

**Azerbaijan National Academy of Sciences**  
**Archaeology and Ethnography Institute**

**COMPREHENSIVE SCIENTIFIC REPORT**

**Excavations at Zəyəmçay kurgan I at KP 336.0**  
**SCPX pipeline**

**Author of the report:**

**ŞAMIL NADIR OĞLU NƏCƏFOV**  
Institute of Archeology and Ethnography,  
Leading Scientific Worker,  
Doctor of Philosophy in History

**Baku-Azerbaijan**

**2018**

# 1 SUMMARY

This report describes the archaeological excavations of the Zayamchai I kurgan, located at KP336,090 on the SCPX pipeline. This kurgan is located on the right or east bank of the Zayam River, towards the end of the Muslim cemetery. This was the first of five more kurgans in the SCPX route corridor, on both banks of the Zayam river.

During the excavations of SCPX KP336.09, information on the structure of the kurgan, funerary rites and rich artefacts was obtained.

## Contents

<b>1</b>	<b>SUMMARY .....</b>	<b>1</b>
<b>2</b>	<b>INTRODUCTION .....</b>	<b>2</b>
2.1	SITE DISCOVERY .....	2
2.2	SITE DESCRIPTION.....	2
2.3	WHO CONDUCTED THE WORK AND WHEN .....	2
<b>3</b>	<b>EXCAVATION RESULTS .....</b>	<b>3</b>
3.1	GENERAL DESCRIPTION OF THE SITE.....	3
3.2	GENERAL DESCRIPTION OF OCCUPATION LAYER .....	4
3.3	ARCHAEOLOGICAL FINDS .....	7
<b>4</b>	<b>GENERAL ANALYSIS OF THE RESULTS OBTAINED .....</b>	<b>8</b>
4.1	ANALYTICAL RESULTS.....	8
<b>5</b>	<b>DISCUSSION .....</b>	<b>8</b>
5.1	INTERPRETATION OF RESULTS OF THE EXCAVATIONS .....	8
<b>6</b>	<b>INVENTORY .....</b>	<b>9</b>
<b>7</b>	<b>APPENDICES .....</b>	<b>10</b>
7.1	REFERENCES.....	10
7.2	ILLUSTRATIONS .....	11
7.3	PHOTOS .....	12

## **2 INTRODUCTION**

### **2.1 SITE DISCOVERY**

In accordance with the SCPX pipeline expansion project, the process of digging out and moving of the graves of the Zayam Muslim cemetery, located at 336km of the pipeline route, was implemented. This time on the end of the Muslim cemetery towards the Zayam River bed, the kurgan was discovered. The Muslim graves around the mound were densely located (photo 1). However, those graves differed greatly from others by structure. When digging out both male, female or children's graves, it turned out that all the walls of the chambers of those Muslim graves, where the corpses had been placed, were orderly constructed using relatively small river stones about 50-60cm high. It looked like a stone box grave. Carbonic calcium gypsum was used as a material. The chambers of those graves were sometimes oval in shape, sometimes quadrangular.

At first we had no a comprehensive idea that this area was a kurgan due to the very dense and disordered masonry of the stones. In addition, the existence of such kurgan at the Muslim cemetery was a little controversial. Therefore, as a preliminary assumption, we decided that this territory was used as a site for collecting spare stones for laying stones on the Muslim graves.

The second assumption was that these stones were the remains of a mausoleum or tomb and were erected on the grave of a prominent cleric buried at the Muslim cemetery, as a memory. However, the fact that no foundation remains was found after the stones had been cleaned up also turned our idea upside down.

It became clear that this site was a kurgan and very long before the burial of Muslim graves, a funeral was performed here. Afterwards, the discovery of kurgans in the SCPX pipeline corridor, both on the right (Kurgan No. 2) and on the left bank of Zayamchai (kurgans No. 3, 4, 5 and 6) allowed us to determine that during the periods of the bronze and early Iron Age, the ancient inhabitants of the basin performed their funeral in this territory.

