

Government of the People's Republic of Bangladesh

Flood Action Plan

FAP 3

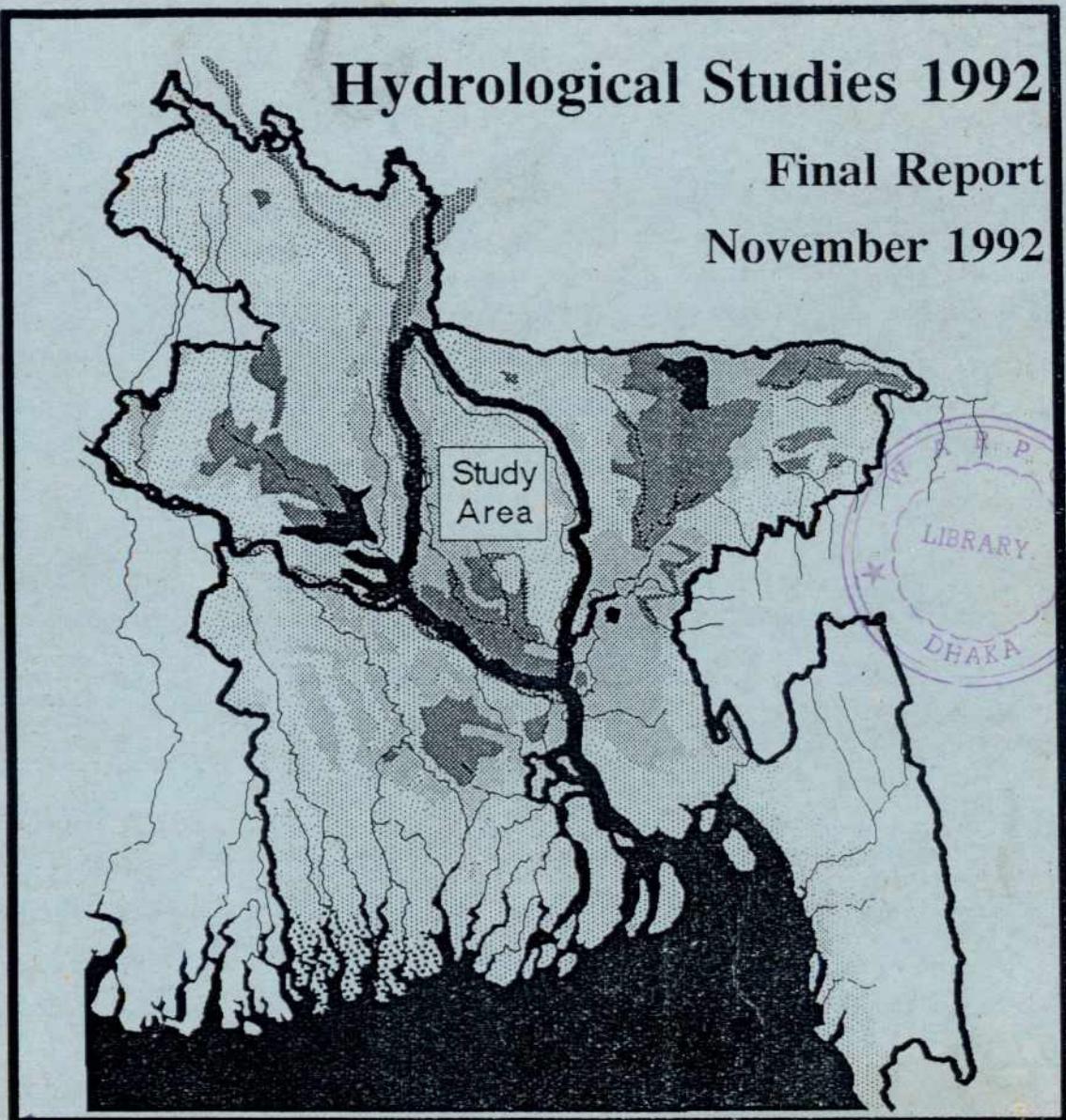
BN - 67  
A - 83 (2)

North Central Regional Study

Hydrological Studies 1992

Final Report

November 1992



2583

RECEIVED AND  
RECORDED  
2583  
A 2583

Commission of the European Communities  
and  
Caisse Centrale de Cooperation Economique  
Government of France  
Project ALA/90/03

Consortium

BCEOM, Compagnie Nationale du Rhône,  
Euroconsult, Mott MacDonald International,  
SATEC Developpement

*in association with:*

Desh Upodesh  
BETS

2

Government of People's Republic of Bangladesh  
Flood Action Plan  
FAP 3  
North Central Regional Study

Hydrological Studies- 1992  
Final Report

November 1992



Commission of the European Communities  
and  
Caisse Centrale de Coopération Economique  
Government of France  
Project ALA/90/03



**Consortium:**

BCEOM, Compagnie Nationale du Rhône  
Euroconsult, Mott MacDonald International,  
Satec Développement

*in association with:*  
Desh Upodesh Ltd.  
BETS Ltd.

1593

**NORTH CENTRAL REGIONAL STUDY, FAP3  
HYDROLOGICAL STUDY - 1992**

**TABLE OF CONTENTS**

<b>1. INTRODUCTION .....</b>	1
<b>2. STUDY AREA .....</b>	1
<b>3. THE HYDROLOGICAL SYSTEM. ....</b>	1
<b>4. RESULTS .....</b>	2
4.1 General.	
4.2 Topographical Survey.	
4.3 Water Levels.	
4.4 Discharges	
<b>5. CONCLUSIONS AND RECOMMENDATIONS .....</b>	3
5.1 Number of Measurement.	
5.2 Topographical Survey.	
5.3 Data Post Processing.	
5.4 Comments on the Stations.	



**List of Tables**

- T.1 List of Stations
- T.2 Topographical Survey
- T.3 Discharges Survey

**List of Maps**

- M.1 River System and Morphology
- M.2 Schematic Map of the Rivers & Drainage System of the NCR
- M.3 River System of the RS2 Bhuapur-Gopalpur Scheme

**References**

- Appendix A** Stations Descriptions : Sketches and Maps
- Appendix B** Flow Measurement and Flow Computation Tables
- Appendix C** Water Level Tables

## 1 INTRODUCTION.

The North Central Regional Study Final Report described a phased series of development projects to both mitigate the effects of flooding and enhance the agricultural potential of the region. The report recommends that two schemes be taken up at feasibility level over the next few years, the first being the RS2 area which is situated between Jamalpur and Tangail. The hydrological system of this region will be studied through the development of an hydrodynamic mathematical model. This kind of model requires comprehensive and reliable data and it was decided to assist in the collection of these data by setting up a hydrometric monitoring program for the 1992 monsoon season in this area - from July 15th to November 15th -. Water levels and discharges were collected at 10 stations on the main rivers. Data were collected by BWDB Hydrology Department and this activity was additional to the on-going program produced by BWDB in association with the Surface Water Modelling Center (SWMC) in the region. In order to ensure a good quality for these data, the survey was supervised by FAP 3 staff. This supervision included water levels and discharges survey, monitoring and comparative discharge measurement, and topographical survey.

## 2 STUDY AREA.

The Bhuapur - Gopalpur development scheme, RS2 comprise a major part of the eastern Jamuna flood plain. It is bordered in the North by the Jagannathganj-Jamalpur railway, in the West by the Bhuapur to Jagannathganj BWDB embankment, in the South by the Pungli River and in the East by the Bangshi River and the western side of the Madhupur Tracts.

## 3 THE HYDROLOGICAL SYSTEM.

The hydrological system is dominated by three major rivers : the Bangshi river in the East, the Jhenai-Futikjani system in the central part and the Pungli river in the South (See map M.3). There is some confusion over the designation of the rivers, even for the local people as some rivers have become captured by others and some secondary tributaries have progressively become main channels.

The following observations result from field visits made during July - November 1992.

The **Bangshi** off-take from the Old Brahmaputra was closed in the early 70'. Now this river is fed by direct run-off from the western slope of the Madhupur tract and local rainfall. (Source FAP3 RWRDP, June 1992).

The **Jhenai** river drains a large part of the Jamalpur Area before entering the RS2 area through the Baushi Railway Bridge. In the RS2 area, the Jhenai river bifurcates, the major channel flowing westward and the other one, flowing southward. This latest channel is called Baruna river or Jhenai river and carries a very little part of the total discharge. The main channel, then divides once more into two channels, the Jhenai West and the Atai. The Jhenai-West, is now closed by the Jagannathganj-Bhuapur BWDB embankment, the Atai river carrying the major discharge, also collects water from the Boalbari Khal at Belua Bazar. This Khal results from Jamuna water in-flowing at Sakaria 2 vent-sluice regulator. These channels finally join the Futikjani river, near Bhuapur.

The **Futikjani** river flows into the area through the Bhuapur 10 gate-sludge regulator, then collects water from the Jhenai system at 2 points upstream of Nolsafa. Downstream of Nolsafa, it then divides into two channels, Futikjani and Nanglai-North. Closer inspection, however has shown that the Nanglai North is normally closed at its upstream junction and in 1992 carried no discharge. Finally, The Futikjani system joins the Bangshi river upstream of Kauljani.

The **Nanglai** river has been completely captured by the Futikjani and the Bangshi. It initially forms a diversion channel from the Futikjani, then just downstream of Kauljani it collects a small part of the Bangshi discharge joining the Pungli river near Basai.

The **Pungli** river forms the Northern intake channel of the Dhaleswari system. It joins the Bangshi river near Mirzapur.

The above descriptions lead to the following comments :

- The in-flowing discharge in a normal year is limited to the following points : Baushi Bridge on the Jhenai river, Sakharia on the Boalbari Khal, Bhuapur on the Futikjani river and the Pungli river off-take. Baushi Bridge and Bhuapur regulator provide most of the inflow since the Sakharia regulator is kept closed during the monsoon.
- 1992 being a low flow year further observations are required before the hydrological pattern in high flood conditions can be better ascertained, see Section 4.3.
- All the rivers converge in one point, at Mirzapur, which not surprisingly results in drainage congestion in that vicinity.

## **4 RESULTS**

### 4.1 General

The analysis of the collected data illustrate the problems that can occur regarding reliability and accuracy. Important discrepancies in the topographical survey have been observed between using BWDB datum and the recently installed SoB-Finmap datum (differences of up to 4 meters). There have also been problems with the discharge data. Many of the discharges measurements are of little use both because of the low discharges observed in some rivers and the initially poor reliability of the instrument used by the BWDB ( this was subsequently changed on the advice of the FAP3 team ).

### 4.2 Topographical Survey.

The linkage of the temporary bench marks and the reference BWDB or SoB bench marks was done separately by BWDB and FAP3 survey teams in order to obtain reliable results. The topographical survey carried by FAP3 was based on using the newly installed SoB-Finmap bench marks, and was double checked using two different levelling instruments with closing back to the bench mark, and when possible two different reference bench marks.

It is well known that BWDB and SoB bench mark networks show a significant discrepancy. Nevertheless, the height differences observed for each station are cause for great concern (see table T.2).

All the temporary bench marks level and water level presented in this report correspond to FAP3 survey result.

### 4.3 Water Levels.

Mean daily water level are presented in annexes for the ten observed stations.

These data can be considered of a good quality, ( except the problem of reference level ), as no significant problems regarding level readings were observed during the frequent checks during the monsoon ( each station was visited at least once a fortnight ).

### 4.4 Discharges

Unfortunately, 1992 was exceptionally dry and many discharge survey was unsuccessful owing to the flow velocity being lower than the sensitivity of the instruments.

Many stations may be affected by back water, but this cannot fully explain the scattering of values observed on the stage discharge curve for each station.

Some surveys were unsuccessful because of the poor quality of the current meter used by the BWDB Hydrology Department observers. This was noted by the FAP 3 monitoring team and subsequently corrected. The analysis of the flow measurement table shows that for many observations the current meter fails to register at the 0.8 point while the velocity at 0.2 depth point was being recorded as being up to 0.5 m/s.

Finally, an attempt has been made to drawn up rating curves for each station. These have found to be inconclusive. Nevertheless, experience from the SWMC has shown that the water levels alone are of considerable use in improving the calibration of the models.

