

DEPARTMENT OF MINES
SOUTH AUSTRALIA

THE INVESTIGATION OF THE BENDIGO COPPER AND MOLYBDENUM PROSPECT

REPORT NO. 3

by

N.R. LANGSFORD
GEOLOGIST
GEOCHEMICAL EXPLORATION SECTION

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Rept.Bk.No. 72/1
G.S. No.4773
D.M. No.1243/70

5th January, 1972

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DEPARTMENT OF MINES
SOUTH AUSTRALIA

Rept.Bk.No.72/1
G.S. No. 4773
D.M. No.1243/70

THE INVESTIGATION OF THE BENDIGO COPPER AND MOLYBDENUM
PROSPECT

REPORT NO. 3

ABSTRACT

Rotary drilling to a maximum depth of 300ft (90m) in alluvium covered areas in the west and south-east of the Reserve area did not intersect any significant concentrations of copper or molybdenum. A zone of weathered granodiorite in the south-east of the Reserve contains weakly anomalous amounts of copper. (100-200 ppm). The western limit of this geochemical anomaly is not known. An I.P. anomaly occurs 1200 ft (360 m). Northwest of the geochemical anomaly. Weathered siltstones west of area C only contain anomalous amounts of copper within about 1000 ft (300 m) of the granodiorite-sediment contact.

Several short cores of altered granodiorite were taken from alluvium covered areas between outcrop areas. Sericitization is the dominant type of hydrothermal alteration in these samples.

INTRODUCTION

This report presents results of two rotary drilling programmes. The first, in June 1971, using a Mayhew drill, tested an alluvium-covered area in the South-east of the Reserve. The aim was to locate zones of copper and molybdenum mineralization in the southerly extension of the granodiorite exposed in areas A and B.

The second programme, in October, 1971 using the Gryphon drill was based on the recommendations of an earlier report. (Langsford, 1971). Fourteen holes tested alluvium covered areas west of area C

for secondary copper concentrations at shallow depths less than 300 ft (90 m). Most of these holes intersected weathered metasediments.

Several existing holes were deepened to obtain samples for petrographic investigation. It was felt that there may be some significant difference in alteration or fracturing between granodiorite cropping out in area A, B and C, and the granodiorite beneath alluvium between outcrop areas.

Five holes were also drilled in the south east of the Reserve to follow-up a weak copper anomaly found during the first programme.

Positions of holes are plotted on Fig.2 and 3. Logs, geochemical results and graphs of metal content against depth are included in the appendix.

DEEP SOIL SAMPLING

(i) South-east of Reserve (see Fig.2)

Ten holes were planned to test alluvium covered areas south of the main outcrop areas B and C. The holes were drilled in two approximately north-south lines about 5000 ft (1500 m) apart. The 5 holes on each line were drilled at 2000 ft (600 m) centres.

To complete this phase required 15 holes totalling 1876 ft (563 m). Gravel beds caused several holes to be abandoned at shallow depth and redrilled nearby. In nine of the ten proposed sites the overburden was penetrated; these holes passed into highly weathered yellow to white biotite granodiorite.

Overburden thickness ranges from 20 feet (6 m) to 100 ft. (30 m) and consists of red-brown and green clays with some thin gravel

beds. Surface soil and calcrete is less than 10 ft (3 m) thick.

Overburden thickness decreases east and south along the lines of holes.

No copper or other sulphide mineralization was observed in any of the holes drilled. Weathering extends to a maximum of 260 ft (78 m). It was not possible to determine the degree of hydrothermal alteration of the granodiorite from examination of the drill cuttings.

Only two holes, BM77 and BM78, contain anomalous amounts of copper. BM77 averages 125 ppm. Copper between 60 and 137 ft (18-4 m); BM78 averages 75 ppm. Copper between 50 and 105 ft (15-32 m). Other holes contain less than 50 ppm. Copper Molybdenum in both holes is less than 3 ppm. in all samples.

Five holes were drilled near BM77 during the second programme to test for extension of this low-order copper anomaly. The positions of these holes relative to BM77 are tabled below.

TABLE 1

<u>Hole No.</u>	<u>Position Relative to BM 77</u>	<u>Depth</u>
BG 27	800ft (240 m) East	139 ft (42 m)
28	800ft (240 m) West	112 ft (34 m)
29	800ft (240 m) North	210 ft (63 m)
30	600ft (180 m) South	147 ft (44 m)
31	1200ft (360 m) South	175 ft (53 m)

BG 28 averages 105 ppm. Cu between 80 and 112 ft (24-34 m) and

BG 30 averages 120 ppm. Cu between 110 and 147 ft (33-44m).

These holes outline a zone of weathered granodiorite containing weakly anomalous amounts of copper, the western limits of this zone are not known.

ii) West of reserve (see fig.3)

Sixteen holes totalling 3780 ft (1134 m) were drilled at 800 ft (240 m) centres in alluvium west of outcrop area C. The main purpose of these holes was to test for possible supergene enrichment zones at shallow depth, less than 300 ft (90 m).

All holes except BG 32 and BG 33 intersected highly weathered meta-siltstone. Weathering extends below 300 ft. (90 m) in some holes. Generally copper contents are 100 ppm. No copper or molybdenum mineralization was noted in any holes.

BG32 and BG33 intersected completely weathered and leached granite, containing less than 65 ppm. Cu.

BG 13, BG 23, BG 24 and BG 25 contain significantly anomalous amounts of copper, from about 100 ft (30 m) to their total depth. The most interesting intervals are tabled below.

TABLE 2

Copper contents of rotary holes, west of area C.

<u>Hole No.</u>	<u>Interval</u>	<u>Av. copper content, ppm</u>	<u>Total Depth of hole</u>
BG 13	60-175ft(18-52.5m)	180	175ft (52.5m)
BG 23	40-300ft(12-90 m)	140	300ft (90 m)
BG 24	30-293ft(9-88m)	280	293ft (88 m)
BG 25	90-242ft(27-73m)	230	242ft (73 m)

BG 23, BG 24 are close to the inferred granite-sediment contact; this suggests that the copper content of the sediments increases near to the contact.

BG 10, BG 12, BG 14 and BG 22 and BG 24 show evidence of a weak zone of copper secondary enrichment in the interval 160-220 ft (48-66m). (See graphs in appendix).

No significantly anomalous concentrations of molybdenum were detected in any holes drilled west of area C.

Rock Sampling

(i) Coring

Several existing rotary holes were deepened to obtain short cores for petrographic investigation. This tested the suggestion that granodiorite below alluvium between areas A, B and C may be more altered fractured than the granodiorite exposed in the outcrop areas.

TABLE 3

Holes deepened to obtain short cones.

Hole No.	Depth	Result
BG 6	200 ft (60 m)	No core - granodiorite too hard
BG 7	172.5 (52 m)	1 ft core of altered granodiorite
BG 8	90 (27 m)	0.25 ft core of altered granodiorite
BG 9	118 (35 m)	0.1 ft core of hornfels
BG 20	157 (47 m)	0.5 ft core of altered granodiorite
BG 30	147 (44 m)	1 ft core cut but not recovered
BG 33	118 (35 m)	1 ft core cut but not recovered

Three samples of altered granodiorite were recovered. Two of these from BG7 and BG20 are sericitized, showing essentially the same hydrothermal alteration as granodiorite in outcrops areas. A sample of granodiorite from BG8 shows evidence of "late stage silicification and potash metasomatism". (AMDEL Petrographic Report MP2114/71;)

No core was recovered in BG30 or BG33. The bit used was built up from broken tungsten carbide slugs and tended to cut a

slightly undersize core, which the core-catcher could not retain.

(ii) Breccia zone in area C

An attempt was made to drill into this breccia zone using the Gryphon as a rotary-percussion drill. BG26 was abandoned at 83ft (25m) due to persistent caving. BG26A, 5ft (2m) west of BG26 was also abandoned at 80ft (25 m) due to persistent caving. Open joints in the upper 30ft (9 m) allowed wedge-shaped blocks to fall into the hole. This could be prevented by casing the upper 50 ft (15 m) of the hole. The hole penetrated hard grey hornfelsed granodiorite-siltstone breccia. No sulphide mineralization was noted. Copper contents range from 15-330 ppm. in BG26 and 75-140 ppm. in BG26A.

GEOPHYSICS

Four I.P. traverses were made at 400 ft dipole-dipole spacing across the weak copper anomaly intersected in BM77 (see fig.4). The methods and detailed results are reported in Pilkington; 1971. Frequency effects up to 4% were measured. The most intense anomalies occur on lines 380N and 372N, west of 564E. This I.P. anomaly lies about 1200 ft (360 m) north-west of the geochemical anomaly outlined by BM77, BG28 and BG30. The western limit of the I.P. anomaly is not known.

Geophysical interpretation suggests that the contact between granodiorite and sediments approximately co-incides with the 500E baseline.

CONCLUSIONS

- (1) No economically significant concentrations of copper or molybdenum occur within 300ft (90 m) of the surface beneath alluvium in the areas tested by drilling.

- (2) A zone of weathered granodiorite containing 100-200 ppm copper occurs in the south-east corner of the Reserve. The western limit of this copper anomaly has not been defined. A geophysical anomaly, as yet only partly defined, has been detected 1200 ft (360 m) north west of the geochemical anomaly. It is possible that the geochemical anomaly might extend westerly, to cover the I.P. anomaly.
- (3) Sediments west of area C generally contain less than 100 ppm copper. However within 1000ft (300 m) of the granodiorite-sediment contact, the copper content of the sediments increases to 100-200 ppm.
- (4) Granodiorite beneath alluvium between outcrop areas has been sericitized. One sample from BG20 shows evidence of possible silicification and potash metasomatism.

RECOMMENDATIONS

- (i) Further I.P. work should be done in the south-east of the Reserve area to determine the westerly extent of the anomaly on lines 572N and 580N.
- (ii) If a significant I.P. anomaly is found, then a rotary drilling programme should be planned to test the anomaly, and the western extension of the geochemical anomaly in BM77, BG27 and BG30.

REFERENCES

- Langsford, N.R., 1971. "The investigation of the Bendigo copper and molybdenum prospect; Report No.1". S.A. Dept. of Mines Rept.Bk.No. 71/129 (unpub.)
- Pilkington, G., 1971. "Report No.3 on the geophysical survey of the Bendigo Homestead area, Franklyn 1 mile sheet" S.A. Dept. of Mines Rept.Bk.No. 71/196 (unpub.)

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BG20	Logs, field analyses	..83...
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BG21	Logs, field analyses	..86...
	AMDEL analyses	..87...
	Graph of metal content v. depth	..88....

BG22	Logs, field analyses	..89...
	AMDEL analyses	..90...
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	AMDEL analyses	..93...
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BG24	Logs, field analyses.	..95...
	AMDEL analyses	..96...
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BG25	Logs, field analyses	..98...
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Hole No. 69

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BM69

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO CO. KIMBERLY DOCKET NO. 1243/70

Collar Coords: Depth: 252ft. Serial No. 983-71
 Date Drilled: 10 June 71 On: 10 June 71 Plan Reference: 71-855
 Bore Logged: N. Langsford Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu(ppm)		
		120 - 130	10
0 - 10	30	130 - 140	25
10 - 20	30	140 - 150	55
20 - 30	55	150 - 160	15
30 - 40	35	160 - 170	25
40 - 50	35	170 - 180	40
50 - 60	30	180 - 190	50
60 - 70	30	190 - 200	50
70 - 80	15	200 - 210	40
80 - 90	10	210 - 220	25
90 - 100	10	220 - 230	25
100 - 110	10	230 - 240	30
110 - 120	10	240 - 250	55
		250 - 252	50

SADM A.A.S. field analyses

Remarks: 0 - 10ft. Red brown clay
 10 - 60 Red brown and green clay with gravels
 60 - 90 Red and green clays
 90 - 252 White to yellow completely weathered biotite granite

BM 69

AMDEL

Analyses

(ppm)

Interval (ft)

Cu

Mo

0 - 10	45	4
10 - 20	45	5
20 - 30	50	5
30 - 40	45	5
40 - 50	55	7
50 - 60	40	4
60 - 70	45	<3
70 - 80	5	<3
80 - 90	5	3
90 - 100	5	3
100 - 110	5	<3
110 - 120	5	<3
120 - 130	5	<3
130 - 140	20	<3
140 - 150	20	7
150 - 160	20	3
160 - 170	25	3
170 - 180	50	<3
180 - 190	50	<3
190 - 200	45	<3
200 - 210	50	3
210 - 220	40	<3
220 - 230	25	<3
230 - 240	35	<3
240 - 250	65	<3
250 - 252	50	3

BENDIGO PROJECTHole No. BM69
Serial No.

Cu in parts per million

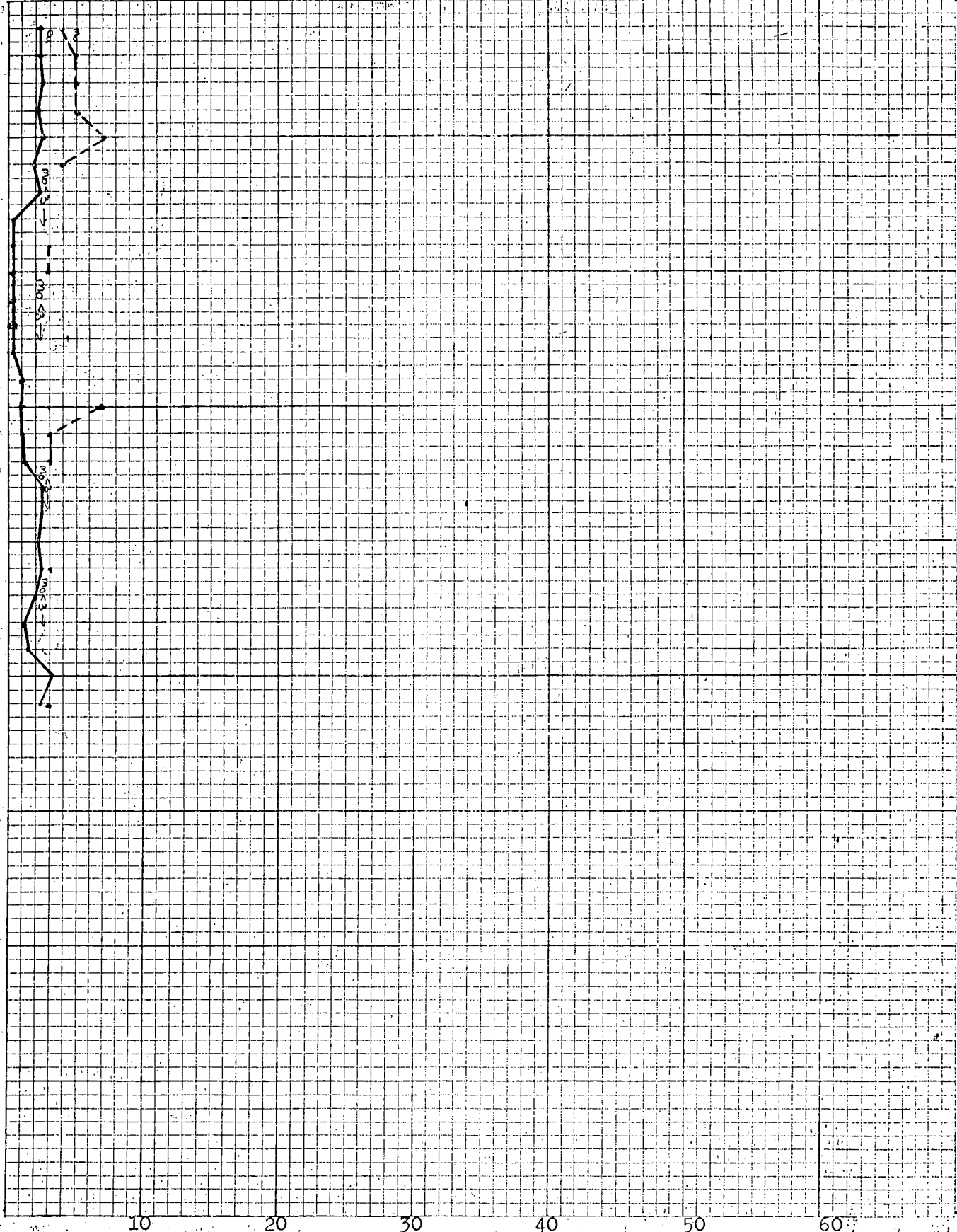
Coordinates

OOE

CON

Depth
(ft.)

0 200 400 600 800 1000 1200



Hole No. 70

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BM70

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 252ft.

Serial No. 983-71

Date Drilled: 10-11 June 71

On: 11 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu ppm.		
0 - 10	25	120 - 130	5
10 - 20	25	130 - 140	25
20 - 30	25	140 - 150	25
30 - 40	40	150 - 160	10
40 - 50	60	160 - 170	30
50 - 60	40	170 - 180	25
60 - 70	30	180 - 190	60
70 - 80	5	190 - 200	30
80 - 90	5	200 - 210	30
90 - 100	5	210 - 220	15
100 - 110	5	220 - 230	15
110 - 120	5	230 - 240	30
		240 - 250	40

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 10 Red-brown clay with calcrete

10 - 40 Red-brown clay

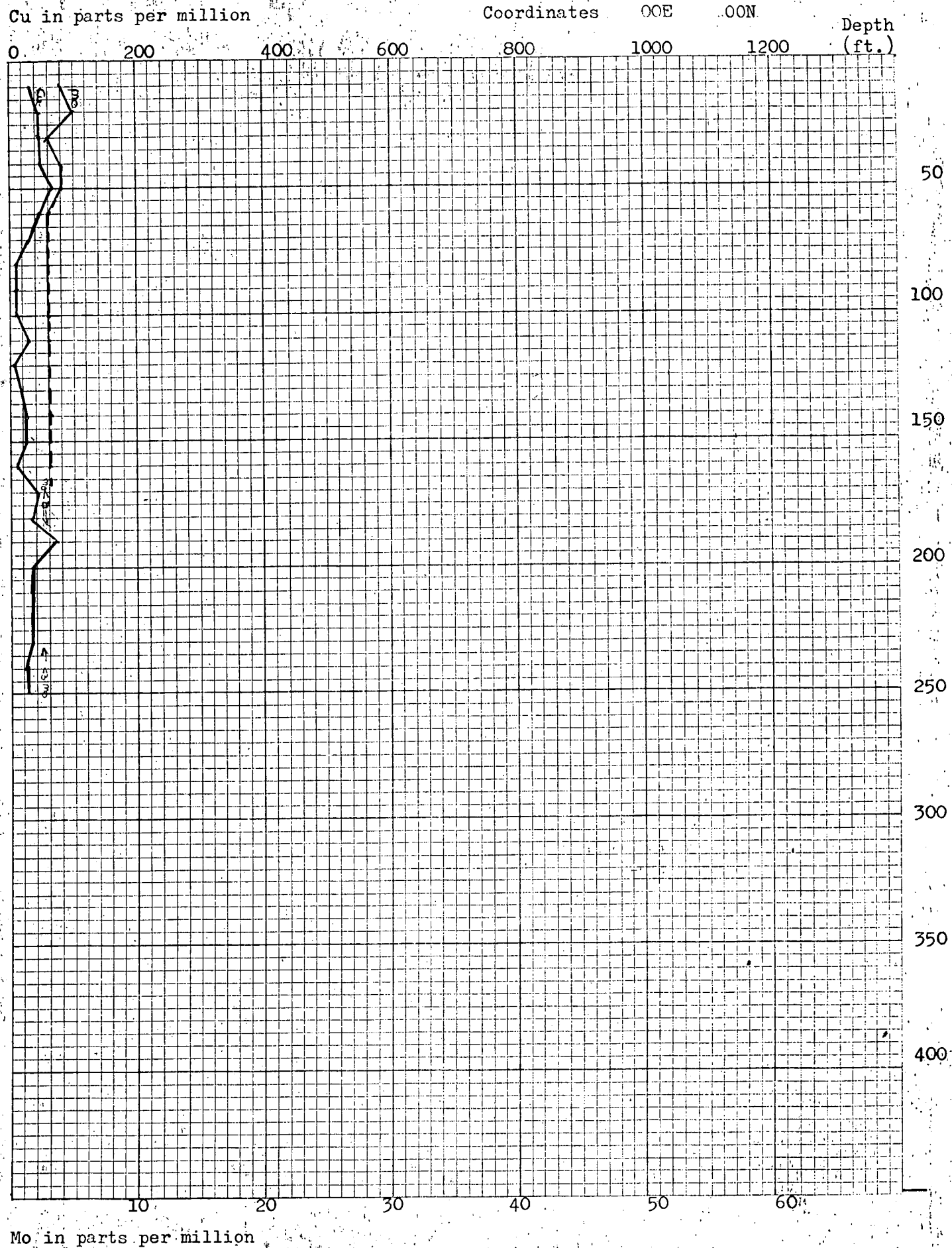
40 - 90 Grey, green clay

90 - 250 White to yellow completely weathered biotite granite

BM 70

AMDEL Analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	30	4
10 - 20	45	5
20 - 30	45	3
30 - 40	45	4
40 - 50	65	4
50 - 60	45	3
60 - 70		3
70 - 80	5	3
80 - 90	<5	3
90 - 100	<5	3
100 - 110	15	3
110 - 120	5	3
120 - 130	20	3
130 - 140	25	3
140 - 150	25	3
150 - 160		3
160 - 170	40	<3
170 - 180	35	<3
180 - 190	75	<3
190 - 200	35	<3
200 - 210	35	<3
210 - 220	35	<3
220 - 230	35	<3
230 - 240	25	<3
240 - 250	25	<3

Hole No. BM70
Serial No. 983-71BENDIGO PROJECT

Hole No. 71

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical)

BM71, 71A, 71B

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: Depth: 57ft. max. Serial No. 983-71
 Date Drilled: 11 June 71 On: 11 June 71 Plan Reference: 71-855
 Bore Logged: N. Langsford Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu ppm.		
	71	71A	71B
0 - 10	30	25	30
10 - 20	30	25	30
20 - 30	30	30	40
30 - 40	30	35	40
40 - 50	30	50	
50 - 57	60		

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 10ft. Red clays with calcrete
 10 - 57 Red brown clays with gravel beds

Holes unable to penetrate gravels due to persistent caving

BM 71, 71A, 71B

AMDEL Analyses (ppm)

Interval (ft)	Cu 71,	71A	71B	Mo 71,	71A	71B
0 - 10	25	25	25	3	3	<3
10 - 20	20	35	25	3	4	<3
20 - 30	25	25	35	3	3	3
30 - 40	25	35	40	4	<3	3
40 - 50	25	45		4	12	
50 - 60	45			5		

BENDIGO PROJECT

Cu in parts per million

Coordinates

OOE

OON

Depth
(ft.)

0

200

400

600

800

1000

1200



50

100

150

200

250

300

350

400

10

20

30

40

50

60

Mo in parts per million

Hole No. 72

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) 72, 72A, 72B

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 50ft. max. Serial No. 983-71

Date Drilled: 12 June 71

On: 12 June 71 Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	ppm Cu		
	72	72A	72B
0 - 10	25	30	15
10 - 20	25	30	15
20 - 30	25	25	15
30 - 40	35	25	15
40 - 50		15	

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 50ft. Red brown clays with gravels

Hole unable to penetrate to bedrock due to caving in gravels.

Hole No. 72

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) 72C

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 260ft.

