**BAKÜ-TİFLİS-CEYHAN HAM PETROL BORU HATTI PROJESİ**
**ARKEOLOJİK KURTARMA KAZILARI PROJE DOKÜMANLARI: 6**

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# KAYRANLIK GÖZÜ

## DOĞU KİLİKYA'DA BİR ROMA HAMAMI

## A ROMAN BATH IN EASTERN KILIKIA

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## DOĞU KİLİKYA'DA BİR ROMA HAMAMI
## A ROMAN BATH IN EASTERN KILIKIA

**MUHAMMET GÖRÜR**

**GAZİ ÜNİVERSİTESİ**
**ARKEOLOJİK ÇEVRE DEĞERLERİ ARAŞTIRMA MERKEZİ**

**GAZI UNIVERSITY**
**RESEARCH CENTER FOR ARCHAEOLOGY**

**ANKARA**
**2005**

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# PREFACE

In the 1990s, the idea was born to tap into the rich natural gas and oil reserves of the Caspian Sea and transport them to the international energy markets. The idea was closely followed by the public throughout the decade which followed. This historic project is aiming to transport 50 million tons of crude oil in a year, mainly Azerbaijani, along a pipeline 1774 km in length. The pipeline starts in Baku and ends at the newly-constructed sea terminal in Ceyhan, from which it will be delivered to the world markets by tankers. The Baku-Tbilisi-Ceyhan Crude Oil Pipeline Project will consolidate Turkey's geopolitical power in the region, and provide a strong and safe "East-West Energy Corridor" which will connect the southern Caucasus and Central Asia to Turkey and the Mediterranean Sea. The project falls within the scope of an Inter-Governmental Agreement, signed by the Presidents of Azerbaijan, Georgia and Turkey. The agreement was signed at the last OSCE summit held in İstanbul on 18 November 1999, and witnessed by the President of the USA. This was followed up by the "Turn-Key Contracting Agreement" with BOTAŞ on 19 October 2000, which allowed for construction of the BTC Crude Oil Pipeline to begin.

The 1076 km-long section of the pipeline in Turkey passes through the provinces of Ardahan, Kars, Erzurum, Erzincan, Sivas, Kayseri, Kahramanmaraş and Adana. The pipeline enters Turkey from Posof, and passes over the Erzurum-Kars Plateau before entering the tectonic depressions near Horasan. The pipeline continues over the Erzurum Plain, through Tercan, Çayırlı, Erzincan. From the mountainous areas and plateaus north of Refahiye, the pipeline crosses the North Anatolian Fault and reaches Central Anatolia from south of Kızıldağ (Kızıl Mountain) (3025 m), the source of the Kızılırmak River. From here, the pipeline extends southwest, drawing a large arc from north of the Tecer Mountains range (southeast of the Sivas Basin) and entering Uzunyayla Plateau from Ulaş Basin and Altınyayla. Continuing past Zamantı Brook, the pipeline climbs over the Tahtalı Mountains at the northeast corner of the Middle Taurus Mountains from east of Pınarbaşı and follows the Sarız Brook Valley. Turning south from the valley, the pipeline passes through the high threshold between the Dibek Mountains (2230 m) and the Binboğa Mountains (2957 m) and reaches the Göksun Brook Valley. Passing through the mountain and high plateaus between Göksun and Andırın, it descends south of Kadirli to the east of the Çukurova Plain (in the Ceylan Plain section) and reaches the Mediterranean Sea.

The Baku-Tbilisi-Ceyhan Crude Oil Pipeline Project is an exemplary project in that it applied advanced technological standards, gave priority to health and safety, and was sensitive to natural, social and historical assets in the pipeline's path. In these aspects, this project was a "first" in Turkey. The project undertook many measures to protect flora and fauna and to restore the land once construction was complete. The project has also applied the most sophisticated mitigation techniques in salvaging and protecting historical assets. Within the framework of the Cultural Heritage Management

Plan, all historical assets, both under and above ground, have been identified using survey techniques which conform to nationally- and internationally-recognized standards and preserved through re-routing or archaeological excavation. Assimilating the data and placing salvaged artefacts in appropriate regional museums have made an enormous contribution to Turkey's and the world's cultural and natural heritages. By publishing the results of each excavation, the project has made a large contribution to Anatolian archaeology in particular.

BOTAŞ, the main contractor for the Turkish section of the pipeline, signed a protocol with the Turkish Ministry of Culture on 12 March 2002, aimed at protecting historical assets in the pipeline corridor. Furthermore, the United Nations conventions, particularly the UNESCO Convention for Protection of the World Cultural and Natural Heritage, Valetta convention, IFA-Archaeological Observation, Site Evaluation, Excavation Work Standard and Guiding Provisions, and the World Bank standards and other recognized international standards were taken into consideration in the protocol, created as Law no. 2863 on the Protection of Cultural and Natural Assets. The Cultural Heritage Management Plan (CHMP) included in the Environmental Impact Assessment (EIA) Report prepared in accordance with all of the above, formed the framework for the Archaeological Salvage Excavations under the BTC Crude Oil Pipeline Project.

Archaeological salvage excavations were carried out between 15 March 2003 and 20 November 2003 in ten sites where re-routing was not possible for various reasons. During that time, 125 archaeologists, art historians, antique age historians, anthropologists, geomorphology experts, geophysicists, surveyors, restorers and approximately 800 workers were employed. They operated under the supervision and consultancy of 25 academicians attached to the Gazi University Research Centre for Archaeology. A total of 17 separate excavations were carried out, including seven sites that emerged in 2004 as "random finds."

The integrated execution of the archaeological survey and salvage works along the pipeline was of course the result of broad cooperation. The most important cooperation was with the Turkish Ministry of Culture (later the Ministry of Culture and Tourism), the BOTAŞ BTC Crude Oil Pipeline Project Directorate and the Gazi University Rectorate.

Prof. Dr. Rıza AYHAN, former Rector of Gazi University, made important contributions for the achieving and execution of the project. Prof. Dr. Kadri YAMAÇ, Rector of Gazi University, contributed immensely during the publication stage. Prof. Dr. Ahmet AKSOY and Prof. Dr. Metin AKTAŞ, former vice-rectors of Gazi University, Prof. Dr. Cemil YILDIZ, Dean of the Faculty of Arts and Science, Prof. Dr. E. Semih YALÇIN, former Head of the History Department and the pipeline's Archaeological Salvage Excavations Project Assistant Director, have made significant contributions and provided selfless supports to the execution of the project.

Mr. Orhan DÜZGÜN, Cultural Assets and Museums General Director of the Ministry of Culture and Tourism and Mr. Nadir AVCI, former Cultural Assets and Museums General Director of the Ministry of Culture and Tourism, Mr. İlhan KAYMAZ, Deputy General Director, have made enormous contributions.

Mr. Gökhan BİLDACI, former General Manager of BOTAŞ, who helped to bring the pipeline project to Turkey, and provided the infrastructure required for managing the archaeological assets of the project, Mr. M. Takiyüddin BİLGİÇ, former General Manager of BOTAŞ, Mr. Salih PAŞAOĞLU, former General Manager of BOTAŞ and BOTAŞ Genaral Manager Rıza ÇİFTÇİ, who were generous with their supports at the later stages. Former BTC Crude Oil Pipeline Project Directors Mr. Hüseyin ERSOY, Mr. H. Doğan ŞİRİKÇİ and Mr. Osman Zühtü GÖKSEL, BTC Crude Oil Pipeline Project Director, and Gökmen ÇÖLOĞLU, Deputy Director, and the pipeline Project Site Maneger Mr. Burçin YANDIMATA have contributed greatly to execution of the project. Furthermore, Mr. Özgür ARARAT, Manager of the Environmental Department of the pipeline Project Directorate and Miss. Ebru DEMİREKLER, former Manager of the Environmental Department of the pipeline Project Directorate, and all employees of the Cultural Heritage Management Unit, Mr. Gökhan MUSTAFAOĞLU, Mr. H. Uğur DAĞ, Mr. Kılıçhan SEVMEN, Mr. Murat YAZGI, Miss. Özgür GÖKDEMİR and GIS expert Mrs. Çiğdem GÜVERCİN ORHAN, have worked selflessly in executing this project.

BTC Co., the owner of the BTC Crude Oil Pipeline Project, has made big contributions to both Anatolian and the world cultural heritage. Becoming the protector of archaeological assets in the pipeline corridor in Turkey and extending financial support to this end, BTC Co. has of course made the largest contribution. The BTC Co. Turkish Section Environmental Department Manager Mr. Paul SUTHERLAND has been instrumental in the realization of the goal. Dr. Hugh ELTON, Director of the British Institute of Archaeology at Ankara and the archaeological consultant of BTC Co., has always been encouraging and supportive.

On this occasion, we cordially thank all entities and individuals who were involved in and contributed to the field and publication activities of the BTC Crude Oil Pipeline Project Archaeological Salvage Excavations Project executed by the Gazi University Research Centre for Archaeology.

Asst. Prof. Dr. S.Yücel ŞENYURT
Baku-Tbilisi-Ceyhan Crude Oil Pipeline
Archaeological Salvage Excavations Project Director

# INTRODUCTION

This work contains the scientific results of the salvage excavation performed by Gazi University Research Center for Archaeology (GÜ – ARÇED) in Kahramanmaraş Province, Andırın District, Geben Town, Kayranlık Gözü site within the frame of Baku-Tbilisi-Ceyhan Crude Oil Pipe Line Archeological Salvage Excavations.

Upon encountering some finds and stones that could create an architecture during the construction activities in Baku – Tbilisi – Ceyhan Crude Oil Pipe Line in Kayranlık Gözü Site, the construction activities were suspended and after relevant examinations, it was decided to make an excavation on this site, and the works were launched. The salvage excavation in Kayranlık Gözü Site was performed under the scientific responsibility of Assist. Prod. Muhammet Görür by Gazi University Research Center for Archaeology (GÜ – ARÇED) under the chairmanship of Ahmet Denizhanliogullari, the Director of Kahramanmaraş Museum, with the permission of the Ministry of Culture and Tourism, General Directorate of Cultural Assets and Museums, within the scope of the project for salvaging and documenting the archeological values located ob Baku – Tbilisi – Ceyhan crude oul pipe line. The works were performed in 30 days between 13.05 2004 – 13.06 2004. Asuman Arslan has participated in . Kayranlık Gözü Site excavation as the Ministry Representative. During the excavation works, archeologists Sibel Arslan, Mustafa Kırdı, Elif Yüce, Zeynep Yılmaz, Volkan Canbulat, Tuba İbiş, Yunus Ekim, Resul İbiş, Hamza Ekmen, Semih İstanbulluoğlu and Jeodesi expert Instructor Gülşah Beyazoğlu took part.

The excavation field is located on the southwest side of Geben Kale, which maintained its significance almost during each period throughout the history and which has been quite important particularly during the Medieval Age, immediately under a spring coming out from the east of Kayranlık Mountains.

Kayranlık Gözü Salvage Excavation started with gridding the excavation field and deriving topographical plan. Since the salvage excavation would be enlarged within the limits of the are where Baku – Tbilisi – Ceyhan Crude Oil Pipe Line would pass through, the aisle was divided into grids coded as A, B and C with dimensions of 10 x 10 each, and divided into plane-squares. During the excavation works, priority was given to the pipe axle passing through B trenches, and the excavation was expended to the other sections of three trenches depending on the status of the finds. Excavation works started in B1, B2, B3 and C3 were followed with A2, A3, B4, B5, C2, C1, C4

and D1 as well as D2 trenches that were opened afterwards in order to follow the architecture revealed.

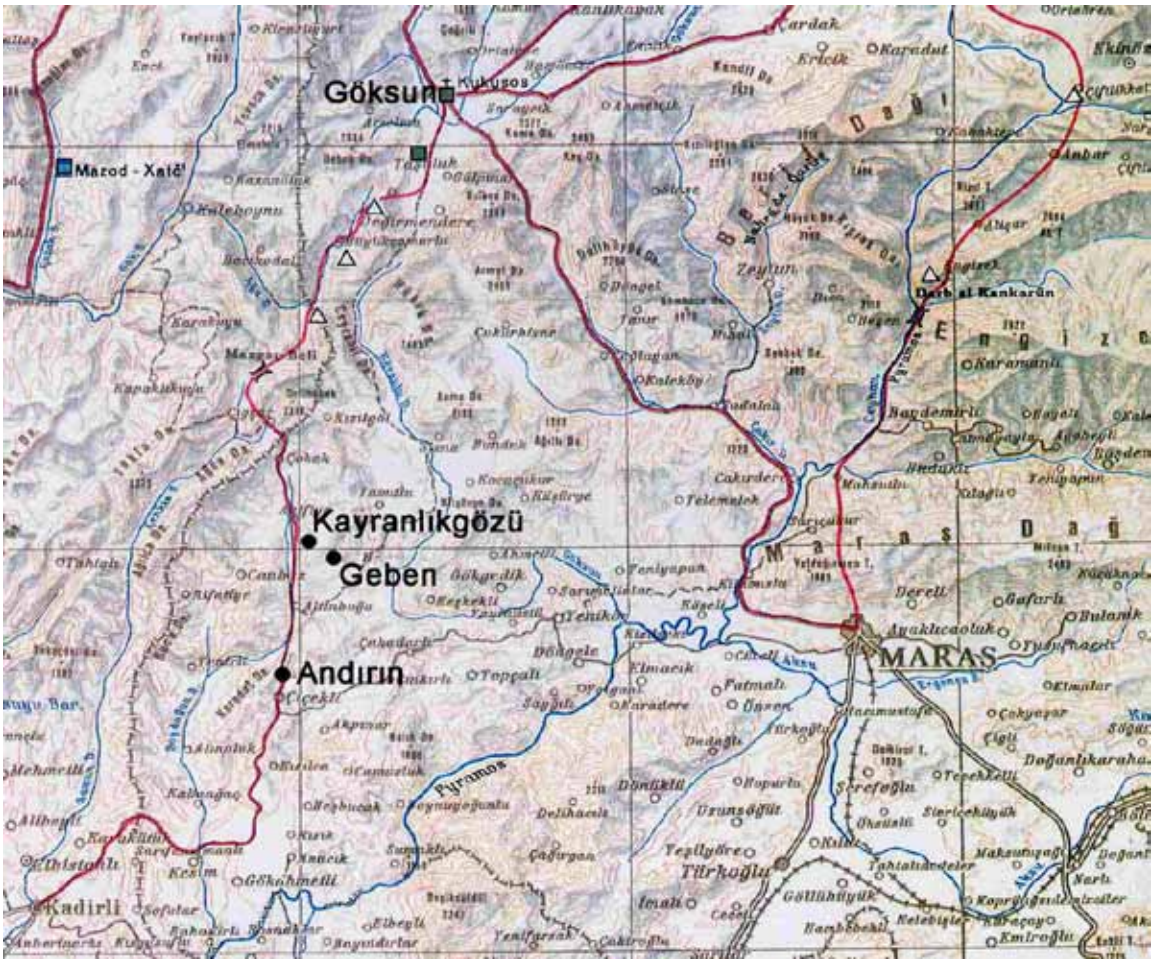
At the end of the excavation, a bath remain, layout of which could be perceived were revealed, though a large section of it was destroyed. The structure progresses on east – west direction. Due to its architectural characteristics, it looks like the bath examples of Late Rome – Early Byzantine period, that is the 3 – 4$^{th}$ centuries. Some repair marks and reinforcements inside the structure demonstrate that the structure was also used during the following periods.

Small number of ceramics and minor finds obtained inside the bath were evaluated in terms of their technical characteristics and form, and the structure was dated by the help of the finds.

# PART I

# GEOGRAPHICAL LOCATION AND HISTORICAL SETTINGS

## A. GEOGRAPHICAL LOCATION



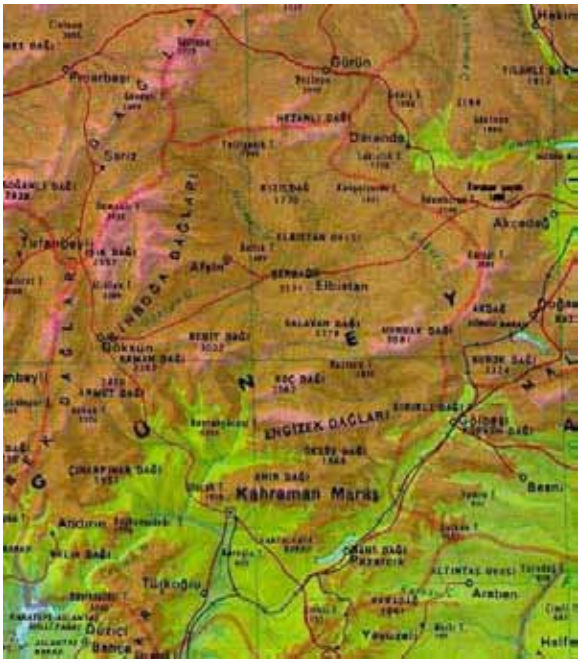

**Hild-Hellenkemper 1990**

**Figure 1 :** Geben-Kayranlık Gözü and its environment.

Kahramanmaraş province covers 1.8 % of the country territories with a surface are of 14.327 km2. Part of the territories of the province is located in Mediterranean region, and the other part is located in East Anatolia Region. The central district has an altitude from the sea of 568 m., the north sections of the province is quite mountainous. Geological formations are usually characterized with mountains that are the extensions of South-east Taurus, and the depressions remaining between them. **(Figure 2)**. There are wide plains in the province, land altitude of which varies between 350 meters to

3000 meters. These are; Gâvur, Maraş, Göksun, Aşağı Göksun, Afşin, Elbistan, Andırın, Mizmilli, Narlı and İnekli Plains. The leading mountains of our province are: Nurhak, Binboğa, Engizek, Uludaz and Ahırdağı. The leading rivers of the province are Ceyhan River and Aksu, Bertiz, Erkenez, Göksu, Göksun, Hurman, Körsulu, Sarsap and Söğütlü brooks. **(Figure 1)** Its land are distributed as: mountains by 59,7 %, plateus by 24 5, and plains by 16.3 %.

Kahramanmaraş is located on a region where three diverse geographical regions (Mediterranean Region, East Anatolia Region, South East Anatolia Region) meet at their closest point. It demonstrates a climate characteristic which tends to be names as "Distorted Mediterranean Climate" between three climate types under the effect of its geographical location and other factors. As opposed to the climate seen in the center of Kahramanmaraş, when one approaches to the north, characteristics of terrestrial climate are demonstrated due to altitude. Annual average temperatures decrease in a significant manner from south to north, and west to east due to the terrestrial effect arising in connection with altitude. Average temperature overall Kahramanmaraş is over 23 °C in four months of the year. With its such characteristic, it is under the effect of "Mediterranean thermal regime type". Its north and northeast section bear the nature of "Terrestrial thermal regime type". This situation takes the Central district, winters of which are cold and summers of which are quite hot, from the "Marine Mediterranean Thermal Regime" to " Terrestrial Mediterranean Thermal Regime"




**MTA- Turkey Physical Map**

**Figure 2 :** Kahramanmaraş and its environment.

Mountains cover 59.72 of te Province territories. **(Figure 2)** The leading mountain figures within the border of the province are the extensions of Southeast Taurus. These are Engizek Mountain, Ahırdağı (2.301 m), Amonos ( Nur) Mountains, Nurhak Mountains, Kandil Mountains, Sarımsak Mountain, Delihöbek Mountain (2.338 m), Düldül Mountain and Binboğa Mountains (2.942 m) dır. **(Figure 2)**

Extensions of Nur (Gavur, Amanos) Mountains gives the southwest of the province a rough and irregular shape. Extensions of Nur Mountains within the borders of the province are called as Çimen Mountain. Nur Mountains are the south extensions of Taurus, which is the Alpine system corrugation mountains of the third era. These constitute a broken - corrugation mountain sequence flattened under various corrosions over years and raised a the end of Neocene. Nur Mountains are seen as a mountain range that has arisen between the long break lying in southwest - northeast direction between Güveydiye and Kahramanmaraş on the one side, and, on the other side, another break lying from Hınzır Burnu to Dörtyol, from the south of Osmaniye to the east of Andırın district, with an arise in opposition to the depression fields in the vicinity. Sides of Nur Mountains facing these depression fields are quite steep. These steep sides are corroded by rivers.

