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Geochemical and Radiometric Investigations Rum Jungle East, Northern Territory 1968

(Coomalie Creek and Huandot Areas)

by

J.R. Willis

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SUMMARY

A detailed geochemical and radiometric investigation of the Coomalie Creek and Huandot Area was carried out in 1968 by the Darwin Uranium Group of the Bureau of Mineral Resources.

In the Huandot Area a broad zone of lead-zinc anomalies was outlined overlying the Coomalie Dolomite/Golden Dyke Formation boundary.

Two broad areas of above background radioactivity were also outlined in the Huandot area; these anomalies were restricted to the shales of the Golden Dyke Formation above the Coomalie Dolomite/Golden Dyke Formation boundary. Another area of above background radioactivity was outlined in the Coomalie Creek Area.

A programme of Rotary Percussion drilling is recommended to test the radiometric anomalies, while more closely spaced auger drilling is recommended for further investigation of the geochemical anomaly in the Huandot Area.

INTRODUCTION

Location

The Rum Jungle East Area, which was covered by reconnaissance geochemical and radiometric surveys in 1964, extends from the vicinity of the Giants Reef Fault line immediately south of Manton Dam, to south of the Batchelor road. Within the Rum Jungle East Area, a number of smaller areas known as Woodcutters, Area 44 Extended and Coomalie Gap West have been covered by detailed geochemical and radiometric surveys during 1965, 1966 and 1967. In 1968 these detailed surveys were extended to the Huandot Area, between Area 44 Extended and Coomalie Gap West - northern section, i.e., between 2885 and 3165 (Rum Jungle East Grid) and to the Coomalie Creek Area, to the south of Coomalie Gap West (see Plate I).

History

The regional geology of the Rum Jungle East Area has been described by Malone (1958) in his report on the Darwin-Adelaide River Area. The geology is shown on the Rum Jungle 1 mile = 1 inch Special Sheet published by the Bureau of Mineral Resources.

The original Rum Jungle East Area was surveyed in 1964, traverse lines being 2400 feet apart, and a reconnaissance geological, geochemical, radiometric and geophysical survey was carried out in 1964 by the Darwin Uranium Group of the Bureau of Mineral Resources (Dodson and Shatwell, 1965; Duckworth, 1966). This survey indicated a linear zone of geochemical and radiometric anomalies extending from 480S to 72S (Rum Jungle East Grid). During the following years (1965, 1966 and 1967) detailed surveys were carried out by the Darwin Uranium Group over some of these anomalous areas. The areas covered were Woodcutters and Coomalie Gap West in 1965 (Shatwell, 1966); Woodcutters

in 1966 (Semple, 1967); Area 44 Extended and Coomalie Gap West-northern section in 1967 (Semple, 1968).

This report completes the detailed coverage of the remaining anomalies in the Rum Jungle East Area. A detailed geophysical survey was also carried out over the areas by Duckworth et al. (1968) and Gardener (in prep.).

Methods

Both areas, (Huandot and Coomalie Creek) were auger drilled on traverse lines 400 feet apart, with holes being drilled every 200 feet along each traverse. Wherever possible, holes were drilled to identifiable weathered rock. At each drill site, a bottom hole sample was taken and sent to the Australian Mineral Development Laboratories, Adelaide (AMDL) for analysis for copper, lead, zinc, cobalt and nickel by Atomic Absorption Spectrophotometer.

In areas of outcrop, or areas inaccessible to the auger drill, samples were collected with a mattock.

Auger holes were tested for radioactivity using Harwell type 1368A ratemeters, readings being recorded every foot.

Geological mapping was largely based on the interpretation of auger cuttings, supplemented by any available outcrop.

Drilling commenced on 22nd May and concluded on 23rd July, 1968. All drilling was done with a power-operated Gemco auger drill owned and operated by the Bureau of Mineral Resources. A total of 9,402 feet was drilled in the Huandot Area, and 5,235 feet in the Creek Area.

STRATIGRAPHY

The geological succession in the Rum Jungle East Area has been described by Dodson and Shatwell (1965), Shatwell (1966) and Semple (1967 and 1968).

The following units have been recorded in order of increasing age:-

Acacia Gap Tongue (Masson Formation)
Golden Dyke Formation
Coomalie Dolomite
Crater Formation

Of the Lower Proterozoic units listed above, only the Coomalie Dolomite and the Golden Dyke Formation were found in the Huandot and Coomalie Creek Areas (Plates II and III).

To the east of the Huandot and Coomalie Creek areas a strike ridge of Acacia Gap Quartzite forms a prominent topographic feature.

Coomalie Dolomite

In the western portion of the Huandot area, outcrops consist mainly of quartz ironstone breccia, with minor occurrences of weathered limestone. In the central portion of the area, outcrops are mainly of siliceous quartzite.

Good exposures of crystalline dolomite also occur in the Huandot Area. This dolomite is coarsely crystalline and in places has been found to be magnesite rather than dolomite.

In areas of non-outcrop the dolomite is generally overlain by a mantle of deep well-sorted quartz sand.

In the Coomalie Creek area, only one small outcrop of crystalline dolomite has been noted, together with some small outcrops of lateritic quartz ironstone in the northwestern portion of the area. Elsewhere the dolomite is covered by fine quartz sand, similar to that in the Huandot Area.

Separating the Coomalie Dolomite from the shales of the Golden Dyke Formation is a transition zone of fine grained black calcilutite. Good exposures of this black calcilutite occur in both the Huandot and Coomalie Creek Areas. In outcrop it is generally well-bedded and very calcareous and exhibits fluted weathering similar to that which is commonly present in weathered limestone. In the southern portion of the Huandot Area, the calcilutite exhibits chevron folding associated with a tight syncline in that area.

The zone is easily distinguished in auger cuttings by the black to chocolate soil resulting from the presence of a coating of iron oxide on the grains.

The economic importance of the horizon was discussed by Semple (1968) in Area 44 Extended, which adjoins the Huandot Area to the north. In this area it was found that the geochemical anomalies closely followed this transition zone and the same was found to be the case in the Huandot Area.

An interesting feature in the Huandot Area is the number of sink holes encountered. A total of 8 sink holes were found in the area, two of them being of very recent occurrence.

Golden Dyke Formation

Very few outcrops of the Golden Dyke Formation occur in either of the survey areas; the main outcrops consist of a siliceous lutite which forms prominent ridges in both survey areas.

In the Coomalie Creek Area some quartzite and quartz ironstone also crop out.

Higher in the sequence in the Coomalie Creek Area is a large belt of amphibolite which extends to the eastern margin of the survey area. To the south of the survey area, this amphibolite outcrops, forming a low hill.

In areas of non outcrop the Golden Dyke Formation is generally overlain by clays, in places extending to more than 70 feet in depth.

STRUCTURE

The Coomalie Creek Area is structurally simple, consisting of a sequence of easterly dipping sediments with dips ranging from 40° to 70°. An inferred fault striking approximately east-west occurs in the central portion of the area, where it has displaced the black calcilutite bed by approximately 800 feet.

The Huandot Area is structurally more complicated, as the strike of the sediments changes abruptly from north-south to east-west and back to north-south again. This change in strike results in a lateral change in the position of the sediments of approximately three quarters of a mile.

In the western portion of the area a tight syncline, plunging to the north, is present. This is accompanied by chevron folding in the black calcilutite bed.

GEOCHEMICAL AND RADIOMETRIC RESULTS

The geochemical and radiometric results are tabulated in appendices I and II and the corresponding contours are shown on plates IV, V, VI, VII and VIII.

Geochemical Results - Coomalie Creek Area

No significant geochemical anomalies were outlined in the Coomalie Creek Area; anomalies were restricted either to single hole peaks, or to 2 or 3 holes along one traverse line. For example, values on 476S, 68W and 64W are:-

476S 68W		476S 64W	
Cu	270 p.p.m.	Co	210 p.p.m.
Zn	100 p.p.m.	Ni	420 p.p.m.
Co	130 p.p.m.		
Ni	530 p.p.m.		

On traverse line 460S, peak values were as follows:-

460S 76W		460S 78W	
Pb	210 p.p.m.	Pb	220 p.p.m.
Zn	190 p.p.m.	Zn	680 p.p.m.
Co	120 p.p.m.		
Ni	190 p.p.m.		

All these anomalous values were situated within the Coomalie Dolomite. However, in the absence of supporting values in near-by holes, the results are not considered to be of great significance.

Radiometric Results - Coomalie Creek Area

During the reconnaissance geochemical and radiometric survey carried out by the Darwin Uranium Group of the Bureau of Mineral Resources in 1964, anomalous radioactivity was recorded along traverse line 480S from 30W to 90W, where some holes showed values in excess of 0.060 mR/Hr, (Dodson and Shatwell, 1965). Numerous readings within this zone also showed values that increased with depth.

One of the purposes of the present survey was to further investigate this zone of anomalous radioactivity.

No highly anomalous area was outlined during the present survey, though a broad 1½ times background anomaly, R3, was encountered in the southwestern portion of the area. This anomaly approximately co-incides with the anomalous zone outlined by Dodson and Shatwell. However, the anomaly is largely restricted to the A-B horizon, and values generally fall off towards the bottom of the holes. The maximum values recorded were 0.033 mR/Hr on 472S 22W and 0.025 mR/Hr on 476S 40W, but in each case values fall to below background at the bottom of the holes.

The anomaly occurs within the lower portion of the Golden Dyke Formation close to the Coomalie Dolomite/Golden Dyke Formation boundary (see plate V).

Geochemical Results - Huandot area

Plates VI and VII show the geochemical contours for the Huandot Area. The main area of interest is in the vicinity of the Coomalie Dolomite/Golden Dyke Formation contact in the western portion of the area. The economic importance of the transition bed of black calcilutite which separates the Coomalie Dolomite from the Golden Dyke Formation has already been discussed by Semple in Area 44 Extended(1968).

In this area, Semple found that the copper and lead anomalies, and to a lesser extent the zinc anomalies, were associated with this transition zone. This was also found to be the case in the Huandot Area, though in this area the anomalies are not so clearly defined. A broad zone of anomalous lead and zinc values, associated with scattered high values of copper and nickel, occurs mainly over the transition bed of black calcilutite, but extends in part over the dolomite to the west and the shales of the Golden Dyke Formation to the east. This anomalous zone adjoins an anomalous lead and zinc zone outlined by Semple in Area 44 Extended (see Semple, 1968).

As zinc is more mobile than either copper or lead, the zinc contours, as expected, show greater dispersion than the copper or lead contours (see plate VI).

The main anomalous values are as follows:-

Co-ordinates	Cu p.p.m.	Pb p.p.m.	Zn p.p.m.	Co p.p.m.	Ni p.p.m.
292S 42W	-	190	870	-	-
292S 58W	-	980	1700	-	110
296S 42W	-	220	400	110	280
296S 66W	-	-	2300	280	380
300S 28W	640	220	240	-	140
300S 30W	-	190	1800	-	370
304S 48W	-	240	640	-	-
304S 52W	-	130	750	-	120

A number of anomalous values have also been recorded from single holes in the eastern portion of the Huandot Area, in the Golden Dyke Formation, e.g.:-

Co-ordinates	Cu p.p.m.	Pb p.p.m.	Zn p.p.m.	Ni p.p.m.
300S 28E	130	-	480	320
308S 38E	770	-	110	-
308S 20E	510	-	-	-

A small anomalous lead zone with a peak value of 420 p.p.m. also occurs at traverse line 300S, extending from 42E to the limit of the survey area on 48E. However, like the single hole copper results quoted above, they lack supporting values and are not considered to be of great significance.

Radiometric Results - Huandot Area

The radiometric contours are shown on plate VIII and as in previous surveys in the Rum Jungle Area, a value of 0.015 MR/HV has been taken as threshold.

Two anomalous areas have been indicated, named RI and RII. RI is the major anomaly in the area, and occurs over the basal portion of the Golden Dyke Formation.

Maximum values are:- 0.050 mR/Hr at 292S 14W
0.050 mR/Hr at 296S 20W

Both these readings were bottom hole measurements.

This anomaly connects with anomaly R3 of Semple in Area 44 Extended (see Semple, 1968). The radiometric results in this area are closely related to stratigraphy, as the 0.015 mR/Hr contour line closely follows the boundary of the transition bed of black calcilutite.

