# DETERMINATION OF SOME CHEMICAL AND PHYSICAL POLLUTION PARAMETERS IN SUMMER SEASON AT KÜÇÜKÇEKMECE LAKE



by

Sönmez ARSLAN



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Başkan Prof. Dr. Ulvi Avcıata.....

Üye Prof. Dr. Ahmet Gül

Üye Doç. Dr. Makbule Koçak

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APPROVED BY:

Prof. Dr. Ulvi AVCIATA

Prof. Dr. Ahmet GÜL

Assoc. Prof. Makbule KOÇAK

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# DETERMINATION OF SOME CHEMICAL AND PHYSICAL POLLUTION PARAMETERS IN SUMMER SEASON AT KÜÇÜKÇEKMECE LAKE

**Sönmez ARSLAN**

**M.S. Thesis, 1999**

**Tehsis Advisor: Prof. Dr. Ulvi AVCIATA**

**Keywords:** Surface Water Pollution, Water quality, Lake Pollution, Water Pollution, Eutrophication.

The polluted waters of Küçükçekmece Lake were studied to measure in terms of variations of chemical, biochemical and physical characteristics in the summer season. The total amounts of wastes discharged into the lake and types of polluting sources were identified. The evaluated lake results were commented with regarding previous studies. The degree of pollution in the lake was assessed.

Some physical, chemical and biological parameters were measured in all the stated locations of the Lake daily, weekly, and monthly in summer season.

According to the results, KC-6 location is polluted by wastes dramatIcally in terms of $COD_{Cr}$, $BOD_5$ measurements, KC-11 location with the highest salinity values due to the Sea of Marmara and KC-7 location with thermocline layers attract attention.The Küçükçekmece Lake is being gradually polluted by Industrial, domestic wastes and there is an increase in the point of eutrophication.

# BAZI KİMYASAL VE FİZİKSEL KİRLİLİK PARAMETRELERİNİN YAZ SEZONUNDA KÜÇÜKÇEKMECE GÖLÜNDE TESPİT EDİLMESİ

**Sönmez ARSLAN**

**MASTER TEZİ, 1999**

**Tez Danışmanı: Prof. Dr. Ulvi AVCIATA**

**Anahtar Kelimeler:** Yüzey suyu kirlenmesi, Su Kalitesi, Göl kirliliği, Su kirliliği, Ötrifikasyon

Küçükçekmece Gölünün kirlenmiş sularinin; kimyasal, biokimyasal ve fiziksel karakterlerin degişimleri açısından ölçümü yaz sezonu içerisinde çalışılmıştır. Göle dökülen atıkların toplam miktarı ve kirlilik kaynaklarinin çeşitliliği tanımlanmıştır. Bulunan göl sonuçları daha önceki çalışmalarda düşünülerek yorumlandı. Göldeki kirliliğin derecesi değerlendirildi.

Bazı fiziksel, kimyasal ve biyokimyasal parametreler gölün bütün belirtilen istasyonlarinda günlük, haftalık ve aylık olarak yaz sezonu içerisinde ölçülmüştür.

Bu sonuçlara göre, KC-6 istasyonu $BOD_5$ ve $COD_{Cr}$ ölçümleri açısından dramatik bir şekilde atıklar tarafından kirletiliyor, KC-11 istasyonu Marmara Denizi vasıtası ile en yüksek tuzluluk değerleri ve KC-7 istasyonu termokilin tabakaları ile dikkat çekmektedir. Küçükçekmece Gölü düzenli olarak endüstriyel, evsel atıklar tarafından kirletilmektedir ve ötrifikasyon noktasinda artış vardır.

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## LIST OF SYMBOLS

| | |
|---|---|
| DO | : Dissolved Oxygen |
| BOD | : Biological Oxygen Demand |
| $BOD_5$ | : 5-day Biological Oxygen Demand |
| COD | : Chemical Oxygen Demand |
| $COD_{Cr}$ | : Chromate Chemical Oxygen Demand |
| DO (%) | : Saturation Dissolved Oxygen |
| FAS | : Ferrous Ammonium Sulphate |
| ORP | : Oxidation Reduction Potential |
| TCMP | : Tricloromethyl Pyridine |
| KHP | : Potassium Hydrogen Phtalate |
| ÇNRTC | : Çekmece Nuclear Research Training Center |
| NTU | : Nephelometric Turbidity Unit |
| Sp. Conductance | : Specific Conductance |
| mS/cm | : Milli siemens per centimeter |
| ppt | : Parts per thousand |
| ppm | : Parts per thousand |
| mm,dd | : Month, Day (eg. 7,10 denotes for July, 10) |

# 1. INTRODUCTION

The scope of this study is determination of some organic and physical contamination parameters in summer season at the Küçükçekmece lake.

This thesis contains a description of the water quality of the Küçükçekmece lake in terms of some physical, chemical and biochemical activities. .

Biological and chemical pollutants are widespread. Especially in Altinşehir, contamination is carried to the deep water from Sazlıdere, which is contaminated by domestic wastes via karstic holes. Nakkaşdere and Halkalıdere have lots of underground waters around Yarimburgaz, but these are contaminated by municipal and industrial wastes [1].

The Çekmece Nuclear Research and Training Center was established near the lake and the drainage system of the Center is connected to the lake. Trace elements and organic pollutants from a combination of industrial, agricultural and municipal activities have contaminated the lake water. At the same time, this lake was greatly affected by atmospheric input of particulate matter originating from the sweepings of waste storage and use of fossil fuels in the region [2 ].

Organic and chemical matters leak from Halkalı dumpt pollutes Nakkaşdere and large amount of underground waters in alluviums and this pollution goes over to the lake [1]. The commercially important fish species in the lagoon are pike, rudd, grey mullet, flounder, eel and perch. In 1986 the total yearly average fish reproduction was estimated to be 5 tons (unpublished data), however, fish fauna in recent years has declined dramatically. Furthermore, the increase of raw domestic sewage inputs from the growing lakeshore community has accelerated the degree of eutrophication [3].

Some information has been published concerning trace metal and detergent levels in the lake environment [4,5], however, no data on the physical and chemical parameters of the lagoon are found in the literature. On the other hand, several investigations have been carried out on radioecological aspects of the lake [6,7]. This paper reports the data obtained on the temporal variation of some limnological parameters in Küçükçekmece Lake [3].

It is clear that water pollution should be a concern of every citizen. Understanding the sources, interactions, and effects of water pollutants are essential for controlling pollutants in an environmentally safe and economically acceptable manner. Above all, an understanding of water pollution and its control depends upon a basic

knowledge of aquatic environmental chemistry [8]. There are several indicators that are used to describe pollution and to measure water quality [9].

Measurement of DO has been one of the most frequently investigated and evaluated parameters since it is an essential criterion of biological life and organic pollution in sources of natural waters [10]. The amount of the DO in the water is an important indicator of overall Lake Health. When oxygen is reduced, organisms are stressed. When oxygen is absent, all oxygen-breathing life forms must either move to an oxygenated zone or die [11].

Oxygen is present in stream systems as DO. Oxygen is necessary to allow aquatic animals, microorganisms and other chemical reactions to survive in the aquatic system. Oxygen is introduced into the stream through plants (photosynthesis) and from the atmosphere. Aquatic systems with running water (such as streams and rivers) can dissolve more oxygen than aquatic systems with still water (like lakes and swamps) because the water "churns" (and has more interactions with the atmosphere).

The oxygen demand is a key indicator value in analyzing surface water. This generally refers to the volume of oxygen required to effect a total oxidization of substances present in a real or colloidal solution. The substances can be natural (in unpolluted waters) or of artificial origin (in polluted waters, effluent, pesticides, fertilizers, street grime, swimming baths, shipping, washed-out air pollutants etc.) [12].

One of the most important measurements of pollution is the amount of oxygen (in milligrams/liter, or parts per million) used by microorganisms to consume biodegradable organic in wastewater. This criterion, the amount of oxygen consumed, is known as the BOD. It is an index of the amount of $O_2$ utilized by organisms in the metabolism of their food. A high BOD indicates that there is a lot of organic waste material in the water and that a lot of oxygen is being used to decompose the material. If the water has a low BOD, then the amount of organic waste material in it is low and, so far as decomposable organic material is concerned, the water is low in pollution.

Although the BOD of a waterway is of prime importance, it is sometimes convenient to determine COD. By definition, the COD is a measure of the total organic content of a test sample that can be oxidized by potassium dichromate, an oxidizing agent, in a sulfuric acid solution. The test is relatively fast and, when combined with a BOD test gives an indication of the amount of nonbiodegradable and toxic material present. Its main

limitation is that it does not give an accurate index of the extent of biodegradable matter [13].

Another pollution indicator group is the physical and chemical parameters, such as pH, specific conductivity, , salinity, total dissolved solid and turbidity. These parameters are important for the determination of the change of water quality.

In order to acquire aim of this study which is the determination of some organic and physical contamination parameters in summer season in Küçükçekmece Lake, Hydrolab device was used for the measurement of the physical contamination indicator parameters and BOD was detected by using $BOD_5$ methods, COD was detected by using open reflux method and DO was detected in addition to Hydrolab device, by using Winkler method for the determination of the organic contamination.

## 1.1 REVIEW OF THE LITERATURE

The presentation of the lake and the previous studies about the lake are given below.

### 1.1.1 Presentation of the lake

The Küçükçekmece lake (41°00- 28°43E) is a brackish water lagoon of 15,22 $km^2$ surface area and a maximum depth of 20m. It is connected to the Marmara Sea via a narrow channel [2][Figure2.3]. The channel pours out excessive water of the lake to the sea when the water level of the lake or vice versa is higher than the sea level because of ebb and flow, wind, precipitation and other factors that may affect. Therefore, the lake water is salty to some extend [3]. The main fresh water supply comes from underground springs and several small streams [2,3][Figure2.1]

The streams wich are source of water supply to the lake as follows;

1. Azatlıdere (Sazlıdere)
2. Ispartakuledere (Hoşdereçayırıdere)
3. Nakkaşdere (Menekşe)

Azatlıdere was used to flow into the lake, but now it has been partially disconnected from the lake because of dam. Ispartakuledere and Azatlıdere are clean nowadays relatively. Dumptwaters which leak from the Halkalı dumpt and Nakkaşdere containing industrial wastes and alluviums. In addition, chemical and biological wastes from the Firuzköy underground waters and domestic wastes from Halkalı and Küçükçekmece are the main pollutants for the Küçükçekmece lake [14].

The total drainage area of the lake for three streams including the area of the lake itself is about 340 $km^2$. The drainage area of the Küçükçekmece Lake is 56 $km^2$. The drainage areas of the Ispartakuledere (Firuzköy), Sazlıdere and Nakkaşdere (Menekşe) are 157 $km^2$, 84 $km^2$ and 43 $km^2$, respectively [Figure2.2].

The annual average precipitation is about 637mm and the annual average temperature is 13,7°C. The regional wind regimes influencing the lake are dominated by northherlies from north and northeast. Southerly winds with the local name of Lodos are pronounced between September to March. The average annual velocity of the wind is 30 m/sn [15].

### 1.1.2 Studies in the lake

The previous studies about the lake are as below:

Table 1.1 Analysis results by ISKI (Istanbul Water Supply and Wastewater Management) in different dates [16].

| LOCATION | Date of Sampling | $NH_3$-N | Sulphate | BOD | COD |
|---|---|---|---|---|---|
| | | mg/l | mg/l | mg/l | mg/l |
| Front of Halkali customs | 1991 | 0,8 | 586 | 4 | 58 |
| Near the Halkali customs | 1991 | 10 | 553 | 12 | 104 |
| Sazlıdere | 1991 | 0,6 | 549 | 6 | 44 |
| Firüzköy | 1991 | 0,5 | 573 | 4 | 250 |
| Front of Nuclear Research | 1991 | 0,6 | 568 | 11 | 86 |
| Front of Beach | 1992 | 0,1 | 384 | 13 | 58 |
| Firüzköy Sazlıdere | 1992 | 0,2 | 363 | 8 | 76 |
| Front of Halkali customs | 1992 | 0 | 431 | 2 | 32 |
| Near the Halkali customs | 1992 | 0 | 425 | 5 | 35 |
| Sazlıdere | 1992 | 0 | 428 | 3 | 36 |
| Firüzköy | 1992 | 0 | 410 | 1 | 33 |
| Front of Halkali customs | 1993 | 0 | 512 | 31 | 96 |
| Sazlıdere | 1993 | 0 | 542 | 22 | 79 |
| Front of Firüzköy ISKI | 1993 | 0,8 | 540 | 20 | 78 |
| Front of Customs, Köydere | 1994 | 0,1 | 651 | ... | 95 |
| Firüzköy | 1994 | 0,07 | 661 | ... | 85 |
| Front of Nuclear Research | 1994 | 0,09 | 657 | ... | 110 |
| Front of Halkalı customs | 1994 | 0,1 | 661 | ... | 110 |
| Beach of Firüzköy | 1995 | 2,3 | ... | 10 | 99 |

Table 1.2 Measurement results of Biological and Chemical Parameters by Çekmece Nuclear Research and Training Center in 1994 [3].

| At surface water | Station no 1 | Station no 2 | Station no 3 | Station no 4 |
|---|---|---|---|---|
| | (KC-5)* | (KC-6)* | (KC-7)* | (KC-10)* |
| Month | 0.7 | 0.7 | 0.7 | 0.7 |
| $BOD_5$ | 0,9 | 7 | 8,6 | 8,7 |
| $NO_3^-N$ | 0,2 | 0,2 | 0,2 | 0,2 |
| $NO_2^-N$ | 0,047 | 0,035 | 0,048 | 0,025 |
| $PO_4^{-3}$-P | 1,89 | 1,85 | 1,77 | 1,69 |
| Detergent | 0,006 | 0,087 | 0,009 | 0,022 |

* Approximate stations in our study

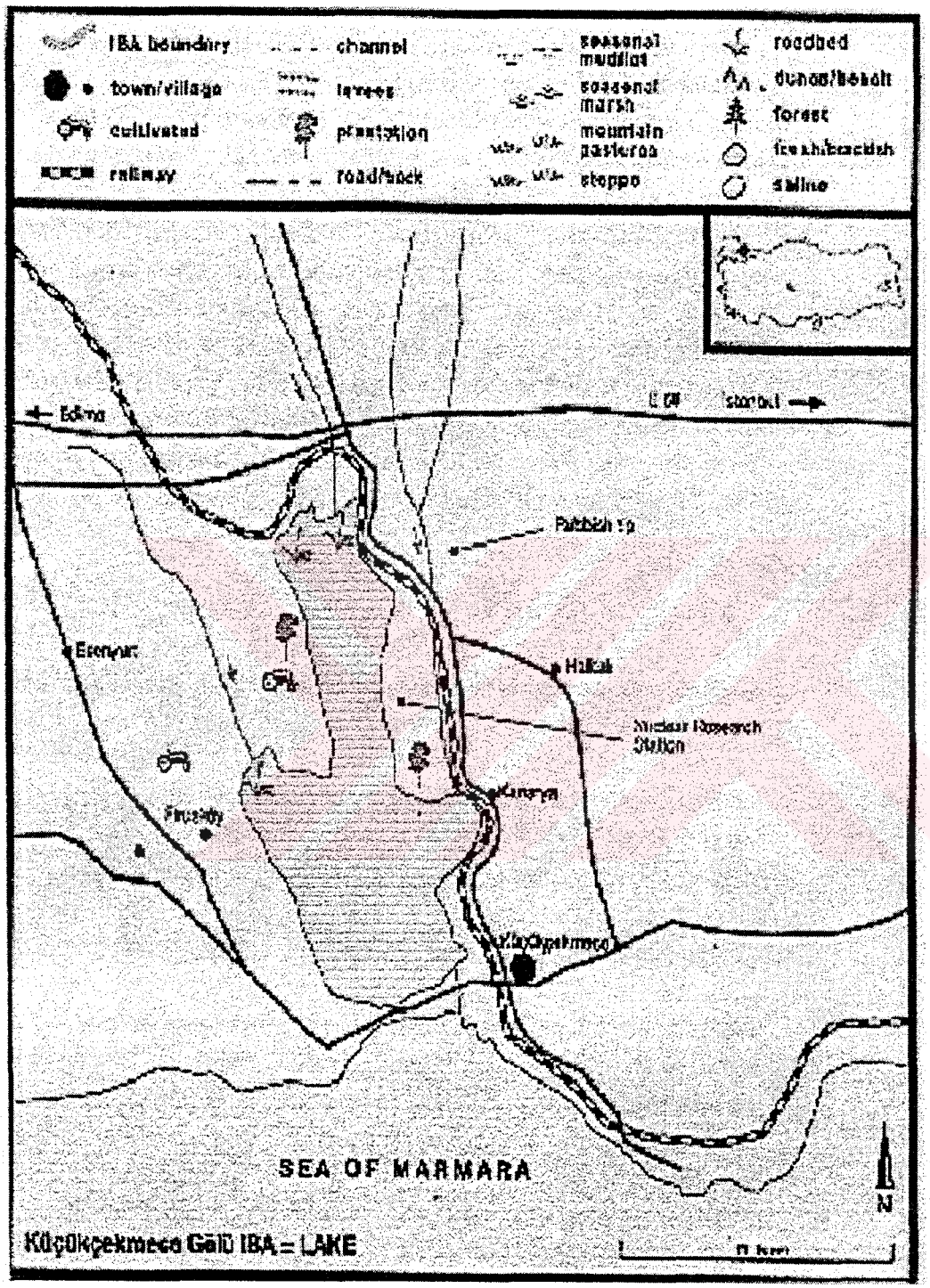


FIGURE 1.1 Presentation of Küçükçekmece Lake map

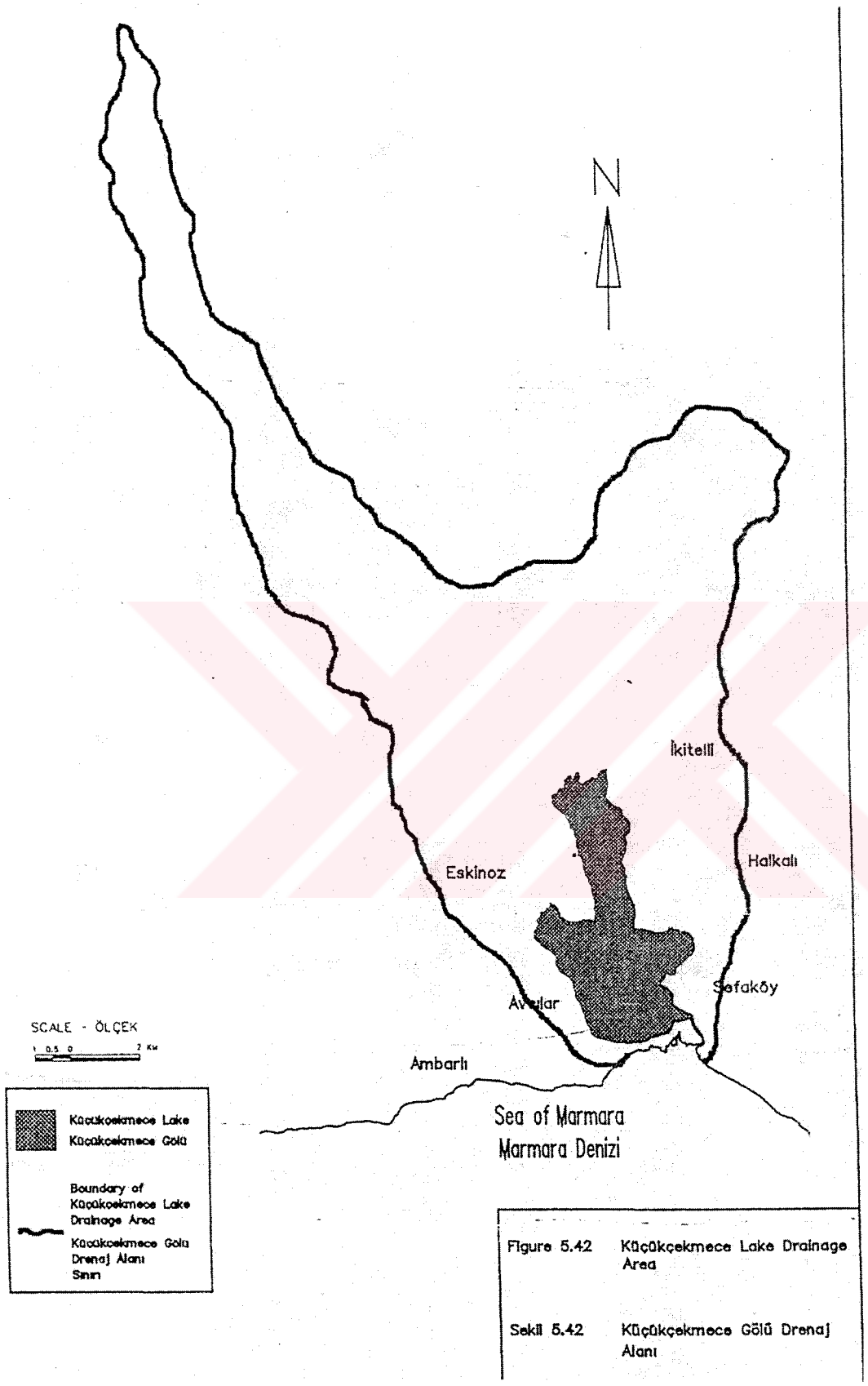


FIGURE 1.2 Presentation of Küçükçekmece Lake Drainage map

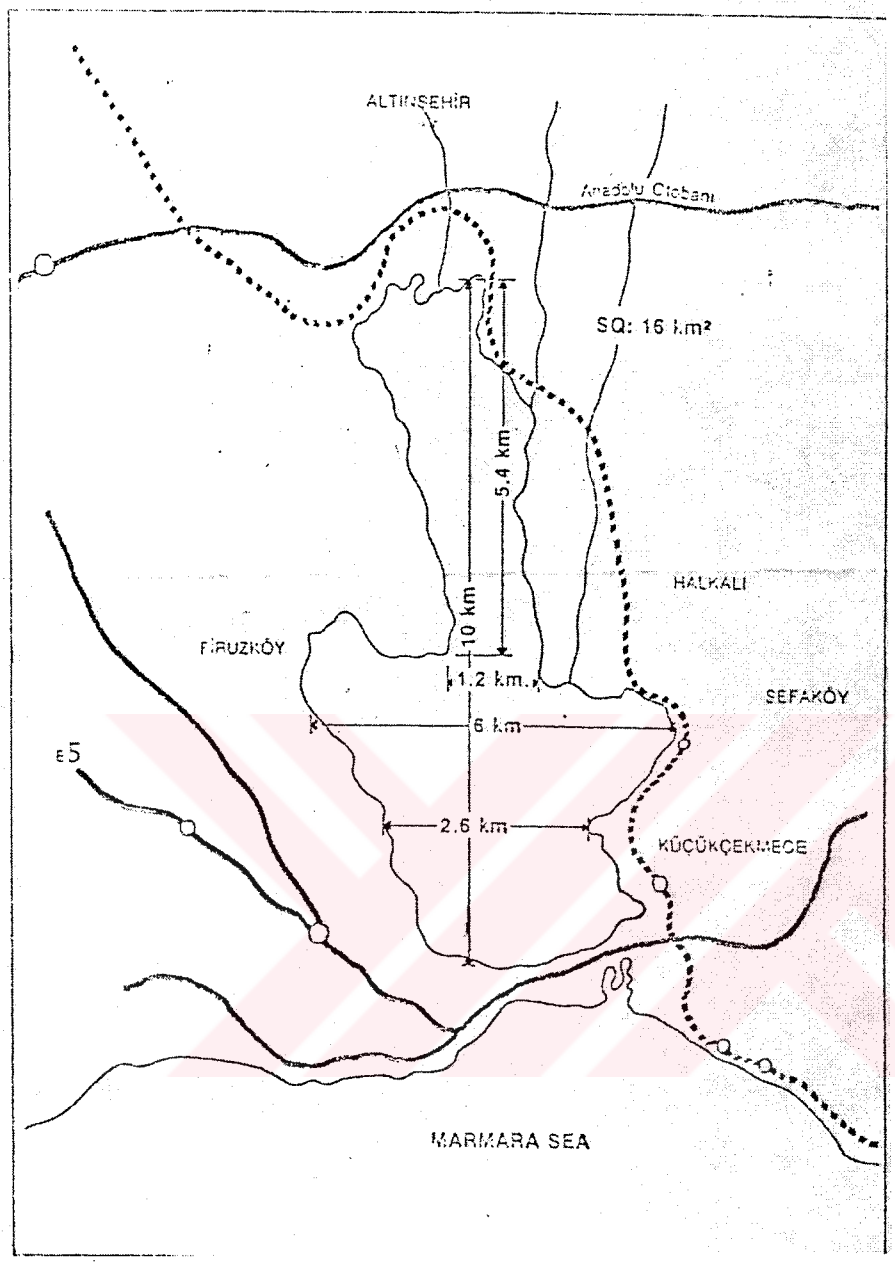


FIGURE 1.3 Presentation of surface area map of the KÜÇÜKÇEKMECE LAKE

## 2. GENERAL INFORMATION

Of all man's natural resources, water is the most plentiful – the earth's oceans, ice caps, glaciers, lakes, rivers, soil, and atmosphere containing approximately 1.5 billion cubic kilometers of water. In spite of this, as the years pass, more and more areas of the world are faced with water availability problems. If water is so plentiful, why should there be cause for concern? There are several reasons for this state of affairs. One of them is the increasing prosperity of many countries. In the developing countries, for example, as little as 12 liters of fresh water is required to sustain each person each day.

The disposal of human wastes has always constituted a serious problem. With the development of urban areas, it became necessary, from public health and aesthetic considerations, to provide drainage or sewer systems to carry such wastes away from the area. The normal repository was usually nearest watercourse. It soon became apparent that rivers and other receiving bodies of water have a limited ability to handle waste materials without creating nuisance conditions. This led to the development of purification or treatment facilities in which chemists, biologists, and engineers have played important roles. The chemist in particular has been responsible for the development of test methods for evaluating the effectiveness of treatment processes and providing knowledge of the biochemical and physicochemical changes involved [13].

It has long been known that all natural bodies of water have the ability to oxidize organic matter without the development of nuisance conditions, provided that the organic loading is kept within the limits of the oxygen resources of the water. It is also known that certain levels dissolved oxygen must be maintained at all times if certain forms of aquatic life are to be preserved. A great deal of research has been conducted to establish these limits, and undoubtedly a great deal more is needed. Such surveys require the combined efforts of biologists, chemists, and engineers if their full value is to be realized.

The purpose of Water Pollution Regulation, which was drafted in line with the articles 8, 9,11, 12 and 13 of Environmental Law no 2872, is to lay down the legal and technical principles for protecting the nations water resource potential, ensuring its use in the best possible way, and preventing water pollution in a way harmonious with economic and social development efforts. The following subjects are specifically mentioned in the regulation as fundamental, priority aims: prevention of the spread of water pollution over the surface waters of the country, protection of groundwater, prevention of coastal and sea

pollution, and regeneration of polluted aquatic environments. The Water Pollution Control Regulation governs the legal and technical principals of water quality control in Turkey and constitutes the main law on this subject in the form of a basic text and six amendments [17].

Knowledge of the way in which different variables affect interactions among organisms and pollutants in the water column is needed to ensure the most effective protection and management of freshwater ecosystems. These interactions are influenced by changes in environmental variables that can alter the physiological condition of the biota or the physicochemical characteristics of the system [18].

## 2.1 TEMPERATURE

Heat is also industrial waste that is discharged into water; heated discharges may drastically after the ecology of a stream or lake. Although such local heating can have beneficial effects like freeing harbors from ice, the primary effect is deleterious: lowering the solubility of oxygen in the water, because gas solubility in water is inversely proportional to temperature, and thereby reducing the amount of DO available to gill-breathing species. As the level of DO decreases, metabolic activity of aerobic aquatic species increases, thus increasing oxygen demand [19].

In limnological studies, water temperatures as a function of depth often are required. Elevated temperatures resulting from discharges of heated water may have significant ecological impact. Identification of source of water supply, such as deep wells, often is possible by temperature measurements alone. Industrial plants often require data on water temperature for process use or heat-transmission calculation [20].

The discharge of heated water into a waterway can have a number of effects. An increase in temperature affects the physical properties of water such as the rate at which it evaporates its density, and its ability to dissolve gasses. One of the most important effects is that as the temperature increases the amount of dissolved oxygen decreases. Not only does a rise in water temperature result in decrease in the amount of dissolved oxygen but also it brings about in the aquatic organisms an increase in the rate oxygen consumption and biochemical reactions. Thus the metabolism of fish and microorganisms is increased, further depleting the amount of available oxygen. Elevated temperatures also result in a decrease in the affinity of hemoglobin for oxygen. Heated water, by decreasing the amount of oxygen in the water, has still other effects. Potentially toxic substances present in sublethal amounts with abundant oxygen become lethal when the dissolved oxygen is

greatly reduced. For example, metal ions such as, nickel, zinc, iron, and selenium, present in sublethal amounts along with abundant oxygen may become lethal if the oxygen concentration is drastically reduced [13].

Deep lakes and reservoirs may become thermally stratified, particularly during the summer months. Thermal stratification is caused by variations in the density of water in lakes and reservoirs. Water is at its densest at $4^0$C, when it weighs exactly 1000 kg/$m^2$. However either side of this temperature water is less dense. During the summer the sun heats the surface of the water reducing its density, so that the colder denser water remains at the bottom of the lake. As the water continues to heat up, then two distinct layers develop. The top layer or epilimnion is much warmer than the lower layer, the hypolimnion. Owing to the differences in density, the two layers separated by a static boundary layer known as the thermocline, do not mix but remain separate [21].

Industrial cooling prolonged exposure may produce undesirable physiological effects, causes adverse effects on aquatic life taste and odor. [22]

**2.2 pH**

pH is a measure of the alkalinity or acidity of a substance. Like temperature, pH level effects both biological and chemical processes. The level of pH in an aquatic system can hinder the reproduction of certain organisms and can allow toxic substances to become more readily available for uptake by aquatic plants and animals. Chemical process used to coagulate sewage or industrial wastes, dewater sledges, or oxidized certain substances, such as cyanide ion require that the pH be controlled within rather narrow limits The pH of a solution is a measure of hydrogen ion concentration, which is in turn a measure of its acidity. Pure water dissociates slightly into equal concentrations of hydrogen and hydroxyl ions [21].

An excess of hydrogen ions makes a solution acidic, whereas a decerase of hydrogen ions or excess of hydroxyl ions, makes its basic. pH is an important in almost all phases of water and wastewater treatment. Aquatic organisms are sensitive to pH changes and biological treatment requires either pH control or monitoring. In water treatment as well as disinfecting and corrosion control, pH is important in ensuring proper chemical treatment Due to presence of acids or alkalis higher or lower pH affects aquatic life and makes it unfit for human use [19].

## 2.3 SPECIFIC CONDUCTANCE

This method is applicable to drinking, surface and saline waters domestic and industrial wastes. The specific conductance of a sample is measured by use of a self-contained conductivity meter. Instruments must be standardized with KCl solution before daily use. Conductivity cell must be kept clean. Field measurements with comparable instruments are reliable [23]. It is directly proportional to the salinity.

## 2.4 TURBIDITY

Turbidity is a measure of how clear the water is; how much the suspended material in water decreases the passage of light through the water. Material that can increase the turbidity are clay, silt, sand, algae, plankton, microbes and other substances. High levels of turbidity can increase the temperature of water. High amounts of suspended particles can also clog fish gills and effect the development of eggs and larvae. As the rivers progress toward the ocean, they pass through urban areas where domestic and industrial wastewater, treated or untreated may be added. Organic materials reaching rivers serve as food for bacteria and the resulting bacterial growth and other microorganisms that feed upon the bacteria produce additional turbidity. From the above considerations, it is safe to say that the materials causing turbidity may range from purely inorganic substances to those that are largely organic in nature. This disparity in the nature of the materials causing turbidity makes it impossible to establish hard and fast rules for its removal. [21]

The aerobic biological activity produces turbidity, decreasing light penetration and in turns limiting photosynthetic algael activity in the surface layers. The amount of DO contributed by the algae is therefore decreased. Eventually, the epilinion also becomes anaerobic, all aerobic aquatic life disappears and the algae concentrate on the lake surface because only there is enough light available for photosynthesis. Due to the presence of suspended clay or dispersed organic and microorganics affect aquatic life also objectionable from aesthetic point of view [22]

## 2.5 SALINITY

Salinity is a critical parameter in the aquatic life. It is dependent on salinity variations. Its fluctuations can cause dead of the aquatic living bodies. Fortunately, living bodies can adapt the medium where they live but it does not occur simultaneously. In addition, variation of salinity effects on algae results in change of their original forms. Ionic composition of the water has vital importance on aquatic species due to osmotic pressure [24].

## 2.6 DO

Measurement of DO has been one of the most frequently investigated and evaluated parameters since it is an essential criterion of biological life and organic pollution in sources of natural waters [10]. The amount of the DO in the water is an important indicator of overall Lake Health. When oxygen is reduced, organisms are stressed. When oxygen is absent, all oxygen-breathing life forms must either move to an oxygenated zone or die [11].

Oxygen is present in stream systems as DO. Oxygen is necessary to allow aquatic animals, microorganisms and other chemical reactions to survive in the aquatic system. Oxygen is introduced into the stream through plants (photosynthesis) and from the atmosphere. Aquatic systems with running water (such as streams and rivers) can dissolve more oxygen than aquatic systems with still water (like lakes and swamps) because the water "churns" (and has more interactions with the atmosphere).

The oxygen demand is also key indicator value in analyzing surface water. This generally refers to the volume of oxygen required to effect a total oxidization of substances present in a real or colloidal solution. The substances can be natural (in unpolluted waters) or of artificial origin (in polluted waters, effluent, pesticides, fertilizers, street grime, swimming baths, shipping, washed-out air pollutants etc.). [12]

Dissolved Oxygen levels in natural and waste - waters depend on the physical, chemical and biochemical activities in the water body. The analysis for DO is a key test in water pollution and waste treatment process control. The solubility of atmospheric oxygen in fresh waters ranges from13.6 mg/L at 0°C to about 7mg/L at 35°C under1atmosphere of pressure. Since it is a poorly, soluble gas, its solubility varies directly with the atmospheric pressure at any given temperature. This is an important consideration at high altitudes.

Because rates of biological oxidation increase with temperature and oxygen demand increases accordingly, high- temperature conditions, where DO is least soluble are of greatest concern to sanitary engineers. Most of the critical conditions related to DO deficiency in sanitary engineering practice occur during the summer months when temperatures are high and solubility of oxygen is at a minimum level. For this reason it is customary to think of DO levels of about 8mg/L as being the maximum available.

The low solubility of oxygen is the major factor that limits the purification capacity of natural waters and necessitates treatment of wastes to remove pollution matter before discharge to receiving streams. In aerobic biological treatment processes the limited solubility of oxygen is of great importance because it governs the rate at which oxygen will be absorbed by the medium and therefore the cost of aeration.

In liquid wastes, DO is the factor that determines whether the biological changes are brought about by an aerobic organism. The former use free oxygen for oxidation of organic and inorganic matter and produce innocuous end products, whereas the latter bring about such oxidation's through the reduction of certain inorganic salts such as sulfates and the end products are often very obnoxious. Since both types of organisms are ubiquitous in nature, it is highly important that conditions favorable to the aerobic organisms (aerobic conditions) be maintained; otherwise the anaerobic organisms will take over, and development of nuisance conditions will result. Thus DO measurements are vital for maintaining aerobic conditions in natural waters that receive pollution matter and in aerobic treatment processes intended to purify domestic and industrial waste – waters.

DO measurements are used for a wide variety of other aims. It is one of the most important single tests that the sanitary engineer uses. In most instances involving the control of stream pollutions, it is desirable to maintain conditions favorable for the growth and reproduction of a normal population of fish and other aquatic organisms. This condition requires the maintenance of DO levels that will support the desired aquatic life in a healthy condition at all time.

Determinations of DO serve as the basis of the BOD test; thus they are the foundation of the most important determination used to evaluate the pollution strength of sewages and industrial wastes. The rate of biochemical oxygen can be measured by determining residual DO in a system at various intervals of time.

All aerobic treatment processes depend upon the presence of DO, and test for it are indispensable as a means of controlling the rate of aeration to make sure that adequate

amounts of air are supplied to maintain aerobic conditions and also to prevent excessive use of air.

Azide Modification is used for most wastewater, effluent, and stream samples, especially if samples contain more than 50mg $NO_2$-.N/L and not more than 1mg ferrous iron/L. Other reducing or oxidizing materials should be absent. If 1mL KF solution is added before the sample is acidified there is no delay in titration, the method is applicable in the presence of 100 to 200 mg ferric iron/L.

In this method the sample is treated with manganous sulfate, potassium hydroxide, and potassium iodide reagents and finally sulfuric acid. The initial precipitate of Manganous hydroxide, $Mn(OH)_2$ , combines with the DO in the sample to form a brown precipitate, manganic hydroxide. Upon acidification, the manganic hydroxide forms manganic sulfate, which acts as an oxidizing agent to release free iodine from the potassium iodine. The iodine, which is stoichiometrically equivalent to the DO in the sample, is then titrated with sodium thiosulfate.

There is a number of interference to the DO test, including oxidizing and reducing agents, nitrate ion, ferrous iron, and organic matter [25].

## 2.7 BOD

Analyses of organics are made to assess the concentration and general composition of organic matter in raw water supplies, wastewater, treated effluents, and receiving waters; and to determine the efficiency of treatment processes [26].

