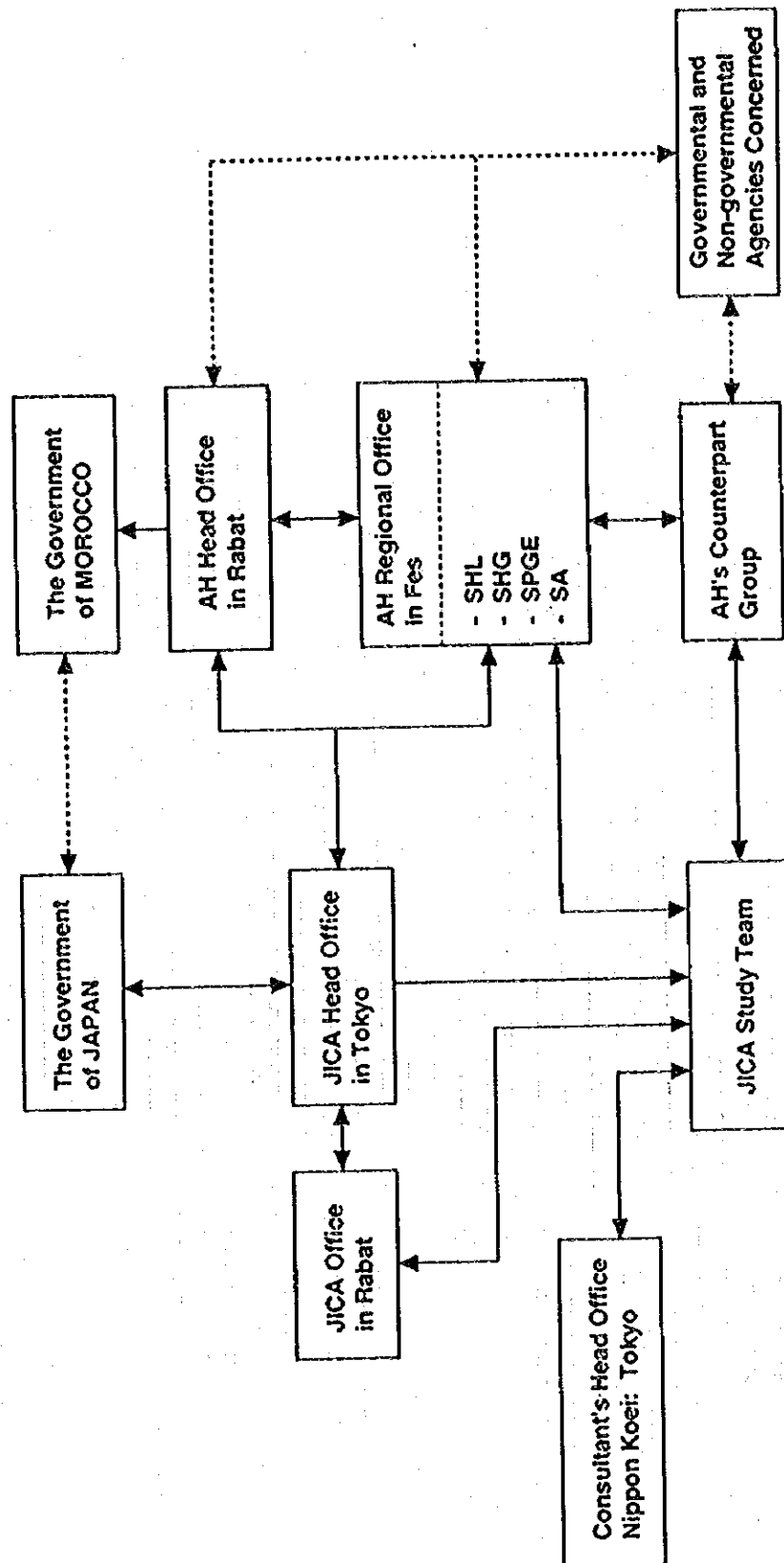


## ***FIGURES***



Source : The Integrated Master Plan on Water Resources Development  
in the Sebou, Bou Regreg and Oum Er Rbia Basins, 1992, A.H

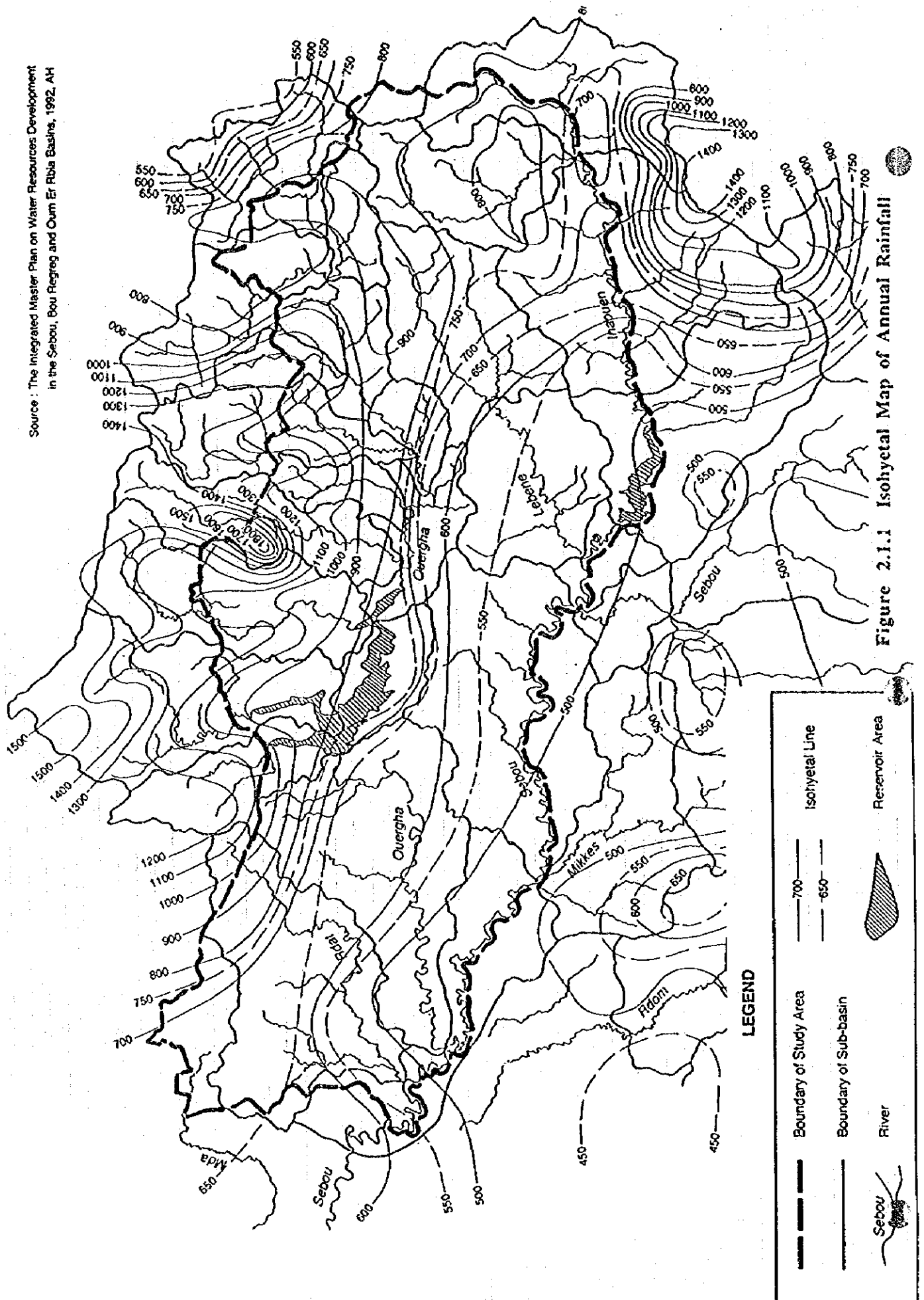
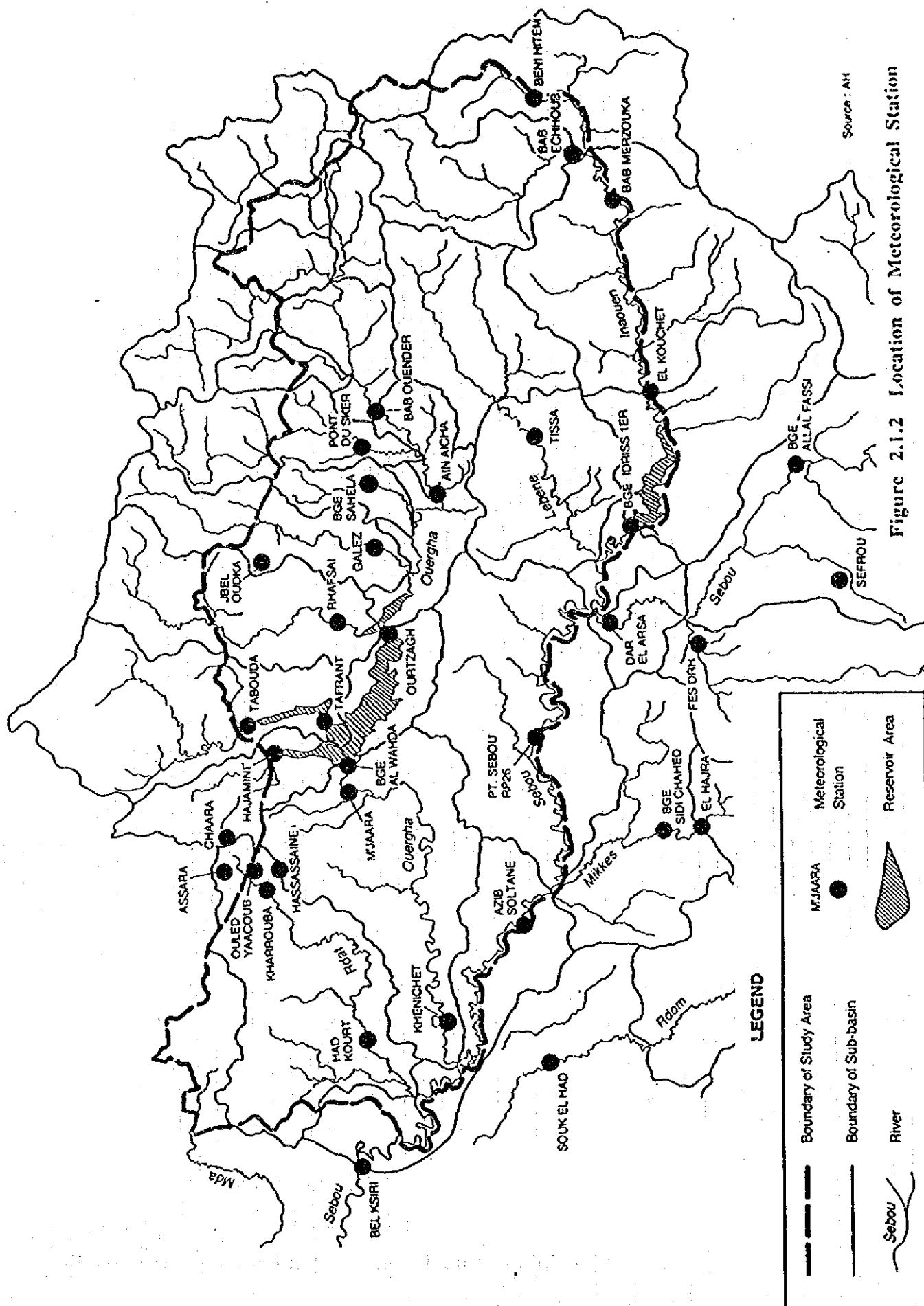


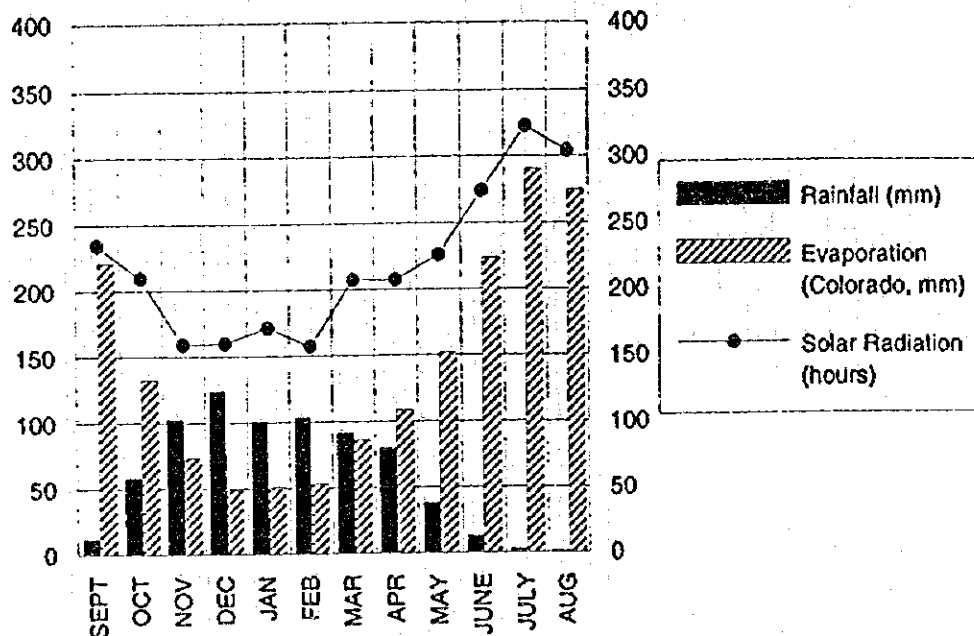
Figure 2.1.1 Isohyetal Map of Annual Rainfall



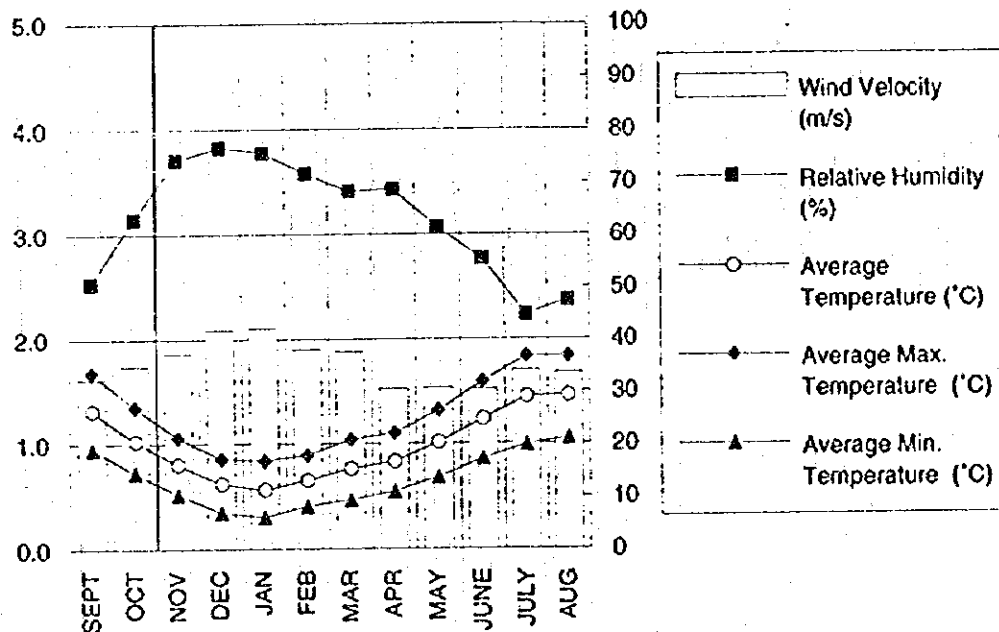
Source : AH

Figure 2.1.2 Location of Meteorological Station

### 6200 OURTZAGH



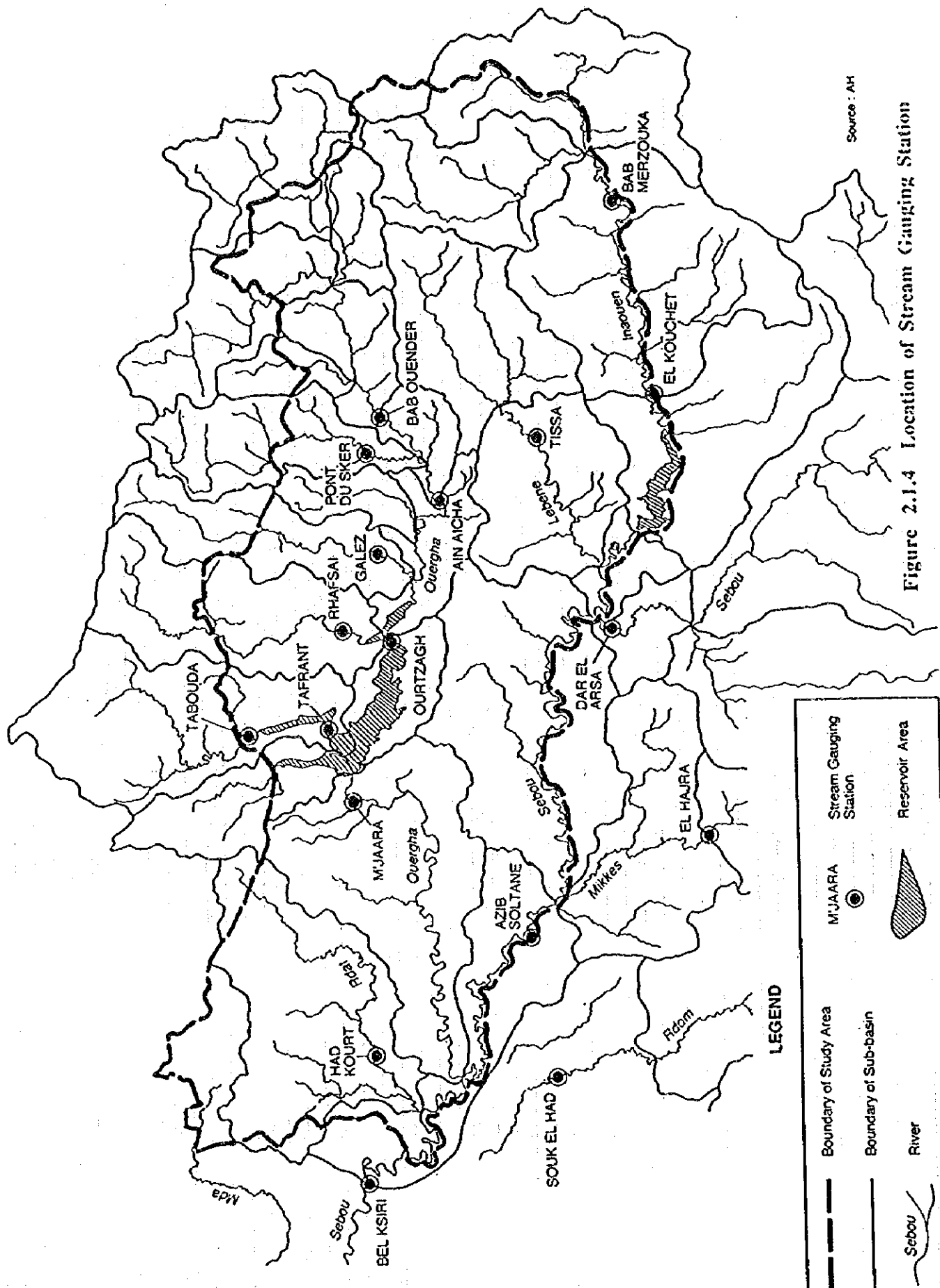
### 6200 OURTZAGH



Note : Solar radiation records are quoted from the station Oulad Yaacoub (No. 6153).