This anomaly was re-drilled later in the field season to an average depth of 50 feet by the auger drill. The results of this drilling are discussed later in this report.

The RII anomaly lies to the east of anomaly RI and occurs over the Golden Dyke Formation. It has two peaks of moderate

radioactivity, viz.:

0.035 mR/Hr at 304S 36E
0.035 mR/Hr at 304S 40E

However, these peaks occurred in the A-B soil horizon and readings in both holes decreased with depth.

DEEP DRILLING OF HUANDOT RI RADIOMETRIC ANOMALY

The Huandot RI radiometric anomaly was outlined during a detailed geochemical and radiometric survey carried out earlier in the year as described above. The anomaly covers a broad area overlying the lower portion of the Golden Dyke Formation, and closely follows the Coomalie Dolomite/Golden Dyke Formation contact (see plate VIII).

Between 2nd and 6th September, 1968, twenty-three auger holes of average depth 50 feet were drilled to test this anomaly, comprising 1,156 feet of auger drilling.

The testing of the anomaly involved drilling holes 200 feet either side of the existing traverse lines which were spaced at 400 foot intervals, as well as redrilling the original lines. Holes were spaced 200 feet apart and where possible were taken to a depth of 50 feet (see plate IX).

The existence of the anomaly was verified, but anomalous values appear to be restricted to a narrow zone, averaging some 10 feet in thickness and generally occurring 10 to 20 feet below the surface. This correlates to some extent with a ferruginized chocolate brown soil layer that was noted in the auger cuttings. Although the correlation is not perfect, the distribution of this chocolate brown soil layer is thought to have been at least partly responsible for the occurrence of these anomalous radiometric values.

All holes were probed using Harwell (1368A) ratemeters, readings being taken every foot, and in all instances readings fell to below background at the bottom of the holes. As in previous surveys in the Rum Jungle East Area, a value of 0.015 mR/Hr was taken as threshold. The maximum value recorded was 0.055 mR/Hr on 296S 18W at a depth of 20 feet. Values then decreased rapidly and fell to an average of 0.008 mR/Hr to the bottom of the hole.

The results are summarized in Table 1 and plotted on plate IX.

TABLE 1

	Depth of Hole	Depth probed (feet)	Max. Rad. Mr/Hr	Rad. Reading B.O.H. (limit of probe)
Traverse 292S				
12W	53	42	0.035 @ 8'	0.006
14W	53	49	0.035 @ 14'	0.008
16W	35	33	0.035 @ 13'	0.009
18W	37	34	0.032 @ 12'	0.007
20W	53	48	0.040 @ 11'	0.010
22W	53	47	0.020 @ 6'	0.008
24W	53	29	0.026 @ 12'	0.010
Traverse 294S				
14W	63	49	0.045 @ 22'	0.013
16W	51	33	0.045 @ 21'	0.008
18W	53	36	0.023 @ 16'	0.005
20W	53	48	0.017 @ 21'	0.006
22W	53	48	0.020 @ 23'	0.009
24W	53	40	0.020 @ 17'	0.007
Traverse 296S				
14W	53	50	0.030 @ 15'	0.008
16W	47	44	0.025 @ 18'	0.006
18W	52	49	0.055 @ 20'	0.007
20W	37	33	0.050 @ 18'	0.009
22W	53	47	0.047 @ 20'	0.007
24W	53	42	0.020 @ 19'	0.007
Traverse 298S				
18W	53	50	0.024 @ 22'	0.008
20W	49	46	0.030 @ 23'	0.008
22W	53	46	0.019 @ 25'	0.008
24W	53	44	0.015 @ 15'	0.008

Bottom hole samples from each hole were collected and submitted to the Australian Mineral Development Laboratories, Adelaide, for analysis for copper, lead, zinc, cobalt, and nickel. A comparison is given in Table II between the results obtained from this deep drilling programme and those obtained earlier in the year during the initial

TABLE II

Traverse	Co-ordinates	Hole 1 Hole Depth (feet)	Hole II Hole Depth (feet)	Cu 1	Cu II	Pb 1	Pb II	Zn I	Zn II	Co 1	Co II	Ni I	NiII
292S	12W	17	53	50	110	35	40	20	150	15	35	25	110
	14W	17	53	40	65	60	20	55	250	35	50	70	150
	16W	23	35	25	45	30	20	70	55	20	15	80	60
	18W	17	37	40	50	90	30	30	80	30	15	65	80
	20W	23	53	70	65	110	20	460	100	20	15	80	70
	22%	23	53	25	30	5	15	50	90	15	5	50	70
292S	24W	23	53	25	60	15	40	40	160	15	30	60	110
296S	14W	17	53	50	65	30	40	35	100	40	30	80	80
	16W	17	47	50	50	60	30	60	100	70	25	100	80
	18W	17	52	60	50	50	15	25	90	50	15	80	80
	20W	23	37	40	30	150	20	45	50	40	10	70	45
	22W	23	53	80	60	130	20	100	75	90	10	110	70
296S	24W	29	53	35	50	40	5	85	110	15	10	70	65

Note: Hole I – Drilled between May and July 1968 during original survey.

Hole II – Drilled in September 1968 for further testing of Anomaly RI.

survey of the Huandot area. In both cases samples were collected from the bottom of the holes and were analysed by atomic absorption spectrophotometer.

As only two traverses were drilled during the initial survey in May, viz. 292S and 296S, not enough data are available to determine any significant trends in the geochemical values. However it is noted that lead values in the majority of cases are higher in the shallow holes, while zinc appears to show the reverse relationship.

A summary of the deep drilling results is given in Appendix III.

TESTING OF PREVIOUSLY KNOWN ANOMALIES IN THE COOMALIE GAP WEST AREA (NORTHERN SECTION)

During a detailed geochemical, geological and radiometric survey of the Coomalie Gap West Area (northern section) undertaken in 1967 by the Darwin Uranium Group of the Bureau of Mineral Resources, a number of high geochemical values were found in isolated, widely scattered auger holes. It was recommended by Semple (1968) that these one-point geochemical anomalies be tested by drilling holes either side of the peaks.

As the Coomalie Gap West Area adjoins the Huandot area to the south, this drilling was undertaken following the completion of the detailed survey of the Huandot Area. This involved drilling holes 100 feet either side of the single hole anomalies as well as re-drilling the original holes.

Plate X shows these single hole geochemical anomalies outlined by Semple in 1967, and Appendix IV gives the results of the further testing undertaken in 1968.

Table III gives a summary of these results. In two cases it was found that the anomalous values obtained by Semple were not substantiated and, in fact, the results obtained in the present survey were below the threshold values for these elements, e.g. at 356S 38E analyses obtained by Semple were:-

Cu - 190 p.p.m.
Pb - 400 p.p.m.
Zn - 400 p.p.m.
Ni - 345 p.p.m.

However analyses obtained during this survey are:-

Cu - 35 p.p.m.
Pb - 45 p.p.m.
Zn - 15 p.p.m.
Ni - 25 p.p.m.

A similar situation occurred on 344S 36E. However, the single hole anomalies on 336S 38E and 340S 42E were verified, though they appear to be restricted to these single holes.

TABLE III

Traverse	Co-ordinates	Hole 1 Depth (feet)	Hole II Depth (feet)	Cu I	Cu II	Pb I	Pb II	Zn I	Zn II	Co I	Co II	Ni I	Ni II
336S	39E		6		50		410		40		25		45
	38E	17	12	280	380	50	100	40	60	25	25	85	130
336S	37E		23		140		75		50		25		80
340S	43E		23		200		70		180		15		110
	42E	17	23	60	80	110	350	300	550	20	25	55	85
340S	41E		23		60		45		70		8		55
344S	37E		18		35		30		25		25		35
	36E	12	21	125	70	85	110	140	55	50	45	250	80
344S	35E		23		70		95		60		30		70
356S	39E		23		85		100		55		60		95
	38E	17	14	190	35	400	45	400	15	65	25	345	50
356S	37E		16		70		95		65		45		75

Note: Hole 1 drilled during 1967 survey (Semple, 1968).
Hole 2 drilled at same co-ordinates during present survey.

Due to the ground conditions at the time of the survey being too swampy, single hole anomalies at 320S 24E and 332S 26E could not be re-drilled at this time.

CONCLUSIONS

An anomalous lead and zinc zone has been outlined in the Huandot Area, overlying a favourable stratigraphic horizon (the Coomalie Dolomite/Golden Dyke Formation boundary) and adjoining similar anomalies found by Semple (1968) in Area 44 Extended to the north.

Three areas of anomalous radioactivity were outlined, two in the Huandot Area and one in the Coomalie Creek Area. However, deeper auger drilling of the major radiometric anomaly in the Huandot Area showed it to be confined to a ferruginized soil layer and to have limited vertical extent. This has been the case with all radiometric anomalies examined within the Rum Jungle East Area to date.

RECOMMENDATIONS

Coomalie Creek Area

(a) A rotary percussion drilling programme is recommended to test radiometric anomaly R3. Eight holes are recommended to an average depth of 150 feet between 472S and 480S and between 28W and 44W.

(b) More closely spaced auger drilling is recommended to test the isolated geochemical highs. This method has proved effective in the Coomalie Gap West Area (northern section). Holes should be drilled 100 feet either side of the geochemical highs to the maximum depth of which the auger drill is capable.

Huandot Area

(a) A programme of more closely spaced auger drilling is recommended over the geochemical anomaly in the western portion of the area, in order to determine whether further follow-up work is warranted. Traverses should be laid out 200 feet either side of the existing traverse lines, as well as redrilling the original lines, and holes should be drilled 100 feet apart on all lines. This would involve re-drilling the area between 288S and 308S and between 16W and 70W. As well as testing the geochemical anomaly, this would also provide further data on the major portion of the R1 anomaly and show whether it extends to the south.

(b) A programme of rotary percussion drilling is recommended to test anomaly RII on the eastern side of the area. Eight holes would be required to a depth of 150' between 292S and 304S and between 36E and 42E.

(c) The localized geochemical highs in the eastern portion of the Huandot Area should be tested by auger drilling of deep holes 100 feet either side of the geochemical high, as was proposed for the Coomalie Creek Area.

Coomalie Gap West - Northern Section

Auger drilling 100 foot either side of the one hole geochemical highs on 332S and 320S should be completed, as these could not be done during the 1968 survey.

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APPENDIX 1

GEOCHEMICAL DATA

HUANDOT AREA

Auger drill samples from the Huandot Area are listed by the co-ordinates position and sample number. Samples were analysed at AMDEL by Atomic Absorption Spectrophotometer and all the results are in parts per million. A minus sign (-) in front of a number means "less than ".

All samples were taken from the bottom of the auger hole with the depth shown. Where mattock samples were taken they are indicated thus "M/SAMPLE".

Auger holes were probed (Harwell 1368A ratemeter) for radioactivity; maximum value for each hole is recorded, in mR/hr.

