

YEARBOOK 1980 - 1983 EASTERN DELTA

DISCHARGE AND CHEMICAL COMPOSITION DRAINAGE WATER

YEARBOOK 1980 - 1983 EASTERN DELTA
DISCHARGE AND CHEMICAL COMPOSITION DRAINAGE
WATER

PROJECT TEAM

REPORT 4

DRAINAGE RESEARCH INSTITUTE, GIZA, EGYPT (DRI)
INSTITUTE FOR LAND AND WATER MANAGEMENT RESEARCH (ICW)
P.O. BOX 35, 6700 AA WAGENINGEN, The Netherlands (1985)

PREFACE:

The 'Reuse of Drainage Water Project' is a joint activity of the technical agencies:

Drainage Research Institute (DRI), Giza/Cairo-Egypt
and

Institute for Land and Water Management Research (ICW),
Wageningen, The Netherlands.

The Project is funded by the Ministry of Irrigation of Egypt and by the Ministry of Foreign Affairs of the Netherlands in the framework of the joint programme of Technical Cooperation between Egypt and the Netherlands.

The Advisory Panel for Land Drainage in Egypt acts as steering committee.

The results of studies, carried out in the 'Reuse of Drainage Water Project', will be presented in preliminary reports and in a final report. As such the contents of preliminary reports can vary strongly, from a simple presentation of data to a discussion of research results with tentative conclusions.

All opinions, conclusions and recommendations in these reports are those of the cooperating Institutes, and not of the Ministry of Irrigation of Egypt or the Ministry of Foreign Affairs of the Netherlands.

Reuse Project team

Project Directors

Dr. Mohamed Mahmud Gasser, (DRI)
Dr. Ir. P.E. Rijtema, (ICW)

Senior Staff

Dr. Samia Mahmud Saad El Din El Guindy

Resident team, ICW

Ir. D. Boels, project leader
Ir. M. Maaskant
Ir. H.J.M. Bijnsdorp

Staff, DRI

Eng. Mohamed Ahmed Abdel Khalek
Eng. Ahmed Mohamed Morsi
Eng. Adel Abdel Rasheed Soleiman
Eng. Mohamed Ezzat Hasan
Eng. Ibrahim Ahmed Lashin
Eng. Magdi Mohamed Abd El Nabi
Eng. Nabil Fathi Kandil
Eng. Mohamed Saad Abbas
Eng. Nadia Abdel Hamid Mansour El Banasawy
Eng. Mervet Mohamed Mustafa El Guindy
Eng. Omayma Saad Shahin
Eng. Somaya Mohamed Abbas

C O N T E N T S

	Page
1. INTRODUCTION	1
2. DATA ELABORATION	1
2.1. Calibration of Pumping stations	3
2.2. Stage-discharge relations	3
2.3. Float measurements	3
2.4. Pendulum measurements	4
2.5. Data checking chemical analysis	4
2.6. Data presentation	4
3. DATA ON DISCHARGE AND WATERQUALITY 1980 - 1983	5
3.1. Discharge, salinity and sodium hazard	6
3.2. Chemical composition	40
REFERENCES	73

1. INTRODUCTION

The growing population of Egypt requires an increase in the production of food and fibres. It also requires new land to substitute land lost due to newly built housings and roads.

Four strategies have been developed to meet the requirements. Among others, reuse of drainage water is a strategy to provide additional irrigation water for areas that will be reclaimed. In the five-year plan 1982-1987 for a total area of about 640,000 feddan (1 feddan = 0,42 ha) reclamation plans will be prepared, and a start will be made with the implementation.

The Re-use of Drainage Water Project aims to provide basic data, that can be used in the above mentioned planning. A measurement network has been established to provide these data. At drainage-catchment level, discharges and drainage waterquality are determined. Discharges from drainage pumping stations are provided by the Ministry of Irrigation. Calibrations of these pumping stations are part of the Reuse Project activities and provide data to calculate the discharges more accurately.

Discharges from areas drained by gravity are measured by appropriate methods, depending on a number of constraints. Water samples at the locations, shown in fig. 1 are regularly taken. The chemical composition is determined and water quality parameters are calculated.

The aim of this report is to present the basic data in a suitable form for the potential user. A short description of the procedures followed is included in this report.

The data are presented in two sections: in the first section are discharges, salinities and parameters for the sodification hazards of irrigation with these waters. In the second section the monthly average chemical composition is presented. Application of these data for different purposes is beyond the scope of this report.

The cooperating Institutes do not accept any responsibility for conclusions drawn on the basis of the data presented nor for the results of application of these data.

2. DATA ELABORATION

In this chapter an overview will be presented of the procedure of data elaboration. Two types of data are distinguished; discharges and chemical characteristics of the drainage water. Concerning the latter, the parameters given are the total dissolved salts, the electrical conductivity, the sodium adsorption ratio and the adjusted sodium adsorption ratio. These parameters are calculated as monthly averages and weighted with respect to discharges.

The elaboration procedure for chemical analysis is in brief as follows: first entering the basic data on computer files. Then the total charge of both cations and anions is calculated. Simultaneously the electrical conductivity is calculated, based on the contribution of each ion to this conductivity. Results are listed and a manual check is performed. Deviations due to mistypings or wrong calculations are restored. If no reason can be found for the detected deviations, results are rejected.

Discharges can be obtained in different ways. Data concerning discharges of pumping stations: lifting head, number of operation hours and the monthly discharge itself are obtained from the Ministry of Irrigation. Based on calibration measurements by DRI a rating curve for the pumping station is established. The average monthly capacity, corresponding to the lifting head is read from this curve and multiplied with the number of operation hours.

If, however, only discharges are provided, these are multiplied by the efficiency of the pumping station.

Discharges at open drainage canal locations may have been determined by float-measurements, by pendulum, by current meter or through a stage discharge relation by measuring the water level.

These discharges are measured with certain time intervals. During these intervals the discharge is assumed to change linearly with time. The total discharge per month is obtained by integration with respect to time.

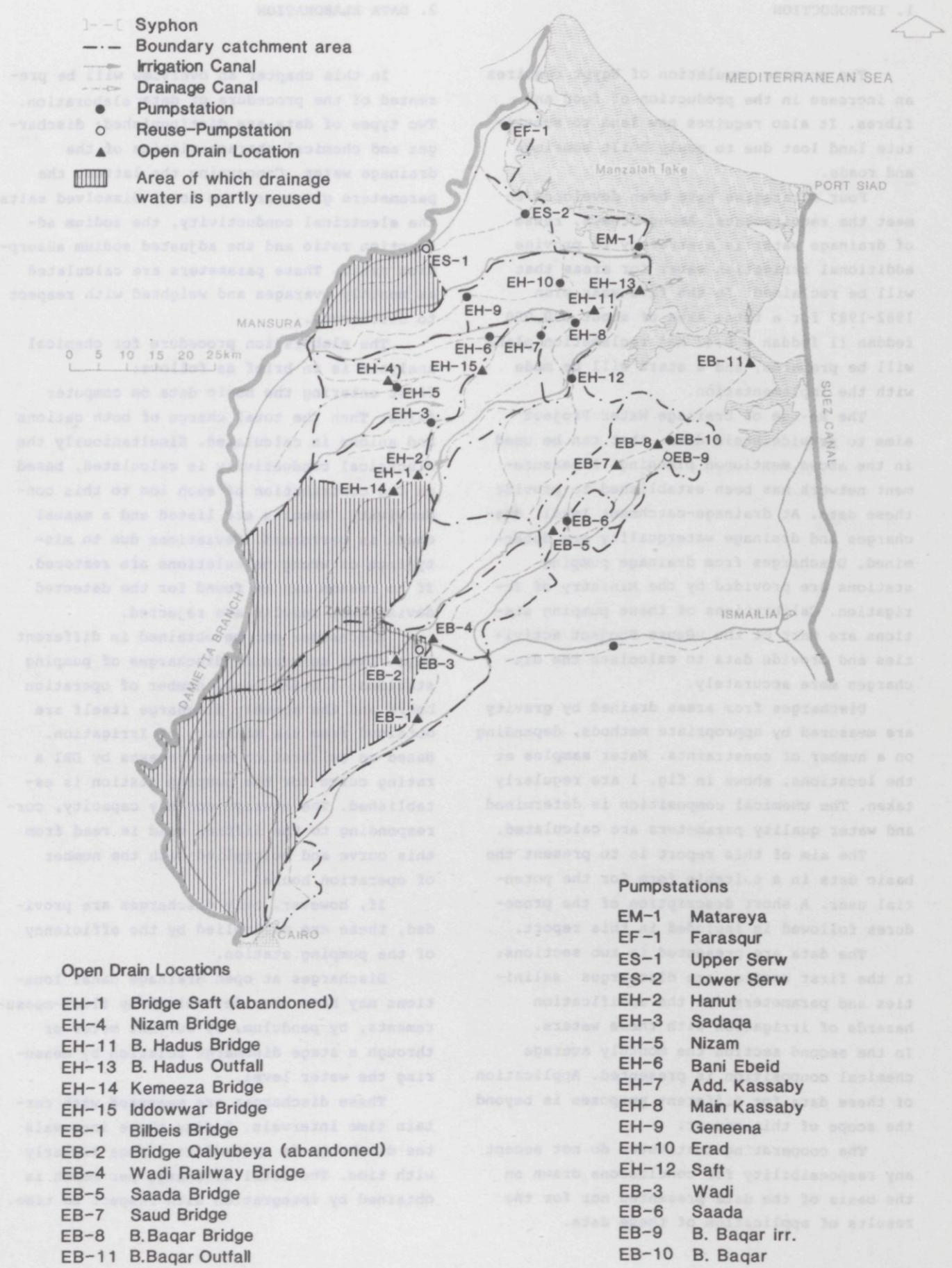


Fig. 1. General view of the network in the Eastern Delta

2.1. Calibration of pumping stations

For each pump unit the relationship between lifting head and discharge has been determined. During the measurement a more or less steady state situation does exist. The water levels at the suction- and delivery side are measured just before and after the discharge measurements.

Discharges are determined, using the current meter, for which a relation is available between the flow velocity and the rotation rate of the meter. Regularly this relation is recalibrated by the Hydraulic Research Institute at the Delta Barrage.

The cross-section at the suction side is subdivided into a grid with meshes of $0,5 \times 0,5 \text{ m}^2$. The velocity in each node is measured during 30 seconds. Multiplying this velocity with the representative area, gives its contribution to the total discharge. In general at least three calibrations per pump unit are performed at lifting heads more or less representing the full range, at which the station is operating.

For the production of this yearbook all the calibration results of the pump units of each pumping station are combined and the best fitting curve is matched.

The average efficiency of a pumping station can be obtained by dividing its capacity, pertaining to the average lifting head, by the guarantee capacity. The guarantee capacity is used by the Ministry of Irrigation to calculate the total discharge from the number of operation hours. This capacity is more or less the capacity of new pumps, operating at average expected lifting heads.

2.2. Stage-discharge relations

The relationship between discharge and water level, the so called stage-discharge relation, can only exist under certain conditions. The first condition is steady state flow, where the slope of the energy line is identical to the slope of the bottom. If changes in discharge occur only very slowly, no significant deviations from the steady state conditions will occur.

A second condition is that the shape of the

cross section is regular and the hydraulic roughness is almost constant.

The water level should not be affected by changing conditions downstream of the observation location.

If all conditions are fulfilled the discharge is a function of the waterdepth (LAMBIE, 1978)

$$Q = a \cdot H^b \quad \text{m}^3 \cdot \text{s}^{-1}$$

In some cases H is not the real water depth, but some height above a level at which the discharge is zero. The constants a and b are derived from the calibration measurements. If not explicitly measured, the water level at which the discharge is zero, can be determined by curve-fitting.

The squared correlation coefficient should be higher than some minimum value, depending on the number of observations. A value of 0.95 is required when the number of observation is less than 5 and 0.90 when this number is less than 10 but more than 5 (ROEST, 1983). For practical applications this value must be higher than 0.5.

If no satisfactory squared correlation coefficient has been obtained, either back-water effects or non steady state conditions have been met.

The discharge at a certain date can now be determined by measuring the water level and reading the pertaining discharge from the stage-discharge curve.

2.3. Float measurements

Float measurement consists of the measurement of the flow velocity at the surface. In cases with regularly shaped cross-sections, the surface flow velocity at a certain point is related to the average flow velocity in the sub section.

In most cases the average velocity in the sub-section is about 85% of the surface velocity.

Measuring at a number of locations, at different distances from the banks the surface velocity, gives ultimately the total discharge at that location.

Floats can be subject to wind effects, giving deviating results. Applied under bridges with contracting stream lines, could give

erroneous results. Data from float-measurements should be considered tentatively.

2.4. Pendulum measurements

The principle of the pendulum meter is based on the force acting on resistance bodies, fixed in streaming water. The magnitude of this force is closely related to the flow velocity and to the shape of the body. With pendulum measurements, a torpedo shaped body with two incinated rearwings is submerged. This body is connected to a wire and is hanging vertical if no velocity is present. The water velocity causes a deviation of the wire from the vertical position. The angle between the wire and the vertical is a measure for the velocity. For each type of body such a relation is available. Measuring at different depths, at different locations provides a velocity distribution in the cross-section and consequently a discharge at that moment.

2.5. Data checking chemical analysis

At the DRI-laboratory the concentration of Ca, Mg, Na, K, CO_3 , HCO_3 and Cl has been determined. From the difference in total charge of the cations and the anions, the concentration of SO_4 has been calculated. Moreover the EC and pH is measured.

Data checking includes first the calculation of the total charge of the anions and the cations. If typing errors during data entry occur, the sum of the charges is not zero.

A second check is obtained by calculating the electrical conductivity and comparing with the measured one.

Basis for this calculation is the assumption, that the EC of a solution, containing several different ions, is the sum of the contributions of the single ion. For the latter empirical relationships have been developed (ROEST, 1983). If the difference between calculated and measured EC is more than 10 μs , an error may be assumed and the original data must be compared with the data entered. In case of deviations the entered data are restored, otherwise this set of data has

been rejected for further elaboration.

2.6. Data presentation

For the pumping stations the discharge provided by the Ministry of Irrigation in million cubic meter per month has been included in the data presentation. The number of operation hours and average lifting head per month have been obtained.

Rating curves are available, whether supplied by the factory or from calibration measurements. If no calibrations are available the factory provided rating curve has been used. In other cases the guarantee capacity has been used or the average capacity from the calibration measurements.

To distinguish the different situations, a code is used to indicate the particular situation.

In table 1 the codes and the meaning of code has been listed.

Table 1. Codes and their meaning

Code	Description
11	- pump station; discharge known in hours of operation; calibration curve established
12	- pump station; discharge not known in hours; calibration curve established
13	- pump station; no calibration curve
21	- open drain; Hm measured; linear relation between discharge and Hm
22	- open drain; Hm measured; power curve relation between water depth and discharge
23	- open drain; float discharge measured; no good calibration relation available
24	- open drain or pump station; no discharge known or measured

For each location this code has been presented in the header, together with the name and code-name of the location, the year and the stage-discharge relation or rating curve. The square of the correlation coefficient is mentioned. The value of this item has been set to zero, in cases where no rating curve is available and in case the average capacity is used.

The total discharge per year is calculated only in those situations that data of all

months are available.

The same holds for the average water-quality parameters.

The discharges at open drainage canal locations have been calculated on a monthly basis. It has been assumed that the discharge rate in between two succeeding measurement dates changes linearly, with time. The course of the discharge rate is described by a polygon. The discharge per month has been obtained by integrating this polygon with respect to time, between the time boundaries, belonging to that particular month (see Fig. 2).

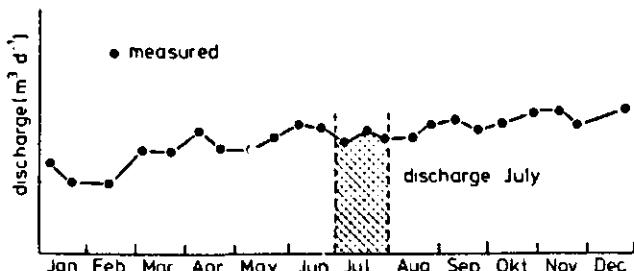


Fig. 2. Schematic presentation, determination discharge per month

The average water quality per month is obtained in a similar way. In this case the concentration of each ion has been multiplied by the discharge rate and with the ionic load thus obtained, a polygon has been constructed. Again an integration per month has been done and the result has been divided by the monthly discharge. With the average composition of the drainage water obtained the waterquality parameters have been calculated.

The salinity, expressed in parts per million (ppm) has been calculated by multiplying the concentration of each ion (in meq.liter⁻¹) by its atomic weight, divided by its charge, and adding the results.

The cation composition of irrigation water determines its potential for sodium hazards for which the sodium adsorption ratio is a parameter.

This parameter has been defined as:

$$SAR = \frac{[Na]}{\sqrt{([Ca] + [Mg])}} \quad (\text{mmol}^{\frac{1}{2}}\text{l}^{\frac{1}{2}})$$

In general four categories are used with limits 8, 12 and 18, where irrigation water having SAR > 18 is in general unsuitable for

irrigation except at low salinity (ppm < 750) and using amendments.

A second parameter to classify the sodium hazard is the adjusted SAR. It has been defined as:

$$\text{adj. SAR} = \text{SAR}(9.4 - \text{pH}_c) \quad (\text{mmol}^{\frac{1}{2}}\text{l}^{\frac{1}{2}})$$

where:

$$\text{pH}_c = (\text{pK}'2 - \text{pK}'c) + \text{p}(\text{Ca} + \text{Mg}) + \text{pALK}$$

where p(Ca + Mg) and pALK are the negative value of the logarithm of the molar concentration of (Ca + Mg) and equivalent concentration of titratable base (CO₃ + HCO₃) respectively and pK'2 and pK'c are the negative value of the logarithms of the second dissociation constant of H₂CO₃ and of the solubility product of CaCO₃, respectively, both corrected for ionic strength. At pH_c values less than 8.4 the soluble calcium tends to precipitate, while at values greater than 8.4 there is a tendency to dissolve lime (EL GUINDY, 1979).

Values of adj. SAR less than 6 do not cause permeability problems when irrigation water having that value is used. Problems increase when the value increases from 6 to 16 where values above 16 cause severe permeability problems.

Salinization hazards are classified by the total dissolved salt parameter, but are related to both drainage conditions and crop sensitivity. In general no problems have to be expected on poorly drained soils when the TDS is less than 750 ppm and when a normal irrigation is practiced.

LOCATION : EB02 : GALYUBEYA BRIDGE YEAR : 1980 CODE : 23
 $Q = 0.85 \times \text{WETTED CROSS SECTION} \times \text{FLOAT VELOCITY}$

MONTH!	MOI	DISCHARGE 10 ⁻⁶ M ³	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	28.42	1.01	717.	2.40	5.61
2	-	21.91	1.05	764.	1.42	3.53
3	-	35.18	0.98	717.	1.38	3.40
4	-	35.18	1.11	746.	3.00	6.91
5	-	35.19	1.45	881.	5.37	11.13
6	-	33.27	0.88	583.	1.24	2.83
7	-	35.07	0.96	694.	2.75	6.32
8	-	38.11	0.93	695.	1.75	4.14
9	-	43.29	0.91	640.	1.87	4.37
10	-	41.81	1.00	697.	1.57	3.81
11	-	44.68	1.23	901.	1.30	3.40
12	-	46.79	1.17	855.	1.69	4.22
1980	-	440.88	1.06	744.	2.04	4.89

LOCATION : EB02 : GALYUBEYA BRIDGE YEAR : 1981 CODE : 23
 $Q = 0.85 \times \text{WETTED CROSS SECTION} \times \text{FLOAT VELOCITY}$

MONTH!	MOI	DISCHARGE 10 ⁻⁶ M ³	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	30.34	1.17	830.	3.78	8.64
2	-	15.15	1.90	1327.	8.06	19.31
3	-	33.29	0.84	579.	1.75	4.01
4	-	32.32	0.97	695.	2.90	6.53
5	-	32.72	0.83	578.	1.93	4.36
6	-	28.23	1.00	731.	2.84	6.59
7	-	31.37	1.31	925.	3.59	8.46
8	-	29.98	1.19	829.	2.47	6.00
9	-	32.94	1.24	901.	2.30	5.65
10	-	34.47	1.00	706.	1.75	4.16
11	-	39.82	1.15	808.	2.05	5.01
12	-	45.23	1.02	725.	2.58	6.02
1981	-	385.88	1.10	776.	2.70	6.36

LOCATION : EB02 : GALYUBEYA BRIDGE YEAR : 1982 CODE : 23
 $Q = 0.85 \times \text{WETTED CROSS SECTION} \times \text{FLOAT VELOCITY}$

MONTH!	MOI	DISCHARGE 10 ⁻⁶ M ³	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	46.96	0.94	672.	2.42	5.64
2	-	22.81	1.05	728.	1.91	4.63
3	-	40.12	0.88	627.	1.75	4.02
4	-	39.14	1.00	686.	1.85	4.39
5	-	36.87	0.83	609.	1.82	4.20
6	-	42.39	0.80	581.	1.53	3.50
7	-	33.72	1.10	824.	3.44	8.24
8	-	41.10	1.42	1055.	5.61	13.46
9	-	-	-	-	-	-
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB02 : GALYUBEYA BRIDGE YEAR : 1983 CODE : 24

MONTH!	MOI	DISCHARGE 10 ⁻⁶ M ³	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	-	0.92	663.	2.98	6.48
2	-	-	0.94	687.	4.07	8.44
3	-	-	-	-	-	-
4	-	-	0.97	679.	3.46	7.39
5	-	-	0.99	701.	3.60	7.81
6	-	-	0.99	717.	3.20	7.23
7	-	-	1.07	786.	3.43	7.90
8	-	-	1.73	1216.	8.56	18.51
9	-	-	1.16	811.	3.81	6.41
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1983	-	-	-	-	-	-

LOCATION : EB03 : WADI PS YEAR : 1980 CODE : 11
 $Q = 7.632 - (1.140 * H)$ QCAP = 4.269 HAV = 2.950

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	23.26	20.62	1.18	842.	2.16	5.26
2	20.91	14.65	1.18	830.	1.92	4.82
3	44.58	33.26	1.15	811.	2.41	5.99
4	42.21	30.52	1.13	809.	3.14	7.47
5	53.27	39.45	0.87	591.	2.43	5.12
6	59.44	39.69	0.97	685.	2.12	5.07
7	61.99	40.70	1.03	739.	3.45	7.76
8	62.06	43.39	1.05	697.	3.08	6.97
9	58.74	42.70	0.95	655.	2.28	5.17
10	51.43	36.32	1.09	782.	1.82	4.62
11	53.26	39.53	1.21	878.	1.85	4.77
12	42.08	32.90	1.27	869.	2.58	6.34
1980	575.33	413.74	1.07	753.	2.43	5.80

LOCATION : EB03 : WADI PS YEAR : 1981 CODE : 11
 $Q = 7.632 - (1.140 * H)$ QCAP = 4.269 HAV = 2.950

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	28.88	21.06	1.14	811.	2.90	6.91
2	14.62	10.43	1.31	910.	2.97	7.51
3	46.38	33.36	0.83	569.	2.47	5.40
4	43.20	28.20	1.02	742.	2.69	6.33
5	42.35	30.02	1.05	730.	2.38	5.64
6	59.00	41.38	1.68	1056.	2.77	6.99
7	65.06	50.52	0.86	604.	1.56	3.67
8	56.82	40.76	1.09	735.	2.30	5.57
9	57.76	40.67	1.09	757.	2.72	6.43
10	58.70	42.46	1.14	814.	2.52	6.09
11	58.56	42.53	1.15	809.	2.25	5.33
12	57.60	35.97	1.08	756.	3.05	7.09
1981	584.93	417.36	1.11	766.	2.47	5.89

LOCATION : EB03 : WADI PS YEAR : 1982 CODE : 11
 $Q = 7.632 - (1.140 * H)$ QCAP = 4.269 HAV = 2.950

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	31.58	22.55	0.89	618.	2.08	4.76
2	7.01	5.02	1.91	1426.	2.37	6.91
3	39.60	28.32	0.93	639.	1.59	3.81
4	46.72	32.93	0.98	699.	2.02	4.87
5	46.63	32.71	0.89	660.	2.30	5.29
6	51.98	36.22	0.83	611.	2.22	5.00
7	63.06	39.99	0.94	679.	2.85	6.53
8	50.19	35.79	1.17	840.	3.89	9.10
9	38.19	40.91	1.08	712.	3.56	7.94
10	36.27	24.95	1.12	787.	2.57	6.25
11	37.11	29.14	0.99	712.	3.07	6.85
12	44.10	33.15	-	-	-	-
1982	512.44	361.67	-	-	-	-

LOCATION : EB03 : WADI PS YEAR : 1983 CODE : 11
 $Q = 7.632 - (1.140 * H)$ QCAP = 4.269 HAV = 2.950

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	28.38	20.67	0.87	612.	1.66	3.78
2	7.09	5.03	-	-	-	-
3	31.48	22.46	1.00	709.	3.26	7.07
4	37.93	27.05	0.94	642.	2.95	6.06
5	35.30	26.34	1.22	817.	3.65	8.04
6	51.36	37.15	1.31	948.	5.27	11.62
7	54.55	39.88	1.23	912.	5.16	11.59
8	63.03	45.63	1.22	838.	4.88	10.77
9	68.31	50.32	1.08	758.	3.34	7.21
10	54.89	42.58	1.03	758.	1.96	4.60
11	40.39	31.99	-	-	-	-
12	44.62	34.00	0.92	639.	2.02	4.46
1983	517.33	385.10	-	-	-	-

LOCATION : EB04 : WADI RAILWAY BRIDGE YEAR : 1982 CODE : 24

DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHD/CM	PPM	
1	-	-	-	-	-
2	-	-	-	-	-
3	-	-	1.12	828.	2.67
4	-	-	1.07	779.	2.25
5	-	-	1.05	771.	3.06
6	-	-	1.08	833.	3.96
7	-	-	1.17	926.	4.23
8	-	-	1.27	992.	4.98
9	-	-	1.35	1029.	5.37
10	-	-	1.14	846.	2.52
11	-	-	1.05	771.	2.95
12	-	-	-	-	-
1982	-	-	-	-	-

LOCATION : EB4A : BILBEIS DRAIN AT WADI YEAR : 1980 CODE : 24

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	1.36	989.	1.96	5.30
4	-	-	1.13	793.	2.65	6.13
5	-	-	1.04	724.	2.12	4.89
6	-	-	1.02	762.	2.10	5.23
7	-	-	1.24	942.	2.91	7.38
8	-	-	1.04	774.	2.41	5.87
9	-	-	1.08	794.	2.39	5.82
10	-	-	1.12	849.	2.56	6.40
11	-	-	1.28	972.	2.57	6.65
12	-	-	1.48	1041.	3.60	8.91
1980	-	-	-	-	-	-

LOCATION : EB4A : BILBEIS DRAIN AT WADI YEAR : 1981 CODE : 24

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	-	1.14	800.	3.70	6.34
2	-	-	1.11	791.	4.67	9.35
3	-	-	1.08	795.	2.89	7.05
4	-	-	1.09	820.	2.84	7.10
5	-	-	1.10	830.	3.08	7.57
6	-	-	1.25	959.	3.25	8.24
7	-	-	1.22	942.	2.76	6.96
8	-	-	1.11	802.	2.22	5.51
9	-	-	1.03	723.	2.14	5.20
10	-	-	1.11	806.	2.46	6.01
11	-	-	1.17	849.	2.73	6.66
12	-	-	1.18	867.	3.26	7.97
1981	-	-	1.13	832.	2.92	7.13

LOCATION : EB4A : BILBEIS DRAIN AT WADI YEAR : 1982 CODE : 24

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	-	1.21	870.	3.80	9.04
2	-	-	1.33	965.	3.68	9.06
3	-	-	1.14	839.	2.59	6.43
4	-	-	1.09	807.	2.37	5.88
5	-	-	1.14	890.	3.47	8.48
6	-	-	1.15	869.	3.71	8.82
7	-	-	1.21	934.	4.22	9.91
8	-	-	1.45	1124.	5.71	13.50
9	-	-	1.33	1024.	5.07	12.15
10	-	-	1.25	954.	3.96	8.86
11	-	-	1.11	838.	3.55	8.44
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB4A : BILBEIS DRAIN AT WADI YEAR : 1983 CODE : 24

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	-	1.12	837.	3.47	8.20
2	-	-	-	-	-	-
3	-	-	1.27	907.	4.29	10.10
4	-	-	1.31	850.	4.09	9.10
5	-	-	1.48	977.	5.14	11.70
6	-	-	1.94	1256.	5.14	12.32
7	-	-	1.76	1198.	5.44	12.85
8	-	-	1.30	914.	4.72	11.06
9	-	-	1.22	879.	3.58	8.19
10	-	-	1.34	974.	3.56	8.37
11	-	-	-	-	-	-
12	-	-	1.08	733.	2.49	5.73
1983	-	-	-	-	-	-

LOCATION : EB4B : GALYUBIA DRAIN AT WADI YEAR : 1980 CODE : 24

DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR	
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	-	-	-	
2	-	-	-	-	-	
3	-	-	1.34	1001.	2.32	6.21
4	-	-	1.14	837.	3.23	7.92
5	-	-	1.03	711.	2.98	5.78
6	-	-	1.14	810.	2.68	6.42
7	-	-	1.23	924.	3.45	8.46
8	-	-	0.91	633.	1.73	4.03
9	-	-	0.97	692.	1.72	4.17
10	-	-	1.09	827.	2.00	5.05
11	-	-	1.35	1014.	2.32	6.09
12	-	-	1.40	1057.	4.18	10.34
1980	-	-	-	-	-	-

LOCATION : EB4B : GALYUBEYA DRAIN AT WADI YEAR : 1981 CODE : 24

DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR	
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.10	785.	4.28	9.47
2	-	-	0.93	689.	2.59	6.16
3	-	-	1.15	848.	3.32	8.06
4	-	-	1.12	828.	3.03	7.36
5	-	-	1.10	823.	3.08	7.44
6	-	-	1.35	1030.	4.20	10.40
7	-	-	1.54	1114.	4.87	11.94
8	-	-	1.16	815.	2.51	6.22
9	-	-	1.05	737.	1.91	4.65
10	-	-	1.09	772.	1.62	3.94
11	-	-	1.14	828.	2.66	6.45
12	-	-	1.12	821.	2.68	6.87
1981	-	-	1.15	842.	3.05	7.38

LOCATION : EB4B : GALYUBIA DRAIN AT WADI YEAR : 1982 CODE : 24

DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR	
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.17	852.	2.69	6.64
2	-	-	1.58	1102.	3.13	8.08
3	-	-	1.24	883.	2.98	6.45
4	-	-	1.08	783.	2.26	5.49
5	-	-	1.09	821.	2.74	6.72
6	-	-	1.01	742.	2.98	6.11
7	-	-	1.17	870.	3.69	8.64
8	-	-	1.40	1083.	5.21	12.20
9	-	-	1.24	943.	4.49	10.69
10	-	-	1.21	905.	3.44	8.36
11	-	-	1.01	734.	2.74	6.28
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB4B : GALYUBIA DRAIN AT WADI YEAR : 1983 CODE : 24

DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR	
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.02	718.	2.97	6.48
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	1.22	806.	4.49	9.15
5	-	-	1.29	892.	3.87	9.18
6	-	-	1.20	862.	3.73	8.80
7	-	-	1.21	886.	3.66	8.71
8	-	-	1.16	861.	3.54	8.42
9	-	-	1.10	785.	2.78	6.43
10	-	-	1.07	779.	2.02	4.79
11	-	-	-	-	-	-
12	-	-	1.04	715.	2.21	5.10
1983	-	-	-	-	-	-

LOCATION : EB05 : SAADA BRIDGE YEAR : 1980 CODE : 21
 Q = 132.127 - 19.459° HM ; R2 = [0.850]

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ SAR
MONTH!	MOI	DRI	MMHO/CM	PPM		
1	-	69.56	1.20	873.	2.23	5.70
2	-	63.35	1.16	837.	1.86	4.73
3	-	73.15	1.24	918.	1.93	5.16
4	-	65.67	1.10	797.	2.58	6.26
5	-	70.84	1.00	696.	1.74	4.10
6	-	74.13	0.99	699.	2.11	5.00
7	-	92.78	0.98	739.	3.29	7.79
8	-	87.89	0.96	683.	2.25	5.41
9	-	91.40	0.99	707.	2.01	4.92
10	-	118.07	1.08	797.	2.40	6.07
11	-	84.90	1.79	1437.	3.71	13.02
12	-	85.10	1.37	1032.	3.28	8.51
1980	-	976.84	1.15	852.	2.68	6.68

LOCATION : EB05 : SAADA BRIDGE YEAR : 1981 CODE : 21
 Q = 132.127 - 19.459° HM ; R2 = [0.850]

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ BAR
MONTH!	MOI	DRI	MMHO/CM	PPM		
1	-	58.74	1.06	755.	3.27	7.54
2	-	60.96	0.87	611.	2.66	5.94
3	-	80.05	1.01	733.	3.50	7.99
4	-	85.67	1.04	767.	3.21	7.55
5	-	86.91	1.04	784.	3.24	7.69
6	-	77.64	1.35	981.	4.14	10.12
7	-	80.20	1.24	897.	3.36	8.08
8	-	88.12	1.05	741.	2.19	5.30
9	-	93.29	1.05	747.	2.28	5.53
10	-	-	-	-	-	-
11	-	88.73	1.11	806.	2.22	5.43
12	-	-	-	-	-	-
1981	-	-	-	-	-	-

LOCATION : EB05 : SAADA BRIDGE YEAR : 1982 CODE : 21
 Q = 132.127 - 19.459° HM ; R2 = [0.850]

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ BAR
MONTH!	MOI	DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	75.61	0.95	675.	1.83	4.41
4	-	63.54	1.01	711.	2.22	5.21
5	-	73.14	0.96	719.	2.23	5.54
6	-	71.83	0.93	687.	2.13	5.15
7	-	71.69	1.01	791.	2.69	6.62
8	-	80.39	1.10	826.	3.16	7.63
9	-	60.35	1.12	839.	4.52	10.34
10	-	82.72	1.05	775.	3.25	7.69
11	-	78.72	1.05	772.	3.14	7.33
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB05 : SAADA BRIDGE YEAR : 1983 CODE : 21
 Q = 132.127 - 19.459° HM ; R2 = [0.850]

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ BAR
MONTH!	MOI	DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	27.63	1.16	776.	3.26	7.40
6	-	25.70	1.08	768.	3.30	7.57
7	-	28.86	1.07	804.	3.74	8.57
8	-	-	-	-	-	-
9	-	29.46	0.97	699.	3.07	6.57
10	-	23.67	0.98	669.	1.86	4.27
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1983	-	-	-	-	-	-

LOCATION : EB06 : SAADA PS YEAR : 1980 CODE : 11
G = 0.735 - (0.000) * H ; QCAP = 0.735 HAV = 0.450

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	1.03	1.22	1.34	973.	3.01
2	0.59	0.61	1.30	934.	2.05
3	1.51	1.84	1.35	970.	1.93
4	1.34	1.69	1.57	1073.	3.94
5	1.52	1.93	1.20	604.	2.85
6	1.42	2.00	1.12	791.	2.79
7	1.89	2.07	1.50	1001.	3.04
8	3.02	2.43	2.39	1463.	11.03
9	3.41	2.69	1.27	865.	3.74
10	2.99	2.37	1.60	1249.	5.05
11	2.55	2.01	1.76	1316.	3.79
12	2.73	2.15	1.89	1339.	4.10
1980	24.00	23.01	1.56	1083.	4.24
					10.50

LOCATION : EB06 : SAADA PS YEAR : 1981 CODE : 11
G = 0.735 - (0.000) * H ; QCAP = 0.735 HAV = 0.450

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	2.34	1.84	1.30	874.	3.79
2	2.15	1.70	1.15	764.	4.10
3	3.06	2.01	1.21	793.	3.45
4	2.61	1.79	1.36	971.	2.89
5	2.61	2.08	1.06	746.	2.18
6	3.11	2.46	1.38	1017.	3.67
7	3.74	2.96	1.67	1257.	4.96
8	4.94	3.90	1.30	862.	2.98
9	4.09	3.23	1.19	805.	2.78
10	4.02	3.19	1.31	901.	3.32
11	3.82	3.01	1.20	839.	2.52
12	3.19	2.52	1.14	793.	2.93
1981	39.68	30.69	1.28	892.	3.26
					7.85

LOCATION : EB06 : SAADA PS YEAR : 1982 CODE : 11
G = 0.735 - (0.000) * H ; QCAP = 0.735 HAV = 0.450

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	2.63	2.10	1.28	852.	3.87
2	1.73	1.34	1.73	1162.	3.40
3	2.49	1.98	1.17	810.	2.48
4	3.33	2.63	0.96	659.	2.23
5	3.71	2.94	1.07	767.	2.79
6	3.21	2.35	1.13	807.	2.93
7	3.92	3.12	1.21	873.	3.89
8	4.55	3.58	1.14	813.	4.10
9	3.82	3.02	1.47	1045.	4.94
10	4.36	3.45	1.12	795.	3.91
11	3.71	2.90	1.34	938.	4.23
12	3.56	2.67	-	-	-
1982	41.04	32.27	-	-	-

LOCATION : EB06 : SAADA PS YEAR : 1983 CODE : 11
G = 0.735 - (0.000) * H ; QCAP = 0.735 HAV = 0.450

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	2.65	2.25	1.43	902.	3.90
2	2.03	1.59	-	-	-
3	3.12	2.46	1.35	923.	4.69
4	2.77	2.32	1.38	898.	4.33
5	3.12	2.47	1.20	852.	3.96
6	3.36	2.68	1.18	837.	3.10
7	4.04	3.34	1.10	793.	3.62
8	3.79	3.00	1.18	813.	3.13
9	3.12	2.47	1.12	769.	3.34
10	3.12	2.47	1.08	757.	2.14
11	2.01	1.59	-	-	-
12	2.55	1.99	1.03	701.	2.63
1983	35.90	29.63	-	-	-

LOCATION : EB07 : SAUD BRIDGE YEAR : 1980 CODE : 21
 $Q = 69.688 - 18.683 \times HM + R2 = [0.640]$

DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	84.58	1.26	903.	3.03	7.98
2	-	74.83	1.55	1064.	4.41	10.93
3	-	82.42	1.29	950.	2.42	6.37
4	-	74.68	1.18	822.	3.21	7.37
5	-	70.07	1.09	760.	2.77	6.43
6	-	76.21	1.04	731.	2.33	5.64
7	-	84.11	1.14	766.	3.93	8.79
8	-	-	-	-	-	-
9	-	92.31	1.06	748.	2.86	6.77
10	-	92.14	1.11	789.	1.99	4.90
11	-	86.24	1.33	994.	2.81	7.12
12	-	94.51	1.43	1062.	3.48	8.76
1980	-	-	-	-	-	-

LOCATION : EB07 : SAUD BRIDGE YEAR : 1981 CODE : 21
 $Q = 69.688 - 18.683 \times HM + R2 = [0.640]$

DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	62.21	1.23	862.	3.51	8.16
2	-	56.51	1.01	684.	3.88	8.44
3	-	79.10	1.11	793.	2.87	6.79
4	-	83.67	1.10	811.	3.32	8.00
5	-	87.07	0.99	731.	2.75	6.50
6	-	75.90	1.06	773.	2.18	5.41
7	-	80.08	1.13	826.	2.92	7.02
8	-	91.50	1.18	813.	2.37	5.84
9	-	96.04	1.23	887.	2.11	5.26
10	-	97.63	1.14	822.	2.61	6.34
11	-	91.81	1.15	817.	2.75	6.57
12	-	-	-	-	-	-
1981	-	-	-	-	-	-

LOCATION : EB07 : SAUD BRIDGE YEAR : 1982 CODE : 21
 $Q = 69.688 - 18.683 \times HM + R2 = [0.640]$

DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	94.47	1.15	798.	1.91	4.59
4	-	86.25	1.11	789.	2.39	5.92
5	-	88.34	1.06	760.	2.57	6.24
6	-	81.05	1.05	768.	2.84	6.74
7	-	84.32	1.12	874.	3.69	8.97
8	-	93.33	1.13	889.	4.74	11.11
9	-	90.39	1.17	868.	4.56	10.39
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB07 : SAUD BRIDGE YEAR : 1983 CODE : 21
 $Q = 69.688 - 18.683 \times HM + R2 = [0.640]$

DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	78.63	1.09	760.	3.73	8.11
6	-	76.88	1.19	857.	4.02	9.18
7	-	-	-	-	-	-
8	-	89.91	1.30	929.	4.57	10.86
9	-	86.93	1.10	800.	3.05	6.98
10	-	86.19	1.10	759.	2.40	5.62
11	-	-	-	-	-	-
12	-	87.38	1.02	692.	2.65	5.72
1983	-	-	-	-	-	-

LOCATION : EB08 : BAHR BAGAR BRIDGE YEAR : 1980 CODE : 23
 $G = 0.85 * \text{WETTED CROSS SECTION} * \text{FLDAT VELOCITY}$

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	96.74	1.50	1102.	2.03	3.45
2	-	81.63	1.55	1125.	2.77	7.31
3	-	72.98	1.27	954.	2.48	6.49
4	-	89.24	1.23	899.	2.89	7.30
5	-	61.23	1.11	755.	2.23	5.26
6	-	75.03	1.10	769.	2.94	7.01
7	-	96.37	1.14	810.	3.96	9.33
8	-	106.37	1.11	795.	2.56	6.09
9	-	92.09	1.10	786.	2.66	6.43
10	-	75.98	1.13	808.	2.25	5.69
11	-	88.99	1.02	973.	2.20	5.70
12	-	93.51	1.49	1116.	4.07	10.13
1980	-	1030.16	1.26	912.	2.73	6.85

LOCATION : EB08 : BAHR BAGAR BRIDGE YEAR : 1981 CODE : 23
 $G = 0.85 * \text{WETTED CROSS SECTION} * \text{FLDAT VELOCITY}$

MNTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	83.50	1.17	840.	3.86	8.84
2	-	68.23	1.15	786.	3.16	7.48
3	-	101.82	1.08	768.	3.06	7.23
4	-	81.57	1.37	1044.	4.98	11.81
5	-	80.21	1.10	810.	2.65	6.90
6	-	55.93	1.07	754.	1.10	2.77
7	-	99.10	-	-	-	-
8	-	107.05	1.07	732.	2.99	7.02
9	-	92.64	1.05	735.	2.61	6.20
10	-	88.96	1.16	827.	3.13	7.42
11	-	103.12	1.19	827.	2.57	6.20
12	-	113.77	1.24	901.	3.26	7.87
1981	-	1075.93	-	-	-	-

LOCATION : EB08 : BAHR BAGAR BRIDGE YEAR : 1982 CODE : 23
 $G = 0.85 * \text{WETTED CROSS SECTION} * \text{FLOAT VELOCITY}$

MNTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	99.75	1.21	839.	2.98	7.25
2	-	79.80	1.30	936.	2.78	7.11
3	-	100.91	1.17	845.	2.64	6.44
4	-	72.62	1.38	993.	3.82	9.49
5	-	63.02	1.12	803.	3.12	7.49
6	-	82.54	1.14	823.	3.52	8.30
7	-	87.17	1.22	932.	4.36	10.54
8	-	110.97	1.23	924.	4.47	10.69
9	-	104.88	1.32	991.	4.73	11.31
10	-	92.07	1.38	1003.	2.81	6.95
11	-	93.81	1.05	750.	2.90	6.63
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB08 : BAHR BAGAR BRIDGE YEAR : 1983 CODE : 23
 $G = 0.85 * \text{WETTED CROSS SECTION} * \text{FLOAT VELOCITY}$