## 5 CONCLUSIONS AND RECOMMENDATIONS

The hydrological survey has helped in improving the understanding of the Bhupur-Gopalpur region and the data is to be incorporated both in the SWMC, North Central Regional Model (NCRM) and will be available for future incorporation into the planned sub-regional model under the proposed FAP3.2

It is to be hoped that the gauging stations will be maintained for further monitoring in the 1993 season, and the following recommendations are made toward improving the quality of data.

### 5.1 Number of Measurements

- The measurements should start at the latest in early June and carry onto November to cover the whole monsoon.
- Discharges should be measured weekly ; many stations being affected by backwater effect, it is not practicable to derive a standard rating curve from observed discharges.

### 5.2 Topographical Survey

- Discrepancies between SoB and BWDB bench marks will remain as long as BWDB will not update their topographical data. BWDB policy is to update their data when the whole country is covered by a topographical survey as occurred under FAP18. Meanwhile, topographical survey under BWDB will continue to refer to the old BWDB bench marks. It is therefore necessary to continue to carry out independent topographical survey to ensure a reliable value as a reference for water levels.
- To ensure correct linkage between hydrological stations temporary bench marks and references bench marks, it is preferable to install stations close to the SoB bench marks, if practicable.
- Global Positioning System (GPS) should be used to ensure an accurate geo-referencing location of gauging stations.

### 5.3 Data Post Processing

Problems were encountered with the current meters during the discharges survey. These problems can lead to inconsistencies in the data which can be detected only if the "Flows Measurements Tables" and the "Flow Computations Tables" are available. It is necessary to check the field data before using the discharges survey.



#### 5.4 Comments on the Stations

Some of the stations were found to give more useful results than others, and the following recommendations are made for further studies in forthcoming seasons :

- S1 : Discharge survey should be monitored during future monsoon. Only water level was measured in 1992.
- S2 : Discharge survey should be monitored during future monsoon. Only water level was measured in 1992.
- S3 : This station should be moved and re-sited in the proximity of the 5807 FM bench mark.
- S4 : This station should be removed. The North Nanglai river is now closed.
- S6 : Discharge measurement is not necessary at this point, Sakharia regulator being closed during the monsoon.
- SG8: This station should be transferred to the Tangail-Bhuapur road at the crossing of the Pungli river. There is an SoB bench mark close to the bridge and the present location of the station is too far from any bench mark.

NORTH CENTRAL REGIONAL STUDY, FAP-3  
HYDROLOGICAL STUDIES - 1992  
STATIONS PARAMETERS

Code	Name	River	Coordinates	Map Sheet	TBM Level	Reference SoB Bench Marks	
					m (PWD)	Code	m (PWD)
S1	Paterghata	Bangshi	24d 10.538' N 90d 07.156' E	78 L/4	10.47	FM 6111 FM 6112	7.5317 10.6049
S2	Basai	Nanglai	24d 13.316' N 90d 02.000' E	78 L/4	10.25	FM 6108	10.7647
S3	Dhalapara	Bangshi	24d 27.865' N 90d 04.791' E	78 L/3	11.03	FM 5807	11.3518
S4	Ichapur	Nanglai	24d 21.588' N 89d 56.841' E	78H/15	12.10	SOB 22	11.2089
S5	Bhuapur Reg.	Futikjani	24d 28.323' N 89d 52.803' E	78H/15	13.48	FM 5107 FM 5108	13.2937 13.1996
S6	Sakharia	Boalbari Khal	24d 33.458' N 89d 49.822' E	78H/14	14.82	SOB 742 FM 5111	14.8136 13.8483
SG2	Kayra	Jhenai	24d 40.133' N 89d 55.831' E	78H/14	14.77	FM 5505 FM 5506	15.0670 14.6104
SG5	Belua Bazar	Atai (Jhenai)	24d 33.630' N 89d 52.775' E	78H/14	13.56	FM 5111	13.8483
SG7	Charan	Sapa (Fatikjani)	24d 22.033' N 90d 00.986' E	78L/3	12.61	FM 6101	10.9031
SG8	Surooi	Pungli	24d 17.142' N 89d 57.294' E	78H/15	11.14	SOB 636	11.2700

Notes : Coordinates were measured with a GPS.

78

**NORTH CENTRAL REGIONAL STUDY, FAP-3**  
**HYDROLOGICAL STUDIES - 1992**  
**TOPOGRAPHICAL SURVEY**

Stations			Temporary Bench Marks		
Code	Name	River	BWDB Survey Level m(PWD)	FAP3 Survey Level m(PWD)	Differences m
S1	Paterghata	Bangshi	11.09	10.47	-0.62
S2	Basai	Nanglai	10.48	10.25	-0.23
S3	Dhalapara	Bangshi	11.54	11.03	-0.51
S4	Ichapur	Nanglai	12.37	12.10	-0.27
S5	Bhuapur Reg.	Futikjani	13.62	13.48	-0.14
S6	Sakharia	Boalbari Khal	10.50	14.82	+4.32
SG2	Kayra	Jhenai	15.89	14.77	-1.12
SG5	Belua Bazar	Atai (Jhenai)	9.47	13.56	+4.09
SG7	Charan	Sapa (Fatikjani)	13.05	12.61	-0.45
SG8	Surooi	Pungli	10.94	11.14	+0.20

**NORTH CENTRAL REGIONAL STUDY, FAP-3**  
**HYDROLOGICAL STUDIES - 1992**  
**DISCHARGE SURVEY**



Date	S3 Dhalapara		
	Water Level	Discharge	Note
27/07/1992	9.12	18.30	
10/08/1992	9.08	20.82	(1)
24/08/1992	8.25	13.70	
07/09/1992	8.52	3.01	(1)
21/09/1992	8.46	9.02	(1)
05/10/1992	9.28	34.44	
19/10/1992	8.88	36.33	
03/11/1992	7.28	14.76	

Date	S4 Ichapur		
	Water Level	Discharge	Note
15/07/1992	9.42	0.00	
29/07/1992	9.29	0.00	
12/08/1992	9.51	0.00	
26/08/1992	9.10	0.00	
08/09/1992	9.27	0.00	(2)
09/09/1992	9.23	0.00	
23/09/1992	9.19	0.00	
07/10/1992	9.65	0.00	
21/10/1992	9.21	0.00	

Date	S5 Bhuapur		
	Water Level	Discharge	Note
18/07/1992	10.87	38.89	
01/08/1992	10.63	23.10	
15/08/1992	10.01	36.98	
29/08/1992	10.53	53.39	
12/09/1992	10.20	27.71	
26/09/1992	10.41	25.32	
10/10/1992	9.83	3.71	
20/10/1992	9.48	0.00	(2)
24/10/1992	9.35	0.04	

Date	S6 Sakharia		
	Water Level	Discharge	Note
16/07/1992	12.58	4.24	
30/07/1992	12.26	0.00	
11/08/1992	12.27	0.00	(2)
13/08/1992	12.06	0.00	
27/08/1992	12.23	0.00	
10/09/1992	11.98	0.00	
24/09/1992	12.38	0.00	
08/10/1992	12.04	0.00	
22/10/1992	12.19	0.00	

Date	SG2 Kayra		
	Water Level	Discharge	Note
25/07/1992	12.61	8.19	
08/08/1992	12.74	10.01	
22/08/1992	11.89	2.35	
05/09/1992	12.45	6.06	
19/09/1992	12.17	3.30	
03/10/1992	12.03	4.17	
17/10/1992	11.58	8.00	
31/10/1992			

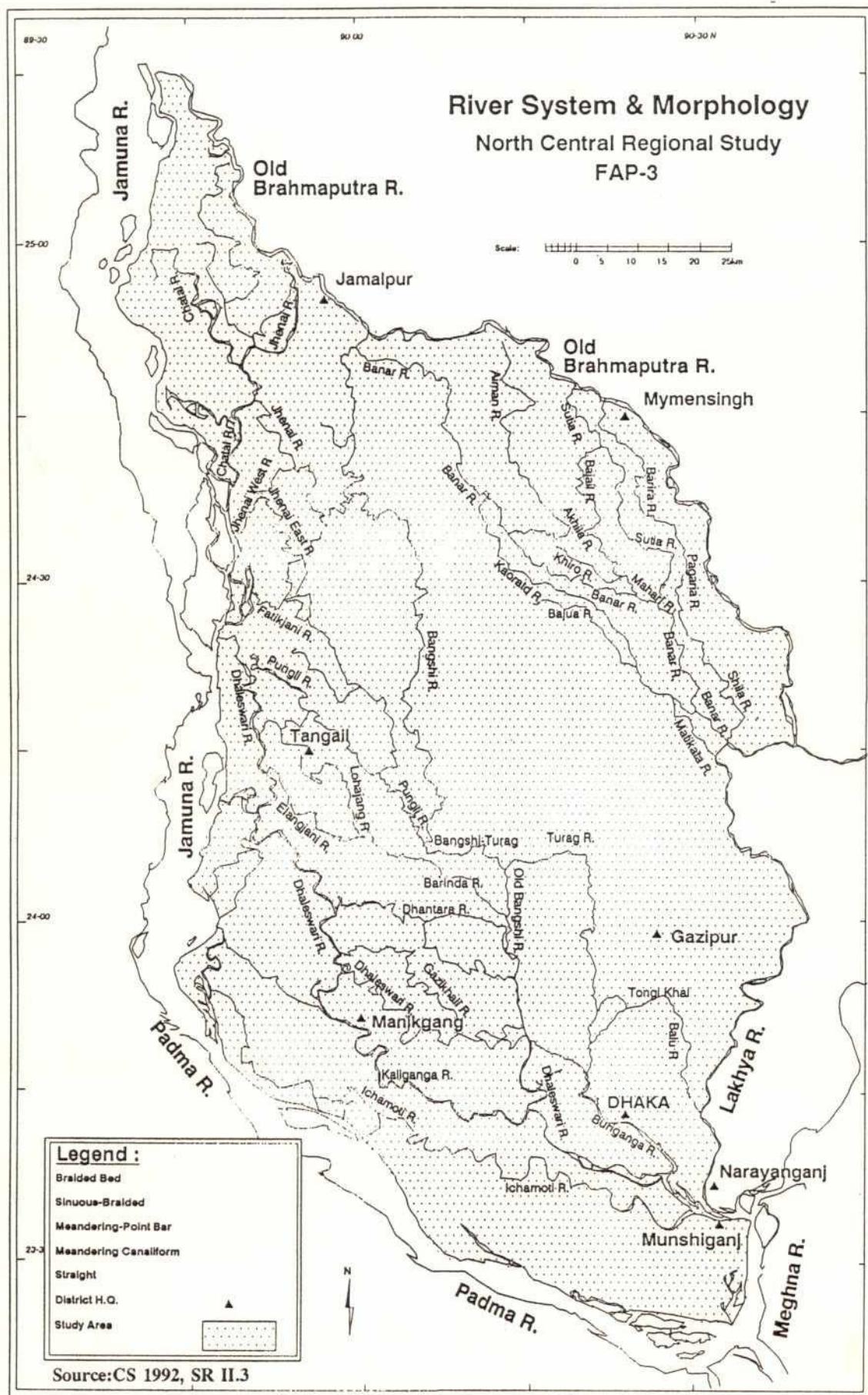
Date	SG5 Belua Bazar		
	Water Level	Discharge	Note
26/07/1992	11.23	39.56	
09/08/1992	11.27	31.32	(1)
23/08/1992	10.20	17.12	
06/09/1992	11.09	28.30	
20/09/1992	10.70	28.64	
04/10/1992	10.69	21.44	
18/10/1992	10.04	17.14	
01/11/1992	9.15	0.00	

Date	SG7 Charan		
	Water Level	Discharge	Note
15/07/1992	9.79	77.72	
29/07/1992	9.77	65.97	
12/08/1992	9.74	61.13	
26/08/1992	9.27	56.18	
09/09/1992	9.46	54.55	
22/09/1992	9.45	66.97	(2)
23/09/1992	9.48	65.49	
07/10/1992	9.55	68.48	
21/10/1992	9.00	22.26	
01/11/1992	8.42	5.29	

