

Fig. II -5-13(2) Chargeability plane map for N=2

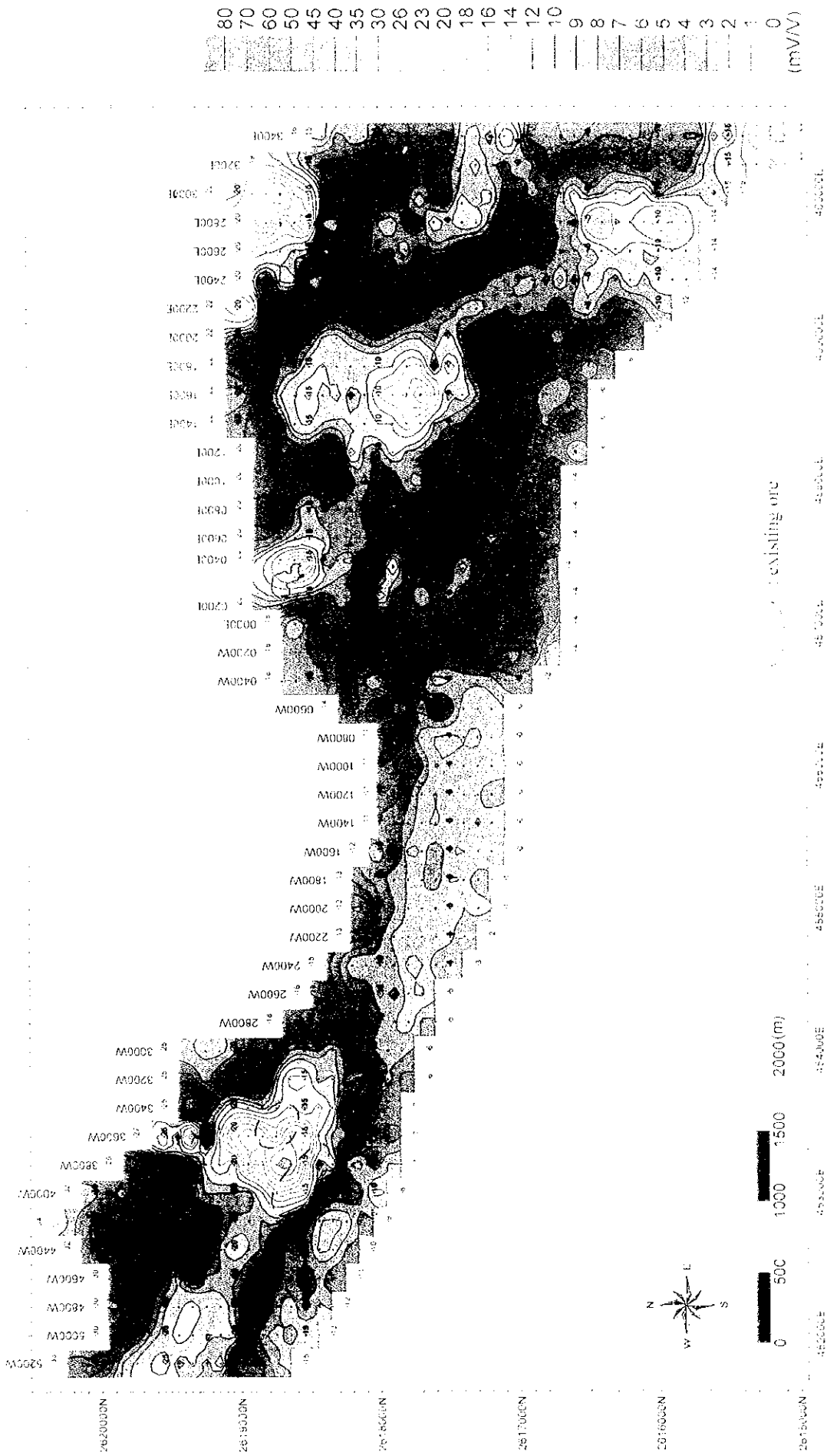


Fig. II-5-13(C) Chargability plane map for N-2

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100







Fig. II -5-13(3) Metal factor plane map for N=2

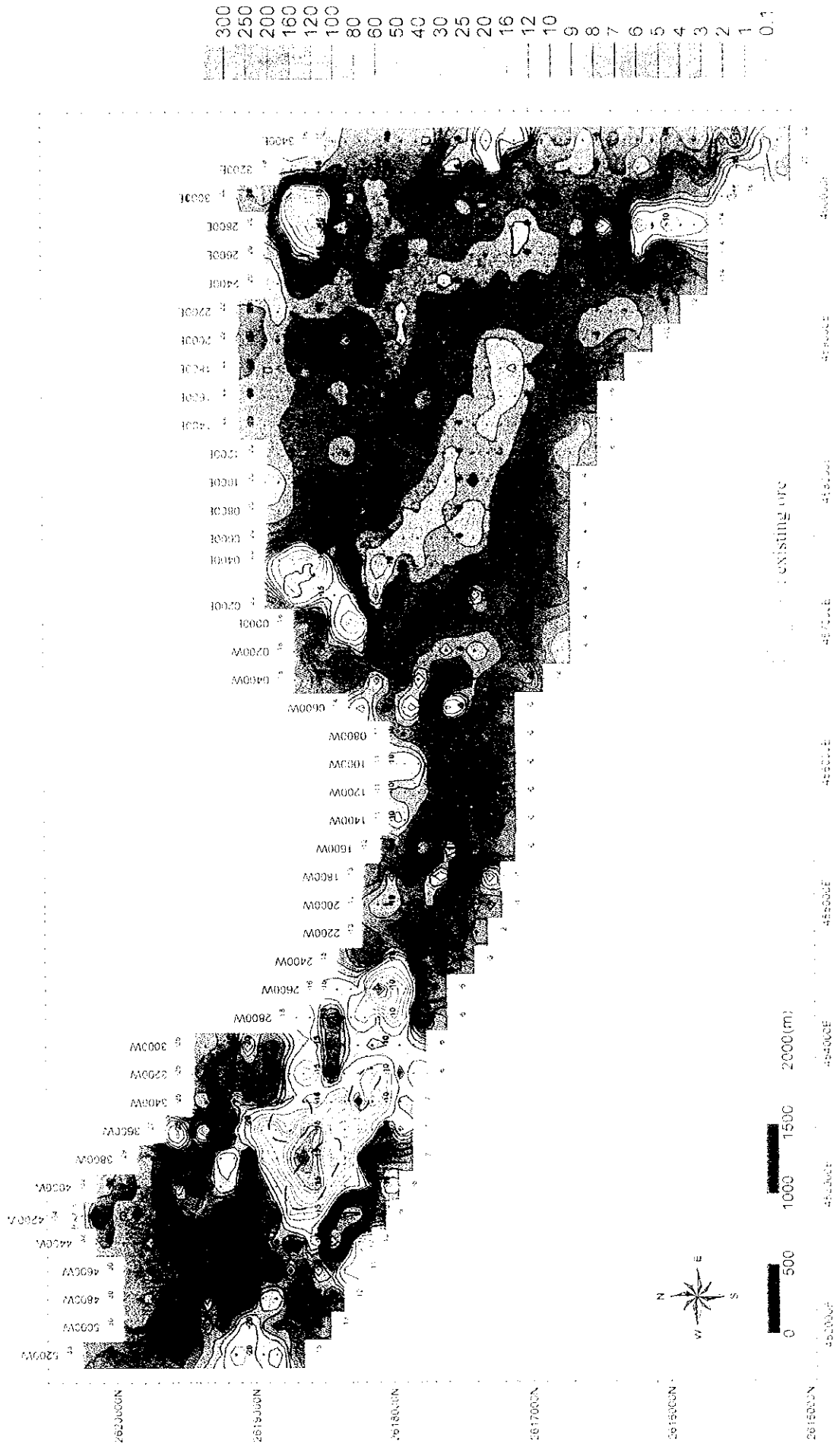


Fig. II -5-13(3) Metal factor plane map for N-2

300
250
200
150
100
50
0
-50
-100
-150
-200
-250
-300





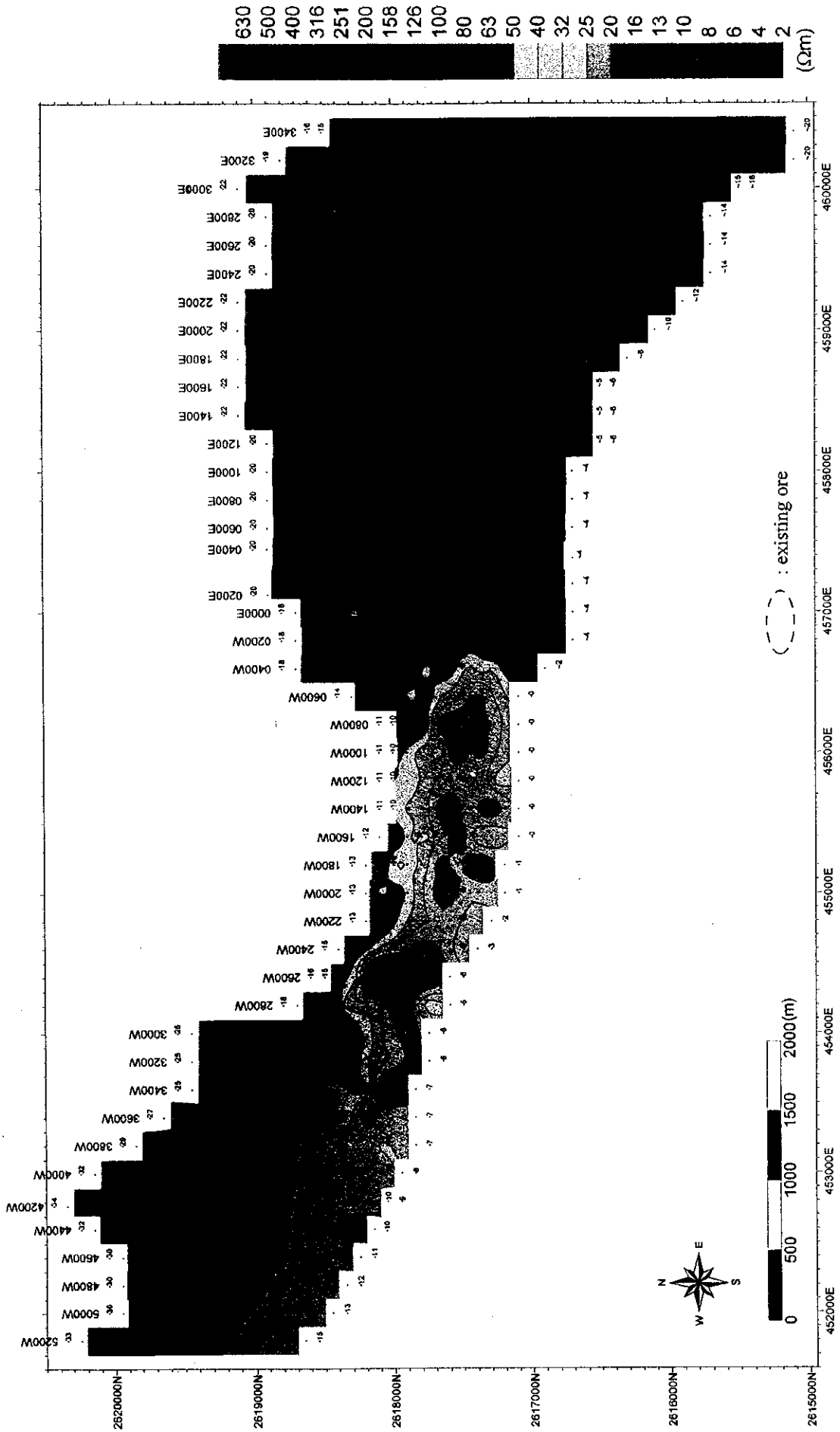


Fig. II-5-14(1) Apparent resistivity plane map for N=3

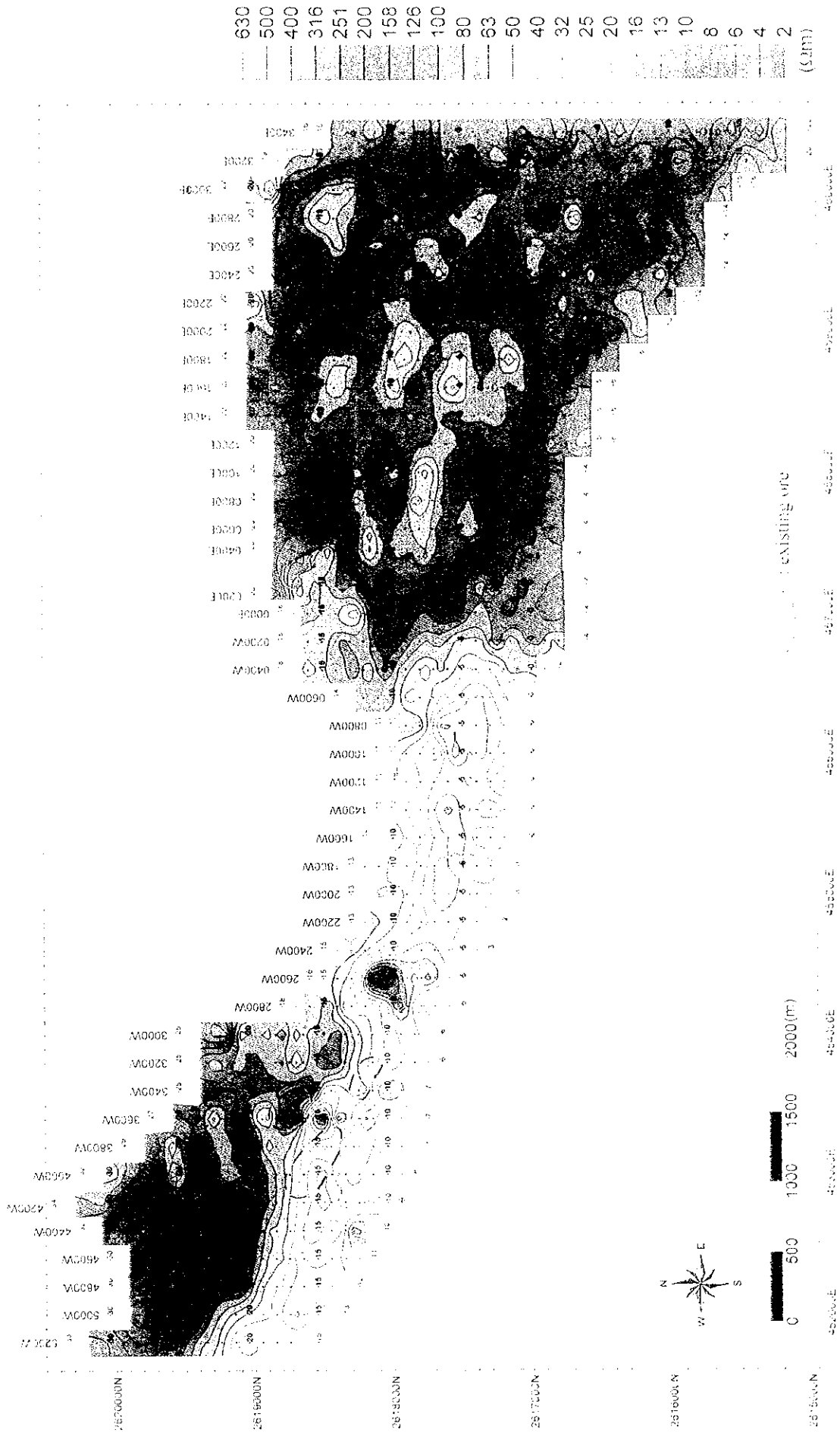
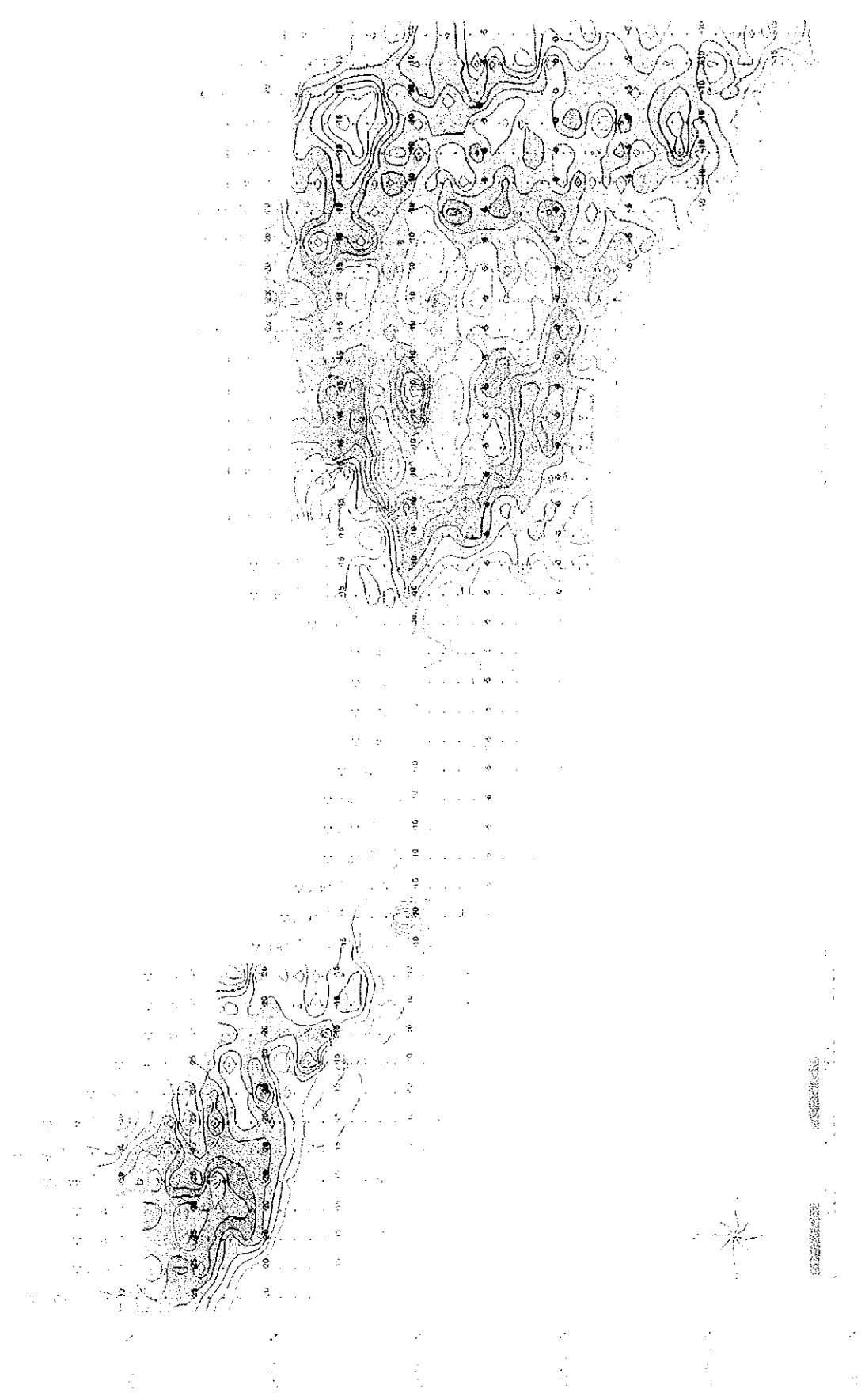


