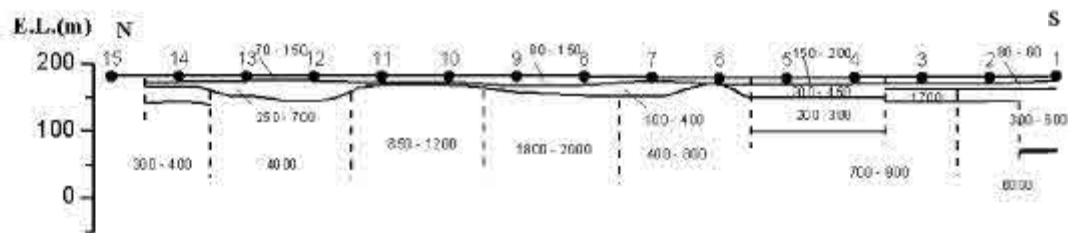
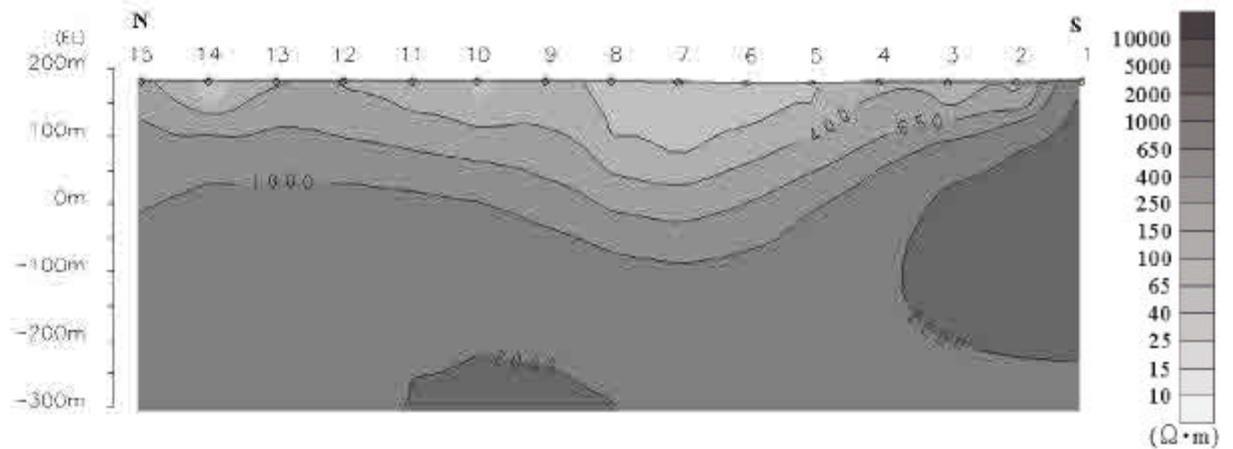


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CSAMT 2-D Inversion



Interpreted Model

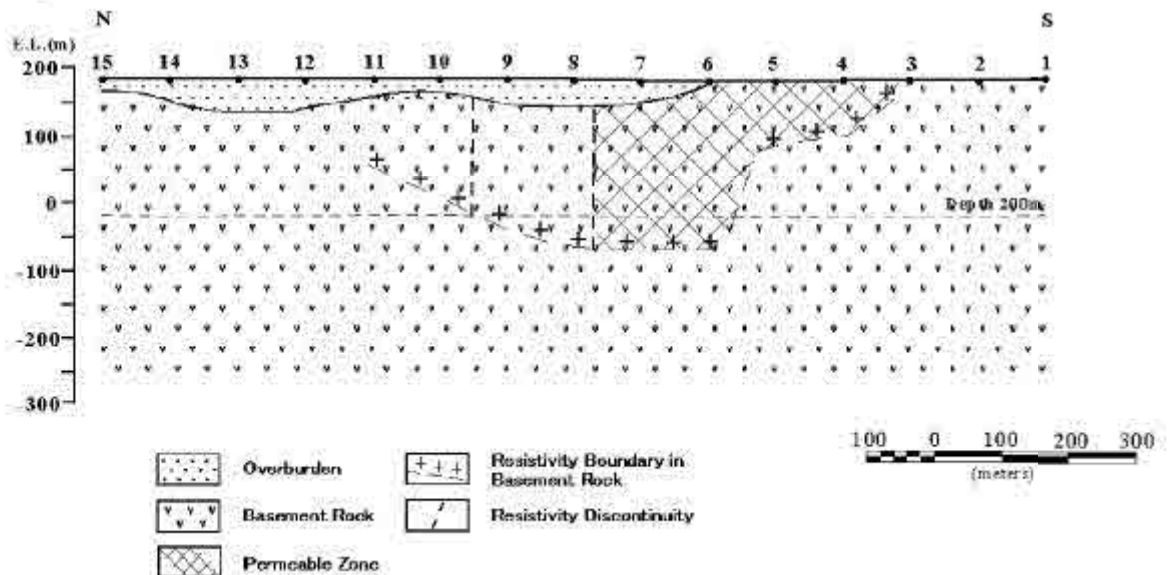
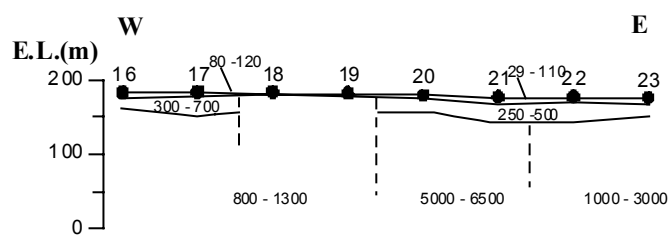


