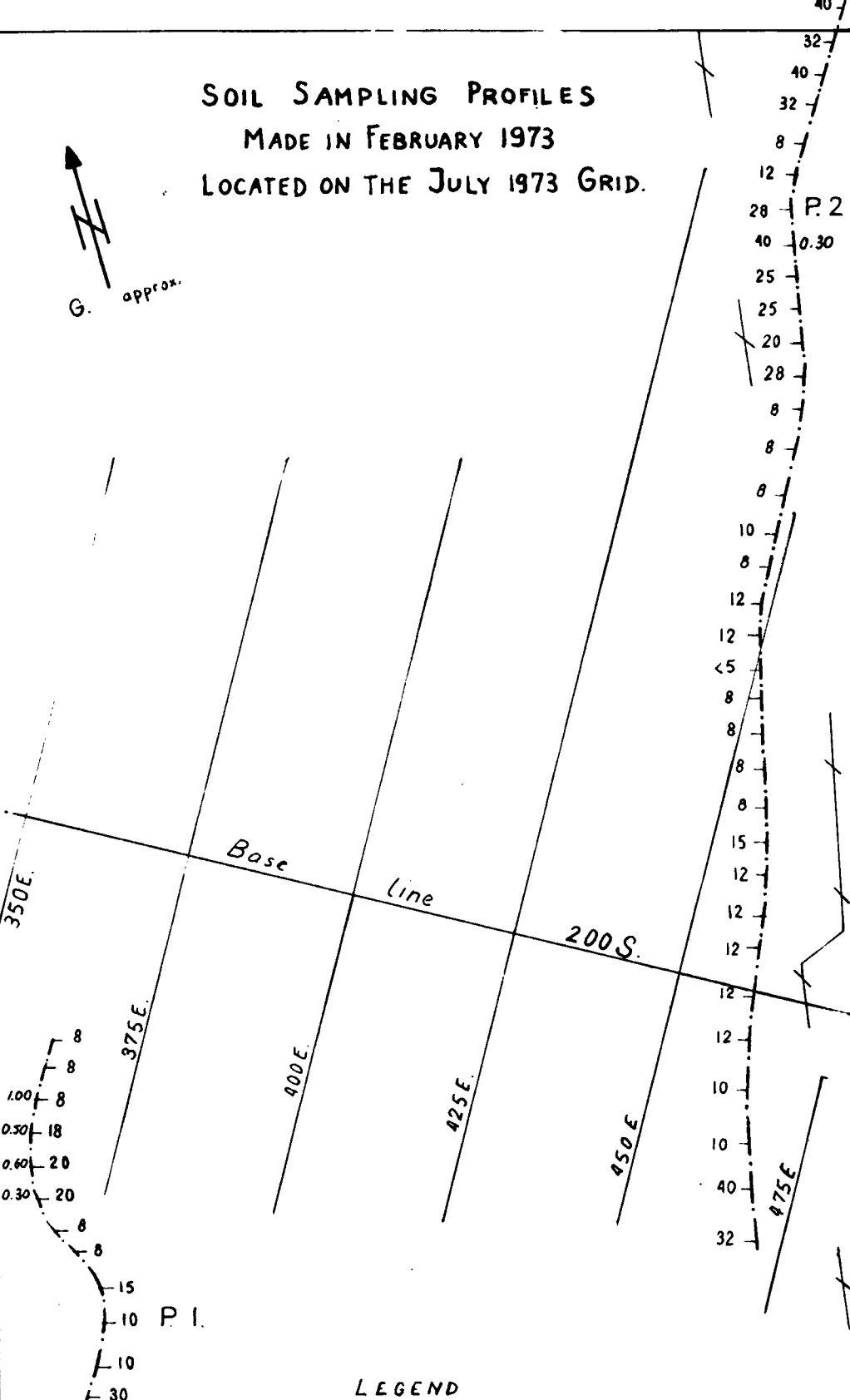
SOIL SAMPLING MADE IN FEBRUARY 1973

> 50 ppm Pb. RESULTS
100 " " "

Angepena H.S.

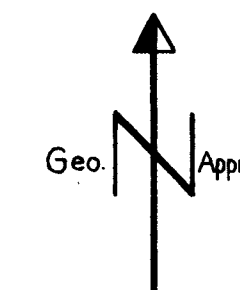
SOIL SAMPLING PROFILES
MADE IN FEBRUARY 1973
LOCATED ON THE JULY 1973 GRID.

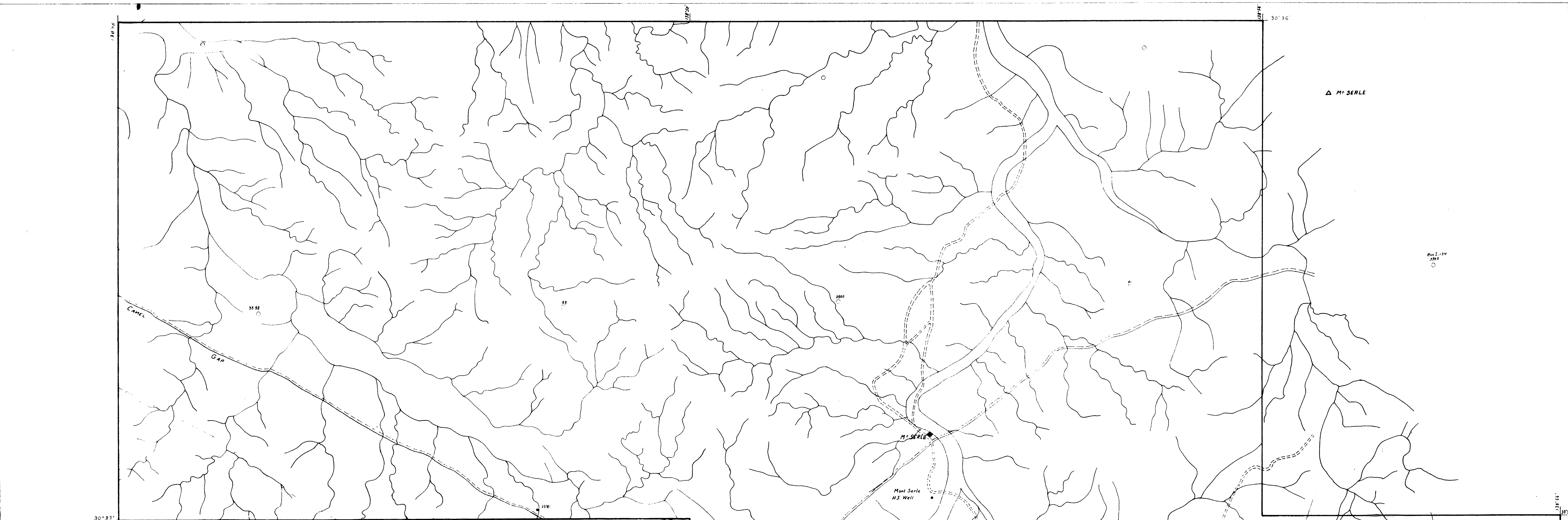
G. approx.



LEGEND

— Nepaburna Mission Fence.
+ . + . P1 (profile 1) P2 (profile 2).





10326 MG 311

AQUITAINE AUSTRALIA MINERALS PTY. LTD. PL.2.