### **2.2 SITE DESCRIPTION**

This site is located above the high rocky terrain on the right bank of the Zayamchai in proximity to the riverbed. On the end of the Muslim cemetery towards the river. However, there are such Muslim graves on all sides of the kurgan. Their surface signs are indistinguishable. Since these lands were used as crop areas for many years, therefore large grave river stones were removed and the site was cleared. The area is plain, and the soil is gravel black soil with a small amount of clay. A local population sows mostly cereals, such as wheat and barley here. There are columns of medieval bridges remaining very close in the river valley.

### **2.3 WHO CONDUCTED THE WORK AND WHEN**

An archaeological expedition team of the Institute of Archaeology and Ethnography of the Azerbaijan National Academy of Sciences (ANAS) also conducted excavations of SCPX 336.09 when removing the Zayam Muslim cemetery. On January 23-30, 2015, excavations of SCPX 336.09 were conducted. Excavations were conducted under the guidance of the leading researcher, PhD in History Shamil Najafov, with the participation of the Institute staff, the leading researcher, PhD in History Vagif Asadov, leading researcher PhD in History Anar Aghalarzade and research scientist Ahliman Abdurahmanov. Muhammad Novruzov - SCPX Cultural Heritage Site construction manager BP (SCPX)) and Louis Ngwa -Site E & S Lead, BP company (SCPX) participated in the excavations as observers.

### 3 EXCAVATION RESULTS

#### 3.1 GENERAL DESCRIPTION OF THE SITE

Zayamchai kurgan is located in coordinates N 40056 / 20.5 // and E 045 053 / 02.1 //, at an altitude of 301m above sea level. This kurgan was assigned with number 1, as kurgans of similar type and related to an even earlier period were found as well. In total, 6 kurgans were found on both banks of the Zayamchai in the SCPX pipeline corridor. Two of these were located on the right bank, while the remaining 4 are on the left bank, about 30-60 metres from



the riverbed.

*Photo 1. View of southern part kurgan and Muslim grave to south-east (vertical view).*

Excavations of SCPX KP 336.09 were conducted during work on the Zayam Muslim cemetery. SCPX KP 336.09 is located in the territory of the Muslim cemetery Zayam, was comprised of a setting of river rocks of various shapes (photo 2). The kurgan is located on the territory of the Muslim cemetery on the end of the cemetery towards the river. The kurgan is located on the high steep right bank of the Zayam river. The distance between it and the riverbed is 20 metres. The surface properties of the kurgan were comprised of an order of large river stones, which could be distinguished one by one.

There were no surface indications of the Muslim graves in this area, which was used as a crop area for many years. Therefore, we used light machinery as agreed to identify the location of the graves. When scraping (cleaning) the Muslim cemetery by machinery (JCB) to locate the graves, the upper stones of this kurgan was exposed. The stone setting, about 0.5 metres high, was made of large and medium sized stones and was very dense. This mound, located in a plain area, was previously unknown.

The right bank of the Zayam River, where SCPX KP 336.09 is located, is a steep drop to the river bed as compared with the left bank. During the high waters in the river (mostly in April-May and October-November) some erosion of the steep bank occur. This leads to a widening of the riverbed and gradual erosion of the cemetery.

### 3.2 GENERAL DESCRIPTION OF OCCUPATION LAYER

The outer diameter of the kurgan was 6.70 metres. Before excavation, an area around it was cleared, and the Muslim grave at the foot of the kurgan was dug and removed (Photo 1).

The kurgan was divided into two sectors in the north-south direction.