FIGURE 3.12(A) RESISTIVITY CROSS SECTION - UNAWATUNA (M4A)

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Interpreted Model

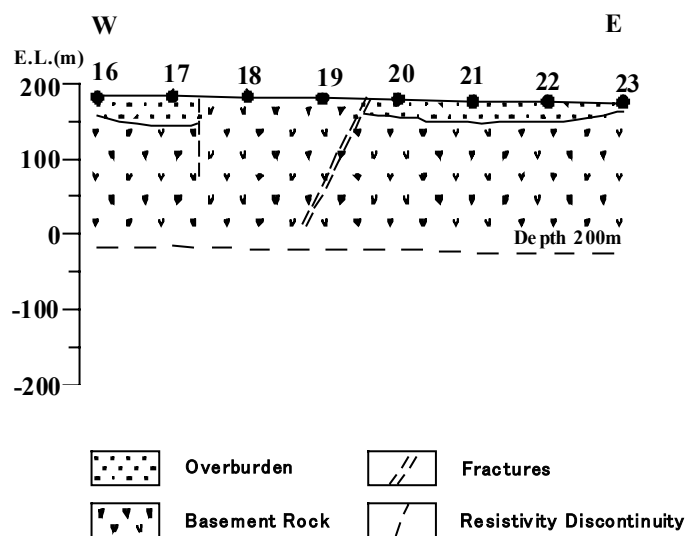
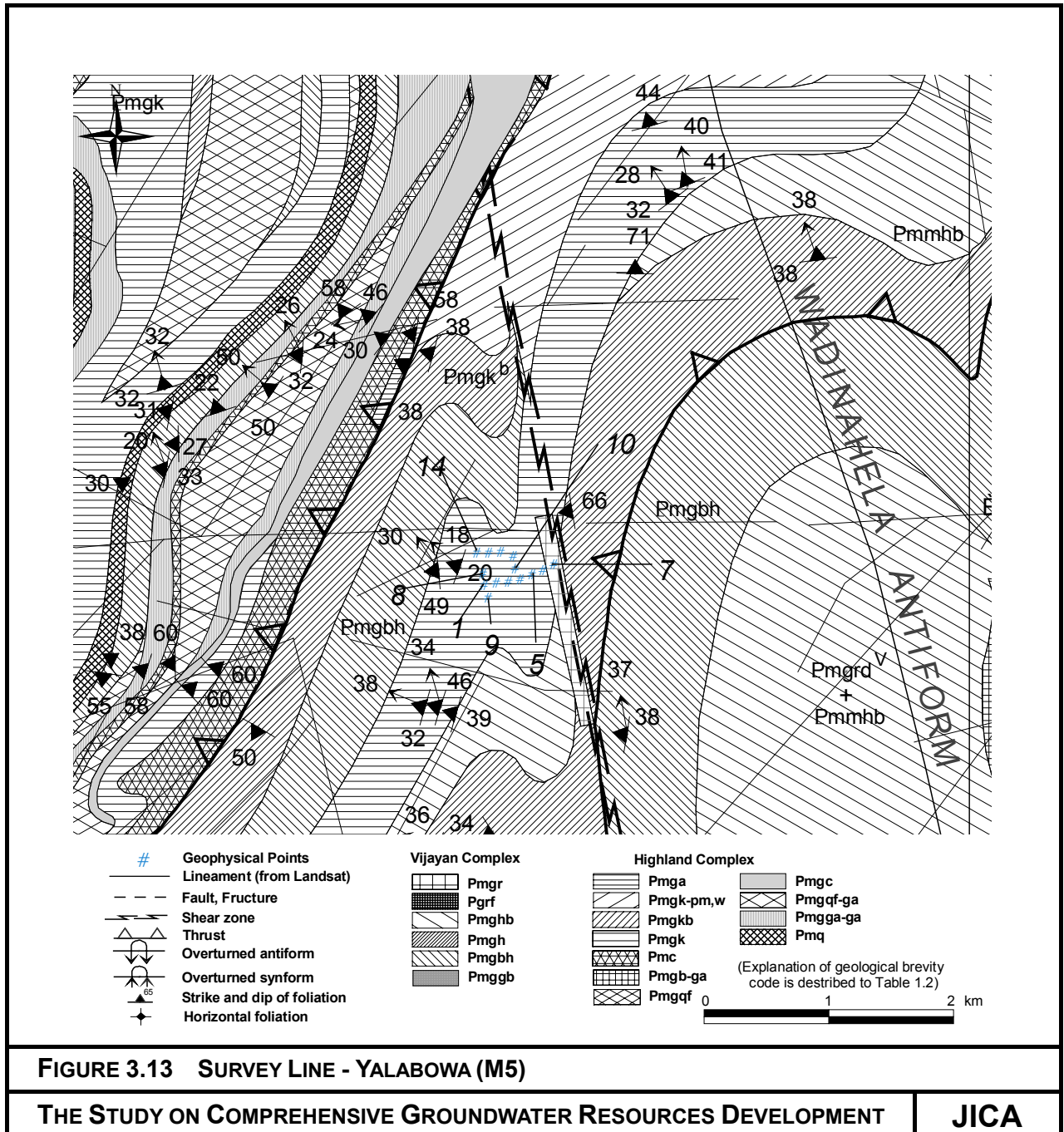


FIGURE 3.12(B) RESISTIVITY CROSS SECTION - UNAWATUNA (M-04B)

3.3.5 YALABOWA AREA (M5) --- SURVEY LINE, FIGURE 3.13, RESISTIVITY CROSS SECTION, FIGURE 3.14

Three short lines, each consists of stations 1-7, 8-9, and 10-14 cover this area. Vertical contours observed between stations 11 and 13, and 1 and 8, may correspond to a geological boundary or a fault.