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125001	288S	48E	100	90	80	25	65	.015	6
02		46E	150	10	15	20	25	.014	23
03		44E	80	180	5	10	20	.017	17
04		42E	80	40	20	20	55	.020	17
05		40E	100	80	70	70	220	.018	17
06		38E	45	20	55	15	100	.015	23
07		36E	45	10	45	10	70	.013	17
08		34E	40	15	35	10	75	.014	23
09		32E	70	15	50	60	110	.013	17
10		30E	80	10	35	10	60	.016	23
11		28E	40	5	20	10	30	.021	23
12		26E	60	40	90	25	75	.016	23
13		24E	50	20	200	35	130	.017	23
14		22E	30	20	5	5	10	.016	23
15		20E	70	30	20	10	55	.015	23
16		18E	80	20	30	15	60	.013	23
17		16E	80	20	30	15	60	.016	23
68128245		14E	75	20	90	20	120	.013	22
46		12E	45	25	90	15	90	.020	17
NOTE: 10E to 2E NOT DRILLED									
68128278		00EW	90	195	150	80	35	.021	23
68125026		2W	110	110	310	160	230	.025	17
27		4W	45	40	50	35	65	.024	17
28	288S	6W	40	20	35	25	40	.024	17

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Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max Radio-metric	Hole Depth Feet
68125029	288S	8W	35	25	55	25	100	.029	17
30		10W	50	50	50	30	65	.034	17
31		12W	40	35	65	35	85	.032	17
32		14W	30	45	120	35	70	.030	17
33		16W	50	60	35	35	80	.023	17
34		18W	25	35	20	30	70	.028	17
35		20W	50	25	210	25	85	.025	59
36		22W	150	35	15	35	60	.025	23
37		24W	80	80	40	35	70	.029	23
38		26W	50	30	65	10	35	.022	23
39		28W	60	85	70	15	85	.022	23
40		30W	210	180	170	35	100	.029	23
41		32W	60	25	70	25	90	.023	23
42		34W	210	140	230	55	150	.021	23
43		36W	50	25	120	50	100	.016	23
44		38W	50	20	110	25	280	.011	23
45		40W	30	35	220	15	70	.014	23
46		42W	40	20	40	25	60	.014	23
47		44W	30	25	100	40	50	.013	29
48		46W	10	5	50	25	50	.010	27
49		48W	30	10	65	35	55	.009	14
50		50W	190	15	120	120	740	.008	21
51		52W	20	70	45	50	80	.010	7
52		54W	100	15	100	40	60	.012	29
53		56W	35	20	70	35	60	.012	29
54		58W	50	60	65	50	80	.012	29
55		60W	40	50	40	50	70	.012	23
56		62W	35	55	75	55	60	.008	23
57		64W	90	15	110	55	70	.007	23
58		66W	170	20	80	35	70	.007	23
59		68W	20	20	75	75	90	.004	6
60	288S	70W	20	30	50	25	35	.008	21

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth feet
68125120	292S	48E	45	15	50	10	30	.023	23
19		46E	60	30	40	15	55	.022	23
18		44E	90	170	50	5	30	.020	23
17		42E	90	50	50	15	60.	.025	23
16		40E	70	10	60	20	80	.027	23
15		38E	60	25	40	15	110	.013	11
14		36E	100	10	70	55	160	.012	23
13		34E	70	10	100	35	110	.012	23
12		32E	80	10	80	50	80	.013	23
11		30E	140	20	150	60	100	.014	23
10		28E	45	10	70	15	60	.018	23
09		26E	60	35	60	35	110	.018	23
08		24E	40	15	80	35	70	.018	23
07B		22E	45	10	45	10	70	.020	23
07A		22E	75	15	5	- 5	15	ROCK SAMPLE	
06		20E	45	30	15	10	25	.022	23
05		18E	45	10	20	10	40	.025	23
04		16E	50	40	35	20	50	.020	23
03		14E	45	15	40	10	60	.015	23
68128247		12E	30	80	30	12	50	.022	23
48		10E	40	75	65	15	85	.015	23
49		8E	60	95	65	30	70	.016	23
68128258		6E	65	95	20	35	50	.018	23
68125098		4E	60	20	30	10	65	.015	17
97		2E	20	20	10	5	10	.034	17
96		00	75	20	15	10	25	.027	17
95		2W	30	10	30	15	55	.032	17
94		4W	45	30	80	35	90	.028	17
93		6W	50	30	80	35	75	.030	
92		8W	35	90	270	30	65	.018	17
91		10W	95	20	35	40	90	.022	17
90		12W	50	35	20	15	25	.031	17
89		14W	40	60	55	35	70	.050	17
88		16W	25	30	70	20	80	.033	23
87	292S	18W	40	90	30	30	65	.037	17

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125086	292S	20W	70	110	460	20	80	.022	23
85		22W	25	5	50	15	50	.023	23
84		24W	25	15	40	15	60	.031	23
83		26W	70	30	65	15	80	.025	23
82		28W	30	35	70	25	90	.019	23
81		30W	70	20	100	15	60	.027	23
80		32W	30	25	270	25	130	.019	23
79		34W	35	25	500	40	240	.020	23
78		36W	20	20	50	15	80	.007	23
77		38W	40	170	300	20	100	.011	23
76		40W	60	30	110	30	55	.011	23
75		42W	40	190	870	55	70	.010	23
74		44W	40	50	270	40	55	.012	23
73		46W	55	10	85	55	55	.010	23
72		48W	60	5	100	55	55	.011	23
71		50W	40	10	85	35	70	.012	16
70		52W	35	10	70	35	70	.010	23
69		54W	10	15	80	35	70	.012	23
68		56W	5	20	60	35	60	.013	23
67		58W	80	980	1700	90	110	.009	21
66		60W	50	120	110	25	35	.013	29
65		62W	30	5	110	50	55	.013	29
64		64W	60	100	170	50	90	.010	23
63		66W	30	25	130	50	5	.011	18
62		68W	10	20	20	5	15	.010	23
61	292S	70W	5	10	10	5	5	.080	23
68125121	296S	48E	60	30	130	20	90	.022	23
22		46E	55	20	120	12	75	.022	23
23		44E	60	65	120	20	120	.023	23
24		42E	70	40	170	12	70	.019	23
25		40E	80	55	30	12	90	.018	23
26		38E	85	50	90	25	170	.019	23
27		36E	65	30	55	12	130	.014	23
28		34E	50	15	70	12	120	.014	23
29		32E	100	20	70	60	150	.015	23
30		30E	70	10	60	30	120	.016	23

Sample No.	Co-ordinates	Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125131	296S 28E	50	10	55	20	100	.018	23
32	26E	40	20	170	40	170	M/SAMPLE	
33	24E	25	35	360	50	250	M/SAMPLE	
34	22E	50	25	35	5	35	.017	23
35	20E	50	25	20	5	30	.019	23
36	18E	25	5	5	5	30	.020	23
37	16E	45	55	5	5	35	.022	23
68128250	14E	45	45	20	12	40	.020	23
51	12E	100	95	220	155	150	.018	23
52	10E	70	30	30	12	40	.016	19
57	8E	120	45	65	20	75	.013	23
68125142	6E	85	110	280	90	190	.023	17
43	4E	80	60	90	60	75	.037	17
44	2E	45	10	10	10	35	.025	17
45	00	260	20	100	50	100	.027	17
46	2W	50	10	30	20	80	.020	17
47	4W	40	10	40	25	80	.019	17
48	6W	75	10	45	50	65	.012	17
49	8W	30	30	190	30	50	.014	17
50	10W	65	20	35	25	80	.015	17
51	12W	65	20	130	45	70	.014	17
52	14W	50	30	35	40	80	.017	17
53	16W	50	60	60	70	100	.015	17
54	18W	60	50	25	50	80	.017	17
55	20W	40	150	45	40	70	.050	23
56	22W	80	130	100	90	110	.035	23
57	24W	35	40	85	15	70	.024	29
58	26W	30	60	100	20	80	.022	23
59	28W	75	220	400	110	280	.021	23
60	30W	40	20	60	20	70	.017	23
61	32W	35	80	85	35	80	.012	23
62	34W	50	40	65	35	90	.013	29
63	36W	30	80	140	25	35	.012	23
64	38W	40	35	130	40	70	.010	23
65	40W	35	10	50	50	55	.010	20
66	42W	40	130	590	55	70	.010	23
67	44W	40	50	70	40	80	.008	7
68	46W	10	15	60	35	60	.010	18
69	296S 48W	60	80	300	65	90	.012	23

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125170	296S	50W	10	10	75	35	70	.013	23
71		52W	35	20	140	40	60	.011	23
72		54W	40	15	120	40	70	.012	23
73		56W	30	10	85	35	70	.010	23
74		58W	35	10	110	35	70	.012	23
75		60W	40	60	540	200	260	.012	23
76		62W	40	20	310	60	130	.013	23
77		64W	15	35	50	25	80	.010	23
78		66W	40	50	2300	280	380	.008	23
79		68W	35	15	220	140	190	.007	12
80	296S	70W	50	80	100	50	60	.007	11
68125240	300S	48E	90	420	60	15	40	.015	9
39		46E	40	200	60	20	70	.018	23
38		44E	65	130	100	20	70	.017	23
37		42E	60	160	110	20	50	.020	23
36		40E	100	70	55	15	80	.025	23
35		38E	60	50	25	12	70	.020	19
34		36E	130	20	70	30	160	.014	23
33		34E	40	15	40	15	75	.012	23
32		32E	45	5	30	15	95	.017	23
31		30E	100	30	40	10	95	.017	23
30		28E	130	30	480	75	320	.017	10
29		26E	10	20	5	5	10	M/SAMPLE	
28		24E	15	20	5	5	8	M/SAMPLE	
27		22E	15	25	5	5	8	M/SAMPLE	
206		20E	60	35	5	5	15	.013	18
68128253		18E	35	40	65	25	110	.018	23
54		16E	70	75	25	25	70	.015	23
55		14E	30	20	55	20	70	.014	17
59		12E	75	75	180	140	50	.014	23
56		10E	35	35	45	25	70	.025	23
77		8E	95	135	75	65	100	.025	6
68125219		6E	50	50	30	35	55	.023	11
18		4E	35	10	15	10	60	.020	17
17		2E	90	10	20	15	40	.022	17
16		00W	30	10	30	10	55	.015	11
15		2W	45	10	70	35	65	.024	17
14		4W	10	10	10	5	10	.012	17

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125213	300S	6W	15	5	5	5	10	.013	23
12		8W	80	220	35	30	80	.016	23
11		10W	15	10	8	20	35	.012	17
10		12W	35	20	30	45	40	.009	17
09		14W	50	10	25	30	65	.014	17
08		16W	50	20	50	30	60	.013	17
07		18W	60	30	25	20	35	.016	17
68125205		20W	35	20	180	40	80	.014	23
04		22W	40	20	130	25	60	.017	17
03		24W	50	25	110	25	80	.018	17
02		26W	50	80	65	15	60	.020	17
01		28W	640	220	240	55	140	.026	23
200		30W	40	190	1800	35	370	.013	23
199A		32W	120	35	80	25	50	.011	23
99		34W	35	20	65	20	70	.012	23
98		36W	20	15	390	50	55	.009	11
97		38W	25	15	60	35	50	.008	7
96		40W	35	50	290	50	70	.011	11
95		42W	60	5	110	35	70	.011	23
94		44W	20	170	280	40	75	.013	23
93		46W	30	80	310	50	80	.010	11
92		48W	50	15	65	35	60	.013	23
91		50W	75	15	70	25	70	.010	23
90		52W	30	10	80	35	90	.012	23
89		54W	40	350	430	65	80	.015	23
88		56W	60	100	120	100	120	.013	29
87		58W	40	40	160	65	80	.012	23
86		60W	20	30	430	140	190	.010	23
85		62W	30	120	470	80	170	.013	23
84		64W	10	15	30	10	20	.011	23
83		66W	30	5	70	90	250	.008	29
82		68W	260	85	380	60	60	.006	11
81	300S	70W	60	45	200	50	110	.004	11

Sample No.	Co-ordinates	Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125241	3048 48E	80	20	55	30	95	.018	23
42	46E	50	30	40	25	50	.020	23
43	44E	50	95	50	15	30	.018	8
44	42E	60	150	35	10	30	.021	8
45	40E	50	160	170	20	70	.035	23
46	38E	80	65	60	20	95	.026	23
47	36E	150	180	40	60	140	.035	8
48	34E	50	35	55	30	65	.024	23
49	32E	85	20	70	30	110	.016	23
50	30E	45	25	35	12	75	.021	23
51	28E	40	25	200	20	140	.006	6
52	26E	25	25	10	5	20	M/SAMPLE	
53	24E	60	25	40	10	60	M/SAMPLE	
54	22E	15	20	5	5	12	M/SAMPLE	
68125275	20E	30	20	5	8	15	.013	1
68128269	18E	45	25	25	30	50	.020	15
62	16E	30	35	20	15	35	.018	23
61	14E	65	35	95	20	100	.013	23
60	12E	30	25	20	12	35	.016	18
75	10E	90	65	70	40	90	.018	23
76	8E	85	35	55	25	90	.026	23
68125262	6E	100	10	75	35	80	.021	11
63	4E	140	80	120	80	120	.022	17
64	2E	50	- 5	40	35	60	.015	11
65	00	10	15	75	30	65	.013	17
66	2W	70	70	18	30	60	.017	23
67	4W	80	90	10	20	60	.012	17
68	6W	45	190	8	20	40	.008	11
69	8W	40	65		20	30	.005	5
70	10W	100	100	45	100	85	.006	3
71	12W	40	30	8	65	40	.012	17
72	14W	- 5	20	20	25	40	.008	11
73	16W	35	15	8	45	65	.009	18
74	18W	50	15	8	50	85	.011	23
74A	20W	120	10	70	50	70	.014	17
75	22W	10	15	50	35	50	.010	11
76	24W	30	25	50	20	35	.013	17
77	26W	30	10	450	25	130	.011	17