*Photo 2. Upper stone setting of the kurgan after initial cleaning.*

The length of the kurgan towards north-south was 6 metres and 6,70 metres towards east-west. The first order of stones was removed. The depth of this stone series was 80cm (Photo 1). After removing this order of stones, a thin layer of soil remained. In the central part a kurgan chamber was discovered. The works here were stopped. Since the other part of the chamber fell on the second tier. The second sector, which forms the western part of the mound, was also excavated and brought to the same level. Then a chamber appeared in the centre of the kurgan (Photo 4). The kurgan chamber was 80cm deep sub-soil. The diameter of the dense order of stones on the chamber was 160cm. A kurgan chamber comprised of small and medium river stones was excavated. The chamber was oval –shaped. The stones on the chamber surface were cleaned and removed. Burial was performed in the chamber. A height of the first order of stones in the chamber itself was 40cm. After removing this order of stones, a second order of stones was discovered under a layer of fine soil composed of clay and gravel. Thickness of the second order of stones was 25cm and the diameter was 100 x 110cm. These stones were arranged very tightly. Stones were fastened with each other by carbonic calcium gypsum. Stones were large and medium, and all came from the river valley. After the stones had been taken, smaller ceramic patterns among them were found. These ceramic samples comprised of fragments of three grey and black ceramic vessels. Moreover, it is very interesting that fragments of trees were found here as well. The remains of tree were very

small and almost completely rotted. It was impossible to lift them from the ground and they were crumbled. Under the 2nd order of stones, a thin layer of soil was again discovered, followed by a third order of stones. Length of this order of stones (towards north-south) was 160cm and the width (towards east-west) was 80cm. Thickness of 3rd order of stones was 20cm. A potsherd of the neck and rim was found under it. This fragment was grey-brown and thin-walled and high-quality, made up of pure clay.

After the third order of stones had been removed, the fourth order of stones was found. This order of stones was scattered and resembled stones thrown into the chamber (Figure 2). This 4th order of stones, comprised of small and medium stones, had  $d = 120\text{cm}$ , and the thickness was 15cm. This order of stones was at a depth of 160cm from the soil surface (Photo 5). In a number of stones, black ceramic patterns were found again.

Ceramic samples discovered during the opening of the upper cover of the kurgan and after removal of the first order also belonged to the Stone Age. These ceramics were light red and red, and also in grey colour and well made on a potter's wheel. The clay of the thin-walled ceramics was pure. In addition to ceramics more typical for the Early Iron Age, 2 units of small-sized obsidian were found. These obsidians are fragments and were not processed.



*Photo 3. Division of the mound into two sectors.*



*Photo 4. Grave chamber under kurgan.*

The grave chamber towards north-south was 120cm long and 140cm towards east-west. The depth of the grave chamber above the surface was 175cm. Grave chamber was round - shaped. To the east of the grave chamber, a human skull was found. It was obvious from the position of the skeleton that the body was placed in the eastern part of the burial chamber and laid towards east-west. Fragments of tooth, neck and skull were found in the cranial bones of the human corpse laid in this direction. More human teeth were found. Near the bones of the human skull 2 pieces of bronze related to some objects were found.

Animal bones were also found near human bones. Most likely, human and animals bones were destroyed and distorted due to the weight of stones on them.

At a depth of 40cm of the grave chamber, parts of the human skeleton were again found in the southern corner of the chamber. Only thigh and shin bones of the skeleton remained. This showed that two men were buried in the grave. However, bodies, most likely, were buried torn. Some parts of the second human skeleton - the skull and vertebral bones along with thigh bones were found in the eastern part of the burial chamber (buried towards east-west, head - towards east, and legs - towards west). Probably the corpse was laid on the side of the eastern wall of the chamber. Another human skeleton was found on the side of the southern wall of the chamber. This corpse was buried in the grave chamber towards north-east-south-west.

A depth of the burial chamber was 40cm, and the height from the grave floor to the upper ground surface was 190cm. The overall level was 210cm, counting 20cm of scraped part of the ground surface.



*Photo 5. Excavation of grave chamber.*

### **3.3 ARCHAEOLOGICAL FINDS**

The artefacts found from the grave chamber were as follows: 2 pottery vessels of various contents, 94 glass beads of various sizes and purposes, and 1 bead of cowrie.