The northwestern side of the area shows rather low resistivity values less than 650 Ohm-m, which may be due to the fractured zone. Stations 13 to 14 in the northwestern part of the area are promising sites for drilling.



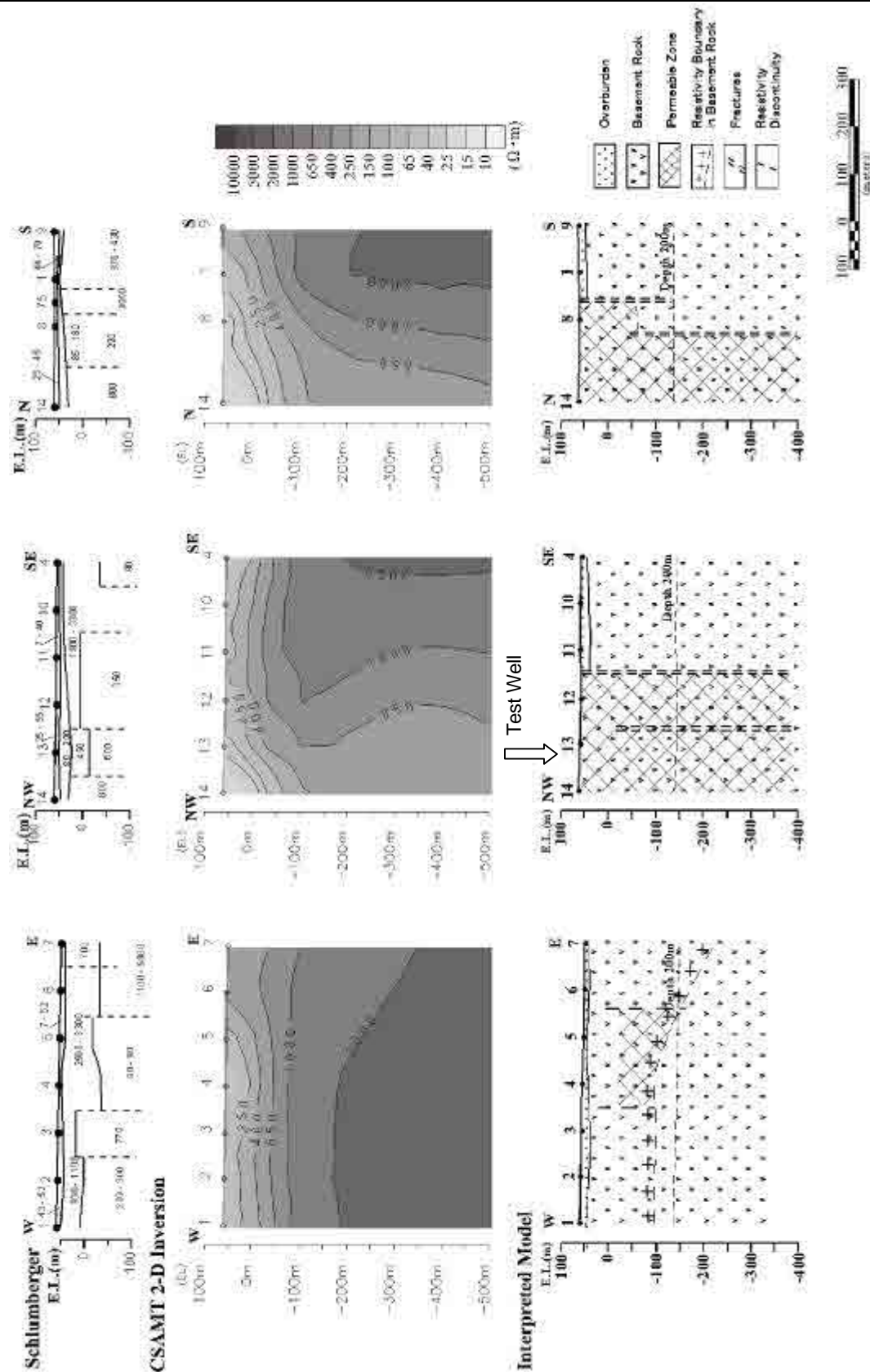
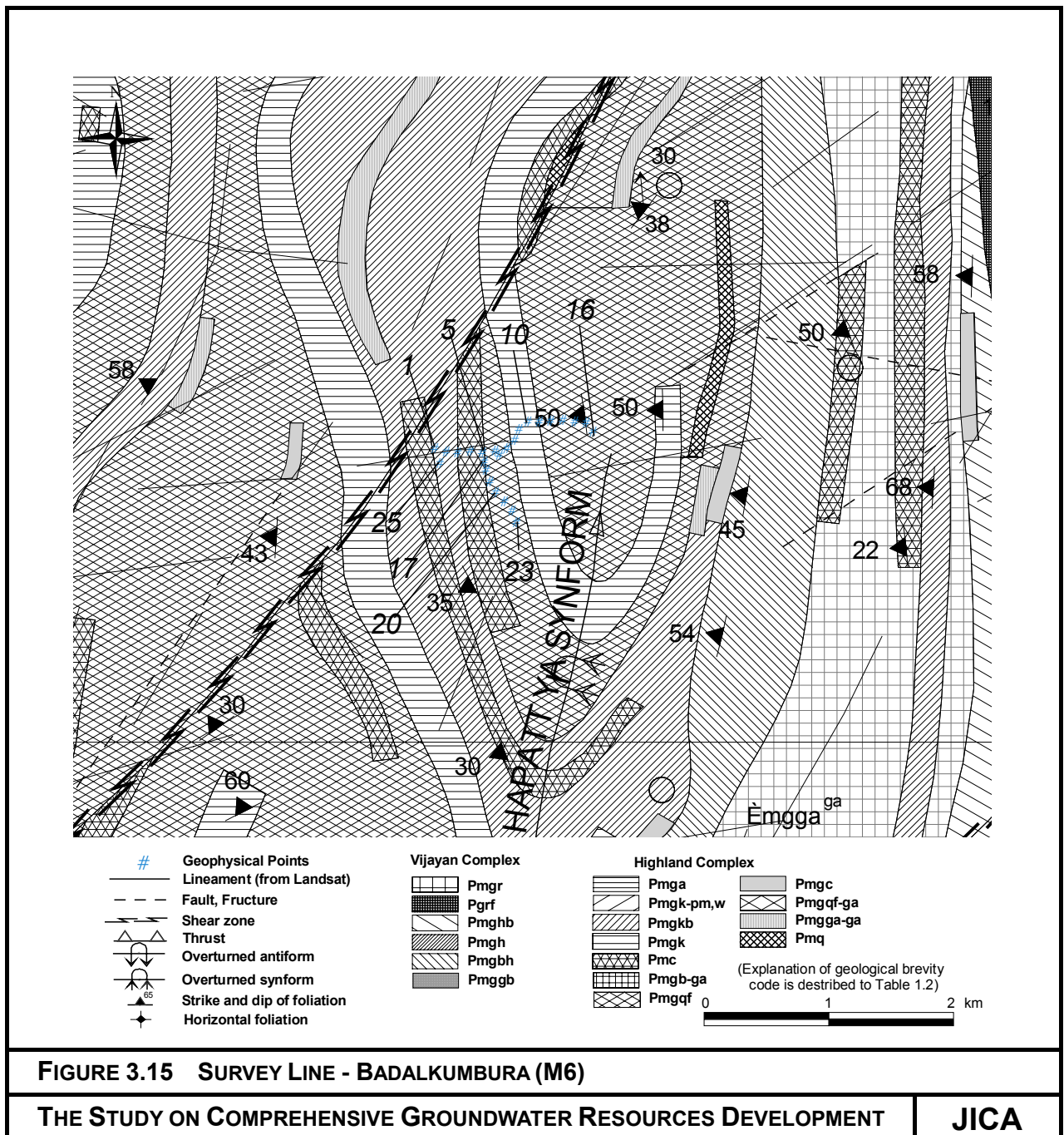


