## Mi.Enlil Arakhtum Survey (2016-2017)

Prof. Abbas Ali Al-Hussainy/ College of Archaeology/ University of Al-Qadisiyah Abbas.alhussainy@qu.edu.iq

Researcher: Hussam H. Kareem (MA Ancient Archaeology)

husamhadi3@gmail.com

Researcher: Mustafa N. Adullah. (SBAH, Iraq) mustafaneamah8@gmail.com

#### **ABSTRACT**

The Mi.Enlil-Arakhtum project for archaeological survey took its name from the ancient designations of two branches of the Euphrates River, as told by cuneiform texts. It is a project to survey archaeological sites in Al-Qadisiyah Governorate, according to the latest archaeological survey methods, its start from Dagharah as a first stage, and then to other provinces, using The latest technologies in its implementation, in its first phase, which began in 2016 with a survey of archaeological sites in the district of Dagharah, and the most important objectives of this project were to determine the actual number of archaeological sites, their current state, document the damage and abuses inflicted on those sites, follow the course of rivers in the survey area. As well as trying to find out the names of the ancient sites through their geographical location among the known sites, and trying to find out the origin of the local name and its relationship to the ancient name.

Keywords: Pottery; Neo-Babylonian; Parthian; Sassanian; Al-Daghrah.

# مشروع مي انليل اراختوم للمسح الاثاري 2017-2016

أ.د. عباس علي الحسيني (كلية الاثار - جامعة القادسية) husamhadi3@gmail.com الباحث: حسام هادي كريم (ماجستير اثار قديمة) الباحث: مصطفى نعمة عبد الله (منقب الهياة العامة للاثار والتراث - مفتشية اثار الديوانية). mustafaneamah8@gmail.com

#### لخلاصة:

ان مشروع مي.انليل- اراختوم للمسح الاثاري اتخذ اسمه من التسميات القديمة لفر عين من فروع نهر الفرات، كما اخبرتنا به النصوص المسمارية، وهو مشروع لمسح المواقع الاثارية في محافظة القادسية مسحا علميا وفق احدث مناهج المسح الاثاري كمرحلة أولى ومن بعدها الى المحافظات الاخرى، مستخدمين احدث التقنيات في تنفيذه، في مرحتله الأولى التي ابتدأت في عام 2016 بمسح المواقع الاثارية في ناحية الدغارة، وكانت اهم اهداف هذا المشروع هو الوقوف على العدد الفعلي للمواقع الاثارية، وحالتها الانية وتوثيق الاضرار والتجاوزات التي لحقت بتلك المواقع، وكذلك تتبع مجاري الأنهار في منطقة المسح، فضلا عن محاولة معرفة أسماء المواقع القديمة من خلال موقعها الجغرافي بين المواقع المعروفة، وكذلك محاولة معرفة اصل الاسم المحلي ومدى علاقته بالاسم القديم.

الكلمات المفتاحية: الفخار؛ العصر البابلي الحديث؛ العصر الفرثي؛ العصر الساساني؛ الدغارة.

#### 1- Introduction:-

The project of Mi.Enlil-Arakhtum survey, called by this name because these are the ancient names of two branches of the Euphrates river which are attested in cuneiform sources. The aim of the survey is – to reveal the real total number of all the sites which are lying along the ancient river courses. I have to add here that the area has never been surveyed before. The area of the archaeological survey is occupied with many villages and the surfaces devoid of elevations. This surface is easily characterized by its symmetrical structure, level and gradual slope from the northeast to the southwest. Different type of archaeological finds was collect from the surface of the sites including pottery, Glasses, shells and metal.

We started our survey on 18 February 2016 at Tell Kozkhan and moved from there to the surrounding area including Ishan Maqam Ismael and Ishan Hassan. On 4<sup>th</sup> of March we surveyed Tell Abu-Tarouf B, R and R2 and three weeks later on 24<sup>th</sup> of March Tell Al-Gamad, Tell Saeed-D, Tell Marza and Tell Abu-Sakhar-D. On 30 of March we covered Tell Satloniya and Tell Muelha, The last site surveyed in 2017 was Tell Abu-Sakharah-S on 21<sup>st</sup> of December.

