

TÜRKİYE CUMHURİYETİ
ENERJİ VE TABİİ KAYNAKLAR
BAKANLIĞI

REPUBLIC OF TURKEY
MINISTRY OF ENERGY AND
NATURAL RESOURCES

ELAZIĞ - KUZOVA

HİDROJEOLJİK ETÜT RAPORU

ELAZIĞ - KUZOVA

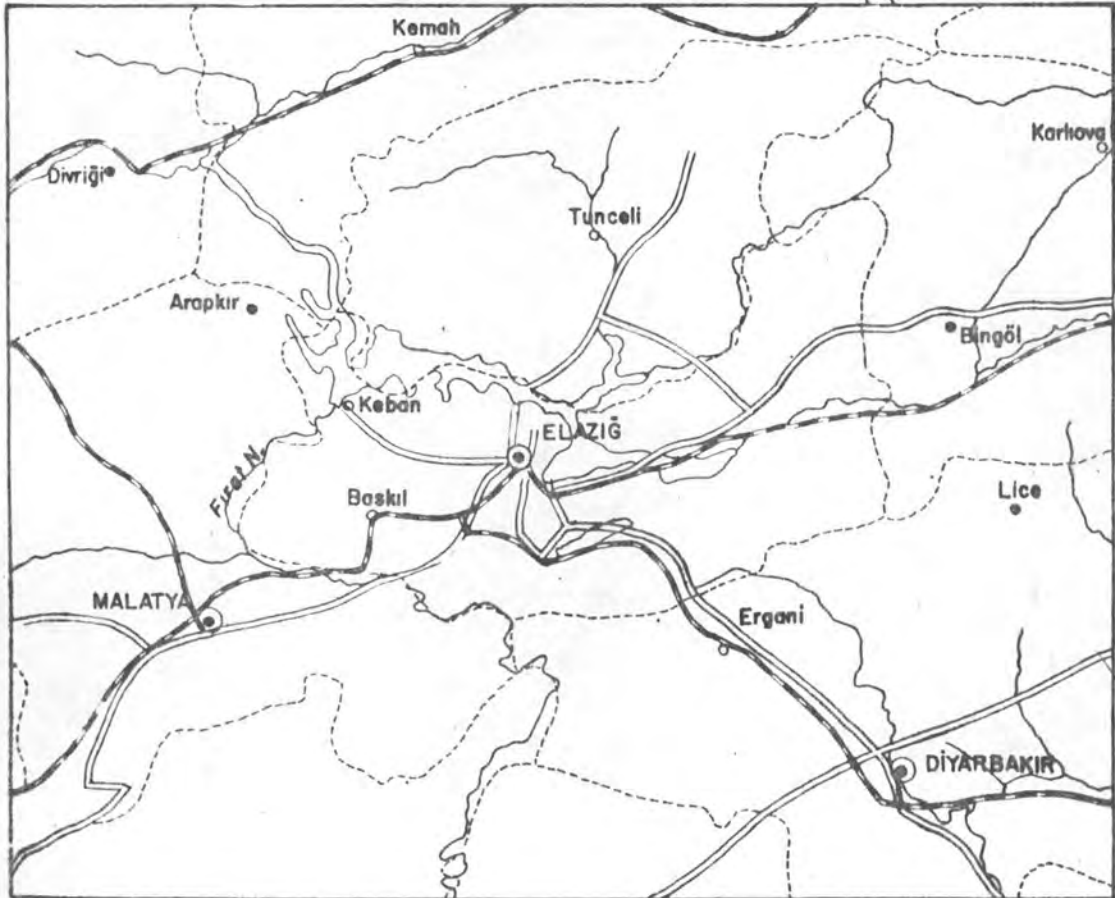
HYDROGEOLOGICAL INVESTIGATION REPORT

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DSİ BASIM ve FOTO-FİLM
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ETÜT SAHASININ TÜRKİYEDEKİ YERİ
Location of the Study Area in Turkey



İŞARETLER-Legend

ÖLÇEK
Scale : 1 / 1850000

- | | | |
|---|--|---|
|  DEMİRYOLU
Railroad |  İL MERKEZİ
Province Center |  ETÜT SAHASI
Study Area |
|  İYİ EVSAFLI YOL
Good Conduction Road |  İLÇE MERKEZİ
District Center | |
|  İL SINIRI
Province Boundard |  BUCAK MERKEZİ
Sub - District Center | |

Summary :

Elazığ-Kuzova plain is situated in the west of Elazığ, between $38^{\circ} 30'$ - $39^{\circ} 00'$ north latitudes and $39^{\circ} 00'$.. $39^{\circ} 30'$ east longitudes. It is 10 kms far from Elazığ. It lies in the north-south direction. The area is surrounded by Murat river in the north and mountains and hills in the other parts. The investigation area covers 1090 sq kms. The area is separated into three parts by the subordinate water divides. The important part is Hankendi and it covers 80 sq kms.

The climate of the area is continental. It is hot and dry in summer, cold and snowy in winter. According to Elazığ Meteorology Station, average mean precipitation is 431.0 mm and average annual temperature is 12.9°C .

The area is underdeveloped in the economic progress. The agriculture is primitive. Elazığ- Malatya Highway and rail-road pass through the area.

The base rocks are Jura- Cretaceous limestones at the bottom and Upper Cretaceous limestones at the top. The Eocene limestone, marl and clay ; the Neogene formations and Alluvial material are placed over the base. The Cenozoic basalts andesites and the Mesozoic serpentine are seen in the area in some places.

The most important stream is Sarım (Cip) stream. There is a pond on this stream in Cip Village. The other important streams are Seli stream, Beşikköprü stream. Murat river which is in the north of the area is the hydrological boundary of this area and Keban Dam's lake is spread over this part. Beşikçay is the important stream too. Ören (Hinsör) spring is the most important stream of the area and it rises from Hankendi limestones. Besides that there are many other springs the discharges of which change according to the precipitation.

There were 24 bore-holes drilled in Kuzova and 16 of them are drilled by İMİ, 4 of them are drilled by YSE and 4 of them are drilled by İller

Hankasi. The depths of the wells are between 25-250 m.

The water bearing formations of Hankendi plain are alluvium, Neogene material and reefoid limestones of Upper Cretaceous. Alluvium and limestones are the water bearing formations of Dambüyük plain and especially the wells which are drilled in the Upper Cretaceous limestones contain abundant water.

The investigation area is separated into three sections by the subordinate surface water divides. In this area only Hankendi and Dambüyük have the groundwater exploitation. For this reason the recharge and discharge calculations are only made for these areas and the groundwater budget is given below :

Groundwater Budget

A- Hankendi Section

Recharge	X10 ⁶ cu m/year	Discharge	X10 ⁶ cu m/year
- Filtration from precipitation	11.0	- To the streams	2.5
- Filtration from surface run off	1.0	- By the springs	3.5
		- By evapotranspiration	0.5
		- By artificial discharge	5.5
TOTAL	12.0	TOTAL	12.0

B- Beşikdüzü Section

(The groundwater budget is not available)

C- Dambüyük Section

Recharge	X10 ⁶ cu m/year	Discharge	X10 ⁶ cu m/year
- Filtration from precipitation	1.5	- Inflow to the Keban Dam's Lake	1.5
- Filtration from surface run off	1.0	- By the springs	1.0
TOTAL	2.5	TOTAL	2.5

The annual safety yield of Hahkendi plain is 8.5×10^6 cu m and
Dambüyk plain 1.5×10^6 cu m.

The groundwater quality of the wells is usually good. Their category
is C_2S_1 irrigation class.

Translated by

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