FIGURE 3.14 RESISTIVITY CROSS SECTION - YALABOWA (M5)

3.3.6 BADALKUMBURA AREA (M6) --- SURVEY LINE, FIGURE 3.15, RESISTIVITY CROSS SECTION, FIGURE 3.16

This area lies over Highland Complex. In general, the resistivity values are not as high as the resistivity detected in other areas of Bijayan group. Due to the heavy traffic through the downtown area, the western part of the line was too noisy to take measurements at stations 2 to 5. A general trending of the basement is east dipping while a syncline is inferred in the eastern end of the line. The eastern part of the line indicates the lower resistivity values less than 65 Ohm-m at depths, while no resistivity anomalies are observed on the western half of the line. The most promising site for drilling is considered to be around stations 11 to 12.



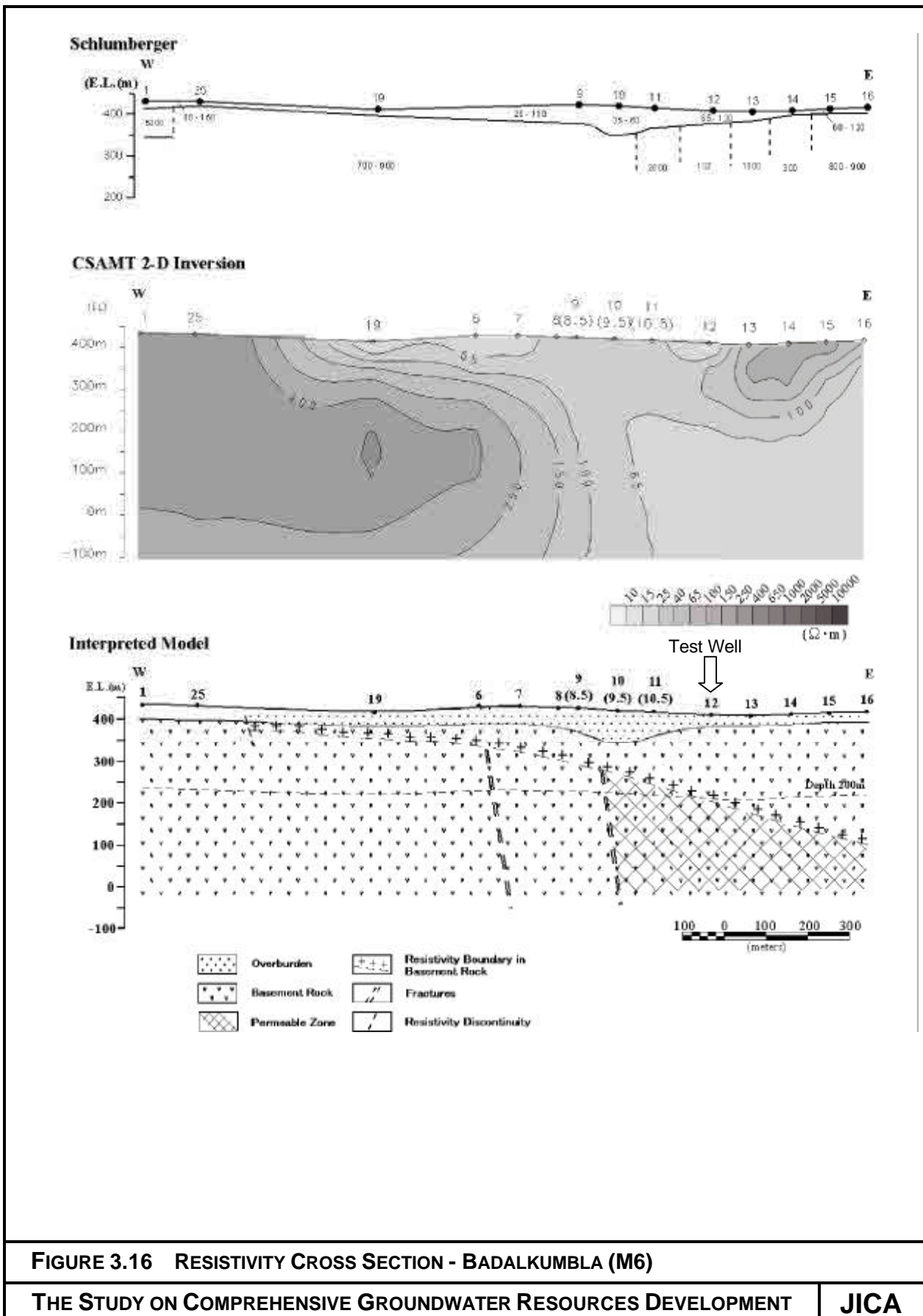
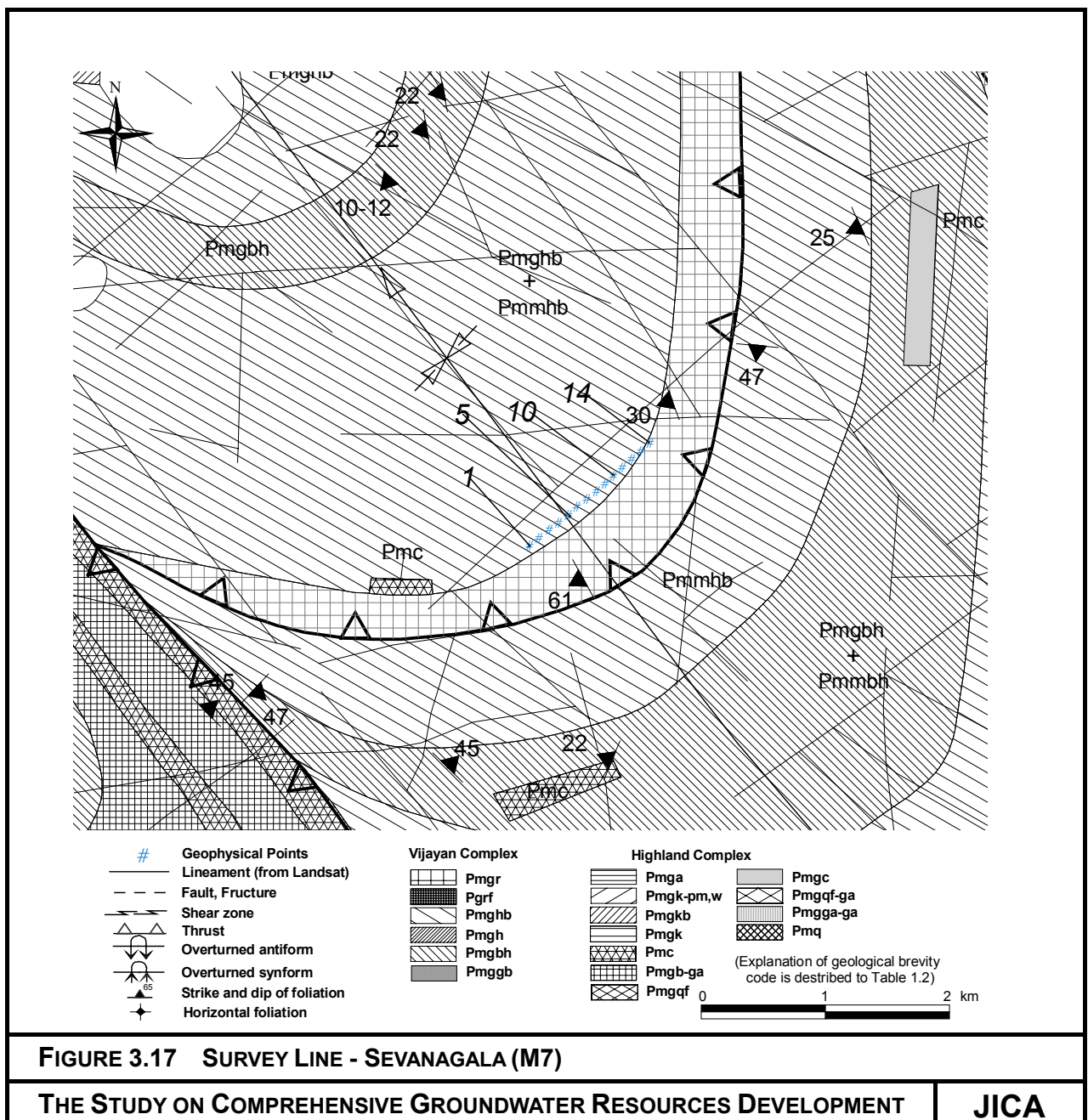