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	85.95	1.19	796.	4.46	9.58
5	-	96.09	1.43	963.	4.84	10.74
6	-	108.55	1.29	911.	4.61	10.42
7	-	116.34	1.24	907.	4.27	9.89
8	-	111.00	1.29	952.	5.37	12.09
9	-	107.04	1.07	757.	3.30	7.26
10	-	113.16	1.17	779.	2.07	4.97
11	-	-	-	-	-	-
12	-	116.29	1.02	693.	2.43	5.28
1983	-	-	-	-	-	-

LOCATION : EB09 : BAHR BAGAR IRR PS YEAR : 1980 CODE : 11
 $Q = 0.364 - (0.000) * H ; QCAP = 0.364$ HAV = 2.600

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	7.65	3.34	1.36	960.	3.03
2	9.78	2.52	1.27	905.	3.06
3	8.15	3.56	1.21	887.	2.10
4	8.49	3.71	1.23	807.	2.96
5	8.39	3.67	1.18	794.	2.76
6	8.18	3.57	1.11	769.	1.89
7	9.25	4.04	1.12	812.	3.02
8	9.24	4.03	1.09	784.	2.57
9	8.33	3.64	0.96	672.	2.31
10	8.23	3.59	1.02	729.	2.15
11	8.87	3.87	1.20	894.	2.20
12	6.86	3.00	1.06	786.	3.62
1980	97.42	42.55	1.15	814.	2.59
					6.28

LOCATION : EB09 : BAHR BAGAR IRR PS YEAR : 1981 CODE : 11
 $Q = 0.364 - (0.000) * H ; QCAP = 0.364$ HAV = 2.600

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	8.81	3.85	0.90	629.	3.27
2	6.10	2.67	1.18	806.	3.69
3	7.74	3.33	1.09	743.	3.49
4	7.42	3.26	0.86	601.	2.52
5	7.76	3.36	0.99	714.	3.13
6	6.98	3.02	1.46	997.	2.87
7	7.63	3.33	1.58	926.	1.70
8	9.05	3.92	1.14	757.	2.25
9	7.91	3.44	1.00	705.	2.10
10	7.36	3.21	1.01	707.	2.22
11	7.90	3.45	1.16	812.	2.79
12	7.26	3.17	0.90	640.	2.41
1981	91.92	40.03	1.10	750.	2.61
					6.11

LOCATION : EB09 : BAHR BAGAR IRR PS YEAR : 1982 CODE : 11
 $Q = 0.364 - (0.000) * H ; QCAP = 0.364$ HAV = 2.600

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	7.23	3.15	1.13	785.	2.59
2	4.13	1.80	1.49	1050.	2.49
3	6.89	2.96	0.95	670.	1.89
4	6.13	2.70	1.35	924.	3.14
5	6.43	2.81	1.09	799.	3.16
6	6.54	2.85	1.09	786.	2.91
7	8.99	3.93	0.83	639.	2.81
8	8.81	3.85	0.63	457.	2.18
9	7.41	3.17	1.01	719.	3.32
10	7.75	3.51	0.63	444.	1.76
11	7.45	3.17	0.79	551.	2.32
12	7.33	3.20	-	-	-
1982	85.09	37.11	-	-	-

LOCATION : EB09 : BAHR BAGAR IRR PS YEAR : 1983 CODE : 11
 $Q = 0.364 - (0.000) * H ; QCAP = 0.364$ HAV = 2.600

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	7.08	3.09	0.91	630.	1.92
2	5.48	2.39	-	-	-
3	6.71	2.93	0.86	585.	3.04
4	7.30	3.19	0.75	486.	2.39
5	8.03	3.51	1.07	762.	3.26
6	7.85	3.43	1.02	715.	2.67
7	8.81	3.73	1.09	786.	3.61
8	8.96	3.92	1.00	689.	4.09
9	8.04	3.51	1.03	742.	3.39
10	9.23	4.03	1.08	765.	2.46
11	7.50	3.27	-	-	-
12	8.47	3.70	0.97	657.	2.11
1983	93.46	40.69	-	-	-

LOCATION : EB10 : BAHR BAGAR DRAINAGE PS YEAR : 1980 CODE : 11
 Q = 6.112 - (0.000) * H ; QCAP = 6.112 HAV = 1.590

MONTH!	MOI	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	22.93	18.20	6.37	3787.	12.53	32.34
2	12.69	10.34	5.66	3355.	13.29	35.12
3	16.55	13.49	6.85	4029.	14.91	40.76
4	17.85	14.54	4.91	2942.	11.84	31.50
5	15.49	13.05	6.67	3831.	14.96	36.34
6	14.39	11.73	6.65	5150.	14.15	40.70
7	13.97	11.16	6.65	5504.	18.22	50.75
8	22.97	18.20	6.12	3782.	13.32	34.84
9	28.30	23.63	5.15	3208.	12.26	31.22
10	28.32	24.60	5.05	3171.	11.36	31.05
11	27.27	22.22	5.88	3869.	11.72	32.81
12	28.73	23.41	6.14	4209.	14.35	37.19
1980	249.46	204.56	6.13	3811.	13.28	35.55

LOCATION : EB10 : BAHR BAGAR DRAINAGE PS YEAR : 1981 CODE : 11
 Q = 6.112 - (0.000) * H ; QCAP = 6.112 HAV = 1.590

MONTH!	MOI	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	23.63	19.25	4.86	3122.	12.43	31.28
2	10.61	8.65	6.47	3925.	11.05	31.21
3	16.98	13.84	5.96	3555.	12.02	31.23
4	18.87	15.38	4.41	2687.	9.64	24.30
5	14.91	11.97	5.49	3248.	10.78	28.03
6	11.92	9.75	6.43	4351.	14.56	38.83
7	13.51	12.23	5.05	3478.	15.13	38.99
8	23.57	19.21	4.46	2536.	8.09	21.08
9	23.89	19.47	4.03	2276.	5.64	15.12
10	23.95	19.52	3.67	2180.	8.32	20.68
11	21.00	17.12	5.95	3567.	12.03	31.03
12	22.49	18.35	5.93	3594.	10.02	26.57
1981	227.33	184.74	5.06	3091.	10.34	26.95

LOCATION : EB10 : BAHR BAGAR DRAINAGE PS YEAR : 1982 CODE : 11
 Q = 6.112 - (0.000) * H ; QCAP = 6.112 HAV = 1.590

MONTH!	MOI	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	19.71	16.06	7.08	4199.	11.27	30.81
2	11.39	9.29	7.35	5840.	15.09	43.28
3	15.26	12.39	4.85	2902.	10.23	26.13
4	15.36	12.52	5.46	3348.	10.91	28.47
5	13.60	13.60	6.23	3777.	12.17	32.20
6	13.62	13.62	7.43	4684.	13.94	37.79
7	17.23	17.43	6.40	4226.	13.94	38.17
8	23.85	23.85	5.69	3808.	15.79	40.74
9	20.18	20.68	4.98	3235.	15.11	38.36
10	24.22	24.23	2.93	1842.	8.50	20.33
11	25.67	25.68	4.99	3005.	11.42	28.01
12	24.77	24.78	-	-	-	-
1982	224.86	214.11	-	-	-	-

LOCATION : EB10 : BAHR BAGAR DRAINAGE PS YEAR : 1983 CODE : 11
 Q = 6.112 - (0.000) * H ; QCAP = 6.112 HAV = 1.590

MONTH!	MOI	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	22.00	22.00	4.00	2327.	8.38	21.41
2	7.44	7.44	-	-	-	-
3	14.43	14.43	4.25	2589.	9.09	22.31
4	13.49	13.49	4.82	2807.	10.78	25.99
5	12.63	12.63	6.08	3619.	13.71	33.96
6	10.76	10.76	6.60	5604.	17.38	46.48
7	11.24	11.24	8.23	5548.	18.04	49.36
8	12.36	12.37	7.33	5028.	19.16	49.20
9	14.37	14.37	4.94	3300.	10.16	25.72
10	16.30	16.30	6.98	4480.	11.98	32.18
11	19.73	19.74	-	-	-	-
12	26.53	26.54	4.99	3263.	9.80	25.45
1983	181.28	181.31	-	-	-	-

LOCATION : EB11 : BAHR BAGAR DUTFALL YEAR : 1980 CODE : 24

! DISCHARGE 10**6 M3 ! EC ! TDS !				PPM	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM			
1	-	-	3.22	2121.	8.55	21.91
2	-	-	3.15	2047.	8.30	21.17
3	-	-	2.05	1410.	4.45	11.95
4	-	-	2.21	1488.	6.32	16.13
5	-	-	2.07	1390.	6.63	15.83
6	-	-	2.52	1672.	6.30	17.02
7	-	-	1.38	1099.	4.37	10.84
8	-	-	1.44	1006.	2.93	7.21
9	-	-	2.19	1420.	3.73	14.26
10	-	-	1.88	1423.	5.06	13.15
11	-	-	2.85	1901.	8.50	22.88
12	-	-	2.54	1794.	7.49	18.90
1980	-	-	2.31	1563.	6.27	16.11

LOCATION : EB11 : BAHR BAGAR DUTFALL YEAR : 1981 CODE : 24

! DISCHARGE 10**6 M3 ! EC ! TDS !				PPM	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM			
1	-	-	3.23	2145.	9.59	24.26
2	-	-	2.86	1769.	6.26	16.33
3	-	-	2.61	1574.	6.29	15.90
4	-	-	1.68	1109.	4.98	12.01
5	-	-	1.51	1044.	4.54	10.94
6	-	-	2.40	1597.	6.16	15.78
7	-	-	1.50	1017.	3.12	7.83
8	-	-	1.74	1102.	3.64	9.18
9	-	-	1.92	1244.	3.52	9.01
10	-	-	1.91	1237.	4.50	11.05
11	-	-	2.28	1468.	5.74	14.04
12	-	-	2.22	1462.	5.95	14.77
1981	-	-	2.15	1395.	5.37	13.53

LOCATION : EB11 : BAHR BAGAR DUTFALL YEAR : 1982 CODE : 24

! DISCHARGE 10**6 M3 ! EC ! TDS !				PPM	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM			
1	-	-	1.77	1119.	3.47	8.71
2	-	-	3.16	1881.	6.80	17.84
3	-	-	2.07	1316.	5.31	13.15
4	-	-	1.99	1318.	4.94	12.45
5	-	-	-	-	-	-
6	-	-	2.23	1434.	5.79	14.26
7	-	-	2.30	1592.	7.31	18.49
8	-	-	2.25	1576.	8.42	20.30
9	-	-	-	-	-	-
10	-	-	1.51	1037.	4.65	11.08
11	-	-	2.11	1332.	5.88	13.97
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EB11 : BAHR BAGAR DUTFALL YEAR : 1983 CODE : 24

! DISCHARGE 10**6 M3 ! EC ! TDS !				PPM	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM			
1	-	-	2.12	1306.	5.69	13.23
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	2.91	1693.	8.99	20.21
5	-	-	2.14	1430.	8.34	18.99
6	-	-	1.78	1265.	6.56	15.38
7	-	-	1.80	1309.	6.58	15.68
8	-	-	1.71	1218.	6.52	15.00
9	-	-	2.01	1312.	4.96	11.83
10	-	-	1.90	1266.	4.64	11.28
11	-	-	-	-	-	-
12	-	-	1.28	822.	2.66	6.11
1983	-	-	-	-	-	-

LOCATION : EB12 : BATIKH CANAL YEAR : 1980 CODE : 24

MONTH!	DISCHARGE 10**6 M3 :	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	-	-	1.18	807.	2.95
2	-	-	1.21	793.	2.56
3	-	-	1.40	946.	2.71
4	-	-	1.26	863.	4.82
5	-	-	1.02	670.	4.06
6	-	-	0.98	673.	1.41
7	-	-	0.97	692.	3.71
8	-	-	0.98	724.	3.34
9	-	-	0.70	492.	2.25
10	-	-	0.71	480.	0.76
11	-	-	0.93	630.	1.60
12	-	-	0.71	490.	1.29
1980	-	-	1.00	688.	2.57
					5.82

LOCATION : EB12 : BATIKH CANAL YEAR : 1981 CODE : 24

MONTH!	DISCHARGE 10**6 M3 :	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	-	-	0.84	585.	3.13
2	-	-	1.13	755.	3.66
3	-	-	1.12	760.	2.91
4	-	-	0.60	431.	2.07
5	-	-	0.72	518.	2.23
6	-	-	1.03	708.	1.71
7	-	-	0.67	452.	2.13
8	-	-	0.69	452.	1.53
9	-	-	0.81	551.	1.73
10	-	-	0.82	560.	1.74
11	-	-	0.87	605.	2.00
12	-	-	0.70	478.	1.53
1981	-	-	0.83	570.	2.16
					4.67

LOCATION : EB12 : BATIKH CANAL YEAR : 1982 CODE : 24

MONTH!	DISCHARGE 10**6 M3 :	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	-	-	0.95	678.	2.82
2	-	-	1.06	718.	2.44
3	-	-	0.65	462.	1.54
4	-	-	0.95	647.	2.30
5	-	-	0.86	585.	1.58
6	-	-	0.82	552.	1.75
7	-	-	-	-	-
8	-	-	0.58	388.	2.42
9	-	-	0.88	605.	3.63
10	-	-	0.67	469.	1.71
11	-	-	0.63	447.	2.01
12	-	-	-	-	-
1982	-	-	-	-	-

LOCATION : EB12 : BATIKH CANAL YEAR : 1983 CODE : 24

MONTH!	DISCHARGE 10**6 M3 :	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	-	-	0.72	497.	2.07
2	-	-	-	-	-
3	-	-	-	-	-
4	-	-	0.57	397.	1.19
5	-	-	0.77	539.	2.48
6	-	-	0.66	462.	2.72
7	-	-	0.66	464.	2.46
8	-	-	0.67	481.	2.09
9	-	-	0.68	629.	2.74
10	-	-	1.04	712.	3.57
11	-	-	-	-	-
12	-	-	0.79	531.	1.69
1983	-	-	-	-	-

LOCATION : EFO1 : FARASGUR PS YEAR : 1982 CODE : 13

DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	14.19	-	-	-	-	-
2	7.55	-	-	-	-	-
3	12.31	-	-	-	-	-
4	14.35	-	2.62	1980.	7.16	17.10
5	21.14	-	1.57	1033.	4.56	10.57
6	24.88	-	1.61	1069.	4.63	10.92
7	34.55	-	1.63	1055.	5.62	13.15
8	32.61	-	1.64	1164.	7.88	17.60
9	25.89	-	1.96	1325.	7.86	18.05
10	21.62	-	2.30	1458.	7.39	17.61
11	15.54	-	2.63	1609.	7.97	18.73
12	13.47	-	-	-	-	-
1982	238.10	-	-	-	-	-

LOCATION : EFO1 : FARASGUR PS YEAR : 1983 CODE : 13

DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	10.39	-	2.75	1604.	7.69	17.36
2	8.94	-	-	-	-	-
3	11.35	-	1.37	920.	4.81	10.32
4	15.02	-	1.56	1027.	4.79	10.33
5	19.61	-	2.44	1583.	9.18	20.35
6	22.66	-	1.85	1261.	7.82	17.28
7	29.38	-	1.50	1046.	6.85	14.92
8	29.16	-	2.44	1656.	8.44	20.35
9	29.50	-	2.04	1306.	7.01	15.60
10	21.03	-	2.56	1552.	6.72	16.01
11	18.38	-	-	-	-	-
12	14.71	-	2.41	1423.	5.78	13.76
1983	230.13	-	-	-	-	-

LOCATION : EH01 : SAFT EL GIBLY BRIDGE YEAR : 1980 CODE : 23
 $Q = 0.85 * \text{WETTED CROSS SECTION} * \text{FLOAT VELOCITY}$

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	27.32	1.19	821.	1.86	4.67
4	-	22.78	1.14	819.	3.33	8.09
5	-	18.49	0.98	640.	2.04	4.46
6	-	28.36	0.98	691.	2.00	4.83
7	-	32.00	1.16	822.	3.31	7.75
8	-	32.10	1.28	918.	3.01	7.19
9	-	34.73	1.26	874.	3.17	7.47
10	-	36.86	1.15	806.	2.28	5.64
11	-	26.22	1.48	1015.	3.11	7.85
12	-	31.01	1.48	1081.	4.00	9.79
1980	-	-	-	-	-	-

LOCATION : EH01 : SAFT EL GIBLY BRIDGE YEAR : 1981 CODE : 23
 $Q = 0.85 * \text{WETTED CROSS SECTION} * \text{FLOAT VELOCITY}$

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	-	19.87	1.39	1011.	3.21	8.26
2	-	13.87	1.53	1028.	4.51	11.01
3	-	25.02	1.19	800.	3.85	8.48
4	-	20.19	1.21	839.	3.68	8.39
5	-	22.60	0.98	680.	2.71	6.09
6	-	24.41	1.12	806.	3.09	7.15
7	-	25.43	1.28	932.	3.78	8.94
8	-	32.49	1.27	866.	3.38	8.11
9	-	29.72	1.17	806.	2.68	6.81
10	-	22.65	1.05	709.	2.33	5.33
11	-	18.16	1.27	668.	2.74	6.94
12	-	24.24	1.22	853.	3.56	8.16
1981	-	274.64	1.21	840.	3.29	7.71

LOCATION : EH01 : SAFT EL GIBLY BRIDGE YEAR : 1982 CODE : 23
 $Q = 0.85 * \text{WETTED CROSS SECTION} * \text{FLOAT VELOCITY}$

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	-	30.61	1.12	739.	2.81	6.48
2	-	11.82	1.43	935.	2.91	7.20
3	-	27.92	0.98	668.	2.28	5.25
4	-	27.06	1.11	757.	2.71	6.34
5	-	24.76	0.97	662.	2.61	5.76
6	-	37.45	0.89	607.	2.00	4.44
7	-	37.73	1.17	848.	4.10	9.40
8	-	35.42	1.43	1046.	5.38	12.27
9	-	38.69	1.35	962.	5.06	11.34
10	-	39.42	1.06	733.	1.95	4.64
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EH01 : SAFT EL GIBLY BRIDGE YEAR : 1983 CODE : 24

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	-	-	1.06	723.	2.79	6.16
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	1.50	921.	5.28	11.36
5	-	-	1.18	829.	3.99	9.03
6	-	-	1.22	885.	4.12	9.52
7	-	-	1.38	1018.	5.39	12.32
8	-	-	1.72	1141.	8.71	18.88
9	-	-	1.45	948.	4.86	10.71
10	-	-	1.20	833.	2.85	6.79
11	-	-	-	-	-	-
12	-	-	1.08	727.	2.18	5.17
1983	-	-	-	-	-	-

LOCATION : EH02 : HANUT PS YEAR : 1980 CODE : 11
 $Q = 4.815 - (0.000) * H$; QCAP = 4.815 HAV = 2.320

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	11.29	9.71	1.51	1030.	4.01	9.67
2	9.94	8.35	2.24	1455.	5.59	13.88
3	22.44	19.54	1.32	880.	2.62	6.43
4	24.82	21.27	1.18	785.	3.84	6.62
5	51.49	21.15	0.96	659.	1.97	4.30
6	31.21	28.39	1.04	690.	1.49	3.45
7	31.28	27.60	1.23	824.	3.94	8.92
8	31.21	26.43	1.30	927.	2.96	7.11
9	31.80	25.36	1.21	841.	2.98	7.07
10	22.12	18.01	1.15	830.	2.54	6.26
11	15.34	11.91	1.56	1119.	3.62	9.32
12	13.82	11.25	1.52	1125.	4.07	9.68
1980	296.76	228.97	1.27	869.	3.05	7.23

LOCATION : EH02 : HANUT PS YEAR : 1981 CODE : 11
 $Q = 4.815 - (0.000) * H$; QCAP = 4.815 HAV = 2.320

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	15.87	13.94	1.47	983.	4.98	11.39
2	12.27	10.64	2.80	1905.	10.07	25.87
3	27.12	23.70	1.21	744.	3.64	8.02
4	27.33	24.37	1.15	794.	3.68	8.22
5	23.28	20.21	0.96	650.	2.71	5.97
6	27.61	24.94	1.34	987.	4.34	10.02
7	31.98	28.12	2.00	1490.	7.31	16.87
8	30.37	25.34	1.52	1027.	3.70	8.90
9	32.61	26.54	1.33	897.	1.90	4.82
10	30.81	25.08	1.25	862.	2.85	6.79
11	24.03	19.69	1.44	974.	3.34	7.88
12	17.40	14.28	1.45	987.	3.89	9.27
1981	300.68	256.86	1.43	994.	4.10	9.65

LOCATION : EH02 : HANUT PS YEAR : 1982 CODE : 11
 $Q = 4.815 - (0.000) * H$; QCAP = 4.815 HAV = 2.320

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	18.00	15.08	1.62	1069.	4.06	9.89
2	9.29	7.35	2.78	1849.	5.39	14.94
3	14.91	12.27	1.11	751.	2.31	5.47
4	32.85	18.74	1.17	793.	2.80	6.61
5	29.09	21.89	1.26	874.	2.73	6.66
6	32.99	29.02	1.04	719.	2.64	6.02
7	29.52	25.12	1.30	918.	4.73	10.70
8	29.22	25.05	1.44	1051.	5.79	13.32
9	31.99	26.37	1.38	995.	6.05	13.40
10	26.11	19.34	0.86	583.	2.55	5.51
11	6.20	4.28	1.37	925.	3.17	7.81
12	10.86	8.34	-	-	-	-
1982	271.03	212.84	-	-	-	-

LOCATION : EH02 : HANUT PS YEAR : 1983 CODE : 11
 $Q = 4.815 - (0.000) * H$; QCAP = 4.815 HAV = 2.320

MONTH	DISCHARGE 10**6 M3		EC	TDS	SAR	ADJ SAR
	MOI	DRI				
1	11.80	9.95	1.26	876.	3.49	8.02
2	6.25	5.03	-	-	-	-
3	20.81	16.66	1.33	892.	5.44	11.71
4	23.32	22.33	1.23	790.	5.32	11.18
5	22.80	19.38	1.34	876.	4.52	10.30
6	29.03	24.39	1.09	739.	3.69	8.19
7	21.13	17.25	1.55	1120.	4.19	10.44
8	28.42	23.11	1.70	1215.	7.57	16.67
9	32.34	29.62	1.23	854.	5.29	10.97
10	19.79	15.36	1.08	754.	2.78	6.38
11	6.56	6.16	-	-	-	-
12	6.53	5.17	1.21	820.	2.58	6.14
1983	230.80	192.39	-	-	-	-

LOCATION : EH03 : SADAKA PS YEAR : 1980 CODE : 11
 $G = 5.778 - (0.616) * H ; QCAP = 4.996$ HAV = 1.270

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	6.30	6.58	4.63	2880.	8.05	21.41	
2	4.08	4.21	4.60	2806.	7.91	21.67	
3	8.32	8.40	2.59	1573.	4.81	12.78	
4	8.49	8.95	2.19	1375.	5.52	12.91	
5	7.63	8.42	2.31	1491.	3.54	8.48	
6	8.05	8.31	2.32	1544.	5.57	13.71	
7	10.93	10.74	2.44	1646.	7.63	19.09	
8	14.40	13.71	2.47	1618.	7.34	18.14	
9	16.18	14.91	2.09	1398.	5.24	13.03	
10	14.08	14.71	2.44	1608.	6.34	16.79	
11	10.64	10.12	2.96	2004.	8.04	21.05	
12	11.54	11.06	2.72	1882.	7.11	17.16	
1980	121.04	120.12	2.64	1724.	6.37	16.12	

LOCATION : EH03 : SADAKA PS YEAR : 1981 CODE : 11
 $G = 5.778 - (0.616) * H ; QCAP = 4.996$ HAV = 1.270

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	7.65	7.47	3.97	2649.	11.00	29.85	
2	6.60	6.82	5.24	3145.	20.09	48.30	
3	8.82	8.56	2.28	1323.	7.32	16.79	
4	7.34	7.31	2.04	1309.	5.15	12.63	
5	9.49	9.62	1.43	946.	4.04	9.32	
6	7.63	7.83	1.78	1173.	3.38	8.58	
7	11.93	11.22	3.09	1981.	5.34	14.27	
8	15.19	14.00	2.32	1466.	5.44	13.75	
9	17.01	15.05	2.23	1380.	5.24	12.95	
10	14.06	12.78	2.07	1271.	5.30	12.40	
11	9.45	9.23	2.60	1588.	5.86	14.11	
12	9.77	9.43	2.42	1495.	5.11	12.39	
1981	124.94	119.32	2.54	1583.	6.38	15.84	

LOCATION : EH03 : SADAKA PS YEAR : 1982 CODE : 11
 $G = 5.778 - (0.616) * H ; QCAP = 4.996$ HAV = 1.270

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	10.98	10.95	4.11	2458.	7.91	20.45	
2	3.28	3.46	10.61	6601.	14.03	42.90	
3	7.83	8.28	2.40	1488.	6.13	14.76	
4	10.06	10.82	1.81	1160.	5.04	11.84	
5	9.79	10.45	2.68	1735.	6.10	15.61	
6	12.91	13.43	2.12	1379.	5.79	13.92	
7	14.18	14.56	2.06	1396.	6.89	17.00	
8	15.16	15.74	2.26	1550.	7.91	19.25	
9	16.49	16.92	2.40	1562.	7.91	19.04	
10	13.36	13.47	2.40	1508.	6.32	15.74	
11	10.80	11.02	2.71	1676.	6.63	15.93	
12	10.91	11.13	-	-	-	-	
1982	135.75	142.25	-	-	-	-	

LOCATION : EH03 : SADAKA PS YEAR : 1983 CODE : 11
 $G = 5.778 - (0.616) * H ; QCAP = 4.996$ HAV = 1.270

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	10.44	10.78	1.73	1052.	4.89	10.63	
2	3.17	3.29	-	-	-	-	
3	7.94	8.00	2.91	1870.	9.18	20.89	
4	8.10	8.26	2.77	1766.	9.08	20.61	
5	10.42	10.48	1.71	1126.	7.23	15.90	
6	9.85	9.80	1.23	793.	5.22	10.90	
7	12.19	11.98	1.77	1193.	6.50	14.81	
8	13.21	13.31	2.73	1824.	10.35	23.15	
9	16.18	15.71	1.90	1286.	6.65	14.34	
10	16.85	16.15	1.84	1221.	4.40	10.51	
11	9.85	9.68	-	-	-	-	
12	11.14	11.09	1.87	1131.	4.13	9.68	
1983	129.34	128.34	-	-	-	-	

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1980 CODE : 21
 Q = 38 535 - 7.032* HM / R2 = [0.970]

DISCHARGE 10 ⁻⁶ M ³			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	7.11	1.76	1244.	4.99	12.17
2	-	11.08	1.45	1024.	3.50	8.25
3	-	11.27	1.27	879.	2.12	5.28
4	-	12.73	1.07	693.	3.33	7.27
5	-	19.38	0.98	641.	2.39	5.08
6	-	13.41	0.89	603.	2.45	5.21
7	-	22.63	1.02	707.	4.29	9.00
8	-	22.59	1.19	820.	3.01	6.92
9	-	25.84	1.26	855.	3.17	7.51
10	-	26.94	1.06	731.	2.23	5.40
11	-	21.60	1.49	1046.	3.08	7.78
12	-	19.93	1.57	1155.	4.96	11.67
1980			210.49	1.23	850.	3.22
						7.51

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1981 CODE : 24

DISCHARGE 10 ⁻⁶ M ³			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.64	1071.	4.94	14.44
2	-	-	1.16	753.	4.95	10.60
3	-	-	1.15	772.	3.75	8.48
4	-	-	1.32	901.	4.70	10.57
5	-	-	1.20	805.	4.16	9.29
6	-	-	1.22	860.	4.11	9.40
7	-	-	1.17	819.	3.10	7.27
8	-	-	1.28	873.	3.45	8.27
9	-	-	1.21	828.	3.37	7.77
10	-	-	-	-	-	-
11	-	-	1.46	978.	4.00	9.19
12	-	-	1.53	1013.	4.43	10.18
1981			-	-	-	-

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1982 CODE : 24

DISCHARGE 10 ⁻⁶ M ³			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.78	1186.	5.38	13.14
2	-	-	2.52	1614.	6.51	17.18
3	-	-	1.17	764.	2.74	6.36
4	-	-	1.44	991.	4.27	10.14
5	-	-	1.13	814.	4.06	9.32
6	-	-	1.09	760.	4.07	8.72
7	-	-	1.38	1000.	5.07	11.87
8	-	-	-	-	-	-
9	-	-	-	-	-	-
10	-	-	1.25	851.	4.43	9.88
11	-	-	1.10	724.	2.98	6.52
12	-	-	-	-	-	-
1982			-	-	-	-

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1983 CODE : 21
 Q = 38 535 - 7.032* HM / R2 = [0.970]

DISCHARGE 10 ⁻⁶ M ³			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	13.26	1.51	982.	6.23	13.32
4	-	12.41	2.12	1286.	8.51	18.05
5	-	19.23	1.34	889.	6.15	12.80
6	-	18.26	1.24	867.	5.39	11.54
7	-	22.26	1.30	927.	5.66	12.30
8	-	23.62	1.59	1137.	6.67	13.19
9	-	-	-	-	-	-
10	-	-	-	-	-	-
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1983			-	-	-	-

LOCATION : EH05 : NIZAM PS YEAR : 1980 CODE : 11
 $Q = 4.269 - (0.618) * H ; QCAP = 3.707$ HAV = 0.910

MONTH	DISCHARGE 10**6 M3			TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM			
1	5.02	6.60	1.79	1182.	5.02	11.89
2	4.30	5.11	1.37	903.	3.01	6.93
3	8.01	8.57	1.28	868.	2.92	7.05
4	10.27	11.13	1.02	695.	3.58	7.91
5	7.89	8.51	0.94	603.	2.65	5.49
6	8.64	9.40	1.08	771.	3.26	7.21
7	13.44	14.78	1.27	895.	4.57	10.45
8	18.01	16.84	1.25	842.	4.03	9.40
9	14.89	15.93	1.23	833.	3.92	9.20
10	11.63	12.44	1.18	793.	2.92	7.03
11	11.00	11.88	1.52	1031.	4.16	10.24
12	10.82	11.77	1.73	1122.	5.72	12.86
1980	124.12	132.95	1.29	872.	3.89	9.04

LOCATION : EH05 : NIZAM PS YEAR : 1981 CODE : 11
 $Q = 4.269 - (0.618) * H ; QCAP = 3.707$ HAV = 0.910

MONTH	DISCHARGE 10**6 M3			TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM			
1	7.74	8.34	1.67	1090.	5.71	12.93
2	6.31	7.09	1.39	883.	6.01	12.95
3	10.66	11.78	1.17	746.	3.48	7.72
4	9.37	10.28	1.45	983.	4.55	10.33
5	8.64	9.34	1.02	692.	3.61	7.74
6	7.51	8.04	1.78	1197.	7.15	16.17
7	11.99	12.98	1.73	1068.	7.36	15.40
8	13.96	14.48	1.30	801.	4.03	8.96
9	13.32	14.43	1.21	783.	3.19	7.35
10	13.08	13.99	1.28	849.	3.65	8.11
11	11.21	12.09	1.54	1002.	4.14	9.44
12	9.84	10.58	1.61	1060.	4.59	10.59
1981	123.63	133.42	1.42	917.	4.59	10.27

LOCATION : EH05 : NIZAM PS YEAR : 1982 CODE : 11
 $Q = 4.269 - (0.618) * H ; QCAP = 3.707$ HAV = 0.910

MONTH	DISCHARGE 10**6 M3			TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM			
1	11.00	11.80	2.11	1308.	5.77	13.91
2	4.60	4.97	4.20	2635.	7.82	22.48
3	9.32	9.96	1.44	930.	3.31	7.87
4	13.14	14.06	1.21	775.	3.10	6.99
5	12.06	12.76	1.10	724.	3.14	6.99
6	17.12	18.35	1.22	851.	4.43	9.93
7	18.62	19.92	1.43	1035.	5.29	12.22
8	19.23	20.29	-	-	-	-
9	19.52	20.80	-	-	-	-
10	18.41	19.37	1.17	813.	3.75	8.37
11	16.47	17.34	1.17	779.	3.68	7.85
12	16.51	16.64	-	-	-	-
1982	176.00	186.24	-	-	-	-

LOCATION : EH05 : NIZAM PS YEAR : 1983 CODE : 11
 $Q = 4.269 - (0.618) * H ; QCAP = 3.707$ HAV = 0.910

MONTH	DISCHARGE 10**6 M3			TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM			
1	15.13	15.59	1.13	738.	3.50	7.37
2	5.68	6.09	-	-	-	-
3	13.58	13.93	1.53	1015.	6.08	12.66
4	12.66	13.14	1.63	1077.	5.69	12.07
5	16.38	16.58	1.28	877.	5.37	11.70
6	14.46	15.09	1.37	952.	5.09	11.57
7	18.42	19.05	1.62	1141.	7.13	15.74
8	16.58	16.86	1.58	1049.	6.38	14.15
9	22.38	21.96	1.17	822.	4.34	9.20
10	20.93	19.98	1.36	954.	3.74	8.72
11	15.78	15.20	-	-	-	-
12	18.70	17.44	1.65	1085.	4.10	9.92
1983	190.68	190.91	-	-	-	-

LOCATION : EH06 : BANI EBEID PS YEAR : 1980 CODE : 11
 Q = 7.515 - (1.241) * H ; QCAP = 4.710 HAV = 2.260

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR !
MOI	DRI	MMHO/CM !	PPM		
1	15.82	13.96	2.78	1736.	5.91 14.52
2	9.40	8.77	2.48	1699.	6.44 15.66
3	16.67	14.73	1.76	1125.	3.08 7.74
4	16.61	14.66	2.22	1426.	5.37 13.99
5	15.61	13.77	2.08	1221.	3.07 7.33
6	15.09	15.96	1.99	1231.	4.48 10.93
7	22.61	19.97	2.14	1414.	7.25 17.36
8	23.43	22.45	2.07	1355.	5.18 12.62
9	24.81	20.57	1.84	1183.	4.71 11.22
10	22.25	19.63	1.83	1283.	5.06 12.75
11	18.68	16.44	2.43	1650.	6.99 17.85
12	19.82	17.49	2.39	1701.	6.20 15.08
1980	222.82	198.40	2.16	1402.	5.28 13.10

LOCATION : EH06 : BANI EBEID PS YEAR : 1981 CODE : 11
 Q = 7.515 - (1.241) * H ; QCAP = 4.710 HAV = 2.260

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR !
MOI	DRI	MMHO/CM !	PPM		
1	17.44	15.39	2.91	1805.	8.99 21.01
2	9.67	8.53	3.41	3470.	11.03 28.28
3	23.49	20.73	1.88	1112.	4.66 10.55
4	21.62	19.25	2.27	1403.	5.28 12.67
5	22.25	19.63	1.79	1117.	4.55 10.56
6	21.22	18.73	2.27	1516.	7.44 17.49
7	25.60	23.92	2.75	1748.	7.56 18.38
8	24.19	21.89	2.11	1298.	4.90 12.34
9	32.42	28.61	1.74	1062.	4.17 10.01
10	31.48	27.78	1.74	1098.	4.70 10.67
11	23.27	20.54	1.95	1221.	4.76 11.00
12	22.68	20.02	1.98	1254.	4.78 11.16
1981	275.53	245.03	2.22	1384.	5.76 13.69

LOCATION : EH06 : BANI EBEID PS YEAR : 1982 CODE : 11
 Q = 7.515 - (1.241) * H ; QCAP = 4.710 HAV = 2.260

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR !
MOI	DRI	MMHO/CM !	PPM		
1	23.09	20.35	2.20	1366.	5.34 12.74
2	7.76	7.81	5.54	3322.	8.02 23.47
3	20.23	20.37	1.86	1136.	3.93 9.35
4	20.81	21.04	1.90	1180.	3.92 9.43
5	18.36	18.48	2.45	1685.	6.78 16.61
6	29.00	29.37	2.00	1393.	6.82 15.60
7	38.35	38.30	1.76	1237.	5.41 12.83
8	43.24	44.59	1.87	1277.	6.34 15.01
9	41.80	42.07	2.06	1363.	6.82 16.20
10	37.10	36.42	1.56	998.	3.28 7.97
11	31.10	31.69	1.55	979.	3.80 8.71
12	29.93	28.65	-	-	-
1982	340.77	339.34	-	-	-

LOCATION : EH06 : BANI EBEID PS YEAR : 1983 CODE : 11
 Q = 7.515 - (1.241) * H ; QCAP = 4.710 HAV = 2.260

MONTH!	DISCHARGE 10**6 M3 !	EC	TDS	SAR	ADJ SAR !
MOI	DRI	MMHO/CM !	PPM		
1	26.06	26.24	1.42	849.	3.31 7.25
2	6.86	6.56	-	-	-
3	20.18	18.31	2.10	1308.	6.44 14.58
4	19.73	17.85	2.10	1244.	6.28 13.54
5	17.68	16.04	2.02	1327.	6.69 15.09
6	21.19	19.22	1.38	979.	4.21 9.89
7	34.56	30.50	1.64	1071.	6.15 13.98
8	31.61	31.82	-	-	-
9	38.99	37.31	1.93	1284.	5.98 13.95
10	38.43	37.73	1.46	939.	3.42 7.83
11	24.23	25.01	-	-	-
12	29.03	26.34	1.56	1019.	3.79 8.89
1983	308.57	292.92	-	-	-

LOCATION : EH07 : ADD QASSABI PS YEAR : 1980 CODE : 11
 $Q = 6.008 - (0.000) * H ; QCAP = 6.008$ HAV = 2.190

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	25.19	20.18	2.85	1798.	4.78	12.25
2	16.96	13.58	3.42	3336.	8.58	22.59
3	23.49	20.42	2.22	1408	4.09	10.66
4	22.25	17.82	2.36	1491	5.41	13.85
5	23.63	18.93	2.17	1397.	5.21	11.84
6	36.23	30.63	2.53	1586.	5.08	12.76
7	48.00	38.46	2.64	1723	7.64	18.49
8	49.00	39.21	2.52	1609	4.59	11.98
9	56.62	40.55	2.45	1580.	5.64	14.30
10	47.11	32.03	2.36	1544.	6.25	15.99
11	30.86	24.72	2.58	1687.	5.49	14.42
12	29.54	24.31	2.77	1850.	7.30	17.57
		1980	412.68	320.84	2.64	1688.
					5.79	14.69

LOCATION : EH07 : ADD QASSABI PS YEAR : 1981 CODE : 11
 $Q = 6.008 - (0.000) * H ; QCAP = 6.008$ HAV = 2.190

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	27.11	21.72	2.34	1489.	8.02	18.79
2	13.88	11.12	2.93	1779.	6.81	17.47
3	28.66	23.12	2.14	1262.	4.82	11.45
4	26.19	20.98	2.21	1368.	5.29	12.72
5	23.09	18.49	2.14	1348.	7.06	16.28
6	36.15	28.96	2.83	1873.	8.73	21.09
7	52.97	42.44	3.08	2044.	12.02	27.20
8	55.76	44.66	2.79	1648.	6.03	15.30
9	51.88	47.17	2.11	1300.	3.14	8.01
10	49.06	39.30	1.83	1179.	4.05	9.53
11	22.11	17.71	2.04	1281.	4.74	11.11
12	22.11	17.71	2.36	1474.	5.85	13.88
		1981	409.17	333.39	2.41	1319.
					6.20	14.97

LOCATION : EH07 : ADD QASSABI PS YEAR : 1982 CODE : 12
 $Q = 6.008 - (0.000) * H ; QCAP = 6.008$ HAV = 2.190

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	24.94	19.98	3.33	1944.	7.33	18.29
2	8.30	6.65	10.02	5850.	14.40	42.63
3	22.71	18.19	2.10	1285.	4.60	11.09
4	20.30	16.26	2.15	1370	5.02	12.31
5	19.95	15.98	3.10	1884.	5.91	15.04
6	25.06	20.07	2.21	1359.	5.43	12.43
7	39.53	31.67	2.22	1484.	7.05	17.05
8	47.11	37.74	2.31	1581.	7.76	18.69
9	47.17	37.79	2.48	1654.	7.21	17.83
10	39.80	31.88	1.88	1236.	5.74	13.67
11	27.16	21.76	1.97	1241.	4.95	11.66
12	25.79	20.66	-	-	-	-
		1982	347.82	278.63	-	-
					-	-

LOCATION : EH07 : ADD QASSABI PS YEAR : 1983 CODE : 11
 $Q = 6.008 - (0.000) * H ; QCAP = 6.008$ HAV = 2.190

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	27.03	21.65	1.77	1073.	3.48	8.11
2	8.07	6.47	-	-	-	-
3	26.00	20.83	1.96	1250.	6.39	14.10
4	21.52	17.24	2.44	1522.	8.05	19.19
5	20.82	16.70	2.47	1630.	7.76	18.29
6	25.87	20.72	2.72	1783	7.91	18.96
7	44.79	35.66	2.27	1525.	7.28	16.91
8	40.99	32.83	2.69	1827.	8.54	20.16
9	42.93	34.39	2.37	1551.	6.84	16.15
10	39.04	31.28	2.15	1468.	5.23	12.91
11	26.16	20.96	-	-	-	-
12	27.89	22.34	1.79	1255.	4.92	10.81
		1983	351.11	281.28	-	-
					-	-

LOCATION : EHOB : MAIN GASSABI PS YEAR : 1980 CODE : 11
 $Q = 6.263 - (0.342) * H ; QCAP = 5.432$ HAV = 2.430

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	16.50	17.40	4.73	3017.	9.58	24.47	
2	9.63	10.03	7.32	4383.	12.15	32.51	
3	15.98	16.67	3.55	2235	6.38	16.83	
4	16.74	17.63	3.87	2360.	6.42	16.32	
5	14.32	14.95	4.93	3055.	10.37	25.04	
6	20.63	21.97	4.85	2982.	9.43	24.45	
7	24.32	32.22	4.65	2910.	11.69	29.35	
8	30.04	33.25	4.36	2758.	10.18	26.46	
9	29.92	33.24	3.87	2428.	8.65	22.62	
10	26.43	28.24	3.38	2206.	7.11	18.95	
11	17.23	18.48	4.23	2765.	8.56	23.51	
12	17.89	18.70	4.25	2947.	9.89	24.99	
1980	244.63	262.79	4.34	2745.	9.20	23.92	

LOCATION : EHOB : MAIN GASSABI PS YEAR : 1981 CODE : 11
 $Q = 6.263 - (0.342) * H ; QCAP = 5.432$ HAV = 2.430

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	16.20	16.75	3.40	2132.	8.57	21.27	
2	6.88	7.06	5.79	3604.	10.22	28.94	
3	16.69	17.36	3.69	2168.	7.62	18.71	
4	18.09	18.76	3.68	2289.	7.71	19.77	
5	19.55	20.50	3.88	2372.	10.10	24.62	
6	26.05	28.10	4.95	3068.	9.21	24.14	
7	30.96	34.55	3.37	1968.	4.95	12.91	
8	28.06	30.24	3.65	2083.	6.23	16.17	
9	29.05	31.42	3.81	2340.	6.34	16.86	
10	29.81	32.34	2.95	1813.	7.28	17.79	
11	18.88	19.82	3.67	2228.	7.87	19.47	
12	17.35	18.17	4.07	2561.	9.87	24.42	
1981	257.57	275.07	3.78	2292.	7.53	19.24	