The highest peek of Berit Mountains, located at 30 km southwest of Elbistan district on the west of the province, has a height ot 3.014 m. Structure of Berit Mountains which are the part of Taurus corrugation mountains is composed of old Paleozoic layers. There are ice basins on the side of the mountain facing north, and on sections facing the peek, that are the remains of the ice age. Lower sides of Berit Mountain are forest areas.

Engizek Mountains arising on northeast of the Central district reach to the height of 2.815 m. **(Figure 2)**. It is separated from Nurhak Mountains on its north with Göksu Valley, and from Ahir Mountains on its south through a depressed area.
Engizek Mountains lying on the south – east direction are an extension of Southeast Taurus Mountains. Permo- carbonipher schist and green conglomerates prevail over the structure of Engizek Mountain. Engizek mountain lacks the natural fauna to a great extent.

Plateus covering 24 % of the area are mostly gather on the north of the region. Binboğa Mountains that are one of the branches of southeast Taurus Mountains opening to north and surrounding Afsin from West turn into plateaus after rising towards east. These plateaus with altitudes ranging from 1.500 - 2.000 m are not that

rich in terms of fauna due to their limestone structure. At lower altitude levels, underground waters frequently find their ways to the surface. Between the high sections of mountains limiting Elbistan depression area from north and east and the plain, there are various plateaus sequences at different altitude levels. These plateaus located between 1.500 - 2.000 m. are divided by the branches of Ceyhan River into various plane areas at different sizes. Some portions of these plateaus that are closed to the cold terrestrial climate of East Anatolia are quite rich in terms of water resources. These parts are covered with rich meadow areas. Excluding the cold winter months, a part of these plateaus are used as mountain pastures. Though not that frequent as in case of north, there are also plateaus on the south section of the province. Environment of Berit Mountain which fills the gap of Goksun Brook which is an important branch of Ceyhan river, and its extensions are covered with plateaus of various sizes. These plateaus with heights decreasing down to 1.000 m in some places, are opened to the effects of Mediterranean climate through Ceyhan Valley, that is why they are not as cold as the north plateaus. Areas that are covered with rich meadows are important in terms of province stockbreeding. There are wide plateaus on the extensions of Maraş and Engizek Mountains lying from the Central district to the northeast and Nur Mountains entering into the province territories from south. Their altitudes vary between 1.000 - 2.000 m. When progressed towards north, the fauna on these plateaus where the limestone structure prevails is quite poor.

In hydrographical terms, the most important river is Ceyhan river. Ceyan originates from the mountains in the vicinity of Elbistan Plain. The river first unites with Söğütlü Brook and then with Harman Brook. After this point, creating narrow meanders, Ceyhan River flows first towards southeast direction, then, turning to south, unites with Goksun Brook in the vicinity of Ortaklı Village. Becoming a very huge river after this point, Ceyhan starts to flow through narrow and deep passes. Flowing on the south direction for some while, Ceyhan River first turns to east in front of Ericek Village, and than to southeast and faces southeast on the south of Ekinözü. The river turns to south in front of Sazköy. In this section it again flows in deep passes. Taking the Güredin Brook of Gölceğiz Village on the east, Ceyhan River enters into Kahramanmaraş Plain. Turning to west by drawing meanders on the plain, the River takes Körsulu brook at the exit of the plain, flows towards southeast direction, and leaves the province borders. The altitude in the source region of Ceyhan River is around 2.000 m. Altitude of the river basin decreases down to 0 m. through its flow distance of 460 m.

The fact that 190 m of Ceyhan River, which has a total length of 425 m, flows within the borders of the province and that this river flows through narrow and deep

valleys created a very suitable situation for the construction of hydroelectric power plant. These water resources are utilized and, within the borders of the province, Kartalkaya Dam (completed, on Aksu brook, for irrigation purposes and preventing floods), Sır Dam (completed, on Ceyhan River, for energy generation purposes), Ayvalı Dam (being constructed, on Erkenez brook, for irrigation and drinking purposes) and Kılavuzlu Dam (being constructed, on Ceyhan River, for energy generation purposes) Menzelet Dam (being constructed, on Ceyhan River, for energy generation purposes) and Berke Dam (on Ceyhan River) have been constructed.

Aksu brook, which is one of the most powerful branches of Ceyhan, originates from the skirts of Engzek Mountain. Aksu Brook, finding its source from a very powerful spring immediately on the east of Küçükcerit Village, is initially named as Ağa Water or Aksu Spring. Aksu is fed with waters coming from Büyükcerit direction and becomes a very powerful brook. Passing through very narrow and deep passes, it unites with another small water coming from the lakes located in the vicinity of Söğütlü. From here, it descends into a long and very deep pass called Uzungeliş.Aksu Valley wideness in the vicinity of Pazarcık and opens to Narlı Plain. Aksu Brook, flowing first towards southeast direction from this plain and than facing towards northwest and then to north, Aksu Brook meets with Ceyhan by passing Kahramanmaraş Plain on northwest – southeast direction. Within the borders of Kahramanmaraş, waters other than Ceyhan and Aksu are mainly small rivers which are the branches of Ceyhan. Among other waters within the borders of the province are Erkenez, Karaçay, Deliçay, Üngüt, Körsulu, Peynirdere, Kerhan, Kırkgöz in Central district; Üzücek, Geben, Başpınar, Andırın, Çokak, Darıovası, Keşiş in Andırın; Söğütlü, Hurman, Nargile, Nurhak in Elbistan; Terbüzek, Göksun, Kömür, Çukurhisar, Güredin in Göksun; Mizmilli, Göksu, Ardıl, Bağlama, Taşbiçme in Pazarcık and Gökpınar in Türkoğlu. There is no natural lake in Kahramanmaraş province. On the north of the province center, in Ahır mountains, there are Karagöl and Küçük Göl with tectonic – karstik structure that are formed seasonally.

Valleys cover a significant part within the borders of Kahramanmaraş province which has a very wide river net. Territories of the provinces are divided with Ceyhan River and the valleys its branches have opened. The valley created by Aksu, which is one of the branches of Ceyhan River, starts from the southeast skirts of Engizek Mountain. It first faces to southeast and than to southwest, and the valley which becomes deeper faces to the east of Sakarya Village, to the south. Then, lying towards southwest, the Aksu Valley opens to a wide depression area after Büyükçam Village.

Plains cover 16.3 % of the province area. Leading plains sequences through the

Ceyhan valet are Elbistan plain, Göksun plain and Kahramanmaraş plain. Elbistan plain is a depression plain located on the north of Kahramanmaraş Province in between Binboğa, Nurhak, Engizek and Berit mountains. Its height is around 1100m.-1150m. Its length is 50 km and its width on north – south direction is 20 km at maximum. The plain is covered with sedimentation (alluviums) Its surrounding is covered with various types of Eosin filches, mountains composed of Kretase layers, and serpentine masses, its east and west are surrounded with mountains made of Permo- Carbonipher layers, crystalline limestone and marbles, and its south with high plateaus where serpentine masses occupy a great area. The plain is fed with Hurman brook and Söğütlü brook. Numerous copious springs flow to the plain from south. The Kahramanmaraş plain located on the south is an alluvial plain with tectonic origin. Kahramanmaraş plane is an extension of Jordan Graben system which starts from Africa Lakes Region, progressing towards Red Sea and Lut Lake, through Amik plain. Hills and mountains around the plane were created in $4^{th}$ period. In Kahramanmaraş plain, there are $3^{rd}$ period old alluviums in addition to $4^{th}$ old alluviums. Height of Kahramanmaraş plain has a height of 450m.- 500m. Length of Kahramanmaraş plain located between Ahır Mountain and Çimen mountain is 40km, its width on north – south direction is around 20 km. Göksun Plain is located on the northwest of the province. **(Figure 1)** The plain is watered with the branches of Ceyhan river. It lyes on northeast – southwest direction. Its height is 1000 -1100 m. Length of the plain is 30 km., and its width in north – south direction is 20 km. The plain is surrounded with Ova Dibek, Binboğa, Delihöyük, Berit, and Armutyücesi mountains.

Andırın District is located on the north east of East Mediterranean region. On its north are Göksun and Saimbeyli, on its west Feke, on its southwest Kadirli, and on its south Bahçe and Düziçi, on its southeast Türkoğlu Districts and on its south Kahramanmaraş province are located. **(Figure 1)** It has a quite irregular land structure. 970 km of the surface area of the district comprise of mountain and rough fields, and the remaining 208 km contains plains and campaign areas. Valleys are generally on north – south direction. Brooks and other rivers mixing with Ceyhan River flow through these valleys. The longest valley is the Kesiş Suyu Valley which starts in the vicinity of Çokak Village and meets with the waters of Aslantaş dam lake. We can count Andırın Brook as the second valley, which starts from the north of Çuhadarlı Village and meets the waters of Aslantaş dam lake from Tokmakli Plain. These valleys have the character of baseless valleys. Their sides are quite steep, which make them look like canyon type valleys.

On the end parts of the basins of rivers flowing to the said valleys are small plains and plateaus. The largest of these is the "Aşağı Andırın" Plate. This plate covers

an agricultural field of 120 dekars. However, a section of these fields, which are quite productive, has remained within the field of Aslantaş dam lake within the borders of the district. Plateaus lying on the south of Çokak Town have the shape of valley bases; and the plateaus in Kocaçukur, Kargaçayırı villages and Geben Town have the shape of plateaus made of rivers. Irrigated agriculture is possible at the bases of valleys.

Though it is located in Mediterranean climate band, Andırın demonstrates the characteristics of a transition region under the effect of Central Anatolia climate. Generally, summers in southern parts of the district pass quite hot and dry, and winters are warm and rainy, demonstrating a Mediterranean climate.

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## B. HISTORICAL SETTINGS

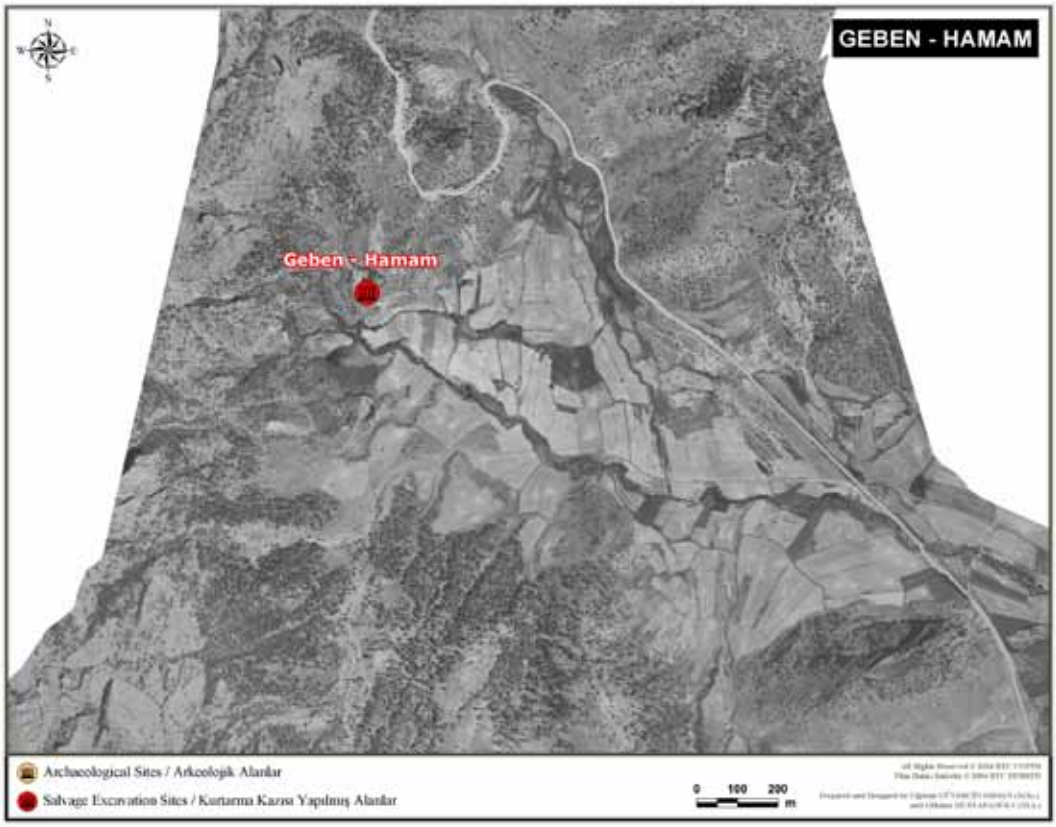



**Figure 3 :** Kayranlık Gözü air photo .

Geben is a town affiliated to Andırın district of Kahramanmaraş province. The old Geben is located on 32 km to the northeast of Andırın, 22 km southwest of Göksun (Kukusos), on the north entry of Capadocia, on the Meryemçil gateway. **(Figure 4)** Up to date, it has been called under various names being Kapnisperti[1], Kapniskerti[2], Gabnupert[3], Gabnupirat, Kapan/Gaban, Çinçin, Sarımsak Kalesi[4] etc..[5] Today it is presented as Geben Kalesi[6] (Castle) or Meryemçil Kalesi **(Figure 4)** in the literature.[7] The castle and its vicinity must have hold a settlement since very old periods. However, there is no information and document reached to our day from the early periods. The earliest data we have in hand belong to the first half of 12th century. The region which

[1] Umar 1993: *" A Kilikia fortress conquered by the Emperor Ioannes Komnenos from Armenians in* 12 th century. The Kapniskerti form ot its name is mentioned by Ramsay (p.424 No:63), he does not mention about the place of the fortress. Honigman (p.129) mentions the name of the fortress as Kapnisperti in the dialect of Greek; he says that its name is Gaban or Gabnupert as used by Armenians, stating that its current name is Geben."
[2] Umar 1993: 378.
[3] Umar 1993: 378.
[4] Hild and Hellenkemper 1990: 287.
[5] Edwards 1987:124-125.
[6] Hild andHellenkemper 1990: 287.
[7] Edwards 1987:124-125.

remained under the sovereignty of Byzantines in Middle Ages, played a significant role during Arab raids. The region which frequently passed to various rulers was subsequently administered by Kilikya Armenian Princes that are subject to Byzantine and Anatolian Seljukian state.[8]

**Figure 4 :** Meryemçil Castle and gateway.

The region which passed to the Mongolian Administration following 1243, was conquered by Memlukians in 1374[9]. Following Memlukians, the region passed under the ruling of Dulkadirogullari and finally Ottomans. Subsequently the region lost its significance as the commercial and military paths changed. Particularly the European travelers and traders provide information about the region which has been quite important in terms of trade in the Middle Ages. Among these, the records of Pegolotti of Florence, who traveled for providing beneficial information for traders and authored the guide named *Pratica della Mercatura*, bear a significance. The path starting from Ayas used to follow Ceyhan river till Anabad, and then followed Anabad Water separating from the river, which is a branch of it. The path passing beneath Geben waters bends towards northeast after Goksun, arrives to the point where Seyhan river finds its source, and reaches Sivas progressing along side Kizilirmak. Two difference

[8] Kaşgarlı 1990: 101-103, 141-150.
[9] Islam encyclopedia 1964: 761-762.

bonds issued by a Genoan notary in the June of 1274 [10] demonstrate that Ayas – Sivas trip lased for 8 days. [11] This path passing over Meryemçil saddle, is the oldest path establishing the north – south connection which connects Anatolio to North Syria. On this path, there are the old castles, Karatepe and Hieropolis-Kastabala. This road from Göksun to Andırın was called as the Immigration Path (Path of Turuk)[12]. From Göksun one arrives to Değirmendere region on the Immigration Path, from where the Meryemçilbeli bottleneck is passed under the lower section of Findikli Castle, which is followed by Geben plateau after around 13 km. Thus one would access to Kilikya in the vicinity of Meryemçil Kale (Geben Castle).[13]

**Figure 5 :** Kayranlık Gözü Site.

The excavation site is located on the southwest side of Geben Caste, which has maintained its significance at almost each period of the history and especially hold an essential position in terms of trade during Middle Ages, under a spring ( Kayranlık Gözü) sourcing from the east of Kayranlık Mountains.**(Figure 5)**

[10] Edwards 1987:124
[11].Bratianu 1929: 158.
[12] Turan 1990: 106.
[13] Hild and Hellenkemper 1990: 137.

As of its plan, the bath does not look like to the plan of any bath ever known, however, due to its some characteristic such as the projection created by the caldarium section towards outside in half –circles etc. it looks like the samples of 3rd – 4th centuries AD,[14] that is the Late Roman – Early Byzantine period.[15] **(Figure 41)** The initial construction stage of the bath can be dated back to the late 3th century and early 4th century AD, though it is not certain. The fact that two coins revealed in excavation works pertaining to the same dates **(Figure 80, 87)** supports our opinion. We can say that, relying on the glazed ceramics revealed in the excavation and the coins pertaining to Kilikya Armenian Prince Herum I (1226 – 1270) that the construction was used during the following periods, at least in the Middle Age. **(Figure 80: 1)** However, the data we hold in hand at the moment are not sufficient enough to make a final dating and evaluation. Some repair traces and reinforcements inside the construction demonstrate that the structure was also used in the following periods.

As minor finds, we can count the three coins characterized for study purposes, two belonging to Rome and one belonging to Kilikya Armenia princedom. **(Figure 87)**

As a conclusion, whereas the information and data obtained pertaining to the region in the previous studies traced back to 11 th – 12th centuries AD, the bath revealed at the end of the excavation is important in the sense that it evidences that the settlement here is dated back to 3rd century AD.

[14] Nielsen 1992: 107-159.
[15] Yegül 1992: 314-326.