Source : AH

Figure 2.1.3 Climatological Summary at Ourtzagh (No. 6200)



Source : AH

Figure 2.1.4 Location of Stream Gauging Station

## Flow Duration Curve

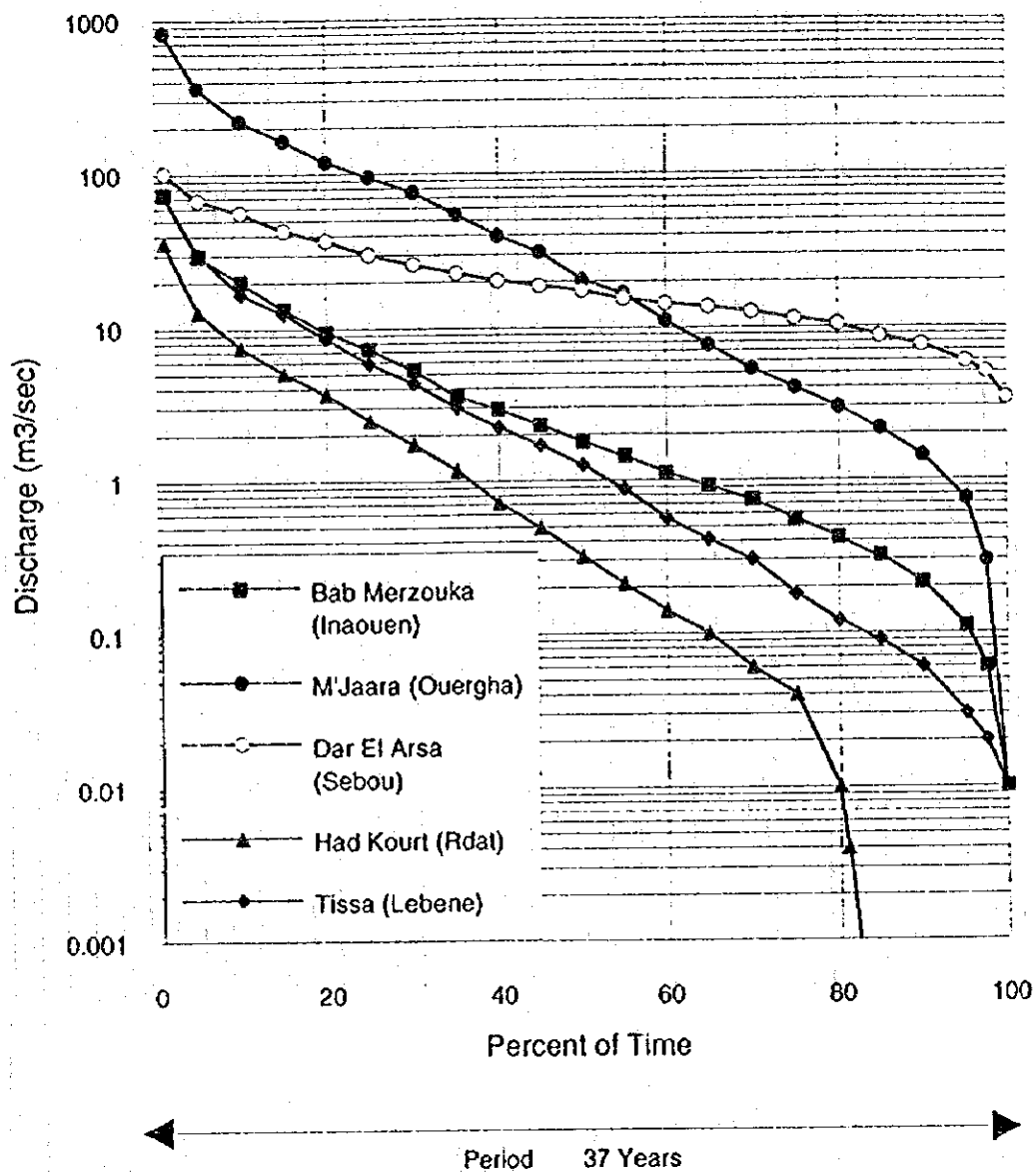
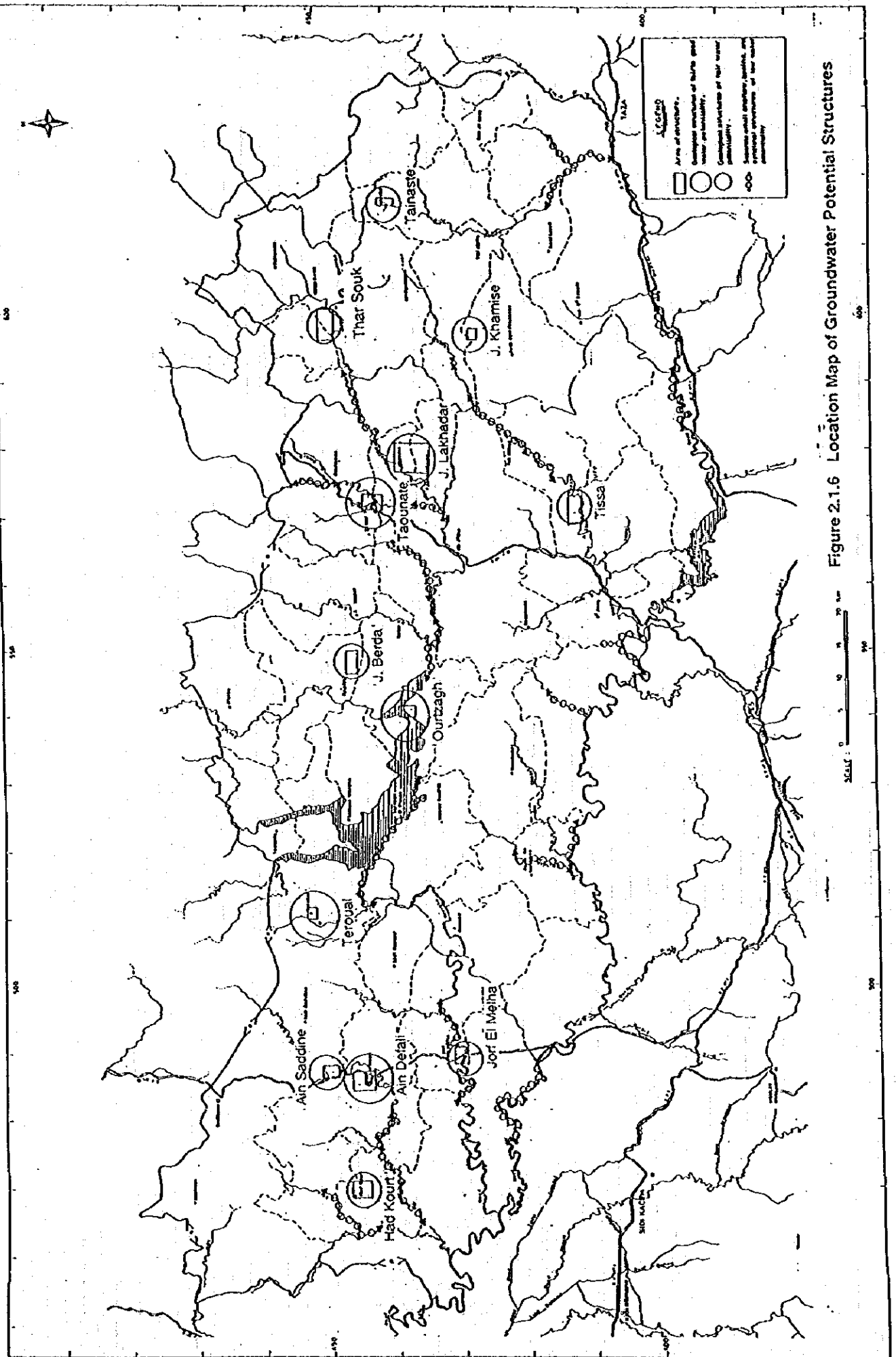
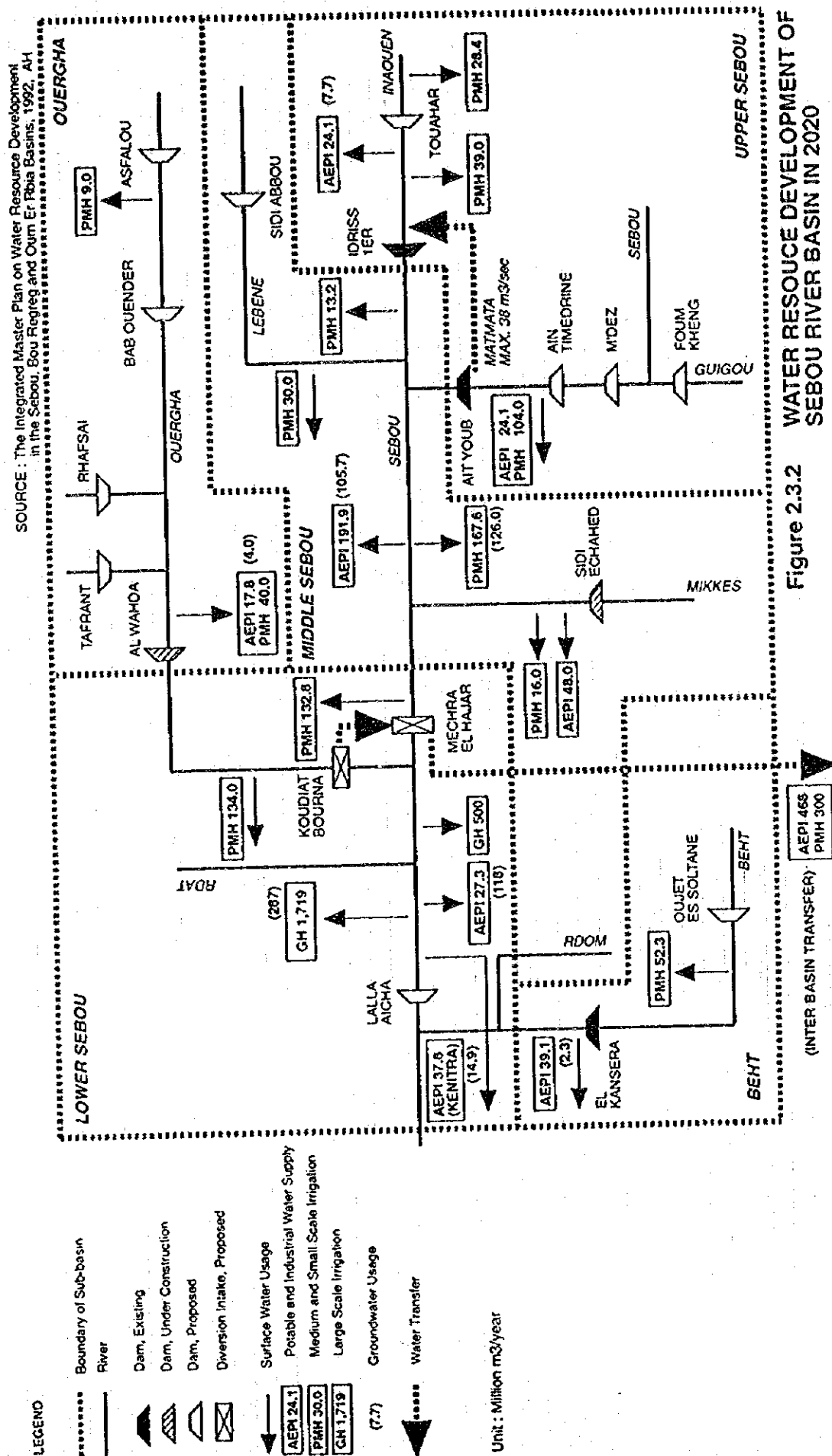