Fig. II-5-14(1) Apparent resistivity plane map for N-5

350
 300
 200
 150
 100
 50
 0
 -50
 -100
 -150
 -200
 -250
 -300
 -350
 -400
 -450
 -500
 -550
 -600
 -650
 -700
 -750
 -800
 -850
 -900
 -950
 -1000





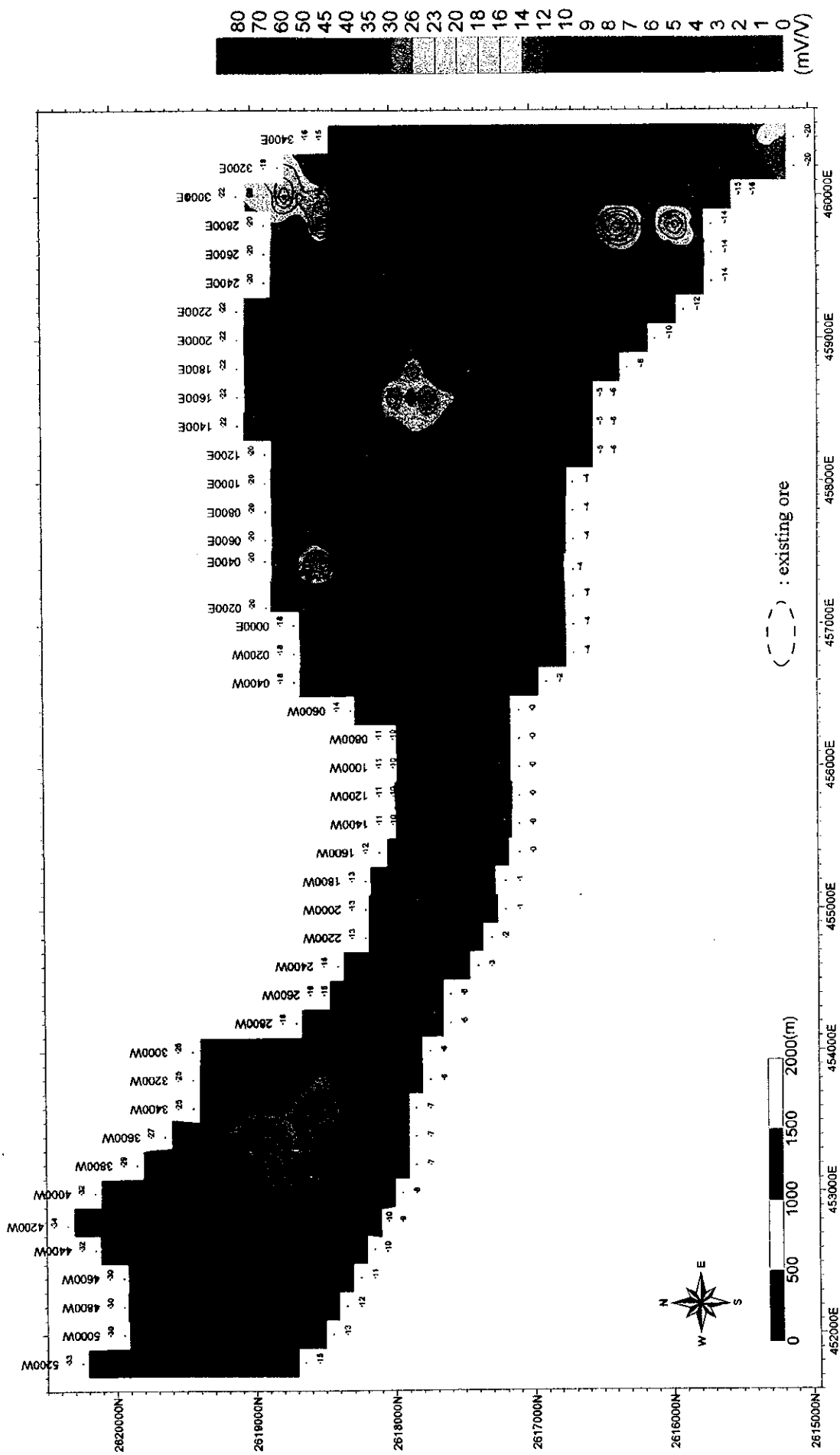


Fig II -5-14(2) Chargeability plane map for N=3

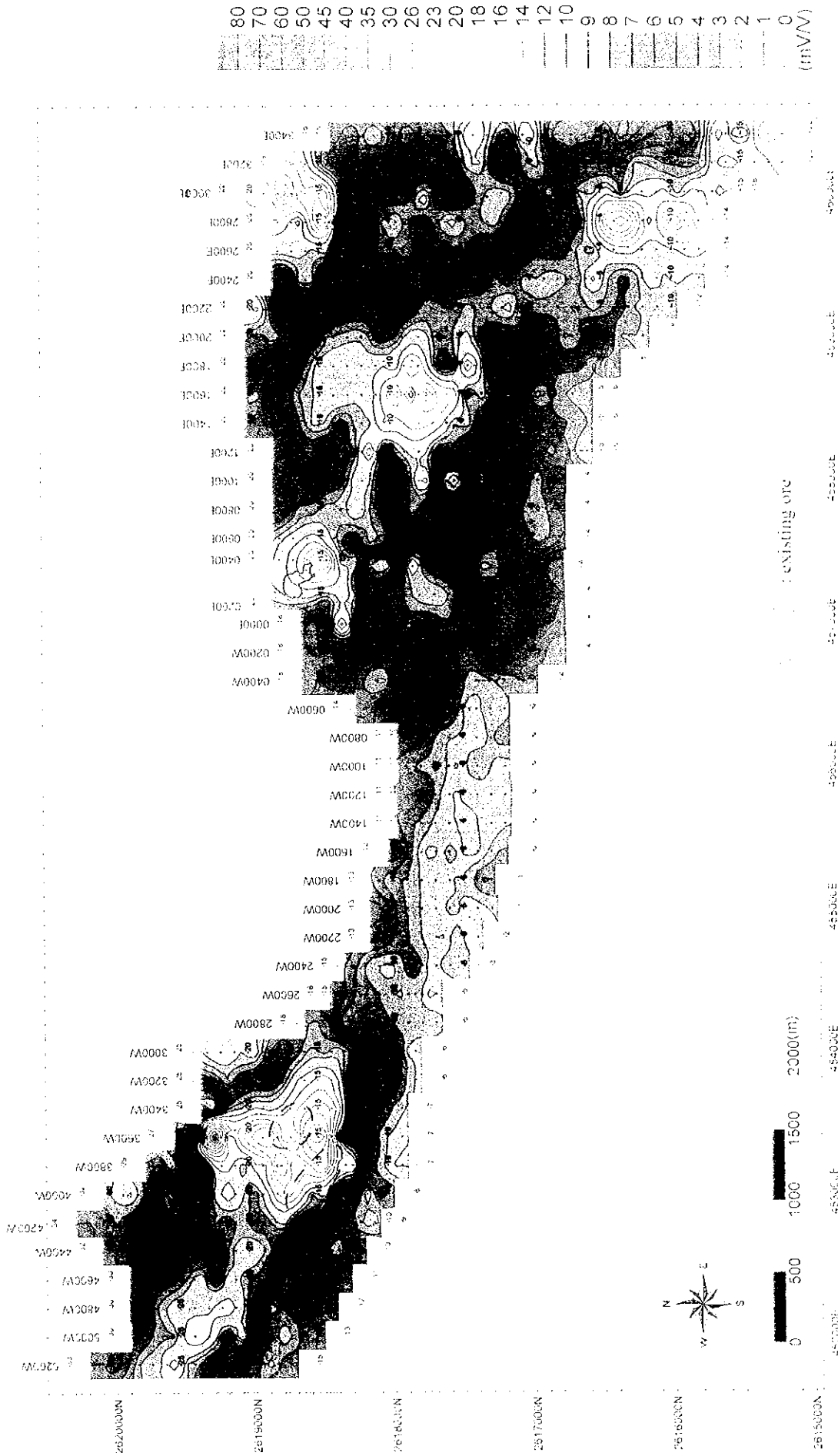


Fig. II-5-14(2) Chargeability plane map for N 3



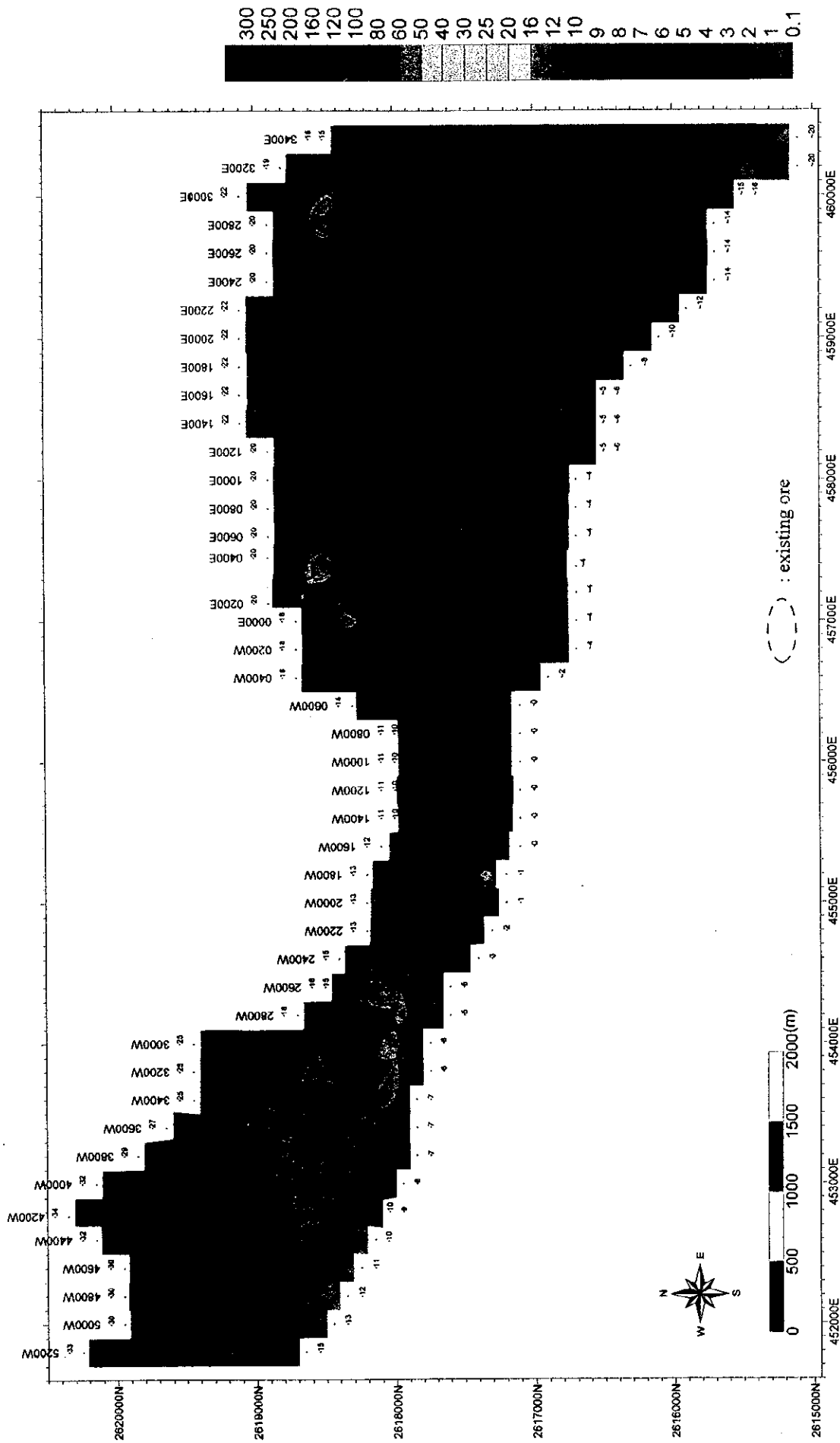


Fig. II -5-14(3) Metal factor plane map for N=3

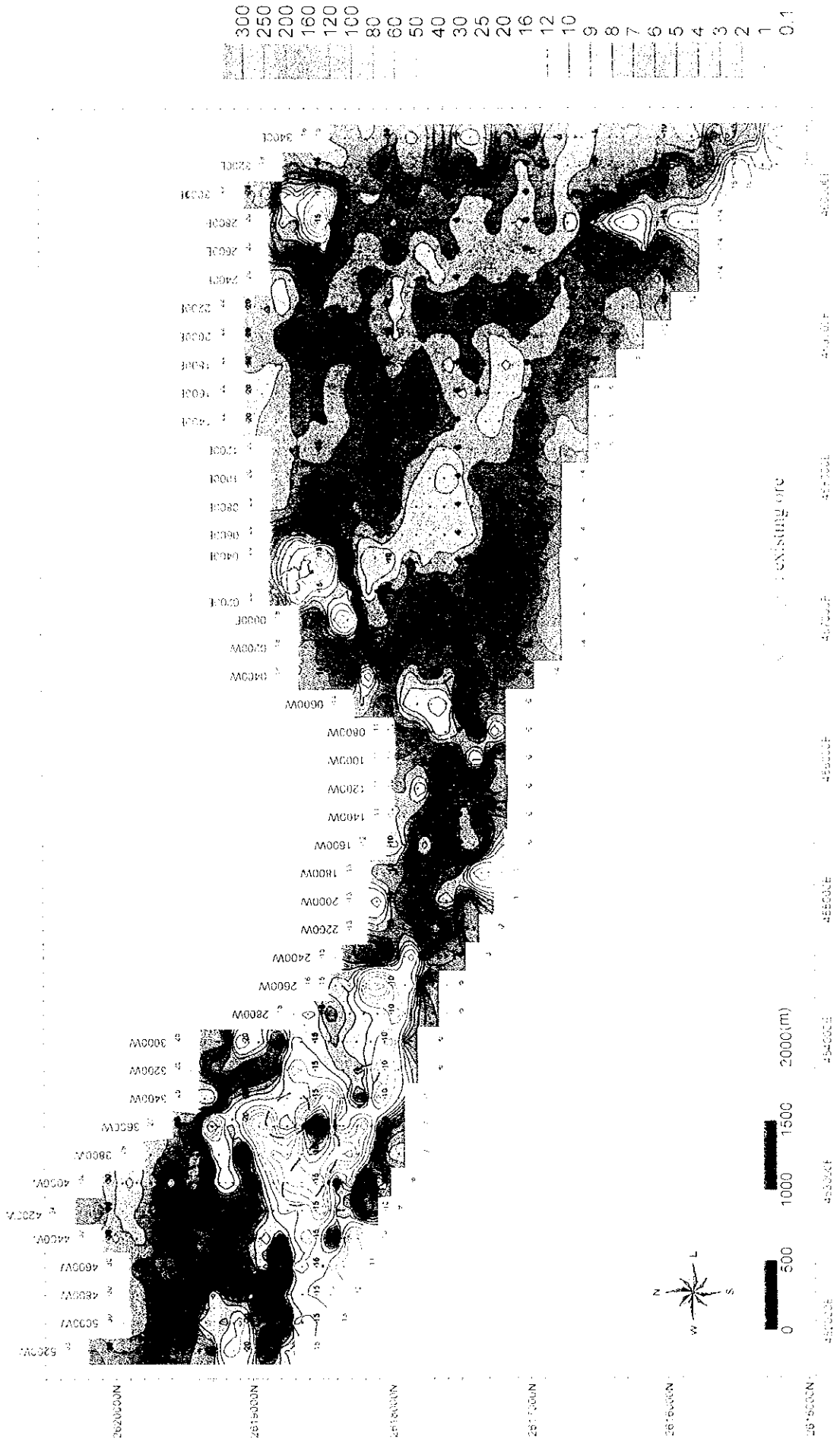
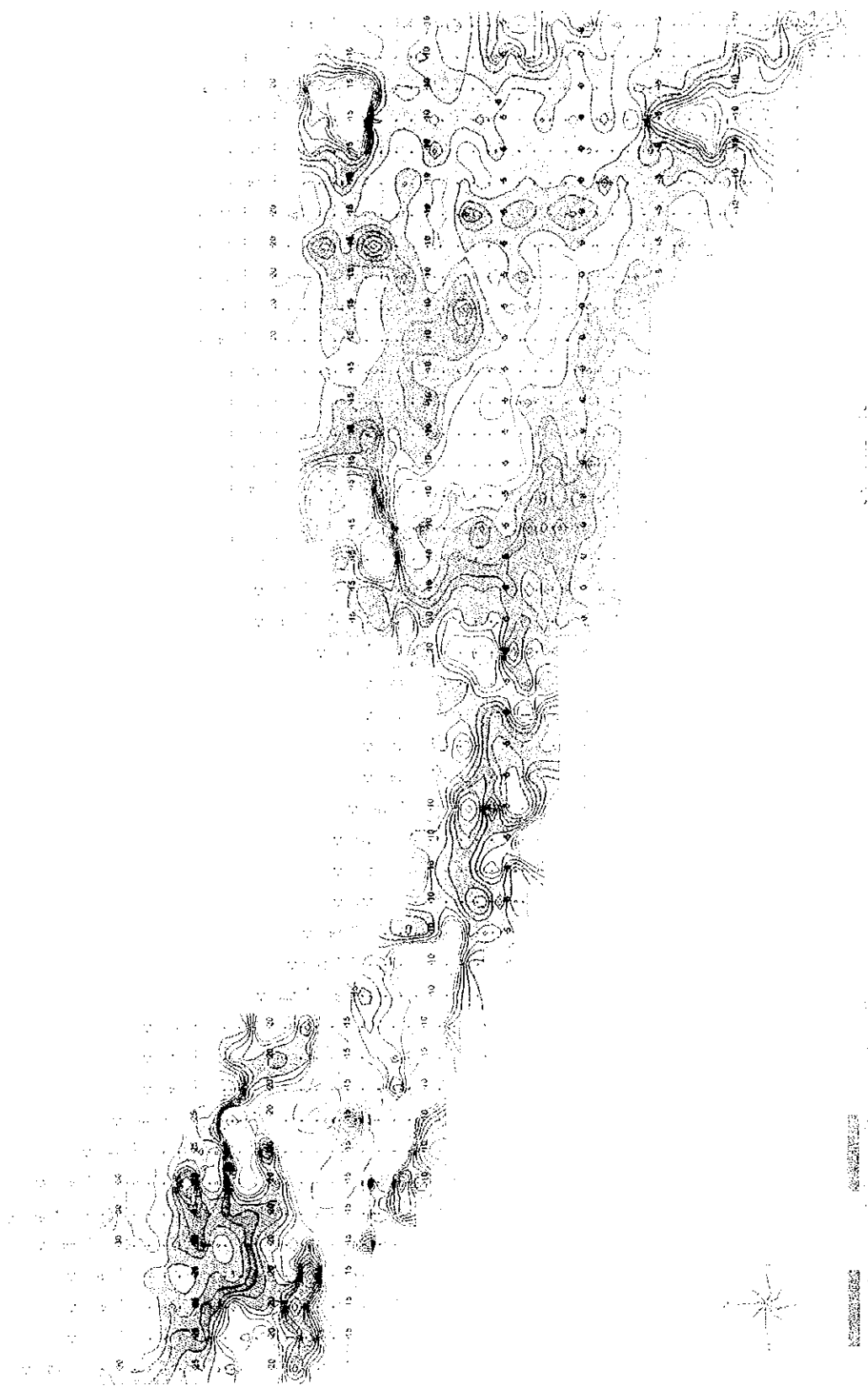