# PART II

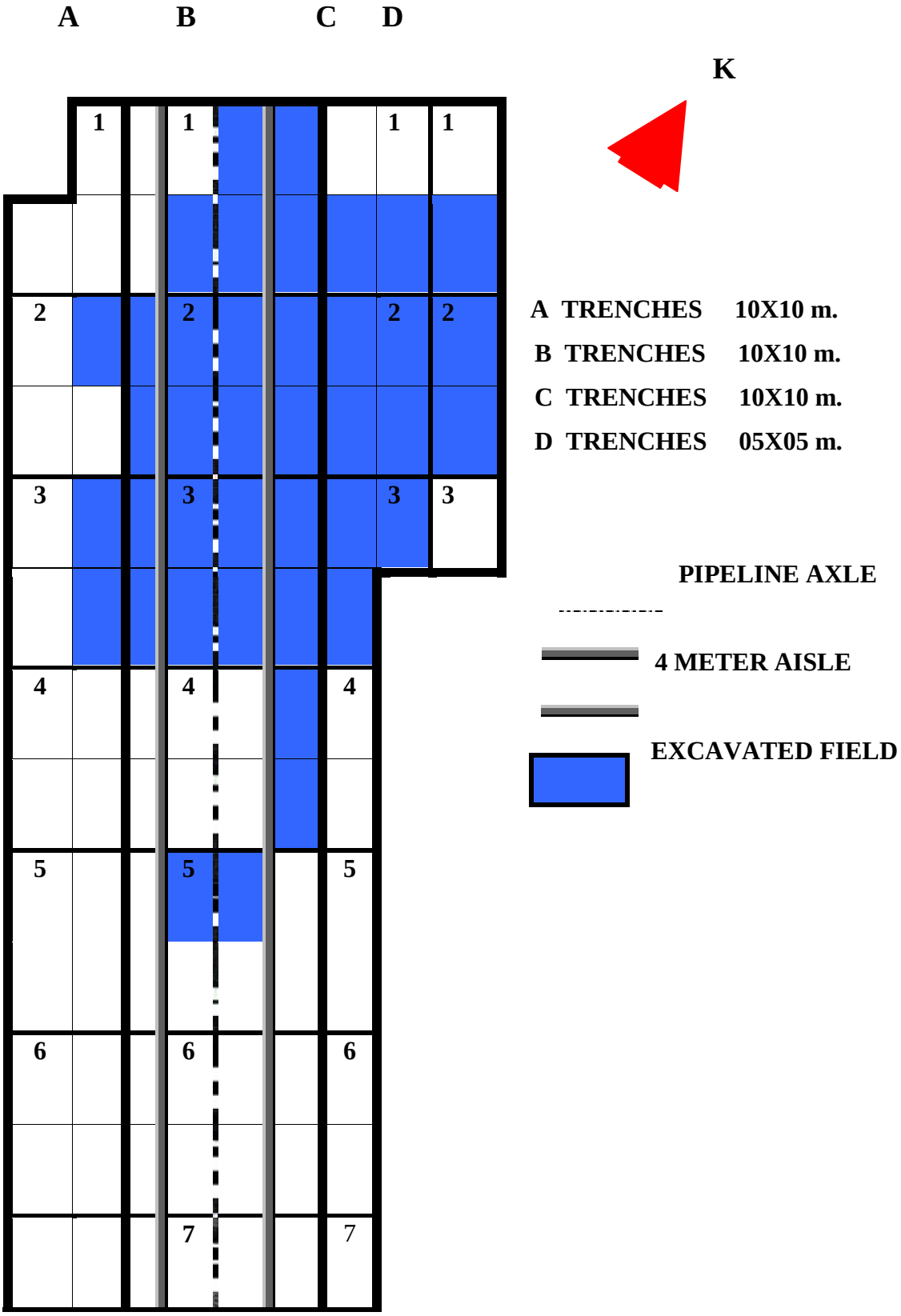
# EXCAVATION WORKS

During the construction activities perfomed within the scope of Baku – Tblisi – Ceyhan Crude Oul Pipe Line in Kahramanmaraş Province, Andırın District, Geben County Kayranlık Gözü Site, remains such as Stones, bricks etc. which might belong to an architectural structure are encountered, upon which the construction activities were suspended, then it was decided to perfom excavation on that site and the works were commenced.

Geben County is a county affiliated to Andırın District of Kahramanmaraş Province. Old Geben is locate don 4 km. northwest to today's county, 32 km. northeast to Andırın'ın 32 km. 22 km to southwest of Göksun (Kukusos), at the north entrance of Kapadokya, in Meryemçil hallway. **(Figure 4)**

**Figure 6**: General overview of the excavation site.

## KAYRANLIK GÖZÜ SALVAGE EXCAVATION PLAN



The excavation site is located immediately under a rocky area (Kayranlık Gözü) which preserved its significance almost at each period, located on the southwest side of Geben Castle which has been particularly significant in commercial terms in the Middle Ages, and on the east of Kayranlık Mountains. **(Figure 7, 8)**

**Figure 7**: Kayranlık Gözü Site and water resources.

**Figure 8**: Kayranlık Gözü Site .

Kayranlık Gözü salvage excavation works were commenced with gridding and topographical planning processes on the excavation field. **(Figure 9)**

Since the salvage excavation will be performed within the limits of the field where the pipeline would pass, the said aisle was divided into grid fields that are coded as A, B and C in dimensions of 10 x 10 m. and separated into plan-squares. **(Figure 9)**

In excavation works, emphasis was put on the pipe axle passing through B trenches and expansion has been provided to other parts of the trenches depending on the status of the finds. In order to follow the architecture obtained, the grid areas which are later on coded as D are added to the site.

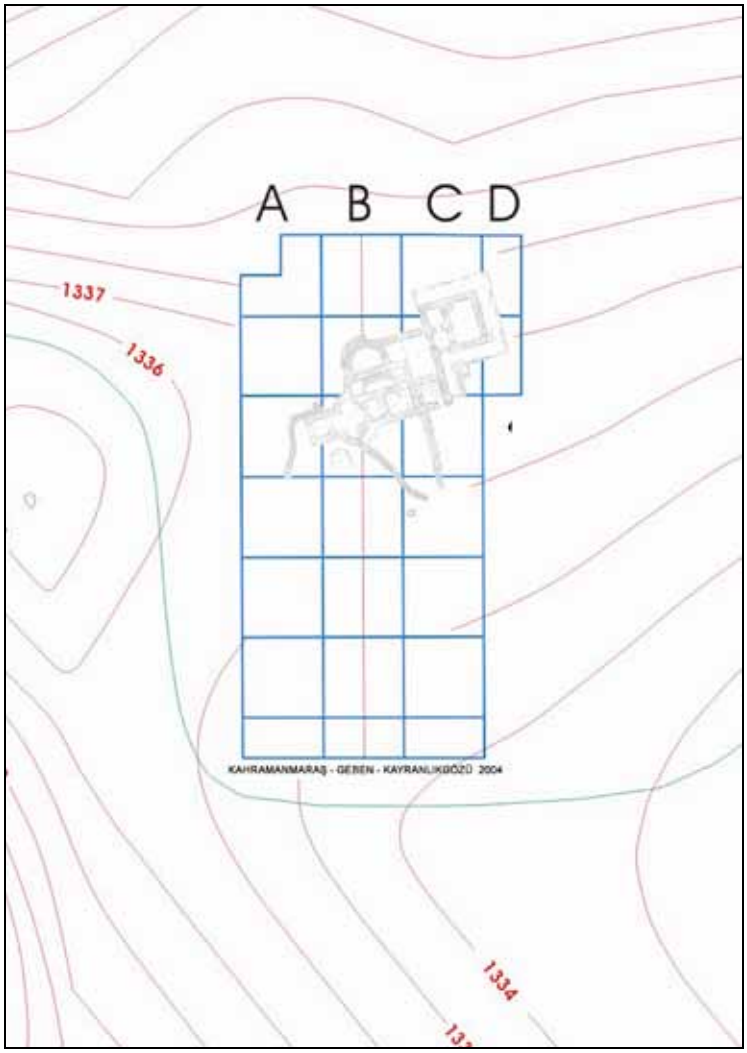



**Figure 9**: Kayranlık Gözü topographical plan.

The excavation works have been commenced simultaneously in B1, B2, B3 and C 3 trenches following the surface cleaning works in the field. Then the works were performed on B 18 and B 19 trenches.

In order to follow the architecture revealed during the excavation, works were performed on A2, A3, B4,B5, C2, C1, C4 and D1 as well as D2 afterwards.

In B1 Trench, the works were initially commences in 6-10 / f-j plan-squares, and stone rows with various sizes were encountered. **(Figure 10)**

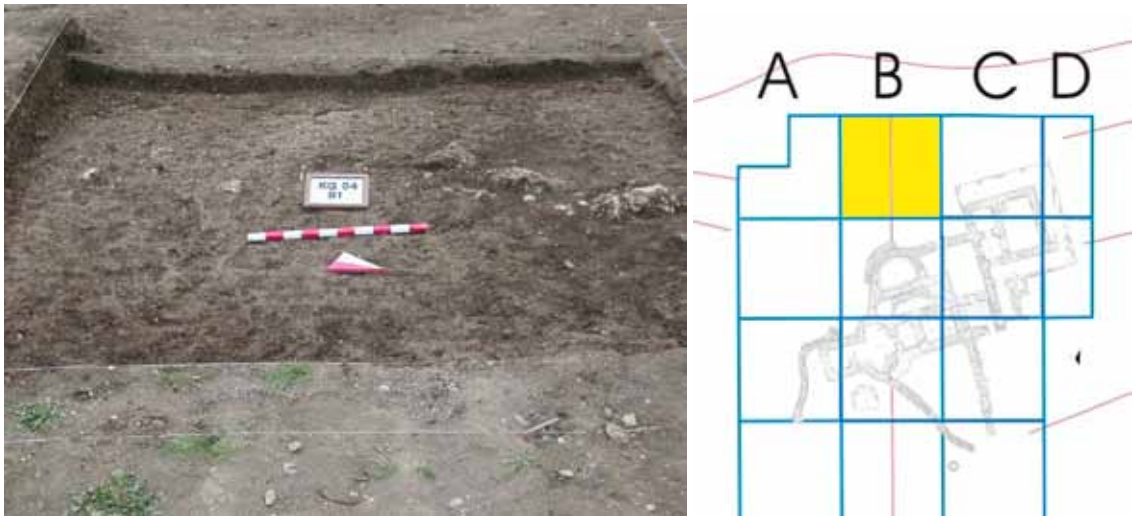



**Figure 10**: B1 trench.

When the debris stones were removed, a wall pertaining the late age starting from the south and progressing towards north, made of dry wall technique containing no attachment material, composed of double-row stones was revealed.

**Figure 11**: B1 trench.

In order to see the continuing part of the wall, works were continued in 1-5 / h-j plan-squares. Here the continuing part of the wall was revealed. It was seen that the stone order was ended up as it approached to the end.

**Figure 12**: B1 trench.

No archeological find was revealed in the drilling performed at 2 x 2 m dimensions in in 2-4 / e-f plan-square and 8-10 / d-e plan-square. Overall the trench, few amount of amorphous ceramic pieces and a corroded nail **(Figure 81: 1)** was obtained.

During the works performed in B2 trench, in 4 – 7 / e – h plan-squares, a wall with a length of approximately 140 cm was determined where lime was used as the attachment material, that in the inner and outer surfaces, bigger and more regular stones as well as rubble stones among them were used as filling materials. **(Figure 13)**

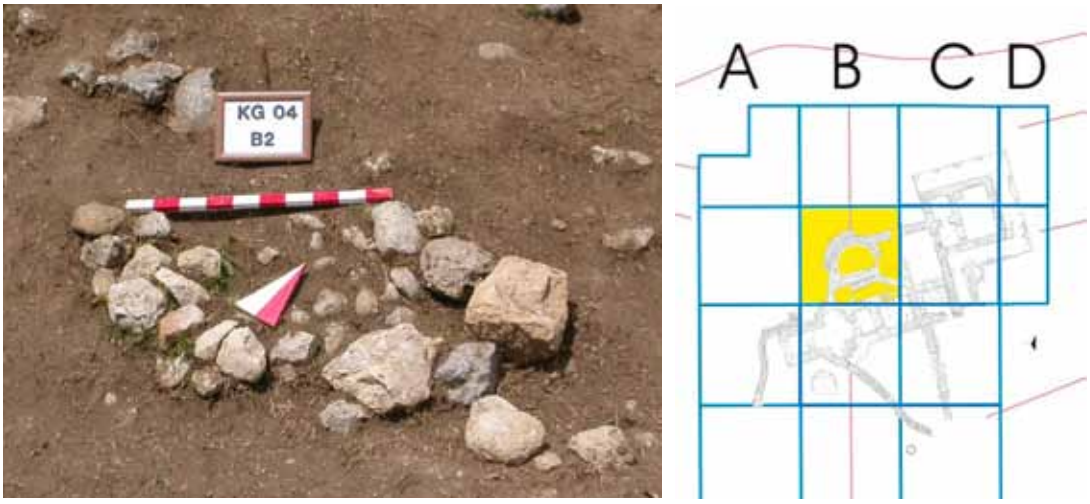



**Figure 13**: B2 trench

In the works performed with the aim of identifying the wall, it was determined that the wall did not turn to east and south by creating a corner, rather by means of a curve. When the wall was completely revealed, it was found that the wall belonged to a residence with half-circular plan. **(Figure 14)**

**Figure 14:** B2 trench.

Besides, it was determined that the thickness of the wall was 70 cm, not 140 cm. It was seen that the thickness on the northwest of the residence was a supportive wall constructed afterwards with the aim of supporting the original wall. **(Figure 14)** Besides, the wall decreases by creating a grade of 50 cm at the inner section. It was seen that the grading circulated the site named M5. **(Figure 15)** It was determined that the residence named M1 found on the east of the residence continued towards C2 trench. It was seen that the walls pertaining to M1 residence has a thickness of 70 cm, and that lime mortar was used as the attaching material, and rubble stones was used as filling material between irregular hewn stones.

**Figure 15**: B2 trench.

Moreover, on the walls of the residence, a plaster with a thickness of 4 cm was used and a concrete with lime mortar was used on the ground. On the south of M5, a residence with rectangular plan was revealed on east – west direction. When the debris stones inside the residence were removed, a water duct originating from the east corner of M5 was seen, and it was covered with lid stones. **(Figure 16)** One end of the duct

faces west and the other faces east. The west end ends at the end of the residence. At the section where it ends, a smaller site northeast corner of which is curved and which has a smaller size catches the attention. This section is severely damaged. The end of the duct approaching to east passes to C3 trench from inside the wall. The width and height of the duct are 20 X 20 cm.

**Figure 16**: B2 trench.

In B2 trench, no significant find was revealed outside the architectural remains excluding a broken glass object **(Figure 85)** and amorphous ceramics colored red and camel hair, most of which have rough characters.

The works in B3 trench commenced by removing the debris stones on the site. When debris stones were revealed, the site named M6 at dimensions of 250 x 190 cm by the intersection of D9, D10, D15 at certain intervals, and another site named M7 at dimensions of 163 x 273 m by the intersection of D9, D10, D15, D16 and D17 were revealed. **(Figure 17)**

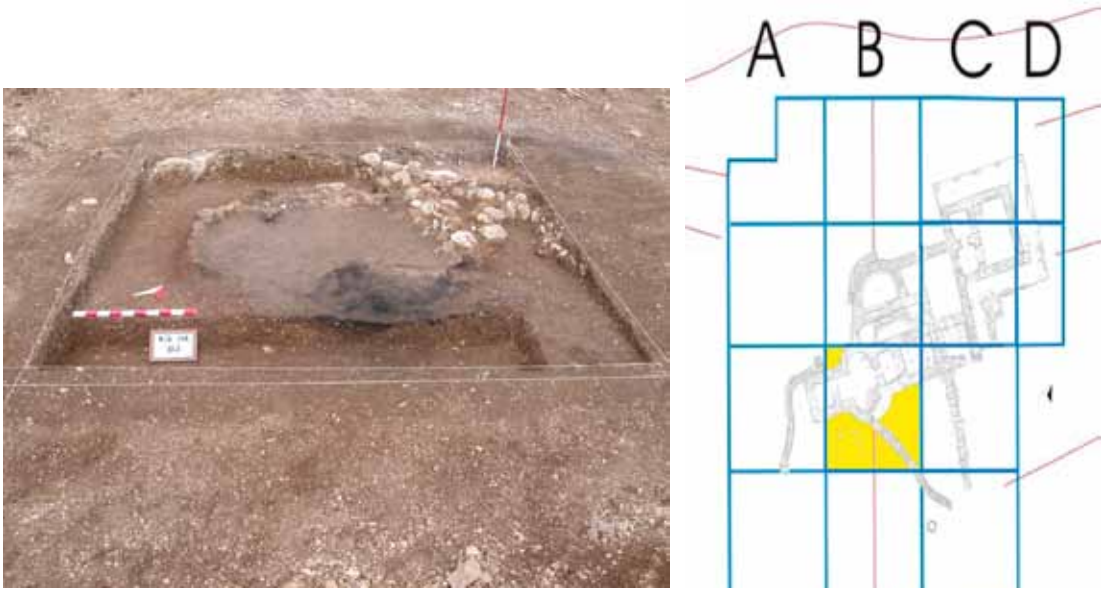



**Figure 17**: B3 trench.

On the west of this, there is the M9 site with dimensions of 500 x 350 m. overflowing the in the shape of exedra on northwest ad southeast.

**Figure 18**: B3 trench.

Inside the exedra on the southeast corner of M8, on an area of 155x135 cm. hypocaust bricks in disc shape on the ground bricks at dimensions of 27 x 27 x 5 cm. as well as a broken ground brick on these **(Figure 19)** were obtained as in-situ. Similarly, in-situ hypocaust bricks were revealed in M6.

**Figure 19**: B3 trench.

On the west of M8, between D9 and D10, there is the M9 at dimensions of 215 x 190 cm., which bears soot and burns on its inner walls. On the approximate axis of the exedra on the southeast of M8, a pipe trace is found on the wall, and there is a water pipe next to this. **(Figure 20)** On the south of the pipe, a short duct made of lime plaster is ended with a lid stone. An arrangement starting from the south of the lid stone and, making a concave curve, reaching to C 4 trench, made of rubble stones placed without any plaster, which is thought to be a duct.

**Figure 20**: B3 trench.

On the south of M8 and M9, a section in half-circle shape made of single-row stones externally, with ground plastered with lime mortar is revealed, which is independent of the architecture. A very intense burnt layer is visible at the lower section of the ground.


**Figure 21**: B3 trench.

On the walls in B3 trench, the regular hewn stones are used at the inner and outer section, rubble stones are put inside them, broken bricks and pebbles are used as filling materials, and lime mortar is used as the attaching material. Wall thickness vary between 65-80 cm.

In addition to the architecture, there is an iron nail which is exposed to intense corrosion, **(Figure 81: 2)** and a fountain bowl was found, which was thought to be made of lead, exposed to corrosion and crashed. **(Figure 84: 2)**

Since no archeological find was encountered in the a 3 x 2 cm drill performed on the pipe axle in B5 trench, in 1-3 / e-f plan-squares, the works were interrupted at this level.

In B18 trench, 9-10 / f-h plan-squares, a site which was protected, built with small sized stones, attached with lime mortar, with internal section plastered in reddish color was revealed, which had a “U” shape.

**Figure 22**: B 18 trench-detail.

It is seen that the site continues towards B 19 trench. No architectural or any other archeological remain was found in its environment.

**Figure 23**: B18 trench.

During the works performed in B19 trench, 6-10/f-j plan-squares, a wall or a foundation composed of single row, progressing from east to west direction, turning to north approximately on the axis is revealed.

**Figure 24**: B19 trench.

During the works, very small amount of amorphous ceramic piece and two metal objects exposed to corrosion were found. **(Figure 84: 1)** During the works in 1-5 / f-j plan-squares, in 1-2/f-h plan-squares, a "U" shaped small residence or establishment progressing towards B18 trench, with inner section plastered, with walls made of lime mortar was encountered. No archeological material was found excluding a few number of amorphous ceramic pieces.