ANGEPENA
EX SML 708 (BEING RENEWED)
QUARTERLY REPORT
25/5/1973 - 24/8/1973

COPPER ANOMALY LOCATIONS

SCALE IN METRES:

0 250 500 750 1000 M

SOUTH AUSTRALIA

SCALE 1:250,000

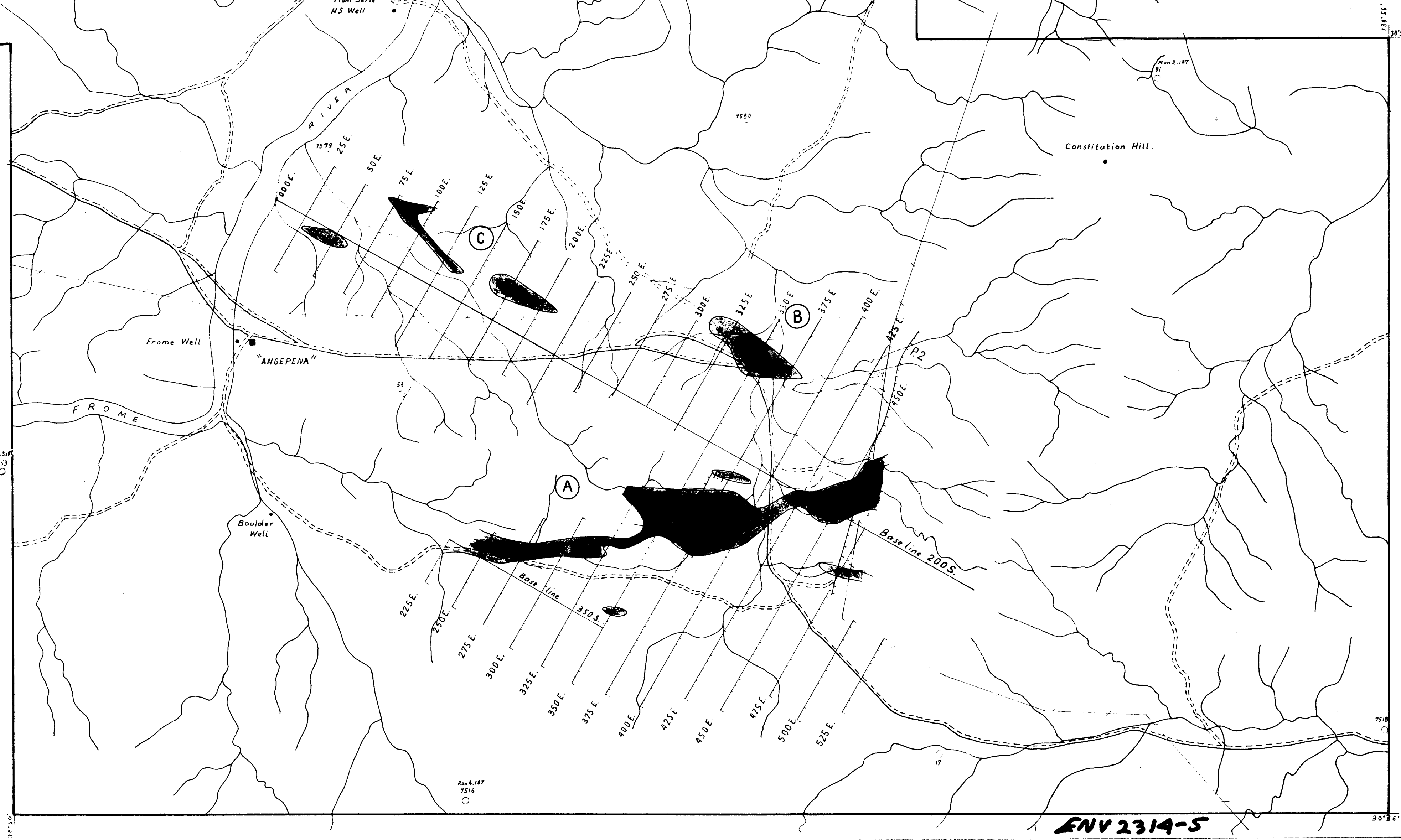
SCALE 1:35,700,000

DATE 9/10/1973
DRN. BY S.A.
DRG. CKD.

AUTHOR CKD. S. OGNAR
DEPT. MIN. GEOL.
BASE MAP 10326

ADMTS.

- COPPER ANOMALIES INCLUDING VALUES FROM >80 ppm TO >200 ppm
- BASE LINE AND CROSS LINES
- AREA REFERRED IN TEXT
- CREEKS AND STREAMS
- PHOTO CENTRES OF S.A. SVY. 187 (SCALE 1:4800)
- HOMESTEAD

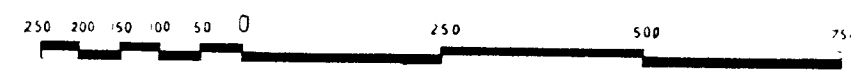


ENV 2314-S

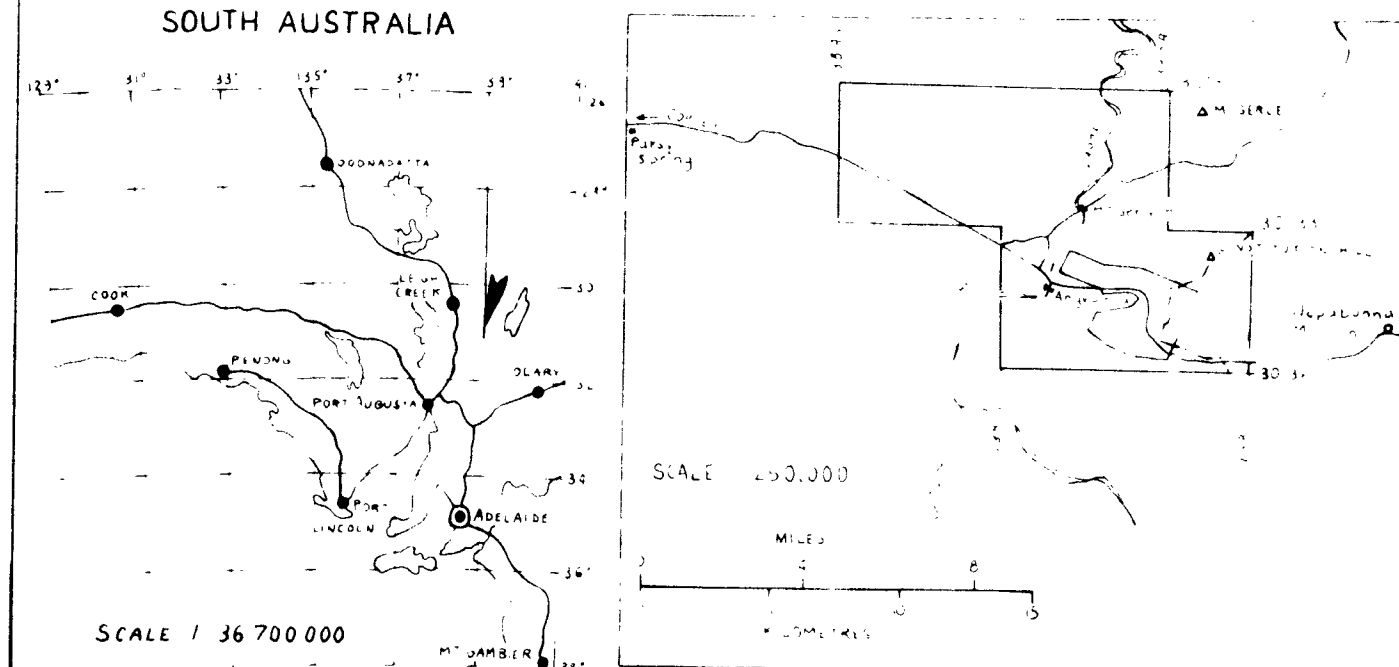
MT. SERLE
EL 96
QUARTERLY REPORT
20-9-73 - 20-12-73