The BOD test is used for determining the relative oxygen requirements of municipal and industrial wastewater. Application of the test to organic waste discharges allows calculation of the effect of the discharges on the oxygen resources of the receiving water. Data from BOD tests are also used for the development of engineering criteria for the design of wastewater treatment plants [27].

Analysis for organic matter in water and wastewater can be classified into two general types of measurements; those that quantify an aggregate amount of organic matter comprising organic constituents with a common characteristic and those that quantify individual organic compounds.

Methods for total organic carbon and COD are used to asses the total amount of organics present. Gross fractions of the organic matter can be identified analytically, as in the measurements of BOD, which is an index of the biodegradable organics present, oil and

grease, which represents material extractable from a sample by a nonpolar solvent or dissolved organic halide (DOX), which measures organically bound halogens [26].

The method consists of filling with sample, to overflowing, an airtight bottle of the specified temperature for five day. Dissolved oxygen is measured initially and after incubation, and the BOD is computed from the difference between initial and final dissolved oxygen is determined immediately after the dilution is made. Biochemical oxygen demand data have wide application in sanitary engineering practice. It is the principal test applied to sewage and industrial wastes to determine strength in terms of oxygen required for stabilization. It is the only test applied that gives a measure of the amount of biologically oxidizable organic matter present that can be used to determine the rates at which oxidation will occur, or BOD will be exerted, in receiving bodies of water. BOD therefore the major criterion used in stream pollution control where organic loading must be restricted to maintain desired dissolved oxygen levels. The determination is used in studies to measure the purification capacity of streams and serves regulatory authorities as a means of checking on the quality of effluents discharged to such waters.

BOD is usually defined as the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions. The term "decomposable" may be interpreted as meaning that the organic matter can serve as food for the bacteria, and energy is derived from its oxidation.

The BOD test is essentially a bioassay procedure involving the measurement of oxygen consumed by living organisms (mainly bacteria) while utilizing the organic matter present in a waste, under conditions as similar as possible to those that occur in nature. In order to make the test quantitative, the samples must be protected from the air to prevent re-aeration as the dissolved oxygen level diminishes. In addition, because of the limited solubility of oxygen in water, about 9mg/L at 20C, strong wastes must be diluted to levels of demand in keeping with this value to ensure that dissolved oxygen will be present throughout the period the test.

Mixed culture of organisms derived from domestic sewage, contain large numbers of saprophytic bacteria and other organisms that utilize the carbonaceous matter present in the samples subjected to BOD analysis, and use oxygen in a corresponding amount. In addition, they normally contain certain autotrophic bacteria, particularly nitrifying bacteria, which oxidize noncarbonaceous matter for energy. The nitrifying bacteria are usually present in relatively small numbers in untreated domestic sewage, and

fortunately their reproductive rate at 20 ° C is such that their populations do not become sufficiently large to exert an appreciable demand for oxygen until about8 to 10 days have elapsed in the regular BOD test.

Once the organisms become established, they oxidize nitrogen in the form of ammonia to nitrous and nitric acids in amounts that introduce serious error into BOD work.

It is true that the oxidation of inorganic nitrogen can deplete the dissolved oxygen in stream and the engineer must take lakes and this effect into account. However, it is not desirable to use normal BOD measurements for such estimates, because ammonia nitrogen is added to BOD dilution water as a required nutrient and its oxidation could lead to erroneous conclusions about the waste. The potential dissolved oxygen utilization by nitrification is best evaluated by an analysis of this waste for the different forms of nitrogen present and use of stoichiometric relationships between oxygen and nitrogen.

The interference caused by nitrifying organisms makes the actual measurement of total carbonaceous BOD impossible unless provision is made to eliminate them. The interference caused by the nitrifying bacteria was a major reason for selecting a 5-day incubation period for the regular BOD test. All oxygen uptakes, including that occurring during the first 15min is included in the BOD measurement [28].

The BOD test is an empirical bioassay type procedure, which measures the dissolved oxygen consumed by microbial life while assimilating and oxidizing the organic matter present. The standard test conditions include dark incubation at 20 ° C for a specified time period (often 5 days). The actual environmental conditions of temperature, population, biological, water movement, sunlight and oxygen concentration cannot be accurately reproduced in the laboratory. Results obtained must take into account_the above factors when relating BOD results to stream oxygen demands.

Shortly, the sample of waste, or an appropriate dilution, is incubated 5 days at 20 °C in the dark. The reduction in DO concentration during the incubation period yields a measure of the BOD [27].

## 2.8 COD

Chemical Oxygen Demand method determines the quantity of oxygen required to oxidize the organic matter in a waste sample. Under specific conditions of oxidizing agent, temperature and time.

Since test utilizes a rigorous chemical oxidation rather than a biological process, the result has no definable relationship to the BOD of the waste. The test result should be considered as an independent measurement of organic matter in the sample, rather than as a substitute for the BOD test.

The method can be applied to domestic and industrial waste samples having an organic carbon concentration greater than 15mg/L. (When the chloride concentration of the sample exceeds 2000mg/L, the modification for saline waters is required [29].

The COD test is widely used as a means of measuring the pollution strength of domestic and industrial wastes.

The chemical oxygen demand is used as a measure of the oxygen equivalent of the organic matter content of a sample that is susceptible to oxidation by a strong chemical oxidant [30].

It is applicable to the analysis of surface waters, domestic and industrial wastes with low characteristic [29].

For samples from a specific source, COD can be related empirically to BOD, organic carbon, or organic matter [30].

During the determination of COD, organic matter is converted to carbon dioxide and water regardless of the biological assimilability of the substances. For example, glucose and lignin are both oxidized completely. As a result, COD values are greater than BOD values and may be much greater when significant amounts of biologically resistant organic matter is present.

The major advantage of the COD test is the short time required for evaluation. The determination can be made in about 3 hour rather than the 5 days required for the measurement of BOD. For this reason it is used as a substitute for the BOD test in many instances. COD data can often be interpreted in terms of BOD values after sufficient experience has been accumulated to establish reliable correlation factors.

One of the chief limitations of the COD test is its inability to differentiate between biologically oxidizable and biologically inert organic matter. In addition, it does not provide

any evidence of the rate at which the biologically active material would be stabilized under conditions that exist in nature.

The COD test is precise and accurate for samples with a COD of 50 mg/L or greater. For more dilute samples it is preferred that a more dilute dichromate solution be used so that a significant relative difference between the quantity of dichromate added and that remaining after refluxing results. With dilute samples, care must be exercised to avoid sample contamination, and good analytical techniques must be used if reasonably accurate results are to be obtained. It is also important in any modification that the volume of sample plus dichromate solution be maintained at a 1:1 ratio. If it is smaller, the oxidizing power of the solution will decrease significantly, while if it is larger, the blank consumption of dichromate becomes excessive [29].

Most types of organic matter are oxidized by a boiling mixture of chromic and sulfuric acids A sample is refluxed in strongly acid solution with a known excess of potassium dichromate ($K_2CrO_7$).

After digestion, the remaining unreduced $K_2CrO_7$ is titrated with FAS to determine the amount of $K_2CrO_7$ consumed and the oxidizable organic matter is calculated in terms of oxygen equivalent [31].

Both the COD and BOD tests are designed to measure oxygen requirements by oxidation of organic matter present in the samples. It is important, therefore, that no organic matter from outside sources be present or a true measure of the amount present in the samples to be obtained. Since it is impossible to exclude extraneous organic matter in the BOD test and impractical to do so in the COD test, blank samples are required in both determinations.

A very marked change in ORP occurs at the end point of all oxidation-reduction reactions. Such changes may be readily detected by electronic means if the necessary equipment is available. Ox- Red indicators may also be used; Ferroin (ferrous 1,10-phenantroline sulfate) is an excellent one to indicate when all dichromate has been reduced by ferrous ion. It gives a very sharp color change that is easily detected in spite of the green color produced by the $Cr^{+3}$ formed on reduction of the dichromate [29].

The dichromate reflux method is preferred over procedures using other oxidants because of superior oxidizing ability, applicability to a wide variety of samples, and ease of manipulation.

Oxidation of most organic compounds is 95 to 100% of the theoretical value. Pyridine and related compounds resist oxidation and volatile organic compounds are oxidized only to the extent that they remain in contact with the oxidant [30] .

Chemical oxidizing agents have long been used for measuring the oxygen demand of sewage and polluted waters.

Organic substances in the sample are oxidized by potassium dichromate in 50% sulfuric acid solution at reflux temperature. Silver sulfate is used as a catalyst and mercuric sulfate is added to remove chloride interference. The excess is titrated with standard ferrous ammonium sulfate, using ferroin complex as an, indicator.

To reduce loss of volatile organic, the flask should be cooled during addition of the sulfuric acid solution [29].

In any method of measuring COD an excess of oxidizing agent must be present to ensure that all organic matter is oxidized as completely as is within the power of the reagent. This requires that is reasonable excess being present in all samples. It is necessary, of course, to measure the excess in some manner so that the actual amount reduced can be determined. A solution of a reducing agent is ordinarily used.

Nearly all solutions of reducing agents are gradually oxidized by oxygen dissolved from the air unless special care is taken to protect them from oxygen. Ferrous ion is an excellent reducing agent for dichromate. Solutions of it can be best prepared from ferrous ammonium sulfate which obtainable in rather pure and stable form. In solution, however, it is only oxidized by oxygen, and standardization is required each time the reagent is to be used. The standardization is made with the 0.25N dilution of dichromate. The reaction between ferrous ammonium sulfate and dichromate may be represented as follows.

Potassium dichromate is a relatively cheap compound, which can be obtained in a high state of purity. The analytical reagent grade, after drying at 103C, can be used to prepare solutions of an exact normality by direct weighing and dilution to the proper volume. The dichromate ion is a very potent oxidizing agent in solutions that are strongly acid. The reaction involved may be represented in a general way as follows;

COD results are reported in terms of milligrams of oxygen. Since the equivalent weight of oxygen is 8, it would seem logical to use a N/8 or 0.125N solution of oxidizing agent in the determination, so that results can be calculated in accordance with the general procedure.

Experience with the test has shown that it has sufficient sensitivity to allow the use of a stronger solution of dichromate, and a N/4 or 0.25N solution is recommended. This allows the use of larger samples by doubling the range of COD that can be measured in the test procedure, since each milliliter of a 0.25N solution of dichromate is equivalent to 2mg of oxygen. It is based upon the fact that all organic compounds, with a few exceptions, can be oxidized by the action of strong oxidizing agents under acid conditions. The amino nitrogen will be converted to ammonia nitrogen. However organic nitrogen in higher oxidation states will be converted to nitrate [31].

Potassium dichromate has been found to be most practical off all of other oxidizing agents, since it is capable of oxidizing a wide variety of organic substances almost completely to carbon dioxide and water. Because all oxidizing agents must be used in excess, it is necessary to measure the amount of excess remaining at the end of the reaction period in order to calculate the amount actually used in the oxidation of the organic matter. It is relatively easy to measure any excess of potassium dichromate, an important point in its favor [30].

In order for potassium dichromate to oxidize organic matter completely, the solution must be strongly acidic and at an elevated temperature. As a result, volatile materials originally present and those formed during the digestion period are lost unless provision is made to prevent their escape. Reflux condensers are ordinarily used for this purpose and allow the sample to be boiled without significant loss of volatile organic compounds [25].

Certain organic compounds, particularly low-molecular weight fatty acids, are not oxidized by dichromate unless a catalyst is present. It has been found that silver ion acts effectively in this capacity. Aromatic hydrocarbons and pyridine are not oxidized under any circumstance [29].

Straight-chain aliphatic compounds are oxidized more effectively when silver sulfate ($Ag_2SO_4$) is added as a catalyst. However $Ag_2SO_4$ reacts with chloride, bromide and iodide to produce precipitates that are oxidized only partially.

The difficulties caused by the presence of the halides can be overcome largely, though not completely, by complexing with mercuric sulfate ($HgSO_4$) before the refluxing procedure.

Although 1g $HgSO_4$ is specified for 50mL sample a lesser amount may be used where sample chloride con is known to be less than 2000mg $CL^-$/L, as long as a 10:1 ratio of $HgSO_4$: $CL^-$ is maintained. Do not use the test for samples containing more than 2000mg $CL^-$ /L. Techniques designed to measure COD in saline waters are available.

Nitrite ($NO_2^-$) exerts a COD of 1.1mg O2/mg $NO_2^-$ -N. Because cons of $NO_2^-$ in waters rarely exceed 1or 2 mg $NO_2^-$ -N, the interference is considered insignificant and usually is ignored. To eliminate a significant interference due to $NO_2^-$ add 10 mg sulfamic acid to the reflux vessel containing the distilled water blank.

Reduced inorganic species such as ferrous iron, sulfide, manganese etc, are oxidized quantitatively under the test conditions.

For samples containing significant levels of these species, stoichiometric oxidation can be assumed from known initial concentrated of the COD value obtained. [31]

Certain reduced inorganic ions can be oxidized under the conditions of the COD test and thus can cause erroneously high results to be obtained. Chlorides cause the most serious problem because of their normally high concentration in most wastewater.

Fortunately this interference can be eliminated by the addition of mercuric sulfate to the sample prior to the addition of the other reagents. The mercuric ion combines with the chloride ions to form poorly ionized mercuric chloride.

In the presence of excess mercuric ions the chloride ion con is so small that is not oxidized to any extent by dichromate.

Nitrites are oxidized to nitrates and this interference can be overcome by the addition of sulfamic acid to the dichromate solution. However, significant amounts of nitrite seldom occur in wastes or in natural waters. This also holds true for other possible interference such as ferrous iron and sulfides [29].

Traces of organic material either from the glassware or atmosphere may cause a gross, positive error.Extreme care should be exercised to avoid inclusion of organic materials in the distilled water used for reagent preparation or sample dilution.

Glassware used in the test should be conditioned by running blank procedures to eliminate traces of organic material.

Volatile materials may be lost when the sample temperature rises during the sulfuric acid addition step.

Chlorides are quantitatively oxidized by dichromate and represent a positive interference. Mercuric sulfate is added to the digestion flask to complex the chlorides, thereby effectively eliminating the interference on all but brine and estuarine samples [31].

# 3. MATERIALS AND METHODS

In this research, some chemical and physical parameters of Küçükçekmece Lake were in the summer season daily, weekly and monthly in eight (8) different locations investigated.

## 3.1 CHEMICAL REAGENTS AND BUFFERS USED IN THE RESEARCH

### 3.1.1 DO

| | |
|---|---|
| Manganous (II) sulfate solution | : 400g $MnSO_3.2H_2O$ in 1L |
| Alkali –iodide-azide reagent | : 10g $NaN_3$ + 350g NaOH+150g NaI in 0.5 L |
| Sulfuric acid | : $H_2SO_4$ [diluted (1+1)] in 1L |
| Starch indicator | : Aqueous solution |
| Sodiumthiosulfate solution | : 6,205g $Na_2S_2O_2.5H_2O$ in 1L |
| Potassium hydrogen diiodate solution | : 1,624g KH $(IO3)_2$ in 1 L |

### 3.1.2 BOD

| | |
|---|---|
| Phosphate buffer solution, pH 7.2 | : 8.5g $KH_2PO_4$ + 21.75g $K_2HPO_4$ + 32.4g$Na_2HPO_3.7\ H_2O$ + 1.7g $NH_4Cl$ in 1L |
| Magnesium sulfate solution | :22.5g $MgSO_3.7\ H_2O$ in 1L |
| Calcium chloride solution | :27.5g $CaCl_2$ in 1L |
| Ferric chloride solution | :$FeCl_2.6\ H_2O$ in 1L |
| Acid solution | :28ml conc. $H_2SO_4$ in 1L |
| Alkali solution | :40g NaOH in 1L |
| Sodium sulfite solution | :1.575g $Na_2S_2O_3$ in 1L |
| Nitrification inhibitor | :2-chloro-6-TCMP |
| Glucose-Glutamic acid solution | :150mg Glucose+150mg Glutamic acid in 1L |
| Ammonium chloride solution | :1.15g $NH_4Cl$ in 1L pH 7.2 |

### 3.1.3 COD

| | |
|---|---|
| Standard potassium dichromate solution | :12.26g $K_2Cr_2O_7$ in 1L |
| Sulphuric acid reagent | : 4.5g AgSO4/kg $H_2SO_4$ |
| Sulphuric acid | : 220ml conc. $H_2SO_4$ in 1L |
| Ferroin indicator solution | : 1.50g 1,10- $(C_{32}H_8N_2.H_2O)$ + 0.7g $FeSO_3.7\ H_2O$ in 1L |
| Standard FAS | : 98g $Fe(NH_4)_2(SO_4)_2.6\ H_2O$ 20ml conc. $H_2SO_4$ in 1L |

Mercuric sulphate : 0.4g $Hg_2SO_4$

KHP standard :425mg $C_8H_5O_4K$ in 1L

## 3.2 METHOD

### 3.2.1 Sampling

In this study samples, for DO, BOD, and COD were collected about 15 cm below the surface water then it was carried to the laboratory to analyse and some physical parameters were measured by Hydrolab Digital Measurement system in situ at all locations of the Küçükçekmece Lake at different depths. Samples, for DO, BOD, and COD were collected at the following dates; 7.10.98, 7.16.98, 8.02.98, 8.03.98. Using Hydrolab device measurement was done at the following dates; 6.16.98, 7.10.98, 7.16.98, 7.29.98, 8.02.98, and 8.03.98. DO was started to analysed in situ by adding 2ml of manganous sulphate solution followed by 2ml of the alkaline iodide-azide solution into the incubation bottles and then it was analysed in the laboratory by "Winkler" method. BOD and COD samples were taken by plastic containers. After that BOD was analysed by $BOD_5$ incubation method and COD was analysed by "Open Reflux Method".

Starting from landing, water samples were collected from KC-4, KC-5, KC-6, KC-7, KC-8, KC-9, KC-10 and KC-11 locations in summer season (ÇNRTC). The channel, which connects Marmara Sea and Küçükçekmece Lake, was called KC-11 location. In this research, the KC-11 location was at the first time investigated. Sampling locations are demonstrated in the following map.

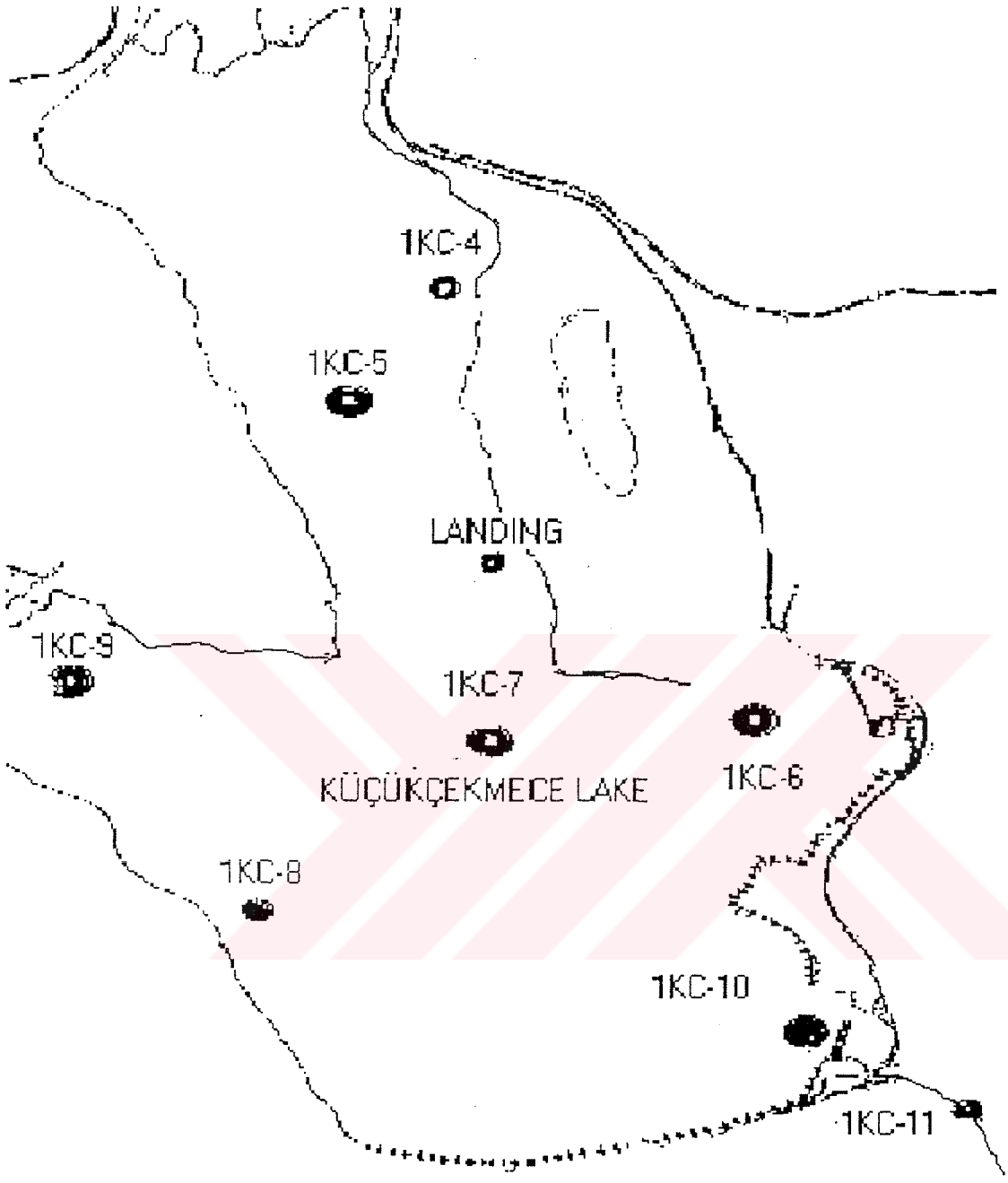


FIGURE 3.1 Küçükçekmece Lake Sample locations

### 3.2.2 Digital System Measurement

Using Water Quality Measuring System temperature, pH, DO, depth and turbidity parameters were measured in situ at all eight locations.

Water Quality Measuring System consists of H 20 Multiprobe and Surveyor 3 Display Logger, which has special software (Hyplot). Before measurement with Hydrolab Digital Measurement device, it was calibrated properly each time.

### 3.2.3 Measurement of DO

Samples were collected from surface water of all locations in narrow-mouth glass-stoppered BOD bottles of 250-300 ml capacity with tapered and pointed ground-glass stoppers and flared mouths. Bottles were filled to overflowing as much as quickly to prevent turbulence and formation of bubbles while filling. 2ml of manganous sulphate solution followed by 2ml of the alkaline iodide-azide solution well below the surface of the liquid were added to the sample collected in the BOD incubation bottle; stoppered with care to exclude air bubbles, and mixed well by inverting the bottle several times. When the brown precipitate settles, leaving a clear supernatant above the manganese hydroxide floc, it was shaked again. After collection of samples, arrived to the laboratory as soon as possible. Sodium azide reagent preserves samples. At the laboratory, the stopper was removed carefully and immediately 2ml of (1+1) $H_2SO_4$ solution was added by allowing the acid to run down the neck of the bottle, re-stopper, and mixed by gentle inversion until the iodine is uniformly distributed throughout the bottle. The entire bottle contents were transferred by inversion into 500ml wide mouth flask and titrated with 0,02 M thiosulphate solution to a pale straw colour. 1-2 ml of starch solution was added and continued to titration till the first disappearance of the blue colour [25].

### 3.2.4 Measurement of BOD

Desired volume of water was placed into clean 5L-graduated cylinder with 4ml of each phosphate buffer, MgSO4, CaCl2, FeCl3 solutions and 40mg TCMP as nitrification inhibitor. The partially filled graduated cylinder was shaked several times for saturation with DO and diluted to 4L. It was not seeded since samples had enough micro - organisms. Samples were mixed at different ratios with this dilution water, regarding to. After preparation of two BOD bottles, one of them was rapidly determined for initial DO. The second bottle was closed tightly, water sealed and incubated for 5 days at 20°C ± 1. After

5-day incubation the final DO was determined for the second bottle. The difference between initial DO and final DO gives the BOD4.

For blank the difference should not be more than 0.2mg/l and preferably not more than 0.1mg/l. [32].

### 3.2.5 Measurement of COD

Samples were collected in glass bottles. The measurement is going to be unstable, if there is a postponement. After a postponement the sample were preserved by acidification to pH $\leq 2$ using concentrated $H_2SO_4$ by pH-meter.

In a 250ml round bottom flask made of heat-resistant glass including 10ml sample, 0.4g $HgSO_4$, several glass beads and 5ml of 0.25N $K_2Cr_2O_7$ solution were mixed. Then 15 ml of sulphuric acid reagent was added slowly with swirling motion into the flask, which is in an ice-bath. After that was the flask to a 12inch condenser connected. Care must be taken to assure that the contents of the flask are well mixed. If not, superheating may result, and the mixture may be blown out of the open end of the condenser. After the attachment of the flask to the condenser, the flask was applied to heat and refluxed for 2 hours at 148 ± 3 °C. The time required to give the maximum oxidation for a wastewater of constant or known composition may be determined and a shorter period of refluxing may be permissible. After boiling until formation of bubbles, the flask was allowed to cool until 60 °C about 30 minutes and the condenser was washed down. The acid solution was diluted to cool about room temperature. 2 or 5 drops of Ferroin indicator was added to the solution and the excess dichromate was titrated with 0.025N ferrous ammonium sulphate (FAS) solution to the end point. The colour change was sharp, changing from a blue-green to a reddish blue [31].

# 4.0 EVALUATION

## 4.1 Evaluation of DO

Determinations of DO serve as the basis of the BOD test, thus they are the foundation of the most important determination used to evaluate the pollution strength of sewages and industrial wastes.

It is important for the evaluation of surface-water quality and waste-treatment process control.

DO is computed as a unit of mg/L by the following formula.

$Co_2$ , (mg/L) = (a* f*160)/ (Vb-4) where

A= Volume of 0.02M $Na_2S_2O_3$ solution used titration

F=Factor of 0.02 M $Na_2S_2O_3$ solution.

Vb=Volume of calibrated winkler bottle or BOD bottle.

4=Total volume of added reagents of 2 ml of $MnSO_4$ and 2mL alkaline iodide azide reagent.

160=con of 0.02M Na $Na_2S_2O_3$ *meg-g of oxygen *1000(to indicate the result in terms of mg/L)

$Co_2$ ,mg/L =$V_{Na2S2O3}$ (ml)* $f_{Na2S2O3}$* $N_{Na2S2O3}$ (meg/ml)*8mg/meq$O_2$ 1000ml/ Vsample-4(ml)

$Co_2$ ,mg/L = $V_{Na2S2O3}$ * $f_{Na2S2O3}$* 0.02 * 8 * 1000/ Vsample-4(ml)

$Co_2$ ,mg/L = $V_{Na2S2O3}$ * $f_{Na2S2O3}$*160/ Vsample-4(ml)

## 4.2 Evaluation of BOD

The BOD test is based upon determinations of DO , consequently the accuracy of the results is influenced greatly by the care given its measurements.

The standard test conditions include dark incubation at 20C for a specified time period (often 5 days). The actual environmental conditions of temperature, biological population, water movement, sunlight , and oxygen concentration cannot be accurately reproduced in the laboratory.

$BOD_5$ is computed as a unit of mg/L by the following formula

$BOD_5$ = (a-b)/R or BOD5 =(a-b) * r

Where for both equations above

a : Concentration of DO at $t_0$ as a unit of mg/L

b: Concentration of DO at $t_5$ as a unit of mg/L

R: Dilution factor r =Vs/Vt

r : Dilution factor r =Vt/Vs

**4.3 Evaluation of COD**

The Chemical Oxygen Demand is used as a measure of the oxygen equivalent of the organic matter content of a sample that is susceptible to oxidation by a strong chemical oxidant. It is widely used as a means of measuring the pollution strength of domestic industrial wastes.

A boiling mixture of chromic and sulfuric acids oxidizes most types of organic matter. A sample is refluxed in strongly acid solution with a known excess of potassium dichromate ($K_2CrO_7$)

COD is computed as a unit of mg/L by the following formula

COD (mg/L) = (8000 * C * ($V_1$-$V_2$)) /$V_0$

8000 = in terms of mg/L miliequivalent weight of oxygen

C= Normality of $Fe(NH_4)_2(SO_4)_2.6H_2O$ solution (FAS)

$V_1$= ml, volume of FAS solution for blank

$V_2$= ml, volume of FAS solution for sample

$V_0$= ml, volume of water sample used in titration

# 5. RESULTS AND DISCUSSION

The results and discussions are presented in this section. Since the results are too much they are listed in Appendix C.

The results of DO, BOD and COD analyses are given below in tabulated form. Furthermore the data obtained from all of the locations are assessed as below and the conclusion is declared.

TABLE 5.1 DO measurement results of all locations of KC Lake.

| | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|
| First | 4,52 | 5,22 | 3,85 | 5,63 | 5,74 | 6,23 | 5,12 | 3,92 |
| Second | 5,70 | 5,43 | 4,92 | 5,83 | 5,94 | 6,18 | 6,15 | 4,18 |
| Third | 5,82 | 5,30 | 4,73 | 6,22 | 6,45 | 5,93 | 5,93 | 4,95 |
| Forth | 5,80 | 5,77 | 5,38 | 6,45 | 6,68 | 6,41 | 5,96 | 4,33 |
| Average | 5,46 | 5,43 | 4,72 | 6,03 | 6,20 | 6,18 | 5,79 | 4,34 |
| Maximum | 5,82 | 5,77 | 5,38 | 6,45 | 6,68 | 6,41 | 6,15 | 4,95 |
| Minimum | 4,52 | 5,22 | 3,85 | 5,63 | 5,74 | 5,93 | 5,12 | 3,92 |

Average DO values vary from 4 and 6 in all stations. KC-6 and KC-11 stations are the most polluted regions with the lower average values respectively 4,72, 4,3 and with the lower minimum values respectively 3,85 and 3,92. KC-6 is the polluted with Nakkaşdere. It is full of industrial wastes and domestic wastes. It is also near the customs. KC-11 is similar to KC-5. It is the connection between the lake and the Sea of Marmara. It is especially polluted with Sea of Marmara, which is highly contaminated.

TABLE 5.2 BOD measurement results of all locations of KC Lake.

| | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|
| First | 6,24 | 6,73 | 10,21 | 8,65 | 5,72 | 5,88 | 9,83 | 8,78 |
| Second | 7,16 | 6,82 | 8,23 | 7,95 | 5,95 | 6,23 | 7,25 | 8,23 |
| Third | 7,91 | 7,18 | 9,76 | 7,42 | 6,38 | 6,92 | 8,44 | 7,88 |
| Forth | 7,48 | 6,93 | 9,32 | 7,60 | 6,23 | 6,85 | 8,50 | 8,04 |
| Average | 7,1975 | 6,915 | 9,38 | 7,905 | 6,07 | 6,47 | 8,505 | 8,2325 |
| Maximum | 7,91 | 7,18 | 10,21 | 8,65 | 6,38 | 6,92 | 9,83 | 8,78 |
| Minimum | 6,24 | 6,73 | 8,23 | 7,42 | 5,72 | 5,88 | 7,25 | 7,88 |

Average BOD values fluctuate between 7 and 9. As it is mentioned above, in the KC-6 and KC-11stations there are considerable higher results with KC-10 rather than other stations. Again by means of Nakkasdere and Sea of Marmara, KC-6 and KC-11stations are polluted especially by organic wastes. Since KC-10 station is in front of the K.Çekmece settlement. It is polluted by drainage with domestic wastes. The KC-6, KC-10 and KC-11

respectively with the maximum value 10,21, 9,83 and 8,78 are different from other stations. On the other hand KC-5, KC-8 and KC-9 stations respectively with the maximum value 7,91, 7,18, 6,38, 6,92 are less polluted stations. KC-4 partially KC-5 stations are near the Sazlidere drainage area and KC-8 KC-9 stations are by the Firuzköy drainage area. These streams are cleaner than Nakkasdere.

TABLE 5.3 COD measurement results of all locations of KC Lake.

| | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|
| First | 68 | 52 | 148 | 112 | 96 | 57 | 73 | 69 |
| Second | 63 | 50 | 118 | 96 | 82 | 51 | 68 | 62 |
| Third | 55 | 43 | 130 | 103 | 77 | 48 | 65 | 58 |
| Forth | 58 | 47 | 125 | 98 | 71 | 52 | 66 | 63 |
| Average | 61 | 48 | 130,25 | 102,25 | 81,5 | 52 | 68 | 63 |
| Maximum | 68 | 52 | 148 | 112 | 96 | 57 | 73 | 69 |
| Minimum | 55 | 43 | 118 | 96 | 71 | 48 | 65 | 58 |

Average COD values are higher than in KC-6, KC-7 and KC-8 stations rather than other stations. With the maximum average value KC-6 is the most chemically polluted station, which is followed by KC-7 with 102,25 and KC-8 with 81,5. As it is mentioned before KC-6 station is gradually polluted with industrial and domestic wastes with Nakkasdere. KC-7 station is the center of the lake and it reflects the general position of the lake. KC-8 station is in front of the I.U. (Istanbul University) and it is located in the drainage area of the Ispartakule stream. Although it does not pollute the lake now as much as in the past, this station has still high COD values with KC-6 and KC-7 than other stations under the influence of wastes from stream.

Landing results are as follows:

Temperature: Average temperature is 26,55 at the surface water. Overall average is 26,89 maximum value at the surface is 28,68 and minimum is 24,62. Overall maximum value and minimum value are almost the same respectively 28,96 and 24,57. Since it is not deep there is homogenisation.

pH: pH values vary between 7 and 8. Only 7,96 were observed in 7,15. Other measurements are all above 8.

Salinity: Salinity changes between 5 and 6. Average of salinity is 5,2, maximum value is 5,85 in 7,10 and minimum value is 4,90 in 8,03. As salinity, Sp. Conductance fluctuates between 8 and 10. There are increases in 7,16 and 7,29 respectively with the values of 9,13 and 9,48 at the maximum value is 10,45 in 7,10.

DO: At the surface water, average DO values are 5,56 and maximum value is 8,82 and minimum value is 4,10. Overall measurements are different from surface water DO measurements. Average value is 5,69 and maximum value is 9,20 and minimum value 3,62. The highest DO value with 9,20 is observed at 0,1m. DO% is similar to DO, at the surface water, average value with the maximum value 120,30 and minimum value 52,30 is 73,54. The average overall with the maximum value 121,90 and the minimum value 46,10 is 75,47.

Turbidity: It is unstable at the surface water the average value with the maximum value 25,00 and the minimum value 0,5 is 5,82. It is a little bit different in overall measurements. The average overall measurements with the maximum value 52,10 and the minimum value 0,5 is 12,44.

KC-4 results are as follows:

Temperature: There isn't a considerable difference between average temperature result with 25.29 at the surface water and average overall temperature result with 25.15. In this manner maximumimum value both the same value with 27.20 and minimumiumum values are 24.57 at the surface and 19.77 at the overall value.

pH: pH values vary between 7 and 8 at the surface water. The values are all above 8 except the value 7.89 in 5.15.

Salinity: Salinity values lie around 5 at the surface water. Average value at the surface water is 5.38 and the maximumimum value is 5.85. In this manner, specific conductance increases from top to bottom.

DO: Average DO values at the surface water is 4.78. It fluactuates in the range of maximumimum value of 5.68 and minimumimum value of 4.30. However at the bottom the values lie between 1.3 and 1.9 except 2,67 at 3,8m. DO% results change between 50 and 70.

Turbidity: Average turbidity value at the surface water is 7,85. There is a sharp difference between maximumimum value 20,30 and minimumimum value 0,80. Since it is affected instantenously, the values are unstable. It may change in second. For example, in 7,10 at 0,2m the value is 15,7 whereas at 0,5m it decreases to 3.

KC-5 results are as follows:

Tempearature: At the surface of water average temperaure results is 25,73 and maximum value and minimum value fluactuates in the range of 27,56 and 23,91. There isn't a noticable difference between average surface water and average overall results there are thermocline points in all dates measurements in different dates. These are as follows;

First, the thermocline point is in the range of 23,86 at 4,1m and 18,2 at 7,9m in 7,10. In this range pH, Specific conductance, Salinity, DO% and DO values may vary dependent on this critical point. For example, pH changes from 8,27 to 7,49, Specific conductance increases from 9,35 to 12,40, Salinity also increases from 5,84 to 7,35. DO values decraeses sharply from 5,06 to 0,24 and DO% values also decreases considerably from 63,3 to 2,7.

Second, thermocline point is in the range of 24,26 at 4m and 19,58 at 7,9m in 7,15. In this range only DO and DO% values decrease respectively from 2,63 to 0,26 and from 33,2 to 3,1.

Third, thermocline point is in the range of 26,31 at 4m and 22,7 at 8m. In this range, pH values decrease from 8,17 to 7,75, Specific conductance and salinity increase orderely from 9,33 to 10,73 and from 5,3 to 6,1. In contrast, DO and DO% values decrease orderely from 5,03 to 1,37 and from 65,9 to 16,9.

Fourth, thermocline point is in the range of 27,24 at 4m and 23,91 at 7,9m. pH values decrease from 8,03 to 7,67, Specific conductance and salinity increase orderely from 9,29 to 10,61 and from 5,2 to 5. In contrast, DO and DO% values decraese from 4,53 to 1,47 and from 60,2 to 18,5.

pH: At the surface water pH values vary around 8 and 8,30. The values are all above 8 with the maximum value 8,27 and the minimum value 8,11. Overall measurements have lower value at the deeper water such as 7,27.

Salinity: Salinity values lie also around 5 at the surface water. Average salinity value is 5,39. There is no big difference between maximum value with 5,86 and minimum value with 5,1. Overall measurements reach the maximum value at 7,45. In this manner average specific conductance vaue at the surface water 6,98 whereas average overall value is 7,94.