**Figure 25**: B19 trench.

Works in A2 trench was commences with a drilling of 2 x 2 in order to determine whether it has any connection with the architecture established in B2 trench. Since some stones were found during the work, the drilling work was expended to 4x3 m. When the surrounding of the stones was opened and deepened, it was determined

that these did not belong to any architecture and were debris stones, and the works here were ended up after these debris stones were removed.

**Figure 26**: A 2 trench.

Works in A3 trench were commenced by the drill performed in 3-6/ı-j plan-squares in order to follow the D9 and D10 walls which started in B3 trench. In the drilling work, the D 9 wall having a wall thickness of 80 – 110 cm with a height of 70 cm. as well as the D 10 wall with a wall thickness between 92-110 cm. were found.

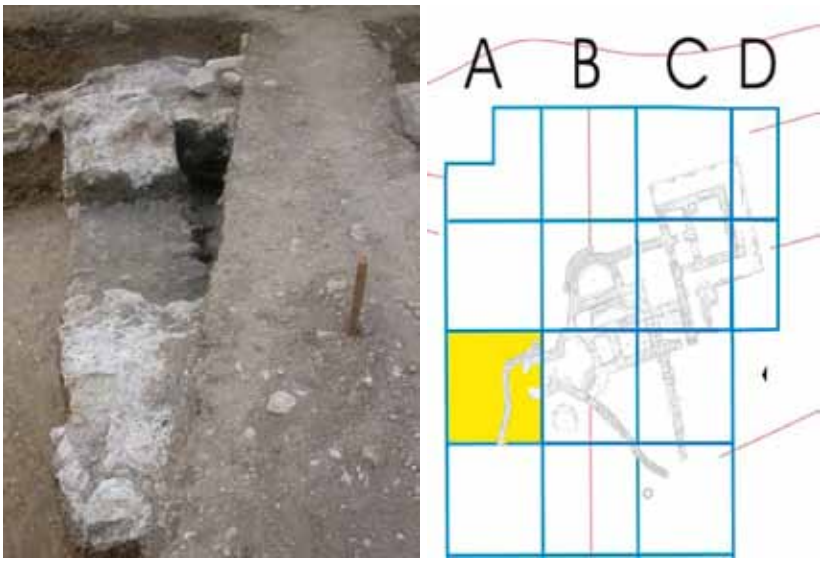



**Figure 27**: A 3 trench.

Adjacent to the north of D10 wall, a water duct with a width of 20 cm. and height of 20 cm made of regularly hewn stones was found, which was thought to be a water duct where the waste water was poured. **(Figure 28)**

**Figure 28**: A 3 trench.

The duct starts from the north of D10, and after progressing to the west, turns to south in a curved path, and ends on the southwest corner of the trench. At the corner which the duct turns, a pythos which is though to be inserted in another period afterwards by breaking the duct, with mouth section broken, having a body of 57 cm was revealed. **(Figure 28)** Lime mortar was used as the attaching material between the stones in the duct. Besides, the inner section of the duct is plastered. The plaster has abundant lime, with small pebble stones and broken red brick. The part of the duct with hewn stone, mortar and plaster ends on the axle of D9 wall, and the part with rubble stone without any plaster and mortar remains. During the works, small amount of profiled and amorphous parts were found.

In order to determine whether the water duct revealed in A3 trench has any continuing part, a drill of 3 x 2 m. in 1-3 / f-g plan-squares of A4 was opened. In the works performed, since no archeological remains nor the continuing part of the duct were found, the works were ended at this level.

Works in C1 trench were performed in order to determine the limits of the wall and residences revealed in C 2 trench. In 8-10/b-ı plan-squares, the D3 wall with a thickness of 75 cm with a length of 7.30 m was revealed on northeast – southwest direction. **(Figure 29)** D3 wall is cut with D 1, D 11 and D 4 walls coming from C2 trench on northwest – southeast direction. The site between D1 and D11 walls was named as M3, and the site between D4 and D11 walls was named as M4. Height of the walls vary between 80-110 cm. The inner section and grounds of the residences are plastered. There is lime plastered ground on the north of residences.

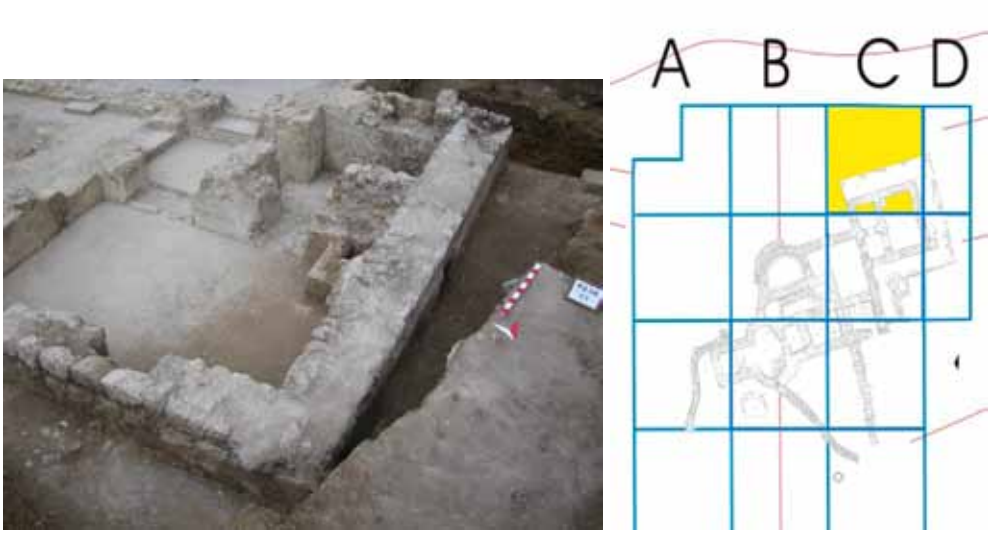



**Figure 29**: C 1 trench.

On the north of this ground, four hewn stone pedestals at dimensions of 40 x 50 x 20 cm symmetrically were revealed.

**Figure 30**: C 1 trench.

On the northwest corner of M3, there is an object with walls plastered, with dimensions of 100x76x62 cm. , and on its north, there is another object inside the wall, with dimensions of 40 x 60 cm, opening to outside through a gap, function of which could not be determined. **(Figure 31)** Again, on the east wall of the residence (D1), there are niches symmetrical to the axle, damaged, having a width of 85 cm, height of 52 cm and depth of 30 cm.

**Figure 31**: C 1 trench.

Small amount of amorphous ceramic piece and four corroded metal objects were obtained in the trench. **(Figure 82: 2, Figure 83: 3, 4))**

Four residences were revealed in C2 trench. The first residence is located on the north east corner of the trench. West of the "L" shaped residence is located in B2 trench. The wall and ground of the residence is plastered. The plaster thickness varies between 3 – 4 cm.

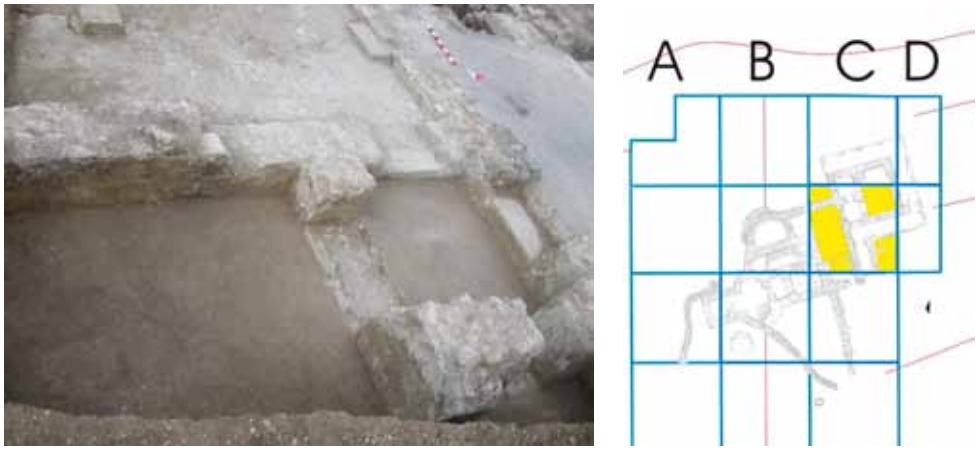



**Figure 32**: C 2 trench.

The residence comprise of D4, D5, D6, D7 and D8 . There is a passage to M2 with a gap of 90 cm from D4. Then there is a passage to M3 and M4.

**Figure 33**: C 2 trench.

M2, M3 and M4 residences were created by the intersection D1, D2, D3 and D4. The thickness of the war is 70 cm. Walls protected up to the height of approximately 1 m of plastered from inside and sutured from outside. On the south of M1, 1 m below the ground level, there is a residence which has 7 – 9 rows of hypocaust bricks. **(Figure 34)** Bricks have two types. The first is wide and flat and has a diameter of 22 cm and thickness of 7 cm, and the other has a bottom diameter of 18.5 cm and upper diameter of 16.5 cm, and a thickness of 8.5 cm. The duct coming from M1 from the lower part of the west wall of the residence progresses towards C 3 trench.

**Figure 34**: C 2 trench.

Works in C3 trench were initially performed on 1-3 /a-e plan-squares and D 9 trench was revealed. South section of the wall was roughly plastered. It is 30 cm thicker than other sections of the wall.

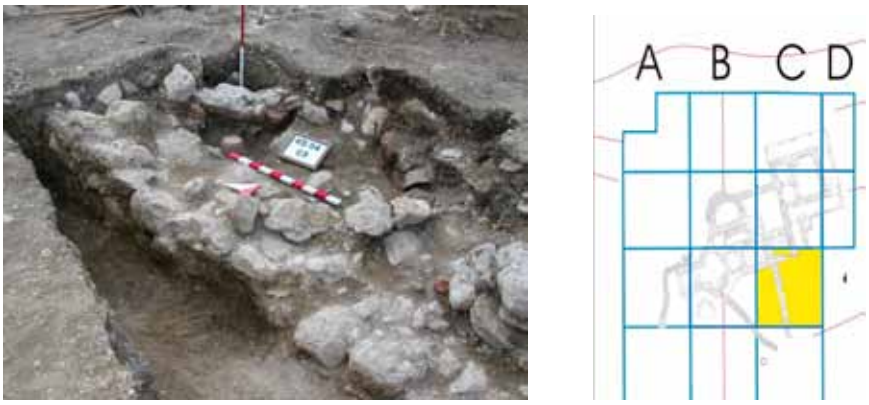



**Figure 35**: C 3 trench.

**Figure 36**: C 3 trench.

The water duct exiting from B2 trench, passing through C 2 trench and under D 9 trench, continues in C 3 trench and arrives at C 4 trench. Upper section of the duct is coated with stones. **(Figure 37)**

In C 3 trench, red colored, amorphous ceramics with folded out rim, glass pieces **(Figure 85: 2, 81:3)** and nail were obtained.

Works in C4 trench were commenced with the aim to follow the water ducts that started in B3 trench and C 2 trench and arrived at C 4 trench and covered with non-plastered and irregular stones. The duct end in 3 /d plan-square.

**Figure 37**: C 4 trench.

During the works, a copper coin pertaining to Constantinus I.(297-306) which is exposed to strict corrosion was revealed in 1/d plan-square. **(Figure 80: 3)** Again, during the cleaning works performed in the tandoor (hearth) revealed on the southeast corner of the trench, a copper coin pertaining to Kilikya Armenian Prince I. Hetum (1226-1270) **(Figure 80: 1)** was found.

**Figure 38**: C 4 trench.

D1 trench was opened with the aim of seen the continued parts of pedestals that were revealed on the corners of lime plastered revealed in C 1 trench. Works performed at 337.50-335.91 m. levels revealed a stone pedestal made of regular hewn stone located in intervals of around 2 m. While commencing the works in the trench, a copper coin pertaining to II. Constantinus was found on the surface. **(Figure 80: 2)**

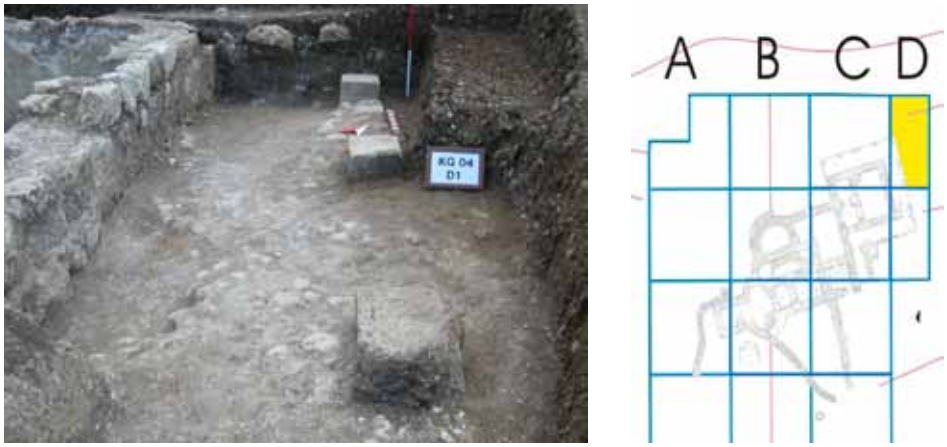



**Figure 39**: D1 trench.

D2 trench was opened on 1- 5 / a – c plan-squares in order to determine the intersection point of D 1 and D2, and a cornerstone with a dimension of 80 x 65 cm was found on the intersection point of the walls. One of the pedestals starting in C 2 trench was found in D 2 trench.

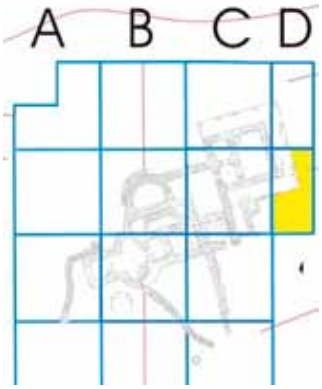



**Figure 40**: D 2 trench.

During the excavation works, as the architecture is revealed, the issue of changing the axle came to the agenda, whereupon relevant works were performed and a new axle was determined. The new axle was shifted to 10 – 20 m west of the excavation field. On the new axle, three new drilling fields were determined in order to understand whether there is any architecture that is connected to the revealed bath.

1. drilling was commenced as 4x1 m. However, as some stone orders are started to be seen, the drill was extended to 4 x 2 m. When the surrounding of stones was opened and cleaned, it was seen that these did not belong to any architecture and were

only debris stones, upon which the stones were removed and no remains were found at depth of 2 m. approximately. For this reason, works were interrupted at this level.

2. drilling was commenced again at 1 x 4 m. dimensions. After 1 m of deepness is obtained, the drilling was narrowed down to 2 x 1 m. When the depth of 2 m. approximately was obtained in the work, water was found, upon which the works here were ended.

3. drilling was commenced at dimensions of 1 x 4 m., when a deepened of 1 m. is obtained, the drilling was narrowed to 1x 2 m. The works here were ended since no remains were found at the depth of 1.60 m and it was understood that water was to emerge at that level since the ground started to get moistened.

# PART III

# ARCHITECTURAL FINDS

In the excavation works performed in a field with a dimension of 40 x 30 m, the priority was put on the pipe axle passing through B trenches and the work was expended to other sections of the trenches depending on the status of the finds. The excavation works commenced with B1, B2, B3 and C3 trenches were continued with A2, A3, B4, B5, C2, C1, C4 and D1 as well as D2 trenches which are subsequently opened in order to follow the architecture revealed in the previous excavation works. **(Figure 9)**

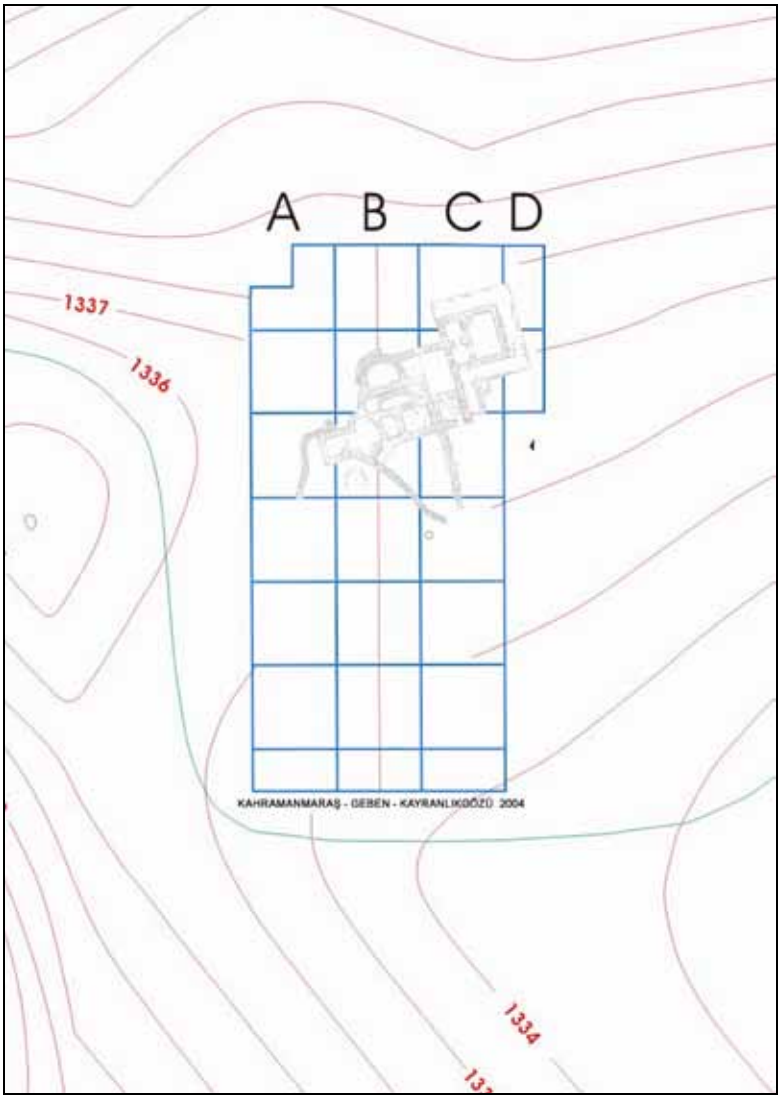



**Figure 41 :** Kayranlık Gözü topographical plan.

In works commenced in B1 trench, when the debris stones were removed, a wall made of double row stones, where no attaching material was used, built with dry wall technique, starting from south and progressing towards north, pertaining to the last period was obtained. It was seen that the stone row was cut towards the end of the trench. **(Figure 42)**

**Figure 42 :** B 1 trench.

During the works in B2 trench, a wall with a length of 140 cm where lime mortar was used as the attaching material, which has bigger and more regular stones at the inner and outer surfaces, and where small rubble stones were used as filling material between them was found. In the works performed with the aim of identifying the wall, it was determined that the wall did not turn to east and south by creating a corner, rather by means of a curve. When the wall was completely revealed, it was found that the wall belonged to a residence with half-circular plan and its thickness was 70 cm. **(Figure 43)** It was seen that the thickness on the northwest of the residence was a supportive wall constructed afterwards with the aim of supporting the original wall.