Fig. II-5-14(3) Metal factor plane map for No.3

300
250
200
150
100
50
0
-50
-100
-150
-200
-250
-300





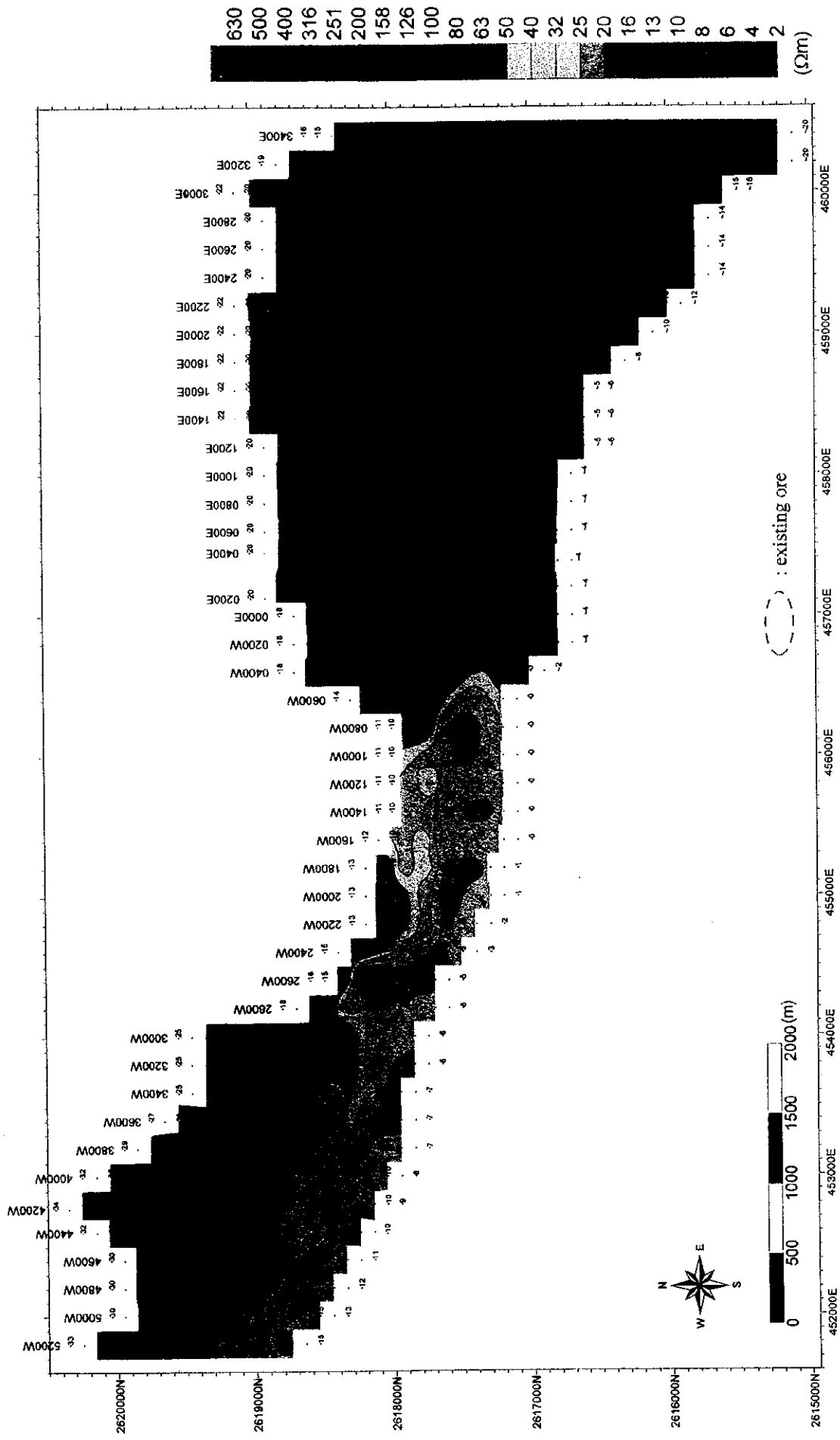
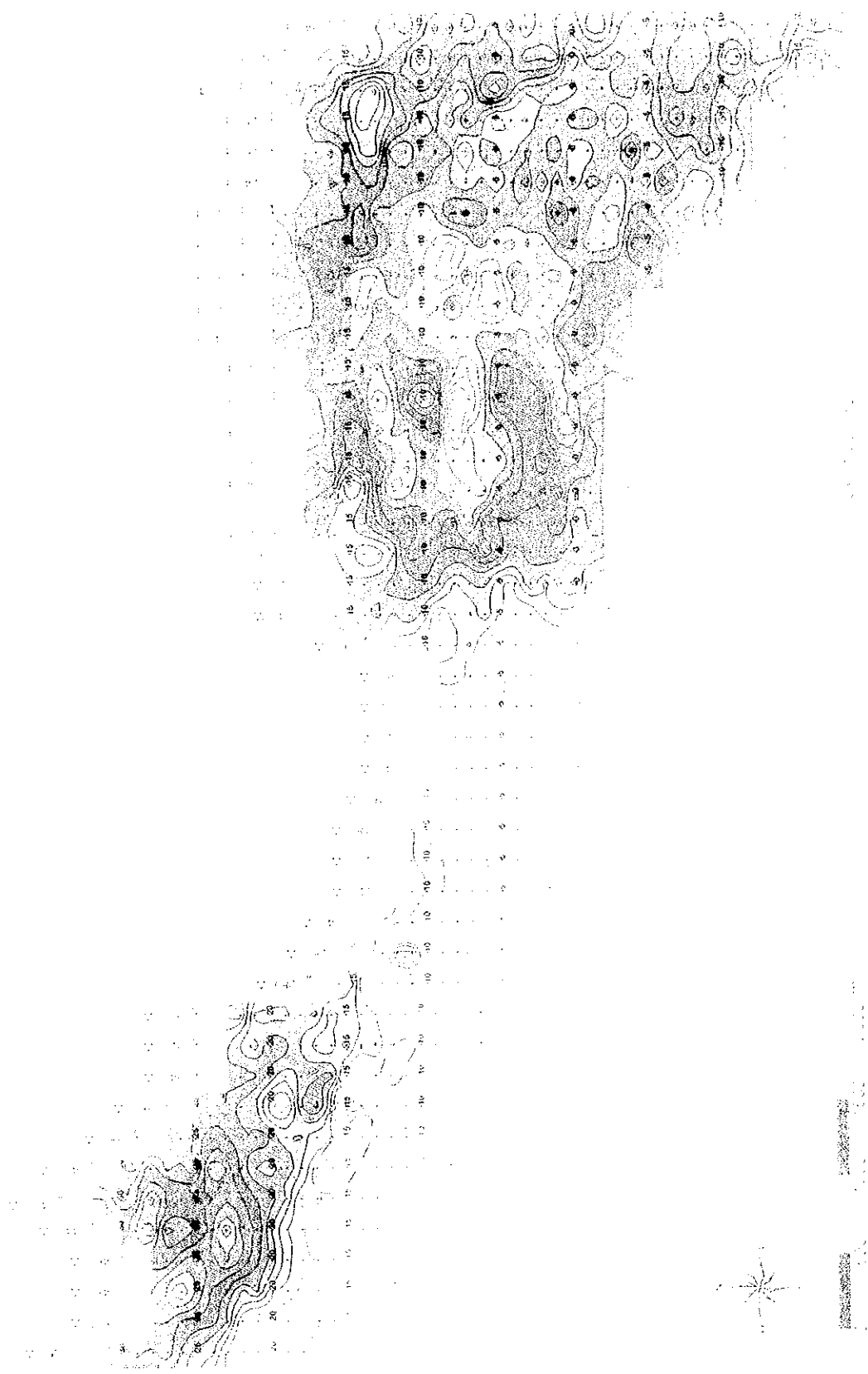


Fig. II -5-15(1) Apparent resistivity plane map for N=4



Fig. II-5-15(1) Apparent resistivity plane map for N+

2500
 3000
 4000
 5000
 6000
 7000
 8000
 9000
 10000
 11000
 12000
 13000
 14000
 15000
 16000
 17000
 18000
 19000
 20000
 21000
 22000
 23000
 24000
 25000
 26000
 27000
 28000
 29000
 30000
 31000
 32000
 33000
 34000
 35000
 36000
 37000
 38000
 39000
 40000
 41000
 42000
 43000
 44000
 45000
 46000
 47000
 48000
 49000
 50000
 51000
 52000
 53000
 54000
 55000
 56000
 57000
 58000
 59000
 60000
 61000
 62000
 63000
 64000
 65000
 66000
 67000
 68000
 69000
 70000
 71000
 72000
 73000
 74000
 75000
 76000
 77000
 78000
 79000
 80000
 81000
 82000
 83000
 84000
 85000
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 92000
 93000
 94000
 95000
 96000
 97000
 98000
 99000
 100000





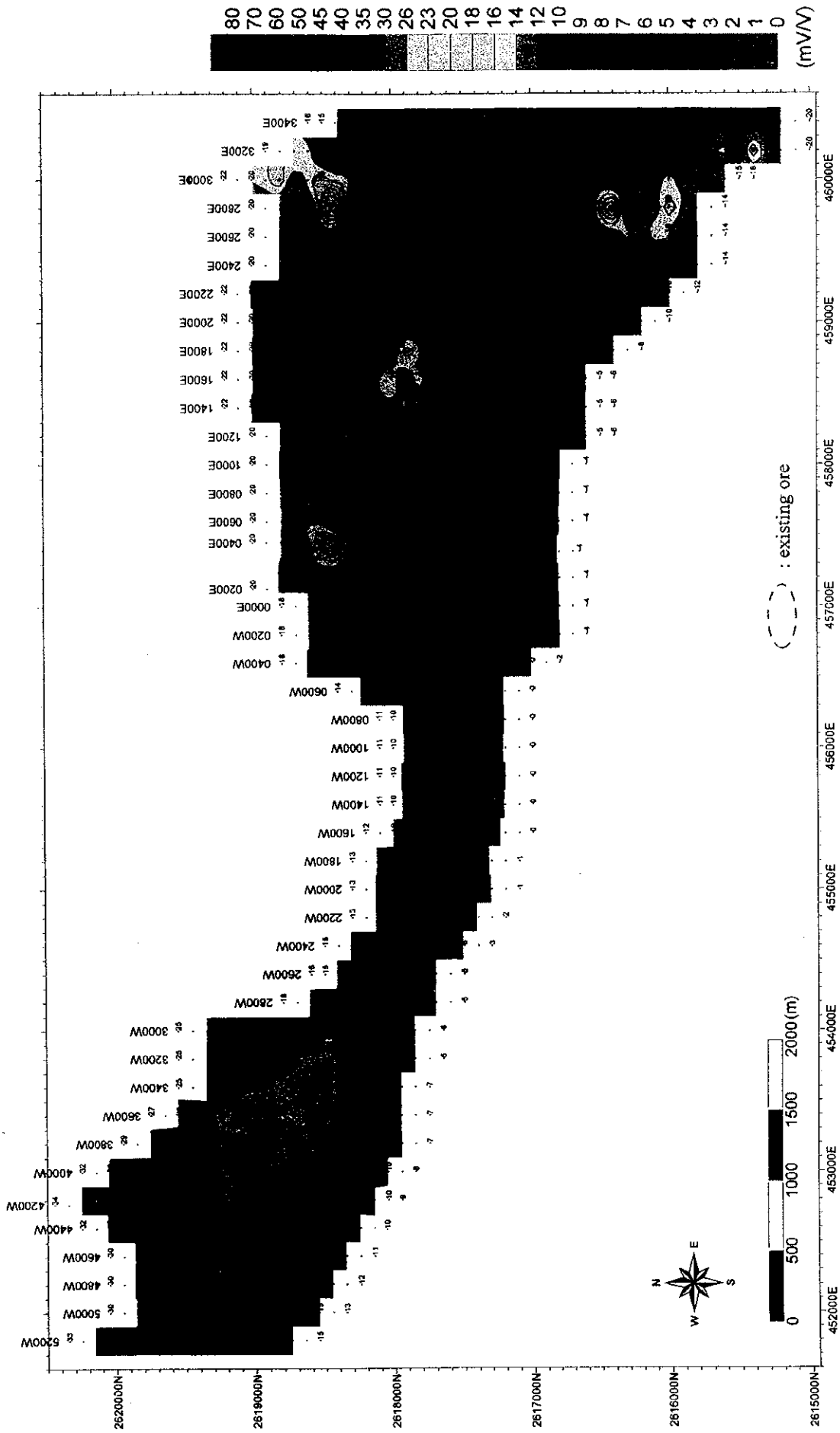


Fig. II -5-15(2) Chargeability plane map for N=4

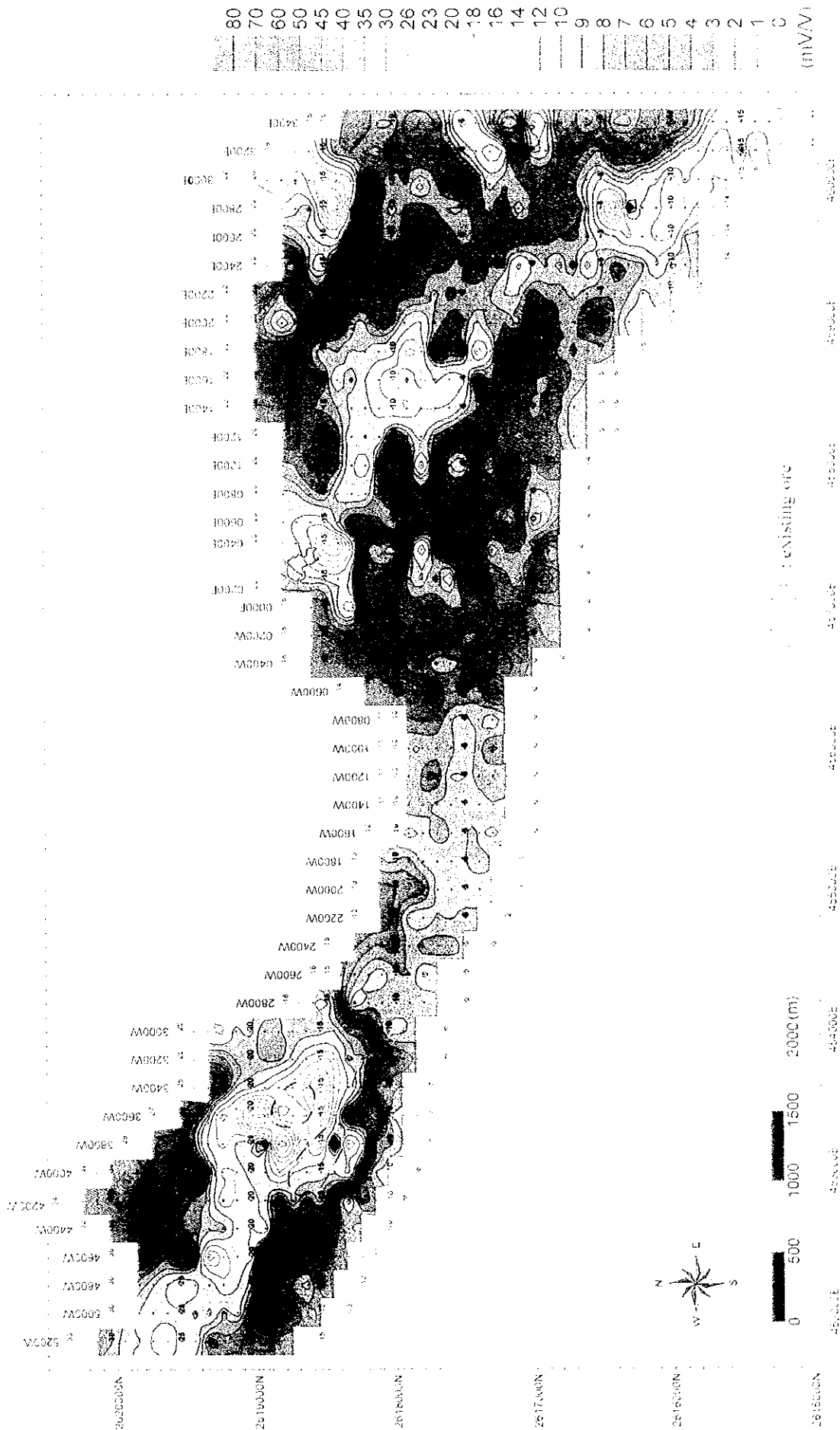
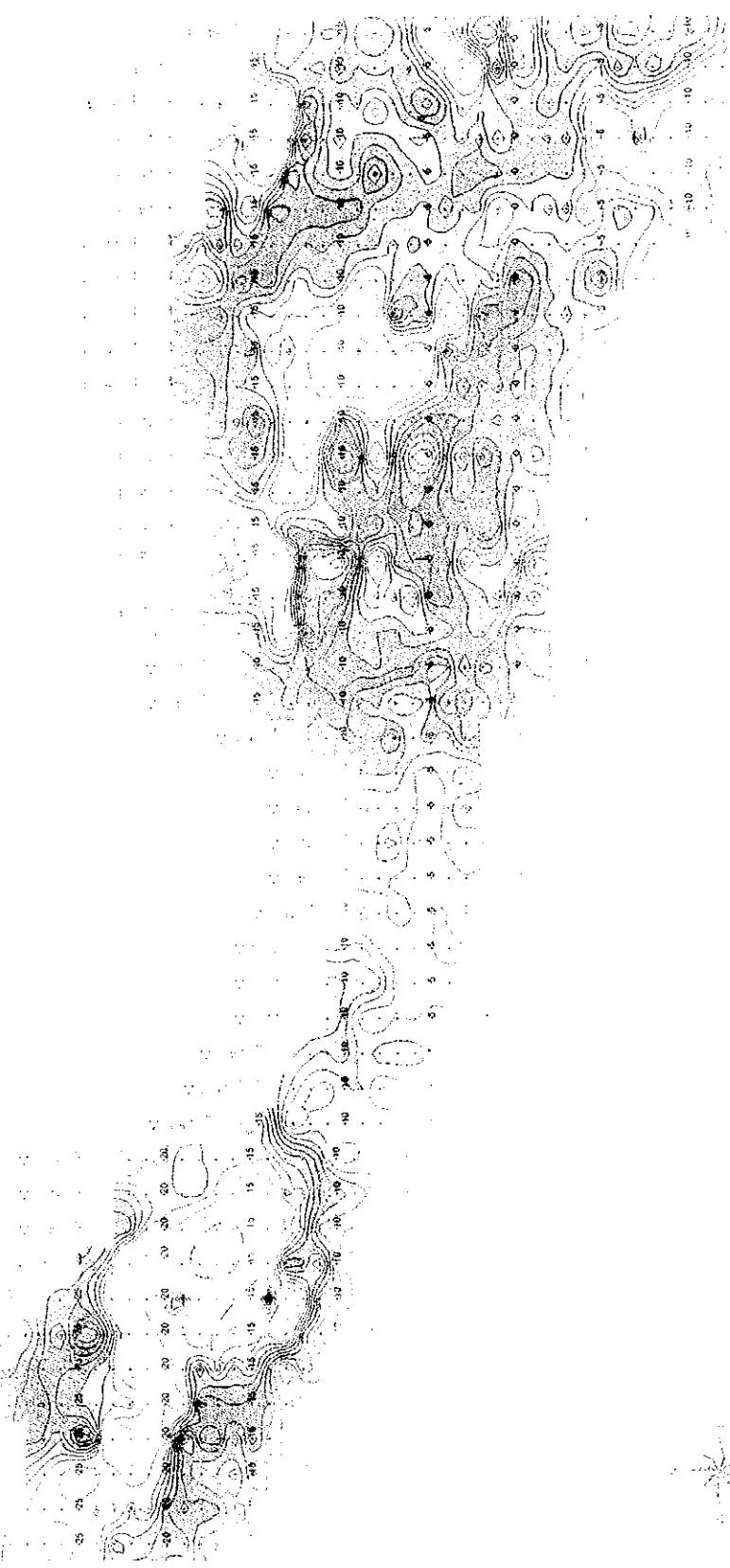