Figure 2.1.5 COMPARISON OF FLOW DURATION CURVE









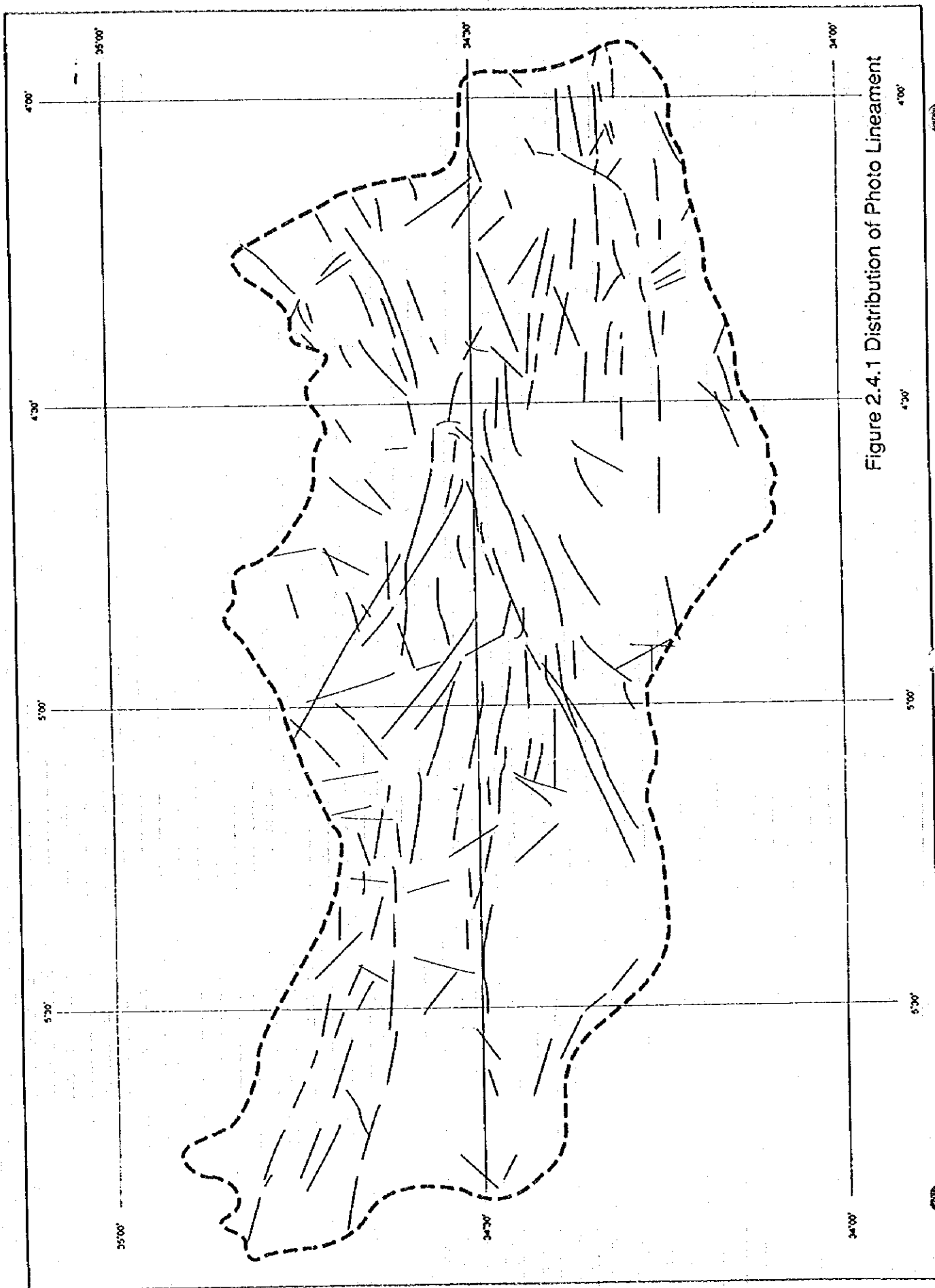


Figure 2.4.1 Distribution of Photo Lineament

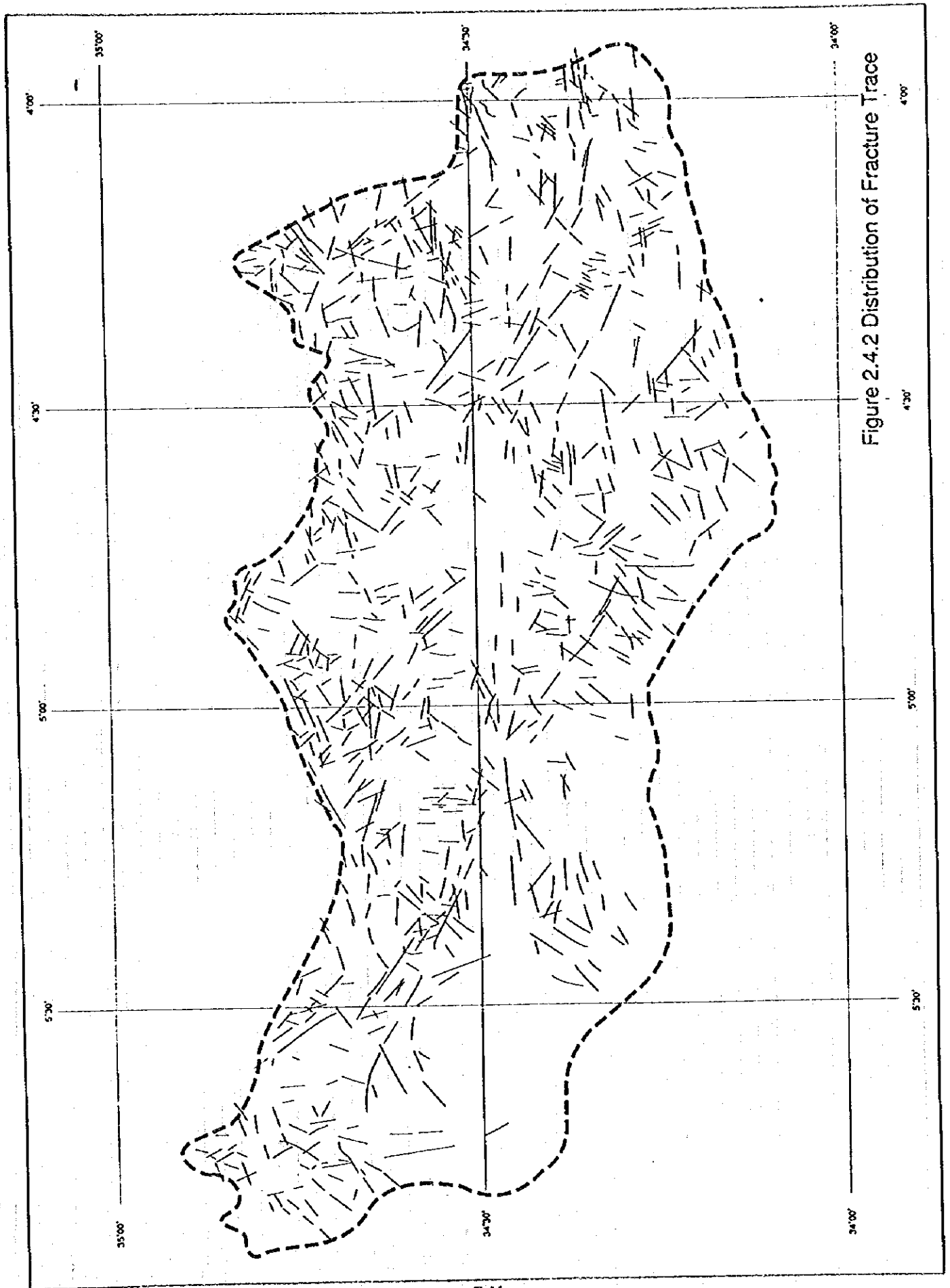
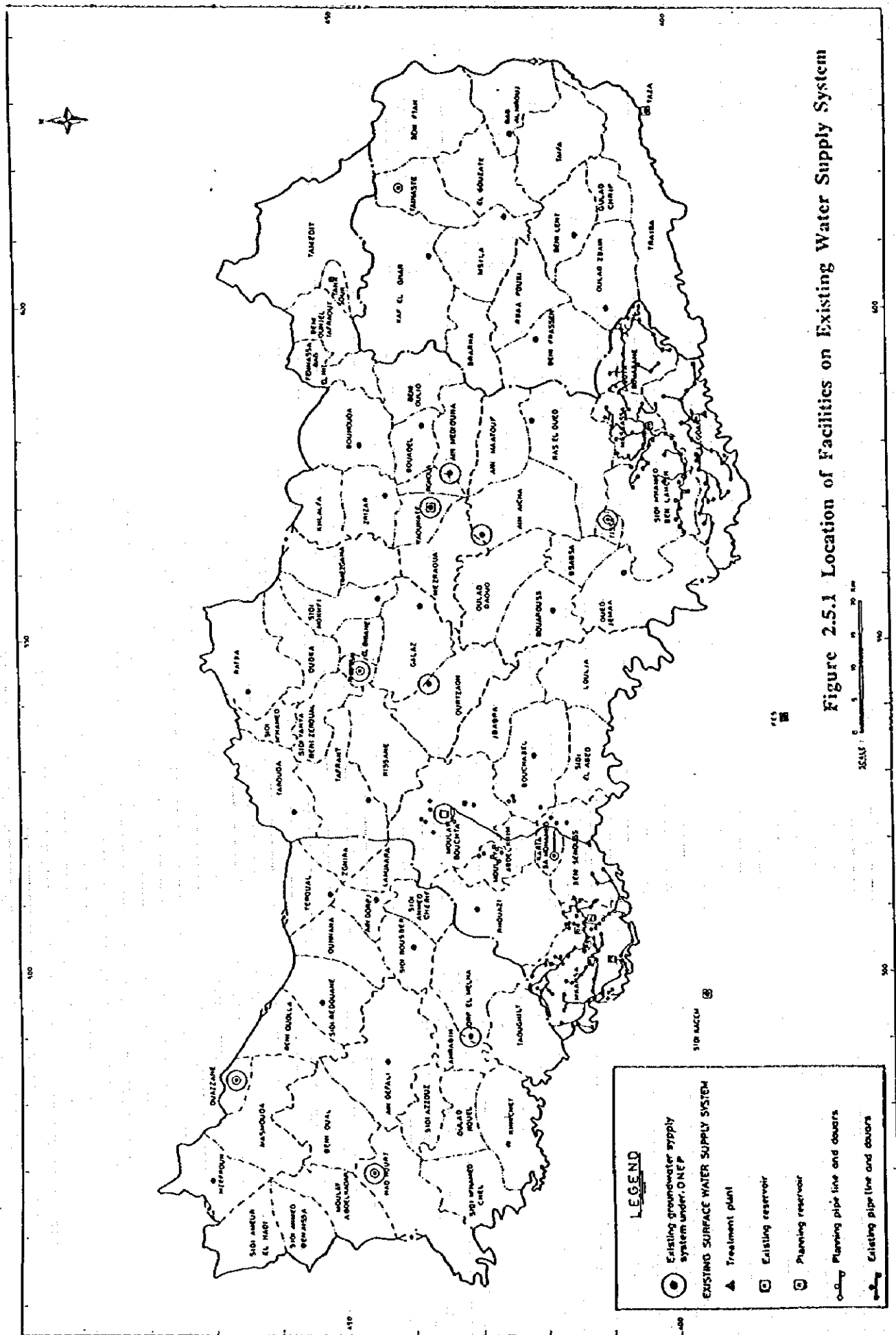


Figure 2.4.2 Distribution of Fracture Trace





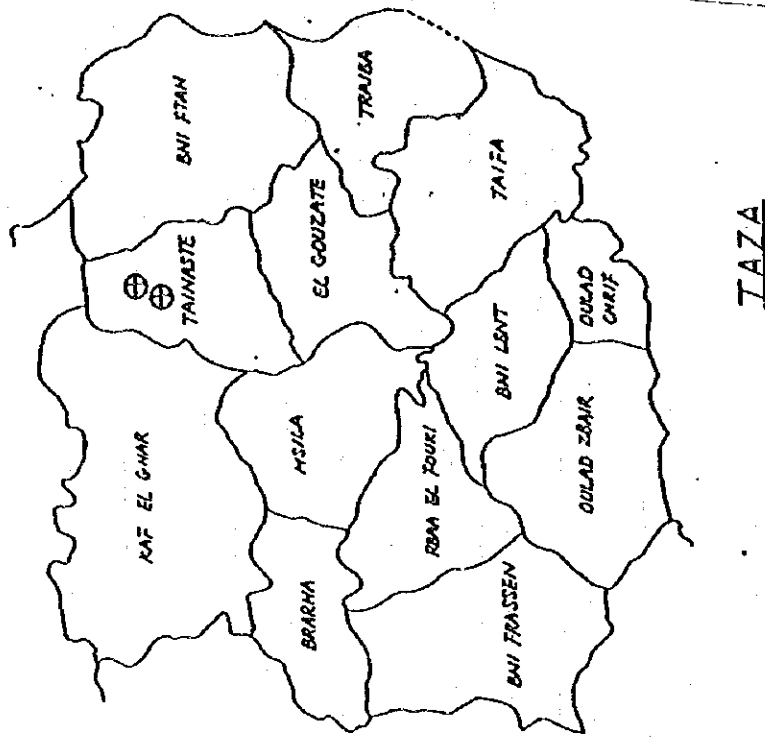
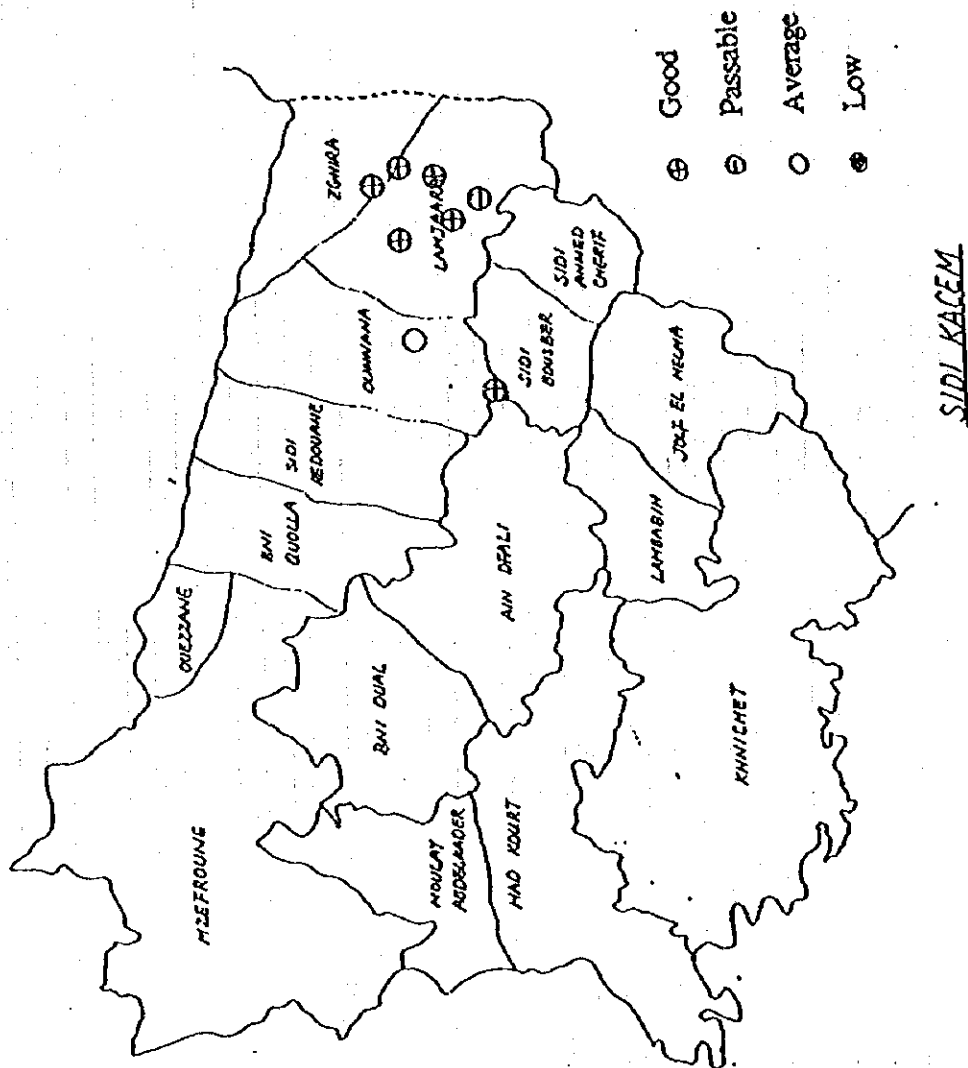


Fig. 2.6.1 Chemical Water Quality (Salinity) of Springs in the Study Area (2/2)



Fig. 2.6.2 Major Sources of Population in Sebou River Basin



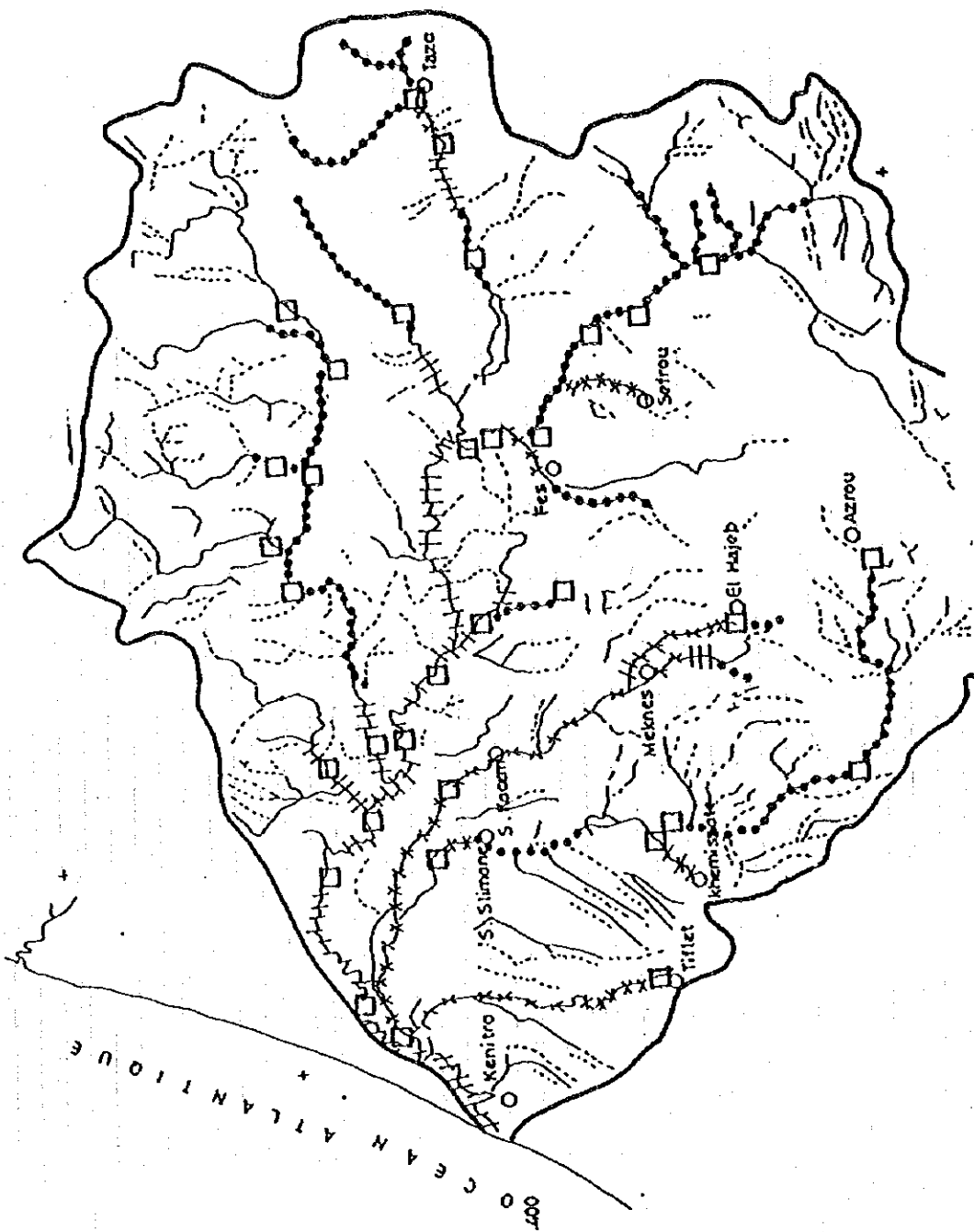


Fig. 2.6.3 Classification of Sebou River Basin in Terms of its Suitability for Drinking Water Use