From 5<sup>th</sup> to 8<sup>th</sup> of March 2017 we surveyed Bent al-Ameer and Tell Sulmbah, then on 26 March we covered Tell Horiah, Tell Horiah 2, Ishan Haroniyah and Tell Abu Jaseebs. On 21 and 22 April we undertook a survey of Tell Al-Newaser, Umm al-Dood, Tell Al-Amarien, Tell Abu Shaib, Tell Sayed Mohamed, Tell Nabee Shaib, Tell Hadi Alwan (Al-Ghewanim) and Zaid al-Nar<sup>1</sup>.

The surveys of Robert McCormick Adams of the Mesopotamian floodplains are well known to archaeologists and other scholars of ancient Mesopotamia. However, he did not survey all of southern Iraq and there are still gaps in our knowledge. To remedy this situation, the present author conducted a number of surveys in and around the current province of Alqudisiyah. One such survey project has received the name Me.Enlil-Arakhtum, after two ancient branches of the Euphrates River flowing southwards from the general area of Kish. The aim of the survey is to document all the sites lying along these ancient river courses.

#### 2- Methodological steps used in this work:

Initially we started by reviewing the primary sources pertaining to the survey region, namely:

- -Archaeological Sites in Iraq (Baghdad, 1970)
- -The Atlas of Archaeological Sites in Iraq (Baghdad, 1976)

Our second step was to review the human geography of the region. As this region has not been surveyed prior to this the study of developments in the region represents an important step. This region has been subject to several agricultural development projects including the construction of irrigation and drainage canals. These developments have impacted archaeological sites in the region. Our third step was to conduct a geomorphological study of the region using satellite imagery (Landsat especially circa 2017 and 1997,and Corona). This step helped us identify some sites despite their low relief and the construction of drainage canals around them .

After that we began ground truthing our remotely detected observations. We started by collecting the coordinates of sites and conducting field walking surveys. We created contour (elevation) maps of the site either through the use of drone photography (see Tell Kozkhan for example)<sup>3</sup>, or manually (see Tell Abu Tarouf Saghir)<sup>4</sup>. During this stage we also described

the mounds in full detail, noted their surroundings and adjacent landmarks, documented the relevant sources of water around them<sup>5</sup>, and created lists of flora and fauna (both domesticated and wild), and finally recorded information of the demographics of the surrounding area of each site.

For collection purposes, mounds were divided into collection units that followed the overall morphology. When a site was composed of a number of separate mounds each mound was given a reference symbol. Moreover, each mound was divided into separate collection zones. These collection zones took into consideration the peak of the mound, slope, and any gullies that may have been impacted by rainfall. Gullies proved to be useful in exposing earlier occupation levels at different sites .

Finds were collected in plastic bags with identification tags that specify the name of the site, year of survey, and the designation of the mound and the collection unit/zone. Each class of artifact (pottery, stone tool, clay object, glass) had its own collection bag with its unique tag. In the lab, artifacts were washed and cleaned and categorized. Categorization depended on the morphology and periodization of the piece. All artifacts and objects were photographed and drawn, and were analyzed based on color and fabric using the Munsell soil colour chart.

#### 3- Description of the Survey Area

The geological formation of the area dates back to the Quaternary Geological Age (2.58 million years ago, extending into the present) containing sediments from the Pleistocene (2.580.000 to 11.700 years ago) and the Holocene (ca. 11.700 to present), covering all of the survey area, the most important being:

- 1. Flood plain deposits, consisting of clay, sand and some gravel.
- 2. Deposits of buried depressions consisting of fine sand, silt and mud.
- 3. Sediments of previous and current swamps characterized by the presence of layers of clay with most of its components being shells and organic matter being very soft and dark in color.<sup>6</sup>

The area of the archaeological survey is occupied by many modern villages in a region without any significant elevations inclining very gradually from the northwest towards the southeast. When irrigated the area can be very fertile, its most important modern canal being the Sader Al-Dagharah, which derives from Shat al-Hilla the eastern branch of the Euphrates River— and enters the province of Al-Qadisiyah near Tell Al-Gamad, reaching a total length of about 70 km from its source until it fades near Tell Fara. The Sader al-Daghara, is located to the northwest of ancient Marad (32° 10)-(32° 15) and (45° 05)-(45° 15) to the southeast of the ancient city of Kish. The ground is flat in this area and rises 24 m above the mean sea level. There are some seasonal marshes and wet areas in different parts of the surveyed area. We recorded many natural plants, among which we can mention artichoke, thistle, oats, wild barley, reeds, and papyrus. Modern cultivated plants are wheat, barley, grain, as well as many vegetables and fruits. The most common domestic animals are cows, sheep, goats, water buffaloes, and many birds, wild animals include boars, foxes, rabbits, wild cats and many migratory birds, together with several species of fish.