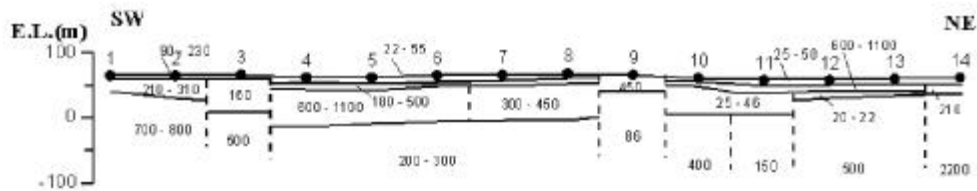
FIGURE 3.16 RESISTIVITY CROSS SECTION - BADALKUMBLA (M6)

3.3.7 SEVANAGALA AREA (M7) --- SURVEY LINE, FIGURE 3.17, RESISTIVITY CROSS SECTION, FIGURE 3.18

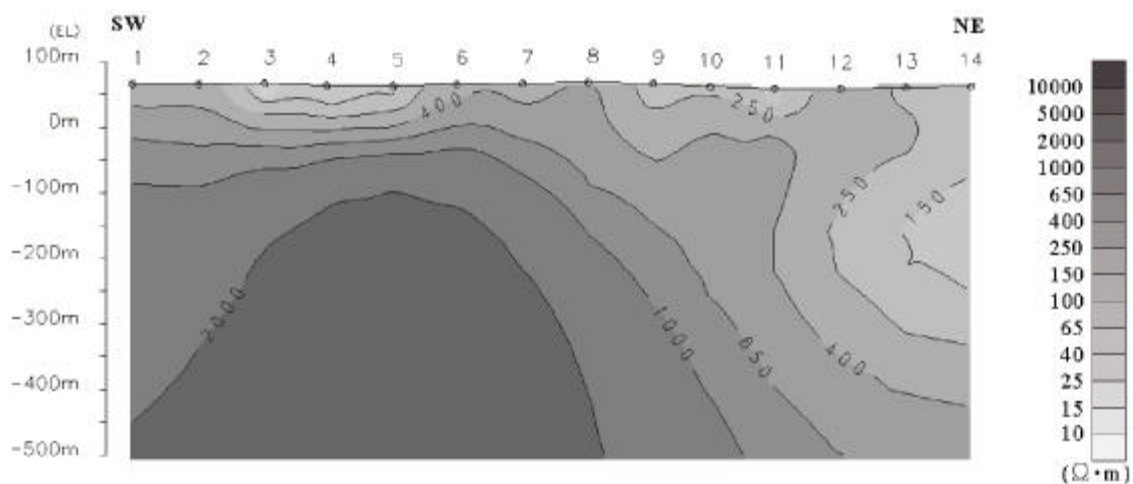
It is apparent that the western half of the line is highly resistive, which suggests that the bedrock is hard and compact. On the other hand, comparatively low resistivity was detected on the eastern half of the line. A northeast dipping geological boundary is inferred around station 9 and between stations 11 and 12. This area corresponds to a geological syncline. Near the station 11, there is a dug well with a water table almost at ground level, which shows low resistivity values. The Schlumberger result indicated the water-saturated formation at this point. However, at deeper depths of this area, the resistivity of the formation is around 250 Ohm-m according to the CSAMT. In this regards, the eastern end of the line suggests higher potential of deeper groundwater resource, since the area is widely conductive with resistivity anomalies extending to the depths. Accordingly, the most promising site for drilling seems to be around station 13.