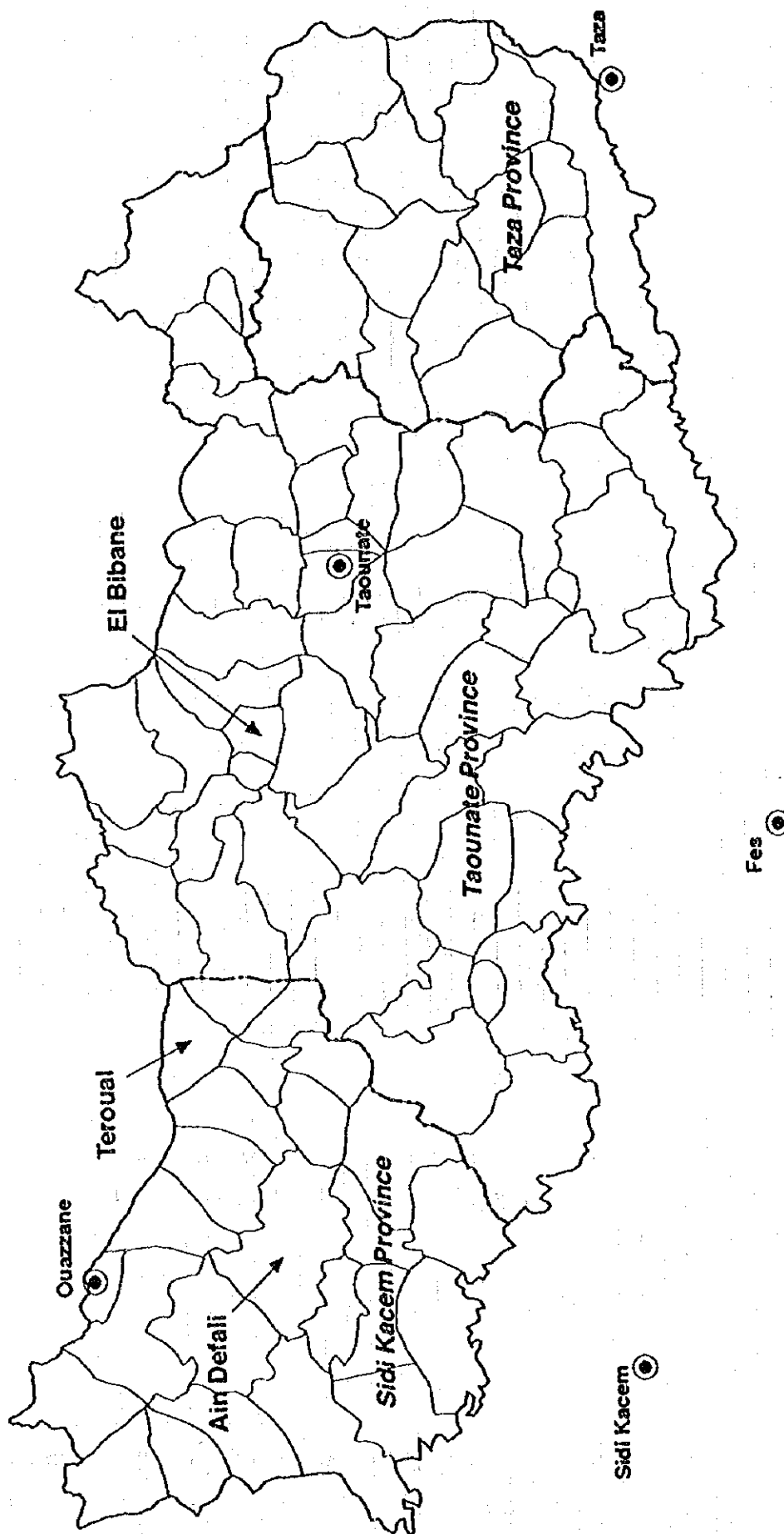
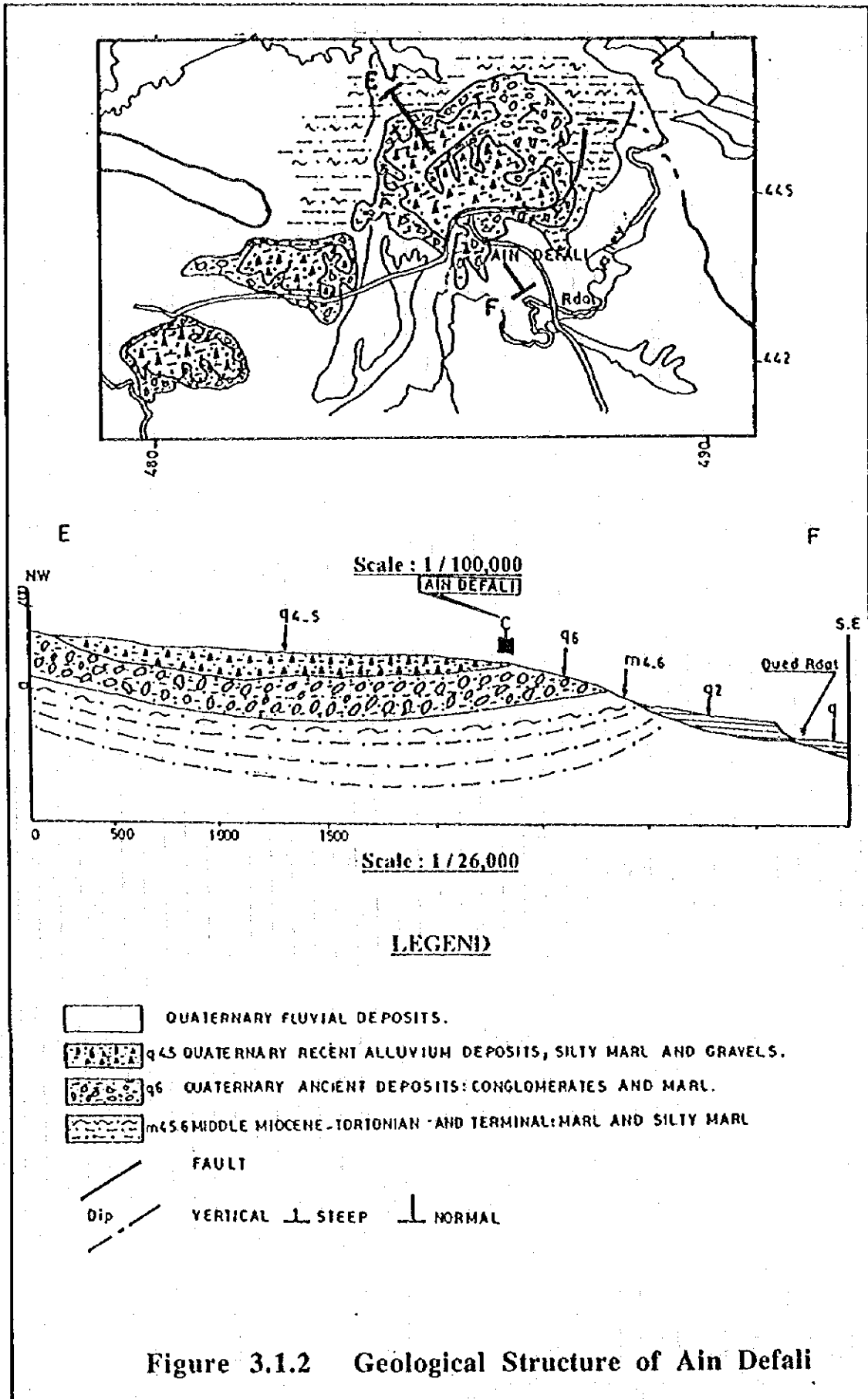
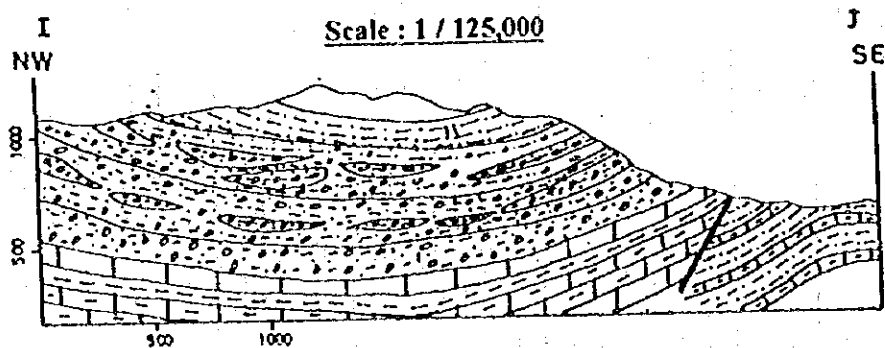
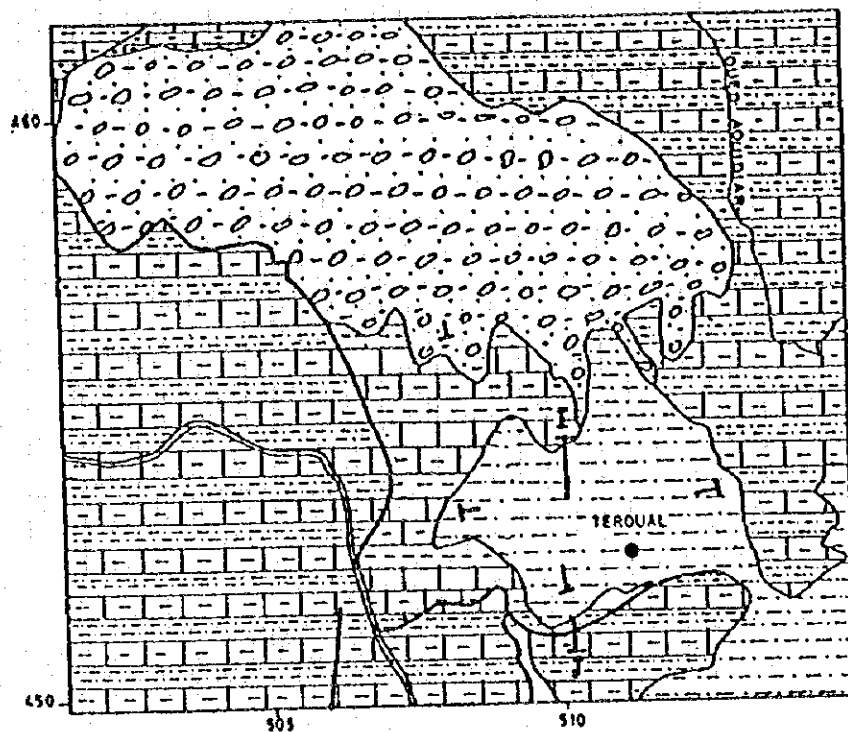


Figure 3.1.1 Location of Model Areas





Scale : 1 / 125,000

Scale : 1 / 62,500

### LEGEND










-  QUATERNARY, RECENT ALLOVIUM DEPOSITS.
-  MIOCENE SUP. MARL AND SILTY MARL.
-  OLIGOCENE, SANDY CONGLOMERATES WITH MARL MATRIX.
-  EOCENE, LIMESTONE, MARLY LIMESTONE AND MARL.
-  CRETEOUS, SUP. SILTY MARL, MARLY LIMESTONE AND SCHISTS.
-  FAULT. DIP  VERTICALE.  STEEP.  NORMALE.

Figure 3.1.3 Geological Structure of Teroual

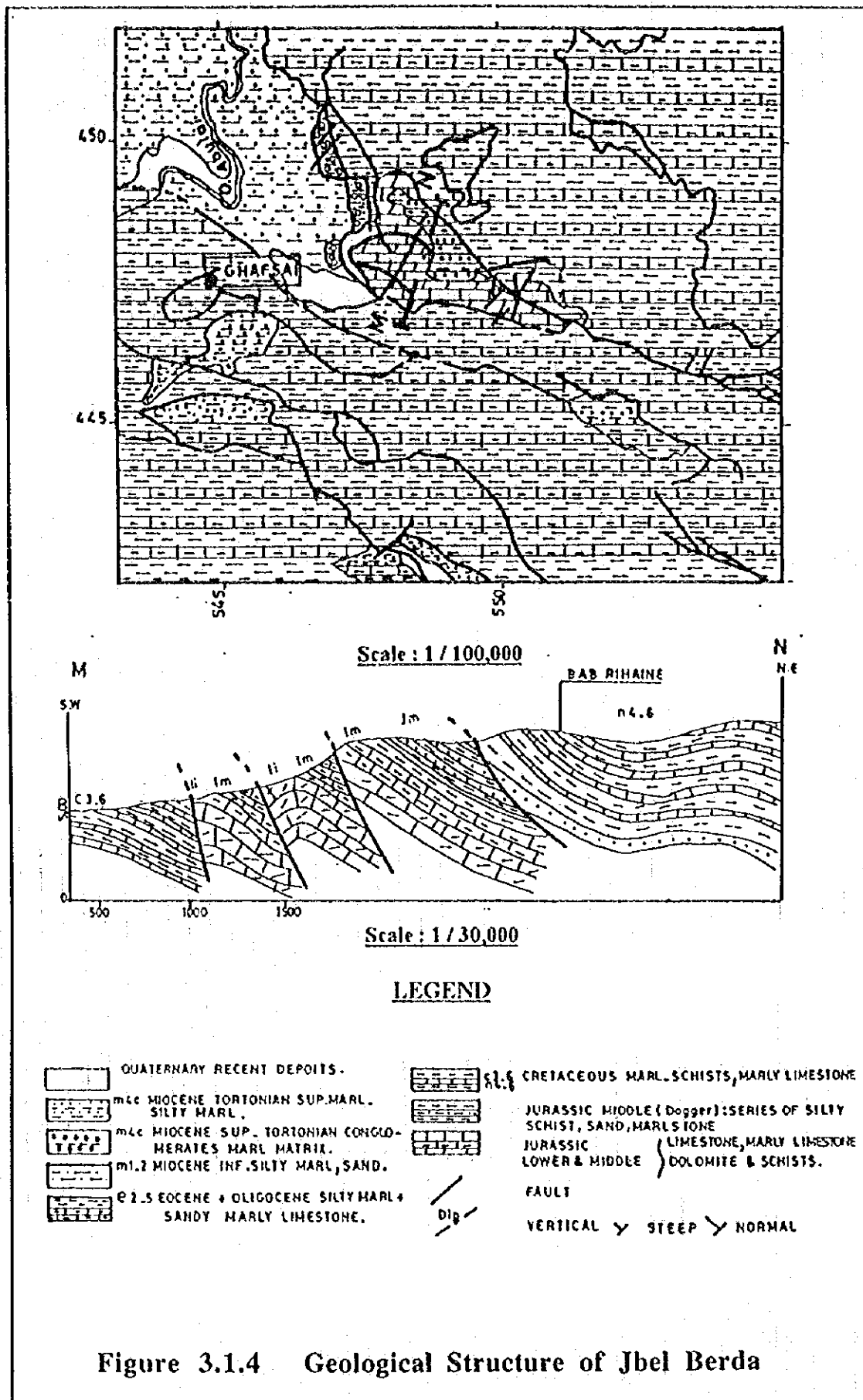
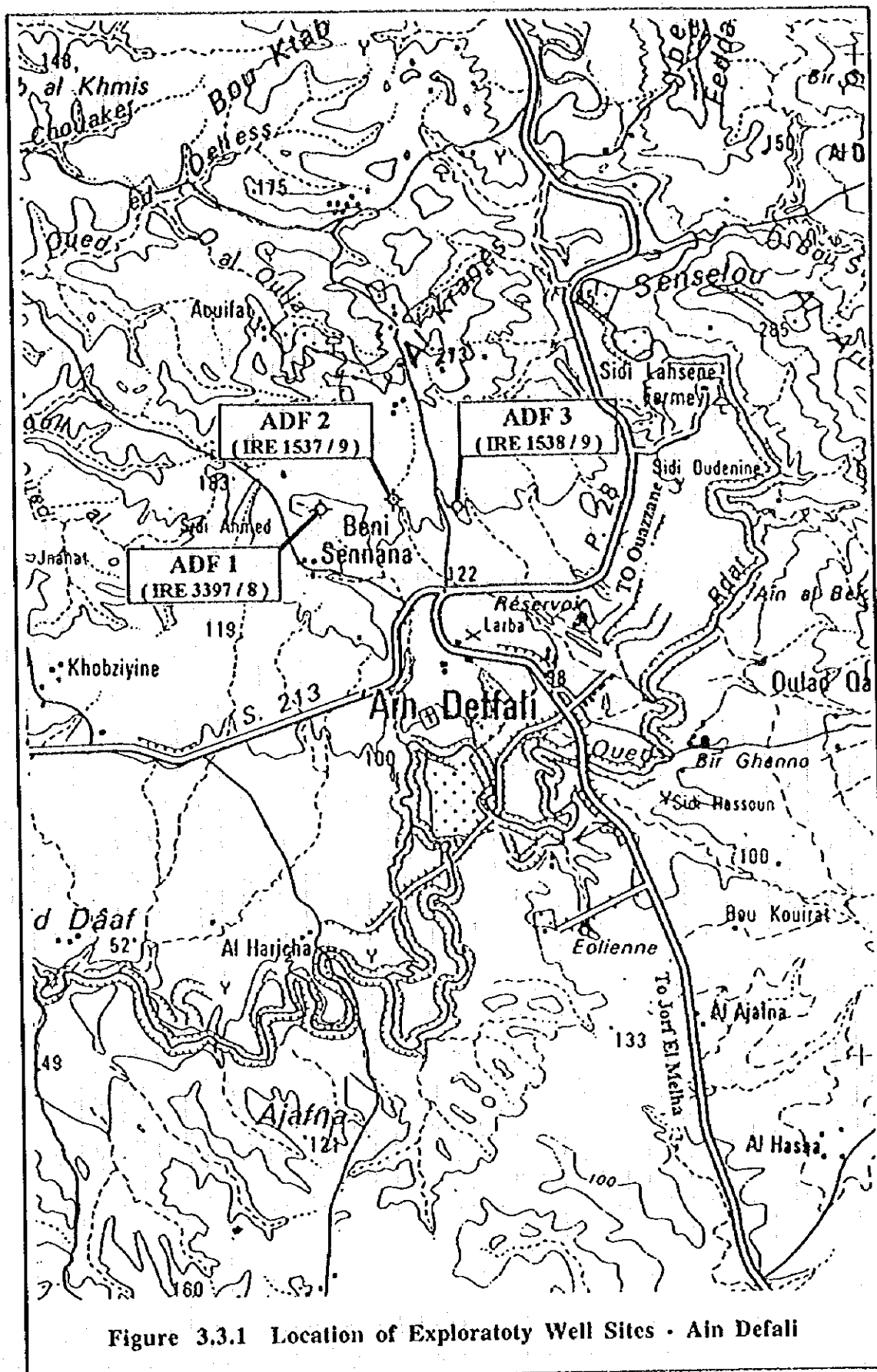
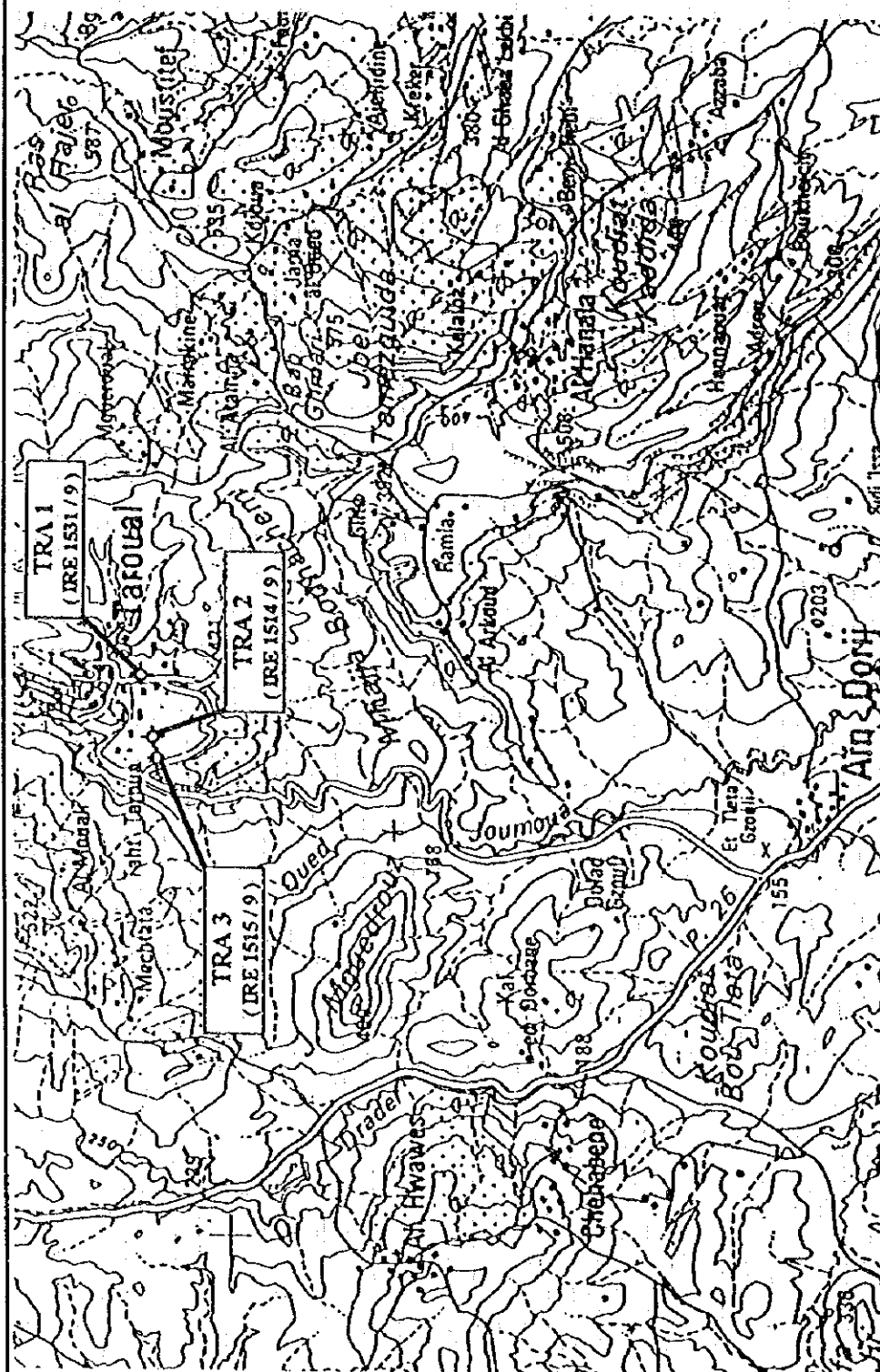