DO: Average DO values at the surface water is 5,55. There is no important difference between maximum value with 5,94 and minimum value with 5,18. There is a sharp difference between maximum value with 5,94 and minimum value with 5,18 in overall measurements DO% measurements vary in the range of 60 to 70 at the surface water. However there is a big range in overall results from 80 to 2.

Turbidity: Average turbidity value at the surface water is 15,55. There is a fluctuation between maximum value with 36,7 and minimum value with 0,2.

KC-6 results are as follows:

Temperature: At the average temperature at the surface water is 25,89. The difference between maximum value with 27,26 and minimum value with 23,37. 27,80 and minimum value with 23,00 is not considerable. There is no thermocline point.

pH: pH values lie between 7 and 8 in both measurements at the surface water and overall measurements.

Salinity: It lies around 5 with the maximum value 5,86 and minimum value 5,1 at the surface water. There is no considerable difference between surface water and overall measurements.

DO: Average value at the surface water is 4,17. There is an important difference between maximum value with 6,56 and minimum value with 0,94. There is an regular increase in DO values at the surface water at overall neasurements, there is no considerable difference. In contrast, If we compare the values of maximum and minimum in both at the surface water with range of 6,56 to 0,94 and in overall measurements with the range of 6,56 to 0,31. Big diffrence is determinimumed. There are also big differences in DO% values. It lies from 10 to 90 at the surface water and from 4 to 90 in overall measurements.

Turbidity: Average turbidity value at the surface water with maximum value of 33,1 and minimum value of 1,1 is 17,7. On the other hand overall average measurements with the maximum value of 78,60 and minimum value 20,60.

KC-7 results are as follows:

Since KC-7 location is the center of the lake it was assessed by using graphs.

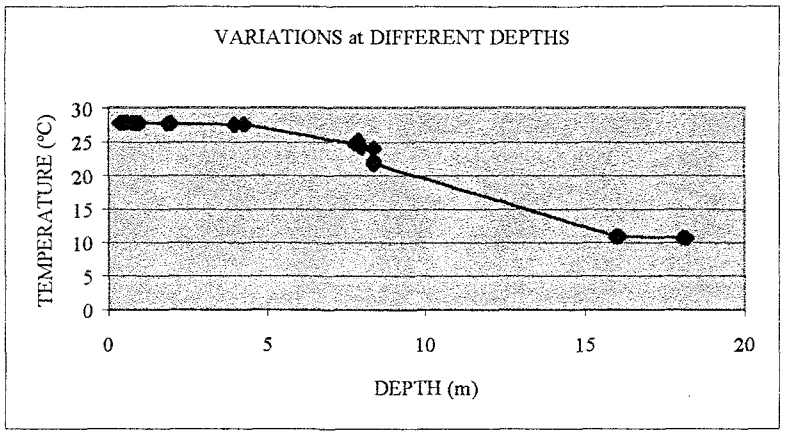


FIGURE 5.1. Temperature as a function of Depth

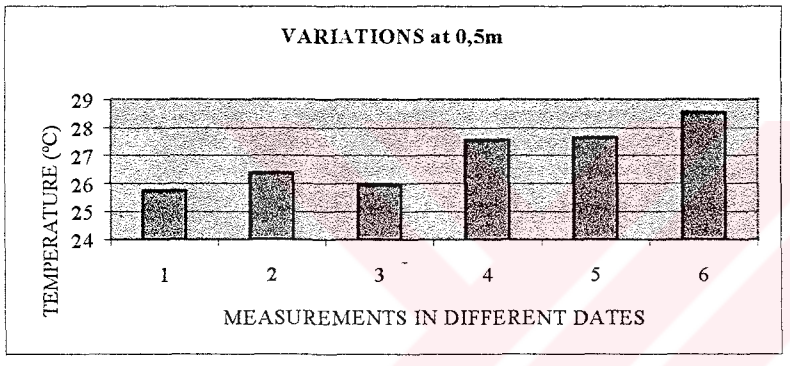


FIGURE 5.2. Temperature as a function of Depth

Temperature: This station is indicator region. Since it has the deep place and stratification layers due to the thermocline points.

Average temperature at the surface water with the maximum value 28,53 and the minimum value 25,72 is 26,98. Overall average with maximum value 28,54 and minimum value 10,35 is 23,01. As it is seen there are no sharp differences between average and maximum value in both measurements.

There are thermocline points in most of the measurements in different dates in this station. In most cases, there are two thermocline points which are upper point and lower point. Of course the lower point is the main thermocline point and it is of course stratification in the lake. At the upper thermocline point startification is also are sharp differences in the DO and DO% values. On the other hand, in the lower case there are sharp differences in the specific conductance and salinity values.

First, the thermocline point is in the range of 25,68 with maximum and 11,58 wit minimum in 6,16 pH value decrease from 8,09 to 7,54. DO and DO% values sharply

decrease orderely from 4,06 to 0,41 and from 52,4 to 4,1. In contrast, specific conductance and salinity increase from 9,06 to 14,05 and from 5,67 to 8,05 respectively.

Second, the thermocline point is in the range of 25,26 at 4,2m and 20,26 at 8m. DO and DO% values sharply decrease from 5,74 to 2,53 and from 74 to 29,7. Second it is observed 19,57 at 8,1 and 11,32 at 14,7m. In contrast to DO, DO%, Sp. Conductance and Salinity inrease from 11 to 15,4 and 6,3 to 9.

Third, the thermocline point is in the range of 27,36 at 4,3m and 24,53 at 7,8m. pH decrase from 8,18 7,13. DO and DO% values decrease from 4,87 to 1,43 and from 64,9 to 18,2. There is no considareble change in Sp. Conductance values from 9,3 to 10,45 and Salinity from 5,2 to 5,9. Second the thermocline point is in the range of 21,61 at 8,4m and 10,71 at 16m. Sp. Conductance and Salinity values incrase from 11,8 to 18,1 and from 6,7 to 10,7. There is no considareble different in pH values from 7,6 to 7,11. DO values from 0,52 to 0,39 and DO% value from 6,2 to 3,8.

Fourth, There is a thermocline point in the range of 24,35 at 8,3m and 10,78 at 15,8m. Since the case is lower case there is s sharp inrease in Sp. Conductance and Salinity values changes from 10,68 to 17,2 and from 6,1 to 10,1. There is ignorant different in DO and DO% values orderely from 2,81 to 0,32 and from 35,7 to 3,2.

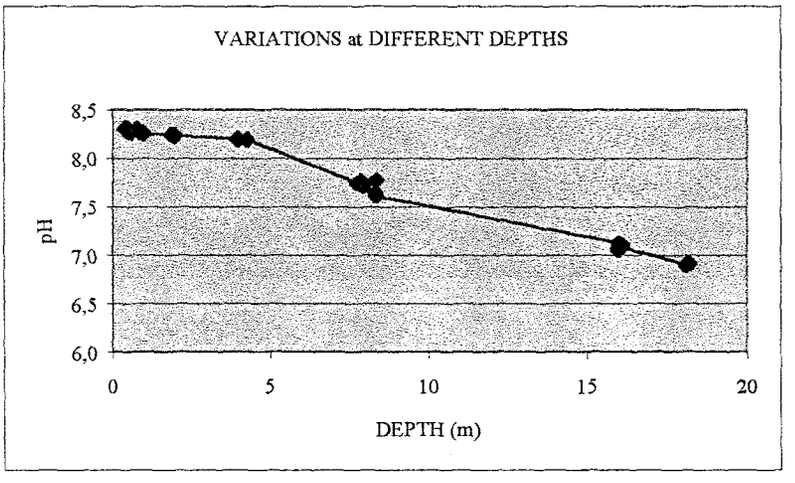


FIGURE 5.3. pH as a function of Depth

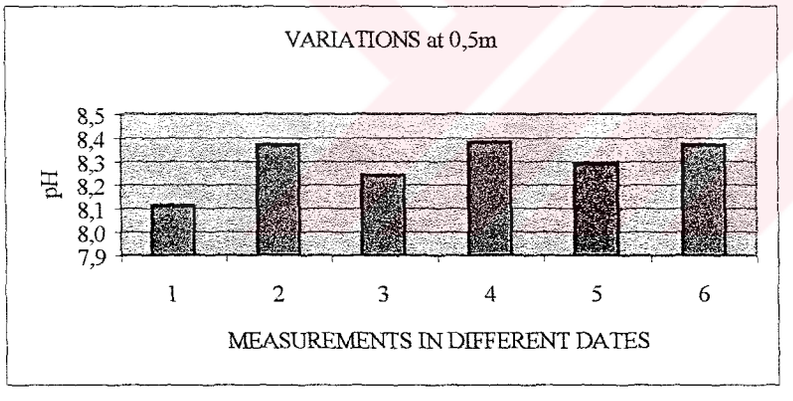


FIGURE 5.4. pH as a function of Depth

pH: Average pH value with the maximum value 8,38 and the minimum value 8,11 at the surface water is 8,29. There is fluactuation in surface water measurements and overall measurements. Average overall with the maximum 8,44 and the minimum value 6,80 in 7,98.

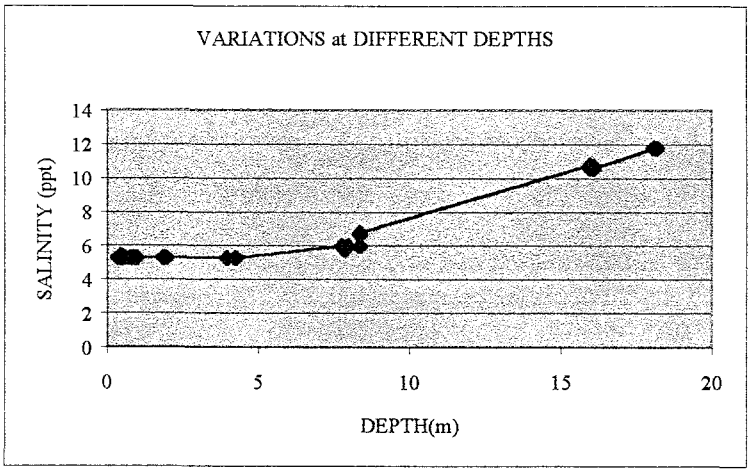


FIGURE 5.5. Salinity as a function of Depth

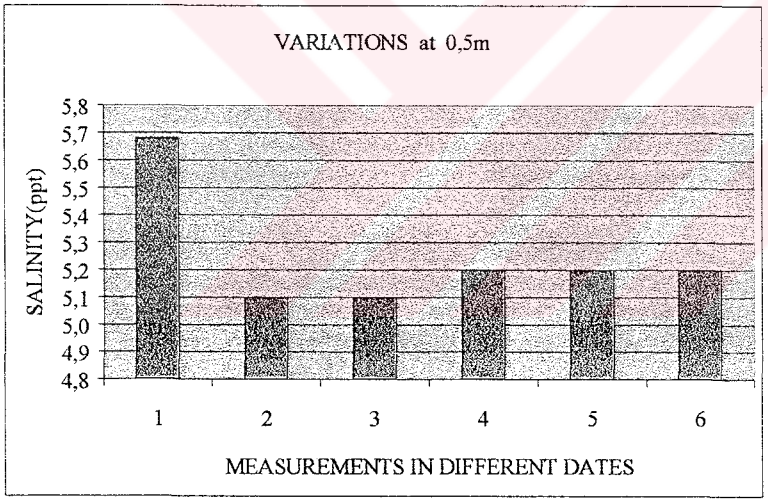


FIGURE 5.6. Salinity as a function of Depth

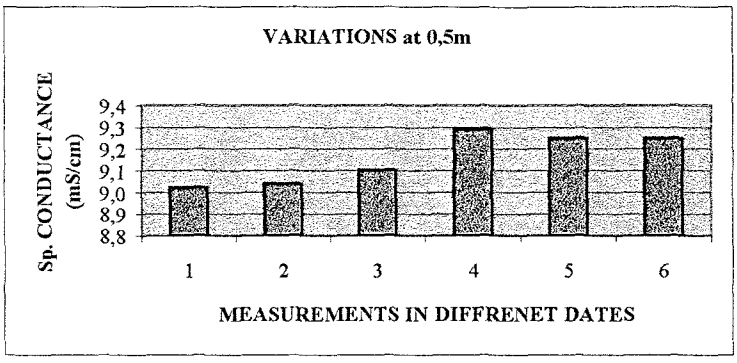


FIGURE 5.7. Specific Conductance as a function of Depth

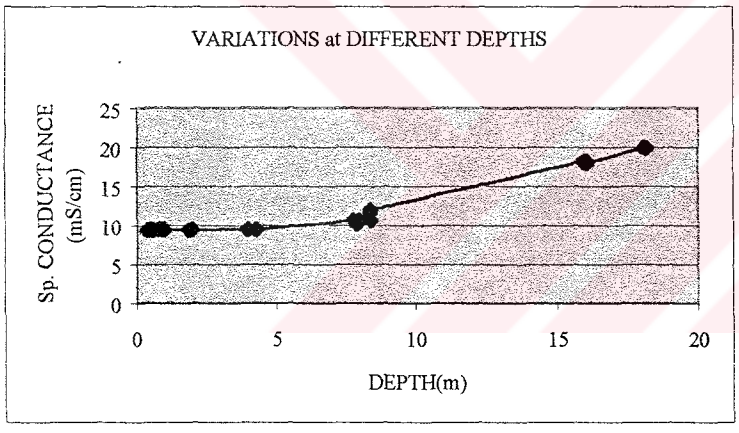


FIGURE 5.8. Specific Conductance as a function of Depth

Salinity: Average salinity with the maximum value 5,68 and the minimum value 5,10 is 5,25 at the surface water. On the other hand overall average with the maximum value 12,70 and the minimum value 5,10 is 6,35. Especially in thermocline point, it jumps to the higher value with the Sp. Conductance value such as in the range of 19,57 to 11,3. Sp. Conductance respectively jumps from 11 to 15,4 and from 6,3 to 9.

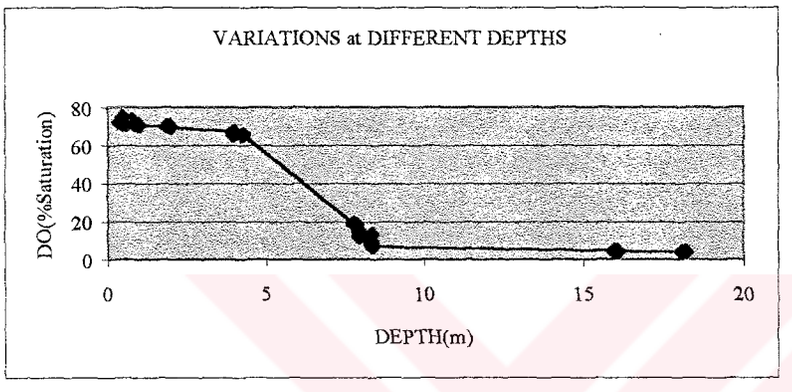


FIGURE 5.9. DO (%) as a function of Depth

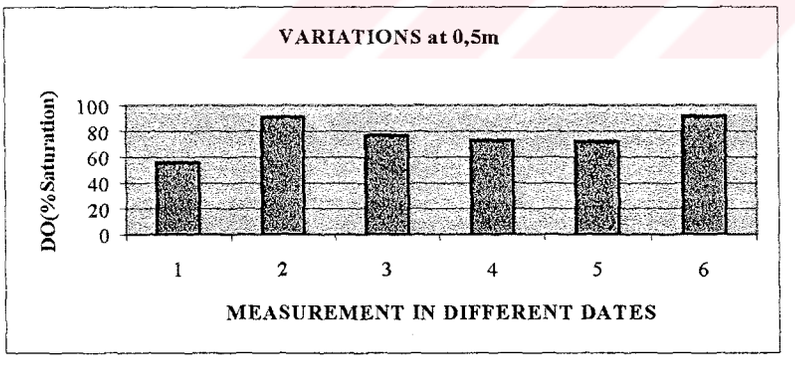


FIGURE 5.10. DO (%) as a function of Depth

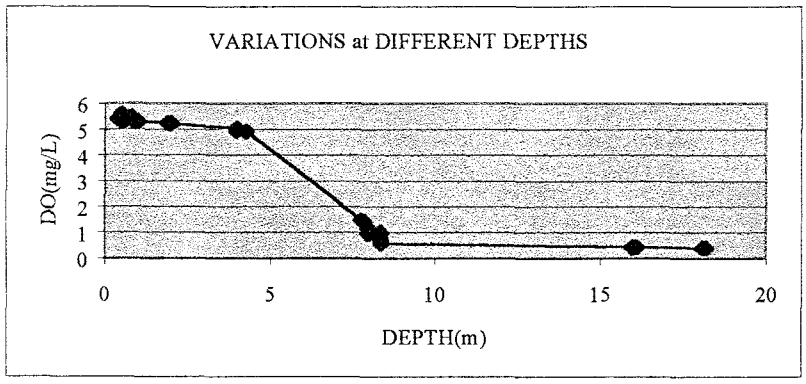


FIGURE 5.11. DO as a function of Depth

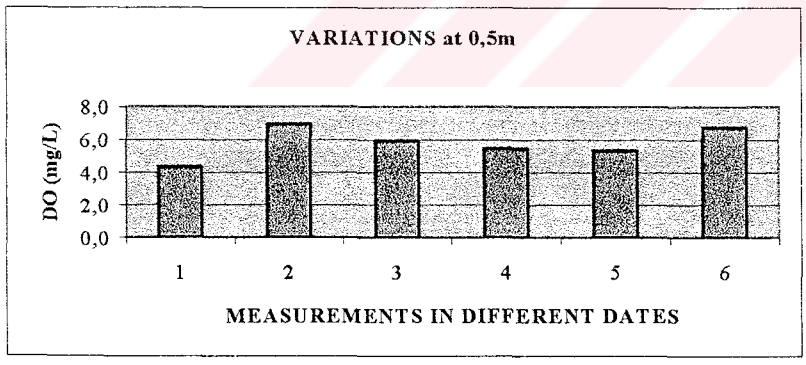


FIGURE 5.12. DO as a function of Depth

DO: There are fluactations in both at the surface water measurements and overall measurements. At the surface water the average with the maximum 6,95 and the minimum 4,30 is 5,78. The average with the maximum 7,02 and the minimum 0,22 is 4,02 in overall measurements. There is a big difference between the maximum value 7,02 and the bottom value 0,22. It means that there is DO at the bottom and of the seclime but it is almost zero. It indicates that there is no aquatic life in this range.

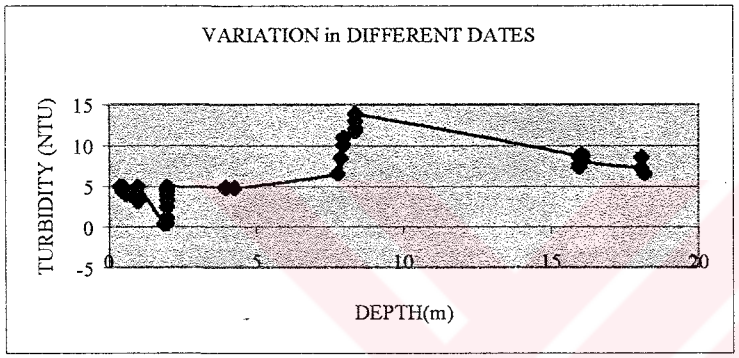


FIGURE 5.13. Turbidity as a function of Depth

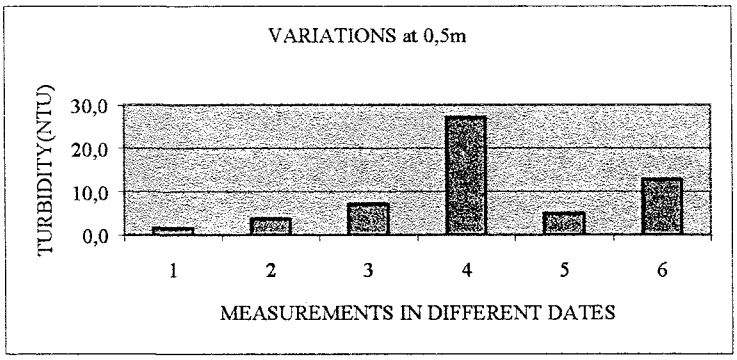


FIGURE 5.14. Turbidity as a function of Depth

Turbidity: Average turbidity values are in both at the surface water and overall measurements parall to each other respectively with the maximum value of 27 and the minimum value 1,40 is 9,43 at the surface water and the maximum value 38,3 and minimum value 1,23 is 7,87 in overall measurements.

KC-8 results are as follows:

Temperature: Average temperature with the maximum value of 28,15 and the minimum value of 24,04 is 27,01 at the surface water. Overall average with the maximum value 26,47 and the minimum value 19,42 is 24,02. In most cases there are thermocline points. As it mentioned above in the KC-7 station.

First, first thermocline point is observed in the range of 23,84 at 4m and 19,6 at 8m in 7,10. PH value decreases from 8,17 to 7,65. DO and DO% values decrease from 3,97 to 0,85 and 49 to 9,9 respectively whereas Sp. Conductance and Salinity increase from 10,3 to 12,07 and from 5,84 to 7,02 respectively. Second thermocline point is observed in the range of 19,41 at 8,3 and 11,51 at 14,2. Sp. Conductance and Salinity increase from 12,07 to 13,8 and from 7,02 to 8,93 respectively.

Second, first thermocline point is observed in the range of 27,48 at 4,1 and 23,19 at 7,8. pH decrease from 8,37 to 7,86 in 7,29. Sp. Conductance and Salinity increase from 9,3 to 11,6 and from 5,2 to 6,4 respectively. In contrast DO and DO% values decrease from 5,58 to 2,6 and from 74,5 to 32,3 respectively. Second thermocline point is observed in the range of 22,84 at 8m and 12,02 at 13,3m. pH decrease from 7,72 to 7,55. Sp. Conductance and Salinity increase from 11,45 to 13,64 and from 6,5 to 7,9 respectively. However, DO and DO% values decrease from 0,31 to 0,32 and from 3,9 to 3,2 respectively.

Third, there is a thermocline point in the range of 26,35 to 11,32 in 8,03. pH decrease from 7,96 to 7,38. Sp. Conductance and Salinity increase from 9,65 to 14,45 and from 5,4 to 8,4 respectively. However, DO and DO% values decrease from 1,85 to 0,47 and from 24,2 to 4,5 respectively.

Fourth, There is a thermocline point in the range of 25,66 to 15,9m in 8,04. pH decrease from 7,86 to 7,15. Sp. Conductance and Salinity increase from 10,3 to 16,1 and from 5,8 to 9,4 respectively. However, DO and DO% values decrease from 3,29 to 0,32 and from 42,8 to 3,2 respectively.

pH: Average pH value 8,32 and the values all lie around 8.

Salinity: Average salinity value wit the maximum value 5,83 and 5 at the surface water. Overall average wit the maximum 7,63 and the minimum 5,20 is 6,20. It jumps in the thermocline points and it inrease instantenously.

DO: DO surface water vary between 5 and 5. Average value with the maximum value 6,26 and the minimum value 5,26 is 5,85. On the other hand there are fluactions in overall values. Average value with the maximum 5,16 and the minimum 2,56 is 4,14. As it is seen above there is a big difference between top and bottom values.

Turbidity: Average value at the surface water with the maximum 26,3 and minimum 5,9 overall average value with the maximum 20,74 and minimum 3,94 is 12,10.

KC-9 results are as follows:

Temperature: Average temperature with the maximum value 28,07 and the minimum value 27,44 is 27,78. It is parallel to the overall average with the maximum 27,43 and the minimum 26,67 is 26,67. There is only one thermocline point in the range of 27,1 at 4,1 and 22,88 at 7,9m in 7,29. pH decrease from 8,33 to 7,9. Sp. Conductance and Salinity increase from 9,3 to 10,46 and from 5,2 to 5,9 respectively. However, DO and DO% values decrease from 5,52 to 0,26 and from 73,2 to 3,2 respectively.

pH: All the values at the surface water at the overall results are above 8 and there is no considerable fluctuation.

Salinity: Average salinity with the maximum value 5,20 and the minimum value 5 is 5,13 at the surface water. Overall results are parallel to the surface water results too. During the thermocline points it jumps instantly.

DO: There is no big differences in surface water measurements. Average value with the maximum 6,19 and the minimum 5,43 is 5,93. Overall results also do not fluactuate. The overall fluactuate between maximum value with 4,71 and the minimum 4,44. At the surface water DO% values vary between 70 and 80 whereas it varies around 60 in overall measurements.

Turbidity: At the surface water, the average value with the maximum value 97,8 and with the minimum value 0,5 is 33,90. In contrast to surface water results, the average overall with the maximum value 4,18 and the minimum value is 3,36 is 3,35.

KC-10 results are as follows:

Temperature: There is a thermocline point in the range of 27,16 to 8,2m and 19,42 at 9,8m in 8,03. Sp. Conductance and Salinity increase from 5,7 to 7,2 and from 10,02 to 12,4 respectively. Average wit the maximum 28,24 ant the minimum 26,69 is 27,73. At the surface water. Overall results are similar to the surface water measurements with the maximum 28,25 and the average 27,15. But the minimum value with 19,42 is lower than others.

pH: The valus are all above 8 at the surface water. The average value wit the maximum 8,43 and the minimum 8,43 is 8,30. Similar to measurements at the surface water.

Salinity: Aalthough there is no fluctuation at the surface water results, there are fluctuation in overall results. The average value with the maximum 5,2 and the minimum value 5,1 is 5,18. At the surface water. However, the average value with the maximum 10,6 and the minimum 5,1 is 5,58. There is no sharp increse in salinity values. Sp. Conductance varies around 9.

DO: There are fluctuations in both at the surface water and overall measurements. The average value with the maximum value 6,91 and the minimum 5,62 is 5. The average value with the maximum 7,1 and the minimum 0,32 is 5,03. There is a big difference between surface DO values and bottom DO value. DO% varies from 75 to 80 at the system water whereas it varies from 3,7 to 90 in overall measurements.

Turbidity: The average value with the maximum 19,7 and the minimum value 0,2 is 13,67. In this manner the average with the maximum 28,2 and the minimum 0,2 is 11,35 in overall measurements.

KC-11 results are as follows:

Temperature: The average value with the maximum 29,36 and the minimum 23,79 is 27,10 at the surface water. Overall measurements are similar to the surface water results which average value with the maximum 29,48 and the minimum 23,78 is 27,62. The highest value with 29,36 is observed in all overall measurements in this station. Since it is not very deep there is no thermocline points but it is said to be homogenizations.

Salinity: In both at the surface water and overall measurements there are the highest salinity values. The average value with the maximum 20,50 and the minimum 6,10 is 13,33 at the surface water and the average maximum 20,70 and the minimum 0,01 is

Salinity: In both at the surface water and overall measurements there are the highest salinity values. The average value with the maximum 20,50 and the minimum 6,10 is 13,33 at the surface water and the average maximum 20,70 and the minimum 0,01 is 10,86 in overall results. This station is the only bridge between the lake and sea of Marmara.

pH: The all values vary around 8. The average with the maximum 8,22 and the minimum 8,04 is 8,11 at the surface water and the average with the maximum 8,24 and the minimum 7,87 is 8,09.

DO: There is no considerable difference in both at the surface water and in overall measurements. The average value with the maximum 5,48 and the minimum 3,32 is 4,10 at the surface water and the average value with the maximum 5,76 and the minimum 1,24 is 3,94 in overall results. DO% values vary between 45 to 80 in the surface water and vary between 18 to 80 in overall results. This station is also lack of DO% where it is compound to the other stations.

Turbidity: There are some fluactuations in both at the surface water and in overall measurements. The average value with the maximum 37,70 and the minimum 2,10is 15 at the surface water and the average value with the maximum 38,40 and the minimum 2,10 is 19,05.

As a summary, KC-11 was found with the most saline location in the lake. Since salinity is a critical parameter for aquatic life in the lake, it should be prevented to inflow to the lake by a regulator. Since the pollutants discharged into the surface waters of the lake are confined in the central part, which is KC-7 location due to the major surface currents towards the inside the lake. It reflects the composition and the quality of the lake. It has salinity stratification created by the low saline waters of the lake overlying the high saline Marmara Sea waters. The thickness' of the layers may change seasonally depending upon the current systems in the area, i.e., the in flow times of both low and high saline waters into the lake.

DO values were found lower than surface water criteria. The results fluctuate when the values are compared to those of the previous studies. DO results prove that the lake varies between third and fourth class according to the water quality criteria [35]. KC-6 location values analyzed and measured were found very low. It was observed to be the most polluted region by way of Nakkaşdere stream, which carries domestic and industrial wastes.

The COD values mesured in this research were found higher than the COD published according to the water quality criteria and this results show a decrease in the water quality of the lake and its quality is entirely fourth class. When COD results are compared to those of the previous studies, it also varies as up and down.

The $BOD_5$ values measured were found variable when they are compared to those of the previous studies. Using the $BOD_5$ data, it is concluded that water quality of the lake decreases in terms of biodegreadable organic load. When the results are evaluated, it can be said according to the water quality criteria that the lake is between third and fourth class.

The enrichment of waters with nutrients, especially phosphorous and nitrogen, can lead to eutrophication. These results in enhanced plant growth like algeal blooms and depleted oxygen content after decomposition of the plant material. The present results show that Küçükçekmece lake was eutrophic by 1994 and the rate of eutrophication appears to be is gradually rising. However, no laws to reduce or replace the use of tripolyphosphates in detergents have yet been enacted. We stress that this situation should be rectified. [33]

Since there exist not sufficient sewerage facility in the lake area. Domestic and industrial wastewater are discharged directly into the lake or dragged by storm run off. The sufficient sewerage system should be employed including urban and industrial area as much as early possible. Applicable treatment systems must be done for the most polluting industries. Discharge standards should be polluting plants and all industrial works in the drainage area of the lake. According to these standards, non-hazardous wastewater of the industries can be discharged into the domestic sewerage system to be constructed after the pre-treatment of industrial wastewater in the area of the plants. Then, the collected wastes will be discharged into defined points in the lake by following the physico-chemical and biological treatment. [34]

If required measures are taken, the lake may be one of the most important drinking water source for the future. Thus its water should be completely transferred out of the lake by pump in order to have fresh water. To uderstand and to evaluate the lake water quality parameters precise, measurements and analysis should be done for all parameters including sedimentation regularly, at least once a month in critical locations including KC-11 which connects the lake and the sea. This study supplies very useful information for physical and chemical compositions of the lake.

As a conlusion, Küçükçekmece Lake is still being polluted and unless necessary measures are taken, it will continue regularly to be polluted leading to a decrease in water quality of the lake. Unfortunately if the lake is not preserved by rules and regulations, it will not be able to be used at all as a source of drinking water in the future.

# APPENDIX A

## WATER QUALITY CRITERIA [35]

| WATER QUALITY PARAMETERS | WATER QUALITY CLASSES | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| A) Physical, inorganic and chemical parameters | | | | |
| Temperature | 25 | 25 | 30 | >30 |
| pH | 6,5-8,5 | 6,5-8,5 | 6,0-9,0 | >6,0-9,0 |
| Dissolved Oxygen | 8 | 6 | 3 | <3 |
| Dissolved Oxygen (%) | 90 | 70 | 40 | <40 |
| Cloride ion (mg/l) | 25 | 200 | 400 | >400 |
| Sulphate ion(mg/l) | 200 | 200 | 400 | >400 |
| Amonium nitration(mg/l) | 0,2 | 1 | 2 | >2 |
| Nitrite nitration(mg/l) | 0,002 | 0,01 | 0,05 | >0,05 |
| Nitrate nitration(mg/l) | 5 | 10 | 20 | >20 |
| Total phosphorus(mg/l) | 0,02 | 0,16 | 0,65 | >0,65 |
| Total dissolved substances(mg/l) | 500 | 1500 | 5000 | >5000 |
| Colour | 5 | 50 | 300 | >300 |
| Sodium | 125 | 125 | 250 | >250 |
| B) Organic parameters | | | | |
| COD(mg/l) | 25 | 50 | 70 | >70 |
| BOD(mg/l) | 4 | 8 | 20 | >20 |
| Organic substance(mg/l) | 5 | 8 | 12 | >12 |
| Total Kjeldhal-nitration(mg/l) | 0,5 | 1,5 | 5 | >5 |
| Fenolic substances(mg/l) | 0,002 | 0,01 | 0,1 | >0,1 |
| Mineral oils and derivatives | 0,02 | 0,1 | 0,5 | >0,5 |
| Total pestisid(mg/l) | 0,001 | 0,01 | 0,1 | >0,1 |
| C) Inorganic Contamination parameters | | | | |
| Mercury(microg/l) | 0,1 | 0,5 | 2 | >2 |
| Cadmium(microg/l) | 3 | 5 | 10 | >10 |
| Lead(microg/l) | 10 | 20 | 50 | >50 |
| Arsenic(microg/l) | 20 | 50 | 100 | >100 |
| Copper(microg/l) | 20 | 50 | 200 | >200 |
| Cromium (total) | 20 | 50 | 200 | >200 |
| Cromium (microg/l) | So small | 20 | 50 | >50 |
| Cobalt(microg/l) | 10 | 20 | 200 | >200 |
| Nikel(microg/l) | 20 | 50 | 200 | >200 |
| Zinc(microg/l) | 200 | 500 | 2000 | >2000 |
| Ciyanur(microg/l) | 10 | 50 | 100 | >100 |
| Floride(microg/l) | 1000 | 1500 | 2000 | >2000 |
| Free Clorine(microg/l) | 10 | 10 | 50 | >50 |
| Sulphide(microg/l) | 2 | 2 | 10 | >10 |
| Iron(microg/l) | 300 | 1000 | 5000 | >5000 |
| Manganese(microg/l) | 100 | 500 | 3000 | >3000 |
| Boron(microg/l) | 1000 | 1000 | 1000 | >1000 |
| Selenium(microg/l) | 10 | 10 | 20 | >20 |
| Barium(microg/l) | 1000 | 2000 | 2000 | >2000 |
| Aluminium(mg/l) | 0,3 | 0,3 | 1 | >1 |
| Radyoactivity (pCi/l) | | | | |
| Alpha activity | 1 | 10 | 10 | >10 |
| Beta activity | 10 | 100 | 100 | >100 |

# APPENDIX B

Solubility of Oxygen in Water [19]

| Water Temperature (°C) | Saturation Concentration of Oxygen in Water (mg/l) |
|---|---|
| 0,0 | 14,6 |
| 2,0 | 13,8 |
| 4,0 | 13,1 |
| 6,0 | 12,5 |
| 8,0 | 11,9 |
| 10,0 | 11,3 |
| 12,0 | 10,8 |
| 14,0 | 10,4 |
| 16,0 | 10,0 |
| 18,0 | 9,5 |
| 20,0 | 9,2 |
| 22,0 | 8,8 |
| 24,0 | 8,5 |
| 26,0 | 8,2 |
| 28,0 | 8,0 |
| 30,0 | 7,6 |

# APPENDIX C

TABLE C.1 Measurement results of LANDING in 7.10.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 125704,00 | 24,59 | 8,13 | 10,45 | 5,86 | 57,50 | 4,54 | 0,20 | 15,70 |
| 125824,00 | 24,62 | 8,14 | 10,43 | 5,85 | 53,60 | 4,23 | 0,50 | 0,50 |
| 125831,00 | 24,57 | 8,14 | 10,44 | 5,85 | 53,60 | 4,23 | 0,50 | 0,50 |
| 125840,00 | 24,57 | 8,14 | 10,44 | 5,85 | 53,70 | 4,24 | 0,50 | 1,00 |
| 125904,00 | 24,57 | 8,14 | 10,44 | 5,86 | 53,70 | 4,24 | 0,50 | 3,20 |

TABLE C.2 Measurement results of LANDING in 7.15.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth Meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 92551,00 | 24,92 | 7,95 | 9,13 | 5,10 | 52,00 | 4,08 | 0,40 | 1,30 |
| 92509,00 | 24,90 | 7,92 | 9,14 | 5,10 | 49,50 | 3,89 | 0,40 | 1,90 |
| 92438,00 | 24,87 | 7,90 | 9,14 | 5,10 | 48,90 | 3,84 | 0,40 | 2,20 |
| 92354,00 | 24,84 | 7,88 | 9,13 | 5,10 | 46,10 | 3,62 | 0,40 | 2,60 |
| 92604,00 | 24,93 | 7,96 | 9,13 | 5,10 | 52,30 | 4,10 | 0,50 | 1,30 |
| 92617,00 | 24,94 | 7,97 | 9,13 | 5,10 | 53,40 | 4,19 | 0,50 | 1,60 |
| 92519,00 | 24,90 | 7,93 | 9,12 | 5,10 | 50,70 | 3,98 | 0,50 | 1,80 |
| 92444,00 | 24,87 | 7,90 | 9,14 | 5,10 | 49,10 | 3,86 | 0,50 | 2,50 |
| 92430,00 | 24,88 | 7,90 | 9,14 | 5,10 | 47,70 | 3,74 | 0,50 | 1,80 |
| 92536,00 | 24,91 | 7,94 | 9,13 | 5,10 | 51,60 | 4,05 | 0,50 | 1,50 |

TABLE C.3 Measurement results of LANDING in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth Meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 105343,00 | 27,28 | 8,36 | 9,37 | 5,30 | 76,80 | 5,77 | 0,10 | 19,50 |
| 105348,00 | 27,28 | 8,36 | 9,37 | 5,30 | 78,20 | 5,87 | 0,20 | 21,10 |
| 105332,00 | 27,25 | 8,35 | 9,38 | 5,30 | 72,90 | 5,48 | 0,30 | 14,60 |
| 105316,00 | 27,15 | 8,32 | 9,41 | 5,30 | 72,70 | 5,47 | 0,40 | 5,80 |
| 105321,00 | 27,12 | 8,32 | 9,41 | 5,30 | 72,00 | 5,43 | 0,40 | 8,60 |
| 105253,00 | 27,16 | 8,36 | 9,48 | 5,40 | 76,00 | 5,72 | 0,50 | 0,60 |
| 105306,00 | 27,17 | 8,34 | 9,46 | 5,30 | 73,90 | 5,56 | 0,50 | 0,60 |