Serial No. 983-71

Date Drilled: 12 June 71

On: 12 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

Interval (ft.)	ppm Cu	130 - 140	10
0 - 10	30	140 - 150	15
10 - 20	25	150 - 160	15
20 - 30	25	160 - 170	15
30 - 40	25	170 - 180	15
40 - 50	25	180 - 190	10
50 - 60	40	190 - 200	10
60 - 70	50	200 - 210	10
70 - 80	55	210 - 220	15
80 - 90	40	220 - 230	15
90 - 100	15	230 - 240	25
100 - 110	10	240 - 250	30
110 - 120	10	250 - 260	50
120 - 130	10		

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 10ft. Calcrete and brown clay
 10 - 52 Red brown clay
 52 - 100 Grey green clays
 100 - 260 White to yellow completely weathered granite

BM 72, 72A, 72B, 72C

Interval (ft)	AMDEL		Analyses				(ppm)			
	Cu	72	72A	72B	72C	Mo	72	72A	72B	72C
0 - 10	30		25	25	25		5	3	3	<3
10 - 20	35		25	30	30		4	3	4	<3
20 - 30	25		25	30	35		3	3	<3	<3
30 - 40	35		25	20	25		9	3	<3	<3
40 - 50			25		25			3		3
50 - 60					40					3
60 - 70					30					3
70 - 80					40					5
80 - 90					45					4
90 - 100					20					<3
100 - 110					10					<3
110 - 120					15					<3
120 - 130					10					<3
130 - 140					15					<3
140 - 150					20					<3
150 - 160					10					<3
160 - 170					5					<3
170 - 180					5					<3
180 - 190					<5					<3
190 - 200					5					<3
200 - 210					5					3
210 - 220					10					3
220 - 230					20					<3
230 - 240					25					<3
240 - 250					55					<3
250 - 260					65					<3

BENDIGO PROJECTHoleNo. BM72C
Serial No. 983-71

Cu in parts per million

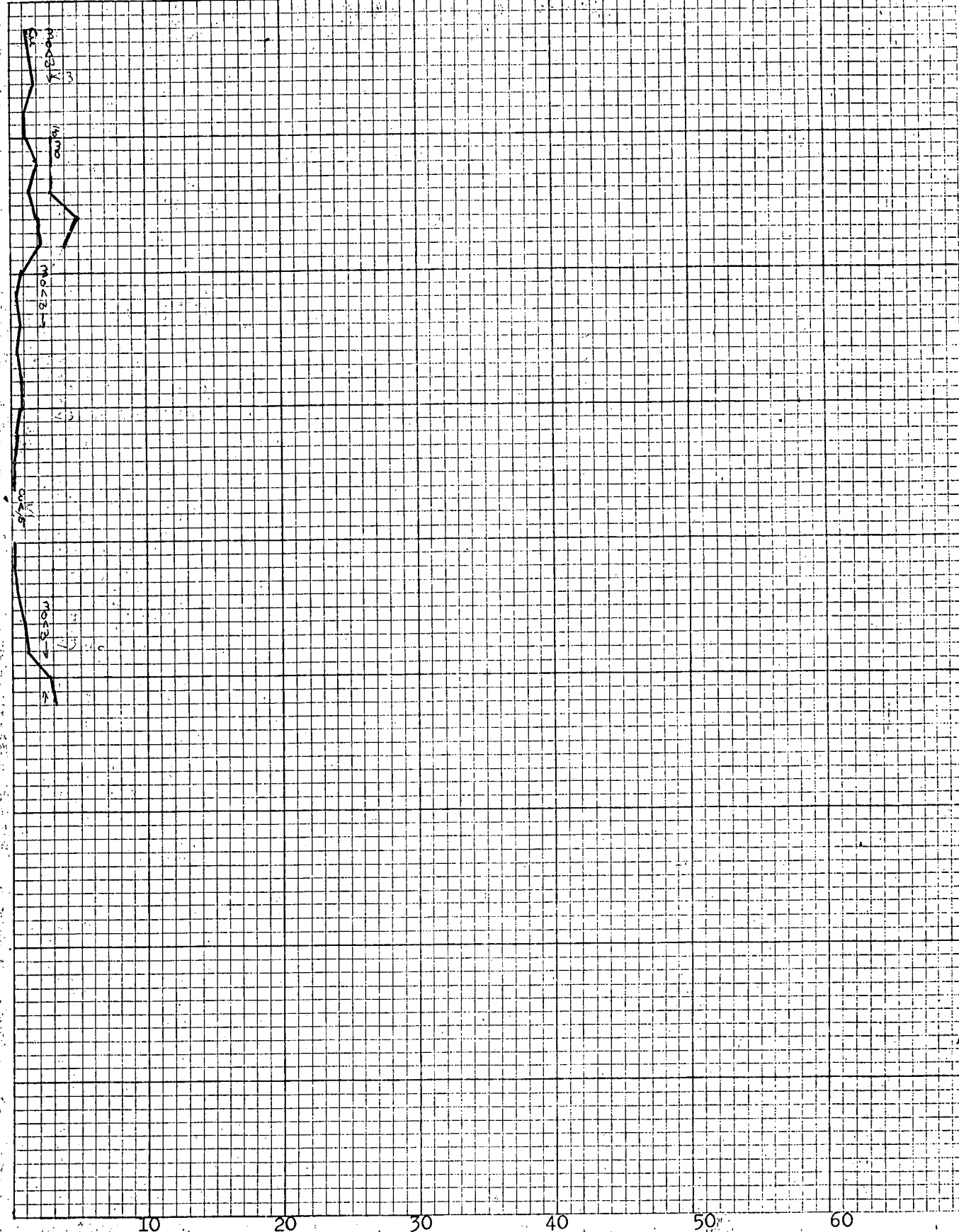
Coordinates

OOE

OON

Depth
(ft.)

0 200 400 600 800 1000 1200



Mo in parts per million

Hole No. 73

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical)

BM73

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 169ft.

Serial No. 983-71

Date Drilled: 12 June 71

On: 12 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

Interval (ft.)	Cu ppm.
0 - 10	25
10 - 20	25
20 - 30	15
30 - 40	25
40 - 50	15
50 - 60	10
60 - 70	10
70 - 80	10
80 - 90	10
90 - 100	10
100 - 110	5
110 - 120	10
120 - 130	5
130 - 140	15
140 - 150	15
150 - 160	25
160 - 169	60

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 45 ft. Red brown clay
 45 - 169 White to yellow completely weathered biotite granite

BM 73

AMDEL analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	30	3
10 - 20	25	4
20 - 30	25	3
30 - 40	20	<3
40 - 50	15	<3
50 - 60	5	<3
60 - 70	5	<3
70 - 80	5	<3
80 - 90	5	<3
90 - 100	5	<3
100 - 110	5	<3
110 - 120	5	3
120 - 130	5	<3
130 - 140	15	<3
140 - 150	15	<3
150 - 160	25	<3
160 - 169	65	<3

BENDIGO PROJECT

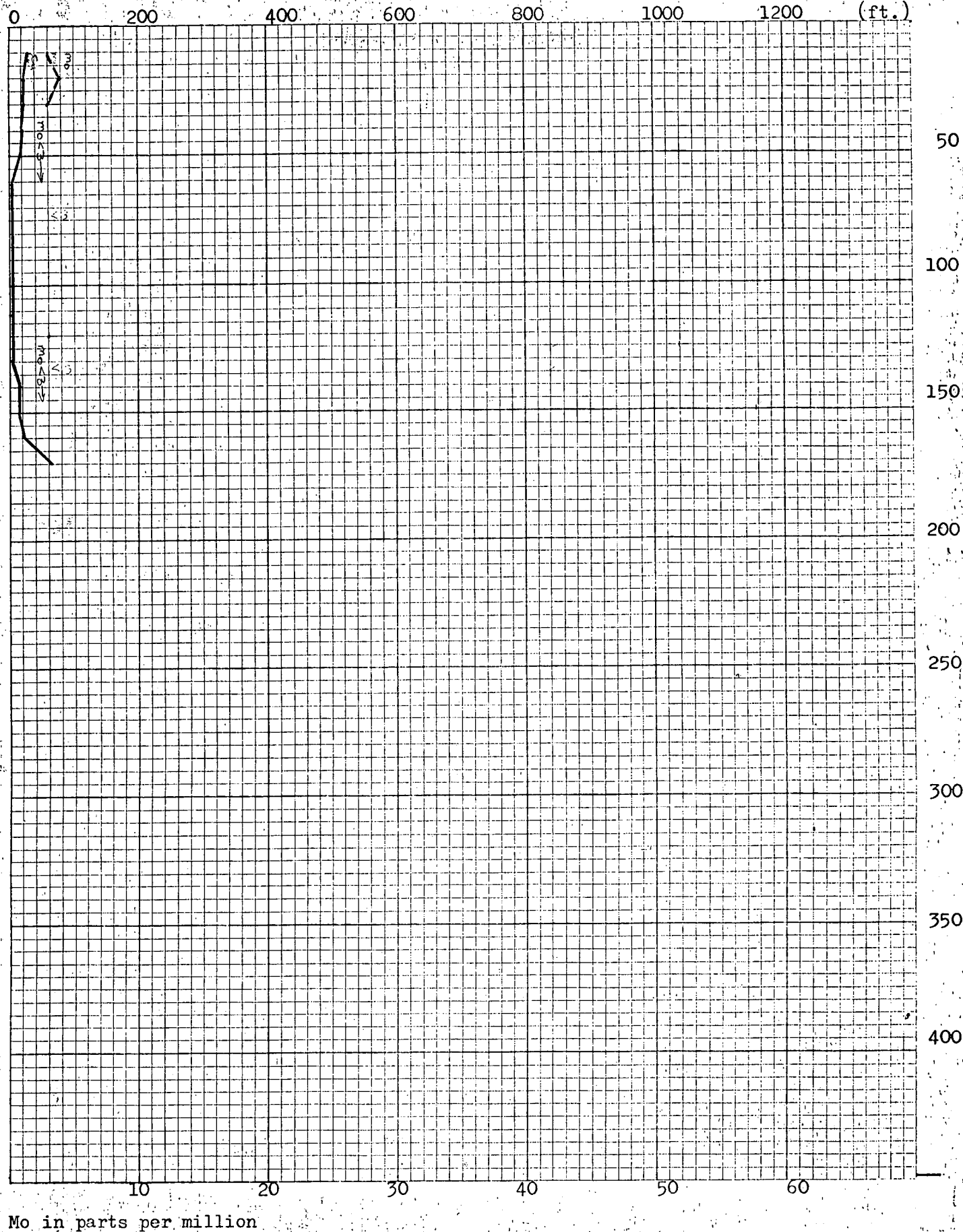
Hole No. BM73
Serial No. 983-71

Cu in parts per million

Coordinates

OOE

OON

Depth
(ft.)

Hole No. 74

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BM 74

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 93ft.

Serial No. 983-71

Date Drilled: 14 June 71

On: 14 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu ppm.
----------------	---------

0 - 10	25
10 - 20	15
20 - 30	10
30 - 40	15
40 - 50	15
50 - 60	15
60 - 70	25
70 - 80	30
80 - 90	30
90 - 93	15

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 18ft. Red brown clay

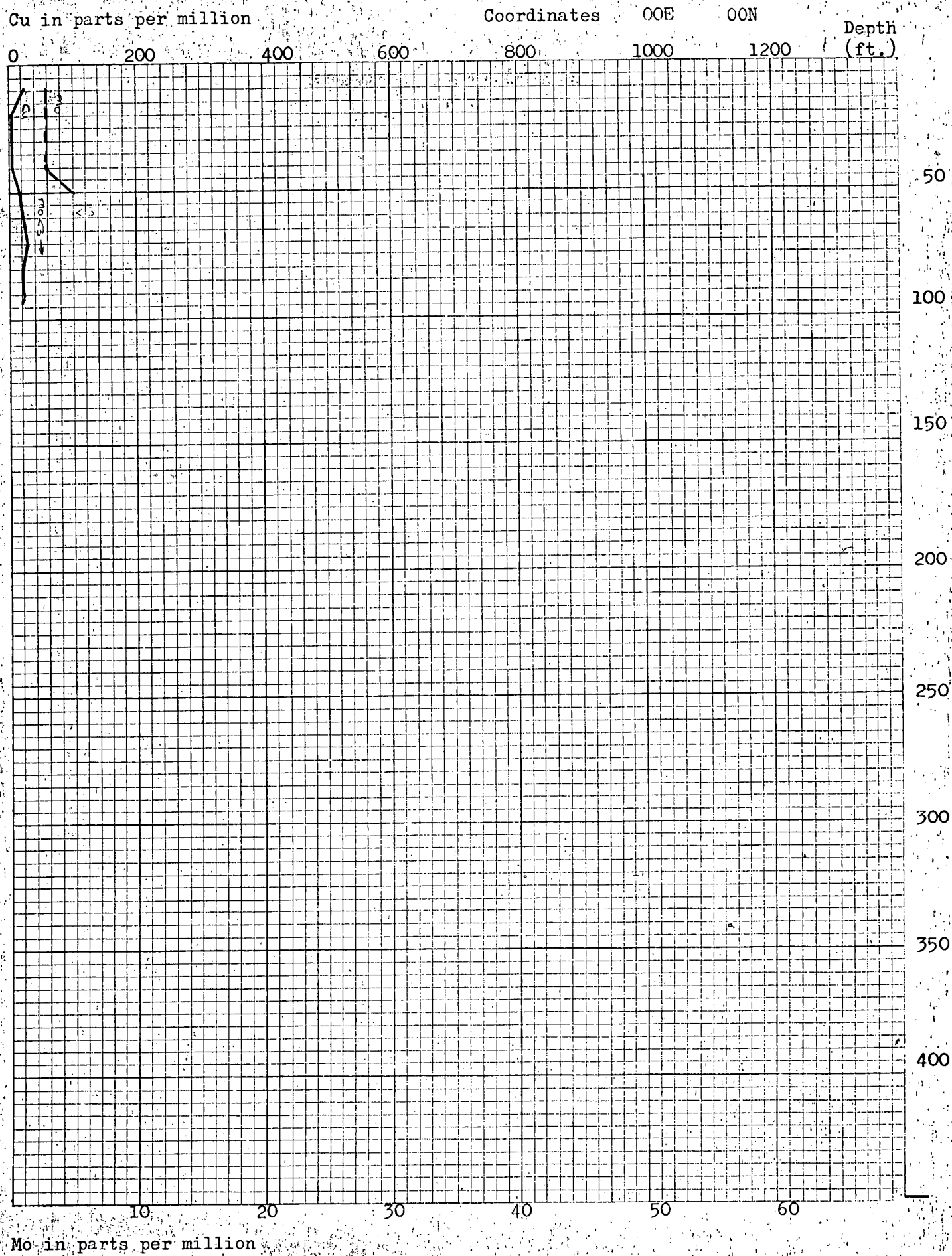
18 - 94 White to yellow weathered biotite granite

BM 74

AMDEL analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	25	3
10 - 20	5	3
20 - 30	5	3
30 - 40	5	3
40 - 50	15	5
50 - 60	25	<3
60 - 70	30	<3
70 - 80	25	<3
80 - 90	25	<3
90 - 93	20	<3

BENDIGO PROJECT

Hole No. BM74
Serial No. 983-71

Hole No. 75

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical)

BM75

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 240ft.

Serial No. 983-71

Date Drilled: 14 June 71

On: 14 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu (ppm)		
0 - 10	30	120-130	5
10 - 20	10	130-140	10
20 - 30	10	140-150	10
30 - 40	10	150-160	10
40 - 50	10	160-170	20
50 - 60	10	170-180	20
60 - 70	10	180-190	25
70 - 80	15	190-200	25
80 - 90	15	200-210	25
90 - 100	15	210-220	10
100 - 110	10	220-230	20
110 - 120	10	230-240	20

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 20ft. Red brown clay

20 - 240 White to yellow completely weathered biotite granite

BM 75

AMDEL Analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	20	3
10 - 20	10	< 3
20 - 30	10	< 3
30 - 40	5	< 3
40 - 50	10	< 3
50 - 60	5	< 3
60 - 70	10	< 3
70 - 80	10	< 3
80 - 90	10	< 3
90 - 100	10	< 3
100 - 110	10	< 3
110 - 120	5	< 3
120 - 130	10	< 3
130 - 140	10	< 3
140 - 150	10	< 3
150 - 160	15	< 3
160 - 170	15	< 3
170 - 180	30	< 3
180 - 190	25	< 3
190 - 200	40	< 3
200 - 210	40	< 3
210 - 220	40	< 3
220 - 230	30	< 3
230 - 240	20	< 3

BENDIGO PROJECT

Hole No. BM75
Serial No. 983-71

Cu in parts per million

Coordinates

OOE

OON

Depth
(ft.)

0

200

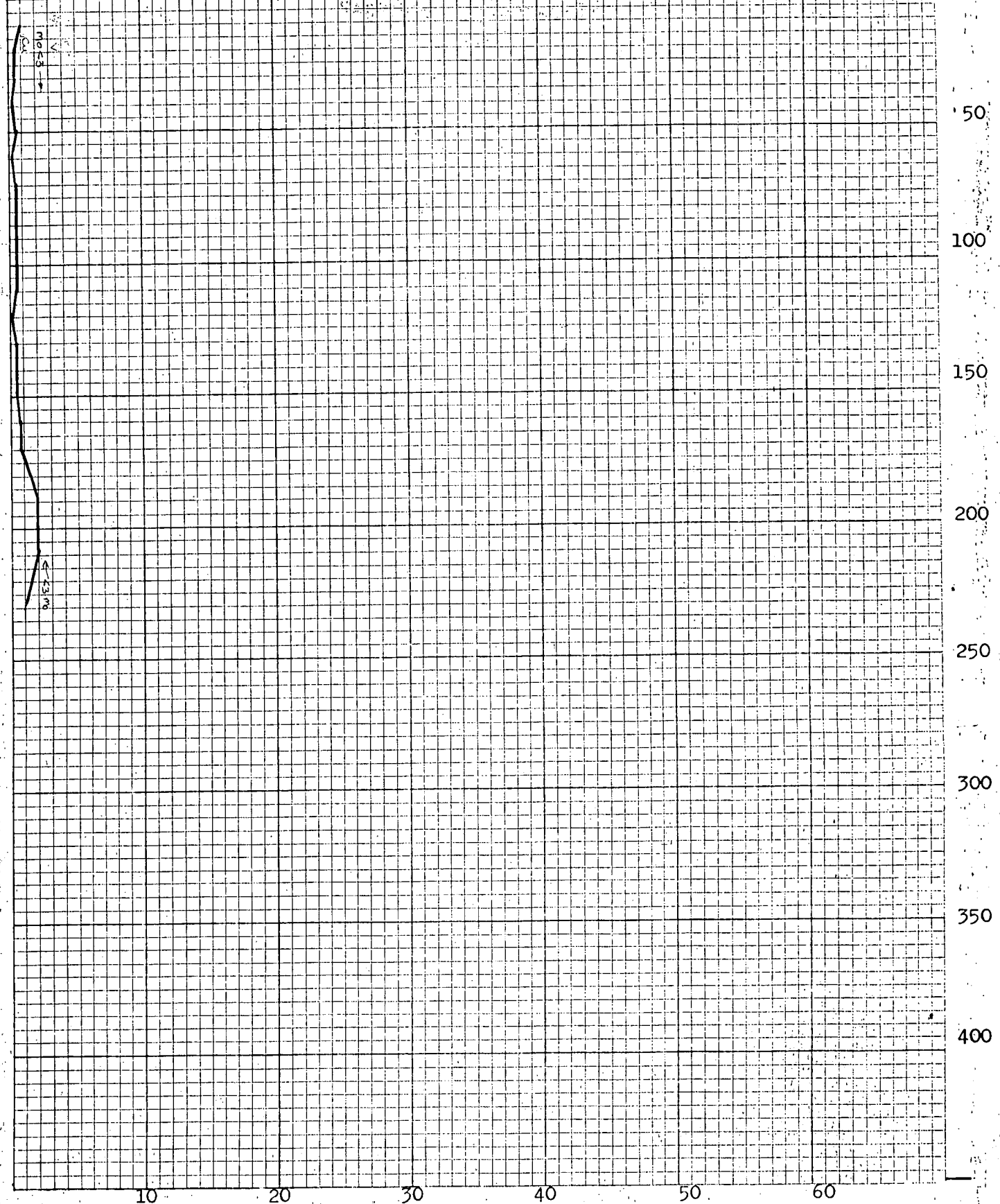
400

600

800

1000

1200



Mo in parts per million

Hole No. 76

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BM 76

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 93ft.

Serial No. 983-71

Date Drilled: 14-15 June 71

On: 15 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu (ppm)
0 - 10	20
10 - 20	10
20 - 30	10
30 - 40	10
40 - 50	10
50 - 60	10
60 - 70	10
70 - 80	10
80 - 90	40
90 - 93	35

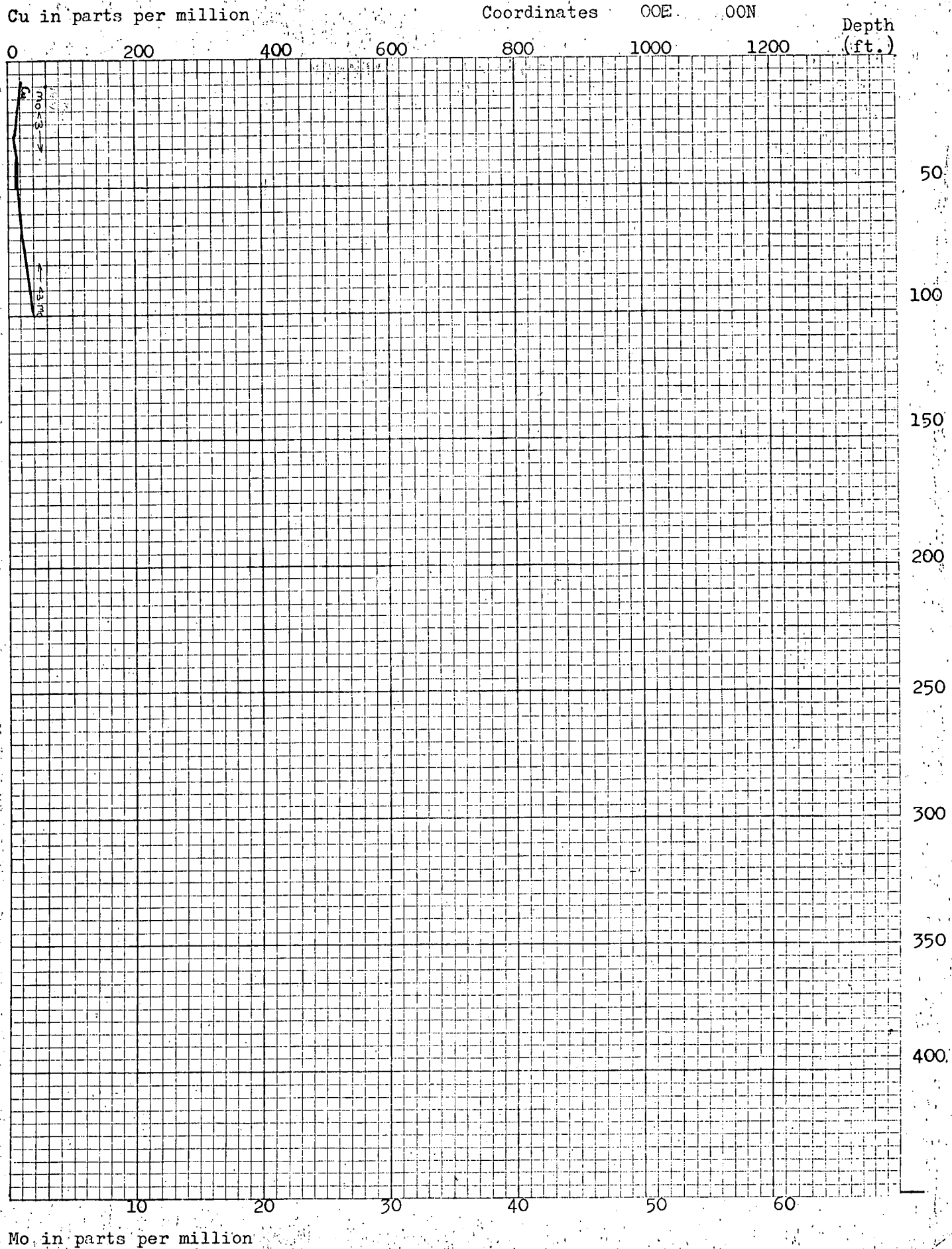
S.A.D.M. A.A.S. field analyses

Remarks: 0 - 25ft. Red brown clay
 25 - 93 White to yellow completely weathered biotite granite

BM 76

AMDEL Analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	20	3
10 - 20	15	< 3
20 - 30	10	< 3
30 - 40	15	< 3
40 - 50	15	< 3
50 - 60	20	< 3
60 - 70	25	< 3
70 - 80	30	< 3
80 - 90	35	< 3
90 - 93	40	< 3

BENDIGO PROJECTHole No. BM76
Serial No. 983-71

Hole No. 77

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical)

BN 77

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 137ft.

Serial No. 983-71

Date Drilled: 15 June 71

On: 15 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

Interval (ft.)	Cu p.p.m.
0 - 10	20
10 - 20	20
20 - 30	20
30 - 40	35
40 - 50	35
50 - 60	90
60 - 70	80
70 - 80	40
80 - 90	140
90 - 100	135
100 - 110	155
110 - 120	100
120 - 130	110
130 - 137	100

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 30ft. Red brown clay
 30 - 137 White to yellow completely weathered biotite granite

BM 77

AMDEL Analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	25	3
10 - 20	25	△3
20 - 30	35	△3
30 - 40	40	3
40 - 50	45	△3
50 - 60	95	3
60 - 70	120	△3
70 - 80	140	△3
80 - 90	140	△3
90 - 100	130	△3
100 - 110	150	△3
110 - 120	100	△3
120 - 130	110	△3
130 - 137	100	△3

BENDIGO PROJECTHole No. ~~1000~~
Serial No. 983-71

Cu in parts per million

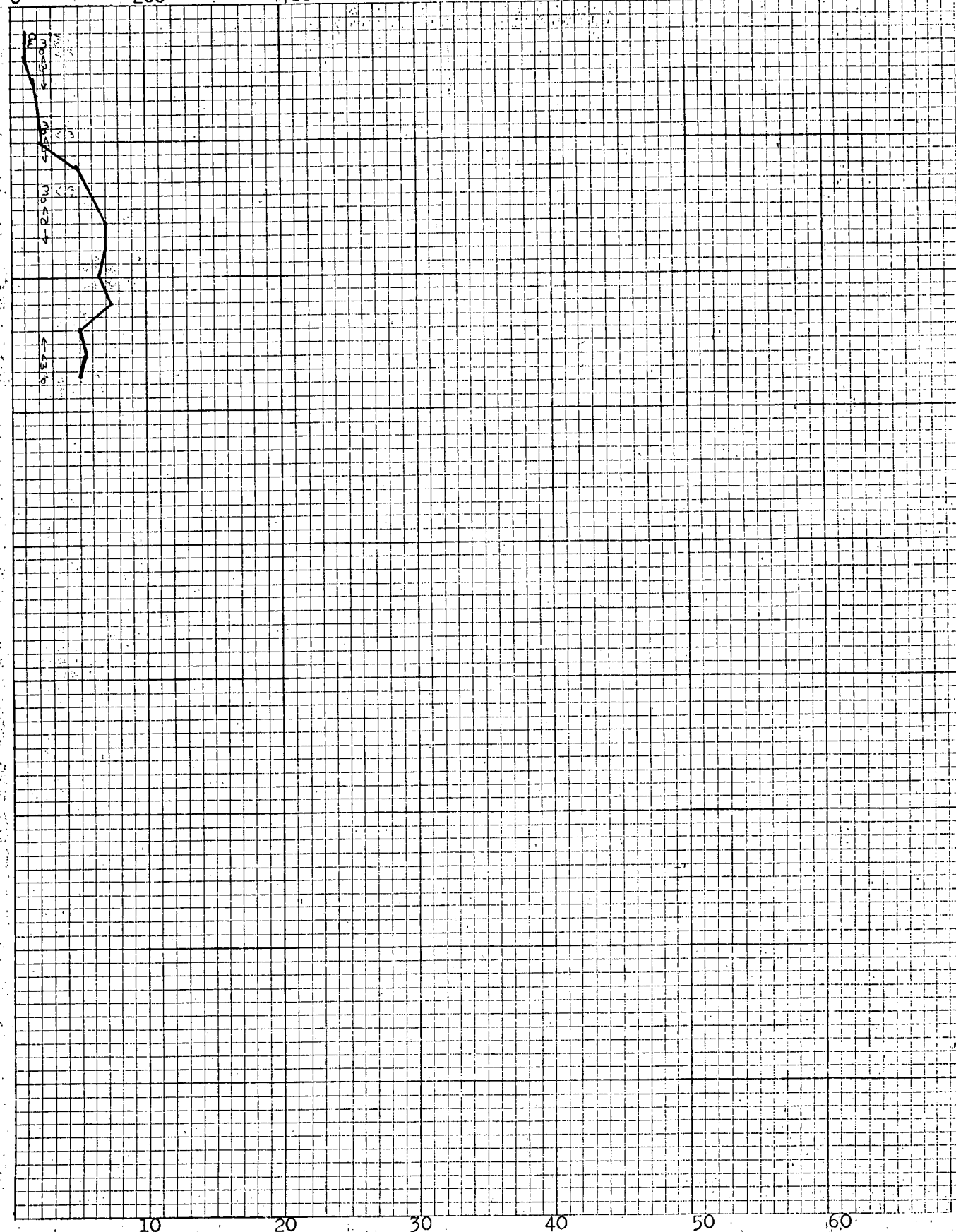
Coordinates

00E

00N

Depth
(ft.)