COPPER RESULTS AND SAMPLE LOCATIONS

SCALE IN METRES:



SOUTH AUSTRALIA



DATE 9/10/1973	AUTHOR CKD. S. OGNAIR	ADMTS 15.1.74
DRN. BY S.A.	DEPT. MIN. GEOL.	
DRG. CKD. S.A.	BASE MAP 10329	

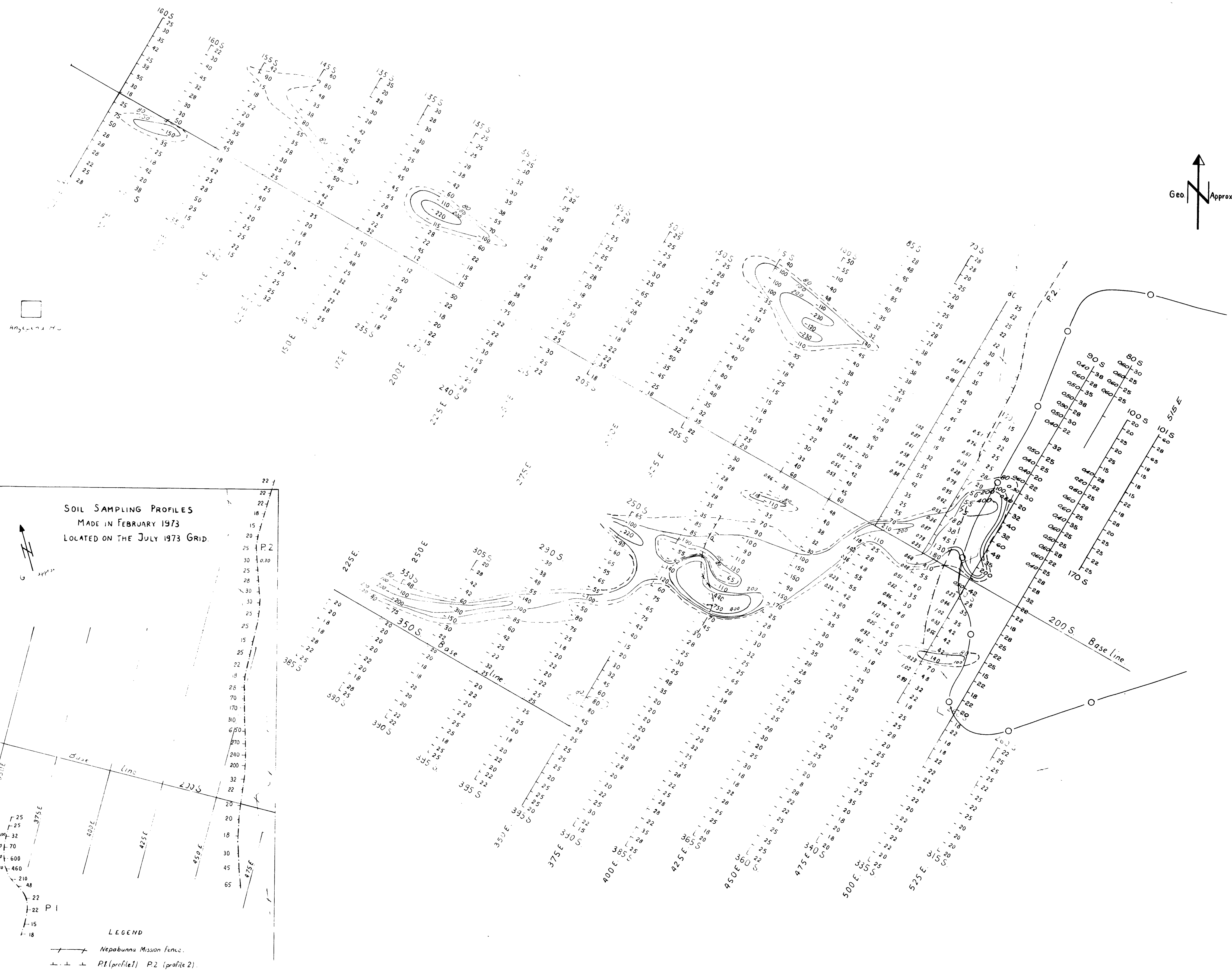
Hand Auger Cu. Results
Depth in Metres
0-100 100-200 200-400

CROSS LINE

SOIL SAMPLING MADE IN FEBRUARY 1973

80 ppm Cu. RESULTS
100 " " "
200 " " "
400 " " "