TABLE C.4 Measurement results of LANDING in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth Meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 95355,00 | 27,40 | 8,11 | 8,67 | 4,90 | 67,00 | 5,03 | 0,40 | 6,90 |
| 95524,00 | 27,38 | 8,09 | 8,55 | 4,80 | 62,00 | 4,66 | 0,40 | 6,90 |
| 95410,00 | 27,38 | 8,11 | 8,66 | 4,90 | 65,50 | 4,92 | 0,50 | 1,70 |
| 95419,00 | 27,39 | 8,11 | 8,62 | 4,80 | 65,20 | 4,90 | 0,50 | 3,20 |
| 95426,00 | 27,39 | 8,11 | 8,67 | 4,90 | 64,80 | 4,87 | 0,50 | 4,20 |
| 95431,00 | 27,39 | 8,11 | 8,38 | 4,70 | 64,50 | 4,85 | 0,50 | 4,90 |
| 95438,00 | 27,39 | 8,11 | 8,43 | 4,70 | 63,90 | 4,80 | 0,50 | 5,60 |
| 95444,00 | 27,39 | 8,11 | 8,73 | 4,90 | 63,40 | 4,77 | 0,50 | 6,10 |
| 95509,00 | 27,37 | 8,10 | 8,58 | 4,80 | 62,80 | 4,72 | 0,50 | 6,90 |
| 95458,00 | 27,38 | 8,10 | 8,52 | 4,80 | 62,80 | 4,72 | 0,50 | 6,90 |
| 95503,00 | 27,37 | 8,10 | 8,63 | 4,80 | 62,80 | 4,72 | 0,60 | 7,00 |
| 95516,00 | 27,37 | 8,09 | 8,50 | 4,80 | 62,30 | 4,69 | 0,60 | 6,90 |
| 95453,00 | 27,38 | 8,10 | 8,52 | 4,80 | 62,80 | 4,73 | 0,60 | 6,70 |

TABLE C.5 Measurement results of LANDING in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth Meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 133413,00 | 28,88 | 8,58 | 0,26 | 0,10 | 121,90 | 9,20 | 0,10 | 52,10 |
| 133418,00 | 28,88 | 8,62 | 3,10 | 1,70 | 119,80 | 8,95 | 0,10 | 49,00 |
| 133422,00 | 28,94 | 8,63 | 3,29 | 1,80 | 117,70 | 8,78 | 0,10 | 45,20 |
| 133428,00 | 28,96 | 8,64 | 8,78 | 4,90 | 117,00 | 8,55 | 0,20 | 40,10 |
| 133432,00 | 28,94 | 8,64 | 8,82 | 5,00 | 116,00 | 8,48 | 0,20 | 36,30 |
| 133437,00 | 28,92 | 8,64 | 8,80 | 4,90 | 116,50 | 8,51 | 0,20 | 32,30 |
| 133443,00 | 28,88 | 8,64 | 8,82 | 5,00 | 116,40 | 8,52 | 0,20 | 26,50 |
| 133505,00 | 28,66 | 8,67 | 9,01 | 5,10 | 118,70 | 8,71 | 0,30 | 23,40 |
| 133500,00 | 28,85 | 8,65 | 8,48 | 4,80 | 115,60 | 8,47 | 0,40 | 22,20 |
| 133513,00 | 28,68 | 8,65 | 9,04 | 5,10 | 120,30 | 8,82 | 0,50 | 25,00 |
| 133518,00 | 28,53 | 8,66 | 9,05 | 5,10 | 120,10 | 8,83 | 0,50 | 24,90 |
| 133522,00 | 28,51 | 8,67 | 9,02 | 5,10 | 121,40 | 8,94 | 0,50 | 23,60 |
| 133526,00 | 28,50 | 8,67 | 9,07 | 5,10 | 122,30 | 9,00 | 0,50 | 21,90 |

TABLE C.6 Measurement results of KC-4 in 5.15.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth Meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 95329,00 | 26,42 | 7,89 | 9,25 | 5,57 | 56,20 | 4,30 | 0,50 | 0,80 |
| 95346,00 | 26,42 | 7,90 | 9,25 | 5,57 | 55,80 | 4,27 | 0,50 | 1,20 |
| 95434,00 | 26,23 | 7,86 | 9,28 | 5,58 | 43,00 | 3,30 | 0,50 | 1,30 |
| 95439,00 | 26,20 | 7,85 | 9,28 | 5,59 | 42,60 | 3,27 | 0,50 | 1,40 |
| 95501,00 | 26,15 | 7,82 | 9,30 | 5,59 | 39,50 | 3,04 | 0,50 | 0,50 |
| 101106,00 | 26,06 | 8,00 | 9,28 | 5,55 | 53,10 | 4,09 | 0,50 | 1,20 |
| 101152,00 | 26,06 | 8,00 | 9,30 | 5,56 | 53,00 | 4,08 | 1,00 | 1,70 |
| 101202,00 | 26,04 | 8,00 | 9,28 | 5,55 | 53,00 | 4,08 | 1,10 | 1,60 |
| 101209,00 | 26,05 | 8,00 | 9,28 | 5,55 | 52,90 | 4,07 | 1,10 | 1,60 |
| 101245,00 | 26,02 | 8,00 | 9,28 | 5,55 | 52,00 | 4,00 | 2,10 | 1,70 |
| 101301,00 | 26,03 | 8,00 | 9,28 | 5,55 | 52,10 | 4,01 | 2,10 | 1,70 |
| 101310,00 | 26,01 | 8,00 | 9,28 | 5,55 | 52,00 | 4,00 | 2,10 | 1,70 |
| 101408,00 | 19,78 | 7,44 | 9,44 | 6,00 | 5,00 | 0,44 | 4,10 | 2,10 |
| 101426,00 | 19,77 | 7,40 | 9,44 | 6,00 | 3,40 | 0,30 | 4,10 | 2,40 |

TABLE C.7 Measurement results of KC-4 in 7.10.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO 1 % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 125704,00 | 24,59 | 8,13 | 10,44 | 5,86 | 57,50 | 4,54 | 0,20 | 15,70 |
| 125749,00 | 24,57 | 8,14 | 10,42 | 5,85 | 54,40 | 4,30 | 0,50 | 3,00 |
| 125800,00 | 24,59 | 8,14 | 10,42 | 5,86 | 54,00 | 4,26 | 0,50 | 3,10 |
| 125824,00 | 24,62 | 8,14 | 10,40 | 5,85 | 53,60 | 4,23 | 0,50 | 0,50 |
| 125831,00 | 24,57 | 8,14 | 10,43 | 5,85 | 53,60 | 4,23 | 0,50 | 0,50 |
| 125840,00 | 24,57 | 8,14 | 10,44 | 5,85 | 53,70 | 4,24 | 0,50 | 1,00 |
| 125904,00 | 24,57 | 8,14 | 10,42 | 5,86 | 53,70 | 4,24 | 0,50 | 3,20 |
| 125849,00 | 24,56 | 8,14 | 10,43 | 5,85 | 53,70 | 4,24 | 0,60 | 2,00 |
| 125932,00 | 24,56 | 8,14 | 10,45 | 5,86 | 53,70 | 4,24 | 1,00 | 4,90 |
| 125952,00 | 24,62 | 8,14 | 10,45 | 5,86 | 53,50 | 4,22 | 1,00 | 9,90 |
| 130001,00 | 24,58 | 8,14 | 10,45 | 5,86 | 53,50 | 4,22 | 1,00 | 12,00 |
| 130010,00 | 24,55 | 8,14 | 10,45 | 5,86 | 53,50 | 4,22 | 1,00 | 11,10 |
| 130018,00 | 24,55 | 8,13 | 10,45 | 5,86 | 53,40 | 4,21 | 1,00 | 9,10 |
| 130025,00 | 24,56 | 8,32 | 10,45 | 5,86 | 53,50 | 4,22 | 1,00 | 6,60 |
| 130033,00 | 24,55 | 8,27 | 10,45 | 5,86 | 53,50 | 4,22 | 1,00 | 4,70 |
| 130043,00 | 24,56 | 8,17 | 10,45 | 5,86 | 53,60 | 4,23 | 1,00 | 4,00 |
| 124925,00 | 24,04 | 8,26 | 10,45 | 5,86 | 62,80 | 5,01 | 4,00 | 4,50 |

TABLE C.8 Measurement results of KC-4 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 111811,00 | 26,17 | 8,18 | 9,25 | 5,20 | 58,00 | 4,44 | 0,50 | 20,30 |
| 111819,00 | 26,15 | 8,17 | 9,24 | 5,20 | 57,30 | 4,39 | 0,50 | 29,60 |
| 111824,00 | 26,17 | 8,17 | 9,23 | 5,20 | 57,00 | 4,37 | 0,50 | 35,40 |
| 111829,00 | 26,18 | 8,17 | 9,22 | 5,20 | 56,80 | 4,36 | 0,50 | 39,60 |
| 111904,00 | 26,11 | 8,13 | 9,21 | 5,20 | 55,80 | 4,28 | 1,00 | 32,60 |
| 111915,00 | 26,16 | 8,12 | 9,20 | 5,20 | 55,80 | 4,28 | 1,00 | 15,50 |
| 111922,00 | 26,18 | 8,12 | 9,21 | 5,20 | 55,70 | 4,27 | 1,00 | 8,30 |
| 111849,00 | 26,12 | 8,14 | 9,21 | 5,20 | 56,00 | 4,30 | 1,10 | 46,10 |
| 112155,00 | 26,07 | 8,06 | 9,21 | 5,20 | 54,00 | 4,15 | 2,00 | 2,70 |
| 112202,00 | 26,08 | 8,06 | 9,21 | 5,20 | 54,00 | 4,14 | 2,00 | 2,80 |
| 112223,00 | 26,06 | 8,05 | 9,21 | 5,20 | 54,20 | 4,17 | 2,00 | 2,90 |
| 111948,00 | 26,06 | 8,10 | 9,21 | 5,20 | 54,80 | 4,21 | 2,20 | 1,20 |
| 112137,00 | 26,07 | 8,06 | 9,21 | 5,20 | 52,40 | 4,02 | 2,30 | 2,60 |
| 112232,00 | 25,58 | 7,94 | 9,41 | 5,30 | 51,20 | 3,96 | 3,20 | 2,90 |
| 112308,00 | 25,47 | 7,82 | 9,45 | 5,30 | 21,50 | 1,67 | 3,30 | 9,20 |
| 112237,00 | 25,53 | 7,89 | 9,44 | 5,30 | 38,00 | 2,94 | 3,40 | 3,80 |
| 112243,00 | 25,52 | 7,88 | 9,44 | 5,30 | 30,20 | 2,34 | 3,40 | 5,10 |
| 112248,00 | 25,47 | 7,86 | 9,46 | 5,30 | 27,40 | 2,13 | 3,40 | 6,30 |
| 112253,00 | 25,48 | 7,85 | 9,46 | 5,30 | 25,40 | 1,97 | 3,40 | 7,40 |
| 112258,00 | 25,46 | 7,84 | 9,46 | 5,30 | 24,60 | 1,90 | 3,40 | 8,40 |

TABLE C.9 Measurement results of KC-4 in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 102454,00 | 27,20 | 8,16 | 9,04 | 5,10 | 68,50 | 5,16 | 0,50 | 3,10 |
| 102459,00 | 27,19 | 8,15 | 9,11 | 5,10 | 68,40 | 5,15 | 0,50 | 3,70 |
| 102505,00 | 27,19 | 8,15 | 9,15 | 5,20 | 68,20 | 5,14 | 0,50 | 4,60 |
| 102521,00 | 27,14 | 8,14 | 9,11 | 5,10 | 66,70 | 5,03 | 0,90 | 6,90 |
| 102534,00 | 27,16 | 8,15 | 9,08 | 5,10 | 67,10 | 5,06 | 0,90 | 6,20 |
| 102546,00 | 27,16 | 8,15 | 9,08 | 5,10 | 67,40 | 5,08 | 1,00 | 4,80 |
| 102554,00 | 27,17 | 8,15 | 9,09 | 5,10 | 67,60 | 5,09 | 1,00 | 4,40 |
| 102602,00 | 27,17 | 8,15 | 9,10 | 5,10 | 67,70 | 5,10 | 1,00 | 4,30 |
| 102609,00 | 27,18 | 8,15 | 9,09 | 5,10 | 67,80 | 5,11 | 1,00 | 4,30 |
| 102619,00 | 27,16 | 8,15 | 9,08 | 5,10 | 67,70 | 5,10 | 1,00 | 4,50 |
| 102624,00 | 27,17 | 8,15 | 9,09 | 5,10 | 67,50 | 5,08 | 1,00 | 4,70 |
| 102631,00 | 27,18 | 8,15 | 9,10 | 5,10 | 67,40 | 5,08 | 1,00 | 4,90 |
| 102637,00 | 27,18 | 8,15 | 9,10 | 5,10 | 67,50 | 5,08 | 1,20 | 5,10 |
| 102650,00 | 27,07 | 8,13 | 9,19 | 5,20 | 66,20 | 4,99 | 2,00 | 5,20 |
| 102700,00 | 27,04 | 8,13 | 9,20 | 5,20 | 65,10 | 4,91 | 2,00 | 4,80 |
| 102705,00 | 27,05 | 8,13 | 9,20 | 5,20 | 64,80 | 4,89 | 2,00 | 4,60 |
| 102710,00 | 27,06 | 8,12 | 9,20 | 5,20 | 64,70 | 4,88 | 2,00 | 4,40 |
| 102715,00 | 27,04 | 8,12 | 9,19 | 5,20 | 64,20 | 4,85 | 2,00 | 4,30 |
| 102726,00 | 27,00 | 8,11 | 9,19 | 5,20 | 62,90 | 4,75 | 2,00 | 4,10 |
| 102731,00 | 26,97 | 8,11 | 9,20 | 5,20 | 62,40 | 4,71 | 2,00 | 4,10 |
| 102736,00 | 26,96 | 8,11 | 9,19 | 5,20 | 62,10 | 4,69 | 2,00 | 4,10 |
| 102854,00 | 26,32 | 7,73 | 9,44 | 5,30 | 16,30 | 1,25 | 3,70 | 5,30 |
| 102750,00 | 26,44 | 7,91 | 9,43 | 5,30 | 52,80 | 4,02 | 3,80 | 4,10 |
| 102759,00 | 26,43 | 7,87 | 9,45 | 5,30 | 35,10 | 2,68 | 3,80 | 4,20 |
| 102808,00 | 26,40 | 7,85 | 9,45 | 5,30 | 28,90 | 2,21 | 3,80 | 4,50 |
| 102816,00 | 26,38 | 7,83 | 9,41 | 5,30 | 27,90 | 2,13 | 3,80 | 4,80 |
| 102821,00 | 26,39 | 7,82 | 9,32 | 5,30 | 27,40 | 2,09 | 3,80 | 4,90 |
| 102827,00 | 26,36 | 7,79 | 9,33 | 5,30 | 26,40 | 2,02 | 3,80 | 5,10 |
| 102831,00 | 26,32 | 7,77 | 9,36 | 5,30 | 23,00 | 1,76 | 3,80 | 5,20 |
| 102838,00 | 26,37 | 7,76 | 9,37 | 5,30 | 18,80 | 1,44 | 3,80 | 5,20 |
| 102845,00 | 26,35 | 7,75 | 9,34 | 5,30 | 18,00 | 1,38 | 3,80 | 5,30 |
| 102849,00 | 26,34 | 7,74 | 9,34 | 5,30 | 17,00 | 1,30 | 3,80 | 5,30 |

TABLE C.10 Measurement results of KC-4 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 102802,00 | 27,11 | 8,14 | 9,29 | 5,20 | 75,40 | 5,68 | 0,50 | 12,10 |
| 102810,00 | 27,11 | 8,13 | 9,28 | 5,20 | 69,00 | 5,20 | 0,50 | 12,50 |
| 102817,00 | 27,10 | 8,13 | 9,28 | 5,20 | 67,40 | 5,08 | 0,50 | 13,00 |
| 102821,00 | 27,12 | 8,13 | 9,27 | 5,20 | 66,70 | 5,03 | 0,50 | 13,40 |
| 102825,00 | 27,11 | 8,12 | 9,26 | 5,20 | 66,10 | 4,98 | 0,50 | 13,80 |
| 102829,00 | 27,10 | 8,12 | 9,26 | 5,20 | 65,70 | 4,95 | 0,60 | 14,10 |
| 102852,00 | 27,11 | 8,12 | 9,37 | 5,30 | 64,80 | 4,88 | 1,00 | 14,90 |
| 102858,00 | 27,11 | 8,12 | 9,36 | 5,30 | 64,80 | 4,88 | 1,00 | 15,00 |
| 102904,00 | 27,10 | 8,11 | 9,35 | 5,30 | 64,50 | 4,86 | 1,00 | 15,20 |
| 102913,00 | 27,12 | 8,11 | 9,35 | 5,30 | 64,00 | 4,82 | 1,00 | 15,50 |
| 102918,00 | 27,12 | 8,11 | 9,35 | 5,30 | 63,90 | 4,81 | 1,00 | 15,60 |
| 102922,00 | 27,11 | 8,11 | 9,35 | 5,30 | 63,80 | 4,81 | 1,00 | 15,70 |
| 102925,00 | 27,11 | 8,11 | 9,35 | 5,30 | 63,70 | 4,80 | 1,20 | 15,60 |
| 102956,00 | 27,09 | 8,10 | 9,37 | 5,30 | 62,70 | 4,72 | 1,90 | 13,70 |
| 103001,00 | 27,09 | 8,10 | 9,37 | 5,30 | 62,90 | 4,74 | 2,00 | 13,30 |
| 103006,00 | 27,09 | 8,10 | 9,37 | 5,30 | 63,00 | 4,75 | 2,00 | 13,00 |
| 103010,00 | 27,08 | 8,10 | 9,37 | 5,30 | 63,00 | 4,75 | 2,00 | 12,70 |
| 103015,00 | 27,08 | 8,10 | 9,37 | 5,30 | 62,70 | 4,72 | 2,00 | 12,50 |
| 103019,00 | 27,08 | 8,10 | 9,37 | 5,30 | 62,10 | 4,68 | 2,00 | 12,30 |
| 103024,00 | 27,09 | 8,10 | 9,36 | 5,30 | 61,70 | 4,65 | 2,00 | 12,20 |
| 103028,00 | 27,10 | 8,10 | 9,35 | 5,30 | 61,60 | 4,64 | 2,00 | 12,10 |
| 103033,00 | 27,10 | 8,10 | 9,35 | 5,30 | 61,80 | 4,66 | 2,40 | 12,00 |
| 103042,00 | 26,70 | 7,95 | 9,55 | 5,40 | 50,10 | 3,80 | 3,80 | 12,00 |
| 103047,00 | 26,69 | 7,93 | 9,55 | 5,40 | 43,00 | 3,26 | 3,80 | 12,00 |
| 103051,00 | 26,68 | 7,91 | 9,55 | 5,40 | 37,20 | 2,82 | 3,80 | 12,00 |
| 103056,00 | 26,67 | 7,90 | 9,56 | 5,40 | 35,20 | 2,67 | 3,80 | 12,10 |

TABLE C.11 Measurement results of KC-5 in 7.10.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 112303,00 | 23,90 | 8,27 | 10,43 | 5,84 | 65,80 | 5,26 | 0,40 | 4,10 |
| 112133,00 | 23,91 | 8,25 | 10,42 | 5,86 | 66,10 | 5,28 | 0,40 | 38,10 |
| 112144,00 | 23,91 | 8,26 | 10,40 | 5,86 | 66,20 | 5,29 | 0,40 | 33,40 |
| 112155,00 | 23,91 | 8,26 | 10,44 | 5,84 | 65,90 | 5,27 | 0,40 | 23,60 |
| 112117,00 | 23,91 | 8,25 | 10,44 | 5,86 | 66,50 | 5,32 | 0,50 | 36,70 |
| 112214,00 | 23,91 | 8,26 | 10,42 | 5,84 | 66,00 | 5,27 | 0,50 | 9,10 |
| 112238,00 | 23,91 | 8,27 | 10,42 | 5,84 | 66,10 | 5,28 | 0,50 | 4,70 |
| 112251,00 | 23,91 | 8,27 | 10,42 | 5,84 | 66,10 | 5,28 | 0,50 | 6,00 |
| 112314,00 | 23,91 | 8,27 | 10,42 | 5,84 | 65,70 | 5,25 | 0,50 | 1,70 |
| 112448,00 | 23,90 | 8,28 | 10,42 | 5,84 | 65,30 | 5,22 | 0,90 | 3,80 |
| 112353,00 | 23,90 | 8,28 | 10,42 | 5,84 | 65,60 | 5,24 | 1,00 | 4,30 |
| 112401,00 | 23,90 | 8,28 | 10,42 | 5,84 | 65,60 | 5,24 | 1,00 | 4,70 |
| 112414,00 | 23,88 | 8,27 | 10,42 | 5,84 | 65,40 | 5,23 | 1,00 | 3,70 |
| 112430,00 | 23,90 | 8,28 | 10,42 | 5,84 | 65,40 | 5,22 | 1,00 | 3,30 |
| 112457,00 | 23,90 | 8,28 | 10,42 | 5,84 | 65,60 | 5,25 | 1,00 | 4,00 |
| 112544,00 | 23,88 | 8,28 | 10,42 | 5,84 | 64,70 | 5,17 | 2,00 | 2,90 |
| 112557,00 | 23,88 | 8,28 | 10,42 | 5,84 | 64,30 | 5,14 | 2,00 | 2,60 |
| 112613,00 | 23,88 | 8,28 | 10,42 | 5,84 | 64,40 | 5,15 | 2,00 | 2,70 |
| 112633,00 | 23,88 | 8,28 | 10,42 | 5,84 | 64,40 | 5,15 | 2,00 | 2,80 |
| 112623,00 | 23,88 | 8,28 | 10,42 | 5,84 | 64,40 | 5,15 | 2,10 | 2,80 |
| 112603,00 | 23,88 | 8,28 | 10,42 | 5,84 | 64,30 | 5,14 | 2,10 | 2,70 |
| 112643,00 | 23,87 | 8,27 | 10,42 | 5,84 | 64,50 | 5,16 | 2,10 | 2,80 |
| 112721,00 | 23,83 | 8,26 | 10,42 | 5,85 | 62,20 | 4,98 | 4,00 | 2,70 |
| 112804,00 | 23,85 | 8,26 | 10,42 | 5,84 | 63,10 | 5,05 | 4,00 | 2,90 |
| 112812,00 | 23,84 | 8,26 | 10,42 | 5,84 | 62,80 | 5,03 | 4,00 | 3,00 |
| 112822,00 | 23,85 | 8,27 | 10,42 | 5,85 | 62,60 | 5,01 | 4,00 | 2,90 |
| 112737,00 | 23,86 | 8,27 | 10,42 | 5,84 | 62,70 | 5,02 | 4,10 | 2,70 |
| 112743,00 | 23,86 | 8,27 | 10,42 | 5,84 | 63,10 | 5,05 | 4,10 | 2,70 |
| 112756,00 | 23,86 | 8,27 | 10,42 | 5,84 | 63,30 | 5,06 | 4,10 | 2,80 |
| 113036,00 | 18,20 | 7,49 | 13,25 | 7,36 | 2,70 | 0,24 | 7,90 | 4,40 |
| 112922,00 | 18,14 | 7,58 | 13,22 | 7,37 | 4,90 | 0,43 | 8,00 | 4,50 |
| 112945,00 | 18,57 | 7,54 | 13,12 | 7,29 | 3,50 | 0,31 | 8,00 | 3,90 |
| 113004,00 | 18,54 | 7,52 | 13,12 | 7,29 | 2,90 | 0,25 | 8,00 | 4,00 |
| 113023,00 | 18,27 | 7,50 | 13,24 | 7,35 | 2,60 | 0,23 | 8,00 | 4,30 |
| 113123,00 | 19,05 | 7,47 | 13,05 | 7,20 | 2,40 | 0,21 | 8,00 | 4,60 |
| 113203,00 | 19,15 | 7,46 | 13,02 | 7,18 | 2,10 | 0,18 | 8,00 | 4,60 |
| 113044,00 | 18,81 | 7,49 | 13,13 | 7,24 | 2,60 | 0,22 | 8,00 | 4,40 |
| 112934,00 | 18,17 | 7,56 | 13,28 | 7,38 | 3,80 | 0,33 | 8,10 | 4,20 |
| 112853,00 | 19,09 | 7,70 | 13,20 | 7,19 | 19,50 | 1,70 | 8,10 | 3,40 |
| 112911,00 | 18,00 | 7,61 | 13,25 | 7,40 | 7,10 | 0,63 | 8,10 | 4,60 |
| 113055,00 | 18,84 | 7,49 | 13,15 | 7,24 | 2,40 | 0,21 | 8,10 | 4,30 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 113102,00 | 19,04 | 7,48 | 13,06 | 7,22 | 2,50 | 0,22 | 8,10 | 4,30 |
| 113143,00 | 18,85 | 7,47 | 13,15 | 7,24 | 2,50 | 0,22 | 8,20 | 4,70 |
| 105515,00 | 15,85 | 7,41 | 13,28 | 7,44 | 2,20 | 0,20 | 10,30 | 9,00 |
| 105531,00 | 15,71 | 7,38 | 13,30 | 7,46 | 2,30 | 0,21 | 10,30 | 4,60 |
| 105540,00 | 15,82 | 7,37 | 13,32 | 7,44 | 2,20 | 0,20 | 10,40 | 3,40 |
| 105613,00 | 15,71 | 7,34 | 13,32 | 7,44 | 2,10 | 0,20 | 10,40 | 3,10 |
| 105624,00 | 15,73 | 7,33 | 13,32 | 7,44 | 2,20 | 0,20 | 10,40 | 3,00 |
| 105635,00 | 15,76 | 7,32 | 13,32 | 7,43 | 2,20 | 0,20 | 10,40 | 3,00 |
| 105645,00 | 15,72 | 7,32 | 13,32 | 7,44 | 2,20 | 0,20 | 10,40 | 3,00 |
| 105703,00 | 15,73 | 7,31 | 13,32 | 7,43 | 2,10 | 0,20 | 10,40 | 3,20 |
| 105714,00 | 15,70 | 7,30 | 13,32 | 7,44 | 2,10 | 0,20 | 10,40 | 3,20 |
| 105734,00 | 15,74 | 7,29 | 13,32 | 7,43 | 2,10 | 0,19 | 10,40 | 3,30 |

TABLE C.12 Measurement results of KC-5 in 7.15.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 93941,00 | 24,87 | 8,18 | 9,12 | 5,10 | 65,60 | 5,15 | 0,50 | 8,40 |
| 93954,00 | 24,85 | 8,18 | 9,12 | 5,10 | 65,40 | 5,14 | 0,50 | 8,50 |
| 94007,00 | 24,85 | 8,18 | 9,12 | 5,10 | 65,00 | 5,10 | 0,50 | 8,50 |
| 94021,00 | 24,89 | 8,18 | 9,11 | 5,10 | 65,20 | 5,12 | 0,50 | 8,40 |
| 94057,00 | 24,81 | 8,18 | 9,15 | 5,20 | 63,90 | 5,02 | 1,00 | 8,30 |
| 94140,00 | 24,83 | 8,18 | 9,14 | 5,10 | 64,30 | 5,05 | 1,00 | 8,10 |
| 94046,00 | 24,78 | 8,18 | 9,15 | 5,20 | 63,70 | 5,01 | 1,10 | 8,30 |
| 94107,00 | 24,79 | 8,18 | 9,15 | 5,20 | 64,00 | 5,04 | 1,10 | 8,20 |
| 94116,00 | 24,81 | 8,18 | 9,15 | 5,20 | 63,70 | 5,01 | 1,10 | 8,10 |
| 94123,00 | 24,83 | 8,18 | 9,14 | 5,10 | 63,70 | 5,00 | 1,10 | 8,10 |
| 94152,00 | 24,84 | 8,18 | 9,15 | 5,20 | 64,30 | 5,05 | 1,10 | 8,20 |
| 94208,00 | 24,90 | 8,19 | 9,14 | 5,10 | 64,80 | 5,09 | 1,10 | 8,20 |
| 94225,00 | 24,89 | 8,19 | 9,15 | 5,20 | 65,20 | 5,12 | 1,10 | 8,20 |
| 94244,00 | 24,88 | 8,19 | 9,15 | 5,20 | 65,00 | 5,10 | 1,10 | 8,10 |
| 94257,00 | 24,86 | 8,19 | 9,15 | 5,20 | 64,90 | 5,09 | 1,10 | 8,10 |
| 94309,00 | 24,81 | 8,18 | 9,14 | 5,10 | 64,10 | 5,04 | 1,10 | 8,20 |
| 94316,00 | 24,79 | 8,18 | 9,14 | 5,10 | 63,60 | 5,01 | 1,10 | 8,20 |
| 94325,00 | 24,77 | 8,18 | 9,15 | 5,20 | 63,30 | 4,98 | 1,20 | 8,20 |
| 94347,00 | 24,66 | 8,13 | 9,15 | 5,20 | 57,20 | 4,51 | 2,00 | 8,00 |
| 94402,00 | 24,67 | 8,12 | 9,15 | 5,20 | 56,40 | 4,44 | 2,00 | 7,80 |
| 94422,00 | 24,66 | 8,12 | 9,15 | 5,20 | 54,80 | 4,32 | 2,00 | 7,70 |
| 94431,00 | 24,66 | 8,11 | 9,16 | 5,20 | 54,80 | 4,32 | 2,00 | 7,70 |
| 94439,00 | 24,65 | 8,11 | 9,16 | 5,20 | 54,80 | 4,32 | 2,00 | 7,70 |
| 94500,00 | 24,66 | 8,11 | 9,16 | 5,20 | 55,50 | 4,37 | 2,00 | 7,60 |
| 94511,00 | 24,66 | 8,11 | 9,16 | 5,20 | 55,50 | 4,37 | 2,00 | 7,70 |
| 94523,00 | 24,67 | 8,12 | 9,15 | 5,20 | 55,50 | 4,37 | 2,00 | 7,70 |
| 94547,00 | 24,27 | 7,95 | 9,23 | 5,20 | 38,70 | 3,07 | 4,00 | 8,10 |
| 94557,00 | 24,27 | 7,94 | 9,23 | 5,20 | 35,60 | 2,82 | 4,00 | 7,90 |
| 94601,00 | 24,27 | 7,94 | 9,23 | 5,20 | 35,10 | 2,79 | 4,00 | 7,70 |
| 94616,00 | 24,27 | 7,93 | 9,23 | 5,20 | 33,90 | 2,69 | 4,00 | 7,00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 94622,00 | 24,28 | 7,92 | 9,23 | 5,20 | 33,50 | 2,65 | 4,00 | 6,80 |
| 94640,00 | 24,28 | 7,92 | 9,23 | 5,20 | 33,90 | 2,69 | 4,00 | 6,80 |
| 94653,00 | 24,28 | 7,91 | 9,22 | 5,20 | 33,40 | 2,65 | 4,00 | 6,80 |
| 94704,00 | 24,28 | 7,90 | 9,23 | 5,20 | 33,30 | 2,65 | 4,00 | 6,80 |
| 94716,00 | 24,27 | 7,90 | 9,23 | 5,20 | 32,90 | 2,61 | 4,00 | 6,70 |
| 94725,00 | 24,26 | 7,90 | 9,22 | 5,20 | 33,20 | 2,63 | 4,00 | 6,70 |
| 94818,00 | 19,58 | 7,53 | 10,90 | 6,20 | 3,10 | 0,26 | 7,90 | 2,80 |
| 94813,00 | 19,51 | 7,54 | 10,92 | 6,20 | 3,30 | 0,29 | 8,00 | 3,10 |
| 94845,00 | 19,31 | 7,50 | 10,98 | 6,20 | 2,60 | 0,22 | 8,00 | 2,70 |
| 94859,00 | 19,25 | 7,48 | 10,94 | 6,20 | 2,50 | 0,22 | 8,00 | 2,70 |
| 94909,00 | 19,37 | 7,48 | 10,91 | 6,20 | 2,50 | 0,21 | 8,00 | 2,60 |
| 94919,00 | 19,34 | 7,46 | 10,89 | 6,20 | 2,40 | 0,21 | 8,00 | 2,60 |
| 94927,00 | 19,47 | 7,46 | 10,87 | 6,20 | 2,20 | 0,19 | 8,00 | 2,60 |
| 94939,00 | 19,54 | 7,45 | 10,86 | 6,20 | 2,30 | 0,20 | 8,00 | 2,60 |
| 95038,00 | 14,91 | 7,34 | 12,16 | 7,00 | 2,30 | 0,22 | 10,00 | 2,20 |
| 95051,00 | 15,05 | 7,34 | 12,04 | 6,90 | 2,20 | 0,21 | 10,00 | 2,30 |
| 95102,00 | 14,88 | 7,32 | 12,06 | 6,90 | 2,20 | 0,21 | 10,00 | 2,30 |
| 95115,00 | 14,79 | 7,31 | 12,09 | 6,90 | 2,20 | 0,20 | 10,10 | 2,30 |
| 95124,00 | 14,80 | 7,30 | 12,10 | 6,90 | 2,20 | 0,21 | 10,10 | 2,30 |
| 95135,00 | 14,78 | 7,29 | 12,12 | 6,90 | 2,20 | 0,21 | 10,10 | 2,30 |
| 95146,00 | 14,76 | 7,28 | 12,14 | 6,90 | 2,20 | 0,21 | 10,10 | 2,40 |
| 95157,00 | 14,76 | 7,27 | 12,14 | 6,90 | 2,20 | 0,20 | 10,10 | 2,50 |
| 95006,00 | 15,22 | 7,39 | 12,17 | 7,00 | 2,30 | 0,21 | 10,10 | 2,30 |
| 95021,00 | 15,16 | 7,37 | 12,14 | 7,00 | 2,30 | 0,22 | 10,10 | 2,20 |

TABLE C.13 Measurement results of KC-5 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 121439,00 | 26,65 | 8,28 | 9,33 | 5,30 | 76,60 | 5,82 | 0,50 | 0,20 |
| 121445,00 | 26,65 | 8,28 | 9,34 | 5,30 | 76,50 | 5,81 | 0,50 | 0,90 |
| 121453,00 | 26,66 | 8,28 | 9,32 | 5,30 | 76,30 | 5,79 | 0,50 | 1,70 |
| 121458,00 | 26,65 | 8,28 | 9,32 | 5,30 | 76,10 | 5,78 | 0,50 | 1,90 |
| 121432,00 | 26,65 | 8,28 | 9,35 | 5,30 | 76,90 | 5,84 | 0,60 | 1,80 |
| 121511,00 | 26,62 | 8,28 | 9,31 | 5,30 | 75,80 | 5,76 | 0,90 | 1,60 |
| 121621,00 | 26,61 | 8,27 | 9,32 | 5,30 | 75,10 | 5,71 | 0,90 | 1,70 |
| 121632,00 | 26,62 | 8,26 | 9,32 | 5,30 | 75,20 | 5,71 | 0,90 | 1,50 |
| 121526,00 | 26,63 | 8,27 | 9,33 | 5,30 | 75,60 | 5,75 | 0,90 | 1,30 |
| 121520,00 | 26,63 | 8,27 | 9,31 | 5,20 | 75,70 | 5,75 | 1,00 | 1,40 |
| 121544,00 | 26,64 | 8,27 | 9,33 | 5,30 | 75,70 | 5,75 | 1,00 | 1,20 |
| 121550,00 | 26,63 | 8,27 | 9,32 | 5,30 | 75,50 | 5,74 | 1,00 | 1,30 |
| 121601,00 | 26,61 | 8,27 | 9,32 | 5,30 | 75,10 | 5,71 | 1,00 | 1,50 |
| 121613,00 | 26,60 | 8,27 | 9,32 | 5,30 | 75,10 | 5,71 | 1,00 | 1,70 |
| 121759,00 | 26,55 | 8,24 | 9,32 | 5,30 | 72,60 | 5,53 | 2,00 | 1,40 |
| 121807,00 | 26,57 | 8,24 | 9,32 | 5,30 | 73,10 | 5,56 | 2,00 | 1,40 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 121707,00 | 26,60 | 8,25 | 9,32 | 5,30 | 72,70 | 5,53 | 2,00 | 1,60 |
| 121716,00 | 26,61 | 8,26 | 9,31 | 5,30 | 74,10 | 5,63 | 2,00 | 1,60 |
| 121735,00 | 26,49 | 8,23 | 9,31 | 5,30 | 72,80 | 5,55 | 2,00 | 1,50 |
| 121741,00 | 26,49 | 8,22 | 9,32 | 5,30 | 71,20 | 5,42 | 2,00 | 1,50 |
| 121726,00 | 26,59 | 8,25 | 9,31 | 5,20 | 74,50 | 5,66 | 2,10 | 1,50 |
| 121750,00 | 26,56 | 8,24 | 9,31 | 5,30 | 71,50 | 5,44 | 2,10 | 1,50 |
| 121657,00 | 26,52 | 8,23 | 9,32 | 5,30 | 72,30 | 5,50 | 2,10 | 1,60 |
| 121819,00 | 26,49 | 8,22 | 9,32 | 5,30 | 72,30 | 5,51 | 2,80 | 1,40 |
| 121909,00 | 26,31 | 8,16 | 9,33 | 5,30 | 65,20 | 4,98 | 3,90 | 1,20 |
| 121831,00 | 26,31 | 8,17 | 9,33 | 5,30 | 67,90 | 5,19 | 4,00 | 1,40 |
| 121841,00 | 26,31 | 8,17 | 9,33 | 5,30 | 66,00 | 5,04 | 4,00 | 1,40 |
| 121852,00 | 26,32 | 8,16 | 9,33 | 5,30 | 65,00 | 4,97 | 4,00 | 1,30 |
| 121918,00 | 26,31 | 8,17 | 9,33 | 5,30 | 65,50 | 5,01 | 4,00 | 1,10 |
| 121923,00 | 26,31 | 8,17 | 9,33 | 5,30 | 65,60 | 5,02 | 4,00 | 1,20 |
| 121928,00 | 26,31 | 8,17 | 9,33 | 5,30 | 65,90 | 5,03 | 4,00 | 1,20 |
| 121955,00 | 22,70 | 7,75 | 10,73 | 6,10 | 16,90 | 1,37 | 8,00 | 1,30 |
| 122004,00 | 22,84 | 7,73 | 10,70 | 6,10 | 8,00 | 0,65 | 8,00 | 1,70 |
| 122034,00 | 22,64 | 7,67 | 10,87 | 6,20 | 3,50 | 0,28 | 8,00 | 3,50 |
| 122042,00 | 22,69 | 7,66 | 10,86 | 6,20 | 3,30 | 0,27 | 8,00 | 3,60 |
| 122054,00 | 22,61 | 7,65 | 10,89 | 6,20 | 3,00 | 0,24 | 8,00 | 3,60 |
| 122102,00 | 22,64 | 7,65 | 10,86 | 6,20 | 2,90 | 0,24 | 8,00 | 3,60 |
| 122107,00 | 22,59 | 7,64 | 10,88 | 6,20 | 2,80 | 0,23 | 8,00 | 3,60 |
| 122120,00 | 20,03 | 7,59 | 11,60 | 6,60 | 2,80 | 0,24 | 8,90 | 3,50 |
| 122125,00 | 19,02 | 7,57 | 11,80 | 6,70 | 2,70 | 0,24 | 8,90 | 3,50 |
| 122129,00 | 19,05 | 7,56 | 11,84 | 6,80 | 2,70 | 0,23 | 8,90 | 3,40 |
| 122133,00 | 19,14 | 7,55 | 11,82 | 6,80 | 2,70 | 0,24 | 8,90 | 3,30 |
| 122136,00 | 19,52 | 7,55 | 11,70 | 6,70 | 2,70 | 0,24 | 8,90 | 3,20 |