LOCATION : EHOB : MAIN GASSABI PS YEAR : 1982 CODE : 11
 $Q = 6.263 - (0.342) * H ; QCAP = 5.432$ HAV = 2.430

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	21.41	23.01	3.98	2328.	8.53	21.42	
2	9.76	10.35	9.03	5227.	11.61	33.93	
3	19.24	20.72	3.51	2060.	7.26	18.14	
4	18.50	19.70	3.55	2405.	7.94	20.25	
5	15.52	16.43	5.59	3483.	10.74	28.95	
6	24.70	28.02	4.23	2618.	9.26	23.20	
7	31.61	36.87	4.05	2588.	10.22	25.99	
8	32.49	37.22	4.09	2712.	11.23	29.05	
9	30.27	35.34	4.33	2855.	12.45	31.80	
10	27.37	30.58	3.49	2184.	9.28	23.28	
11	21.13	22.38	2.82	1676.	6.85	16.15	
12	14.36	15.04	-	-	-	-	
1982	266.36	295.67	-	-	-	-	

LOCATION : EHOB : MAIN GASSABI PS YEAR : 1983 CODE : 11
 $Q = 6.263 - (0.342) * H ; QCAP = 5.432$ HAV = 2.430

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	14.89	15.64	3.24	1943.	7.55	17.90	
2	5.63	5.66	-	-	-	-	
3	18.34	20.03	3.96	2435.	10.90	25.44	
4	17.86	19.17	4.03	2379.	10.12	24.13	
5	17.57	18.64	3.95	2577.	11.60	27.88	
6	19.55	21.28	4.87	3164.	15.66	37.54	
7	28.44	31.48	4.19	2777.	13.22	32.27	
8	28.37	31.85	4.34	2843.	11.98	30.66	
9	29.05	33.27	3.87	2271.	9.03	22.38	
10	25.04	27.32	3.37	2166.	7.02	17.54	
11	16.72	17.91	-	-	-	-	
12	13.66	14.59	3.57	2163.	11.41	25.81	
1983	235.12	256.83	-	-	-	-	

LOCATION : EHO9 : GENEENA PS YEAR : 1980 CODE : 11
 Q = 6.630 - (0.843) * H ; QCAP = 5.011 HAV = 1.920

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	10.22	10.28	4.54	2726.	11.09	28.79
2	9.84	8.59	5.58	3365	12.30	33.11
3	12.92	12.41	1.18	774.	2.29	5.47
4	12.48	12.07	0.88	537.	2.33	4.02
5	11.90	11.56	0.97	618.	2.22	4.58
6	20.98	21.04	0.82	531.	1.55	3.27
7	26.41	26.20	0.94	637.	3.40	7.18
8	23.85	23.56	0.96	603.	2.75	6.20
9	22.41	22.95	0.83	566.	2.36	5.20
10	14.92	14.96	1.38	898.	3.77	9.10
11	13.00	13.14	1.69	1073.	4.23	10.23
12	11.50	11.66	1.74	1158.	4.20	10.26
1980	191.43	190.42	1.49	939.	4.18	9.61

LOCATION : EHO9 : GENEENA PS YEAR : 1981 CODE : 11
 Q = 6.630 - (0.843) * H ; QCAP = 5.011 HAV = 1.920

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	10.39	10.95	2.31	1514.	7.05	17.05
2	9.14	9.44	5.53	3634.	13.52	35.33
3	14.17	14.41	1.49	918.	3.37	11.46
4	11.57	11.89	1.60	1026.	5.68	12.44
5	10.84	11.98	1.45	916.	3.24	11.44
6	17.82	18.09	1.25	872.	4.38	9.66
7	25.13	25.78	1.23	897.	4.17	9.39
8	24.08	23.29	1.17	795.	3.16	7.43
9	20.63	20.08	1.16	730.	3.28	7.27
10	14.89	14.34	1.48	939.	4.19	9.22
11	11.47	11.49	1.78	1118.	5.58	12.40
12	11.05	11.19	2.03	1281.	6.33	14.26
1981	181.18	182.94	1.68	1093.	5.37	12.23

LOCATION : EHO9 : GENEENA PS YEAR : 1982 CODE : 11
 Q = 6.630 - (0.843) * H ; QCAP = 5.011 HAV = 1.920

MON.H	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	11.43	11.51	4.69	2736.	10.31	26.54
2	6.41	6.89	7.46	4368.	15.18	42.48
3	12.44	12.34	1.47	958.	4.07	9.21
4	12.37	12.46	1.57	1048.	5.25	11.92
5	11.74	11.88	1.60	1015.	4.15	9.78
6	17.57	18.46	1.09	711.	2.70	5.93
7	27.21	25.88	1.19	788.	4.51	9.78
8	24.37	24.22	1.46	1014.	6.53	14.60
9	22.63	22.26	1.57	1042.	6.19	13.67
10	16.27	15.93	1.52	935.	3.84	8.99
11	15.46	15.41	1.31	825.	4.62	9.70
12	13.70	13.50	-	-	-	-
1982	191.62	190.73	-	-	-	-

LOCATION : EHO9 : GENEENA PS YEAR : 1983 CODE : 11
 Q = 6.630 - (0.843) * H ; QCAP = 5.011 HAV = 1.920

MONTH	MOI	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
		DRI	MMHO/CM	PPM		
1	13.64	13.38	0.99	623.	2.73	5.59
2	5.62	5.45	-	-	-	-
3	13.00	13.09	1.30	842	4.51	9.43
4	13.61	13.69	1.23	809.	3.88	8.28
5	13.73	13.77	1.44	976.	4.50	10.16
6	19.24	19.03	0.99	671.	4.14	8.36
7	28.13	26.87	0.97	659.	4.07	8.42
8	23.90	23.07	1.09	781.	4.91	10.87
9	23.65	22.67	0.90	634.	3.51	7.23
10	15.95	15.25	0.93	597.	2.65	5.68
11	11.18	11.49	-	-	-	-
12	12.47	13.26	1.36	863.	3.39	7.81
1983	193.72	190.95	-	-	-	-

LOCATION : EH10 : ERAD PS YEAR : 1980 CODE : 11
 $Q = 14.424 - (1.525) * H ; QCAP = 9.834 \text{ HAV} = 3.010$

! DISCHARGE 10**6 M3 !				EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHD/CM	PPM			
1	37.42	46.74	5.34	3122	9.63	24.64	
2	22.57	28.23	7.16	4193	11.33	30.32	
3	39.04	46.42	2.36	1468	3.95	10.36	
4	42.24	52.01	2.51	1384	6.72	16.97	
5	36.56	45.21	2.93	1792	7.67	17.67	
6	52.45	69.78	2.70	1686	6.78	16.64	
7	67.33	81.66	2.78	1782	7.58	18.73	
8	74.80	90.79	2.74	1694	7.30	18.25	
9	77.98	94.18	2.48	1530	6.43	15.82	
10	58.56	72.76	2.12	1364	4.63	12.02	
11	49.67	63.57	3.02	1985	6.33	16.76	
12	43.57	54.72	3.10	2086	9.45	22.30	
1980	602.17	746.06	3.01	1872	7.12	17.98	

LOCATION : EH10 : ERAD PS YEAR : 1981 CODE : 11
 $Q = 12.424 - (1.525) * H ; QCAP = 7.834 \text{ HAV} = 3.010$

! DISCHARGE 10**6 M3 !				EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHD/CM	PPM			
1	35.36	32.69	2.85	1978	7.70	19.11	
2	25.60	23.46	3.07	2078	5.89	15.85	
3	37.79	36.99	2.40	1438	5.93	13.65	
4	36.28	36.42	2.76	1719	6.74	16.17	
5	32.12	32.26	2.74	1669	6.54	15.98	
6	48.41	46.41	2.65	1884	9.26	22.02	
7	63.57	59.69	3.21	2173	12.76	29.20	
8	73.10	67.69	2.81	1837	8.20	20.34	
9	66.86	60.54	2.92	1529	7.26	17.42	
10	50.33	49.45	2.56	1540	6.94	16.60	
11	45.52	41.93	2.79	1679	6.72	16.36	
12	40.24	38.73	3.46	2188	6.24	15.78	
1981	555.18	528.28	2.81	1803	7.63	18.59	

LOCATION : EH10 : ERAD PS YEAR : 1982 CODE : 11
 $Q = 12.424 - (1.525) * H ; QCAP = 7.834 \text{ HAV} = 3.010$

! DISCHARGE 10**6 M3 !				EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHD/CM	PPM			
1	38.84	36.89	4.06	2399	7.47	19.21	
2	18.01	18.03	8.15	4813	12.72	36.13	
3	34.76	33.74	2.45	1484	5.73	13.74	
4	36.97	36.20	2.43	1608	6.27	15.12	
5	34.31	33.72	2.97	1850	6.17	15.73	
6	49.51	49.39	2.79	1753	6.31	15.88	
7	67.72	66.18	2.56	1691	8.33	20.39	
8	68.60	66.17	2.90	1959	10.14	24.68	
9	66.37	64.30	2.78	1780	8.83	21.40	
10	54.05	53.61	2.50	1561	6.90	16.66	
11	50.49	49.08	2.32	1402	6.10	14.00	
12	42.80	41.89	-	-	-	-	
1982	562.43	549.18	-	-	-	-	

LOCATION : EH10 : ERAD PS YEAR : 1983 CODE : 11
 $Q = 12.424 - (1.525) * H ; QCAP = 7.834 \text{ HAV} = 3.010$

! DISCHARGE 10**6 M3 !				EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHD/CM	PPM			
1	44.25	43.04	2.06	1254	5.60	12.34	
2	13.71	13.45	-	-	-	-	
3	39.20	39.98	-	-	-	-	
4	38.57	37.46	2.72	1735	8.31	19.26	
5	40.19	38.32	2.60	1728	9.27	21.06	
6	50.43	48.36	2.66	1729	8.70	20.06	
7	68.34	67.90	2.52	1670	9.01	20.83	
8	58.87	56.63	3.05	2055	11.47	28.08	
9	60.34	63.01	2.41	1507	8.19	18.69	
10	51.49	52.44	2.15	1397	5.84	14.03	
11	42.90	42.71	-	-	-	-	
12	46.34	43.60	2.40	1515	7.51	17.32	
1983	554.63	546.89	-	-	-	-	

LOCATION : EH11 : BAHR HADUS BRIDGE YEAR : 1980 CODE : 22
 $G = 109.750 \times (3.000 - HM) ** 1.380 R2 = [0.950]$

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	!
MONTH	MOI	DRI	MMHO/CM	PPM	ADJ SAR	!
1	-	80.29	2.75	1673.	5.90	14.56
2	-	78.55	2.00	1269	4.22	10.31
3	-	97.75	1.86	1203.	3.34	8.48
4	-	105.30	2.28	1472.	6.07	15.37
5	-	129.21	2.15	1354.	5.71	12.89
6	-	88.89	2.34	1494.	6.52	16.51
7	-	142.24	2.50	1611.	8.06	19.26
8	-	177.78	2.49	1629.	6.90	16.98
9	-	196.02	2.45	1576.	6.86	16.52
10	-	74.37	2.12	1398.	5.57	14.25
11	-	155.63	2.28	1581.	5.96	15.29
12	-	168.18	2.22	1606.	5.29	12.87
1980	-	1493.21	2.31	1514.	6.00	14.81

LOCATION : EH11 : BAHR HADUS BRIDGE YEAR : 1981 CODE : 22
 $G = 109.750 \times (3.000 - HM) ** 1.380 R2 = [0.950]$

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	!
MONTH	MOI	DRI	MMHO/CM	PPM	ADJ SAR	!
1	-	26.56	2.12	1482.	5.64	13.48
2	-	33.10	2.72	1586.	8.12	19.02
3	-	115.56	1.78	1054.	3.84	9.06
4	-	93.90	1.94	1256.	4.96	11.71
5	-	73.64	1.79	1143.	4.56	10.98
6	-	68.43	2.66	1747.	7.39	18.28
7	-	89.61	-	-	-	-
8	-	141.78	2.36	1492.	6.21	15.46
9	-	197.77	1.10	759.	2.38	5.61
10	-	189.31	1.38	855.	2.98	6.92
11	-	136.94	2.32	1451.	5.76	13.61
12	-	199.97	2.40	1552.	5.88	14.13
1981	-	1376.60	-	-	-	-

LOCATION : EH11 : BAHR HADUS BRIDGE YEAR : 1982 CODE : 22
 $G = 109.750 \times (3.000 - HM) ** 1.380 R2 = [0.950]$

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	!
MONTH	MOI	DRI	MMHO/CM	PPM	ADJ SAR	!
1	-	217.32	1.85	1139.	3.66	8.78
2	-	74.13	1.48	915.	3.13	7.37
3	-	185.11	1.32	853.	3.18	7.25
4	-	114.41	1.46	905.	3.59	8.18
5	-	116.34	1.99	1255.	4.69	11.04
6	-	120.10	2.12	1329.	5.57	12.97
7	-	140.19	2.23	1519.	7.38	17.83
8	-	192.95	2.25	1555.	7.99	19.33
9	-	174.33	2.48	1676.	8.04	19.68
10	-	203.26	1.80	1194.	5.60	13.03
11	-	-	-	-	-	-
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EH11 : BAHR HADUS BRIDGE YEAR : 1983 CODE : 22
 $G = 109.750 \times (3.000 - HM) ** 1.380 R2 = [0.950]$

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	!
MONTH	MOI	DRI	MMHO/CM	PPM	ADJ SAR	!
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	68.42	2.21	1294.	8.06	17.44
5	-	118.57	2.25	1469.	8.30	18.49
6	-	116.61	2.60	1713.	8.72	20.29
7	-	154.74	2.37	1605.	7.92	18.86
8	-	164.43	2.31	1580.	6.13	15.00
9	-	213.55	2.00	1318.	6.39	14.63
10	-	243.85	2.00	1291.	4.20	10.41
11	-	-	-	-	-	-
12	-	182.36	1.39	883.	3.61	8.17
1983	-	-	-	-	-	-

LOCATION : EH12 : SAFT PS YEAR : 1980 CODE : 11
 $G = 8.558 - (0.964) * H ; QCAP = 6.669$ HAV = 1.960

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MDI	DRI	MMHO/CM				
1	32.97	34.45	3.97	3306	9.96	26.09	
2	25.32	28.31	8.25	4823	12.78	34.68	
3	44.75	51.59	2.26	1448	4.73	11.94	
4	44.93	50.22	2.22	1370	5.21	11.63	
5	49.57	52.06	2.22	1377	6.39	13.69	
6	44.89	50.96	2.61	1672	5.72	14.15	
7	56.08	61.70	2.99	1999	9.10	22.39	
8	59.30	71.48	1.56	1001	3.52	8.42	
9	53.84	64.90	2.19	1401	5.79	14.07	
10	60.75	73.76	2.23	1463	5.90	15.13	
11	39.13	47.16	2.48	1700	6.19	16.24	
12	47.16	57.63	2.31	1584	6.19	14.72	
1980	558.69	649.22	2.78	1744	6.61	16.42	

LOCATION : EH12 : SAFT PS YEAR : 1981 CODE : 11
 $G = 8.558 - (0.964) * H ; QCAP = 6.669$ HAV = 1.960

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MDI	DRI	MMHO/CM				
1	53.89	45.56	2.12	1375	6.94	16.38	
2	25.54	20.94	3.29	2149	6.14	16.79	
3	63.37	54.74	2.21	1343	5.84	13.46	
4	62.80	54.31	2.29	1422	6.01	14.10	
5	50.68	43.50	2.44	1558	6.64	15.68	
6	52.25	46.18	2.89	1837	6.66	16.39	
7	62.64	56.98	2.42	1398	3.71	9.41	
8	70.79	63.95	2.62	1918	5.71	14.34	
9	68.69	62.31	2.69	1639	6.68	16.57	
10	77.22	70.74	2.28	1408	5.95	14.03	
11	55.03	49.37	2.70	1620	6.16	15.05	
12	53.59	50.13	2.33	1402	6.18	14.38	
1981	696.51	618.72	2.48	1519	5.95	14.47	

LOCATION : EH12 : SAFT PS YEAR : 1982 CODE : 11
 $G = 8.558 - (0.964) * H ; QCAP = 6.669$ HAV = 1.960

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MDI	DRI	MMHO/CM				
1	53.16	48.36	3.77	2171	7.76	19.30	
2	28.73	25.76	7.50	4485	10.87	32.59	
3	60.40	51.84	2.29	1362	4.91	11.79	
4	54.46	48.84	2.31	1432	5.38	12.99	
5	52.73	50.00	2.41	1516	5.29	12.96	
6	55.43	52.92	2.43	1525	5.26	12.39	
7	58.46	59.84	2.93	1963	7.80	19.27	
8	71.25	70.31	2.97	2034	9.20	22.53	
9	64.45	64.43	2.65	1766	8.69	20.95	
10	67.01	67.21	1.77	1157	5.17	11.89	
11	69.96	62.74	2.96	1760	7.40	17.10	
12	75.41	62.79	-	-	-	-	
1982	711.45	665.07	-	-	-	-	

LOCATION : EH12 : SAFT PS YEAR : 1983 CODE : 11
 $G = 8.558 - (0.964) * H ; QCAP = 6.669$ HAV = 1.960

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MDI	DRI	MMHO/CM				
1	62.59	52.91	1.92	1202	5.38	11.85	
2	20.66	17.73	-	-	-	-	
3	54.19	48.60	2.28	1452	7.93	17.58	
4	58.86	51.28	2.38	1471	8.01	18.56	
5	62.48	53.22	2.36	1937	7.17	16.43	
6	48.95	42.01	3.31	2162	9.29	22.38	
7	52.41	48.35	2.97	1961	9.02	21.96	
8	69.39	63.69	1.62	1986	6.28	14.20	
9	71.55	63.71	2.57	1610	8.04	18.95	
10	72.66	66.10	2.23	1413	4.92	11.96	
11	50.81	44.59	-	-	-	-	
12	61.48	55.53	2.04	1242	4.92	11.75	
1983	682.03	607.73	-	-	-	-	

LOCATION : EH13 : BAHR HADUS OUTFALL YEAR : 1980 CODE : 24

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	3.99	2491.	10.24	25.44
2	-	-	4.08	2559.	8.78	22.27
3	-	-	2.32	1485.	4.80	12.29
4	-	-	2.31	1466.	5.95	13.39
5	-	-	2.14	1443.	6.07	13.71
6	-	-	2.48	1519.	5.94	14.36
7	-	-	2.70	1752.	7.93	19.36
8	-	-	2.70	1761.	6.67	16.82
9	-	-	2.67	1721.	6.77	16.98
10	-	-	2.35	1326.	7.26	18.10
11	-	-	2.68	1800.	6.48	16.82
12	-	-	2.58	1860.	8.04	19.62
1980			2.74	1779.	7.10	17.57

LOCATION : EH13 : BAHR HADUS OUTFALL YEAR : 1981 CODE : 24

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.68	1082.	5.25	12.03
2	-	-	2.50	1613.	6.67	16.38
3	-	-	2.67	1880.	7.07	17.94
4	-	-	2.55	1752.	6.61	17.04
5	-	-	2.60	1778.	5.90	15.06
6	-	-	2.45	1617.	6.82	16.55
7	-	-	-	-	-	-
8	-	-	2.53	1497.	6.04	15.12
9	-	-	2.12	1259.	4.86	11.83
10	-	-	1.90	1129.	4.42	10.40
11	-	-	2.50	1568.	6.12	14.60
12	-	-	2.47	1542.	5.07	12.23
1981			-	-	-	-

LOCATION : EH13 : BAHR HADUS OUTFALL YEAR : 1982 CODE : 24

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	3.23	1813.	5.61	14.06
2	-	-	-	-	-	-
3	-	-	2.14	1275.	6.43	14.75
4	-	-	2.13	1362.	4.89	11.80
5	-	-	1.97	1241.	5.24	12.30
6	-	-	2.08	1322.	5.15	12.12
7	-	-	2.65	1749.	7.61	18.54
8	-	-	2.60	1718.	8.65	19.18
9	-	-	-	-	-	-
10	-	-	1.97	1293.	6.01	13.96
11	-	-	1.93	1224.	5.08	11.64
12	-	-	-	-	-	-
1982			-	-	-	-

LOCATION : EH13 : BAHR HADUS OUTFALL YEAR : 1983 CODE : 24

! DISCHARGE 10**6 M3 !			EC	TDS	SAR	ADJ SAR
MONTH	MOI	DRI	MMHO/CM	PPM		
1	-	-	1.81	1103.	3.58	8.45
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
5	-	-	-	-	-	-
6	-	-	-	-	-	-
7	-	-	2.61	1788.	8.90	21.41
8	-	-	2.69	1727.	8.69	20.80
9	-	-	2.47	1505.	7.15	16.99
10	-	-	2.14	1415.	8.41	13.17
11	-	-	-	-	-	-
12	-	-	2.52	1491.	7.54	17.73
1983			-	-	-	-

LOCATION : EH16 : EL ARIN BRIDGE YEAR : 1982 CODE : 24

MONTH	DISCHARGE 10**6 M3		EC MMHO/CM	TDS PPM	SAR	ADJ SAR
	MOI	DRI				
1	-	-	-	-	-	-
2	-	-	1.52	1019	2.85	7.21
3	-	-	0.98	666	2.04	4.61
4	-	-	1.50	1023	3.92	9.22
5	-	-	0.85	589	2.33	5.06
6	-	-	1.12	762	3.33	7.39
7	-	-	1.45	1046	5.24	12.46
8	-	-	1.67	1188	6.64	15.59
9	-	-	1.31	920	5.30	12.02
10	-	-	0.84	589	3.62	7.33
11	-	-	0.62	566	2.49	5.12
12	-	-	-	-	-	-
1982	-	-	-	-	-	-

LOCATION : EH16 : EL ARIN BRIDGE YEAR : 1983 CODE : 24

MONTH	DISCHARGE 10**6 M3		EC MMHO/CM	TDS PPM	SAR	ADJ SAR
	MOI	DRI				
1	-	-	0.94	644	2.70	5.84
2	-	-	-	-	-	-
3	-	-	1.51	1064	4.97	11.09
4	-	-	1.36	860	4.15	8.78
5	-	-	1.24	847	4.30	9.58
6	-	-	1.33	937	5.11	11.51
7	-	-	1.28	926	3.41	11.91
8	-	-	1.36	970	5.62	12.30
9	-	-	1.03	676	3.82	8.11
10	-	-	0.96	662	2.84	6.27
11	-	-	-	-	-	-
12	-	-	1.04	704	2.86	6.61
1983	-	-	-	-	-	-

LOCATION :E101 : BAHR FAGUS AT FAGUS YEAR : 1982 CODE : 24

MONTH!	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	-	-	0.96	683	2.12
2	-	-	0.57	378	1.68
3	-	-	0.59	395	1.26
4	-	-	0.65	427	1.26
5	-	-	-	-	-
6	-	-	0.55	402	1.44
7	-	-	0.55	404	1.41
8	-	-	0.67	446	2.22
9	-	-	0.73	524	2.75
10	-	-	0.75	545	2.17
11	-	-	0.66	472	1.99
12	-	-	-	-	-
1982	-	-	-	-	-

LOCATION :E101 : BAHR FAGUS AT FAGUS YEAR : 1983 CODE : 24

MONTH!	DISCHARGE 10**6 M3	EC	TDS	SAR	ADJ SAR
MOI	DRI	MMHO/CM	PPM		
1	-	-	0.61	435	2.02
2	-	-	-	-	-
3	-	-	0.63	447	2.24
4	-	-	0.64	442	1.60
5	-	-	0.60	402	1.74
6	-	-	0.63	427	1.87
7	-	-	0.61	415	1.74
8	-	-	0.58	421	2.75
9	-	-	0.68	478	1.37
10	-	-	0.63	562	1.01
11	-	-	-	-	-
12	-	-	0.70	450	1.19
1983	-	-	-	-	-

LOCATION : EM01 : MATAREYA PS YEAR : 1980 CODE : 11
 $Q = 9.608 - (0.431) * H$; QCAP = 8.401 HAV = 2.800

MONTH	MOI	DRI	MMHO/CM	EC	TDS	SAR	ADJ SAR
1	15.06	15.76	8.06	4830	15.47	41.24	
2	10.15	10.62	9.11	5433	17.71	47.67	
3	14.56	15.33	6.68	3967	12.88	35.29	
4	12.83	13.43	7.56	4648	15.18	37.72	
5	14.70	15.36	7.86	4828	17.11	42.33	
6	15.78	16.51	8.74	5261	16.34	43.92	
7	17.47	18.39	7.44	4772	20.44	52.43	
8	19.55	20.45	12.32	7478	23.43	63.21	
9	20.11	21.05	9.99	6069	23.31	60.96	
10	23.96	25.07	7.45	4742	16.23	43.03	
11	21.36	22.35	8.82	5530	18.79	52.92	
12	18.21	19.05	8.17	5443	19.21	50.27	
	1980	203.74	213.37	8.57	5310.	18.28	48.95

LOCATION : EM01 : MATAREYA PS YEAR : 1981 CODE : 11
 $Q = 9.608 - (0.431) * H$; QCAP = 8.401 HAV = 2.800

MONTH	MOI	DRI	MMHO/CM	EC	TDS	SAR	ADJ SAR
1	17.66	17.97	5.69	3560.	15.25	37.16	
2	12.98	13.58	7.01	4309.	13.79	36.86	
3	16.82	17.60	5.69	3369.	12.35	31.63	
4	14.71	15.39	6.59	3931.	14.04	36.73	
5	12.76	14.09	7.00	4057.	13.63	35.68	
6	12.31	12.88	6.99	4435.	16.65	43.69	
7	14.28	14.88	7.70	4891.	14.96	41.45	
8	20.90	21.96	8.50	5436.	21.21	55.84	
9	22.28	23.83	7.62	4524.	16.01	42.70	
10	30.46	31.88	6.66	4108.	19.18	47.01	
11	21.88	22.89	6.90	4044.	14.26	36.32	
12	22.97	24.04	6.84	4405.	12.82	33.49	
	1981	220.01	231.01	6.95	4268.	15.48	40.22

LOCATION : EM01 : MATAREYA PB YEAR : 1982 CODE : 11
 $Q = 9.608 - (0.431) * H$; QCAP = 8.401 HAV = 2.800

MONTH	MOI	DRI	MMHO/CM	EC	TDS	SAR	ADJ SAR
1	24.19	25.13	7.33	4349.	13.27	35.33	
2	9.68	10.13	11.91	6973.	17.71	51.60	
3	12.63	13.22	7.00	4231.	14.89	39.12	
4	13.18	13.79	6.98	4383.	15.51	40.80	
5	13.70	14.34	7.64	4811.	16.65	43.43	
6	14.51	15.21	8.01	5141.	16.65	43.68	
7	19.20	19.90	6.79	4292.	15.66	41.31	
8	21.63	22.53	7.78	5073.	16.94	44.58	
9	20.16	19.96	8.97	5813.	21.70	57.66	
10	21.92	22.74	8.49	5441.	19.11	50.85	
11	21.08	21.75	7.23	4384.	19.75	40.27	
12	17.44	18.24	-	-	-	-	
	1982	209.32	216.94	-	-	-	-

LOCATION : EM01 : MATAREYA PB YEAR : 1983 CODE : 11
 $Q = 9.608 - (0.431) * H$; QCAP = 8.401 HAV = 2.800

MONTH	MOI	DRI	MMHO/CM	EC	TDS	SAR	ADJ SAR
1	16.64	17.39	9.66	3323.	13.08	31.85	
2	8.10	8.47	-	-	-	-	
3	15.56	15.78	7.40	4475.	18.24	41.91	
4	13.61	13.62	8.66	4860.	18.39	44.26	
5	14.07	14.20	8.07	4940.	18.53	47.25	
6	14.37	14.86	7.24	4716.	17.33	45.64	
7	18.37	19.64	6.67	4414.	18.18	46.64	
8	17.66	18.48	8.39	5552.	22.75	58.57	
9	18.44	20.31	8.08	4930.	20.13	51.48	
10	24.22	22.62	-	-	-	-	
11	19.72	20.40	-	-	-	-	
12	18.73	19.52	9.35	3338.	11.06	28.53	
	1983	199.49	205.29	-	-	-	-

LOCATION :ES01 : UPPER SERUA PS YEAR : 1980 CODE : 11
 $G = 17.740 - (1.944) * H ; QCAP = 11.208$ HAV = 3.360

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	9.46	13.27	3.15	1852	7.05	17.87	
2	7.76	10.89	4.08	2423	8.94	23.10	
3	15.04	21.10	1.01	681	2.80	6.38	
4	14.04	19.69	1.08	710	3.44	7.60	
5	14.57	20.42	0.84	510	1.53	3.13	
6	19.02	26.67	0.77	519	1.80	3.83	
7	20.10	28.16	0.90	601	2.96	5.99	
8	19.79	27.76	0.79	528	1.91	4.12	
9	18.58	26.03	0.87	581	2.07	4.38	
10	17.04	31.92	0.80	546	1.29	2.88	
11	13.15	18.48	1.07	733	2.59	5.91	
12	13.07	18.32	0.95	648	3.32	6.61	
1980	181.62	262.71	1.15	735	3.04	6.76	

LOCATION :ES01 : UPPER SERUA PS YEAR : 1981 CODE : 11
 $G = 17.740 - (1.944) * H ; QCAP = 11.208$ HAV = 3.360

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	9.66	13.56	1.18	771	3.93	8.65	
2	9.38	12.71	1.06	686	1.81	4.15	
3	13.53	18.96	0.82	532	2.42	5.01	
4	12.18	17.07	1.07	714	3.90	8.32	
5	14.55	20.38	1.20	745	3.95	8.53	
6	17.79	24.94	0.89	597	2.14	4.74	
7	19.97	28.00	1.26	839	2.89	6.86	
8	19.07	26.71	1.00	670	2.27	5.25	
9	18.19	25.50	0.85	570	2.28	5.02	
10	17.24	25.22	0.84	559	1.88	4.08	
11	19.58	21.83	1.08	722	2.34	5.76	
12	13.58	19.04	1.36	880	3.95	8.85	
1981	180.72	253.92	1.04	685	2.75	6.13	

LOCATION :ES01 : UPPER SERUA PS YEAR : 1982 CODE : 11
 $G = 17.740 - (1.944) * H ; QCAP = 11.208$ HAV = 3.360

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	11.69	16.38	0.91	594	2.12	4.63	
2	6.64	8.51	3.95	2316	7.78	21.41	
3	13.65	19.13	0.86	542	1.76	3.77	
4	12.38	17.35	0.92	581	2.07	4.48	
5	16.13	22.60	0.92	584	2.67	5.61	
6	17.71	24.81	0.86	579	2.29	4.90	
7	20.99	29.41	0.89	611	2.78	6.00	
8	20.06	29.41	0.93	685	3.94	8.48	
9	18.76	26.27	0.99	748	3.38	7.58	
10	17.86	25.02	0.88	616	2.69	5.64	
11	19.84	22.19	0.85	553	2.58	5.31	
12	13.36	18.72	-	-	-	-	
1982	185.07	259.81	-	-	-	-	

LOCATION :ES01 : UPPER SERUA PS YEAR : 1983 CODE : 11
 $G = 17.740 - (1.944) * H ; QCAP = 11.208$ HAV = 3.360

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	12.21	18.09	0.66	448	1.80	3.62	
2	14.31	20.44	-	-	-	-	
3	12.31	16.87	0.88	596	2.89	6.00	
4	13.36	18.57	0.85	556	2.55	5.26	
5	17.37	24.88	0.98	662	3.73	7.71	
6	20.97	31.11	0.80	553	3.17	6.36	
7	24.44	37.07	0.81	569	2.82	5.92	
8	21.31	30.12	1.02	707	3.51	7.74	
9	20.48	28.04	0.87	605	3.00	6.07	
10	19.70	20.46	0.91	595	2.31	5.06	
11	12.18	19.77	-	-	-	-	
12	15.21	21.16	0.75	496	1.66	3.30	
1983	199.83	282.56	-	-	-	-	

LOCATION : E502 : LOWER SERUA PS YEAR : 1980 CODE : 11
 $Q = 11.165 - (1.188) * H ; QCAP = 8.243 HAV = 2.460$

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	33.37	33.19	2.98	1850.	6.49	16.20	
2	24.11	23.86	3.04	1981.	6.76	16.67	
3	40.77	41.57	1.69	1086.	3.34	8.35	
4	47.83	46.68	1.33	854.	4.03	8.97	
5	36.17	36.79	1.80	1175.	4.68	10.83	
6	65.49	65.08	1.60	1047.	3.43	8.33	
7	70.65	72.31	1.54	998.	4.22	9.99	
8	69.46	70.07	1.53	978.	4.61	10.90	
9	70.24	71.90	1.32	813.	3.79	8.61	
10	51.85	52.70	1.47	974.	2.81	7.25	
11	50.75	49.30	1.92	1306.	4.93	12.61	
12	44.13	42.97	1.90	1311.	5.20	12.12	
1980	604.84	606.43	1.72	1115.	4.34	10.49	

LOCATION : E502 : LOWER SERUA PS YEAR : 1981 CODE : 11
 $Q = 11.165 - (1.188) * H ; QCAP = 8.243 HAV = 2.460$

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	39.97	36.64	1.72	1167.	4.86	11.80	
2	26.77	27.12	1.88	1155.	6.16	14.23	
3	45.10	46.93	1.63	957.	5.45	11.74	
4	46.28	49.56	1.47	936.	4.82	10.62	
5	59.48	52.25	1.37	895.	4.61	10.17	
6	62.78	64.69	1.44	919.	3.89	9.02	
7	69.65	68.63	1.48	892.	2.16	5.27	
8	64.12	65.49	1.45	902.	3.58	8.45	
9	63.39	64.64	1.31	831.	4.04	9.23	
10	58.45	58.96	1.38	868.	3.89	8.60	
11	51.36	52.63	1.35	834.	3.79	8.23	
12	43.60	46.59	1.55	986.	4.85	10.73	
1981	632.95	634.13	1.47	925.	4.09	9.35	

LOCATION : E502 : LOWER SERUA PS YEAR : 1982 CODE : 11
 $Q = 11.165 - (1.188) * H ; QCAP = 8.243 HAV = 2.460$

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	36.73	38.01	2.48	1444.	6.00	14.30	
2	16.31	16.46	5.35	3149.	9.29	25.90	
3	42.18	43.53	1.61	976.	4.04	9.20	
4	47.08	46.77	1.47	936.	4.22	9.52	
5	50.35	51.71	1.34	1045.	4.22	9.89	
6	62.50	68.06	1.54	1031.	5.05	11.51	
7	71.17	75.04	1.58	1074.	5.75	13.53	
8	72.05	76.49	1.73	1188.	6.94	16.32	
9	65.48	71.76	1.70	1140.	7.32	16.03	
10	52.21	58.01	1.39	922.	5.50	11.89	
11	46.41	49.33	1.43	933.	5.33	11.17	
12	39.16	41.13	-	-	-	-	-
1982	601.63	636.30	-	-	-	-	-

LOCATION : E502 : LOWER SERUA PS YEAR : 1983 CODE : 11
 $Q = 11.165 - (1.188) * H ; QCAP = 8.243 HAV = 2.460$

MONTH	DISCHARGE 10**6 M3			EC	TDS	SAR	ADJ SAR
	MOI	DRI	MMHO/CM				
1	36.62	38.92	1.15	709.	3.74	7.69	
2	17.18	17.46	-	-	-	-	
3	43.71	39.31	1.55	973.	4.76	10.21	
4	43.39	45.60	1.61	1014.	3.97	8.88	
5	56.44	58.21	1.39	917.	4.36	9.49	
6	57.39	60.35	1.68	1141.	6.30	14.19	
7	71.61	73.03	1.71	1187.	6.77	15.19	
8	62.80	64.95	1.89	1289.	8.03	17.93	
9	59.87	66.83	1.70	1152.	6.58	14.27	
10	48.55	49.47	-	-	-	-	
11	43.10	49.06	-	-	-	-	
12	43.75	44.52	1.62	997.	3.48	8.24	
1983	584.41	605.71	-	-	-	-	-

3.2. Chemical composition

LOCATION : E801 BILBETS BRIDGE YEAR : 1980 CODE : 21
 MEASUREMENT POINT CODE 21 : OPEN DRAIN ; BASIC DATA: WATER LEVEL MEASUREMENTS

DISCHARGE RELATION Q = A + B * HM
 Q = DISCHARGE IN M³/SEC
 A = 53.325 = Q INTERCEPT FOR HM = 0
 B = -10.196 = SLOPE OF Q-HM RELATION
 HM = DISTANCE TO WATERLEVEL FROM FIXED POINT
 R² = 0.690 = CORRELATION COEFFICIENT

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ													
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	23.99	1.56	1141	7.04	5.73	14.08	0.97	2.60	3.49	10.01	0.28	0.00	7.06	3.62	5.70
2	28.16	1.26	930	7.09	2.85	7.31	0.00	4.70	2.60	5.44	0.36	0.00	7.22	1.27	4.63
3	38.07	1.29	950	7.43	1.69	4.54	0.00	4.51	4.99	3.68	0.40	0.00	7.69	1.65	4.24
4	36.66	1.48	1072	7.33	4.12	10.61	0.53	4.13	3.15	7.65	0.20	0.00	7.81	1.57	5.95
5	37.87	1.20	872	7.37	2.82	6.90	0.00	3.82	3.26	5.32	0.20	0.00	5.49	3.14	3.96
6	37.53	1.28	926	7.50	2.40	6.17	0.00	4.39	3.91	4.90	0.20	0.00	6.41	2.49	4.49
7	42.08	1.25	943	7.40	3.51	8.79	0.33	4.01	2.98	6.37	0.27	0.00	6.92	2.42	3.83
8	43.22	1.17	880	7.43	2.82	7.11	0.86	4.16	2.22	5.03	0.78	0.00	7.23	0.75	4.13
9	41.64	1.22	904	7.36	3.03	7.73	1.09	3.82	2.75	5.50	0.55	0.00	7.66	0.26	4.68
10	40.56	1.30	987	7.47	3.14	8.14	1.42	4.10	2.69	5.79	1.00	0.00	8.21	0.70	4.67
11	39.88	1.52	1158	7.55	3.39	9.04	0.00	3.48	3.27	7.08	0.50	0.00	8.27	2.87	5.19
12	40.00	1.95	1412	7.45	6.59	16.13	0.00	4.26	3.11	12.65	0.21	0.00	6.13	9.28	4.81
1980	449.64	1.36	1012	7.36	3.41	8.73	0.00	4.20	3.15	6.55	0.43	0.00	7.19	2.48	4.64

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ													
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	25.42	1.45	1045	7.06	5.70	13.47	0.79	2.24	3.20	9.39	0.23	0.00	6.22	3.47	5.36
2	25.72	1.00	665	7.32	4.47	9.03	0.29	2.31	1.26	5.97	0.18	0.00	3.85	1.23	4.64
3	35.57	1.66	1100	7.38	6.60	15.40	0.67	4.05	1.28	10.78	0.20	0.00	6.00	1.33	8.97
4	36.48	1.42	1061	7.53	4.61	11.69	1.51	3.93	2.51	8.27	0.19	0.00	7.95	1.86	5.08
5	38.00	1.29	991	7.26	3.58	9.20	1.12	4.12	2.64	6.59	0.34	0.00	7.88	1.93	3.89
6	36.58	1.65	1202	7.62	4.65	12.01	0.00	3.79	4.08	9.21	0.29	0.00	7.64	3.37	6.36
7	38.23	2.14	1475	8.14	7.71	18.59	0.00	4.64	2.52	14.59	0.31	0.00	5.87	5.69	10.51
8	38.14	1.67	997	7.58	4.07	10.00	0.00	4.05	2.80	7.54	0.34	0.00	6.06	1.43	7.26
9	39.98	1.56	1031	7.23	4.55	11.02	0.00	2.92	3.94	8.43	0.35	0.00	5.69	1.46	8.47
10	39.64	1.07	782	7.31	2.31	3.74	0.00	4.04	2.42	4.15	0.36	0.00	6.38	0.79	3.80
11	39.11	1.27	961	7.29	3.13	8.00	0.20	4.71	2.39	5.89	0.40	0.00	7.30	2.01	4.09
12	40.25	1.27	942	7.26	3.23	8.17	0.00	4.90	2.12	6.06	0.21	0.00	6.84	1.90	4.55
1981	433.12	1.45	1028	7.36	4.46	10.99	0.03	3.90	2.62	8.05	0.29	0.00	6.55	2.19	6.12

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ													
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	37.72	1.33	965	7.30	2.76	7.06	0.00	4.01	4.18	5.58	0.20	0.00	6.47	2.90	4.62
2	30.06	1.42	1052	7.39	3.19	8.39	0.00	4.68	3.58	6.47	0.24	0.00	7.86	2.03	5.08
3	40.12	1.34	1019	7.21	4.03	10.15	1.30	4.39	1.91	7.15	0.67	0.00	7.59	1.85	4.67
4	42.00	1.38	1020	7.16	4.73	10.97	0.00	4.21	1.80	8.20	0.42	0.00	5.00	5.10	4.49
5	38.72	1.35	1011	7.25	3.78	9.56	0.27	4.05	2.82	7.01	0.38	0.00	7.14	2.57	4.54
6	39.60	1.28	982	7.28	4.10	10.13	1.00	4.33	1.69	7.11	0.46	0.00	7.02	2.60	3.96
7	39.24	1.26	1018	7.53	4.23	10.73	2.00	3.97	2.16	7.41	0.25	0.00	8.13	2.83	2.83
8	41.57	1.41	1148	7.26	5.50	13.62	1.43	3.44	2.57	9.53	0.23	0.00	7.44	5.68	2.65
9	39.53	1.51	1161	7.27	6.13	14.95	1.57	2.54	3.15	10.34	0.28	0.00	7.26	4.60	4.50
10	37.41	1.36	1041	7.27	4.41	11.06	0.84	3.41	3.09	7.94	0.08	0.00	7.34	3.10	4.32
11	34.72	1.25	943	7.35	4.10	10.15	1.06	3.95	2.07	7.11	0.06	0.00	7.08	1.97	4.15
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 10 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ													
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	33.94	1.49	1004	7.29	6.52	13.69	0.00	3.10	1.69	10.09	0.11	0.00	3.86	4.45	6.69
5	34.81	1.62	1102	7.19	5.78	13.03	0.00	3.93	2.17	10.09	0.24	0.00	4.40	4.45	7.74
6	32.46	1.43	1028	7.47	4.46	10.76	0.00	3.92	2.72	8.13	0.15	0.00	3.71	3.76	5.50
7	34.80	1.50	1190	7.87	5.61	13.79	0.63	4.41	1.86	9.93	0.25	0.00	6.91	5.81	4.00
8	39.19	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	38.57	1.49	954	7.93	3.77	8.56	0.00	3.91	3.65	7.32	0.07	0.17	3.53	3.90	7.13
10	40.26	1.34	964	7.49	3.44	8.24	0.00	4.07	3.47	6.68	0.08	0.40	4.43	5.25	4.23
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	44.60	1.27	845	7.38	3.07	7.00	0.00	3.93	3.03	5.72	0.12	0.01	3.85	3.34	5.57
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EB02 : GALYUBEYA BRIDGE YEAR : 1980 CODE : 23
 MEASUREMENT POINT CODE: 23 : OPEN DRAIN : BASIC DATA: WATERLEVEL AND FLOAT MEASUREMENTS

DISCHARGE RELATION: $Q=0.85 \cdot AS \cdot VF$

Q - DISCHARGE IN $M^3 \text{ PER SECOND}$
 0.85 - FACTOR
 AS - WETTED CROSS SECTION IN M^2
 VF - FLOAT VELOCITY IN $M \text{ PER SECOND}$