Date	SG8 Surooi		
	Water Level	Discharge	Note
17/07/1992	9.50	139.31	
31/07/1992	9.23	120.87	
14/08/1992	9.07	89.15	(1)
28/08/1992	9.20	136.43	
11/09/1992	8.85	99.56	
25/09/1992	9.15	100.97	
09/10/1992	8.57	53.61	
23/10/1992	8.25	44.46	

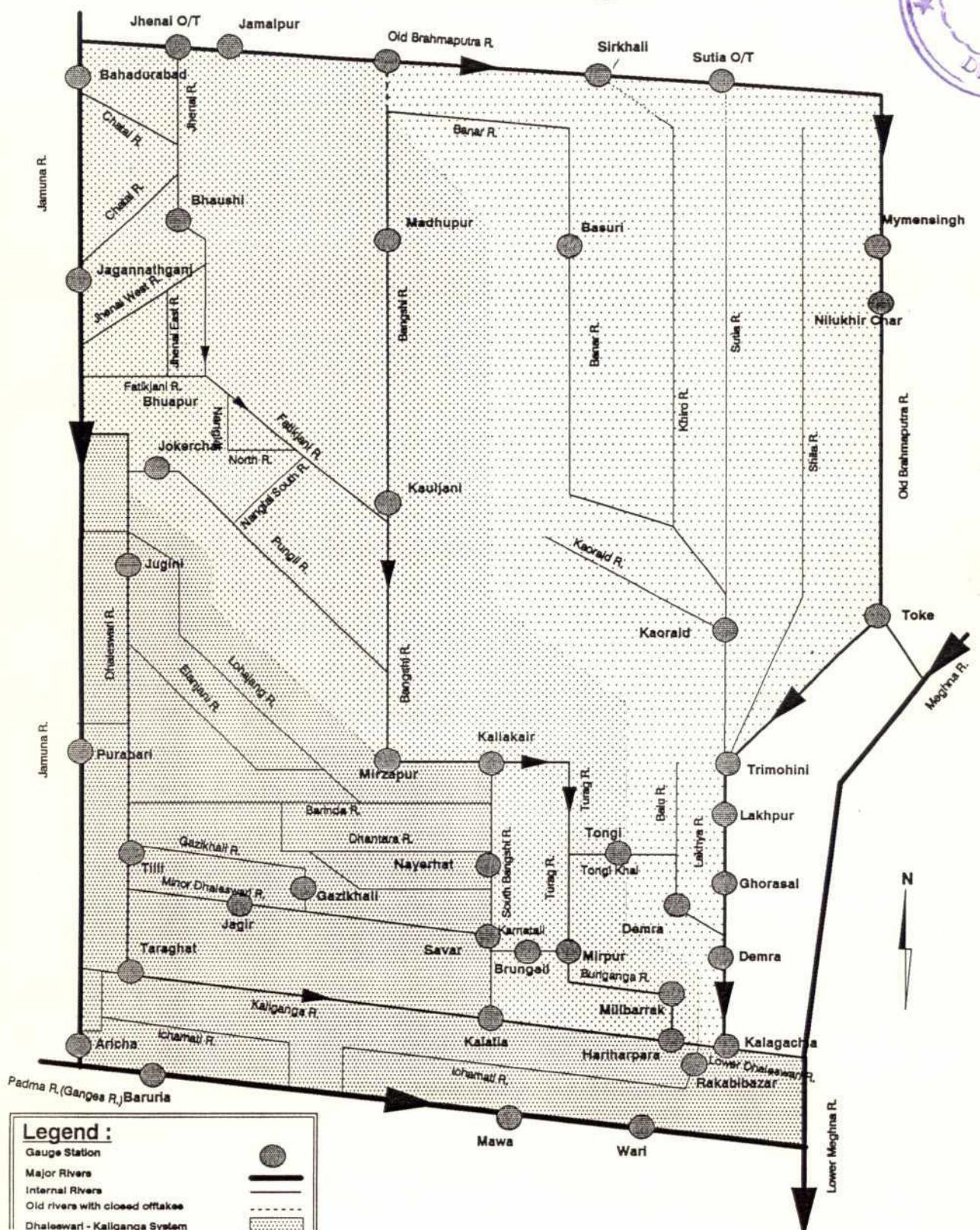
Notes :

- (1) Unreliable data. They present unconsistent velocity for some verticals
- (2) Data collected by Desh Upadesh Ltd surveyors
- (3) Water Level correspond to FAP3 survey

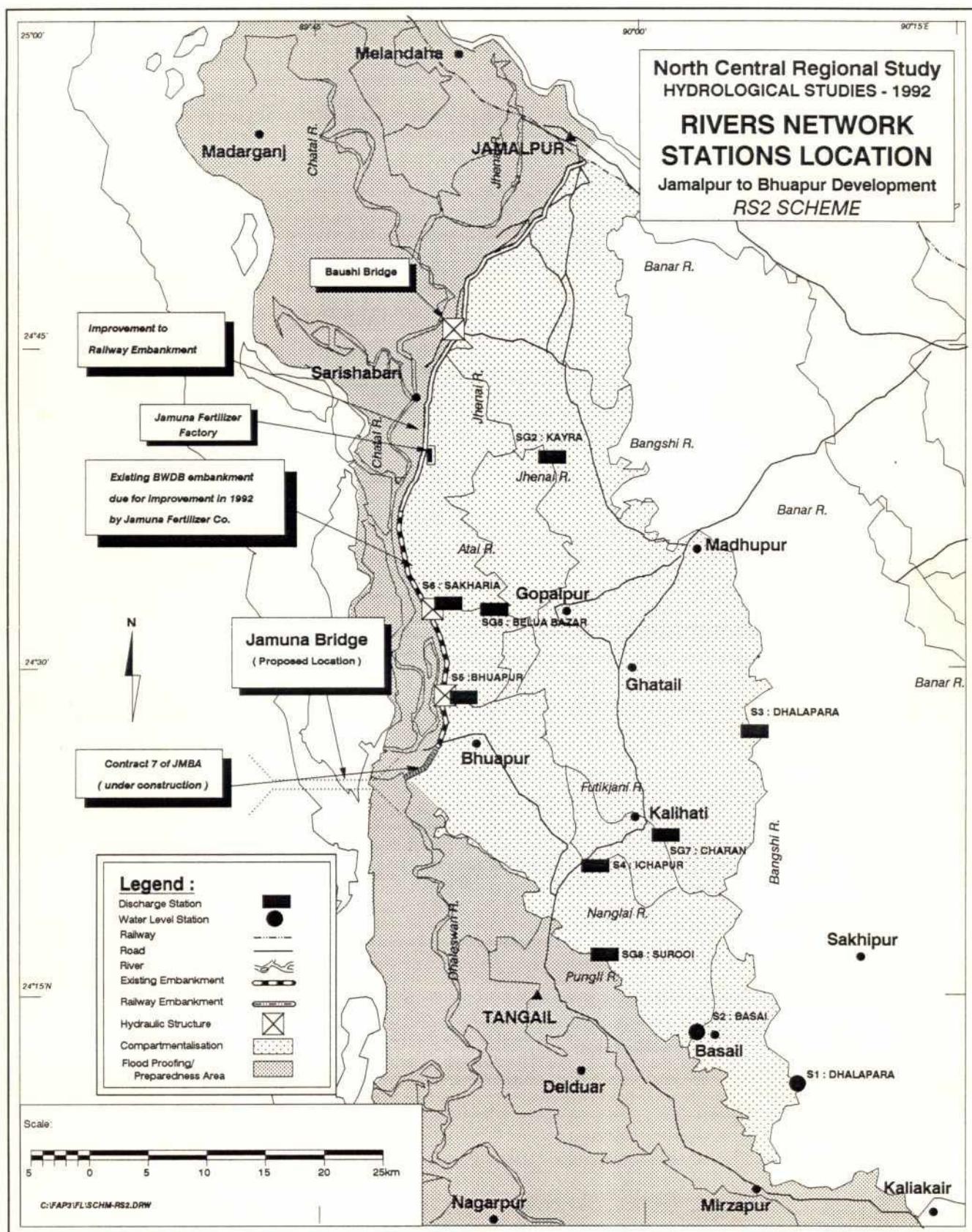




## Schematic Map of the Rivers & Drainage System of the North Central Region



Source: CS 1992, SR II.2



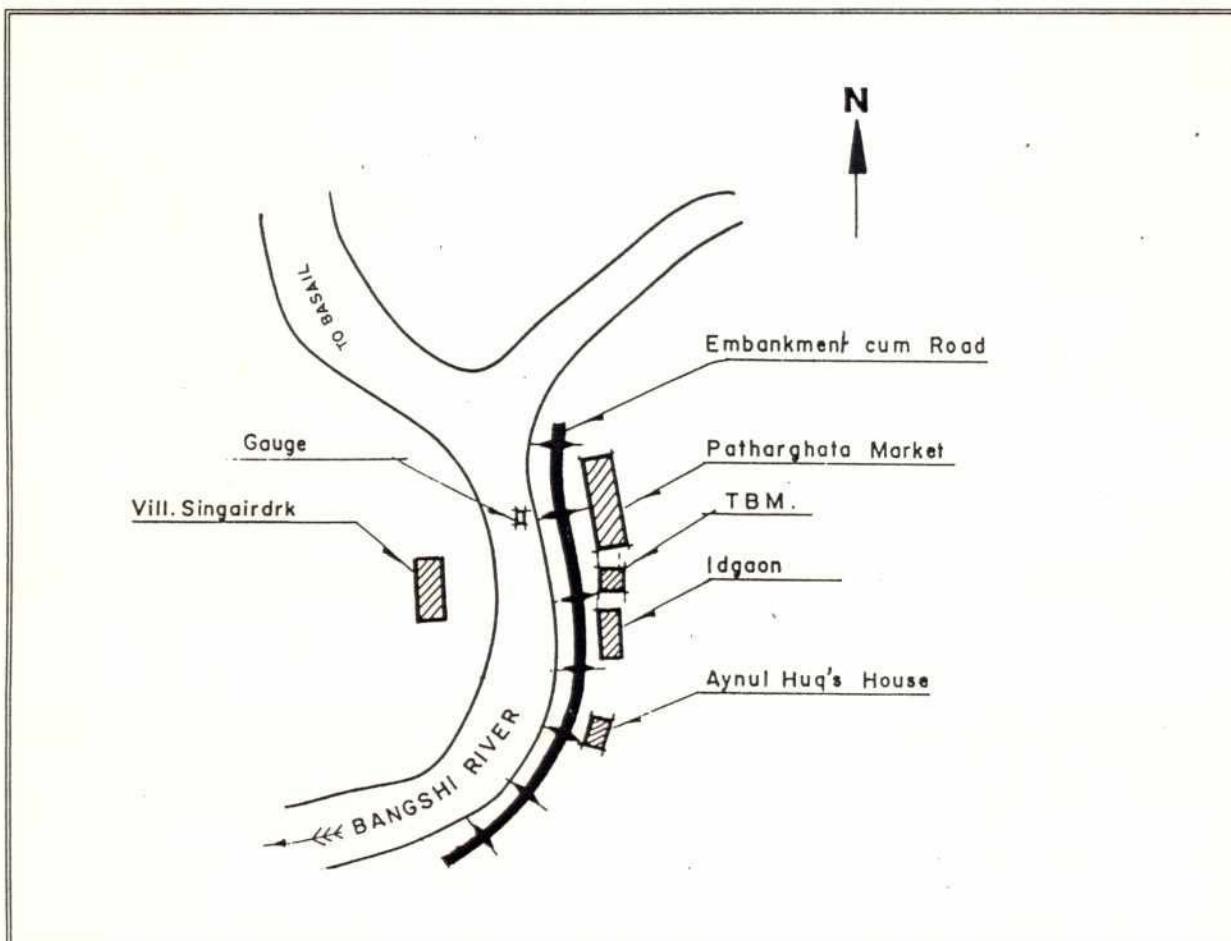
D

**STATION S1 : PATERGHATA**  
**BANGSHI RIVER**

1st INSTALLATION : 15/07/1992  
STATUS : Water Level  
GRID : 24 $^{\circ}$  - 10.538' N  
90 $^{\circ}$  - 07.156' E  
MAP SHEET : 78 L/4  
ACCESS : By boat from Mirzapur.