Field work limit made in December 1973



ENV 2314-6

ANGEPENA

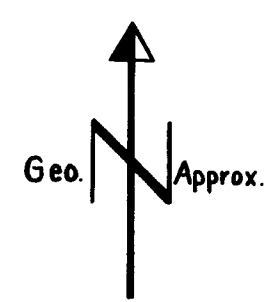
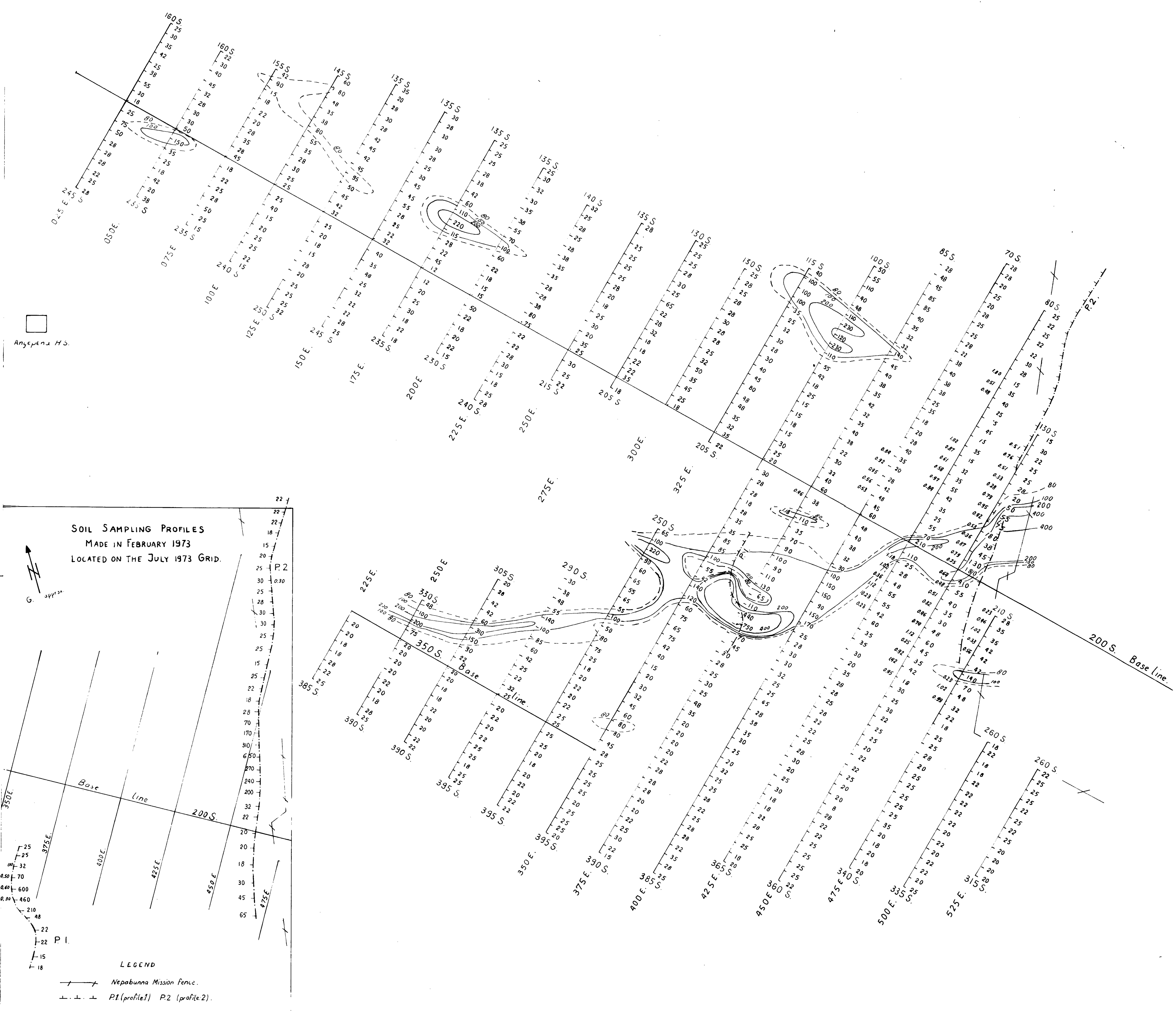
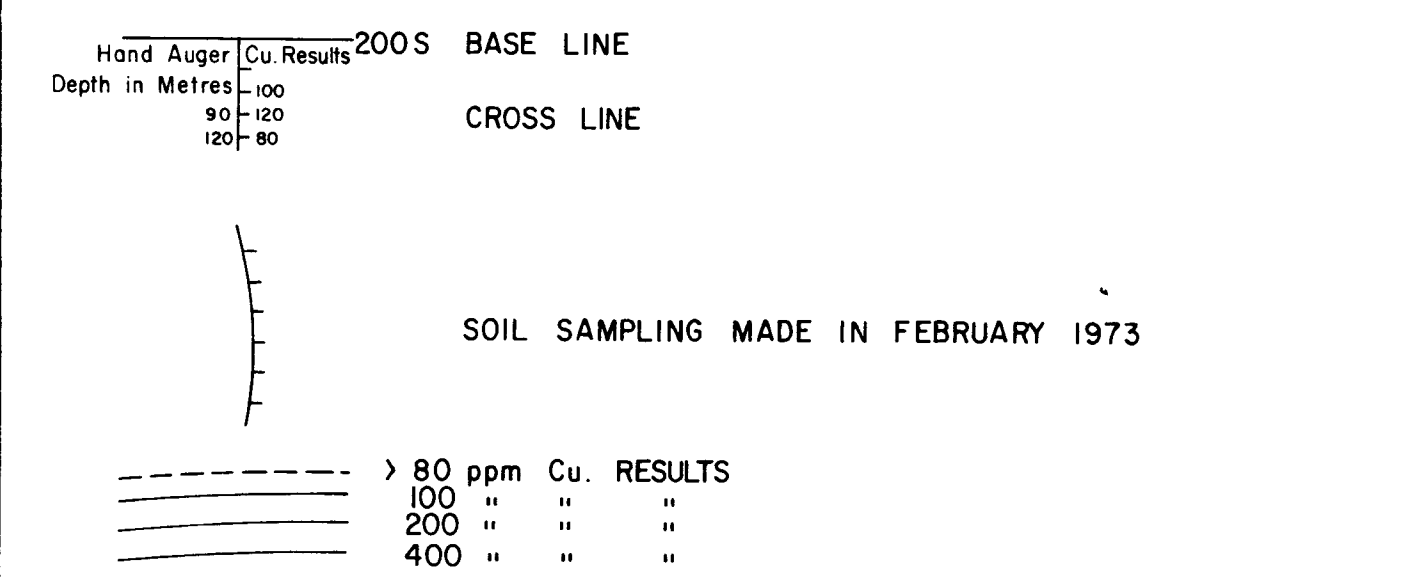
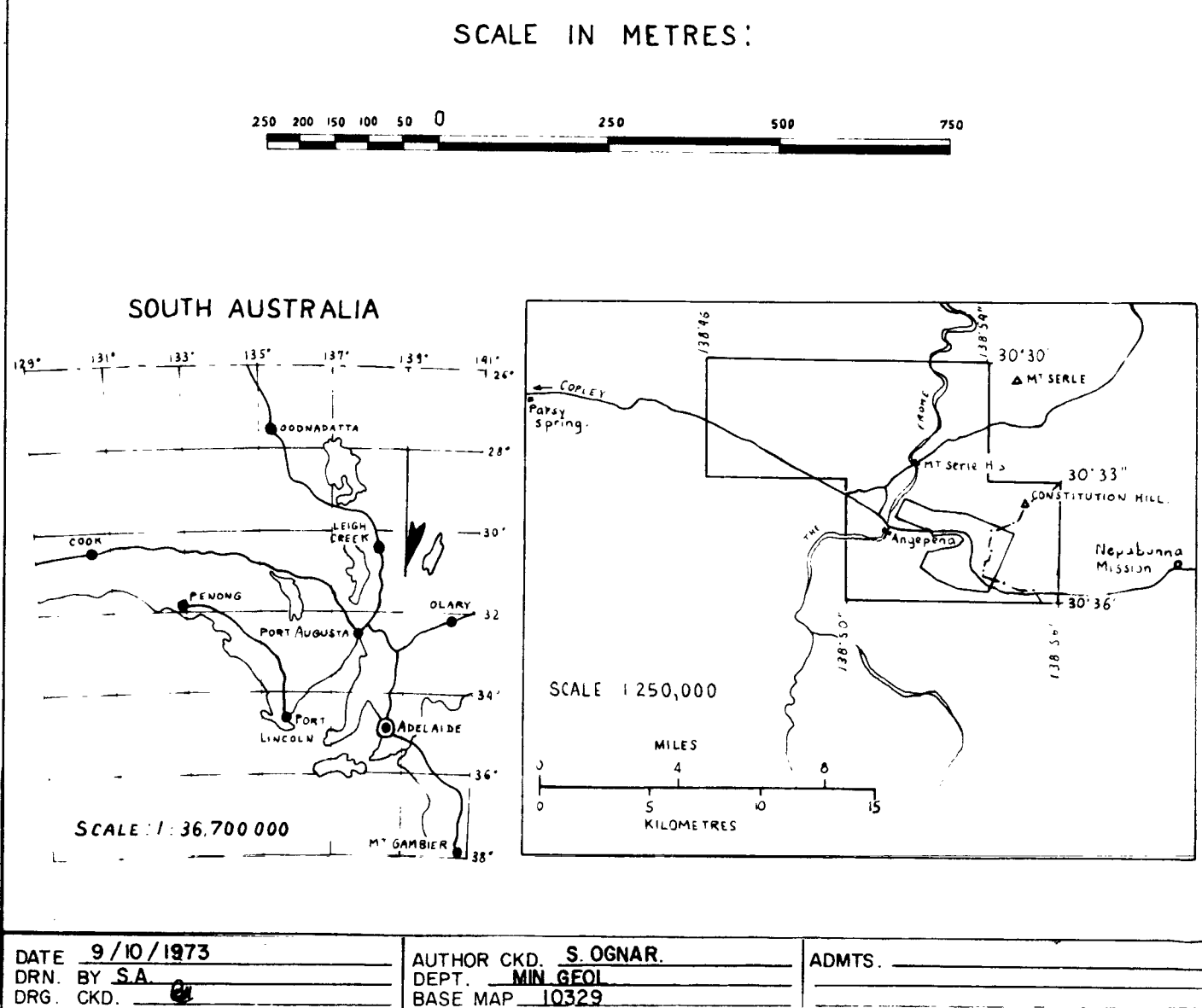
EX SML 708 (BEING RENEWED)