Fig. II-5-15(2) Chargeability plane map for N-4

100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100





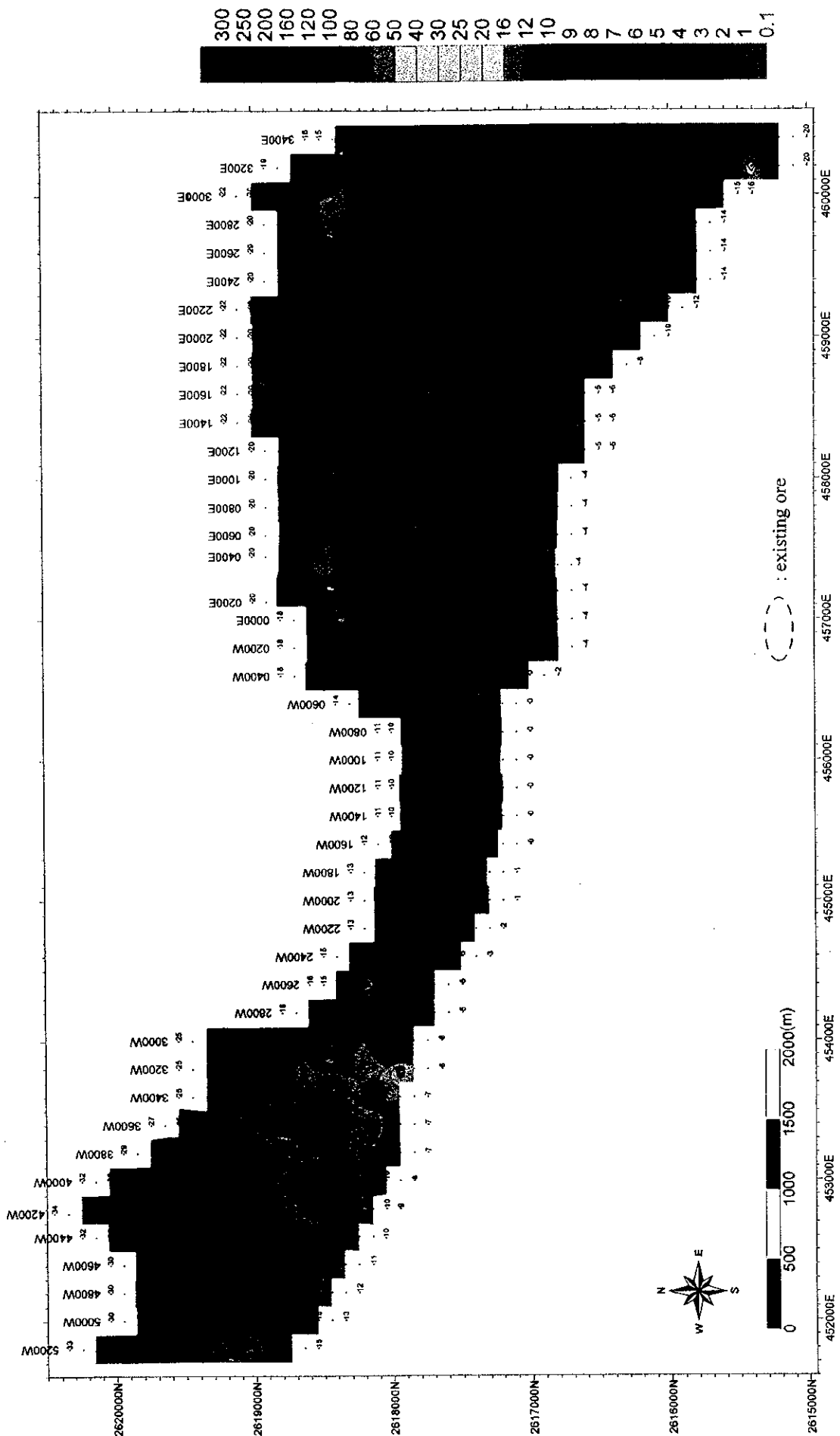
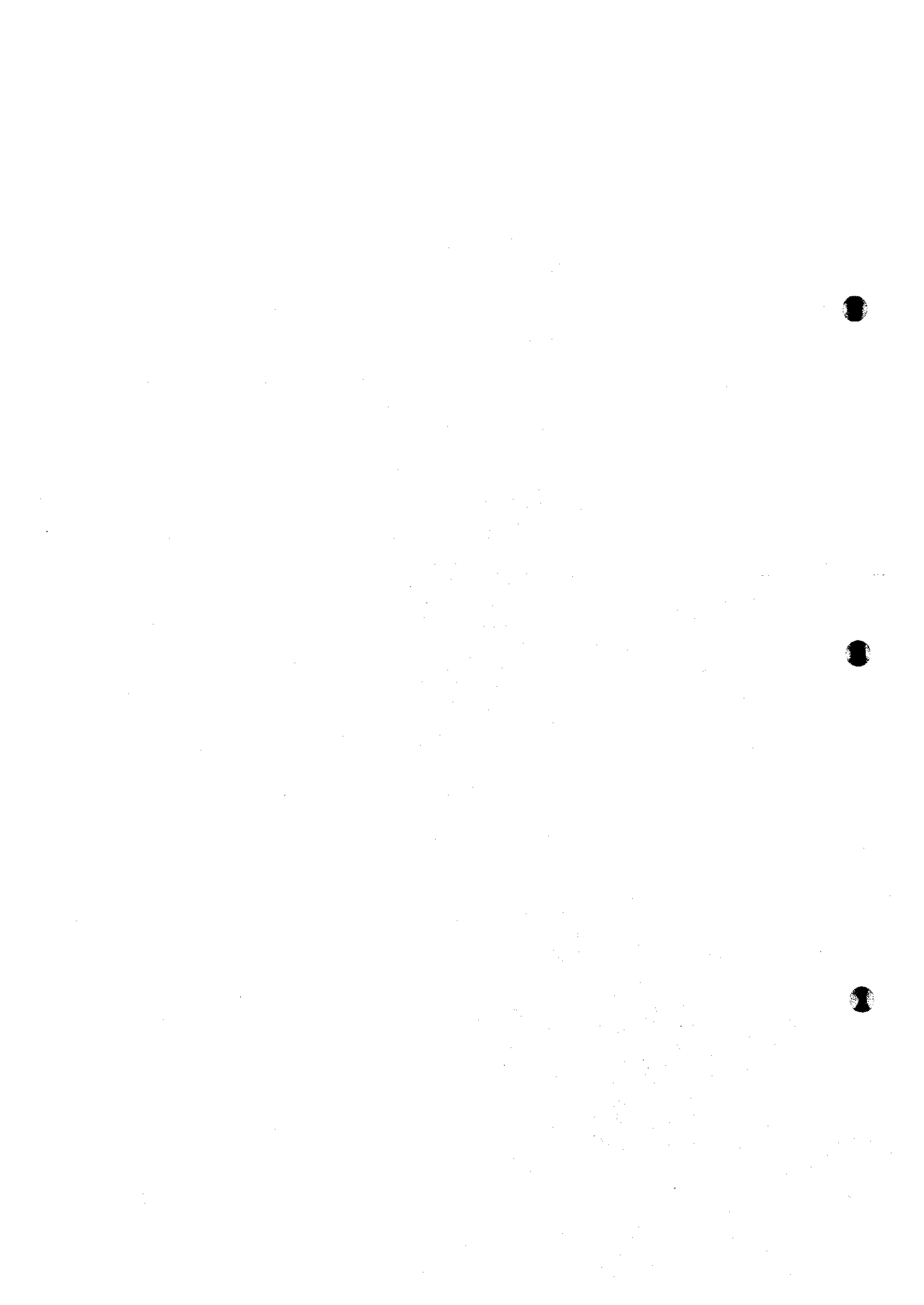


Fig. II-5-15(3) Metal factor plane map for N=4

300 250 200 150 100 50 0 50 100 150 200 250 300
300 250 200 150 100 50 0 50 100 150 200 250 300





- Quron Al-Akhabab area (North East part of the survey area)
- Tawi Rakah prospect
- Hayl as Safil deposit and surroundings
- Najaid area (surroundings of line 1600E and station 700N)

5-5-1 Rakah Gold Mine and surroundings

The TDIP observed results in Rakah mine and its surroundings are shown as plane maps in Fig. II -5-16. The results of the 2D analysis calculated from the lines 00E to 600E are indicated as sections in Fig. II -5-17 and as plane maps at the depths of 100m, 150m, 200m and 250m in Figs. II -5-18. Due to mining operations within the open pit of Rakah mine, the two lines 200E and 400E were slightly displaced from the original plan.

According to the TDIP plane maps, the SE part of the open pit (around station 1600N of line 400E) confirms a high chargeability distribution for $N=1$, and extended southward to deeper depth (Fig. II -5-18(2)). On the other hand, 2D calculations carried out after the geophysical survey, indicates that chargeability distribution around the station 1600N of the line 400E trends NE towards depth, indicating an opposite trend to the indicated by the observed data. According to the results of the past drilling survey carried out around the Rakah deposit, stockwork dips NE from the place where the open pit is located, confirming that the results of the 2D analysis reflects the stockwork.

The observed anomaly of the chargeability pseudosection around the line 400E appears to dip in the opposite direction of the discovered stockwork ore body. According to the IP method, for the case of an inclined IP anomaly, the observed chargeability appears to dip in the opposite direction to the actual anomaly. This explains the reason of the difference between the observed data and the result of 2D analysis obtained around the station 14 to 17 of line 400E. Moreover at the depth of the stations 15 and 16 of line 400E, the chargeability value presents values of more than 20mV/V, indicating that stockwork of a big scale may exist below these stations.

5-5-2 Quron Al-Akhabab area

The TDIP results obtained in Quron Al-Akhabab area are shown as plane maps in Figs. II -5-19 for $N=1,4$. 2D modelings are indicated as sections in the Figs. II -5-20 (Lines 2600E to 3400E) and as plane maps at the depth of 100m, 150m, 200m and 250m in Figs. II -5-21.

Low apparent resistivity and high chargeability values are detected in the central part around the station 1600N between the lines 2800E and 3000E. Low apparent resistivity at shallow level ($N=1$) is seen within a range of about 200m along E-W and 100m along N-S, however at deeper part, the resistivity becomes higher. On the other hand, the chargeability shows strong anomaly values at $N=1$ and covering a wider range than the apparent resistivity, i.e., distributed about 300m along E-W and 200m along N-S. At deeper levels, its scale is smaller but with values of more than 20mV/V. At $N=1$ the center of the chargeability anomaly is seen around the central part of 1600N of line 3000E, but at $N=4$, this high chargeability anomaly is displaced about 200m southwards around 1400N of line



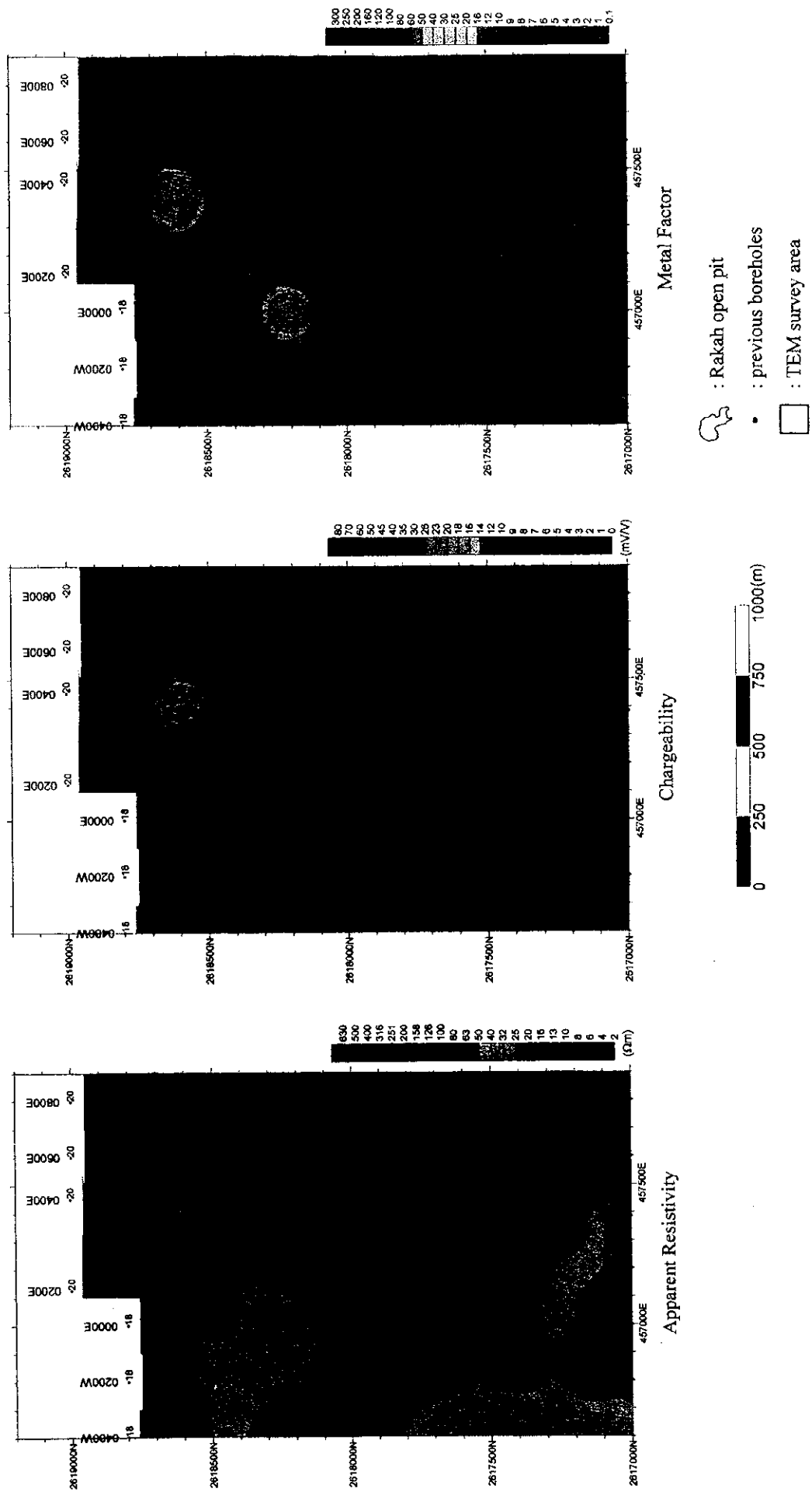


Fig. II-5-16(1) TDIP plane maps in Rakah Mine area for N=1

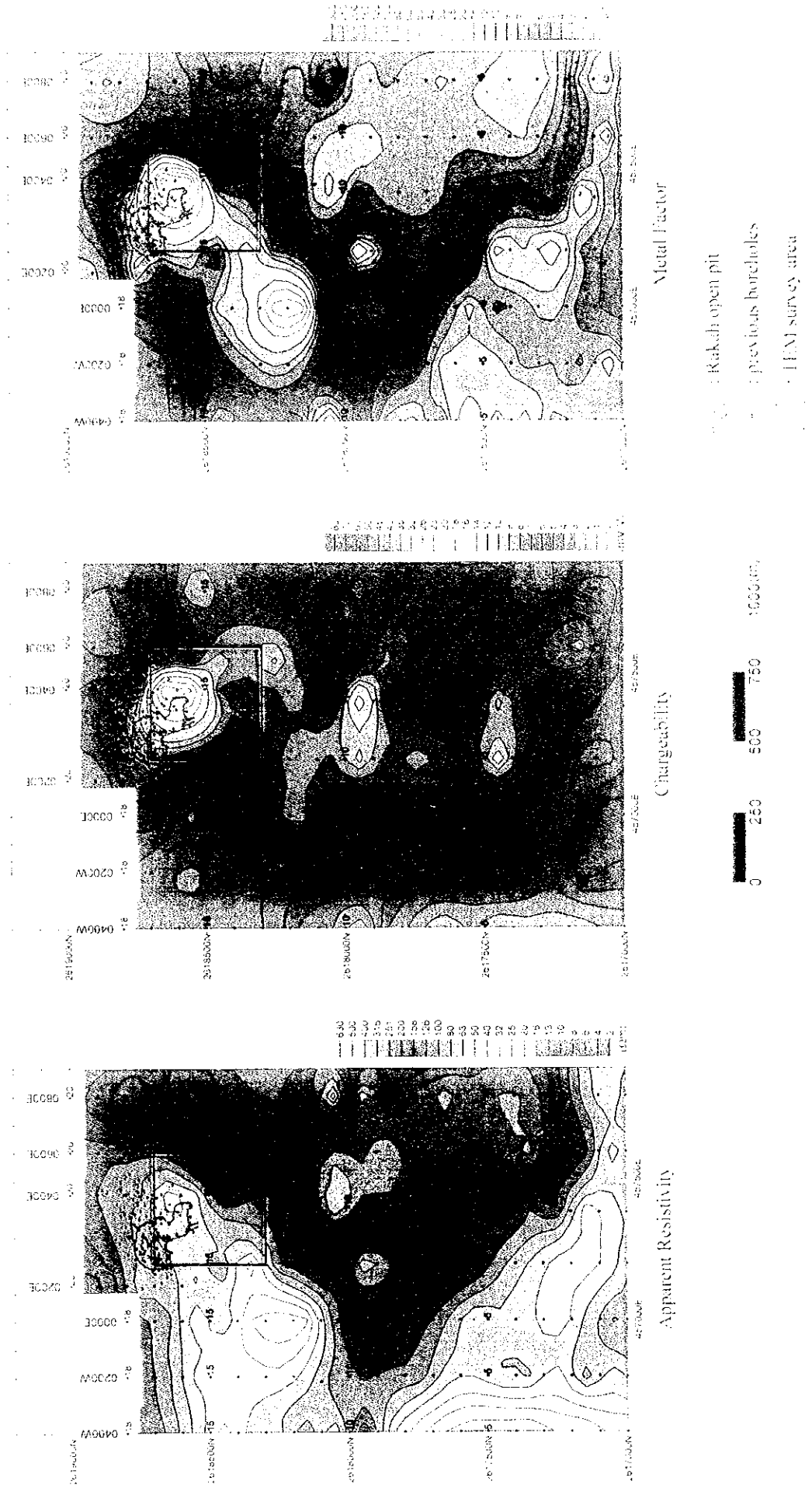
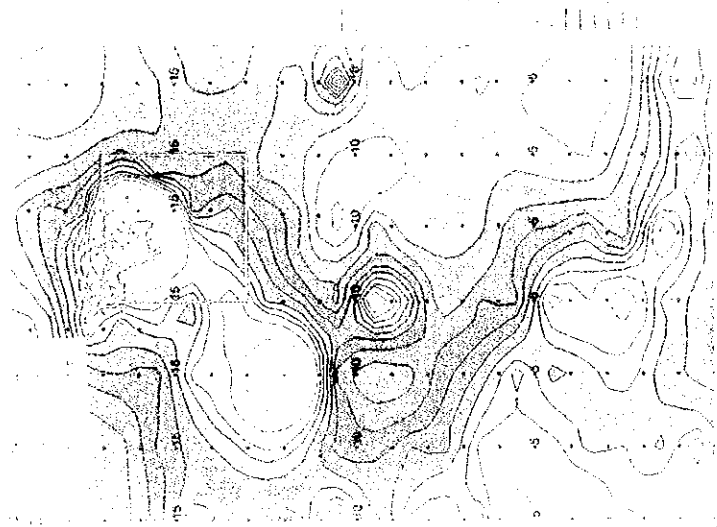
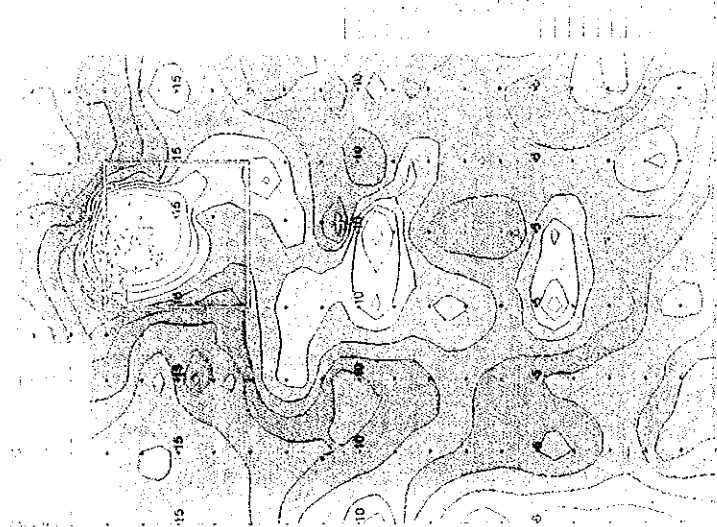