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	BAR	ADJ		CA	MO	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	28.42	1.01	717.	7.02	2.40	5.61	0.00	3.24	2.71	4.13	0.28	0.00	4.84	1.98	3.48
2	21.91	1.05	764.	7.19	1.42	3.53	0.00	4.35	3.53	2.81	0.30	0.00	5.35	2.43	3.21
3	35.18	0.98	717.	7.31	1.38	3.40	0.00	3.94	3.51	2.66	0.16	0.00	5.21	2.37	2.71
4	35.18	1.11	746.	7.65	3.00	6.91	0.00	3.05	2.68	5.08	0.17	0.00	4.69	1.20	5.24
5	39.19	1.43	881.	7.57	3.37	11.13	0.00	2.72	2.35	8.56	0.14	0.00	3.36	1.72	8.70
6	33.27	0.80	583.	7.20	1.24	2.93	0.00	3.03	3.32	2.22	0.18	0.00	3.74	1.44	3.57
7	35.07	0.96	694.	7.58	2.75	6.32	0.00	3.15	2.01	4.43	0.25	0.00	4.94	1.60	3.30
8	38.11	0.93	695.	7.51	1.75	4.14	0.03	2.96	2.44	2.87	1.28	0.00	5.43	1.10	3.00
9	43.29	0.91	640.	7.39	1.87	4.37	0.00	2.77	2.70	3.10	0.55	0.00	4.90	0.79	3.44
10	41.81	1.00	697.	7.14	1.57	3.81	0.00	3.15	3.55	2.88	0.53	0.00	5.19	0.94	4.00
11	44.68	1.23	901.	7.53	1.30	3.40	0.00	3.82	5.65	2.84	0.79	0.00	6.12	3.15	3.92
12	46.79	1.17	855.	7.56	1.69	4.22	0.00	3.66	4.75	3.46	0.61	0.00	5.31	3.66	3.44
1980	440.88	1.06	744.	7.36	2.04	4.69	0.00	3.29	3.34	3.72	0.47	0.00	4.96	1.88	3.99

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	BAR	ADJ		CA	MO	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	30.34	1.17	830.	7.10	3.78	8.64	0.00	2.13	3.41	6.30	0.27	0.00	4.75	3.20	4.18
2	15.15	1.90	1327.	7.05	8.06	19.31	1.25	3.24	2.42	13.57	0.22	0.00	6.91	3.72	8.82
3	33.29	0.81	579.	7.27	1.75	4.01	0.00	2.42	2.81	2.82	0.28	0.00	4.68	0.46	3.16
4	32.32	0.97	695.	7.34	2.90	6.53	0.00	2.85	2.29	4.65	0.17	0.00	4.53	2.29	3.12
5	32.72	0.83	578.	7.42	1.93	4.36	0.00	3.18	1.83	3.06	0.19	0.00	4.48	0.58	3.20
6	28.23	1.00	731.	7.70	2.84	6.59	0.00	3.43	2.07	4.71	0.18	0.00	5.01	2.13	3.24
7	31.37	1.31	925.	8.19	3.59	8.46	0.00	3.87	2.90	6.60	0.21	0.00	4.81	3.87	4.90
8	29.98	1.19	829.	7.86	2.47	6.00	0.00	4.15	3.14	4.72	0.19	0.00	5.11	2.29	4.80
9	32.94	1.24	901.	7.45	2.30	5.65	0.00	3.30	5.08	4.72	0.19	0.00	4.89	4.98	3.52
10	34.47	1.00	706.	7.55	1.75	4.16	0.00	3.15	3.77	3.26	0.16	0.00	4.51	2.67	3.18
11	39.82	1.15	808.	7.44	2.05	5.01	0.00	3.57	4.16	4.04	0.13	0.00	4.97	2.98	3.97
12	45.25	1.02	725.	7.27	2.58	6.02	0.00	3.43	2.50	4.44	0.10	0.00	4.81	2.07	3.60
1981	385.88	1.12	776.	7.41	2.70	6.36	0.00	3.23	3.08	4.80	0.19	0.00	4.86	2.33	3.90

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 13 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	BAR	ADJ		CA	MO	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	46.96	0.94	672.	7.15	2.42	5.64	0.00	3.73	1.70	3.98	0.11	0.00	5.15	0.93	3.44
2	22.81	1.05	728.	7.43	1.91	4.63	0.00	4.32	2.59	3.56	0.12	0.00	5.06	1.44	4.09
3	40.12	0.86	627.	7.25	1.75	4.02	0.00	3.47	2.35	2.98	0.19	0.00	4.37	1.82	2.79
4	35.14	1.00	686.	7.05	1.85	4.39	0.00	3.68	2.88	3.36	0.15	0.00	4.66	1.44	3.97
5	36.87	0.83	609.	7.23	1.82	4.20	0.00	3.42	1.99	2.99	0.13	0.00	4.74	1.52	2.26
6	42.39	0.90	581.	7.34	1.53	3.50	0.00	3.90	1.50	2.52	0.20	0.00	4.39	1.49	2.25
7	33.72	1.10	824.	7.50	3.44	8.24	0.44	3.42	2.18	5.76	0.18	0.00	6.04	2.14	3.36
8	41.10	1.42	1055.	7.58	5.61	13.46	1.10	2.88	2.66	9.34	0.12	0.00	6.64	3.58	4.78
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB02 : GALYUBEYA BRIDGE YEAR : 1983 CODE : 24
 THE WATER QUALITY DATA DURING 1983 ARE BASED ON 9 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	BAR	ADJ		CA	MO	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	-	0.92	663.	7.54	2.98	6.48	0.00	2.81	1.94	4.39	0.11	0.00	4.09	2.67	2.68
2	-	0.94	687.	7.68	4.07	8.44	0.07	2.38	1.51	5.68	0.12	0.00	3.96	3.28	2.45
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	0.47	679.	7.31	3.46	7.39	0.00	2.49	2.02	5.20	0.11	0.00	3.97	2.49	3.36
5	-	0.49	701.	7.47	3.60	7.81	0.00	2.70	1.82	5.42	0.14	0.00	4.26	2.32	3.49
6	-	0.99	717.	7.89	3.20	7.23	0.00	2.76	2.27	5.08	0.12	0.00	4.72	2.37	3.14
7	-	1.07	786.	8.14	3.43	7.90	0.00	3.32	2.05	5.62	0.15	0.00	5.03	2.91	3.19
8	-	1.73	1216.	8.23	8.52	18.51	0.26	2.51	2.11	12.96	0.13	0.00	4.89	6.41	6.53
9	-	1.16	811.	8.06	3.81	8.41	0.00	2.70	2.77	6.30	0.16	0.00	4.06	3.68	4.18
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB03 : W-DI PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE 11 : PUMP STATION ; BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION G=Q0+B*H
 G - DISCHARGE IN M**3 PER SECOND
 Q0 = 7 632 - DISCHARGE IN M**3 PER SECOND AT ZERO SUCTION HEAD
 B = -1.140 - SLOPE OF CAPACITY CURVE
 H - SUCTION HEAD IN M
 QCAP= 4 269 - AVERAGE PUMP CAPACITY IN M**3 PER SECOND
 HAV = 2 950 - AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	20 62	1.18	842.	7.34	2.16	3.26	0.00	4.88	2.93	4.27	0.18	0.00	4.84	3.35	4.15
2	14 65	1.18	830.	7.36	1.92	4.82	0.00	4.31	3.79	3.85	0.19	0.00	5.72	1.97	4.47
3	33.26	1.15	811.	7.80	2.41	5.99	0.00	3.66	3.46	4.55	0.12	0.00	5.90	1.48	4.38
4	30.52	1.13	809.	7.68	3.14	7.47	0.00	3.29	2.76	5.45	0.17	0.00	5.44	2.15	4.04
5	39.45	0.87	591.	7.51	2.43	3.12	0.00	2.53	2.09	3.69	0.32	0.00	3.51	1.72	3.40
6	39.69	0.97	685.	7.05	2.12	5.07	0.00	3.21	2.76	3.66	0.18	0.00	5.36	0.90	3.56
7	40.70	1.03	739.	7.50	3.45	7.76	0.00	3.26	1.64	5.40	0.21	0.00	4.81	2.03	3.68
8	43.39	1.05	697.	7.26	3.08	6.97	0.00	3.14	1.97	4.93	0.21	0.00	4.67	0.49	5.08
9	42.70	1.95	655.	7.41	2.28	5.17	0.00	3.29	2.27	3.80	0.18	0.00	4.32	1.47	3.75
10	36.32	1.09	782.	7.44	1.82	4.62	0.00	3.74	3.77	3.52	0.19	0.00	6.36	1.08	3.77
11	39.53	1.21	878.	7.53	1.85	4.77	0.00	5.05	3.59	3.85	0.20	0.00	6.16	2.32	4.22
12	32.90	1.27	869.	7.78	2.58	6.34	0.00	3.73	4.01	3.08	0.15	0.00	5.26	2.30	5.41
1980	413.74	1.07	793.	7.42	2.43	3.80	0.00	3.58	2.82	4.34	0.19	0.00	5.14	1.67	4.13

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	21.06	1.14	611.	7.49	2.90	6.91	0.00	2.57	3.85	5.19	0.22	0.00	5.17	2.61	4.07
2	10.43	1.01	910.	7.02	2.97	7.51	0.00	3.46	3.94	5.71	0.23	0.00	6.56	0.94	5.84
3	33.36	0.83	569.	7.44	2.47	5.40	0.01	2.49	1.89	3.65	0.16	0.00	4.39	0.26	3.54
4	28.20	1.02	742.	7.33	2.69	6.33	0.00	3.29	2.53	4.58	0.17	0.00	5.17	2.08	3.31
5	30.02	1.05	730.	7.14	2.38	5.64	0.00	3.29	2.95	4.20	0.21	0.00	5.01	1.44	4.20
6	41.38	1.68	1056.	7.56	2.77	6.99	0.00	4.06	6.18	6.26	0.17	0.00	5.12	2.13	9.43
7	50.52	0.86	604.	8.28	1.56	3.67	0.00	3.43	2.40	2.66	0.11	0.00	4.90	0.78	2.92
8	40.76	1.09	735.	7.71	2.30	5.57	0.00	3.55	2.92	4.15	0.18	0.00	3.40	0.42	4.97
9	40.67	1.09	757.	7.27	2.72	6.43	0.00	3.33	2.75	4.73	0.21	0.00	5.16	1.38	4.49
10	42.46	1.14	814.	7.18	2.32	6.09	0.00	3.58	3.33	4.68	0.21	0.00	5.21	2.68	3.92
11	42.53	1.15	809.	7.13	2.25	5.33	0.00	3.17	4.38	4.37	0.14	0.00	4.31	3.91	3.84
12	35.97	1.08	756.	7.26	3.05	7.09	0.00	2.58	3.20	5.18	0.09	0.00	4.94	1.99	4.12
1981	417.36	1.11	766.	7.35	2.47	5.89	0.00	3.27	3.34	4.49	0.17	0.00	3.01	1.75	4.52

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	22.55	0.89	618.	7.12	2.08	4.76	0.00	3.14	2.26	3.42	0.09	0.00	4.52	1.11	3.28
2	5.02	1.91	1426	7.08	2.37	6.91	0.00	8.14	6.04	6.32	0.21	0.00	10.49	2.69	7.53
3	28.32	0.93	658.	7.14	1.59	3.81	0.00	3.70	2.76	2.85	0.14	0.00	5.05	1.25	3.13
4	32.93	0.98	699.	7.08	2.02	4.67	0.00	4.00	2.23	3.57	0.18	0.00	5.32	1.05	3.62
5	32.71	0.39	660.	7.28	2.30	5.29	0.00	4.09	1.14	3.71	0.21	0.00	4.89	1.72	2.54
6	36.22	0.83	611.	7.36	2.22	5.00	0.00	3.42	1.44	3.45	0.20	0.00	4.64	1.48	2.38
7	39.99	0.94	679.	7.45	2.85	6.53	0.16	3.20	1.72	4.48	0.19	0.00	5.08	1.08	3.43
8	35.79	1.17	840.	7.14	3.89	9.10	0.00	2.73	2.80	6.48	0.08	0.00	5.44	2.46	4.20
9	40.91	1.08	712.	7.14	3.56	7.94	0.00	2.39	2.51	5.57	0.09	0.00	4.59	0.79	5.19
10	24.95	1.12	787.	7.12	2.57	6.25	0.00	3.80	2.85	4.70	0.03	0.00	5.49	1.62	4.34
11	29.14	0.90	712.	7.60	3.07	6.85	0.00	3.17	2.07	4.96	0.02	0.00	4.30	2.89	3.04
12	33.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	361.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	20.67	0.87	612.	7.39	1.66	3.78	0.00	3.53	2.33	2.84	0.13	0.00	4.13	1.95	2.76
2	5.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	22.46	1.00	709.	7.14	3.26	7.07	0.00	2.76	2.20	5.14	0.16	0.00	3.93	3.14	3.18
4	27.05	0.94	642.	7.13	2.95	6.06	0.00	2.47	2.30	4.56	0.15	0.00	3.11	3.04	3.32
5	28.34	1.22	617.	7.28	3.65	8.04	0.00	3.99	1.85	6.23	0.12	0.00	3.81	2.95	5.44
6	37.15	1.31	948.	7.79	5.27	11.62	0.00	3.16	2.00	8.47	0.10	0.00	4.42	4.93	4.39
7	39.98	1.23	912.	8.15	5.16	11.59	0.28	2.76	2.06	8.02	0.13	0.01	5.09	4.25	3.62
8	45.63	1.22	838.	8.34	4.88	10.77	0.00	2.25	2.49	7.51	0.16	0.37	4.34	2.89	4.79
9	50.32	1.08	758.	8.07	3.34	7.21	0.00	2.74	2.74	5.53	0.14	0.01	3.53	4.07	3.54
10	42.58	1.05	758.	7.37	1.96	4.60	0.00	3.81	3.50	3.74	0.05	0.00	4.17	4.16	2.77
11	31.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	34.00	0.92	639.	6.94	2.02	4.46	0.00	3.47	2.32	3.44	0.13	0.00	3.63	2.48	3.27
1983	385.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION EB04 : WADI RAILWAY BRIDGE YEAR : 1982 CODE : 24
 THE WATER QUALITY DATA DURING 1982 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ SAR		RSC	CA	MC	NA	K	CO3	HCO3	SO4	CL
					SAR	RSC									
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.12	828.	7.27	2.67	6.47	0.00	4.15	2.50	4.86	0.26	0.00	5.50	2.76	3.51
4	-	1.07	779.	7.06	2.25	5.50	0.00	3.46	3.30	4.14	0.26	0.00	5.53	2.13	3.53
5	-	1.05	771.	7.23	3.06	7.18	0.00	3.63	1.91	5.10	0.24	0.00	5.30	2.22	3.35
6	-	1.08	833.	7.34	3.96	9.24	0.92	3.47	1.49	6.23	0.27	0.00	5.87	2.79	2.80
7	-	1.17	926.	7.49	4.25	10.27	1.39	3.58	1.79	6.97	0.30	0.00	6.76	3.21	2.67
8	-	1.27	992.	7.16	4.98	11.82	0.73	2.47	2.97	8.22	0.18	0.00	6.20	4.83	2.82
9	-	1.35	1029.	7.11	5.37	12.67	0.59	2.07	3.40	8.88	0.22	0.00	6.06	4.94	3.57
10	-	1.14	846.	7.24	2.92	6.25	0.00	3.67	3.61	4.81	0.09	0.00	5.77	3.08	3.29
11	-	1.05	771.	7.50	2.95	6.93	0.00	3.62	2.24	5.05	0.06	0.00	5.10	2.76	3.09
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION E84A : BILBFIS DRAIN AT WADI YEAR : 1980 CODE : 24
THE WATER QUALITY DATA DURING 1980 ARE BASED ON 20 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	BAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.36	989	7.29	1.96	5.30	0.00	4.59	5.19	4.33	0.21	0.00	7.83	1.44	5.04
4	-	1.13	793	7.27	2.63	6.13	0.00	3.10	3.57	4.84	0.21	0.00	4.21	3.56	3.94
5	-	1.04	724	7.30	2.12	4.89	0.00	3.01	3.65	3.87	0.18	0.00	4.09	3.16	3.46
6	-	1.02	762	7.23	2.10	5.23	0.32	3.43	2.75	3.70	0.67	0.00	6.51	0.64	3.40
7	-	1.24	942	7.47	2.91	7.38	0.00	3.92	3.58	5.63	0.18	0.00	6.63	3.33	3.34
8	-	1.04	774	7.28	2.41	5.87	0.41	3.90	1.91	4.10	0.77	0.00	6.22	0.62	3.64
9	-	1.08	794	7.42	2.39	5.82	0.00	3.60	2.70	4.25	0.63	0.00	5.72	1.62	3.66
10	-	1.12	849	7.77	2.56	6.40	0.79	3.55	2.65	4.50	0.98	0.00	6.98	0.97	3.72
11	-	1.28	972	7.52	2.57	6.65	0.00	4.26	3.44	5.04	0.85	0.00	7.19	2.38	4.04
12	-	1.48	1041	7.58	3.60	8.91	0.00	4.48	3.44	7.17	0.26	0.00	5.98	3.63	5.93
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	-	1.14	800	7.10	3.70	8.34	0.00	2.39	3.05	6.10	0.16	0.00	4.52	3.11	4.07
2	-	1.11	791	7.33	4.07	9.35	0.77	1.88	2.92	6.31	0.22	0.00	5.57	1.60	4.15
3	-	1.08	795	7.28	2.89	7.05	0.23	3.60	2.39	5.00	0.19	0.00	6.21	1.32	3.64
4	-	1.09	820	7.47	2.84	7.10	0.66	3.51	2.65	4.98	0.24	0.00	7.02	0.81	3.55
5	-	1.10	830	7.35	3.08	7.57	0.52	3.84	2.13	5.33	0.26	0.00	6.50	1.60	3.42
6	-	1.25	959	7.72	3.25	8.24	0.00	3.60	3.52	6.12	0.21	0.00	7.00	3.18	3.26
7	-	1.22	942	8.14	2.76	6.96	0.00	4.40	3.26	5.41	0.21	0.00	6.16	4.26	2.87
8	-	1.11	802	7.88	2.22	5.51	0.00	4.39	2.68	4.17	0.24	0.00	3.86	1.61	3.99
9	-	1.03	723	7.48	2.14	5.20	0.00	2.81	3.57	3.82	0.24	0.00	3.56	1.08	3.80
10	-	1.11	806	7.27	2.46	6.01	0.00	3.53	3.23	4.54	0.25	0.00	5.53	2.35	3.70
11	-	1.17	849	7.22	2.73	6.66	0.00	3.73	3.12	5.05	0.31	0.00	5.56	2.73	3.85
12	-	1.18	867	7.10	3.26	7.97	0.00	3.73	2.64	5.82	0.17	0.00	6.09	2.23	3.99
1981	-	1.13	832	7.36	2.92	7.13	0.00	3.47	2.93	5.21	0.23	0.00	3.96	2.17	3.69

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	-	1.21	870	7.39	3.80	9.04	0.08	4.61	1.11	6.42	0.20	0.00	5.80	1.80	4.75
2	-	1.33	965	7.58	3.68	9.06	0.00	4.89	2.04	6.85	0.09	0.00	6.04	2.81	5.01
3	-	1.14	939	7.33	2.59	6.43	0.00	4.66	2.16	4.78	0.24	0.00	6.12	1.88	3.85
4	-	1.09	807	7.11	2.37	9.88	0.00	3.79	2.94	4.35	0.31	0.00	6.13	1.77	3.49
5	-	1.14	890	7.19	3.47	6.48	0.41	4.00	1.99	6.01	0.28	0.00	6.39	3.00	2.88
6	-	1.15	865	7.43	3.71	8.82	0.41	3.95	1.56	6.13	0.37	0.00	5.92	2.63	3.48
7	-	1.21	934	7.53	4.22	9.91	0.06	4.46	1.09	7.02	0.39	0.00	5.61	4.12	3.23
8	-	1.05	1124	7.52	5.71	13.50	0.03	3.40	2.45	9.74	0.18	0.00	5.88	6.78	3.11
9	-	1.53	1024	7.14	5.07	12.15	0.47	2.86	2.91	8.61	0.11	0.00	6.24	4.85	3.27
10	-	1.25	954	7.16	3.56	8.86	0.00	3.23	3.62	6.38	0.04	0.00	6.47	3.78	3.28
11	-	1.11	838	7.37	3.55	8.44	0.13	3.83	1.81	5.96	0.12	0.00	5.77	2.76	3.19
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	-	1.12	837	7.28	3.47	8.20	0.00	3.93	1.68	5.82	0.32	0.00	5.55	2.70	3.49
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.27	907	7.37	4.29	10.10	0.05	3.76	1.81	7.17	0.25	0.00	5.62	2.45	4.92
4	-	1.31	850	7.32	4.09	9.10	0.00	3.92	1.79	6.92	0.18	0.00	4.09	1.92	6.81
5	-	1.48	977	7.38	5.14	11.70	0.00	3.55	2.20	8.71	0.18	0.00	4.78	2.45	7.41
6	-	1.94	1256	7.40	5.14	12.32	0.00	4.49	4.19	10.70	0.14	0.00	4.62	4.34	10.57
7	-	1.76	1198	7.61	5.44	12.85	0.00	4.14	3.26	10.47	0.19	0.01	4.81	5.16	8.07
8	-	1.20	914	8.07	4.72	11.06	0.30	3.15	2.19	7.71	0.24	0.37	5.47	2.34	5.10
9	-	1.22	879	7.86	3.58	8.19	0.00	3.23	3.12	6.39	0.09	0.02	4.27	4.81	3.76
10	-	1.34	974	7.42	3.56	8.37	0.00	3.96	3.41	6.83	0.10	0.00	4.44	5.68	4.18
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	1.08	733	7.20	2.49	5.73	0.00	3.40	2.86	4.40	0.19	0.00	4.31	2.14	4.40
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB48 : GALYUBIA DRAIN AT WADI YEAR : 1980 CODE : 24
 THE WATER QUALITY DATA DURING 1980 ARE BASED ON 19 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.34	1001.	7.24	2.32	6.21	0.00	4.86	4.10	4.92	0.40	0.00	7.87	1.77	4.52
4	-	1.14	837.	7.31	3.23	7.92	0.33	3.39	2.59	3.58	0.24	0.00	6.31	1.25	4.04
5	-	1.03	711.	7.41	2.58	5.78	0.00	3.14	2.74	4.43	0.17	0.00	3.91	2.79	3.77
6	-	1.14	810.	7.37	2.68	6.42	0.00	4.91	1.53	4.81	0.35	0.00	5.21	1.95	4.44
7	-	1.23	924.	7.32	3.45	8.46	0.00	4.76	1.79	6.25	0.21	0.00	6.05	3.15	3.81
8	-	0.91	635.	7.59	1.73	4.03	0.00	3.81	2.23	3.01	0.18	0.00	4.55	1.28	3.27
9	-	0.97	692.	7.36	1.72	4.17	0.00	3.74	2.61	3.07	0.45	0.00	3.37	0.95	3.50
10	-	1.09	827.	7.43	2.00	5.05	0.17	3.94	2.63	3.63	1.12	0.00	6.74	0.94	3.74
11	-	1.35	1014.	7.32	2.32	6.09	0.00	5.07	3.90	4.90	0.53	0.00	7.08	3.10	4.25
12	-	1.40	1057.	7.56	4.18	10.34	0.00	4.26	2.72	7.81	0.23	0.00	6.29	4.58	4.15
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	1.10	785	7.28	4.28	9.47	0.26	1.50	3.05	6.46	0.29	0.00	4.81	2.71	3.78
2	-	0.93	689.	7.04	2.59	6.16	0.72	2.18	3.06	4.19	0.19	0.00	5.96	0.86	2.78
3	-	1.15	848.	7.19	3.32	8.06	0.00	3.42	2.65	3.79	0.18	0.00	6.02	2.18	3.81
4	-	1.12	828.	7.46	3.03	7.36	0.00	3.39	2.80	5.33	0.21	0.00	5.96	2.19	3.38
5	-	1.10	825.	7.31	3.08	7.44	0.00	4.24	1.76	5.33	0.20	0.00	5.97	2.19	3.34
6	-	1.35	1030	7.70	4.20	10.40	0.05	4.75	1.84	7.62	0.22	0.00	6.64	3.77	4.03
7	-	1.54	1114.	8.13	4.87	11.94	0.00	4.21	2.68	9.05	0.21	0.00	6.13	4.17	5.85
8	-	1.16	815	7.70	2.51	6.22	0.00	3.86	3.04	4.67	0.23	0.00	5.95	1.11	4.74
9	-	1.05	737.	7.29	1.91	4.65	0.00	3.33	3.57	3.55	0.24	0.00	5.24	1.70	3.80
10	-	1.09	772.	7.43	1.62	3.94	0.00	4.56	3.22	3.19	0.24	0.00	4.82	2.70	3.81
11	-	1.14	828	7.18	2.66	6.45	0.00	3.34	3.40	4.88	0.31	0.00	5.45	2.65	3.83
12	-	1.12	821.	7.35	2.88	6.87	0.00	4.02	2.03	5.01	0.34	0.00	5.38	2.42	3.80
1981	-	1.15	842.	7.35	3.05	7.38	0.00	3.58	2.76	5.43	0.26	0.00	5.69	2.40	3.94

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	1.17	852.	7.19	2.69	6.64	0.00	4.41	2.53	5.01	0.21	0.00	5.86	2.32	3.98
2	-	1.58	1102	7.56	3.13	8.08	0.00	5.48	3.95	6.79	0.16	0.00	6.27	3.26	6.85
3	-	1.24	895.	7.12	2.58	6.45	0.00	4.77	2.82	5.02	0.18	0.00	5.91	2.22	4.67
4	-	1.08	783.	7.10	2.26	5.49	0.00	3.81	2.95	4.16	0.30	0.00	5.32	2.38	3.52
5	-	1.09	821.	7.18	2.74	6.72	0.00	3.49	2.94	4.91	0.20	0.00	6.01	2.51	3.02
6	-	1.01	742.	7.27	2.58	6.11	0.00	3.81	1.95	4.38	0.30	0.00	5.33	1.85	3.26
7	-	1.17	870.	7.41	3.69	8.64	0.00	3.59	2.28	6.33	0.19	0.00	5.14	3.79	3.45
8	-	1.40	1083	7.17	5.21	12.20	0.00	3.82	2.26	5.08	0.10	0.00	5.29	7.24	2.73
9	-	1.24	943.	7.21	4.49	10.69	0.51	2.87	2.70	7.50	0.16	0.00	6.08	3.87	3.31
10	-	1.21	905.	7.08	3.44	8.36	0.00	3.59	2.97	6.23	0.05	0.00	5.80	3.52	3.45
11	-	1.01	734.	7.55	2.74	6.28	0.00	3.60	2.17	4.65	0.10	0.00	4.52	2.87	3.15
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	1.02	718.	7.40	2.97	6.48	0.00	3.72	1.99	4.83	0.26	0.00	3.82	2.96	3.63
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	1.22	806.	7.40	4.49	9.15	0.00	3.57	1.33	7.03	0.16	0.00	3.12	3.42	5.33
5	-	1.24	892.	7.52	3.87	9.18	0.00	3.87	2.21	6.75	0.18	0.00	5.43	2.03	5.56
6	-	1.20	862.	7.86	3.73	8.80	0.00	3.07	2.80	6.40	0.16	0.00	5.37	2.84	4.22
7	-	1.21	886.	7.89	3.66	8.71	0.00	3.96	2.19	6.42	0.11	0.01	5.42	3.26	3.99
8	-	1.16	861.	8.03	3.54	8.42	0.00	2.71	3.34	6.14	0.18	0.37	5.09	3.90	3.06
9	-	1.13	785.	7.78	2.78	6.43	0.00	3.18	3.22	4.98	0.10	0.02	4.34	3.65	3.48
10	-	1.07	779.	7.32	2.02	4.79	0.00	3.90	3.96	3.90	0.04	0.00	4.31	4.19	2.89
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	1.04	715.	6.92	2.21	5.10	0.00	3.68	2.82	3.99	0.10	0.00	4.16	2.40	4.02
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB05 : SANDA BRIDGE YEAR : 1980 CODE : 21
 MEASUREMENT POINT CODE 21 ; OPEN DRAIN ; BASIC DATA: WATER LEVEL MEASUREMENTS

DISCHARGE RELATION : $Q = A + B \cdot HM$
 Q - DISCHARGE IN M³/SEC
 $A = 132.127$ - Q INTERCEPT FOR HM = 0
 $B = -19.459$ - SLOPE OF Q-HM RELATION
 HM - DISTANCE TO WATERLEVEL FROM FIXED POINT
 $R^2 = 0.890$ - CORRELATION COEFFICIENT

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 23 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3	MM3					SAR	RSC								
1	69.36	1.20	873.	7.30	2.23	5.70	0.00	4.84	3.06	4.44	0.17	0.00	6.35	1.98	4.17	
2	63.35	1.16	837.	7.27	1.86	4.73	0.00	4.49	3.58	3.73	0.26	0.00	6.08	1.99	4.00	
3	73.15	1.24	918.	7.19	1.93	5.16	0.00	4.39	4.43	4.06	0.21	0.00	7.69	1.16	4.23	
4	65.67	1.10	797.	7.28	2.58	6.26	0.00	3.84	2.72	4.67	0.17	0.00	5.50	2.22	3.69	
5	70.84	1.00	696.	7.25	1.74	4.10	0.00	3.51	3.28	3.21	0.23	0.00	4.41	2.21	3.61	
6	74.13	0.99	699.	7.40	2.11	5.00	0.00	4.35	1.77	3.69	0.18	0.00	5.05	1.24	3.69	
7	92.78	0.98	739.	7.41	3.29	7.79	1.47	3.39	1.44	5.12	0.17	0.00	6.30	0.71	3.12	
8	87.89	0.96	683.	7.42	2.25	5.41	0.08	3.53	2.13	3.79	0.22	0.00	5.74	0.12	3.81	
9	91.40	0.99	709.	7.44	2.01	4.92	0.00	3.50	2.77	3.55	0.22	0.00	5.94	0.59	3.52	
10	118.07	1.08	799.	7.51	2.40	6.07	0.20	3.67	3.00	4.39	0.16	0.00	6.87	0.68	3.67	
11	84.90	1.79	1437.	7.51	5.71	15.02	0.10	4.30	4.03	11.65	0.19	0.00	8.42	7.62	4.13	
12	85.10	1.37	1032.	7.59	3.38	8.51	0.00	4.01	3.91	6.72	0.17	0.00	6.16	4.76	3.89	
1980	976.84	1.15	852.	7.38	2.68	6.68	0.00	3.94	2.98	4.96	0.19	0.00	6.27	2.05	3.77	

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3	MM3					SAR	RSC								
1	58.74	1.06	755.	7.05	3.27	7.54	0.00	2.08	3.32	5.37	0.15	0.00	5.03	2.27	3.63	
2	60.76	0.87	611.	7.00	2.66	5.94	0.17	2.90	1.63	4.01	0.16	0.00	4.70	0.52	3.48	
3	80.05	1.01	733.	7.12	3.50	7.99	0.53	3.09	1.66	5.40	0.18	0.00	5.28	1.51	3.54	
4	85.67	1.04	767.	7.52	3.21	7.55	0.18	2.73	2.66	5.27	0.17	0.00	5.36	2.16	3.09	
5	86.91	1.04	784.	7.43	3.24	7.69	0.55	3.19	2.18	5.30	0.24	0.00	5.92	1.96	3.02	
6	77.64	1.35	981.	7.68	4.16	10.12	0.00	3.59	2.83	7.45	0.24	0.00	6.06	3.11	4.94	
7	80.20	1.24	897.	8.27	3.36	8.08	0.00	4.33	2.29	6.10	0.21	0.00	5.40	3.16	4.33	
8	88.12	1.05	741.	7.64	2.19	5.30	0.00	3.37	3.16	3.95	0.22	0.00	5.46	1.42	3.81	
9	93.29	1.05	747.	7.05	2.28	5.53	0.00	2.93	3.53	4.10	0.22	0.00	5.47	1.61	3.70	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	88.73	1.11	806.	7.16	2.22	5.43	0.00	4.17	2.97	4.19	0.24	0.00	5.37	2.61	3.59	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 13 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3	MM3					SAR	RSC								
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	75.61	0.95	675.	7.19	1.83	4.41	0.00	4.29	1.87	3.22	0.19	0.00	5.36	0.65	3.57	
4	63.54	1.01	711.	7.11	2.22	5.21	0.00	4.20	1.94	3.89	0.22	0.00	4.75	1.58	3.93	
5	73.14	0.96	719.	7.18	2.28	5.54	0.17	4.71	1.12	3.90	0.15	0.00	6.00	0.96	2.92	
6	71.83	0.93	687.	7.39	2.15	5.15	0.10	4.64	0.93	3.59	0.29	0.00	5.67	0.71	3.07	
7	71.69	1.01	791.	7.59	2.69	6.62	0.86	3.89	1.92	4.58	0.34	0.00	6.67	1.58	2.49	
8	80.39	1.10	826.	7.62	3.16	7.65	0.00	2.27	3.78	5.30	0.16	0.00	5.95	2.79	2.97	
9	80.35	1.12	839.	7.24	4.52	10.34	0.90	2.17	2.56	6.94	0.13	0.00	5.63	2.89	3.31	
10	82.72	1.05	775.	7.25	3.25	7.69	0.22	2.47	3.02	5.38	0.04	0.00	5.71	2.09	3.25	
11	78.72	1.05	772.	7.45	3.14	7.33	0.00	3.57	2.08	5.26	0.02	0.00	5.13	2.65	3.19	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 7 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3	MM3					SAR	RSC								
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	27.63	1.16	776.	7.24	3.26	7.40	0.00	3.64	2.16	5.56	0.16	0.00	4.33	1.98	5.21	
6	25.70	1.08	768.	7.79	3.30	7.57	0.00	3.39	2.05	5.44	0.16	0.00	4.84	2.24	3.97	
7	28.86	1.07	804.	7.78	3.74	8.57	0.10	3.54	1.53	5.94	0.21	0.00	5.18	3.03	3.03	
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	29.46	0.97	699.	8.03	3.07	6.57	0.00	2.46	2.65	4.91	0.09	0.00	3.56	4.07	2.49	
10	23.67	0.98	669.	7.62	1.86	4.27	0.00	3.44	3.09	3.36	0.03	0.00	4.04	2.36	3.52	
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EB06 : SA/DA PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 : PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: Q=GO+B+H

Q = DISCHARGE IN M³/SEC
 GO = 0.735 = DISCHARGE IN M³/SEC AT ZERO SUCTION HEAD
 B = 0.000 = SLOPE OF CAPACITY CURVE
 H = 0.000 = SUCTION HEAD IN M
 QCAP = 0.735 = AVERAGE PUMP CAPACITY IN M³/SEC
 HAV = 0.450 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	1.22	1.34	973.	7.49	3.01	7.64	0.00	5.15	2.73	5.97	0.16	0.00	6.44	2.57	4.99
2	0.61	1.30	934.	7.18	2.09	5.45	0.00	4.59	4.27	4.40	0.31	0.00	6.63	2.07	4.88
3	1.84	1.35	970.	7.37	1.93	5.12	0.00	4.23	5.34	4.21	0.38	0.00	7.05	2.08	5.03
4	1.69	1.57	1073.	7.56	3.94	9.39	0.00	4.36	3.73	7.93	0.19	0.00	4.49	4.86	6.86
5	1.93	1.20	804.	7.84	2.85	6.58	0.00	3.26	3.36	5.18	0.25	0.00	4.26	2.64	3.15
6	2.00	1.12	791.	7.59	2.79	6.64	0.00	3.47	2.91	4.99	0.14	0.00	5.08	2.25	4.17
7	2.07	1.50	1001.	7.62	5.04	11.98	0.00	3.69	2.26	8.69	0.23	0.00	5.83	1.22	7.81
8	2.43	2.39	1463.	7.95	11.03	24.51	0.43	2.71	2.29	17.44	0.36	0.00	5.44	1.52	15.85
9	2.67	1.27	865.	7.57	3.74	8.89	0.00	3.12	2.82	6.45	0.32	0.00	3.56	1.16	6.00
10	2.37	1.60	1249.	7.54	5.03	12.96	0.53	4.05	3.23	9.64	0.55	0.00	7.81	5.26	4.41
11	2.01	1.76	1316.	7.83	3.79	10.24	0.00	5.14	4.84	8.46	0.52	0.00	8.30	4.40	6.26
12	2.15	1.89	1339.	7.75	4.10	10.39	0.00	4.73	5.86	9.43	0.25	0.00	5.36	7.29	7.62
1980	23.01	1.34	1083.	7.61	4.24	10.50	0.00	3.92	3.57	8.21	0.31	0.00	5.99	3.14	6.88

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	1.84	1.30	874.	7.28	3.79	8.75	0.00	2.24	3.64	6.49	0.62	0.00	4.84	2.25	5.90
2	1.70	1.15	764.	7.13	4.10	9.23	0.40	2.52	2.19	6.29	0.24	0.00	5.11	0.34	5.80
3	2.01	1.71	793.	7.58	3.45	8.04	0.00	2.89	2.94	5.90	0.14	0.00	4.98	0.86	6.03
4	1.79	1.36	971.	7.94	2.85	7.28	0.00	3.34	4.92	5.80	0.20	0.00	6.33	2.85	5.07
5	2.08	1.06	746.	7.65	2.18	5.32	0.00	2.86	3.85	3.99	0.16	0.00	5.52	1.44	3.91
6	2.46	1.31	1017.	8.14	3.67	9.01	0.00	3.53	3.78	7.02	0.37	0.00	5.68	4.65	4.37
7	2.96	1.67	1257.	8.19	4.96	12.12	0.00	5.41	2.17	9.65	0.79	0.00	5.63	6.96	3.42
8	3.90	1.30	862.	7.93	2.98	7.20	0.00	4.20	2.85	5.59	0.25	0.00	5.22	1.19	6.48
9	3.23	1.19	805.	7.81	2.78	6.71	0.00	4.05	2.56	5.05	0.20	0.00	5.41	0.82	5.63
10	3.19	1.31	901.	7.75	3.32	7.97	0.00	4.21	2.70	6.17	0.20	0.00	5.17	2.51	3.60
11	3.01	1.20	839.	7.65	2.52	6.06	0.00	3.31	4.11	4.86	0.17	0.00	4.76	3.28	4.42
12	2.52	1.14	793.	7.78	2.93	7.00	0.00	3.33	2.94	5.19	0.11	0.00	5.30	1.68	4.60
1981	30.69	1.28	892.	7.68	3.26	7.85	0.00	3.65	3.15	6.01	0.29	0.00	5.31	2.47	5.31

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	2.10	1.28	892.	7.47	3.87	9.11	0.00	4.60	1.25	6.62	0.08	0.00	5.40	0.57	6.56
2	1.34	1.73	1162.	7.60	3.60	9.39	0.00	6.62	2.81	7.82	0.16	0.00	6.79	1.45	9.17
3	1.98	1.17	810.	7.19	2.48	6.04	0.00	4.63	2.32	4.62	0.26	0.00	5.38	1.28	5.17
4	2.63	0.93	659.	7.32	2.23	5.13	0.00	3.33	2.39	3.77	0.13	0.00	4.57	1.13	3.91
5	2.94	1.07	767.	7.57	2.79	6.68	0.00	3.40	2.66	4.85	0.10	0.00	5.49	1.63	3.89
6	2.35	1.13	807.	7.47	2.93	6.94	0.00	4.65	1.51	5.14	0.24	0.00	5.18	2.12	4.25
7	3.12	1.21	873.	7.63	3.89	9.30	0.28	3.91	1.79	6.56	0.18	0.00	5.97	1.73	4.74
8	3.58	1.14	813.	7.62	4.10	9.51	0.57	2.66	2.40	6.52	0.07	0.00	5.64	1.65	4.36
9	3.02	1.47	1045.	7.54	4.94	11.86	0.00	2.27	4.12	8.83	0.09	0.00	5.82	3.98	5.56
10	3.43	1.12	795.	7.49	3.91	8.81	0.00	2.90	2.25	6.28	0.03	0.00	4.71	2.60	4.28
11	2.90	1.34	938.	7.59	4.23	9.70	0.00	3.69	2.57	7.48	0.04	0.00	4.52	4.08	5.32
12	2.87	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	32.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 10 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	2.25	1.43	902.	7.47	3.90	8.83	0.00	4.22	2.44	7.11	0.12	0.00	3.99	2.07	7.83
2	1.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	2.46	1.35	923.	7.35	4.69	10.58	0.00	3.48	2.15	7.88	0.15	0.00	4.52	3.28	5.86
4	2.32	1.38	898.	7.09	4.33	9.41	0.00	3.17	2.81	7.49	0.20	0.00	3.59	3.47	6.62
5	2.47	1.20	852.	7.94	3.96	9.13	0.00	3.45	2.07	6.58	0.19	0.00	5.02	2.77	4.50
6	2.68	1.18	837.	8.24	3.10	7.30	0.00	3.26	3.07	5.50	0.35	0.00	4.96	2.85	4.37
7	3.34	1.10	793.	8.53	3.62	8.30	0.00	3.31	1.96	5.88	0.18	0.00	5.00	2.48	3.84
8	3.00	1.18	813.	8.17	3.13	7.31	0.00	2.39	4.12	5.65	0.11	0.00	4.62	3.33	3.94
9	2.47	1.12	769.	7.84	3.34	7.10	0.00	2.82	2.90	5.65	0.11	0.00	3.24	4.29	3.93
10	2.47	1.08	757.	8.27	2.14	4.82	0.00	4.09	3.05	4.04	0.07	0.00	3.45	4.42	3.38
11	1.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	1.99	1.03	701.	8.11	2.63	5.88	0.00	3.40	2.40	4.48	0.09	0.00	3.95	2.28	4.14
1983	28.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB07 : SAUD BRIDGE YEAR : 1980 CODE : 21
 MEASUREMENT POINT CODE: 21 ; OPEN DRAIN ; BASIC DATA: WATER LEVEL MEASUREMENTS

DISCHARGE RELATION : $G = A + B * HM$
 G = DISCHARGE IN M³/SEC
 A = 69.688 $- G$ INTERCEPT FOR HM = 0
 B = -18.683 SLOPE OF G-HM RELATION
 HM = DISTANCE TO WATERLEVEL FROM FIXED POINT
 $R^2 = 0.640$ CORRELATION COEFFICIENT