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125278	304S	28W	70	90	180	20	55	.011	23
79		30W	40	90	50	10	50	.012	17
80		32W	50	210	310	15	60	.012	17
81		34W	40	30	140	25	60	.010	17
82		36W	50	20	85	35	55	.010	11
83		38W	40	10	100	35	55	.008	6
84		40W	60	320	600	20	70	.012	11
85		42W	60	260	830	40	80	.009	23
86		44W	20	20	80	25	60	.012	17
88		46W	60	140	520	110	130	.012	17
89		48W	40	240	640	50	70	.006	23
90		50W	60	60	220	45	65	.008	23
91		52W	70	130	750	60	120	.008	23
92		54W	40	50	360	45	110	.009	23
93		56W	90	80	540	100	130	.012	23
94		58W	5	25	200	60	200	.008	17
95		60W	40	120	160	70	120	.006	9
96		62W	25	35	80	50	100	.006	5
97		64W	20	60	110	95	110	.007	11
98		66W	40	20	45	90	130	.006	5
99		68W	25	15	30	110	200	.006	5
300	304S	70W	10	25	30	45	80	.006	5
68125360	308S	48E	60	110	60	20	35	.025	5
59		46E	50	140	30	10	20	.020	8
58		44E	30	40	55	8	20	.016	17
57		42E	40	80	25	15	25	.014	5
56		40E	70	70	140	65	85	.012	23
55		38E	770	45	110	45	95	.018	23
54		36E	60	40	25	20	85	.023	23
53		34E	25	10	30	20	30	.016	23
52		32E	100	70	35	20	70	.020	23
51		30E	45	15	20	8	30	.015	23
50		28E	20	30	10	5	12	.016	2
49		26E	25	15	10	5	15	M/SAMPLE	
48		24E	40	20	5	5	12	M/SAMPLE	

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125347	308S	22E	20	15	5	5	12	M/SAMPLE	
46		20E	510	20	80	30	95	.017	23
68128265		18E	60	55	65	35	60	.018	23
64		16E	30	105	45	25	70	.015	6
63		14E	50	30	40	12	40	.015	18
73		12E	50	75	70	35	80	.012	23
74		10E	50	65	60	25	80	.017	18
68125340		8E	200	35	65	35	110	.025	17
39		6E	200	25	45	45	70	.016	17
38		4E	40	30	40	30	60	.012	17
37		2E	75	- 5	45	35	65	.012	17
36		00	70	- 5	80	40	85	.014	11
35		2W	20	25	8	12	35	.015	17
34		4W	10	35	8	5	15	.009	17
33		6W	35	40	15	15	45	.007	5
32		8W	20	15	8	10	25	.008	11
31		10W	10	25	15	10	15	.006	5
30		12W	15	25	8	8	20	.005	5
29		14W	15	15	8	8	25	.006	5
28		16W	10	25	8	8	15	.006	5
27		18W	5	25	15	5	15	M/SAMPLE	
26		20W	15	5	15	8	15	.010	17
25		22W	45	10	140	30	60	.010	11
24		24W	110	20	110	45	80	.009	11
23		26W	15	10	60	30	85	.007	17
22		28W	40	10	65	30	50	.008	17
21		30W	20	15	80	30	30	.008	17
20		32W	40	10	90	45	50	.008	17
19		34W	50	10	35	35	50	.010	17
18		36W	160	15	35	25	70	.009	11
17		38W	140	25	95	45	80	-	5
16		40W	200	10	85	40	70	.006	5
15		42W	60	50	20	65	90	.011	14
14		44W	20	55	95	65	160	.013	17
13		46W	5	10	15	25	40	.007	11
12		48W	35	50	45	65	120	.013	17
11		50W	10	15	15	20	50	.010	11
10		52W	15	40	290	280	330	.013	23

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125309	308S	54W	15	20	45	80	220	.010	17
08		56W	75	110	120	150	210	.011	11
07		58W	30	40	85	100	270	.011	12
06		60W	20	50	40	25	70	.006	5
05		62W	10	40	65	30	65	.006	5
04		64W	10	40	15	12	40	.006	5
03		66W	15	40	30	25	50	.008	11
02		68W	20	20	45	120	130	.008	17
01	308S	70W	20	25	45	150	190	.006	11
68125361	312S	48E	50	70	35	12	25	.015	10
62		46E	40	110	30	10	25	.015	10
63		44E	75	55	40	40	55	.015	23
64		42E	35	55	40	20	35	.015	5
65		40E	50	35	40	25	45	.015	23
66		38E	35	100	35	20	30	.015	5
67		36E	50	60	55	25	85	.027	23
68		34E	50	50	50	25	75	.029	23
69		32E	85	40	180	50	120	.025	23
70		30E	150	30	60	60	95	.015	23
71		28E	100	35	110	35	130	.021	23
72		26E	220	25	30	15	60	.023	11
73		24E	15	15	65	5	15	.044	23
74		22E	100	35	10	5	15	.018	23
68128268		20E	95	45	95	35	75	.013	17
67		18E	80	45	130	30	100	.014	23
66		16E	30	40	30	18	50	.011	23
70		14E	30	30	90	25	90	.018	23
71		12E	25	35	45	25	70	.014	5
72		10E	25	25	60	15	60	.018	11
68125381		8E	130	30	40	65	130	.024	17
82		6E	40	10	45	45	50	.017	17
83		4E	35	10	65	30	65	.011	17
84		2E	45	20	55	45	60	M/SAMPLE	
85		00	15	15	8	12	25	.017	23
86		2W	40	30	15	65	65	.008	5
87		4W	75	240	30	45	50	.012	11

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth, Feet
68125388	312S	6W	50	10	25	30	65	.012	23
89		8W	60	30	55	35	65	.008	5
90		10W	20	25	12	12	25	.007	5
91		12W	10	10	8	8	20	.005	5
92		14W	5	40	5	5	5.	.006	11
93		16W	10	35	15	8	25	.005	5
94		18W	10	35	12	5	25	.005	7
95		20W	15	10	15	12	35	.007	11
96		22W	10	75	8	5	15	.035	23
97		23W	20	5	75	25	85	.017	23
98		24W	35	45	85	35	50	.013	23
99		26W	160	10	100	35	85	.012	17
400		28W	75	15	30	35	65	.010	17
01		30W	10	5	45	30	60	.010	17
02		32W	50	- 5	170	50	70	.010	17
03		34W	15	40	20	80	90	.007	17
04		36W	20	35	30	50	130	.009	11
05		38W	60	45	65	90	160	.009	11
06		40W	75	60	20	45	70	.012	17
07		42W	20	50	45	40	130	.010	17
08		44W	45	110	110	75	150	.011	17
09		46W	20	50	25	55	130	.011	11
10		48W	15	45	25	25	65	.006	5
11		50W	45	25	20	35	60	.009	7
12		52W	60	30	30	55	100	.006	5
13		54W	20	30	35	35	100	.008	5
14		56W	30	50	35	75	120	.011	11
15		58W	35	100	60	65	100	.011	11
16		60W	20	50	40	30	60	.008	5
17		62W	10	25	15	15	20	.006	5
18		64W	15	25	8	15	25	.006	5
19		66W	20	35	15	18	35	.007	11
20		68W	40	45	15	30	60	.008	5
21		70W	30	45	18	30	40	.007	5

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125464	316S	14E	20	20	40	15	60	.011	5
63		12E	25	25	15	10	55	.012	8
62		10E	20	25	55	15	65	.016	17
61		8E	30	20	30	35	55	.015	17
60		6E	200	10	15	35	80	.016	17
59		4E	20	20	10	120	70	.015	17
58		2E	60	40	10	70	65	.015	17
57		00	20	65	10	10	35	.017	23
56		2W	40	35	10	20	40	.016	23
55		4W	10	10	50	140	100	.013	17
54		6W	30	20	100	70	110	.011	8
53		8W	200	25	90	20	75	.013	11
52		10W	110	40	60	50	80	.014	11
51		12W	10	15	5	- 5	10	.008	11
50		14W	20	25	10	10	30	.009	11
49		16W	10	25	5	- 5	20	.007	11
48		18W	25	20	110	5	20	.010	17
47		20W	90	65	200	60	110	.007	17
46		22W	10	25	40	25	50	.009	17
45		24W	5	20	60	25	55	.009	17
44		26W	50	40	100	35	60	.008	17
43		28W	25	10	70	15	75	.008	17
42		30W	30	45	15	20	60	.010	
41		32W	10	35	10	10	35	.011	17
40		34W	10	45	20	5	20	.009	11
39		36W	25	35	15	15	55	.009	11
38		38W	45	90	50	110	130	.012	23
37		40W	230	70	50	170	110	.012	15
36		42W	40	90	50	80	100	.012	17
35		44W	20	50	40	50	80	.015	17
34		46W	5	10	15	75	190	.013	17
33		48W	5	15	20	55	90	.006	3
32		50W	20	5	5	- 5	30	.013	11
31		52W	20	10	75	35	70	.013	11
30		54W	10	5	30	35	30	.010	9
29		56W	25	20	20	50	70	.015	17
28		58W	50	50	45	100	140	.013	17
27		60W	25	45	15	35	40	.010	11

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125426	316S	62W	15	20	10	15	20	.011	11
25		64W	20	10	10	10	40	.009	11
24		66W	25	30	15	35	55	.011	11
23		68W	35	10	10	25	55	.011	11
22	316S	70W	25	5	10	35	70	.009	11
68125501	328S	18E	30	20	120	35	120	.017	11
02		16E	40	40	20	35	70	.014	11
03		14E	40	30	80	35	55	.014	17
04		12E	20	10	60	50	45	.014	17
05		10E	70	20	60	25	55	.010	15
06		8E	70	20	100	35	55	.010	17
07		6E	20	10	75	35	55	.009	13
08		4E	10	10	60	35	55	.008	7
09		2E	50	70	50	55	65	M/SAMPLE	
10	328S	00E	5	5	10	20	40	.011	17
68125500	324S	16E	40	50	40	40	45	.020	17
99		14E	20	20	80	50	190	.020	17
98		12E	70	10	30	25	60	.017	17
97		10E	10	20	40	50	60	.021	17
96		8E	150	20	90	35	65	.016	17
95		6E	10	20	80	35	70	.007	3
94		4E	45	50	100	25	45	M/SAMPLE	
93		2E	60	10	120	60	70	.007	n3
92		00	10	10	70	35	60	.009	6
68125483	320S	16E	20	10	20	15	30	.014	17
84		14E	35	50	40	25	80	.015	17
85		12E	25	30	40	25	75	.019	17
86		10E	50	55	30	50	70	.017	17
87		8E	130	60	40	20	55	.010	17
88		6E	50	20	70	35	75	.009	12
89		4E	25	30	15	20	30	.011	23
90		2E	20	70	10	25	15	.010	13
91	320S	00	10	15	10	10	15	.009	17

APPENDIX 11

GEOCHEMICAL DATA

COOMALIE CREEK AREA

Auger drill samples from the Coomalie Creek Area are listed by the co-ordinate position and sample number. Samples were analysed at AMDEL by Atomic Absorption Spectrophotometer and all the results are in parts per million. A minus sign (-) in front of a number means "less than."

All samples were taken from the bottom of the auger hole with the depth shown. Where mattock samples were taken, they are indicated thus "M/SAMPLE".

Auger holes were probed (Harwell 1368A ratemeter) for radioactivity; maximum value for each hole is recorded, in mR/hr.