0 200 400 600 800 1000 1200



Mo in parts per million

Hole No. 78

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical)

BM 78

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Depth: 105ft.

Serial No. 983-71

Date Drilled: 15 June 71

On: 15 June 71

Plan Reference: 71-855

Bore Logged: N. Langsford

Driller: W. Boyd

OBJECT: To test for secondary mineralization

RESULTS: Geochemical Analyses

Interval (ft.)	Cu p.p.m.
0 - 10	25
10 - 20	25
20 - 30	25
30 - 40	25
40 - 50	60
50 - 60	85
60 - 70	100
70 - 80	70
80 - 90	80
90 - 100	70
100 - 105	70

S.A.D.M.

A.A.S. field analyses

Remarks: 0 - 40ft. Red brown clays
 40 - 105 Whiteto yellow completely weathered granite

BM 78

AMDEL Analyses (ppm)

Interval (ft)	Cu	Mo
0 - 10	25	<3
10 - 20	25	<3
20 - 30	35	<3
30 - 40	40	<3
40 - 50	55	<3
50 - 60	70	<3
60 - 70	80	<3
70 - 80	60	<3
80 - 90	70	<3
90 - 100	75	<3
100 - 105	65	<3

BENDIGO PROJECTHole No. BM78
Serial No. 983-71

Cu in parts per million

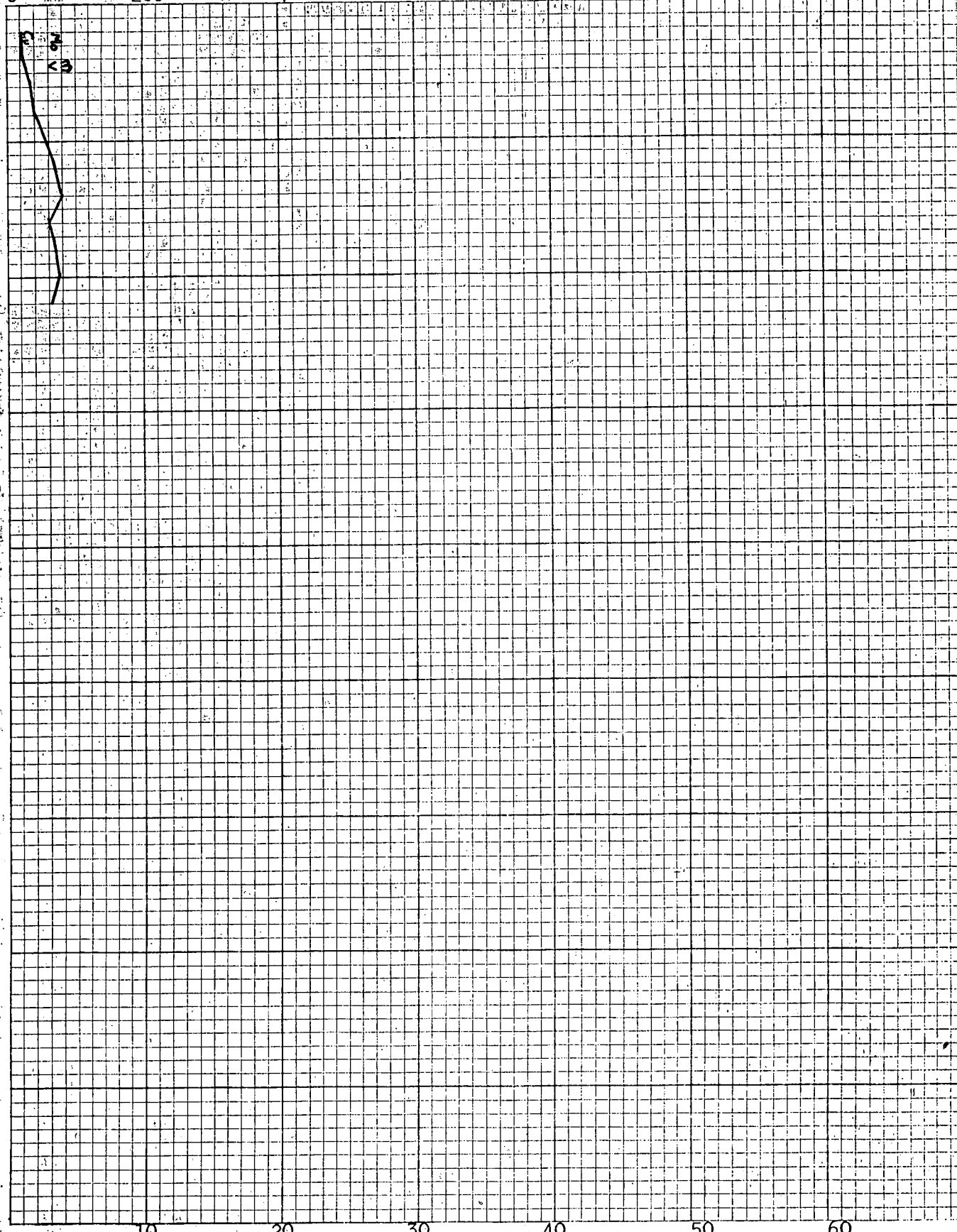
Coordinates

00E

00N

Depth
(ft.)

0 200 400 600 800 1000 1200



Mo in parts per million

10 20 30 40 50 60

Hole No. BG6 (BM7)

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG6DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 518E 508N

Depth: 200ft.

Serial No. 907/72

Date Drilled: 8 Oct 71

On: 8 Oct 71

Plan Reference: 71-834

Bore Logged:

Driller: J. Martin

OBJECT: To test for secondary sulphide mineralization and to obtain short core for petrographic investigation.

RESULTS: Geochemical Analyses

140 - 150 (ft)	205	ppm Cu
150 - 160	150	
160 - 170	850	
170 - 180	450	
180 - 190	380	
190 - 200	360	

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 140ft. rotary drilled as BM7140 - 200ft. Moderately weathered pink biotite granodiorite? with minor limonite
Some green alteration sericite.

Attempt to core was unsuccessful owing to hardness of granodiorite.

BG6

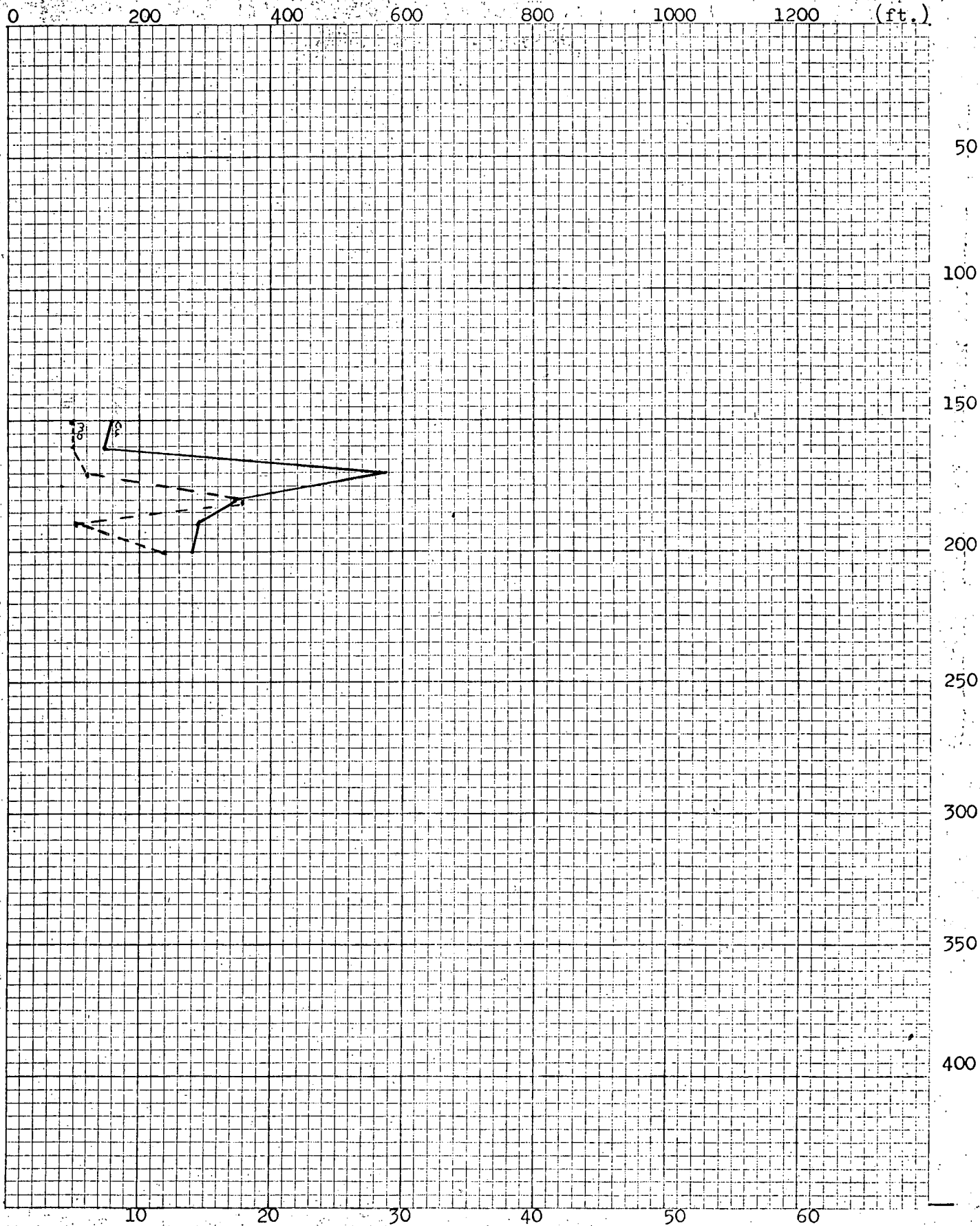
AMDEL Analyses			ppm	
INTERVAL (ft.)	Cu		Mo	
140 - 150	160		5	
150 - 160	130		5	
160 - 170	570		6	
170 - 180	350		18	
180 - 190	290		5	
190 - 200	280		12	

BENDIGO PROJECT

Hole No. BG6
Serial No. 907/72

Cu in parts per million

Coordinates 51800E 508100N

Depth
(ft.)

Mo in parts per million

Hole No. BG7 (BM59)

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG7DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 528E 524N

Date Drilled: 9 Oct. 71

Depth: 172.5ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 9 Oct. 71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary sulphide mineralization and to obtain short core for petrographic investigation.

RESULTS: Geochemical Analyses

123 - 130 (ft.)	290	ppm Cu
130 - 140	290	
140 - 150	290	
150 - 160	240	
160 - 170	290	
170 - 171.5	290	

S.A.D.M. A.A.S. field analyses.

Remarks: 0 - 123ft. rotary drilled as BM59.

123 - 171.5 Cuttings suggest pale pink to white weathered biotite granite with minor limonite.

171.5 - 172.5 - Core. Medium weathered white biotite granite, some sericite alteration.

BG7

AMDEL Analyses

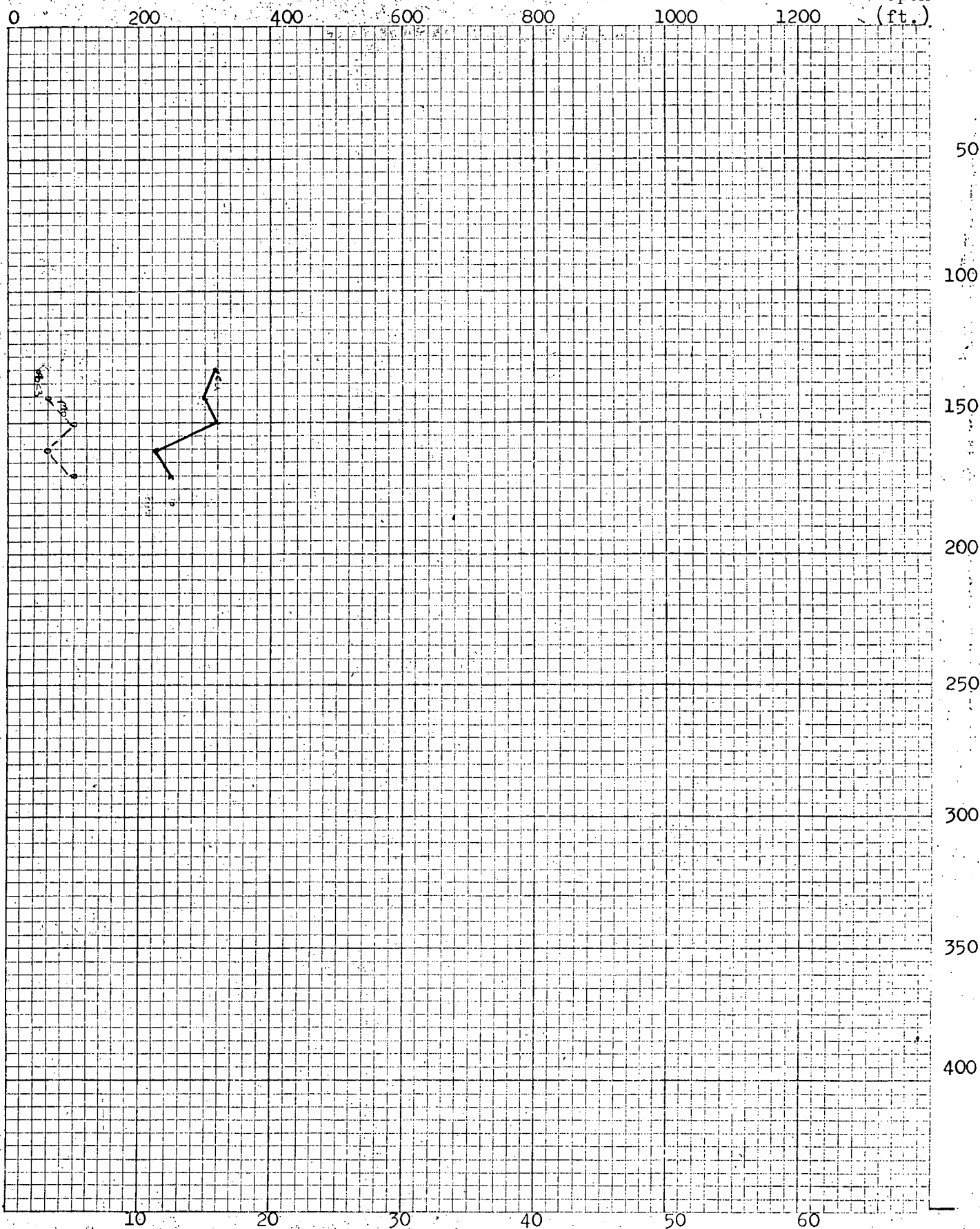
ppm

Interval (ft.)	Cu	Mo
123 - 130	320	< 3
130 - 140	300	3
140 - 150	320	5
150 - 160	230	3
160 - 170	250	5
170 - 171.5	250	5

BENDIGO PROJECTHole No. BG7
Serial No. 907/72

Cu in parts per million

Coordinates 52800E 52400N

Depth
(ft.)

Mo in parts per million

Hole No. BG8 (BM62)

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG8DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 528E 536N

Serial No. 907/72

Date Drilled: 11 Oct. 71 Depth: 90ft.

Plan Reference: 71-834

Bore Logged N. Langsford On: 12 Oct. 71

Driller: J. Martin

OBJECT: To test for secondary copper mineralization and to obtain short core for petrographic investigation.

RESULTS: Geochemical Analyses

0 - 10ft.	450	ppm Cu
10 - 20	690	
20 - 30	570	
30 - 40	1250	
40 - 50	150	
50 - 60	150	
60 - 70	205	
70 - 80	550	
80 - 90	270	

S.A.D.M. A.A.S. field analyses.

Remarks: 0 - 41ft. rotary drilling, 2 in core at 41ft.0 - 40ft. fine grained green metasediment with granite or pegmatite
mining 20-30ft. Core is altered biotite granite or granodiorite with
quartz veining. 41-90ft. pyrite granodiorite, sparse biotite.Quartz - pyrite - limonite veins (Probably pyritic zone - pyritic granodiorite
with partly oxidized quartz - pyrite veins).

BGS

AMDEL Analysis

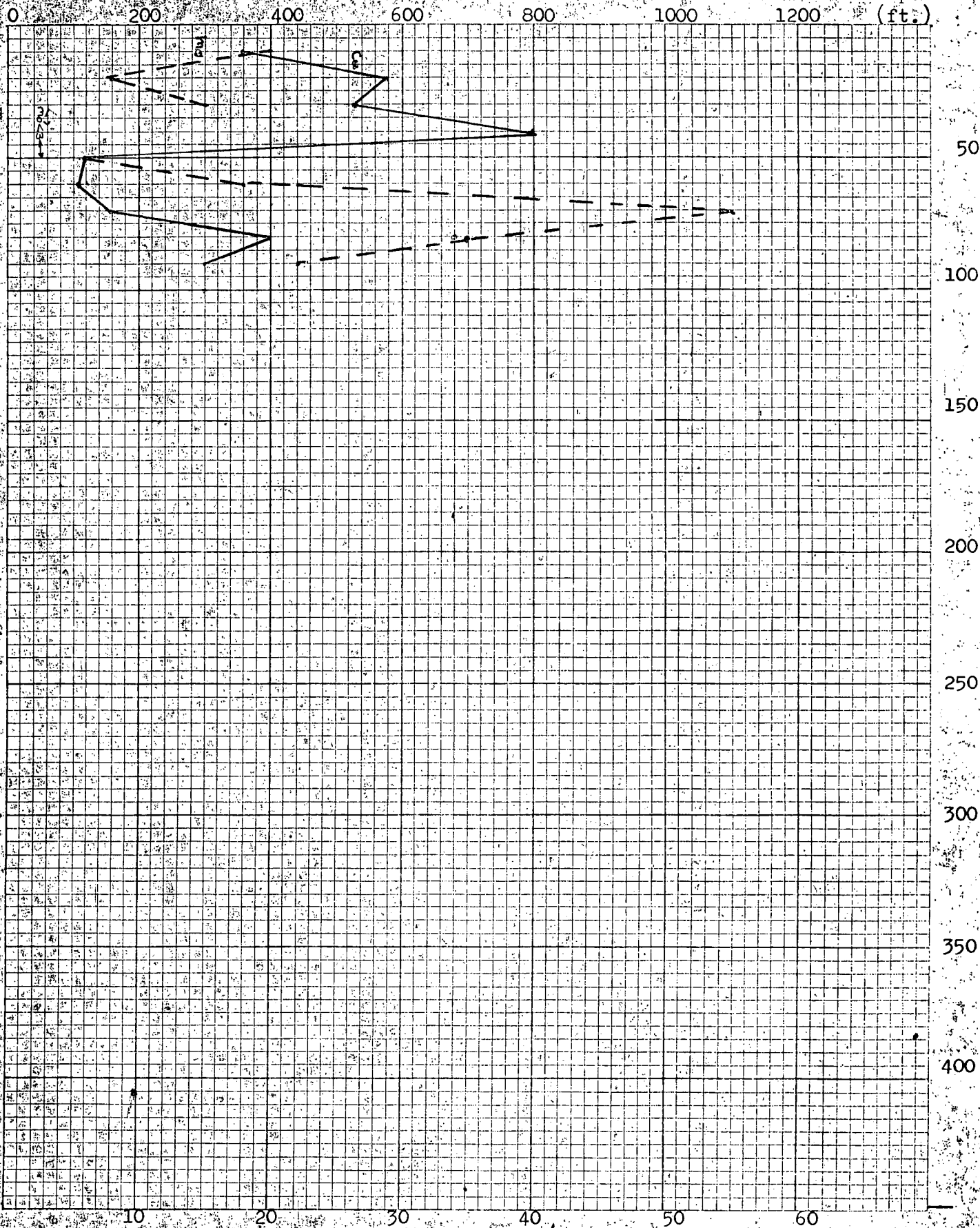
ppm

Interval (ft.)	Cu	Mo
0 - 10	360	20
10 - 20	580	8
20 - 30	530	15
30 - 40	800	< 3
40 - 50	120	7
50 - 60	110	18
60 - 70	160	55
70 - 80	400	35
80 - 90	250	22

BENDIGO PROJECTHole No. BG8
Serial No. 907/72

Cu in parts per million

Coordinates 52800E 536 00N

Depth
(ft.)

Mo in parts per million

Hole No. BG9 (BM36)

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG9DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO.

KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 533E 544N

Date Drilled: 12 Oct. 71

Depth: 119.5ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 12 Oct. 71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization and to obtain core
for petrographic investigation.RESULTS: Geochemical Analyses

94 - 100 (ft.)	215	ppm Cu
100 - 110	460	
110 - 118a	405	

S.A.D.M. A.A.S. field analyses

Remarks: Rotary drilled 0 - 94ft. (Mayhew)
94-118 Rotary drilled (Gryphon) Green hornfelsed siltstone. Cored
8-119.5ft.; rock is closely jointed, and only one small piece of core
recovered. Core is hard, dark green fine grained meta sediment (Hornfels).

BG9

AMDEL Analyses

ppm

Interval (ft.)

Cu

Mo

94 - 100

430

< 3

100 - 110

450

< 3

110 - 118

500

3

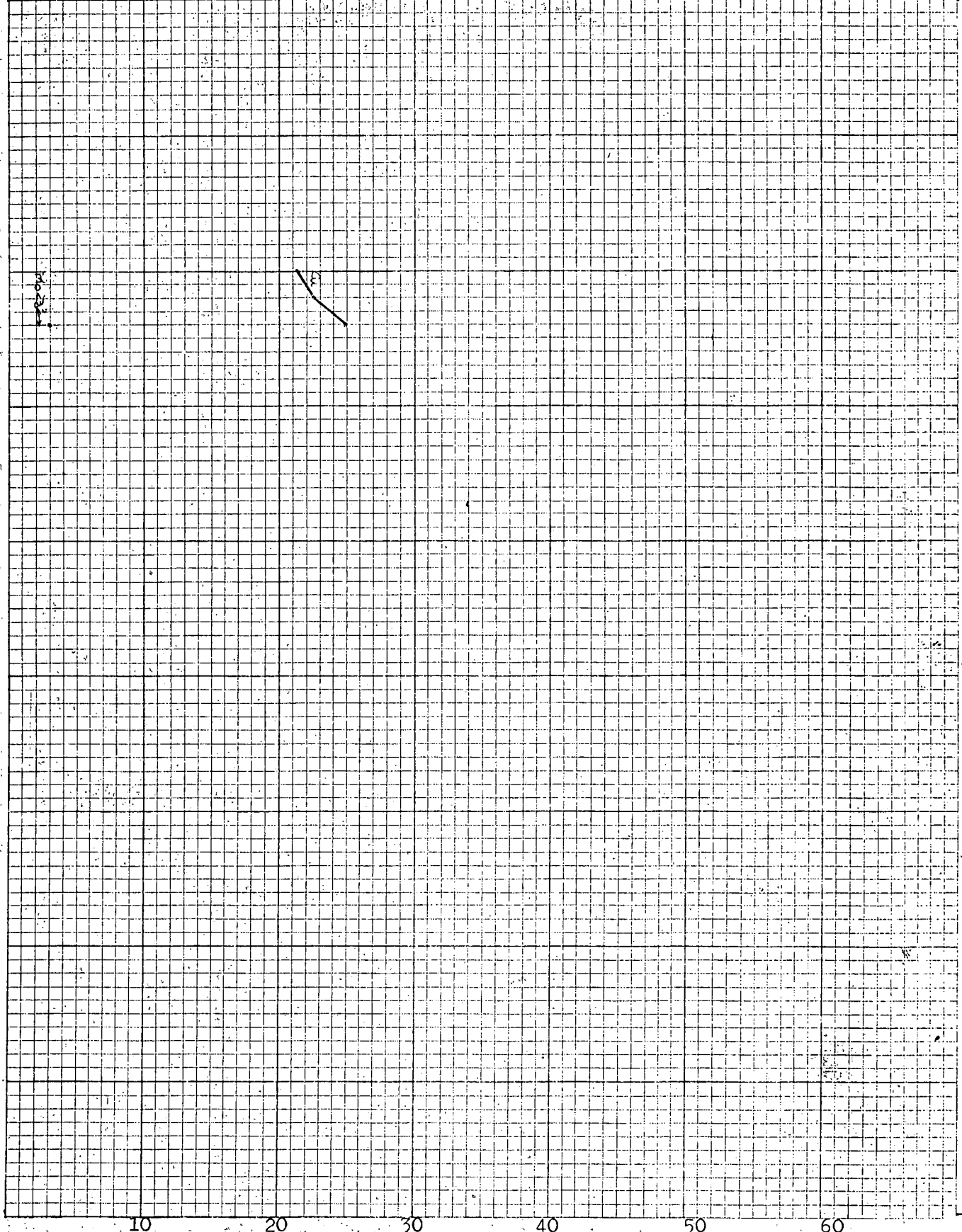
BENDIGO PROJECTHole No. BG9
Serial No. 907/72

Cu in parts per million

Coordinates 53300E 54400N

Depth
(ft.)

0 200 400 600 800 1000 1200



Mo in parts per million

Hole No. BG10

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical)

BG10

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 535E 55N

Date Drilled: 13 Oct. 71

Depth: 253ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 13 Oct. 71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization.