QUARTERLY REPORT

25/5/1973 - 24/8/1973

COPPER RESULTS

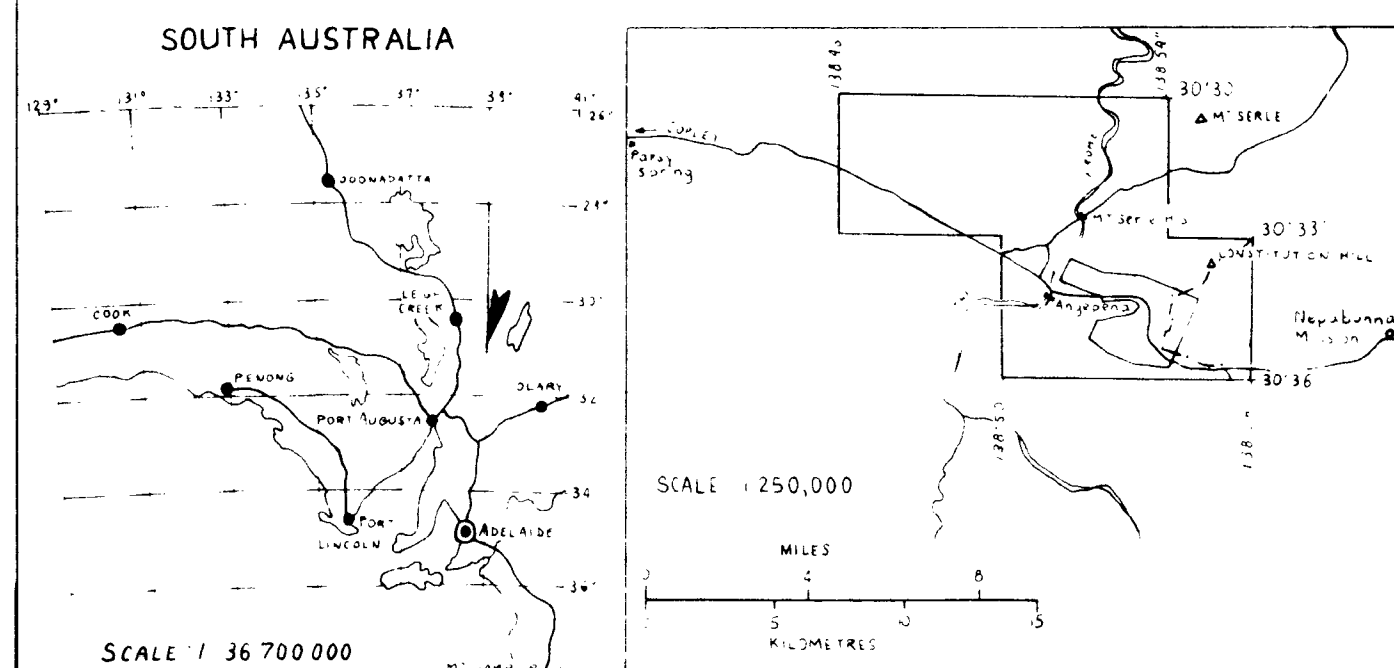
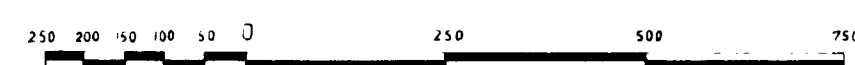
AND SAMPLE LOCATIONS



MT. SERLE
EL 96
QUARTERLY REPORT
20 - 9 - 73 — 20-12-73

ZINC RESULTS AND SAMPLE LOCATIONS

SCALE IN METRES:



DATE 9/10/1973	AUTHOR CKD S. OGNAR	ADMTS 15.1.74 <i>chf</i>
DRN BY S.A.	DEPT MIN. GEOL.	
DRG CKD	BASE MAP 10331	

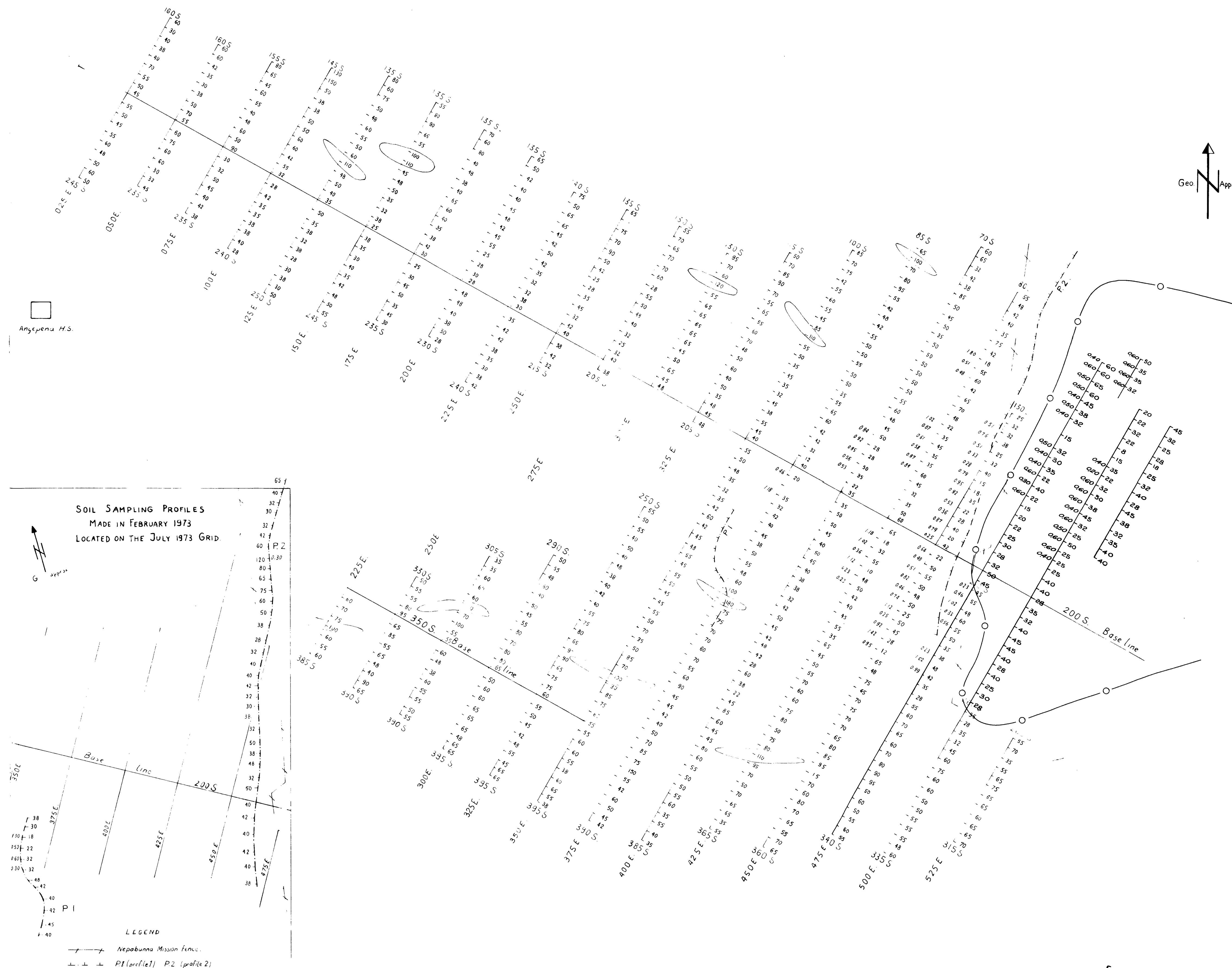
Hand Auger	Zn Results	80 S	BASE LINE
Depth in Metres	48		
1.02	22		
0.87	35		CROSS LINE

CROSS LINE

SOIL SAMPLING MADE IN FEBRUARY 1973

> 100 ppm Zn RESULTS

Field work limit made in December 1973



ENV 2314-8

AQUITAINE AUSTRALIA MINERALS PTY. LTD.