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125760	456S	00EW	110	30	210	110	90	.005	23
61		2W	65	25	140	65	100	.005	23
62		4W	180	35	70	45	75	.006	12
63		6W	65	30	20	15	35	.009	9
64		8W	35	35	20	15	25	.007	5
65		10W	15	35	15	- 5	5	.011	18
66		12W	12	10	10	- 5	5	M/SAMPLE	
67		14W	12	10	5	- 5	20	M/SAMPLE	
68		16W	75	10	5	- 5	20	.013	23
69		18W	170	20	25	25	40	.013	23
70		20W	35	10	5	- 5	5	.020	23
71		22W	250	20	25	- 5	10	.016	23
72		24W	75	20	45	40	50	.006	6
73		26W	20	10	40	30	35	.014	15
74		28W	70	30	85	65	60	.017	23
75		30W	50	30	110	50	70	.018	23
76		32W	45	45	65	45	70	.014	23
77		34W	55	55	50	55	80	.016	23
68125778	456S	36W	60	35	25	40	70	M/SAMPLE	

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Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125779	456S	38W	40	25	20	25	50	.012	17
78		40W	45	35	15	40	85	.012	17
77		42W	30	25	10	20	25	.014	17
76		44W	25	25	10	10	225	.015	15
75		46W	45	25	15	15	40	.014	17
74		48W	45	35	35	25	35	.013	17
73		50W	40	45	30	35	40	.014	17
72		52W	40	25	25	20	30	.016	17
71		54W	25	20	15	10	20	.017	17
70		56W	50	55	45	50	55	.015	17
69		58W	15	10	10	5	30	.014	17
68		60W	20	10	5	5	15	.010	5
67		62W	20	20	10	10	20	.014	17
66		64W	20	20	10	10	15	.010	4
65		66W	15	25	5	5	15	.012	13
64		68W	20	20	50	10	30	.011	17
63		70W	60	20	45	25	60	.011	17
62		72W	90	20	130	35	90	.010	17
61	456S	74W	50	20	110	40	60	.008	23
68125753	460S	00EW	20	20	5	5	5	.005	23
54		2W	70	20	25	- 5	15	.006	23
55		4W	90	15	30	5	35	.013	29
56		6W	230	20	100	20	35	.012	23
57		8W	110	15	100	65	70	.011	23
58		10W	45	30	370	140	120	.011	0
59		12W	85	20	80	40	25	M/SAMPLE	
91		14W	20	10	5	5	15	M/SAMPLE	
90		16W	20	15	10	5	15	M/SAMPLE	
89		18W	20	20	15	25	40	M/SAMPLE	
88		20W	35	20	45	25	230	.014	23
87		22W	70	10	20	15	80	.013	23
86		24W	60	10	20	35	70	.013	23
85		26W	20	10	50	35	60	.013	23
84		28W	180	10	60	85	100	.013	23
83		30W	25	10	60	30	70	.010	18
82		32W	65	20	90	20	65	.011	23
81	460S	34W	30	20	55	20	60	.012	23

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125778	460S	36W	45	15	40	30	80	.010	23
79		38W	50	40	50	50	80	.014	23
68125680		40W	30	35	20	15	30	.012	17
81		42W	30	20	15	20	35	.013	17
82		44W	30	20	15	15	35	.012	17
83		46W	40	25	25	30	50	.010	17
84		48W	40	45	35	40	55	.010	17
85		50W	70	75	50	50	85	.010	17
86		52W	40	25	20	25	55	.010	17
87		54W	40	25	15	25	35	.015	17
88		56W	45	45	35	25	70	.011	17
89		58W	40	45	30	35	55	.009	17
90		60W	25	20	15	15	30	.009	17
91		62W	40	25	20	15	55	.012	17
92		64W	45	55	40	30	55	.012	17
68125805		66W	25	35	20	15	30	.015	23
06		68W	30	55	40	30	45	.011	16
07		70W	5	15	5	5	20	.010	20
08		72W	10	10	30	60	60	.008	12
68125660		74W	30	45	60	30	55	.008	12
59		76W	15	210	190	120	190	.008	17
58		78W	20	220	680	75	90	M/SAMPLE	
57		80W	25	300	190	100	70	.015	7
56		82W	30	20	150	75	100	.018	17
55		84W	20	15	10	10	25	.019	7
54	460S	86W	25	10	20	10	30	.020	12
68125745	464S	00EW	65	35	65	40	50	.008	23
46		2W	160	30	50	20	25	.008	23
47		4W	110	30	50	30	60	.008	23
48		6W	120	35	90	75	70	.008	23
49		8W	45	30	75	40	50	.009	23
50		10W	95	30	25	10	15	.014	23
51		12W	25	20	20	- 5	5	.016	23
52	464S	14W	75	20	25	12	70	M/SAMPLE	

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Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125792	4648	16W	35	15	20	30	40	M/SAMPLE	
93		18W	25	10	10	- 5	5	.016	23
94		20W	60	15	30	10	70	.012	23
95		22W	50	15	20	15	50	.013	15
96		24W	45	15	15	10	65	.011	8
97		26W	50	40	50	15	45	.010	8
98		28W	25	10	15	10	50	.011	12
99		30W	40	160	30	40	65	.008	6
800		32W	70	10	40	75	80	.010	5
01		34W	120	10	60	25	80	.011	17
02		36W	50	100	300	15	50	.010	23
03		38W	20	10	55	15	60	.016	23
04		40W	45	10	30	15	60	.020	23
68125704		42W	35	45	30	45	25	.010	17
03		44W	35	35	25	55	35	.009	17
02		46W	40	45	50	60	30	.010	17
01		48W	25	30	20	20	20	.010	17
700		50W	35	45	40	25	25	.011	23
68125699		52W	45	45	25	30	50	.009	23
98		54W	55	55	25	50	60	.012	17
97		56W	40	25	15	20	40	.014	17
96		58W	40	35	40	40	55	.009	17
95		60W	35	25	25	10	30	.010	23
94		62W	45	65	60	65	70	.009	17
93		64W	30	35	20	25	35	.010	17
68126812		66W	35	45	30	20	50	.013	20
11		68W	35	35	85	75	90	.010	20
10		70W	25	15	15	15	50	.010	23
09		72W	50	80	55	40	15	.009	23
68125647		74W	25	20	30	30	70	.014	17
48		76W	25	20	30	20	65	.014	17
49		78W	20	20	30	15	50	.020	17
50		80W	20	20	15	15	30	.019	17
51		82W	15	10	10	15	30	.022	17
52		84W	20	10	10	5	25	.026	17
53	4648	86W	15	10	10	5	30	.022	17

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125744	468S	00EW	50	35	90	30	70	M/SAMPLE	
43		2W	60	35	75	40	70	M/SAMPLE	
42		4W	75	45	100	50	70	M/SAMPLE	
41		6W	120	30	85	85	60	.010	23
40		8W	15	35	95	100	80	.010	23
39		10W	95	30	85	20	35	.006	23
38		12W	80	35	40	60	50	.007	5
37		14W	18	10	10	- 5	10	.012	23
36		16W	85	10	25	- 5	25	.014	23
35		18W	40	20	85	25	90	.012	17
34		20W	50	20	10	5	35	.012	23
33		22W	30	25	25	8	35	.013	23
32		24W	15	25	30	25	35	.009	21
31		26W	15	30	30	20	35	.011	23
30		28W	30	20	30	25	80	.012	23
29		30W	30	35	45	20	50	.017	23
28		32W	60	30	25	40	50	.013	14
27		34W	140	45	75	40	70	.013	8
26		36W	35	30	70	25	40	.009	7
25		38W	30	40	60	30	35	.010	23
24		40W	20	25	65	20	20	.012	23
23		42W	30	20	80	30	60	.012	23
22		44W	70	75	140	65	120	.009	14
21		46W	15	20	20	10	15	M/SAMPLE	
68125705		48W	20	30	25	12	20	M/SAMPLE	
06		50W	20	30	75	60	60	.008	17
07		52W	45	35	40	35	85	.014	23
68125720		54W	40	30	20	25	25	.010	23
19		56W	35	35	20	30	15	.010	23
18		58W	45	55	55	40	35	.010	23
17		60W	50	60	80	55	60	.013	23
16		62W	45	45	30	40	35	.010	23
15		64W	50	45	50	45	50	.010	23
14		66W	30	35	55	20	35	.011	18
13		68W	35	55	50	40	35	.008	23
12		70W	35	35	35	40	35	.010	23
11		72W	35	35	70	40	60	.012	22
10		74W	35	35	55	25	35	.013	23
09		76W	18	35	20	15	25	.011	17
08		78W	35	75	45	35	50	.011	17

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125646	468S	80W	45	35	50	35	70	.010	13
45		82W	25	20	15	10	30	.020	17
44	468S	84W	20	25	10	5	30	.016	17
68125602	472S	00EW	50	20	75	70	50	M/SAMPLE	
03		2W	90	20	100	60	50	.008	23
04		4W	420	20	20	5	5	.012	17
05		6W	110	15	15	10	15	.010	5
06		8W	100	20	80	65	40	.009	23
07		10W	50	20	95	75	60	.006	23
08		12W	70	20	75	65	80	.007	23
09		14W	60	20	120	65	60	.008	23
10		16W	80	20	130	70	50	.007	23
11		18W	15	20	15	90	100	.012	23
12		20W	20	20	5	5	10	.018	13
13		22W	90	20	30	60	100	.033	23
14		24W	80	25	45	55	160	.018	23
15		26W	45	45	25	15	80	.015	19
16		28W	40	20	25	15	85	.016	23
17		30W	40	20	25	15	55	.028	23
18		32W	60	45	50	25	90	.023	23
19		34W	70	45	30	35	85	.020	23
20		36W	100	150	230	30	60	.020	23
21		38W	55	20	15	25	55	.020	23
22		40W	95	25	40	35	60	.016	23
23		42W	60	25	45	60	80	.015	23
24		44W	25	20	70	25	55	.013	23
25		46W	40	20	60	20	70	.018	23
26		48W	140	20	45	25	85	.011	23
27		50W	45	20	60	25	60	.011	23
28		52W	45	10	65	25	65	.013	23
29		54W	65	25	10	35	70	.011	54
30		56W	20	20	50	35	90	.010	20
31		58W	150	10	25	60	70	.015	23
32		60 W	90	20	50	45	55	.010	17
33		62W	25	20	15	15	85	.014	17
34		64W	45	20	15	30	90	.007	19
35		66W	40	45	40	25	50	.019	23
36		68W	45	50	45	25	60	.015	15

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125637	472S	70W	60	65	70	45	75	.011	23
38		72W	25	25	15	20	35	.013	17
39		74W	50	75	50	30	65	.011	17
40		76W	30	35	20	20	40	.010	17
41		78W	50	45	70	40	60	.010	17
42		80W	40	45	60	35	60	.009	17
68125643	472S	82W	25	20	15	10	50	.011	17
68125601	476S	00W	210	5	85	80	75	.018	23
600		2W	140	5	100	55	90	.011	14
599		4W	15	5	100	110	150	.008	5
98		6W	110	10	110	70	65	.009	23
97		8W	90	10	130	70	80	.008	23
96B		10W	80	10	140	70	50	GOSSAN	
96A		10W	80	10	140	70	50	.008	23
95		12W	5	5	80	35	75	.014	23
94		14W	20	5	80	30	10	.009	23
93		16W	140	5	90	50	60	.008	23
92		18W	80	5	90	50	60	.006	23
91		20W	50	5	110	60	65	.009	23
90		22W	100	5	30	35	160	.015	23
89		24W	40	5	150	90	210	.017	23
88		26W	25	5	70	10	120	.012	7
87		28W	50	5	40	20	140	.018	23
86		30W	45	5	30	20	130	.013	18
85		32W	25	5	20	10	60	.012	17
84		34W	25	10	15	25	100	.019	20
83		36W	15	10	15	15	30	.020	23
82		38W	35	5	15	15	50	.021	23
81		40W	30	10	30	20	60	.025	19
80		42W	15	5	20	60	65	.016	23
79		44W	30	5	25	15	50	.020	18
78		46W	25	5	30	25	75	.019	23
77		48W	25	5	50	20	75	.018	23
76		50W	40	5	45	25	70	.013	17
75		52W	25	- 5	50	20	75	.010	5
74		54W	80	95	100	40	50	.010	7