RESULTS: Geochemical Analyses

0 - 10 ft.	ppm Cu	130 - 140ft.	40 ppm Cu
10 - 20	75	140 - 150	70
20 - 30	80	150 - 160	80
30 - 40	100	160 - 170	85
40 - 50	75	170 - 180	110
50 - 60	45	180 - 190	110
60 - 70	30	190 - 200	120
70 - 80	30	200 - 210	150
80 - 90	20	210 - 220	130
90 - 100	20	220 - 230	55
100 - 110	40	230 - 240	45
110 - 120	45	240 - 250	55
120 - 130	35	250 - 253	60

S.A.D.M. A.A.S. field analysis

Remarks: 0 - 10 Calcrete and red calcareous siltsoil.
 10 - 27 Yellow-brown clay.
 27 - 47 Red-brown clay.
 47 - 55 Grey-green clay.
 55 - 57 Pale grey clay.
 75 - 190 Yellow-brown and red-brown completely weathered sediment.
 190 - 253 Brown and green highly weathered meta-siltstone with minor limonite staining.

BG10

AMDEL Analyses

ppm

Interval (ft.)

Cu

Mo

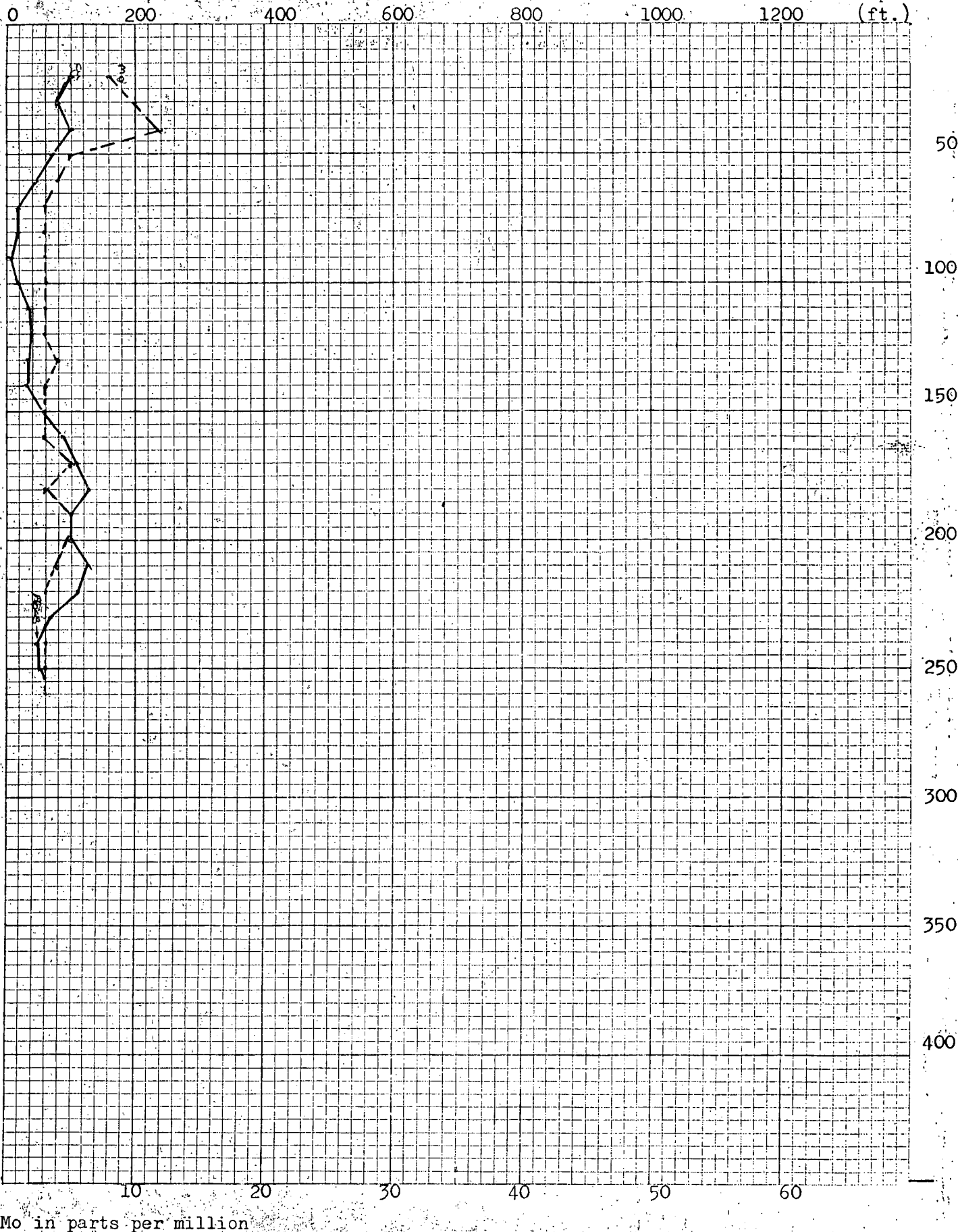
0 - 10	-	-
10 - 20	100	8
20 - 30	80	10
30 - 40	100	12
40 - 50	70	5
50 - 60	45	4
60 - 70	20	3
70 - 80	20	3
80 - 90	5	3
90 - 100	20	3
100 - 110	40	3
110 - 120	40	3
120 - 130	35	4
130 - 140	35	3
140 - 150	60	3
150 - 160	85	3
160 - 170	110	5
170 - 180	130	3
180 - 190	120	5
190 - 200	120	5
200 - 210	130	4
210 - 220	110	3
220 - 230	65	< 3
230 - 240	45	3
240 - 250	55	3
250 - 260	60	3

BENDIGO PROJECT

Hole No. BG16
Serial No. 907/72

Cu in parts per million

Coordinates 535.00E 556.00N

Depth
(ft.)

Hole No. BG11

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG11DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 527E 556N

Date Drilled: 13 Oct. 71

Depth: 297ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 13 Oct. 71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization.

RESULTS: Geochemical Analyses

0 - 10 ft.	35	ppm Cu	150 - 160	70	ppm Cu
10 - 20	30		160 - 170	55	
20 - 30	30		170 - 180	70	
30 - 40	30		180 - 190	80	
40 - 50	15		190 - 200	70	
50 - 60	15		200 - 210	45	
60 - 70	15		210 - 220	45	
70 - 80	55		220 - 230	45	
80 - 90	55		230 - 240	45	
90 - 100	45		240 - 250	55	
100 - 110	45		250 - 260	40	
110 - 120	45		260 - 270	35	
120 - 130	40		270 - 280	30	
130 - 140	55		280 - 290	35	
140 - 150	55		290 - 295	140	

S.A.D.M. A.A.S. field analysis

Remarks:

0 - 7ft.	Calcrete and red calcareous silt.
7 - 35	Red-brown clay.
35 - 80	Pale grey clay.
80 - 170	Yellow-brown completely weathered siltstone.
170 - 295	Green and brown highly weathered metasiltstone.

BG11

AMDEL Analyses

ppm

Interval (ft.)

Cu

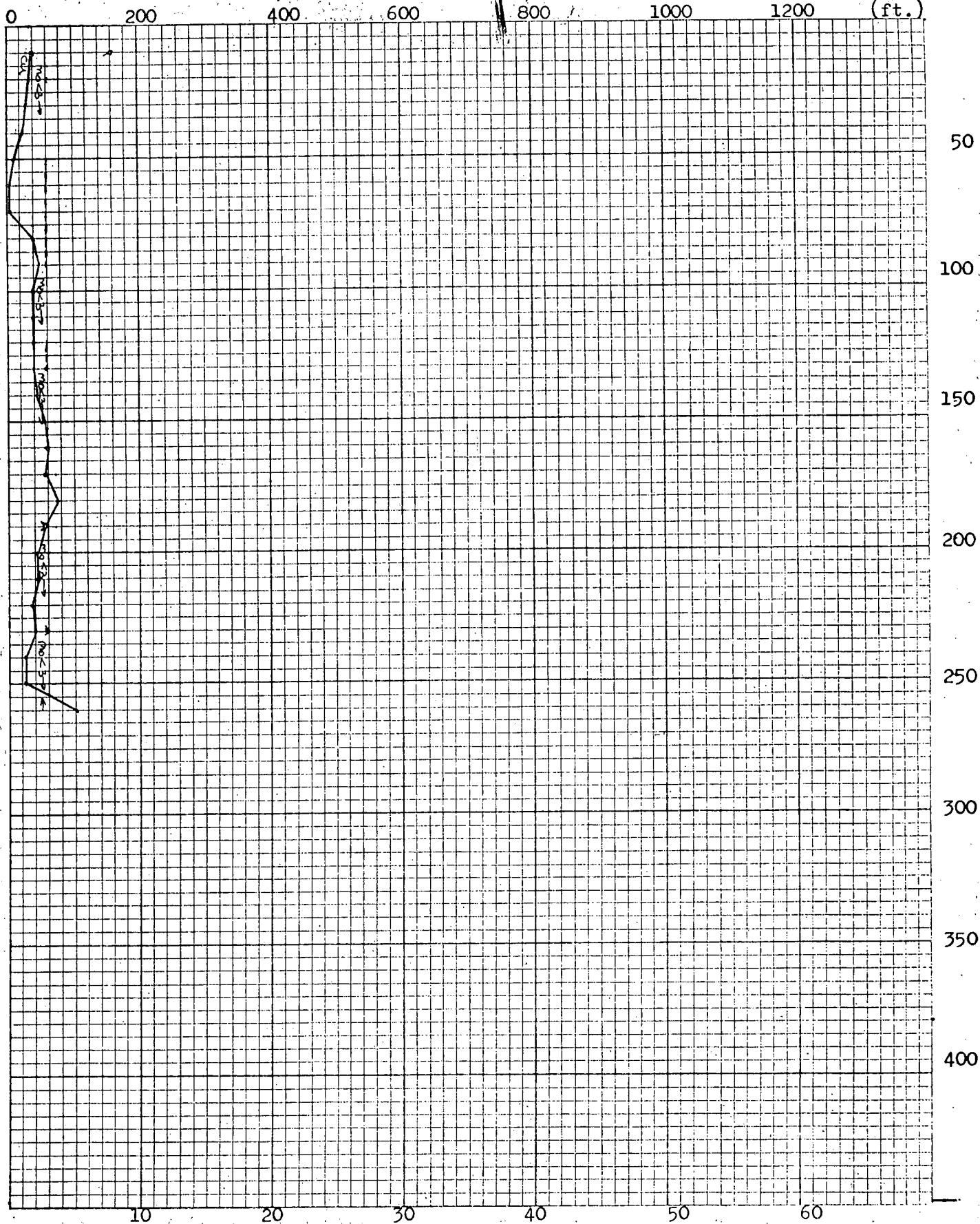
Mo

0 - 10	40	8
10 - 20	35	< 3
20 - 30	30	< 3
30 - 40	25	< 3
40 - 50	10	3
50 - 60	5	3
60 - 70	5	3
70 - 80	40	3
80 - 90	45	3
90 - 100	40	< 3
100 - 110	40	< 3
110 - 120	40	3
120 - 130	40	3
130 - 140	45	< 3
140 - 150	55	< 3
150 - 160	60	< 3
160 - 170	55	< 3
170 - 180	75	< 3
180 - 190	80	3
190 - 200	75	< 3
200 - 210	55	< 3
210 - 220	45	< 3
220 - 230	45	3
230 - 240	35	< 3
240 - 250	40	< 3
250 - 260	50	< 3
260 - 270	30	< 3
270 - 280	25	< 3
280 - 290	25	< 3
290 - 294	100	< 3

BENDIGO PROJECTHole No. BG11
Serial No. 907/72

Cu in parts per million

Coordinates 52700E 55600N

Depth
(ft.)

Hole No. BG12

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG12

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO CO. KIMBERLY DOCKET NO. 1243/70

Collar Coords: 519E 556N

Date Drilled: 14-15 Oct. 71 Depth: 285ft.

Bore Logged by N. Langsford On: 15 Oct. 71

Serial No. 907/22

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0-10ft.	40	ppm Cu	140-150	30
10-20	70		150-160	40
20-30	20		160-170	90
30-40	15		170-180	110
40-50	15		180-190	120
50-60	20		190-200	130
60-70	20		200-210	140
70-80	20		210-220	140
80-90	20		220-230	80
90-100	20		230-240	80
100-110	10		240-250	80
110-120	10		250-260	80
120-130	20		260-270	45
130-140	20		270-280	55
			280-285	80

SADM A.A.S. field analyses.

Remarks: 0-6 Calcrete
 6-15 Red clay
 15-40 Silcrete rubble
 40-165 White clay
 165-285 Red-brown to green; completely to highly weathered meta
 siltstone. Minor limonite staining, thin quartz-felspar
 veins.

BG12

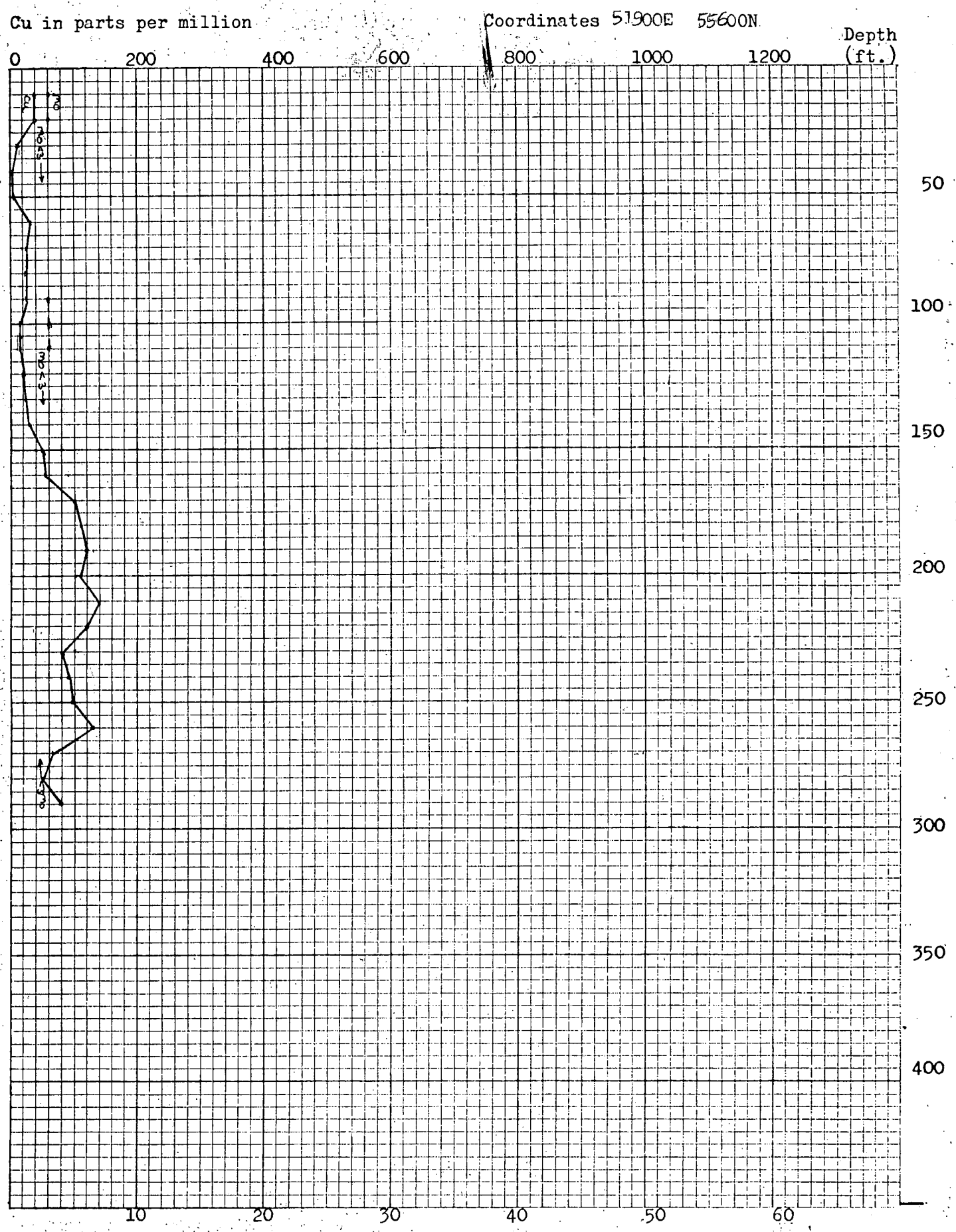
AMDEL Analyses ppm

Interval (ft.)	Cu	Mo
0 - 10	40	3
10 - 20	40	3
20 - 30	10	< 3
30 - 40	5	< 3
40 - 50	5	< 3
50 - 60	30	< 3
60 - 70	25	< 3
70 - 80	25	< 3
80 - 90	25	3
90 - 100	15	3
100 - 110	15	3
110 - 120	20	< 3
120 - 130	25	< 3
130 - 140	30	< 3
140 - 150	50	< 3
150 - 160	55	< 3
160 - 170	100	< 3
170 - 180	110	< 3
180 - 190	120	< 3
190 - 200	110	< 3
200 - 210	140	< 3
210 - 220	120	< 3
220 - 230	80	< 3
230 - 240	90	< 3
240 - 250	95	< 3
250 - 260	130	< 3
260 - 270	65	< 3
270 - 280	50	< 3
280 - 285	80	< 3

MINES DEPARTMENT - S.A.

BENDIGO PROJECT

Hole No. BG12
Serial No. 907/72



Hole No.13

GEOCHEMICAL EXPLORATION SECTIONLOG ROTARY DRILLHOLE (vertical) BG13DEPARTMENT OF MINESSOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 503E 556N

Date Drilled: 15Oct.71 Depth: 175ft.

Serial No. 907/22

Bore Logged by N. Langsford On: 15Oct.71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0-10	ft.	55 ppmCu
10-20		110
20-30		130
30-40		10
40-50		20
50-60		90
60-70		145
70-80		200
80-90		290
90-100		165
100-110		235
110-120		170
120-130		200
130-140		190
140-150		155
150-160		165
160-170		170
170-175		235

SADM. A.A.S. field analyses.

Remarks:

0-12ft.	Red clay
12-45	Red-green mottled clay.
35-45	White clay
45-175	Yellow C.W. metasilstone. Hole discontinued when roller bit could not penetrate quartz vein.

BG13

AMDEL Analyses			ppm
Interval (ft.)	Cu	Mo	
0 - 10	80	5	
10 - 20	95	5	
20 - 30	95	3	
30 - 40	15	< 3	
40 - 50	30	3	
50 - 60	85	< 3	
60 - 70	170	< 3	
70 - 80	200	< 3	
80 - 90	240	3	
90 - 100	140	3	
100 - 110	180	4	
110 - 120	170	4	
120 - 130	180	3	
130 - 140	190	3	
140 - 150	140	< 3	
150 - 160	150	< 3	
160 - 170	160	< 3	
170 - 175	230	< 3	

MINES DEPARTMENT - S.A.

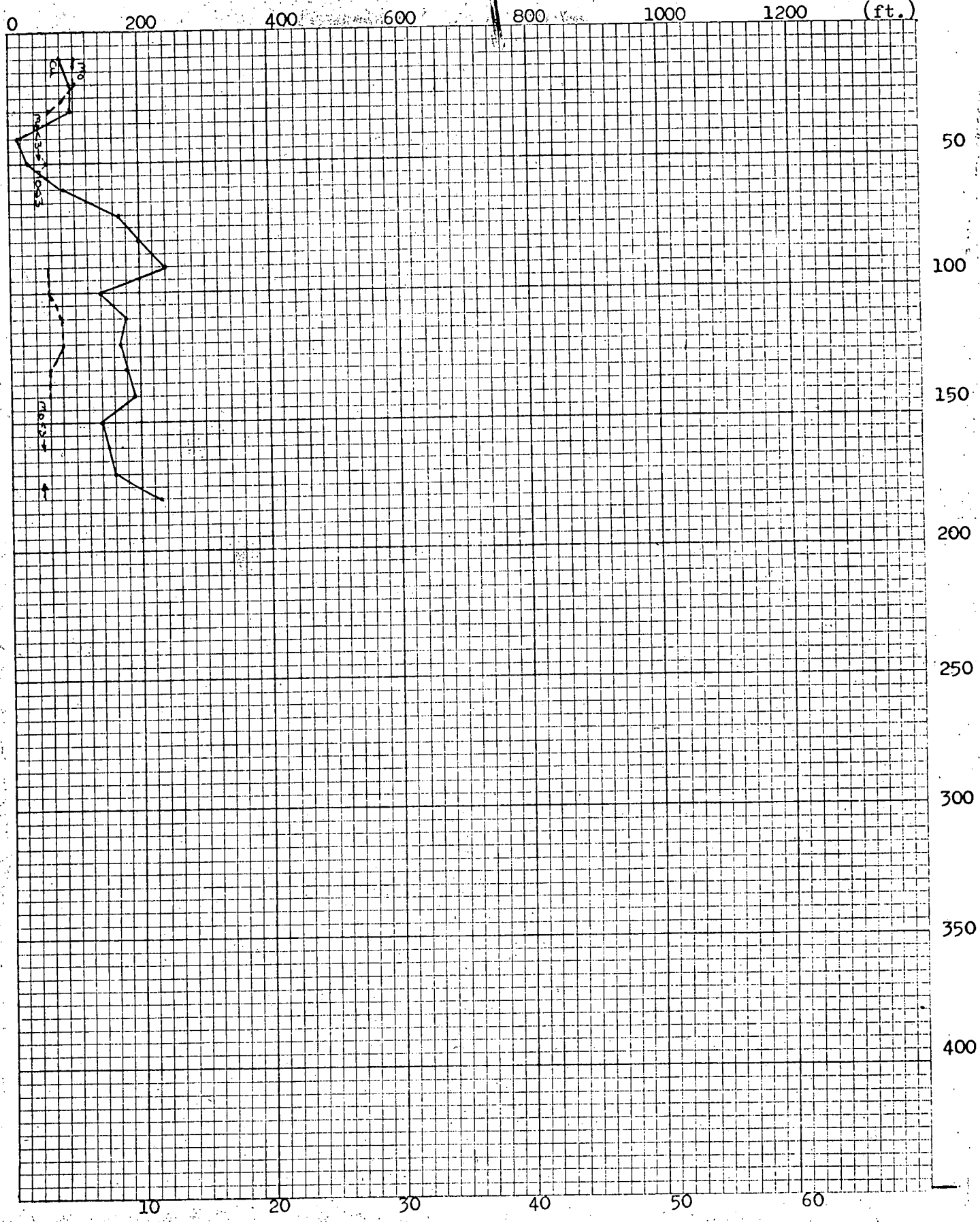
BENDIGO PROJECT

HoleNo. BG13
Serial No. 907/72

Cu in parts per million

Coordinates 50300E 55600N

Depth
(ft.)



Mo in parts per million

Hole No. 14

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG14DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 495E 556N

Date Drilled: 15-16 Oct. 71 Depth: 234 ft.

Serial No. 907/72

Bore Logged by N. Langsford On: 16 Oct. 71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0-10ft.	20	ppm Cu
10-20	30	
20-30	30	
30-40	40	
40-50	30	
50-60	20	
60-70	20	
70-80	30	
80-90	110	
90-100	145	
100-110	170	
110-120	200	
120-130	170	
130-140	145	
140-150	165	
150-160	235	
160-170	80	
170-180	55	
180-190	155	
190-200	40	
200-210	45	
210-220	55	
220-230	70	
230-240	100	

S.A.D.M. A.A.S. field analyses

Remarks: 0-3ft. Calcrete
 3-22 Red clay
 22-37 Green clay
 37-88 White clay
 88-234 Yellow-brown to green completely to highly weathered
 meta siltstone.

BG14

AMDEL Analyses ppm

Interval	Cu	Mo
0 - 10	20	< 3
10 - 20	25	3
20 - 30	25	3
30 - 40	25	3
40 - 50	50	< 3
50 - 60	40	< 3
60 - 70	35	< 3
70 - 80	60	< 3
80 - 90	110	3
90 - 100	140	3
100 - 110	130	4
110 - 120	150	4
120 - 130	130	< 3
130 - 140	150	3
140 - 150	170	3
150 - 160	180	3
160 - 170	65	3
170 - 180	45	3
180 - 190	50	3
190 - 200	25	< 3
200 - 210	35	3
210 - 220	35	3
220 - 230	45	< 3
230 - 234	60	< 3

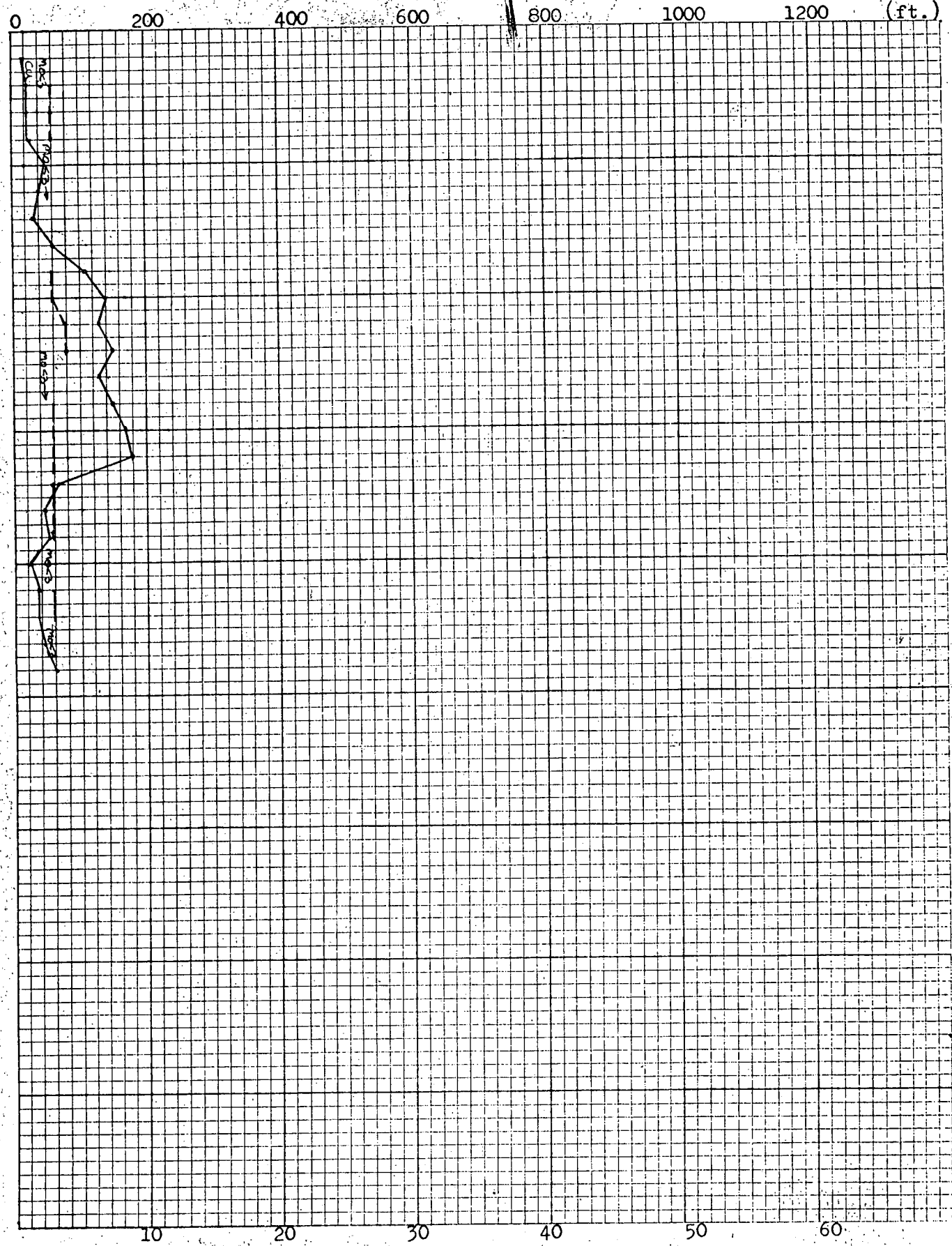
BENDIGO PROJECT

Hole No. BGL4
Serial No. 907/72

Cu in parts per million

Coordinates 49500E 556.00N

Depth
(ft.)