Fig. II-5-16(1) TDDIP plane maps in Kakah Mine area for N-1



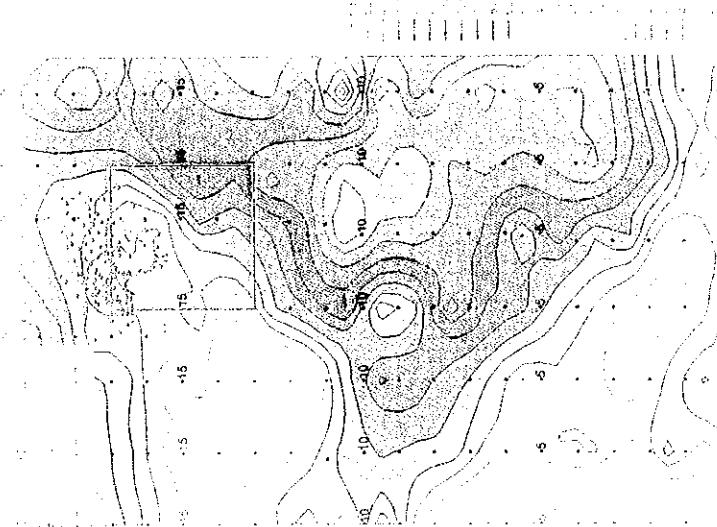
Map 1: 1:50,000

Scale: 1:50,000
 Contour Interval: 5m
 Projection: UTM



Map 2: 1:50,000

Scale: 1:50,000
 Contour Interval: 5m
 Projection: UTM



Map 3: 1:50,000

Scale: 1:50,000
 Contour Interval: 5m
 Projection: UTM



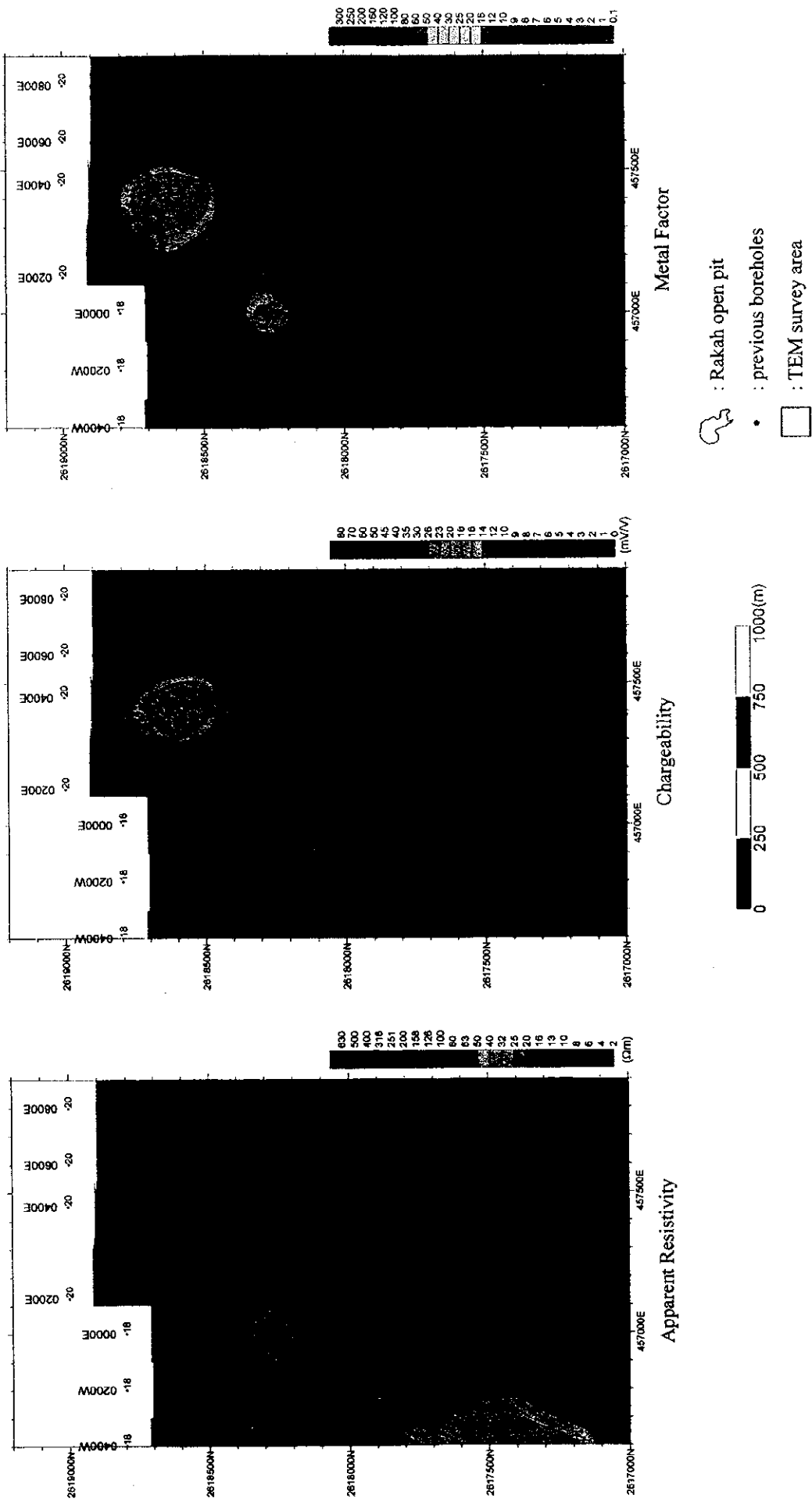


Fig. II -5-16(2) TDIP plane maps in Rakah Mine area for N=2

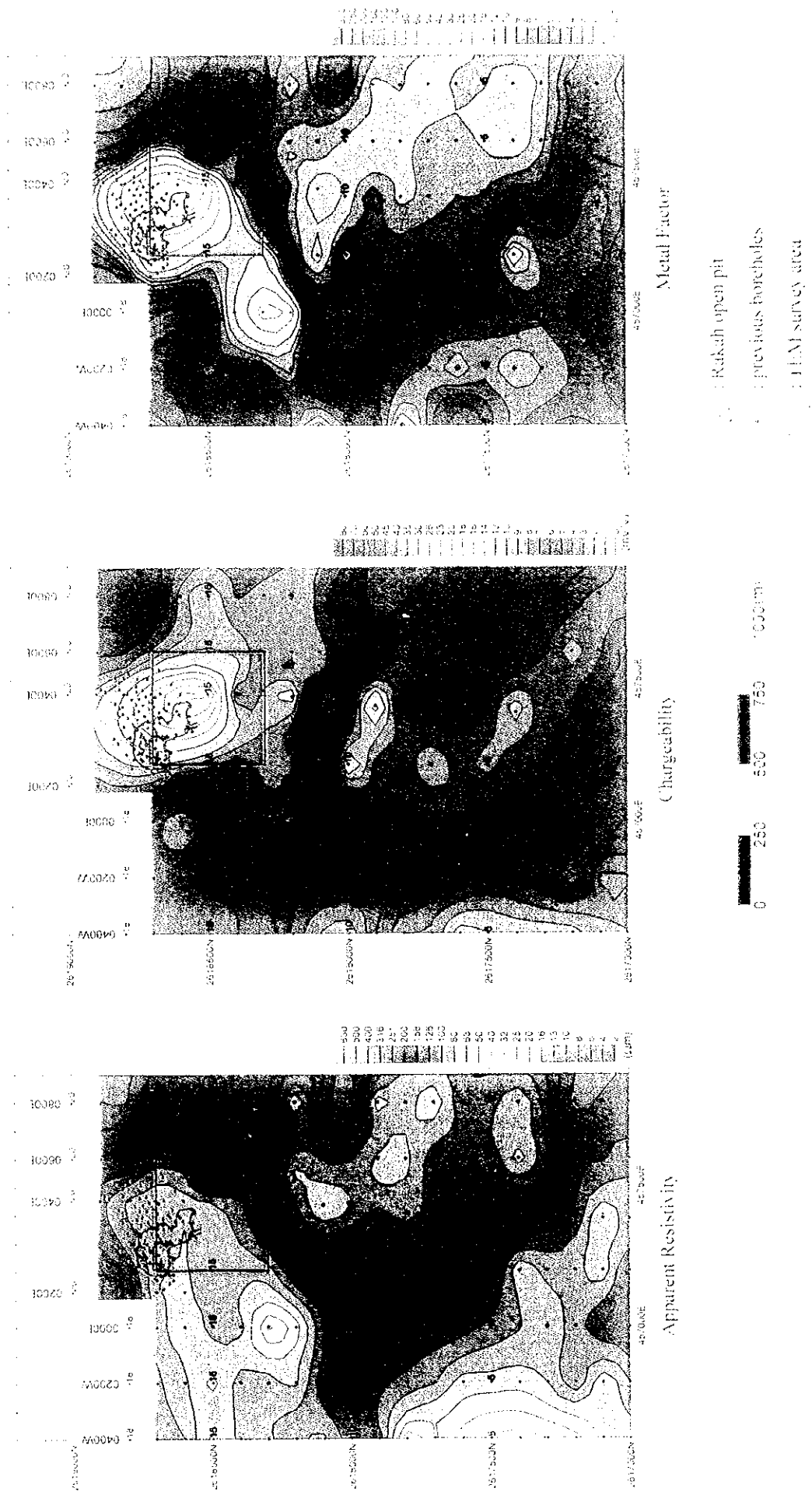
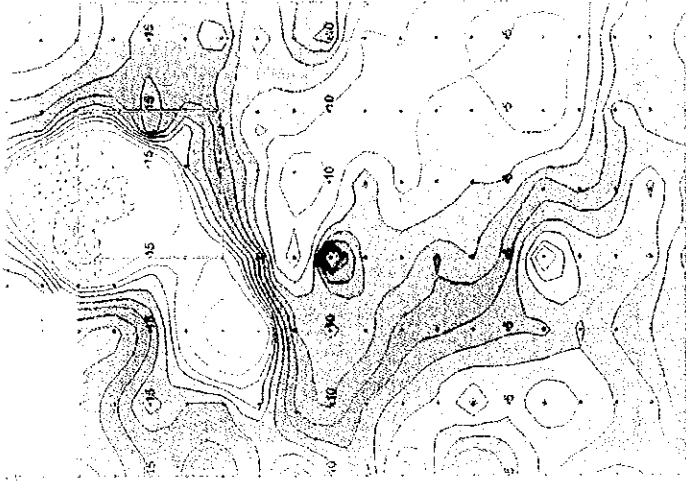