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Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX)	Hole Depth Feet
68125573	476S	56W	10	- 5	50	15	100	.008	8
72		58W	10	- 5	35	30	50	.007	6
71		60W	45	- 5	30	30	65	.008	6
70		62W	10	5	70	30	70	.010	13
69		64W	75	5	75	210	420	.009	23
68		66W	40	5	70	25	65	.015	23
67		68W	270	10	100	130	530	.014	23
66		70W	20	20	100	20	65	.018	23
65		72W	70	20	20	60	130	.015	23
64		74W	50	50	40	20	60	.017	23
63		76W	50	20	30	50	70	.018	23
62		78W	40	50	75	15	50	.013	17
61	476S	80W	60	40	120	25	80	.014	29
68125523	480S	00W	25	10	5	5	10	.013	23
24		2W	100	10	25	30	65	.006	6
25		4W	90	50	40	10	65	.018	20
26		6W	90	20	310	50	170	.015	23
27		8W	100	10	120	70	30	.007	23
28		10W	70	10	110	60	30	.007	23
29		12W	75	5	110	60	50	.009	23
30		14W	60	5	100	80	35	.010	23
31		16W	60	5	75	40	30	.007	23
32		18W	60	- 5	80	65	35	.010	23
33		20W	80	- 5	120	50	30	.010	23
34		22W	70	5	130	60	60	.009	23
35		24W	10	5	90	40	75	.011	23
36		26W	10	5	50	15	120	.018	23
37		28W	15	10	35	35	170	.016	23
38		30W	80	10	50	20	100	.023	23
39		32W	40	5	50	30	110	.016	23
40		34W	20	10	70	10	100	.013	20
41		36W	60	5	70	20	100	.020	23
42		38W	30	5	15	15	75	.021	23
43		40W	40	5	15	15	90	.022	23

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Radio-Metric (MAX.)	Hole Depth Feet
68125544	480S	42W	80	10	15	20	100	.022	23
45		44W	90	10	20	20	80	.021	23
46		46W	60	5	10	20	60	.018	23
47		48W	30	5	15	50	120	.020	23
48		50W	25	5	30	30	100	.018	23
49		52W	50	15	50	60	100	.016	23
50		54W	110	20	70	50	70	.021	23
51		56W	15	5	15	15	50	.013	20
52		58W	25	10	30	15	75	.010	19
53		60W	50	10	35	20	100	.012	19
54		62W	60	10	50	40	100	.009	7
55		64W	110	- 5	70	30	90	.012	13
56		66W	5	5	50	20	70	.010	17
57		68W	50	5	30	35	80	.010	10
58		70W	70	30	40	30	35	.010	23
59		72W	25	10	35	30	15	.012	23
681255 60	480S	74W	90	5	15	35	70	.020	23

APPENDIX 111

GEOCHEMICAL DATA

HUANDOT AREA - DEEP DRILLING R1 RADIOMETRIC ANOMALY

Geochemical samples from the Huandot R1 anomaly are listed by the co-ordinate position and sample number. Samples were analysed at AMDEL by Atomic Absorption Spectrophotometer and all the results are in parts per million.

All samples were taken from the bottom of the auger hole with the depth shown.

Auger holes were probed (Harwell 1368A ratemeter) for radioactivity; maximum for each hole is recorded, in mR/hr.

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radiometric	Hole Depth Feet
68126420	292S	12W	110	40	150	35	110	.035	53
19		14W	65	20	250	50	150	.035	53
21		16W	45	20	55	15	60	.035	35
22		18W	50	30	80	15	80	.032	37
30		20W	65	20	100	15	70	.040	53
31		22W	30	15	90	5	70	.020	53
32	292S	24W	60	40	160	30	110	.026	53
68126426	294S	14W	65	80	150	70	120	.045	53
27		16W	65	20	80	25	90	.045	53
28		18W	45	20	80	15	50	.023	53
37		20W	35	10	70	5	60	.018	53
38		22W	60	25	80	15	80	.020	53
41	294S	24W	65	30	160	50	120	.022	53
68126425	296S	14W	65	40	100	30	80	.030	53
24		16W	50	30	100	25	80	.025	47
23		18W	50	15	90	15	80	.055	52
36		20W	30	20	50	10	45	.050	37
33		22W	60	20	75	10	70	.047	53
39	296S	24W	50	25	110	10	65	.020	53

../2

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68126429	298S	18W	60	180	130	70	90	.024	53
35		20W	110	20	160	75	120	.030	49
34		22W	65	15	160	15	100	.019	53
40	298S	24W	40	20	220	25	110	.015	53

APPENDIX 1V

GEOCHEMICAL DATA

COOMALE GAP WEST - NORTHERN SECTION

Auger drill samples from the Coomalie Gap West area are listed by the co-ordinate position and sample number. Samples were analysed at AMDEL by Atomic Absorption Spectrophotometer and all the results are in parts per million. A minus sign (-) in front of a number means "less than."

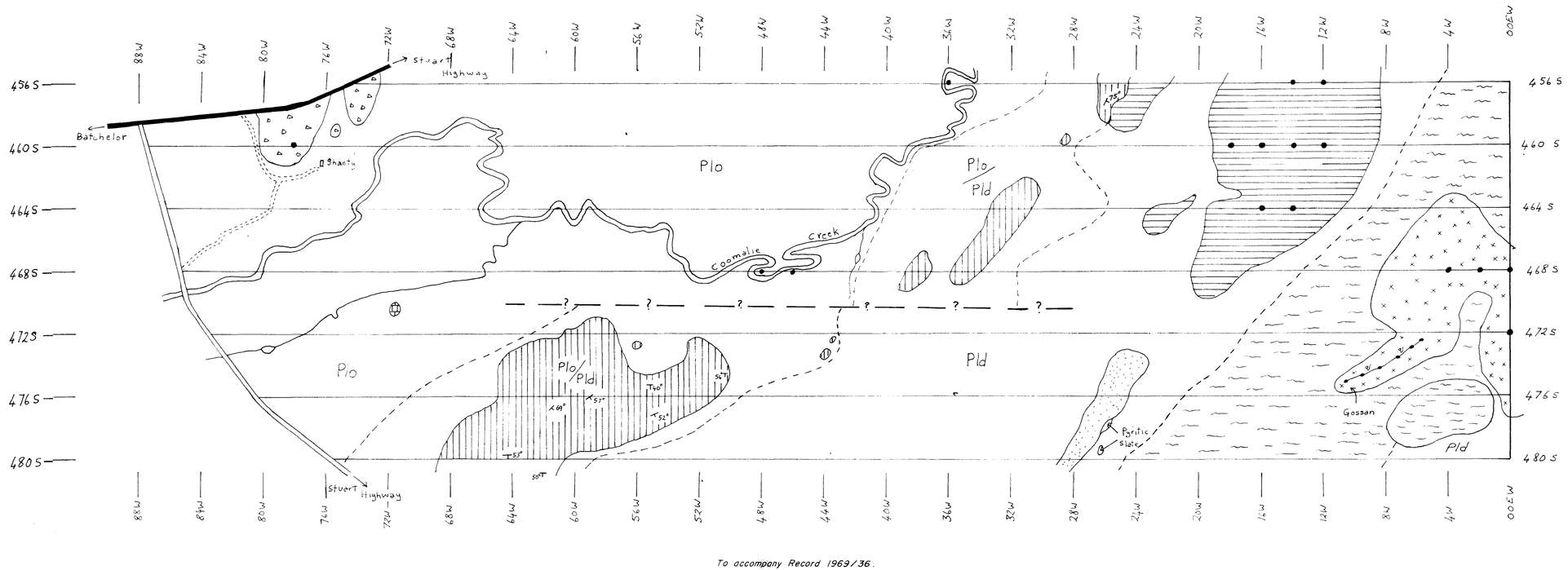
All samples were taken from the bottom of the auger hole with the depth shown.

Auger holes were probed (Harwell 1368A ratemeter) for radioactivity; maximum value for each hole is recorded, in mR/hr.

Sample No.	Co-ordinates		Cu	Pb	Zn	Co	Ni	Max. Radio-metric	Hole Depth Feet
68125511	336S	39E	50	410	40	25	45	.022	6
12		38E	380	100	60	25	130	.029	12
13	336S	37E	140	75	50	25	80	.031	23
68125516	340S	43E	200	70	180	15	110	.018	23
15		42E	80	350	550	25	85	.023	23
14	340S	41E	60	45	70	8	55	.022	23
68125517	344S	37E	35	30	25	25	35	.023	18
18		36E	70	110	55	45	80	.010	21
19	344S	35E	70	95	60	30	70	.010	23
68125522	356S	39E	85	100	55	60	95	.012	23
21		38E	35	45	15	25	50	.012	14
20	356S	37E	70	95	65	45	75	.010	16


PLATE I
DIAMOND DRILLING
GEOLOGICAL AND
GEOPHYSICAL SURVEYS
1968
RUM JUNGLE AREA
LEGEND
Geochemical Surveys 1968
Geophysical Surveys 1968
Diamond drill holes completed since October 1967, or in progress October 1968
Areas of rotary-percussion drilling, 1968
MILES
1 0 1 2
Reference to Australian standard 1:250,000 map series.
DARWIN
PINE CREEK
ACACIA AREA
L4
Z1
L3
Co1
C1
L2
C2
L1
Acacia Creek
MANTON RIVER
ADELAIDE RIVER
Geochemical Survey in Progress - October 1968
MANTON AREA
Manton Dam
Darwin River
RUM JUNGLE COMPLEX
GIANTS REEF FAULT
SLINGRAM, RESISTIVITY AND RADIOMETRIC SURVEYS
GRAVITY SURVEY
120S RUM JUNGLE EAST GRID.
TO 642 W
MT FITCH NORTH
560 N
500 N
MT FITCH
384 N
372 N
MT BURTON AREA
MT BURTON
Australian Railway
North
RUM JUNGLE
BROWNS S-W
RUM JUNGLE TRIANGLE (NORTH)
AREA 55B
AREA 55
FINNIS RIVER
RUM JUNGLE TRIANGLE (SOUTH)
RUM JUNGLE CREEK SOUTH
WOODCUTTERS AREA
AREA 44 EXTENDED
HUANDOT
COOMALIE GAP WEST (NORTHERN SECTION)
COOMALIE GAP WEST
COOMALIE CREEK
STURT HIGHWAY
BATCHELOR
POWER LINE
Airfield
BATCHELOR LATERITES EXTENDED
GOULD AREA
GOULD Airfield
MT MINZA AREA
201 S
213 S
68/7
WATERHOUSE NO 2 PROSPECT.
WATERHOUSE GRANITE
ADELAIDE RIVER
BASED ON D52/87-360
To accompany Record 1969/36.
D 52/A8/338

COOMALIE CREEK AREA
GEOLOGY



To accompany Record 1969/36.