Mo in parts per million

Hole No. 15

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG15

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 487E 556N

Date Drilled: 16Oct.71

Depth: 74ft.

Serial No. 907/71

Bore Logged by N. Langsford On: 16Oct.71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0-10ft.	180 ppm Cu
10-20	10
20-30	10
30-40	10
40-50	10
50-60	10
60-70	45
70-80	10

S.A.D.M. A.A.S. field analyses.

Remarks: 0-7ft. Calcrete
 7-20 White clay
 20-74 Moderately weathered felspathic sandstone with
 quartz veins. Hole discontinued when roller
 bit could not penetrate quartz vein.

BG15

ANDEL Analyses

ppm

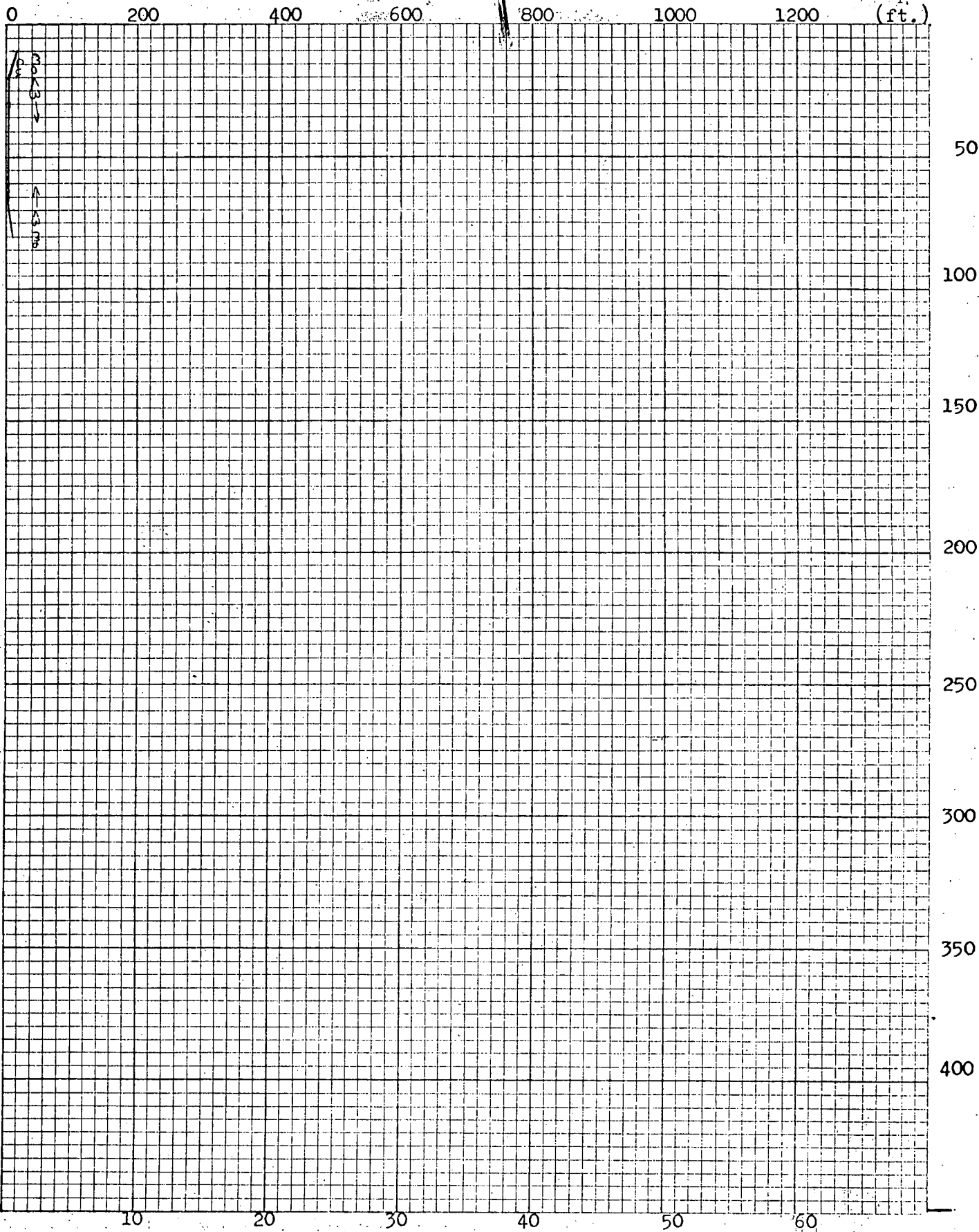
Interval (ft.)	Cu	Mo
0 - 10	15	< 3
10 - 20	5	< 3
20 - 30	5	< 3
30 - 40	5	< 3
40 - 50	5	< 3
50 - 60	5	< 3
60 - 70	5	< 3
70 - 80	10	< 3

MINES DEPARTMENT - S.A.

BENDIGO PROJECTHole No. BG15
Serial No. 907/72

Cu in parts per million

Coordinates 48700E 55600N

Depth
(ft.)

Mo in parts per million

Hole No. 16

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG16DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 503E 564N

Date Drilled: 16 Oct. 71

Depth: 276ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 16 Oct. 71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0-10ft.	40	ppm Cu
10-20	65	
20-30	65	
30-40	55	
40-50	10	
50-60	10	
60-70	20	
70-80	20	
80-90	10	
90-100	10	
100-110	10	
110-120	10	
120-130	20	
130-140	30	
140-150	30	
150-160	20	
160-170	40	
170-180	40	
180-190	40	
190-200	30	
200-210	30	
210-220	30	
220-230	40	
230-240	20	
240-250	30	
250-260	30	
260-270	40	
270-276	20	

S.A.D.M. A.A.S. field analyses.

Remarks:

0-4ft. Calcrete

4-30ft. Red clay

30-120 White clay

120-276 Yellow to green completely to highly weathered meta
siltstone.

BG16

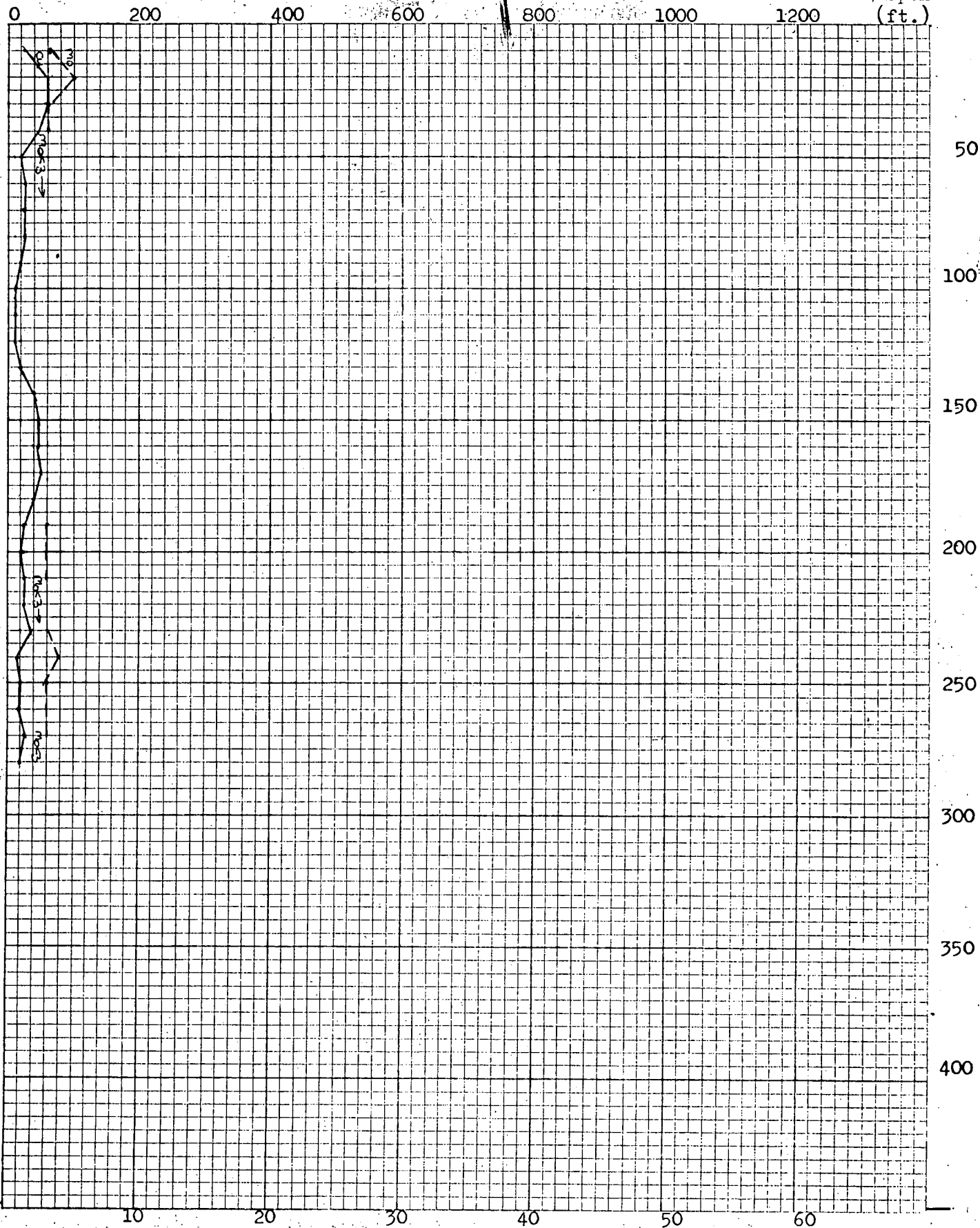
AMDEL Analyses

Interval (ft.)	ppm	
	Cu	Mo
0 - 10	25	3
10 - 20	60	5
20 - 30	60	3
30 - 40	45	3
40 - 50	20	< 3
50 - 60	25	< 3
60 - 70	25	< 3
70 - 80	25	< 3
80 - 90	20	< 3
90 - 100	10	< 3
100 - 110	10	< 3
110 - 120	10	< 3
120 - 130	20	< 3
130 - 140	40	< 3
140 - 150	45	< 3
150 - 160	45	< 3
160 - 170	50	3
170 - 180	40	< 3
180 - 190	25	3
190 - 200	20	3
200 - 210	25	3
210 - 220	25	< 3
220 - 230	35	3
230 - 240	15	4
240 - 250	20	3
250 - 260	20	3
260 - 270	25	3
270 - 280	20	< 3

BENDIGO PROJECTHole No. B616
Serial No. 907/72

Cu in parts per million

Coordinates 50300E 56400N

Depth
(ft.)

Mo in parts per million

Hole No. 17

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG17

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 511E 564N

Date Drilled: 18Oct.71 Depth: 280ft.

Bore Logged by N. Langsford On: 18Oct.71

Serial No. 907/72

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

		ppm Cu.
0-10ft.	-	
19-20	-	
20-30	30	
30-40	10	
40-50	10	
50-60	10	
60-70	50	
70-80	70	
80-90	80	
90-100	110	
100-110	55	
110-120	40	
120-130	65	
130-140	55	
140-150	40	
150-160	40	
160-170	40	
170-180	30	
180-190	40	
190-200	50	
200-210	30	
210-220	20	
220-230	20	
230-240	40	
240-250	50	
250-260	55	
260-270	50	
270-280	50	

SADM A.A.S. field analyses.

Remarks: 0-7 Calcrete

7-22 Red clay

22-65 White clay

65-280 Red-brown to green completely to highly weathered meta-siltstone.

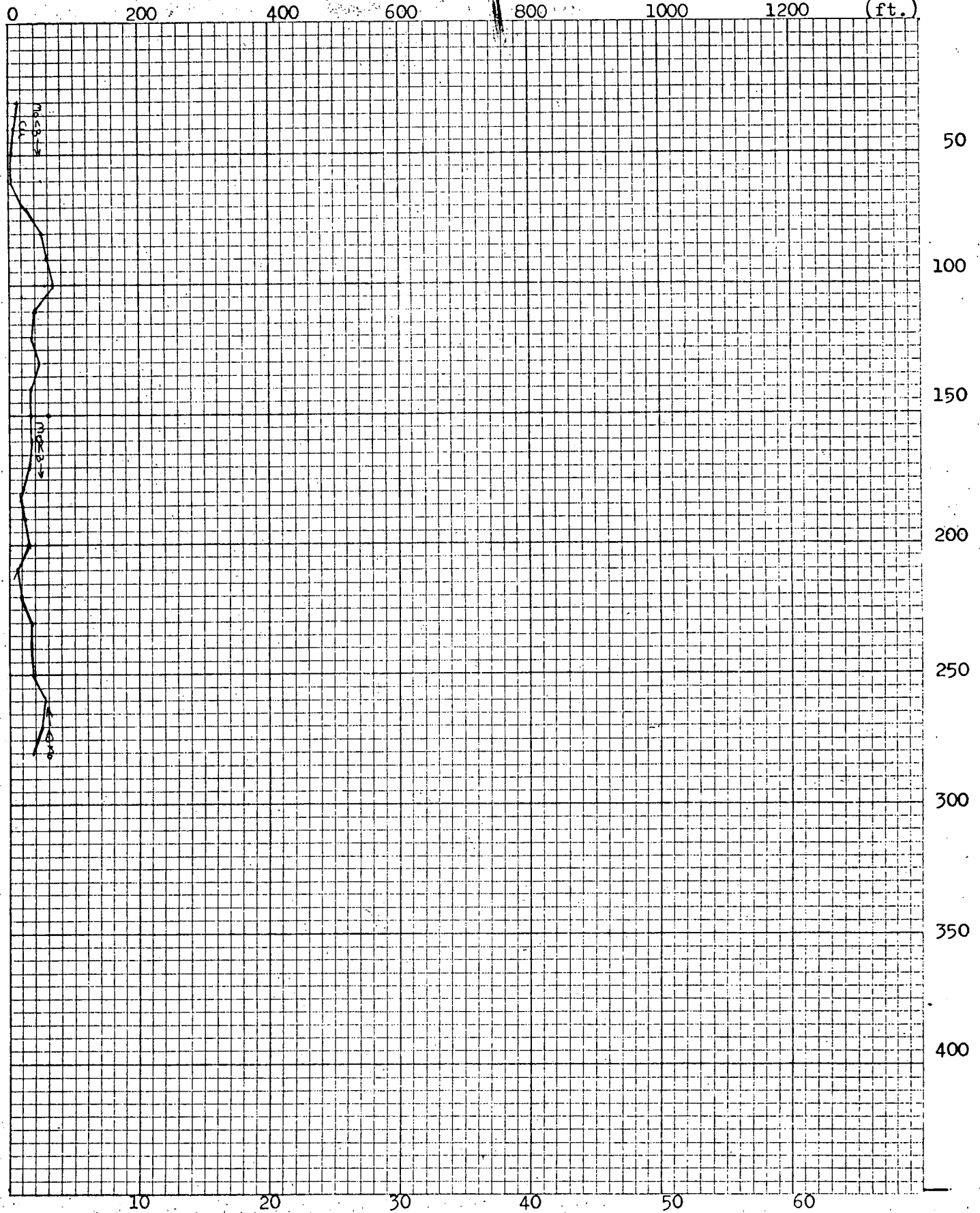
BG17

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10		
10 - 20		
20 - 30	15	< 3
30 - 40	10	< 3
40 - 50	5	< 3
50 - 60	5	< 3
60 - 70	25	< 3
70 - 80	50	< 3
80 - 90	55	< 3
90 - 100	65	< 3
100 - 110	40	< 3
110 - 120	35	< 3
120 - 130	45	< 3
130 - 140	35	< 3
140 - 150	35	3
150 - 160	35	< 3
160 - 170	30	< 3
170 - 180	20	< 3
180 - 190	25	< 3
190 - 200	30	< 3
200 - 210	15	< 3
210 - 220	20	< 3
220 - 230	35	< 3
230 - 240	35	< 3
240 - 250	40	< 3
250 - 260	55	< 3
260 - 270	50	< 3
270 - 280	35	< 3

BENDIGO PROJECTHoleNo. BG17
Serial No. 902/72

Cu in parts per million

Coordinates 51100E 56400N

Depth
(ft.)

Mo in parts per million

Hole No. 19

GEOCHEMICAL EXPLORATION SECTION
 LOG ROTARY DRILLHOLE (vertical) BG 19

DEPARTMENT OF MINES
 SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 511E 572N

Depth: 260ft.

Serial No. 907/72

Date Drilled: 18 Oct 71

On: 18 Oct 71

Plan Reference: 71-834

Bore Logged: N. Langsford

Driller: J. Martin

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

0 - 10ft	30 ppm Cu	130 - 140	70
10 - 20	55	140 - 150	40
20 - 30	65	150 - 160	40
30 - 40	90	160 - 170	40
40 - 50	80	170 - 180	80
50 - 60	65	180 - 190	65
60 - 70	10	190 - 200	55
70 - 80	45	200 - 210	70
80 - 90	20	210 - 220	65
90 - 100	40	220 - 230	70
100 - 110	50	230 - 240	55
110 - 120	55	240 - 250	55
120 - 130	90	250 - 260	50

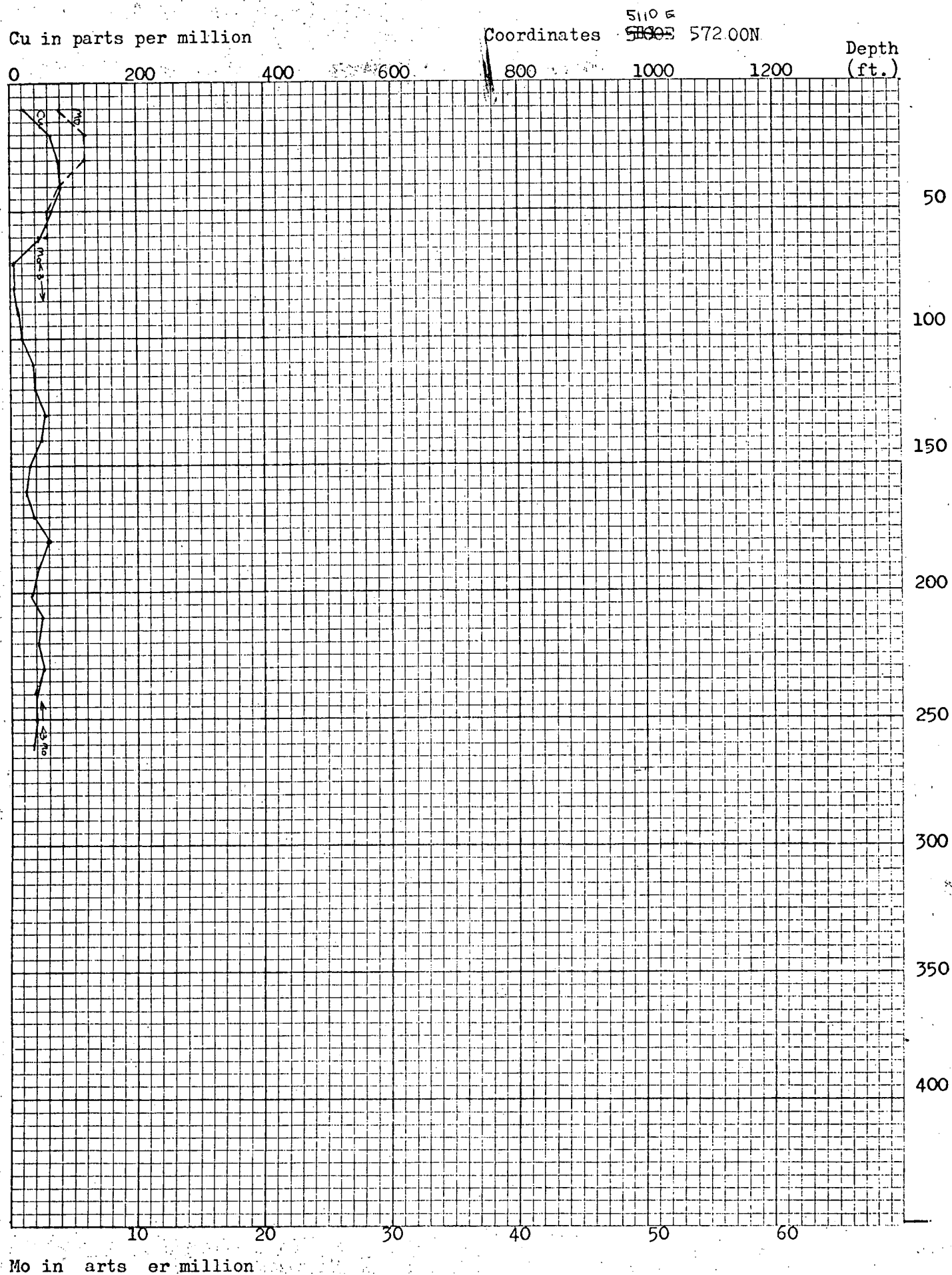
A.S.D.M. A.A.S. field analyses

Remarks: 0 - 8ft. calcrete
 8 - 48 green clay
 48 - 60 yellow clay
 60 - 90 white clay
 90 - 260 yellow to green completely to highly weathered meta-siltstone

BG19

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	25	4
10 - 20	65	6
20 - 30	75	6
30 - 40	80	4
40 - 50	65	3
50 - 60	45	3
60 - 70	5	Δ 3
70 - 80	5	Δ 3
80 - 90	10	Δ 3
90 - 100	20	Δ 3
100 - 110	35	Δ 3
110 - 120	40	Δ 3
120 - 130	55	Δ 3
130 - 140	50	Δ 3
140 - 150	30	Δ 3
150 - 160	25	Δ 3
160 - 170	35	Δ 3
170 - 180	60	Δ 3
180 - 190	45	Δ 3
190 - 200	35	Δ 3
200 - 210	50	Δ 3
210 - 220	45	Δ 3
220 - 230	50	Δ 3
230 - 240	40	Δ 3
240 - 250	40	Δ 3
250 - 259	35	Δ 3

MINES DEPARTMENT - S.A.

BENDIGO PROJECTHole No. BG19
Serial No. 907/72

Hole No. 20

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG20

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 518E 506M

Depth: 157ft.

Serial No. 907/72

Date Drilled: 19 Oct. 71

On: 19 Oct. 71

Plan Reference 71-834

Bore Logged: N. Langsford

Driller: J. Martin

OBJECT: ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ To obtain core for petrographic investigation

RESULTS: Geochemical Analyses

50 - 60	200 ppm Cu
60 - 70	170
70 - 80	220
80 - 90	155
90 - 100	220
100 - 110	265
110 - 120	110
120 - 130	190
130 - 140	150
140 - 150	140
150 - 156	130

S.A.D.M. A.A.S. field analyses

Remarks: Drilled 0 - 50ft as BM6
 50 - 156ft. Rotary drilled. Weathered biotite granite
 0.5ft. of core recovered between 156 and 157ft. Core is partly altered biotite
 granodiorite

BG20

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10		
10 - 20		
20 - 30		
30 - 40		
40 - 50		
50 - 60	160	20
60 - 70	150	12
70 - 80	170	20
80 - 90	140	12
90 - 100	180	10
100 - 110	210	20
110 - 120	220	10
120 - 130	260	50
130 - 140	270	65
140 - 150	280	22
150 - 156	270	25

MINES DEPARTMENT - S.A.