The number of hours of daylight has an annual variation of nearly four hours, the maximum being up to 14 hours in June, and the minimum some 10 hours in January. Whereas temperatures are high during summer, reaching spikes of up to  $50^{\circ}$  C in August, they can fall

to 5° C or less in the winter, specifically in January. Rain falls in winter, especially during the months of December, January and February, after which it decreases sharply. Therefore, the dependence of agriculture on rainfall is quite limited, and the Shatt Al-Dagharah is the main source of irrigation. Winds in the surveyed area blow mostly from the north-west (with low speeds that increase during the summer), in addition to wind from the west and south-west<sup>12</sup>.

In Antiquity there were five main rivers/canal beds passing through the surveyed area together with many small canals. These rivers flowed from the north-west towards the southeast. Proceeding from west to east, one first came across the Arakhtum, then the Mi.Enlil, the Sura river, the Id-sahar and finally the Euphrates proper.

The Arakhtum canal was the westernmost branch of the Euphrates in the area under survey and connected Marad with Babylon to the north, it continued towards Isin to the south. Many sites of different periods lay on its banks. <sup>13</sup> The Euphrates proper, instead, was more to the east, passing Kish and Nippur down to Uruk and Ur in the south. <sup>14</sup> Between the Arakhtum and the Euphrates, there were three additional canals. In the second millennium BCE, we find the Me-Enlil River, connecting Marad with Kish <sup>15</sup>, and the Id-saḥar, branching from the Me-Enlil north of Marad. <sup>16</sup> In later times during the Islamic Abbasid period, the so-called Sura canal was dug to connect the city of Sura with the area of Marad. <sup>17</sup>

According to the results of our survey, the area was occupied uninterruptedly from prehistoric times (on the basis of the evidence from Jemdet Zabi and Tell Abu-Tarouf), through the Uruk period down to the present.

#### 4- The Sites.

The sites of the fourth and third millennium BC are very rare in the survey area, as we have indicated only one site in this season of our work, which is Tell Abu Tarouf, whose area does not exceed six hectares, and its shape is closer to the ring with elongation from the southern side<sup>18</sup>, and it is likely that the reason for this is that This area was covered with water in the fourth and third millennium BC, and this is indicated by its current names, as parts of it are called *Hur*, with the exception of some high places that were settled for limited periods and then flooded with water, and this is indicated by the nature of the surface of tell Abu Tarouf, where snails abound. And oysters, as well as a lot of broken pottery, some of them made by hand, such as beveled rim bowls<sup>19</sup>, and some made with wheels of jars, pots and many sickles<sup>20</sup>, which date back to the uruk period and Jemdet Nasr, as well as some pottery that dates back to the early dynastic period, especially sold footed goblet<sup>21</sup>. And a lot of tools made of stones of different shapes and functions<sup>22</sup>.

As for the sites of the second millennium, although they are few, as they do not exceed the two sites, which are Tell al-Harounia and tell Abu Jaseeb al-Saghir<sup>23</sup>, they are almost within the medium-sized sites. High places, or that the places of settlement of this period are covered by layers of settlement later in the second millennium, or that they were affected by silt processes, especially those that were settled for a short period and were not high above the surrounding land, so they are subject to removal by the daily activities of human, especially there agricultural activities.