REFERENCE

LOWER PROTEROZOIC

Golden Dyke Formation Pld

- *Undifferentiated Shale (non-Outcropping).*
- *Amphibolite.*
- *Siliceous Lutite.*
- *Quartzite.*
- *Quartz Ironstone.*

Coomalie Dolomite Plo

Transition Beds - Plo/Pld

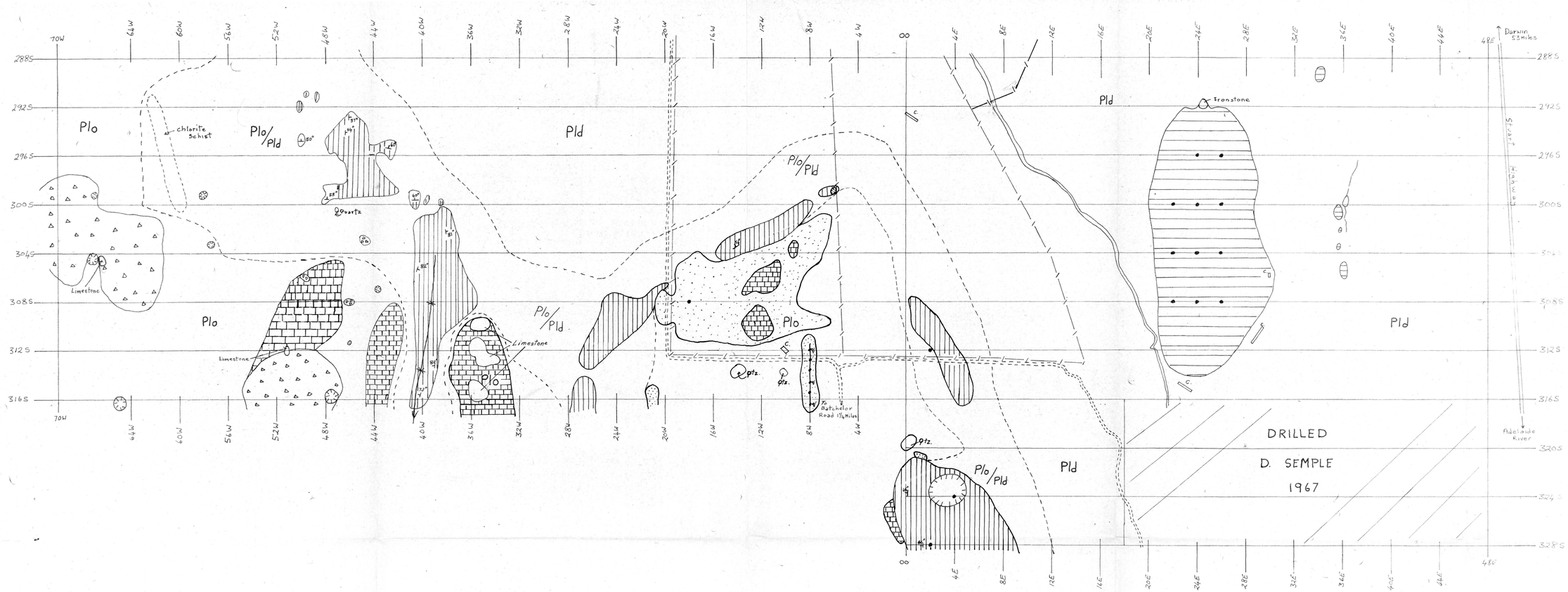
- *Undifferentiated (non-Outcropping).*
- *Black Calcilutite.*
- *Crystalline Dolomite.*
- *Quartz Lateritic - Ironstone Breccia.*

- *Outcrop Boundary*
- *Non-Outcropping Boundary*
- *Strike and Dip of Beds*
- *Mattock Sample*
- *Inferred Fault*
- *Vehicle Track*
- *Highway*
- *Creek*
- *Dry Watercourse and Billabong*
- *Quartz Reef*
- *Formed Road*

Scale 1"= 400'

D52/A8/339

PLATE 3.



REFERENCE

LOWER PROTEROZOIC

Golden Dyke Formation Pld

- Undifferentiated Shale non-outcroping
- Siliceous Lutite

Coomalie Dolomite Plo

Transition Beds Plo/Pld.

- Black Calcilutite
- Crystalline Dolomite
- Undifferentiated quartz Sand. non-outcropping
- Quartzite
- Quartz-Ironstone Breccia.

- Outcrop Boundary
- Non-outcropping Boundary
- Strike and Dip of Beds
- Mattock Sample
- Synclinal Trough
- Vehicle Track
- Sink hole
- Costean
- Stream
- Qtz. vein.
- stream.
- Billabong

HUANDOT AREA GEOLOGY

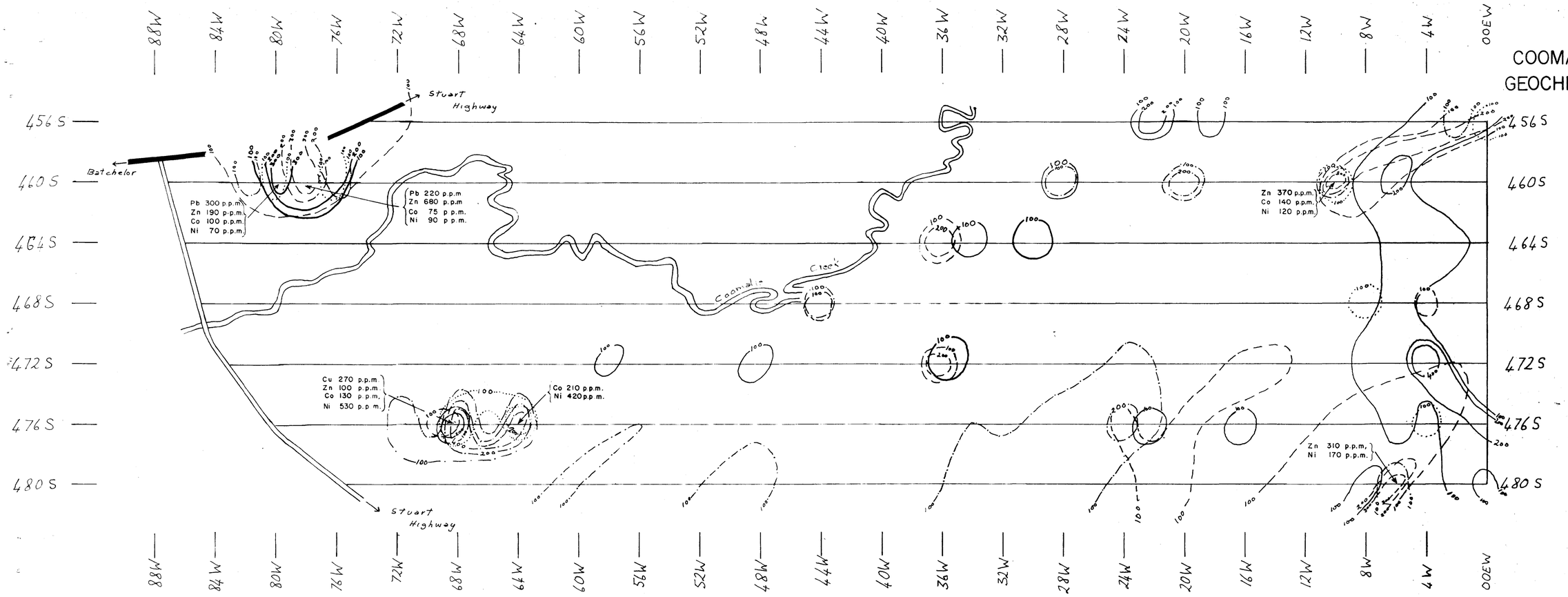
Scale 1" = 400'

To accompany Record 1969/36.

D52/A8/340

PLATE 4.

COOMALIE CREEK AREA
GEOCHEMICAL CONTOURS



REFERENCE

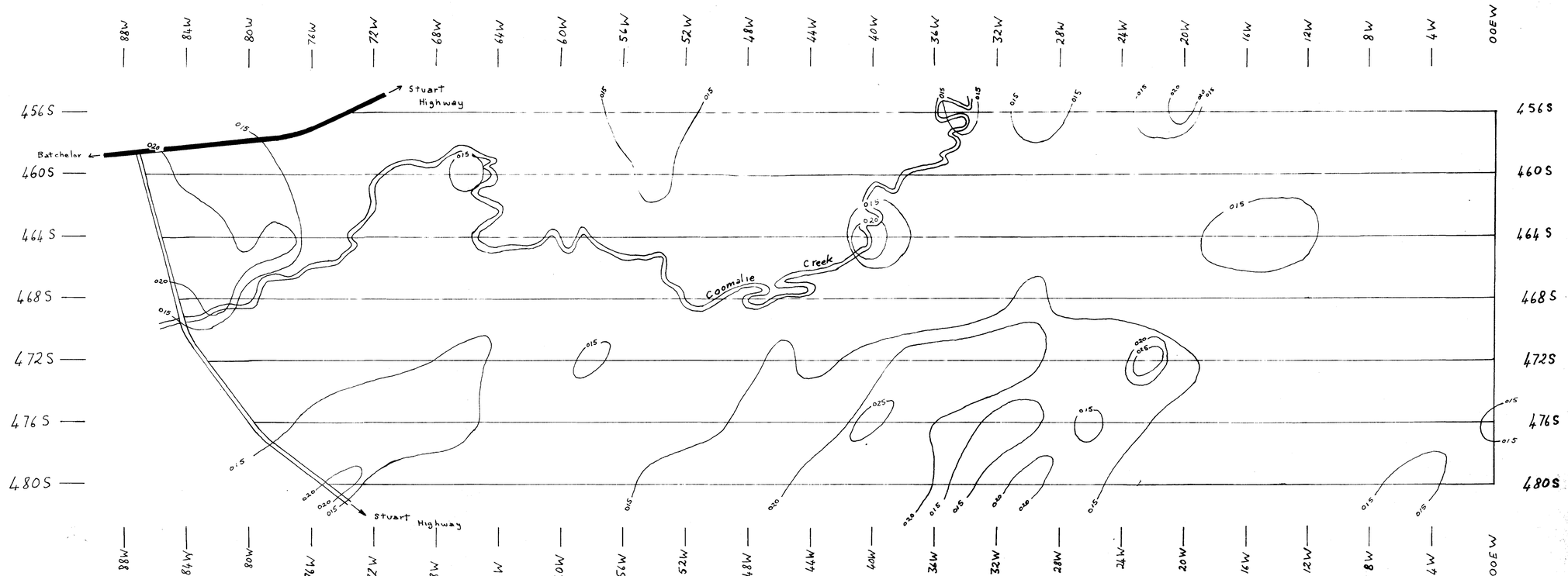
- Copper
- Lead
- Zinc
- Cobalt
- Nickel

400 200 0 400 feet

To accompany Record 1969/36.

D52/A8/341

PLATE 5.



COOMALIE CREEK AREA
RADIOMETRIC CONTOURS

REFERENCE

Contour Interval : 005 MR/Hr.

Contours Based on Maximum Values From Auger Holes.

Holes Drilled Every 200' Along Traverses

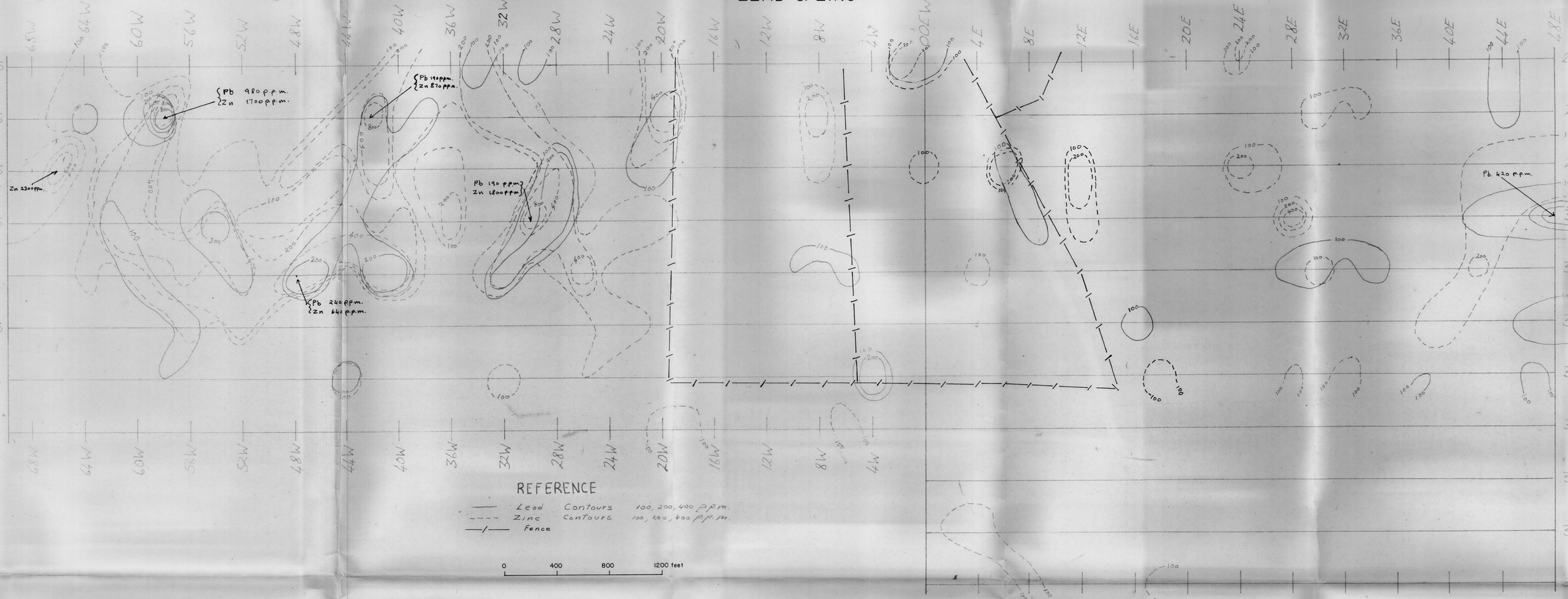
Scale 1" = 400'

To accompany Record 1969/36

D52/A8/342

HUANDOT AREA - GEOCHEMICAL CONTOURS
LEAD & ZINC

PLATE 6.