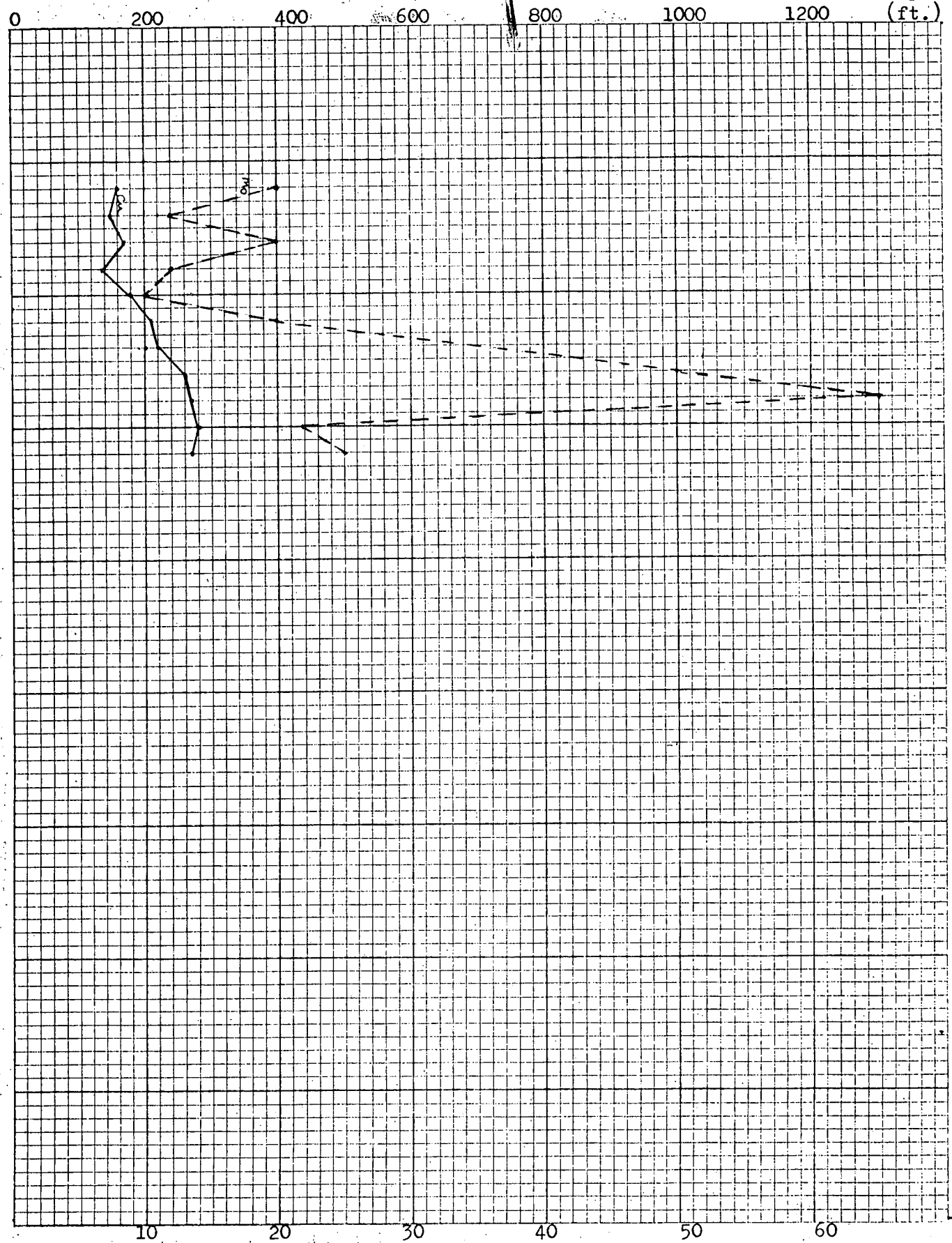
BENDIGO PROJECT

HoleNo. BG20
Serial No. 907/72

Cu in parts per million

Coordinates 51800E 50600N

Depth
(ft.)



Mo in parts per million

Hole No. 21

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG 21

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 519E 564N

Depth: 282ft.

Serial No. 907/72

Date Drilled: 19 Oct 71

On: 20 Oct 71

Plan Reference: 71-834

Bore Logged: N. Langsford

Driller: J. Martin

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

0 - 10ft.	35 ppm Cu	140 - 150	L5
10 - 20	50	150 - 160	10
20 - 30	65	160 - 170	25
30 - 40	10	170 - 180	70
40 - 50	10	180 - 190	110
50 - 60	10	190 - 200	110
60 - 70	45	200 - 210	70
70 - 80	80	210 - 220	45
80 - 90	80	220 - 230	50
90 - 100	65	230 - 240	35
100 - 110	50	240 - 250	35
110 - 120	10	250 - 260	35
120 - 130	10	260 - 270	45
130 - 140	10	270 - 280	45
		280 - 282	50

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 16ft. calcrete
 16 - 30 green clay
 30 - 45 white clay
 45 - 50 sandy white clay
 50 - 75 white clay
 75 - 110 black clay
 110 - 156 white clay
 156 - 282 completely weathered green meta-siltstone

BG21

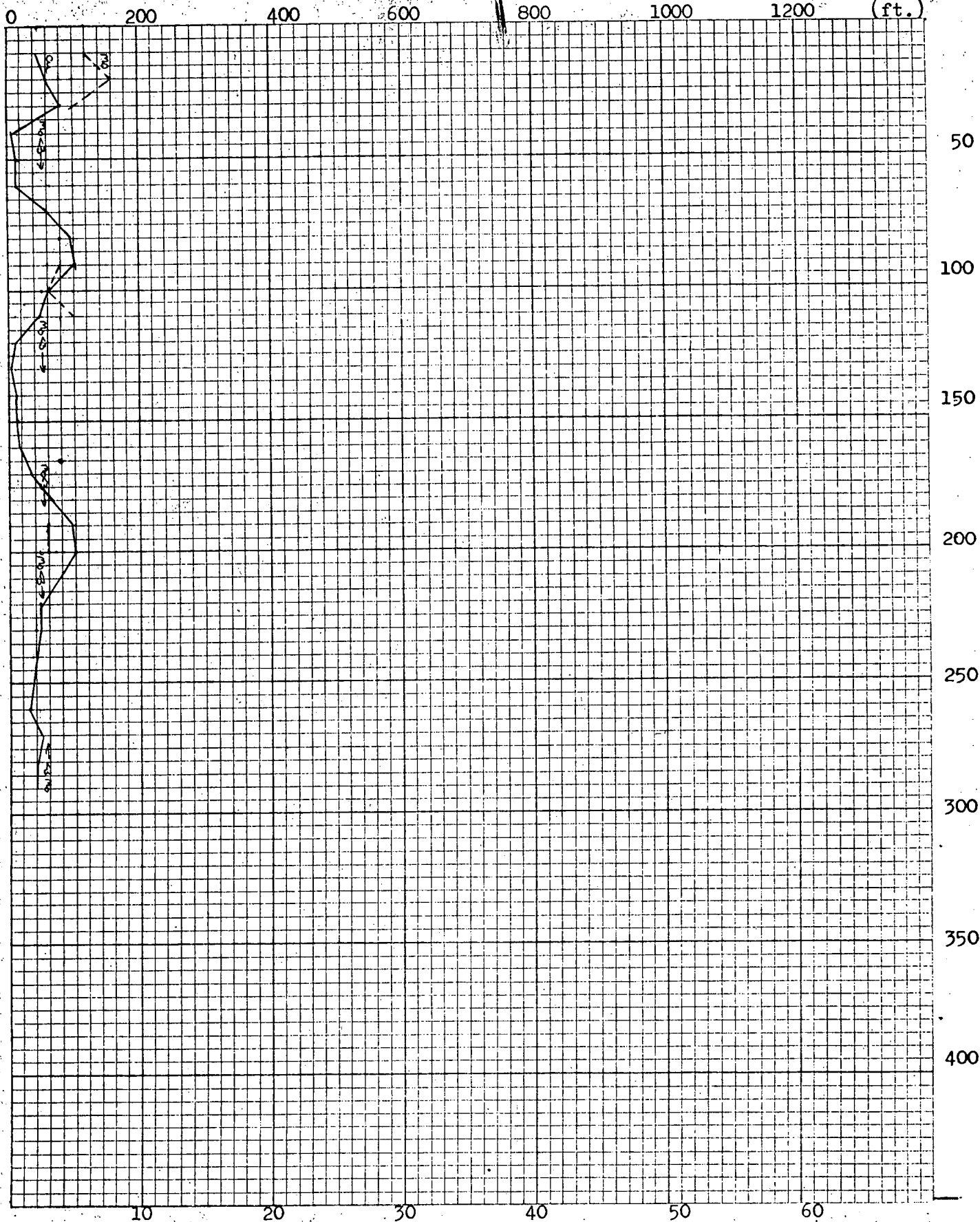
AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	45	6
10 - 20	60	8
20 - 30	80	5
30 - 40	10	43
40 - 50	15	43
50 - 60	15	43
60 - 70	65	43
70 - 80	95	43
80 - 90	100	4
90 - 100	60	3
100 - 110	50	5
110 - 120	10	43
120 - 130	5	43
130 - 140	10	43
140 - 150	10	43
150 - 160	15	43
160 - 170	35	4
170 - 180	65	43
180 - 190	95	3
190 - 200	100	3
200 - 210	70	43
210 - 220	45	43
220 - 230	45	43
230 - 240	40	43
240 - 250	35	43
250 - 260	30	43
260 - 270	45	43
270 - 280	40	43
280 - 282	40	43

MINES DEPARTMENT - S.A.

BENDIGO PROJECTHole No. BG21
Serial No. 907/72Coordinates 51900E
500E 56400N

Cu in parts per million

Coordinates

Depth
(ft.)

Mo in parts per million

Hole No. 22

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) B622DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 511E 556N

Serial No. 907/72

Date Drilled: 20 Oct. '71 Depth: 300ft

Plan Reference: 71-834

Bore Logged N. Langsford

On: 20 Oct. '71

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 - 10 ft	30	ppm Cu	150 - 160	60
10 - 20	55		160 - 170	40
20 - 30	15		170 - 180	80
30 - 40	70		180 - 190	165
40 - 50	15		190 - 200	50
50 - 60	10		200 - 210	40
60 - 70	10		210 - 220	110
70 - 80	10		220 - 230	50
80 - 90	10		230 - 240	50
90 - 100	10		240 - 250	30
100 - 110	10		250 - 260	25
110 - 120	10		260 - 270	40
120 - 130	55		270 - 280	30
140 - 150	125		280 - 290	30
			290 - 300	30

S.A.D.M. A.A.S. field analyses

Remarks:

0 - 9ft Calcrete

9 - 40 Red and green clays

40 - 300 Pink to yellow completely weathered siltstone.

BG22

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	40	4
10 - 20	75	8
20 - 30	20	< 3
30 - 40	65	< 3
40 - 50	20	< 3
50 - 60	10	< 3
60 - 70	10	< 3
70 - 80	15	< 3
80 - 90	10	< 3
90 - 100	10	< 3
100 - 110	10	< 3
110 - 120	15	< 3
120 - 130	25	< 3
130 - 140	60	< 3
140 - 150	100	< 3
150 - 160	65	< 3
160 - 170	40	< 3
170 - 180	110	< 3
180 - 190	240	< 3
190 - 200	60	< 3
200 - 210	85	< 3
210 - 220	150	< 3
220 - 230	50	< 3
230 - 240	45	< 3
240 - 250	45	< 3
250 - 260	35	< 3
260 - 270	35	< 3
270 - 280	35	< 3
280 - 290	30	< 3
290 - 300	55	< 3

MINES DEPARTMENT - S.A.

BENDIGO

PROJECT

HoleNo. B622

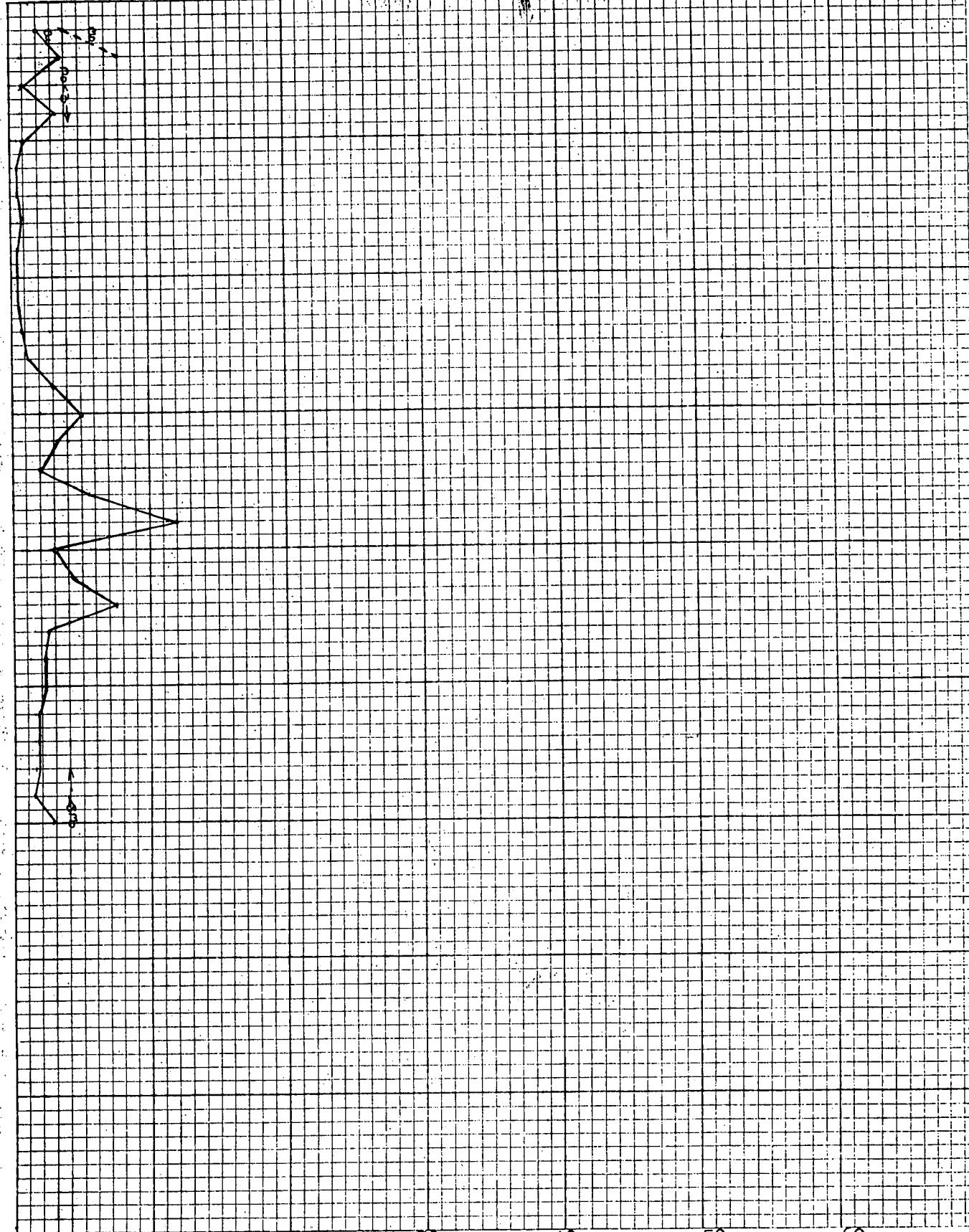
Serial No. 907/72

Cu in parts per million

Coordinates 51DOE 55600N

Depth
(ft.)

0 200 400 600 800 1000 1200



Mo in arts er million

Hole No. 23

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG23DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Cellar Coords: 519E 548N

Date Drilled: 20 Oct. '71 Depth: 300ft

Serial No. 907/72

Bore Logged N. Langsford

On: 21 Oct. '71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 - 10	ft	35	ppm Cu	150 - 160	90
10 - 20		25		160 - 170	165
20 - 30		35		170 - 180	150
30 - 40		50		180 - 190	150
40 - 50		65		190 - 200	120
50 - 60		90		200 - 210	110
60 - 70		100		210 - 220	80
70 - 80		110		220 - 230	100
80 - 90		25		230 - 240	110
90 - 100		200		240 - 250	65
100 - 110		200		250 - 260	100
110 - 120		200		260 - 270	65
120 - 130		275		270 - 280	80
130 - 140		300		280 - 290	130
140 - 150		120		290 - 300	100

S.A.D.M. A.A.S. field analyses

Remarks:

0 - 3 ft Calcrete

3 - 300 Pink to green completely weathered siltstone.

BG23

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	35	43
10 - 20	40	43
20 - 30	45	4
30 - 40	65	4
40 - 50	130	43
50 - 60	110	43
60 - 70	130	43
70 - 80	160	43
80 - 90	150	43
90 - 100	180	43
100 - 110	200	3
110 - 120	230	3
120 - 130	260	43
130 - 140	290	43
140 - 150	170	43
150 - 160	160	43
160 - 170	190	3
170 - 180	140	3
180 - 190	130	43
190 - 200	100	3
200 - 210	100	43
210 - 220	90	43
220 - 230	95	43
230 - 240	90	43
240 - 250	65	43
250 - 260	110	43
260 - 270	80	43
270 - 280	70	43
280 - 290	100	43
290 - 300	80	43

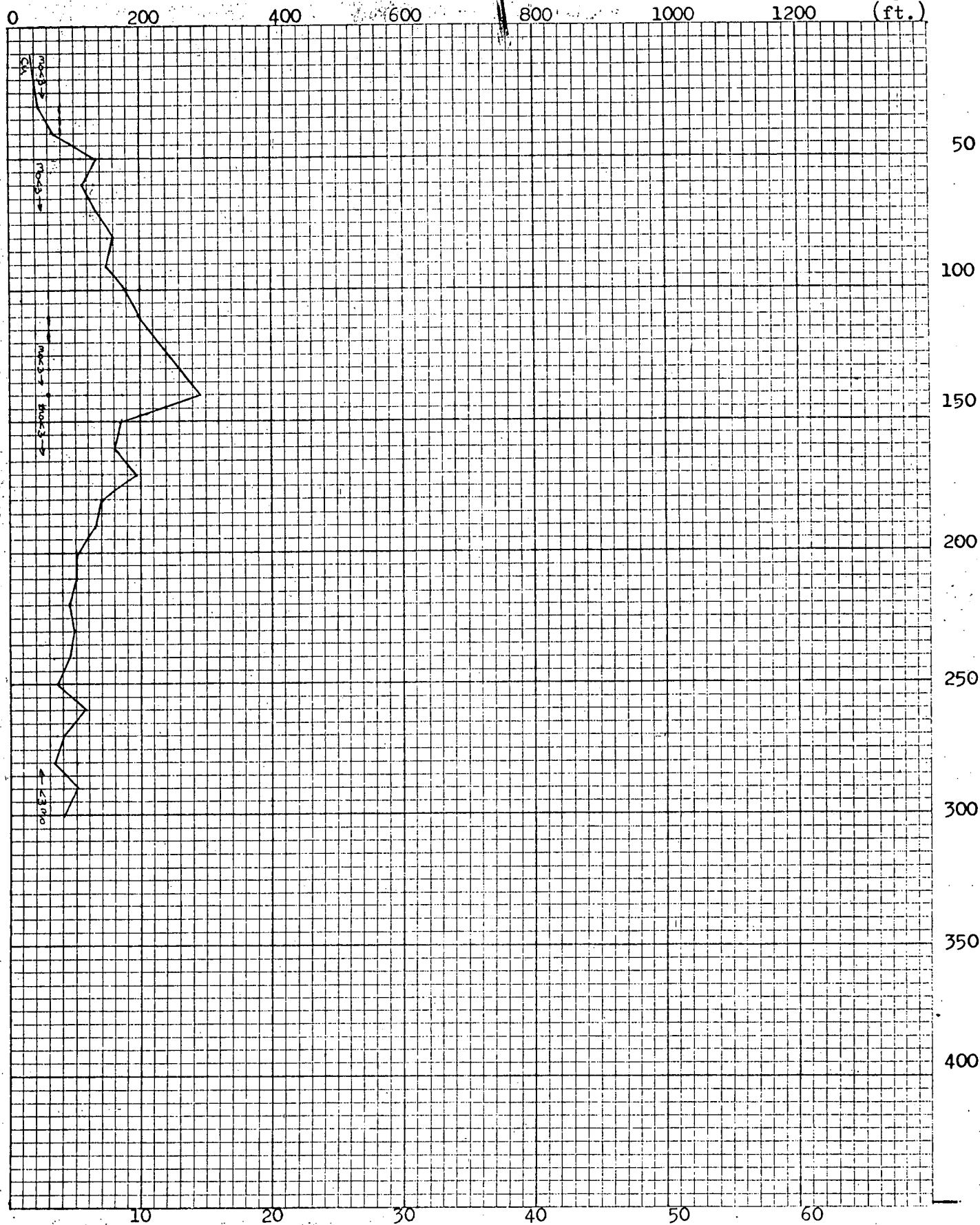
MINES DEPARTMENT - S.A.

BENDIGO PROJECT

Hole No. BG23
Serial No. 907/72

Cu in parts per million

Coordinates 51900E 548.00N

Depth
(ft.)

Hole No. 24

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG24

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 511E 548N

Depth: 292ft.

Serial No. 907/72

Date Drilled: 21 Oct 71

On: 21 Oct 71

Plan Reference: 71-834

Bore Logged: N. Langsford

Driller: J. Martin

OBJECT: To test for secondary copper mineralisation

RESULTS: Geochemical Analyses

0 - 10ft.	30 ppm Cu	140-150	120
10 - 20	60	150-160	250
20 - 30	80	160-170	110
30 - 40	190	170-180	90
40 - 50	40	180-190	130
50 - 60	60	190-200	90
60 - 70	100	200-210	110
70 - 80	55	210-220	85
80m- 90	1030	220-230	120
90 - 100	845	230-240	130
100 - 110	920	240-250	135
110 - 120	440	250-260	90
120 - 130	150	260-270	100
130 - 140	230	270-280	150
		280-290	170
		290-292	195

S.A.D.M. A.A.S. field analyses

Remarks: 0 - 8ft. calcrete
 8 - 40 Red clay
 40 - 50 green clay
 50 - 82 white clay
 82 - 292 completely to highly weathered green metasiltstone

BG24

AMDEL Analyses PPM

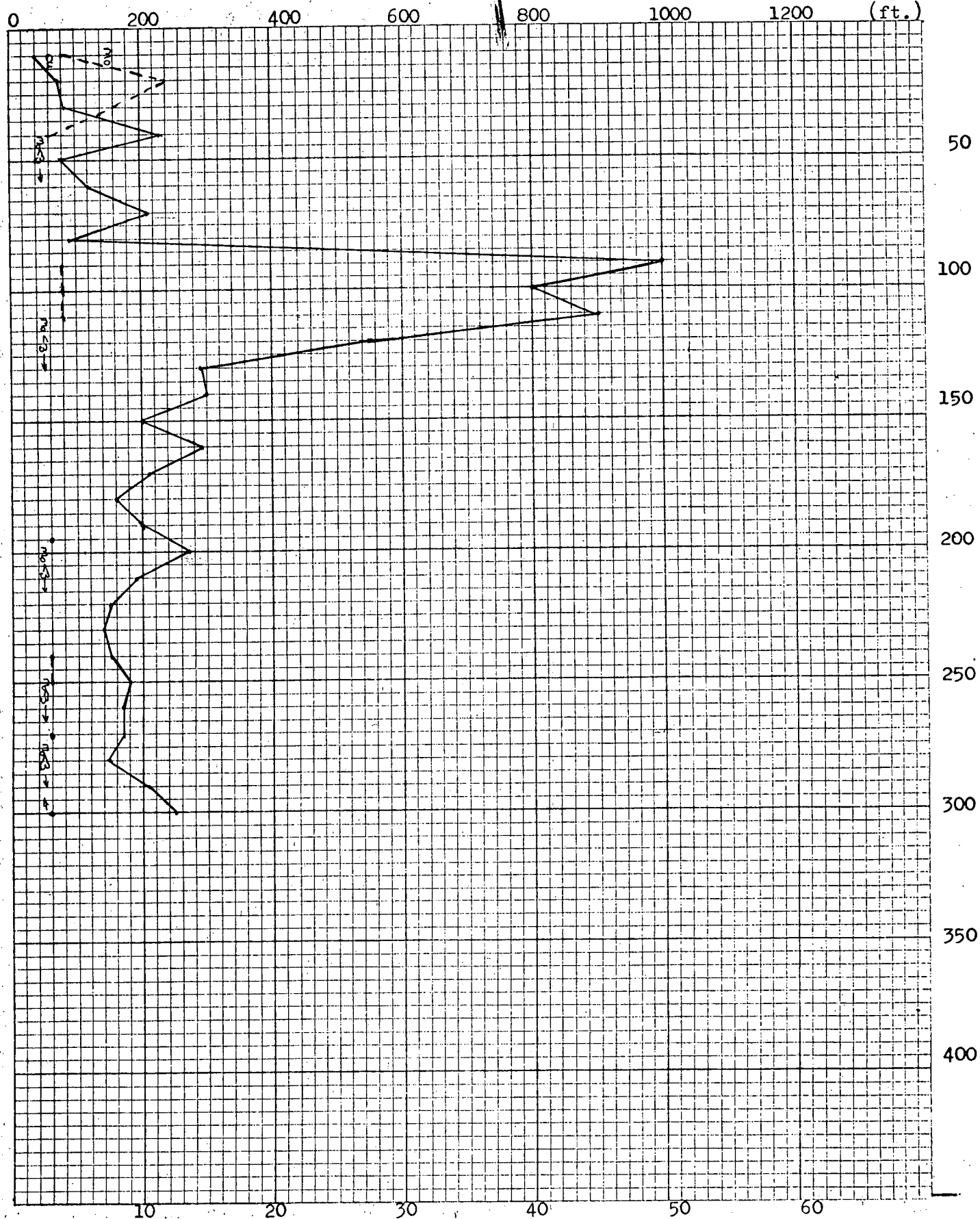
Interval (ft.)	Cu	Mo
0 - 10	40	4
10 - 20	75	12
20 - 30	85	8
30 - 40	230	3
40 - 50	80	< 3
50 - 60	120	< 3
60 - 70	210	< 3
70 - 80	90	< 3
80 - 90	1000	4
90 - 100	800	4
100 - 110	900	4
110 - 120	550	< 3
120 - 130	290	< 3
130 - 140	300	< 3
140 - 150	200	< 3
150 - 160	290	< 3
160 - 170	210	< 3
170 - 180	160	< 3
180 - 190	200	3
190 - 200	270	< 3
200 - 210	190	< 3
210 - 220	150	< 3
220 - 230	140	< 3
230 - 240	150	3
240 - 250	180	3
250 - 260	170	< 3
260 - 270	170	3
270 - 280	150	< 3
280 - 290	210	< 3
290 - 292	250	3

BENDIGO PROJECT

Hole No. BG24
Serial No. 907/72

Cu in parts per million

Coordinates 51100E 54800N

Depth
(ft.)