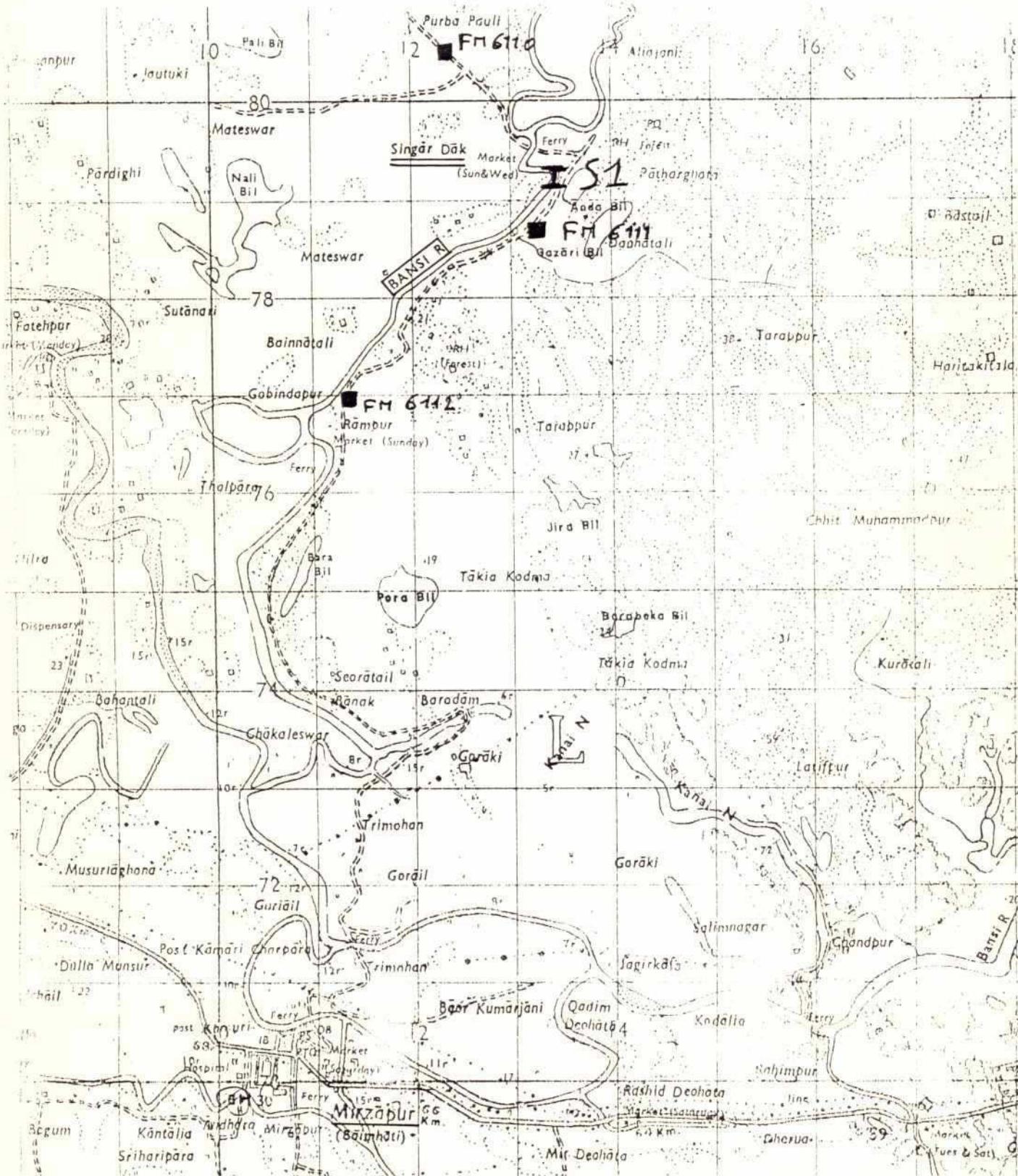
TEMPORARY BENCH MARK 10.47 m (PWD)

**SKETCH**



22

**STATION S1 : PATERGHATA**  
**BANGSHI RIVER**



27

## STATION S2 : BASAI

### NANGLAI RIVER

1st INSTALLATION : 15/07/1992

STATUS : Water Level

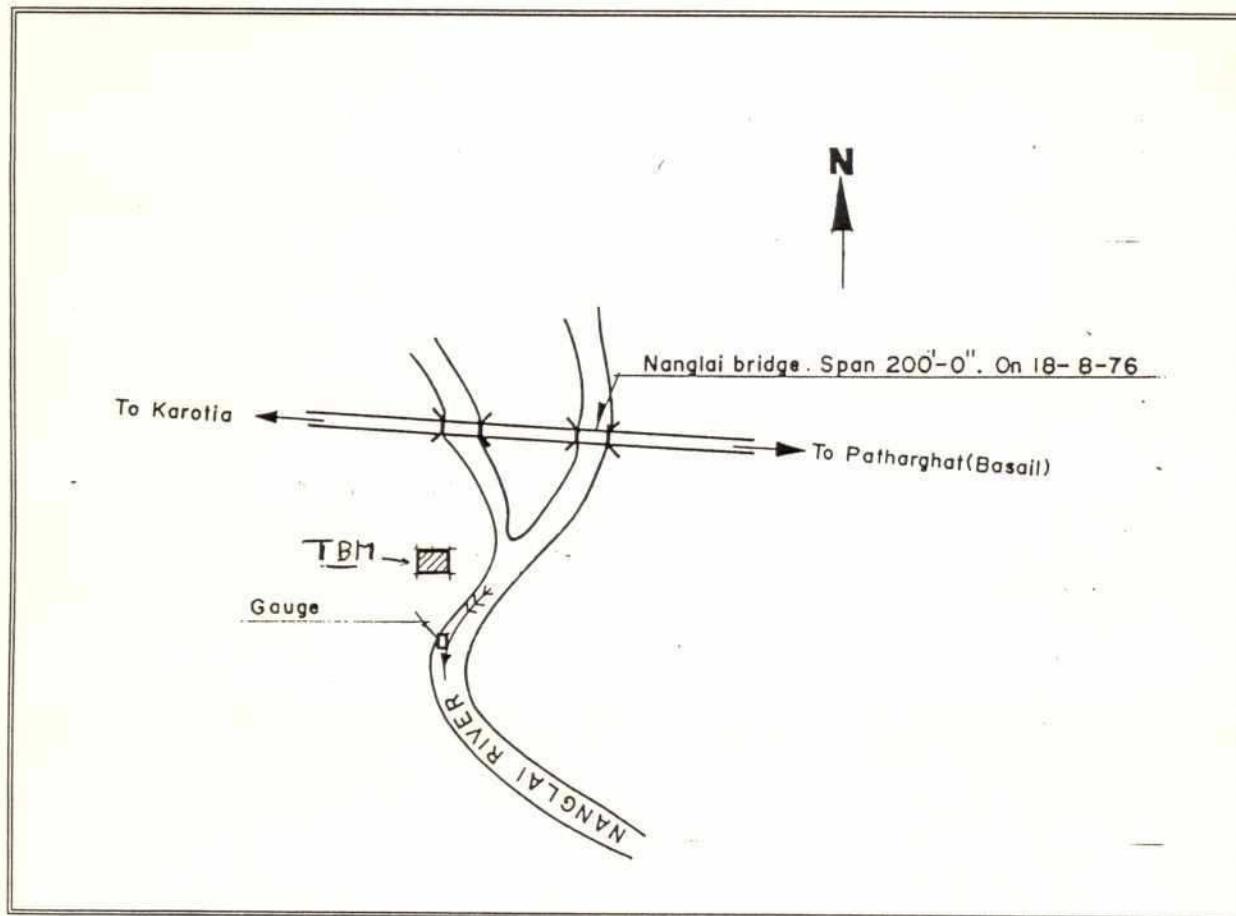
GRID : 24 $^{\circ}$  - 13.316' N  
90 $^{\circ}$  - 02.000' E

MAP SHEET : 78 L/4

ACCESS : By road from Tangail.  
Then, by local transport after crossing the Pungli river.

TEMPORARY BENCH MARK 10.25 m (PWD)

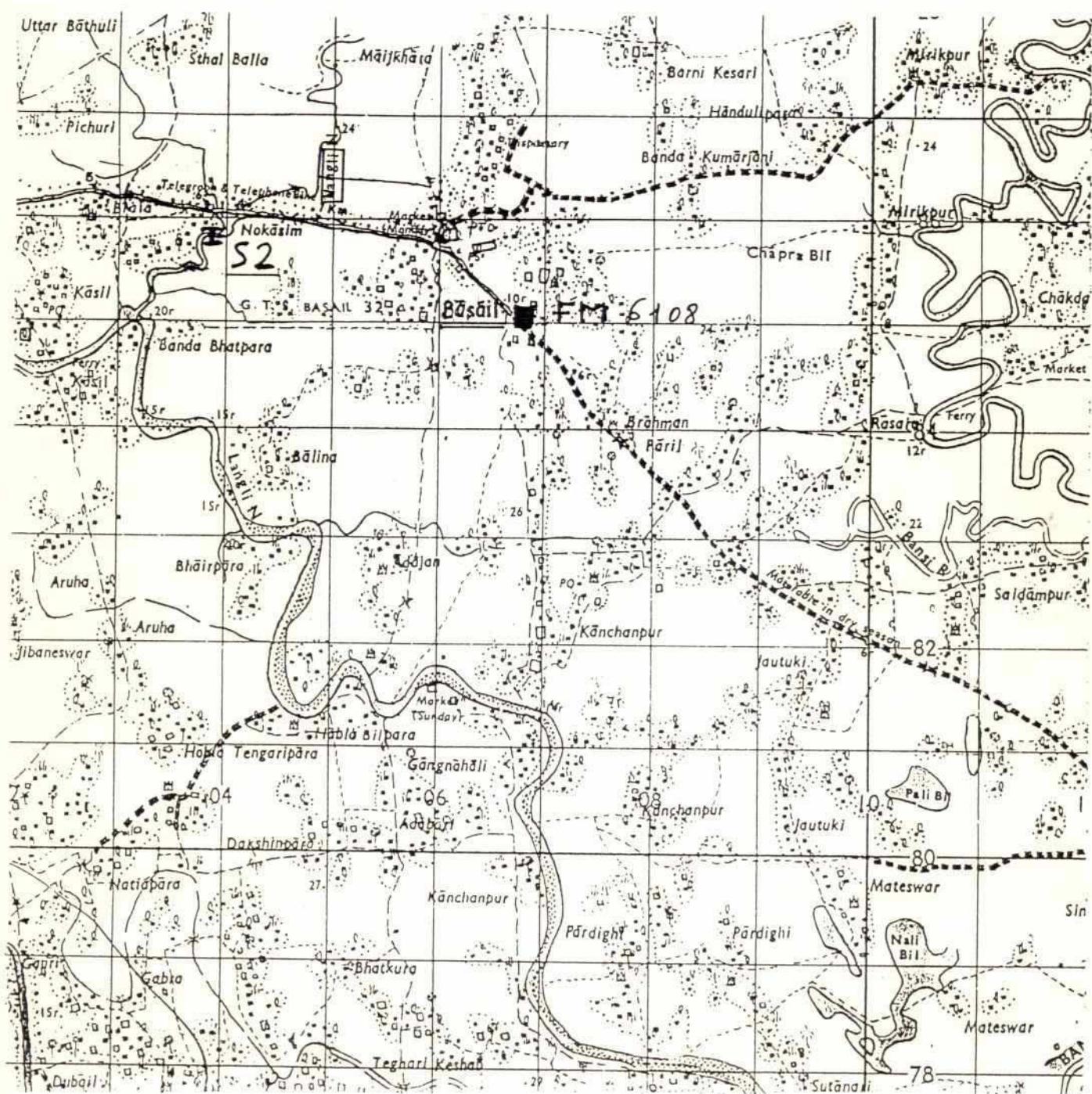
#### SKETCH



74

## STATION S2 : BASAI

### NANGLAI RIVER



N.R.D.O.