**Figure 43 :** B2 trench.

Besides, the wall decreases by creating a grade of 50 cm. **(Figure 44)** at the inner section. It was seen that the grading circulated the site named M5.

**Figure 44 :** Detailed view of B 2 trench.

It was determined that the residence named M1 found on the east of the residence continued towards C2 trench. It was seen that the walls pertaining to M1 residence has a thickness of 70 cm, and that lime mortar was used as the attaching

material, and rubble stones was used as filling material between irregular hewn stones. Moreover, on the walls of the residence, a plaster with a thickness of 4 cm was used and a concrete with lime mortar was used on the ground. On the south of M5, a residence with rectangular plan was revealed on east – west direction. When the debris stones inside the residence were removed, a water duct originating from the east corner of M5 was seen, and it was covered with lid stones. **(Figure 45)**

**Figure 45 :** Duct revealed in B 2 trench

One end of the duct faces west and the other faces east. **(Figure 45)** The west end ends at the end of the residence. At the section where it ends, a smaller site northeast corner of which is curved and which has a smaller size catches the attention. This section is severely damaged. The end of the duct approaching to east passes to C3 trench from inside the wall. The width and height of the duct are 20 cm each.

When debris stones were revealed in B 3 trench, the site named M6 at dimensions of 250 x 190 cm by the intersection of D9, D10, D15 at certain intervals, and another site named M7 at dimensions of 163 x 273 m by the intersection of D9, D10, D15, D16 and D17 were revealed. On the west of this, there is the M9 site with dimensions of 500 x 350 m. overflowing the in the shape of half-circle on northwest ad southeast.

**Figure 46 :** B 3 trench.

Inside the half-circle on the southeast corner of M8, on an area of 155x135 cm. hypocaust bricks in disc shape on the ground bricks at dimensions of 27 x 27 x 5 cm. as well as a broken ground brick on these **(Figure 47)** were obtained as in-situ. Similarly, in-situ hypocaust bricks were revealed in M6.

**Figure 47 :** B 3 trench hypocaust bricks- detailed.

On the west of M8, between D9 and D10, there is the M9 at dimensions of 215 x 190 cm., which bears soot and burns on its inner walls. On the approximate axis of the exedra on the southeast of M8, a pipe trace is found on the wall, and there is a water pipe next to this. **(Figure 48)** On the south of the pipe, a short duct made of lime plaster is ended with a lid stone. An arrangement starting from the south of the lid stone and, making a concave curve, reaching to C 4 trench, made of rubble stones placed without any plaster, which is thought to be a duct.

**Figure 48 :** B3 trench pipe remain

On the south of M8 and M9, a section in half-circle shape made of single-row stones externally, with ground plastered with lime mortar is revealed, which is independent of the architecture. **(Figure 47)** A very intense burnt layer is visible at the lower section of the ground.

On the walls in B3 trench, the regular cut stones are used at the inner and outer section, rubble stones are put inside them, broken bricks and pebbles are used as filling materials, and lime mortar is used as the attaching material. Wall thickness vary between 65-80 cm.

In B18 trench, a site which was protected, built with small sized stones, attached with lime mortar, with internal section plastered in reddish color was revealed, which had a “U” shape. It is seen that the site continues towards B 19 trench.

**Figure 49 :** B 18 trench.

During the works performed in B19 trench, 6a wall or a foundation composed of single row, progressing from east to west direction, turning to north approximately on

the axis is revealed. A “U” shaped small residence or establishment progressing towards B18 trench, with inner section plastered, with walls made of lime mortar was encountered.

**Figure 50 :** B 19 trench.

Works in A2 trench was commences with a drilling of 2 x 2 in order to determine whether it has any connection with the architecture established in B2 trench, however the works here were ended since no architectural element was found.

Works in A3 trench were commenced by the drill performed in order to follow the D9 and D10 walls which started in B3 trench. In the drilling work, the D 9 wall having a wall thickness of 80 – 110 cm with a height of 70 cm. as well as the D 10 wall with a wall thickness between 92-110 cm. were found.

**Figure 51 :** A 3 trench.

Adjacent to the north of D10 wall, a water duct with a width of 20 cm. and height of 20 cm made of regularly cut stones was found, which was thought to be a water duct where the waste water was poured. **(Figure 52)** The duct starts from the north of D10, and after progressing to the west, turns to south in a curved path, and ends on the southwest corner of the trench. At the corner which the duct turns, a pythos which is though to be inserted in another period afterwards by breaking the duct, with mouth section broken, having a body of 57 cm was revealed. **(Figure 52)** Lime mortar was used as the attaching material between the stones in the duct. Besides, the inner section of the duct is plastered. The plaster has abundant lime, with small pebble stones and broken red brick. The part of the duct with cut stone, mortar and plaster ends on the axle of D9 wall, and the part with rubble stone without any plaster and mortar remains.

**Figure 52 :** A 3 trench duct and detail.

Works in C1 trench were performed in order to determine the limits of the wall and residences revealed in C 2 trench. In 8-10/b-ı plan-squares, the D3 wall with a thickness of 75 cm with a length of 7.30 m was revealed on northeast – southwest direction. D3 wall is cut with D 1, D 11 and D 4 walls coming from C2 trench on northwest – southeast direction.

**Figure 53 :** C 1 trench.

The site between D1 and D11 walls was named as M3, and the site between D4 and D11 walls was named as M4. Height of the walls vary between 80-110 cm. The inner section and grounds of the residences are plastered. There is lime plastered ground on the north of residences. On the north of this ground, four cut stone pedestals at dimensions of 40 x 50 x 20 cm symmetrically were revealed. **(Figure 55)**

**Figure 54 :** C 1 trench.

On the northwest corner of M3, there is an object with walls plastered, with dimensions of 100x76x62 cm. , and on its north, there is another object inside the wall, with dimensions of 40 x 60 cm, opening to outside through a gap, function of which could not be determined. Again, on the east wall of the residence (D1), there are niches symmetrical to the axle, damaged, having a width of 85 cm, height of 52 cm and depth of 30 cm. **(Figure 55)**

**Figure 55 :** C 1 trench.

Four residences were revealed in C2 trench. The first residence is located on the north east corner of the trench. West of the “L” shaped residence is located in B2 trench. **(Figure 56)** The wall and ground of the residence is plastered. The plaster thickness varies between 3 – 4 cm.


**Figure 56 :** C 2 trench architecture.

The residence comprise of D4, D5, D6, D7 and D8 . There is a passage to M2 with a gap of 90 cm from D4. Then there is a passage to M3 and M4. M2, M3 and M4 residences were created by the intersection D1, D2, D3 and D4. The thickness of the war is 70 cm. Walls protected up to the height of approximately 1 m of plastered from inside and sutured from outside. On the south of M1, 1 m below the ground level, there is a residence which has 7, 8, 9 rows of hypocaust bricks. **(Figure 57)** Bricks have two types. The first is wide and flat and has a diameter of 22 cm and thickness of 7 cm, and the other has a bottom diameter of 18.5 cm and upper diameter of 16.5 cm, and a thickness of 8.5 cm. The duct coming from M1 from the lower part of the west wall of the residence progresses towards C 3 trench

**Figure 57 :** C 2 trench architecture and bricks.

During the works in C3 trench, D 9 trench was revealed. South section of the wall was roughly plastered. It is 30 cm thicker than other sections of the wall. The water duct exiting from B2 trench, passing through C 2 trench and under D 9 trench, continues in C 3 trench and arrives at C 4 trench. Upper section of the duct is coated with stones.

**Figure 58 :** C 3 trench .

**Figure 59 :** C 3 trench.

Works in C4 trench were commenced with the aim to follow the water ducts that started in B3 trench and C 2 trench and arrived at C 4 trench and covered with non-plastered and irregular stones. A tandoor (hearth) was revealed on the southwest corner of the trench. **(Figure 60)**

**Figure 60 :** C 4 trench.

D1 trench was opened with the aim  of seen the continued parts of pedestals that were revealed on the corners of lime plastered revealed in C 1 trench. Works performed revealed a stone pedestal made of regular cut stone located in intervals of around 2 m.


**Figure 61 :** C 4 trench.

D2 trench was opened in order to determine the intersection point of D 1 and D2, and a cornerstone with a dimension of 80 x 65 cm was found on the intersection point of the walls. **(Figure 61)** One of the pedestals starting in C 2 trench was found in D 2 trench.

At the end of the excavation, a bath whose general layout could be perceived but most part is damaged is revealed. **(Figure 41)** The structure develops on east – west direction. From inside the structure, there is access to a canopy area through a stairs composed of two steps, which is damaged to a high extent, located on the east, which only has a few pedestals for the time being. Relying on the traces revealed, it can be said that the canopy area surrounds the south of the tepidarium and a portion of the apodyterium section from three directions. Access to the apodyterium section from is here through a door located on the west section. From this section, there is an access to two residences from the doors located on the east and north. The residence on the east has rectangular plan on north – south direction. On the east wall, there are two rectangular niches and an architectural element whose function is not established but thought to be related to water. This element opens to outside through a gap located on the north wall at the same level. On the west wall, there is a door opening to a small residence with square plan.

Through a door on the west, access to a firigidarium of rectangular plan on east – west direction is provided from the apodyterium. From the apodyterium, there is an access to a “L” planned site which we think is a tepidarium through a door located possibly on the axis on the south, though not visible today. On the south of this site, at the lower section, there is a residence whose hypocaust bricks are visible since its

ground is damaged. There seems to exist no data to let us determine where and how the passage from this site to the caldarium is. On the west of the section which we think is a tepidarium, there is a half-circle planned section at the upper site, which we can say is a pool relying on the water arc below. There is a rectangular planned residence on east – west direction on the south of this section. On the south of this section, there are two residences, one on the east is square planned, whereas the one on the west is rectangular planned. Inside the one among these located on the east, there are hypocaust bricks having in-situ status.

On the west of these sections, there is the caldarium section with square plan, middle section of which has half-circular shape on the north and south, extended with a rectangular site in the shape of penthouse on the west. On the west of this section exists a rectangular planned praefurnium. The water arc originating from the north corner of praefurnium, turning to south through a bending and ending on the southwest corner catches the attention.

Similarly, there are two more water arcs having their origin from the middle of the wall of the exedra on the south and from the southwest corner of the section which we think is a tepidarium on the east, progressing towards south.

Though a high portion of it is damaged as a result of the excavation, a bath layout of which can be perceived has been revealed as a result of the excavation. **(Figure 62)**

The bath is located on the southwest of the old Geben (Geben Castle) on northeast of the water having its source from the east side of Kayranlik Mountain, on a land with a slope towards south.

According to the classification made by Kreckner on the Roman baths according to plan types[1] , the Kayranlık Gözü Bath can be evaluated under “parallel sequenced type”. In this type of baths, residences are sequenced as upside – downside and parallel to one another. At the first sequence, there are the apodyterium, and a section of firigidarium and tepidarium , and at the second sequence, the tepidarium, caldarium and praefurnium. **(Figure 62)** In this order, the person entering into the bath first enters into apoditarium, and passes from here to the firigidarium. Following this, he passes to tepidarium and caldarium sections; after having his bath, he returns following the same path.

[1] Krencker 1929:175

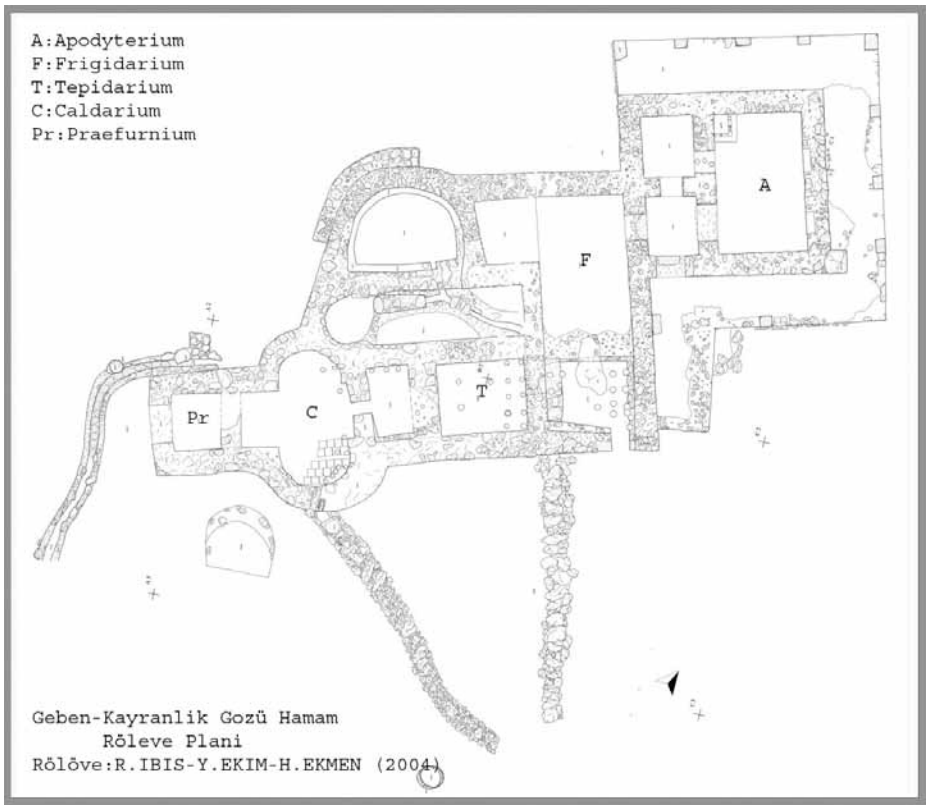



**Figure 62 :** Kayranlık Gözü Bath- Relief Plan.

**Figure 62a :**. Kayranlık Gözü Hamam- A-A cross section.

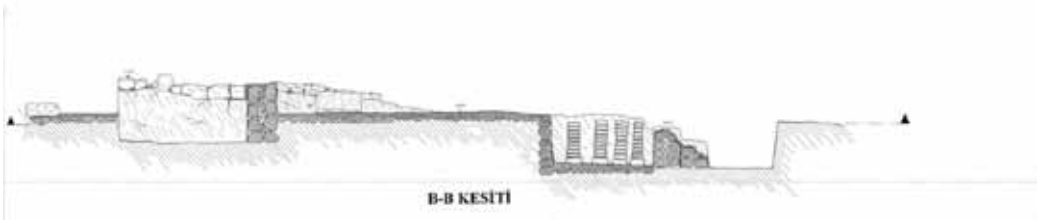



**Figure 62b :** Kayranlık Gözü Bath- B-B cross section.

**Construction Material:**

In the bath, hewn stone, rubble stone, bricks, marble and lime mortar have been used as construction material. Hewn stones are used in the walls, corners, on the north of apoditarium canopies, on the ground and in the legs of carriers; rubble stones are used as building and filling material in walls, round brick is used in hypocaust as carrier (22 x 7; 18.5 x 16.5 x 8.5 cm)square bricks are used in ground flooring at two different dimensions, pink grainy marble is used for wall coating in the caldarium, and lime mortar is used as the attaching material. Moreover, plaster was not used on both grounds and walls of apoditarium and firigidarium, since flooring or coating was not used.

At the corners of the walls, hewn stones at huge dimensions are used, spaces between them are filled with rubble stones as filling material, was well as brick debris, and lime mortar is used as attaching material. Local material have been used for the walls of the construction.

Since the walls of the structure are damaged to a high extent and remaining to a certain extent, **(Figure 62a)** we could not obtain any information relating to its cover.

No data was revealed in the excavation performed pertaining to the decoration.

**Sections Constituting the Structure**

All of the bath was revealed at the end of the excavation. According to this, the bath is composed of Apodyterium, Firigidarium, Tepidarium, Caldarium and Praefurnium sections. **(Figure 62)**

**Apodyterium**

At the end of the excavation, the apodyterium was revealed on the northeast of Firigidarium on the northeast section of the bath. From inside the structure, there is access to a canopy area through a stairs composed of two steps, which is damaged to a high extent, located on the east, which only has a few pedestals for the time being. From the traces remained, we can say that the canopies curround the east of the firigidarium and the apoditarium from three directions. Access from the canopy section to the square planned apoditarium section through a door located on the west corner. The firigidarium section is composed of rectangular planned section on the east lying on north- south

direction, and from two small square sections on the west. On the east wall located on the east section, there are rectangular niches symmetrical to the axis. On the north-west corner, there is a small pool, and on the north of this, there is a rectangular space opening to the canopy.

From the section on the east, access is possible to the site on west through two doors symmetrical to the axis. From the square section on north-west corner, access is possible to the section on the south through a door on the south axis. The door on the south axis opens to the outside canopy, and the door on the west opens to the Firigidarium. **(Figure 62)**

**Firigidarium**

The firigidarium section of the bath is "L" planned. Access to the firigidairum section is through a door located on the east axis and a door located on the west of the apoditarium section. The ground and walls of the residence is plastered. **(Figure 62)**

**Tepidarium**

Today, there seems to exist no trance relating to a door or entry providing access from the firigidarium section to the tepidarium section on the south. However, deriving from the other doors, we can think that this door is also located on the axis. The tepidarium section is located on the south of the firigidarium, composed of a square planned section ground of which bears in-situ hypocaust bricks, and a second section with rectangular plan on north – south direction on the west with in-situ hypocaust bricks on its ground, as well as a half-circular pool on the north of it. **(Figure 62)**

**Caldarium**

The caldarium located on south-west of the structure was probably accessed through a door from the tepidarium section the caldarium section is composed of a square section at the middle, half-circles on the north and south, and is extended with rectangular planned sections on the west and east. On the ground of the section on the east, square flooring bricks as round in-situ hypocaust bricks are seen on the ground.

**Praefurnium**

It is a square planned facility on south-west corner of the structure. There is the hearth space on the west axis. There is a waste water arc originating from the north of the residence, turning to south with a bending, and ending on the south-west corner.

**Water System**

During the excavation, no section or facility providing water to the structure was encountered. Though we estimate that the bath has taken its water from Kayranlık Gözü which passes immediately nearby, no duct or any other piping systems was found to evidence this connection. However, due to the fact that a high portion of the walls of the structure was collapsed, we think that this connection is from the north due to slope. Since the connection is at an upper level, it is collapsed and can not be seen today.

We can not ascertain how the water circulation was provided inside the structure, since the walls of tepidarium and caldarium sections are collapse down to the foundation level. There are certain traces in the structure pertaining to the waste water circulation. Two ducts at dimensions of 20 x 20 cm originating from the pool on the north of the tepidarium and progressing towards east and west were found. While the duct advancing to the west is cut on the west corner of the pool , the one progressing towards east opens to outside by passing beneath the west wall of the tepidarium section. There is a duct made of rubble stones originating from the front part of the gap and ending after a progress of ten meters to the south. **(Figure 64)** We see the same arrangement in the duct starting from the south of the caldarium section and progressing towards east. Another duct is present on the north and west of the praefurnium.