Mo in parts per million

Hole No. 25

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG25

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 503E 548N

Date Drilled: 21 Oct. 71 Depth: 242 ft.

Serial No. 907/72

Bore Logged N. Langsford On: 22nd Oct. 71 Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0-10ft.	p.p.m. Cu.		
10-20		120-130	180
20-30		130-140	225
30-40		140-150	190
40-50		150-160	310
50-60	15	160-170	300
60-70	15	170-180	305
70-80	55	180-190	195
80-90	70	190-200	200
90-100	210	200-210	220
100-110	190	210-220	225
110-120	165	220-230	200
		230-240	200
		240-242	210

S.A.D.M. A.A.S. field analyses

Remarks:

0-6 calcrete
 6-61 white clay
 61-242 pale green to grey completely to highly
 weathered siltstone.

BG 25

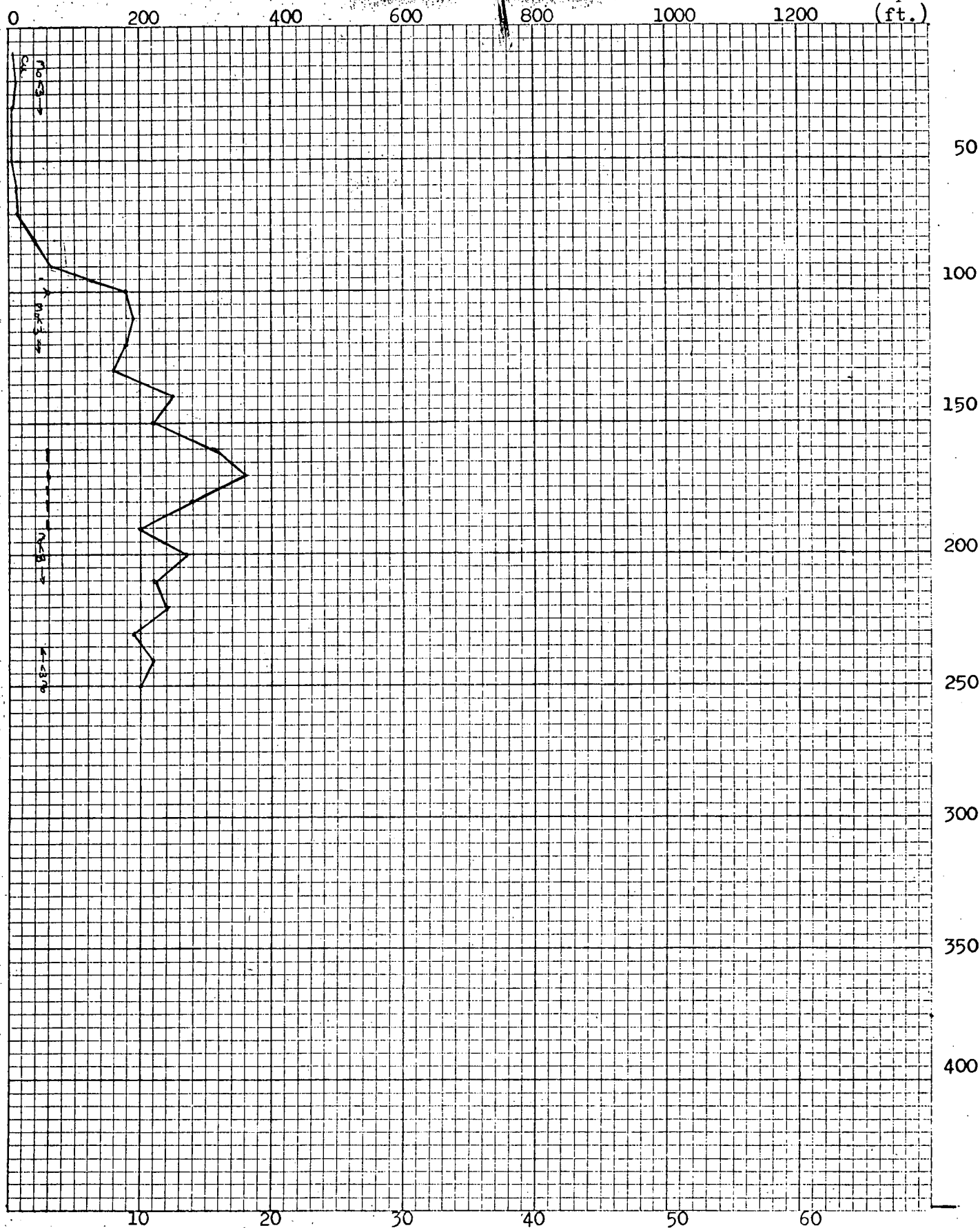
AMDEL	Analyses	PPM
Interval (ft.)	Cu	Mo
0 - 10	5	< 3
10 - 20	10	< 3
20 - 30	5	< 3
30 - 40	5	< 3
40 - 50	5	< 3
50 - 60	10	< 3
60 - 70	15	< 3
70 - 80	40	< 3
80 - 90	65	< 3
90 - 100	180	3
100 - 110	190	< 3
110 - 120	180	< 3
120 - 130	160	< 3
130 - 140	250	< 3
140 - 150	220	< 3
150 - 160	310	3
160 - 170	360	3
170 - 180	280	3
180 - 190	200	3
190 - 200	270	< 3
200 - 210	220	< 3
210 - 220	240	< 3
220 - 230	190	< 3
230 - 240	220	< 3
240 - 242	200	< 3

MINES DEPARTMENT - S.A.

BENDIGO PROJECTHole No. BG25
Serial No. 907/72

Cu in parts per million

Coordinates 50300E 54800N

Depth
(ft.)

Hole No. 26

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG 26

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 561E 559N

Depth: 83ft.

Serial No. 907/72

Date Drilled: 22 Oct 71

On: 22 Oct. 71 Plan Reference: 71-834

Bore Logged: N. Langsford

Driller: J. Martin

OBJECT: To test breccia zone for copper mineralisation

RESULTS: Geochemical Analyses

0 - 10ft	110 ppm Cu
10 - 20	140
20 - 30	130
30 - 40	400
40 - 50	100
50 - 60	50
60 - 70	25
70 - 80	25

S.A.D.M. A.A.S. field analyses

Remarks: Hole penetrated hydrothermally altered? breccia of hornfelsed siltstone and granodiorite. Hole abandoned when bit lost down hole.

BG26

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	MO
0 - 10	85	3
10 - 20	110	4
20 - 30	140	3
30 - 40	330	3
40 - 50	100	< 3
50 - 60	50	< 3
60 - 70	20	< 3
70 - 80	15	< 3

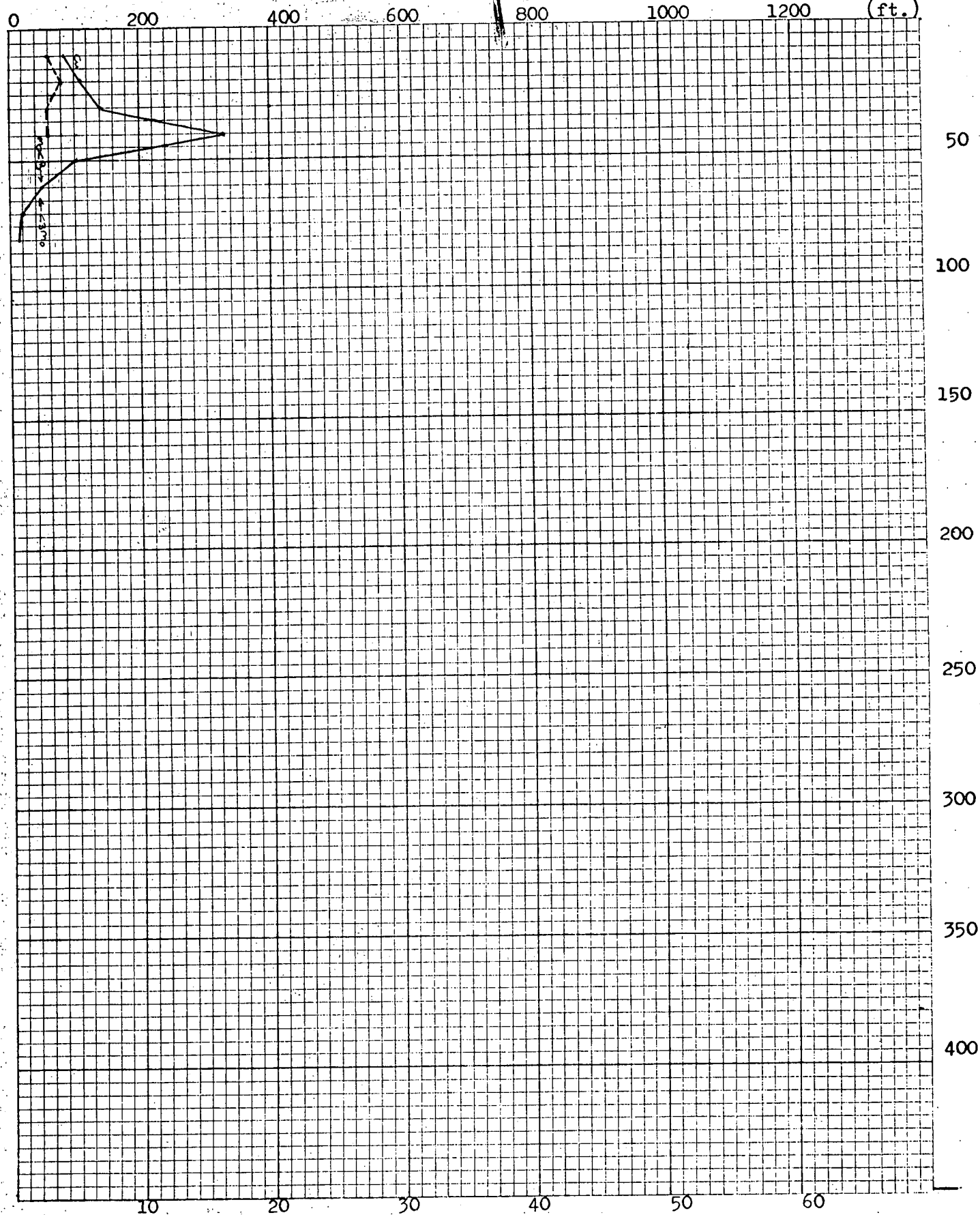
MINES DEPARTMENT - S.A.

BENDIGO PROJECT

HoleNo. BG26
Serial No. 907/72

Cu in parts per million

Coordinates 56100E 55900N

Depth
(ft.)

Mo in parts per million

Hole No. 27

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG 27DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: -

Date Drilled: 25 Oct. 71 Depth: 139ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 25 Oct. 71

Plan Reference: 71-855

Driller: J. Martin

OBJECT: To test for secondary copper mineralization.

RESULTS: Geochemical Analyses

0-10ft.	10	p.p.m. Cu.
10-20	5	
20-30	5	
30-40	10	
40-50	15	
50-60	10	
60-70	10	
70-80	15	
80-90	25	
90-100	15	
100-110	15	
110-120	15	
120-130	15	
130-139	30	

S.A.D.M. A.A.S. field analyses.

Remarks:

0 - 6 Calcrete
 6 - 16 Red gypsiferous clay.
 16 - 139 Highly weathered biotite granite.

BG27

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	15	3
10 - 20	10	<3
20 - 30	5	<3
30 - 40	15	<3
40 - 50	25	<3
50 - 60	30	<3
60 - 70	40	<3
70 - 80	40	<3
80 - 90	35	<3
90 - 100	40	<3
100 - 110	45	<3
110 - 120	40	<3
120 - 130	40	<3
130 - 139	50	<3

BENDIGO PROJECT

Hole No. BG27
Serial No. 907/72

Cu in parts per million

Coordinates

OOE

OON

Depth
(ft.)

0

200

400

600

800

1000

1200

0
3
6
9

50

100

150

200

250

300

350

400

10

20

30

40

50

60

Mo in parts per million

Hole No. 28

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG28DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Date Drilled: 25 Oct. 71 Depth: 112 ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 25 Oct. 71

Plan Reference: 71-855

Driller: J. Martin.

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 -10ft.	15	p.p.m. Cu.
10-20	15	
20-30	15	
30-40	15	
40-50	25	
50-60	10	
60-70	30	
70-80	25	
80-90	40	
90-100	70	
100-110	70	
110-112	90	

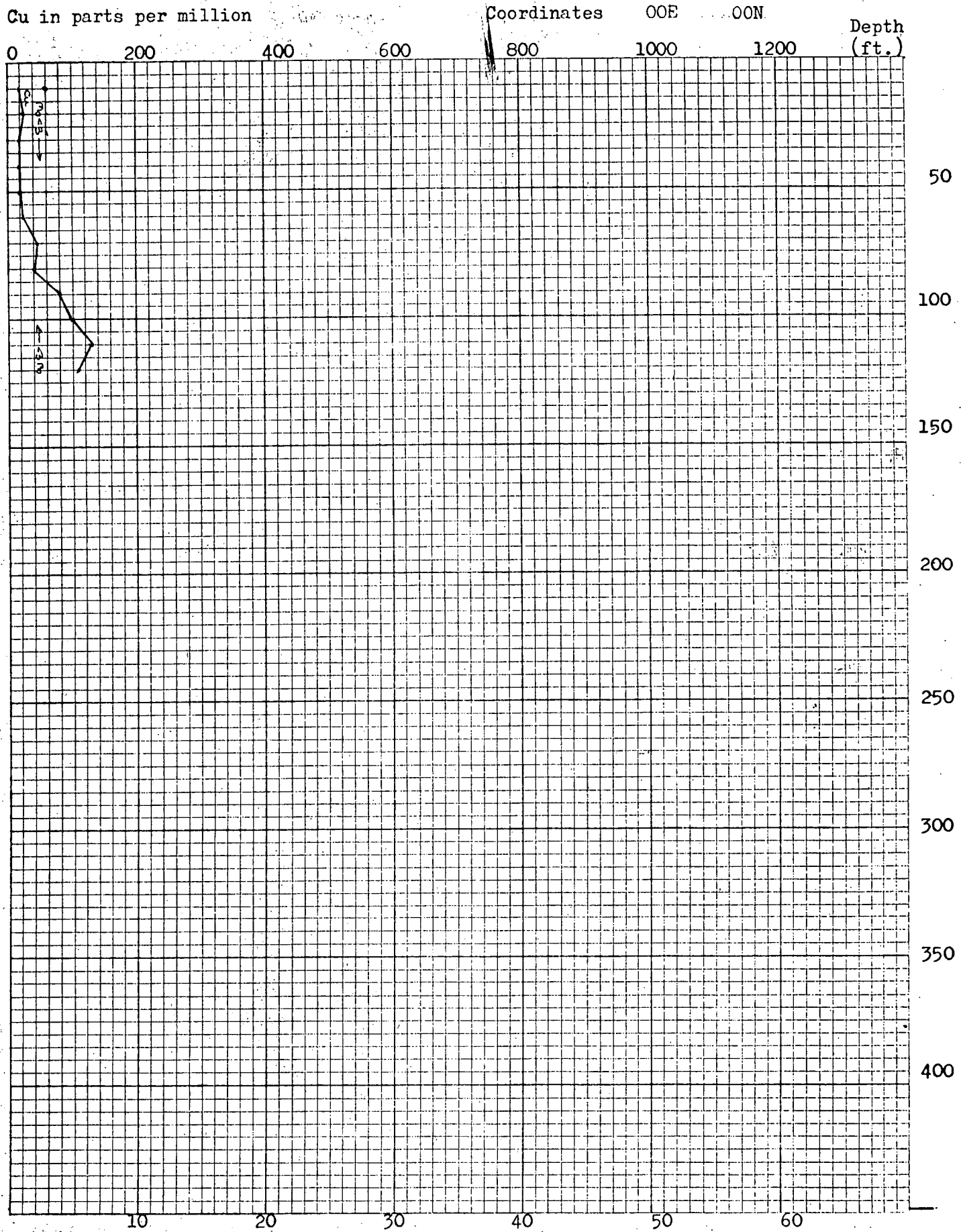
S.A.D.M. A.A.S. field analyses.

Remarks:

0-5 Calcrete
 5-16 Red clay
 16-112 Highly weathered biotite granite.

BG28

ANDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	20	3
10 - 20	25	< 3
20 - 30	20	< 3
30 - 40	20	< 3
40 - 50	20	< 3
50 - 60	25	< 3
60 - 70	45	< 3
70 - 80	40	< 3
80 - 90	80	< 3
90 - 100	100	< 3
100 - 110	130	< 3
110 - 120	110	< 3

BENDIGO PROJECTHole No. BG28
Serial No. 907/72

Hole No. 29

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG29

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords:

Date Drilled: 25 Oct. 71 Depth: 210ft.
Bore Logged N. Langsford On: 25 Oct. 71

Serial No. 907/72
Plan Reference: 71-855
Driller: J. Martin

OBJECT: To test for secondary copper mineralization.

RESULTS: Geochemical Analyses

0-10ft.	15	p.p.m. Cu.	100-110	15
10-20	15		110-120	80
20-30	10		120-130	70
30-40	5		130-140	60
40-50	5		140-150	30
50-60	5		150-160	50
60-70	5		160-170	30
70-80	10		170-180	50
80-90	5		180-190	70
90-100	10		190-200	60
			200-210	50

S.A.D.M. A.A.S. field analyses.

Remarks:

0-6ft. calcrete
6-22 red clay
22-45 White clay
45-210 Highly weathered biotite granite.

BG29

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	25	<3
10 - 20	25	<3
20 - 30	10	<3
30 - 40	5	<3
40 - 50	5	<3
50 - 60	5	<3
60 - 70	10	<3
70 - 80	10	<3
80 - 90	15	<3
90 - 100	10	<3
100 - 110	25	<3
110 - 120	75	<3
120 - 130	80	<3
130 - 140	85	<3
140 - 150	75	<3
150 - 160	55	<3
160 - 170	45	<3
170 - 180	50	<3
180 - 190	70	<3
190 - 200	75	<3
200 - 210	65	<3

MINES DEPARTMENT - S.A.

BENDIGO PROJECT

HoleNo. BG29
Serial No. 907/72

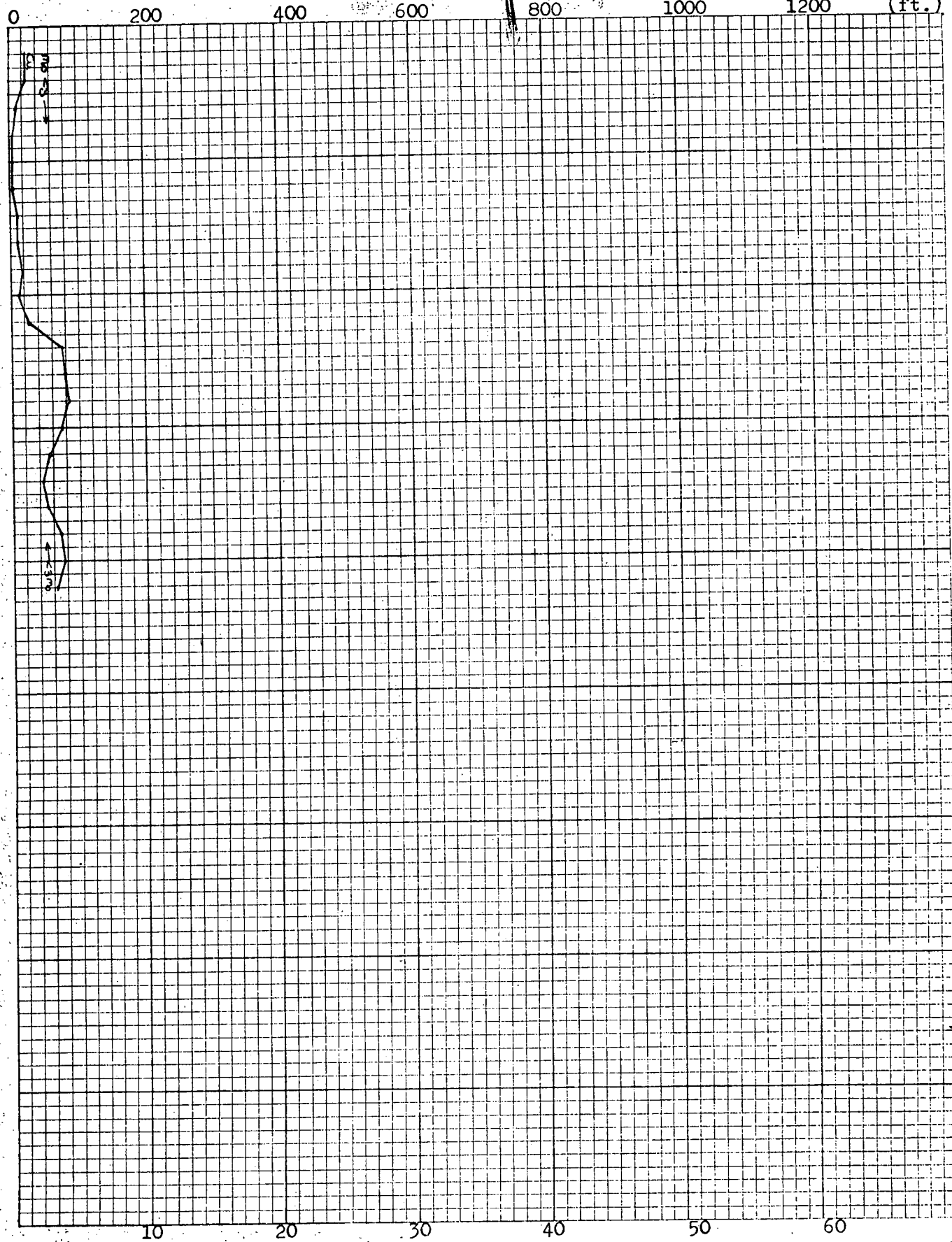
Cu in parts per million

Coordinates

OOE

OON

Depth
(ft.)



Mo in arts per million

Hole No. 30

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) B630DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: -

Date Drilled: 26 Oct.'71 Depth: 146ft

Bore Logged N. Langsford On: 26 Oct.'71

Serial No. 907/72

Plan Reference: 71-855

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 - 10 ft	25	ppm Cu
10 - 20	10	
20 - 30	10	
30 - 40	15	
40 - 50	25	
50 - 60	25	
60 - 70	40	
70 - 80	30	
80 - 90	50	
90 - 100	100	
100 - 110	60	
110 - 120	105	
120 - 130	140	
130 - 140	200	
140 - 146	125	

S.A.D.M. A.A.S field analysis

Remarks:

0 - 6ft Calcrete

6 - 19 Red clay

19 - 147 Highly weathered biotite granite

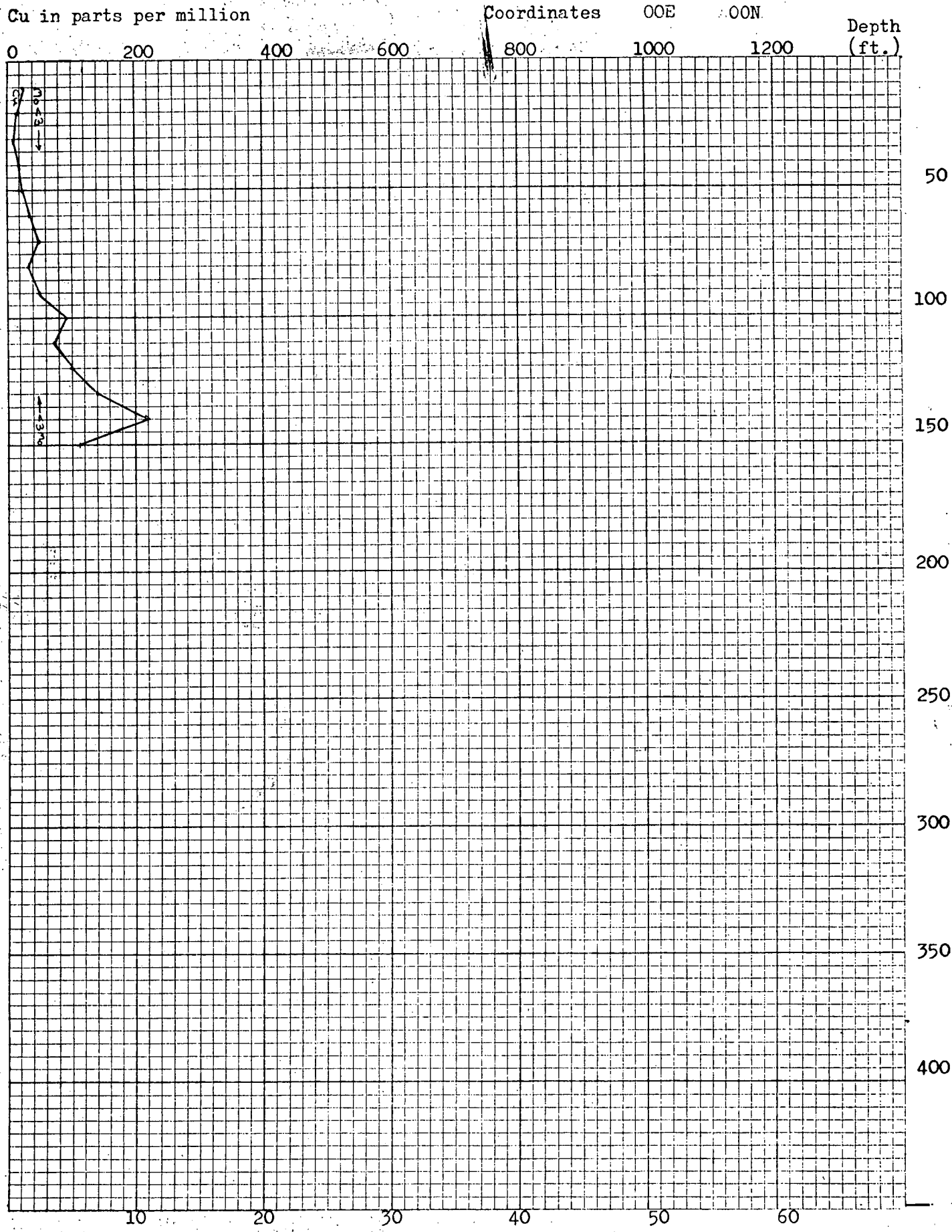
BG30

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	25	< 3
10 - 20	15	< 3
20 - 30	10	< 3
30 - 40	20	< 3
40 - 50	25	< 3
50 - 60	35	< 3
60 - 70	50	< 3
70 - 80	35	< 3
80 - 90	50	< 3
90 - 100	90	< 3
100 - 110	75	< 3
110 - 120	100	< 3
120 - 130	140	< 3
130 - 140	220	< 3
140 - 146	110	< 3

MINES DEPARTMENT - S.A.