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH		TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC				SAR	RSC								
1	84.58	1.26	903	7.31	3.03	7.58	0.00	4.08	3.02	5.71	0.21	0.00	6.32	1.81	4.87
2	74.83	1.55	1064	7.35	4.41	10.93	0.00	4.27	2.88	8.35	0.20	0.00	6.26	2.21	7.22
3	82.42	1.19	950	7.56	2.42	6.37	0.00	4.31	4.11	4.97	0.18	0.00	7.44	1.66	4.49
4	74.68	1.18	822	7.38	3.21	7.37	0.00	3.31	2.93	5.67	0.20	0.00	4.35	3.26	4.50
5	70.07	1.09	760	7.25	2.77	6.43	0.00	3.15	2.90	4.83	0.24	0.00	4.59	2.37	4.16
6	76.21	1.04	731	7.28	2.33	5.64	0.00	3.96	2.22	4.09	0.22	0.00	5.71	0.38	4.39
7	84.11	1.14	766	7.46	3.93	8.79	0.00	2.98	1.96	6.17	0.16	0.00	4.70	1.21	5.34
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	92.31	1.06	748	7.43	2.86	6.77	0.00	3.28	2.38	4.80	0.27	0.00	5.51	1.07	4.08
10	92.14	1.11	789	7.31	1.99	4.40	0.00	3.95	2.81	3.66	0.84	0.00	5.71	1.09	4.46
11	86.24	1.33	994	7.54	2.81	7.12	0.00	4.58	3.03	5.47	0.95	0.00	6.50	3.12	4.41
12	94.51	1.43	1062	7.47	3.48	8.76	0.00	4.11	3.85	6.94	0.41	0.00	6.13	4.62	4.57
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH		TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC				SAR	RSC								
1	62.21	1.23	862	7.08	3.51	8.16	0.00	2.35	3.49	5.99	0.71	0.00	5.00	2.75	4.80
2	56.51	1.01	684	7.19	3.88	8.44	0.59	1.69	2.46	5.98	0.23	0.00	4.73	0.73	4.49
3	79.10	1.11	793	7.36	2.67	6.79	0.00	3.06	2.93	4.97	0.45	0.00	5.22	2.10	4.09
4	83.67	1.10	811	7.40	3.32	8.00	0.48	2.46	3.19	5.59	0.24	0.00	6.14	1.71	3.63
5	87.07	0.99	731	7.17	2.75	6.50	0.17	3.85	1.57	4.53	0.24	0.00	5.39	1.38	3.22
6	75.90	1.04	773	7.69	2.18	5.41	0.00	4.06	2.65	3.99	0.22	0.00	6.06	1.36	3.50
7	80.08	1.13	826	7.82	2.92	7.02	0.00	3.42	3.00	5.23	0.21	0.00	5.39	2.80	3.66
8	91.30	1.13	813	7.63	2.37	5.84	0.00	3.79	3.42	4.51	0.22	0.00	5.54	1.47	4.92
9	96.04	1.21	887	7.45	2.11	5.26	0.00	3.50	3.00	4.34	0.22	0.00	5.28	3.97	3.81
10	97.63	1.14	822	7.42	2.61	6.36	0.00	3.45	3.37	4.83	0.22	0.00	5.44	2.62	3.81
11	91.81	1.15	817	7.32	2.75	6.57	0.00	3.91	2.72	5.00	0.23	0.00	5.12	2.41	4.34
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 10 WATER SAMPLES

MONTH	DISCH		TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC				SAR	RSC								
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	94.47	1.15	798	7.17	1.91	4.59	0.00	4.56	3.35	3.81	0.12	0.00	4.38	3.34	4.13
4	86.25	1.11	789	7.16	2.39	5.92	0.00	3.69	3.03	4.39	0.22	0.00	6.02	1.03	4.29
5	88.54	1.06	760	7.28	2.57	6.24	0.00	3.14	3.03	4.52	0.20	0.00	5.75	1.25	3.89
6	81.05	1.05	768	7.31	2.84	6.74	0.00	4.13	1.68	4.84	0.18	0.00	5.43	1.95	3.44
7	84.32	1.12	874	7.47	3.69	8.97	0.97	4.30	1.32	6.19	0.17	0.00	6.59	2.36	3.02
8	93.33	1.13	889	7.33	4.74	11.11	1.70	2.88	1.87	7.30	0.13	0.00	6.44	3.09	2.64
9	90.35	1.17	868	7.26	4.56	10.39	0.34	2.77	2.19	7.17	0.14	0.00	5.30	3.59	3.39
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 9 WATER SAMPLES

MONTH	DISCH		TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC				SAR	RSC								
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	78.65	1.09	760	7.66	3.73	8.11	0.00	2.81	2.20	5.90	0.17	0.00	4.00	3.18	3.90
6	76.88	1.19	857	7.63	4.02	9.18	0.00	3.14	2.39	6.69	0.15	0.01	4.78	3.64	3.94
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	89.91	1.30	929	8.17	4.57	10.86	0.48	3.12	2.46	7.63	0.26	0.45	5.61	2.63	4.76
9	86.93	1.10	800	8.18	3.05	6.98	0.00	3.37	2.72	5.31	0.15	0.02	4.37	3.99	3.18
10	86.19	1.10	759	7.86	2.40	5.62	0.00	3.57	3.15	4.40	0.11	0.00	4.43	2.62	4.18
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	87.38	1.02	692	7.21	2.65	5.72	0.00	3.46	2.11	4.42	0.26	0.00	3.46	2.66	4.14
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB08 : BAHR BAGAR BRIDGE YEAR : 1980 CODE : 23
 MEASUREMENT POINT CODE: 23 ; OPEN DRAIN ; BASIC DATA: WATERLEVEL AND FLOAT MEASUREMENTS

DISCHARGE RELATION: Q=0.85*AS*VF

Q - DISCHARGE IN M³/SEC PER SECOND
 0.85 - FACTOR
 AS - WETTED CROSS SECTION IN M²
 VF - FLOAT VELOCITY IN M PER SECOND

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 23 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	96.74	1.50	1102.	7.27	2.03	5.45	0.00	6.06	5.05	4.77	0.24	0.00	6.91	4.11	5.10
2	81.63	1.55	1125.	7.43	2.77	7.31	0.00	5.50	4.57	6.21	0.22	0.00	6.82	3.84	5.84
3	72.98	1.27	954.	7.18	2.48	6.49	0.00	4.84	3.41	5.04	0.20	0.00	7.23	2.33	3.94
4	89.24	1.23	899.	7.26	2.89	7.30	0.00	3.49	3.73	5.50	0.14	0.00	6.58	2.06	4.27
5	61.23	1.11	755.	7.31	2.23	5.26	0.00	3.58	3.28	4.14	0.23	0.00	4.45	2.23	4.55
6	73.03	1.10	769.	7.30	2.94	7.01	0.00	3.61	2.26	5.04	0.19	0.00	5.52	0.94	4.64
7	96.37	1.14	810.	7.53	3.96	9.33	1.13	3.51	1.50	6.26	0.19	0.00	6.14	0.53	4.79
8	106.37	1.11	795.	7.24	2.56	6.09	0.03	3.37	2.22	4.28	1.36	0.00	5.61	0.81	4.73
9	92.09	1.10	786.	7.39	2.66	6.43	0.00	3.27	2.73	4.61	0.59	0.00	5.80	1.06	4.32
10	75.98	1.12	808.	7.34	2.25	5.69	0.00	3.99	3.18	4.26	0.16	0.00	6.54	0.60	4.44
11	68.99	1.32	973.	7.35	2.20	5.70	0.00	4.49	4.00	4.54	0.88	0.00	6.60	2.79	4.48
12	93.51	1.45	1116.	7.39	4.07	10.13	0.00	3.82	3.91	8.00	0.22	0.00	6.02	6.41	3.52
1980	1030.16	1.26	912.	7.33	2.73	6.85	0.00	4.12	3.31	5.26	0.41	0.00	6.21	2.33	4.56

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	83.50	1.17	840.	7.27	3.86	8.84	0.00	2.28	3.16	6.36	0.32	0.00	4.90	3.30	3.93
2	68.25	1.15	786.	7.10	3.16	7.48	0.00	3.29	2.49	5.38	0.29	0.00	5.40	0.89	5.17
3	101.82	1.08	768.	7.27	3.06	7.23	0.00	3.38	2.27	5.13	0.21	0.00	5.50	1.34	4.15
4	81.57	1.37	1044.	7.37	4.98	11.81	0.00	2.99	3.01	8.62	0.21	0.00	5.71	5.52	3.61
5	80.21	1.10	810.	7.25	2.85	6.90	0.00	3.81	2.41	5.02	0.23	0.00	5.81	2.04	3.61
6	55.93	1.07	754.	7.58	1.10	2.77	0.00	4.82	3.76	2.27	0.20	0.00	5.36	1.89	3.78
7	99.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	107.05	1.07	732.	7.62	2.99	7.02	0.00	3.12	2.36	4.96	0.21	0.00	5.37	0.36	4.92
9	92.64	1.05	735.	7.25	2.61	6.20	0.00	3.07	2.86	4.49	0.22	0.00	5.34	1.02	4.28
10	88.96	1.16	827.	7.21	3.13	7.42	0.00	3.44	2.81	5.53	0.22	0.00	5.16	2.54	4.29
11	103.12	1.19	827.	7.19	2.57	6.20	0.00	3.34	3.79	4.85	0.24	0.00	4.98	2.64	4.60
12	113.77	1.24	901.	7.26	3.26	7.87	0.00	3.72	2.84	5.91	0.44	0.00	5.51	3.17	4.23
1981	1075.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	99.75	1.21	939.	7.17	2.98	7.25	0.00	3.86	2.84	5.45	0.15	0.00	5.65	1.40	5.19
2	79.80	1.30	936.	7.54	2.78	7.11	0.00	4.85	2.99	5.51	0.14	0.00	6.65	1.77	5.07
3	100.91	1.17	845.	7.37	2.64	6.44	0.00	4.27	2.71	4.93	0.26	0.00	5.45	2.60	4.11
4	72.62	1.34	993.	7.14	3.82	9.49	0.00	3.72	3.19	7.09	0.24	0.00	6.43	2.99	4.82
5	83.02	1.12	803.	7.19	3.12	7.49	0.00	3.55	2.36	5.36	0.19	0.00	5.81	1.42	4.23
6	82.94	1.14	823.	7.32	3.52	8.30	0.00	3.27	2.35	5.89	0.24	0.00	5.58	2.03	4.15
7	87.17	1.22	932.	7.39	4.36	10.34	1.29	3.54	1.90	7.19	0.28	0.00	6.73	2.57	3.61
8	110.97	1.23	924.	7.40	4.47	10.69	0.86	2.69	2.78	7.39	0.15	0.00	6.33	2.99	3.70
9	104.88	1.32	991.	7.35	4.75	11.31	0.03	3.38	3.48	8.13	0.14	0.00	5.89	4.54	3.70
10	92.07	1.36	1003.	7.18	2.81	6.95	0.00	2.07	6.86	5.93	0.05	0.00	5.04	4.56	3.31
11	93.81	1.05	750.	7.41	2.90	6.63	0.00	3.37	2.47	4.95	0.03	0.00	4.44	3.10	3.30
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	85.95	1.19	796.	7.21	4.46	9.58	0.00	3.04	1.71	6.86	0.19	0.00	4.07	2.20	5.53
5	96.09	1.43	963.	7.42	4.84	10.74	0.00	3.63	2.29	8.33	0.16	0.00	4.06	3.93	6.43
6	108.55	1.29	911.	7.80	4.61	10.42	0.00	3.85	1.63	7.63	0.12	0.00	4.68	3.58	4.98
7	116.34	1.24	907.	7.64	4.27	9.89	0.00	3.73	1.93	7.18	0.13	0.00	5.13	3.83	4.00
8	111.00	1.29	952.	7.84	5.37	12.09	0.00	2.60	2.44	8.52	0.12	0.12	4.89	4.82	3.84
9	109.04	1.07	757.	8.39	3.30	7.26	0.00	2.34	3.22	5.50	0.10	0.18	3.70	4.11	3.16
10	113.16	1.17	779.	7.89	2.07	4.97	0.00	3.59	4.18	4.09	0.07	0.43	4.05	2.75	4.72
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	116.29	1.02	683.	7.33	2.43	5.28	0.00	3.46	2.36	4.14	0.23	0.02	3.39	2.66	4.14
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB09 : BAHR BADAR IRR PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: II ; PUMP STATION ; BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $G=00+B\cdot H$
 G = DISCHARGE IN M³/SEC
 QD = 0.364 = DISCHARGE IN M³/SEC AT ZERO SUCTION HEAD
 B = 0.000 = SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 QCAP = 0.364 = AVERAGE PUMP CAPACITY IN M³/SEC
 HAV = 2.600 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	3.34	1.36	960	7.08	3.03	7.65	0.00	3.16	2.62	5.98	0.21	0.00	6.27	1.88	3.83
2	2.52	1.27	905.	7.17	3.06	7.55	0.00	3.67	3.49	5.00	0.22	0.00	5.77	2.60	4.61
3	3.56	1.21	887.	7.43	2.10	5.48	0.00	3.36	4.70	4.28	0.19	0.00	6.96	1.79	4.03
4	3.71	1.23	807.	7.36	2.96	6.77	0.00	3.54	3.11	5.40	0.19	0.00	4.05	2.32	3.89
5	3.67	1.19	794.	7.47	2.76	6.26	0.00	3.51	3.20	5.06	0.18	0.00	3.80	3.17	4.98
6	3.57	1.11	769.	7.53	1.89	4.60	0.00	4.26	3.29	3.67	0.13	0.00	4.96	2.09	4.28
7	4.04	1.12	812.	7.47	3.02	7.28	0.00	4.01	1.90	5.19	0.36	0.00	5.88	1.30	4.36
8	4.03	1.09	784.	7.33	2.57	6.07	0.00	3.66	2.16	4.38	0.90	0.00	5.23	1.60	4.30
9	3.64	0.96	672.	7.28	2.31	5.33	0.00	3.13	2.26	3.80	0.46	0.00	4.75	1.02	3.88
10	3.59	1.02	729.	7.35	2.15	5.20	0.00	3.46	2.62	3.75	0.52	0.00	5.64	0.85	3.86
11	3.87	1.20	894.	7.21	2.20	5.66	0.00	4.45	3.63	4.42	0.20	0.00	6.63	2.33	3.81
12	3.00	1.06	786.	7.53	3.62	8.15	0.00	2.76	2.41	5.83	0.13	0.00	4.64	3.66	2.89
1980	42.93	1.15	814.	7.33	2.39	6.28	0.00	3.78	2.93	4.75	0.32	0.00	5.38	2.01	4.41

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	3.85	0.90	629.	7.04	3.22	6.83	0.00	1.83	2.41	4.69	0.15	0.00	3.98	2.05	3.05
2	2.67	1.18	806.	7.02	3.69	6.58	0.00	2.59	2.91	6.12	0.23	0.00	5.24	1.29	5.32
3	3.33	1.09	745.	7.14	3.49	7.91	0.00	3.32	1.76	5.56	0.18	0.00	4.85	1.18	4.78
4	3.26	0.86	601.	7.43	2.52	5.59	0.00	2.66	1.97	3.83	0.15	0.00	4.50	0.83	3.27
5	3.36	0.97	714.	7.34	3.13	7.09	0.00	3.20	1.77	4.93	0.21	0.00	4.81	1.99	3.31
6	3.02	.46	997.	7.65	2.87	7.26	0.00	4.48	4.23	5.99	0.23	0.00	5.80	2.50	6.63
7	3.33	1.58	926.	7.74	1.70	4.26	0.00	4.54	6.31	3.96	0.30	0.00	4.56	0.34	10.21
8	3.92	1.14	757.	7.53	2.25	5.42	0.00	3.55	3.37	4.18	0.21	0.00	5.11	0.74	5.46
9	3.44	1.00	705.	7.22	2.10	4.94	0.00	3.51	2.77	3.73	0.20	0.00	4.67	2.09	3.45
10	3.21	1.01	707.	7.45	2.22	5.15	0.00	3.21	3.01	3.91	0.18	0.00	4.44	2.37	3.50
11	3.45	1.16	812.	7.36	2.79	6.57	0.00	3.72	2.90	5.08	0.19	0.00	4.69	2.91	4.28
12	3.17	0.90	640.	7.51	2.41	5.30	0.00	3.02	2.15	3.87	0.18	0.00	3.94	2.38	2.91
1981	40.03	1.10	750.	7.32	2.61	6.11	0.00	3.29	2.96	4.62	0.20	0.00	4.70	1.72	4.63

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	3.15	1.13	785.	7.23	2.59	6.27	0.00	4.06	2.51	4.69	0.18	0.00	5.46	1.10	4.87
2	1.80	1.47	1050.	7.29	2.49	6.61	0.00	5.28	4.52	5.51	0.17	0.00	7.03	2.23	6.21
3	2.96	0.93	670.	7.18	1.89	4.44	0.00	4.00	2.19	3.32	0.13	0.00	4.69	1.68	3.26
4	2.70	.35	924.	7.11	3.14	7.75	0.00	4.33	3.18	6.08	0.16	0.00	5.64	2.00	6.01
5	2.81	1.09	799.	7.27	3.16	7.60	0.25	3.68	2.08	5.35	0.19	0.00	6.01	1.37	3.91
6	2.85	1.04	786.	7.46	2.91	6.90	0.00	3.71	2.24	5.01	0.28	0.00	5.37	1.83	4.04
7	3.93	0.83	639.	7.61	2.81	6.33	0.80	2.84	1.32	4.15	0.20	0.00	5.16	1.58	1.97
8	3.85	0.63	457.	7.49	2.18	4.37	0.10	2.07	1.35	2.85	0.09	0.00	3.52	1.19	1.64
9	3.17	1.01	719.	7.19	3.32	7.37	0.00	1.55	3.52	5.28	0.11	0.00	4.35	2.95	3.17
10	3.51	0.63	444.	7.62	1.76	3.62	0.00	1.85	1.96	2.43	0.03	0.00	3.50	0.97	1.85
11	3.17	0.79	551.	7.82	2.32	4.86	0.00	2.77	1.70	3.47	0.03	0.00	3.45	1.85	2.67
12	3.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	37.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC								
1	3.09	0.91	630.	7.64	1.92	4.37	0.00	3.84	1.90	3.26	0.16	0.00	4.16	1.46	3.53
2	2.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	2.93	0.86	585.	7.57	3.04	6.15	0.00	2.38	1.71	4.34	0.11	0.00	3.31	1.98	3.25
4	3.19	0.75	486.	7.56	2.39	4.71	0.00	1.72	2.13	3.32	0.11	0.00	2.99	0.92	3.36
5	3.51	1.07	762.	7.34	3.26	7.17	0.00	3.56	1.96	3.41	0.13	0.00	3.87	3.72	3.47
6	3.43	1.02	715.	7.70	2.67	6.01	0.00	3.14	2.67	4.55	0.10	0.00	4.09	2.87	3.50
7	3.73	1.09	786.	7.99	3.61	8.10	0.00	3.26	1.91	5.80	0.29	0.01	4.58	2.96	3.71
8	3.92	1.00	689.	8.38	4.09	8.70	0.24	1.97	2.10	5.84	0.18	0.30	4.01	1.95	3.82
9	3.51	1.03	742.	8.60	3.39	7.52	0.00	2.73	2.44	5.45	0.14	0.39	3.90	3.80	2.67
10	4.03	1.08	765.	7.28	2.46	5.73	0.00	3.69	3.08	4.54	0.05	0.41	3.85	3.87	3.24
11	3.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	3.70	0.97	657.	6.73	2.11	4.79	0.00	3.55	2.43	3.65	0.07	0.02	4.01	1.80	3.88
1983	40.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB10 : BAHR BAGAR DRAINAGE PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE 11 : PUMP STATION : BASIC DATA PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION Q=GO+B*H
 Q = DISCHARGE IN M³/SECOND
 GO = 6 112 = DISCHARGE IN M³/SECOND AT ZERO SUCTION HEAD
 B = 0 000 = SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 QCAP = 6.112 = AVERAGE PUMP CAPACITY IN M³/SECOND
 MAV = 1.590 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	18.20	6.37	3787.	7.56	12.53	32.34	0.00	9.87	11.96	41.40	0.57	0.00	4.50	8.76	50.34
2	10.34	5.36	3355	7.53	13.29	35.12	0.00	6.99	9.60	38.27	0.71	0.00	6.24	5.05	44.28
3	13.49	6.85	4029	7.62	14.91	40.76	0.00	7.46	12.45	47.05	0.41	0.00	7.06	5.08	55.24
4	14.54	4.91	2942	7.52	11.84	31.50	0.00	6.56	8.67	32.67	0.37	0.00	6.73	4.57	36.97
5	13.05	6.67	3831	7.51	14.96	36.54	0.00	6.51	12.19	45.76	0.61	0.00	3.74	6.04	55.29
6	11.73	8.55	5150	7.13	14.15	40.70	0.00	13.37	16.81	54.97	1.44	0.00	7.71	7.36	71.53
7	11.16	8.65	5504	7.49	18.22	50.75	0.00	11.85	13.21	64.50	0.69	0.00	7.26	17.07	65.90
8	18.20	6.12	3782	7.44	13.32	34.84	0.00	9.42	10.50	42.04	0.36	0.00	5.21	11.47	45.66
9	23.63	5.15	3208	7.47	12.26	31.22	0.00	8.08	8.45	35.26	0.55	0.00	4.89	10.44	37.05
10	24.60	5.03	3171	7.54	11.36	31.05	0.00	9.08	8.39	33.58	0.24	0.00	7.27	8.21	35.81
11	22.22	3.68	3869	7.26	11.72	32.81	0.00	10.68	11.09	38.65	1.60	0.00	7.49	14.46	40.06
12	23.41	6.14	4209	7.32	14.35	37.19	0.00	8.94	11.37	45.74	0.73	0.00	4.94	25.46	36.39
1980	204.56	6.13	3811.	7.43	13.28	35.55	0.00	9.06	10.87	41.91	0.66	0.00	6.02	11.13	45.37

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	19.25	4.86	3122.	7.36	12.43	31.28	0.00	4.17	11.28	34.56	0.59	0.00	4.78	13.41	32.41
2	8.65	6.47	3925.	7.10	11.05	31.21	0.00	15.19	10.19	39.37	0.27	0.00	7.14	7.57	50.31
3	13.84	5.96	3555	7.21	12.02	31.23	0.00	11.43	9.11	38.51	0.24	0.00	4.82	7.89	46.54
4	15.38	4.41	2687.	7.42	9.64	24.30	0.00	6.89	9.47	27.58	0.35	0.00	4.44	8.30	31.53
5	11.97	5.49	3248.	7.50	10.78	28.03	0.00	8.87	11.11	34.06	0.35	0.00	4.83	7.08	42.49
6	9.75	6.43	4351.	8.07	14.50	38.83	0.00	10.48	11.14	47.68	0.45	0.00	5.82	21.71	42.21
7	12.23	5.05	3478.	8.17	15.13	38.99	0.00	7.59	6.05	39.52	0.58	0.00	6.23	20.55	26.97
8	19.21	4.45	2536	7.73	8.09	21.08	0.00	8.43	9.69	24.36	0.36	0.00	4.90	2.59	35.34
9	19.47	4.03	2276	7.27	5.64	15.12	0.00	6.91	13.66	18.09	0.31	0.00	5.14	2.49	31.35
10	19.52	3.67	2180	7.61	8.32	20.68	0.00	6.47	7.31	21.85	0.27	0.00	4.45	4.99	26.48
11	17.12	5.95	3567.	7.53	12.03	31.03	0.00	10.56	9.91	38.49	0.46	0.00	4.62	8.65	46.15
12	18.35	5.93	3594	7.57	10.02	26.57	0.00	10.48	14.22	35.21	0.34	0.00	4.75	10.55	44.95
1981	184.74	5.06	3091.	7.46	10.34	26.95	0.00	8.51	10.38	31.78	0.38	0.00	3.02	8.91	37.13

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	16.06	7.08	4199.	7.16	11.27	30.81	0.00	12.71	15.54	42.35	0.43	0.00	5.44	8.70	56.89
2	9.29	9.35	5840.	7.28	15.09	43.28	0.00	18.14	16.13	62.49	0.43	0.00	7.10	16.19	73.90
3	12.39	4.85	2902	7.18	10.23	26.15	0.00	8.48	9.17	30.39	0.19	0.00	4.66	7.11	36.41
4	12.52	5.46	3348.	7.16	10.91	29.47	0.00	8.60	11.74	34.78	0.36	0.00	4.90	10.28	40.29
5	13.60	6.23	3777	7.30	12.17	32.20	0.00	10.54	11.50	40.30	0.42	0.00	5.18	9.79	47.86
6	13.62	7.47	4684.	7.31	13.94	37.79	0.00	12.23	14.03	50.50	0.63	0.00	5.59	16.07	55.64
7	17.43	4.40	4226.	7.37	13.94	38.17	0.00	10.59	11.16	45.98	0.39	0.00	6.65	17.84	43.60
8	23.85	5.69	3808.	7.19	15.79	40.74	0.00	8.62	6.92	44.31	0.23	0.00	5.75	18.81	35.72
9	20.68	4.96	3235.	7.50	15.11	38.36	0.00	7.48	5.42	38.38	0.20	0.00	5.91	12.18	33.42
10	24.23	2.93	1842.	7.39	8.50	20.33	0.00	4.74	5.42	19.15	0.05	0.00	4.44	6.45	18.59
11	23.68	4.99	3005.	7.79	11.42	28.01	0.00	8.06	8.68	33.04	0.07	0.00	3.89	8.76	37.21
12	24.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	214.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	22.00	4.00	2327.	7.70	8.38	21.41	0.00	7.66	7.63	23.17	0.26	0.00	4.89	3.45	30.32
2	7.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	14.43	4.25	2589.	7.81	9.09	22.31	0.00	6.22	10.14	25.99	0.43	0.00	3.81	9.01	29.97
4	13.49	4.82	2807.	7.48	10.78	25.99	0.00	6.54	9.27	30.32	0.87	0.00	3.63	5.90	37.47
5	12.63	6.08	3619.	7.56	13.71	33.96	0.00	9.86	8.43	41.47	0.54	0.00	4.03	8.32	47.96
6	10.76	8.60	5604.	7.85	17.38	46.48	0.00	13.57	13.33	63.72	1.00	0.00	5.29	22.70	63.63
7	11.24	8.23	5548	7.95	18.04	48.36	0.00	12.16	12.88	63.83	0.53	0.00	5.63	27.76	56.02
8	12.37	7.33	5028.	8.14	19.16	49.20	0.00	9.82	9.46	59.48	0.33	0.00	5.14	32.07	41.88
9	14.37	4.94	3300.	8.12	10.16	25.72	0.00	8.94	11.66	32.62	0.16	0.11	3.91	18.58	30.78
10	16.30	6.98	4480.	7.75	11.98	32.18	0.00	13.40	15.24	45.34	0.09	0.25	4.63	19.05	30.13
11	19.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	26.54	4.99	3263.	7.59	9.80	25.43	0.00	11.04	9.88	31.70	0.23	0.01	4.57	15.47	32.80
1983	181.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EBII : LAHR BAGAR OUTFALL YEAR : 1980 CODE : 24
 THE WATER QUALITY DATA DURING 1980 ARE BASED ON 23 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												SO4	CL
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	3.22	2121.	7.01	8.99	21.91	0.00	3.95	6.00	20.91	0.37	0.00	3.88	8.37	18.99
2	-	3.15	2067.	7.28	8.30	21.17	0.00	3.65	6.20	20.21	0.39	0.00	5.72	8.24	18.49
3	-	2.05	1410.	7.42	4.45	11.95	0.00	3.35	5.40	10.32	0.19	0.00	7.67	3.66	9.84
4	-	2.21	1468.	7.38	6.32	16.13	0.00	5.04	3.90	13.38	0.23	0.00	6.69	4.28	11.56
5	-	2.07	1390.	7.31	6.63	15.83	0.00	3.23	4.72	13.22	0.12	0.00	5.01	6.14	10.14
6	-	2.52	1672.	7.01	6.30	17.02	0.00	5.56	5.07	14.52	0.31	0.00	8.55	2.52	14.42
7	-	1.58	1099.	7.46	4.37	10.84	0.00	4.35	2.90	8.32	0.35	0.00	6.23	2.54	7.37
8	-	1.44	1006.	7.89	2.93	7.21	0.00	3.81	3.58	5.63	1.62	0.00	5.56	2.57	6.51
9	-	2.19	1420.	7.44	5.73	14.26	0.00	4.54	4.41	12.12	0.79	0.00	5.67	3.69	12.30
10	-	1.88	1423.	7.37	5.06	13.15	0.00	5.12	3.70	10.63	0.98	0.00	7.32	6.55	6.56
11	-	2.65	1901.	7.56	9.50	22.88	0.38	4.78	5.59	18.37	0.91	0.00	9.75	2.02	16.91
12	-	2.54	1794.	7.61	7.49	18.90	0.00	4.77	5.29	16.79	0.33	0.00	5.93	9.49	11.85
1980	-	2.31	1563.	7.34	6.27	16.11	0.00	4.84	4.64	13.66	0.57	0.00	6.66	5.01	12.04

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												SO4	CL
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	3.23	2145.	7.48	9.59	24.26	0.00	3.47	7.44	22.41	0.31	0.00	3.92	9.19	18.52
2	-	2.86	1769.	7.06	6.26	16.93	0.00	6.85	5.41	15.50	0.35	0.00	6.61	2.46	19.03
3	-	2.61	1574.	7.13	6.29	15.90	0.00	5.19	5.34	14.42	0.27	0.00	5.64	1.98	17.60
4	-	1.68	1109.	7.45	4.98	12.01	0.00	3.44	3.71	9.41	0.24	0.00	5.47	2.74	6.99
5	-	1.51	1044.	7.31	4.54	10.94	0.00	4.30	2.50	9.37	0.23	0.00	5.60	2.94	6.87
6	-	2.40	1597.	7.69	6.16	15.78	0.00	5.08	5.29	14.04	0.22	0.00	6.11	3.67	12.83
7	-	1.50	1017.	7.99	3.12	7.83	0.00	4.53	4.05	6.45	0.22	0.00	5.70	2.69	6.87
8	-	1.74	1102.	7.56	3.64	9.18	0.00	4.54	4.57	7.76	0.23	0.00	5.67	1.41	10.02
9	-	1.92	1244.	7.19	3.52	9.01	0.00	4.04	6.98	8.25	0.23	0.00	5.40	3.95	10.16
10	-	1.91	1237.	7.33	4.50	11.05	0.00	4.32	4.98	9.70	0.23	0.00	4.94	4.02	10.26
11	-	2.28	1468.	7.26	5.74	14.04	0.00	4.99	4.96	12.81	0.26	0.00	4.75	3.31	12.95
12	-	2.22	1462.	7.29	5.96	14.77	0.00	4.41	5.07	12.97	0.18	0.00	5.34	3.43	11.87
1981	-	2.13	1395.	7.34	5.39	13.53	0.00	4.58	5.02	11.82	0.25	0.00	5.59	3.99	12.09

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 14 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												SO4	CL
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	1.77	1119.	7.00	3.47	8.71	0.00	4.95	4.77	7.65	0.15	0.00	5.22	2.12	10.18
2	-	3.14	1881.	7.37	6.80	17.84	0.00	7.38	5.57	17.30	0.23	0.00	6.18	1.66	22.64
3	-	2.07	1316.	7.12	5.31	13.15	0.00	5.35	3.66	11.26	0.19	0.00	5.43	2.71	12.31
4	-	1.99	1318.	7.13	4.94	12.45	0.00	5.58	3.73	10.67	0.16	0.00	5.75	3.81	10.58
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	2.23	1434.	7.44	5.79	14.26	0.00	5.54	3.85	12.55	0.33	0.00	5.14	4.28	12.86
7	-	2.30	1592.	7.34	7.31	18.49	0.00	5.54	2.93	19.09	0.30	0.00	6.77	9.56	11.50
8	-	2.25	1576.	7.13	8.42	20.30	0.00	4.15	3.16	16.11	0.17	0.00	5.85	7.33	10.41
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	1.51	1037.	7.06	4.65	11.08	0.00	2.82	4.02	8.60	0.03	0.00	5.23	3.64	6.74
11	-	2.11	1392.	7.26	5.88	13.97	0.00	4.80	3.77	12.18	0.12	0.00	4.31	3.97	12.42
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 9 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												SO4	CL
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	2.12	1306.	7.39	5.69	13.23	0.00	4.67	3.96	11.82	0.27	0.00	4.00	3.67	13.04
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	2.91	1695.	7.31	8.99	20.21	0.00	3.63	5.15	18.84	0.19	0.00	3.60	3.41	20.79
5	-	2.14	1430.	7.42	8.34	18.99	0.00	3.79	2.75	19.06	0.17	0.00	4.70	6.07	11.00
6	-	1.78	1269.	7.67	6.56	15.38	0.00	4.43	2.14	11.89	0.18	0.00	5.24	6.01	7.38
7	-	1.80	1309.	7.91	6.58	15.68	0.00	4.36	2.44	12.14	0.21	0.00	5.56	6.71	6.89
8	-	1.71	1218.	7.90	6.52	15.00	0.00	3.78	2.45	11.91	0.18	0.00	4.91	6.42	6.60
9	-	2.01	1312.	7.86	4.96	11.83	0.00	5.56	3.92	10.80	0.11	0.00	4.20	5.61	10.58
10	-	1.90	1266.	7.94	4.64	11.28	0.00	5.32	4.05	10.04	0.07	0.00	4.63	5.42	9.43
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	1.28	822.	7.73	2.66	6.11	0.00	3.71	3.74	9.12	0.10	0.00	3.83	2.67	6.18
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EB12 - BATIKH CANAL YEAR : 1980 CODE : 24
 THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	1.19	807	7.90	2.95	7.00	0.00	3.18	3.24	5.29	0.20	0.00	5.03	1.97	4.92
2	-	1.21	793	7.52	2.56	6.03	0.00	3.54	3.51	4.80	0.17	0.00	4.48	1.72	5.81
3	-	1.40	948	7.82	2.71	6.88	0.00	3.64	4.84	5.59	0.17	0.00	5.94	1.98	6.32
4	-	1.26	663	7.62	4.82	11.07	0.57	2.54	2.36	7.54	0.15	0.00	5.47	1.55	5.55
5	-	1.02	670	7.80	4.06	6.01	0.00	2.37	1.69	5.79	0.17	0.00	3.08	2.47	4.37
6	-	0.98	673	7.66	1.41	3.29	0.00	3.33	3.32	2.58	0.68	0.00	4.13	1.94	3.82
7	-	0.97	692	7.63	3.71	8.07	0.34	2.93	1.32	5.41	0.18	0.00	4.59	1.64	3.61
8	-	0.98	724	7.16	3.34	7.21	0.94	2.83	0.98	4.61	1.45	0.00	4.75	1.64	3.49
9	-	0.70	492	7.37	2.25	4.44	0.00	2.09	1.29	2.93	0.58	0.00	3.23	1.10	2.49
10	-	0.71	480	7.30	0.96	2.12	0.00	2.85	2.35	1.56	0.15	0.00	3.65	0.98	2.32
11	-	0.93	630	7.52	1.60	3.67	0.00	3.32	2.99	2.85	0.17	0.00	4.01	1.76	3.56
12	-	0.77	490	7.46	1.29	2.85	0.00	2.73	2.14	2.02	0.13	0.00	3.90	0.77	2.36
1980	-	1.00	688	7.51	2.57	5.82	0.00	2.94	2.50	4.25	0.35	0.00	4.36	1.63	4.04

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	0.94	585	7.03	3.13	6.53	0.07	1.46	2.42	4.36	0.17	0.00	3.95	1.60	2.86
2	-	1.13	755	7.05	3.66	8.31	0.00	2.54	2.59	5.87	0.16	0.00	4.84	0.96	5.37
3	-	1.12	760	7.56	2.91	6.65	0.00	2.12	3.97	5.06	0.18	0.00	4.27	2.72	4.35
4	-	0.60	431	7.93	2.07	4.11	0.23	2.09	1.15	2.64	0.09	0.00	3.47	0.86	1.64
5	-	0.72	518	7.69	2.23	4.81	0.47	2.50	1.42	3.12	0.16	0.00	4.39	0.41	2.40
6	-	1.03	708	7.51	1.61	3.64	0.00	3.40	3.85	3.07	0.19	0.00	4.51	2.16	3.84
7	-	0.67	452	7.78	2.13	4.10	0.00	1.34	2.04	2.83	0.17	0.00	2.66	1.34	2.39
8	-	0.69	452	7.76	1.53	3.14	0.00	2.44	1.80	2.23	0.17	0.00	3.15	0.62	2.67
9	-	0.61	551	7.35	1.73	3.72	0.00	2.95	2.14	2.75	0.19	0.00	3.52	1.67	2.85
10	-	0.82	560	7.43	1.74	3.68	0.00	2.95	2.33	2.82	0.14	0.00	3.17	2.23	2.86
11	-	0.67	605	7.46	2.00	4.40	0.00	2.76	2.66	3.29	0.11	0.00	3.74	2.23	2.86
12	-	0.70	478	7.73	1.53	3.25	0.00	2.68	1.78	2.28	0.13	0.00	3.57	0.94	2.31
1981	-	0.53	570	7.44	2.16	4.67	0.00	2.45	2.34	3.35	0.16	0.00	3.78	1.48	3.03

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 15 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	0.93	678	7.41	2.82	6.41	0.00	3.31	1.74	4.49	0.10	0.00	4.78	1.51	2.36
2	-	1.06	718	7.72	2.44	5.61	0.00	3.20	3.11	4.33	0.07	0.00	4.24	2.06	4.40
3	-	0.65	462	7.47	1.54	3.22	0.00	2.36	1.81	2.22	0.13	0.00	3.49	1.25	1.79
4	-	0.95	647	7.47	2.30	5.16	0.00	3.33	2.15	3.80	0.17	0.00	4.16	1.47	3.82
5	-	0.85	565	7.54	1.58	3.60	0.00	3.33	2.49	2.69	0.07	0.00	4.12	1.10	3.35
6	-	0.82	552	7.64	1.79	3.85	0.00	3.05	2.16	2.83	0.08	0.00	3.77	1.01	3.32
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	-	0.58	388	7.44	2.42	4.24	0.00	1.74	0.95	2.80	0.11	0.00	2.65	0.56	2.39
9	-	0.86	605	7.69	3.63	7.32	0.00	1.65	2.08	4.96	0.08	0.00	3.57	2.08	3.15
10	-	0.67	469	7.67	1.71	3.47	0.00	1.69	2.52	2.48	0.03	0.00	3.10	1.91	1.84
11	-	0.63	447	7.67	2.01	3.94	0.00	2.01	1.57	2.69	0.06	0.00	3.03	1.64	1.67
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 10 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	0.72	497	7.31	2.07	4.25	0.00	1.99	2.13	2.97	0.10	0.00	3.36	1.44	2.39
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	-	0.57	397	7.35	1.19	2.51	0.00	1.14	2.74	1.63	0.07	0.00	3.76	0.39	1.47
5	-	0.77	539	7.85	2.48	5.24	0.00	2.48	1.58	3.53	0.10	0.00	3.91	1.00	2.78
6	-	0.66	462	7.69	2.72	5.33	0.59	1.97	1.07	3.35	0.10	0.00	3.62	0.13	2.34
7	-	0.66	464	8.01	2.46	4.94	0.48	1.91	1.34	3.14	0.12	0.00	3.73	0.50	2.27
8	-	0.67	481	8.24	2.09	4.38	0.11	1.74	2.07	2.86	0.12	0.00	3.92	1.04	1.73
9	-	0.88	625	8.41	2.74	5.94	0.00	2.14	2.69	4.25	0.09	0.10	3.84	2.67	2.39
10	-	1.04	712	7.90	3.57	7.81	0.00	2.92	2.46	5.65	0.03	0.25	3.67	2.63	3.42
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	0.79	531	7.49	1.69	3.73	0.00	2.75	2.24	2.68	0.09	0.01	3.91	0.61	2.99
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EFO1 : FAHASUR PB YEAR : 1982 CODE : 13
 THE WATER QUALITY DATA DURING 1982 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MO	NA	K	CO3	HCO3	SO4	CL	
					SAR	SAR									
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	-	2.62	1980.	7.15	7.16	17.10	0.00	3.60	5.99	15.68	0.25	0.00	4.44	3.71	17.37
5	-	1.57	1033.	7.37	4.56	10.57	0.00	3.53	3.48	8.53	0.22	0.00	4.44	3.46	7.87
6	-	1.61	1069.	7.56	4.63	10.92	0.00	4.12	2.96	8.72	0.34	0.00	4.81	3.34	7.99
7	-	1.62	1055.	7.72	5.62	13.13	0.00	2.64	3.33	9.71	0.26	0.00	5.44	1.59	9.05
8	-	1.54	1164.	7.53	7.88	17.60	0.92	2.26	2.37	11.99	0.12	0.00	5.54	3.87	8.07
9	-	1.96	1323.	7.36	7.86	18.05	0.00	2.72	3.38	13.72	0.13	0.00	5.11	5.08	9.97
10	-	2.30	1458.	7.18	7.39	17.61	0.00	3.05	4.93	14.75	0.06	0.00	5.05	3.95	14.06
11	-	2.63	1609.	7.37	7.91	18.73	0.00	3.31	5.68	16.77	0.04	0.00	4.52	4.36	16.98
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MO	NA	K	CO3	HCO3	SO4	CL	
					SAR	SAR									
1	-	2.75	1604.	7.43	7.69	17.36	0.00	3.33	6.06	16.67	0.32	0.00	3.42	3.65	19.31
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.37	920.	7.49	4.81	10.32	0.00	3.16	2.48	8.07	0.12	0.00	3.58	4.35	5.90
4	-	1.56	1027.	7.28	4.79	10.33	0.00	3.22	3.64	8.86	0.12	0.00	3.19	5.35	7.30
5	-	2.44	1583.	7.69	9.18	20.35	0.00	3.07	4.06	17.33	0.24	0.00	3.91	7.17	13.61
6	-	1.85	1261.	8.08	7.82	17.28	0.00	3.51	2.10	13.10	0.17	0.00	4.47	5.87	8.55
7	-	1.50	1046.	8.35	6.85	14.92	0.00	2.43	2.29	10.52	0.16	0.01	4.66	4.58	6.13
8	-	2.44	1656.	8.06	8.44	20.35	0.00	2.86	5.30	17.06	0.30	0.37	5.03	8.04	12.06
9	-	2.04	1306.	7.67	7.01	15.60	0.00	3.67	3.34	13.13	0.21	0.11	3.74	5.23	11.28
10	-	2.58	1852.	7.76	6.72	16.01	0.00	3.12	7.06	15.16	0.05	0.33	3.85	4.56	16.65
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	2.41	1423.	7.19	5.78	13.76	0.00	4.27	5.86	13.01	0.10	0.02	4.04	2.89	16.29
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION EHO1 : SAFT EL GIBLY BRIDGE YEAR 1980 CODE : 23
 MEASUREMENT POINT CODE 23 , OPEN DRAIN , BASIC DATA WATERLEVEL AND FLOAT MEASUREMENTS