Figure 3.1.4 Geological Structure of Jbel Berda





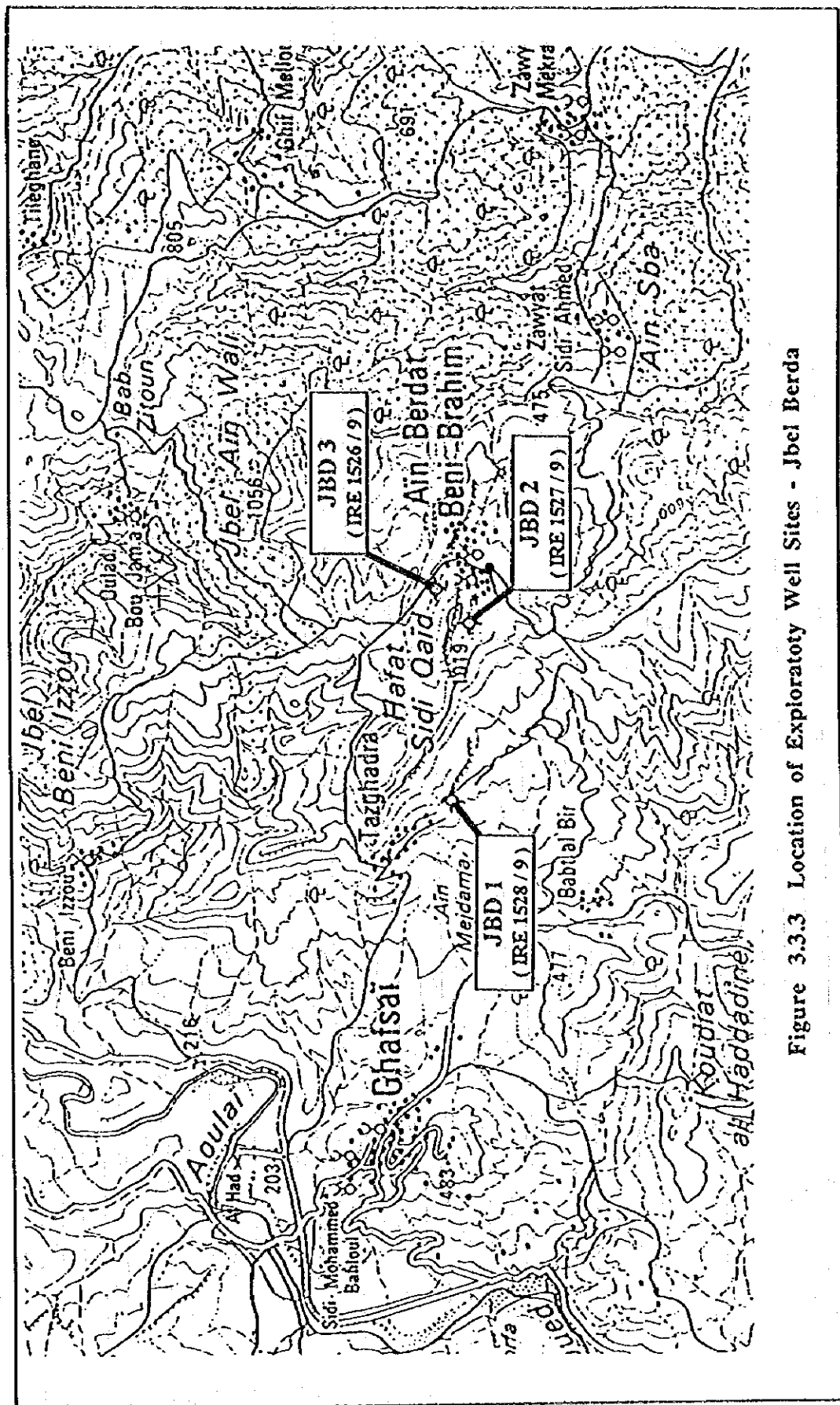
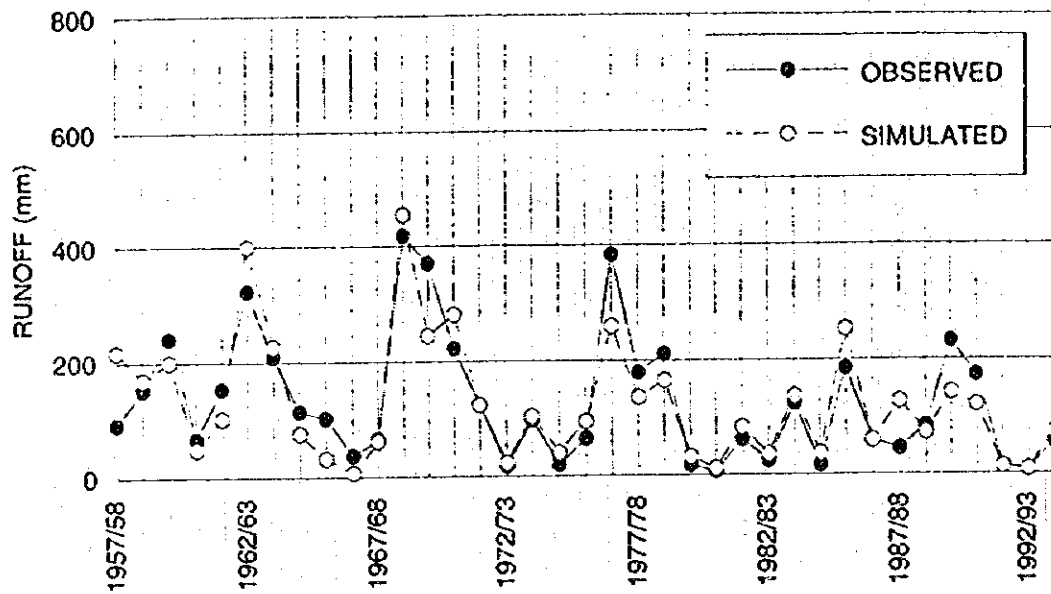


Figure 3.3.3 Location of Exploratory Well Sites - Jbel Berda



### HAD KOURT



### RHAFSAI

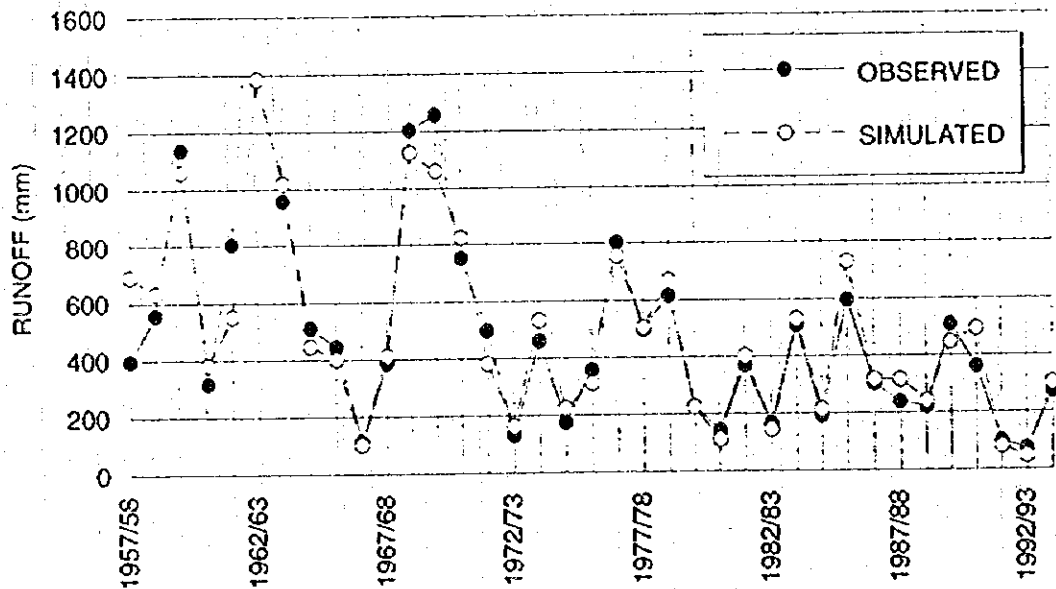
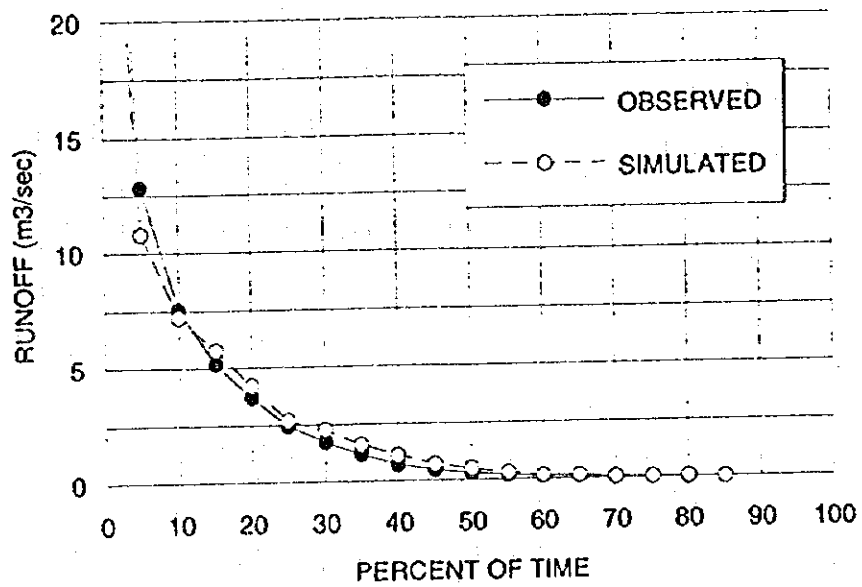