**Figure 63 :** C1 trench.

**Figure 64 :** B2 trench.

**Figure 65 :** B2 trench.

**Figure 66 :** B3 trench.

**Figure 67 :** C2 trench.

**Figure 68 :** C1 trench.

**Figure 69:** C1 trench.

**Figure 70 :** C1 trench.

**Figure 71 :** C1 trench.

**Figure 72 :** A3 and B3 trenches.

**Figure 73 : O**verview of trenches

**Figure 74 :** Trenches, overview

**Figure 75 :** Trenches, overview.

**Figure 76 :** C2 trench, detail.

**Figure 77:** C2 trench, detail.

**Figure 78 :** C2 trench, detail.

**Figure 79 :** Bath, overview

# PART IV

# SMALL FINDS

Metal and glass works were revealed in Kayranlık Gözü excavation as minor finds

**METAL FINDS**

21 metal pieces were obtained in Kayranlık Gözü settlement. 2 coins obtained in C 4 trench, **(Figure 80-1,2)**, 1 coin obtained from the surface **(Figure 80-3)**, 16 nails and pegs found in various trenches and surface **(Figure 81-1,2,3/ 82-1,2,3,4/ 83-1,2,3,4/ 84-1)**, and 1 iron ringlet are among the finds **(Figure 84-2)**.

## Catalogue

## Fig. 80

**1.** **C-4/ C 4003:** Ø: 29 mm. Copper coin. C-4 trench, 4-5/a-b plan-square, obtained during the cleaning works inside the tandoor (hearth) revealed from the southwest corner of the trench

**2.** **C-4/ C 4002:** Ø: xx mm. Copper coin. C-4 trench, 1/d plan-square, excessively oxidized.

**3.** **Surface: :** Ø: xx mm. Copper coin. Silk coating on the front side.

## Fig. 81

**1.** **B-1/ B 1002:** U: 1,5 cm. Iron peg Revealed in B 1 trench 8/h plan-square. Upper side distorted rectangular shape.

**2.** **B-3/ B 3007:** Corroded iron nail. Revealed in B 3 trench 2/c plan-square,

**3.** **C-3/ C 3005:** Corroded iron nail. Revealed in C 3 trench 7/d plan-square.

## Fig. 82

**1.** **C-2/ C 2002a:** Corroded iron nail. Revealed in C 2 trench 1-4/g-d plan-square.

**2.** **C-1/ C 1003:** Corroded , metal object with end broken. Obtained in C 1 trench 6/e plan-square.

**3.** **C-2/ C 2002b:** Corroded iron nail. Revealed in C 2 trench 1-4/g-d plan-square.

**4.** **C-2/ C 2002c:** Corroded iron nail. Revealed in C 2 trench 1-4/g-d plan-square.

## Fig. 83

**1.** **Surface:** Corroded iron nail.

**2.** **Surface:** Corroded iron nail.

**3.** **C 1/ C 1001a:** Corroded iron nail. Revealed in C 1 trench 10/e-f plan-square.

**4**. . **C 1/ C 1001b:** Corroded iron nail. Revealed in C 1 trench 10/e-f plan-square.

## Fig. 84

**1.** **B 19/ B 19004:** Corroded iron nail. Revealed in B 19 trench 8/g plan-square.

**2.** **B 3/ B 3004:** Lead ringlet. Corroded, almost whole, lead tap part. Revealed in B 3 trench 1/e plan-square.

**GLASS FINDS**

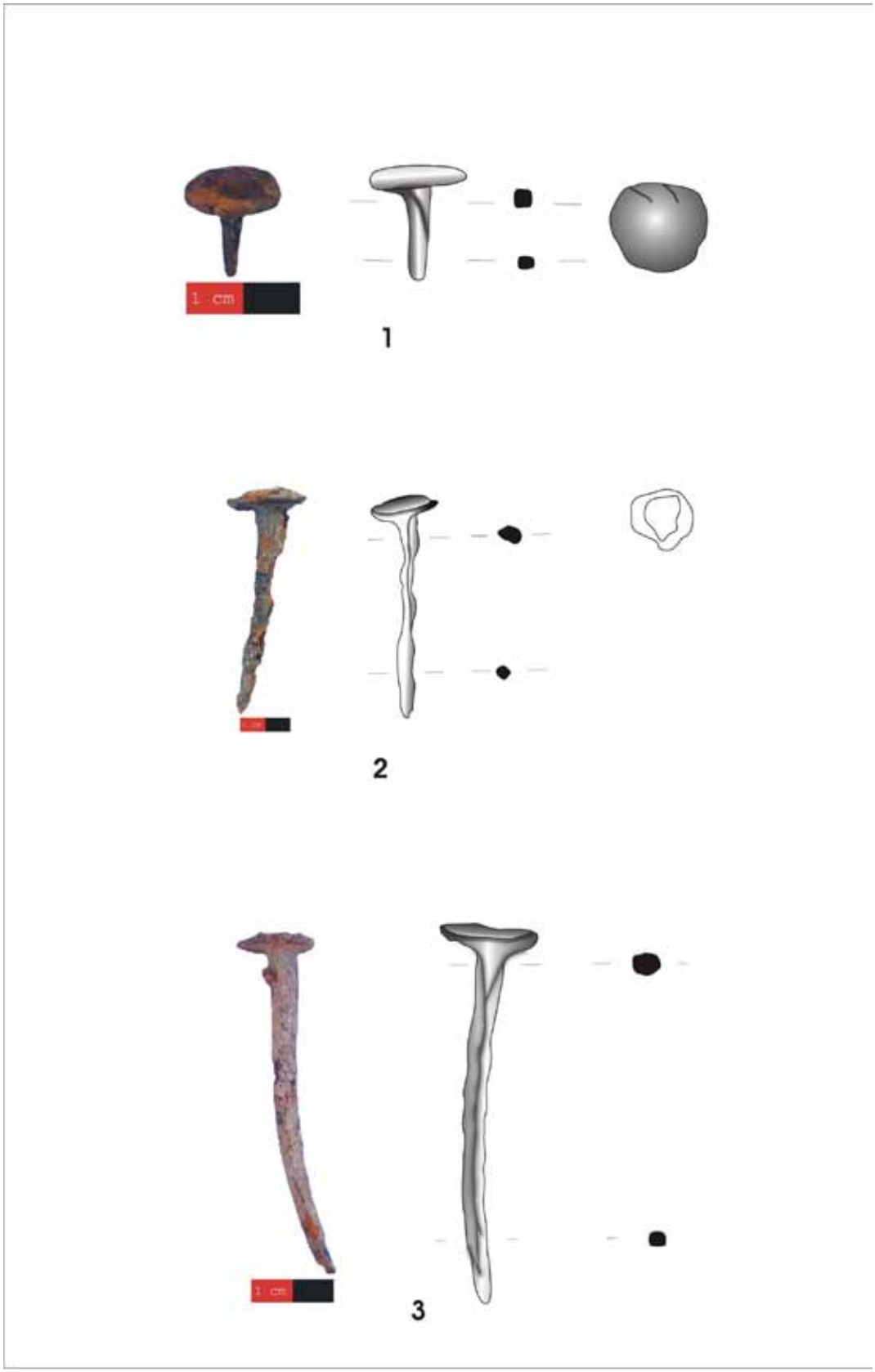
2 glass vessels pieces included under this group are evaluated.

## Fig. 85

**1.** **C-3/ C 3004:** Ø: 3,5 cm. Glass bottle mouth piece, only mouth section preserved.

**2.** **C-3/ C 3004:** Ø: 12 cm. Glass dish mouth piece, with mouth section preserved.


**Res./ Fig.:80**

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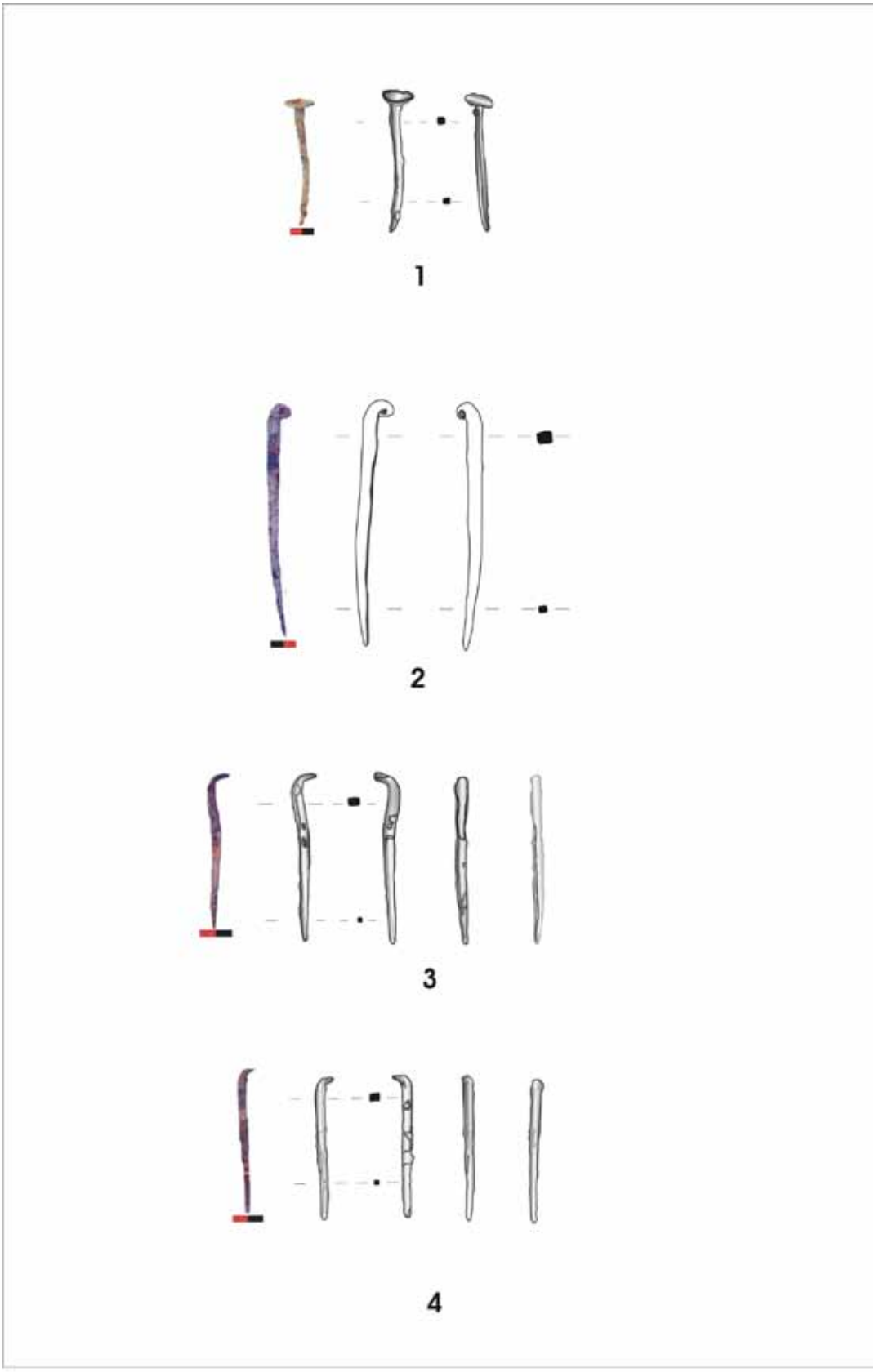


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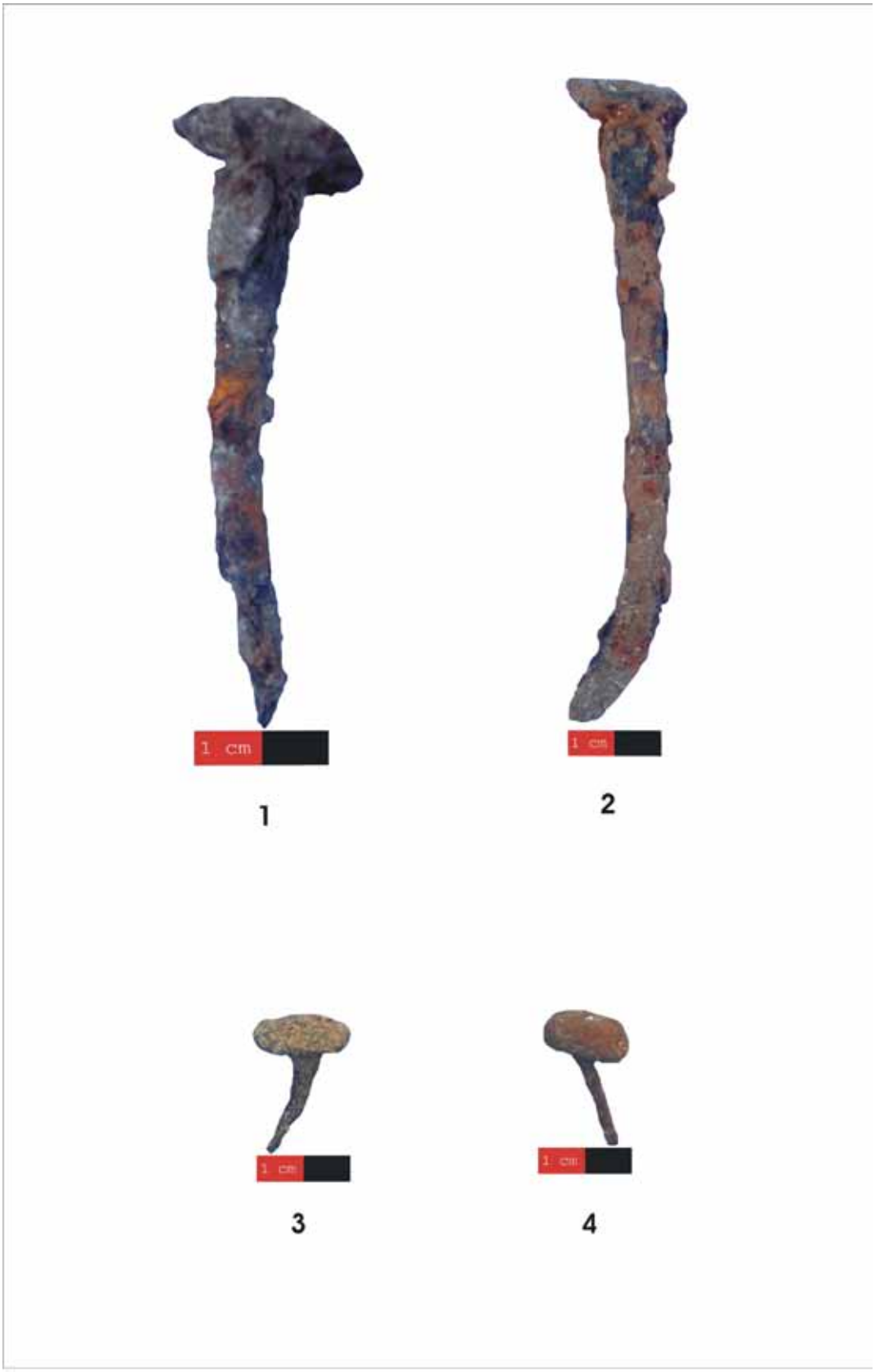


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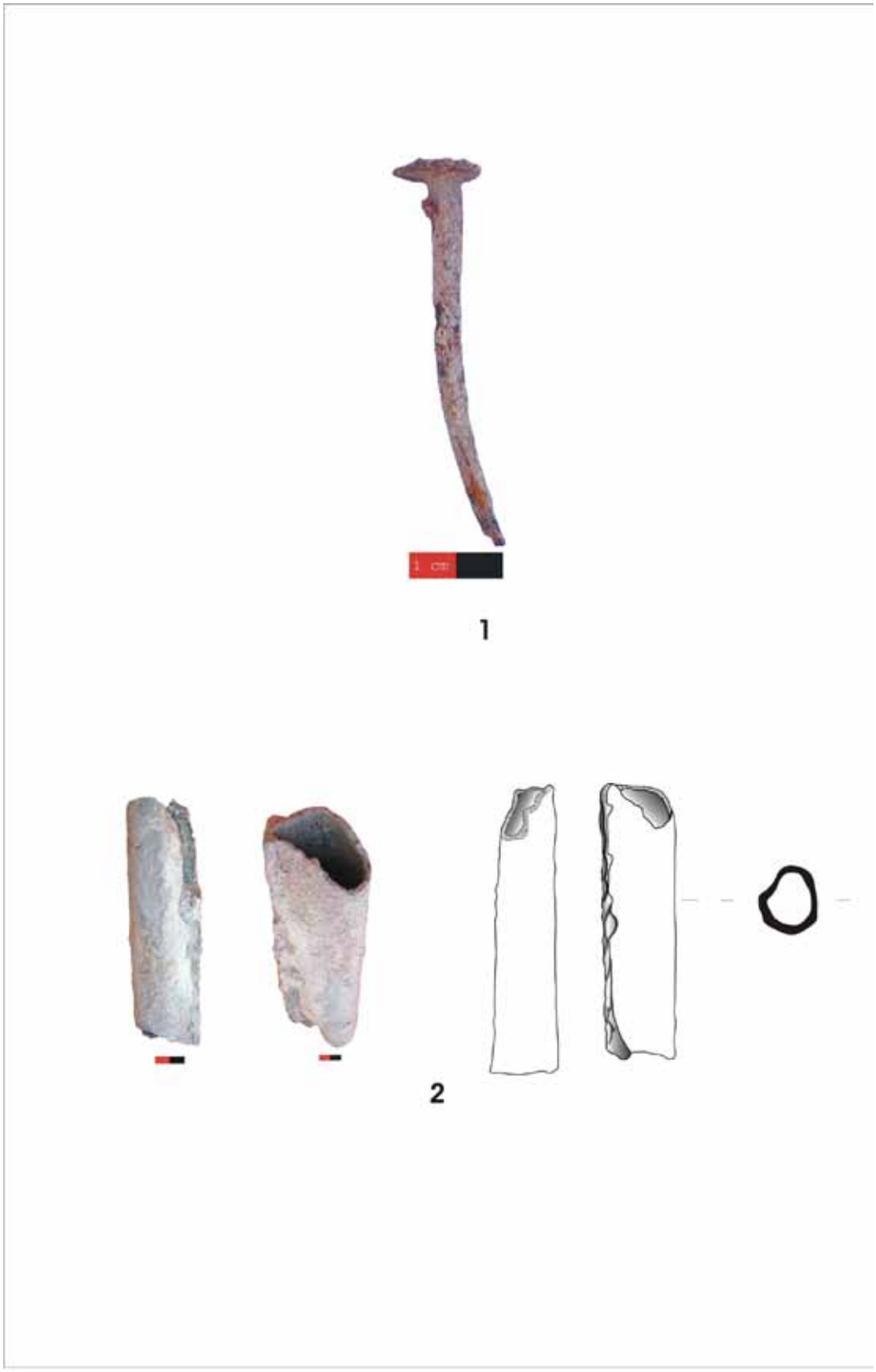