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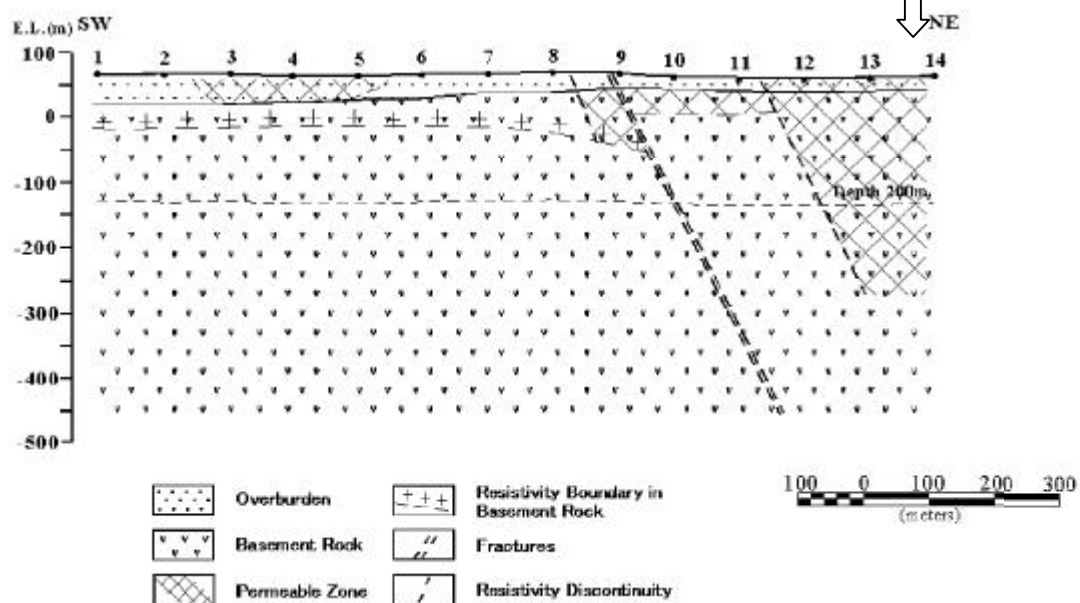
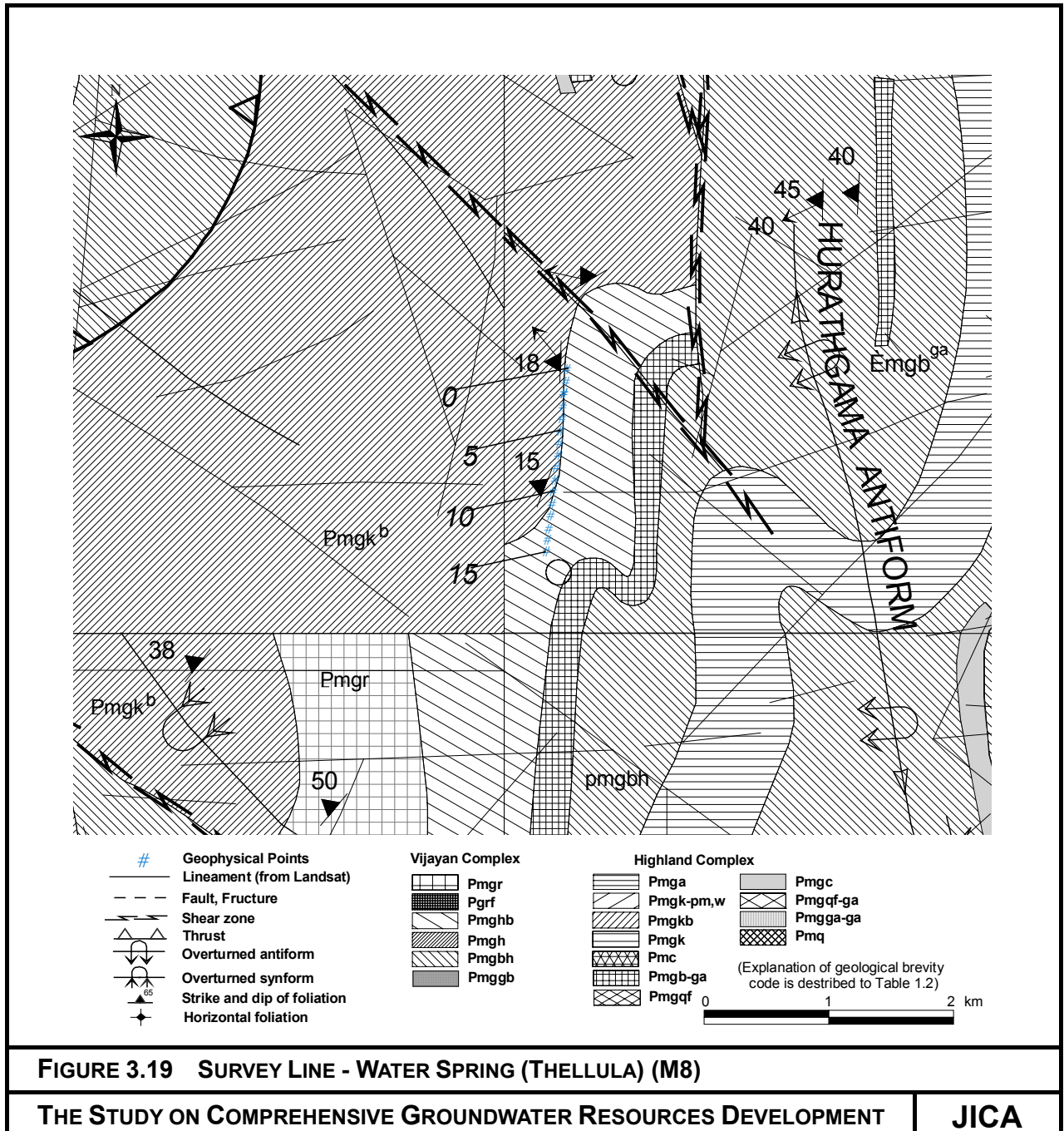


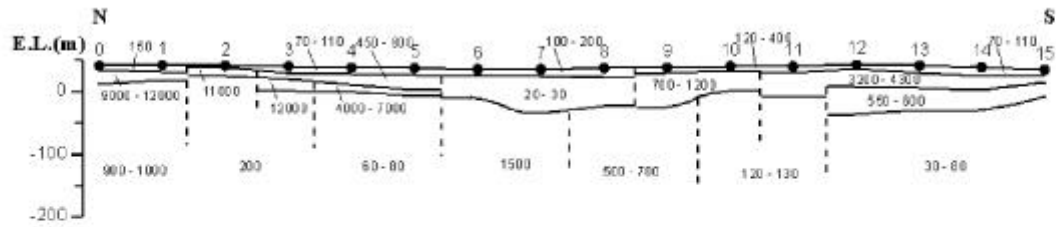
FIGURE 3.18 RESISTIVITY CROSS SECTION - SEVANAGALA (M7)

