

Table 8.2.1-1 Result of Water Level Measurement in El Qaa Plain (1/2)

| Sr. No. | Well Identification |           | Elev. (m. asl)      | TOC (m. asl) | Drilling Depth (m. bgl) | Well Specification                     |                  | Aquifer (layer) | Water Level                                   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|---------|---------------------|-----------|---------------------|--------------|-------------------------|--|------------------|-----------------|---|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|         | Well Name           | Well Name |                     |              |                         | Cased Screen Depth from to (thickness) | Screen Depth (m) |                 | Up: Depth to Water Surface from TOC in meters | Bottom: Piezometric head in meters above mean sea level | Feb-89 | Mar-89 | Apr-89 | May-89 | Jun-89 | Jul-89 | Aug-89 | Sep-89 | Oct-89 | Nov-89 | Dec-89 | Jan-90 | Feb-90 | Mar-90 | Apr-90 | May-90 | Jun-90 |
| 1       | 37DA-001            | QAA3      | 98                  |              | 200                     | 145                                    | (42)             | Q(S+G)          | 69.05 (28.1)                                  | 69.95 (28.1)  |        |        |        |        |        |        |        |        | 80.80  | 80.75  | 80.77  | 80.79  | 80.77  | 80.77  | 80.77  | 80.78  | 80.74  |
| 2       | 37DB-001            | R1WR8     | 105.87              | 0.76         | 200                     | 175                                    | 150 - 170 (20)   | Q(S+G)          |   |   |        |        |        |        |        |        |        |        | 25.83  | 25.88  | 25.86  | 25.84  | 25.86  | 25.86  | 25.86  | 25.85  | 25.89  |
| 3       | 37DA-002            | R1WR6     | 102.5 <sup>1)</sup> |              | 300                     | 196                                    | 175 - 190 (15)   | Q(S+G)          | 75.64   | 75.48   | 74.90  | 75.04  | 75.14  | 75.13  | 75.12  | 75.12  | 75.13  | 75.15  | 75.01  | 75.15  | 75.01  | 75.00  | 75.00  | 74.98  | 75.05  | 75.05  | 75.01  |
|         |                     |           |                     |              |                         |  |                  |                 | 26.86   | 27.02   | 27.60  | 27.46  | 27.36  | 27.37  | 27.38  | 27.37  | 27.35  | 27.49  | 27.47  | 27.49  | 27.50  | 27.52  | 27.52  | 27.45  | 27.49  |        |        |
| 7       |                     | QAA10     | (64)                | 0.00         | 160                     | 100                                    | 65 - 95 (30)     |                 |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 11      | 37EA-003            | QAA5/1    | 71.5 <sup>2)</sup>  | 0.90         | 200                     | 115                                    | 80 - 110 (30)    | Q(S+G)          | 43.94   | 43.09   | 43.48  | 43.42  | 43.48  | 43.43  | 43.45  | 43.41  | 43.40  | 43.41  | 43.41  | 43.41  | 43.41  | 43.41  | 43.41  | 43.41  | 43.41  | 43.41  | 43.41  |
|         |                     |           |                     |              |                         |  |                  |                 | 28.46   | 29.31   | 28.92  | 28.98  | 28.97  | 28.97  | 28.95  | 28.98  | 29.00  | 28.99  | 28.99  | 28.99  | 28.99  | 28.99  | 28.99  | 28.99  | 28.99  | 28.99  | 28.99  |
| 13      | 37EA-007            | QAA2/2    | 82.5 <sup>3)</sup>  | 0.61         | 200                     | 110                                    | 75 - 105 (30)    | Q(S+G)          | 59.52   | 59.27   | 58.75  | 58.74  | 58.91  | 58.93  | 58.94  | 58.93  | 58.93  | 57.43  | 58.93  | 58.93  | 58.97  | 58.97  | 58.97  | 58.95  | 58.95  | 58.85  | 58.85  |
|         |                     |           |                     |              |                         |  |                  |                 | 23.59   | 23.84   | 24.36  | 24.20  | 24.18  | 24.18  | 24.18  | 24.18  | 24.18  | 24.18  | 24.18  | 24.18  | 24.16  | 24.16  | 24.16  | 24.16  | 24.16  | 24.16  | 24.26  |
| 15      | 37EB-001            | R1WR7     | 126.29              | 1.10         | 405                     | 145                                    | 125 - 140 (15)   | Q(S+G)          |   |   |        |        |        |        |        |        |        |        | 102.05 | 102.08 | 102.09 | 102.09 | 102.08 | 102.08 | 102.09 | 102.10 | 102.10 |
|         |                     |           |                     |              |                         |  |                  |                 | 25.35   | 23.39   | 24.09  | 24.08  | 23.79  | 23.78  | 23.78  | 23.79  | 23.79  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  |
| 16      | 48AA-001            | QAA16     | (78)                | 0.00         | 256                     | 100                                    | 60 - 95 (35)     | Q(S+G)          |   |   |        |        |        |        |        |        |        |        | 25.34  | 25.31  | 25.30  | 25.30  | 25.31  | 25.31  | 25.30  | 25.29  | 25.29  |
| 17      | 48AB-003            | QAA8      | 64.23               | 0.00         | 250                     | 100                                    | 65 - 95 (30)     | Q(S+G)          |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 21      | 48AB-002            | QAA2/1    | 78.9 <sup>4)</sup>  | 0.85         | 200                     | 89                                     | 64 - 89 (25)     | Q(S+G)          | 36.40   | 36.36   | 35.66  | 35.67  | 35.96  | 35.97  | 35.96  | 35.96  | 35.96  | 35.96  | 35.97  | 35.97  | 35.97  | 35.97  | 35.97  | 35.97  | 35.97  | 35.97  | 35.97  |
|         |                     |           |                     |              |                         |  |                  |                 | 23.35   | 23.39   | 24.09  | 24.08  | 23.79  | 23.78  | 23.78  | 23.79  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  | 23.78  |
| 22      |                     | R1WR6/1   | 98.17               |              | 500                     | 360                                    | 300 - 350 (50)   |                 |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 26      | 48BB-004            | QAA15     | 44.17               |              | 300                     | 95                                     | 50 - 90 (40)     | Q(S+G)          |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 35      | 48BB-013            | R1WR5     | 62.68               |              | 274                     | 236                                    | 220 - 230 (10)   | Q(S+G)          | 40.13   | 40.18   | 40.18  | 40.18  | 40.18  | 40.19  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.20  | 40.19  |
|         |                     |           |                     |              |                         |  |                  |                 | 22.55   | 22.50   | 22.50  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  | 22.48  |
| 36      | 48BB-015            | QAA2/1    | 76.65               |              | 200                     | 115                                    |                  | Q(S+G)          | 54.89   | 54.73   | 54.76  | 54.63  | 54.85  | 54.86  | 54.87  | 54.90  | 54.89  | 54.90  | 54.90  | 54.90  | 54.90  | 54.90  | 54.90  | 54.90  | 54.90  | 54.90  | 54.90  |
|         |                     |           |                     |              |                         |  |                  |                 | 21.76   | 21.92   | 21.89  | 22.02  | 21.80  | 21.79  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  | 21.78  |
| 40      | 48CB-005            | Abu Kalam | 19.48               |              |                         |  |                  | Q(S+G)          |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 41      | 48CB-003            | Osman     | 31.24               |              |                         |  | 15 - 26 (11)     | Q(S+G)          | 20.06   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|         |                     |           |                     |              |                         |  |                  |                 | 11.18   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
| 43      | 48CB-001            | R1WR1     | 5.11                | 1.17         | 49                      | 40                                     | 15 - 17 (2)      | Q(S+G)          |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|         |                     |           |                     |              |                         |  |                  |                 | 11.96   | 11.9  | 11.92  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  | 11.91  |
| 44      | 48CB-002            | R1WR2     | 19.74               | 0.87         | 54                      | 51                                     | 28 - 37 (9)      | Q(S+G)          |   |   |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|         |                     |           |                     |              |                         |  |                  |                 | 8.65  | 8.71  | 8.7    | 8.69   | 8.7    | 8.68   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.65   | 8.68   |
| 45      | 48CB-007            | T-1/1     | 57.23               | 1.05         |                         |  |                  | Q(S+G)          | 40.32   | 40.34   | 40.32  | 40.34  | 40.32  | 40.34  | 40.32  | 40.34  | 40.32  | 40.34  | 40.32  | 40.34  | 40.32  | 40.34  | 40.32  | 40.34  | 40.32  | 40.34  | 40.34  |
|         |                     |           |                     |              |                         |  |                  |                 | 17.96   | 17.94   | 17.96  | 17.94  | 17.96  | 17.94  | 17.96  | 17.94  | 17.96  | 17.94  | 17.96  | 17.94  | 17.96  | 17.94  | 17.96  | 17.94  | 17.96  | 17.94  |        |
| 46      | 48CB-008            | T-1/2     | 57.23               | 1.05         |                         |  |                  | Q(S+G)          | 41.67   | 41.59   | 42.00  | 41.57  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  | 41.58  |
|         |                     |           |                     |              |                         |  |                  |                 | 16.61   | 16.89   | 16.28  | 16.71  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  | 16.70  |        |
| 50      | 48CC-003            | T-1       | 58.84               | 1.20         |                         |  |                  | Q(S+G)          | 45.88   | 42.83   | 45.37  | 45.40  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  | 45.45  |
|         |                     |           |                     |              |                         |  |                  |                 | 14.16   | 17.21   | 14.67  | 14.64  | 14.59  | 14.59  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  | 14.58  |        |
| 51      | 48CC-004            | R1WR1A    | 88.36               | 0.85         | 300                     | 281                                    | 260 - 270 (10)   | Q(S+G)          | 73.42   | 73.28   | 73.83  | 72.71  | 72.94  | 72.96  | 72.99  | 73.04  | 73.01  | 73.06  | 73.06  | 73.06  | 73.06  | 73.06  | 73.06  | 73.06  | 73.06  | 73.06  | 73.09  |
|         |                     |           |                     |              |                         |  |                  |                 | 15.79   | 15.95   | 15.38  | 16.50  | 16.27  | 16.26  | 16.22  | 16.19  | 16.20  | 16.17  | 16.20  | 16.15  | 16.15  | 16.15  | 16.15  | 16.15  | 16.15  | 16.12  |        |
| 52      | 48CC-005            | R1WR1B    | 88.34               | 0.81         | 125                     | 120                                    | 105 - 115 (10)   | Q(S+G)          | 70.48   | 70.42   | 69.91  | 69.86  | 70.07  | 70.09  | 70.10  | 70.10  | 70.12  | 70.12  | 70.12  | 70.12  | 70.12  | 70.12  | 70.12  | 70.12  | 70.12  | 70.12  | 70.19  |
|         |                     |           |                     |              |                         |  |                  |                 | 18.67   | 18.73   | 19.29  | 19.06  | 19.08  | 19.06  | 19.05  | 19.05  | 19.03  | 19.03  | 19.03  | 19.03  | 19.03  | 19.03  | 19.03  | 19.03  | 19.03  | 19.03  |        |

TOC: Top of casing  
 1) = 7.3m from the difference between observer data and contour map Apr 92  
 2) = 7.3m from the difference between observer data and contour map Apr 92  
 3) = 5.0m from the difference between observer data and contour map Apr 92  
 4) = 5.9m from the difference between observer data and contour map Apr 92



Table 8.2.1-2 Hydrogeological description of formations in El Qaa Plain

| Period                  | Formation   | Maximum thickness (meters)      | Description   |
|-------------------------|---|---------------------------------|---|
| Quaternary              | Sabkha Deposits   |                                 | Distributed in the limited area at northwest of El Tur. Unexploitable aquifer.  |
| Holocene                | Wadi Deposits   |                                 | Distributed in some wadi valleys. Mainly sand with small gravel. No aquifer in general but the area around El Tur.  |
| Pleistocene             | Gravel Deposits   | >100 in the central area        | Distributed in the whole El Qaa Plain. Composed of three parts; Upper, Middle, Lower.<br>Upper; Coarse gravel with sand. An aquifer occurs at the shallow in the limited area around El Tur. Generally high electric resistivity value (>100 ohm-m) indicates no water.   |
|                         |   | About 100                       | Middle; Coarse to medium sand and gravel, with interbedded clay. 2 <sup>nd</sup> aquifer occurs. Most of production wells extract groundwater from the aquifer. No distribution in southern El Qaa Plain, where basement likely occurs at the shallow depth. Showing medium electric resistivity value (10<50 ohm-m). |
|                         |   | >1000 depending on the location | Lower; Sand and gravel with clay and silt. 3 <sup>rd</sup> aquifer occurs. Less productivity than 2 <sup>nd</sup> aquifer. Showing low electric resistivity value (<10 ohm-m) in general. Probably low quality of water.  |
|                         | Terrace Deposits  |                                 | Mainly distributed on the northwestern border of El Qaa plain in contact with Gebel Quabiliyat.   |
| Tertiary --- Cretaceous | Al Qa Formation<br>Quabiliyat F.<br>Mokattam F.<br>Samalut F.<br>Egma F.<br>Esna F.<br>Sudr F.<br>Matallah F.<br>Wata F.<br>Galalah F.<br>Mal'ah F. |                                 | Distributed in the mountainous region on the north and northwest side of El Qaa Plain. Remnant occurs in Gebel Safariat. Mainly limestone.<br>No drilled borehole except oil exploration holes reached the formations in the plain.   |
| Precambrian             |   |                                 | Metamorphic rocks, Igneous rocks.<br>Distributed in the mountainous region on the eastern side of El Qaa Plain and in the southern area of the plain in places. Results of geophysical prospecting indicate the basement rocks appear at the shallow depth in the south El Qaa Plain.                                 |