**STATION S3 : DHALAPARA**  
**BANGSHI RIVER**

1st INSTALLATION :

15/07/1992

STATUS :

Water Level and Discharges

GRID :

24 $^{\circ}$  - 27.865' N

90 $^{\circ}$  - 04.791' E

MAP SHEET :

78 L/3

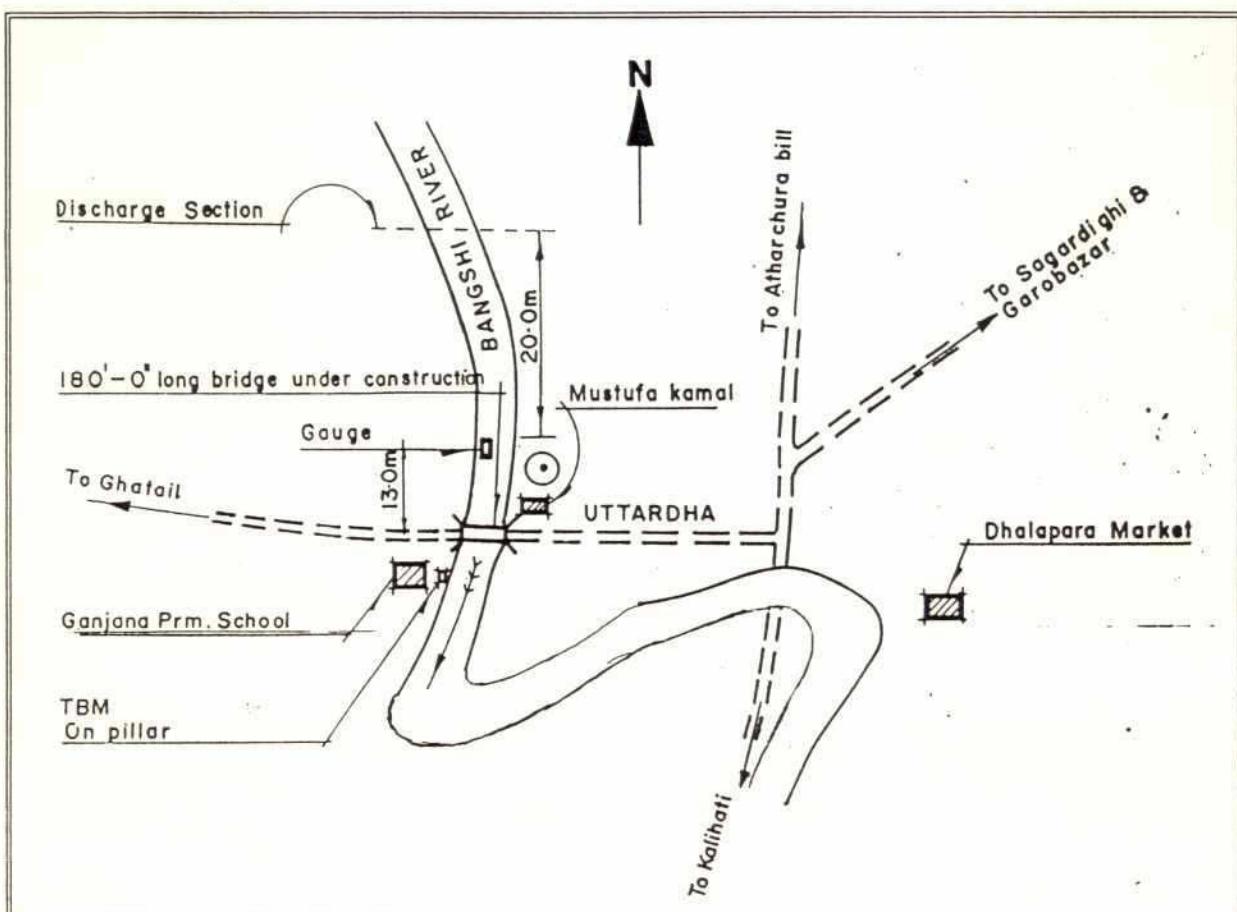
ACCESS :

By road from Tangail. The access is very difficult after Gatail

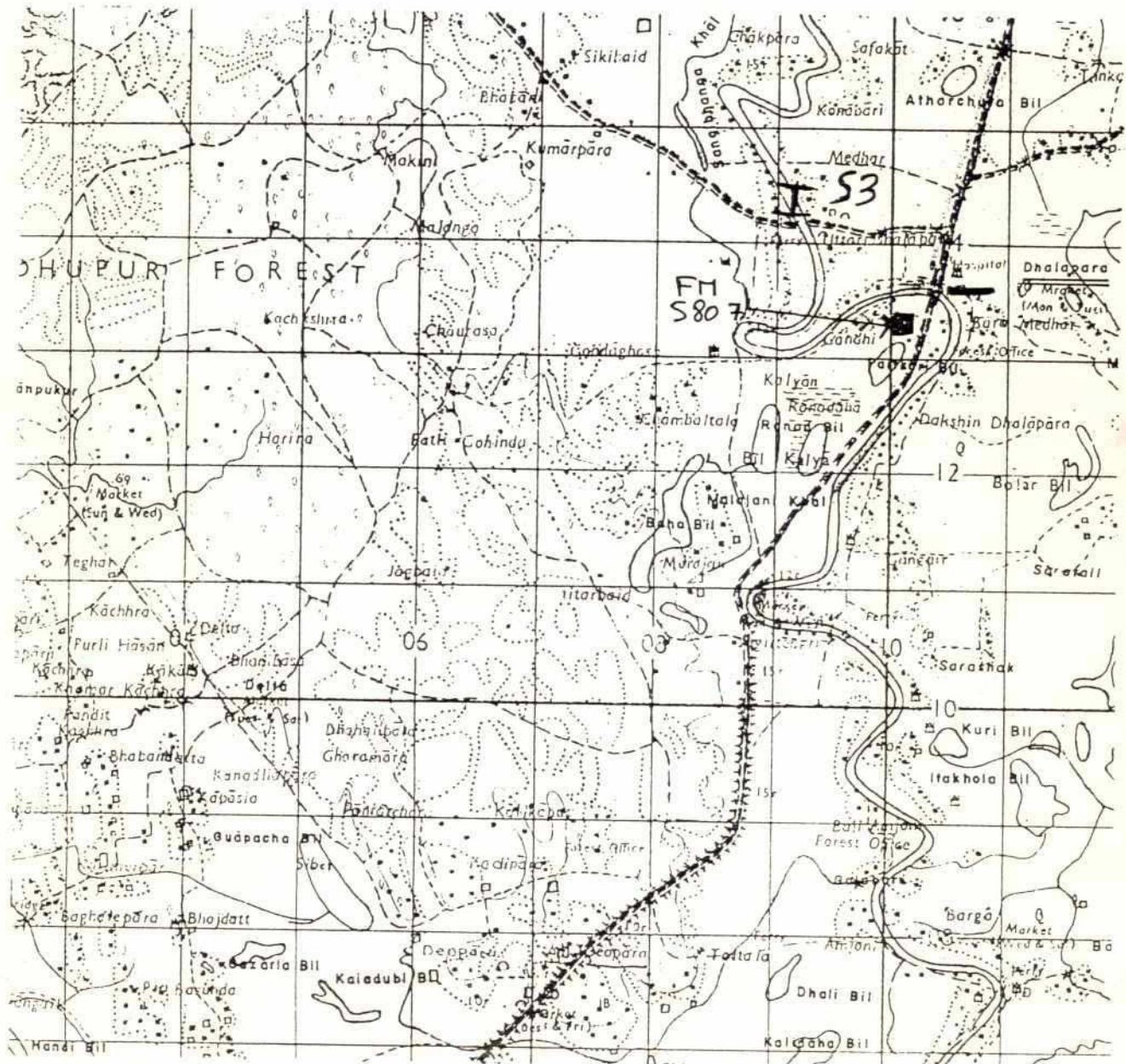
TEMPORARY BENCH MARK 11.03 m (PWD)



### SKETCH



**STATION S3 : DHALAPARA  
BANGSHI RIVER**



20

**STATION S4 : ICHAPUR**  
**NANGLAI RIVER**

1st INSTALLATION : 15/07/1992

STATUS : Water Level and Discharges

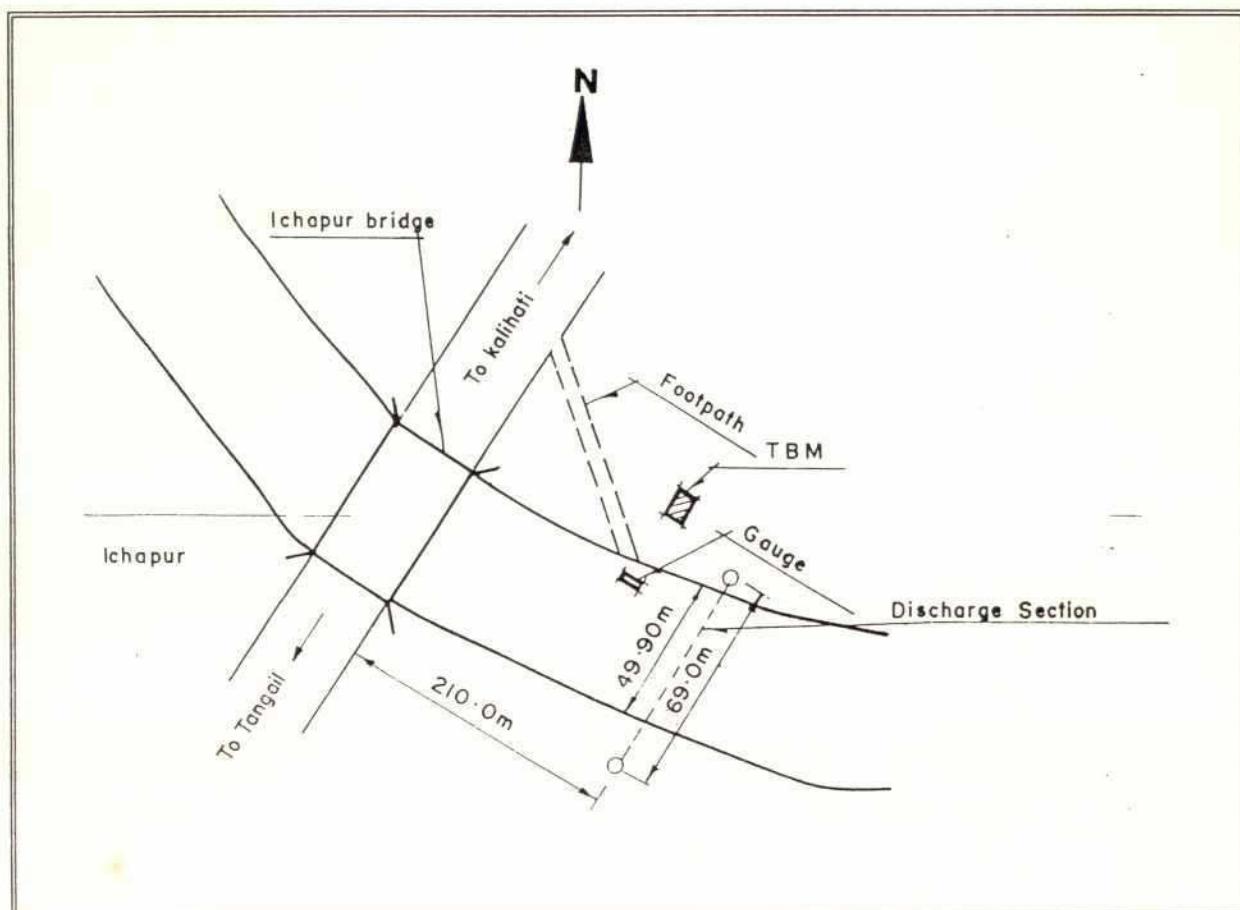
GRID : 24<sup>o</sup> - 21.588' N  
89<sup>o</sup> - 56.841' E