Figure 3.3.6 Comparison of Hydrograph

### HAD KOURT



### RHAFSAI

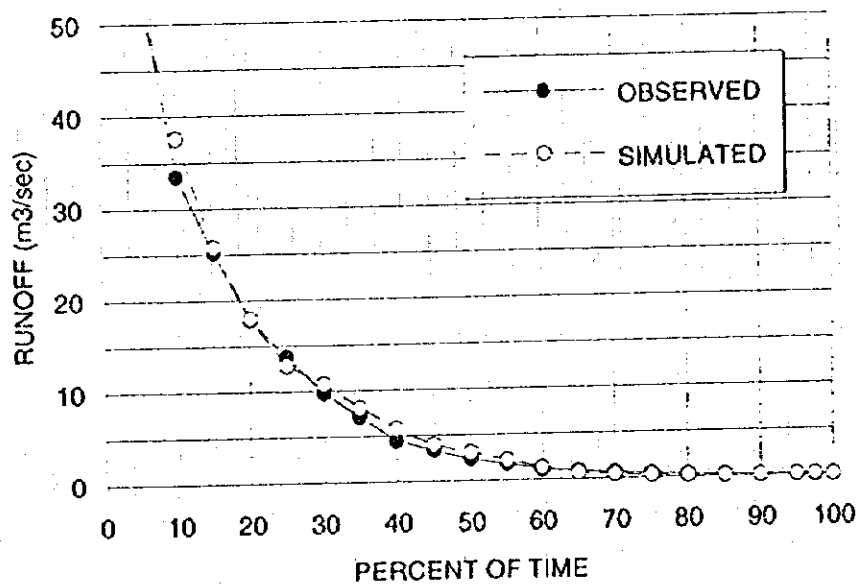
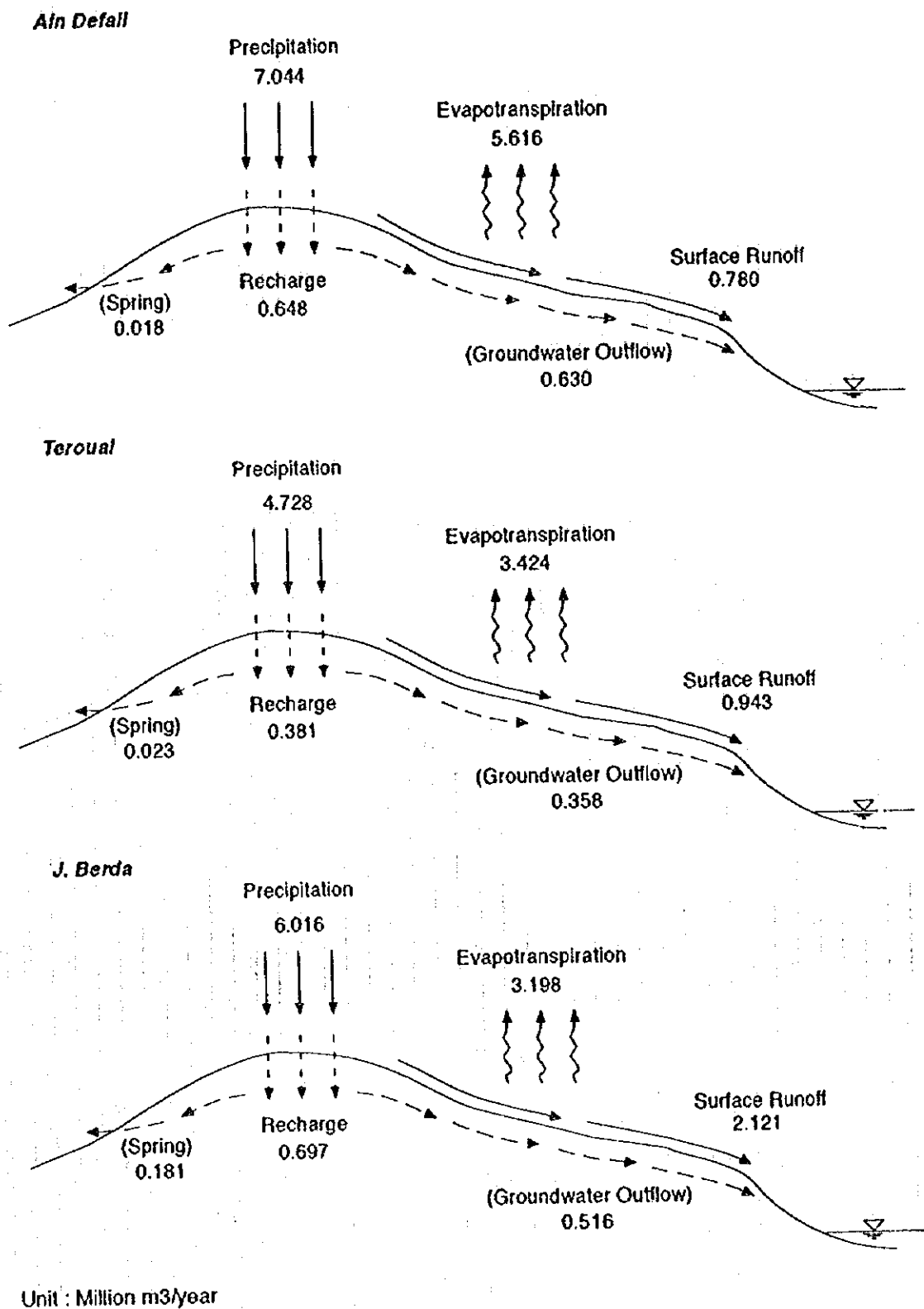
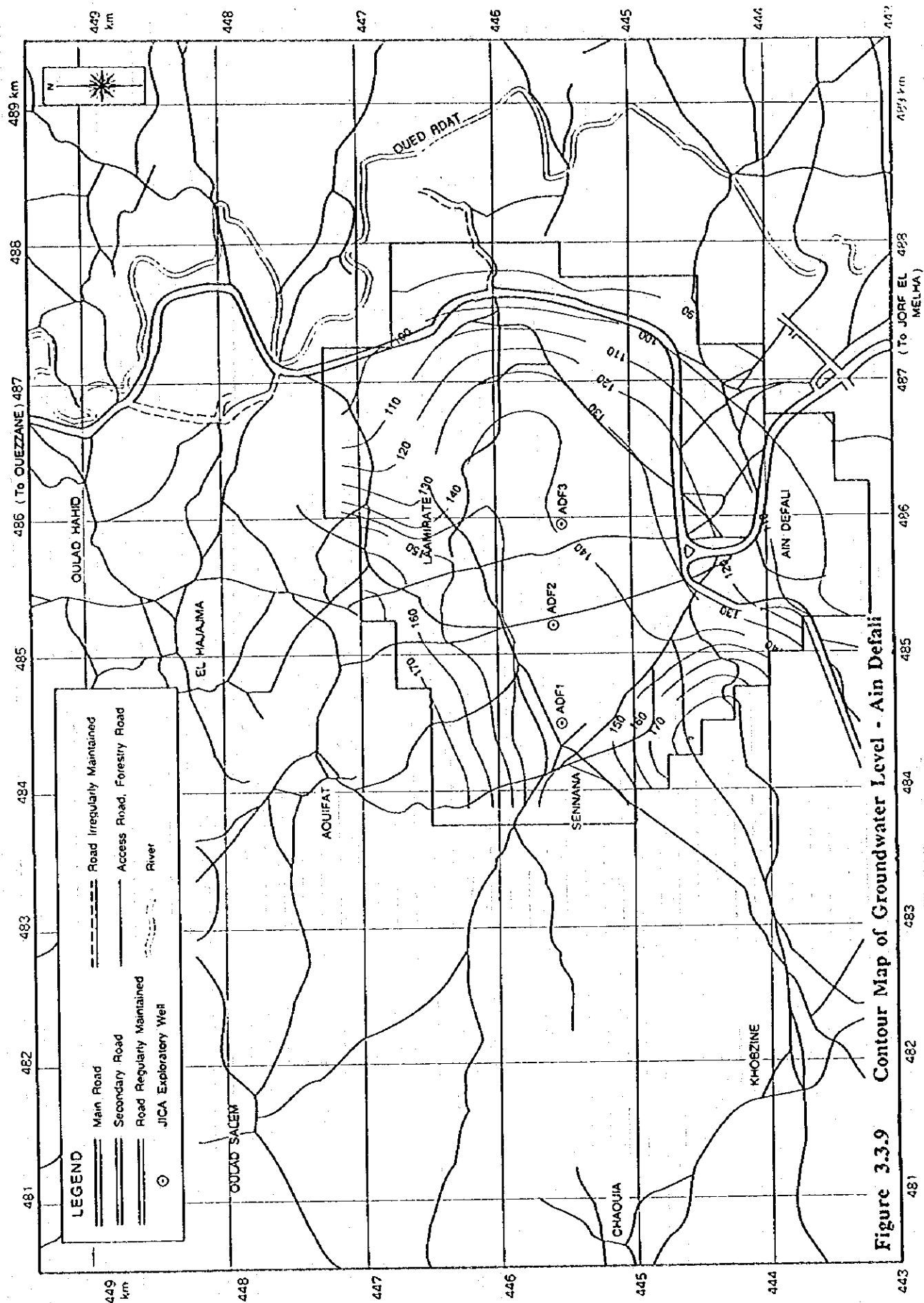


Figure 3.3.7 Comparison of Flow Duration Curve



**Figure 3.3.8 Water Balance**



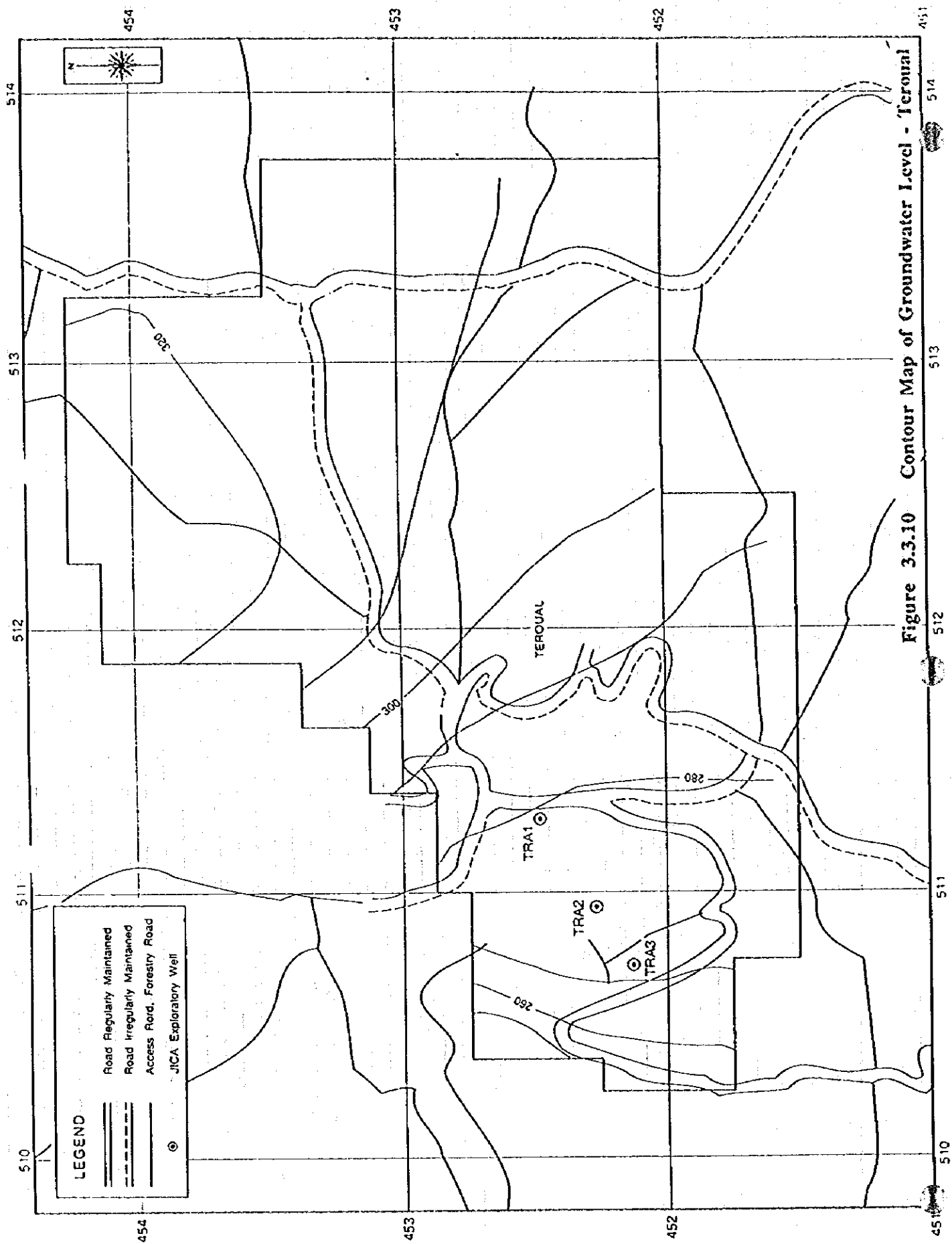


Figure 3.3.10 Contour Map of Groundwater Level - Teroual

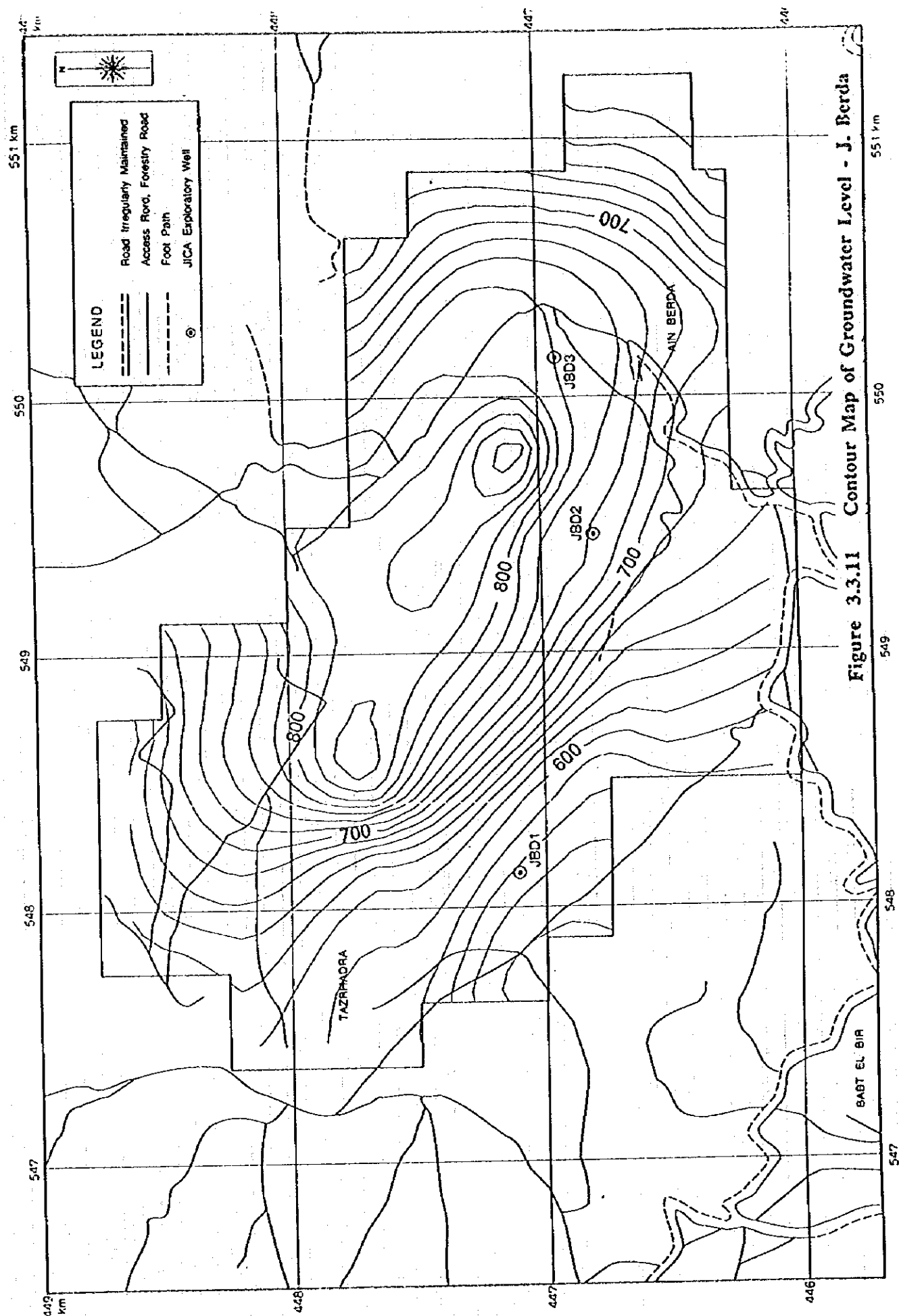
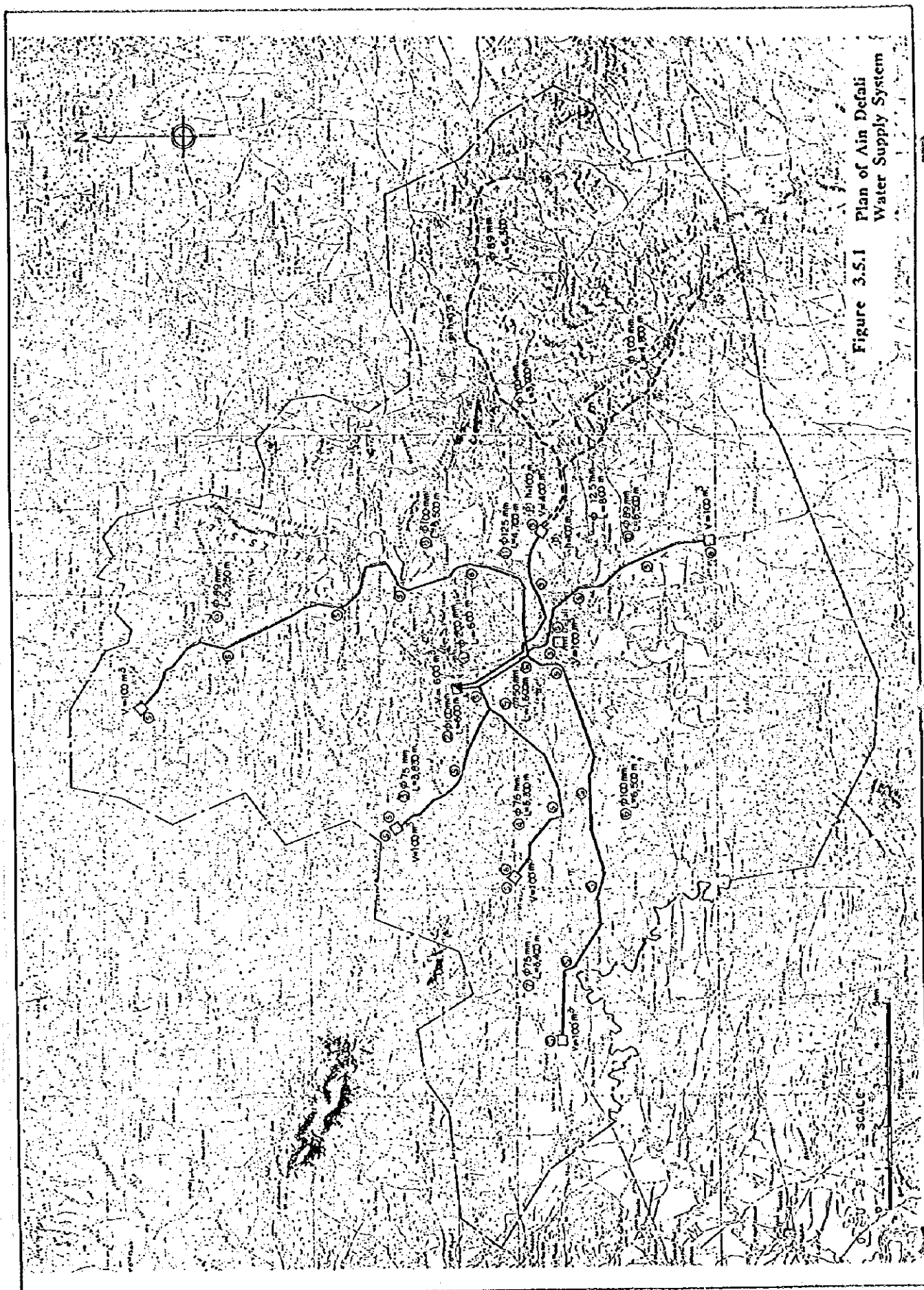
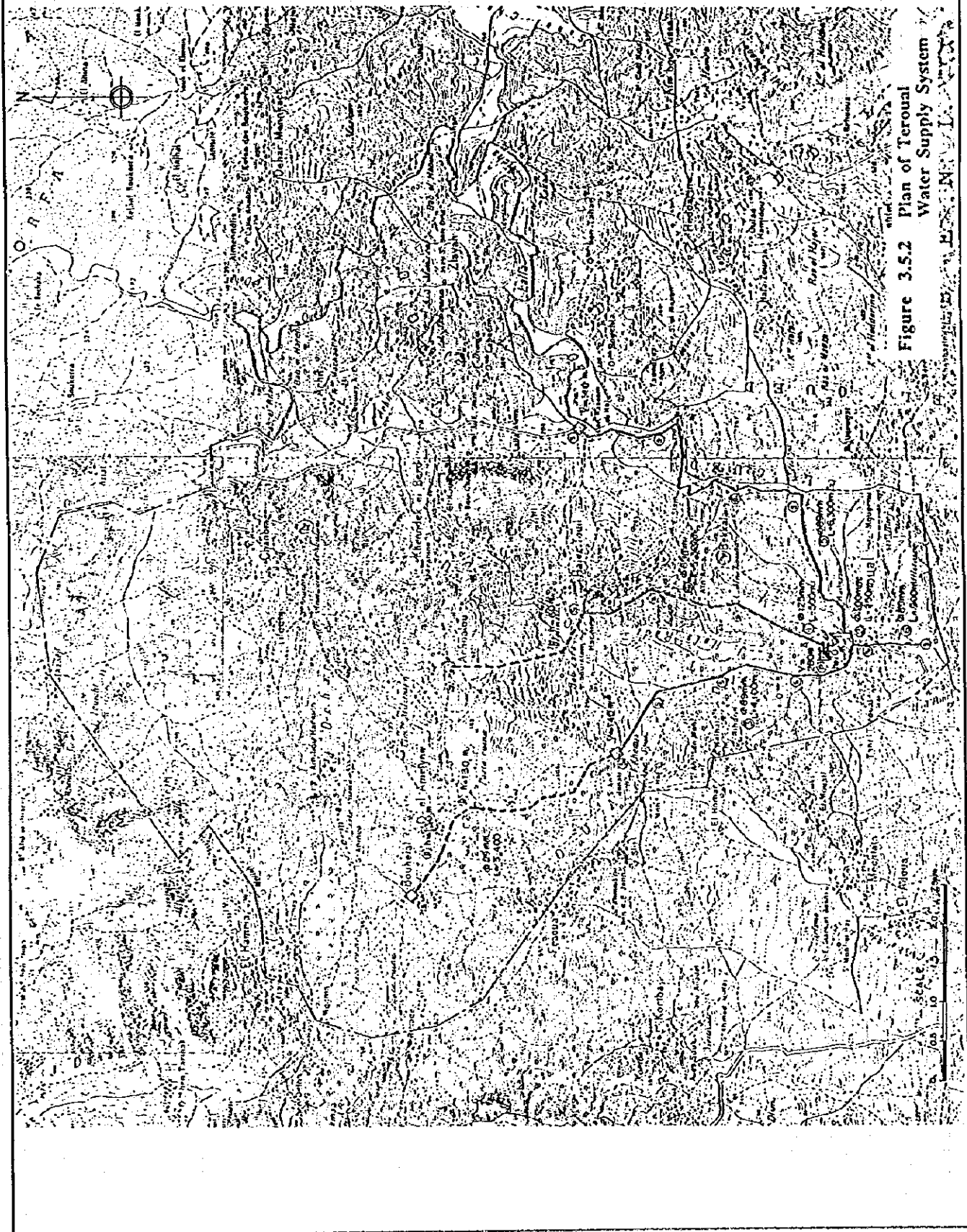
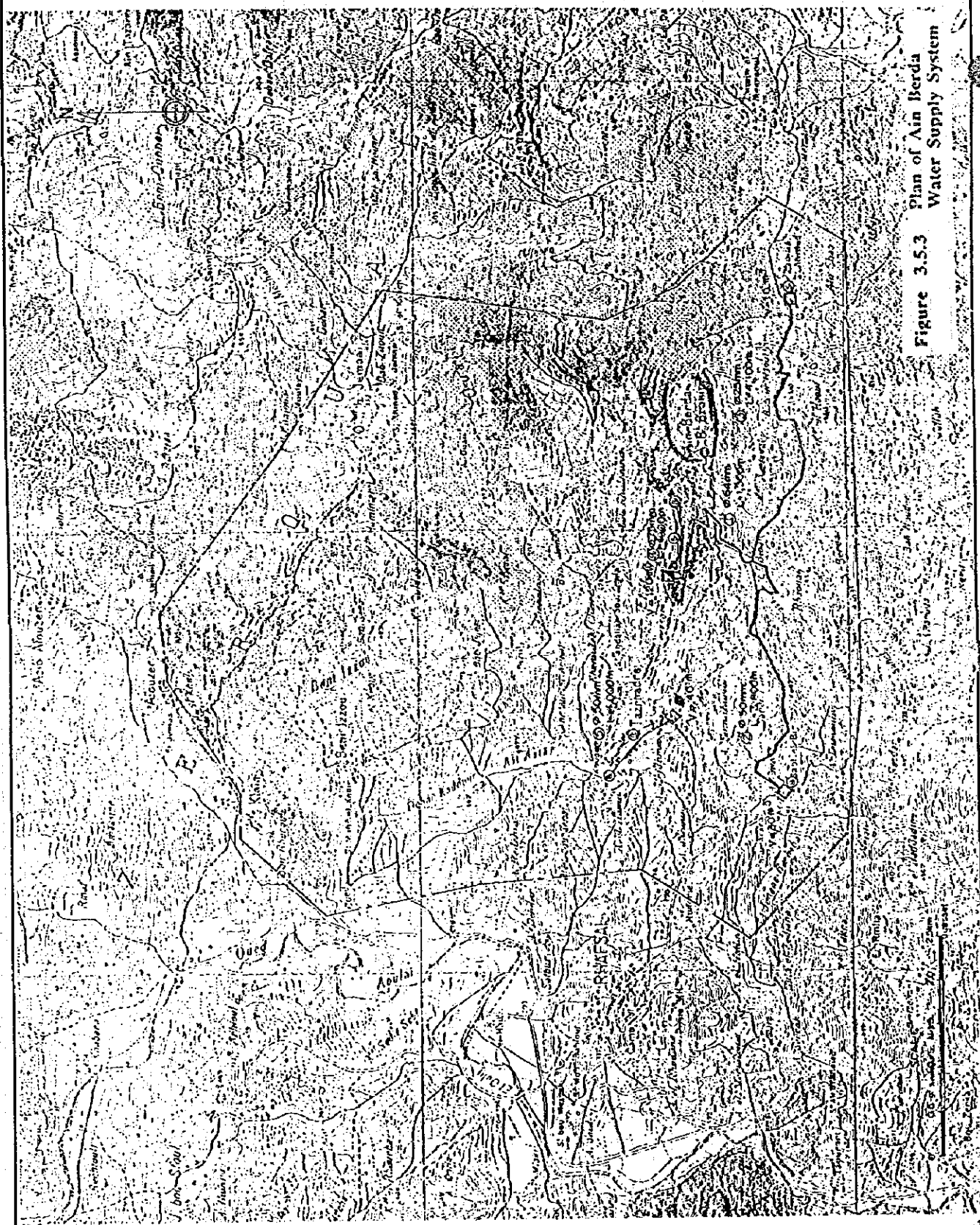