Table 8.2.1-3 Hydrogeological Data of Wells in El Qaa Plain

| Identification                               |               |                | Well Identification and Data |                                 |           |                | Hydrogeological Data |                           |                           |  |                                |  |
|--|---------------|----------------|------------------------------|---------------------------------|-----------|----------------|----------------------|---------------------------|---------------------------|--|--------------------------------|--|
| Sr. No.                                      | WRR/ Cord No. | Well Name      | Well Depth (m. bgl)          | Screen Position (m) (thickness) | Aquifer   | S.W.L (m. bgl) | D.W.L (m. bgl)       | Yield (m <sup>3</sup> /h) | Specific Capacity (l/s/m) | Trans -missivity (m <sup>2</sup> /day) | Hydraulic conductivity (m/day) |  |
| 1  | 37DA-001      | QAA3           | 145                          | 98-140(42)                      | N. of 2nd | 69.76          | 82.5                 | 90                        | 1.96                      | 1433                                   | 34.1                           |  |
| 4  | 37EA-001      | QAA18          | 110                          | 70-100(30)                      | N. of 2nd | 66.23          | 68.05                | 40                        | 6.11                      | 1175                                   | 39.2                           |  |
| 5  | 37EA-009      | QAA6           | 155                          | 90-150(45)                      | N. of 2nd | 45.85          | 55.42                | 67.1                      | 1.95                      | 462                                    | 10.3                           |  |
| 6  | 37EA-002      | QAA5           | 115                          | 80-110(30)                      | N. of 2nd | 43.13          | 69.85                | 50                        | 0.52                      | 227                                    | 7.57                           |  |
| 7  |               | QAA10          | 100                          | 65-95(30)                       | N. of 2nd | 39.43          | 60.65                | 25                        | 0.33                      | 138                                    | 4.6                            |  |
| 8  | 37EA-004      | QAA9           | 120                          | 85-115(30)                      | N. of 2nd | 45.43          | 52.55                | 75                        | 3.01                      | 1028                                   | 34.3                           |  |
| 9  | 37EA-005      | QAA2           | 110                          | 75-105(30)                      | N. of 2nd | 58.22          | 64                   | 100                       | 4.81                      | 2150                                   | 71.6                           |  |
| 10   | 37EA-008      | QAA17          | 80                           | 55-80 (25)                      | N. of 2nd | 68.5           | 71.93                | 20                        | 1.61                      | 106                                    | 4.24                           |  |
| 16   | 48AA-001      | QAA16          | 100                          | 65-95(30)                       | N. of 2nd | 52.5           | 55.51                | 55                        | 5.08                      | 762                                    | 25.4                           |  |
| 18   | 48AB-004      | QAA4           | 105                          | 75-100(25)                      | N. of 2nd | 38.77          | 50.6                 | 45                        | 1.06                      | 196                                    | 7.84                           |  |
| Average of the north area of the 2nd aquifer |               |                |                              |                                 |           |                |                      | <b>56.7</b>               | <b>2.64</b>               | <b>768</b>                             | <b>23.9</b>                    |  |
| 20   | 48AB-007      | QAA7           | 120                          | 75-115(40)                      | S. of 2nd | 34.17          | 40.37                | 101.5                     | 4.55                      | 1226                                   | 30.7                           |  |
| 24   | 48BB-006      | QAA12          | 95                           | 60-90(30)                       | S. of 2nd | 15.55          | 41.75                | 50                        | 0.53                      | 81                                     | 2.7                            |  |
| 26   | 48BB-004      | QAA15          | 95                           | 50-90(40)                       | S. of 2nd | 21.8           | 26                   | 60                        | 3.97                      | 218                                    | 5.45                           |  |
| 27   | 48BB-005      | T-2 (amy)      | 102                          | 26-100(74)                      | S. of 2nd | 44.02          | 53.17                | 50                        | 1.52                      | 279                                    | 12.7                           |  |
| 29   | 48BB-009      | QAA20          | 92                           | 65-87(22)                       | S. of 2nd | 23.8           | 34.7                 | 75                        | 1.91                      | 451                                    | 15                             |  |
| 32   | 48BB-001      | QAA13          | 100                          | 65-95(30)                       | S. of 2nd | 27.96          | 32                   | 100                       | 6.88                      | 2145                                   | 71.5                           |  |
| 33   | 48BB-002      | QAA1           | 120                          | 65-85,105-115(30)               | S. of 2nd |                |                      |                           |                           |  | 7                              |  |
| 39   | 48CB-006      | T-1 (amy)      | 126                          | 38-123(85)                      | S. of 2nd |                |                      |                           |                           |  | 580                            |  |
| 59   |               | El Qaa 3       | 150                          | 71-95,105-117,126-138(48)       | S. of 2nd | 60.65          | 63.57                | 60.8                      | 7.38                      | 2283                                   | 47.6                           |  |
| 60   |               | El Qaa 4       | 146                          | 81-93,113-131(30)               | S. of 2nd | 56.59          | 61.17                | 72                        | 4.57                      | 1622                                   | 54.1                           |  |
| 61   |               | El Qaa 5       | 160                          | 82-107,151-147(41)              | S. of 2nd | 51.5           | 53.33                | 60.9                      | 9.23                      | 2639                                   | 64.4                           |  |
| 62   |               | No.6/96 El Qaa | 132.5                        | 53-113 (50)                     | S. of 2nd | 21.27          | 29.47                | 48.6                      | 1.65                      | 242                                    | 4.86                           |  |
| 63   |               | No.7/97 El Qaa | 159.17                       | 76-149 (62)                     | S. of 2nd | 27.07          | 29.88                | 60.45                     | 5.98                      | 342                                    | 5.5                            |  |
| Average of the south area of the 2nd aquifer |               |                |                              |                                 |           |                |                      | <b>67.2</b>               | <b>4.36</b>               | <b>989</b>                             | <b>25.5</b>                    |  |
| 22   | RIWR6/1       |                | 357                          | 310-332,342-354(34)             | 3rd       | 79.35          | 152.85               | 20.3                      | 0.08                      | 9                                      | 0.28                           |  |
| 51   | 48CC-004      | RIWR1A         | 281                          | 260-270 (10)                    | 3rd       | 73.45          | 81.86                |                           |                           | 52.3                                   | 5.25                           |  |
| 54   | 48CC-006      | RIWR1C         | 290                          | 260-280(20)                     | 3rd       | 73.46          | 108.9                | 26.4                      | 0.21                      |  |                                |  |
| 57   |               | El Qaa 1       | 335                          | 134-209,263-325(137)            | 3rd       | 39.6           | 50.25                | 39.6                      | 1.07                      | 162                                    | 1.2                            |  |
| 58   |               | El Qaa 2       | 286                          | 140-180,205-230,250-275(90)     | 3rd       | 63.06          | 80.68                | 52                        | 0.82                      | 116                                    | 1.3                            |  |
| Average of the 3rd aquifer                   |               |                |                              |                                 |           |                |                      | <b>34.6</b>               | <b>0.54</b>               | <b>85</b>                              | <b>2.0</b>                     |  |
| 67   |               | JICA-7         |                              |                                 |           |                |                      |                           |                           |  |                                |  |

N. of 2nd; Northern area of the 2nd aquifer  
 S. of 2nd; Southern area of the 2nd Aquifer  
 3rd; The 3rd Aquifer

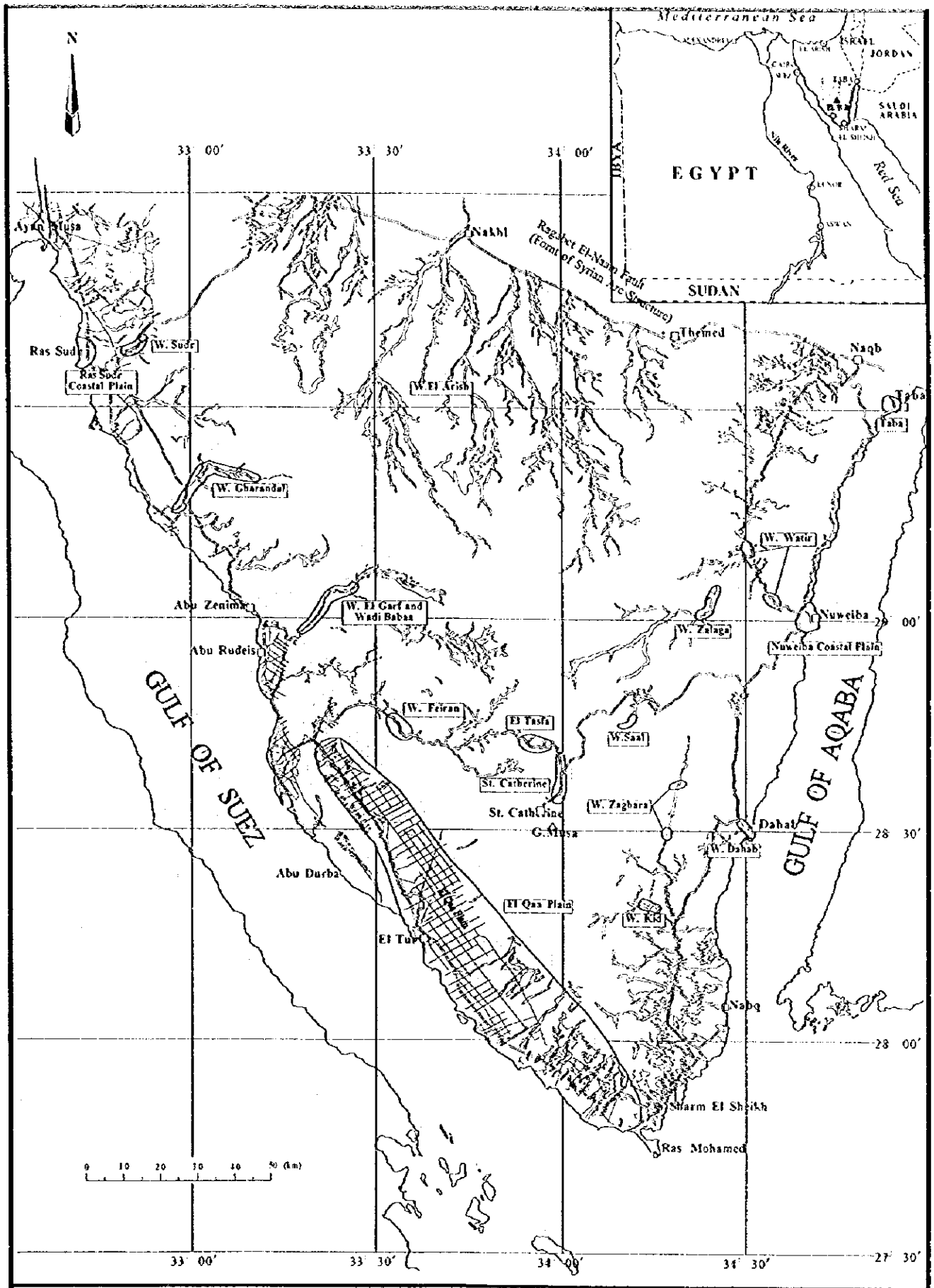


Fig. 8.2-1 Distribution of Quaternary Aquifer in South Sinai

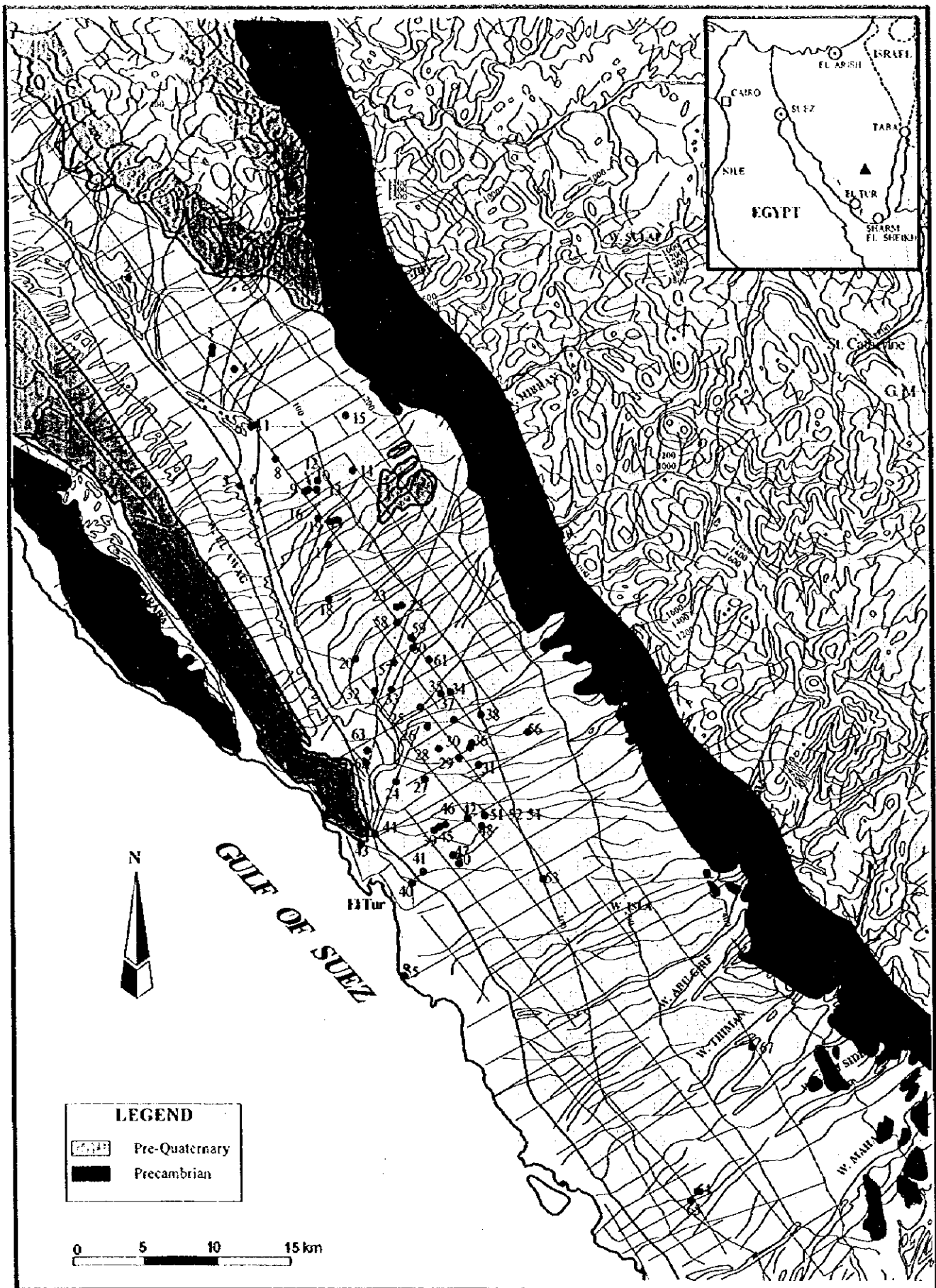


Fig. 8.2.1-1 Well Location (El Qaa Plain)

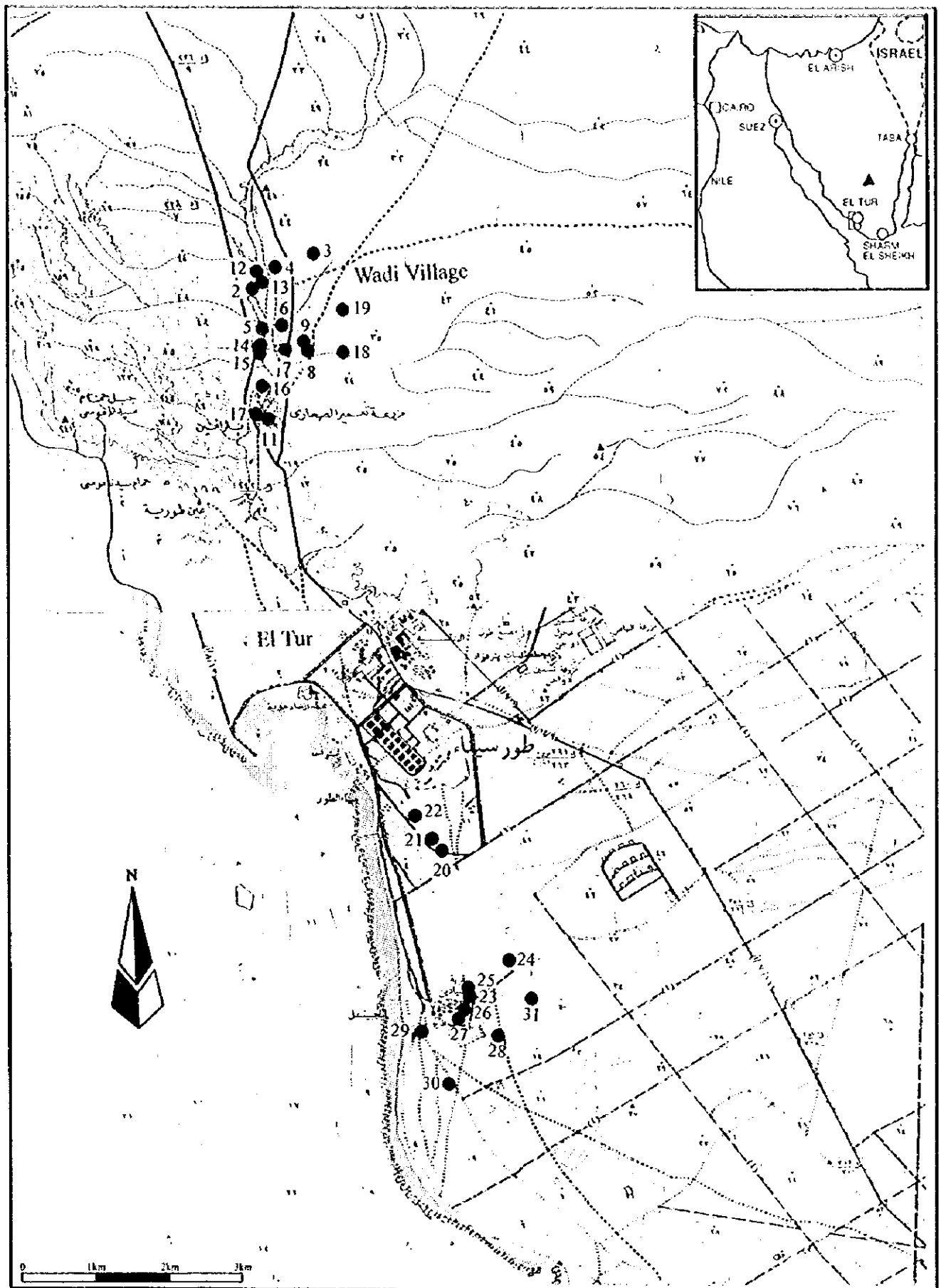


Fig. 8.2.1-2 Location of Dug Wells (El Qaa Plain)