MAP SHEET : 78 H/15

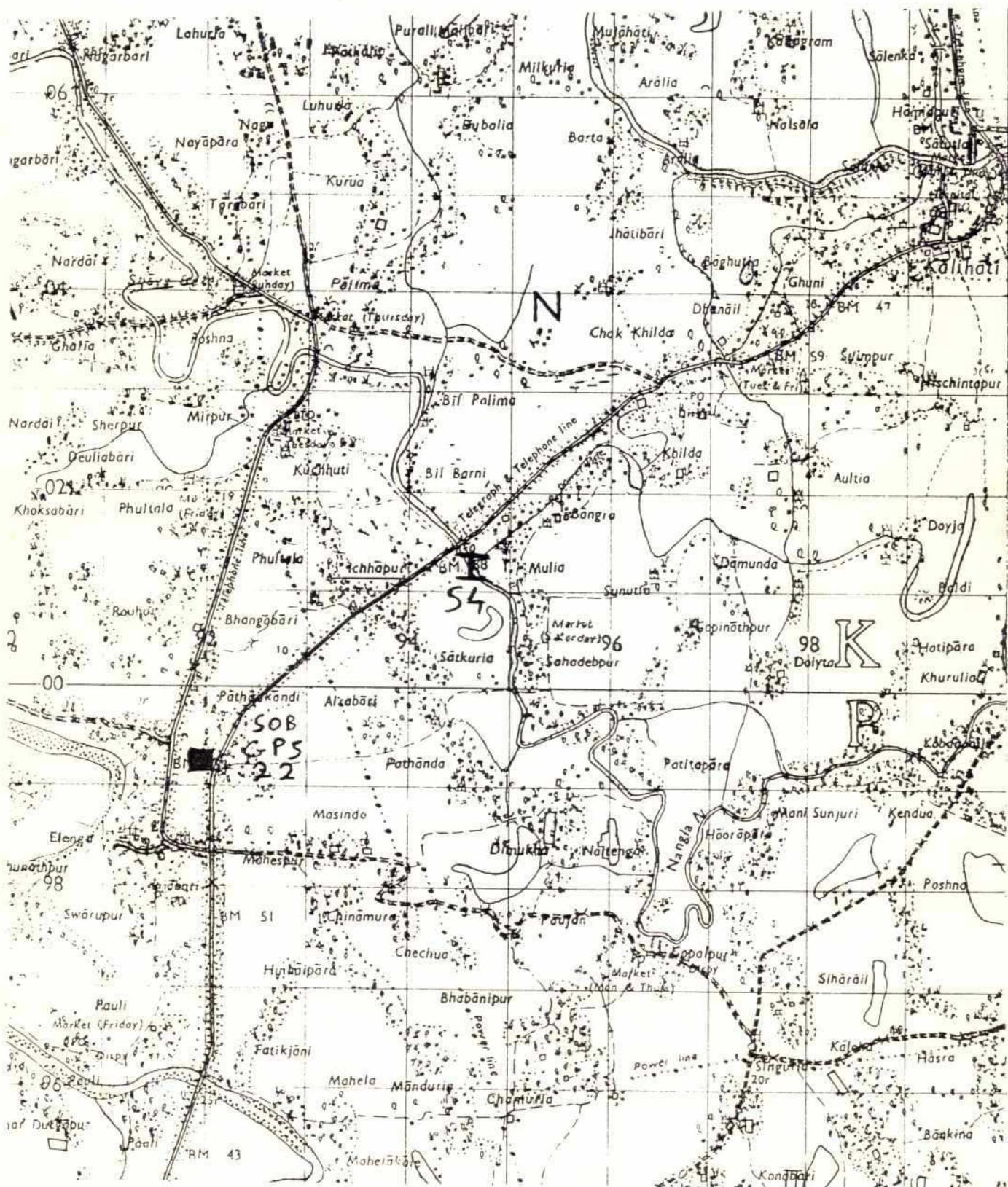
ACCESS : Easy access by road from Tangail

**TEMPORARY BENCH MARK 12.10 m (PWD)**

**SKETCH**



**STATION S4 : ICHAPUR  
NANGLAI RIVER**



# STATION S5 : BHUAPUR REG.

## FUTIKJANI RIVER

1st INSTALLATION : 15/07/1992

STATUS : Water Level and Discharges

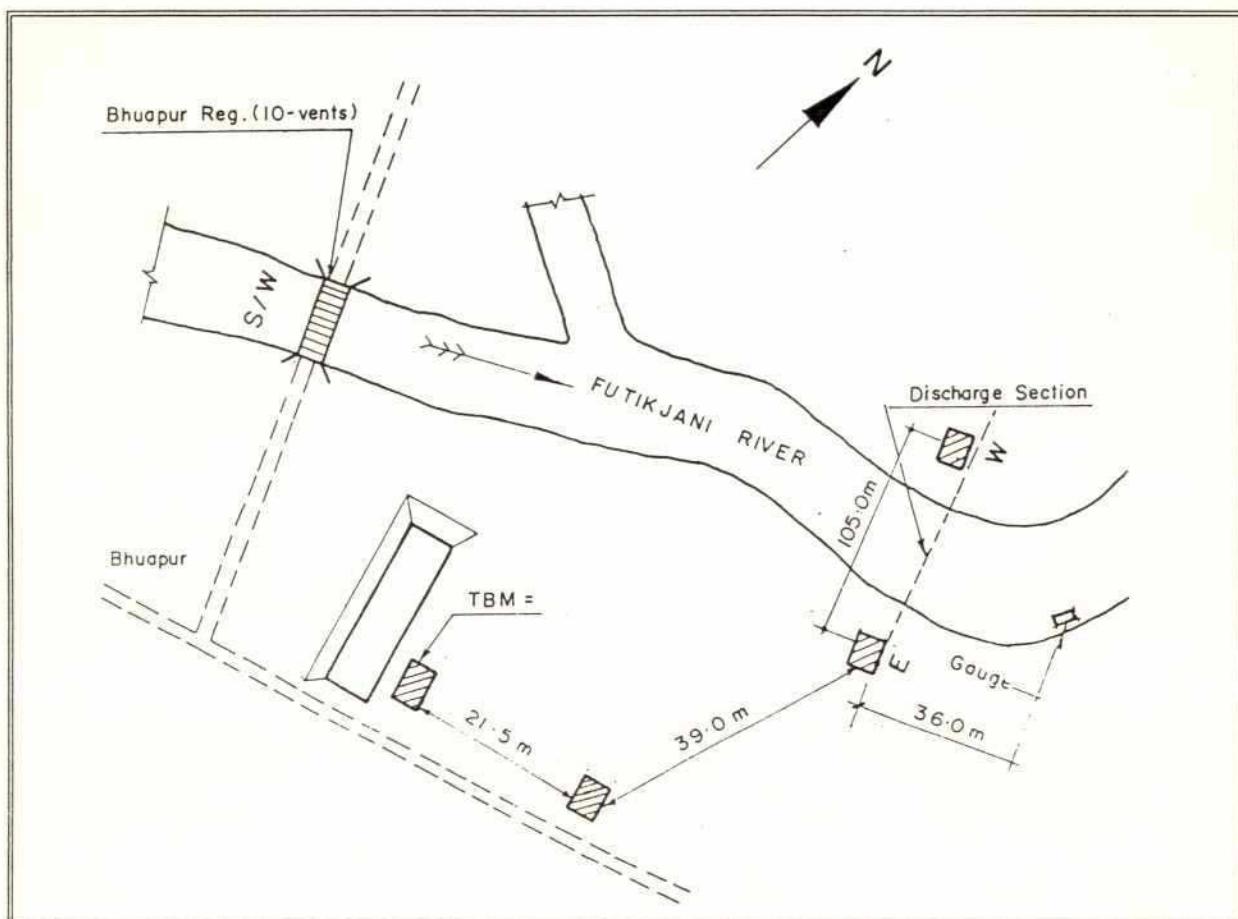
GRID : 24 $^{\circ}$  - 28.323' N  
89 $^{\circ}$  - 52.803' E

MAP SHEET : 78 H/15

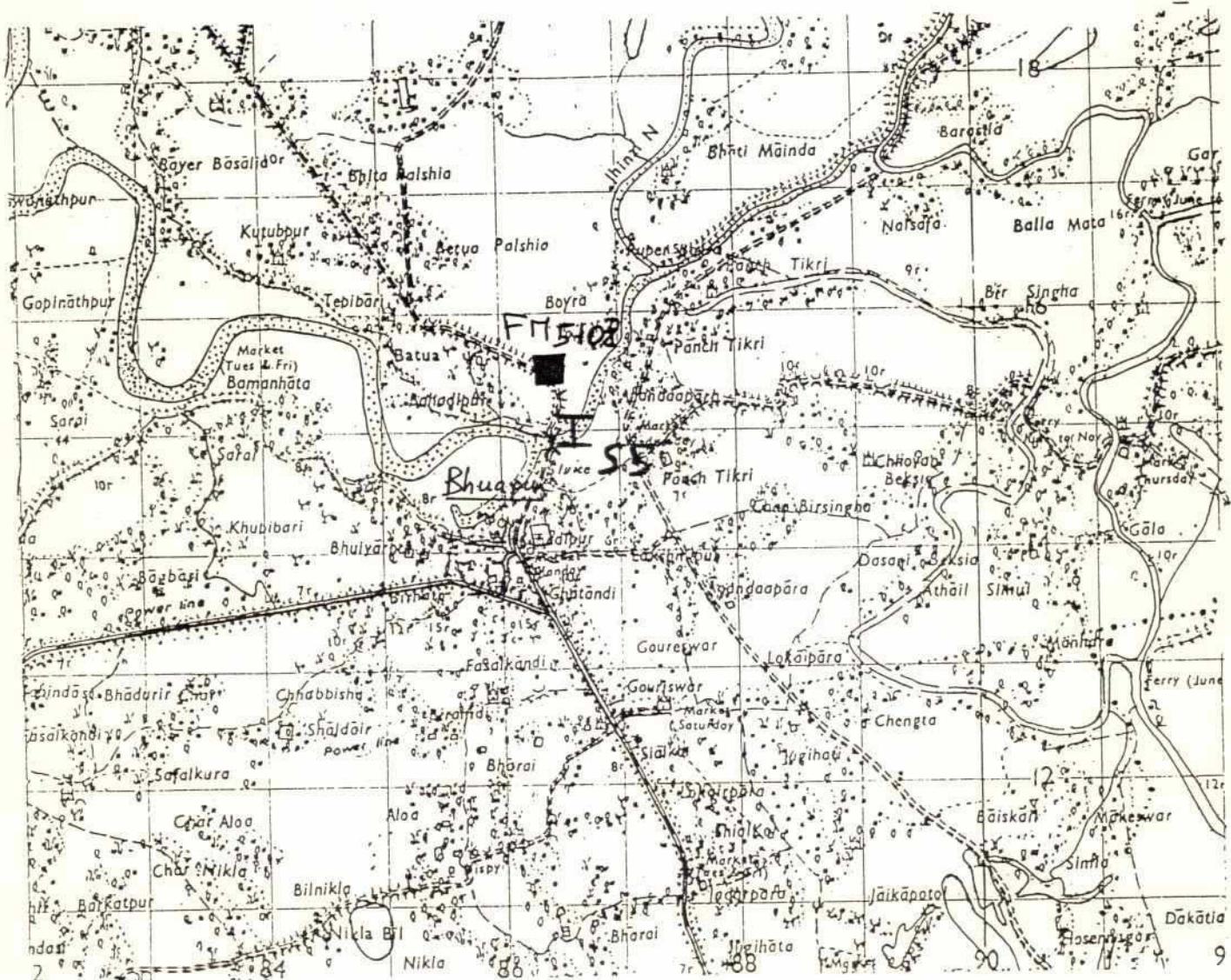
ACCESS : Easy access by road from Tangail

TEMPORARY BENCH MARK 13.48 m (PWD)