Fig. II-5-16(2) TDDIP plane maps in Rakah Mine area for N-2

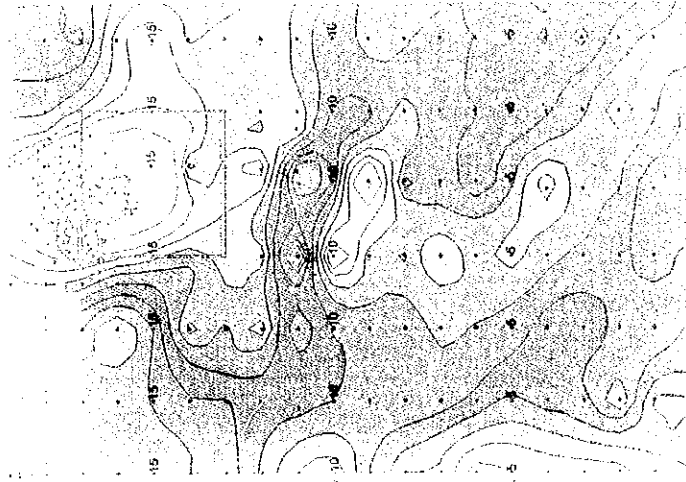


Map 1

1000

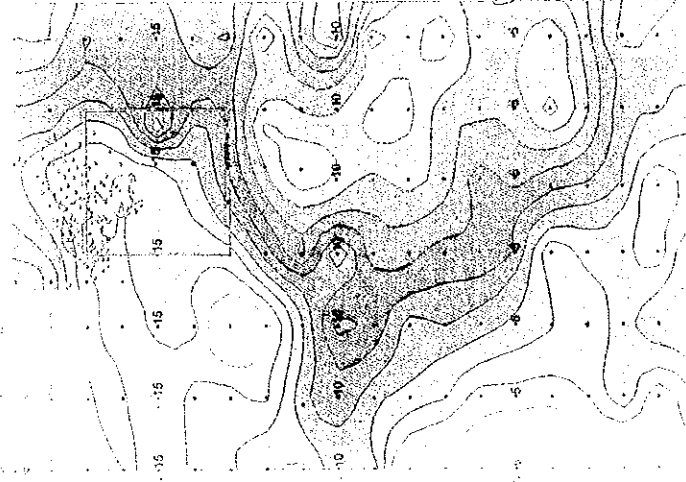
1000

1000



Map 2

1000



Map 3



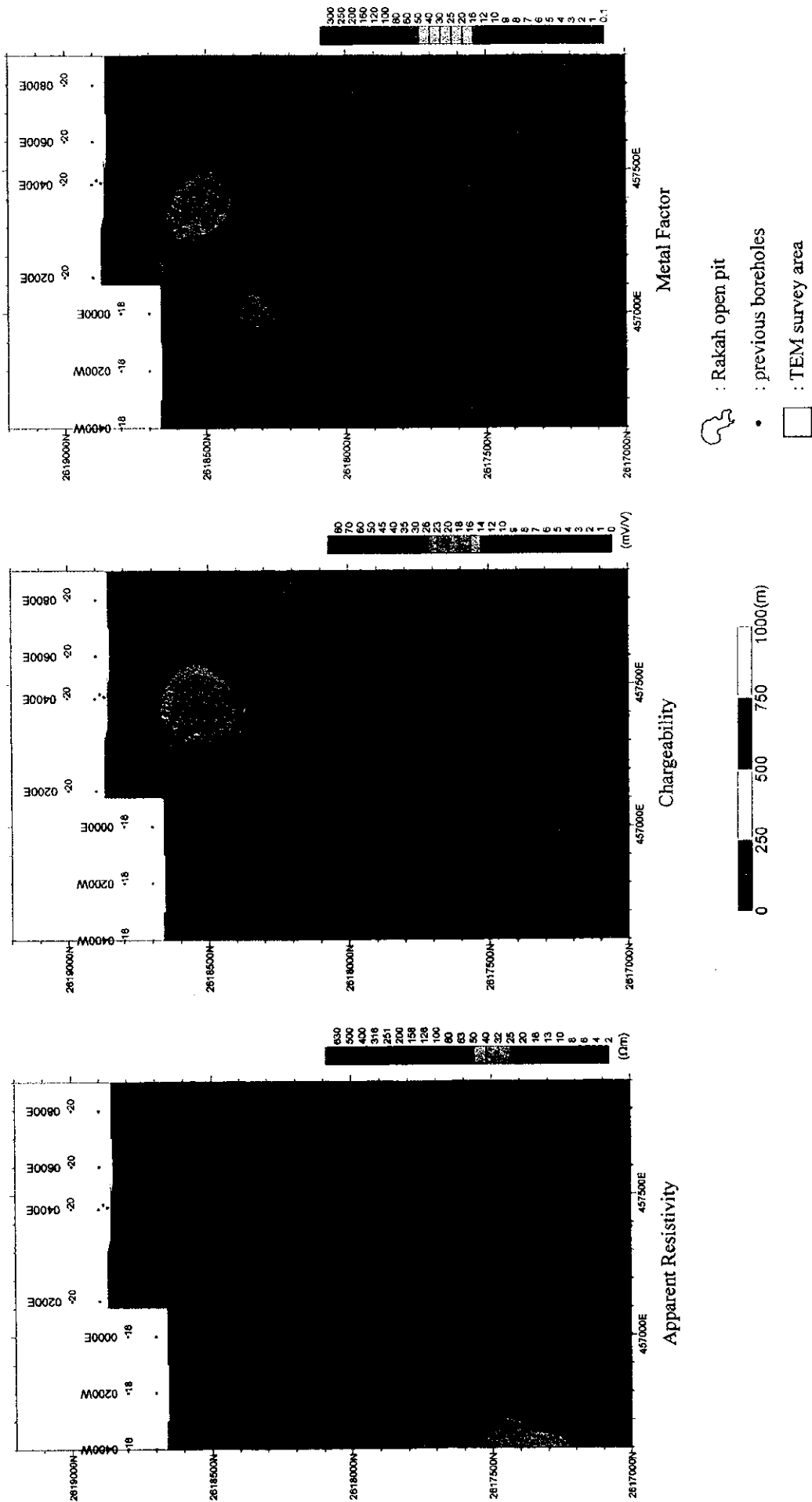


Fig. II -5-16(3) TDIP plane maps in Rakah Mine area for N=3

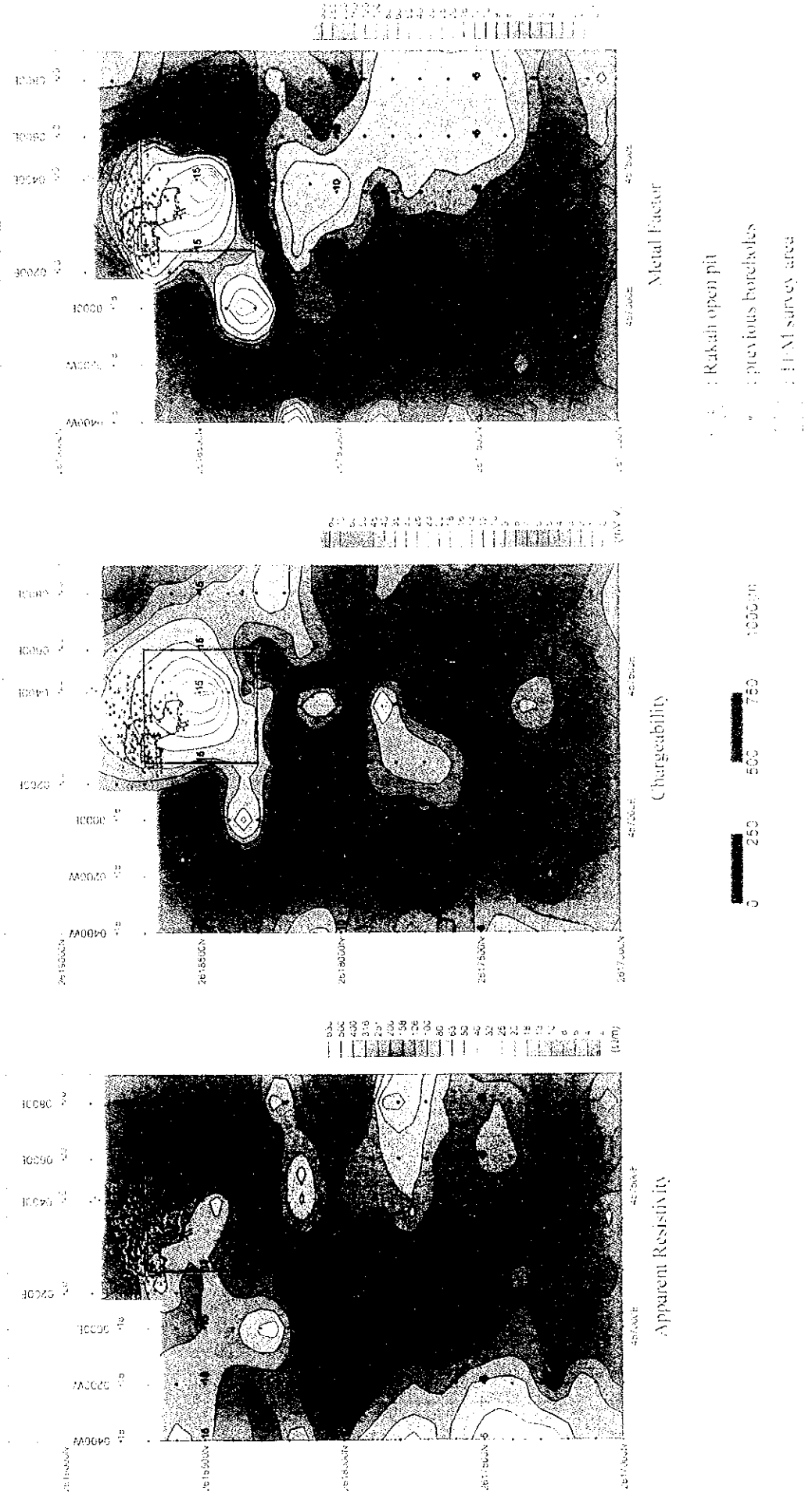
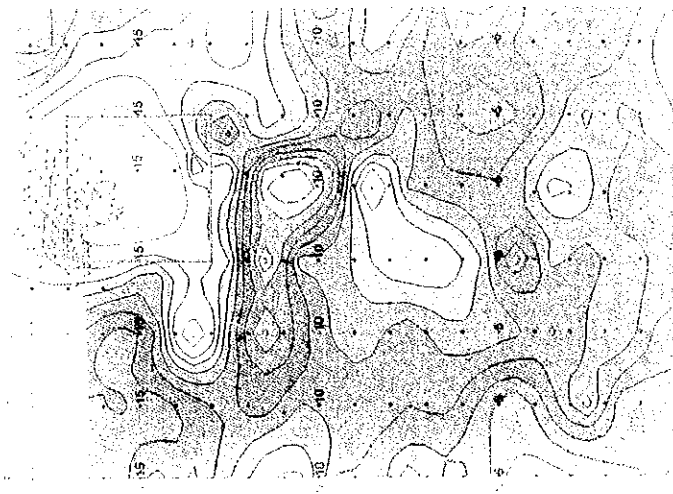


Fig. II-5-16(3) EDIP plane maps in Rakah Mine area for N-3



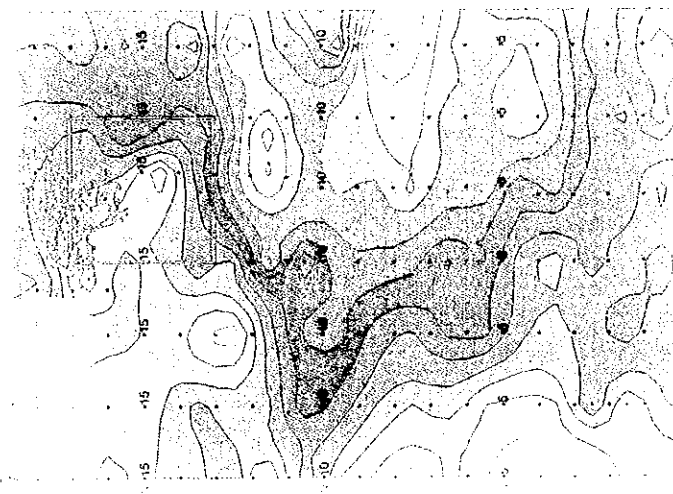
North East

10
15
20
25
30
35
40
45
50



Central

10
15
20
25
30
35
40
45
50



South West

10
15
20
25
30
35
40
45
50



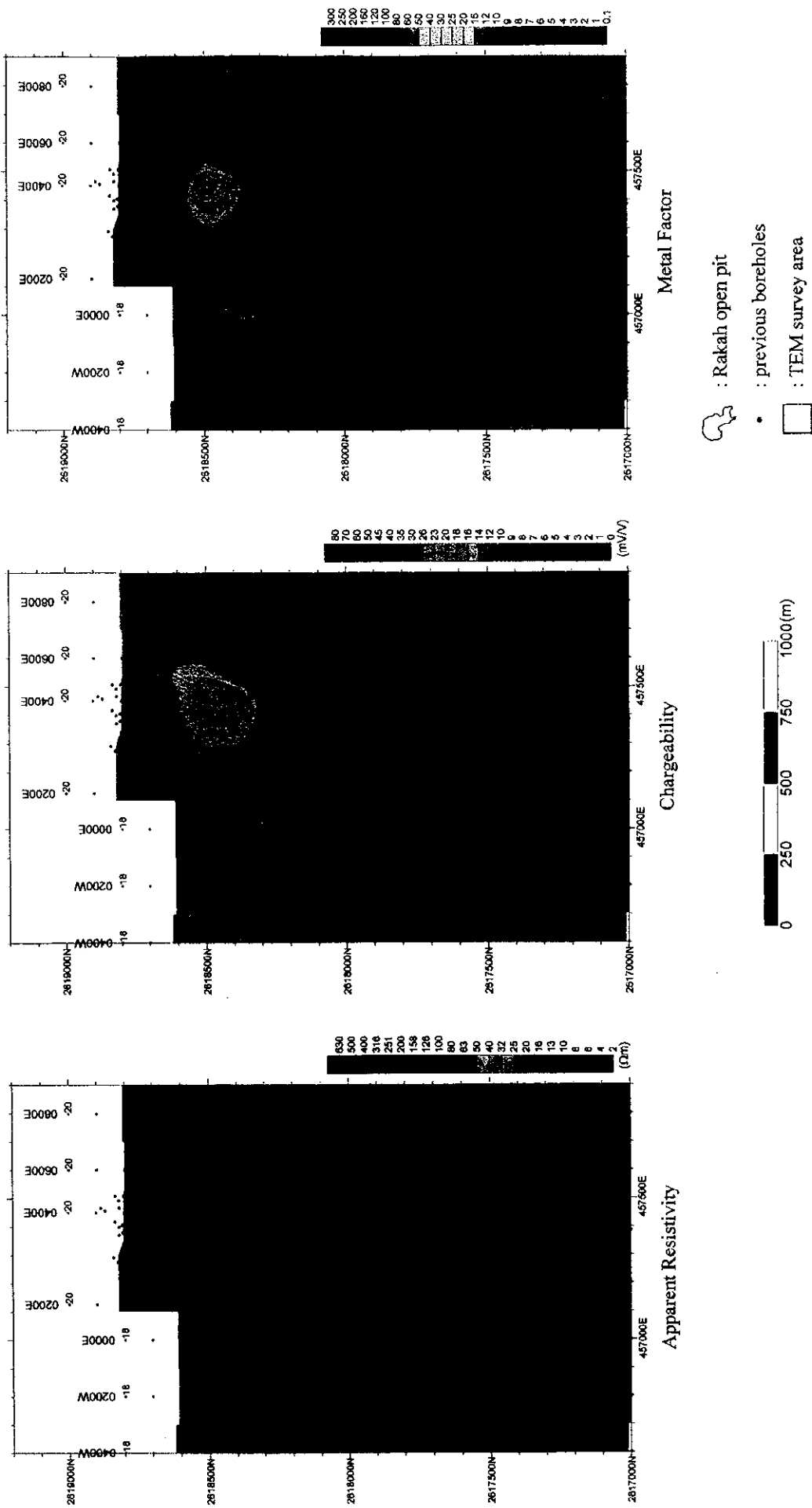


Fig. II-5-16(4) TDIP plane maps in Rakah Mine area for N=4

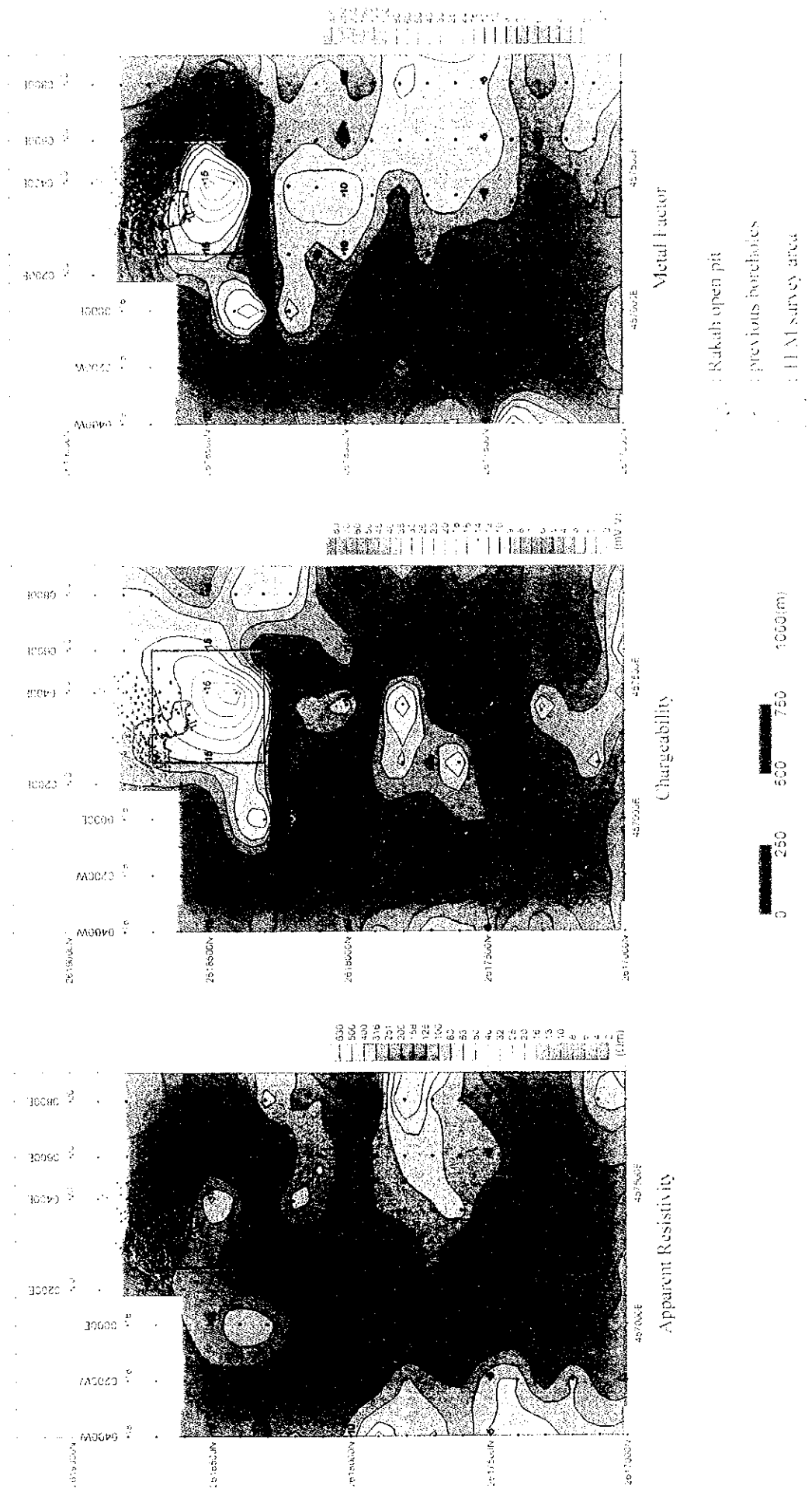
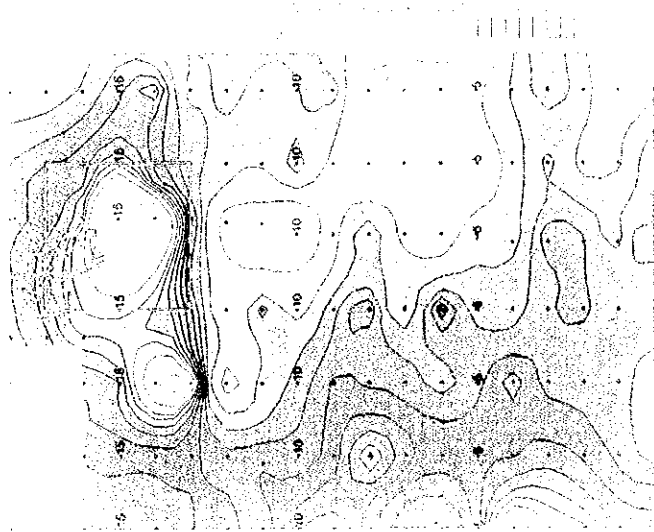


Fig. II-5-16(4) IIP plane maps in Rakah Mine area for N +



North East

0 5 10 15 20

0 5 10 15 20

0 5 10 15 20

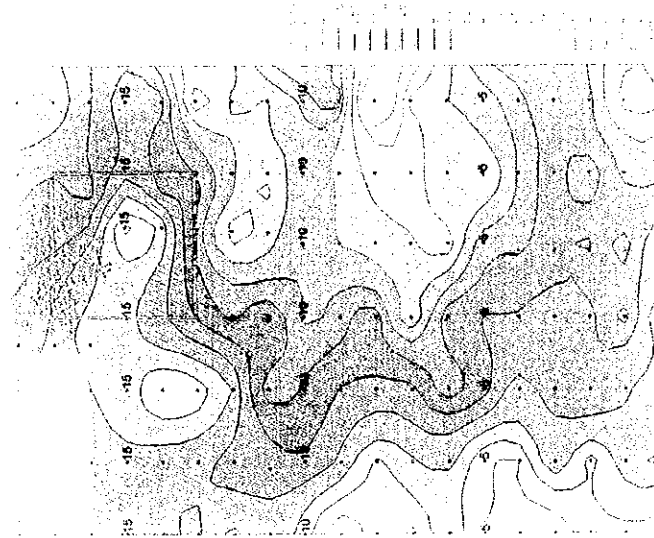


Central

0 5 10 15 20

0 5 10 15 20

0 5 10 15 20



South West

0 5 10 15 20

0 5 10 15 20

0 5 10 15 20

Topographic map of the study area showing contour lines and elevation values.