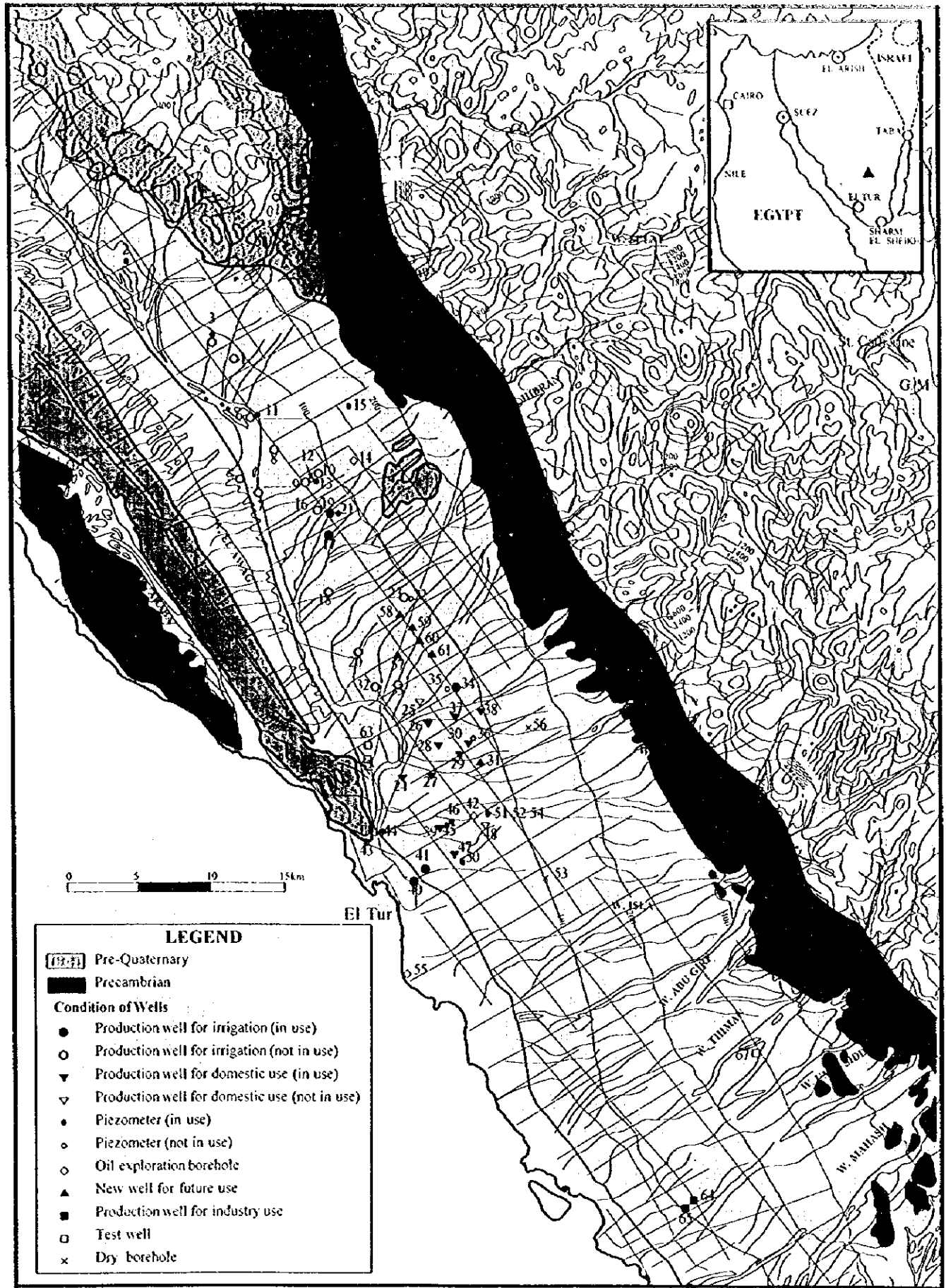


Fig. 8.2.1-4 Using Condition of Wells (El Qaa Plain)

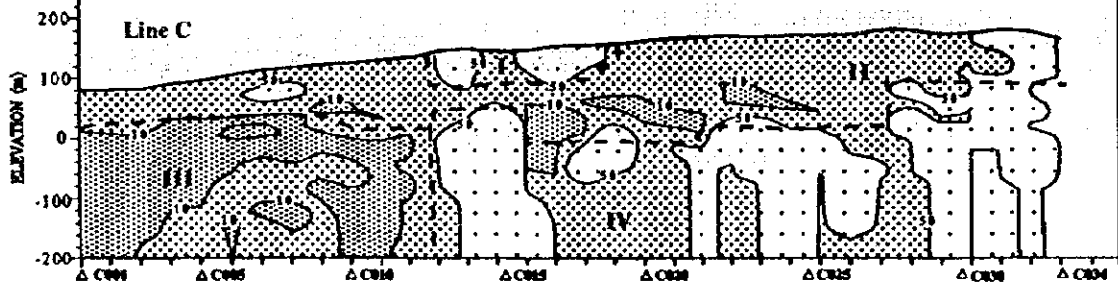
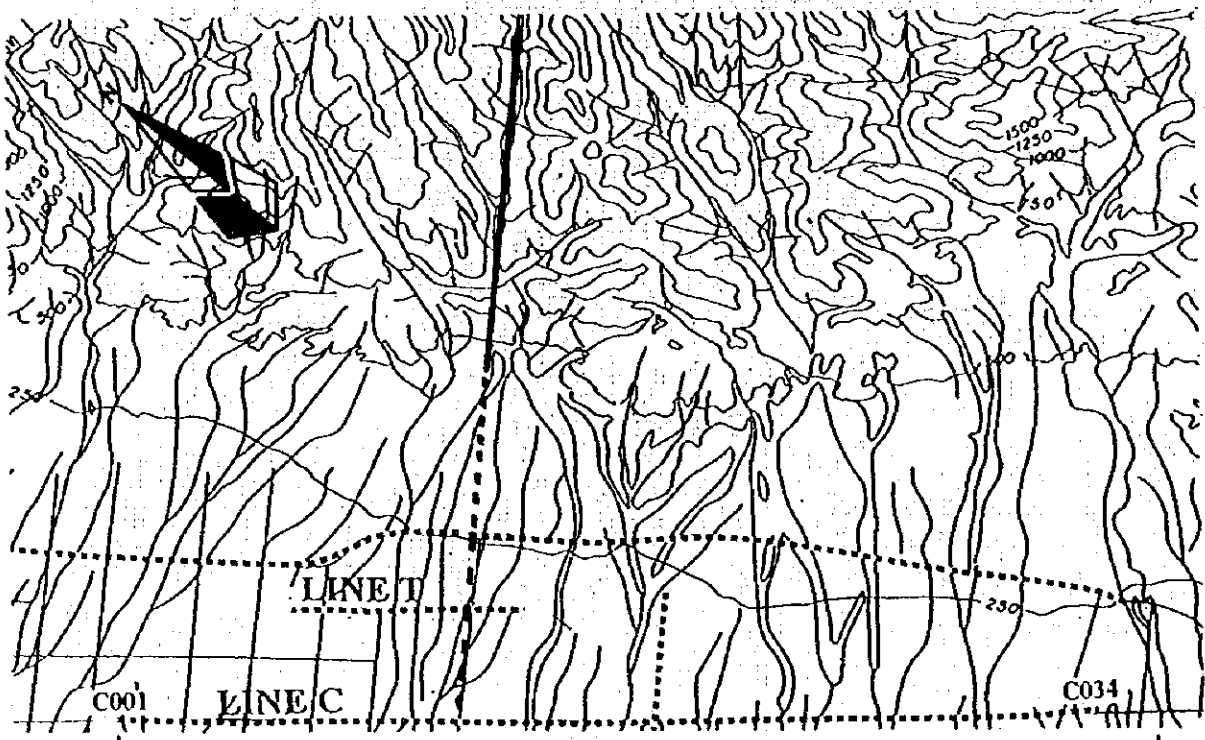
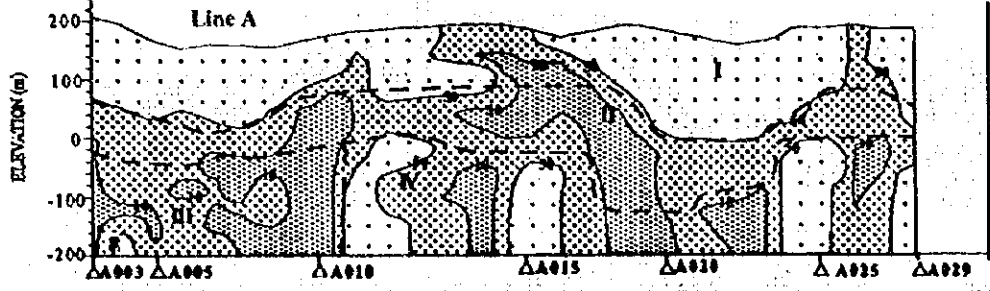
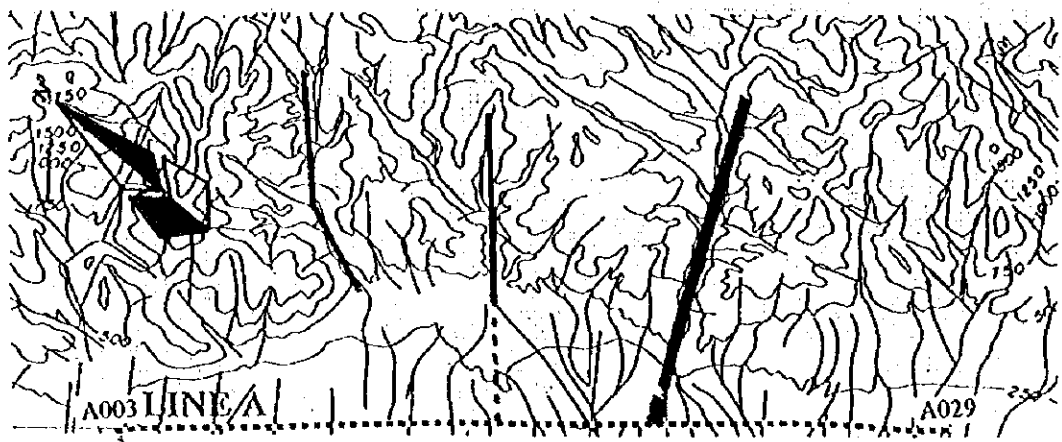


Fig. 8.2.1-5(1) Geoelectric Profile (Line A and C) (El Qaa Plain)

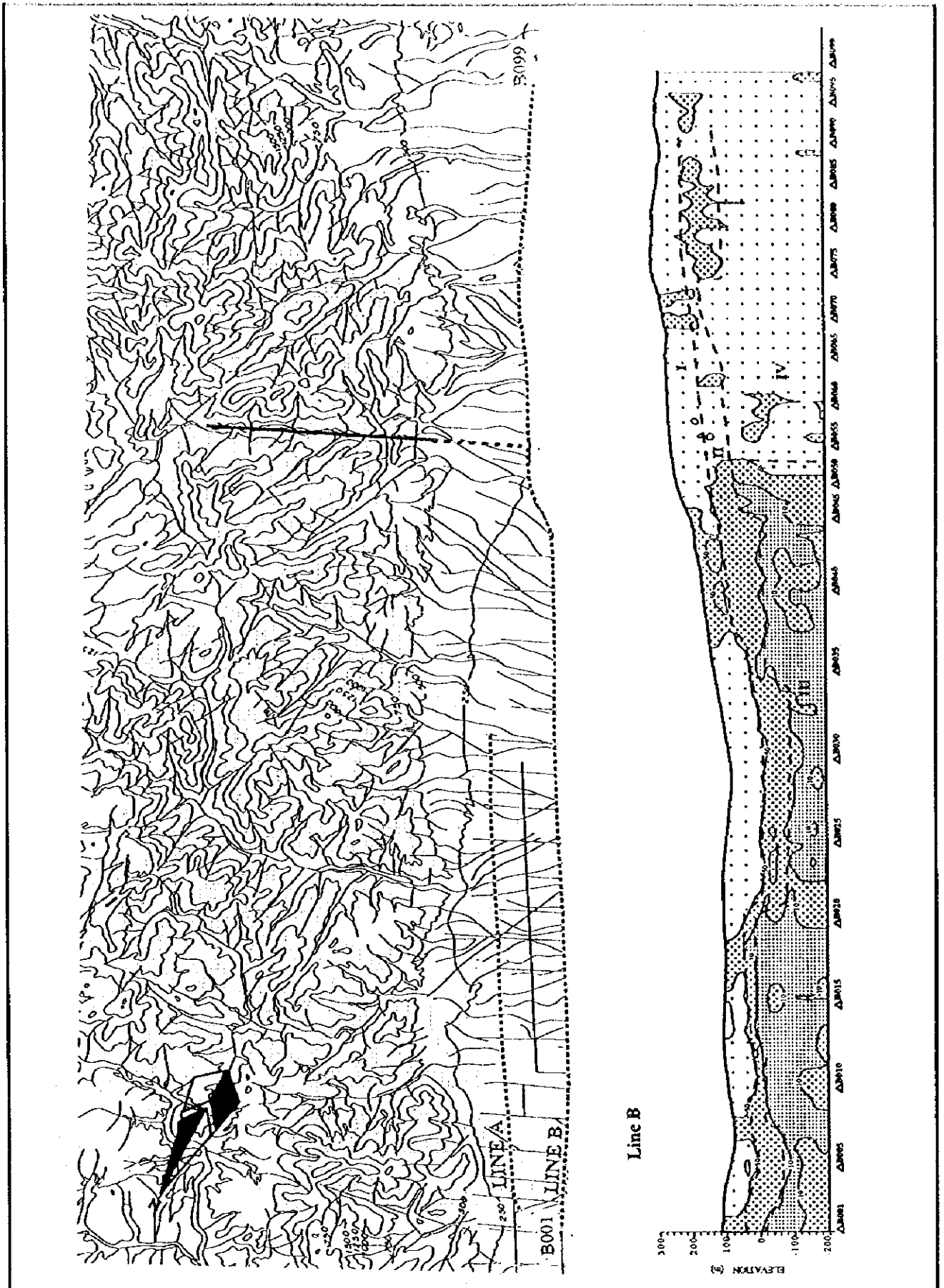


Fig. 8.2.1-5(2) Geoelectric Profile (Line B) (El Qaa Plain)(1/2)