Figure 3.3.11 Contour Map of Groundwater Level - J. Berda









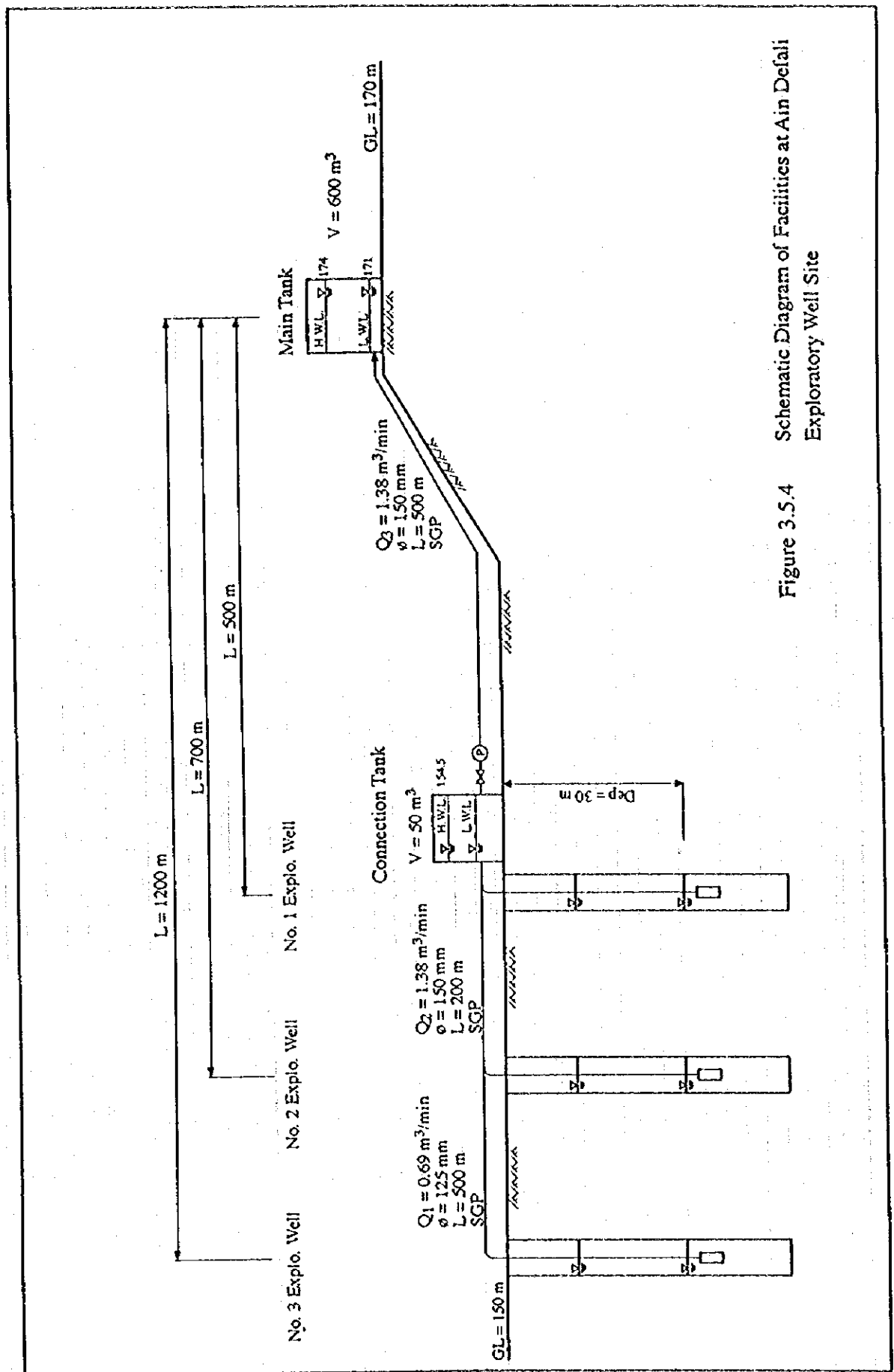


Figure 3.5.4 Schematic Diagram of Facilities at Ain Defali Exploratory Well Site

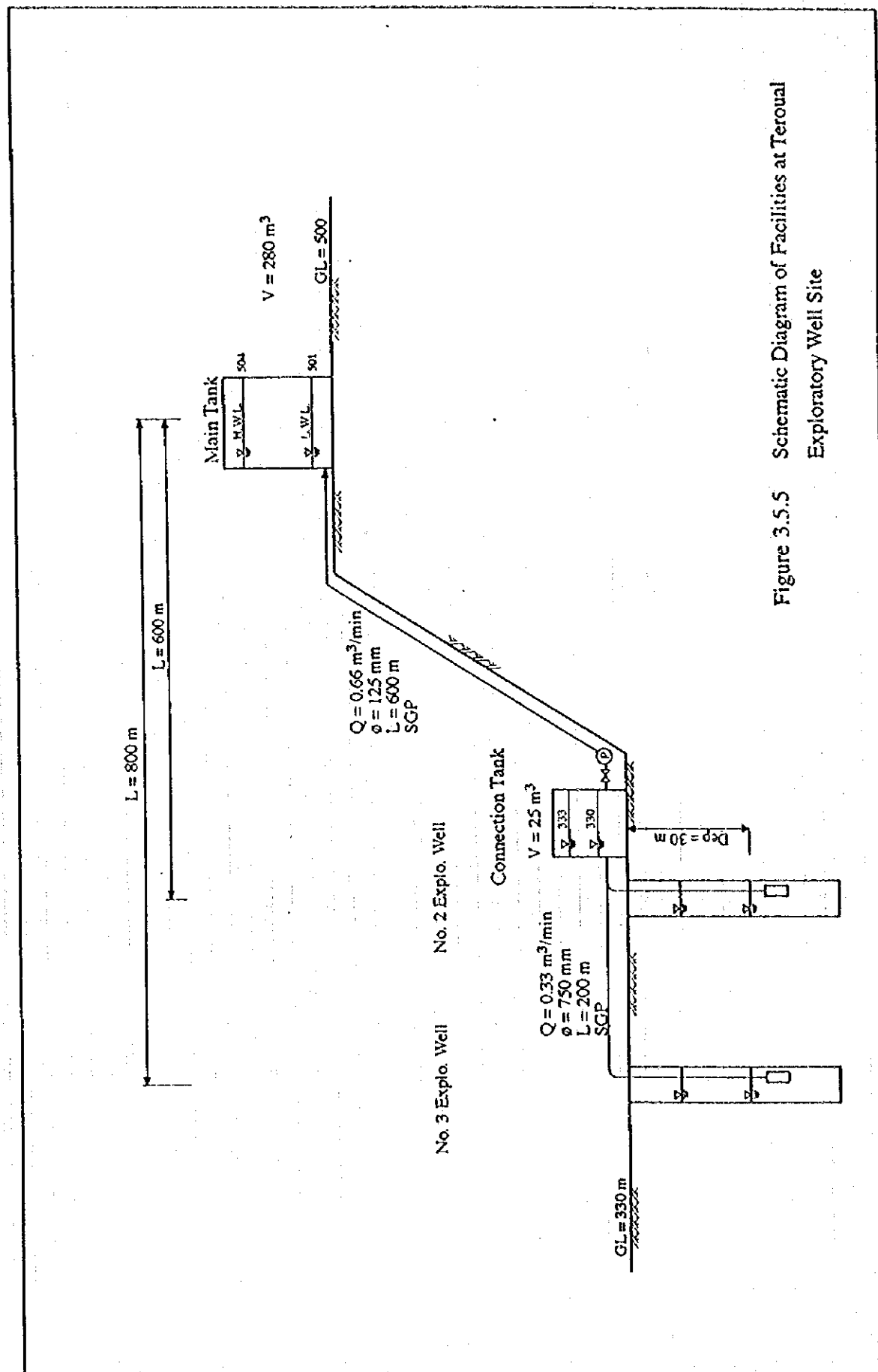


Figure 3.5.5 Schematic Diagram of Facilities at Teroul Exploratory Well Site

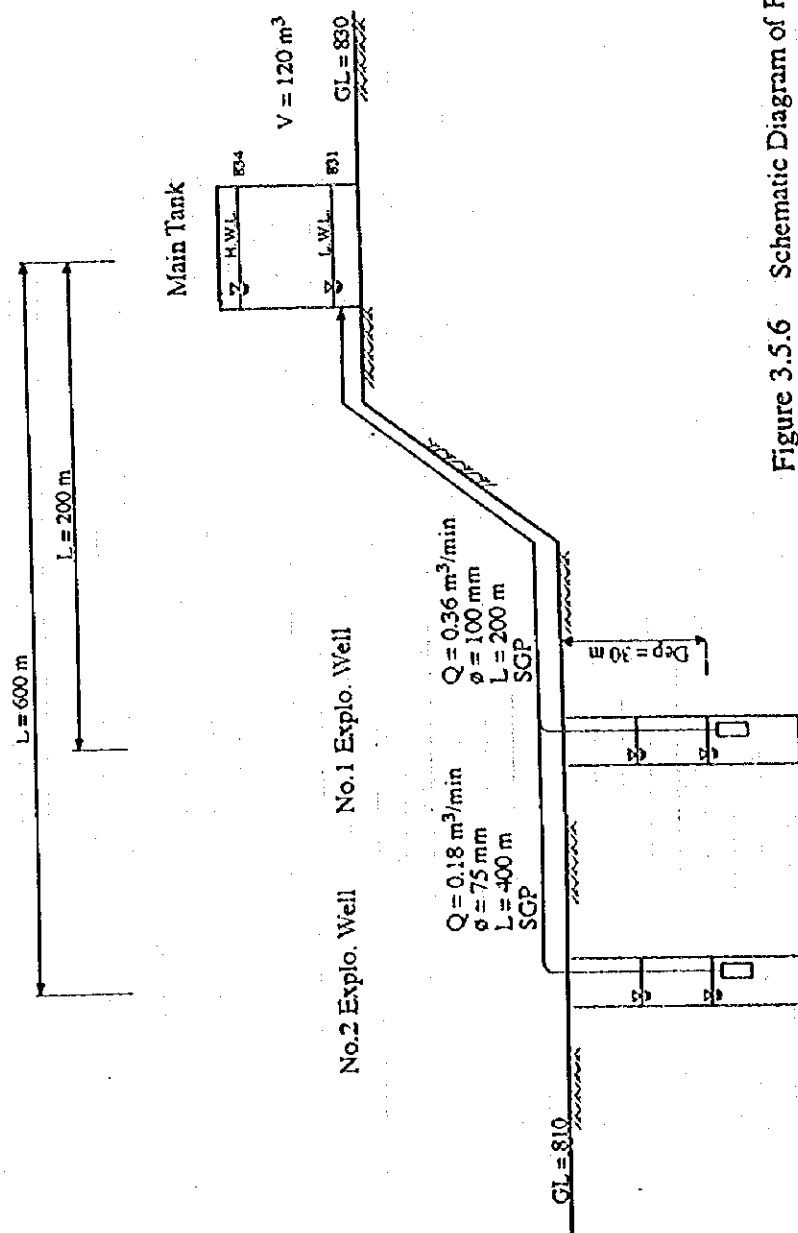
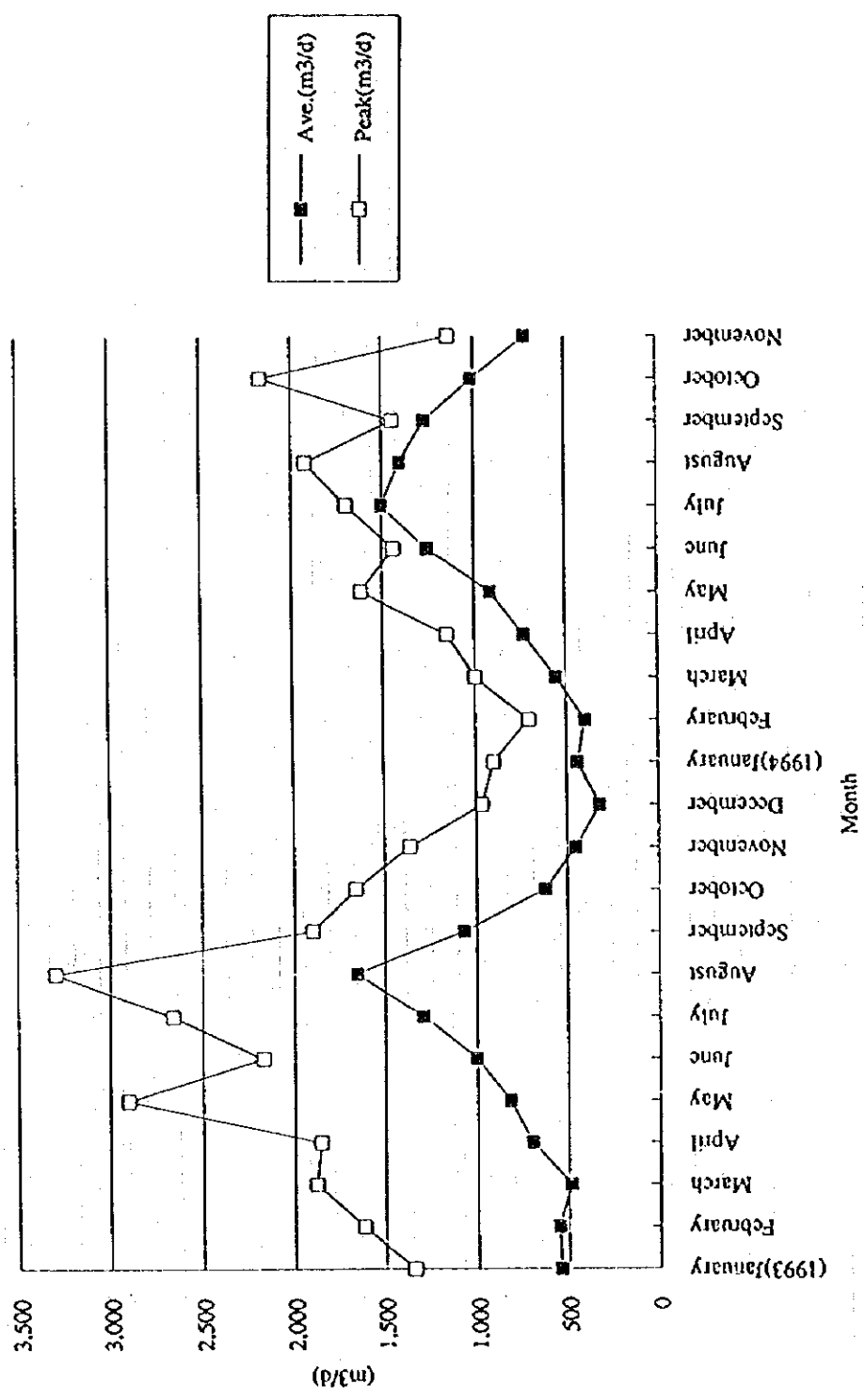


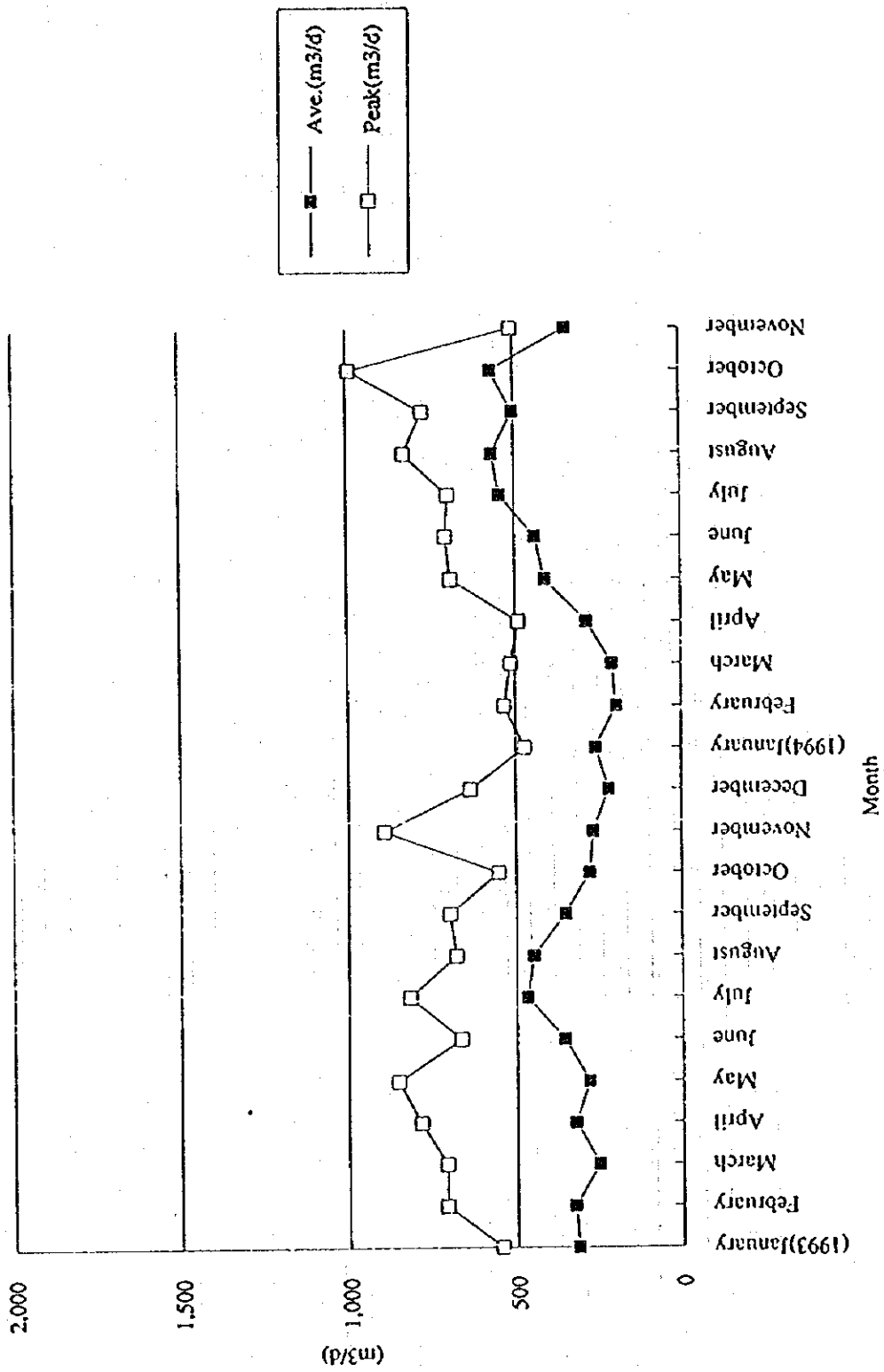
Figure 3.5.6 Schematic Diagram of Facilities at Ain Berda  
Exploratory Well Site

Figure 4.1.1 Water Production at Ain Gdah Water Treatment Plant



Water production

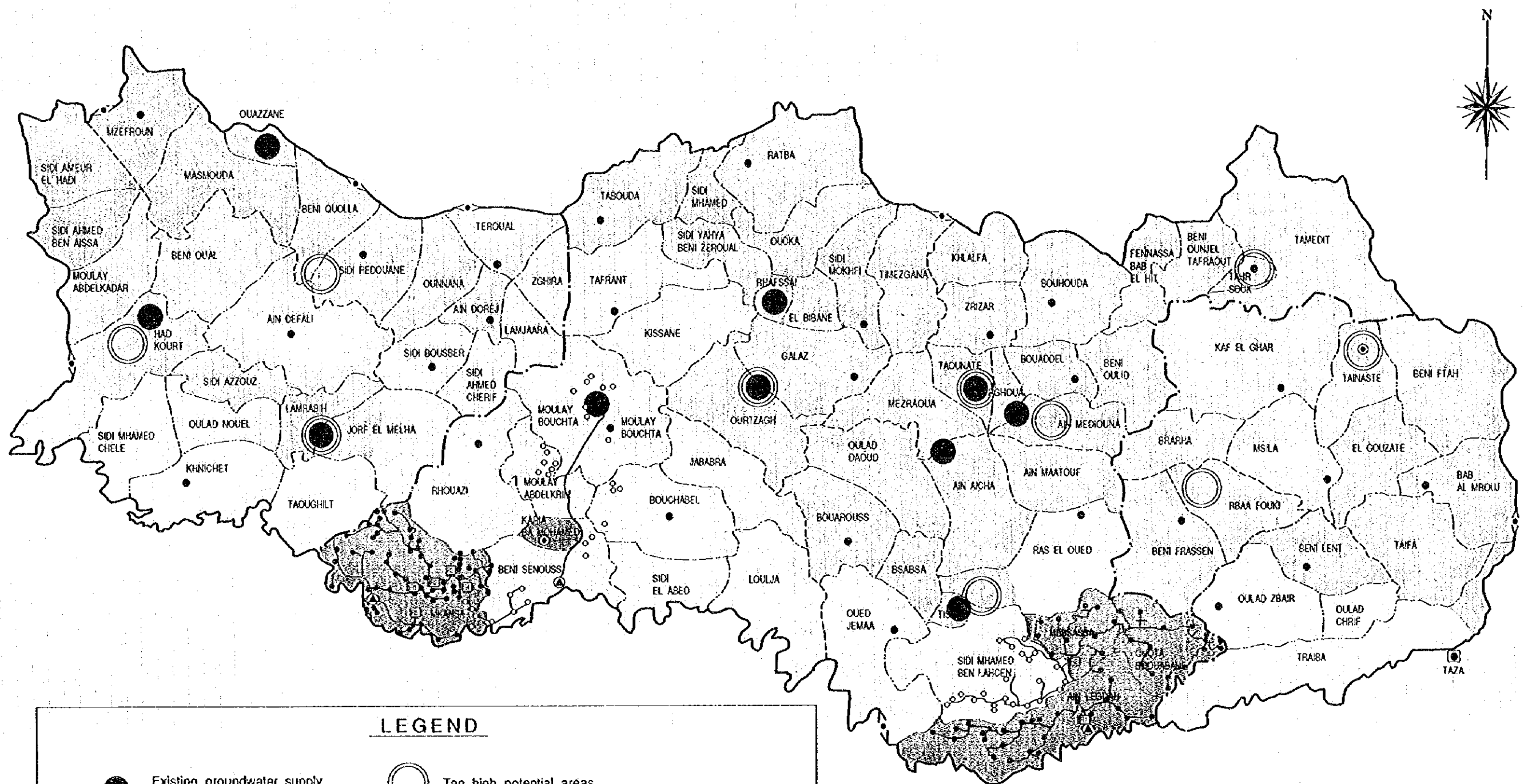
Figure 4.1.2 Water Production at M'kansa Water Treatment Plant









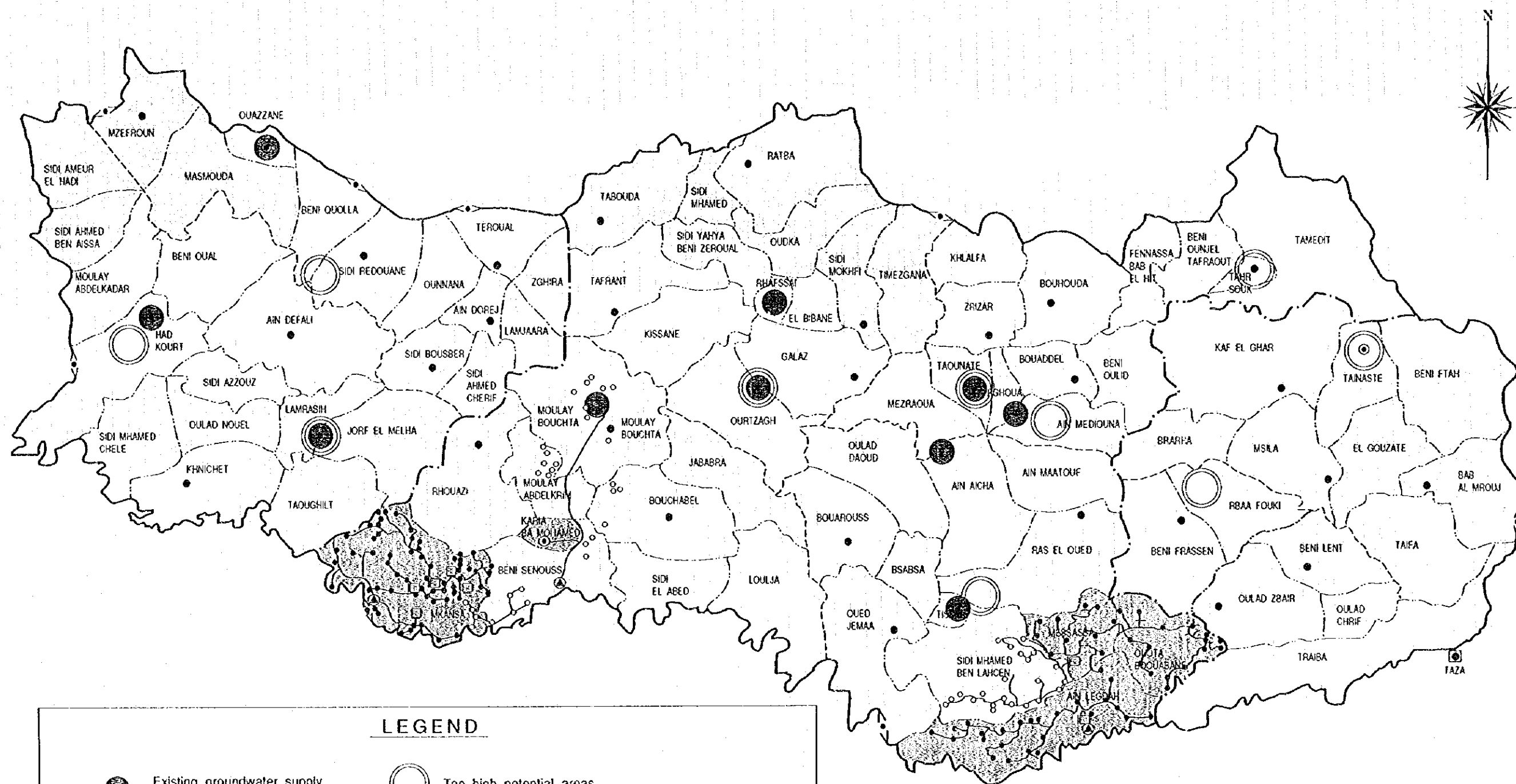


### LEGEND

- |   |  |
|---|--|
| ● Existing groundwater supply system under ONEP | ○ Ten high potential areas                               |
| <b>EXISTING SURFACE WATER SUPPLY SYSTEM</b>     |  |
| ▲ Treatment plant                               | ■ Existing surface water supply area                     |
| [R] Existing reservoir                          | ■ Ongoing and proposed surface water supply area         |
| [R] Planning reservoir                          | ■ Proposed future groundwater supply area                |
| — Planning pipe line and douars                 | ■ Model area (propose as future groundwater supply area) |
| — Existing pipe line and douars                 | ■ Proposed future groundwater supply area from bouagba   |
|   | ■ Proposed future supply area by Al Wahada reservoir     |
|   | ■ Future supply area by other water sources              |

SCALE  
0 5 10 15 20km

Figure 4.3 Covering Area by Supply System



### LEGEND

- |   |   |  |   |
|---|---|--|---|