PL.7.

ANGEPENA

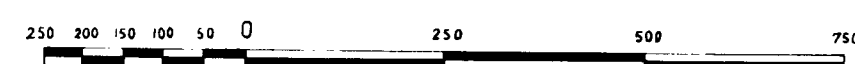
EX SML 708 (BEING RENEWED)

QUARTERLY REPORT

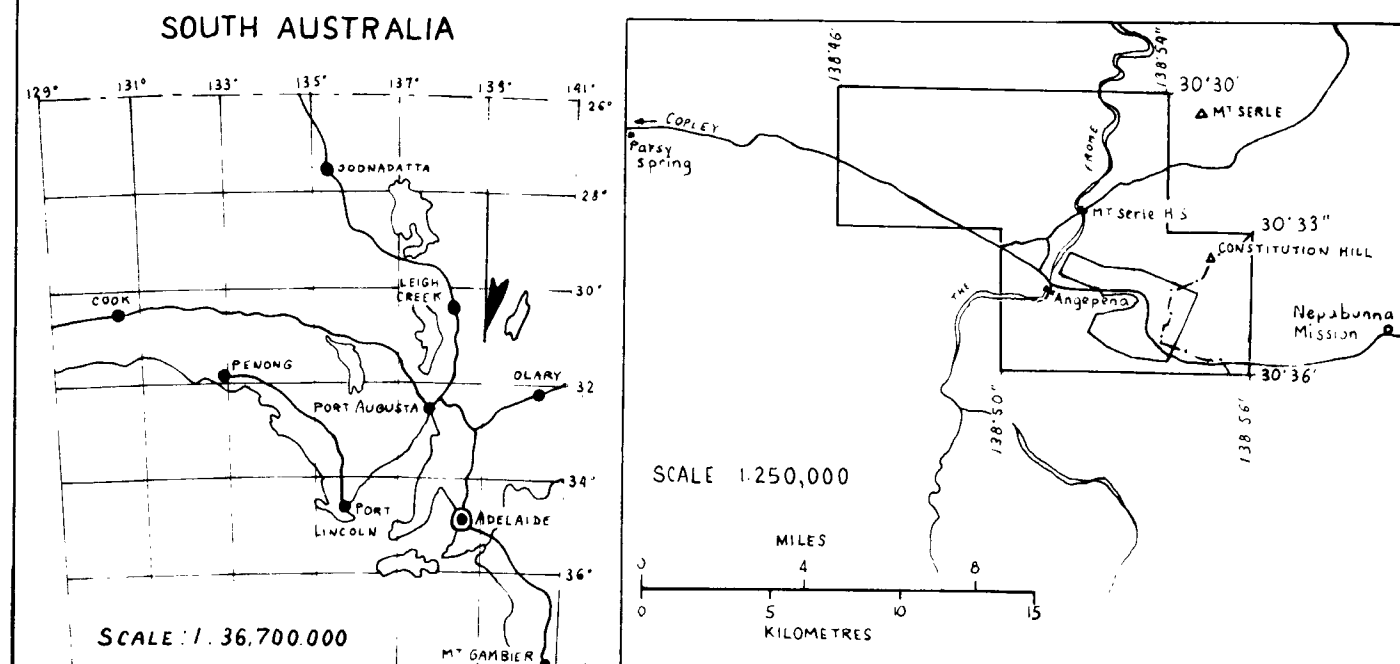
25/5/1973 — 24/8/1973

ZINC RESULTS
AND SAMPLE LOCATIONS

SCALE IN METRES:



SOUTH AUSTRALIA



DATE 9/10/1973	AUTHOR CKD. S. OGNAR	ADMTS.
DRN BY S.A. 0	DEPT. MIN. GEOL.	
DRG. CKD. 0	BASE MAP 10331	

Hand Auger Zn Results 80 S BASE LINE
Depth in Metres—48
102—22
0.87—35

CROSS LINE

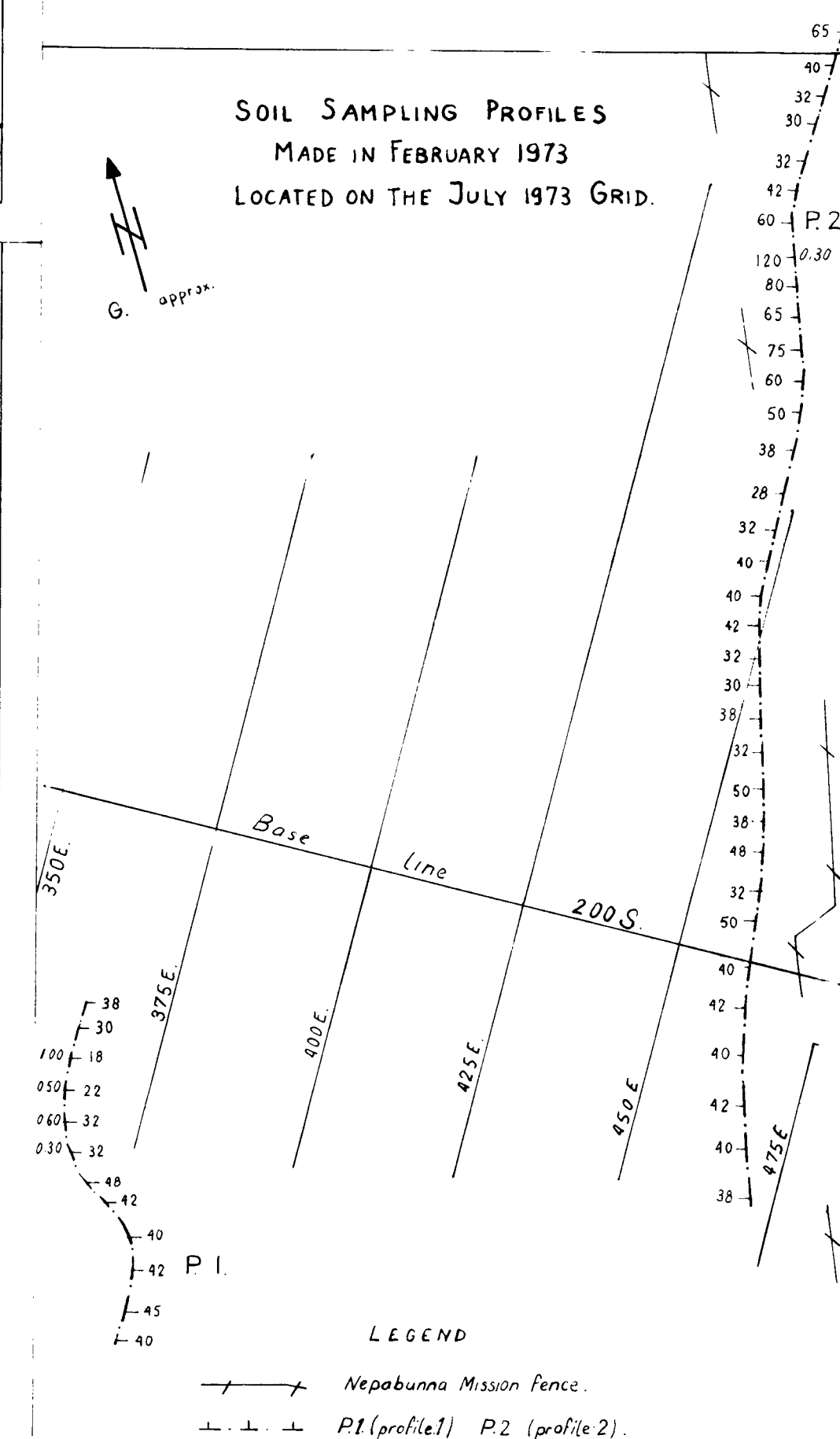
SOIL SAMPLING MADE IN FEBRUARY 1973

> 100 ppm Zn RESULTS

Angepena H.S.