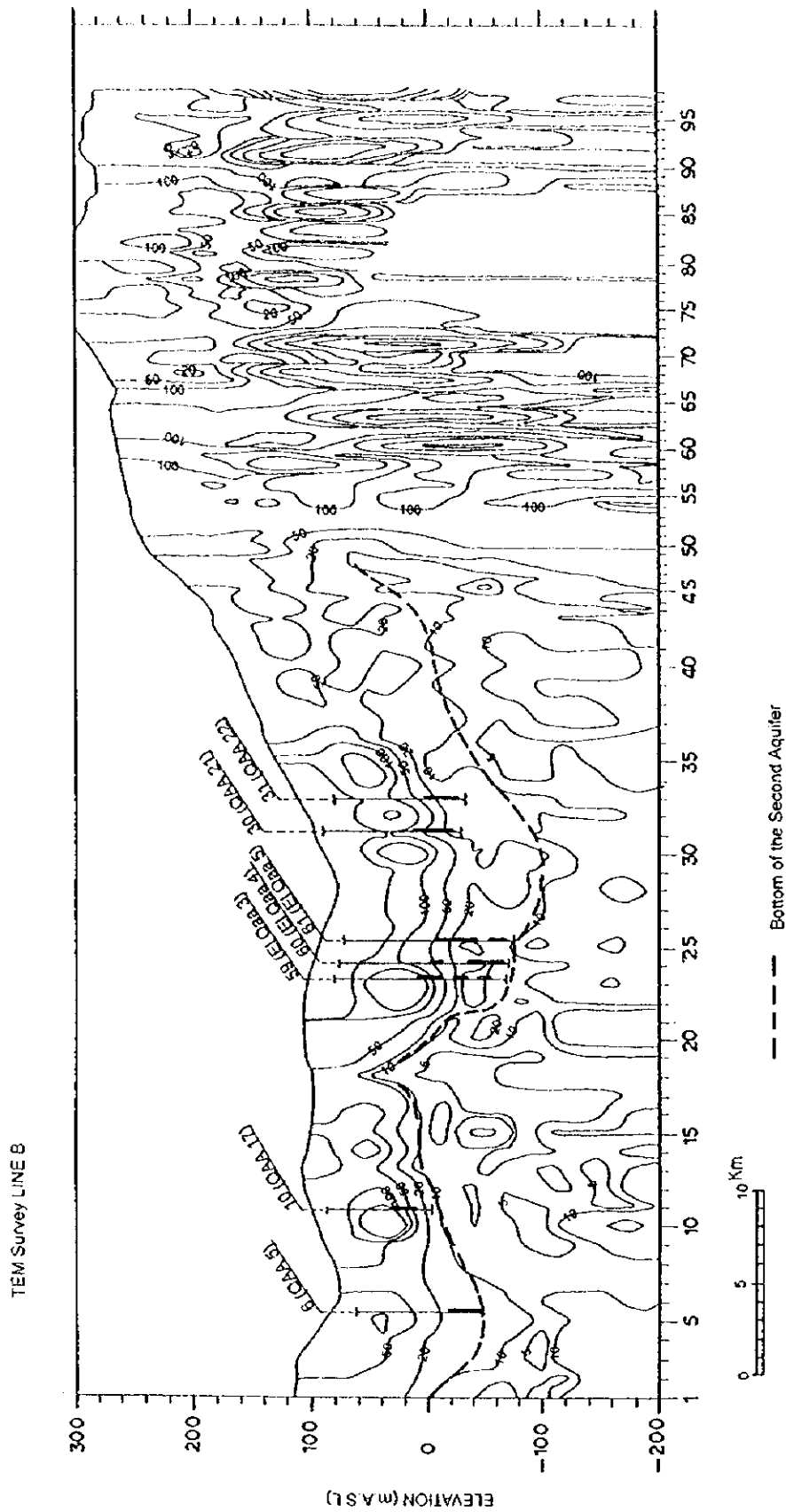


Fig. 8.2.1-5(2) Geoelectric Profile (Line B) (El Qaa Plain)(2/2)

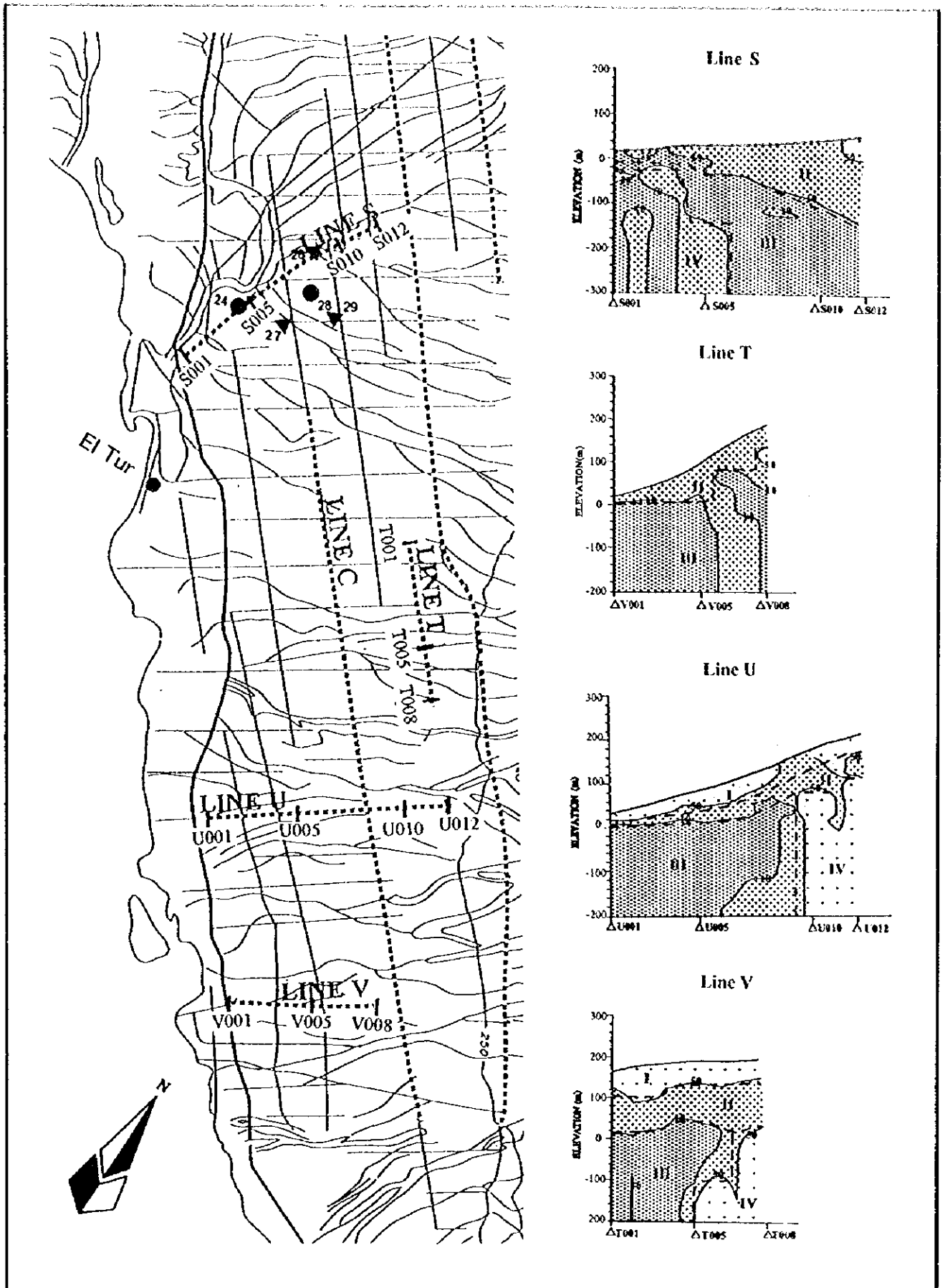


Fig. 8.2.1-5(3) Geoelectric Profile (Line S,T,U & V)

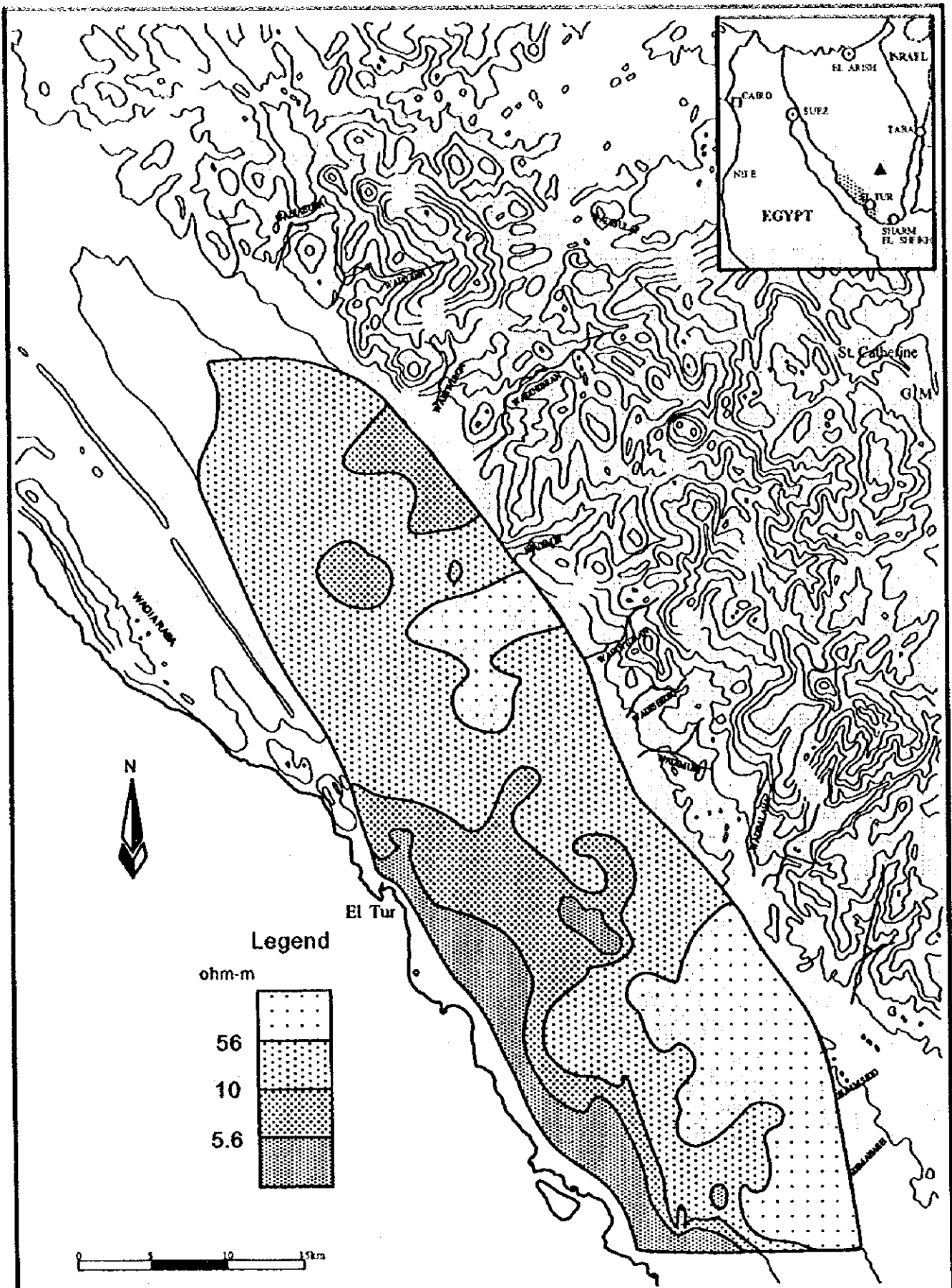


Fig. 8.2.1- 6(1) Resistivity Contour at Sea Level (El Qaa Plain)



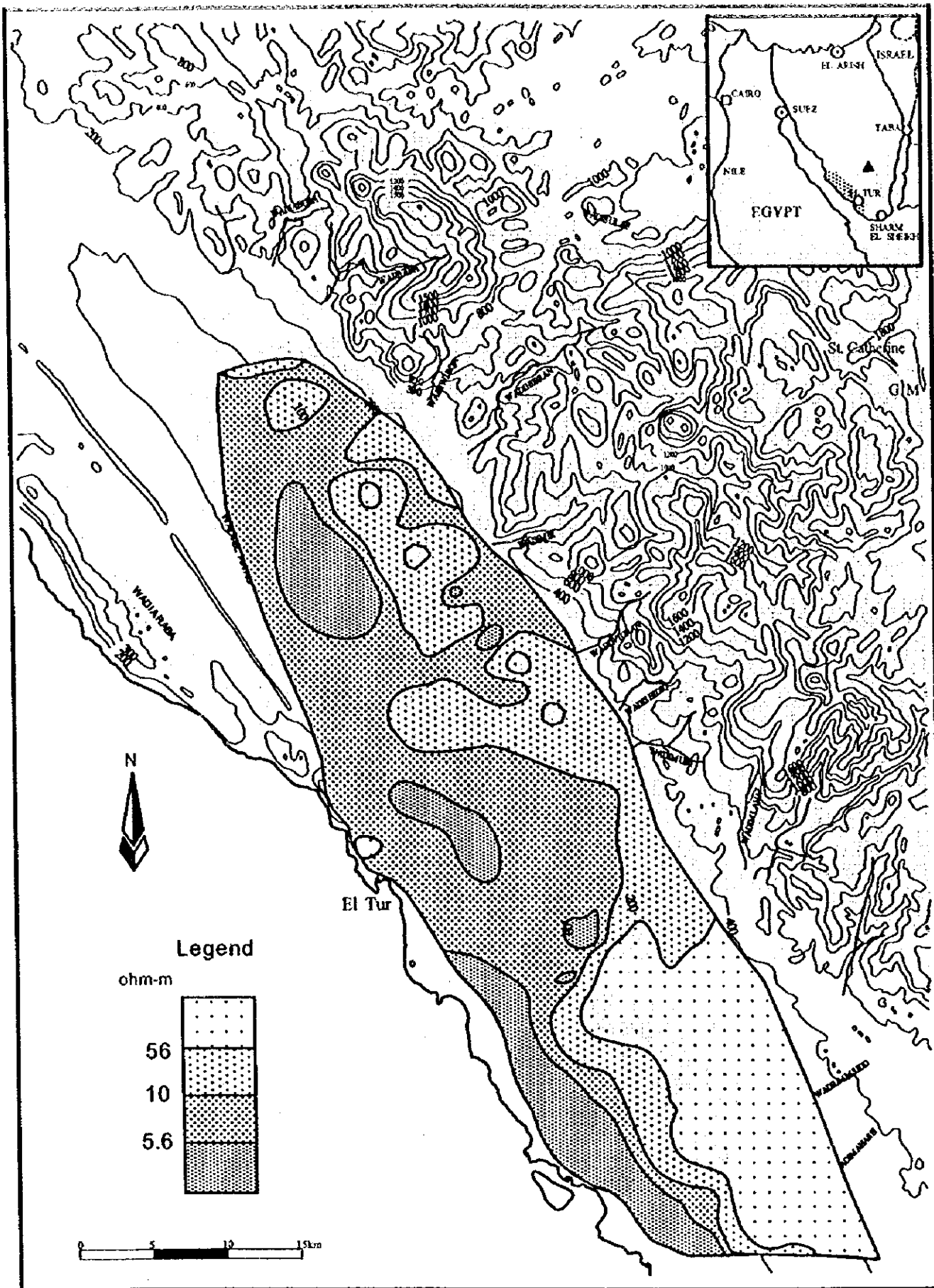


Fig. 8.2.1- 6(3) Resistivity Contour at 100m below Sea Level (El Qaa Plain)





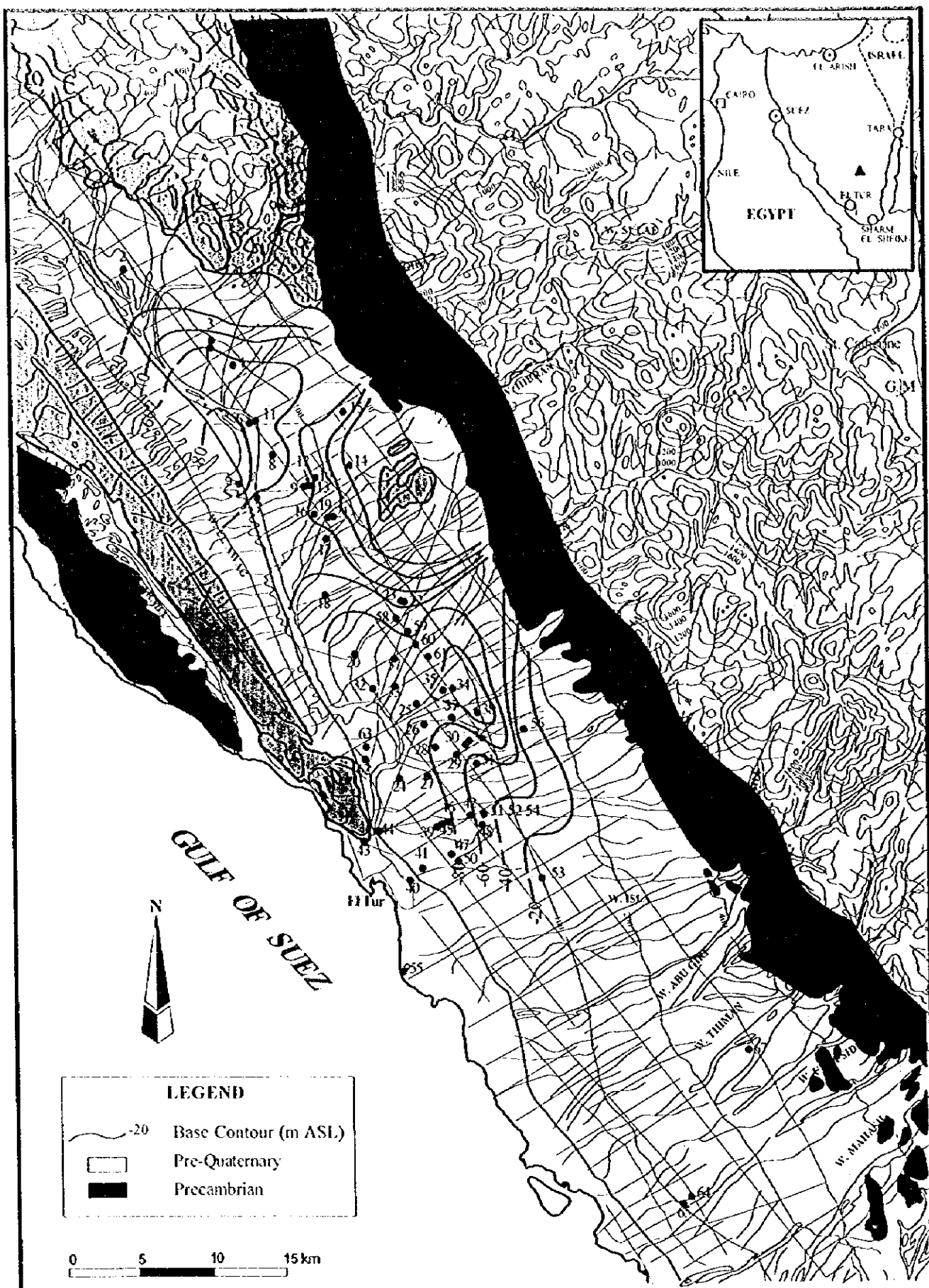


Fig. 8.2.1-8 Isobath Map of the Aquifer (El Qaa Plain)