TABLE C.14 Measurement results of KC-5 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 104652,00 | 27,51 | 8,13 | 9,31 | 5,20 | 75,40 | 5,64 | 0,40 | 13,20 |
| 104618,00 | 27,56 | 8,11 | 9,33 | 5,30 | 78,00 | 5,83 | 0,50 | 17,10 |
| 104622,00 | 27,56 | 8,11 | 9,32 | 5,30 | 77,60 | 5,80 | 0,50 | 16,70 |
| 104656,00 | 27,51 | 8,14 | 9,31 | 5,20 | 75,30 | 5,63 | 0,50 | 13,20 |
| 104647,00 | 27,51 | 8,13 | 9,32 | 5,30 | 75,20 | 5,62 | 0,50 | 13,40 |
| 104629,00 | 27,52 | 8,12 | 9,32 | 5,30 | 77,10 | 5,77 | 0,60 | 15,90 |
| 104636,00 | 27,48 | 8,12 | 9,32 | 5,30 | 76,10 | 5,70 | 0,60 | 14,80 |
| 104707,00 | 27,55 | 8,15 | 9,32 | 5,30 | 75,50 | 5,65 | 0,60 | 13,10 |
| 104723,00 | 27,48 | 8,14 | 9,31 | 5,30 | 73,80 | 5,52 | 0,80 | 12,70 |
| 104731,00 | 27,52 | 8,15 | 9,31 | 5,20 | 74,30 | 5,56 | 0,90 | 12,40 |
| 104748,00 | 27,53 | 8,16 | 9,31 | 5,20 | 75,00 | 5,61 | 0,90 | 12,50 |
| 104736,00 | 27,53 | 8,15 | 9,31 | 5,20 | 74,80 | 5,60 | 1,00 | 12,40 |
| 104742,00 | 27,53 | 8,16 | 9,31 | 5,20 | 75,00 | 5,61 | 1,00 | 12,50 |
| 104752,00 | 27,53 | 8,16 | 9,31 | 5,20 | 75,10 | 5,62 | 1,00 | 12,60 |
| 104818,00 | 27,44 | 8,15 | 9,31 | 5,20 | 72,50 | 5,43 | 1,90 | 12,30 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 104825,00 | 27,49 | 8,15 | 9,31 | 5,20 | 72,80 | 5,45 | 1,90 | 12,10 |
| 104830,00 | 27,50 | 8,16 | 9,31 | 5,20 | 73,30 | 5,49 | 1,90 | 12,00 |
| 104836,00 | 27,45 | 8,15 | 9,31 | 5,20 | 73,70 | 5,52 | 1,90 | 11,90 |
| 104813,00 | 27,44 | 8,14 | 9,31 | 5,20 | 72,20 | 5,41 | 2,00 | 12,40 |
| 104805,00 | 27,41 | 8,14 | 9,31 | 5,20 | 73,00 | 5,47 | 2,10 | 12,70 |
| 104840,00 | 27,45 | 8,15 | 9,31 | 5,20 | 73,20 | 5,48 | 2,10 | 11,90 |
| 104858,00 | 27,25 | 8,05 | 9,29 | 5,20 | 63,80 | 4,80 | 3,90 | 12,00 |
| 104928,00 | 27,24 | 8,03 | 9,29 | 5,20 | 60,30 | 4,53 | 3,90 | 12,00 |
| 104907,00 | 27,24 | 8,04 | 9,29 | 5,20 | 61,80 | 4,65 | 4,00 | 12,00 |
| 104914,00 | 27,24 | 8,04 | 9,29 | 5,20 | 61,10 | 4,59 | 4,00 | 12,00 |
| 104936,00 | 27,24 | 8,03 | 9,29 | 5,20 | 60,20 | 4,53 | 4,00 | 11,90 |
| 105002,00 | 23,91 | 7,67 | 10,61 | 6,00 | 18,50 | 1,47 | 7,90 | 11,80 |
| 105007,00 | 23,98 | 7,66 | 10,58 | 6,00 | 10,40 | 0,83 | 8,00 | 11,90 |
| 105025,00 | 23,75 | 7,62 | 10,69 | 6,10 | 4,50 | 0,36 | 8,00 | 12,20 |
| 105030,00 | 23,80 | 7,61 | 10,67 | 6,10 | 4,20 | 0,33 | 8,00 | 12,40 |
| 105035,00 | 23,91 | 7,61 | 10,62 | 6,00 | 4,00 | 0,31 | 8,00 | 12,50 |
| 105051,00 | 23,84 | 7,59 | 10,63 | 6,00 | 3,60 | 0,28 | 8,00 | 12,80 |
| 105058,00 | 23,86 | 7,58 | 10,61 | 6,00 | 3,40 | 0,27 | 8,00 | 12,80 |
| 105107,00 | 23,90 | 7,57 | 10,57 | 6,00 | 3,40 | 0,27 | 8,00 | 12,90 |
| 105015,00 | 23,80 | 7,64 | 10,60 | 6,00 | 6,60 | 0,52 | 8,10 | 12,00 |
| 105021,00 | 23,72 | 7,63 | 10,68 | 6,10 | 5,10 | 0,41 | 8,10 | 12,10 |
| 105041,00 | 23,90 | 7,60 | 10,58 | 6,00 | 3,50 | 0,28 | 8,10 | 12,60 |
| 105045,00 | 23,74 | 7,59 | 10,66 | 6,10 | 3,50 | 0,28 | 8,10 | 12,70 |
| 104953,00 | 23,76 | 7,77 | 10,90 | 6,20 | 50,20 | 4,00 | 8,40 | 11,90 |
| 105119,00 | 20,87 | 7,53 | 11,85 | 6,80 | 3,10 | 0,26 | 9,00 | 12,90 |
| 105125,00 | 20,72 | 7,52 | 11,90 | 6,80 | 3,10 | 0,26 | 9,00 | 12,80 |
| 105129,00 | 20,70 | 7,52 | 11,92 | 6,80 | 3,00 | 0,25 | 9,00 | 12,80 |

TABLE C.15 Measurement results of KC-6 in 5.15.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 145845,00 | 23,36 | 7,74 | 10,44 | 5,86 | 13,40 | 1,08 | 0,60 | 13,20 |
| 145904,00 | 23,39 | 7,71 | 10,44 | 5,85 | 12,00 | 0,96 | 0,60 | 15,90 |
| 145911,00 | 23,38 | 7,70 | 10,43 | 5,86 | 11,90 | 0,96 | 0,70 | 15,10 |
| 145949,00 | 23,33 | 7,67 | 10,44 | 5,86 | 11,00 | 0,89 | 1,10 | 10,40 |
| 145956,00 | 23,32 | 7,66 | 10,45 | 5,86 | 10,90 | 0,88 | 1,10 | 10,20 |
| 150003,00 | 23,31 | 7,66 | 10,48 | 5,87 | 10,70 | 0,87 | 1,10 | 9,50 |
| 150009,00 | 23,31 | 7,65 | 10,48 | 5,86 | 10,40 | 0,84 | 1,20 | 8,90 |
| 150016,00 | 23,33 | 7,65 | 10,48 | 5,86 | 10,40 | 0,84 | 1,20 | 8,00 |
| 150142,00 | 23,41 | 7,61 | 10,52 | 5,91 | 9,30 | 0,75 | 1,70 | 6,80 |
| 150108,00 | 23,36 | 7,63 | 10,48 | 5,86 | 9,50 | 0,76 | 1,80 | 7,80 |
| 150039,00 | 23,30 | 7,63 | 10,48 | 5,87 | 9,50 | 0,77 | 2,00 | 6,40 |
| 150047,00 | 23,36 | 7,64 | 10,48 | 5,86 | 9,80 | 0,79 | 2,00 | 6,60 |
| 150101,00 | 23,36 | 7,63 | 10,48 | 5,86 | 9,30 | 0,75 | 2,00 | 7,40 |
| 150136,00 | 23,43 | 7,61 | 10,55 | 5,91 | 9,30 | 0,75 | 2,00 | 7,10 |
| 150317,00 | 23,43 | 7,58 | 10,58 | 5,91 | 9,00 | 0,73 | 2,30 | 5,00 |

TABLE C.16 Measurement results of KC-6 in 7.10.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 122656,00 | 25,53 | 8,06 | 9,74 | 5,65 | 48,70 | 3,78 | 0,50 | 1,50 |
| 122703,00 | 25,53 | 8,06 | 9,75 | 5,66 | 48,60 | 3,77 | 0,50 | 1,20 |
| 122620,00 | 25,53 | 8,05 | 9,75 | 5,66 | 50,00 | 3,88 | 0,60 | 0,00 |
| 122640,00 | 25,53 | 8,05 | 9,75 | 5,65 | 49,10 | 3,82 | 0,60 | 0,60 |
| 122738,00 | 25,53 | 8,06 | 9,75 | 5,66 | 48,30 | 3,75 | 1,00 | 0,00 |
| 122749,00 | 25,54 | 8,06 | 9,75 | 5,66 | 48,00 | 3,73 | 1,00 | 0,00 |
| 122758,00 | 25,54 | 8,06 | 9,75 | 5,66 | 47,90 | 3,72 | 1,00 | 0,00 |
| 122807,00 | 25,54 | 8,06 | 9,75 | 5,66 | 47,70 | 3,71 | 1,00 | 0,00 |
| 122815,00 | 25,54 | 8,06 | 9,75 | 5,66 | 47,70 | 3,70 | 1,00 | 0,00 |
| 122900,00 | 25,53 | 8,05 | 9,75 | 5,66 | 47,30 | 3,67 | 2,00 | 0,60 |
| 122918,00 | 25,54 | 8,05 | 9,75 | 5,66 | 46,90 | 3,64 | 2,00 | 1,50 |
| 122932,00 | 25,54 | 8,05 | 9,75 | 5,66 | 46,90 | 3,64 | 2,00 | 1,50 |
| 122909,00 | 25,53 | 8,05 | 9,75 | 5,66 | 47,00 | 3,65 | 2,10 | 1,20 |
| 122925,00 | 25,54 | 8,05 | 9,75 | 5,66 | 47,00 | 3,65 | 2,10 | 1,50 |
| 123021,00 | 25,55 | 8,04 | 9,75 | 5,66 | 47,00 | 3,65 | 2,70 | 2,80 |
| 123037,00 | 25,54 | 8,04 | 9,75 | 5,66 | 47,00 | 3,65 | 2,70 | 2,50 |
| 123105,00 | 25,54 | 8,03 | 9,75 | 5,66 | 46,90 | 3,65 | 2,70 | 1,70 |
| 123050,00 | 25,54 | 8,04 | 9,75 | 5,66 | 47,00 | 3,65 | 2,80 | 2,00 |
| 123114,00 | 25,54 | 8,03 | 9,75 | 5,66 | 46,70 | 3,63 | 2,80 | 2,10 |
| 123121,00 | 25,55 | 8,03 | 9,75 | 5,66 | 46,70 | 3,62 | 2,80 | 3,20 |

TABLE C.17 Measurement results of KC-6 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 140945,00 | 26,92 | 8,29 | 9,32 | 5,30 | 71,40 | 5,40 | 0,50 | 33,50 |
| 140950,00 | 26,92 | 8,29 | 9,32 | 5,30 | 71,30 | 5,39 | 0,50 | 34,10 |
| 140954,00 | 26,95 | 8,29 | 9,31 | 5,20 | 71,00 | 5,36 | 0,50 | 34,60 |
| 140959,00 | 26,95 | 8,29 | 9,31 | 5,20 | 70,80 | 5,35 | 0,50 | 35,00 |
| 141004,00 | 26,94 | 8,29 | 9,31 | 5,20 | 70,80 | 5,35 | 0,50 | 35,40 |
| 141009,00 | 26,93 | 8,29 | 9,31 | 5,20 | 70,80 | 5,35 | 0,50 | 35,70 |
| 141013,00 | 26,92 | 8,29 | 9,31 | 5,20 | 70,80 | 5,35 | 0,50 | 35,80 |
| 141018,00 | 26,92 | 8,29 | 9,31 | 5,20 | 70,80 | 5,35 | 0,50 | 35,20 |
| 141045,00 | 26,91 | 8,29 | 9,30 | 5,20 | 70,50 | 5,33 | 1,00 | 29,00 |
| 141051,00 | 26,85 | 8,29 | 9,31 | 5,20 | 70,60 | 5,35 | 1,00 | 26,10 |
| 141056,00 | 26,86 | 8,29 | 9,32 | 5,30 | 70,60 | 5,35 | 1,00 | 22,90 |
| 141101,00 | 26,86 | 8,29 | 9,31 | 5,20 | 70,60 | 5,35 | 1,00 | 19,80 |
| 141105,00 | 26,85 | 8,29 | 9,31 | 5,30 | 70,60 | 5,35 | 1,00 | 16,40 |
| 141110,00 | 26,85 | 8,29 | 9,31 | 5,20 | 70,60 | 5,34 | 1,00 | 14,20 |
| 141114,00 | 26,85 | 8,29 | 9,32 | 5,30 | 70,60 | 5,34 | 1,00 | 12,00 |
| 141119,00 | 26,84 | 8,29 | 9,31 | 5,30 | 70,60 | 5,34 | 1,00 | 10,50 |
| 141124,00 | 26,84 | 8,29 | 9,31 | 5,30 | 70,50 | 5,34 | 1,00 | 9,80 |
| 141210,00 | 26,58 | 8,28 | 9,33 | 5,30 | 68,40 | 5,20 | 2,00 | 11,40 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 141215,00 | 26,56 | 8,27 | 9,33 | 5,30 | 67,60 | 5,15 | 2,00 | 11,70 |
| 141220,00 | 26,66 | 8,27 | 9,31 | 5,20 | 67,20 | 5,11 | 2,00 | 11,90 |
| 141225,00 | 26,73 | 8,28 | 9,31 | 5,20 | 67,50 | 5,12 | 2,00 | 12,10 |
| 141230,00 | 26,70 | 8,28 | 9,32 | 5,30 | 67,70 | 5,14 | 2,00 | 12,10 |
| 141234,00 | 26,72 | 8,28 | 9,32 | 5,30 | 68,10 | 5,16 | 2,00 | 12,10 |
| 141239,00 | 26,71 | 8,28 | 9,32 | 5,30 | 68,30 | 5,18 | 2,00 | 12,00 |
| 141244,00 | 26,73 | 8,28 | 9,31 | 5,30 | 68,50 | 5,20 | 2,00 | 12,00 |
| 141249,00 | 26,69 | 8,28 | 9,32 | 5,30 | 68,60 | 5,20 | 2,00 | 11,90 |
| 141254,00 | 26,65 | 8,28 | 9,32 | 5,30 | 68,30 | 5,19 | 2,00 | 11,90 |
| 141259,00 | 26,65 | 8,28 | 9,33 | 5,30 | 67,80 | 5,15 | 2,00 | 11,80 |
| 141306,00 | 26,62 | 8,28 | 9,32 | 5,30 | 67,50 | 5,13 | 2,00 | 11,80 |
| 141311,00 | 26,62 | 8,27 | 9,33 | 5,30 | 67,50 | 5,13 | 2,00 | 11,70 |
| 141317,00 | 26,66 | 8,28 | 9,32 | 5,30 | 67,50 | 5,13 | 2,00 | 11,70 |
| 141149,00 | 26,64 | 8,28 | 9,33 | 5,30 | 68,70 | 5,22 | 2,10 | 9,60 |
| 141322,00 | 26,66 | 8,28 | 9,32 | 5,30 | 67,50 | 5,12 | 2,20 | 11,60 |
| 141351,00 | 26,27 | 8,17 | 9,34 | 5,30 | 57,00 | 4,36 | 4,00 | 10,80 |
| 141358,00 | 26,27 | 8,17 | 9,34 | 5,30 | 56,10 | 4,29 | 4,00 | 11,00 |
| 141403,00 | 26,27 | 8,17 | 9,34 | 5,30 | 55,90 | 4,28 | 4,00 | 11,10 |
| 141408,00 | 26,28 | 8,17 | 9,34 | 5,30 | 55,70 | 4,26 | 4,00 | 11,30 |
| 141419,00 | 26,27 | 8,16 | 9,34 | 5,30 | 55,50 | 4,24 | 4,00 | 11,60 |
| 141426,00 | 26,27 | 8,16 | 9,34 | 5,30 | 55,30 | 4,23 | 4,00 | 11,70 |
| 141433,00 | 26,24 | 8,11 | 9,34 | 5,30 | 54,80 | 4,19 | 5,70 | 11,70 |
| 141459,00 | 23,22 | 7,73 | 11,32 | 6,50 | 13,40 | 1,07 | 7,70 | 15,20 |
| 141515,00 | 23,12 | 7,68 | 11,40 | 6,50 | 5,60 | 0,45 | 7,70 | 24,00 |
| 141520,00 | 23,19 | 7,67 | 11,33 | 6,50 | 4,80 | 0,39 | 7,70 | 26,00 |
| 141524,00 | 23,09 | 7,67 | 11,38 | 6,50 | 4,50 | 0,36 | 7,70 | 26,10 |
| 141527,00 | 23,08 | 7,67 | 11,38 | 6,50 | 4,10 | 0,33 | 7,70 | 25,10 |
| 141531,00 | 23,07 | 7,65 | 11,41 | 6,50 | 3,90 | 0,31 | 7,70 | 23,90 |
| 141502,00 | 23,10 | 7,71 | 11,38 | 6,50 | 10,90 | 0,87 | 7,80 | 17,10 |
| 141508,00 | 23,00 | 7,70 | 11,41 | 6,50 | 7,80 | 0,63 | 7,80 | 19,60 |
| 141449,00 | 23,38 | 7,77 | 11,23 | 6,40 | 26,60 | 2,13 | 7,80 | 11,90 |

TABLE C.18 Measurement results of KC-6 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 130037,00 | 27,77 | 8,26 | 9,06 | 5,10 | 73,90 | 5,51 | 0,50 | 25,00 |
| 130042,00 | 27,76 | 8,26 | 9,04 | 5,10 | 70,80 | 5,28 | 0,50 | 24,50 |
| 130046,00 | 27,74 | 8,25 | 9,06 | 5,10 | 69,00 | 5,15 | 0,50 | 23,80 |
| 130051,00 | 27,77 | 8,25 | 9,06 | 5,10 | 68,20 | 5,08 | 0,50 | 22,90 |
| 130056,00 | 27,79 | 8,25 | 9,05 | 5,10 | 67,90 | 5,06 | 0,50 | 22,40 |
| 130100,00 | 27,80 | 8,24 | 9,05 | 5,10 | 67,80 | 5,05 | 0,50 | 22,10 |
| 130105,00 | 27,80 | 8,24 | 9,01 | 5,10 | 67,50 | 5,03 | 0,50 | 21,90 |
| 130109,00 | 27,80 | 8,24 | 9,06 | 5,10 | 67,40 | 5,02 | 0,50 | 21,80 |
| 130129,00 | 27,76 | 8,23 | 9,27 | 5,20 | 66,50 | 4,96 | 0,90 | 35,20 |
| 130206,00 | 27,73 | 8,21 | 9,26 | 5,20 | 66,10 | 4,93 | 0,90 | 67,90 |
| 130134,00 | 27,77 | 8,23 | 9,27 | 5,20 | 66,60 | 4,96 | 1,00 | 41,50 |
| 130140,00 | 27,77 | 8,22 | 9,27 | 5,20 | 66,70 | 4,97 | 1,00 | 50,30 |
| 130146,00 | 27,76 | 8,22 | 9,26 | 5,20 | 66,70 | 4,97 | 1,00 | 57,50 |
| 130200,00 | 27,75 | 8,22 | 9,27 | 5,20 | 66,40 | 4,94 | 1,00 | 67,00 |
| 130211,00 | 27,72 | 8,21 | 9,27 | 5,20 | 66,00 | 4,92 | 1,30 | 67,80 |
| 130229,00 | 27,69 | 8,20 | 9,30 | 5,20 | 65,10 | 4,85 | 2,00 | 71,90 |
| 130234,00 | 27,70 | 8,20 | 9,30 | 5,20 | 65,00 | 4,85 | 2,00 | 73,60 |
| 130239,00 | 27,70 | 8,20 | 9,30 | 5,20 | 65,00 | 4,84 | 2,00 | 75,20 |
| 130243,00 | 27,67 | 8,19 | 9,30 | 5,20 | 64,60 | 4,82 | 2,00 | 76,90 |
| 130248,00 | 27,67 | 8,19 | 9,30 | 5,20 | 64,50 | 4,81 | 2,00 | 77,60 |
| 130252,00 | 27,68 | 8,19 | 9,29 | 5,20 | 64,70 | 4,82 | 2,00 | 78,10 |
| 130256,00 | 27,67 | 8,19 | 9,30 | 5,20 | 64,80 | 4,83 | 2,00 | 78,60 |
| 130319,00 | 27,60 | 8,17 | 9,30 | 5,20 | 62,20 | 4,64 | 4,00 | 58,20 |
| 130324,00 | 27,61 | 8,16 | 9,30 | 5,20 | 62,30 | 4,65 | 4,00 | 50,50 |
| 130328,00 | 27,61 | 8,16 | 9,30 | 5,20 | 62,40 | 4,66 | 4,00 | 39,80 |
| 130333,00 | 27,61 | 8,16 | 9,29 | 5,20 | 62,20 | 4,64 | 4,00 | 30,70 |
| 130338,00 | 27,60 | 8,16 | 9,30 | 5,20 | 62,00 | 4,63 | 4,10 | 23,50 |
| 130355,00 | 26,89 | 7,91 | 9,34 | 5,30 | 40,80 | 3,09 | 7,80 | 12,90 |
| 130400,00 | 26,83 | 7,88 | 9,36 | 5,30 | 30,80 | 2,34 | 7,80 | 13,30 |
| 130405,00 | 26,83 | 7,87 | 9,35 | 5,30 | 25,50 | 1,93 | 7,80 | 13,80 |
| 130410,00 | 26,84 | 7,86 | 9,34 | 5,30 | 20,40 | 1,55 | 7,80 | 14,90 |
| 130414,00 | 26,84 | 7,85 | 9,35 | 5,30 | 17,50 | 1,33 | 7,80 | 15,90 |
| 130419,00 | 26,84 | 7,84 | 9,34 | 5,30 | 16,20 | 1,22 | 7,80 | 17,20 |

TABLE C.19 Measurement results of KC-7 in 6.16.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 131030,00 | 25,72 | 8,11 | 9,02 | 5,68 | 55,50 | 4,30 | 0,60 | 1,40 |
| 131037,00 | 25,72 | 8,11 | 9,02 | 5,68 | 55,30 | 4,28 | 0,60 | 1,60 |
| 131046,00 | 25,71 | 8,11 | 9,02 | 5,68 | 55,00 | 4,25 | 0,60 | 1,30 |
| 131053,00 | 25,72 | 8,12 | 9,02 | 5,68 | 54,90 | 4,25 | 0,60 | 1,50 |
| 131102,00 | 25,73 | 8,12 | 9,03 | 5,68 | 55,10 | 4,26 | 0,70 | 1,90 |
| 131141,00 | 25,72 | 8,12 | 9,04 | 5,68 | 54,30 | 4,20 | 1,20 | 1,70 |
| 131206,00 | 25,71 | 8,12 | 9,04 | 5,68 | 53,80 | 4,16 | 1,20 | 1,80 |
| 131223,00 | 25,70 | 8,11 | 9,03 | 5,67 | 53,80 | 4,17 | 1,30 | 1,80 |
| 131331,00 | 25,71 | 8,10 | 9,05 | 5,67 | 53,20 | 4,12 | 2,00 | 10,70 |
| 131337,00 | 25,72 | 8,10 | 9,05 | 5,67 | 53,20 | 4,12 | 2,00 | 7,60 |
| 131343,00 | 25,71 | 8,10 | 9,04 | 5,67 | 53,30 | 4,13 | 2,10 | 4,90 |
| 131405,00 | 25,67 | 8,09 | 9,06 | 5,67 | 52,00 | 4,03 | 3,70 | 1,70 |
| 131420,00 | 25,70 | 8,10 | 9,06 | 5,67 | 52,10 | 4,03 | 3,70 | 1,70 |
| 131425,00 | 25,68 | 8,09 | 9,06 | 5,67 | 52,40 | 4,06 | 3,70 | 1,70 |
| 131542,00 | 11,58 | 7,54 | 14,05 | 8,06 | 4,10 | 0,41 | 12,70 | 1,70 |
| 131612,00 | 10,50 | 7,02 | 16,07 | 11,60 | 3,70 | 0,38 | 16,10 | 1,30 |
| 131606,00 | 10,53 | 7,06 | 16,02 | 11,40 | 4,10 | 0,41 | 16,20 | 1,50 |
| 131651,00 | 10,47 | 6,87 | 16,02 | 11,70 | 3,50 | 0,36 | 16,20 | 3,30 |
| 131656,00 | 10,48 | 6,86 | 16,01 | 11,70 | 3,60 | 0,36 | 16,50 | 3,70 |
| 131644,00 | 10,42 | 6,84 | 16,80 | 12,00 | 3,40 | 0,35 | 16,70 | 2,70 |
| 131639,00 | 10,37 | 6,83 | 16,13 | 12,50 | 3,50 | 0,36 | 17,20 | 2,30 |
| 131632,00 | 10,35 | 6,84 | 16,15 | 12,70 | 3,50 | 0,36 | 17,80 | 1,80 |

TABLE C.20 Measurement results of KC-7 in 7.10.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 104121,00 | 26,38 | 8,37 | 9,04 | 5,10 | 90,90 | 6,95 | 0,50 | 3,60 |
| 104145,00 | 26,36 | 8,39 | 9,04 | 5,10 | 90,10 | 6,89 | 0,50 | 3,60 |
| 104158,00 | 26,37 | 8,40 | 9,05 | 5,10 | 89,90 | 6,87 | 0,50 | 3,70 |
| 104209,00 | 26,39 | 8,40 | 9,05 | 5,10 | 90,00 | 6,87 | 0,50 | 3,70 |
| 104224,00 | 26,41 | 8,41 | 9,05 | 5,10 | 90,10 | 6,88 | 0,50 | 3,90 |
| 104235,00 | 26,50 | 8,42 | 9,05 | 5,10 | 90,40 | 6,89 | 0,50 | 4,00 |
| 104248,00 | 26,55 | 8,42 | 9,04 | 5,10 | 90,20 | 6,87 | 0,50 | 4,00 |
| 104442,00 | 26,15 | 8,43 | 9,07 | 5,10 | 89,50 | 6,87 | 1,00 | 3,70 |
| 104310,00 | 26,15 | 8,43 | 9,08 | 5,10 | 90,00 | 6,90 | 1,00 | 3,80 |
| 104326,00 | 26,14 | 8,43 | 9,08 | 5,10 | 90,10 | 6,91 | 1,00 | 3,70 |
| 104334,00 | 26,12 | 8,43 | 9,08 | 5,10 | 89,90 | 6,90 | 1,00 | 3,60 |
| 104344,00 | 26,10 | 8,43 | 9,08 | 5,10 | 89,40 | 6,87 | 1,00 | 3,60 |
| 104351,00 | 26,10 | 8,43 | 9,07 | 5,10 | 89,00 | 6,84 | 1,00 | 3,60 |
| 104358,00 | 26,10 | 8,43 | 9,08 | 5,10 | 88,60 | 6,80 | 1,00 | 3,70 |
| 104408,00 | 26,10 | 8,43 | 9,08 | 5,10 | 88,50 | 6,80 | 1,10 | 3,70 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 104258,00 | 26,29 | 8,43 | 9,05 | 5,10 | 89,60 | 6,86 | 1,10 | 3,90 |
| 104416,00 | 26,13 | 8,43 | 9,06 | 5,10 | 88,80 | 6,81 | 1,10 | 3,70 |
| 104432,00 | 26,10 | 8,43 | 9,08 | 5,10 | 89,00 | 6,83 | 1,10 | 3,60 |
| 104456,00 | 26,16 | 8,44 | 9,07 | 5,10 | 90,00 | 6,90 | 1,10 | 3,90 |
| 104503,00 | 26,17 | 8,44 | 9,07 | 5,10 | 90,10 | 6,91 | 1,30 | 4,00 |
| 104514,00 | 26,02 | 8,42 | 9,10 | 5,10 | 88,00 | 6,76 | 1,90 | 3,90 |
| 104527,00 | 26,04 | 8,42 | 9,10 | 5,10 | 87,20 | 6,71 | 1,90 | 3,70 |
| 104537,00 | 26,04 | 8,42 | 9,10 | 5,10 | 87,00 | 6,69 | 1,90 | 3,60 |
| 104544,00 | 26,04 | 8,42 | 9,09 | 5,10 | 87,00 | 6,69 | 1,90 | 3,50 |
| 104557,00 | 26,02 | 8,42 | 9,09 | 5,10 | 86,70 | 6,67 | 1,90 | 3,50 |
| 104608,00 | 26,03 | 8,42 | 9,09 | 5,10 | 86,40 | 6,64 | 1,90 | 3,50 |
| 104617,00 | 26,03 | 8,42 | 9,09 | 5,10 | 86,40 | 6,64 | 1,90 | 3,50 |
| 104628,00 | 26,02 | 8,42 | 9,09 | 5,10 | 86,30 | 6,64 | 1,90 | 3,50 |
| 104638,00 | 26,02 | 8,42 | 9,09 | 5,10 | 86,10 | 6,62 | 1,90 | 3,50 |
| 104641,00 | 26,02 | 8,42 | 9,09 | 5,10 | 86,10 | 6,62 | 1,90 | 3,50 |
| 104648,00 | 26,02 | 8,42 | 9,09 | 5,10 | 85,80 | 6,60 | 1,90 | 3,50 |
| 104659,00 | 26,01 | 8,41 | 9,10 | 5,10 | 85,40 | 6,57 | 1,90 | 3,50 |
| 104707,00 | 26,01 | 8,41 | 9,09 | 5,10 | 85,20 | 6,55 | 1,90 | 3,50 |
| 104718,00 | 26,01 | 8,41 | 9,09 | 5,10 | 85,20 | 6,55 | 1,90 | 3,50 |
| 104748,00 | 25,54 | 8,33 | 9,11 | 5,10 | 76,00 | 5,89 | 4,00 | 3,20 |
| 104804,00 | 25,54 | 8,33 | 9,11 | 5,10 | 74,90 | 5,81 | 4,00 | 3,00 |
| 104811,00 | 25,53 | 8,33 | 9,11 | 5,10 | 74,60 | 5,79 | 4,00 | 3,00 |
| 104819,00 | 25,54 | 8,32 | 9,11 | 5,10 | 74,30 | 5,77 | 4,00 | 2,90 |
| 104826,00 | 25,54 | 8,32 | 9,11 | 5,10 | 74,10 | 5,75 | 4,00 | 3,00 |
| 104842,00 | 25,54 | 8,32 | 9,11 | 5,10 | 74,00 | 5,74 | 4,00 | 3,00 |
| 104901,00 | 25,55 | 8,32 | 9,11 | 5,10 | 73,80 | 5,72 | 4,00 | 3,20 |
| 104908,00 | 25,56 | 8,32 | 9,11 | 5,10 | 73,90 | 5,73 | 4,00 | 3,30 |
| 104915,00 | 25,56 | 8,32 | 9,10 | 5,10 | 73,90 | 5,73 | 4,00 | 3,50 |
| 104931,00 | 25,56 | 8,32 | 9,11 | 5,10 | 74,00 | 5,74 | 4,00 | 3,60 |
| 104939,00 | 25,57 | 8,32 | 9,11 | 5,10 | 74,00 | 5,74 | 4,00 | 3,40 |
| 104946,00 | 25,57 | 8,32 | 9,11 | 5,10 | 74,00 | 5,74 | 4,00 | 3,30 |
| 104953,00 | 25,56 | 8,32 | 9,11 | 5,10 | 74,00 | 5,74 | 4,20 | 3,10 |
| 105016,00 | 20,26 | 7,84 | 10,71 | 6,10 | 29,70 | 2,53 | 8,00 | 2,80 |
| 105056,00 | 19,43 | 7,67 | 11,01 | 6,30 | 6,20 | 0,54 | 8,10 | 2,00 |
| 105109,00 | 19,60 | 7,64 | 10,98 | 6,20 | 4,70 | 0,40 | 8,10 | 2,10 |
| 105121,00 | 19,53 | 7,63 | 11,02 | 6,30 | 4,00 | 0,34 | 8,10 | 2,10 |
| 105126,00 | 19,57 | 7,62 | 11,00 | 6,30 | 3,90 | 0,33 | 8,10 | 2,10 |
| 105213,00 | 11,32 | 7,28 | 15,40 | 9,00 | 3,20 | 0,32 | 14,70 | 1,40 |
| 105233,00 | 11,28 | 7,24 | 15,50 | 9,00 | 3,10 | 0,32 | 14,70 | 2,30 |
| 105257,00 | 11,04 | 7,19 | 15,60 | 9,10 | 3,00 | 0,31 | 14,70 | 3,10 |
| 105309,00 | 11,02 | 7,18 | 15,60 | 9,10 | 3,00 | 0,30 | 14,70 | 2,40 |
| 105316,00 | 11,04 | 7,16 | 15,70 | 9,10 | 2,90 | 0,30 | 14,70 | 2,00 |