DISCHARGE RELATION Q=0.85*AS*VF

J - DISCHARGE IN M³/SEC
 0.85 - FACTOR
 AS - WETTED CROSS SECTION IN M²
 VF - FLOAT VELOCITY IN M PER SECOND

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 20 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ SAR		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC									
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	27.32	1.19	621	7.35	1.86	4.67	0.00	3.81	4.38	3.76	0.22	0.00	5.59	1.72	4.86	
4	22.78	1.14	619	7.45	3.33	8.09	0.41	3.07	2.77	5.69	0.17	0.00	6.25	1.07	4.34	
5	18.49	0.98	640	7.50	2.04	4.46	0.00	3.06	2.96	3.53	0.15	0.00	3.39	1.95	4.37	
6	28.36	0.98	691	7.19	2.00	4.83	0.00	3.82	2.35	3.52	0.19	0.00	5.42	0.72	3.74	
7	32.00	1.16	622	7.33	3.31	7.75	0.00	2.72	3.28	5.74	0.23	0.00	4.99	2.88	4.08	
8	32.10	1.28	918	7.64	3.01	7.15	0.00	3.19	2.98	5.29	1.64	0.00	5.20	2.84	5.05	
9	34.73	1.26	674	7.50	3.17	7.47	0.00	3.73	2.67	5.67	0.70	0.00	4.92	2.46	5.38	
10	36.86	1.15	806	7.56	2.28	5.64	0.00	3.80	3.46	4.34	0.16	0.00	5.64	1.67	4.46	
11	26.22	1.49	1015	7.74	3.11	7.85	0.00	4.27	4.03	6.34	0.46	0.00	5.97	2.28	6.85	
12	31.01	1.48	1081	7.65	4.00	9.79	0.00	3.56	4.02	7.78	0.40	0.00	5.52	5.30	4.95	
1980	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ SAR		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC									
1	15.87	1.39	1011	6.96	3.21	8.26	0.00	2.31	5.75	6.45	0.23	0.00	6.87	3.13	4.76	
2	13.87	1.53	1028	6.96	4.51	11.01	0.00	3.35	3.40	8.29	0.26	0.00	6.01	1.84	7.46	
3	25.02	1.19	800	7.32	3.85	8.48	0.00	2.87	2.54	6.32	0.18	0.00	4.06	2.63	5.22	
4	20.19	1.21	639	7.56	3.68	8.39	0.00	3.03	2.78	6.27	0.23	0.00	4.52	3.12	4.66	
5	22.60	0.98	680	7.72	2.71	6.09	0.00	2.99	2.33	4.43	0.16	0.00	4.01	1.78	3.82	
6	24.41	1.12	806	7.94	3.09	7.15	0.00	3.62	2.40	5.37	0.22	0.00	4.61	3.40	3.61	
7	25.43	1.22	932	8.10	3.78	8.94	0.00	3.52	2.98	6.82	0.16	0.00	5.05	4.23	4.25	
8	32.49	1.27	866	8.02	3.38	8.11	0.00	3.39	3.13	6.10	0.16	0.00	5.39	1.66	5.79	
9	29.72	1.17	806	7.71	2.88	6.81	0.00	2.44	4.14	5.22	0.16	0.00	4.68	2.54	4.54	
10	22.65	1.05	709	7.51	2.33	5.33	0.00	3.09	3.21	4.14	0.14	0.00	4.06	2.28	4.21	
11	18.16	1.27	868	7.48	2.94	6.94	0.00	3.84	3.46	5.62	0.10	0.00	4.41	3.36	5.25	
12	24.24	1.22	853	7.62	3.56	6.16	0.00	3.77	2.42	6.27	0.06	0.00	4.40	3.65	4.46	
1981	274.64	1.21	840	7.50	3.29	7.71	0.00	3.19	3.15	5.86	0.17	0.00	4.82	2.79	4.76	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ SAR		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC									
1	30.61	1.12	739	7.16	2.81	6.48	0.00	3.78	2.25	4.88	0.11	0.00	4.52	1.07	5.43	
2	11.82	1.43	935	7.75	2.91	7.20	0.00	4.54	3.58	5.87	0.20	0.00	5.31	1.54	7.33	
3	27.92	0.98	668	7.35	2.28	5.25	0.00	3.53	2.15	3.85	0.23	0.00	4.55	0.89	4.32	
4	27.06	1.11	757	7.17	2.71	6.34	0.00	3.38	2.86	4.79	0.14	0.00	4.74	1.78	4.65	
5	24.76	0.97	662	7.56	2.61	5.76	0.00	2.47	2.91	4.27	0.12	0.00	3.94	2.12	3.71	
6	37.45	0.39	607	7.73	2.00	4.44	0.00	2.90	2.57	3.31	0.16	0.00	3.83	1.65	3.46	
7	37.73	1.17	848	7.92	4.10	9.40	0.00	3.48	1.79	6.65	0.17	0.00	5.12	2.96	4.01	
8	35.42	1.43	1046	7.49	5.38	12.27	0.00	2.69	3.21	9.25	0.08	0.00	4.71	6.22	4.29	
9	38.69	1.35	962	7.44	5.06	11.34	0.00	2.26	3.32	8.45	0.09	0.00	4.48	5.10	4.54	
10	39.42	1.06	733	7.69	1.95	4.64	0.00	3.17	3.96	3.63	0.09	0.00	4.55	2.46	3.89	
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION EHO1 : SAFT EL GIBLY BRIDGE YEAR 1983 CODE : 24
 THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	SAR	ADJ SAR		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
						SAR	RSC									
1	-	1.06	723	7.34	2.79	6.16	0.00	3.78	2.04	4.75	0.12	0.00	3.74	2.76	4.19	
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.50	921	7.32	5.28	11.36	0.00	3.95	1.48	8.69	0.15	0.00	3.79	1.31	9.17	
5	-	1.1E	829	7.58	3.99	9.03	0.00	3.45	1.89	6.52	0.13	0.00	4.71	2.84	4.46	
6	-	1.22	885	7.28	4.12	9.52	0.00	3.34	2.33	6.54	0.14	0.00	5.00	3.63	4.11	
7	-	1.38	1018	7.60	5.39	12.32	0.00	3.19	2.36	8.97	0.12	0.01	5.05	5.25	4.33	
8	-	1.72	1141	8.38	8.71	18.88	0.93	2.47	1.79	12.73	0.13	0.25	4.95	3.26	8.63	
9	-	1.45	948	8.23	4.86	10.71	0.00	3.29	2.67	6.39	0.15	0.22	3.69	3.54	7.04	
10	-	1.20	833	7.61	2.85	6.79	0.00	3.67	3.98	5.35	0.07	0.49	4.32	3.53	4.09	
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	1.08	727	7.12	2.18	5.17	0.00	3.80	2.88	3.99	0.12	0.02	4.65	1.46	4.64	
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH02 : MANUT PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 / PUMP STATION / BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION Q=Q0+B·H
 Q - DISCHARGE IN M³/SEC
 Q0 = 4.815 - DISCHARGE IN M³/SEC AT ZERO SUCTION HEAD
 B = 0.000 - SLOPE OF CAPACITY CURVE
 H - SUCTION HEAD IN M
 QCAP = 4.815 - AVERAGE PUMP CAPACITY IN M³/SEC
 HAV = 2.320 - AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	RSC									
1	9.71	1.51	1030.	7.51	4.01	9.67	0.00	4.22	3.27	7.76	0.16	0.00	5.10	3.54	6.77
2	8.35	2.24	1459.	7.42	5.59	13.88	0.00	5.42	4.55	12.48	0.19	0.00	5.16	4.89	12.63
3	19.54	1.32	880.	7.60	2.62	6.45	0.00	3.61	4.31	5.21	0.16	0.00	5.27	1.89	6.13
4	21.27	1.18	785.	7.40	3.84	8.62	0.00	2.45	2.83	6.24	0.17	0.00	4.52	1.71	5.47
5	21.15	0.96	659.	7.44	1.97	4.30	0.00	2.86	3.08	3.39	0.42	0.00	3.39	2.97	3.40
6	28.39	1.04	690.	7.38	1.49	3.45	0.00	4.40	3.01	2.86	0.19	0.00	3.81	2.21	4.36
7	27.60	1.23	824.	7.31	3.94	8.92	0.00	3.12	2.41	6.56	0.15	0.00	4.54	2.03	5.67
8	26.43	1.30	927.	7.59	2.96	7.11	0.00	4.05	2.57	5.39	1.29	0.00	5.27	2.68	5.36
9	25.36	1.21	841.	7.21	2.98	7.07	0.00	3.54	2.79	5.30	0.61	0.00	5.10	2.05	5.09
10	18.01	1.15	830.	7.58	2.54	6.26	0.00	3.81	3.09	4.72	0.28	0.00	5.84	2.03	4.03
11	11.91	1.56	1119.	7.33	3.62	9.32	0.00	4.64	3.48	7.38	0.34	0.00	6.89	2.98	6.37
12	11.25	1.52	1125.	7.61	4.07	9.68	0.00	4.20	3.89	8.19	0.26	0.00	4.47	7.52	4.94
1980	226.97	1.27	869.	7.42	3.05	7.23	0.00	3.72	3.10	5.63	0.40	0.00	4.82	2.66	5.37

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	RSC									
1	13.94	1.47	983.	7.21	4.98	11.39	0.00	2.20	3.78	8.62	0.22	0.00	4.68	3.47	6.62
2	10.64	2.80	1905.	6.98	10.07	25.87	0.00	3.25	4.97	20.41	0.24	0.00	8.19	5.47	15.22
3	23.70	1.21	744.	7.33	3.64	8.02	0.00	2.51	2.81	5.94	0.20	0.00	4.06	0.42	6.97
4	24.37	1.15	794.	7.53	3.68	8.22	0.00	2.94	2.44	6.05	0.22	0.00	4.29	2.80	4.56
5	20.21	0.96	650.	7.37	2.71	5.97	0.00	2.61	2.45	4.31	0.17	0.00	4.09	1.56	3.90
6	24.94	1.34	987.	7.93	4.34	10.02	0.00	2.11	4.28	7.76	0.27	0.00	4.59	6.06	3.78
7	28.12	2.00	1490.	8.30	7.31	16.67	0.00	3.43	3.75	13.83	0.48	0.00	4.59	12.73	4.15
8	25.34	1.92	1027.	7.94	3.70	8.90	0.00	3.92	4.00	7.37	0.24	0.00	4.77	3.87	6.87
9	26.54	1.33	897.	7.31	1.90	4.62	0.00	3.58	5.76	4.10	0.19	0.00	5.40	2.55	5.67
10	29.08	1.25	862.	7.56	2.85	6.79	0.00	4.07	3.15	5.41	0.16	0.00	4.72	3.05	5.01
11	19.67	1.44	974.	7.39	3.34	7.88	0.00	3.78	4.22	6.67	0.13	0.00	4.24	4.52	6.01
12	14.28	1.15	987.	7.65	3.89	9.27	0.00	3.70	3.59	7.43	0.11	0.00	4.84	3.67	6.29
1981	236.86	1.43	994.	7.48	4.10	9.65	0.00	3.20	3.74	7.65	0.23	0.00	4.73	4.32	5.76

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	RSC									
1	15.08	1.62	1069.	7.35	4.06	9.89	0.00	4.45	3.60	8.14	0.10	0.00	5.15	2.93	6.20
2	7.35	2.78	1849.	7.21	5.39	14.94	0.00	8.10	6.07	14.33	0.11	0.00	8.13	4.58	15.91
3	12.27	1.11	751.	7.31	2.31	5.47	0.00	3.77	2.92	4.22	0.21	0.00	4.74	1.56	4.82
4	18.74	1.17	793.	7.24	2.80	6.61	0.00	3.20	3.34	5.07	0.19	0.00	4.78	1.93	5.09
5	21.89	1.26	874.	7.32	2.73	6.66	0.00	4.16	3.35	5.28	0.13	0.00	5.25	2.51	5.16
6	29.02	1.04	719.	7.74	2.64	6.02	0.00	3.55	2.30	4.51	0.17	0.00	4.31	2.08	4.14
7	25.12	1.30	918.	7.69	4.73	10.70	0.00	3.93	1.82	7.74	0.22	0.00	4.81	3.52	4.97
8	25.05	1.44	1051.	7.69	5.79	13.32	0.00	3.39	2.06	9.56	0.14	0.00	5.33	4.98	4.75
9	26.37	1.38	995.	7.63	6.05	13.40	0.00	2.63	2.26	9.76	0.09	0.00	4.83	4.90	4.63
10	19.34	0.86	983.	7.30	2.55	5.51	0.00	2.27	2.30	3.86	0.09	0.00	3.98	1.13	3.39
11	4.28	1.37	925.	7.40	3.17	7.81	0.00	4.47	3.07	6.16	0.08	0.00	5.37	1.79	6.43
12	8.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	212.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	RSC									
1	9.95	1.26	876.	7.45	3.49	8.02	0.00	3.71	2.68	6.23	0.29	0.00	4.39	3.50	5.03
2	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	14.66	1.33	892.	7.89	5.44	11.71	0.00	3.09	1.67	8.36	0.15	0.00	4.24	2.92	6.05
4	22.33	1.23	780.	8.01	5.32	11.18	0.25	2.06	1.99	7.56	0.17	0.00	4.28	0.80	6.64
5	19.38	1.34	874.	7.96	4.52	10.30	0.00	2.67	2.87	7.92	0.13	0.00	4.82	1.59	6.76
6	24.39	1.09	739.	7.70	3.69	8.19	0.00	2.55	2.44	5.62	0.06	0.00	4.47	1.83	4.57
7	17.25	1.55	1120.	7.81	4.19	10.44	0.00	3.49	4.49	8.66	0.12	0.00	5.94	5.11	5.40
8	23.11	1.70	1215.	8.12	7.57	16.67	0.00	3.23	2.04	12.28	0.14	0.19	4.42	7.93	5.15
9	25.62	1.23	854.	8.45	5.29	10.97	0.00	2.38	2.13	7.55	0.17	0.31	3.36	4.76	4.20
10	19.36	1.08	754.	8.25	2.78	6.38	0.00	3.23	3.06	4.94	0.06	0.50	3.72	3.61	3.41
11	8.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	5.17	1.2.	820.	7.51	2.98	6.14	0.00	3.93	3.28	4.90	0.16	0.06	4.34	2.54	5.14
1983	192.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH03 - FADAKA PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 PUMP STATION BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $Q=Q_0+B \cdot H$

Q	- DISCHARGE IN M^3/SEC
Q_0	- DISCHARGE IN M^3/SEC AT ZERO SUCTION HEAD
B	- SLOPE OF CAPACITY CURVE
H	- SUCTION HEAD IN M
Q_{CAP}	- AVERAGE PUMP CAPACITY IN M^3/SEC
H_{AV}	- AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH		ADJ												
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	6.58	4.63	2880	7.55	8.05	21.41	0.00	10.46	10.54	26.09	0.28	0.00	3.11	9.76	32.52
2	4.21	4.60	2806	7.40	7.91	21.67	0.00	10.68	9.90	25.38	0.24	0.00	6.21	6.60	33.41
3	8.40	2.59	1573	7.61	4.81	12.78	0.00	7.12	5.69	12.18	0.21	0.00	6.38	1.31	17.54
4	8.93	2.19	1375	7.50	5.52	12.91	0.00	5.30	4.27	12.07	0.19	0.00	3.84	5.00	12.94
5	8.42	2.31	1491	7.59	3.54	8.48	0.00	6.72	7.71	9.50	0.14	0.00	3.21	8.42	12.39
6	8.31	2.32	1544	7.44	5.57	13.71	0.00	6.70	3.98	12.88	0.28	0.00	4.66	6.64	12.73
7	10.74	2.44	1646	7.52	7.83	19.09	0.00	5.29	3.30	16.23	0.27	0.00	5.48	6.76	12.92
8	13.71	2.47	1618	7.86	7.34	18.14	0.00	5.25	3.88	15.69	0.19	0.00	5.59	5.46	13.97
9	14.91	3.09	1398	7.48	5.24	13.03	0.00	4.72	4.96	11.53	0.27	0.00	5.25	5.74	10.49
10	14.71	2.44	1608	7.33	6.54	16.79	0.00	5.35	4.30	14.37	0.64	0.00	6.60	4.07	13.98
11	10.12	2.46	2004	7.27	8.04	21.05	0.00	5.75	5.59	19.16	0.29	0.00	6.90	7.51	16.60
12	11.06	2.72	1882	7.69	7.11	17.16	0.00	4.63	6.90	17.07	0.56	0.00	4.16	11.97	13.06
1980	120.12	2.64	1724	7.50	6.37	16.12	0.00	6.00	5.44	15.25	0.31	0.00	5.33	6.45	15.26

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH		ADJ												
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	7.47	3.97	2649	7.32	11.00	29.85	0.00	6.60	6.28	27.91	0.40	0.00	8.52	8.48	24.19
2	6.82	1.24	3145	7.18	20.09	48.30	0.00	5.49	3.26	42.02	0.23	0.00	6.10	4.68	40.21
3	8.56	2.28	1323	7.27	7.32	16.79	0.00	4.20	3.01	13.89	0.19	0.00	4.42	0.59	16.28
4	7.31	2.04	1309	7.43	5.15	12.63	0.00	4.80	4.33	11.00	0.22	0.00	5.06	3.81	11.49
5	9.62	1.43	946	7.33	4.04	9.32	0.00	3.68	2.81	7.39	0.20	0.00	4.37	3.09	6.82
6	7.83	1.78	1173	7.98	3.38	8.58	0.00	5.40	4.85	7.65	0.16	0.00	5.39	3.64	9.03
7	11.22	3.09	1981	8.36	5.34	14.27	0.00	7.96	8.36	15.25	0.18	0.00	5.78	7.12	18.85
8	14.00	2.32	1466	8.03	5.44	13.75	0.00	5.12	5.34	12.45	0.20	0.00	5.48	3.66	13.96
9	15.05	2.25	1380	7.64	5.24	12.95	0.00	5.27	4.77	11.74	0.19	0.00	4.95	2.76	14.26
10	12.78	2.07	1271	7.63	5.30	12.40	0.00	4.44	4.45	11.16	0.18	0.00	4.03	3.51	12.69
11	9.23	2.60	1588	7.61	5.66	14.11	0.00	5.00	6.52	14.06	0.18	0.00	3.99	5.11	16.65
12	9.43	2.42	1495	7.82	5.11	12.39	0.00	4.78	6.90	12.34	0.14	0.00	4.03	5.34	14.79
1981	119.32	2.54	1583	7.56	6.38	15.84	0.00	5.24	5.14	14.55	0.20	0.00	5.08	4.20	15.85

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH		ADJ												
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	10.95	4.11	2458	7.19	7.91	20.45	0.00	9.66	7.56	23.21	0.17	0.00	4.83	5.55	30.23
2	3.46	10.61	6601	7.20	14.03	42.90	0.00	25.36	18.71	65.84	0.35	0.00	9.89	14.27	86.10
3	8.28	2.40	1488	7.20	6.13	14.76	0.00	5.66	4.24	13.64	0.11	0.00	4.44	4.30	14.92
4	10.82	1.81	1160	7.11	5.06	11.84	0.00	3.69	4.17	10.02	0.17	0.00	4.36	3.82	9.87
5	10.45	2.68	1735	7.10	6.10	15.61	0.00	6.08	6.03	15.00	0.20	0.00	5.49	6.29	15.34
6	15.45	2.12	1379	7.38	5.79	13.92	0.00	5.44	3.47	12.22	0.22	0.00	4.68	4.91	11.77
7	14.56	2.06	1396	7.37	6.89	17.00	0.00	4.54	2.94	13.33	0.16	0.00	6.34	4.13	10.51
8	15.74	2.24	1550	7.08	7.91	19.25	0.00	3.81	3.96	19.60	0.09	0.00	5.83	6.64	10.98
9	16.92	2.40	1562	7.34	7.91	19.04	0.00	3.94	4.19	15.95	0.12	0.00	5.31	5.36	13.53
10	13.47	2.40	1508	7.34	6.52	15.74	0.00	4.85	4.61	14.19	0.18	0.00	4.67	4.62	14.53
11	11.02	2.71	1676	7.53	6.63	15.93	0.00	6.13	5.04	15.66	0.08	0.00	4.10	5.53	17.29
12	11.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	142.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH		ADJ												
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
1	10.78	1.73	1052	7.24	4.89	10.63	0.00	3.89	3.39	9.33	0.11	0.00	3.18	3.22	10.31
2	3.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	8.00	2.91	1870	7.53	9.18	20.89	0.00	4.75	4.74	19.99	0.15	0.00	3.64	8.64	17.35
4	8.26	2.77	1766	7.46	9.08	20.61	0.00	4.51	4.25	18.99	0.17	0.00	3.80	7.49	16.64
5	10.48	1.71	1126	8.00	7.23	15.90	0.00	3.66	1.52	11.62	0.14	0.00	4.62	3.47	8.85
6	9.80	1.23	793	7.84	5.22	10.90	0.00	3.05	1.14	7.55	0.12	0.00	4.03	1.31	6.52
7	11.98	1.77	1193	7.89	6.50	14.81	0.00	3.50	2.83	11.57	0.09	0.00	4.59	5.09	8.31
8	13.31	2.73	1824	8.11	10.35	23.15	0.00	3.10	4.57	20.26	0.15	0.12	3.85	11.28	12.84
9	15.71	1.90	1286	7.84	6.65	14.34	0.00	3.03	4.03	12.49	0.10	0.11	3.17	8.65	7.72
10	16.15	1.84	1221	7.99	4.40	10.51	0.00	4.74	4.65	9.54	0.06	0.25	3.94	6.03	8.76
11	9.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	11.09	1.87	1131	7.50	4.13	9.68	0.00	3.00	4.16	8.83	0.13	0.01	3.84	2.53	11.74
1983	128.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1980 CODE : 21
 MEASUREMENT POINT CODE: 21 ; OPEN DRAIN ; BASIC DATA: WATER LEVEL MEASUREMENTS

DISCHARGE RELATION : $G = A + B \cdot HM$

G = DISCHARGE IN M \times 3 PER SECOND
 A = 38.585 = G INTERCEPT FOR HM = 0
 B = -7.032 = SLOPE OF G-HM RELATION
 HM = DISTANCE TO WATERLEVEL FROM FIXED POINT
 R^2 = 0.970 = CORRELATION COEFFICIENT

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH		ADJ								NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG							
1	7.11	1.76	1244.	7.03	4.99	12.17	0.00	3.93	4.31	10.13	0.21	0.00	5.23	6.36	6.98	
2	11.08	1.45	1024.	7.21	3.50	8.25	0.00	4.72	3.21	6.97	0.33	0.00	4.25	5.55	5.40	
3	11.27	1.27	879.	7.37	2.12	5.28	0.00	3.93	4.63	4.39	0.21	0.00	5.17	2.93	5.05	
4	12.73	1.07	695.	7.29	3.33	7.27	0.00	2.63	2.38	5.27	0.17	0.00	4.03	1.17	3.19	
5	15.38	0.98	641.	7.26	2.39	5.08	0.00	2.86	2.77	4.00	0.09	0.00	3.13	2.38	4.17	
6	13.41	0.89	603.	7.27	2.45	5.21	0.00	3.11	1.72	3.81	0.19	0.00	3.52	1.77	3.53	
7	22.63	1.02	709.	7.03	4.29	9.00	0.11	2.26	1.75	6.08	0.18	0.00	4.12	2.18	3.96	
8	22.59	1.19	820.	7.55	3.01	6.92	0.00	2.71	2.92	5.05	1.23	0.00	4.73	1.88	5.29	
9	25.84	1.26	855.	7.31	3.17	7.51	0.00	3.53	2.87	5.67	0.53	0.00	5.05	1.76	5.80	
10	26.94	1.04	731.	7.36	2.23	5.40	0.00	3.39	3.14	4.04	0.13	0.00	5.32	1.00	4.36	
11	21.60	1.49	1046.	7.45	3.08	7.78	0.00	4.37	4.17	6.37	0.57	0.00	5.86	3.43	6.14	
12	19.93	1.57	1155.	7.40	4.96	11.67	0.00	3.17	4.12	9.48	0.19	0.00	4.68	7.58	4.71	
1980	210.49	1.23	850.	7.35	3.22	7.51	0.00	3.31	3.09	5.76	0.37	0.00	4.67	2.87	4.97	

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1981 CODE : 24
 THE WATER QUALITY DATA DURING 1981 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH		ADJ								NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG							
1	-	1.64	1071.	7.12	6.44	14.44	0.00	2.17	3.26	10.61	0.22	0.00	4.78	2.94	6.54	
2	-	1.16	753.	7.06	4.95	10.60	0.66	1.74	2.27	7.01	0.18	0.00	4.67	0.49	6.04	
3	-	1.15	772.	7.09	3.75	8.48	0.00	3.12	2.06	6.04	0.15	0.00	4.74	1.23	5.40	
4	-	1.32	901.	7.39	4.70	10.57	0.00	3.25	2.12	7.71	0.20	0.00	4.62	2.93	3.74	
5	-	1.20	805.	7.27	4.16	9.29	0.00	2.96	2.09	6.61	0.21	0.00	4.60	1.75	5.53	
6	-	1.22	860.	7.46	4.11	9.40	0.00	2.92	2.58	6.81	0.21	0.00	4.89	2.93	4.67	
7	-	1.17	819.	8.00	3.10	7.27	0.00	4.87	1.35	5.47	0.17	0.00	4.82	2.31	4.73	
8	-	1.28	873.	7.72	3.45	8.27	0.00	3.96	2.50	6.20	0.20	0.00	5.37	1.64	5.85	
9	-	1.21	828.	7.23	3.37	7.77	0.00	3.08	3.07	5.91	0.19	0.00	4.54	2.83	4.89	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	-	1.46	978.	7.19	4.00	9.19	0.00	3.46	3.66	7.55	0.18	0.00	4.09	4.15	6.62	
12	-	1.53	1013.	7.34	4.43	10.18	0.00	4.10	2.88	8.20	0.12	0.00	4.22	3.87	7.29	
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 14 WATER SAMPLES

MONTH	DISCH		ADJ								NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG							
1	-	1.78	1186.	7.17	5.38	13.14	0.00	4.82	2.52	10.32	0.19	0.00	5.81	2.64	9.39	
2	-	2.52	1614.	7.64	6.51	17.18	0.00	4.93	5.16	14.62	0.27	0.00	7.64	1.99	15.36	
3	-	1.17	764.	7.13	2.74	4.36	0.00	3.48	2.99	4.92	0.13	0.00	4.44	1.40	5.68	
4	-	1.44	991.	7.10	4.27	10.14	0.00	3.66	2.97	7.77	0.24	0.00	5.18	3.29	6.18	
5	-	1.13	814.	7.20	4.06	9.32	0.39	2.93	2.02	6.40	0.22	0.00	5.36	2.14	4.09	
6	-	1.09	760.	7.42	4.07	8.72	0.00	2.73	1.89	6.19	0.24	0.00	4.03	2.90	4.12	
7	-	1.38	1000.	7.46	5.07	11.87	0.00	3.68	1.96	8.51	0.20	0.00	5.60	3.80	4.93	
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	-	1.25	851.	7.45	4.43	9.88	0.00	2.80	2.54	7.23	0.18	0.00	4.45	2.92	5.07	
11	-	1.12	724.	7.44	2.98	6.52	0.00	3.27	2.51	5.04	0.06	0.00	3.62	2.46	4.79	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EH04 : NIZAM BRIDGE YEAR : 1983 CODE : 21
 MEASUREMENT POINT CODE: 21 ; OPEN DRAIN ; BASIC DATA: WATER LEVEL MEASUREMENTS
 THE WATER QUALITY DATA DURING 1983 ARE BASED ON 7 WATER SAMPLES

MONTH	DISCH		ADJ								NA	K	CO3	HCO3	SO4	CL
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG							
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	13.26	1.31	982.	7.28	6.25	13.32	0.00	3.11	1.80	9.79	0.17	0.00	4.02	3.07	7.74	
4	12.41	2.12	1286.	7.52	8.31	18.05	0.00	3.02	2.73	14.43	0.25	0.00	3.67	3.10	13.50	
5	19.23	1.24	889.	7.21	6.15	12.80	0.00	2.68	1.49	8.88	0.19	0.00	4.08	2.63	6.50	
6	18.26	1.24	867.	7.29	5.39	11.54	0.00	2.72	1.73	8.04	0.12	0.00	4.33	3.57	4.70	
7	22.26	1.30	927.	7.63	5.66	12.30	0.00	3.04	1.59	8.61	0.19	0.00	4.54	4.23	4.62	
8	23.62	1.35	1137.	7.73	6.67	15.19	0.00	3.16	2.14	10.86	0.18	0.11	5.18	6.40	4.64	
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH05 : NIZAM PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 ; PUMP STATION ; BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $Q=Q_0+B \cdot H$
 $Q = Q_0 + B \cdot H$
 $Q_0 = 4.269$ - DISCHARGE IN M^3/SEC
 $B = -0.618$ - SLOPE OF CAPACITY CURVE
 H - SUCTION HEAD IN M
 $Q_{CAP} = 3.707$ - AVERAGE PUMP CAPACITY IN M^3/SEC
 $H_{AV} = 0.910$ - AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 23 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	SAR									
1	6.60	1.77	1182.	7.30	5.02	11.89	0.00	4.28	3.51	9.90	0.36	0.00	4.66	4.29	9.07
2	5.11	1.37	903.	7.35	3.01	6.93	0.00	4.28	3.38	5.89	0.24	0.00	3.82	3.65	6.31
3	8.57	1.28	868.	7.39	2.92	7.03	0.00	3.74	3.29	5.48	0.37	0.00	5.16	1.96	5.75
4	11.13	1.02	695.	7.39	3.58	7.91	0.16	2.09	2.42	5.38	0.24	0.00	4.68	0.93	4.52
5	8.51	0.94	603.	7.45	2.65	5.49	0.00	2.80	2.00	4.11	0.16	0.00	3.16	1.51	4.41
6	9.40	1.08	771.	7.28	3.26	7.21	0.00	2.81	2.73	5.42	0.17	0.00	3.97	3.66	3.75
7	14.78	1.27	895.	7.19	4.57	10.45	0.00	2.39	3.00	7.51	0.16	0.00	5.01	3.25	4.79
8	16.84	1.25	842.	7.90	4.03	9.40	0.00	2.92	2.58	6.69	0.23	0.00	5.36	1.02	6.04
9	15.93	1.23	833.	7.65	3.92	9.20	0.00	2.97	2.62	6.56	0.16	0.00	5.45	1.06	5.67
10	12.44	1.18	793.	7.45	2.92	7.03	0.00	3.30	3.03	5.20	0.20	0.00	5.50	0.65	5.53
11	11.88	1.52	1031.	7.60	4.16	10.24	0.00	3.75	3.30	7.81	0.44	0.00	6.05	1.89	7.34
12	11.77	1.73	1122.	7.73	5.72	12.86	0.00	3.95	2.51	10.28	0.41	0.00	4.16	3.66	9.34
1980	132.95	1.29	872.	7.47	3.89	9.04	0.00	3.16	2.82	6.73	0.25	0.00	4.90	2.08	5.97

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	SAR									
1	8.34	1.67	1090.	7.36	5.71	12.93	0.00	2.77	3.48	10.10	0.29	0.00	4.42	3.64	8.58
2	7.09	1.39	883.	7.43	6.01	12.95	0.40	2.16	2.13	8.80	0.25	0.00	4.68	0.76	7.91
3	11.78	1.17	746.	7.32	3.48	7.72	0.00	2.71	2.67	5.70	0.23	0.00	4.15	1.04	6.12
4	10.28	1.45	983.	7.52	4.55	10.33	0.00	3.01	3.46	8.19	0.16	0.00	4.20	4.36	6.24
5	9.34	1.02	692.	7.38	3.61	7.74	0.00	2.51	2.01	5.43	0.18	0.00	4.03	1.90	4.20
6	8.04	1.78	1197.	7.77	7.15	16.17	0.00	2.88	2.85	12.11	0.18	0.00	4.86	4.51	8.65
7	12.98	1.73	1068.	8.14	7.36	15.40	0.00	2.31	2.38	11.51	0.22	0.00	3.80	2.32	10.49
8	14.48	1.30	801.	7.67	4.03	8.96	0.00	3.00	2.48	6.67	0.19	0.00	4.22	0.43	7.68
9	14.43	1.21	763.	7.41	3.19	7.35	0.00	2.66	3.48	5.59	0.14	0.00	4.51	1.37	5.99
10	13.99	1.28	849.	7.66	3.65	8.11	0.00	2.84	3.41	6.46	0.16	0.00	3.75	3.59	5.53
11	12.09	1.54	1002.	7.50	4.14	9.44	0.00	3.59	3.75	7.94	0.16	0.00	3.85	3.95	7.65
12	10.58	1.61	1060.	7.46	4.59	10.59	0.00	3.54	3.81	8.79	0.11	0.00	4.18	4.31	7.76
1981	133.42	1.42	917.	7.52	4.59	10.27	0.00	2.87	3.02	7.89	0.18	0.00	4.18	2.60	7.18

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 15 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	SAR									
1	11.80	2.11	1308.	7.29	5.77	13.91	0.00	4.99	3.52	11.91	0.16	0.00	4.89	2.53	13.13
2	4.97	4.20	2635.	7.19	7.82	22.48	0.00	8.88	9.43	23.66	0.29	0.00	9.36	4.07	28.84
3	9.96	1.44	930.	7.19	3.31	7.87	0.00	4.04	3.63	6.49	0.13	0.00	4.52	2.26	7.53
4	14.06	1.21	775.	7.21	3.10	6.99	0.00	2.93	3.23	5.45	0.23	0.00	3.99	1.71	6.13
5	12.76	1.10	724.	7.33	3.14	6.99	0.00	3.62	1.83	5.18	0.16	0.00	4.14	1.26	5.39
6	18.35	1.22	851.	7.61	4.43	9.93	0.00	4.03	1.01	7.02	0.23	0.00	4.77	2.39	5.13
7	19.92	1.43	1035.	7.32	5.29	12.22	0.00	4.27	1.42	8.93	0.27	0.00	5.20	4.49	5.20
8	20.29	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	20.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	19.37	1.17	813.	7.26	3.75	8.37	0.00	3.11	2.46	6.26	0.13	0.00	4.21	3.31	4.41
11	17.34	1.17	779.	7.66	3.68	7.85	0.00	2.63	2.86	6.11	0.18	0.00	3.39	3.62	4.62
12	16.64	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	186.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		CA	MG	NA	K	CO3	HCO3	SO4	CL	
					SAR	SAR									
1	15.39	1.13	738.	7.66	3.50	7.37	0.00	3.00	2.34	5.73	0.11	0.00	3.26	2.73	5.20
2	6.09	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	13.93	1.53	1015.	7.46	6.08	12.66	0.00	3.09	2.24	9.93	0.11	0.00	3.36	4.86	7.19
4	13.14	1.63	1077.	7.38	5.69	12.07	0.00	4.14	2.10	10.05	0.12	0.00	3.24	5.43	7.75
5	16.58	1.28	877.	7.60	5.37	11.70	0.04	3.14	1.43	8.12	0.12	0.00	4.61	2.69	5.51
6	15.09	1.37	952	7.68	5.09	11.57	0.00	3.28	2.18	8.41	0.08	0.00	4.90	3.48	5.57
7	19.05	1.62	1141.	7.86	7.13	15.74	0.00	2.97	2.20	11.46	0.11	0.00	4.69	5.90	6.15
8	16.86	1.58	1049.	7.95	6.38	14.15	0.00	3.03	2.27	10.38	0.13	0.12	4.47	3.50	7.69
9	21.96	1.17	822.	7.90	4.34	9.20	0.00	3.23	1.84	6.91	0.09	0.16	3.46	4.52	3.95
10	19.98	1.36	954	8.03	3.74	8.72	0.00	3.93	3.20	7.06	0.08	0.41	3.95	5.23	4.69
11	15.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	17.44	1.65	1085.	7.47	4.10	9.92	0.00	4.15	4.03	8.29	0.13	0.02	4.89	3.45	8.26
1983	190.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH06 : BANI EBEID PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 / PUMP STATION / BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $G=GO+B\cdot H$
 G = - DISCHARGE IN M³/SEC
 GO = 7.515 = DISCHARGE IN M³/SEC AT ZERO SUCTION HEAD
 B = -1.241 = SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 QCAP = 4.710 = AVERAGE PUMP CAPACITY IN M³/SEC
 HAV = 2.260 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MQ	NA	K	CO3	HCO3	SO4	CL
	MIL M ³	SEC					SAR	RSC								
1	13.96	2.78	1736.	7.36	5.91	14.52	0.00	6.78	5.99	14.94	0.22	0.00	4.15	6.36	17.40	
2	8.77	2.48	1699.	7.59	6.44	15.66	0.00	5.71	5.25	15.07	0.22	0.00	4.40	9.78	12.07	
3	14.73	1.76	1123.	7.15	3.08	7.76	0.00	5.56	4.76	6.79	0.22	0.00	3.09	2.79	9.65	
4	14.66	2.22	1426.	6.72	5.37	13.99	0.00	5.18	4.72	11.55	0.21	0.00	6.87	1.96	13.23	
5	13.77	2.08	1221.	7.49	3.07	7.33	0.00	6.13	5.94	7.34	0.48	0.00	3.42	2.81	13.86	
6	13.96	1.79	1231.	7.21	4.48	10.93	0.00	5.39	4.07	9.74	0.24	0.00	4.70	2.53	12.16	
7	19.97	2.14	1414.	7.51	7.23	17.36	0.00	4.92	2.51	13.93	0.16	0.00	5.53	4.39	11.59	
8	22.45	2.07	1355.	7.37	5.18	12.82	0.00	4.59	4.92	11.30	0.19	0.00	5.15	4.85	10.98	
9	20.57	1.84	1183.	7.47	4.71	11.22	0.00	4.07	4.43	9.72	0.19	0.00	4.43	4.04	9.95	
10	19.63	1.83	1283.	7.27	5.06	12.75	0.00	4.98	3.47	10.41	0.19	0.00	6.22	4.83	7.99	
11	16.44	2.43	1650.	7.52	6.99	17.85	0.00	5.72	3.19	14.76	1.12	0.00	6.85	4.76	13.17	
12	17.49	2.59	1701.	7.31	6.20	15.08	0.00	4.73	6.82	14.90	0.37	0.00	4.24	8.55	14.05	
1980	198.40	2.16	1402	7.28	5.28	13.10	0.00	5.21	4.97	11.68	0.31	0.00	5.14	4.67	11.95	

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MQ	NA	K	CO3	HCO3	SO4	CL
	MIL M ³	SEC					SAR	RSC								
1	15.39	2.91	1805.	7.17	8.99	21.01	0.00	3.68	5.62	19.37	0.24	0.00	4.22	6.05	18.64	
2	8.53	3.41	3470	6.98	11.03	26.28	0.00	11.41	9.29	35.50	0.35	0.00	4.36	14.65	37.53	
3	20.73	1.88	1112.	7.34	4.66	10.55	0.00	4.44	3.80	9.45	0.22	0.00	3.53	2.12	12.25	
4	19.25	2.27	1403.	7.48	5.28	12.67	0.00	4.68	5.56	11.94	0.26	0.00	4.18	4.38	13.88	
5	19.63	1.79	1117.	7.28	4.55	10.56	0.00	3.60	4.62	9.22	0.20	0.00	3.98	3.35	10.31	
6	18.73	2.27	1516.	7.82	7.44	17.49	0.00	5.38	2.61	14.87	0.32	0.00	4.66	6.46	12.07	
7	23.92	2.75	1748.	8.35	7.56	18.39	0.00	5.08	4.89	16.88	0.68	0.00	4.82	5.82	16.90	
8	21.89	2.11	1298.	8.00	4.90	12.34	0.00	4.51	5.02	10.69	0.26	0.00	5.69	1.42	13.41	
9	28.61	1.74	1062.	7.61	4.17	10.01	0.00	3.65	4.56	8.44	0.16	0.00	4.72	1.39	10.71	
10	27.78	1.74	1098.	7.52	4.70	10.67	0.00	4.18	3.60	9.26	0.16	0.00	3.72	3.79	9.68	
11	20.94	1.95	1221.	7.28	4.76	11.00	0.00	4.50	4.57	10.13	0.16	0.00	3.68	4.48	11.20	
12	20.02	1.98	1254.	7.61	4.78	11.16	0.00	5.17	4.20	10.34	0.10	0.00	3.77	4.79	11.24	
1981	245.03	2.22	1384.	7.47	5.76	13.69	0.00	4.67	4.60	12.40	0.26	0.00	4.29	4.23	13.41	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MQ	NA	K	CO3	HCO3	SO4	CL
	MIL M ³	SEC					SAR	RSC								
1	20.35	2.20	1366.	7.29	5.34	12.74	0.00	5.74	4.04	11.81	0.11	0.00	4.16	4.00	13.55	
2	7.81	5.54	3322.	7.32	8.02	23.47	0.00	13.53	12.40	28.87	0.32	0.00	8.57	4.00	42.87	
3	20.97	1.86	1136.	7.42	3.93	9.35	0.00	5.17	4.24	8.53	0.16	0.00	4.03	2.68	11.40	
4	21.04	1.50	1180.	7.21	3.92	9.43	0.00	4.35	5.54	8.72	0.19	0.00	4.12	3.65	11.03	
5	18.48	2.45	1685.	7.24	6.78	16.61	0.00	4.97	5.34	15.40	0.21	0.00	4.81	9.29	11.83	
6	29.37	2.00	1393.	7.76	6.82	15.60	0.00	5.06	2.47	13.24	0.13	0.00	4.16	8.44	8.29	
7	38.90	1.76	1237.	7.65	5.41	12.83	0.00	5.26	2.33	10.55	0.27	0.00	4.81	6.17	7.36	
8	44.59	1.87	1277.	7.53	6.34	15.01	0.00	4.57	2.43	11.86	0.42	0.00	5.21	4.97	8.76	
9	42.07	2.06	1363.	7.42	6.82	16.20	0.00	2.91	4.64	13.26	0.18	0.00	5.07	5.20	10.66	
10	36.42	1.56	998.	7.38	3.28	7.97	0.00	3.79	4.83	6.81	0.10	0.00	4.71	2.55	8.28	
11	31.69	1.53	979.	7.31	3.80	8.71	0.00	3.77	4.01	7.49	0.04	0.00	3.78	3.30	8.25	
12	28.65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	339.34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 10 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MQ	NA	K	CO3	HCO3	SO4	CL
	MIL M ³	SEC					SAR	RSC								
1	26.24	1.42	849.	7.36	3.31	7.25	0.00	3.44	3.76	6.29	0.10	0.00	3.14	1.90	8.55	
2	6.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	18.31	2.10	1308.	7.56	6.64	14.58	0.00	5.01	2.56	12.92	0.12	0.00	3.38	4.64	12.60	
4	17.83	2.10	1244.	7.71	6.28	13.54	0.00	5.51	2.11	12.25	0.12	0.00	3.07	2.81	14.11	
5	16.04	2.02	1327.	7.26	6.69	15.09	0.00	4.69	2.68	12.84	0.20	0.00	3.93	5.85	10.63	
6	19.22	1.38	979.	7.65	4.21	9.89	0.00	3.76	2.76	7.61	0.20	0.00	4.92	4.26	5.16	
7	30.50	1.64	1071.	8.18	6.15	13.58	0.00	3.92	1.76	10.38	0.16	0.00	4.23	3.43	8.57	
8	31.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
9	37.91	1.93	1284.	7.97	5.98	13.95	0.00	3.08	2.67	11.77	0.19	0.10	4.32	5.50	9.67	
10	37.73	1.46	939.	8.24	3.42	7.83	0.00	3.93	3.84	6.75	0.18	0.25	3.44	3.93	6.71	
11	25.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	26.34	1.56	1019.	7.64	3.79	8.89	0.00	4.11	3.89	7.59	0.12	0.01	4.12	3.80	7.79	
1983	292.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EH07 : ADD QASSABI PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 : PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION Q=QD+B·H
 Q = 6.008 - DISCHARGE IN M³/S PER SECOND
 QD = 0.000 - DISCHARGE IN M³/S PER SECOND AT ZERO SUCTION HEAD
 B = 0.000 - SLOPE OF CAPACITY CURVE
 H = 0.000 - SUCTION HEAD IN M
 QCAP = 6.008 - AVERAGE PUMP CAPACITY IN M³/S PER SECOND
 HAV = 2.190 - AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	20.18	2.63	1798	7.36	4.78	12.25	0.00	7.05	7.25	12.77	1.59	0.00	4.81	5.81	18.09
2	13.58	3.42	3336	7.44	8.58	22.59	0.00	12.63	11.97	30.08	0.74	0.00	4.45	11.19	39.76
3	20.42	2.22	1408	7.59	4.09	10.66	0.00	6.09	5.89	10.02	0.19	0.00	5.79	3.34	13.05
4	17.82	2.36	1491	7.48	5.41	13.85	0.00	5.88	4.85	12.53	0.17	0.00	5.84	3.22	14.37
5	18.93	2.17	1397	7.43	5.21	11.84	0.00	5.19	4.91	11.69	0.30	0.00	3.20	7.03	11.86
6	30.63	2.53	1586	7.55	5.08	12.76	0.00	7.75	4.54	12.59	0.34	0.00	4.72	4.71	15.78
7	36.46	2.64	1723	7.62	7.64	18.49	0.00	6.70	3.06	16.88	0.19	0.00	4.76	6.67	15.40
8	39.21	2.52	1609	7.46	4.59	11.98	0.00	5.81	7.61	11.90	0.32	0.00	5.48	5.33	14.78
9	40.55	2.45	1580	7.46	5.64	14.30	0.00	5.39	5.85	13.38	0.24	0.00	5.36	5.36	14.10
10	32.03	2.36	1544	7.52	6.25	15.99	0.00	5.29	4.57	13.87	0.15	0.00	6.32	4.12	13.39
11	24.72	2.98	1687	7.60	5.49	14.42	0.00	6.28	5.64	13.41	0.86	0.00	6.35	4.68	15.19
12	24.31	2.77	1850	7.67	7.30	17.57	0.00	4.80	6.53	17.38	0.36	0.00	4.14	10.06	14.83
1980	320.84	2.64	1688	7.31	5.79	14.68	0.00	6.31	5.75	14.21	0.40	0.00	5.17	5.76	15.72