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Recorded water levels and rainfall in El Qaa (Second Aquifer)

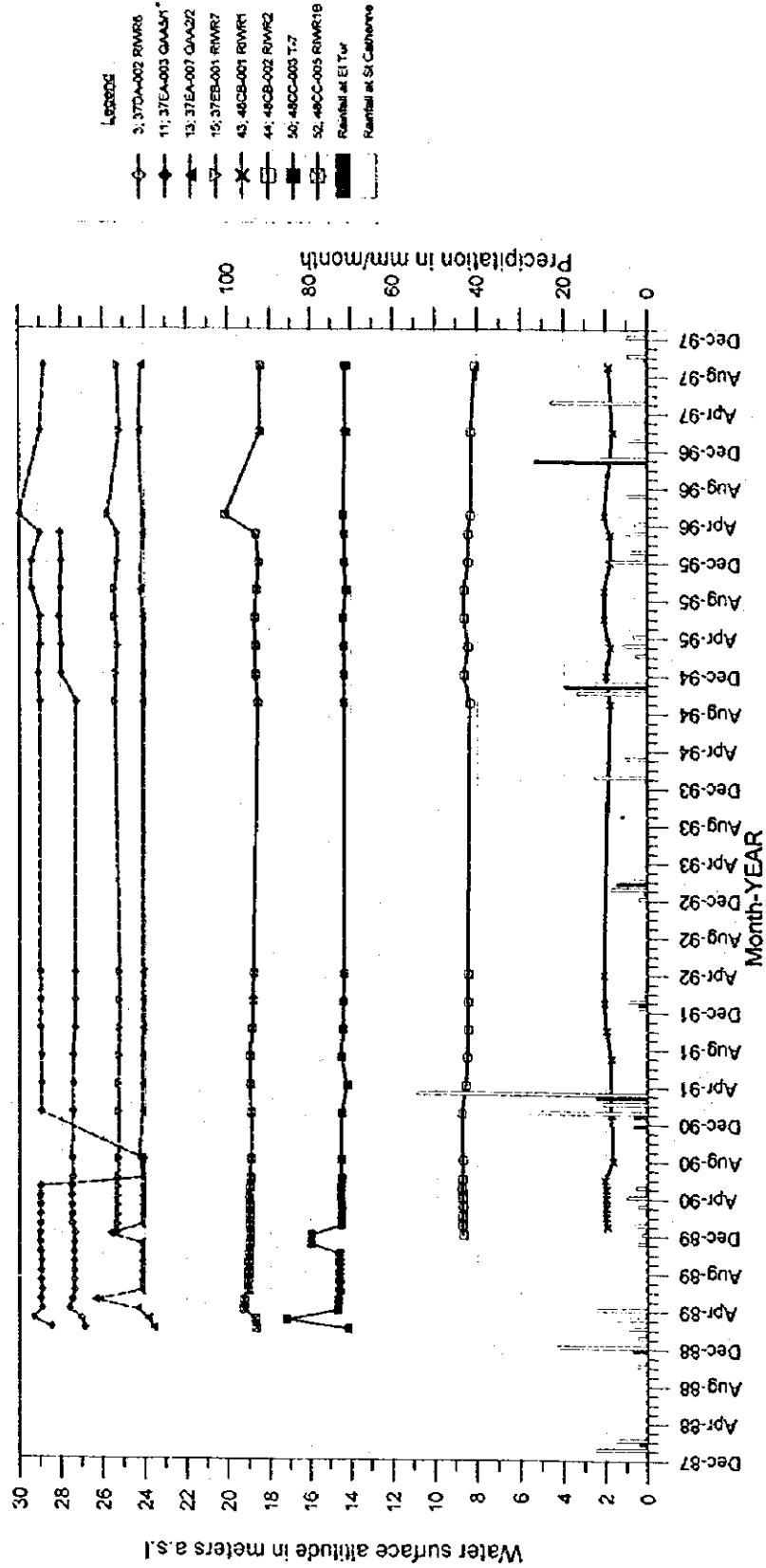


Fig. 8.2.1-10 Groundwater Level Fluctuation of the Main Aquifer (El Qaa Plain)

Recorded water levels and rainfall in El Qaa (Third Aquifer)

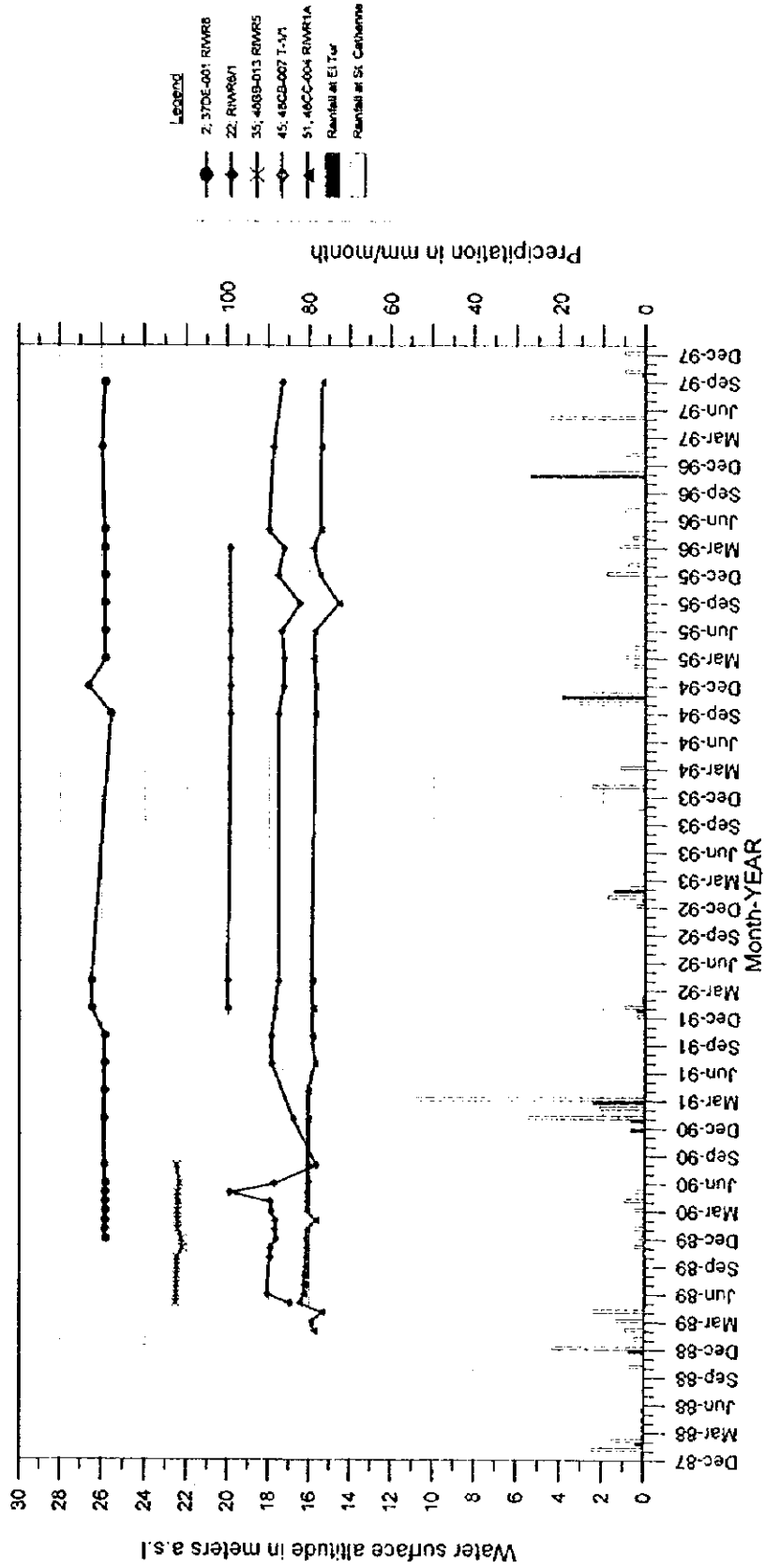


Fig. 8.2.1-11 Groundwater Level Fluctuation of the Third Aquifer (El Qaa Plain)

Recorded water levels of Dug Wells in Wadi Village

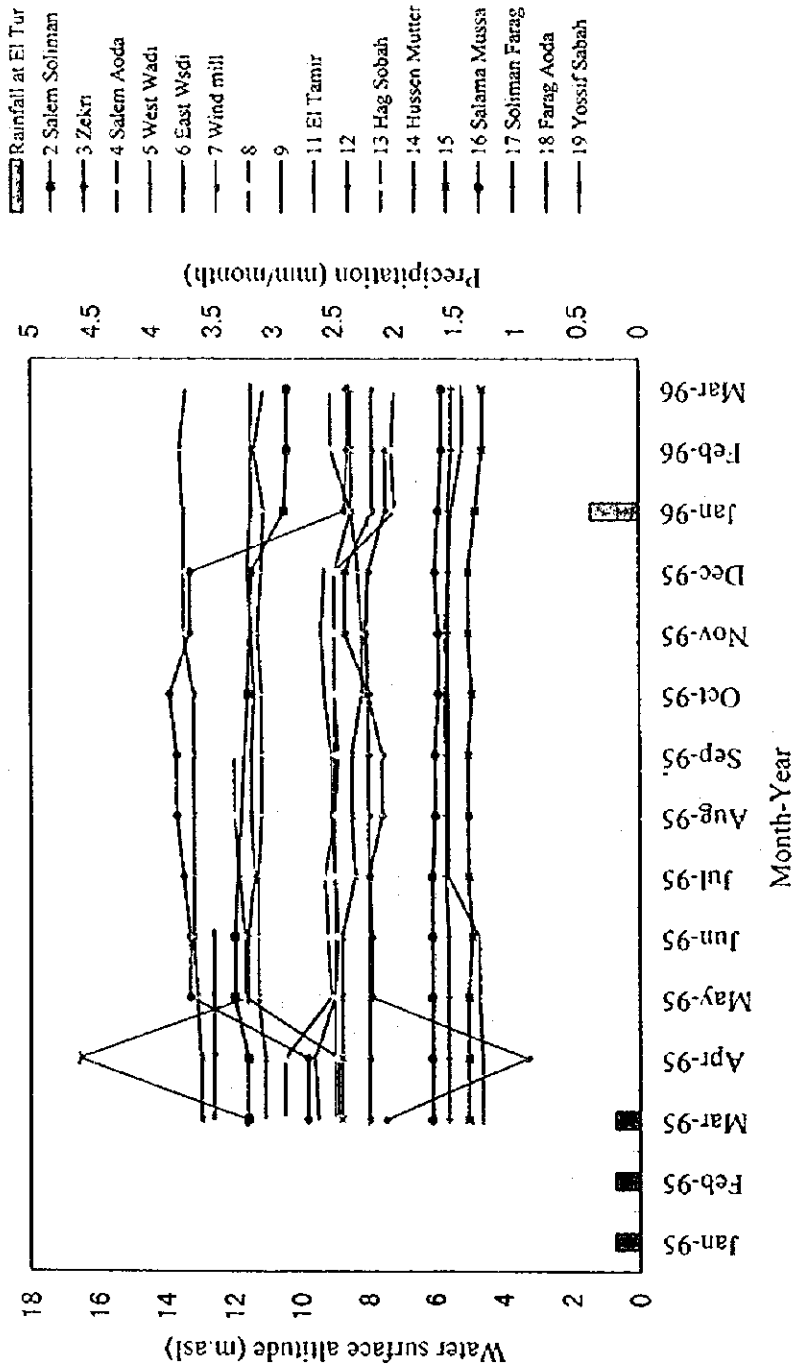


Fig. 8.2.1-12 Groundwater Level Fluctuation in Wadi Village (El Qaa Plain)

Recorded water levels of Dug Wells in El Gebaal

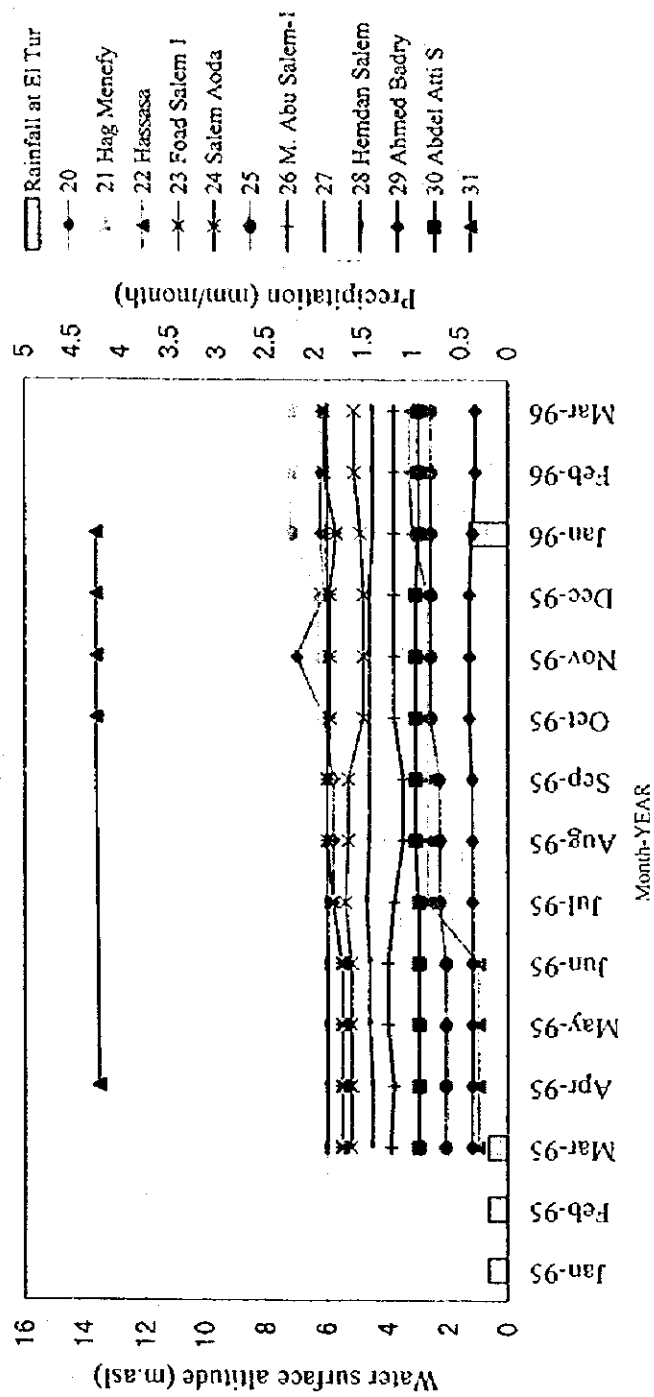


Fig. 8.2.1-13 Groundwater Level Fluctuation in El Gebaal (El Qaa Plain)