3.3.8 WATER SPRING (THELLULA AREA) (M8) --- SURVEY LINE, FIGURE 3.19, RESISTIVITY CROSS SECTION, FIGURE 3.20

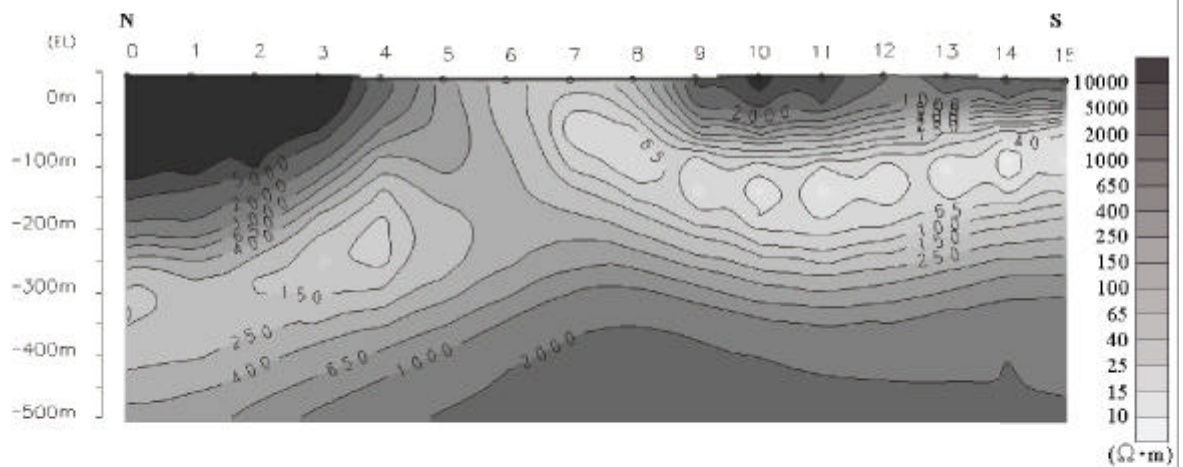
Water springs out from a tube well beside the road of Route 2 in Thellura area. As seen on the 2-D inversion CSAMT section, the distribution of prominent low resistivity anomalous comes out to the surface at station 7. This anomalous belt with low resistivity less than 150 Ohm-m seems to be reflecting the shape of an aquifer around 200m deep in the southern side of the line, and dipping north to the deeper zones in the northern side of the line. This anomalous belt might be reflecting a NW-SE trending fractured zone containing considerable amount of groundwater.



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Interpreted Model

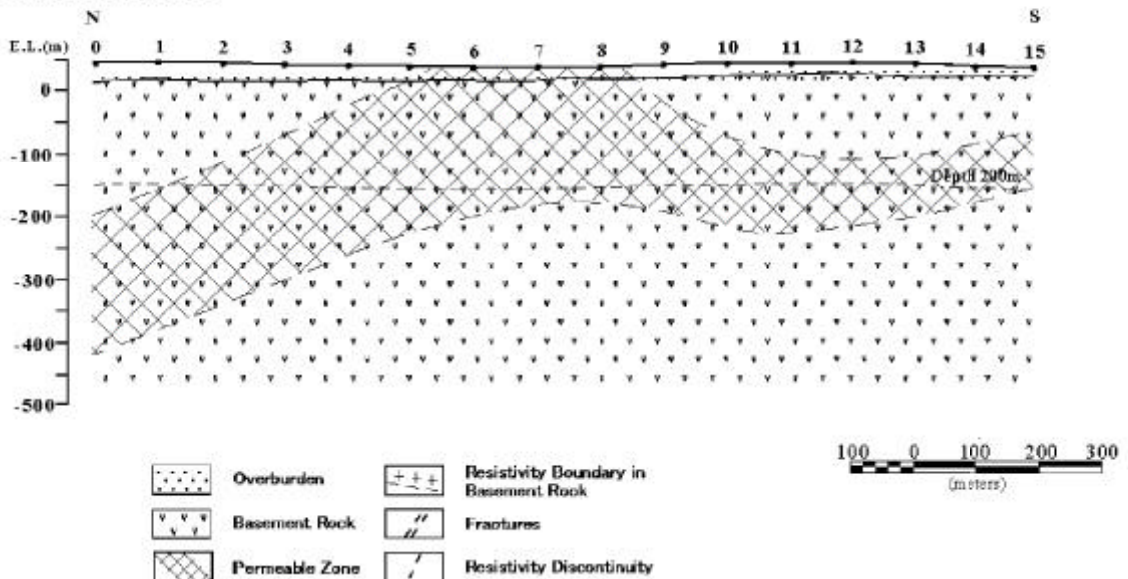


FIGURE 3.20 RESISTIVITY CROSS SECTION - WATER SPRING (THELLULA) (M8)

3.3.9 KELIYAPURA AREA (H1) --- SURVEY LINE, FIGURE 3.21, RESISTIVITY CROSS SECTION, FIGURE 3.22

An anomaly with distinct low resistivity was detected across the section in the centre at stations 6 to 8 with developed vertical contours on CSAMT 2-D Inversion Section, which may correspond to a fractured zone running east and west down to the bedrock, or widely distributed faults. This zone could imply the existence of a deep aquifer if the fractured zone contains abundant groundwater. The most promising site for drilling is around station 7.