### SKETCH



STATION S5 : BHUAPUR REG.  
FUTIKJANI RIVER



20

# STATION S6 : SAKHARIA

## BOALBARI KHAL

1st INSTALLATION : 15/07/1992

STATUS : Water Level and Discharges

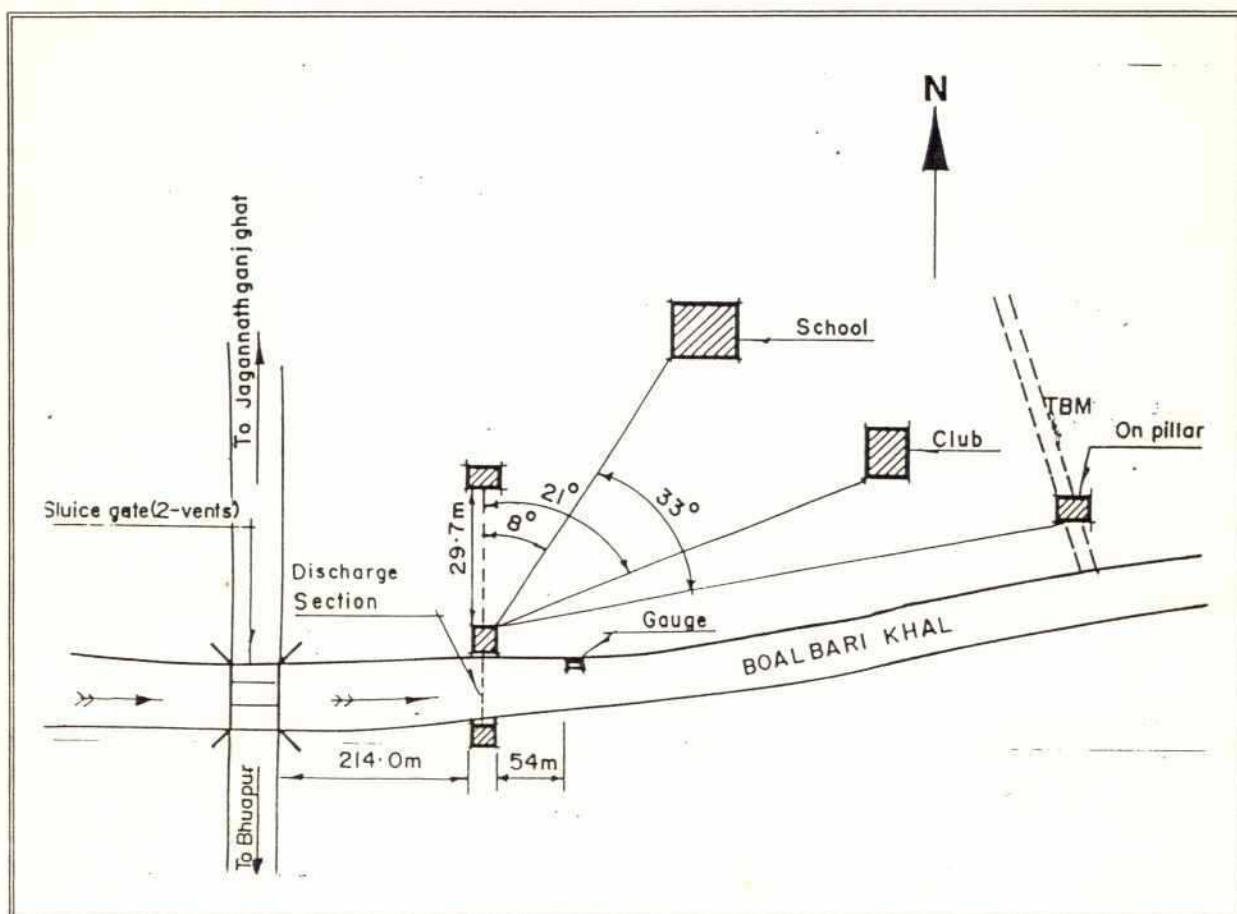
GRID : 24 $^{\circ}$  - 33.458' N  
89 $^{\circ}$  - 49.822' E

MAP SHEET : 78 H/14

ACCESS : By road from Tangail

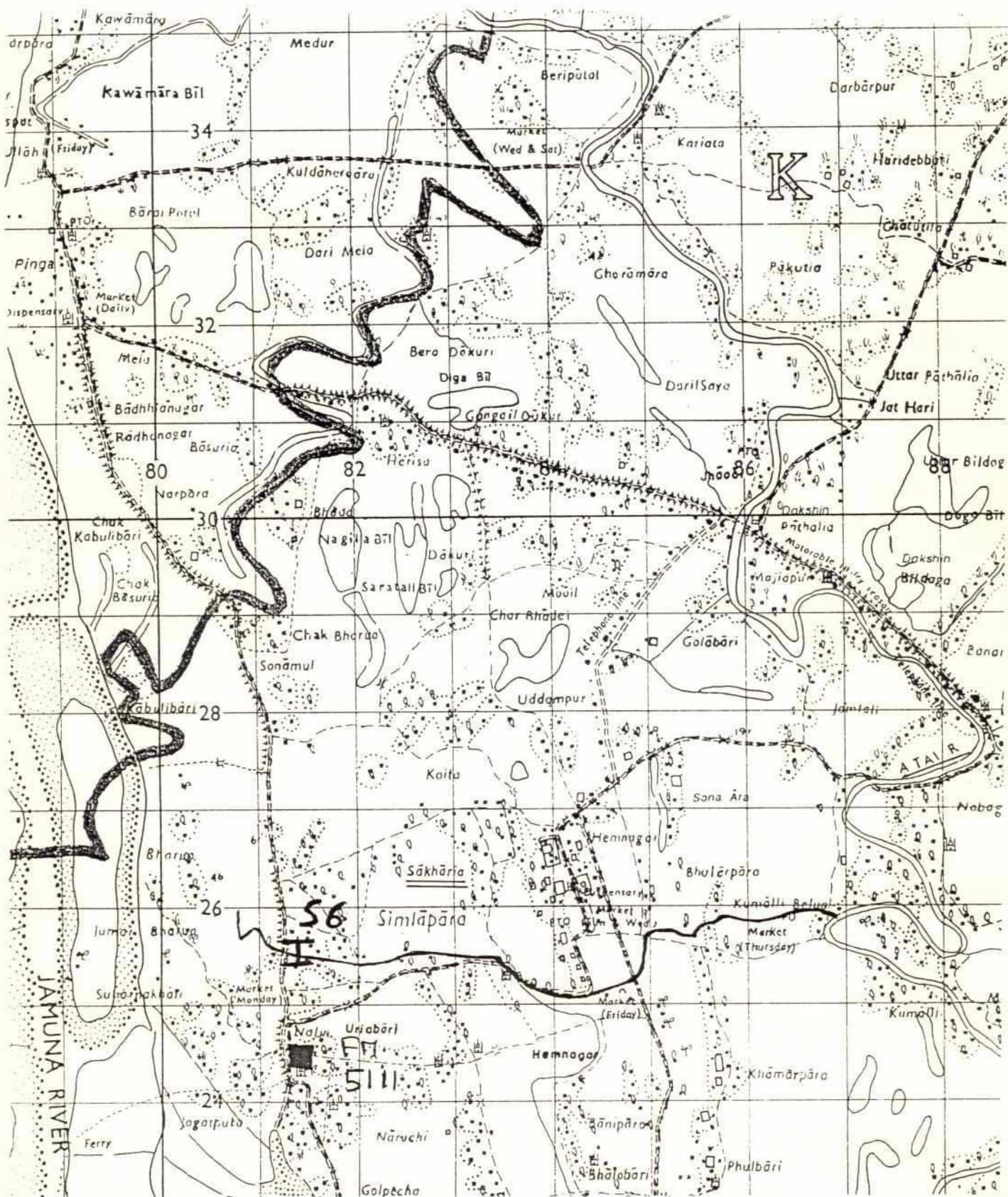
**TEMPORARY BENCH MARK 14.82 m (PWD)**

### SKETCH



27

**STATION S6 : SAKHARIA  
BOALBARI KHAL**



29

## STATION SG2 : KAYRA

### JHENAI RIVER

1st INSTALLATION : 08/1992

STATUS : Water Level and Discharges

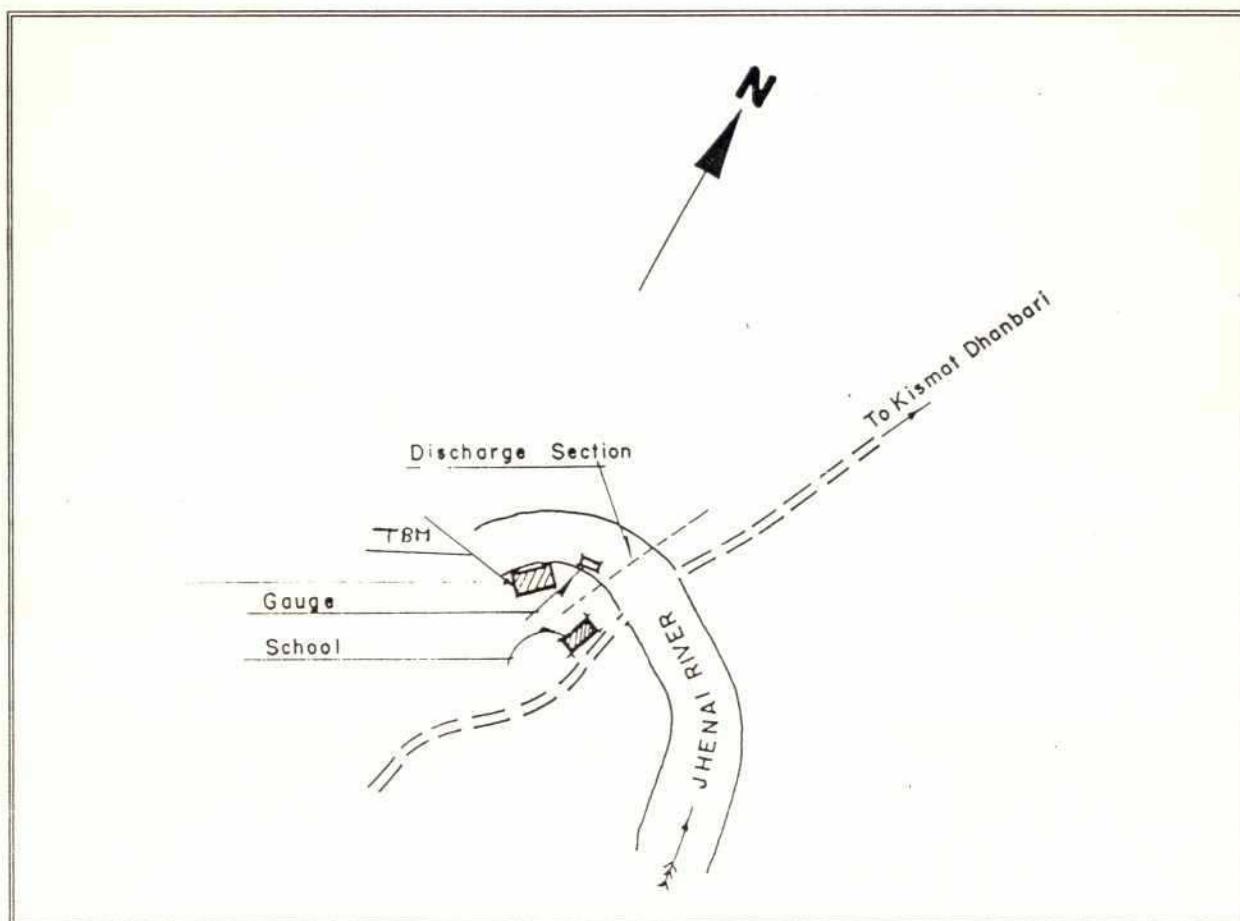
GRID : 24 $\wedge$  - 40.133' N  
89 $\wedge$  - 55.831' E

MAP SHEET : 78 H/14

ACCESS :