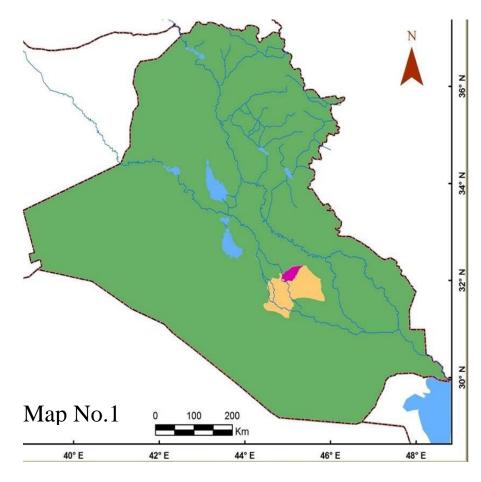
The sites of the first millennium BC, as well as the settlements of the first millennium AD, were distinguished by their wide area and height above the level of the surrounding land, due to the long period of settlement in them and the increase in their population. They are all located within the large-scale sites because this classification places the archaeological sites

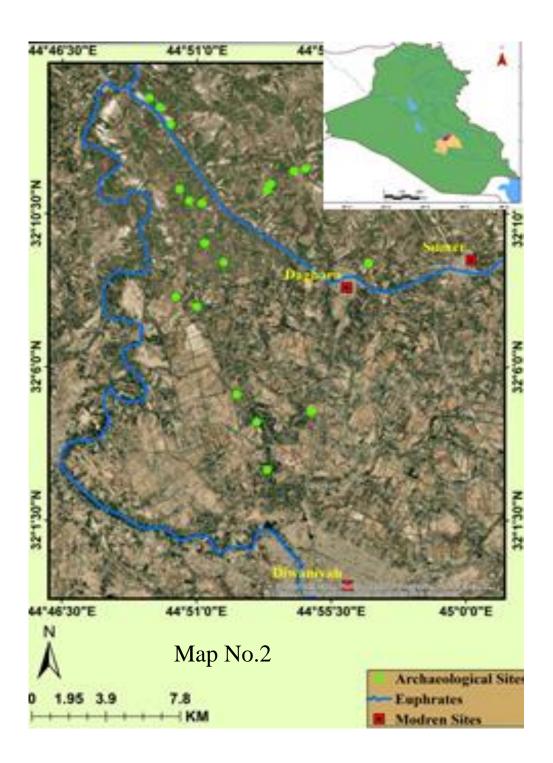
whose area is from five hectares and less within the small and from five hectares to ten hectares within the medium, and from ten hectares and more within the wide area, the most important of which are Tell Kozkhan<sup>24</sup>, Tell Bint Al Amir<sup>25</sup>, Tell Al-Nawasir<sup>26</sup> and Tell Al-Amariyin<sup>27</sup>, which are spread over their surfaces a lot of broken glazed pottery<sup>28</sup> and stone tools as well as glass<sup>29</sup>.

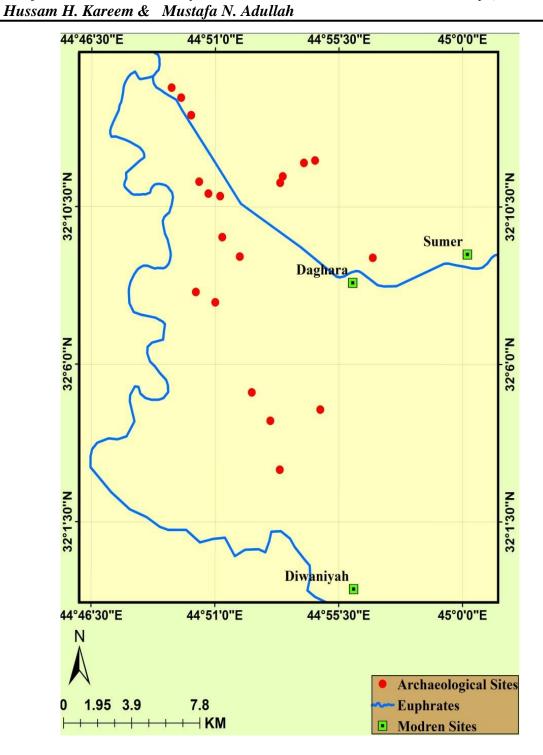
#### **Conclusions:-**

The sites of the fourth and third millennium BC are very rare in the study area, and the reason for this is likely that this area was covered with water in the fourth and third millennium BC, as well as the second millennium, whose remains were found in only two sites, as for the sites of the first millennium BC The first millennium AD and until the late Islamic periods, it is the dominant settlement in this region, and was characterized by the large area and height above the level of the surrounding land, and this is due to the long period of settlement in it and the increase in its population.