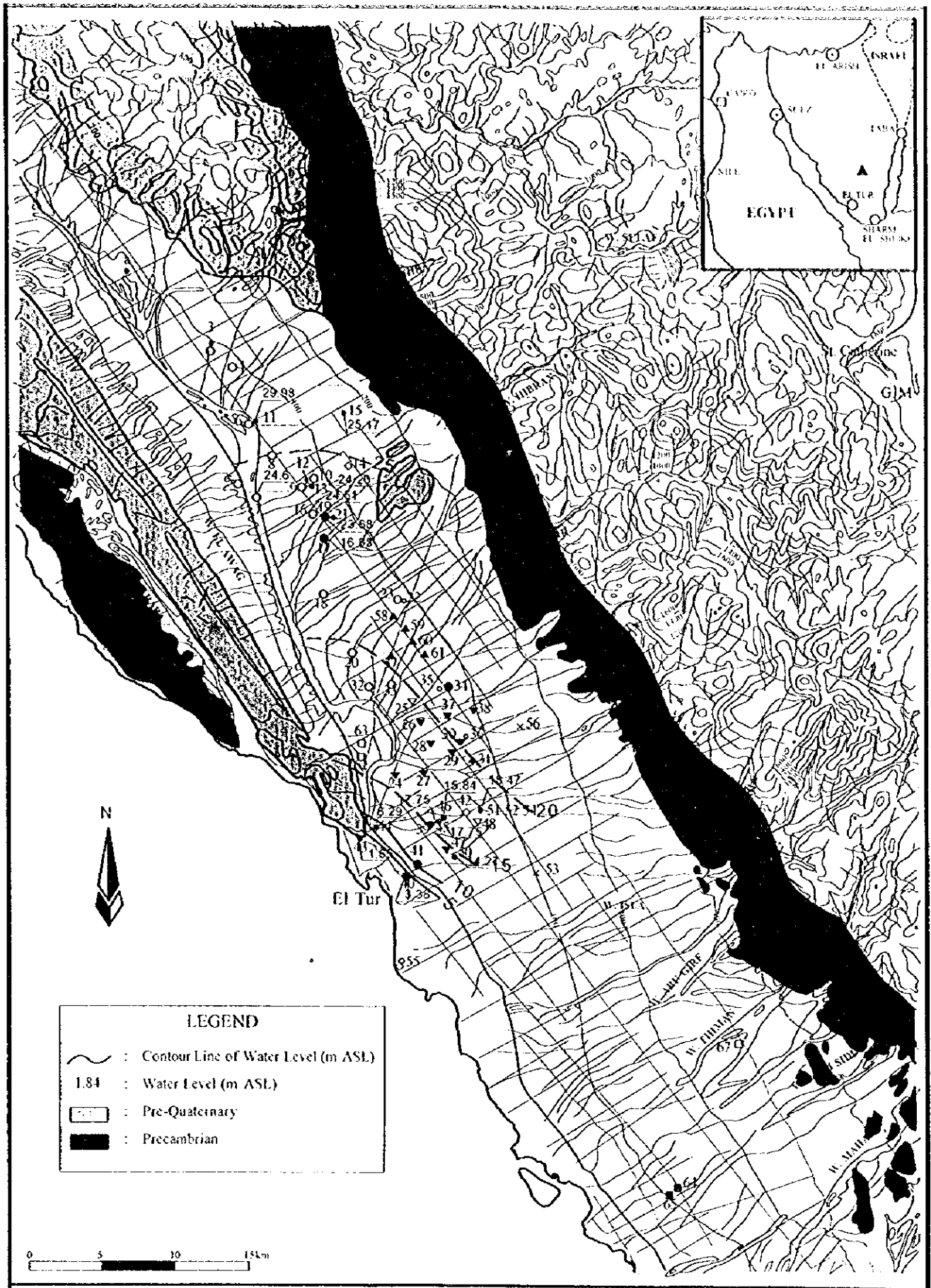


Fig. 8.2.1-14(2) Piezometric Head Contour Map Feb-97 (El Qaa Plain)

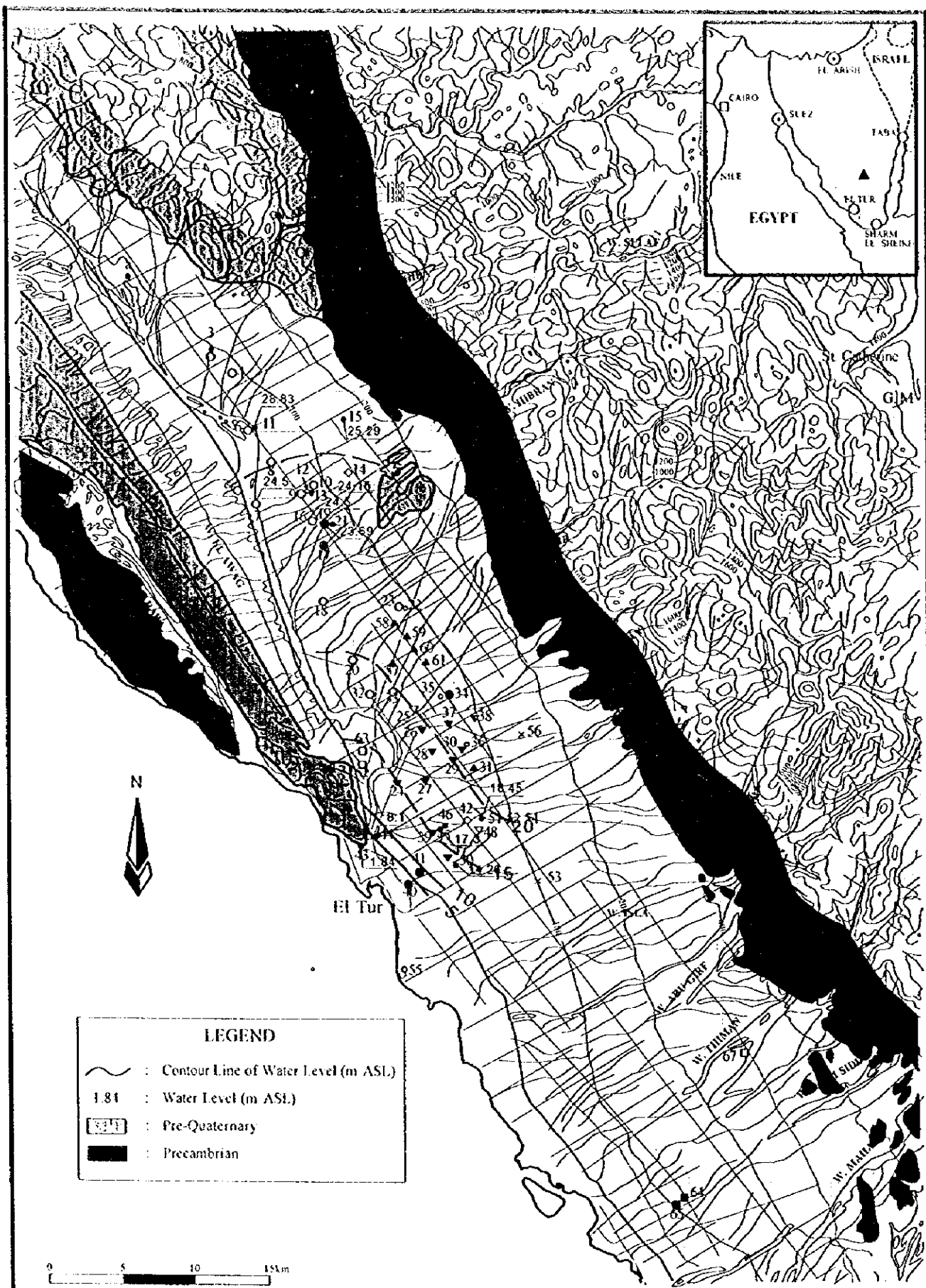


Fig. 8.2.1-14(3) Piezometric Head Contour Map Sep-97 (El Qaa Plain)

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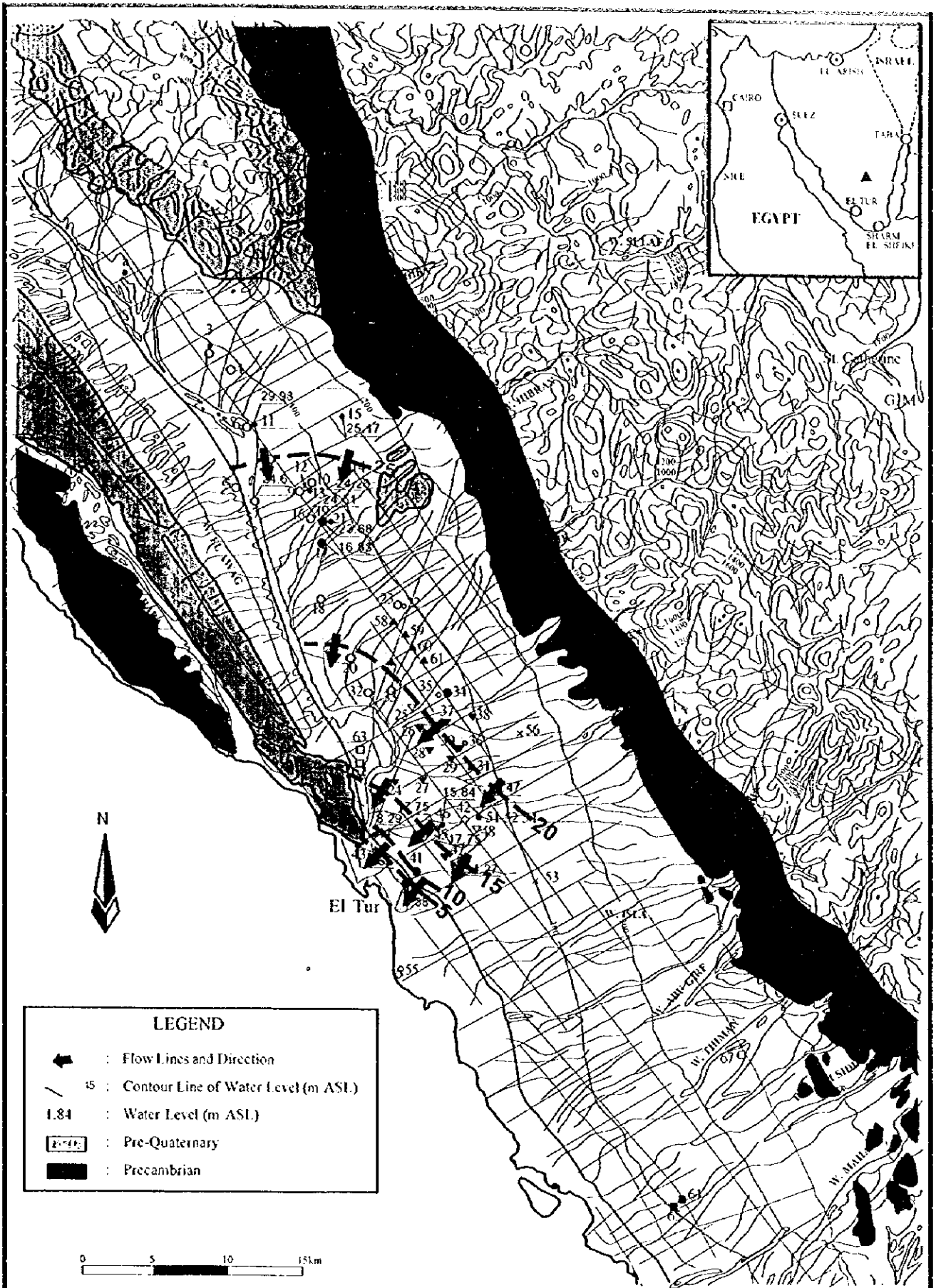


Fig. 8.2.1-15 Groundwater Flow in El Qaa Plain

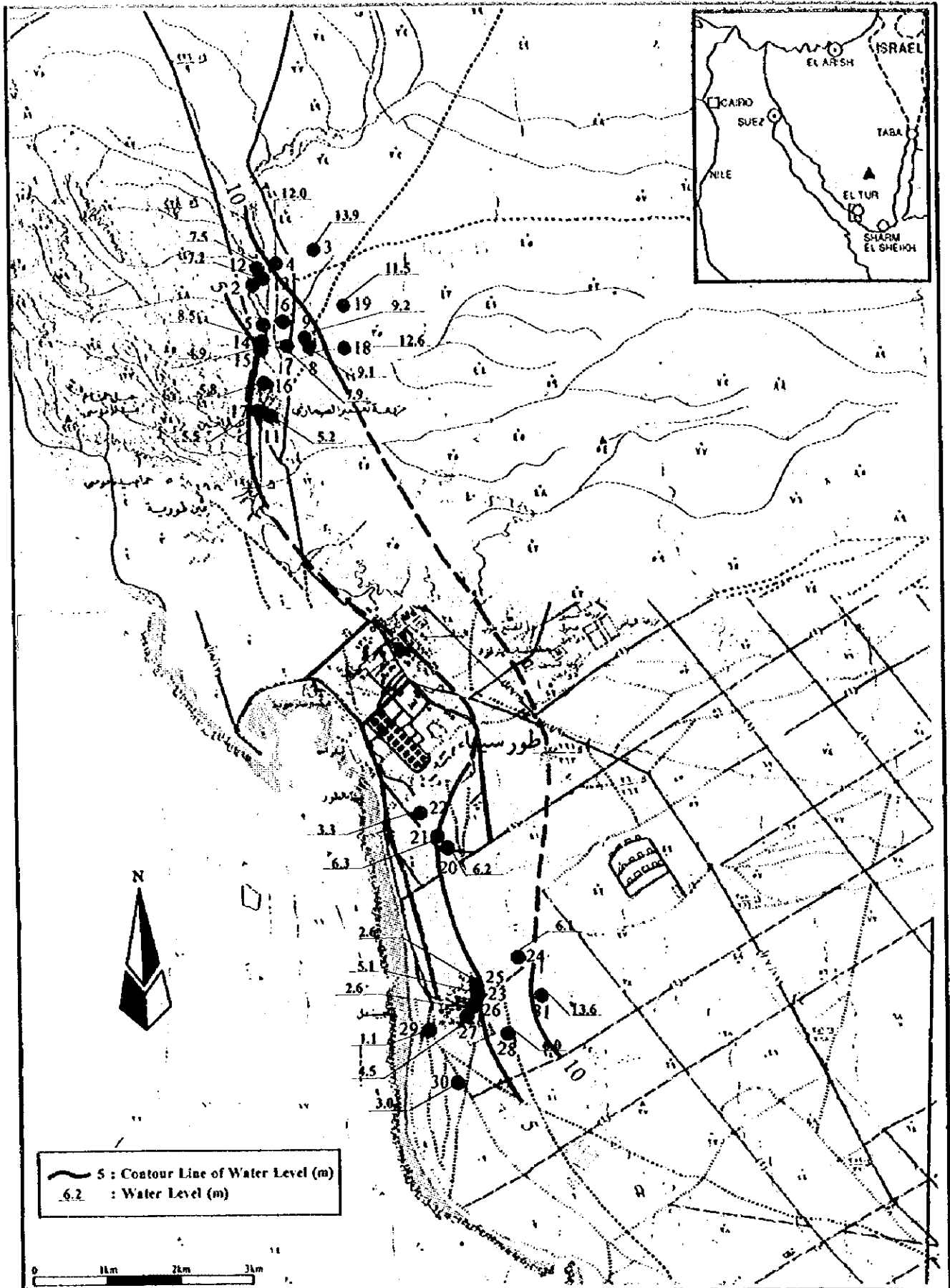


Fig.8.2.1-16 Water Table Contour of Dug Wells ( El Qaa Plain )