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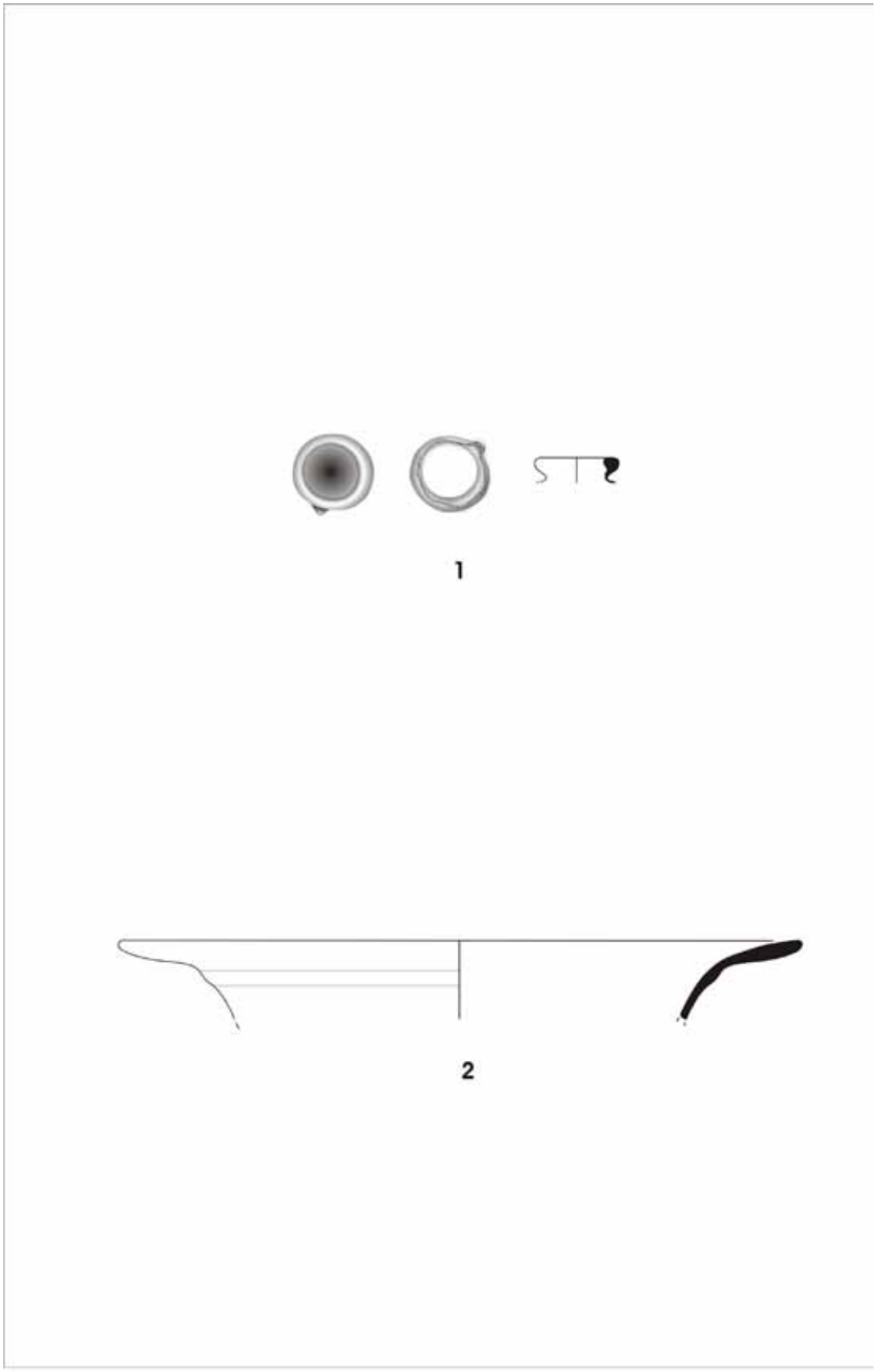



Res./ Fig.: 85

**Figure 85:** Nails.

**Figure 86:** Ringlet (tap part).

**Figure 87:** Front view of coins.

**Figure 88:** View from rear side of coins.

**Figure 89:** Glass plate piece.

**Figure 90:** Glass bottle piece.

# PART V

# POTTERY FINDS

During the excavation works, small amount of ceramics were revealed. The ceramics obtained are mainly unglazed, and most of them are amorphous pieces. **(Figure 95, 96)** The mostly comprise of red pasted, commonly uncoated and non-burnished rough ceramic pieces. As the inclusion material abundant limestone, grit and mica were used.

## A. FORMS

## Open Vessels

Some publications use general terms meaning “open vessel” for wide and shallow vessel types, with curved out mouth, with mouth diameter less than the body diameter and not more than the body height. These type of vessels can be names as jar and dish in general sense according to the ratio of their mouth diameters to the vessel height[16].

### Jars

Generally the vessels forms with low depth, shallow and wide body, with mouth diameter equal to or more than four folds the vessel height are mentioned as shallow jars, and open mouthed, wide and shallow or semi-circular body vessel forms with mouth diameter more than double the vessel height are included under this group.[17] **(Figure 91: 1, 2)**

## Closed Vessels

Closed vessel term is use for vessel forms which narrow from base to the rim, whose mouth diameter is not more than half the body diameter and height. In this work, jars are included under this group[18].

[16] Ökse 1993, 45.
[17] Ökse 1993, 49.
[18] Ökse 1993, 46.

**Jars**

Vessels, made of fired earth, that are used for cooking food, or in which liquid or solid food are preserved, are called ”*jar*”; jars with handles or handholds and lid are called “*pot*”, those without any handle or lid are called “*stew*”[19].

For vessel forms whose body heights and body widths are almost equal, mouth diameter are equal to the half of body diameter, with or without neck, the name jar is generally used in archeology literature[20]. **(Figure 92: 1, 2)**

## Bases

4 pieces are taken into evaluation from among the ceramics in Kayranlık Gözü settlement. Flat base **(Figure 93: 2, 3, 4)**, ring base **(Figure 93: 1)** are the base forms seen in the settlement.

## Handles

3 pieces are taken into evaluation from among the handles in Kayranlık Gözü settlement ceramics. **(Figure 94: 1, 2, 3).** Two of the handles have vertical handles, **(Figure 94: 1, 2),** and one has horizontal handle **(Figure 94: 3)**.

[19] Ökse 1993: 55.
[20] Ökse 1993: 55.

## CATALOGUE[21]

**Fig. 91**

**1. C-2/ C 2001-2:** Ø: 17 cm, Direct, slightly flaring jar rim. With inclusion of small amount of grit, medium amount of limestone, mica and sand; yellowish reddish (5 YR 5/6) pasted, inner surface brown (5 YR 4/4) plane and outer surface brown (7,5 YR 5/4) plane; crispy, porous.

**2. C-3/ C 3003-2:** Ø: 24 cm. Direct, round, cut out rim, jar mouth piece.

**3. C-3/ C 3002-1:** Ø: 10 cm. Jug piece, slightly flaring, direct rim, with long neck. Small amount of grit, high amount of mica and sand inclusion; red (2,5 YR 4/8) pasted, inner and outer surface red, (2,5 YR 4/8) plane, tight, low porous, well fired

**4. B-2/ B 2010-1:** Ø: 6 cm. Jar rim, direct, flaring, with grooves on the mouth. Small amount of grit, high amount of mica inclusion; yellowish red (5 YR 5/8) pasted, inner and outer surface yellowish red (5 YR 5/6) plane, tight, low porous, well fired.

**Fig. 92**

**1. C-1/ C 1002-1:** Ø: 20 cm. Jar mouth piece with direct rim, without neck, spherical body. Small amount of grit, medium amount of limestone, mica and cum inclusion; yellowish red pasted (5 YR 5/6), inner surface reddish brown (5 YR 4/4) plane, outer surface brown (7,5 YR 5/4) plane , crispy cooked.

**2. A-3/ A 3003-1:** Ø: 12 cm. Jar mouth piece with flaring rim, with upper section flattened, with vertical long neck. Small amount of limestone, medium amount of grit, mica and sand inclusion; reddish yellow (7,5 YR 6/6) pasted, inner and outer surface red (2,5 YR 4/8), outer and inner plane, inner surface burnished; loose ,porous, crispy cooked.

**Fig. 93**

[21] Colors in ceramic catalogue are given as per Munsell Soil Color Charts.

**1.** **C-3/ C 3031-1:** DØ: 6 cm. Ring base. Small amount of grit, medium amount of limestone, mica and sand inclusion; yellowish red (5 YR 5/6) pasted, inner surface reddish brown (5 YR 4/4) plane, outer surface brown (7,5 YR 5/4) plane, crispy cooked.

**2.** **C-3/ C 3003-1:** DØ: 8 cm. Flat base. Medium amount of grit, small amount of limestone, mica ve sand inclusion; yellowish red (5 YR 5/6) pasted, inner surface reddish brown (5 YR 4/4) plane, outer surface brown (7,5 YR 5/4) plane, crispy cooked.

**3.** **C-2/ C 2001-1:** DØ: 14 cm. Flat base. Small amount of grit, medium amount of limestone, mica and sand inclusion; yellowish red (5 YR 5/6) pasted, inner surface reddish brown (5 YR 4/4) plane, outer surface brown (7,5 YR 5/4) plane, crispy cooked.

**4.** **A-3/ A 3003-2:** DØ: 12 cm. Flat base. Small amount of limestone, medium amount of grit, mica ve sand inclusion; reddish yellow (7,5 YR 6/6) pasted, inner and outer surface red (2,5 YR 4/8), outer and inner plane, inner surface burnished; loose ,porous, crispy cooked.

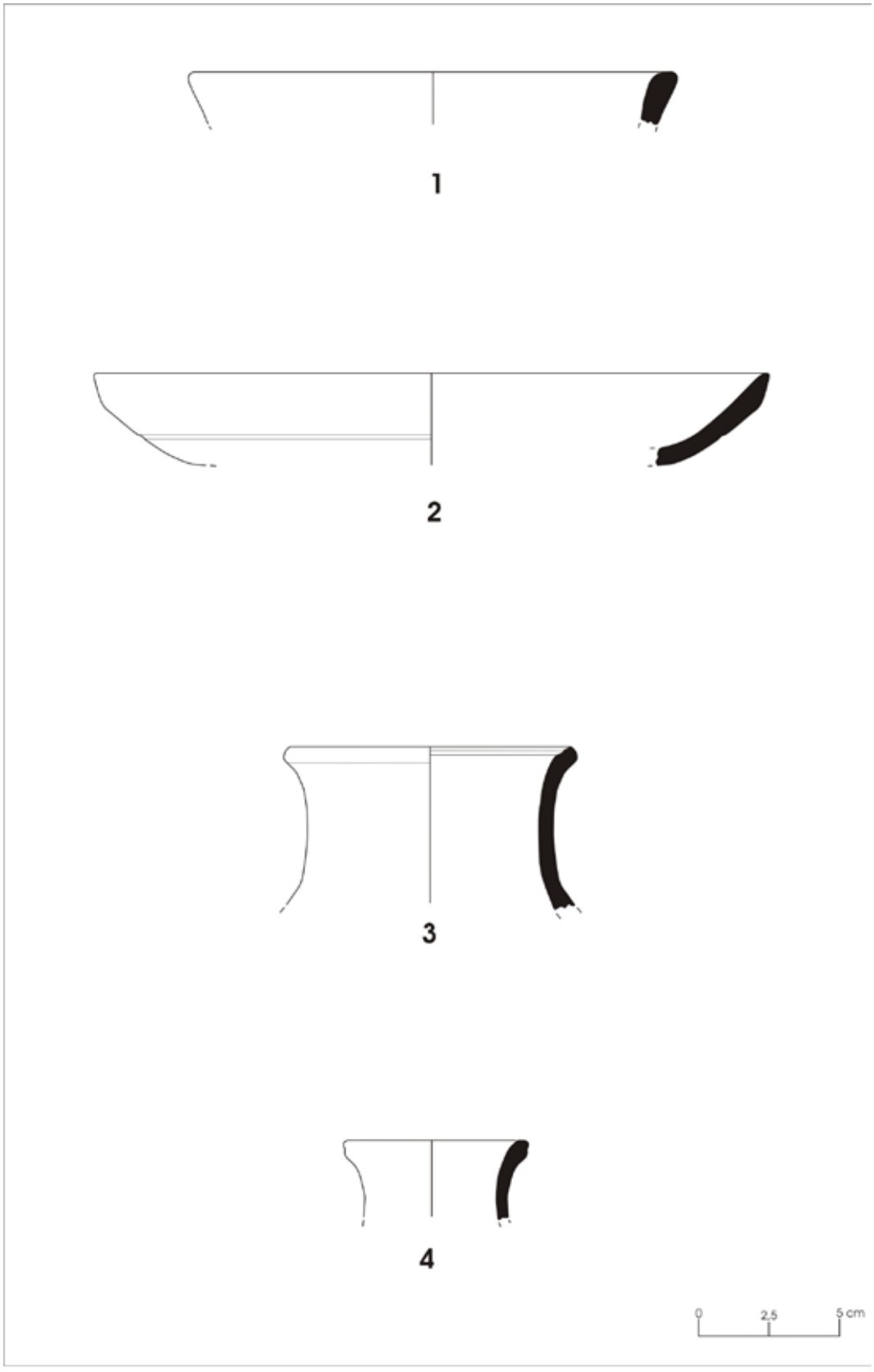
**Fig. 94**

**1.** **B-19/ B 19002-1:** Handle. Small amount of grit, high amount of mica and sand inclusion; red (2,5 YR 4/8) pasted, inner and outer surface red (2,5 YR 4/8) plane, tight, Small amount of porous, well fired.

**2.** **C-3/ C 3002-1:** Handle. Small amount of grit, high amount of mica and sand inclusion; red (2,5 YR 4/8) pasted, inner and outer surface red (2,5 YR 4/8) plane, tight, Small amount of porous, well fired.

**3.** **C-1/ C 1002-1:** Ø: 20 cm. Horizontal handle . Small amount of grit, medium amount of limestone, mica and sand inclusion; yellowish red (5 YR 5/6) pasted, inner surface reddish brown (5 YR 4/4) plane, outer surface brown (7,5 YR 5/4) plane, crispy cooked.

**4.** **C-1/ Surface:** Amorphous. Glazed ceramic piece.

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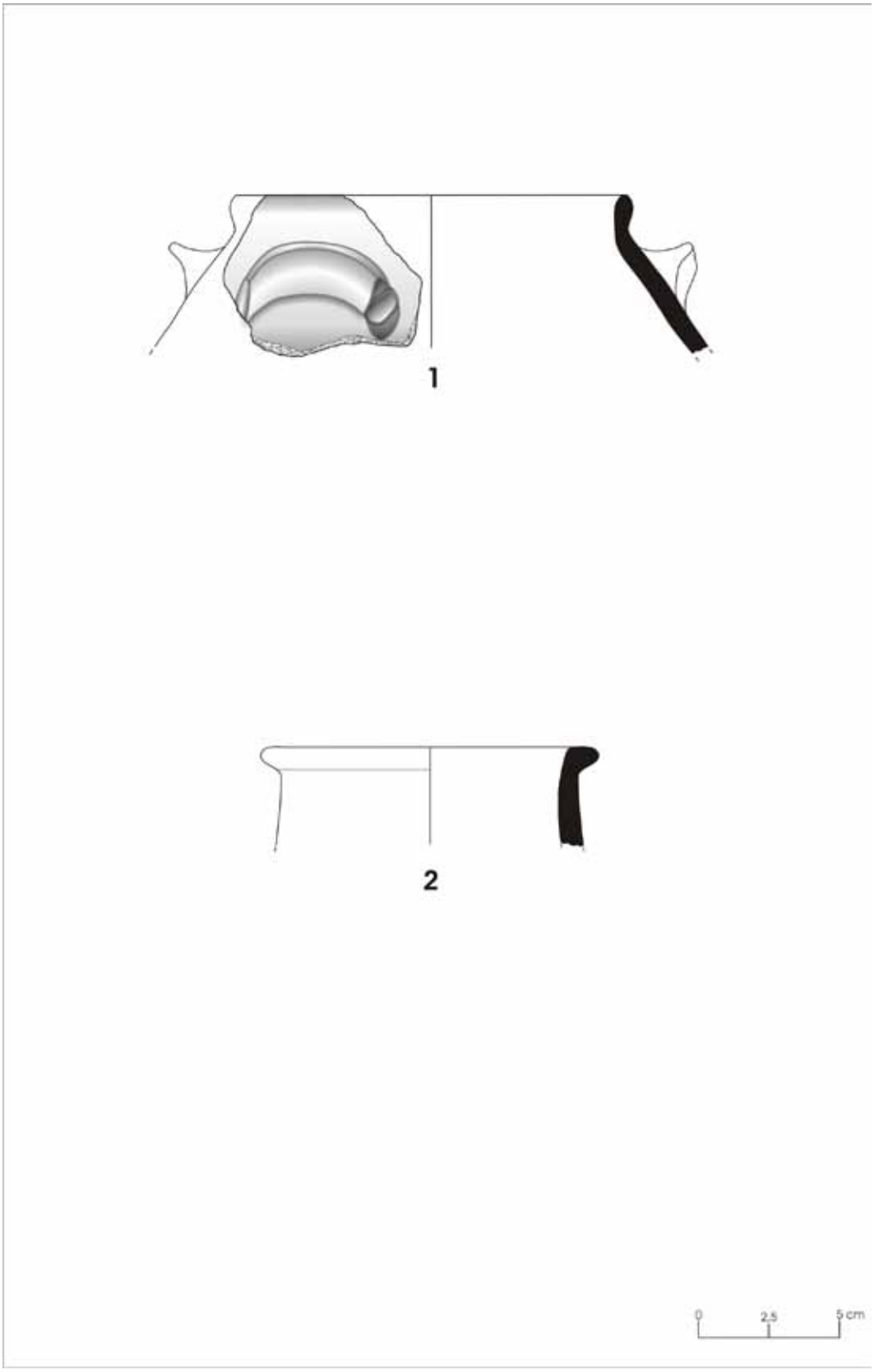


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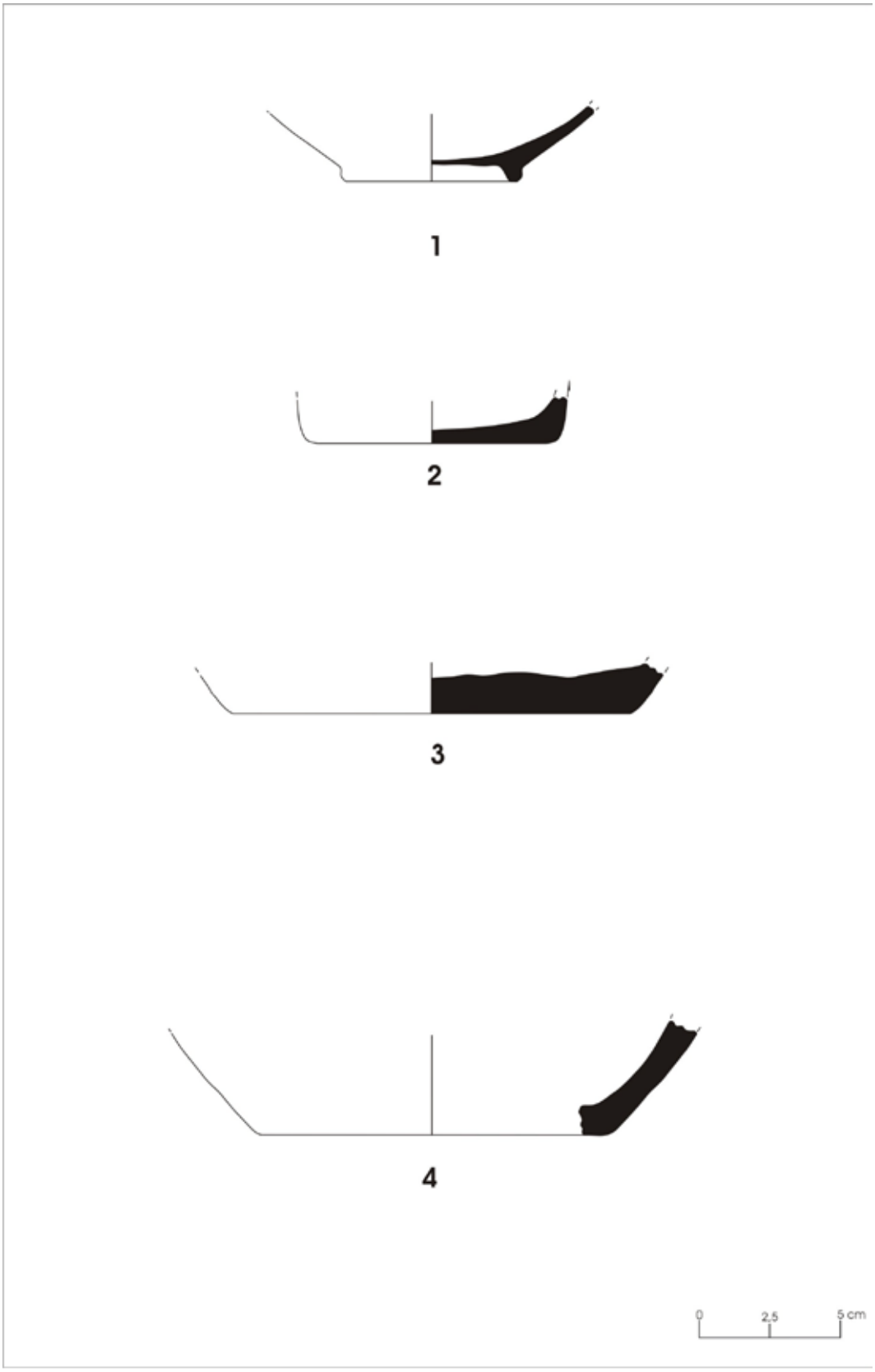