|   | Existing groundwater supply system under ONEP |  | Ten high potential areas                                |
| <b>EXISTING SURFACE WATER SUPPLY SYSTEM</b> |   |  |   |
|   | Treatment plant                               |  | Existing surface water supply area                      |
|   | Existing reservoir                            |  | Ongoing and proposed surface water supply area          |
|   | Planning reservoir                            |  | Proposed future groundwater supply area                 |
|   | Planning pipe line and douars                 |  | Model area (proposed as future groundwater supply area) |
|   | Existing pipe line and douars                 |  | Proposed future groundwater supply area from bouagba    |
|   |   |  | Proposed future supply area by Al Wahada reservoir      |
|   |   |  | Future supply area by other water sources               |

SCALE  
0 5 10 15 20km

Figure 4.3 Covering Area by Supply System



Figure 4.5.1 Implementation Plan for Water Supply System

No.	Implementation Item	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
(1)	Establishment of Water Supply System in Model Areas															
	1) Development by Gravity System															
	2) Development by Pumping System															
(2)	Exploitation of Groundwater Resources															
	1) High potential structures (10 structures)															
	2) Medium potential structures															
(3)	Rehabilitation of Existing Facilities of Groundwater Sources															
	1) Model Areas															
	2) Others in the Study Area															
(4)	Development of Surface Water Supply System															
	1) Rehabilitation and Improvement of ONEP Facilities															
	2) New Water Supply System based on Al Wahda Reservoir															

1

2

3









JICA