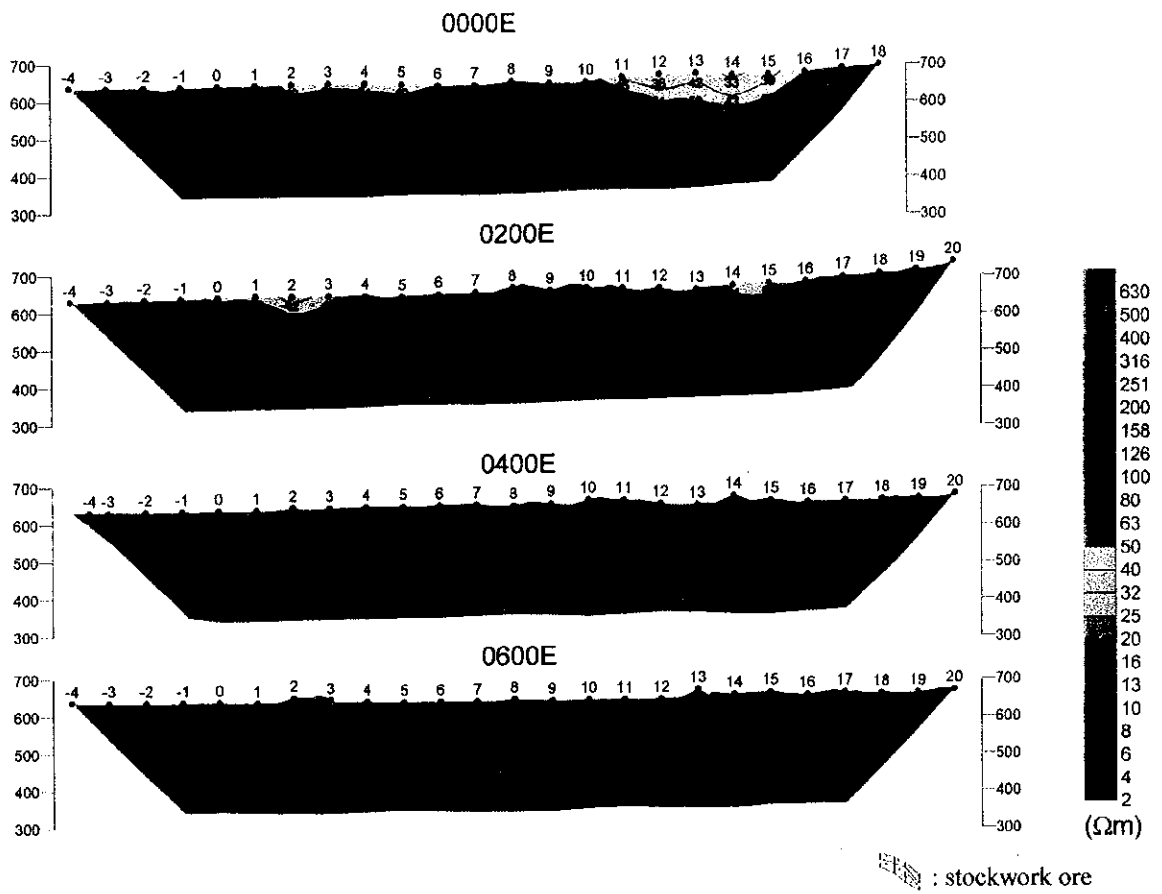


Fig. II -5-17(1) 2D analysis sections for resistivity in Rakah Mine area

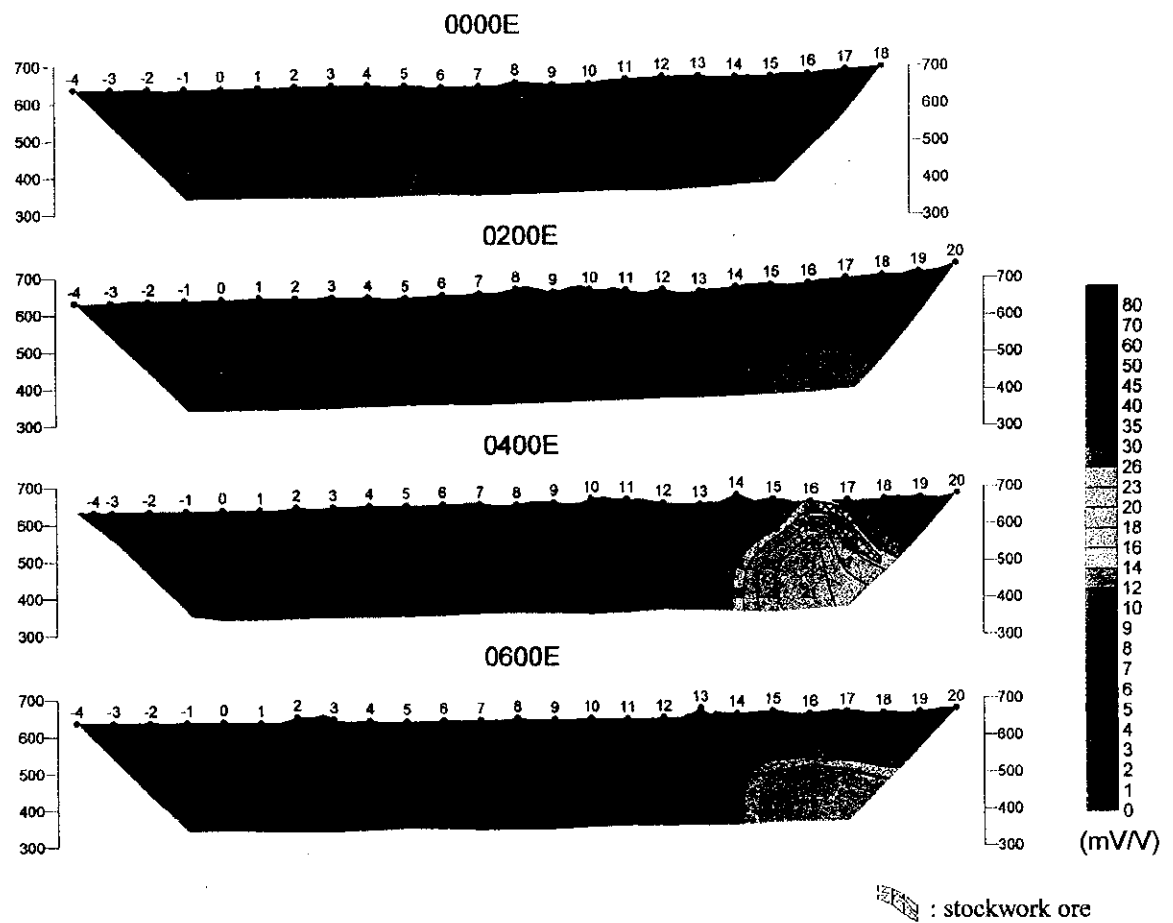


Fig. II -5-17(2) 2D analysis sections for Chargeability in Rakah Mine area

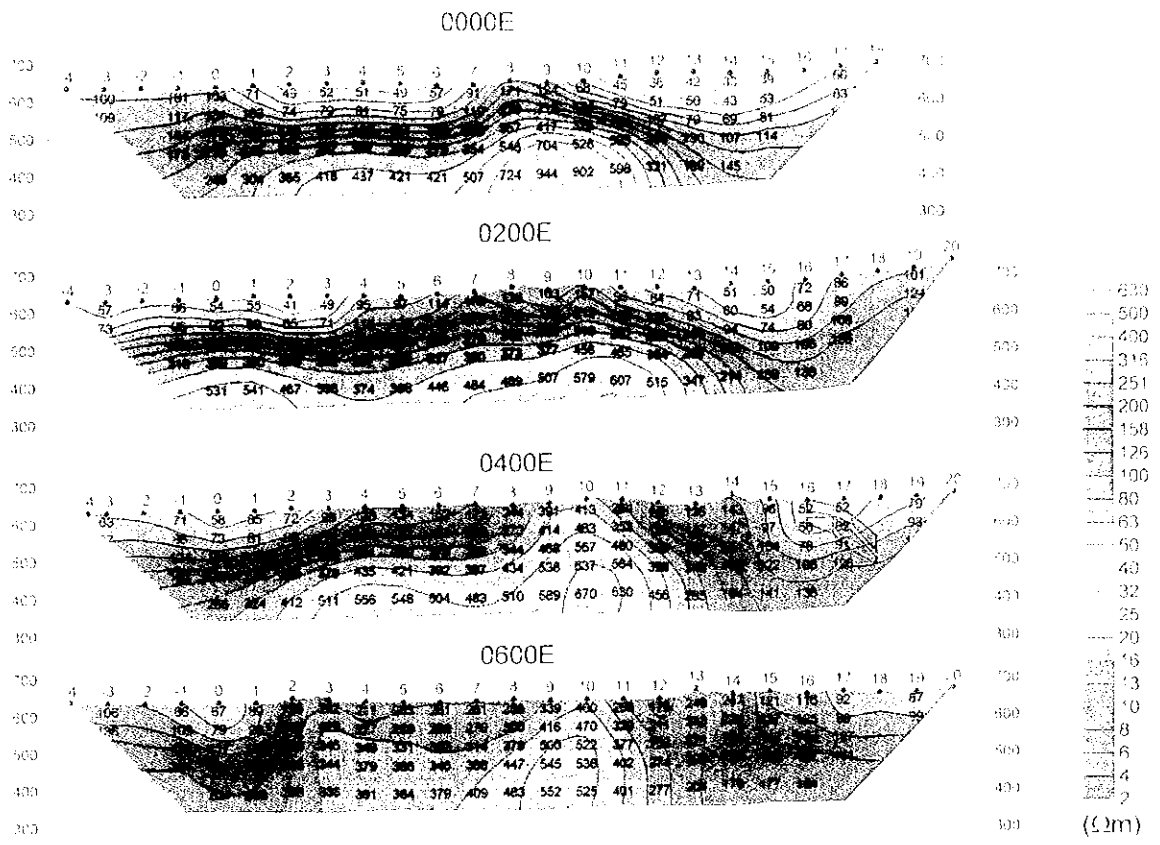


Fig. II-5-17(1) 2D analysis sections for resistivity in Rakah Mine area

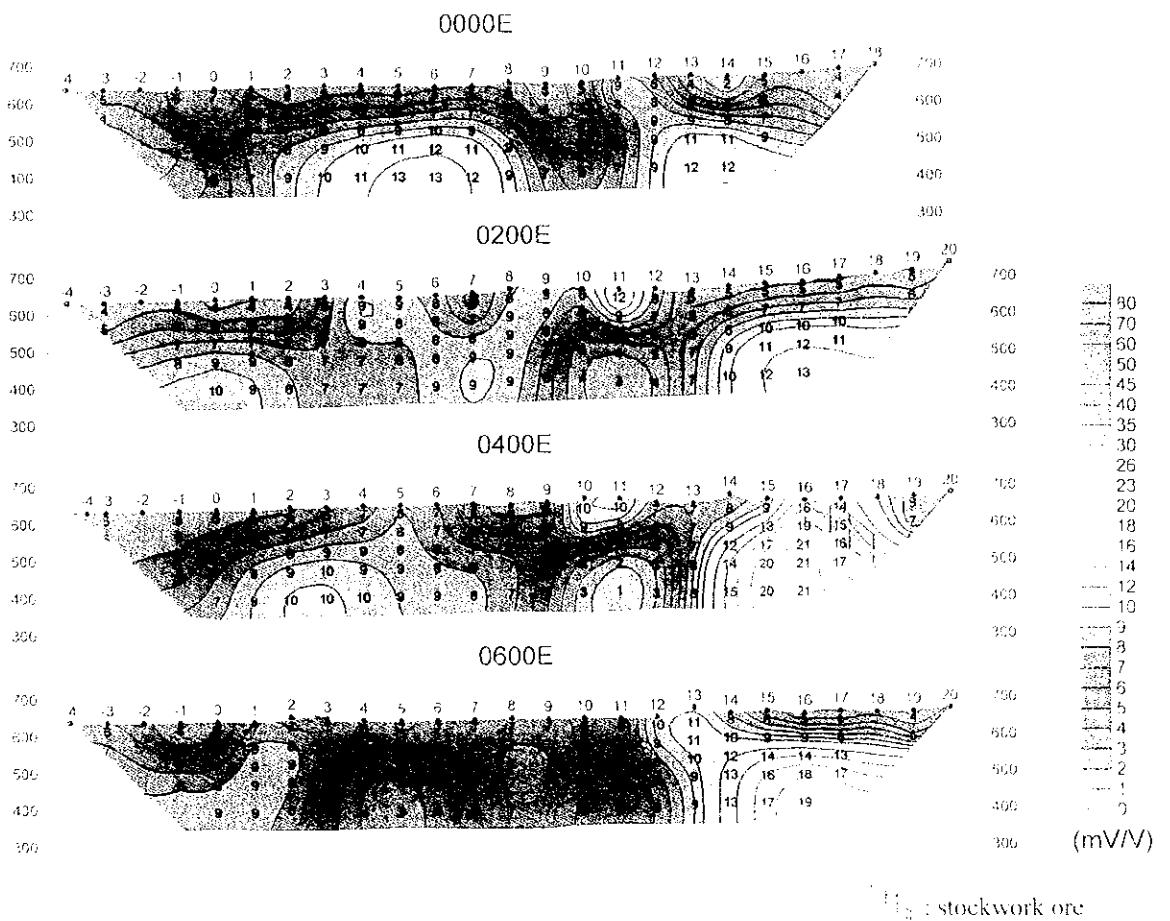


Fig. II-5-17(2) 2D analysis sections for Chargeability in Rakah Mine area

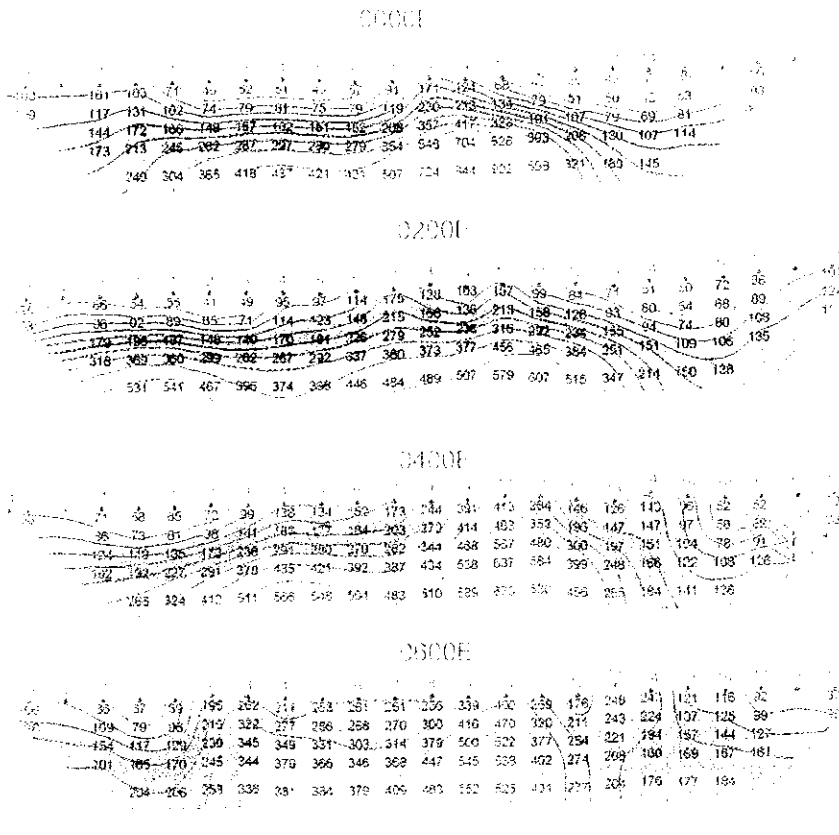


Fig. 8.17(1) 2D analysis sections for resistivity in Rakah Mine area

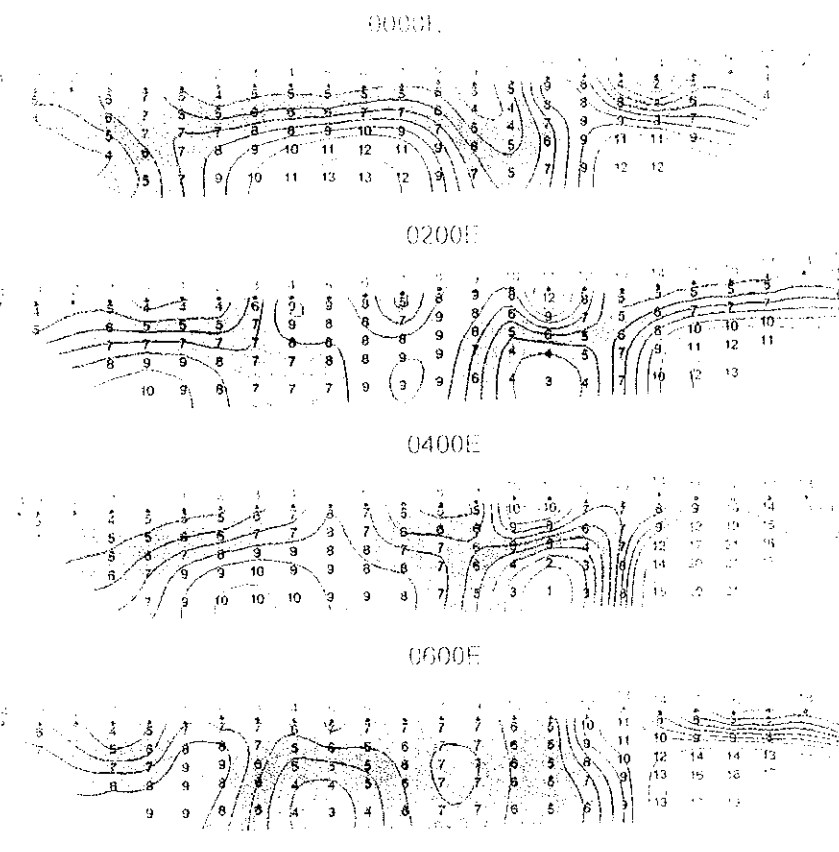


Fig. 8.17(2) 2D analysis sections for Chlorinity in Rakah Mine area



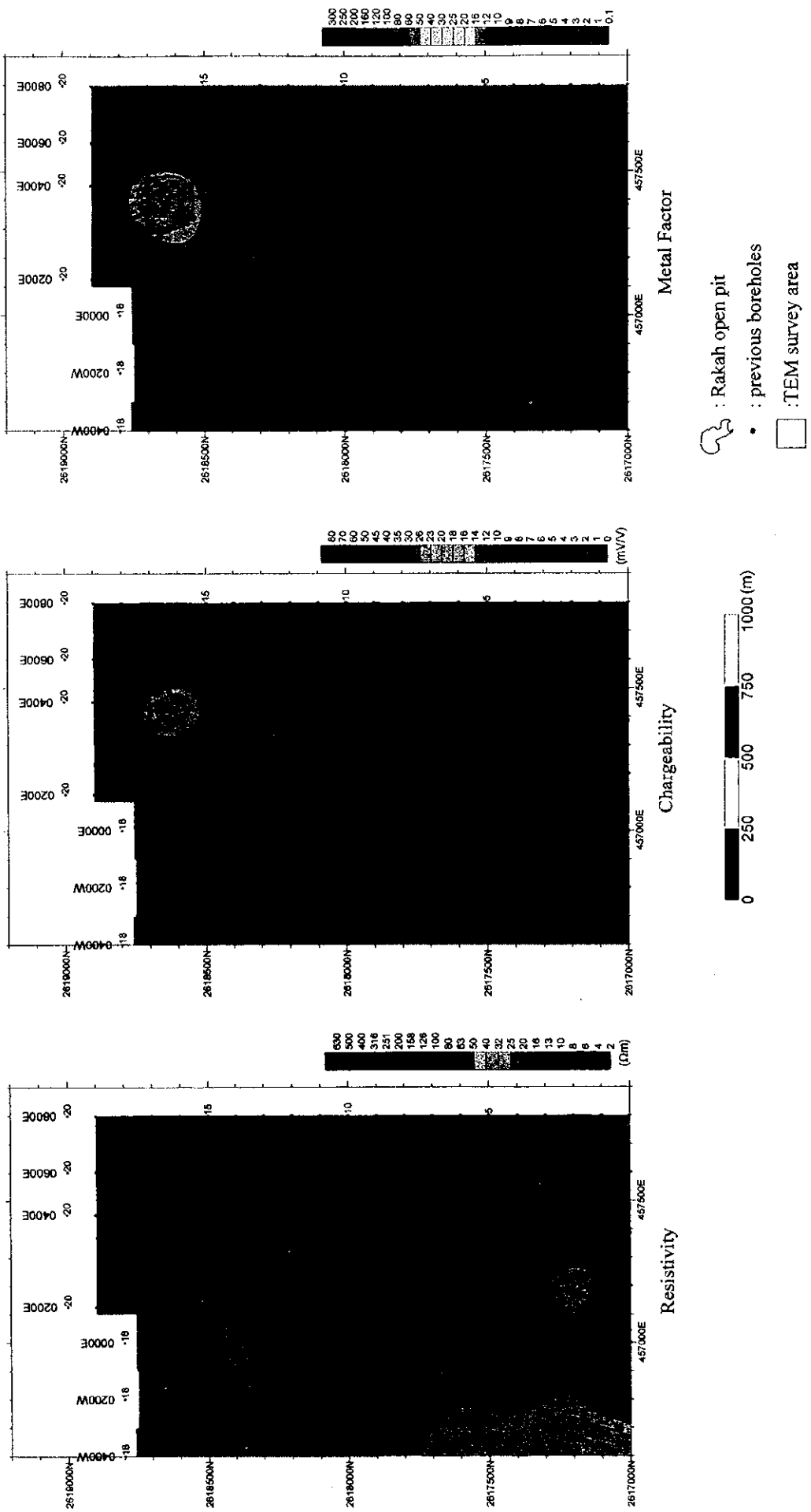


Fig. II-5-18(1) 2D analysis plane maps in Rakah Mine area at 100m depth

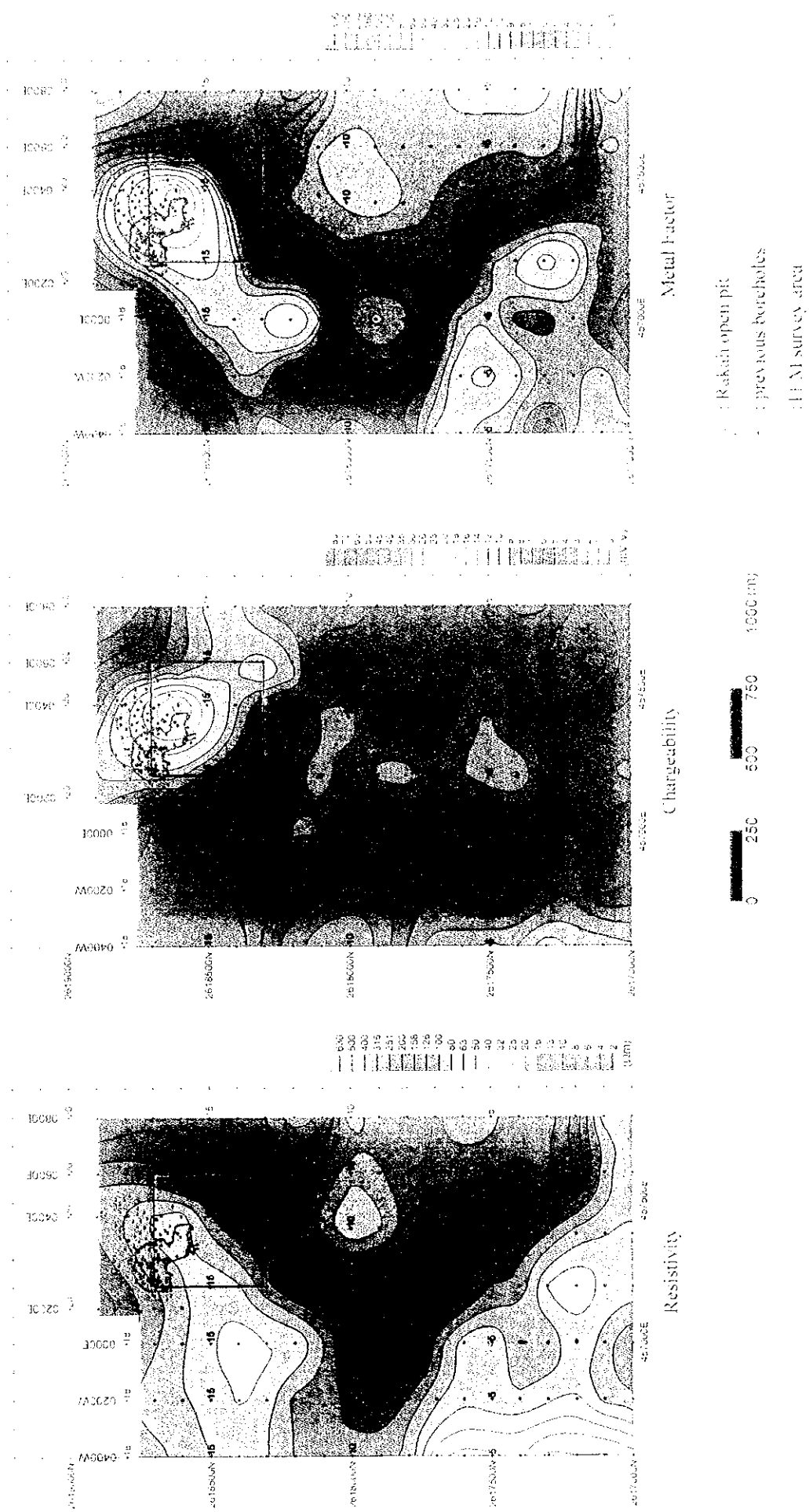
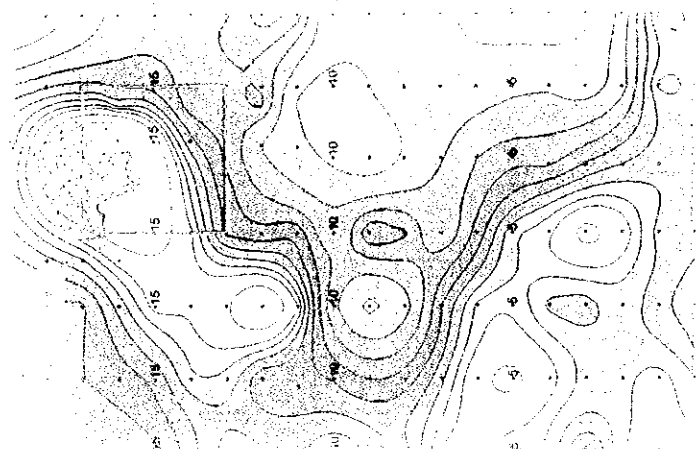
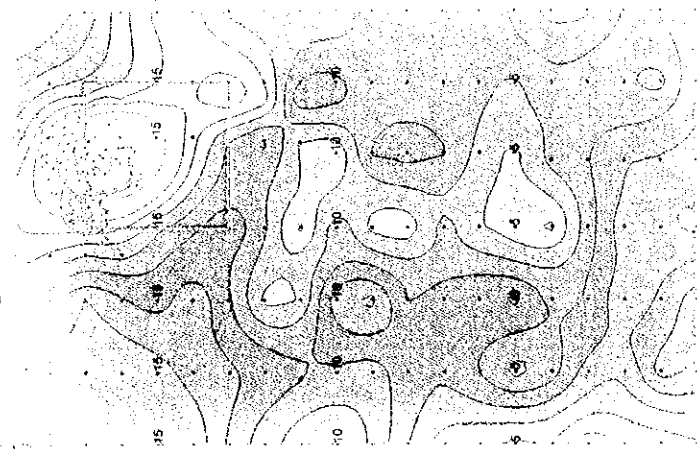