TABLE C.21 Measurement results of KC-7 in 7.16.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO 1 % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 101149,00 | 25,93 | 8,24 | 9,10 | 5,10 | 76,70 | 5,91 | 0,50 | 7,10 |
| 101200,00 | 25,94 | 8,25 | 9,09 | 5,10 | 76,10 | 5,86 | 0,50 | 6,80 |
| 101223,00 | 25,95 | 8,26 | 9,09 | 5,10 | 76,30 | 5,87 | 0,50 | 6,80 |
| 101236,00 | 25,91 | 8,27 | 9,09 | 5,10 | 76,40 | 5,89 | 0,50 | 6,90 |
| 101246,00 | 25,94 | 8,27 | 9,09 | 5,10 | 76,10 | 5,86 | 0,50 | 6,90 |
| 101257,00 | 25,93 | 8,28 | 9,08 | 5,10 | 75,80 | 5,83 | 0,50 | 6,90 |
| 101310,00 | 25,88 | 8,28 | 9,08 | 5,10 | 75,90 | 5,86 | 0,50 | 6,90 |
| 101326,00 | 25,90 | 8,29 | 9,09 | 5,10 | 76,00 | 5,86 | 0,50 | 6,80 |
| 101337,00 | 25,82 | 8,29 | 9,09 | 5,10 | 75,90 | 5,86 | 0,50 | 6,80 |
| 101349,00 | 25,90 | 8,29 | 9,08 | 5,10 | 76,10 | 5,87 | 0,50 | 6,80 |
| 101401,00 | 25,83 | 8,29 | 9,09 | 5,10 | 76,00 | 5,87 | 0,60 | 6,80 |
| 101411,00 | 25,73 | 8,30 | 9,09 | 5,10 | 76,30 | 5,90 | 0,90 | 6,80 |
| 101423,00 | 25,76 | 8,30 | 9,09 | 5,10 | 76,80 | 5,94 | 0,90 | 7,70 |
| 101441,00 | 25,78 | 8,30 | 9,07 | 5,10 | 76,30 | 5,89 | 0,90 | 10,80 |
| 101545,00 | 25,72 | 8,32 | 9,08 | 5,10 | 77,50 | 6,00 | 0,90 | 14,10 |
| 101550,00 | 25,72 | 8,32 | 9,08 | 5,10 | 77,70 | 6,01 | 0,90 | 14,20 |
| 101458,00 | 25,77 | 8,31 | 9,09 | 5,10 | 76,70 | 5,92 | 0,90 | 13,30 |
| 101615,00 | 25,73 | 8,32 | 9,09 | 5,10 | 77,70 | 6,01 | 0,90 | 14,40 |
| 101507,00 | 25,76 | 8,31 | 9,09 | 5,10 | 77,00 | 5,95 | 1,00 | 13,70 |
| 101516,00 | 25,72 | 8,31 | 9,08 | 5,10 | 76,80 | 5,94 | 1,00 | 13,80 |
| 101537,00 | 25,70 | 8,32 | 9,09 | 5,10 | 77,40 | 5,99 | 1,00 | 14,00 |
| 101559,00 | 25,72 | 8,32 | 9,08 | 5,10 | 77,60 | 6,00 | 1,00 | 14,30 |
| 101636,00 | 25,46 | 8,30 | 9,10 | 5,10 | 75,50 | 5,86 | 2,00 | 14,00 |
| 101703,00 | 25,50 | 8,30 | 9,09 | 5,10 | 73,90 | 5,74 | 2,00 | 12,70 |
| 101715,00 | 25,46 | 8,29 | 9,09 | 5,10 | 72,60 | 5,64 | 2,00 | 12,50 |
| 101723,00 | 25,45 | 8,28 | 9,09 | 5,10 | 71,60 | 5,56 | 2,00 | 12,50 |
| 101729,00 | 25,45 | 8,28 | 9,09 | 5,10 | 71,00 | 5,52 | 2,00 | 12,70 |
| 101746,00 | 25,44 | 8,27 | 9,09 | 5,10 | 70,50 | 5,48 | 2,00 | 12,70 |
| 101759,00 | 25,44 | 8,27 | 9,09 | 5,10 | 70,50 | 5,48 | 2,00 | 12,70 |
| 101824,00 | 25,45 | 8,27 | 9,09 | 5,10 | 70,20 | 5,46 | 2,00 | 12,50 |
| 101851,00 | 25,27 | 8,21 | 9,09 | 5,10 | 65,20 | 5,09 | 4,00 | 11,40 |
| 101915,00 | 25,27 | 8,20 | 9,09 | 5,10 | 63,90 | 4,98 | 4,00 | 10,00 |
| 101929,00 | 25,27 | 8,20 | 9,09 | 5,10 | 63,50 | 4,95 | 4,00 | 10,40 |
| 101951,00 | 25,27 | 8,20 | 9,09 | 5,10 | 63,90 | 4,98 | 4,00 | 10,70 |
| 102007,00 | 25,27 | 8,20 | 9,09 | 5,10 | 65,40 | 5,10 | 4,00 | 10,70 |
| 102018,00 | 25,27 | 8,20 | 9,09 | 5,10 | 65,00 | 5,07 | 4,00 | 10,70 |
| 102027,00 | 25,27 | 8,20 | 9,09 | 5,10 | 65,00 | 5,06 | 4,00 | 10,60 |
| 102050,00 | 25,27 | 8,20 | 9,10 | 5,10 | 65,60 | 5,11 | 4,00 | 10,50 |
| 102042,00 | 25,27 | 8,20 | 9,10 | 5,10 | 65,20 | 5,09 | 4,10 | 10,50 |
| 102100,00 | 25,27 | 8,20 | 9,10 | 5,10 | 65,80 | 5,13 | 4,10 | 10,50 |
| 102125,00 | 19,32 | 7,75 | 10,94 | 6,20 | 23,30 | 2,02 | 8,10 | 9,90 |
| 102151,00 | 19,29 | 7,65 | 11,06 | 6,30 | 6,50 | 0,57 | 8,10 | 8,70 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 102223,00 | 19,29 | 7,59 | 11,07 | 6,30 | 3,50 | 0,31 | 8,10 | 8,40 |
| 102258,00 | 19,29 | 7,54 | 11,04 | 6,30 | 2,80 | 0,24 | 8,10 | 8,30 |
| 102308,00 | 19,30 | 7,54 | 11,05 | 6,30 | 2,70 | 0,24 | 8,10 | 8,30 |
| 102319,00 | 19,29 | 7,53 | 11,05 | 6,30 | 2,60 | 0,23 | 8,10 | 8,20 |
| 102323,00 | 19,30 | 7,52 | 11,04 | 6,30 | 2,60 | 0,23 | 8,10 | 8,20 |
| 102334,00 | 19,29 | 7,51 | 11,04 | 6,30 | 2,50 | 0,22 | 8,10 | 8,20 |
| 102339,00 | 19,29 | 7,51 | 11,05 | 6,30 | 2,50 | 0,22 | 8,10 | 8,20 |
| 102443,00 | 11,11 | 7,20 | 15,50 | 9,00 | 2,50 | 0,26 | 15,20 | 5,20 |
| 102459,00 | 11,11 | 7,17 | 15,70 | 9,10 | 2,50 | 0,26 | 15,20 | 5,90 |
| 102509,00 | 11,11 | 7,15 | 15,80 | 9,20 | 2,50 | 0,26 | 15,20 | 6,40 |
| 102518,00 | 11,11 | 7,14 | 15,70 | 9,10 | 2,50 | 0,25 | 15,20 | 6,80 |
| 102528,00 | 11,10 | 7,13 | 15,60 | 9,10 | 2,50 | 0,25 | 15,20 | 7,10 |
| 102538,00 | 11,11 | 7,13 | 15,50 | 9,00 | 2,40 | 0,25 | 15,20 | 7,00 |
| 102543,00 | 11,13 | 7,14 | 15,30 | 8,90 | 2,40 | 0,25 | 15,20 | 6,90 |
| 102552,00 | 11,13 | 7,14 | 15,20 | 8,80 | 2,40 | 0,25 | 15,20 | 6,60 |
| 102420,00 | 11,11 | 7,27 | 14,98 | 8,70 | 2,50 | 0,26 | 15,30 | 6,10 |

TABLE C.22 Measurement results of KC-7 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 133947,00 | 27,54 | 8,38 | 9,29 | 5,20 | 72,60 | 5,43 | 0,40 | 27,00 |
| 133918,00 | 27,59 | 8,38 | 9,30 | 5,20 | 73,90 | 5,52 | 0,40 | 10,00 |
| 133924,00 | 27,59 | 8,38 | 9,30 | 5,20 | 73,70 | 5,51 | 0,40 | 11,30 |
| 133905,00 | 27,58 | 8,37 | 9,29 | 5,20 | 76,00 | 5,68 | 0,50 | 9,20 |
| 133911,00 | 27,58 | 8,37 | 9,29 | 5,20 | 74,60 | 5,58 | 0,50 | 9,10 |
| 133929,00 | 27,57 | 8,38 | 9,30 | 5,20 | 73,10 | 5,47 | 0,50 | 14,00 |
| 134009,00 | 27,54 | 8,38 | 9,29 | 5,20 | 72,40 | 5,41 | 0,80 | 35,80 |
| 133958,00 | 27,54 | 8,38 | 9,29 | 5,20 | 72,40 | 5,42 | 0,90 | 32,80 |
| 134014,00 | 27,56 | 8,38 | 9,29 | 5,20 | 72,30 | 5,40 | 0,90 | 36,70 |
| 134020,00 | 27,56 | 8,38 | 9,29 | 5,20 | 72,20 | 5,40 | 0,90 | 36,90 |
| 134024,00 | 27,55 | 8,38 | 9,29 | 5,20 | 72,20 | 5,40 | 0,90 | 36,30 |
| 134029,00 | 27,56 | 8,38 | 9,28 | 5,20 | 72,10 | 5,39 | 1,00 | 34,70 |
| 134057,00 | 27,51 | 8,37 | 9,29 | 5,20 | 71,20 | 5,33 | 1,90 | 14,00 |
| 134052,00 | 27,48 | 8,37 | 9,29 | 5,20 | 71,10 | 5,32 | 2,00 | 17,50 |
| 134104,00 | 27,49 | 8,37 | 9,29 | 5,20 | 71,40 | 5,34 | 2,00 | 9,80 |
| 134110,00 | 27,50 | 8,37 | 9,29 | 5,20 | 71,40 | 5,34 | 2,00 | 7,10 |
| 134118,00 | 27,49 | 8,37 | 9,29 | 5,20 | 71,20 | 5,33 | 2,00 | 5,20 |
| 134124,00 | 27,48 | 8,37 | 9,29 | 5,20 | 71,20 | 5,33 | 2,00 | 4,40 |
| 134134,00 | 27,47 | 8,37 | 9,29 | 5,20 | 71,10 | 5,32 | 2,00 | 3,60 |
| 134141,00 | 27,47 | 8,37 | 9,29 | 5,20 | 70,90 | 5,31 | 2,00 | 3,70 |
| 134206,00 | 27,46 | 8,37 | 9,29 | 5,20 | 70,80 | 5,30 | 2,00 | 3,50 |
| 134151,00 | 27,46 | 8,37 | 9,29 | 5,20 | 70,70 | 5,30 | 2,10 | 3,70 |
| 134033,00 | 27,55 | 8,38 | 9,28 | 5,20 | 71,90 | 5,38 | 3,00 | 32,70 |
| 134333,00 | 26,64 | 8,26 | 9,31 | 5,20 | 60,70 | 4,61 | 3,90 | 2,90 |
| 134343,00 | 26,64 | 8,26 | 9,31 | 5,20 | 60,90 | 4,63 | 4,00 | 2,90 |
| 134224,00 | 26,64 | 8,28 | 9,32 | 5,30 | 64,30 | 4,89 | 4,00 | 3,50 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 134248,00 | 26,67 | 8,28 | 9,32 | 5,30 | 63,20 | 4,80 | 4,00 | 3,10 |
| 134302,00 | 26,63 | 8,27 | 9,32 | 5,30 | 61,90 | 4,70 | 4,00 | 3,00 |
| 134313,00 | 26,62 | 8,26 | 9,31 | 5,30 | 61,30 | 4,66 | 4,00 | 3,00 |
| 134319,00 | 26,61 | 8,25 | 9,32 | 5,30 | 61,00 | 4,64 | 4,00 | 3,00 |
| 134326,00 | 26,60 | 8,25 | 9,32 | 5,30 | 60,80 | 4,62 | 4,10 | 2,90 |
| 134235,00 | 26,67 | 8,29 | 9,32 | 5,30 | 63,30 | 4,80 | 4,10 | 3,40 |
| 134348,00 | 26,53 | 8,23 | 9,32 | 5,30 | 60,80 | 4,63 | 5,80 | 2,90 |
| 134443,00 | 22,91 | 7,72 | 10,93 | 6,20 | 3,60 | 0,29 | 7,90 | 3,80 |
| 134451,00 | 22,96 | 7,71 | 10,96 | 6,20 | 3,20 | 0,26 | 8,00 | 4,20 |
| 134456,00 | 22,90 | 7,70 | 10,95 | 6,20 | 3,10 | 0,25 | 8,00 | 4,40 |
| 134502,00 | 22,99 | 7,70 | 10,84 | 6,20 | 3,00 | 0,24 | 8,00 | 4,40 |
| 134412,00 | 23,18 | 7,80 | 10,74 | 6,10 | 15,30 | 1,24 | 8,10 | 2,90 |
| 134423,00 | 23,17 | 7,76 | 10,70 | 6,10 | 6,40 | 0,51 | 8,10 | 3,00 |
| 134636,00 | 10,74 | 7,08 | 17,70 | 10,40 | 2,60 | 0,26 | 15,90 | 2,70 |
| 134641,00 | 10,73 | 7,07 | 17,70 | 10,40 | 2,60 | 0,26 | 16,00 | 2,70 |
| 134648,00 | 10,72 | 7,06 | 17,70 | 10,40 | 2,60 | 0,26 | 16,00 | 2,60 |
| 134654,00 | 10,72 | 7,05 | 17,70 | 10,40 | 2,60 | 0,26 | 16,00 | 2,60 |
| 134703,00 | 10,73 | 7,03 | 17,70 | 10,40 | 2,50 | 0,26 | 16,00 | 2,60 |
| 134709,00 | 10,74 | 7,02 | 17,80 | 10,50 | 2,50 | 0,25 | 16,00 | 2,60 |
| 134553,00 | 10,72 | 7,16 | 17,90 | 10,50 | 2,80 | 0,28 | 16,00 | 2,60 |
| 134603,00 | 10,70 | 7,12 | 17,90 | 10,50 | 2,80 | 0,28 | 16,00 | 2,80 |
| 134610,00 | 10,70 | 7,11 | 17,90 | 10,50 | 2,70 | 0,28 | 16,00 | 2,90 |
| 134617,00 | 10,72 | 7,10 | 17,80 | 10,50 | 2,70 | 0,27 | 16,00 | 3,00 |
| 134624,00 | 10,74 | 7,09 | 17,80 | 10,50 | 2,60 | 0,27 | 16,00 | 2,90 |
| 134629,00 | 10,75 | 7,09 | 17,70 | 10,40 | 2,60 | 0,27 | 16,00 | 2,90 |
| 134728,00 | 10,46 | 6,89 | 19,70 | 11,70 | 2,50 | 0,25 | 17,70 | 3,50 |
| 134736,00 | 10,45 | 6,87 | 19,80 | 11,80 | 2,40 | 0,25 | 17,80 | 8,30 |
| 134742,00 | 10,45 | 6,86 | 19,80 | 11,80 | 2,40 | 0,25 | 17,80 | 13,90 |

TABLE C.23 Measurement results of KC-7 in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 132410,00 | 27,63 | 8,29 | 9,25 | 5,20 | 71,60 | 5,34 | 0,40 | 4,80 |
| 132354,00 | 27,67 | 8,30 | 9,33 | 5,30 | 74,30 | 5,54 | 0,50 | 11,60 |
| 132419,00 | 27,64 | 8,28 | 9,29 | 5,20 | 70,90 | 5,29 | 0,50 | 11,55 |
| 132426,00 | 27,66 | 8,27 | 9,27 | 5,20 | 70,40 | 5,25 | 0,50 | 10,40 |
| 132431,00 | 27,63 | 8,27 | 9,28 | 5,20 | 70,40 | 5,25 | 0,50 | 10,55 |
| 132436,00 | 27,66 | 8,27 | 9,29 | 5,20 | 70,50 | 5,26 | 0,50 | 12,50 |
| 132441,00 | 27,66 | 8,26 | 9,25 | 5,20 | 70,40 | 5,26 | 0,50 | 13,50 |
| 132445,00 | 27,66 | 8,26 | 9,25 | 5,20 | 70,40 | 5,26 | 0,60 | 14,22 |
| 132402,00 | 27,61 | 8,29 | 9,29 | 5,20 | 72,70 | 5,43 | 0,80 | 10,20 |
| 132457,00 | 27,62 | 8,25 | 9,29 | 5,20 | 70,10 | 5,24 | 0,90 | 8,50 |
| 132504,00 | 27,62 | 8,25 | 9,28 | 5,20 | 70,10 | 5,24 | 1,00 | 11,45 |
| 132509,00 | 27,62 | 8,25 | 9,27 | 5,20 | 70,10 | 5,23 | 1,00 | 11,00 |
| 132513,00 | 27,61 | 8,25 | 9,27 | 5,20 | 70,00 | 5,23 | 1,00 | 11,25 |
| 132517,00 | 27,62 | 8,25 | 9,27 | 5,20 | 70,10 | 5,23 | 1,00 | 11,34 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 132521,00 | 27,62 | 8,24 | 9,27 | 5,20 | 70,10 | 5,24 | 1,00 | 11,52 |
| 132530,00 | 27,52 | 8,23 | 9,24 | 5,20 | 69,40 | 5,19 | 1,90 | 9,25 |
| 132535,00 | 27,53 | 8,23 | 9,29 | 5,20 | 69,00 | 5,16 | 2,00 | 3,48 |
| 132540,00 | 27,56 | 8,23 | 9,29 | 5,20 | 69,20 | 5,17 | 2,00 | 1,00 |
| 132544,00 | 27,56 | 8,23 | 9,28 | 5,20 | 69,40 | 5,18 | 2,00 | 2,30 |
| 132549,00 | 27,57 | 8,23 | 9,28 | 5,20 | 69,40 | 5,19 | 2,00 | 3,10 |
| 132553,00 | 27,56 | 8,23 | 9,28 | 5,20 | 69,30 | 5,18 | 2,00 | 3,80 |
| 132557,00 | 27,54 | 8,22 | 9,29 | 5,20 | 69,20 | 5,18 | 2,00 | 4,10 |
| 132601,00 | 27,54 | 8,22 | 9,29 | 5,20 | 69,10 | 5,17 | 2,00 | 4,40 |
| 132607,00 | 27,53 | 8,22 | 9,29 | 5,20 | 69,00 | 5,16 | 2,00 | 4,80 |
| 132612,00 | 27,54 | 8,22 | 9,28 | 5,20 | 69,00 | 5,16 | 2,00 | 4,80 |
| 132616,00 | 27,54 | 8,22 | 9,29 | 5,20 | 69,00 | 5,16 | 2,00 | 4,80 |
| 132630,00 | 27,36 | 8,19 | 9,30 | 5,20 | 66,60 | 5,00 | 4,00 | 4,70 |
| 132635,00 | 27,36 | 8,19 | 9,30 | 5,20 | 66,10 | 4,96 | 4,00 | 4,70 |
| 132639,00 | 27,37 | 8,19 | 9,30 | 5,20 | 65,80 | 4,93 | 4,00 | 4,70 |
| 132644,00 | 27,36 | 8,19 | 9,30 | 5,20 | 65,50 | 4,92 | 4,00 | 4,60 |
| 132649,00 | 27,35 | 8,18 | 9,31 | 5,20 | 65,40 | 4,91 | 4,00 | 4,60 |
| 132654,00 | 27,36 | 8,18 | 9,30 | 5,20 | 65,10 | 4,88 | 4,00 | 4,60 |
| 132700,00 | 27,35 | 8,18 | 9,30 | 5,20 | 65,00 | 4,88 | 4,00 | 4,60 |
| 132705,00 | 27,36 | 8,18 | 9,30 | 5,20 | 64,90 | 4,87 | 4,30 | 4,60 |
| 132734,00 | 24,53 | 7,73 | 10,45 | 5,90 | 18,20 | 1,43 | 7,80 | 6,40 |
| 132742,00 | 24,98 | 7,75 | 10,03 | 5,70 | 17,40 | 1,36 | 7,90 | 8,30 |
| 132746,00 | 24,02 | 7,71 | 10,43 | 5,90 | 13,90 | 1,10 | 8,00 | 9,90 |
| 132750,00 | 24,01 | 7,70 | 10,44 | 5,90 | 11,30 | 0,90 | 8,00 | 10,80 |
| 132726,00 | 23,83 | 7,76 | 10,47 | 5,90 | 29,30 | 2,33 | 8,40 | 5,20 |
| 132754,00 | 22,02 | 7,63 | 11,50 | 6,60 | 8,50 | 0,70 | 8,40 | 11,90 |
| 132758,00 | 21,49 | 7,61 | 11,75 | 6,70 | 7,10 | 0,59 | 8,40 | 12,90 |
| 132803,00 | 21,61 | 7,60 | 11,80 | 6,70 | 6,20 | 0,52 | 8,40 | 13,70 |
| 123913,00 | 10,71 | 7,11 | 18,10 | 10,70 | 3,80 | 0,39 | 16,00 | 8,50 |
| 123932,00 | 10,68 | 7,05 | 17,90 | 10,50 | 3,60 | 0,37 | 16,00 | 7,50 |
| 123937,00 | 10,69 | 7,04 | 17,90 | 10,60 | 3,60 | 0,36 | 16,00 | 7,20 |
| 123918,00 | 10,70 | 7,09 | 18,00 | 10,60 | 3,80 | 0,38 | 16,10 | 8,70 |
| 123923,00 | 10,72 | 7,08 | 17,90 | 10,60 | 3,70 | 0,38 | 16,10 | 8,50 |
| 123928,00 | 10,70 | 7,07 | 17,80 | 10,50 | 3,70 | 0,38 | 16,10 | 7,90 |
| 123953,00 | 10,48 | 6,89 | 19,80 | 11,70 | 3,40 | 0,35 | 18,10 | 7,10 |
| 123957,00 | 10,49 | 6,88 | 19,80 | 11,70 | 3,40 | 0,35 | 18,10 | 8,40 |
| 123948,00 | 10,46 | 6,90 | 19,70 | 11,70 | 3,50 | 0,35 | 18,20 | 6,40 |

TABLE C.24 Measurement results of KC-7 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 115527,00 | 28,53 | 8,37 | 9,25 | 5,20 | 91,50 | 6,73 | 0,40 | 12,70 |
| 115533,00 | 28,54 | 8,37 | 9,25 | 5,20 | 91,30 | 6,71 | 0,40 | 13,10 |
| 115518,00 | 28,52 | 8,35 | 9,23 | 5,20 | 92,90 | 6,83 | 0,50 | 11,60 |
| 115554,00 | 28,52 | 8,38 | 9,26 | 5,20 | 90,90 | 6,68 | 0,50 | 13,50 |
| 115510,00 | 28,53 | 8,35 | 9,23 | 5,20 | 95,50 | 7,02 | 0,60 | 11,00 |
| 115538,00 | 28,51 | 8,37 | 9,25 | 5,20 | 91,10 | 6,70 | 0,60 | 13,30 |
| 115543,00 | 28,51 | 8,38 | 9,26 | 5,20 | 91,00 | 6,69 | 0,60 | 13,30 |
| 115559,00 | 28,52 | 8,39 | 9,26 | 5,20 | 90,80 | 6,68 | 0,90 | 13,60 |
| 115617,00 | 28,53 | 8,40 | 9,27 | 5,20 | 90,20 | 6,63 | 0,90 | 14,30 |
| 115710,00 | 28,53 | 8,41 | 9,26 | 5,20 | 91,00 | 6,69 | 0,90 | 13,20 |
| 115612,00 | 28,50 | 8,39 | 9,27 | 5,20 | 89,80 | 6,60 | 1,00 | 14,00 |
| 115647,00 | 28,53 | 8,41 | 9,26 | 5,20 | 90,70 | 6,66 | 1,00 | 13,00 |
| 115656,00 | 28,53 | 8,41 | 9,26 | 5,20 | 90,60 | 6,66 | 1,00 | 13,30 |
| 115719,00 | 28,53 | 8,42 | 9,26 | 5,20 | 90,50 | 6,65 | 1,00 | 13,00 |
| 115715,00 | 28,52 | 8,41 | 9,26 | 5,20 | 90,70 | 6,67 | 1,10 | 13,10 |
| 115701,00 | 28,54 | 8,41 | 9,26 | 5,20 | 90,70 | 6,66 | 1,10 | 13,30 |
| 115627,00 | 28,54 | 8,40 | 9,26 | 5,20 | 90,80 | 6,67 | 1,20 | 13,70 |
| 115637,00 | 28,53 | 8,40 | 9,26 | 5,20 | 91,10 | 6,70 | 1,20 | 13,40 |
| 115705,00 | 28,54 | 8,41 | 9,26 | 5,20 | 91,00 | 6,68 | 1,20 | 13,20 |
| 115824,00 | 28,48 | 8,41 | 9,27 | 5,20 | 88,40 | 6,50 | 2,00 | 13,10 |
| 115746,00 | 28,50 | 8,41 | 9,26 | 5,20 | 88,50 | 6,51 | 2,00 | 12,90 |
| 115754,00 | 28,48 | 8,41 | 9,26 | 5,20 | 89,00 | 6,55 | 2,00 | 13,00 |
| 115806,00 | 28,49 | 8,41 | 9,26 | 5,20 | 89,00 | 6,55 | 2,10 | 13,20 |
| 115810,00 | 28,47 | 8,41 | 9,27 | 5,20 | 88,90 | 6,54 | 2,10 | 13,10 |
| 115740,00 | 28,50 | 8,41 | 9,27 | 5,20 | 87,40 | 6,43 | 2,10 | 12,80 |
| 115829,00 | 28,49 | 8,41 | 9,26 | 5,20 | 89,40 | 6,58 | 3,40 | 13,10 |
| 115843,00 | 27,58 | 8,20 | 9,30 | 5,20 | 68,00 | 5,08 | 3,90 | 12,90 |
| 115908,00 | 27,61 | 8,16 | 9,31 | 5,20 | 60,20 | 4,50 | 3,70 | 12,10 |
| 115855,00 | 27,58 | 8,18 | 9,30 | 5,20 | 61,80 | 4,62 | 3,90 | 12,60 |
| 115900,00 | 27,59 | 8,17 | 9,29 | 5,20 | 60,80 | 4,54 | 3,90 | 12,30 |
| 115943,00 | 27,56 | 8,15 | 9,29 | 5,20 | 59,40 | 4,44 | 3,90 | 11,90 |
| 115924,00 | 27,60 | 8,15 | 9,29 | 5,20 | 58,60 | 4,38 | 4,00 | 11,90 |
| 115935,00 | 27,58 | 8,15 | 9,29 | 5,20 | 59,20 | 4,42 | 4,00 | 12,00 |
| 120011,00 | 27,55 | 8,15 | 9,29 | 5,20 | 59,40 | 4,44 | 4,00 | 11,80 |
| 115848,00 | 27,59 | 8,19 | 9,29 | 5,20 | 63,90 | 4,78 | 4,10 | 12,80 |
| 115955,00 | 27,56 | 8,15 | 9,29 | 5,20 | 59,50 | 4,45 | 4,20 | 11,90 |
| 120039,00 | 26,30 | 7,84 | 9,64 | 5,40 | 12,50 | 0,95 | 7,70 | 11,80 |
| 120122,00 | 25,75 | 7,75 | 10,09 | 5,70 | 16,20 | 1,25 | 7,90 | 12,10 |
| 120132,00 | 25,55 | 7,72 | 10,13 | 5,70 | 7,20 | 0,55 | 7,90 | 11,90 |
| 120117,00 | 25,84 | 7,78 | 10,08 | 5,70 | 28,90 | 2,22 | 8,00 | 12,20 |
| 120127,00 | 25,51 | 7,72 | 10,26 | 5,80 | 10,40 | 0,80 | 8,00 | 12,00 |
| 120136,00 | 25,46 | 7,71 | 10,26 | 5,80 | 5,70 | 0,44 | 8,10 | 12,00 |
| 120053,00 | 24,35 | 7,84 | 10,68 | 6,10 | 35,70 | 2,81 | 8,30 | 12,00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 120259,00 | 10,78 | 7,06 | 17,20 | 10,10 | 3,20 | 0,32 | 15,80 | 16,50 |
| 120208,00 | 10,77 | 7,19 | 17,30 | 10,20 | 4,50 | 0,46 | 15,90 | 14,70 |
| 120215,00 | 10,73 | 7,16 | 17,50 | 10,30 | 4,00 | 0,41 | 16,00 | 16,20 |
| 120221,00 | 10,72 | 7,13 | 17,60 | 10,40 | 3,80 | 0,39 | 16,00 | 17,80 |
| 120236,00 | 10,73 | 7,09 | 17,50 | 10,30 | 3,50 | 0,35 | 16,00 | 18,20 |
| 120245,00 | 10,77 | 7,08 | 17,30 | 10,20 | 3,30 | 0,33 | 16,00 | 17,60 |
| 120227,00 | 10,72 | 7,11 | 17,60 | 10,30 | 3,70 | 0,37 | 16,10 | 18,20 |
| 120324,00 | 10,68 | 6,99 | 17,80 | 10,50 | 3,00 | 0,31 | 16,20 | 15,10 |
| 120349,00 | 10,45 | 6,83 | 19,70 | 11,70 | 2,90 | 0,30 | 17,60 | 23,90 |

TABLE C.25 Measurement results of KC-8 in 7.10.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 115430,00 | 24,04 | 8,17 | 10,80 | 5,83 | 65,90 | 5,26 | 0,50 | 26,30 |
| 115440,00 | 24,05 | 8,18 | 10,80 | 5,83 | 64,30 | 5,13 | 0,50 | 22,60 |
| 115537,00 | 24,04 | 8,22 | 10,20 | 5,82 | 62,90 | 5,02 | 0,60 | 21,70 |
| 115555,00 | 24,05 | 8,22 | 10,20 | 5,82 | 62,60 | 4,99 | 0,60 | 21,50 |
| 115608,00 | 24,04 | 8,22 | 10,20 | 5,82 | 62,50 | 4,99 | 0,60 | 21,10 |
| 115627,00 | 24,03 | 8,23 | 10,20 | 5,82 | 62,20 | 4,96 | 1,00 | 21,80 |
| 115647,00 | 24,02 | 8,23 | 10,20 | 5,82 | 62,20 | 4,96 | 1,00 | 23,80 |
| 115659,00 | 24,03 | 8,23 | 10,20 | 5,82 | 62,00 | 4,95 | 1,00 | 23,50 |
| 115713,00 | 24,02 | 8,23 | 10,20 | 5,82 | 61,90 | 4,94 | 1,00 | 23,30 |
| 115721,00 | 24,04 | 8,24 | 10,15 | 5,81 | 62,00 | 4,95 | 1,00 | 23,60 |
| 115733,00 | 24,01 | 8,24 | 10,20 | 5,82 | 62,20 | 4,96 | 1,50 | 24,30 |
| 115747,00 | 24,01 | 8,24 | 10,30 | 5,82 | 62,10 | 4,96 | 2,00 | 24,40 |
| 115801,00 | 24,00 | 8,24 | 10,30 | 5,82 | 61,80 | 4,93 | 2,00 | 23,60 |
| 115812,00 | 23,98 | 8,23 | 10,20 | 5,82 | 61,40 | 4,90 | 2,00 | 22,70 |
| 115821,00 | 23,99 | 8,23 | 10,20 | 5,82 | 61,30 | 4,90 | 2,00 | 22,30 |
| 115847,00 | 23,99 | 8,23 | 10,20 | 5,82 | 61,10 | 4,87 | 2,00 | 22,10 |
| 115910,00 | 23,97 | 8,23 | 10,20 | 5,82 | 61,10 | 4,88 | 2,00 | 22,20 |
| 115921,00 | 23,95 | 8,23 | 10,80 | 5,83 | 60,20 | 4,81 | 2,00 | 22,30 |
| 115934,00 | 23,96 | 8,23 | 10,80 | 5,83 | 60,20 | 4,81 | 2,60 | 22,40 |
| 115958,00 | 23,83 | 8,17 | 10,92 | 5,85 | 50,20 | 4,02 | 3,90 | 21,80 |
| 120022,00 | 23,77 | 8,15 | 10,95 | 5,86 | 48,60 | 3,90 | 3,90 | 20,40 |
| 120008,00 | 23,81 | 8,16 | 10,94 | 5,85 | 48,10 | 3,85 | 4,00 | 21,10 |
| 120016,00 | 23,83 | 8,17 | 10,90 | 5,84 | 48,50 | 3,88 | 4,00 | 20,70 |
| 120031,00 | 23,83 | 8,16 | 10,92 | 5,85 | 47,30 | 3,79 | 4,00 | 20,10 |
| 120040,00 | 23,84 | 8,17 | 10,90 | 5,84 | 49,70 | 3,98 | 4,00 | 20,10 |
| 120052,00 | 23,85 | 8,17 | 10,90 | 5,84 | 50,70 | 4,06 | 4,00 | 20,10 |
| 120104,00 | 23,85 | 8,17 | 10,90 | 5,84 | 51,80 | 4,15 | 4,00 | 20,20 |
| 120122,00 | 23,83 | 8,17 | 10,90 | 5,84 | 48,10 | 3,85 | 4,00 | 20,40 |
| 120134,00 | 23,84 | 8,17 | 10,90 | 5,84 | 49,60 | 3,97 | 4,00 | 20,90 |
| 120204,00 | 19,60 | 7,66 | 12,41 | 7,02 | 9,90 | 0,85 | 8,00 | 18,30 |
| 120227,00 | 19,39 | 7,62 | 12,42 | 7,05 | 4,40 | 0,38 | 8,00 | 11,10 |
| 120237,00 | 19,39 | 7,60 | 12,42 | 7,05 | 3,70 | 0,32 | 8,00 | 9,70 |
| 120248,00 | 19,37 | 7,58 | 12,45 | 7,06 | 3,20 | 0,28 | 8,00 | 9,60 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 120311,00 | 19,40 | 7,56 | 12,41 | 7,02 | 2,80 | 0,24 | 8,00 | 9,80 |
| 120318,00 | 19,47 | 7,55 | 12,41 | 7,02 | 2,70 | 0,23 | 8,00 | 9,70 |
| 120328,00 | 19,53 | 7,53 | 12,41 | 7,00 | 2,60 | 0,23 | 8,00 | 9,50 |
| 120334,00 | 19,51 | 7,53 | 12,41 | 7,01 | 2,50 | 0,22 | 8,00 | 9,40 |
| 120346,00 | 19,47 | 7,52 | 12,41 | 7,02 | 2,50 | 0,21 | 8,00 | 9,10 |
| 120353,00 | 19,44 | 7,52 | 12,41 | 7,02 | 2,40 | 0,21 | 8,10 | 9,00 |
| 120400,00 | 19,41 | 7,51 | 12,41 | 7,02 | 2,40 | 0,21 | 8,30 | 9,00 |
| 120428,00 | 11,51 | 7,37 | 14,02 | 8,93 | 2,60 | 0,27 | 14,20 | 7,40 |
| 113334,00 | 10,57 | 6,85 | 16,50 | 11,70 | 2,40 | 0,24 | 15,60 | 21,30 |
| 113310,00 | 10,58 | 6,90 | 16,50 | 11,70 | 2,40 | 0,24 | 15,70 | 6,50 |
| 113319,00 | 10,56 | 6,88 | 16,50 | 11,70 | 2,40 | 0,25 | 15,70 | 12,10 |
| 113343,00 | 10,57 | 6,83 | 16,50 | 11,70 | 2,40 | 0,24 | 15,70 | 22,50 |
| 113412,00 | 10,59 | 6,79 | 16,50 | 11,80 | 2,30 | 0,24 | 15,70 | 34,10 |
| 113532,00 | 10,58 | 6,73 | 16,40 | 11,60 | 2,30 | 0,24 | 15,70 | 30,90 |
| 113546,00 | 10,57 | 6,72 | 16,50 | 11,70 | 2,30 | 0,23 | 15,70 | 40,60 |
| 113325,00 | 10,59 | 6,87 | 16,40 | 11,70 | 2,40 | 0,25 | 15,80 | 16,20 |
| 113353,00 | 10,58 | 6,81 | 16,50 | 11,80 | 2,30 | 0,24 | 15,80 | 25,70 |
| 113402,00 | 10,59 | 6,80 | 16,50 | 11,80 | 2,40 | 0,24 | 15,80 | 28,30 |
| 113423,00 | 10,58 | 6,77 | 16,40 | 11,80 | 2,40 | 0,24 | 15,80 | 37,40 |
| 113448,00 | 10,56 | 6,75 | 16,50 | 11,80 | 2,30 | 0,24 | 15,80 | 20,50 |
| 113539,00 | 10,56 | 6,72 | 16,50 | 11,70 | 2,20 | 0,23 | 15,80 | 36,60 |
| 113552,00 | 10,57 | 6,71 | 16,50 | 11,80 | 2,20 | 0,23 | 15,80 | 45,10 |