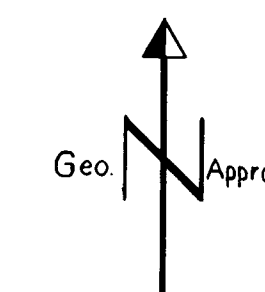
SOIL SAMPLING PROFILES
MADE IN FEBRUARY 1973
LOCATED ON THE JULY 1973 GRID.

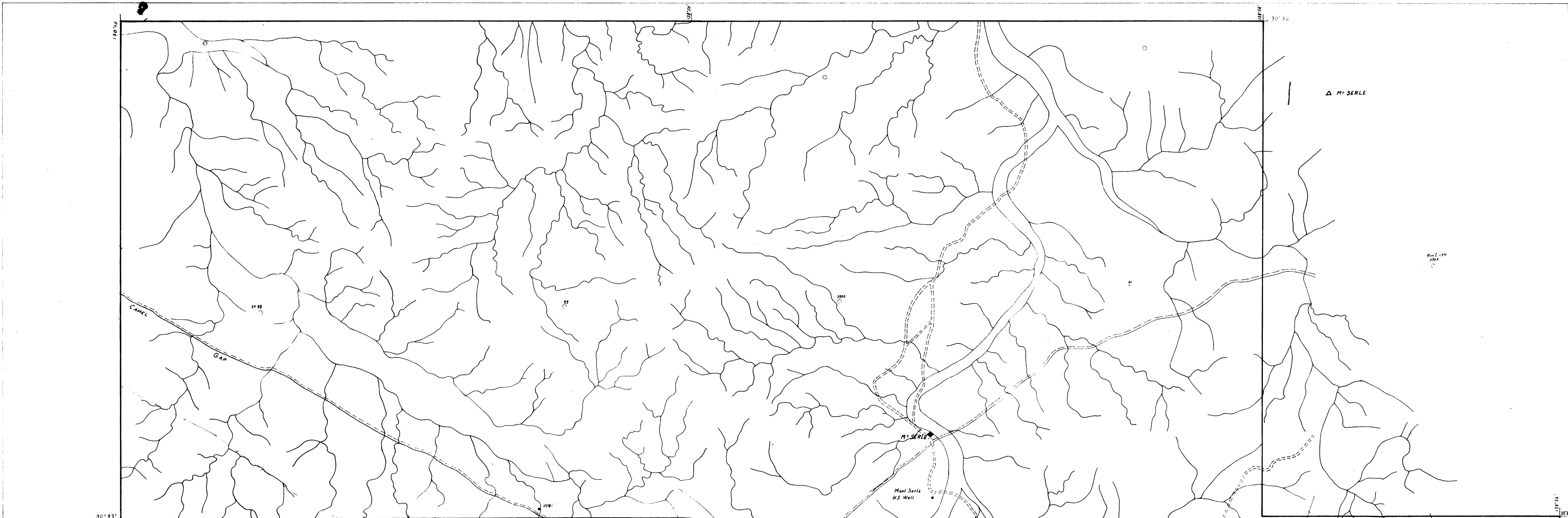
G. approx.



LEGEND

— X — Nepaburna Mission fence.
— . . . — P1 (profile 1) P2 (profile 2).





10328 MG 311 PL. 4.

AQUITAINE AUSTRALIA MINERALS PTY. LTD.

ANGEPENA

EX SML 708 (BEING RENEWED)
QUARTERLY REPORT
25/5/1973 — 24/8/1973

ZINC ANOMALY LOCATIONS

SCALE IN METRES:

0 250 500 750 1000 M

SOUTH AUSTRALIA

SCALE 1:36,700,000

SCALE 1:250,000

0 5 10 15 KILOMETRES

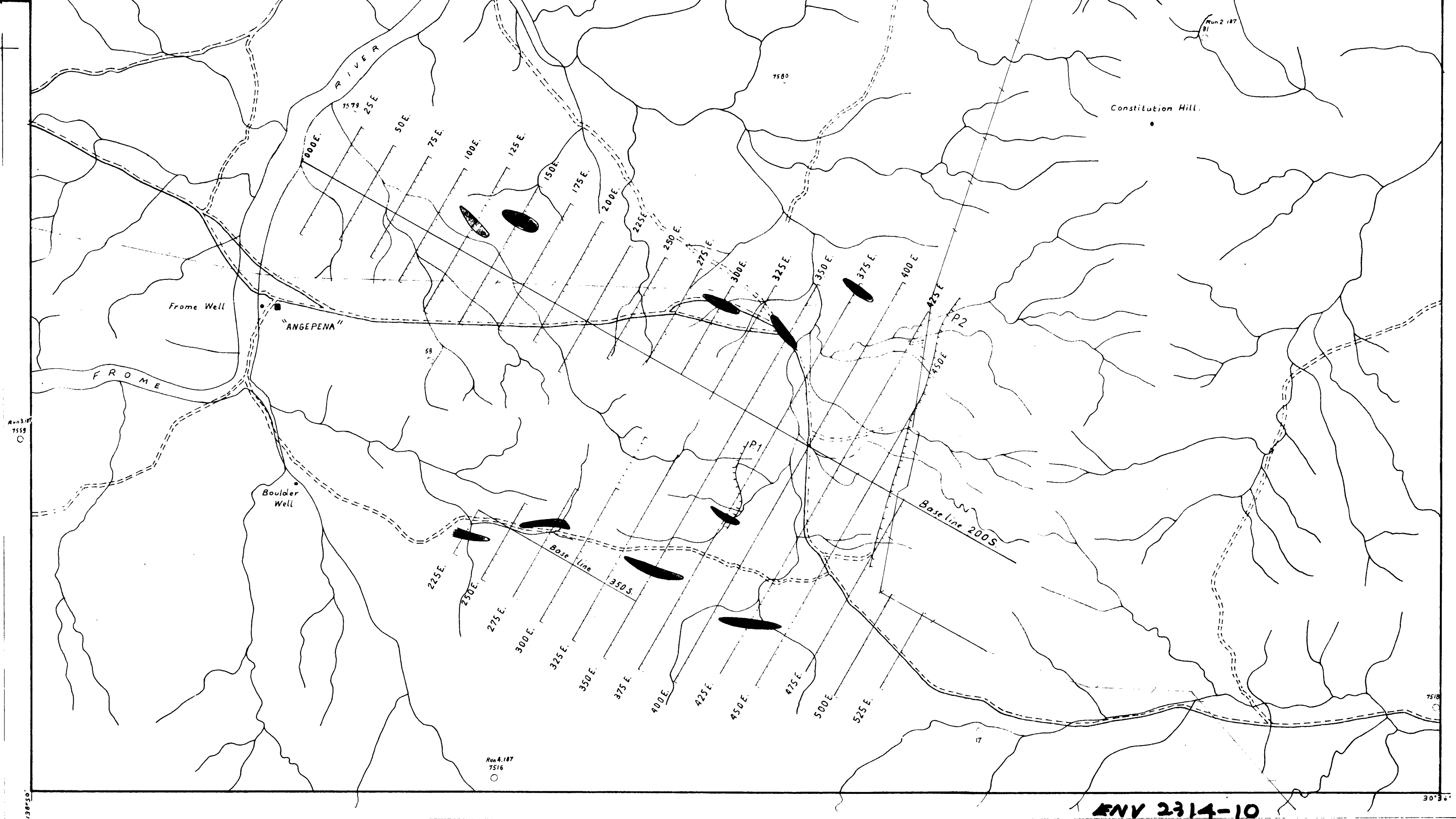
0 4 8 MILES

DATE 9/10/1973
BY S.A.O.
DRO. CND.