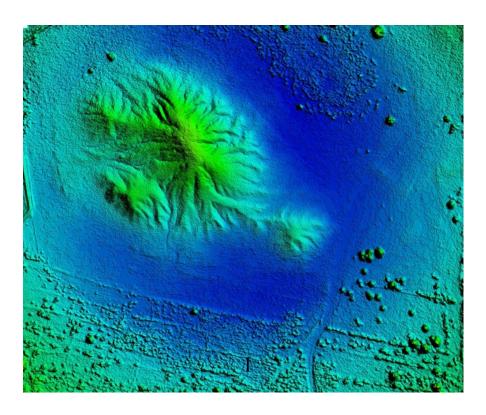
The archaeological finds found in the sites of the survey area varied, from different ages ranging from the Uruk time to the Ottoman era, as well as varied in type, shape and function. We found pottery, stone, metal and glass, and the quality of its industry varied from good to poor industry.







Map No.3





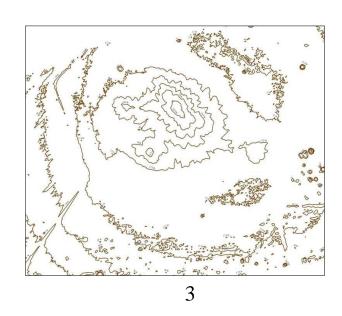
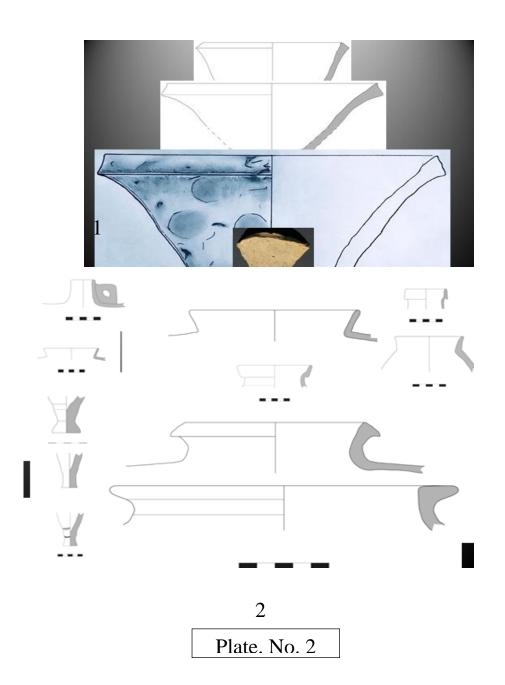
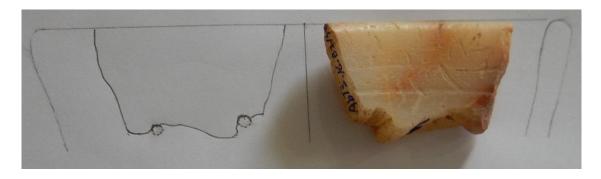


Plate. No. 1













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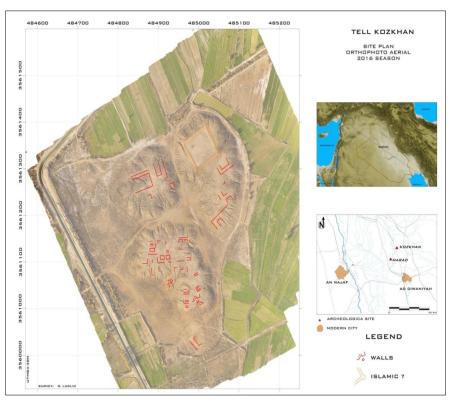


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Plate. No. 5

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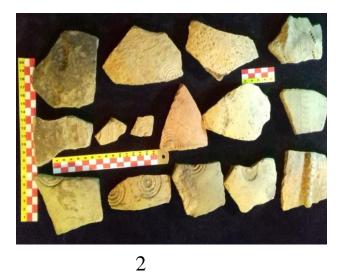