*Photo 6. Pottery found in the grave chamber. Inv 6.*



## **4 GENERAL ANALYSIS OF THE RESULTS OBTAINED**

Interesting scientific results were obtained during excavations of SCPX KP 336.09.

First, it should be noted that all these scheduled archaeological excavations conducted in the Zayamchai basin require repeated and comprehensive comparative study of archaeological sites of the Bronze Age basin. Rich archaeological materials obtained from the sites in the Zayamchai basin allow to conduct more extensive studies and to prepare a comprehensive monograph.

The custom to fill the graves in the Zayamchai basin with kurgans on the surface of both stone box and simple earth graves began long before the Late Bronze/Iron Age. There are kurgans found on the plains between the Zayam River and the Shamkir River, a plateau between the Jayir River and the rivers in the west, near Chinarli and Chiragli villages of the Shamkir district. Such kurgans are also found in the upper Zayamchai basin - in the Gadabay district. These shallow kurgans are located one by one [8, c. 161-162]. In the area between Chinarli village and Shamkir city, there is a burial cemetery in the area of 1.5km<sup>2</sup> comprising the kurgans 1-1.5 metres high and 10-12 metres in diameter.

Pottery found in the kurgan graves of the Zayamchai basin are made in a workmanlike manner. Some metal objects are not so much different from those found in extraneous places. Undoubtedly, in the Late Bronze Age - the early Iron Age in the Zayamchai basin there was a separate version of the Khojaly-Gadabay culture and not an independent culture different from neighbouring regions.

### **4.1 ANALYTICAL RESULTS**

In the Zayamchai basin, both stone-covered and earthen mounds were extensively studied. Usually they are found in areas near rivers and residential areas. Kurgans in the Zayamchai basin are built of only of river stone (photo 7-8). Some mounds were built of stone and gravel, which undoubtedly was closely related to the relief. The upper surface of some barrows, surveyed both in the mountain and in the foothills and flat areas of the basin was paved with a stone in the form of a circle. In very rare cases, the base of the mound is surrounded by circles made of one or two rows of stones. We observed this feature during the study of mounds Zayamchai No. 3 and 4, excavated on the SCPX pipeline. Usually the number of graves found in groups of barrows does not exceed 10.

Despite the fact that SCPX KP 336.09, contains a slightly different structure of mound, the obsequies and archaeological materials are typical for the majority of the kurgans of the Late Bronze Age.

## **5 DISCUSSION**

### **5.1 INTERPRETATION OF RESULTS OF THE EXCAVATIONS**

Excavations of SCPX KP 336.09 were successfully completed and scientific results obtained. It has been established that the kurgan of the basin more closely related to the foothill and plain zones differ also by size. In the Late Bronze-Early Iron Age, the structure of kurgans was relatively small and accompanied with rich artefacts. Zayamchai I kurgan reflects the material culture of the Late Bronze Age. A grave chamber was recorded in the kurgan. Human and

animal skeletons were discovered in the camera. This kurgan was very interesting both in terms of burial practise and value of the archaeological finds. These ceramic fragments keeping typical features of the ceramics of the Middle Bronze Age are useful for studying archaeological sites of transitional period of basin from the Middle Bronze to the Late Bronze Age.