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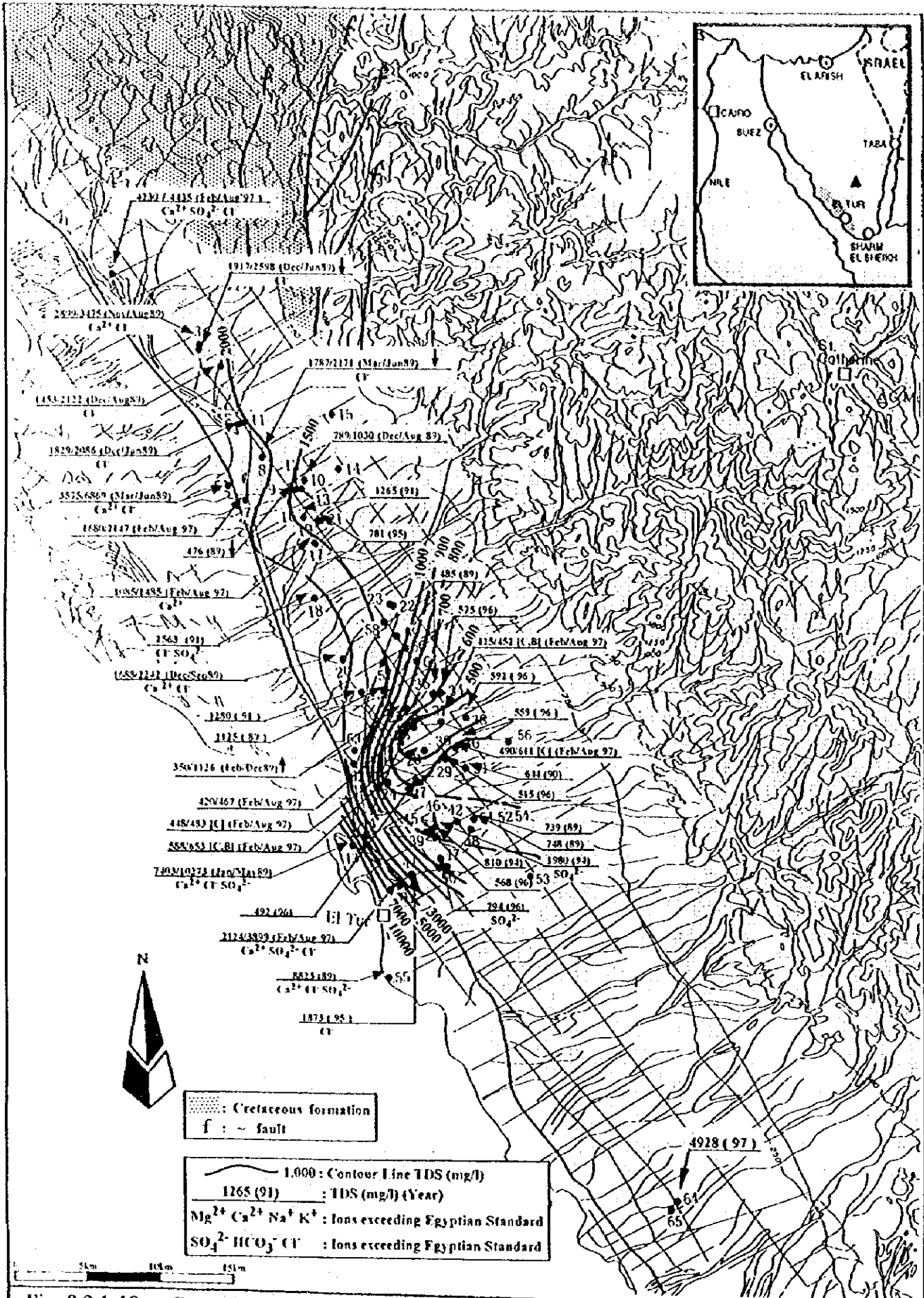


Fig. 8.2.1-18 Groundwater Quality in Summer (El Qaa Plain)

Variation of TDS (El Qaa Plain)

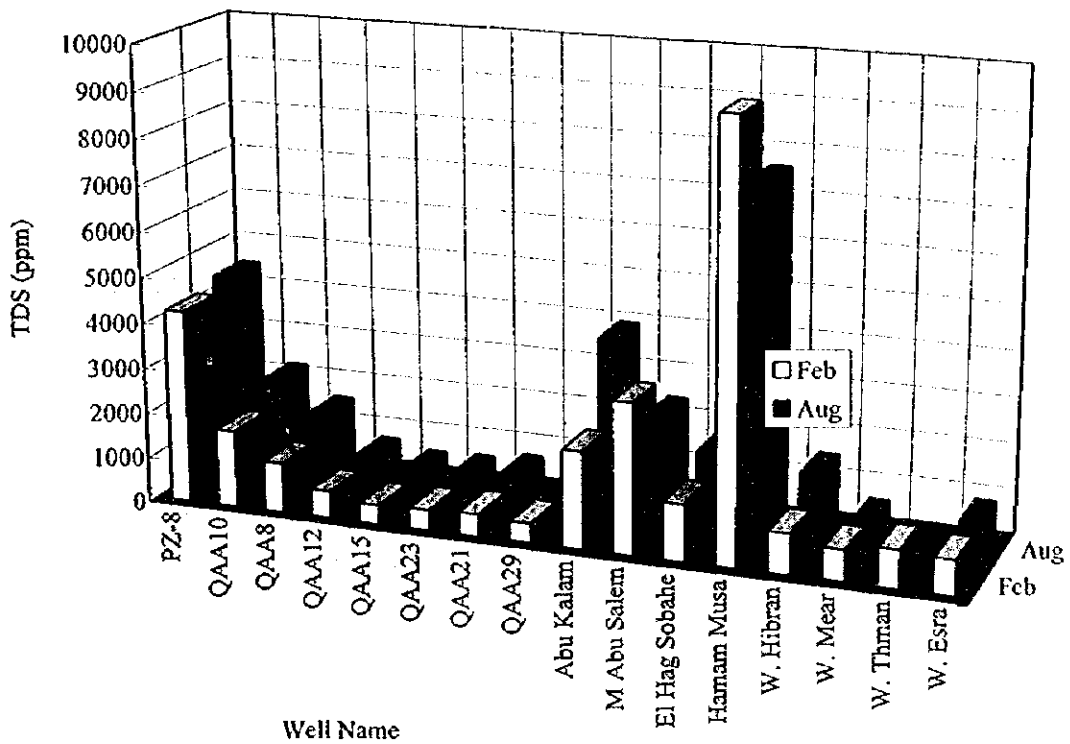


Fig. 8.2.1-19 Variation of TDS (El Qaa Plain)

Variation of TDS in El Tur City

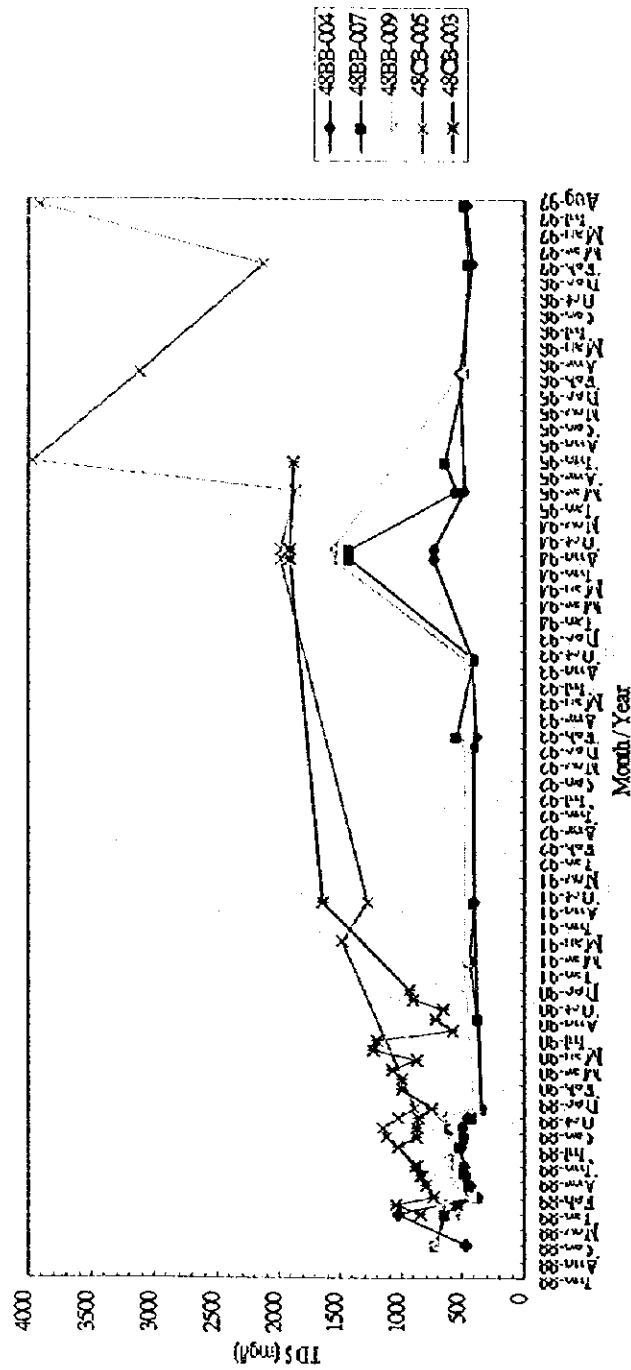


Fig. 8.2.1-20 Variation of TDS (El Tur City)



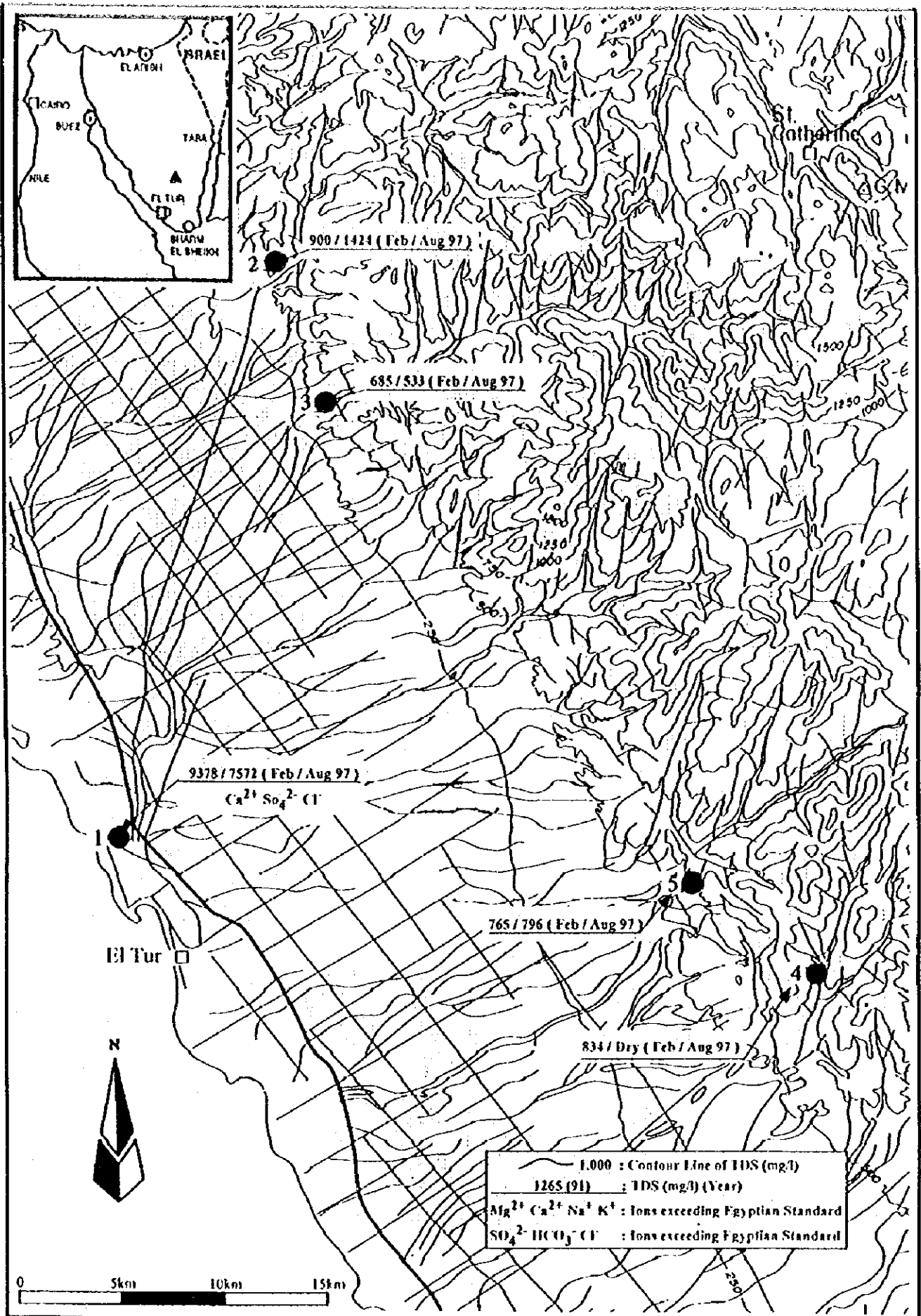


Fig. 8.2.1-21 Groundwater Quality (Spring: El Qaa Plain)