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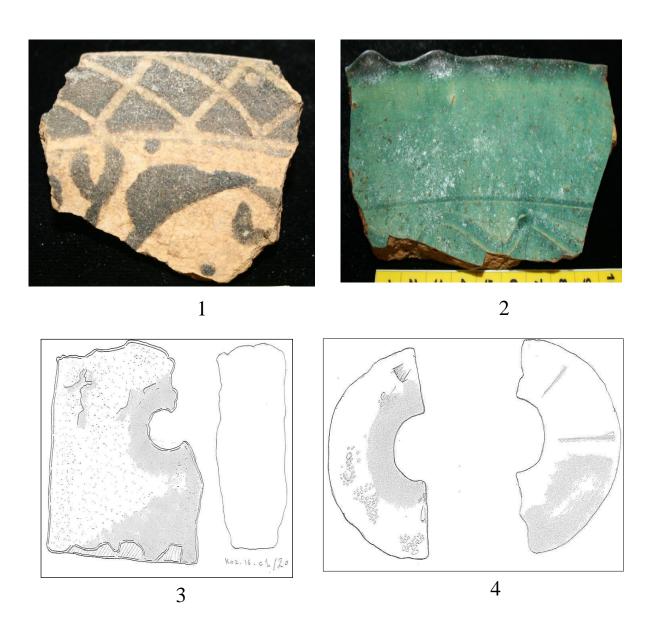
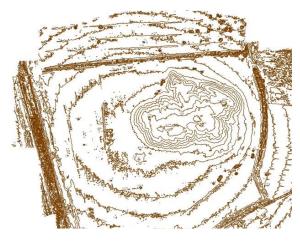
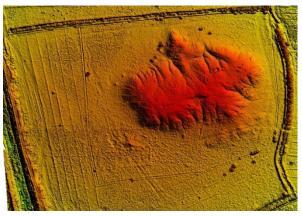


Plate. No. 7







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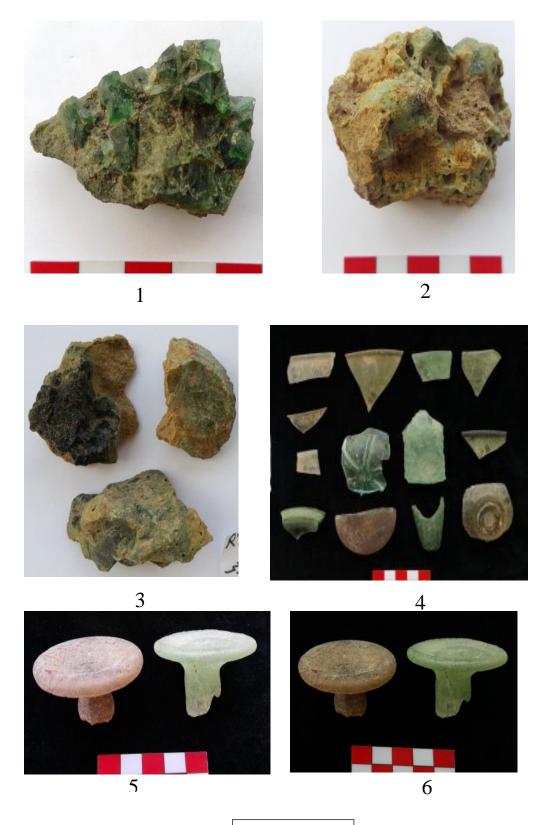
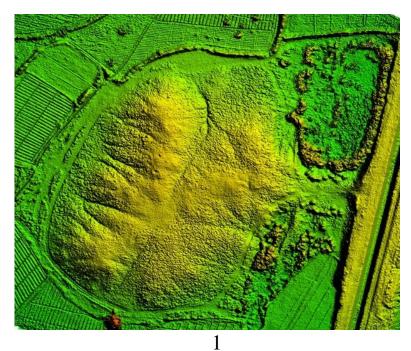