AUTHOR CND. S. OSMAR
DEPT. MIN. GEOL.
BASE MAP 10328

ADMTS.

- ZINC ANOMALIES VALUE > 100 ppm
- BASE LINE AND CROSS LINES
- AREA REFERRED IN TEXT
- CREEKS AND STREAMS
- PHOTO CENTRES OF S.A. SVY. 187 (SCALE 1:4800)
- HOMESTEAD



ENV 2314-10

AQUITAINE AUSTRALIA MINERALS PTY.LTD.QUARTERLY REPORTLEASE : E.L. 96DATE GRANTED: 20TH SEPTEMBER, 1973NAME : 'MT. SERLE'

LOCATED : _____

FOR THE PERIOD ENDED : 19TH DECEMBER, 1973.ABSTRACT

As proposed in the last Quarterly Report (MG 311), an additional programme of soil sampling was carried out on the north-eastern part of the copper anomaly delineated during the previous field work.

This anomaly has no extension in the north-eastern direction. With these discouraging results there is no further justification to continue the exploration programme on this area.

GEOCHEMICAL SURVEY

During December, 1973 five days were spent on E.L. 96, 'Mt. Serle' area, to extend the soil sampling grid already made during the previous field programme.

Seventy samples were taken, including twenty-eight auger drill samples and assayed for Cu, Pb and Zn.

The target was the eventual extension of the copper anomaly found in July, 1973, inside the Nepabuna mission property.

RESULTS

All results are reported on plates 1, 2 and 3 for Cu, Pb and Zn respectively.

Copper

Except for one result of 200 ppm, the copper anomaly cannot be seen to have any extension.

Lead

No significant lead results can be reported above background value.

Zinc

As for lead, all zinc results stay into the normal background.

CONCLUSIONS

From the above results it is concluded that the copper anomaly does not continue to the north-east and the lead and zinc results are background values only.

Consequently it is recommended that the area be relinquished.

EXPENDITURE

Expenditure recorded in our books for the period 1st September, 1973 to 31st December, 1973 amounted to \$10,037.48.

Peter G. Haskins

B

B. BLANGY

AMDEL ANALYTICAL SERVICE

Results in ppm unless otherwise stated

BATCH N° 1/2

JOB 24488/14

FORM 6

Sample No.	Cu	Pb	Zn				
1 475E 90 S	38	10	60				
2 95	28	8	60				
3 100	35	15	65				
4 105	38	12	60				
5 110	28	12	45				
6 115	30	12	38				
7 120 x	22	18	32				
8 128	32	10	15				
9 135	25	15	32				
10 140	25	18	30				
11 145	20	12	35				
12 150	22	10	22				
13 155	30	15	40				
14 160	20	5	22				
15 500.58							
16 165	32	10	15				
17 170	40	8	20				
18 175	32	12	22				
19 475E 180 S	60	5	25				
20 180 x							
1 475E - 185 S	48	15	30				
2 190	35	45	28				
3 195	200	5	32				
4 200	32	10	50				
5 475E - 205 S	42	12	45				
6 500.57							
7 490E - 80 S	30	8	55				
8 85	25	8	35				
9 90	25	12	35				
10 490E 95	25	8	32				
11 500E 100	20	8	20				
12 105	20	8	22				
13 110	25	8	32				
14 115	20	8	22				
15 120 x	25	8	8				
16 125	15	12	15				
17 130	28	8	35				
18 135	22	5	22				
19 500E - 140 S	25	10	32				
20 120 x							

AMDEL ANALYTICAL SERVICE

FORM 6 JOB 2488/74

Results in ppm unless otherwise stated

BATCH N° 3/4

TT	Sample No.	Cu	Pb	Zn				
1	500E 1455	28	10	50				
2	50	25	8	38				
3	55	35	10	45				
4	60	25	8	32				
5	65	25	<5	25				
6	70	28	8	50				
7	75x	22	<5	25				
8	80	25	<5	25				
9	85	28	<5	25				
10	90	28	5	40				
11	195	32	8	40				
12	200	22	8	28				
13	5	22	10	35				
14	210	18	8	32				
15	51058							
16	15	28	<5	40				
17	20	25	5	45				
18	25	22	8	45				
19	500E - 2305	25	<5	40				
20	75x							
1	500E - 2355	15	5	28				
2	40	22	5	40				
3	46	18	<5	25				
4	50	22	5	30				
5	500E - 2555	20	5	28				
6	51057							
7	515E - 1015	60	5	45				
8	106	28	5	32				
9	110	65	<5	25				
10	115	18	5	28				
11	120	15	8	18				
12	125	18	8	25				
13	130	15	8	32				
14	135	22	8	40				
15	140x	18	8	28				
16	145	28	10	45				
17	150	20	5	38				
18	155	25	<5	32				
19	515E - 1605	25	<5	35				
20	160x							

00013

AQUITAINE AUSTRALIA MINERALS PTY.LTD.

QUARTERLY REPORT

LEASE : E.L. 96

DATE GRANTED: 20TH SEPTEMBER, 1973

NAME : 'MT. SERLE'

LOCATED : _____

FOR THE PERIOD ENDED : 19TH MARCH, 1974

During the period no field work was undertaken as results from the previous geochemistry survey were not considered as warranting it.

Expenditure recorded in our books for the period (1st January to 31st March, 1974) amounted to \$718.27.


B. BLANGY



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AQUITAINE AUSTRALIA MINERALS PTY. LTD.

QUARTERLY REPORT

LEASE : E.L. 96

DATE GRANTED : 20TH SEPTEMBER, 1973

NAME : 'MT. SERLE'

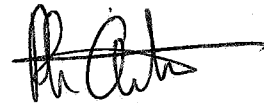
LOCATED :

FOR THE PERIOD ENDING : 19TH JUNE, 1974

No field or office work was carried out during the quarter.

The Final Report on this E.L. is in preparation.

Expenditure recorded in our books for the quarter amounted to \$112.49.



PH. ARTRU

ACTING EXPLORATION MANAGER



AQUITAINE AUSTRALIA MINERALS PTY LTDQUARTERLY REPORT

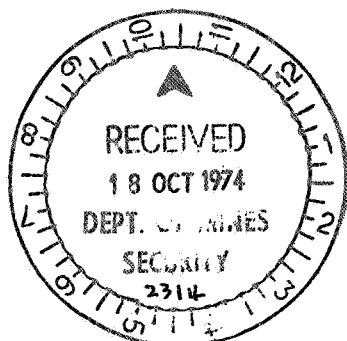
LEASE : E.L. 96 (part B) DATE GRANTED : SEPTEMBER 20, 1973
NAME : ANGEPENA LOCATED :
FOR THE PERIOD ENDING : QUARTER TO SEPTEMBER 20, 1974

No additional field work was carried out in the final quarter.

Our joint venture partners were advised on June 14 of Aquitaine's intention to withdraw from further exploration in E.L. 96 (part B) effective as of September 14, 1974, and consequently no extension of the licence is requested on our behalf.

Work carried out during the period of tenure consisted principally of geochemical soil prospecting. The results of this survey and related information were supplied to the Mines Department in Aquitaine Australia Minerals Report MG311 at the end of the first quarter.

Total expenditure was \$10,967.24.



R. W. Fidler
for Ph. ARTRU
ACTING EXPLORATION MANAGER

Ph. Artru