Fig. II-5-18(1) 2D analysis plane maps in Rakah Mine area at 100m depth



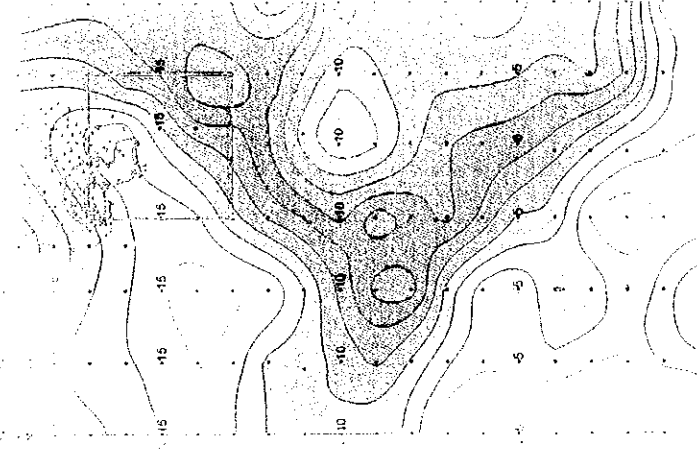
Алматы

1:50,000
 1:100,000
 1:200,000



Бишкек

1:50,000
 1:100,000
 1:200,000



Бишкек

1:50,000
 1:100,000
 1:200,000

1:50,000
 1:100,000
 1:200,000



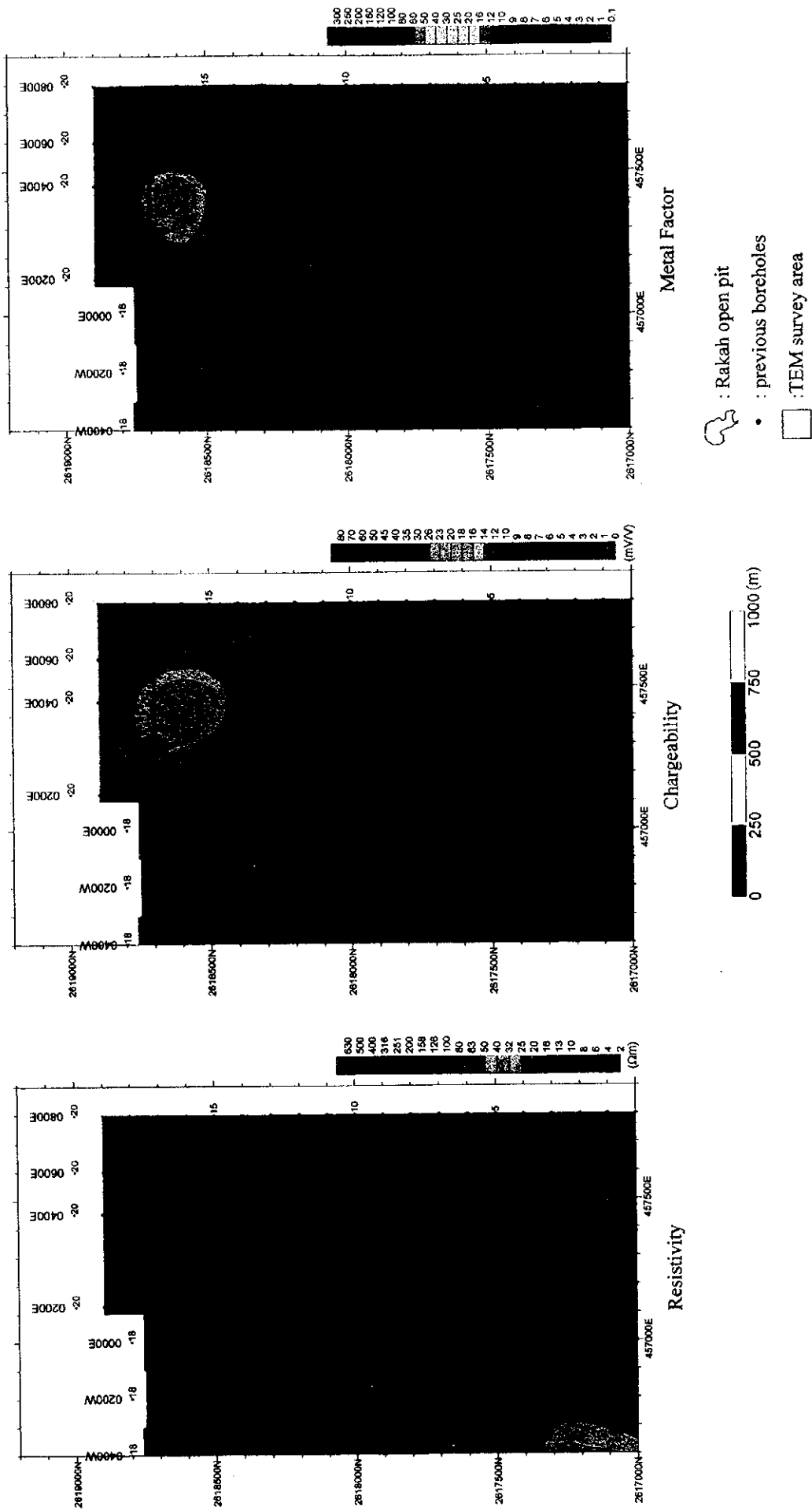


Fig. II-5-18(2) 2D analysis plane maps in Rakah Mine area at 150m depth

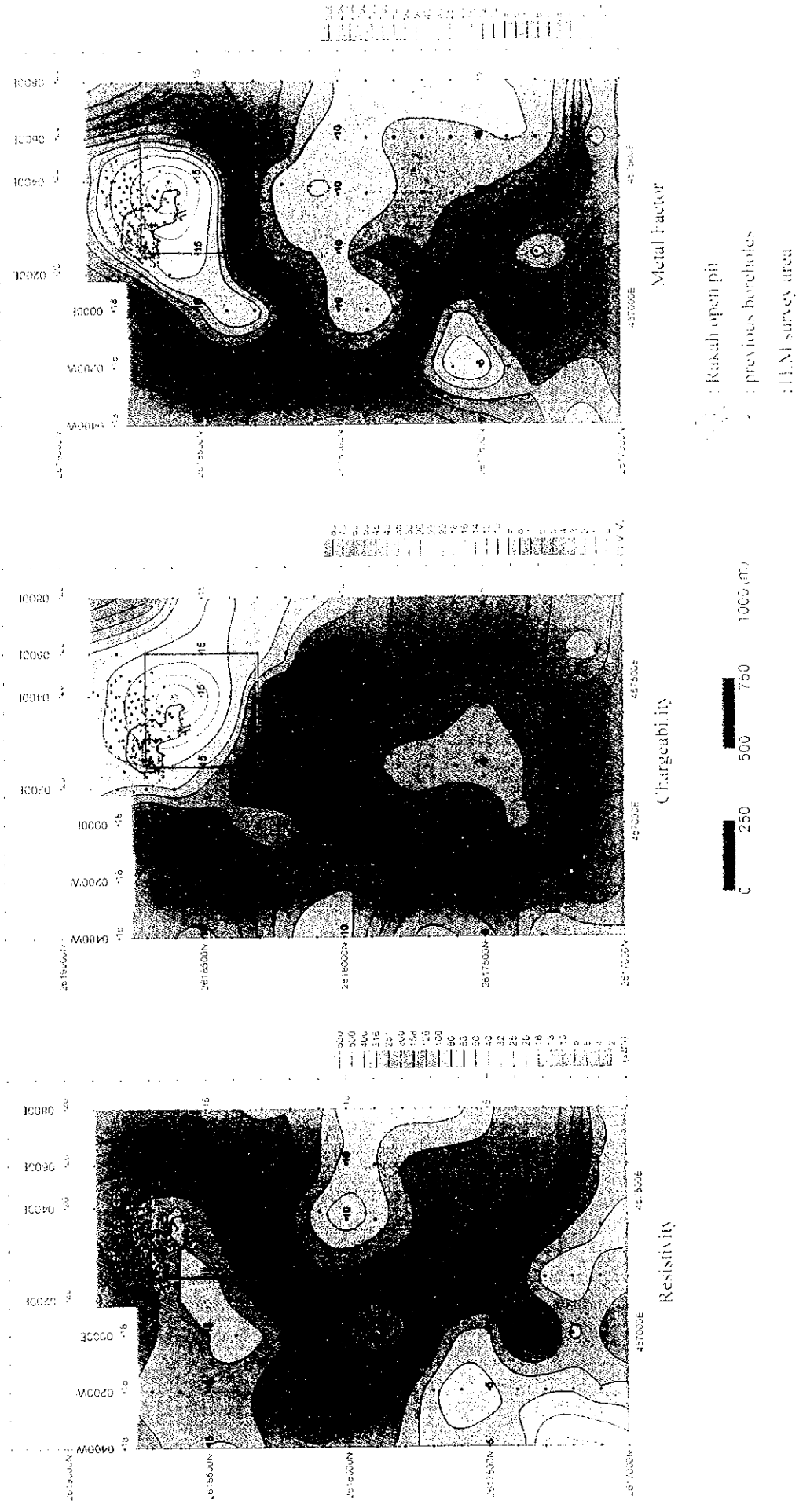
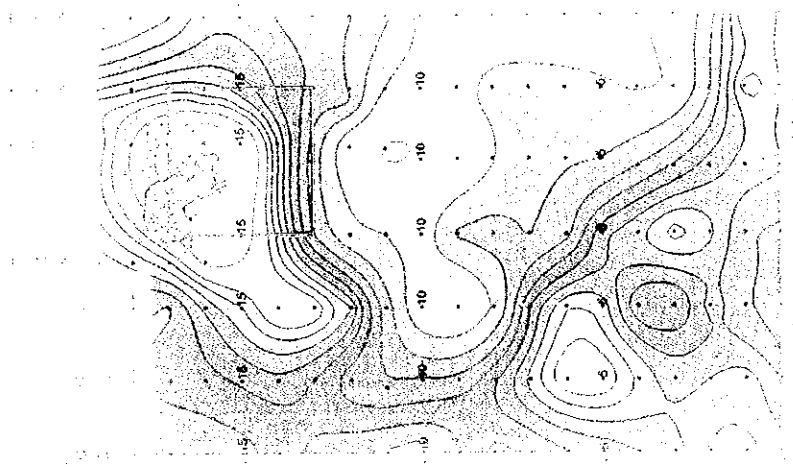


Fig. II-5-18(2) 2D analysis plane maps in Rakah Mine area at 150m depth

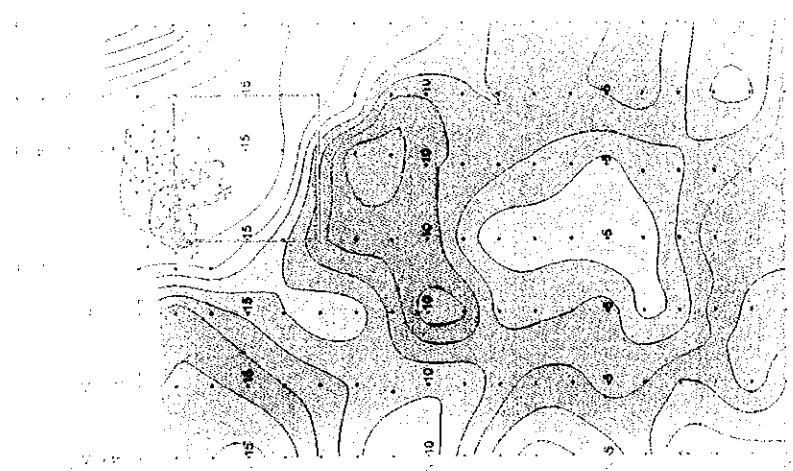
Figure 11



Western Portion

Topographic map
 showing contour lines
 and elevation markers.

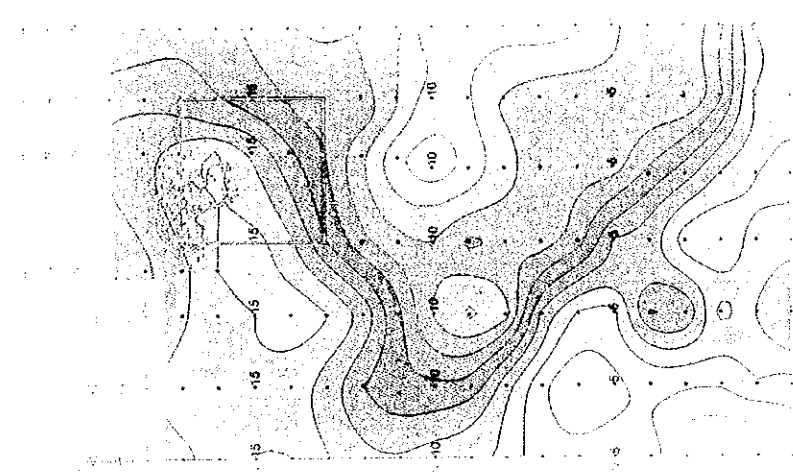
Figure 12



Central Portion

Topographic map
 showing contour lines
 and elevation markers.

Figure 13



Eastern Portion

Topographic map
 showing contour lines
 and elevation markers.

Topographic map showing contour lines and elevation markers.