TABLE C.26 Measurement results of KC-8 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 131326,00 | 27,79 | 8,42 | 9,30 | 5,20 | 79,90 | 5,95 | 0,50 | 5,90 |
| 131332,00 | 27,80 | 8,42 | 9,30 | 5,20 | 79,80 | 5,94 | 0,60 | 6,00 |
| 131249,00 | 27,78 | 8,40 | 9,30 | 5,20 | 80,10 | 5,96 | 0,60 | 3,00 |
| 131310,00 | 27,81 | 8,42 | 9,29 | 5,20 | 80,00 | 5,96 | 0,60 | 6,10 |
| 131236,00 | 27,83 | 8,38 | 9,31 | 5,20 | 79,50 | 5,91 | 0,70 | 1,40 |
| 131243,00 | 27,80 | 8,39 | 9,31 | 5,20 | 80,20 | 5,97 | 0,70 | 1,50 |
| 131300,00 | 27,81 | 8,41 | 9,30 | 5,20 | 80,00 | 5,95 | 0,70 | 5,50 |
| 131403,00 | 27,79 | 8,43 | 9,30 | 5,20 | 79,80 | 5,94 | 0,80 | 4,40 |
| 131557,00 | 27,74 | 8,43 | 9,30 | 5,20 | 78,90 | 5,88 | 1,00 | 3,80 |
| 131413,00 | 27,79 | 8,43 | 9,30 | 5,20 | 79,70 | 5,93 | 1,00 | 4,00 |
| 131510,00 | 27,78 | 8,43 | 9,29 | 5,20 | 79,20 | 5,90 | 1,00 | 4,40 |
| 131526,00 | 27,79 | 8,43 | 9,29 | 5,20 | 79,00 | 5,88 | 1,00 | 3,70 |
| 131537,00 | 27,78 | 8,43 | 9,29 | 5,20 | 79,00 | 5,89 | 1,00 | 3,60 |
| 131544,00 | 27,73 | 8,43 | 9,29 | 5,20 | 79,00 | 5,89 | 1,00 | 3,60 |
| 131551,00 | 27,80 | 8,43 | 9,29 | 5,20 | 78,80 | 5,87 | 1,10 | 3,70 |
| 131418,00 | 27,78 | 8,43 | 9,30 | 5,20 | 79,60 | 5,93 | 1,10 | 3,90 |
| 131424,00 | 27,79 | 8,43 | 9,29 | 5,20 | 79,60 | 5,93 | 1,10 | 3,90 |
| 131430,00 | 27,78 | 8,43 | 9,30 | 5,20 | 79,70 | 5,93 | 1,10 | 4,00 |
| 131434,00 | 27,79 | 8,43 | 9,29 | 5,20 | 79,70 | 5,93 | 1,10 | 4,20 |
| 131439,00 | 27,79 | 8,43 | 9,29 | 5,20 | 79,70 | 5,93 | 1,10 | 4,30 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 131446,00 | 27,78 | 8,43 | 9,30 | 5,20 | 79,70 | 5,93 | 1,10 | 4,50 |
| 131452,00 | 27,78 | 8,43 | 9,29 | 5,20 | 79,50 | 5,92 | 1,10 | 4,70 |
| 131459,00 | 27,78 | 8,43 | 9,29 | 5,20 | 79,30 | 5,90 | 1,10 | 4,60 |
| 131515,00 | 27,79 | 8,43 | 9,29 | 5,20 | 79,00 | 5,88 | 1,10 | 4,10 |
| 131505,00 | 27,78 | 8,43 | 9,29 | 5,20 | 79,20 | 5,90 | 1,20 | 4,50 |
| 131611,00 | 27,64 | 8,42 | 9,29 | 5,20 | 78,20 | 5,84 | 2,00 | 3,80 |
| 131621,00 | 27,64 | 8,42 | 9,30 | 5,20 | 78,10 | 5,83 | 2,00 | 3,70 |
| 131629,00 | 27,65 | 8,42 | 9,30 | 5,20 | 78,00 | 5,82 | 2,00 | 3,60 |
| 131634,00 | 27,64 | 8,42 | 9,30 | 5,20 | 77,90 | 5,81 | 2,00 | 3,60 |
| 131735,00 | 27,67 | 8,42 | 9,30 | 5,20 | 78,00 | 5,82 | 2,00 | 4,00 |
| 131742,00 | 27,67 | 8,42 | 9,29 | 5,20 | 78,00 | 5,82 | 2,00 | 4,10 |
| 131648,00 | 27,65 | 8,42 | 9,30 | 5,20 | 77,70 | 5,80 | 2,10 | 3,70 |
| 131656,00 | 27,67 | 8,42 | 9,29 | 5,20 | 77,90 | 5,81 | 2,10 | 3,70 |
| 131715,00 | 27,67 | 8,42 | 9,30 | 5,20 | 77,80 | 5,81 | 2,10 | 3,80 |
| 131721,00 | 27,68 | 8,42 | 9,29 | 5,20 | 78,00 | 5,82 | 2,10 | 3,80 |
| 131746,00 | 27,65 | 8,42 | 9,29 | 5,20 | 77,80 | 5,81 | 2,60 | 4,10 |
| 131804,00 | 27,51 | 8,39 | 9,30 | 5,20 | 74,80 | 5,60 | 3,80 | 4,30 |
| 131842,00 | 27,48 | 8,37 | 9,30 | 5,20 | 73,90 | 5,53 | 3,90 | 3,90 |
| 131847,00 | 27,49 | 8,37 | 9,30 | 5,20 | 74,00 | 5,54 | 3,90 | 3,80 |
| 131852,00 | 27,50 | 8,37 | 9,30 | 5,20 | 74,00 | 5,54 | 3,90 | 3,60 |
| 131857,00 | 27,49 | 8,37 | 9,30 | 5,20 | 73,90 | 5,53 | 4,00 | 3,60 |
| 131904,00 | 27,51 | 8,37 | 9,30 | 5,20 | 74,00 | 5,54 | 4,00 | 3,50 |
| 131910,00 | 27,47 | 8,37 | 9,30 | 5,20 | 73,90 | 5,53 | 4,00 | 3,40 |
| 131822,00 | 27,50 | 8,38 | 9,30 | 5,20 | 73,90 | 5,53 | 4,00 | 4,40 |
| 131830,00 | 27,51 | 8,38 | 9,30 | 5,20 | 74,00 | 5,53 | 4,00 | 4,20 |
| 131836,00 | 27,48 | 8,37 | 9,30 | 5,20 | 74,10 | 5,54 | 4,00 | 4,10 |
| 131815,00 | 27,48 | 8,37 | 9,30 | 5,20 | 74,50 | 5,58 | 4,10 | 4,40 |
| 131934,00 | 23,19 | 7,86 | 11,16 | 6,40 | 32,30 | 2,60 | 7,80 | 3,30 |
| 131943,00 | 23,12 | 7,82 | 11,28 | 6,40 | 16,10 | 1,29 | 8,00 | 3,20 |
| 132007,00 | 22,80 | 7,74 | 11,44 | 6,50 | 4,70 | 0,38 | 8,00 | 3,10 |
| 132017,00 | 22,84 | 7,72 | 11,45 | 6,50 | 3,90 | 0,31 | 8,00 | 3,20 |
| 132052,00 | 12,02 | 7,55 | 13,64 | 7,90 | 3,20 | 0,32 | 13,30 | 4,30 |
| 132057,00 | 12,02 | 7,53 | 13,67 | 7,90 | 3,20 | 0,32 | 13,40 | 5,90 |
| 132047,00 | 12,03 | 7,57 | 13,61 | 7,90 | 3,30 | 0,33 | 13,40 | 3,20 |

TABLE C.27 Measurement results of KC-8 in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 121706,00 | 28,08 | 8,30 | 9,00 | 5,10 | 83,20 | 6,17 | 0,30 | 7,90 |
| 121711,00 | 28,07 | 8,31 | 8,83 | 5,00 | 83,80 | 6,22 | 0,30 | 10,10 |
| 121715,00 | 28,06 | 8,31 | 9,00 | 5,10 | 84,30 | 6,25 | 0,40 | 11,70 |
| 121727,00 | 28,06 | 8,32 | 8,97 | 5,00 | 84,50 | 6,27 | 0,40 | 9,70 |
| 121737,00 | 28,06 | 8,33 | 8,89 | 5,00 | 84,60 | 6,28 | 0,40 | 6,80 |
| 121723,00 | 28,06 | 8,32 | 8,83 | 5,00 | 84,30 | 6,26 | 0,50 | 12,20 |
| 121731,00 | 28,06 | 8,33 | 8,88 | 5,00 | 84,60 | 6,28 | 0,50 | 8,40 |
| 121639,00 | 27,90 | 8,11 | 9,33 | 5,30 | 77,00 | 5,72 | 0,60 | 5,40 |
| 121741,00 | 28,06 | 8,33 | 8,71 | 4,90 | 84,60 | 6,28 | 0,60 | 5,60 |
| 121819,00 | 28,03 | 8,34 | 7,93 | 4,40 | 84,10 | 6,26 | 0,80 | 5,10 |
| 121757,00 | 28,02 | 8,33 | 9,07 | 5,10 | 84,40 | 6,26 | 0,90 | 4,90 |
| 121803,00 | 28,07 | 8,34 | 9,04 | 5,10 | 84,40 | 6,26 | 0,90 | 5,30 |
| 121752,00 | 28,02 | 8,33 | 8,97 | 5,00 | 84,50 | 6,27 | 1,00 | 4,30 |
| 121809,00 | 28,05 | 8,34 | 9,09 | 5,10 | 84,40 | 6,26 | 1,00 | 5,30 |
| 121814,00 | 28,04 | 8,34 | 9,00 | 5,10 | 84,20 | 6,25 | 1,00 | 5,20 |
| 121831,00 | 28,02 | 8,34 | 9,23 | 5,20 | 83,80 | 6,22 | 1,80 | 4,90 |
| 121848,00 | 28,04 | 8,34 | 9,21 | 5,20 | 84,00 | 6,23 | 1,90 | 5,20 |
| 121839,00 | 28,04 | 8,34 | 9,23 | 5,20 | 83,90 | 6,22 | 2,00 | 5,00 |
| 121844,00 | 28,04 | 8,34 | 9,23 | 5,20 | 83,90 | 6,22 | 2,00 | 5,10 |
| 121853,00 | 28,02 | 8,34 | 9,22 | 5,20 | 84,00 | 6,23 | 2,00 | 5,20 |
| 121906,00 | 28,02 | 8,34 | 9,21 | 5,20 | 83,70 | 6,20 | 2,00 | 5,10 |
| 121913,00 | 28,05 | 8,34 | 9,22 | 5,20 | 83,70 | 6,20 | 2,00 | 5,10 |
| 121919,00 | 28,04 | 8,35 | 9,22 | 5,20 | 84,10 | 6,23 | 2,00 | 5,10 |
| 121859,00 | 28,03 | 8,34 | 9,22 | 5,20 | 83,80 | 6,21 | 2,20 | 5,20 |
| 121951,00 | 27,72 | 8,28 | 9,25 | 5,20 | 76,60 | 5,71 | 3,90 | 5,30 |
| 121955,00 | 27,71 | 8,27 | 9,25 | 5,20 | 75,90 | 5,66 | 3,90 | 5,30 |
| 121945,00 | 27,73 | 8,28 | 9,25 | 5,20 | 77,20 | 5,76 | 4,00 | 5,20 |
| 122008,00 | 27,68 | 8,26 | 9,25 | 5,20 | 74,30 | 5,54 | 4,00 | 5,20 |
| 122012,00 | 27,70 | 8,26 | 9,24 | 5,20 | 74,20 | 5,53 | 4,00 | 5,10 |
| 122018,00 | 27,70 | 8,26 | 9,24 | 5,20 | 74,20 | 5,54 | 4,00 | 5,00 |
| 122003,00 | 27,67 | 8,26 | 9,25 | 5,20 | 74,70 | 5,57 | 4,10 | 5,20 |
| 122038,00 | 25,45 | 7,94 | 10,09 | 5,70 | 57,50 | 4,45 | 7,90 | 4,90 |
| 122044,00 | 25,94 | 7,95 | 9,91 | 5,60 | 33,80 | 2,59 | 7,90 | 5,00 |
| 122055,00 | 26,09 | 7,91 | 9,95 | 5,60 | 21,90 | 1,68 | 7,90 | 5,40 |
| 122102,00 | 26,24 | 7,95 | 9,68 | 5,50 | 22,90 | 1,75 | 7,90 | 5,80 |
| 122050,00 | 25,98 | 7,92 | 9,88 | 5,60 | 24,70 | 1,89 | 8,00 | 5,10 |
| 122059,00 | 26,09 | 7,92 | 9,75 | 5,50 | 22,20 | 1,70 | 8,00 | 5,50 |
| 122107,00 | 26,35 | 7,96 | 9,65 | 5,40 | 24,20 | 1,85 | 8,00 | 6,00 |
| 122204,00 | 11,32 | 7,38 | 14,45 | 8,40 | 4,60 | 0,47 | 14,90 | 33,40 |
| 122141,00 | 11,36 | 7,46 | 14,52 | 8,40 | 6,10 | 0,62 | 15,00 | 6,70 |
| 122155,00 | 11,35 | 7,41 | 14,53 | 8,40 | 5,00 | 0,50 | 15,00 | 18,80 |
| 122210,00 | 11,32 | 7,36 | 14,45 | 8,40 | 4,30 | 0,44 | 15,00 | 41,90 |

TABLE C.28 Measurement results of KC-8 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 113333,00 | 28,14 | 8,24 | 9,25 | 5,20 | 81,00 | 5,99 | 0,40 | 14,20 |
| 113338,00 | 28,15 | 8,25 | 9,25 | 5,20 | 80,80 | 5,98 | 0,50 | 13,80 |
| 113349,00 | 28,14 | 8,25 | 9,25 | 5,20 | 81,10 | 6,00 | 0,50 | 13,40 |
| 113407,00 | 28,13 | 8,26 | 9,25 | 5,20 | 81,00 | 5,99 | 0,50 | 13,20 |
| 113343,00 | 28,15 | 8,25 | 9,25 | 5,20 | 81,00 | 5,99 | 0,60 | 13,50 |
| 113358,00 | 28,15 | 8,26 | 9,24 | 5,20 | 81,20 | 6,01 | 0,60 | 13,20 |
| 113403,00 | 28,14 | 8,26 | 9,25 | 5,20 | 81,10 | 6,00 | 0,60 | 13,20 |
| 113443,00 | 28,10 | 8,27 | 9,24 | 5,20 | 81,00 | 6,00 | 0,90 | 12,50 |
| 113500,00 | 28,12 | 8,27 | 9,26 | 5,20 | 80,60 | 5,96 | 0,90 | 12,40 |
| 113447,00 | 28,10 | 8,27 | 9,24 | 5,20 | 80,80 | 5,99 | 1,00 | 12,50 |
| 113425,00 | 28,11 | 8,26 | 9,24 | 5,20 | 80,80 | 5,98 | 1,00 | 12,80 |
| 113438,00 | 28,10 | 8,27 | 9,24 | 5,20 | 80,90 | 5,99 | 1,00 | 12,60 |
| 113433,00 | 28,12 | 8,27 | 9,24 | 5,20 | 80,90 | 5,99 | 1,10 | 12,70 |
| 113454,00 | 28,11 | 8,27 | 9,26 | 5,20 | 80,70 | 5,97 | 1,10 | 12,40 |
| 113537,00 | 28,05 | 8,27 | 9,26 | 5,20 | 78,80 | 5,84 | 1,90 | 13,10 |
| 113547,00 | 28,03 | 8,27 | 9,26 | 5,20 | 78,90 | 5,85 | 1,90 | 13,40 |
| 113623,00 | 27,98 | 8,27 | 9,26 | 5,20 | 78,20 | 5,81 | 1,90 | 14,20 |
| 113523,00 | 27,97 | 8,26 | 9,26 | 5,20 | 77,70 | 5,76 | 2,00 | 12,90 |
| 113630,00 | 28,03 | 8,27 | 9,26 | 5,20 | 78,20 | 5,80 | 2,00 | 13,50 |
| 113558,00 | 28,03 | 8,27 | 9,26 | 5,20 | 79,00 | 5,86 | 2,00 | 14,10 |
| 113603,00 | 28,02 | 8,27 | 9,26 | 5,20 | 78,80 | 5,84 | 2,00 | 14,20 |
| 113613,00 | 28,01 | 8,27 | 9,26 | 5,20 | 78,60 | 5,83 | 2,00 | 14,20 |
| 113528,00 | 28,00 | 8,26 | 9,26 | 5,20 | 78,10 | 5,80 | 2,10 | 12,90 |
| 113542,00 | 28,03 | 8,27 | 9,26 | 5,20 | 79,00 | 5,86 | 2,10 | 13,30 |
| 113700,00 | 27,71 | 8,22 | 9,26 | 5,20 | 71,80 | 5,35 | 3,90 | 12,10 |
| 113707,00 | 27,71 | 8,22 | 9,27 | 5,20 | 71,50 | 5,33 | 3,90 | 12,00 |
| 113723,00 | 27,70 | 8,22 | 9,27 | 5,20 | 70,80 | 5,28 | 4,00 | 11,90 |
| 113729,00 | 27,71 | 8,21 | 9,27 | 5,20 | 70,50 | 5,26 | 4,00 | 11,80 |
| 113715,00 | 27,71 | 8,22 | 9,26 | 5,20 | 71,20 | 5,31 | 4,10 | 11,90 |
| 113653,00 | 27,71 | 8,22 | 9,26 | 5,20 | 72,20 | 5,38 | 4,10 | 12,20 |
| 113748,00 | 25,42 | 7,85 | 10,05 | 5,70 | 27,40 | 2,12 | 7,80 | 11,70 |
| 113753,00 | 27,26 | 8,07 | 9,39 | 5,30 | 29,20 | 2,19 | 7,90 | 11,70 |
| 113816,00 | 25,44 | 7,81 | 10,19 | 5,80 | 8,30 | 0,64 | 7,90 | 11,90 |
| 113843,00 | 25,70 | 7,81 | 10,27 | 5,80 | 10,20 | 0,79 | 8,00 | 12,70 |
| 113822,00 | 26,60 | 7,95 | 9,68 | 5,50 | 17,00 | 1,29 | 8,10 | 12,00 |
| 113829,00 | 26,76 | 7,99 | 9,72 | 5,50 | 24,20 | 1,83 | 8,10 | 12,10 |
| 113833,00 | 25,84 | 7,88 | 10,06 | 5,70 | 19,90 | 1,53 | 8,10 | 12,30 |
| 113838,00 | 25,81 | 7,86 | 10,18 | 5,80 | 13,70 | 1,06 | 8,10 | 12,50 |
| 113852,00 | 26,08 | 7,85 | 10,20 | 5,80 | 8,50 | 0,65 | 8,10 | 13,00 |
| 113802,00 | 25,66 | 7,86 | 10,30 | 5,80 | 42,80 | 3,29 | 8,20 | 11,70 |
| 114001,00 | 10,98 | 7,16 | 16,10 | 9,40 | 3,20 | 0,32 | 15,90 | 34,50 |
| 114017,00 | 11,00 | 7,14 | 15,90 | 9,30 | 3,10 | 0,31 | 15,90 | 19,90 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 113936,00 | 10,97 | 7,23 | 16,20 | 9,50 | 3,80 | 0,38 | 16,00 | 54,40 |
| 113947,00 | 10,96 | 7,19 | 16,20 | 9,50 | 3,40 | 0,35 | 16,00 | 56,10 |
| 113954,00 | 10,94 | 7,17 | 16,40 | 9,60 | 3,30 | 0,34 | 16,00 | 45,20 |
| 114024,00 | 10,98 | 7,12 | 16,10 | 9,40 | 3,00 | 0,31 | 16,10 | 20,40 |
| 114030,00 | 10,96 | 7,10 | 16,30 | 9,50 | 3,00 | 0,30 | 16,10 | 19,90 |
| 114040,00 | 10,92 | 7,06 | 16,50 | 9,60 | 3,00 | 0,30 | 16,20 | 18,20 |
| 114055,00 | 10,91 | 7,05 | 16,50 | 9,70 | 3,00 | 0,30 | 16,20 | 20,60 |
| 114059,00 | 10,92 | 7,04 | 16,60 | 9,70 | 2,90 | 0,30 | 16,20 | 23,30 |

TABLE C.29 Measurement results of KC-9 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 124534,00 | 27,42 | 8,37 | 9,28 | 5,20 | 82,70 | 6,20 | 0,50 | 4,50 |
| 124547,00 | 27,40 | 8,38 | 9,24 | 5,20 | 82,10 | 6,16 | 0,50 | 7,20 |
| 124559,00 | 27,42 | 8,39 | 9,23 | 5,20 | 82,30 | 6,17 | 0,50 | 8,20 |
| 124607,00 | 27,42 | 8,39 | 9,24 | 5,20 | 82,40 | 6,17 | 0,50 | 8,30 |
| 124612,00 | 27,41 | 8,39 | 9,23 | 5,20 | 82,40 | 6,17 | 0,50 | 8,60 |
| 124617,00 | 27,42 | 8,39 | 9,23 | 5,20 | 82,40 | 6,17 | 0,50 | 8,70 |
| 124641,00 | 27,37 | 8,39 | 9,29 | 5,20 | 81,70 | 6,13 | 1,00 | 8,40 |
| 124648,00 | 27,38 | 8,39 | 9,29 | 5,20 | 81,60 | 6,12 | 1,00 | 7,60 |
| 124654,00 | 27,39 | 8,39 | 9,29 | 5,20 | 81,70 | 6,13 | 1,00 | 6,80 |
| 124659,00 | 27,39 | 8,39 | 9,29 | 5,20 | 81,80 | 6,13 | 1,00 | 6,10 |
| 124710,00 | 27,43 | 8,39 | 9,29 | 5,20 | 81,90 | 6,14 | 1,00 | 5,10 |
| 124715,00 | 27,43 | 8,39 | 9,29 | 5,20 | 82,10 | 6,15 | 1,00 | 4,90 |
| 124720,00 | 27,42 | 8,40 | 9,29 | 5,20 | 82,20 | 6,16 | 1,00 | 4,90 |
| 124725,00 | 27,42 | 8,39 | 9,29 | 5,20 | 82,20 | 6,16 | 1,00 | 5,00 |
| 124728,00 | 27,42 | 8,40 | 9,29 | 5,20 | 82,20 | 6,16 | 1,00 | 5,10 |
| 124733,00 | 27,42 | 8,40 | 9,29 | 5,20 | 82,10 | 6,15 | 1,00 | 5,20 |
| 124740,00 | 27,41 | 8,40 | 9,29 | 5,20 | 82,00 | 6,14 | 1,00 | 5,40 |
| 124705,00 | 27,42 | 8,39 | 9,29 | 5,20 | 81,90 | 6,14 | 1,10 | 5,40 |
| 124805,00 | 27,28 | 8,39 | 9,29 | 5,20 | 79,90 | 6,00 | 1,80 | 5,00 |
| 124826,00 | 27,31 | 8,39 | 9,29 | 5,20 | 80,00 | 6,01 | 2,00 | 5,20 |
| 124832,00 | 27,28 | 8,39 | 9,29 | 5,20 | 80,10 | 6,01 | 2,00 | 5,40 |
| 124848,00 | 27,34 | 8,39 | 9,28 | 5,20 | 80,40 | 6,04 | 2,00 | 5,50 |
| 124858,00 | 27,34 | 8,39 | 9,29 | 5,20 | 80,80 | 6,06 | 2,00 | 5,50 |
| 124905,00 | 27,33 | 8,39 | 9,29 | 5,20 | 80,60 | 6,05 | 2,00 | 5,40 |
| 124914,00 | 27,29 | 8,39 | 9,29 | 5,20 | 80,30 | 6,03 | 2,00 | 5,40 |
| 124922,00 | 27,30 | 8,39 | 9,29 | 5,20 | 79,90 | 6,00 | 2,10 | 5,30 |
| 125001,00 | 27,09 | 8,34 | 9,30 | 5,20 | 73,40 | 5,53 | 3,90 | 4,50 |
| 125011,00 | 27,09 | 8,33 | 9,30 | 5,20 | 73,00 | 5,50 | 3,90 | 4,40 |
| 124937,00 | 27,08 | 8,34 | 9,30 | 5,20 | 75,60 | 5,70 | 4,00 | 5,10 |
| 125027,00 | 27,08 | 8,33 | 9,30 | 5,20 | 72,90 | 5,50 | 4,00 | 4,40 |
| 124950,00 | 27,09 | 8,34 | 9,30 | 5,20 | 73,50 | 5,54 | 4,00 | 4,80 |
| 124942,00 | 27,08 | 8,34 | 9,30 | 5,20 | 74,30 | 5,60 | 4,10 | 5,00 |
| 125020,00 | 27,10 | 8,33 | 9,30 | 5,20 | 73,20 | 5,52 | 4,10 | 4,40 |
| 125141,00 | 22,88 | 7,59 | 10,46 | 5,90 | 3,20 | 0,26 | 7,90 | 5,60 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 125148,00 | 22,80 | 7,58 | 10,46 | 5,90 | 3,10 | 0,26 | 8,00 | 4,70 |
| 125154,00 | 22,79 | 7,57 | 10,49 | 6,00 | 3,10 | 0,25 | 8,00 | 4,60 |
| 125056,00 | 22,97 | 7,72 | 10,44 | 5,90 | 16,40 | 1,33 | 8,00 | 6,90 |
| 125108,00 | 22,84 | 7,67 | 10,48 | 5,90 | 6,80 | 0,55 | 8,00 | 10,10 |
| 125116,00 | 22,84 | 7,64 | 10,50 | 6,00 | 5,20 | 0,42 | 8,00 | 11,40 |
| 125129,00 | 22,74 | 7,61 | 10,58 | 6,00 | 3,90 | 0,32 | 8,00 | 8,50 |
| 125124,00 | 22,76 | 7,63 | 10,54 | 6,00 | 4,30 | 0,35 | 8,10 | 9,60 |
| 125103,00 | 22,90 | 7,69 | 10,44 | 5,90 | 10,00 | 0,81 | 8,10 | 8,60 |
| 125133,00 | 22,77 | 7,61 | 10,58 | 6,00 | 3,80 | 0,31 | 8,10 | 7,50 |
| 125159,00 | 22,44 | 7,55 | 10,79 | 6,10 | 2,30 | 0,18 | 8,40 | 4,50 |
| 125205,00 | 20,99 | 7,55 | 11,41 | 6,50 | 2,90 | 0,24 | 8,60 | 4,40 |
| 125214,00 | 20,94 | 7,54 | 11,44 | 6,50 | 2,80 | 0,24 | 8,60 | 4,30 |
| 125226,00 | 20,87 | 7,52 | 11,44 | 6,50 | 2,70 | 0,23 | 8,60 | 4,10 |
| 125232,00 | 20,86 | 7,52 | 11,45 | 6,50 | 2,70 | 0,22 | 8,60 | 4,00 |
| 125240,00 | 20,90 | 7,51 | 11,46 | 6,50 | 2,50 | 0,21 | 8,60 | 3,90 |
| 125247,00 | 20,76 | 7,50 | 11,49 | 6,60 | 2,60 | 0,22 | 8,60 | 3,80 |
| 125256,00 | 20,93 | 7,50 | 11,44 | 6,50 | 2,70 | 0,22 | 8,60 | 3,70 |
| 125301,00 | 20,94 | 7,49 | 11,42 | 6,50 | 2,60 | 0,22 | 8,60 | 3,70 |
| 125220,00 | 20,90 | 7,53 | 11,43 | 6,50 | 2,70 | 0,23 | 8,70 | 4,20 |

TABLE C.30 Measurement results of KC-9 in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 115544,00 | 27,84 | 8,14 | 9,18 | 5,20 | 73,00 | 5,43 | 0,50 | 4,80 |
| 115554,00 | 27,86 | 8,20 | 9,27 | 5,20 | 75,60 | 5,62 | 0,50 | 4,70 |
| 115609,00 | 27,86 | 8,22 | 9,20 | 5,20 | 76,40 | 5,68 | 0,50 | 4,90 |
| 115614,00 | 27,85 | 8,23 | 9,21 | 5,20 | 76,40 | 5,68 | 0,50 | 6,80 |
| 115619,00 | 27,85 | 8,23 | 9,20 | 5,20 | 76,40 | 5,68 | 0,50 | 8,90 |
| 115623,00 | 27,85 | 8,23 | 9,16 | 5,20 | 76,50 | 5,70 | 0,50 | 10,10 |
| 115628,00 | 27,86 | 8,23 | 9,13 | 5,10 | 76,80 | 5,71 | 0,50 | 10,90 |
| 115636,00 | 27,85 | 8,24 | 9,18 | 5,20 | 76,90 | 5,72 | 0,50 | 11,20 |
| 115644,00 | 27,86 | 8,24 | 9,16 | 5,20 | 77,00 | 5,73 | 0,50 | 10,80 |
| 115650,00 | 27,85 | 8,24 | 9,15 | 5,20 | 77,00 | 5,73 | 0,50 | 10,40 |
| 115657,00 | 27,85 | 8,24 | 9,18 | 5,20 | 77,10 | 5,73 | 0,50 | 10,40 |
| 115711,00 | 27,85 | 8,24 | 9,14 | 5,10 | 76,90 | 5,72 | 0,50 | 10,80 |
| 115734,00 | 27,82 | 8,24 | 9,21 | 5,20 | 75,50 | 5,62 | 1,00 | 10,50 |
| 115742,00 | 27,81 | 8,24 | 9,21 | 5,20 | 75,80 | 5,65 | 1,00 | 10,40 |
| 115747,00 | 27,83 | 8,25 | 9,21 | 5,20 | 75,90 | 5,64 | 1,00 | 10,40 |
| 115752,00 | 27,83 | 8,25 | 9,19 | 5,20 | 75,90 | 5,65 | 1,00 | 10,50 |
| 115757,00 | 27,82 | 8,25 | 9,19 | 5,20 | 76,00 | 5,65 | 1,00 | 10,50 |
| 115801,00 | 27,82 | 8,25 | 9,19 | 5,20 | 76,20 | 5,67 | 1,10 | 10,60 |
| 115818,00 | 27,77 | 8,23 | 9,18 | 5,20 | 71,70 | 5,34 | 1,80 | 9,70 |
| 115847,00 | 27,78 | 8,24 | 9,19 | 5,20 | 75,10 | 5,60 | 1,90 | 5,10 |
| 115843,00 | 27,78 | 8,24 | 9,18 | 5,20 | 74,90 | 5,58 | 2,00 | 5,70 |
| 115900,00 | 27,74 | 8,23 | 9,18 | 5,20 | 74,20 | 5,53 | 2,00 | 4,50 |
| 115904,00 | 27,71 | 8,22 | 9,19 | 5,20 | 73,60 | 5,49 | 2,00 | 4,50 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 115909,00 | 27,71 | 8,22 | 9,20 | 5,20 | 73,20 | 5,46 | 2,00 | 4,50 |
| 115913,00 | 27,72 | 8,22 | 9,20 | 5,20 | 73,10 | 5,45 | 2,00 | 4,50 |
| 115918,00 | 27,72 | 8,22 | 9,20 | 5,20 | 73,10 | 5,45 | 2,00 | 4,50 |
| 115923,00 | 27,69 | 8,22 | 9,19 | 5,20 | 72,90 | 5,44 | 2,00 | 4,50 |
| 115828,00 | 27,79 | 8,24 | 9,19 | 5,20 | 74,70 | 5,57 | 2,10 | 8,10 |
| 115855,00 | 27,74 | 8,23 | 9,19 | 5,20 | 74,80 | 5,58 | 2,10 | 4,60 |
| 115927,00 | 27,69 | 8,21 | 9,20 | 5,20 | 72,50 | 5,41 | 2,10 | 4,50 |
| 115946,00 | 27,47 | 8,06 | 9,24 | 5,20 | 59,60 | 4,46 | 4,00 | 4,30 |
| 120005,00 | 27,46 | 8,05 | 9,24 | 5,20 | 56,00 | 4,19 | 4,00 | 4,00 |
| 120009,00 | 27,47 | 8,05 | 9,24 | 5,20 | 55,70 | 4,17 | 4,00 | 4,00 |
| 120014,00 | 27,47 | 8,04 | 9,24 | 5,20 | 55,60 | 4,16 | 4,00 | 3,90 |
| 120019,00 | 27,46 | 8,04 | 9,24 | 5,20 | 55,50 | 4,16 | 4,00 | 3,80 |
| 120024,00 | 27,47 | 8,04 | 9,24 | 5,20 | 55,40 | 4,15 | 4,00 | 3,80 |
| 120029,00 | 27,46 | 8,04 | 9,24 | 5,20 | 55,40 | 4,15 | 4,00 | 3,80 |
| 120033,00 | 27,47 | 8,04 | 9,24 | 5,20 | 55,30 | 4,14 | 4,00 | 3,80 |
| 120038,00 | 27,46 | 8,03 | 9,23 | 5,20 | 55,20 | 4,13 | 4,00 | 3,80 |
| 120042,00 | 27,46 | 8,03 | 9,23 | 5,20 | 55,20 | 4,13 | 4,00 | 3,80 |
| 120047,00 | 27,46 | 8,03 | 9,24 | 5,20 | 55,30 | 4,14 | 4,00 | 3,80 |
| 120051,00 | 27,46 | 8,03 | 9,24 | 5,20 | 55,40 | 4,15 | 4,00 | 3,80 |
| 120056,00 | 27,46 | 8,03 | 9,24 | 5,20 | 55,20 | 4,13 | 4,00 | 3,80 |
| 120100,00 | 27,47 | 8,03 | 9,24 | 5,20 | 55,00 | 4,12 | 4,00 | 3,80 |
| 120105,00 | 27,46 | 8,03 | 9,24 | 5,20 | 54,80 | 4,11 | 4,00 | 3,80 |
| 120109,00 | 27,46 | 8,03 | 9,24 | 5,20 | 54,90 | 4,11 | 4,00 | 3,80 |
| 115957,00 | 27,46 | 8,05 | 9,25 | 5,20 | 56,70 | 4,24 | 4,10 | 4,10 |
| 120134,00 | 25,23 | 7,71 | 10,16 | 5,80 | 13,90 | 1,08 | 8,00 | 4,30 |
| 120138,00 | 24,96 | 7,69 | 10,26 | 5,80 | 10,10 | 0,79 | 8,00 | 4,90 |
| 120142,00 | 24,79 | 7,67 | 10,27 | 5,80 | 7,90 | 0,62 | 8,00 | 5,60 |
| 120147,00 | 24,79 | 7,66 | 10,27 | 5,80 | 6,70 | 0,53 | 8,00 | 6,40 |
| 120125,00 | 25,22 | 7,77 | 10,20 | 5,80 | 30,30 | 2,36 | 8,10 | 3,90 |

TABLE C.31 Measurement results of KC-9 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) DO % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 110938,00 | 28,07 | 8,23 | 8,95 | 5,00 | 83,50 | 6,19 | 0,50 | 31,55 |
| 110944,00 | 28,07 | 8,24 | 9,00 | 5,10 | 83,00 | 6,16 | 0,50 | 30,15 |
| 111010,00 | 28,07 | 8,25 | 8,97 | 5,00 | 81,30 | 6,03 | 0,50 | 29,85 |
| 111015,00 | 28,05 | 8,26 | 9,01 | 5,10 | 81,70 | 6,06 | 0,50 | 31,45 |
| 111021,00 | 28,05 | 8,26 | 8,98 | 5,10 | 81,00 | 6,01 | 0,50 | 29,95 |
| 111029,00 | 28,03 | 8,26 | 9,02 | 5,10 | 81,00 | 6,01 | 0,50 | 30,15 |
| 111034,00 | 28,02 | 8,26 | 9,00 | 5,10 | 81,00 | 6,01 | 0,50 | 31,85 |
| 111039,00 | 28,02 | 8,26 | 8,92 | 5,00 | 81,40 | 6,04 | 0,50 | 32,15 |
| 111044,00 | 28,03 | 8,26 | 8,82 | 5,00 | 81,60 | 6,06 | 0,50 | 32,45 |
| 111002,00 | 28,07 | 8,25 | 8,94 | 5,00 | 82,10 | 6,09 | 0,60 | 32,10 |
| 111107,00 | 28,04 | 8,27 | 9,23 | 5,20 | 81,10 | 6,02 | 1,00 | 29,15 |
| 111113,00 | 28,05 | 8,27 | 9,24 | 5,20 | 81,40 | 6,03 | 1,00 | 30,25 |
| 111118,00 | 28,03 | 8,27 | 9,24 | 5,20 | 81,50 | 6,04 | 1,00 | 28,55 |
| 111128,00 | 28,05 | 8,28 | 9,24 | 5,20 | 81,90 | 6,07 | 1,00 | 30,40 |
| 111132,00 | 28,04 | 8,28 | 9,23 | 5,20 | 82,00 | 6,08 | 1,00 | 32,35 |
| 111141,00 | 27,99 | 8,27 | 9,23 | 5,20 | 81,80 | 6,07 | 1,00 | 30,45 |
| 111302,00 | 27,96 | 8,27 | 9,26 | 5,20 | 79,20 | 5,88 | 1,90 | 28,55 |
| 111306,00 | 27,98 | 8,27 | 9,26 | 5,20 | 79,40 | 5,89 | 2,00 | 32,45 |
| 111311,00 | 27,93 | 8,27 | 9,26 | 5,20 | 79,40 | 5,90 | 2,00 | 33,25 |
| 111225,00 | 27,91 | 8,26 | 9,26 | 5,20 | 79,10 | 5,88 | 2,00 | 34,10 |
| 111230,00 | 27,91 | 8,26 | 9,26 | 5,20 | 79,10 | 5,87 | 2,00 | 33,45 |
| 111233,00 | 27,92 | 8,26 | 9,27 | 5,20 | 79,20 | 5,88 | 2,00 | 33,10 |
| 111238,00 | 27,94 | 8,26 | 9,26 | 5,20 | 79,40 | 5,89 | 2,00 | 32,15 |
| 111242,00 | 27,94 | 8,27 | 9,26 | 5,20 | 79,50 | 5,90 | 2,00 | 30,55 |
| 111246,00 | 27,99 | 8,27 | 9,26 | 5,20 | 79,50 | 5,90 | 2,00 | 29,90 |
| 111250,00 | 27,96 | 8,27 | 9,26 | 5,20 | 79,50 | 5,90 | 2,00 | 29,80 |
| 111257,00 | 27,94 | 8,27 | 9,26 | 5,20 | 78,90 | 5,86 | 2,00 | 29,80 |
| 111327,00 | 27,61 | 8,21 | 9,27 | 5,20 | 72,00 | 5,38 | 4,00 | 29,20 |
| 111333,00 | 27,61 | 8,20 | 9,28 | 5,20 | 71,10 | 5,31 | 4,00 | 28,60 |
| 111349,00 | 27,62 | 8,20 | 9,27 | 5,20 | 69,80 | 5,22 | 4,00 | 26,40 |
| 111354,00 | 27,61 | 8,20 | 9,27 | 5,20 | 69,20 | 5,17 | 4,00 | 25,80 |
| 111359,00 | 27,60 | 8,20 | 9,27 | 5,20 | 68,80 | 5,14 | 4,00 | 25,40 |
| 111405,00 | 27,60 | 8,19 | 9,27 | 5,20 | 68,70 | 5,14 | 4,00 | 25,20 |
| 111410,00 | 27,60 | 8,19 | 9,27 | 5,20 | 68,70 | 5,13 | 4,00 | 25,00 |
| 111415,00 | 27,60 | 8,19 | 9,27 | 5,20 | 68,80 | 5,14 | 4,00 | 24,90 |
| 111422,00 | 27,60 | 8,19 | 9,27 | 5,20 | 68,80 | 5,14 | 4,10 | 24,80 |
| 111501,00 | 25,34 | 7,72 | 10,15 | 5,70 | 6,50 | 0,51 | 7,90 | 22,10 |
| 111508,00 | 25,40 | 7,71 | 10,14 | 5,70 | 5,00 | 0,38 | 7,90 | 21,80 |
| 111512,00 | 25,40 | 7,70 | 10,14 | 5,70 | 4,40 | 0,34 | 8,00 | 21,60 |
| 111520,00 | 25,27 | 7,69 | 10,17 | 5,80 | 3,80 | 0,30 | 8,00 | 21,50 |
| 111525,00 | 25,22 | 7,68 | 10,18 | 5,80 | 3,80 | 0,29 | 8,00 | 21,50 |
| 111534,00 | 25,16 | 7,67 | 10,20 | 5,80 | 3,40 | 0,27 | 8,20 | 21,40 |
| 111557,00 | 23,28 | 7,58 | 10,98 | 6,20 | 3,10 | 0,25 | 8,70 | 20,40 |