## 6 INVENTORY

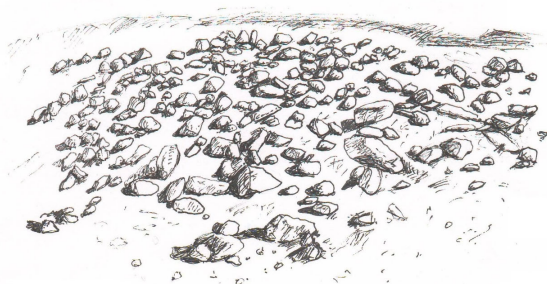
No.	Type	Description	Dimensions	Notes
1	Beads	Glass beads of various sizes. White, green, blue and light blue, round section, barrel-shaped, tubular-shaped, wheat-shaped. 74 beads are very small. 5 pieces - wheat-shaped, 11 barrel-shaped, 3 tubular-shaped. Drawing 6, Photo 13.	various sizes	93 pcs
2	Bead	White, cowrie shell bead. Middle is open, and a hole made for threading. Drawing 6, Photo 13.	Diameter 2cm	1 pc
3	Bead	Dark blue glass bead. Barrel shaped. Hole made for the threading through the centre. Drawing 6, Photo 13.	Diameter 7mm	1 pc
4	Base of jug type dish	Base of thick-walled, black, small of jug type dish. The wide body tapers sharply towards the base. Made of clay mixed with sand and well cooked. Inside the crockery there was a trace of the rotation of the potter's wheel. Weakly polished patterns were applied on the outer surface. The surface was simultaneously smoothed. Not illustrated.	Base diameter 5cm	
5	Pottery	Thick-walled, red colour, ceramic dish of jug type of medium capacity, made of sandy clay and well-cooked. Relatively narrow and long throat of dishes is smoothed with a thick and folded mouth edge. The shoulder part of the dish with the mouth edge is joined by a rectangular handle. Top of the handle is broken. Spherical body tapers sharply towards the Base. Decorations were applied in the shoulder part of the dishes by stamping. 3 of these ornaments are zigzag patterns, adjacent to each other, and 2 are spiked ornaments. All the patterns vertically cover the shoulder of the dishes. From the upper and lower sides, the patterns are surrounded by circular concentric lines drawn horizontally. These lines are 3 bands at the top and 1 strip at the bottom. Roughly made by hand. Photo 11-12.	Mouth diameter 10.3 cm Neck height 4.5cm Body diameter 19cm Height 21cm Base diameter 7.8cm	
6	Pottery	Large ceramic dish of jug type. Thick-walled, black, pomegranate sand, well fired of fine-grained sandy clay. A narrow and relatively long throat gradually passes into the shoulder. Mouth edge is thick and folds outward. There are diamond-shaped patterns embossed on the shoulder part of the dish on 4 sides and each in 4 rows. In between these patterns, grid-like patterns are applied by polishing. Below the patterns, convex pattern encircles the embroidered part of the dishes moving from the shoulder to the body. Body tapers sharply towards the Base. Made on a potter's wheel. Photo 9-10.	Mouth diameter 15.2cm Neck height 6.5cm Height 42cm Body diameter 35cm Base diameter 10cm	

## 7 APPENDICES

### 7.1 REFERENCES

1. Bakhshaliyev V.B. *Azerbaijan archaeology*. volume I, Baku, Elm, 2007, p. 239 p.
2. *Azerbaijan archaeology*. VI volumes. volume VI (Middle Ages), Baku, "East-West", 2008, 632 p.
3. Najafov Sh.N. *Grave sites at Zayamchai necropolis and comparative analysis of some of them*. Scientific researches (collection of scientific and theoretical articles), Institute of Oriental Studies named after Z.Bunyadov, VII edition, Baku, 2004, p. 292-296.
4. *Zayam*. ASE (Azerbaijan Soviet Encyclopedia), volume IV, Baku, Azerneshr, 1980, p. 314.
5. Veliyev S.S., Mamamadov A.V., Rabotina E.N. *Major natural and climatic events of the Holocene of Azerbaijan*. Int. Conf. "Problems of the Holocene", Tbilisi, 1988, pp. 70-71.
6. Narimanov I.H. *Archeological sites of Ganjachay region (from ancient times to the beginning of the Iron Age)*. Baku, Azerb. SSP AS, 142 p.
7. Khalilov J.A. *Archeological sites of Bronze Age and Early Iron Age of Western Azerbaijan (Basins Shamkir and Zayam rivers)*. Baku, Azerb. SSR AS publication, 1959, p. 171 p.
8. Najafov Sh.N. *Kurgans of the Zayam basin of Late Bronze-Early Iron Age*. Caucasus: Archaeology and Ethnology. International Scientific Conference, September 11-12. Materials, Azerbaijan, Shamkir-2008 (ANAS and OAPR) Baku, 2009, "Chashyogly", pp. 160-166
9. Museyibli N.A. *Types of graves of Zayamchai necropolis*. *Azerbaijan archaeology*, 2009, № 2, pp. 37-57.