Plate. No. 9







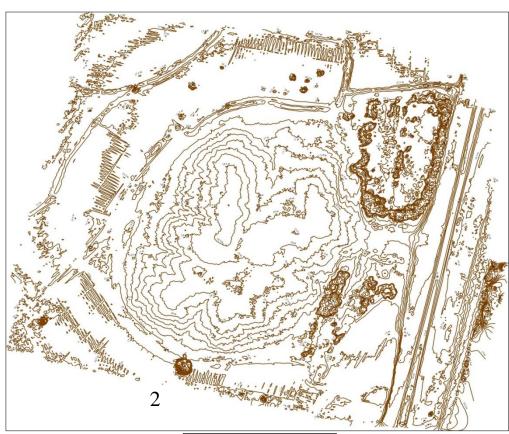


Plate. No. 11





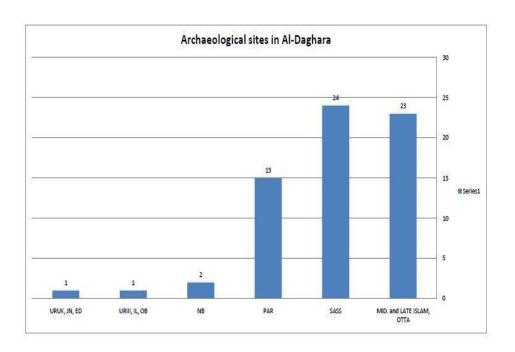


Chart No.

### Hussam H. Kareem & Mustafa N. Adullah

#### **Footnotes:**

<sup>1</sup> - Map no. 1

- <sup>2</sup> Adams, R.McC., Land Behind Baghdad: A History of Settlement on the Diyala Plains, Chicago, 1965; Heartland of Cities. Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates, Chicago, 1981.
- <sup>3</sup> pl.6 no.1
- <sup>4</sup> pl. 1 no. 1,2,3
- <sup>5</sup> map, n0.2,3
- <sup>6</sup> Al-Assadi, D. M., Hydrology of Shatt Al-Dagharah (Study in physical Geography), MA. Thesis, Al-Qadisiyah University 2016, p.18 (in Arabic).
- <sup>7</sup> Al-Omeri, G., The Water-Climate Equation in the Middle Euphrates Governorates , Ph.D Thesis, Al-Qadisiyah University (2007), p. 31 (in Arabic).
- <sup>8</sup> Al-Hussainy, A., The city of Kazallu Its importance, history and geographical location in the light of cuneiform sources and archaeological surveys, *Sumer* 63 (2017), p. 253-287 (Arabic section)
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- <sup>11</sup> Mahdi, Sh., Water birds in Iraq and the Arab world, Baghdad 1982, p. 148. (in Arabic).
- <sup>12</sup> Al-Shalash, A. H., Climate of Iraq, Amman 1966, pp. 20-23.
- <sup>13</sup> Frayne, D., The Early Dynastic list of Geographical Names,(new Haven,1992) AOS vol.74, pp. 8, 51; B. Groneberg, RGTC 3 (1980), pp. 274-275 and the Map at the end of the volume.
- <sup>14</sup> Frayne, D., Op. Cit., p. 51; Groneberg, op. cit. Map.
- <sup>15</sup> Frayne, D., Op. Cit., p. 51; Groneberg, Op. Cit., p. 297 and Map.
- <sup>16</sup> Frayne, D., Op. Cit., p. 51.
- <sup>17</sup> Adams, R. Mc., Heartland of Cities, Chicago 1981, p. 158.
- <sup>18</sup> pl,1 no.1,2,3
- <sup>19</sup> pl,2 no. 1
- <sup>20</sup> pl,4 no. 2,3 <sup>21</sup> pl,2. no. 3.2 <sup>22</sup> pl,3. no. 1,2
- <sup>23</sup> pl, 5 no.3
- <sup>24</sup> pl.6 no. 1. <sup>25</sup> pl.8 no. 1,2. <sup>26</sup> - pl.10 no. 1,2
- <sup>27</sup> pl.11 no.1,2.
- <sup>28</sup> pl.6 no. 2,3; pl. 8 no. 3; pl.12. no 1,2
- <sup>29</sup> pl.9 no. 1,2,3,4,5,6; chart 1

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- 1- Adams, R.McC., Heartland of Cities. Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates, (1981, Chicago).
- 2- Adams, R.McC., Land Behind Baghdad: A History of Settlement on the Diyala Plains, (1965, Chicago).
- 3- Al-Assadi, D. M., Hydrology of Shatt Al-Dagharah (Study in physical Geography), MA. Thesis , Al-Qadisiyah University 2016, (in Arabic).
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