BENDIGO- PROJECT

Hole No. BG30
Serial No. 907/72



Hole No. 31

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG31

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: -

Date Drilled: 26 Oct.'71 Depth: 175 ft.

Serial No. 907/72

Bore Logged N. Langsford

On: 26 Oct.'71

Plan Reference: 71-855

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 - 10	25	ppm Cu
10 - 20	50	
20 - 30	10	
30 - 40	45	
40 - 50	45	
50 - 60	45	
60 - 70	45	
70 - 80	15	
80 - 90	15	
90 - 100	15	
100 - 110	10	
110 - 120	10	
120 - 130	15	
130 - 140	10	
140 - 150	10	
150 - 160	15	
160 - 170	10	
170 - 175	15	

S.A.D.M. A.A.S. Analyses

Remarks:

0 - 6 Calcrete

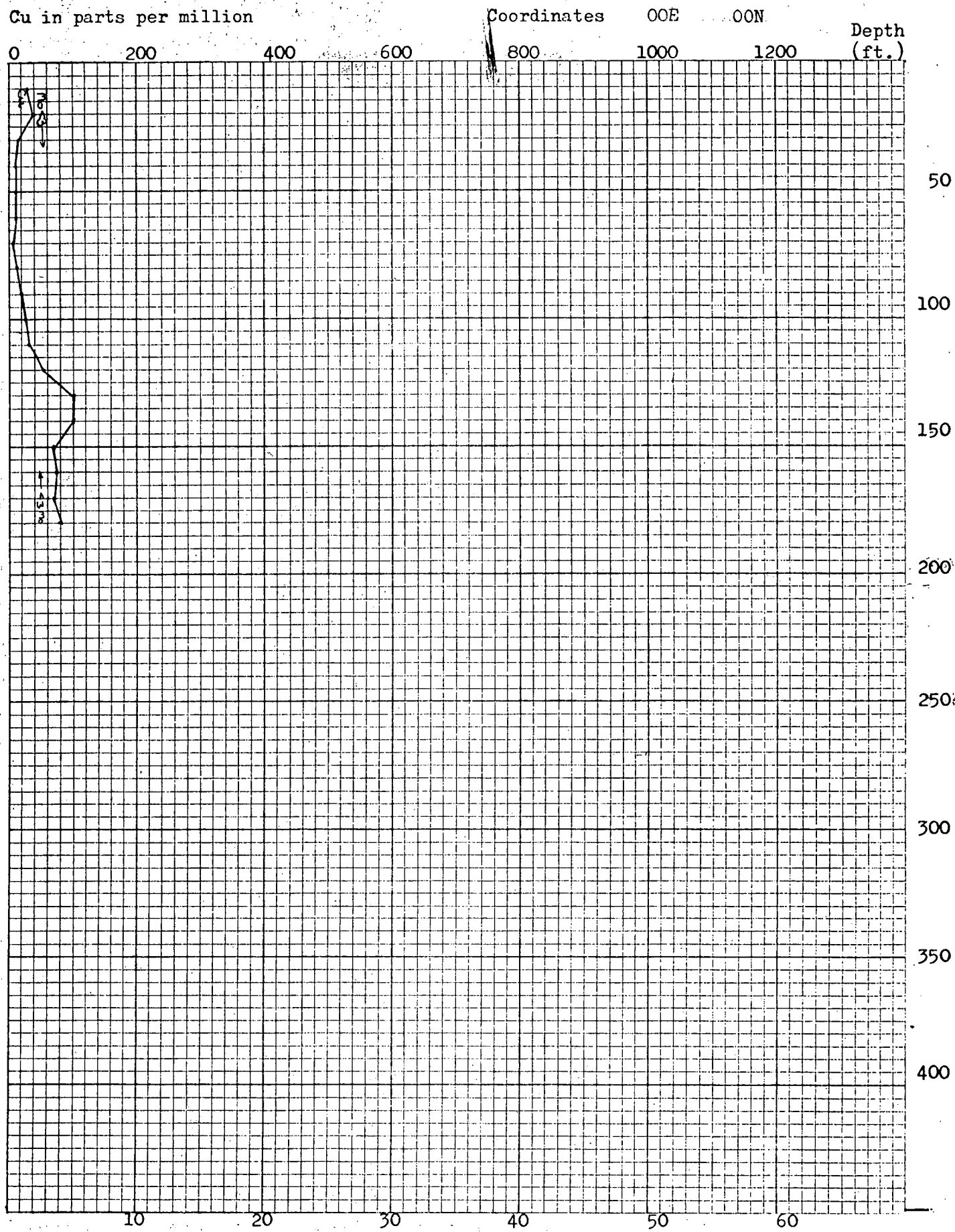
0 - 40 Red clay

40 - 175 Highly weathered biotite granite

BG31

AMDEL	ANALYSES	PPM
Interval (ft.)	Cu	Mo
0 - 10	30	< 3
10 - 20	40	< 3
20 - 30	15	< 3
30 - 40	10	< 3
40 - 50	10	< 3
50 - 60	10	< 3
60 - 70	5	< 3
70 - 80	10	< 3
80 - 90	20	< 3
90 - 100	25	< 3
100 - 110	30	< 3
110 - 120	55	< 3
120 - 130	100	< 3
130 - 140	100	< 3
140 - 150	70	< 3
150 - 160	75	< 3
160 - 170	70	< 3
170 - 180	80	< 3

MINES DEPARTMENT - S.A.

BENDIGO PROJECTHoleNo. BG31
Serial No. 907/72

Hole No. 32

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) BG32

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 519E 540N

Date Drilled: 27 Oct. '71 Depth: 108 ft.

Serial No. 907/72

Bore Logged N. Langsford On: 27 Oct. '71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 - 10	15	ppm Cu
10 - 20	<5	
20 - 30	<5	
30 - 40	<5	
40 - 50	<5	
50 - 60	<5	
60 - 70	<5	
70 - 80	<5	
80 - 90	<5	
90 - 100	10	
100 - 108	10	

S.A.D.M. A.A.S. field analyses

Remarks:

0 - 3 Calcrete

3 - 40 White clay

40 - 108 Sandy white clay (weathered granite?)

BG32

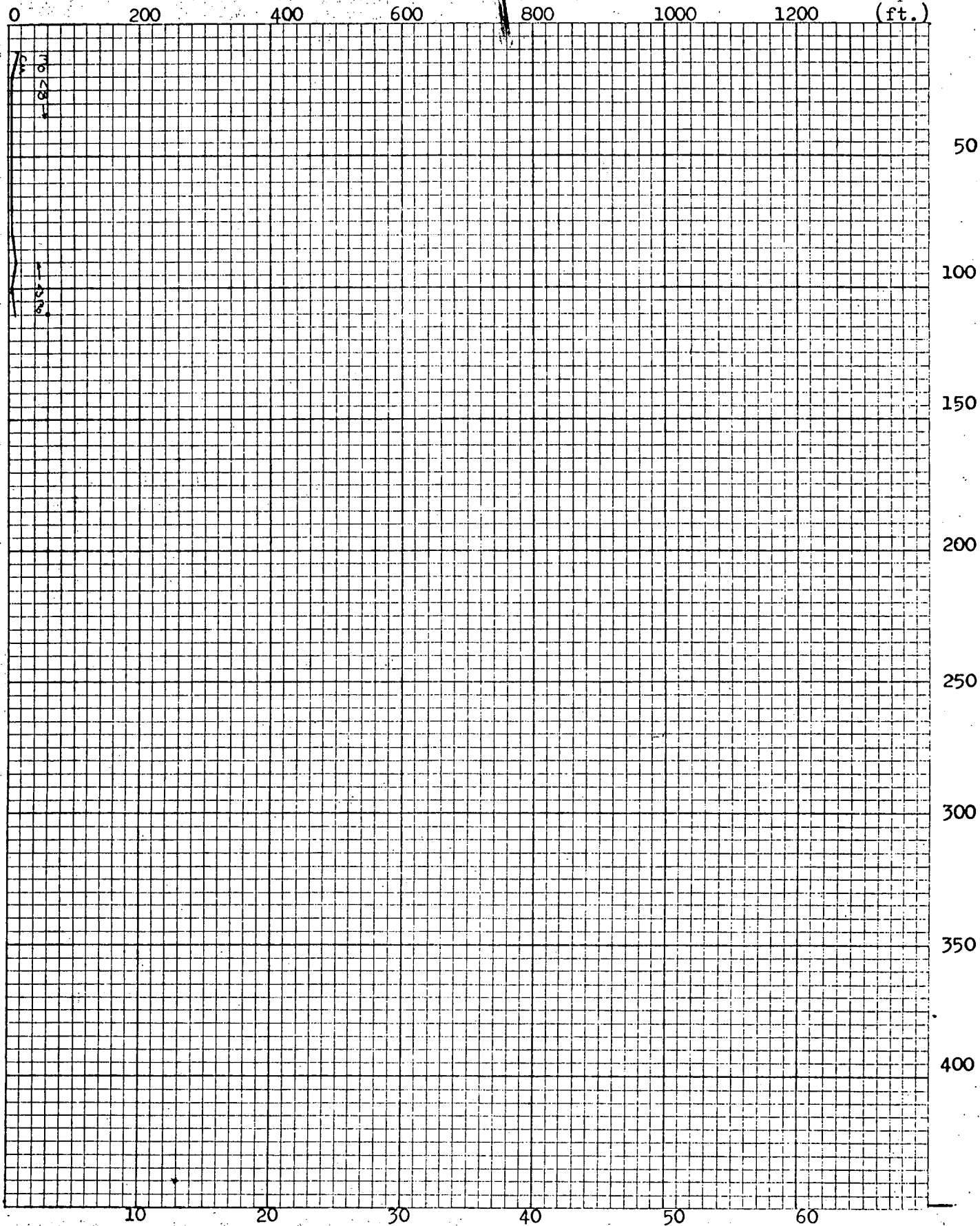
AMDEL	ANALYSES	PPM
Interval(ft.)	Cu	Mo
0 - 10	15	< 3
10 - 20	5	< 3
20 - 30	5	< 3
30 - 40	5	< 3
40 - 50	5	< 3
50 - 60	5	< 3
60 - 70	5	< 3
70 - 80	5	< 3
80 - 90	10	< 3
90 - 100	5	< 3
100 - 108	10	3

MINES DEPARTMENT - S.A.

BENDIGO PROJECTHoleNo. BG32
Serial No. 907/72

Cu in parts per million

Coordinates 51900E 54000N

Depth
(ft.)

Mo in parts per million

Hole No. 33

GEOCHEMICAL EXPLORATION SECTION
LOG ROTARY DRILLHOLE (vertical) Rg33

DEPARTMENT OF MINES
SOUTH AUSTRALIA

PROJECT: BENDIGO

CO. KIMBERLY

DOCKET NO. 1243/70

Collar Coords: 511E 540N

Date Drilled: 28 Oct. '71

Depth: 118ft

Serial No. 907/72

Bore Logged N. Langsford

On: 28 Oct. '71

Plan Reference: 71-834

Driller: J. Martin

OBJECT: To test for secondary copper mineralization

RESULTS: Geochemical Analyses

0 - 10	ft	20	ppm Cu
10 - 20		20	
20 - 30		20	
30 - 40		10	
40 - 50		10	
50 - 60		< 5	
60 - 70		< 5	
70 - 80		10	
80 - 90		10	
90 - 100		10	
100 - 110		10	
110 - 118		10	

S.A.D.M. A.A.S. field analyses

Remarks:

0 - 3	Calcrete
3 - 30	Red-brown clay
30 - 40	White clay, silcrete
40 - 118	Sandy white clay (probably weathered granite)

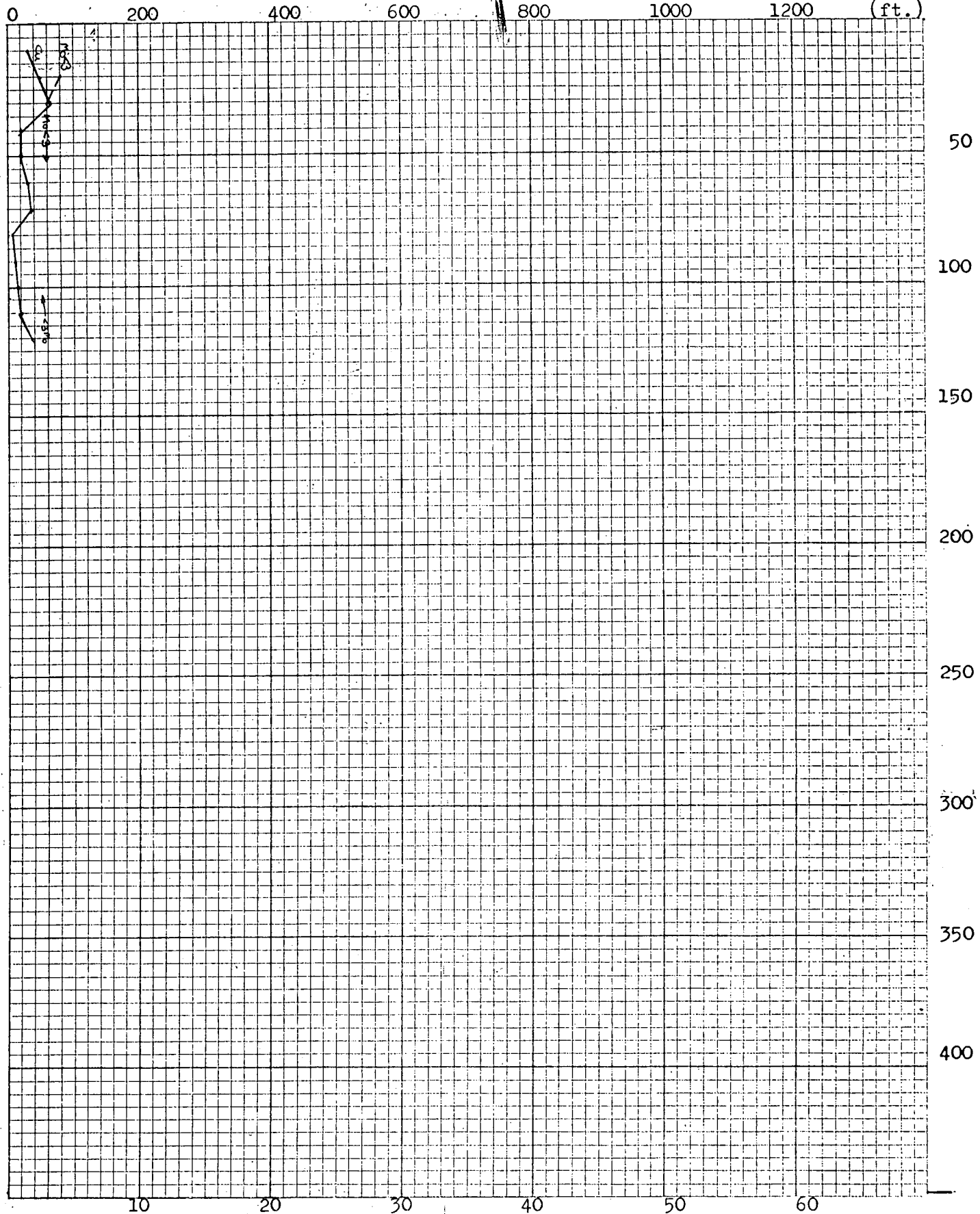
BG33

AMDEL ANALYSES PPM		
Interval (ft)	Cu	Mo
0 - 10	30	△ 3
10 - 20	50	4
20 - 30	65	3
30 - 40	20	△ 3
40 - 50	20	△ 3
50 - 60	30	△ 3
60 - 70	35	△ 3
70 - 80	5	△ 3
80 - 90	10	△ 3
90 - 100	15	△ 3
100 - 110	20	△ 3
110 - 118	35	△ 3

BENDIGO PROJECTHole No. BG33
Serial No. 967/72

Cu in parts per million

Coordinates 511.00E 540.00N

Depth
(ft.)

Mo in arts er million

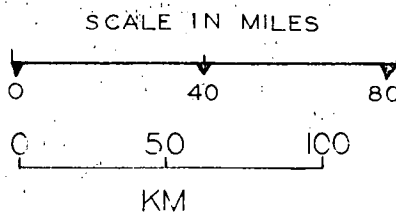
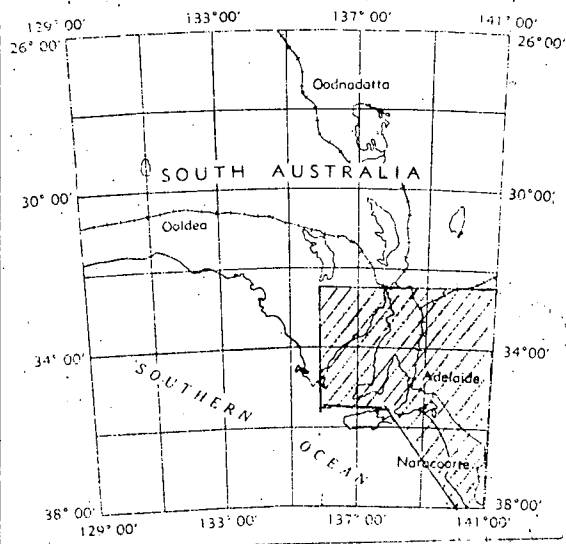
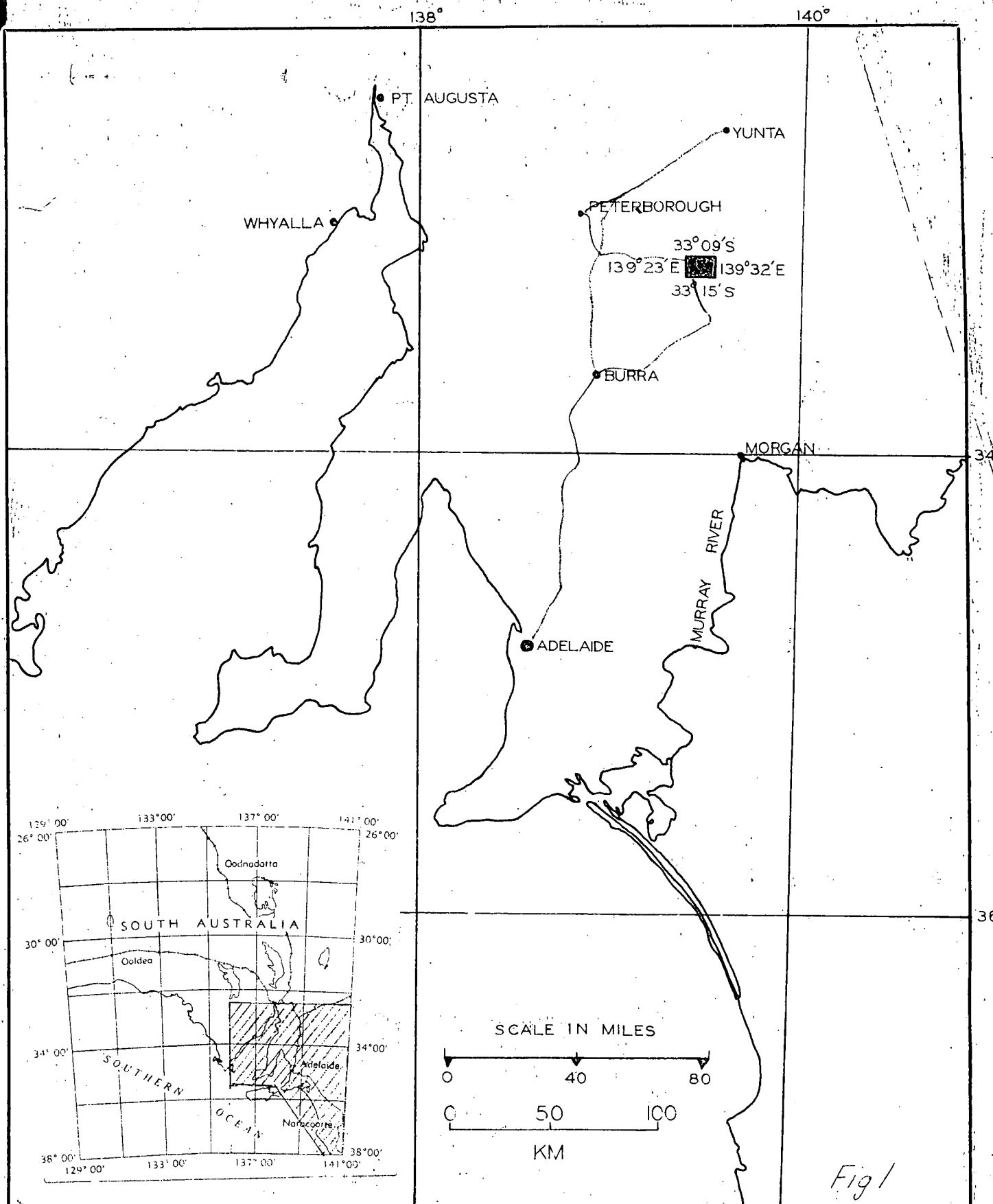
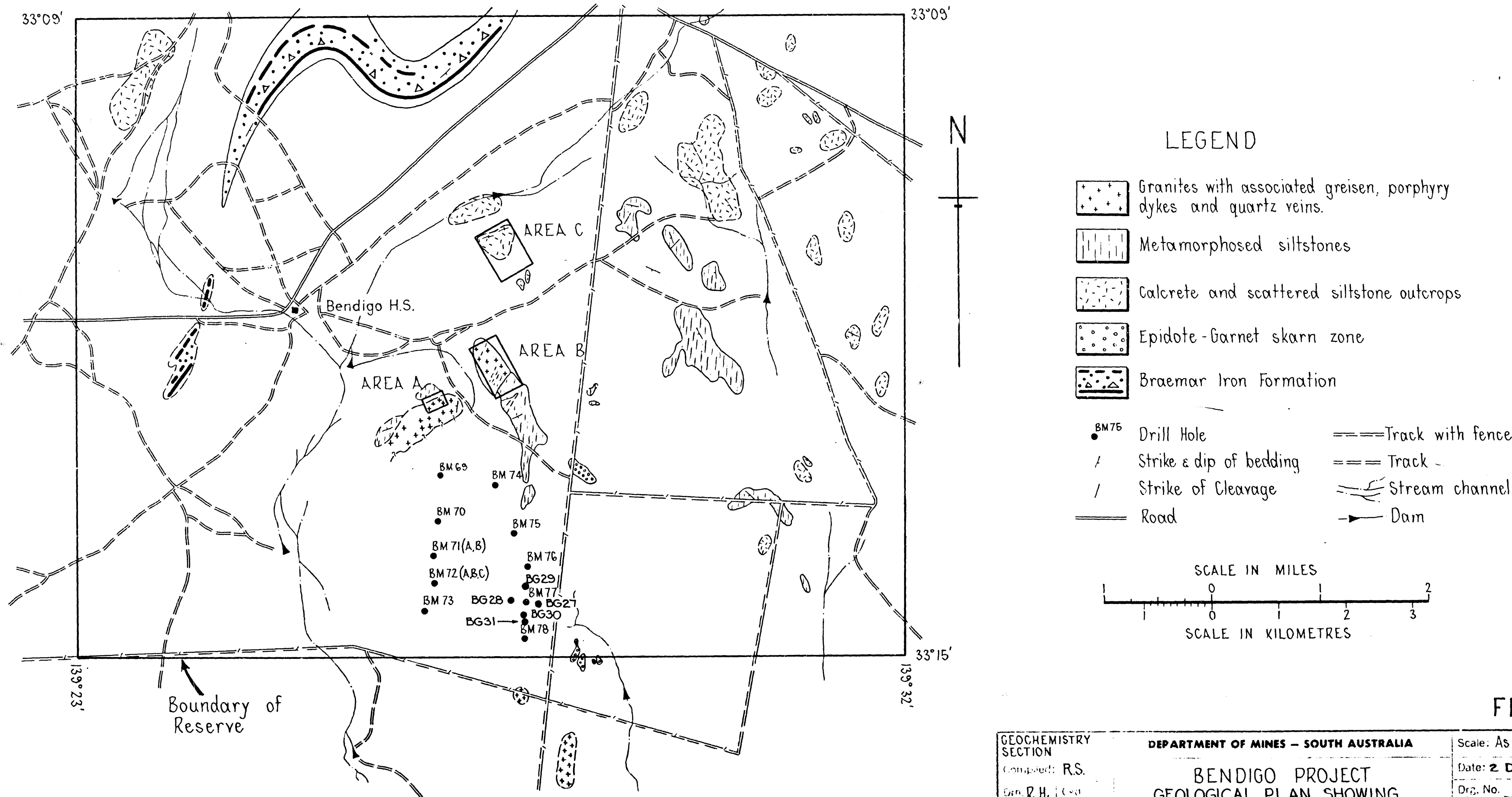


Fig 1

		DEPARTMENT OF MINES – SOUTH AUSTRALIA		Scale: 1:2500,000
Compiled: R.S.		LOCALITY PLAN BENDIGO RESERVE		Date: 2-5-71
Drn.	Ckd.			Drg. No. S9279
				GB



GEOCHEMISTRY
SECTION
Compiled: R.S.
Dra. R.H. (ed)

DEPARTMENT OF MINES - SOUTH AUSTRALIA

BENDIGO PROJECT
GEOLOGICAL PLAN SHOWING
DRILLHOLE LOCATIONS

Scale: As shown

Date: 2 Dec. 1971

Drg. No.
71-855 Gb