TABLE C.32 Measurement results of KC-10 in 7.15.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 111515,00 | 26,75 | 8,42 | 9,07 | 5,10 | 91,40 | 6,94 | 0,40 | 17,70 |
| 111534,00 | 26,72 | 8,42 | 9,07 | 5,10 | 90,90 | 6,90 | 0,40 | 18,60 |
| 111545,00 | 26,69 | 8,43 | 9,07 | 5,10 | 90,90 | 6,91 | 0,50 | 19,70 |
| 111351,00 | 26,65 | 8,35 | 9,08 | 5,10 | 93,40 | 7,10 | 0,50 | 6,60 |
| 111428,00 | 26,70 | 8,39 | 9,07 | 5,10 | 91,30 | 6,93 | 0,50 | 15,30 |
| 111553,00 | 26,71 | 8,43 | 9,07 | 5,10 | 90,90 | 6,91 | 0,50 | 20,30 |
| 111722,00 | 26,34 | 8,44 | 9,09 | 5,10 | 88,30 | 6,75 | 1,00 | 20,70 |
| 111732,00 | 26,35 | 8,44 | 9,09 | 5,10 | 88,10 | 6,74 | 1,00 | 20,90 |
| 111740,00 | 26,34 | 8,44 | 9,09 | 5,10 | 87,20 | 6,67 | 1,00 | 21,00 |
| 111616,00 | 26,73 | 8,44 | 9,07 | 5,10 | 91,10 | 6,91 | 1,00 | 20,90 |
| 111626,00 | 26,60 | 8,44 | 9,10 | 5,10 | 90,80 | 6,91 | 1,00 | 20,70 |
| 111646,00 | 26,61 | 8,45 | 9,08 | 5,10 | 91,20 | 6,94 | 1,00 | 20,40 |
| 111701,00 | 26,68 | 8,45 | 9,07 | 5,10 | 91,40 | 6,95 | 1,00 | 20,50 |
| 111709,00 | 26,51 | 8,45 | 9,07 | 5,10 | 90,70 | 6,91 | 1,10 | 20,60 |
| 111602,00 | 26,71 | 8,44 | 9,08 | 5,10 | 90,90 | 6,91 | 1,10 | 20,90 |
| 111808,00 | 26,01 | 8,40 | 9,12 | 5,10 | 83,10 | 6,39 | 2,00 | 17,90 |
| 111821,00 | 26,01 | 8,40 | 9,12 | 5,10 | 82,30 | 6,33 | 2,00 | 11,80 |
| 111828,00 | 26,01 | 8,40 | 9,12 | 5,10 | 82,10 | 6,32 | 2,00 | 7,90 |
| 111841,00 | 26,01 | 8,40 | 9,12 | 5,10 | 81,70 | 6,28 | 2,00 | 4,50 |
| 111853,00 | 26,01 | 8,40 | 9,11 | 5,10 | 81,50 | 6,27 | 2,00 | 3,80 |
| 111905,00 | 26,00 | 8,40 | 9,12 | 5,10 | 81,40 | 6,26 | 2,00 | 3,80 |
| 111928,00 | 25,98 | 8,39 | 9,13 | 5,10 | 80,50 | 6,19 | 4,00 | 3,70 |
| 111938,00 | 25,97 | 8,39 | 9,13 | 5,10 | 79,90 | 6,15 | 4,00 | 3,60 |
| 112008,00 | 25,97 | 8,39 | 9,13 | 5,10 | 79,70 | 6,13 | 4,00 | 3,70 |
| 112026,00 | 25,98 | 8,39 | 9,13 | 5,10 | 79,80 | 6,14 | 4,00 | 3,70 |
| 112038,00 | 25,97 | 8,39 | 9,13 | 5,10 | 80,00 | 6,15 | 4,00 | 3,70 |
| 112044,00 | 25,97 | 8,39 | 9,12 | 5,10 | 79,90 | 6,15 | 4,00 | 3,70 |
| 112153,00 | 25,15 | 8,07 | 17,90 | 10,60 | 47,00 | 3,55 | 6,60 | 20,20 |
| 112210,00 | 25,14 | 8,07 | 18,00 | 10,60 | 46,50 | 3,51 | 6,60 | 16,10 |
| 112219,00 | 25,15 | 8,07 | 18,00 | 10,60 | 46,30 | 3,50 | 6,60 | 12,30 |
| 112232,00 | 25,13 | 8,05 | 18,00 | 10,60 | 45,10 | 3,41 | 6,70 | 7,90 |
| 112111,00 | 25,15 | 8,06 | 17,80 | 10,40 | 55,90 | 4,23 | 6,80 | 20,30 |

TABLE C.33 Measurement results of KC-10 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 143733,00 | 27,89 | 8,39 | 9,29 | 9,13 | 75,80 | 5,64 | 0,50 | 20,10 |
| 143739,00 | 27,91 | 8,39 | 9,29 | 9,13 | 75,30 | 5,59 | 0,50 | 22,70 |
| 143744,00 | 27,91 | 8,40 | 9,29 | 9,13 | 74,90 | 5,56 | 0,50 | 24,80 |
| 143751,00 | 27,87 | 8,40 | 9,29 | 9,13 | 74,60 | 5,55 | 0,50 | 26,90 |
| 143800,00 | 27,88 | 8,40 | 9,29 | 9,13 | 74,30 | 5,52 | 0,50 | 28,20 |
| 143805,00 | 27,85 | 8,40 | 9,29 | 9,13 | 74,20 | 5,52 | 0,50 | 27,50 |
| 143809,00 | 27,85 | 8,40 | 9,29 | 9,13 | 74,10 | 5,51 | 0,50 | 26,30 |
| 143813,00 | 27,85 | 8,41 | 9,28 | 9,13 | 73,80 | 5,49 | 1,00 | 25,00 |
| 143825,00 | 27,38 | 8,40 | 9,29 | 9,13 | 71,40 | 5,35 | 1,00 | 20,70 |
| 143830,00 | 27,50 | 8,40 | 9,28 | 9,13 | 71,30 | 5,33 | 1,00 | 19,10 |
| 143835,00 | 27,64 | 8,40 | 9,27 | 9,13 | 71,50 | 5,34 | 1,00 | 17,50 |
| 143841,00 | 27,60 | 8,40 | 9,28 | 9,13 | 71,50 | 5,34 | 1,00 | 15,60 |
| 143845,00 | 27,51 | 8,40 | 9,30 | 9,13 | 71,60 | 5,35 | 1,00 | 14,70 |
| 143852,00 | 27,75 | 8,41 | 9,26 | 9,13 | 71,70 | 5,34 | 1,00 | 11,90 |
| 143908,00 | 27,15 | 8,38 | 9,31 | 9,13 | 68,80 | 5,18 | 1,80 | 9,00 |
| 143936,00 | 27,14 | 8,37 | 9,30 | 9,13 | 66,20 | 4,99 | 1,90 | 7,60 |
| 143945,00 | 27,13 | 8,37 | 9,30 | 9,13 | 66,10 | 4,98 | 2,00 | 7,30 |
| 143950,00 | 27,13 | 8,37 | 9,30 | 9,13 | 66,00 | 4,97 | 2,00 | 7,10 |
| 143955,00 | 27,13 | 8,37 | 9,30 | 9,13 | 65,90 | 4,97 | 2,00 | 7,00 |
| 144000,00 | 27,13 | 8,37 | 9,30 | 9,13 | 65,90 | 4,96 | 2,00 | 7,00 |
| 143928,00 | 27,13 | 8,38 | 9,30 | 9,13 | 66,40 | 5,00 | 2,10 | 7,90 |
| 144007,00 | 27,12 | 8,37 | 9,30 | 9,13 | 65,70 | 4,95 | 3,00 | 7,00 |
| 144024,00 | 27,03 | 8,35 | 9,31 | 9,13 | 63,70 | 4,81 | 3,90 | 6,80 |
| 144017,00 | 27,03 | 8,35 | 9,31 | 9,13 | 64,40 | 4,86 | 4,00 | 6,90 |
| 144032,00 | 27,03 | 8,34 | 9,31 | 9,13 | 63,40 | 4,78 | 4,00 | 6,30 |
| 144037,00 | 27,03 | 8,34 | 9,31 | 9,13 | 63,20 | 4,77 | 4,00 | 5,80 |
| 144042,00 | 27,03 | 8,34 | 9,31 | 9,13 | 63,00 | 4,75 | 4,00 | 5,40 |
| 144046,00 | 27,03 | 8,34 | 9,31 | 9,13 | 63,00 | 4,75 | 4,00 | 4,80 |
| 144054,00 | 27,04 | 8,34 | 9,31 | 9,13 | 62,90 | 4,75 | 4,00 | 4,10 |
| 144103,00 | 27,03 | 8,34 | 9,31 | 9,13 | 62,80 | 4,74 | 4,00 | 3,40 |
| 144109,00 | 27,03 | 8,34 | 9,31 | 9,13 | 62,70 | 4,73 | 4,00 | 3,20 |
| 144113,00 | 27,03 | 8,34 | 9,31 | 9,13 | 62,80 | 4,74 | 4,00 | 3,00 |
| 144118,00 | 27,04 | 8,34 | 9,31 | 9,13 | 62,80 | 4,74 | 4,00 | 3,00 |
| 144126,00 | 27,03 | 8,34 | 9,31 | 9,13 | 62,80 | 4,74 | 4,00 | 3,00 |
| 144130,00 | 27,03 | 8,34 | 9,31 | 9,13 | 62,80 | 4,74 | 4,00 | 3,00 |
| 144135,00 | 27,04 | 8,34 | 9,31 | 9,13 | 62,70 | 4,73 | 4,00 | 3,00 |
| 144254,00 | 26,64 | 8,16 | 15,80 | 9,20 | 49,70 | 3,68 | 7,00 | 19,90 |
| 144237,00 | 26,69 | 8,17 | 15,50 | 9,00 | 49,60 | 3,68 | 7,20 | 7,90 |
| 144242,00 | 26,68 | 8,17 | 15,60 | 9,10 | 50,20 | 3,72 | 7,20 | 12,50 |
| 144249,00 | 26,65 | 8,16 | 15,70 | 9,20 | 50,10 | 3,71 | 7,20 | 17,10 |
| 144153,00 | 26,76 | 8,18 | 14,94 | 8,70 | 56,10 | 4,16 | 7,30 | 3,00 |
| 144159,00 | 26,76 | 8,18 | 15,00 | 8,70 | 54,20 | 4,03 | 7,30 | 3,00 |
| 144218,00 | 26,72 | 8,17 | 15,40 | 8,90 | 51,70 | 3,83 | 7,40 | 3,30 |

TABLE C.34 Measurement results of KC-10 in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 125402,00 | 28,09 | 8,20 | 9,26 | 5,20 | 76,00 | 5,63 | 0,50 | 0,40 |
| 125410,00 | 28,09 | 8,21 | 9,25 | 5,20 | 75,80 | 5,61 | 0,50 | 0,30 |
| 125421,00 | 28,09 | 8,22 | 9,25 | 5,20 | 75,70 | 5,61 | 0,50 | 3,90 |
| 125427,00 | 28,08 | 8,22 | 9,28 | 5,20 | 75,90 | 5,62 | 0,50 | 5,00 |
| 125415,00 | 28,08 | 8,21 | 9,26 | 5,20 | 75,70 | 5,61 | 0,60 | 1,80 |
| 125531,00 | 28,03 | 8,24 | 9,25 | 5,20 | 75,20 | 5,57 | 0,80 | 6,20 |
| 125444,00 | 28,08 | 8,23 | 9,25 | 5,20 | 75,40 | 5,59 | 1,00 | 5,80 |
| 125452,00 | 28,07 | 8,23 | 9,26 | 5,20 | 75,60 | 5,60 | 1,00 | 4,50 |
| 125458,00 | 28,07 | 8,24 | 9,25 | 5,20 | 75,70 | 5,61 | 1,00 | 4,60 |
| 125503,00 | 28,07 | 8,24 | 9,26 | 5,20 | 75,90 | 5,62 | 1,00 | 4,90 |
| 125507,00 | 28,06 | 8,24 | 9,25 | 5,20 | 75,80 | 5,62 | 1,00 | 5,20 |
| 125512,00 | 28,07 | 8,24 | 9,26 | 5,20 | 75,80 | 5,61 | 1,00 | 5,40 |
| 125520,00 | 28,04 | 8,24 | 9,25 | 5,20 | 75,50 | 5,59 | 1,10 | 6,00 |
| 125524,00 | 28,03 | 8,24 | 9,26 | 5,20 | 75,20 | 5,58 | 1,10 | 6,40 |
| 125549,00 | 27,81 | 8,22 | 9,26 | 5,20 | 72,20 | 5,37 | 1,50 | 6,40 |
| 125610,00 | 27,70 | 8,21 | 9,26 | 5,20 | 69,50 | 5,18 | 1,90 | 6,30 |
| 125615,00 | 27,71 | 8,21 | 9,26 | 5,20 | 69,20 | 5,16 | 1,90 | 6,20 |
| 125621,00 | 27,69 | 8,21 | 9,27 | 5,20 | 69,00 | 5,14 | 2,00 | 6,00 |
| 125626,00 | 27,69 | 8,21 | 9,26 | 5,20 | 68,90 | 5,14 | 2,00 | 5,80 |
| 125605,00 | 27,69 | 8,21 | 9,26 | 5,20 | 70,20 | 5,23 | 2,00 | 6,50 |
| 125540,00 | 27,99 | 8,24 | 9,09 | 5,10 | 75,00 | 5,57 | 2,20 | 6,20 |
| 125558,00 | 27,74 | 8,22 | 9,26 | 5,20 | 71,80 | 5,35 | 2,20 | 6,50 |
| 125638,00 | 27,60 | 8,19 | 9,28 | 5,20 | 67,30 | 5,03 | 3,80 | 5,50 |
| 125711,00 | 27,60 | 8,18 | 9,28 | 5,20 | 64,70 | 4,83 | 3,90 | 4,90 |
| 125652,00 | 27,61 | 8,20 | 9,27 | 5,20 | 66,90 | 4,99 | 4,00 | 5,20 |
| 125658,00 | 27,60 | 8,18 | 9,27 | 5,20 | 66,40 | 4,96 | 4,00 | 5,10 |
| 125705,00 | 27,60 | 8,18 | 9,28 | 5,20 | 65,40 | 4,89 | 4,00 | 5,00 |
| 125715,00 | 27,60 | 8,19 | 9,27 | 5,20 | 64,60 | 4,83 | 4,00 | 4,80 |
| 125647,00 | 27,62 | 8,20 | 9,27 | 5,20 | 66,40 | 4,96 | 4,10 | 5,30 |
| 125719,00 | 27,60 | 8,18 | 9,27 | 5,20 | 64,60 | 4,83 | 4,10 | 4,80 |
| 125754,00 | 27,18 | 7,75 | 9,93 | 5,60 | 14,10 | 1,06 | 7,80 | 5,20 |
| 125746,00 | 27,09 | 7,75 | 10,07 | 5,70 | 22,90 | 1,72 | 8,00 | 4,90 |
| 125804,00 | 27,14 | 7,72 | 10,10 | 5,70 | 12,20 | 0,91 | 8,00 | 5,60 |
| 125815,00 | 27,16 | 7,69 | 10,10 | 5,70 | 6,80 | 0,51 | 8,10 | 6,30 |
| 125821,00 | 27,17 | 7,69 | 10,02 | 5,70 | 6,00 | 0,45 | 8,10 | 6,50 |
| 125825,00 | 27,16 | 7,69 | 10,01 | 5,70 | 5,60 | 0,42 | 8,20 | 6,70 |
| 125835,00 | 19,42 | 7,61 | 12,49 | 7,20 | 5,00 | 0,43 | 9,80 | 6,80 |
| 125842,00 | 19,63 | 7,60 | 12,47 | 7,10 | 4,20 | 0,36 | 9,80 | 7,00 |
| 125847,00 | 19,70 | 7,59 | 12,51 | 7,20 | 4,00 | 0,34 | 9,80 | 7,10 |
| 125851,00 | 19,70 | 7,58 | 12,54 | 7,20 | 3,70 | 0,32 | 9,80 | 7,20 |

TABLE C.35 Measurement results of KC-10 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 122000,00 | 28,21 | 8,21 | 9,26 | 5,20 | 71,80 | 5,30 | 0,40 | 16,40 |
| 121936,00 | 28,24 | 8,19 | 9,23 | 5,20 | 77,80 | 5,75 | 0,50 | 17,00 |
| 121952,00 | 28,24 | 8,21 | 9,26 | 5,20 | 72,60 | 5,36 | 0,50 | 16,70 |
| 121956,00 | 28,23 | 8,21 | 9,26 | 5,20 | 72,30 | 5,34 | 0,50 | 16,50 |
| 122005,00 | 28,22 | 8,22 | 9,26 | 5,20 | 71,40 | 5,28 | 0,50 | 16,30 |
| 122009,00 | 28,22 | 8,22 | 9,26 | 5,20 | 71,20 | 5,26 | 0,50 | 16,20 |
| 122019,00 | 28,24 | 8,22 | 9,26 | 5,20 | 71,30 | 5,27 | 0,50 | 16,10 |
| 122032,00 | 28,17 | 8,22 | 9,26 | 5,20 | 70,50 | 5,21 | 0,50 | 16,00 |
| 122119,00 | 28,17 | 8,23 | 9,27 | 5,20 | 69,00 | 5,10 | 0,90 | 16,00 |
| 122124,00 | 28,17 | 8,23 | 9,27 | 5,20 | 69,10 | 5,11 | 0,90 | 15,80 |
| 122059,00 | 28,15 | 8,22 | 9,27 | 5,20 | 68,70 | 5,08 | 1,00 | 16,30 |
| 122104,00 | 28,14 | 8,22 | 9,27 | 5,20 | 68,60 | 5,08 | 1,00 | 16,30 |
| 122111,00 | 28,14 | 8,22 | 9,27 | 5,20 | 68,50 | 5,07 | 1,00 | 16,30 |
| 122115,00 | 28,16 | 8,22 | 9,27 | 5,20 | 68,70 | 5,08 | 1,00 | 16,10 |
| 122134,00 | 28,19 | 8,23 | 9,27 | 5,20 | 69,40 | 5,13 | 1,00 | 15,60 |
| 122140,00 | 28,18 | 8,23 | 9,27 | 5,20 | 69,20 | 5,11 | 1,00 | 15,60 |
| 122129,00 | 28,18 | 8,23 | 9,27 | 5,20 | 69,30 | 5,12 | 1,10 | 15,70 |
| 122158,00 | 28,01 | 8,23 | 9,27 | 5,20 | 68,70 | 5,10 | 1,90 | 15,60 |
| 122329,00 | 27,99 | 8,24 | 9,28 | 5,20 | 69,30 | 5,14 | 1,90 | 15,00 |
| 122207,00 | 28,04 | 8,22 | 9,28 | 5,20 | 67,90 | 5,03 | 2,00 | 15,40 |
| 122213,00 | 28,05 | 8,22 | 9,27 | 5,20 | 67,60 | 5,01 | 2,00 | 15,20 |
| 122218,00 | 28,01 | 8,22 | 9,27 | 5,20 | 67,70 | 5,02 | 2,00 | 15,10 |
| 122222,00 | 28,00 | 8,23 | 9,27 | 5,20 | 68,10 | 5,05 | 2,00 | 15,00 |
| 122227,00 | 27,99 | 8,23 | 9,27 | 5,20 | 68,50 | 5,08 | 2,00 | 14,90 |
| 122231,00 | 27,99 | 8,23 | 9,28 | 5,20 | 68,80 | 5,10 | 2,00 | 14,90 |
| 122236,00 | 27,98 | 8,23 | 9,28 | 5,20 | 69,00 | 5,12 | 2,00 | 14,80 |
| 122256,00 | 27,99 | 8,24 | 9,28 | 5,20 | 69,30 | 5,14 | 2,00 | 14,90 |
| 122302,00 | 27,98 | 8,24 | 9,28 | 5,20 | 69,30 | 5,14 | 2,00 | 15,00 |
| 122310,00 | 27,98 | 8,24 | 9,28 | 5,20 | 69,30 | 5,14 | 2,00 | 15,00 |
| 122316,00 | 27,99 | 8,24 | 9,27 | 5,20 | 69,50 | 5,15 | 2,00 | 15,00 |
| 122322,00 | 27,98 | 8,24 | 9,27 | 5,20 | 69,50 | 5,16 | 2,00 | 15,00 |
| 122401,00 | 27,92 | 8,25 | 9,28 | 5,20 | 68,60 | 5,09 | 4,00 | 14,70 |
| 122414,00 | 27,92 | 8,25 | 9,28 | 5,20 | 68,70 | 5,11 | 4,00 | 14,20 |
| 122452,00 | 27,92 | 8,25 | 9,28 | 5,20 | 69,00 | 5,12 | 4,00 | 14,20 |
| 122421,00 | 27,92 | 8,25 | 9,28 | 5,20 | 68,70 | 5,10 | 4,10 | 14,10 |
| 122426,00 | 27,92 | 8,25 | 9,28 | 5,20 | 68,70 | 5,11 | 4,10 | 14,10 |
| 122434,00 | 27,92 | 8,25 | 9,28 | 5,20 | 68,70 | 5,11 | 4,10 | 14,20 |
| 122457,00 | 27,92 | 8,25 | 9,28 | 5,20 | 69,00 | 5,13 | 4,20 | 14,10 |
| 122509,00 | 27,87 | 8,11 | 9,38 | 5,30 | 58,60 | 4,36 | 6,80 | 13,70 |
| 122516,00 | 27,87 | 8,08 | 9,39 | 5,30 | 52,70 | 3,91 | 6,80 | 13,40 |
| 122521,00 | 27,86 | 8,07 | 9,39 | 5,30 | 50,50 | 3,75 | 6,80 | 13,30 |

TABLE C.36 Measurement results of KC-11 in 7.15.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 113053,00 | 23,79 | 8,04 | 32,90 | 20,60 | 50,50 | 3,69 | 0,50 | 2,80 |
| 113104,00 | 23,78 | 8,04 | 32,90 | 20,50 | 50,30 | 3,67 | 0,50 | 2,70 |
| 113109,00 | 23,78 | 8,05 | 32,90 | 20,50 | 50,30 | 3,67 | 0,50 | 2,60 |
| 113123,00 | 23,79 | 8,05 | 32,80 | 20,50 | 49,80 | 3,64 | 0,50 | 2,70 |
| 113157,00 | 23,79 | 8,05 | 33,10 | 20,70 | 49,80 | 3,63 | 1,10 | 2,90 |
| 113206,00 | 23,79 | 8,05 | 33,00 | 20,70 | 49,80 | 3,63 | 1,10 | 2,60 |
| 113213,00 | 23,79 | 8,05 | 33,10 | 20,70 | 49,80 | 3,63 | 1,10 | 2,40 |
| 113224,00 | 23,78 | 8,05 | 33,10 | 20,70 | 49,80 | 3,64 | 1,10 | 2,30 |
| 113236,00 | 23,78 | 8,06 | 33,00 | 20,70 | 49,90 | 3,64 | 1,10 | 2,40 |
| 113246,00 | 23,78 | 8,06 | 33,00 | 20,70 | 49,90 | 3,64 | 1,10 | 2,40 |

TABLE C.37 Measurement results of KC-11 in 7.29.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 145129,00 | 26,13 | 8,23 | 31,80 | 19,80 | 76,50 | 5,37 | 0,30 | 7,20 |
| 145156,00 | 26,13 | 8,24 | 31,80 | 19,80 | 76,00 | 5,34 | 0,40 | 7,40 |
| 145044,00 | 26,11 | 8,21 | 31,80 | 19,80 | 78,90 | 5,54 | 0,50 | 4,40 |
| 145050,00 | 26,11 | 8,22 | 31,80 | 19,80 | 77,90 | 5,48 | 0,50 | 4,50 |
| 145110,00 | 26,12 | 8,23 | 31,50 | 19,60 | 76,80 | 5,40 | 0,50 | 4,30 |
| 145115,00 | 26,12 | 8,23 | 31,80 | 19,80 | 76,60 | 5,38 | 0,50 | 5,00 |
| 145134,00 | 26,13 | 8,23 | 31,80 | 19,80 | 76,20 | 5,35 | 0,50 | 8,00 |
| 145140,00 | 26,13 | 8,24 | 31,80 | 19,80 | 76,10 | 5,35 | 0,50 | 8,60 |
| 145146,00 | 26,14 | 8,24 | 31,80 | 19,80 | 76,10 | 5,35 | 0,50 | 8,30 |
| 145150,00 | 26,13 | 8,24 | 31,80 | 19,80 | 76,10 | 5,35 | 0,50 | 7,90 |

TABLE C.38 Measurement results of KC-11 in 8.03.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 130518,00 | 29,08 | 8,00 | 11,33 | 6,50 | 52,50 | 3,79 | 0,40 | 2,10 |
| 130536,00 | 29,12 | 7,99 | 11,18 | 6,40 | 37,80 | 2,73 | 0,40 | 11,80 |
| 130542,00 | 29,14 | 8,05 | 10,69 | 6,10 | 45,90 | 3,32 | 0,50 | 15,70 |
| 130511,00 | 29,09 | 8,00 | 11,26 | 6,40 | 63,80 | 4,61 | 0,60 | 12,30 |
| 130525,00 | 29,12 | 7,97 | 11,37 | 6,50 | 49,40 | 3,56 | 0,70 | 5,80 |
| 130547,00 | 29,16 | 7,97 | 10,94 | 6,20 | 48,10 | 3,47 | 0,70 | 17,60 |
| 130551,00 | 29,12 | 7,92 | 10,09 | 5,70 | 43,10 | 3,13 | 0,70 | 19,20 |
| 130555,00 | 29,11 | 7,89 | 6,87 | 3,80 | 35,60 | 2,61 | 0,70 | 19,80 |

TABLE C.39 Measurement results of KC-11 in 8.04.1998

| Time | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| 123429,00 | 28,85 | 8,15 | 0,12 | 0,01 | 65,60 | 4,96 | 0,10 | 33,10 |
| 123433,00 | 28,06 | 8,04 | 0,09 | 0,01 | 71,30 | 5,46 | 0,10 | 31,30 |
| 123438,00 | 27,50 | 7,99 | 0,08 | 0,01 | 74,40 | 5,76 | 0,10 | 29,20 |
| 123446,00 | 29,33 | 8,15 | 4,12 | 2,20 | 66,00 | 4,87 | 0,20 | 23,40 |
| 123451,00 | 29,44 | 8,15 | 4,07 | 2,20 | 62,10 | 4,58 | 0,20 | 20,80 |
| 123455,00 | 29,46 | 8,15 | 4,09 | 2,20 | 60,90 | 4,48 | 0,30 | 18,00 |
| 123500,00 | 29,45 | 8,15 | 4,08 | 2,20 | 60,20 | 4,44 | 0,30 | 17,00 |
| 123504,00 | 29,46 | 8,15 | 4,09 | 2,20 | 59,50 | 4,39 | 0,30 | 17,80 |
| 123509,00 | 29,46 | 8,16 | 4,07 | 2,20 | 59,20 | 4,36 | 0,30 | 19,90 |
| 123513,00 | 29,48 | 8,16 | 4,05 | 2,20 | 59,00 | 4,35 | 0,40 | 23,20 |
| 123517,00 | 29,48 | 8,17 | 11,01 | 6,30 | 59,80 | 4,29 | 0,40 | 27,20 |
| 123522,00 | 29,47 | 8,15 | 11,06 | 6,30 | 59,60 | 4,28 | 0,40 | 30,50 |
| 123526,00 | 29,44 | 8,15 | 11,12 | 6,30 | 58,70 | 4,22 | 0,40 | 33,50 |
| 123530,00 | 29,39 | 8,14 | 11,30 | 6,40 | 55,60 | 3,99 | 0,40 | 36,30 |
| 123535,00 | 29,36 | 8,12 | 12,04 | 6,90 | 54,00 | 3,87 | 0,50 | 37,70 |
| 123539,00 | 29,35 | 8,11 | 12,12 | 6,90 | 52,10 | 3,73 | 0,50 | 38,40 |
| 123543,00 | 29,33 | 8,10 | 12,13 | 6,90 | 51,50 | 3,69 | 0,50 | 38,30 |
| 123547,00 | 29,35 | 8,10 | 12,07 | 6,90 | 51,10 | 3,67 | 0,50 | 38,40 |
| 123551,00 | 29,36 | 8,10 | 12,07 | 6,90 | 51,20 | 3,67 | 0,50 | 38,40 |
| 123607,00 | 29,35 | 8,08 | 12,68 | 7,30 | 30,40 | 2,17 | 0,60 | 37,80 |
| 123612,00 | 29,35 | 8,09 | 12,42 | 7,10 | 39,70 | 2,84 | 0,60 | 37,60 |
| 123616,00 | 29,31 | 8,10 | 12,29 | 7,00 | 41,90 | 3,00 | 0,60 | 37,20 |
| 123621,00 | 29,32 | 8,09 | 12,26 | 7,00 | 39,80 | 2,85 | 0,60 | 36,90 |

TABLE C.40 Landing Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 24,70 | 14,47 | 31,75 | 24,66 | 35,41 | 13,89 | 16,19 | 28,40 |
| Max | 68,00 | 52,00 | 148,00 | 112,00 | 96,00 | 57,00 | 73,00 | 69,00 |
| Min | 4,00 | 5,00 | 3,85 | 5,63 | 5,72 | 1,78 | 0,40 | 3,92 |

TABLE C.41 Landing Surface Water Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 61,00 | 48,00 | 130,25 | 102,25 | 81,50 | 52,00 | 68,00 | 63,00 |
| Max | 68,00 | 52,00 | 10,75 | 112,00 | 96,00 | 57,00 | 73,00 | 69,00 |
| Min | 55,00 | 43,00 | 8,62 | 96,00 | 71,00 | 48,00 | 65,00 | 58,00 |

TABLE C.42 KC-4 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 25,93 | 11,13 | 25,07 | 17,83 | 48,11 | 8,87 | 8,21 | 8,21 |
| Max | 68,00 | 52,00 | 148,00 | 112,00 | 96,00 | 57,00 | 73,00 | 73,00 |
| Min | 4,00 | 5,00 | 0,08 | 0,01 | 5,72 | 1,78 | 0,10 | 0,10 |

TABLE C.43 KC-4 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 32,64 | 22,71 | 57,72 | 43,28 | 49,94 | 22,55 | 27,10 | 27,10 |
| Max | 68,00 | 52,00 | 148,00 | 112,00 | 96,00 | 57,00 | 73,00 | 73,00 |
| Min | 4,00 | 5,00 | 0,08 | 0,01 | 5,72 | 1,78 | 0,10 | 0,10 |

TABLE C.44 KC-5 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 27,40 | 10,74 | 19,26 | 14,45 | 54,54 | 8,05 | 7,45 | 16,92 |
| Max | 68,00 | 52,00 | 148,00 | 112,00 | 96,00 | 57,00 | 73,00 | 69,00 |
| Min | 4,00 | 5,00 | 0,08 | 0,01 | 3,70 | 0,32 | 0,10 | 2,10 |

TABLE C.45 KC-5 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 33,133 | 22,578 | 55,781 | 42,152 | 51,413 | 21,791 | 26,85 | 29,339 |
| Max | 68 | 52 | 148 | 112 | 96 | 57 | 73 | 69 |
| Min | 4 | 5 | 0,079 | 0,01 | 3,7 | 0,32 | 0,1 | 2,1 |

TABLE C.46 KC-6 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 28,02 | 14,15 | 31,04 | 24,77 | 49,20 | 12,50 | 25,43 | 23,01 |
| Max | 68,00 | 52,00 | 148,00 | 112,00 | 96,00 | 57,00 | 73,00 | 73,00 |
| Min | 4,00 | 5,00 | 0,08 | 0,01 | 3,70 | 0,32 | 0,10 | 0,10 |

TABLE C.47 KC-6 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 25,895 | 8,0725 | 4,6475 | 5,48 | 55,025 | 4,1775 | 0,5 | 17,725 |
| Max | 27,76 | 8,29 | 9,32 | 5,86 | 88 | 6,56 | 0,5 | 33,1 |
| Min | 23,37 | 7,69 | 0,11 | 5,1 | 11,6 | 0,94 | 0,5 | 1,1 |

TABLE C.48 KC-7 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 23,01 | 7,98 | 10,14 | 6,35 | 52,73 | 4,02 | 5,51 | 7,87 |
| Max | 28,54 | 8,44 | 19,80 | 12,70 | 95,50 | 7,02 | 18,20 | 38,30 |
| Min | 10,35 | 6,80 | 0,05 | 5,10 | 2,40 | 0,22 | 0,40 | 1,20 |

TABLE C.49 KC-7 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 20,63 | 7,74 | 10,00 | 8,05 | 50,21 | 3,75 | 8,04 | 15,79 |
| Max | 28,54 | 8,44 | 19,80 | 12,70 | 95,50 | 7,02 | 18,20 | 38,30 |
| Min | 10,35 | 6,80 | 0,05 | 5,10 | 2,40 | 0,22 | 0,40 | 1,20 |

TABLE C.50 KC-8 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 19,84 | 7,66 | 9,95 | 8,62 | 49,37 | 3,66 | 8,88 | 18,43 |
| Max | 28,54 | 8,44 | 19,80 | 12,70 | 95,50 | 7,02 | 18,20 | 38,30 |
| Min | 10,35 | 6,80 | 0,05 | 5,10 | 2,40 | 0,22 | 0,40 | 1,20 |

TABLE C.51 KC-8 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 19,577 | 7,6333 | 9,933 | 8,8055 | 49,09 | 3,6349 | 9,1597 | 19,31 |
| Max | 28,54 | 8,44 | 19,8 | 12,7 | 95,5 | 7,02 | 18,2 | 38,3 |
| Min | 10,35 | 6,8 | 0,05 | 5,1 | 2,4 | 0,22 | 0,4 | 1,2 |

TABLE C.52 KC-9 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 19,49 | 7,62 | 9,93 | 8,87 | 49,00 | 3,62 | 9,25 | 19,60 |
| Max | 28,54 | 8,44 | 19,80 | 12,70 | 95,50 | 7,02 | 18,20 | 38,30 |
| Min | 19,49 | 7,62 | 9,93 | 8,87 | 49,00 | 3,62 | 9,25 | 19,60 |

TABLE C.53 KC-9 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 22,51 | 7,90 | 13,22 | 10,15 | 64,50 | 4,76 | 0,50 | 25,84 |
| Max | 28,54 | 8,44 | 19,8 | 12,7 | 95,5 | 7,02 | 18,2 | 38,3 |
| Min | 19,489 | 7,6244 | 9,9277 | 8,8685 | 48,997 | 3,625 | 9,2532 | 19,603 |

TABLE C.54 KC-10 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 27,73 | 14,39 | 29,55 | 24,07 | 49,28 | 12,71 | 14,48 | 24,65 |
| Max | 68 | 52 | 148 | 112 | 96 | 57 | 73 | 73 |
| Min | 4 | 5 | 0,05 | 0,01 | 2,4 | 0,22 | 0,1 | 0,1 |

TABLE C.55 KC-10 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 33,24 | 23,80 | 59,20 | 45,36 | 49,23 | 23,31 | 29,19 | 32,58 |
| Max | 68 | 52 | 148 | 112 | 96 | 57 | 73 | 73 |
| Min | 4 | 5 | 0,05 | 0,01 | 2,4 | 0,22 | 0,1 | 0,1 |

TABLE C.56 KC-11 Overall Statistical Results In Different Dates

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 27,62 | 8,09 | 17,93 | 10,86 | 54,52 | 3,94 | 0,54 | 19,05 |
| Max | 29,48 | 8,24 | 33,10 | 20,70 | 78,90 | 5,76 | 1,10 | 38,40 |
| Min | 23,78 | 7,87 | 0,08 | 0,01 | 17,50 | 1,24 | 0,10 | 2,10 |

TABLE C.57 KC-11 Surface Water Statistical Results

| | Temp (°C) | pH | SpCond mS/cm | Salin ppt | DO (%) % Sat. | DO mg/l | Depth meter | Turb NTU |
|---|---|---|---|---|---|---|---|---|
| Average | 26,96 | 8,07 | 17,04 | 10,52 | 50,31 | 3,65 | 0,58 | 19,85 |
| Max | 29,36 | 8,24 | 33,10 | 20,70 | 78,90 | 5,76 | 1,10 | 38,40 |
| Min | 23,78 | 7,87 | 0,08 | 0,01 | 17,50 | 1,24 | 0,10 | 2,10 |

# APPENDIX D

FIGURE D.1. Visual part of the thesis

FIGURE D.2. Visual presentation of Winkler bottles before incubation

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