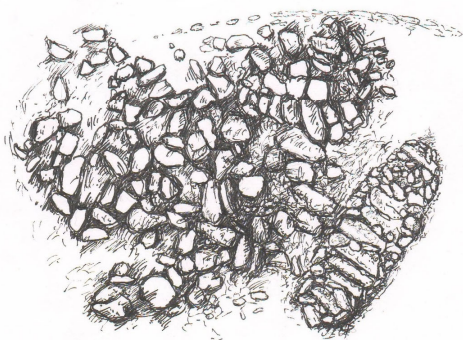
## 7.2 ILLUSTRATIONS



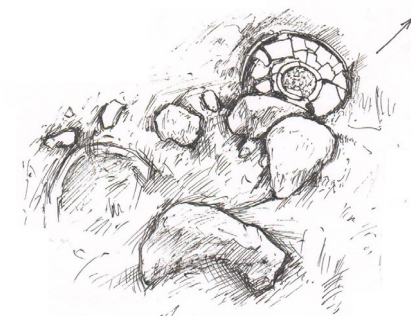
*Drawing 1. Upper stone order of SCPX KP 336.09*



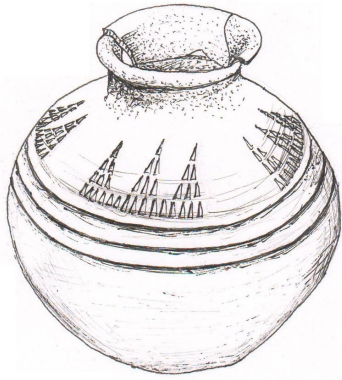
*Drawing 2. Stone order of grave chamber under kurgan*



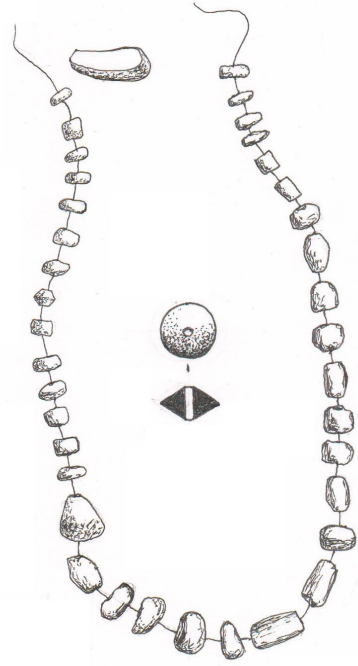
*Drawing 3. Parts of human skeleton in the grave chamber*



*Drawing 4. Order of pottery in the grave chamber*



*Drawing 5. Pottery found from the kurgan. Inv 6 top, Inv 5 bottom.*



*Drawing 6. Beads found from the kurgan. Inv 1, 2, 3.*

### 7.3 PHOTOS



*Photo 7. View of densely laid upper stone order of the Kurgan*



*Photo 8. North view of the kurgan*



Photo 9. Ceramic vessel found from the kurgan and patterns on its surface. Inv 6.



Photo 10. Ceramic vessel found from the kurgan and patterns on its surface. Inv 6.



Photo 11. Small-sized jug type ceramic vessel found from the kurgan. Inv 5.



Photo 12. Small-sized jug type ceramic vessel found from the kurgan. Inv 5.



Photo 13. Beads found from the kurgan. Inv 1, 2, 3