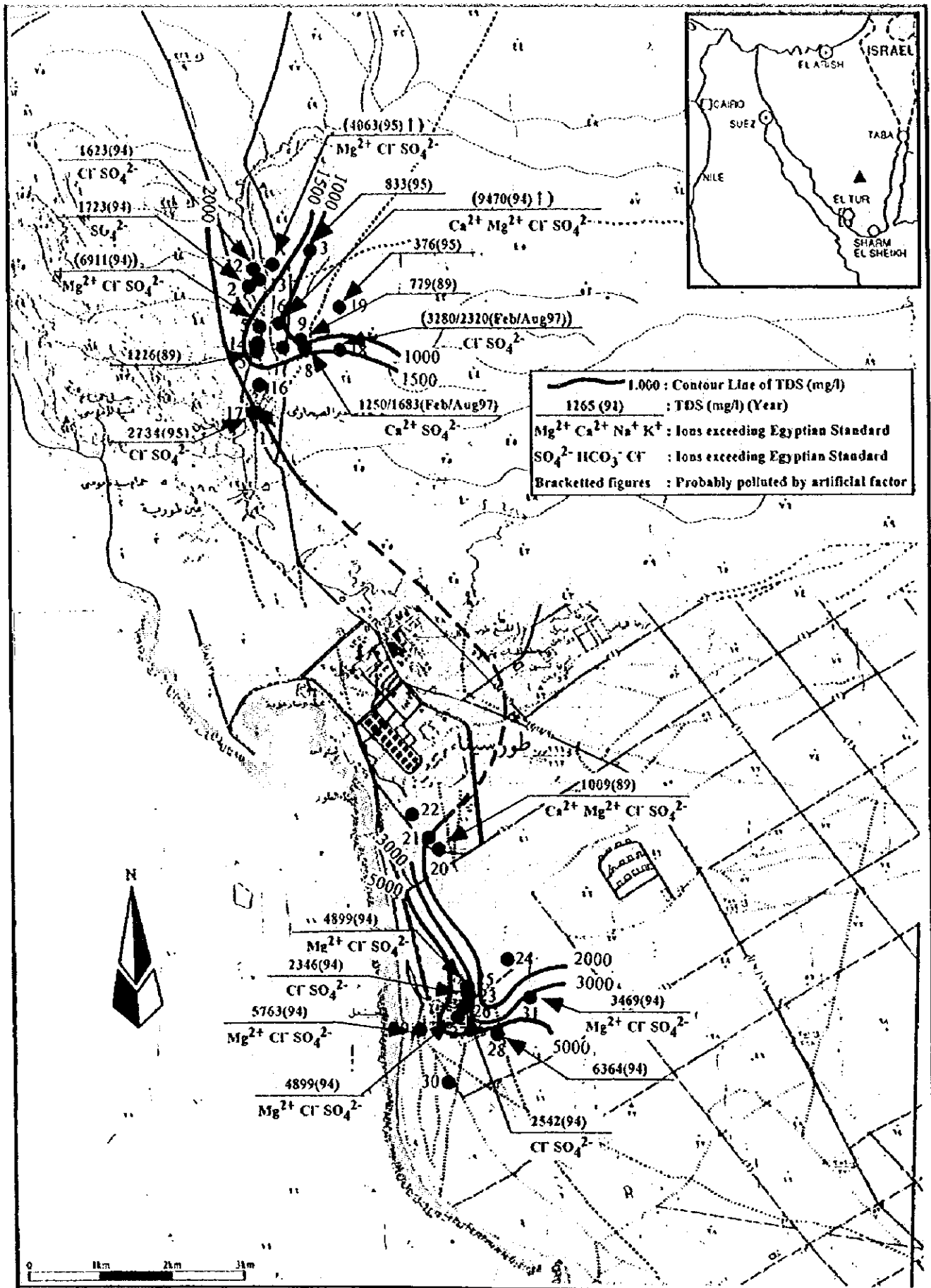


Fig.8.2.1-22 Groundwater Quality: Dug Well of El Qaa Plain

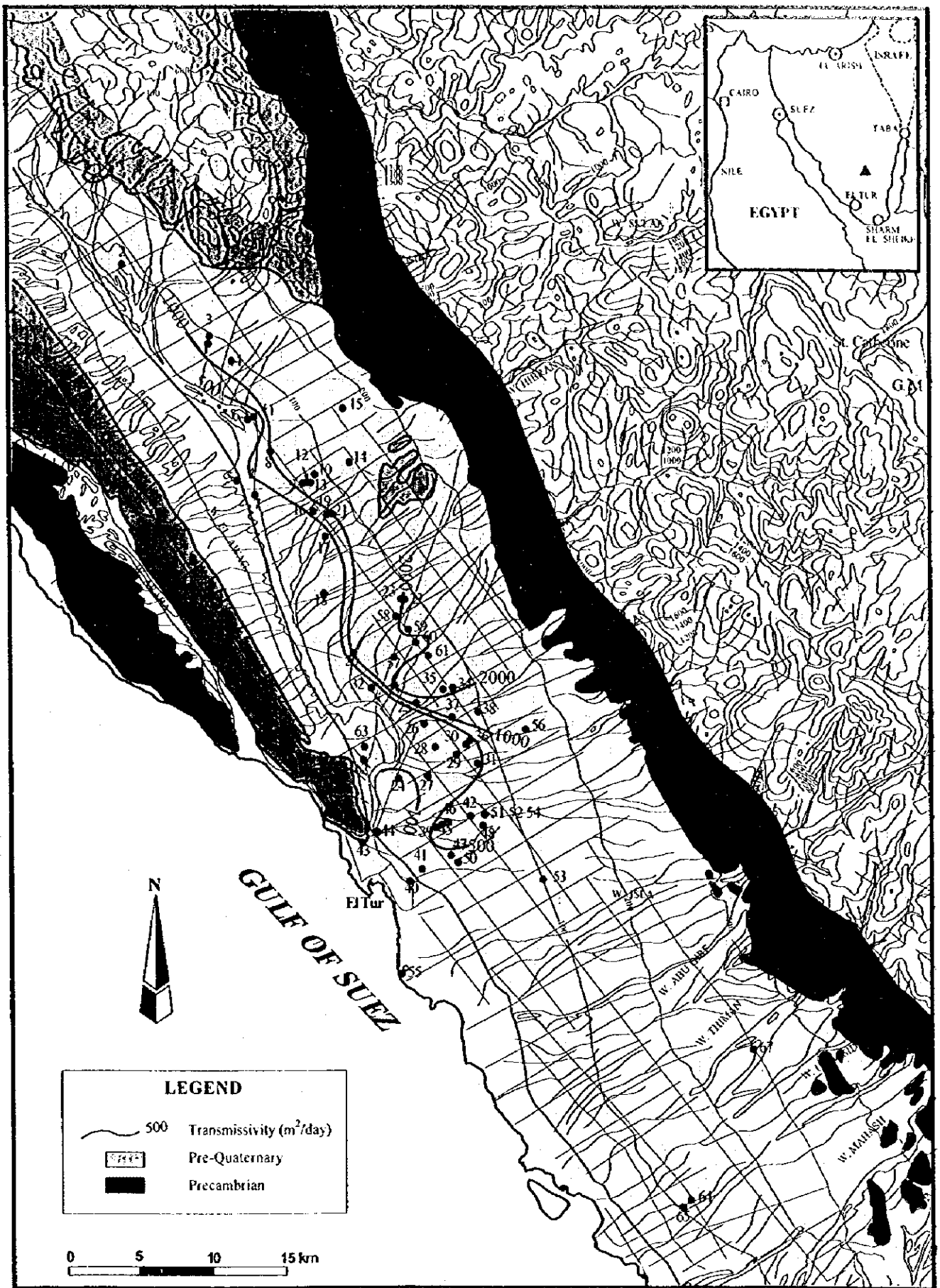


Fig. 8.2.1-23 Transmissivity Distribution (El Qaa Plain)

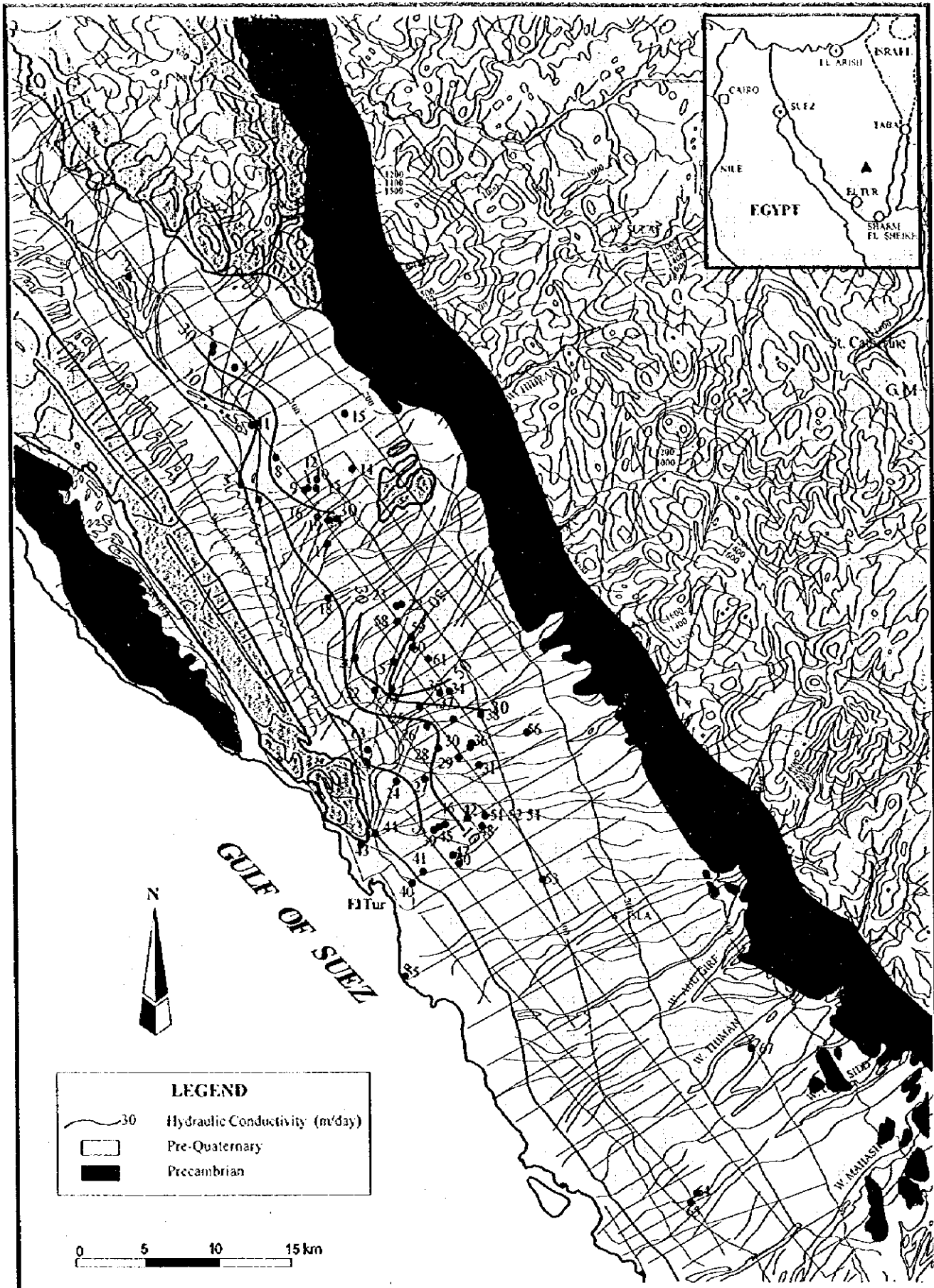


Fig. 8.2.1-24 Hydraulic Conductivity Distribution (El Qaa Plain)

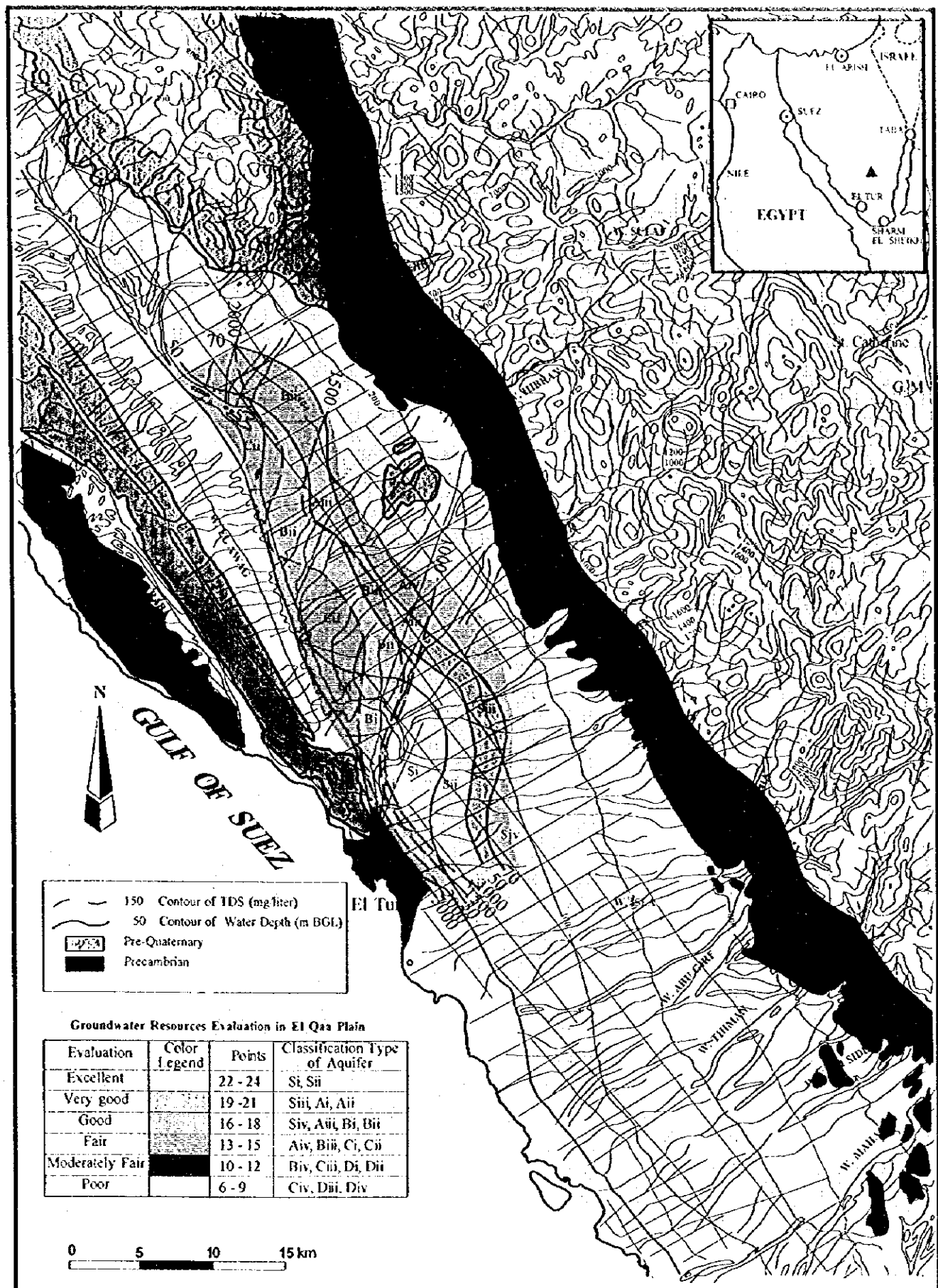


Fig. 8.2.1-25 Groundwater Evaluation Map (El Qaa Plain)

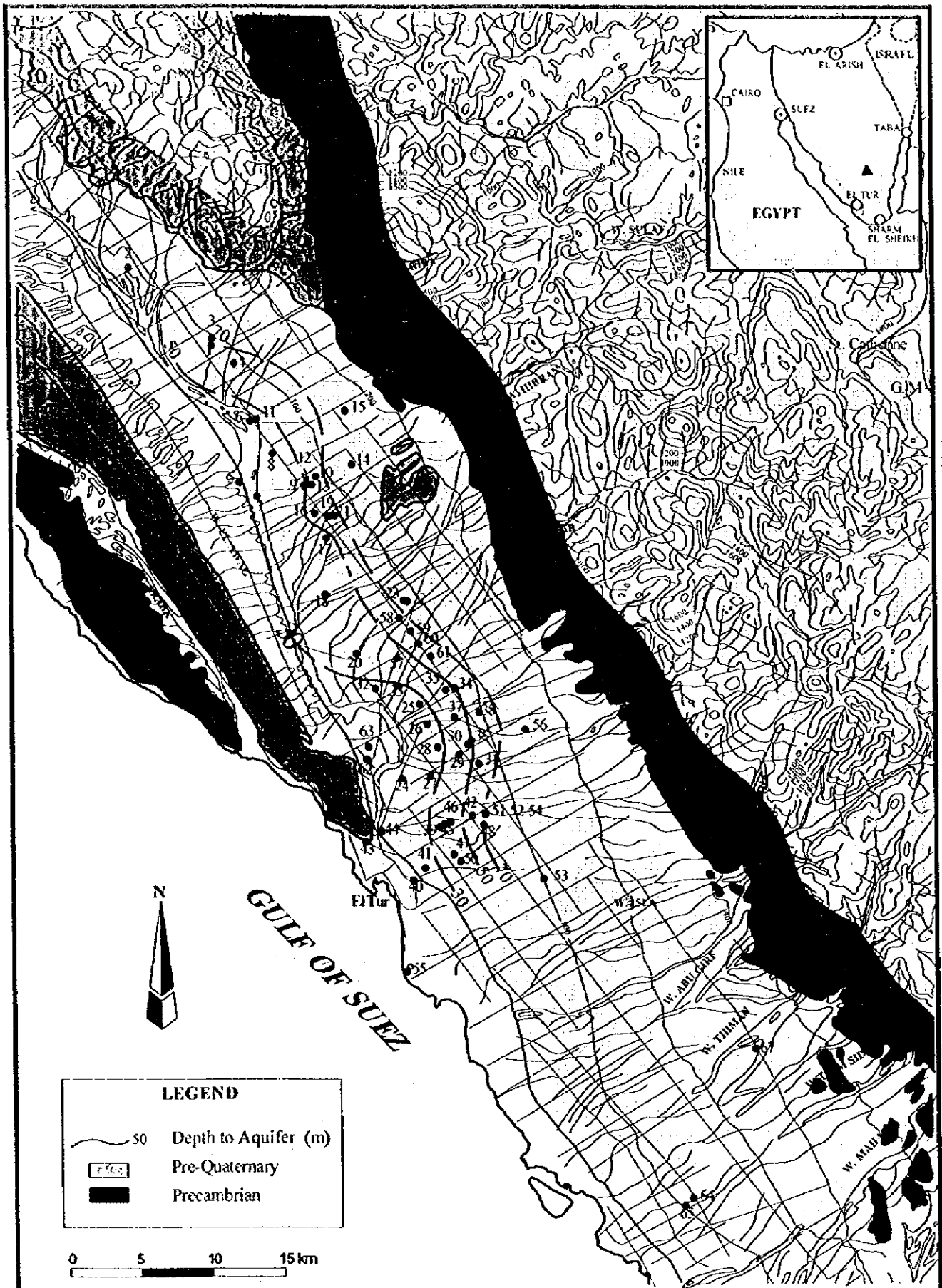


Fig. 8.2.1-26 Depth to Aquifer (El Qaa Plain)