REFERENCE

Lead Contours 100, 200, 400 p.p.m.

Zinc Contours 100, 200, 400 p.p.m.

Fence

0 400 800 1200 feet

To accompany Record 1969/36.

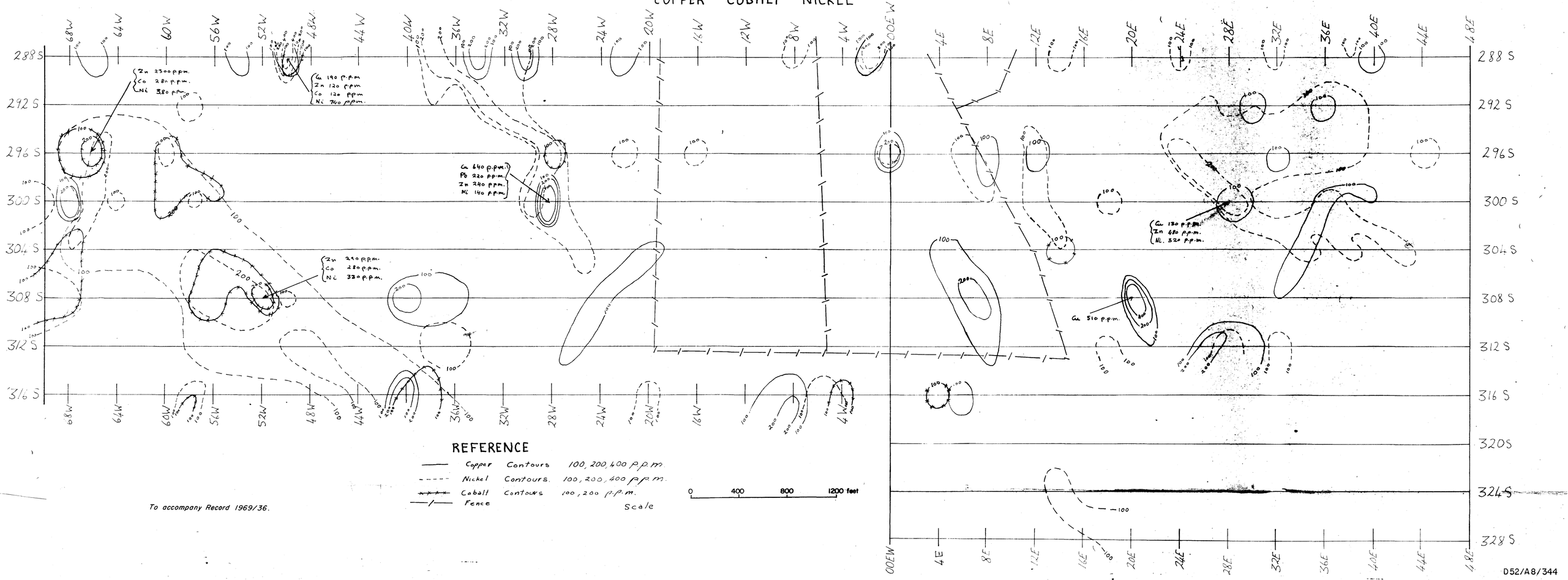
D52/A8/343

HUANDOT AREA

GEOCHEMICAL CONTOURS

COPPER COBALT NICKEL

PLATE 7.



REFERENCE

———	Copper Contours	100, 200, 400 p.p.m.
- - - - -	Nickel Contours.	100, 200, 400 p.p.m.
×-×-×-×	Cobalt Contours	100, 200 p.p.m.
——/——	Fence	

0 400 800 1200 feet

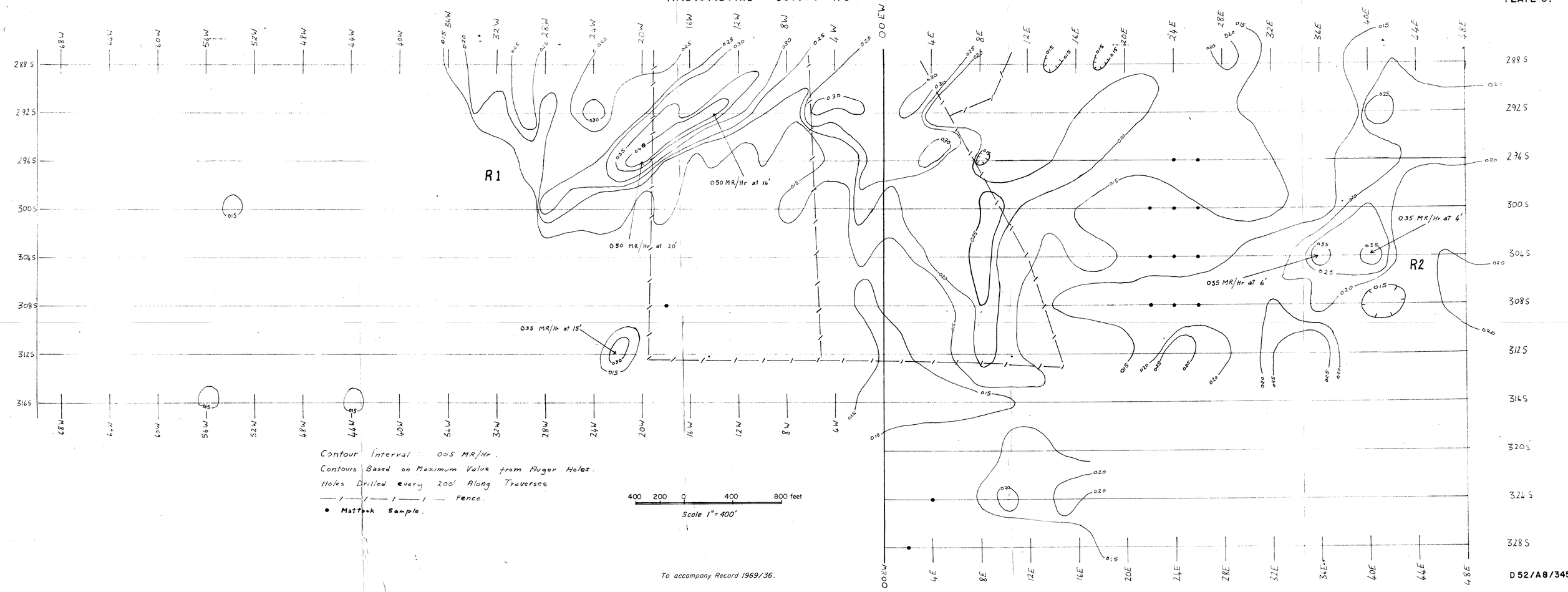
Scale

To accompany Record 1969/36.

D52/A8/344

HUANDOT AREA
RADIOMETRIC CONTOURS

PLATE 8.



Contour Interval : 005 MR/Hr.

Contours Based on Maximum Value from Auger Holes.

Holes Drilled every 200' Along Traverses.

— / — / — / — Fence.

• Matlock Sample.

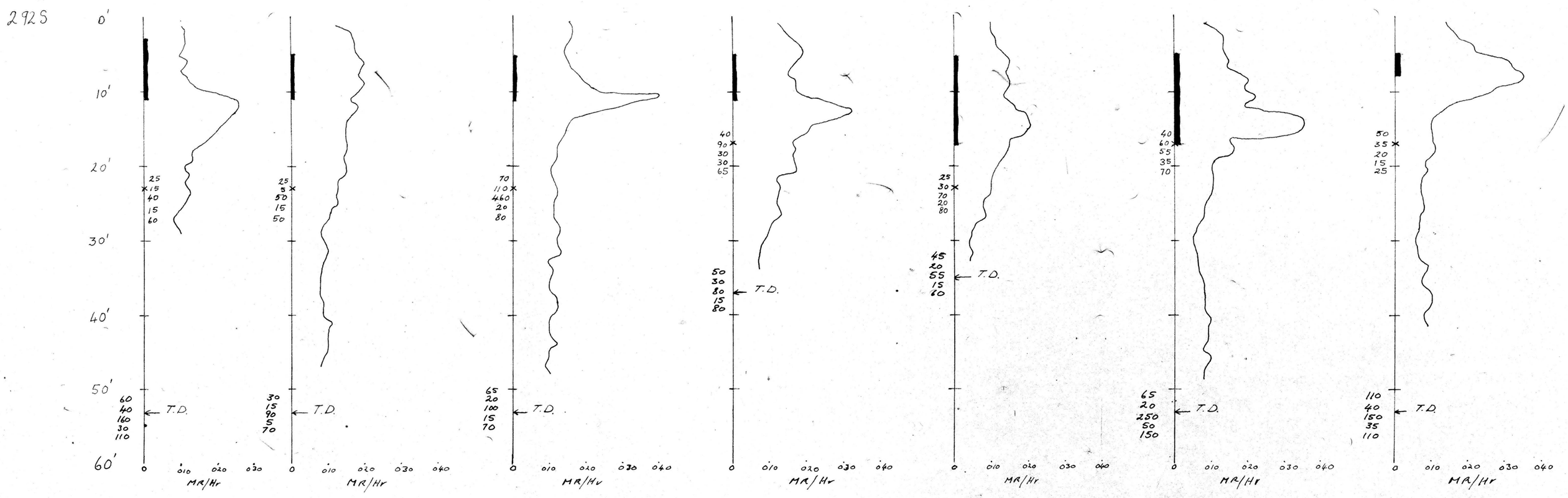
400 200 0 400 800 feet

Scale 1"= 400'

To accompany Record 1969/36.

D52/A8/345

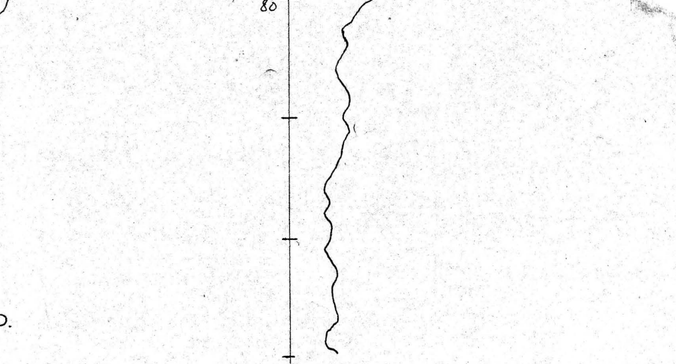
PLATE 9.



ANOMALY R1

HUANDOT AREA

AUGER DRILLING SEPT. 1968.



To accompany Record 1969/36.

D52/A8/346

PLATE 10

14E 18E 22E 26E 30E 34E 38E 42E 46E

312S 316S 320S 324S 328S 332S 336S 340S 344S 348S 352S 356S 360S

Cu. 230 ppm.
Ni. 120 ppm.

Zn. 130 ppm.
Ni. 450 ppm.
Co. 100 ppm.

Cu. 280 ppm.

Cu. 125 ppm.
Pb. 85 ppm.
Zn. 140 ppm.
Ni. 250 ppm.

Pb. 110 ppm
Zn. 300 ppm.

Cu. 190 ppm.
Pb. 400 ppm.
Zn. 400 ppm.
Ni. 345 ppm.

⊗ Location of holes drilled in 1968 survey

Copper ------ 100, 200 ppm.

Lead -x-x-x- 100, 200 ppm.

Zinc ——— 100, 200 ppm.

Nickel —·—·— 100, 200, 400 ppm.

COOMALIE GAP WEST

NORTHERN SECTION

GEOCHEMICAL CONTOURS

After D.Semple. 1968/7.

Scale 1" = 400 Feet

400 200 0 400

To accompany Record 1969/36.

D52/A8/347