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	21.72	2.34	1489	7.40	8.02	18.79	0.00	2.72	4.77	15.52	0.28	0.00	4.88	4.70	13.70
2	11.12	2.93	1779	7.06	6.81	17.47	0.00	6.68	4.83	16.48	0.33	0.00	5.78	2.56	20.19
3	23.12	2.14	1262	7.43	4.82	11.45	0.00	4.70	4.98	10.60	0.21	0.00	4.04	2.11	14.34
4	20.98	2.21	1398	7.63	5.29	12.72	0.00	3.83	6.21	11.65	0.23	0.00	4.27	4.98	12.64
5	18.49	2.14	1348	7.42	7.06	16.28	0.00	3.49	3.86	13.54	0.22	0.00	4.45	3.97	12.70
6	28.96	2.33	1873	7.78	8.73	21.09	0.00	2.97	6.76	19.26	0.36	0.00	4.85	8.91	15.54
7	42.44	3.08	2044	8.35	12.02	27.20	0.00	3.53	4.07	23.44	0.49	0.00	4.36	11.25	15.81
8	44.66	2.79	1648	7.72	6.05	15.30	0.00	4.82	7.10	14.78	0.25	0.00	5.12	2.37	19.45
9	47.17	2.11	1300	7.29	3.14	8.01	0.00	4.97	7.91	7.97	0.18	0.00	4.71	3.83	12.50
10	39.30	1.83	1179	7.79	4.05	9.33	0.00	5.12	4.38	8.83	0.16	0.00	3.80	4.95	9.74
11	17.71	2.04	1281	7.70	4.74	11.11	0.00	4.21	5.57	10.48	0.15	0.00	3.74	5.04	11.62
12	17.71	2.36	1474	7.34	5.85	13.88	0.00	4.56	5.66	13.23	0.11	0.00	3.96	5.51	14.09
1981	333.39	2.41	1519	7.54	6.20	14.97	0.00	4.29	5.71	13.86	0.26	0.00	4.49	5.28	14.33

LOCATION : EH07 : ADD QASSABI PS YEAR : 1982 CODE : 12
 MEASUREMENT POINT CODE: 12 : PUMP STATION : BASIC DATA: DISCHARGE AND LIFTING HEAD

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	19.98	3.33	1944	7.35	7.33	18.29	0.00	7.21	5.94	18.80	0.13	0.00	4.60	2.85	24.63
2	6.65	10.02	5850	7.11	14.40	42.63	0.00	22.45	14.52	61.92	0.36	0.00	8.50	4.22	86.53
3	18.19	2.10	1285	7.35	4.60	11.09	0.00	5.90	4.18	10.33	0.12	0.00	4.22	3.09	13.22
4	16.26	2.15	1370	7.18	5.02	12.31	0.00	5.03	5.09	11.29	0.17	0.00	4.69	4.55	12.34
5	15.98	3.10	1884	7.29	5.91	15.04	0.00	7.28	7.35	15.99	0.17	0.00	4.65	5.17	20.96
6	20.07	2.21	1359	7.55	5.43	12.43	0.00	5.29	4.36	11.94	0.17	0.00	3.40	4.86	13.50
7	31.67	2.22	1484	7.61	7.05	17.05	0.00	4.73	3.47	14.27	0.19	0.00	5.30	5.82	11.55
8	37.74	2.31	1581	7.76	7.76	18.69	0.00	3.90	4.34	15.75	0.09	0.00	5.25	7.66	11.17
9	37.79	2.48	1854	7.53	7.21	17.85	0.00	3.76	5.93	15.87	0.10	0.00	5.40	7.22	13.05
10	31.88	1.88	1236	7.20	5.74	13.67	0.00	2.98	4.72	11.26	0.10	0.00	4.93	4.45	9.67
11	21.76	1.97	1241	7.55	4.95	11.66	0.00	4.52	4.50	10.51	0.05	0.00	4.06	4.32	11.20
12	20.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	278.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH07 : ADD QASSABI PS YEAR : 1983 CODE : 11
 MEASUREMENT POINT CODE: 11 : PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH			ADJ										CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	21.65	1.77	1073	7.69	3.48	8.11	0.00	4.51	5.03	7.60	0.12	0.00	3.53	3.20	10.52
2	6.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	20.83	1.96	1250	7.50	6.39	14.10	0.00	3.50	3.76	12.17	0.14	0.00	3.56	5.21	10.79
4	17.24	2.44	1522	7.55	8.05	19.19	0.00	3.67	4.16	15.93	0.19	0.00	5.19	3.43	15.33
5	16.70	2.47	1430	7.74	7.76	18.29	0.00	4.68	4.12	16.23	0.22	0.00	4.44	7.40	13.46
6	20.72	2.72	1783	8.07	7.91	18.96	0.00	4.64	5.38	17.70	0.26	0.00	4.47	8.16	15.35
7	35.88	2.27	1525	8.12	7.28	16.91	0.00	3.72	4.73	14.96	0.15	0.00	4.20	8.05	11.31
8	32.83	2.69	1827	8.10	8.54	20.16	0.00	3.91	5.36	18.58	0.18	0.00	4.35	10.76	13.13
9	34.39	2.37	1591	7.85	6.84	16.15	0.00	5.43	3.85	14.74	0.16	0.06	4.17	6.96	12.99
10	31.28	2.15	1468	8.13	5.25	12.91	0.00	3.83	4.68	12.03	0.09	0.16	4.50	7.91	10.02
11	20.96	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	22.34	1.79	1255	7.55	4.32	10.81	0.00	4.72	4.49	9.70	0.11	0.01	4.28	7.65	7.07
1983	281.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH08 - MAIN GASSABI PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $\Delta = Q_0 + B \cdot H$

Q_0	=	6.263	- DISCHARGE IN M ³ /SEC
B	=	-0.342	- DISCHARGE IN M ³ /SEC AT ZERO SUCTION HEAD
H	=		- SLOPE OF CAPACITY CURVE
OCAP	=	5.432	- SUCTION HEAD IN M
HAV	=	2.430	- AVERAGE PUMP CAPACITY IN M ³ /SEC
			- AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CO3	HC03	SO4	CL
					SAR	SAR	RSC	CA	MG	NA	K					
1	17.40	4.73	3017.	7.76	9.58	24.47	0.00	8.90	10.37	29.72	0.26	0.00	4.36	13.07	31.81	
2	10.05	7.32	4383.	7.34	12.15	32.51	0.00	14.01	14.02	45.50	0.36	0.00	4.82	10.41	38.66	
3	16.67	3.55	2235.	7.55	6.36	16.83	0.00	8.22	9.10	18.72	0.25	0.00	5.35	7.88	23.02	
4	17.63	3.87	2360.	7.55	6.62	16.32	0.00	8.29	10.24	20.16	0.46	0.00	3.45	8.98	26.73	
5	14.95	4.93	3055.	7.56	10.37	25.04	0.00	9.97	7.94	31.03	1.15	0.00	3.39	11.10	33.61	
6	21.97	4.85	2982.	7.40	9.43	24.45	0.00	8.04	11.26	29.29	0.64	0.00	4.73	9.64	34.85	
7	32.22	4.65	2910.	7.35	11.69	29.35	0.00	7.52	7.35	31.86	0.49	0.00	4.80	9.83	32.59	
8	33.25	4.36	2758.	7.53	10.18	26.46	0.00	7.60	7.78	28.24	0.79	0.00	5.58	9.19	29.63	
9	33.24	3.87	2428.	7.54	8.65	22.62	0.00	7.30	7.62	23.54	0.54	0.00	5.74	7.36	26.00	
10	28.24	3.38	2206.	7.49	7.11	18.95	0.00	6.01	8.54	19.17	1.16	0.00	6.41	7.79	20.63	
11	18.48	4.23	2765.	7.43	8.56	23.31	0.00	9.81	8.05	25.38	0.55	0.00	7.00	9.85	27.14	
12	18.70	4.25	2947.	7.50	9.89	24.99	0.00	8.76	8.10	28.73	0.66	0.00	4.45	18.77	22.98	
1980	262.79	4.34	2745.	7.49	9.20	23.92	0.00	8.21	8.79	26.83	0.63	0.00	5.15	9.97	29.34	

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CO3	HC03	SO4	CL
					SAR	SAR	RSC	CA	MG	NA	K					
1	16.73	3.40	2132.	7.32	8.57	21.27	0.00	5.14	7.37	21.43	0.38	0.00	4.74	7.56	22.01	
2	7.06	5.79	3604	6.99	10.22	28.54	0.00	13.44	10.07	35.02	0.51	0.00	6.83	9.66	42.55	
3	17.36	3.69	2168.	7.19	7.62	19.71	0.00	6.81	8.08	20.78	0.39	0.00	3.93	5.00	27.12	
4	18.76	3.68	2289.	7.64	7.71	19.77	0.00	6.58	8.87	21.43	0.37	0.00	4.90	7.80	24.54	
5	20.50	3.88	2372.	7.61	10.10	24.62	0.00	6.64	6.14	25.53	0.29	0.00	4.36	7.01	27.21	
6	28.10	4.95	3069.	7.96	9.21	24.14	0.00	8.48	12.20	29.61	0.39	0.00	4.83	10.80	35.05	
7	34.55	3.37	1968.	8.13	4.95	12.91	0.00	7.66	10.29	14.94	0.23	0.00	4.62	4.04	24.36	
8	30.24	3.65	2083.	7.95	6.23	16.17	0.00	6.89	9.93	18.06	0.26	0.00	4.85	2.43	27.66	
9	31.42	3.81	2340.	7.56	6.34	16.86	0.00	6.01	12.98	19.34	0.22	0.00	5.22	7.77	25.76	
10	32.34	2.95	1813.	7.71	7.28	17.79	0.00	4.81	6.77	17.52	0.21	0.00	4.43	9.72	19.16	
11	19.82	3.67	2228.	7.55	7.87	19.47	0.00	6.39	8.46	21.45	0.33	0.00	4.11	7.05	25.47	
12	18.17	4.07	2561.	7.97	9.87	24.42	0.00	6.63	7.99	26.68	0.23	0.00	4.33	10.08	27.13	
1981	275.07	3.79	2292.	7.59	7.53	19.24	0.00	6.77	9.33	21.35	0.29	0.00	4.68	6.69	26.37	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CO3	HC03	SO4	CL
					SAR	SAR	RSC	CA	MG	NA	K					
1	23.01	3.98	2328.	7.40	8.53	21.42	0.00	8.23	6.86	23.42	0.12	0.00	4.49	4.21	29.94	
2	10.35	9.03	5227.	7.39	11.61	33.93	0.00	19.31	19.08	50.89	0.34	0.00	7.26	5.14	77.23	
3	20.72	3.51	2060.	7.44	7.26	18.14	0.00	6.67	7.79	19.52	0.20	0.00	4.37	4.19	25.62	
4	19.70	3.55	2405.	7.41	7.94	20.25	0.00	6.55	9.06	22.18	0.30	0.00	4.73	13.76	19.36	
5	16.43	5.59	3483.	7.27	10.74	28.95	0.00	10.30	11.26	35.28	0.41	0.00	5.74	10.94	40.59	
6	28.02	4.23	2618.	7.64	9.26	23.20	0.00	7.71	8.43	26.30	0.40	0.00	4.32	9.04	29.48	
7	36.87	4.05	2588.	7.32	10.22	25.99	0.00	6.40	7.82	27.24	0.17	0.00	5.19	10.01	26.43	
8	37.22	4.09	2712.	7.70	11.23	29.05	0.00	6.27	7.29	29.23	0.09	0.00	6.03	11.83	25.01	
9	35.34	4.33	2855.	7.40	12.45	31.80	0.00	5.74	7.43	31.93	0.18	0.00	5.81	12.27	27.25	
10	30.58	3.47	2184.	7.16	9.28	23.28	0.00	5.81	6.31	22.84	0.06	0.00	5.21	6.68	23.30	
11	22.38	3.82	1676.	7.38	6.85	16.15	0.00	5.44	5.74	16.19	0.06	0.00	3.72	4.39	19.35	
12	15.04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	293.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CO3	HC03	SO4	CL
					SAR	SAR	RSC	CA	MG	NA	K					
1	15.64	3.24	1945.	7.36	7.55	17.90	0.00	6.82	5.82	18.99	0.23	0.00	3.60	5.69	22.57	
2	5.66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	20.03	3.96	2435.	7.30	10.90	25.44	0.00	6.07	6.28	27.08	0.25	0.00	3.60	8.54	27.54	
4	19.17	4.03	2379.	7.65	10.12	24.13	0.00	5.67	7.50	25.97	0.29	0.00	3.80	5.81	29.81	
5	18.64	3.95	2577.	7.88	11.60	27.88	0.00	6.19	5.95	28.58	0.29	0.00	4.28	11.91	24.82	
6	21.28	4.87	3164.	8.16	15.66	37.54	0.00	6.64	5.21	38.11	0.28	0.00	4.56	14.60	31.11	
7	31.48	4.19	2777.	8.20	13.22	32.27	0.00	5.81	5.78	31.83	0.24	0.01	4.91	14.14	24.60	
8	31.85	4.31	2843.	8.29	11.98	30.66	0.00	5.65	6.08	31.38	0.26	0.01	5.43	12.39	27.29	
9	33.27	4.87	2271.	8.21	9.03	22.38	0.00	7.00	6.75	23.67	0.21	0.17	4.29	4.43	29.72	
10	27.32	3.37	2166.	8.18	7.02	17.54	0.00	9.28	6.11	19.47	0.08	0.49	3.69	10.13	20.58	
11	17.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	14.59	3.57	2163.	7.54	11.41	25.81	0.00	4.89	4.86	25.18	0.22	0.04	3.58	6.63	24.89	
1983	256.83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EH09 - GENEENA PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE : 11 : PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION Q=GD+B*H
 Q = - DISCHARGE IN M**3 PER SECOND
 GD = 6 630 - DISCHARGE IN M**3 PER SECOND AT ZERO SUCTION HEAD
 B = -0 843 - SLOPE OF CAPACITY CURVE
 H = - SUCTION HEAD IN M
 QCAP= 5 011 - AVERAGE PUMP CAPACITY IN M**3 PER SECOND
 HAV = 1 920 - AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ										CL			
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	10 28	4.54	2726	7.41	11.09	26.79	0.00	5.67	8.91	29.95	0.27	0.00	5.84	5.46	33.49
2	8.59	7.58	3365	7.43	12.30	33.11	0.00	7.96	10.14	37.01	0.45	0.00	6.51	6.53	42.45
3	12.41	4.18	774	7.37	2.29	5.47	0.00	3.37	3.79	4.33	0.21	0.00	4.72	1.38	5.60
4	12.07	0.88	537	7.42	2.33	4.02	0.00	2.41	2.17	3.52	0.26	0.00	1.65	2.60	4.10
5	11.56	0.97	618	7.47	2.22	4.58	0.00	2.85	2.75	3.72	0.15	0.00	2.75	2.41	4.29
6	21.04	0.82	531	7.57	1.55	3.27	0.00	2.62	2.74	2.54	0.12	0.00	3.03	1.64	3.34
7	26.20	0.94	637	7.45	3.40	7.18	0.00	2.37	1.77	4.89	0.22	0.00	4.01	1.31	3.94
8	25.56	0.96	653	7.34	2.75	6.20	0.00	2.61	2.37	4.34	0.21	0.00	4.65	0.66	4.22
9	22.95	0.83	566	7.33	2.36	5.20	0.00	2.44	2.03	3.52	0.18	0.00	4.45	0.20	3.47
10	14.96	1.38	898	7.35	3.77	9.10	0.00	3.29	3.24	6.82	0.18	0.00	5.62	0.44	7.47
11	13.14	1.69	1073	7.58	4.23	10.23	0.00	3.69	4.34	8.47	0.14	0.00	5.01	2.21	9.45
12	11.66	1.74	1158	7.45	4.20	10.25	0.00	3.74	5.00	8.78	0.25	0.00	4.95	4.34	8.48
1980	190.42	1.49	939	7.42	4.18	9.61	0.00	3.21	3.46	7.64	0.21	0.00	4.32	1.92	8.26

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ										CL			
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	10.95	7.31	1514	7.22	7.05	17.05	0.00	3.95	4.62	14.60	0.29	0.00	5.14	5.58	12.74
2	9.44	5.53	3634	7.21	13.52	35.33	0.00	8.85	8.96	40.36	0.24	0.00	5.55	15.96	36.89
3	14.41	1.49	918	7.22	5.37	11.46	0.00	2.84	2.48	8.75	0.18	0.00	3.71	1.83	8.70
4	11.89	1.60	1026	7.47	5.68	12.44	0.00	3.32	2.48	9.67	0.23	0.00	3.95	3.26	8.49
5	11.98	1.45	916	7.29	5.24	11.44	0.00	2.45	2.86	8.54	0.23	0.00	4.12	1.89	8.07
6	10.09	1.25	872	8.12	4.38	9.66	0.00	1.94	3.52	7.23	0.19	0.00	4.13	4.31	4.45
7	25.78	1.23	897	8.40	4.17	9.39	0.00	3.13	2.59	7.05	0.20	0.00	4.38	4.89	3.69
8	23.29	1.17	795	7.79	3.16	7.43	0.00	3.31	2.74	5.50	0.18	0.00	5.06	1.35	5.33
9	20.08	1.16	730	7.41	3.28	7.27	0.00	2.69	2.86	5.46	0.17	0.00	4.00	0.85	6.32
10	14.34	1.48	939	7.41	4.19	9.22	0.00	2.94	3.80	7.69	0.19	0.00	3.47	3.43	7.72
11	11.49	1.78	1118	7.21	5.58	12.40	0.00	3.75	3.14	10.35	0.21	0.00	3.74	3.53	10.17
12	11.19	2.03	1281	7.69	6.33	14.26	0.00	3.58	4.05	12.37	0.15	0.00	3.77	4.72	11.65
1981	182.94	1.68	1093	7.48	5.37	12.23	0.00	3.33	3.40	9.85	0.20	0.00	4.26	3.80	8.72

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ										CL			
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	11.51	4.69	2736	7.42	10.31	26.54	0.00	6.36	9.66	29.18	0.46	0.00	5.15	4.21	36.30
2	6.89	7.46	4368	7.52	15.18	42.48	0.00	10.03	12.01	50.38	0.69	0.00	7.82	3.65	61.65
3	12.34	1.47	958	7.20	4.07	9.21	0.00	3.18	3.72	7.36	0.25	0.00	3.89	3.60	7.21
4	12.46	1.57	1048	7.13	5.25	11.92	0.00	3.33	2.96	9.31	0.23	0.00	4.39	3.90	7.54
5	11.68	1.60	1015	7.55	4.15	9.78	0.00	3.34	4.17	8.04	0.20	0.00	4.51	2.51	8.73
6	18.46	1.09	711	7.83	2.70	5.93	0.00	3.14	2.77	4.64	0.20	0.00	3.60	2.08	5.07
7	25.88	1.19	788	7.72	4.51	9.78	0.00	3.77	0.83	6.85	0.17	0.00	4.34	1.28	6.00
8	24.22	1.46	1014	7.36	6.93	14.60	0.60	2.63	2.08	10.02	0.09	0.00	5.30	3.31	6.20
9	22.26	1.57	1042	7.20	6.19	13.67	0.00	1.75	3.69	10.21	0.13	0.00	4.39	4.05	7.35
10	15.93	1.52	935	7.06	3.84	8.99	0.00	2.57	4.65	7.29	0.18	0.00	4.45	1.42	8.81
11	15.41	1.31	825	7.58	4.62	9.70	0.00	2.72	2.47	7.45	0.06	0.00	3.41	2.39	6.89
12	13.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	190.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ										CL			
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	13.38	0.99	623	7.41	2.73	5.59	0.00	2.65	2.43	4.35	0.12	0.00	2.91	1.73	4.92
2	5.45	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	13.05	1.30	842	7.39	4.51	9.43	0.00	2.79	2.54	7.37	0.14	0.00	3.27	3.28	6.29
4	13.69	1.23	809	7.35	3.88	8.28	0.00	2.97	2.64	6.50	0.14	0.00	3.40	3.36	5.48
5	13.77	1.44	976	7.73	4.50	10.16	0.00	4.03	2.35	8.05	0.14	0.00	4.10	4.24	6.25
6	19.03	0.99	671	7.97	4.14	8.36	0.00	2.38	1.54	5.79	0.11	0.00	3.53	2.35	3.95
7	26.87	0.97	639	8.43	4.09	8.42	0.04	2.22	1.63	5.67	0.07	0.01	3.88	1.78	3.93
8	23.07	1.09	781	8.36	4.91	10.87	1.33	1.92	2.17	7.02	0.11	0.37	5.05	2.10	3.67
9	22.67	0.90	634	8.22	3.51	7.23	0.00	1.86	2.20	5.01	0.11	0.11	3.52	2.91	2.64
10	15.25	0.93	597	8.17	2.65	5.68	0.00	2.60	2.26	4.14	0.06	0.33	3.32	1.24	4.17
11	11.49	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	13.26	1.36	863	7.48	3.39	7.81	0.00	3.82	3.09	6.30	0.11	0.02	4.14	1.78	7.38
1983	190.95	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EH10 : ERAD PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 / PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: Q=Q0+B·H
 Q = DISCHARGE IN M³/SEC
 Q0 = 14.424 = DISCHARGE IN M³/SEC AT ZERO SUCTION HEAD
 B = -1.525 = SLOPE OF CAPACITY CURVE
 H = 9.834 = SUCTION HEAD IN M
 QCAP = 9.834 = AVERAGE PUMP CAPACITY IN M³/SEC
 HAV = 3.010 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3						SAR	RSC								
1	46.74	5.34	3122	7.35	9.65	24.64	0.00	9.32	11.73	31.30	0.35	0.00	4.14	6.81	41.76	
2	28.23	7.16	4193	7.47	11.33	30.32	0.00	12.21	16.14	42.68	0.41	0.00	4.74	8.20	58.50	
3	46.42	2.36	1468	7.47	3.95	10.36	0.00	5.21	7.49	9.95	0.76	0.00	5.80	2.87	14.75	
4	52.01	2.51	1584	7.43	6.72	16.97	0.00	5.01	4.80	14.89	0.17	0.00	5.91	3.42	15.58	
5	45.21	2.93	1792	7.57	7.67	17.67	0.00	5.36	5.37	17.77	0.50	0.00	3.45	6.12	19.41	
6	69.78	2.70	1686	7.55	6.78	16.64	0.00	6.67	4.05	15.69	0.37	0.00	4.75	4.72	17.28	
7	81.66	2.78	1782	7.46	7.58	18.73	0.00	5.44	5.02	17.33	0.26	0.00	5.11	6.26	16.68	
8	90.79	2.74	1694	7.78	7.30	18.25	0.00	5.24	5.01	16.54	0.18	0.00	5.48	3.58	17.92	
9	94.18	2.49	1530	7.57	6.43	15.82	0.00	4.87	5.00	14.27	0.20	0.00	5.06	3.53	15.74	
10	72.76	2.12	1364	7.45	4.63	12.02	0.00	5.13	5.31	10.59	0.18	0.00	6.31	2.65	12.26	
11	63.57	3.02	1985	7.11	6.33	16.76	0.00	5.22	8.82	16.77	0.56	0.00	6.14	7.80	17.42	
12	54.72	3.10	2066	7.50	9.45	22.30	0.00	4.24	6.29	21.69	0.28	0.00	4.11	12.65	15.74	
1980	746.06	3.01	1872	7.46	7.12	17.98	0.00	5.77	6.37	17.54	0.32	0.00	5.17	5.38	19.45	

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3						SAR	RSC								
1	32.69	2.85	1978	7.34	7.70	19.11	0.00	3.62	8.11	18.65	0.33	0.00	4.84	12.30	13.53	
2	25.46	3.07	2078	7.09	5.89	15.85	0.00	7.92	7.78	16.50	0.33	0.00	6.26	9.53	16.74	
3	36.99	2.40	1438	7.38	5.93	13.65	0.00	4.45	5.43	13.18	0.32	0.00	3.50	4.00	15.85	
4	36.42	2.76	1719	7.78	6.74	16.17	0.00	5.11	6.20	16.02	0.32	0.00	4.04	6.36	17.20	
5	32.26	2.74	1669	7.60	6.54	15.98	0.00	4.74	6.52	15.51	0.23	0.00	4.46	4.55	18.03	
6	46.41	2.85	1884	7.67	9.26	22.02	0.00	4.03	5.19	19.87	0.31	0.00	4.68	8.74	15.99	
7	59.69	3.21	2173	7.69	12.76	29.20	0.00	3.61	4.01	24.91	0.50	0.00	4.66	13.52	14.85	
8	67.69	2.81	1837	7.74	8.20	20.34	0.00	4.46	5.63	18.41	0.25	0.00	5.43	7.07	16.24	
9	60.54	2.52	1529	7.23	7.26	17.42	0.00	3.90	5.03	15.33	0.20	0.00	4.81	3.15	16.50	
10	49.45	2.56	1540	7.40	6.94	16.60	0.00	4.63	4.84	15.09	0.23	0.00	4.50	3.09	17.21	
11	41.93	2.79	1679	7.59	6.72	16.36	0.00	5.01	6.14	15.86	0.26	0.00	4.42	3.94	18.92	
12	38.73	3.46	2188	7.52	6.24	15.78	0.00	7.90	9.30	18.29	0.18	0.00	4.11	9.60	21.95	
1981	528.28	2.81	1803	7.47	7.63	18.59	0.00	4.75	5.71	17.61	0.29	0.00	4.66	7.09	16.82	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3						SAR	RSC								
1	36.89	4.06	2399	7.31	7.47	19.21	0.00	8.10	9.53	22.17	0.20	0.00	4.38	5.49	29.94	
2	18.03	8.15	4815	7.49	12.72	36.13	0.00	14.03	17.02	30.13	0.40	0.00	6.78	7.61	67.18	
3	33.74	2.45	1484	7.47	5.73	13.74	0.00	5.20	5.35	13.15	0.26	0.00	4.13	3.80	16.03	
4	36.20	2.43	1608	7.22	6.27	15.12	0.00	5.16	5.38	14.41	0.20	0.00	4.28	7.93	12.94	
5	33.72	2.97	1850	7.25	6.17	15.75	0.00	6.12	7.43	16.07	0.24	0.00	4.99	5.85	19.01	
6	49.39	2.79	1753	7.48	6.31	15.88	0.00	5.36	6.82	15.58	0.30	0.00	4.94	5.75	17.38	
7	66.18	2.56	1691	7.59	8.33	20.39	0.00	4.96	3.64	17.28	0.17	0.00	5.65	6.07	14.33	
8	66.17	2.90	1959	7.59	10.14	24.68	0.00	3.84	4.95	21.26	0.14	0.00	5.59	9.14	19.46	
9	64.30	2.78	1780	7.51	8.83	21.40	0.00	3.40	5.66	18.79	0.17	0.00	5.21	6.17	16.68	
10	53.61	2.50	1561	7.19	6.90	16.66	0.00	3.50	6.06	15.09	0.18	0.00	4.70	4.70	15.58	
11	49.08	2.32	1402	7.60	6.10	14.00	0.00	4.27	5.11	13.22	0.06	0.00	3.97	4.19	14.93	
12	41.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	549.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH		EC	TDS	PH	SAR	ADJ		CA	MG	NA	K	CO3	HC03	SO4	CL
	MIL M3						SAR	RSC								
1	43.04	2.06	1234	7.64	5.60	12.34	0.00	4.31	4.06	11.46	0.26	0.00	3.14	4.22	12.72	
2	13.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	39.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	37.46	2.72	1755	7.51	8.31	19.26	0.00	3.20	6.33	18.14	0.16	0.00	3.91	8.35	15.58	
5	38.32	2.60	1728	7.57	9.27	21.06	0.00	3.87	4.13	18.55	0.19	0.00	4.07	9.16	13.51	
6	48.36	2.66	1729	8.01	8.70	20.06	0.00	4.03	4.74	18.22	0.17	0.00	4.07	7.95	15.11	
7	67.90	2.52	1670	7.88	9.01	20.83	0.00	3.50	4.36	17.86	0.18	0.00	4.49	7.88	13.48	
8	56.63	3.05	2055	6.40	11.47	28.08	0.00	3.27	4.93	23.23	0.16	0.00	6.26	8.81	16.52	
9	63.01	2.41	1507	7.66	8.19	18.69	0.00	3.50	4.17	16.04	0.15	0.08	4.12	4.90	14.76	
10	52.44	2.15	1397	8.05	5.84	14.03	0.00	3.71	5.60	12.59	0.08	0.25	4.29	6.00	11.42	
11	42.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	43.60	2.40	1515	7.59	7.51	17.32	0.00	4.61	3.75	15.36	0.15	0.01	4.08	5.35	14.45	
1983	546.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EH11 : BAHR MADUS BRIDGE YEAR : 1980 CODE : 22
 MEASUREMENT POINT CODE : 22 : OPEN DRAIN : BASIC DATA: WATER LEVEL MEASUREMENTS

DISCHARGE RELATION: $G=A*(HR-HM)^{B+C}$

G = DISCHARGE IN M \cdot s PER SECOND
 A = 109.750 = DISCHARGE COEFFICIENT
 HR = 3.000 = DATUM HM VALUE IN M FOR ZERO DISCHARGE
 HM = DISTANCE BETWEEN REF. POINT AND WATERLEVEL IN M
 B = 1.380 = DISCHARGE EXPONENT
 $R2$ = 0.950 = CORRELATION COEFFICIENT

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MC	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	80.29	2.75	1673.	7.42	5.90	14.56	0.00	5.49	6.85	14.66	0.20	0.00	4.34	4.82	18.04
2	78.55	2.00	1249.	7.34	4.22	10.31	0.00	5.35	4.89	9.53	0.22	0.00	4.43	4.18	11.40
3	97.75	1.86	1203.	7.55	3.34	8.48	0.00	4.94	5.88	7.76	0.21	0.00	5.21	3.75	9.83
4	105.30	2.28	1472.	7.52	6.07	15.37	0.00	4.63	4.79	13.17	0.24	0.00	6.13	3.53	13.13
5	128.21	2.15	1354.	7.46	5.71	12.89	0.00	4.78	4.36	12.20	0.16	0.00	3.33	5.67	12.50
6	88.89	2.34	1494.	7.38	6.52	16.51	0.00	4.03	5.06	13.90	0.24	0.00	6.36	2.94	13.95
7	142.24	2.50	1611.	7.33	8.06	19.26	0.00	3.62	4.68	16.43	0.40	0.00	5.03	5.56	14.54
8	177.78	2.49	1629.	7.51	6.90	16.98	0.00	4.87	4.62	15.04	0.72	0.00	5.25	5.80	14.21
9	196.02	0.45	1576.	7.55	6.86	16.52	0.00	4.76	4.74	14.94	0.29	0.00	4.66	5.80	14.28
10	74.37	2.12	1398.	7.78	5.57	14.25	0.00	5.26	4.02	12.00	0.11	0.00	6.48	3.40	11.42
11	155.63	2.28	1581.	7.66	5.98	15.29	0.00	4.00	4.25	13.53	0.19	0.00	6.10	6.86	10.99
12	168.18	2.22	1606.	7.62	5.29	12.87	0.00	4.68	6.84	12.69	0.22	0.00	4.15	12.44	7.85
1980	1493.21	2.31	1314.	7.30	6.00	14.81	0.00	4.84	5.06	13.36	0.29	0.00	5.05	3.90	12.59

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MC	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	26.56	2.12	1482.	7.54	5.64	13.48	0.00	2.95	7.00	12.57	0.25	0.00	4.20	9.91	6.67
2	53.10	2.72	1586.	7.08	8.12	19.02	0.00	4.02	4.65	16.90	0.23	0.00	4.40	1.95	19.46
3	115.56	1.78	1054.	7.30	3.84	9.06	0.00	3.84	4.93	8.04	0.19	0.00	4.05	1.52	11.43
4	83.90	1.94	1256.	7.51	4.96	11.91	0.00	5.10	3.70	10.40	0.25	0.00	4.59	4.30	10.55
5	73.64	1.79	1143.	7.43	4.56	10.98	0.00	3.79	4.50	9.29	0.21	0.00	4.77	3.07	9.95
6	68.43	2.66	1747.	7.97	7.39	18.28	0.00	5.12	5.21	16.80	0.15	0.00	5.16	7.18	14.95
7	89.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	141.78	2.36	1492.	7.74	6.21	15.46	0.00	4.88	4.71	13.60	0.22	0.00	5.46	3.68	14.28
9	197.77	1.10	759.	7.38	2.38	5.61	0.00	3.19	3.45	4.33	0.21	0.00	4.69	2.26	4.24
10	189.31	1.38	855.	7.42	2.98	6.92	0.00	3.30	4.15	5.75	0.20	0.00	4.04	1.59	7.77
11	136.94	2.32	1451.	7.41	5.78	13.61	0.00	4.54	5.51	12.97	0.17	0.00	3.84	5.45	13.90
12	199.97	2.40	1552.	7.61	5.88	14.13	0.00	4.31	6.50	13.67	0.12	0.00	4.11	7.23	13.27
1981	1376.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MC	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	217.32	1.95	1139.	7.38	3.66	8.78	0.00	4.07	5.94	8.19	0.06	0.00	4.00	3.61	10.65
2	74.13	1.48	915.	7.43	3.13	7.37	0.00	4.29	3.71	6.26	0.09	0.00	4.12	1.82	8.41
3	185.11	1.32	853.	7.36	3.18	7.25	0.00	3.67	3.36	5.96	0.11	0.00	3.85	2.71	6.54
4	114.41	1.46	905.	7.25	3.59	8.18	0.00	3.28	3.91	6.81	0.18	0.00	3.83	2.14	8.22
5	116.34	1.97	1255.	7.45	4.69	11.04	0.00	4.39	5.10	10.22	0.18	0.00	3.88	4.69	11.33
6	120.10	1.12	1329.	7.54	5.57	12.97	0.00	4.73	4.25	11.80	0.23	0.00	3.92	4.66	12.42
7	140.19	2.22	1519.	7.63	7.38	17.83	0.00	3.48	4.62	14.86	0.20	0.00	3.36	6.89	10.90
8	192.95	2.25	1555.	7.53	7.99	19.33	0.00	3.64	4.07	15.67	0.07	0.00	5.70	7.24	10.53
9	174.33	2.49	1676.	7.60	8.04	19.68	0.00	3.11	5.69	16.86	0.14	0.00	5.54	7.57	12.70
10	203.26	1.80	1194.	7.53	5.60	13.03	0.00	3.70	3.65	10.74	0.15	0.00	4.47	4.96	8.81
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MC	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	88.42	2.21	1294.	7.52	8.06	17.44	0.00	3.19	3.15	14.33	0.16	0.00	3.72	1.84	15.26
5	116.57	2.25	1467.	7.75	8.30	18.49	0.00	4.08	2.94	15.54	0.17	0.00	3.99	6.40	12.34
6	116.61	2.60	1713.	7.82	8.72	20.29	0.00	4.61	3.89	17.97	0.17	0.00	4.36	7.76	14.53
7	134.74	2.37	1605.	8.14	7.92	18.86	0.00	4.38	3.90	16.12	0.18	0.01	4.91	7.70	11.96
8	164.43	2.31	1580.	8.12	6.13	15.00	0.00	3.05	7.41	14.03	0.14	0.34	4.31	9.52	10.45
9	213.35	2.00	1318.	7.85	6.39	14.63	0.00	3.64	4.13	12.59	0.08	0.13	3.94	6.24	10.13
10	243.65	2.00	1291.	8.13	4.20	10.41	0.00	4.14	6.56	9.70	0.04	0.26	4.42	5.45	10.29
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	182.36	1.39	863.	7.76	3.61	8.17	0.00	2.74	4.17	6.70	0.13	0.01	3.84	2.69	7.20
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH12 : SAFT PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 : PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $Q=Q_0+B\cdot H$
 Q = DISCHARGE IN M³/SECOND
 Q₀ = 8.558 - DISCHARGE IN M³/SECOND AT ZERO SUCTION HEAD
 B = -0.964 - SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 QCAP = 6.669 - AVERAGE PUMP CAPACITY IN M³/SECOND
 NAV = 1.960 - AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ SAR		RSC	CA	MG	NA	K	CO3	HC03	SO4	CL
					SAR	ADJ SAR									
1	39.45	5.97	3306.	7.69	9.96	26.09	0.00	11.61	11.35	33.74	0.21	0.00	4.59	1.38	50.94
2	28.31	8.25	4823.	7.50	12.78	34.68	0.00	17.43	13.70	50.43	0.45	0.00	5.02	7.66	69.33
3	31.39	2.26	1449	7.80	4.73	11.94	0.00	5.39	5.96	11.28	0.19	0.00	3.05	4.87	12.95
4	50.22	2.22	1370	7.61	3.21	11.65	0.00	5.24	4.89	11.73	0.20	0.00	2.94	5.72	13.39
5	52.06	2.22	1377.	7.46	6.39	13.69	0.00	3.94	4.68	13.26	0.20	0.00	2.77	6.03	13.28
6	50.96	2.61	1672	7.47	5.72	14.15	0.00	6.38	5.71	14.07	0.36	0.00	4.43	6.75	15.33
7	61.70	2.99	1999.	7.46	9.10	22.39	0.00	6.12	4.09	20.56	0.25	0.00	5.23	8.90	16.88
8	71.48	1.56	1001	7.98	3.52	8.42	0.00	5.19	3.00	7.14	0.10	0.00	4.48	2.45	8.50
9	64.90	2.19	1401	7.62	5.75	14.07	0.00	4.85	4.51	12.45	0.11	0.00	4.95	4.45	12.51
10	73.76	2.23	1463	7.61	5.90	15.13	0.00	5.68	3.77	12.82	0.15	0.00	6.58	3.22	12.62
11	47.16	2.48	1700.	7.49	6.19	16.24	0.00	5.69	5.37	14.57	0.28	0.00	6.77	6.48	12.73
12	57.63	2.31	1584	7.78	6.19	14.72	0.00	4.43	5.82	14.01	0.22	0.00	4.06	9.61	10.86
1980	649.22	2.78	1744.	7.61	6.61	16.42	0.00	6.21	5.47	15.96	0.21	0.00	4.78	5.51	17.56

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ SAR		RSC	CA	MG	NA	K	CO3	HC03	SO4	CL
					SAR	ADJ SAR									
1	43.56	2.12	1375.	7.35	6.94	16.38	0.00	2.80	4.78	13.51	0.24	0.00	4.90	4.73	11.71
2	20.94	3.29	2149.	6.95	6.14	16.79	0.00	8.75	7.32	17.41	0.43	0.00	6.88	7.09	19.94
3	54.74	2.21	1343.	7.33	5.84	13.46	0.00	4.54	4.29	12.27	0.37	0.00	3.78	3.68	14.01
4	54.31	2.29	1422.	7.76	6.01	14.10	0.00	3.93	5.48	13.03	0.26	0.00	3.99	4.84	13.87
5	43.50	2.44	1558.	7.57	6.64	15.68	0.00	4.64	5.13	14.67	0.21	0.00	4.09	6.38	14.17
6	46.18	2.89	1837.	8.00	6.66	16.39	0.00	6.34	6.17	16.67	0.18	0.00	4.31	7.47	17.58
7	56.98	2.42	1398	8.38	3.71	9.41	0.00	6.20	7.25	9.62	0.13	0.00	4.55	1.66	16.99
8	63.95	2.62	1518.	7.81	5.71	14.34	0.00	5.64	5.52	13.49	0.19	0.00	5.11	0.64	18.88
9	62.31	2.59	1639.	7.27	6.68	16.57	0.00	4.93	5.76	15.44	0.21	0.00	5.02	3.56	17.77
10	70.74	2.28	1408.	7.67	5.95	14.03	0.00	5.14	4.21	12.87	0.19	0.00	4.09	4.08	14.24
11	49.37	2.70	1620.	7.48	6.16	15.05	0.00	5.97	5.42	14.69	0.20	0.00	4.38	3.62	18.30
12	50.13	2.33	1402	7.59	6.18	14.38	0.00	5.56	3.60	13.22	0.14	0.00	3.92	3.16	15.44
1981	618.72	2.48	1519.	7.52	5.95	14.47	0.00	5.21	5.30	13.64	0.22	0.00	4.48	3.93	15.95