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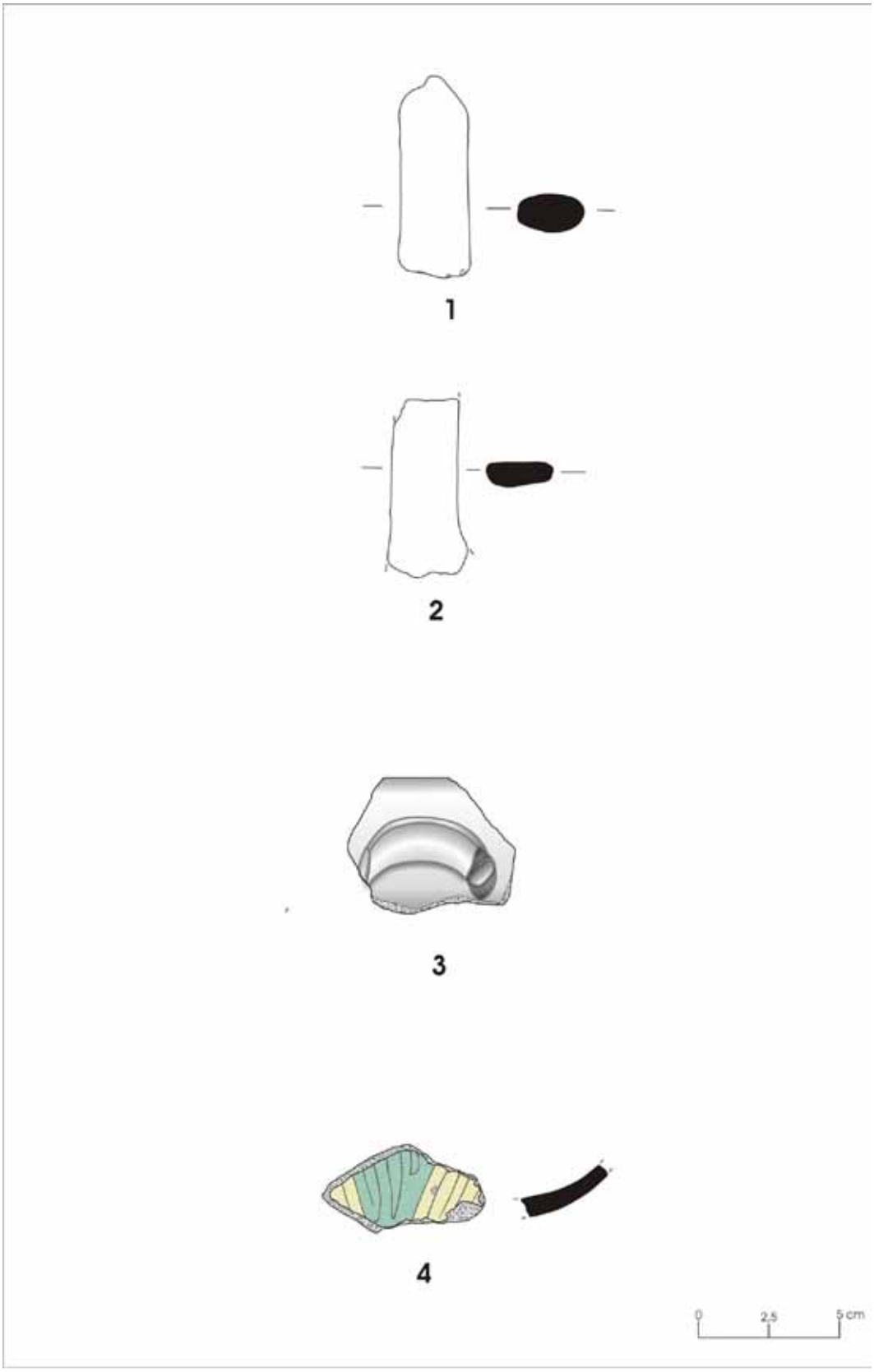


**Res./ Fig.:94**

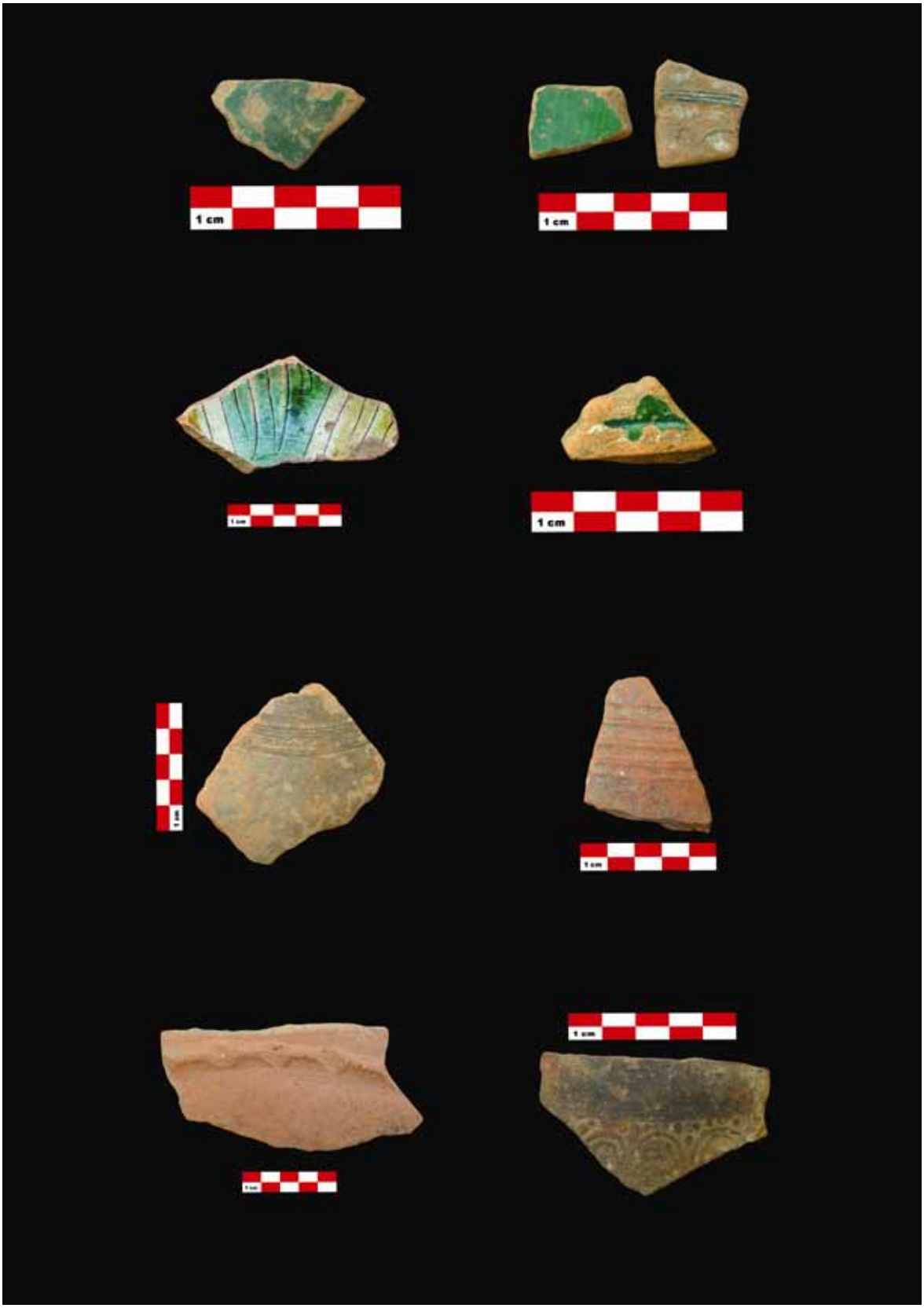


**Figure 95:** Amorphous ceramics.

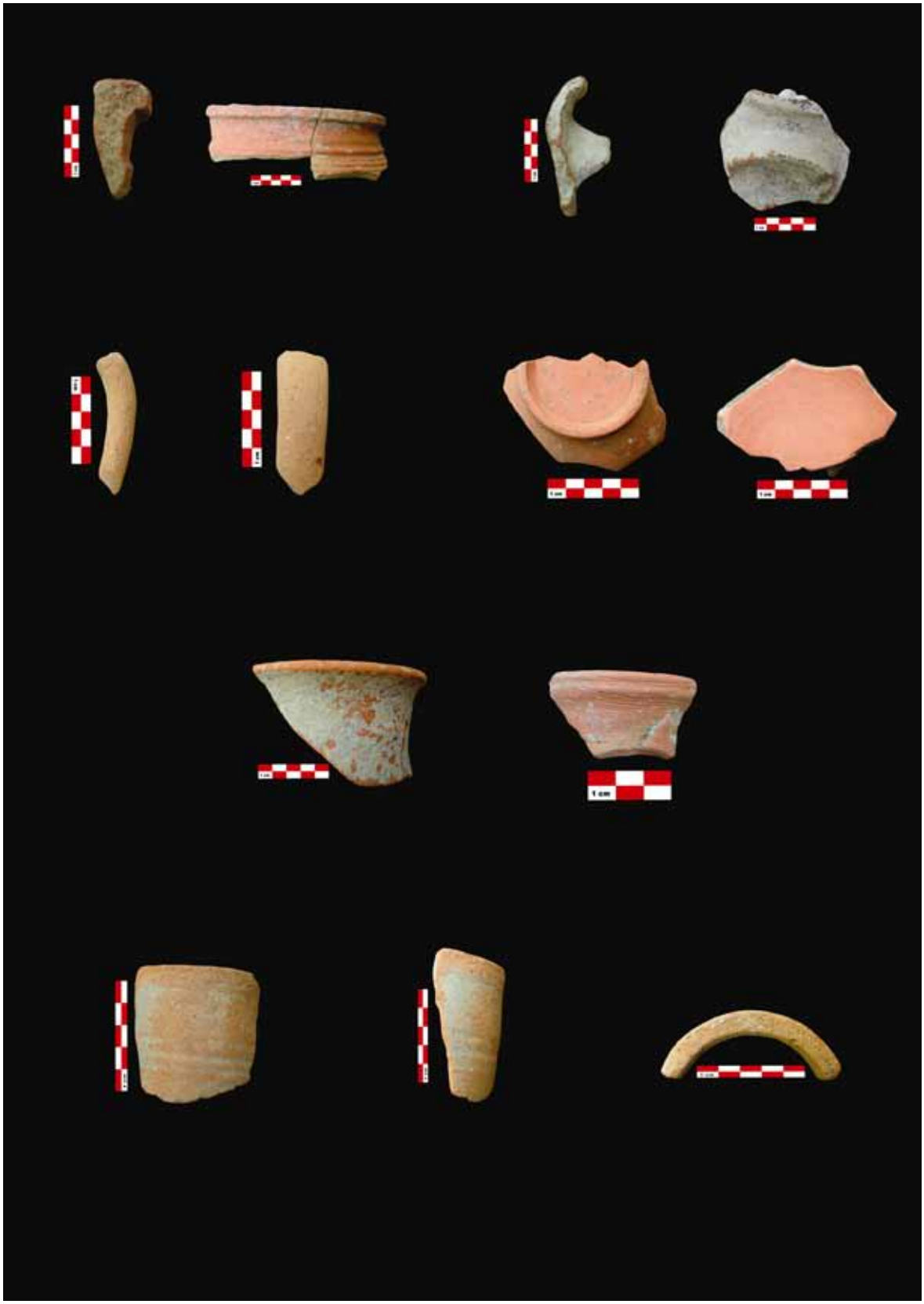

**Figure 96:** Ceramic pieces giving profile.

# PART VI

# CONCLUSIONS

Despite the fact that we have no written document or transcript that will provide us with accurate information as to the date on which Kayranlık Gözü Bath was constructed, we had the opportunity to date the structure depending on the plan, architectural characteristics, and minor finds obtained in the excavation and to determine for which period the structure was used.

When the baths that are revealed after being discovered and excavated in regions under Rome such as Italy, Greece, North Africa, Europe and Anatolia are examined in terms of their plans, there is not model among them that completely matches with this structure. However, when examined in general plan and the plans of caldarium section, the bath demonstrates similarities with the baths in other regions that were under Roman rule. However, we can easily say that the structure did not copy any other model externally, and demonstrated local characteristics to a high extent.

The structure demonstrates similarities with baths of Rome Period of 2 – 4$^{th}$ centuries AD. Though the apoditarium and firigidarium sections are different, the Athenai-Olympieion Bath dated 2$^{nd}$ century AD is the closest similar of Kayranlık Gözü Bath in the sense that both have half-circle pool in the tepidarium section, that the caldarium section creates a projection in the shape of a half circle to the north and south, and the square praefurnium on the west. Again, Germany -Stockstadt Castellum bath dated 2$^{nd}$ century AD is a quite similar example in the sense that it has similar half-circle on the north and south of caldarium, that it expends in rectangular form on the east and west, and the praefurnium is located on the west. Aesica- Greatchesters Bath dated 2$^{nd}$ century AD presents similarities in the sense that it has similar half-circle on the north and south of caldarium, that it expends in rectangular form on the east and west[22] , also the Germany - Welzheim-Castellum Bath dated back to second half of 2$^{nd}$ century AD with the half-circle expansion from the caldarium towards outside; also the Saalburg- Castellum Bath dated back to 3$^{rd}$ century AD in the sense that it has similar half-circle on the north and south of caldarium and the praefurnium is located on the west. Moreover, Istanbul Kalenderhane[23] Bath (4 -5$^{th}$ century AD) demonstrates similarities with Kayranlık Gözü Bath in the sense that the caldarium projects out in a half-circle shape, and there is the praefurnium on the west of the rectangular section.

[22] Nielsen 1993: 159.
[23] Yegül 1992: 314-326.

Considering the caldarium section, the bath has many similar models from 2nd century AD to 5th century AD from the points of view of its plan. Yet, it does not look like any example from the close environment except the two examples, one in Greece and the other in Istanbul, but presents quite lot of similarities with German examples that are dated back to 2 – 3rd centuries AD. When considered from the point of material – technical characteristics, while no local material was used in Kayranlık Gözü Bath, it looks like the baths in Kilikya region in the sense that hewn stone, rubble stone and bricks are used; rubble stones, bricks and red bricks are used as filling material and lime mortar was used as the attaching material.

Part of the ceramics, that are obtained at a small number, revealed in the excavation belong to Late Roman age, and other part belong to Middle Age. Some glazed samples belong to 9 – 12th centuries AD with their decoration on them made using sgraffito technique.

From the metal finds revealed, the lead ringlet must most probably belong to 3 – 4th century AD, that means they belong to the original structure **(Figure 84: 2)**. Again, those from among the nails obtained with smooth tops, curved tops and those without any top might belong to the initial construction stage, that is 3 – 4th century AD, since they look like those nails used to attach the wall coatings **(Figure 82: 2-4)**. Other nails with head **(Figure 81: 1-3; 82: 1; 83: 1-4: 84: 1)** must belong to 9 – 13th century AD due to the gross similarity with the nails revealed in Middle Age excavations. These mainly imitate the nails used on such elements as wood door, window etc.

From the two pieces of glasses obtained in the excavation, one belongs to the dish, **(Figure 85: 2)**, and the other belongs to the bottle mouth **(Figure 85: 1)**. Though it is not possible to determine which period both two pieces belong to, it is thought that the pieces might belong to Late Rome, Early Christian (Byzantine) periods.

As a conclusion, when considered from the point of view of two coins **(Figure 80: 1, 2)** obtained in the excavation and the architectural characteristics, it can be said that it is constructed during the early years of 4th century. The repair marks on the east section of the tepidarium of the structure, the support walls, the reinforcement wall located on the northwest corner of the pool indicate that it is also used during the following periods. Again, relying on the coins pertaining to 13th century AD **(Figure 80: 3)**, and glazed sgraffito ceramics **(Figure 95)** and nails that are revealed during the excavation, we can say that the bath was at least used till 12 – 13th century AD.

## BIBLIOGRAPHY


**Anonim**
**1964** "Geben Maddesi", *İslam Ansiklopedisi*, cilt: 4, Milli Eğitim Basımevi, İstanbul: 761-762.

**Bratianu, G.J.**
**1929** *Recherches sur le commerce Génois dans la mer Noire au XII*$^{e}$ *siécle*, Paris.

**Edwards, R.**
**1987** *The Fortifications of Armenian Cilicia*, Dumbarton Oaks, Washington D.C.

**Hild,F. ve Hellenkemper,H.**
**1990** *Kilikien und Isaurien, Tabula Imperia Byzantini Band 5*, Verlag der Osterreichen Akademie der Wissenschaften, Wien.

**Kaşgarlı, M.A.**
**1990** *Kilikya Tâbi Ermeni Baronluğu Tarihi*, Ankara.

**Krencker**
**1929** *Die Trierer Kaiser Thermen*, Ausburg.

**Nielsen, I.**
**1993** *Thermae et Balnea*, Cilt.2, Denmark.

**Ökse,T.**
**1993**. *Önasya Arkeolojisi Seramik Terimleri*, Arkeoloji ve Sanat Yayınları, İstanbul.

**Turan, Ş.**
**1990** *Türkiye İtalya İlişkileri-I*, İstanbul.

**Umar, B.**
**1993** *Türkiye'deki Tarihsel Adlar*, İnkılap Yayınevi, İstanbul.

**Yegül, F.K.**
**1992** *Baths and Bathing in Classical Antiquity*, New York.