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ SAR		RSC	CA	MG	NA	K	CO3	HC03	SO4	CL
					SAR	ADJ SAR									
1	48.36	3.77	2171.	7.28	7.76	19.30	0.00	8.58	6.35	21.19	0.14	0.00	4.22	3.23	28.69
2	25.76	7.50	4485	7.26	10.87	32.59	0.00	16.73	14.82	43.15	0.32	0.00	9.75	4.96	60.18
3	51.84	2.29	1362.	7.45	4.91	11.79	0.00	5.42	5.16	11.30	0.23	0.00	4.04	2.75	15.33
4	48.84	2.31	1432.	7.35	5.38	12.99	0.00	5.22	5.18	12.28	0.18	0.00	4.26	4.45	14.16
5	50.00	2.41	1516.	7.27	5.29	12.96	0.00	6.76	4.58	12.59	0.17	0.00	4.37	5.04	14.68
6	52.92	2.43	1525.	7.40	5.26	12.39	0.00	7.30	4.23	12.62	0.22	0.00	3.51	6.02	14.83
7	59.86	2.93	1963	7.60	7.80	19.27	0.00	6.29	4.95	18.49	0.78	0.00	4.88	9.26	16.36
8	70.31	2.97	2034	7.48	9.20	22.53	0.00	4.30	5.97	20.85	0.26	0.00	5.07	11.48	14.83
9	64.43	2.65	1766.	7.50	8.69	20.95	0.00	3.41	5.51	18.36	0.13	0.00	5.08	8.19	14.14
10	67.21	1.77	1157.	7.20	5.17	11.89	0.00	3.64	4.03	10.12	0.10	0.00	4.06	4.89	8.94
11	62.74	2.93	1760.	7.44	7.40	17.10	0.00	5.86	5.40	17.37	0.05	0.00	3.38	4.93	20.56
12	62.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	665.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ SAR		RSC	CA	MG	NA	K	CO3	HC03	SO4	CL
					SAR	ADJ SAR									
1	52.91	1.92	1202	7.83	5.38	11.85	0.00	4.58	3.47	10.80	0.13	0.00	3.18	4.85	10.95
2	17.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	48.60	2.28	1452.	7.74	7.93	17.58	0.00	4.10	3.27	15.22	0.17	0.00	3.72	5.70	13.33
4	51.28	2.38	1471.	7.56	8.01	18.56	0.00	3.60	3.88	15.50	0.26	0.00	4.61	3.49	15.15
5	53.22	2.36	1537.	7.56	7.17	16.43	0.00	4.83	3.98	15.05	0.18	0.00	3.80	7.13	13.11
6	42.01	3.31	2.82	7.63	9.29	22.38	0.00	5.73	6.06	22.57	0.17	0.00	4.23	10.90	19.41
7	48.35	2.97	1961.	8.04	9.02	21.56	0.00	4.45	5.81	20.42	0.14	0.01	4.43	9.62	16.76
8	63.69	1.62	3086.	8.29	6.28	14.20	0.00	2.73	2.97	10.61	0.15	0.43	4.35	4.37	7.29
9	63.71	2.57	1610.	8.36	8.04	18.55	0.00	5.04	3.68	16.78	0.15	0.38	3.67	5.82	15.77
10	66.10	2.23	1413.	7.71	4.92	11.96	0.00	6.23	4.72	11.52	0.05	0.41	3.80	5.69	12.63
11	44.59	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	55.53	2.04	1242.	7.22	4.92	11.75	0.00	5.43	3.71	10.52	0.13	0.02	4.31	2.47	12.96
1983	607.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : EH13 : BAHR MADUS DUTFALL YEAR : 1980 CODE : 24
 THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CL		
					SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	3.99	2491.	7.64	10.24	25.44	0.00	8.19	5.28	26.58	0.15	0.00	4.68	8.31	27.16
2	-	4.08	2559.	7.36	8.78	22.27	0.00	8.30	8.03	25.10	0.20	0.00	4.55	9.48	27.60
3	-	2.32	1465.	7.44	4.80	12.29	0.00	5.46	6.19	11.58	0.20	0.00	5.45	4.56	13.43
4	-	2.31	1466.	7.36	5.95	13.39	0.00	4.75	5.15	13.24	0.17	0.00	3.14	6.91	13.40
5	-	2.14	1443.	7.49	6.09	13.71	0.00	4.67	4.50	13.04	0.14	0.00	3.31	8.83	10.26
6	-	2.48	1519.	7.19	5.94	14.36	0.00	5.57	4.93	13.61	0.23	0.00	4.34	4.08	15.93
7	-	2.70	1752.	7.30	7.93	19.36	0.00	4.87	4.87	17.51	0.19	0.00	5.02	6.73	15.70
8	-	2.70	1761.	7.48	6.67	16.82	0.00	5.57	5.49	15.70	0.75	0.00	5.38	6.40	15.73
9	-	2.67	1721.	7.45	6.77	16.98	0.00	5.36	5.49	15.76	0.43	0.00	5.33	5.83	15.87
10	-	2.35	1526.	7.53	7.26	18.10	0.00	4.16	3.98	14.64	0.63	0.00	6.40	3.19	13.82
11	-	2.68	1800.	7.62	6.48	16.82	0.00	6.18	5.44	15.61	0.53	0.00	6.19	7.04	14.54
12	-	2.58	1860.	7.79	8.04	19.62	0.00	4.86	4.87	17.74	0.33	0.00	5.05	13.37	9.39
1980	-	2.74	1779.	7.45	7.10	17.57	0.00	5.65	5.34	16.65	0.33	0.00	4.91	7.06	16.02

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CL		
					SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	1.68	1082.	7.18	5.25	12.03	0.00	3.20	3.56	9.66	0.23	0.00	4.36	3.33	8.97
2	-	2.50	1613.	7.31	6.67	16.38	0.00	4.76	5.30	14.97	0.30	0.00	4.94	5.86	14.53
3	-	2.87	1880.	7.52	7.07	17.94	0.00	6.84	5.05	17.25	0.29	0.00	5.36	7.42	16.65
4	-	2.55	1752.	7.55	6.61	17.04	0.00	7.21	3.76	15.48	0.23	0.00	6.21	7.44	13.03
5	-	2.60	1778.	7.70	5.90	15.06	0.00	7.87	4.61	14.73	0.21	0.00	5.26	8.88	13.29
6	-	2.45	1617.	7.82	6.82	16.55	0.00	5.42	4.39	15.11	0.22	0.00	4.71	6.99	13.45
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
8	-	2.53	1497.	7.85	6.04	15.12	0.00	5.12	5.15	13.70	0.21	0.00	5.34	1.27	17.58
9	-	2.12	1258.	7.50	4.86	11.83	0.00	5.51	3.91	10.55	0.21	0.00	4.68	1.12	14.41
10	-	1.90	1129.	7.49	4.42	10.40	0.00	4.75	3.93	9.20	0.21	0.00	4.11	1.44	12.60
11	-	2.50	1568.	7.22	6.12	14.60	0.00	3.26	5.40	14.14	0.22	0.00	4.01	5.93	15.09
12	-	2.47	1542.	7.42	5.07	12.23	0.00	5.13	7.11	12.53	0.13	0.00	3.81	6.39	14.70
1981	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 15 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CL		
					SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	3.23	1813	7.50	5.61	14.06	0.00	6.44	8.72	15.44	0.14	0.00	4.15	1.77	24.82
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	2.14	1275.	7.50	6.43	14.75	0.00	4.73	2.89	12.54	0.19	0.00	4.17	1.81	14.36
4	-	2.13	1362.	7.35	4.89	11.80	0.00	5.05	5.15	11.04	0.22	0.00	4.26	5.27	11.95
5	-	1.97	1241.	7.38	5.24	12.30	0.00	4.22	4.32	10.82	0.17	0.00	4.19	3.97	11.36
6	-	2.08	1322.	7.51	5.15	12.12	0.00	4.87	4.39	11.08	0.41	0.00	4.01	4.96	11.79
7	-	2.65	1749.	7.52	7.61	18.54	0.00	4.67	5.27	16.97	0.36	0.00	4.87	7.64	14.77
8	-	2.60	1718.	7.41	8.65	19.18	0.00	4.34	4.30	17.99	0.14	0.00	3.38	10.00	13.38
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	-	1.97	1293.	7.17	6.01	13.96	0.00	2.91	5.01	11.97	0.17	0.00	4.24	5.85	9.96
11	-	1.93	1224.	7.47	5.08	11.64	0.00	4.20	4.47	10.57	0.08	0.00	3.65	4.91	10.76
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 7 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ								CL		
					SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3		
1	-	1.81	1103.	7.82	3.38	8.45	0.00	4.24	5.48	7.90	0.14	0.00	3.74	3.16	10.85
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	-	2.61	1768.	8.16	8.90	21.41	0.00	3.71	5.02	18.58	0.09	0.01	5.14	9.59	12.66
8	-	2.69	1727.	8.15	8.69	20.80	0.00	3.41	5.43	18.26	0.18	0.37	4.56	6.80	15.34
9	-	2.47	1905.	8.00	7.15	16.99	0.00	4.66	4.09	14.96	0.29	0.02	4.59	3.20	16.19
10	-	2.14	1415.	7.97	5.41	13.17	0.00	5.41	4.08	11.78	0.52	0.00	4.75	5.70	11.35
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
12	-	2.52	1491.	7.82	7.54	17.73	0.00	4.42	3.98	15.46	0.16	0.00	4.52	1.93	17.61
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LOCATION : EH16 : EL RIN BRIDGE YEAR : 1982 CODE : 24
 THE WATER QUALITY DATA DURING 1982 ARE BASED ON 16 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	1.52	1019.	7.67	2.85	7.21	0.00	5.69	3.54	6.12	0.05	0.00	5.56	2.49	7.36
3	-	0.98	646	7.70	2.04	4.61	0.00	3.45	2.75	3.60	0.08	0.00	3.85	2.31	3.72
4	-	1.50	1023.	7.44	3.92	9.22	0.00	3.56	4.08	7.67	0.14	0.00	4.37	4.89	6.19
5	-	0.85	589.	7.44	2.33	5.06	0.00	3.50	1.27	3.59	0.11	0.00	3.93	1.29	3.25
6	-	1.12	762	7.51	3.33	7.39	0.00	4.10	1.40	5.52	0.17	0.00	4.04	2.42	4.71
7	-	1.45	1046	7.73	5.24	12.46	0.11	3.46	2.38	8.96	0.28	0.00	5.94	3.63	5.50
8	-	1.67	1188.	7.65	6.64	15.59	0.00	3.11	2.79	11.40	0.11	0.00	5.76	4.88	6.79
9	-	1.31	920	7.68	5.50	12.02	0.00	2.25	2.57	8.54	0.09	0.00	4.49	4.18	4.79
10	-	0.84	589	7.22	3.62	7.33	0.22	1.91	1.66	4.83	0.02	0.00	3.78	1.71	3.00
11	-	0.82	566.	7.64	2.45	5.12	0.00	2.49	2.02	3.68	0.05	0.00	3.42	2.00	2.83
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	EC	TDS	PH	ADJ		RSC	CA	MG	NA	K	CO3	HCO3	SO4	CL
					SAR	SAR									
1	-	0.94	644.	7.63	2.70	5.84	0.00	2.85	2.20	4.28	0.09	0.00	3.74	2.24	3.44
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	1.31	1064	8.00	4.97	11.07	0.00	3.88	2.79	9.08	0.10	0.00	3.83	6.37	5.65
4	-	1.36	860.	7.85	4.15	8.78	0.00	3.24	2.75	7.19	0.11	0.00	3.15	3.20	6.96
5	-	1.24	847.	7.89	4.30	9.58	0.00	3.65	1.66	7.00	0.13	0.00	4.43	2.65	5.36
6	-	1.33	937.	7.97	5.11	11.51	0.00	3.45	1.78	8.26	0.12	0.00	4.85	3.64	5.11
7	-	1.28	926	7.93	5.41	11.91	0.00	3.20	1.62	8.39	0.11	0.00	4.67	4.24	4.42
8	-	1.36	970.	7.94	5.62	12.30	0.00	2.49	2.59	8.95	0.13	0.06	4.31	5.31	4.48
9	-	1.03	676.	8.52	3.82	8.11	0.00	1.87	2.52	5.66	0.12	0.36	3.64	1.80	4.36
10	-	0.96	662.	7.93	2.84	6.27	0.00	2.43	2.75	4.57	0.08	0.41	3.64	2.51	3.29
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	1.04	704.	7.50	2.86	6.61	0.00	2.52	2.98	4.74	0.11	0.02	4.88	0.96	4.49
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION E101 BATH FAQUS AT FAQUS YEAR : 1982 CODE : 24
THE WATER QUALITY DATA DURING 1982 ARE BASED ON 14 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	0.96	683.	7.27	2.12	4.94	0.00	3.81	2.16	3.67	0.13	0.00	4.60	2.00	3.23
2	-	0.57	378.	7.37	1.68	3.05	0.00	2.00	1.26	2.15	0.10	0.00	2.40	0.97	2.14
3	-	0.59	395.	7.61	1.26	2.51	0.00	2.50	1.33	1.74	0.09	0.00	2.99	0.61	2.06
4	-	0.65	427.	7.13	1.26	2.58	0.00	2.34	1.94	1.84	0.12	0.00	3.11	0.68	2.46
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	0.55	402.	7.40	1.44	2.78	0.00	2.37	1.09	1.89	0.17	0.00	2.90	1.72	0.89
7	-	0.55	404.	7.63	1.41	2.78	0.00	2.55	0.81	1.82	0.30	0.00	3.25	1.04	1.20
8	-	0.67	446.	7.28	2.22	4.28	0.00	1.84	1.62	2.92	0.11	0.00	2.97	0.91	2.61
9	-	0.73	524.	7.42	2.75	5.48	0.00	2.38	1.23	3.70	0.09	0.00	3.37	1.91	2.14
10	-	0.75	545.	7.38	2.17	4.58	0.00	2.55	1.68	3.23	0.03	0.00	3.60	2.16	2.06
11	-	0.66	472.	7.43	1.99	4.04	0.00	2.43	1.39	2.76	0.05	0.00	3.34	1.65	1.64
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	-	0.61	435.	7.25	2.02	3.99	0.00	2.54	0.79	2.61	0.11	0.00	3.33	1.03	1.64
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	0.63	447.	7.57	2.24	4.30	0.00	1.94	1.39	2.88	0.10	0.00	3.03	1.53	1.75
4	-	0.64	442.	7.28	1.60	3.29	0.00	1.61	2.37	2.26	0.09	0.00	3.38	1.20	1.76
5	-	0.60	402.	7.68	1.74	3.34	0.00	1.51	2.01	2.31	0.09	0.00	2.80	1.05	1.95
6	-	0.63	427.	8.12	1.87	3.73	0.00	1.61	1.97	2.51	0.08	0.00	3.23	0.89	2.00
7	-	0.61	415.	8.31	1.74	3.48	0.00	1.61	1.97	2.33	0.11	0.00	3.31	0.59	1.99
8	-	0.58	421.	8.27	2.75	5.23	1.11	1.41	1.15	3.12	0.12	0.04	3.63	0.46	1.64
9	-	0.68	478.	7.80	1.37	2.93	0.00	2.88	1.80	2.09	0.10	0.30	3.28	1.57	1.75
10	-	0.63	582.	7.32	1.01	2.34	0.00	3.59	3.09	1.85	0.05	0.41	3.44	2.96	1.81
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	0.70	450.	7.10	1.19	2.38	0.00	2.81	2.03	1.84	0.08	0.02	2.49	1.52	2.78
1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : MATAREYA PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 : PUMP STATION : BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $G=GO+B\cdot H$
 G = DISCHARGE IN M^3/SEC
 GO = 9 608 = DISCHARGE IN M^3/SEC AT ZERO SUCTION HEAD
 B = -0 431 = SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 $GCAP$ = 8 401 = AVERAGE PUMP CAPACITY IN M^3/SEC
 HAV = 2 800 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ						CA	MG	NA	K	CO3	HCO3	SO4	CL	
		EC	TDS	PH	SAR	SAR	RSC									
1	15.76	8.06	4830	7.56	15.47	41.24	0.00	6.12	19.56	55.45	0.56	0.00	5.18	11.82	64.64	
2	10.62	9.11	5433	7.64	17.71	47.67	0.00	7.06	19.61	64.66	0.69	0.00	5.56	11.39	74.93	
3	15.33	6.68	3967	7.86	12.88	35.29	0.00	5.54	17.33	43.55	0.40	0.00	6.39	7.83	52.61	
4	13.43	7.56	4648	7.53	15.18	37.72	0.00	6.58	17.51	52.67	1.15	0.00	3.58	15.82	58.44	
5	15.36	7.86	4829	7.93	17.11	42.33	0.00	6.51	15.50	56.76	1.72	0.00	3.76	15.19	61.53	
6	16.51	8.74	5281	7.47	16.34	43.92	0.00	7.17	19.91	60.11	1.71	0.00	5.37	12.72	70.81	
7	18.39	7.44	4772	7.49	20.44	52.43	0.00	6.88	10.18	59.70	0.78	0.00	5.59	17.40	54.55	
8	20.45	12.32	7478	7.52	23.43	63.21	0.00	8.43	23.71	93.91	0.57	0.00	5.40	17.28	103.95	
9	21.05	9.99	6069	7.50	23.31	60.96	0.00	6.71	15.70	78.01	1.09	0.00	5.48	13.79	82.24	
10	25.07	7.45	4742	7.52	16.23	45.03	0.00	6.03	16.04	53.90	1.56	0.00	7.46	15.12	54.94	
11	22.35	8.82	5530	7.39	18.79	52.92	0.00	6.46	18.02	65.75	1.08	0.00	8.02	15.06	68.24	
12	19.05	8.17	5443	7.67	19.21	50.27	0.00	5.30	17.32	64.60	0.80	0.00	5.22	28.56	54.24	
1980		213.37	8.37	5310	7.55	18.28	48.75	0.00	6.56	17.44	63.32	1.03	0.00	5.75	15.50	67.09

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 18 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ						CA	MG	NA	K	CO3	HCO3	SO4	CL	
		EC	TDS	PH	SAR	SAR	RSC									
1	17.97	5.69	3560	7.36	15.25	37.16	0.00	4.17	11.21	42.30	0.68	0.00	4.17	13.32	40.87	
2	13.58	7.01	4309	7.29	13.79	36.86	0.00	8.23	15.61	47.62	0.37	0.00	5.39	13.02	53.42	
3	17.60	5.69	3369	7.25	12.35	31.63	0.00	4.74	13.77	37.56	0.50	0.00	4.74	7.84	43.98	
4	15.39	6.59	3931	7.47	14.04	36.73	0.00	4.51	15.95	44.90	0.69	0.00	5.19	9.21	51.65	
5	14.09	7.00	4057	7.09	13.63	35.68	0.00	5.55	16.88	45.67	0.91	0.00	4.89	6.81	57.30	
6	12.88	6.97	4435	7.69	16.65	43.69	0.00	6.07	13.75	52.42	0.53	0.00	5.58	15.94	51.23	
7	14.82	7.70	4891	8.24	14.96	41.45	0.00	6.93	18.88	53.75	1.15	0.00	6.59	17.04	57.08	
8	21.96	8.50	5343	7.87	21.21	55.84	0.00	4.74	15.63	67.71	1.07	0.00	5.90	19.43	63.81	
9	23.83	7.62	4524	7.40	16.01	42.70	0.00	7.18	14.66	52.90	1.15	0.00	5.78	8.36	61.77	
10	31.88	6.66	4108	7.76	19.18	47.01	0.00	9.87	4.59	51.57	0.97	0.00	4.71	11.01	51.26	
11	22.89	6.90	4044	7.62	14.28	36.32	0.00	4.74	16.30	46.32	1.13	0.00	4.33	8.36	55.79	
12	24.04	6.94	4405	6.51	12.82	33.49	0.00	10.62	15.32	46.15	0.49	0.00	4.42	19.27	48.88	
1981		231.01	6.95	4268	7.21	15.48	40.22	0.00	6.72	13.75	49.52	0.84	0.00	5.08	12.48	53.27

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ						CA	MG	NA	K	CO3	HCO3	SO4	CL
		EC	TDS	PH	SAR	SAR	RSC								
1	25.13	7.33	4349	7.42	13.27	35.33	0.00	7.53	17.83	47.25	0.98	0.00	5.03	9.70	58.84
2	10.13	11.91	6973	7.47	17.71	51.60	0.00	9.14	30.69	79.05	1.09	0.00	7.56	9.07	103.34
3	13.22	7.00	4231	7.20	14.89	39.12	0.00	5.56	16.16	49.05	0.19	0.00	5.20	11.31	54.44
4	13.79	6.98	4383	7.07	15.51	40.80	0.00	5.45	15.75	50.50	0.69	0.00	5.35	15.36	51.68
5	14.34	7.64	4611	7.32	16.65	43.43	0.00	8.45	13.93	55.71	1.19	0.00	5.00	16.58	57.70
6	15.21	8.01	5141	7.38	16.65	43.68	0.00	9.79	14.67	58.21	1.70	0.00	4.92	19.76	59.69
7	19.90	6.79	4292	7.49	15.66	41.31	0.00	5.02	15.17	49.75	0.64	0.00	5.63	15.46	49.49
8	22.53	7.78	5075	7.18	16.94	44.58	0.00	4.81	19.09	58.55	0.88	0.00	5.09	22.58	55.67
9	19.96	8.97	3815	7.26	21.70	57.66	0.00	4.67	17.33	71.95	1.19	0.00	6.01	22.78	66.35
10	22.74	8.49	5441	7.36	19.11	50.85	0.00	5.88	17.31	65.09	1.19	0.00	5.70	20.28	63.30
11	21.75	7.25	4384	7.67	15.75	40.27	0.00	6.41	15.11	51.67	0.32	0.00	4.49	12.16	56.86
12	18.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982		216.94	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ						CA	MG	NA	K	CO3	HCO3	SO4	CL
		EC	TDS	PH	SAR	SAR	RSC								
1	17.39	5.66	3323	7.22	13.08	31.85	0.00	5.21	11.74	38.08	0.80	0.00	3.81	7.53	44.49
2	8.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	15.78	7.40	4475	7.49	18.24	41.91	0.00	5.28	13.23	55.50	0.89	0.00	2.98	13.61	58.41
4	13.62	8.66	4860	7.41	18.39	44.26	0.00	5.28	15.91	60.84	1.03	0.00	3.31	4.54	75.91
5	14.20	8.07	4940	7.65	18.53	47.25	0.00	6.42	14.68	60.17	1.02	0.00	4.63	14.03	63.62
6	14.86	7.24	4716	8.07	17.33	45.64	0.00	8.73	11.77	55.51	0.58	0.00	5.63	19.31	51.65
7	19.64	6.67	4414	8.23	18.18	46.64	0.00	6.48	10.49	52.95	0.63	0.00	5.47	22.01	43.07
8	18.48	8.39	5552	8.02	22.75	58.57	0.00	5.70	12.84	69.27	1.09	0.00	5.56	28.30	55.05
9	20.31	8.08	4830	7.65	20.13	51.48	0.00	6.24	12.68	61.90	1.02	0.00	5.13	12.65	64.05
10	22.62	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	20.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	19.52	5.35	3338	7.49	11.06	28.53	0.00	7.12	12.58	34.71	0.61	0.00	4.66	12.12	38.25
1983		205.29	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : E501 : UPPER SERUA PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE: 11 : PUMP STATION : BASIC DATA. PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION Q=GO+B*H

Q = DISCHARGE IN M**3 PER SECOND
 GO = 17.740 = DISCHARGE IN M**3 PER SECOND AT ZERO SUCTION HEAD
 B = -1.944 = SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 QCAP = 11.208 = AVERAGE PUMP CAPACITY IN M**3 PER SECOND
 HAV = 3.360 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 23 WATER SAMPLES

MONTH	DISCH		ADJ						NA	K	CO3	HC03	SO4	CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA							
1	13.27	3.15	1852.	7.56	7.05	17.87	0.00	3.34	7.15	17.62	0.29	0.00	5.17	2.54	22.70
2	10.89	4.09	2423	7.52	8.94	23.10	0.00	5.22	9.89	24.58	0.39	0.00	5.34	4.88	29.87
3	21.10	1.01	681.	7.64	2.80	6.38	0.00	2.75	2.56	4.56	0.16	0.00	4.70	0.70	4.63
4	19.69	1.08	710.	7.43	3.44	7.60	0.00	2.69	2.29	5.42	0.16	0.00	4.35	0.98	5.24
5	20.42	0.84	510.	7.46	1.53	3.13	0.00	2.58	2.80	2.51	0.08	0.00	2.63	1.04	4.29
6	26.67	0.77	519.	7.11	1.80	3.83	0.00	3.50	1.10	2.73	0.17	0.00	3.53	0.75	3.23
7	28.16	0.90	601.	7.38	2.96	5.98	0.00	3.19	1.14	4.36	0.12	0.00	3.13	2.04	3.64
8	27.76	0.79	528.	7.53	1.91	4.12	0.00	2.66	1.98	2.91	0.14	0.00	3.82	0.65	3.23
9	26.03	0.87	581.	7.60	2.07	4.58	0.00	2.75	2.31	3.30	0.18	0.00	4.02	0.72	3.82
10	31.92	0.80	546.	7.65	1.29	2.88	0.00	2.77	2.43	2.08	0.60	0.00	4.00	0.60	3.29
11	18.48	1.07	733	7.77	2.59	5.91	0.00	3.72	2.26	4.49	0.28	0.00	4.22	2.23	4.29
12	18.32	0.95	648.	7.80	3.32	6.81	0.00	2.51	1.87	4.91	0.22	0.00	3.36	2.53	3.58
1980	262.71	1.15	735.	7.49	3.04	6.76	0.00	3.13	2.63	5.17	0.23	0.00	3.90	1.38	5.87

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH		ADJ						NA	K	CO3	HC03	SO4	CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA							
1	13.56	1.16	771.	7.11	3.93	8.65	0.00	2.62	2.44	6.26	0.22	0.00	4.23	1.52	5.78
2	12.71	1.06	686.	7.05	1.81	4.15	0.00	4.26	2.65	3.36	0.17	0.00	3.81	1.52	5.03
3	18.96	0.82	532.	7.49	4.42	5.01	0.00	2.74	1.45	3.50	0.17	0.00	3.47	0.40	3.98
4	17.07	1.07	714.	7.57	3.90	8.32	0.00	2.78	1.73	5.85	0.17	0.00	4.02	1.61	4.90
5	20.38	1.20	745	7.29	3.95	8.53	0.00	3.11	1.85	6.22	0.21	0.00	3.95	0.34	7.10
6	24.94	0.89	597.	7.61	2.14	4.74	0.00	3.08	2.11	3.45	0.14	0.00	3.96	0.98	3.85
7	28.00	1.26	639	7.71	2.89	6.86	0.00	3.75	3.27	5.42	0.16	0.00	4.71	2.12	5.77
8	26.71	1.00	670	7.99	2.27	5.25	0.00	3.37	2.47	3.88	0.16	0.00	4.58	0.80	4.49
9	25.50	0.85	570.	7.69	2.28	5.02	0.00	2.39	2.29	3.50	0.16	0.00	4.21	0.36	3.76
10	23.22	0.84	559.	7.73	1.88	4.08	0.00	2.30	2.85	3.01	0.15	0.00	3.63	1.27	3.40
11	21.83	1.08	722.	7.50	2.54	5.76	0.00	3.37	2.84	4.47	0.14	0.00	4.00	2.21	4.57
12	19.04	1.34	880	7.28	3.95	8.85	0.00	3.54	2.76	7.00	0.14	0.00	3.96	2.62	6.85
1981	253.92	1.04	685	7.48	2.75	6.13	0.00	3.09	2.43	4.56	0.16	0.00	4.08	1.29	4.67

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH		ADJ						NA	K	CO3	HC03	SO4	CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA							
1	16.38	0.91	594.	7.26	2.12	4.63	0.00	3.34	1.96	3.45	0.12	0.00	3.67	0.83	4.38
2	8.51	3.95	2316.	7.60	7.78	21.41	0.00	7.35	8.48	21.88	0.32	0.00	7.57	0.71	29.75
3	19.13	0.86	542	7.49	1.76	3.77	0.00	3.28	1.89	2.83	0.19	0.00	3.34	0.43	4.42
4	17.35	0.92	581.	7.19	2.07	4.48	0.00	3.21	2.09	3.38	0.13	0.00	3.49	0.53	4.79
5	22.60	0.92	584.	7.45	2.67	5.61	0.00	2.60	2.02	4.06	0.13	0.00	3.49	0.66	4.66
6	24.81	0.86	579.	7.48	2.29	4.90	0.00	3.02	1.76	3.54	0.16	0.00	3.66	1.29	3.51
7	29.41	0.99	611.	7.43	2.78	6.00	0.00	3.53	0.95	4.16	0.14	0.00	4.03	1.08	3.67
8	29.41	0.93	689.	7.50	3.94	8.48	0.63	2.29	1.73	5.36	0.08	0.00	4.61	2.30	2.71
9	26.27	0.99	748	7.47	3.38	7.58	0.00	1.97	3.11	5.38	0.11	0.00	4.58	4.07	1.93
10	25.02	0.88	616.	7.20	2.69	5.64	0.00	2.22	2.57	4.16	0.03	0.00	3.39	2.86	2.80
11	22.19	0.83	553	7.59	2.58	5.31	0.00	2.22	2.19	3.84	0.02	0.00	3.26	1.27	3.75
12	18.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	259.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 12 WATER SAMPLES

MONTH	DISCH		ADJ						NA	K	CO3	HC03	SO4	CL	
	MIL M3	EC	TDS	PH	SAR	SAR	RSC	CA							
1	18.09	0.66	448.	7.51	1.80	3.62	0.00	2.22	1.66	2.51	0.08	0.00	3.13	1.10	2.23
2	20.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	16.87	0.38	596.	7.48	2.89	6.00	0.00	2.69	1.64	4.26	0.10	0.00	3.50	1.79	3.40
4	18.57	0.85	558.	7.51	2.55	5.26	0.00	2.48	1.95	3.80	0.08	0.00	3.27	1.29	3.74
5	24.88	0.98	662.	7.78	3.73	7.71	0.00	2.50	1.69	5.40	0.10	0.00	3.63	2.14	3.92
6	31.11	0.80	553.	7.83	3.17	6.36	0.00	2.17	1.44	4.26	0.08	0.00	3.52	1.53	2.89
7	37.07	0.81	569.	7.76	2.82	5.92	0.00	2.33	1.71	4.00	0.09	0.00	3.91	1.47	2.74
8	30.12	1.02	707.	7.90	3.51	7.74	0.00	2.25	2.48	5.40	0.13	0.00	4.44	2.01	3.81
9	28.04	0.87	605.	7.93	3.00	6.07	0.00	1.92	2.40	4.41	0.09	0.05	3.11	3.19	2.48
10	20.46	0.91	595.	8.09	2.31	5.06	0.00	2.48	2.64	3.70	0.10	0.16	3.68	1.12	3.99
11	15.77	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	21.16	0.75	496.	7.97	1.66	3.30	0.00	2.62	1.80	2.47	0.42	0.01	2.70	1.98	3.03
1983	282.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATION : ES02 : LOWER GERUA PS YEAR : 1980 CODE : 11
 MEASUREMENT POINT CODE 11 : PUMP STATION ; BASIC DATA: PUMPING HOURS AND LIFTING HEAD

DISCHARGE RELATION: $Q=Q_0+B\cdot H$
 Q = DISCHARGE IN M^3/S
 Q_0 = 11.163 = DISCHARGE IN M^3/S AT ZERO SUCTION HEAD
 B = -1.188 = SLOPE OF CAPACITY CURVE
 H = SUCTION HEAD IN M
 Q_{CAP} = 8.243 = AVERAGE PUMP CAPACITY IN M^3/S
 H_{AV} = 2.460 = AVERAGE LIFTING HEAD IN M

THE WATER QUALITY DATA DURING 1980 ARE BASED ON 24 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	33.19	2.98	1850.	7.45	6.48	16.20	0.00	5.42	7.63	16.56	0.32	0.00	4.58	6.26	19.07
2	23.86	3.04	1981.	7.43	6.76	16.67	0.00	6.09	7.60	17.69	0.24	0.00	4.14	9.96	17.50
3	41.57	1.69	1086	8.14	3.34	8.35	0.00	2.82	6.65	7.27	0.23	0.00	5.17	3.07	8.73
4	46.68	1.33	854	7.45	4.03	8.97	0.00	2.88	3.03	6.92	0.20	0.00	4.02	2.25	6.77
5	36.79	1.80	1175	7.35	4.68	10.83	0.00	4.38	4.09	9.63	0.14	0.00	3.85	3.28	9.11
6	65.08	1.60	1047	7.40	3.43	8.33	0.00	4.76	3.98	7.16	0.20	0.00	4.68	3.24	8.17
7	72.31	1.54	998	7.43	4.22	9.99	0.00	2.87	4.25	7.96	0.24	0.00	4.81	2.46	8.04
8	70.07	1.53	978	7.24	4.61	10.90	0.00	3.18	3.26	8.27	0.20	0.00	5.27	1.13	8.51
9	71.90	1.32	813.	7.33	3.79	8.61	0.00	3.14	2.70	6.48	0.21	0.00	4.42	0.26	7.86
10	52.70	1.47	974.	7.58	2.81	7.25	0.00	4.01	4.65	5.85	0.19	0.00	6.55	0.59	7.55
11	49.30	1.92	1306	7.30	4.93	12.61	0.00	3.88	4.90	10.32	0.54	0.00	6.67	3.52	9.43
12	42.97	1.90	1311.	7.34	5.20	12.12	0.00	3.84	5.06	10.97	0.21	0.00	3.91	8.03	8.13
1980	606.43	1.72	1115.	7.42	4.34	10.49	0.00	3.74	4.44	8.78	0.24	0.00	4.91	3.15	9.16

THE WATER QUALITY DATA DURING 1981 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	36.64	1.72	1167.	7.08	4.86	11.80	0.00	2.57	5.28	9.63	0.24	0.00	5.24	4.69	7.79
2	27.12	1.88	1155.	7.11	6.16	14.23	0.00	3.01	3.60	11.20	0.27	0.00	4.75	1.69	11.63
3	46.93	1.63	957.	7.34	5.45	11.74	0.00	2.70	3.09	9.26	0.21	0.00	3.65	0.79	10.82
4	49.56	1.47	936.	7.50	4.82	10.62	0.00	2.74	3.16	8.28	0.21	0.00	3.92	2.72	7.75
5	52.25	1.37	895.	7.30	4.61	10.17	0.00	2.24	3.40	7.73	0.21	0.00	4.08	2.96	6.55
6	64.69	1.44	919.	7.86	3.89	9.02	0.00	2.01	4.84	7.20	0.17	0.00	4.42	2.41	7.40
7	68.63	1.48	892.	8.37	2.16	5.27	0.00	4.43	4.92	4.67	0.21	0.00	4.39	0.80	9.06
8	65.49	1.45	902.	8.12	3.58	8.45	0.00	3.84	3.17	6.70	0.20	0.00	4.69	0.73	8.56
9	64.64	1.31	831.	7.64	4.04	9.23	0.00	2.35	3.33	6.81	0.20	0.00	4.71	0.74	7.24
10	58.96	1.38	868.	7.44	3.89	8.60	0.00	2.43	3.91	6.94	0.22	0.00	3.64	2.60	7.26
11	52.63	1.35	834.	7.45	3.79	8.23	0.00	3.04	3.12	6.66	0.18	0.00	3.41	2.16	7.43
12	46.59	1.35	985.	7.64	4.85	10.73	0.00	2.66	3.80	8.73	0.13	0.00	3.73	3.46	8.13
1981	634.13	1.47	925.	7.51	4.09	9.35	0.00	2.87	3.81	7.47	0.20	0.00	4.20	2.02	8.14

THE WATER QUALITY DATA DURING 1982 ARE BASED ON 17 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	38.01	2.48	1444.	7.25	6.00	14.30	0.00	3.90	6.17	13.47	0.16	0.00	4.12	2.40	17.18
2	16.46	5.35	3149.	7.27	9.29	25.90	0.00	8.23	13.50	30.63	0.39	0.00	6.95	4.24	41.57
3	43.53	1.61	976.	7.29	4.04	9.20	0.00	4.04	3.46	7.63	0.13	0.00	3.76	1.89	9.81
4	46.77	1.47	936.	7.16	4.22	9.52	0.00	3.04	3.56	7.66	0.20	0.00	3.98	2.63	7.86
5	51.71	1.54	1045.	7.36	4.22	9.89	0.00	4.51	2.88	8.12	0.22	0.00	4.44	4.29	7.00
6	66.06	1.54	1031.	7.71	5.05	11.51	0.00	4.38	1.86	8.92	0.25	0.00	4.48	3.54	7.40
7	75.04	1.58	1074.	7.41	5.75	13.53	0.00	3.52	2.38	9.88	0.15	0.00	5.67	2.62	7.64
8	76.49	1.73	1188.	7.92	6.94	16.32	0.23	2.70	3.05	11.76	0.10	0.00	5.98	3.68	7.94
9	71.76	1.70	1140.	7.57	7.32	16.03	0.00	2.65	2.57	11.82	0.10	0.00	4.50	4.57	8.09
10	58.01	1.39	922.	7.96	5.50	11.89	0.00	2.87	2.17	8.73	0.04	0.00	4.12	2.91	6.91
11	49.33	1.45	933.	7.81	5.33	11.17	0.00	2.79	2.68	8.82	0.04	0.00	3.32	3.79	7.23
12	41.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1982	636.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THE WATER QUALITY DATA DURING 1983 ARE BASED ON 11 WATER SAMPLES

MONTH	DISCH MIL M3	ADJ												CL	
		EC	TDS	PH	SAR	SAR	RSC	CA	MG	NA	K	CO3	HCO3	SO4	
1	38.92	1.15	709.	8.14	3.74	7.69	0.00	2.47	2.47	5.87	0.14	0.00	3.15	1.60	6.19
2	17.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	39.31	1.55	973.	7.61	4.76	10.21	0.00	3.20	3.28	8.58	0.15	0.00	3.22	3.54	8.44
4	45.60	1.61	1014.	7.70	3.97	8.88	0.00	3.65	4.29	7.91	0.14	0.00	3.32	4.04	8.63
5	58.21	1.39	917.	7.83	4.36	9.49	0.00	3.04	3.11	7.65	0.14	0.00	3.53	4.18	6.24
6	60.35	1.68	1141.	8.14	6.30	14.19	0.00	2.79	3.31	10.99	0.13	0.00	4.46	5.10	7.64
7	75.03	1.71	1187.	8.28	6.77	15.19	0.00	2.80	3.12	11.66	0.15	0.00	4.50	5.99	7.24
8	64.95	1.89	1289.	8.33	8.03	17.93	0.00	1.78	3.96	13.60	0.14	0.25	4.42	6.87	7.92
9	66.83	1.70	1152.	7.92	6.58	14.27	0.00	2.19	3.75	11.34	0.14	0.01	3.79	6.54	7.10
10	49.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	45.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	44.52	1.62	997.	7.27	3.48	8.24	0.00	3.39	5.06	7.15	0.20	0.00	4.17	2.33	9.30
1983	605.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-

REFERENCES

- EL GUINDY, S.M. and M.H. AMER, 1979. Quality criteria for Irrigation Water. Drainage Research Institute, Cairo, Egypt.
- LAMBIE, J.C., 1978. Measurements of flow. Velocity-area methods. In: Herschy (ed) Hydrometry: Principles and practices. Wiley Interscience. New York. p. 1-52.
- ROEST, C.W.J., 1983. Manual on data collection. Processing and presentation short term routine measurement program. Reuse of Drainage Water Project, Report 1. Inst. for Land and Water Management Research. P.O. Box 35, 6700 AA, Wageningen.

والكهرباء بوزارة الري لتصرفات محطات الصرف ثم يجرى تصحیح لهذه القياسات بناءً على قیاس کفاءة تلك المحطات بصفة دورية - وهذا هو أحد اوجه نشاط المشروع إعادة استخدام مياه الصرف . ذلك بالنسبة للمصارف التي يتم رفع مياهها بواسطة محطات الطرمبات .

اما المصارف التي يتم صرف مياهها بالراحة فانه يجرى قیاس تصرفاتها بالطرق المناسبة التي تخضع لاعتبارات اخرى .

أما دراسة نوعية مياه الصرف فانه يتم تجميع عينات المياه من مناطق القياس المختلفة - بصفة دورية - ويجرى تحليلها كيميائيا وتحليل نتائجها وفقا للمواصفات القياسية لنوعية المياه .

والغرض الاساسى فى هذا التقرير السنوى هو عرض لهذه البيانات الأساسية والمتحدة لدى معهد بحوث الصرف لاستخدامها ضمن المشروعات المختلفة - هذا الى جانب عرض مبسط عن وسائل القياس وطرق الحساب المستخدمة لاخراج هذه البيانات فى صورتها المذكورة ضمن هذا التقرير - كذلك فانه جدير بالذكر ان مايتعلق بنوعية مياه الصرف ومدى ملائمتها للاستخدام فى الري فقد استخدم الاسس وانماعيير والتى من خلالها يمكن توصيف وتمثیل هذه المياه حسب الاغراض المختلفة (كاستخدامها مباشرة فى اغراض الري او بعد خلطها مع نوعية مياه اخرى .. الخ) .

وفي حالة عدم كتابة البيانات المذكورة ضمن هذا التقرير فانه ينصح باستشارة بتلك المعلومات بمعهد بحوث الصرف حيث تتوافر كافة نتائج التحليل الكيميائى للعينات الممثلة لكل موقع .

ان الزيارة المتطردة في اعداد السكان لا بد من محابتها بانتاج المزيد من الحبوب والالياف - من جهة - واستصلاح اراضي جديدة بدلا من تلك التي استنرفت في عمليات البناء والتشييد من جهة أخرى .

ولقد كانت استراتيجية اعادة استخدام مياة الصرف - أمرا واردا - ضمن الاستراتيجيات المقترحة لايجاد مصادر مياه اضافية للاراضي التي سيتم استصلاحها . وفي هذا المجال يجدر بنا ان نذكر ان الخطة الخمسية ١٩٨٢ - ١٩٨٧ تتضمن استصلاح (٦٤٠ ٠٠٠) فدان والبدأ الفعلى في التنفيذ .

ويهدف مشروع اعادة استخدام مياة الصرف الى ايجاد البيانات الاساسية على درجة عالية من الدقة والواقع - والتي يمكن استخدامها في تلك الخطة السالفة الذكر - لذلك فقد تم اختيار شبكة قياس متكاملة والتي من خلالها يمكن الحصول على تلك البيانات الممثلة لكل زمام من مناطق الصرف .

ان البيانات اللازمة لخطط استصلاح الاراضي ممثلة في كل من كميات المياة المتاحة ونوعية تلك المياة ومدى ملائمتها ومناسبتها لعمليات الاستصلاح والري . لذلك فان كميات مياة الصرف يتم الحصول عليها اولا من خلال قياسات مصلحة الميكانيكا

- ٧ - المهندس / مجدى عبد النب
- ٨ - المهندس / نبيل قندي
- ٩ - المهندس / محمد سعد ع
- ١٠ - المهندسة / ميرفت محمد مصطفى الج
- ١١ - المهندسة / اميمة سعد شاهي
- ١٢ - المهندسة / سميرة محمد ع

يهدف هذا التقرير الى القاء الضوء والملحوظات على
البيانات المتاحة حتى يمكن الاستعانت بها في وضع خطط
وبرامج اعادة استخدام مياه الصرف في دلتا نهر النيل
، كما يهدف ايضا الى ابراز النواحي الفنية الممكنة
في ايجاد تلك الوسائل .

الفريق البحثي للمشروع :

مدير المشروع : دم / محمد محمود جابر
د . / ب . ا . ريتمن

رئيس الشعبية : د . / سامية محمود سعد الدين الجندي

الخبراء الهولنديين العقيمين :

مستر / ديتتر بولز
مستر / مارين ماسكين
مستر / هاندريلك بانت زدورب

الفريق المصري للمشروع :

- ١ - المهندسة / نادية عبد الحميد منصور البهنساوي
- ٢ - المهندس / محمد احمد عبد الخالق
- ٣ - المهندس / احمد محمد مرقس
- ٤ - المهندس / عادل عبد الرشيد
- ٥ - المهندس / محمد عزت شاهين
- ٦ - المهندس / ابراهيم لاشين

مشروع اعادة استخدام مياه الصرف نشاط مشترك بين :-
معهد بحوث الصرف - الجيزة - جمهورية مصر العربية
ومعهد بحوث ادارة الاراضي والبيئة - فاجنجن - هولندا

ويعتبر الجهة الممولة للمشروع وزارة الري بجمهورية مصر العربية
وزارة العلاقات الخارجية بهولندا في إطار البرنامج المشترك للتعاون الفنى
بين مصر وهولندا .

ويعمل المجلس الاستشارى المصرى الهولندى كهيئه مشرفة .
نتائج الدراسات التى تمت خلال هذا المشروع ستعرض اما فى تقارير مبدئية
او تقارير نهائية . حيث ان محتويات التقارير المبدئية معكן تختلف بشدة
من تقديم مبسط للبيانات او مناقشات لنتائج وخلاصات بحثيه .

الاراء والتوصيات الموجودة فى التقارير السابقة تعتبر اراء . المؤلف فقط
وليس لها علاقه بالمعاهد او الوزارات المعنية .

مشروع اعادة استخدام مياه الصرف
تقرير رقم ٤

الكتاب السنوي
شرق الدلتا ١٩٨٣ - ١٩٨٠
التصوفات والتحاليل الكيماوية لمياه الصرف

الفريق البحثي

١٩٨٥

معهد بحوث الصرف مركز البحوث المائية ج.م.ع.
معهد بحوث ادارة الاراضى والمياه
واخنجن، هولندا

بسم الله الرحمن الرحيم
”وجعلنا من الماء كل شى حى“
صدق الله العظيم