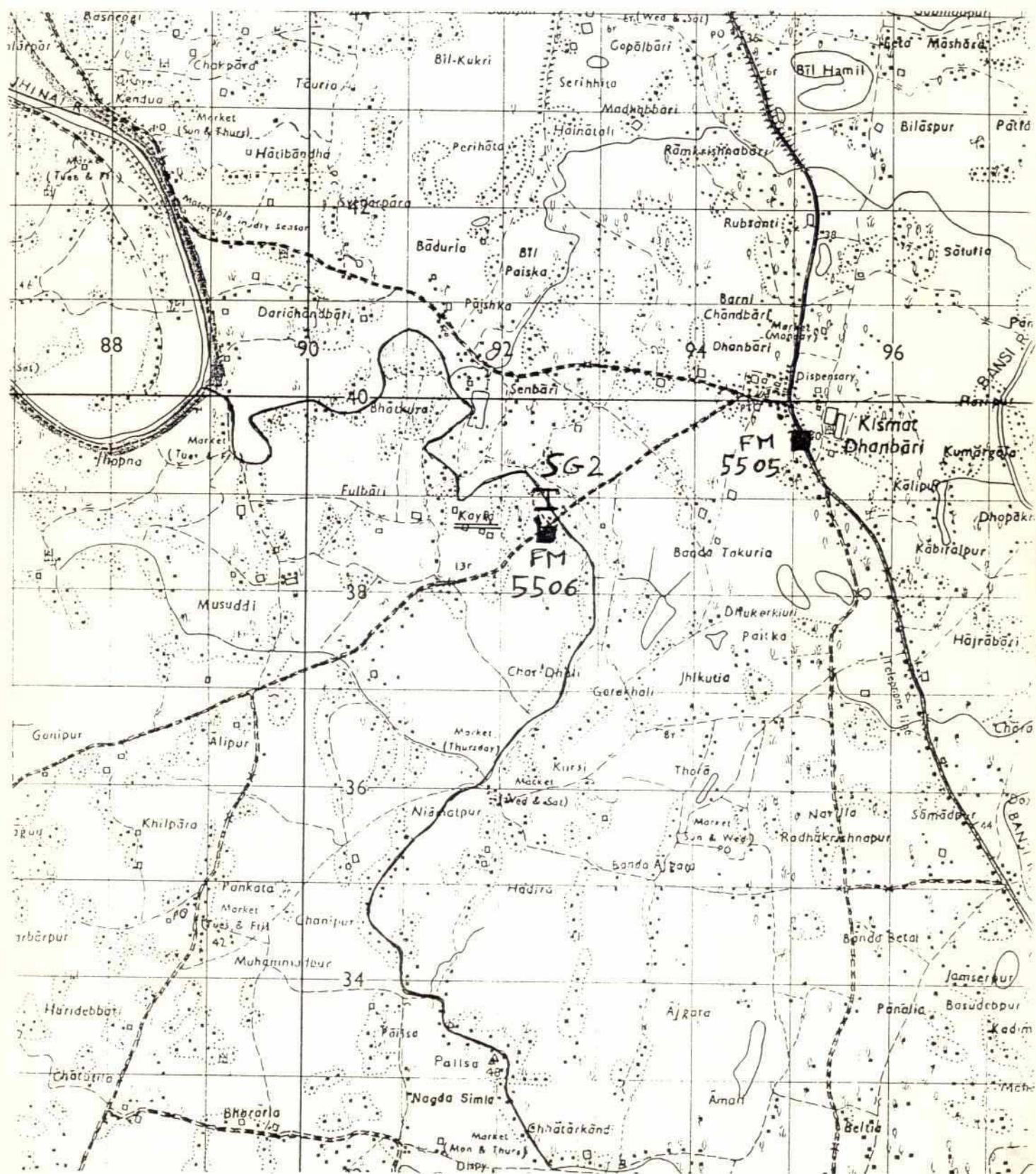
TEMPORARY BENCH MARK 14.77 m (PWD)

### SKETCH



**STATION SG2 : KAYRA  
JHENAI RIVER**

28



# STATION SG5 : BELUA BAZAR

## ATAI RIVER

1st INSTALLATION :

08/1990

STATUS :

Water Level and Discharges

GRID :

24 $^{\circ}$  - 33.630' N

89 $^{\circ}$  - 52.775' E

MAP SHEET :

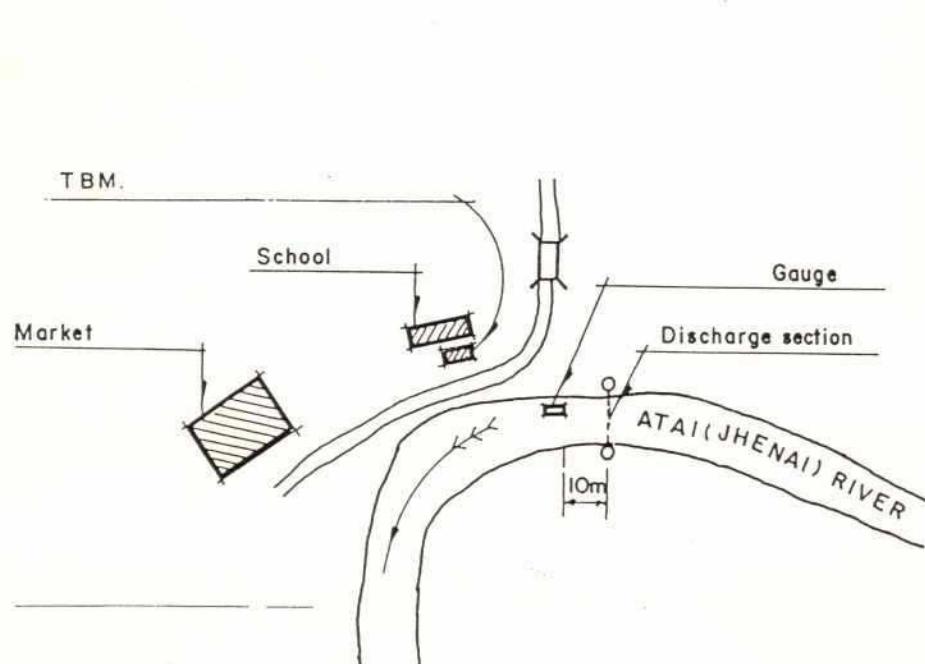
78 H/14

ACCESS :

By road from Tangail then by local transport

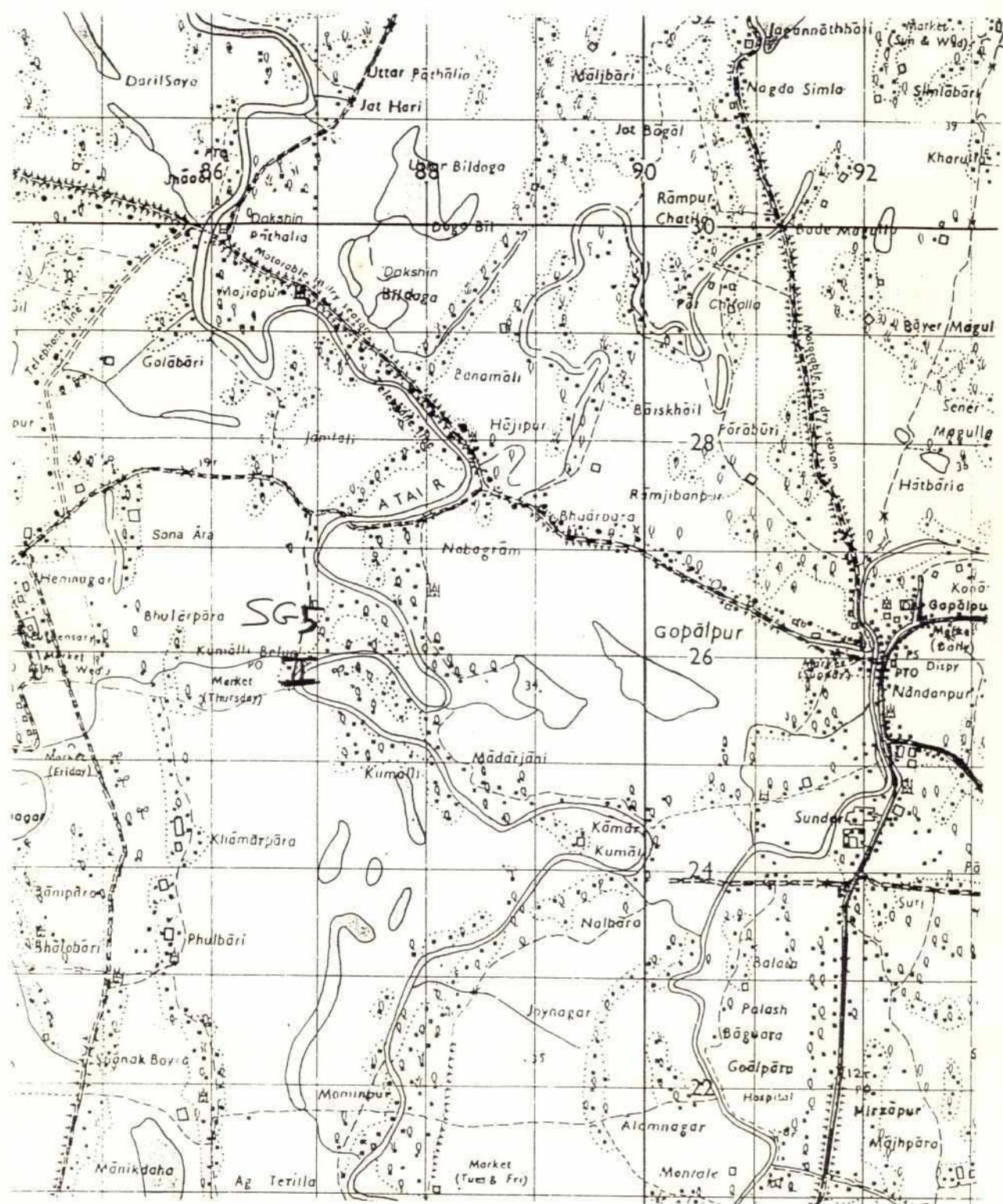
**TEMPORARY BENCH MARK** 13.56 m (PWD)

### SKETCH



60

**STATION SG5 : BELUA BAZAR  
ATAI RIVER**



6

**STATION SG7 : CHARAN (KALIATI)**  
**SAPA (FUTIKJANI) RIVER**

1st INSTALLATION : 08/1992

STATUS : Water Level and Discharges

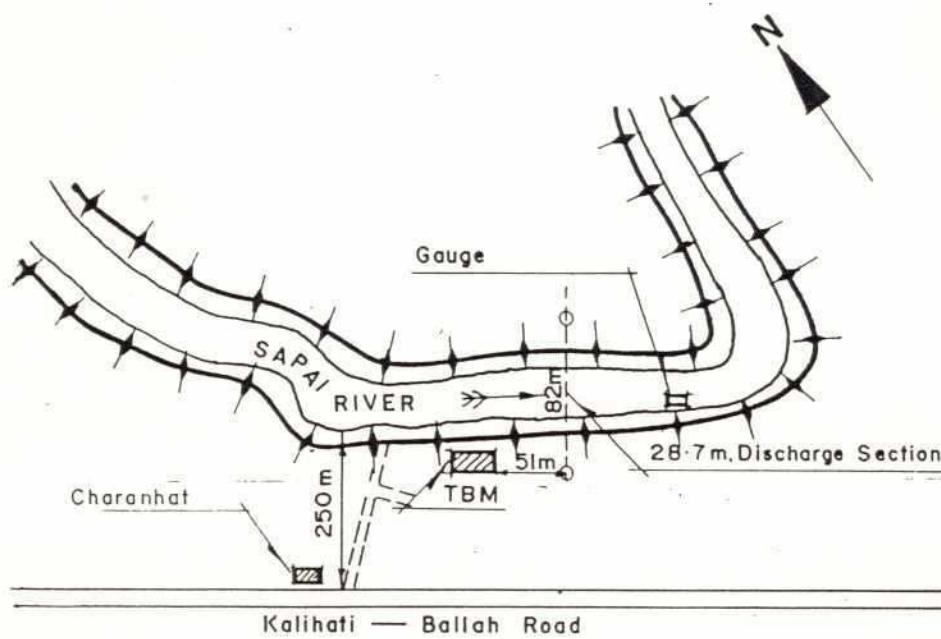
GRID : 24 $^{\circ}$  - 22.033' N  
90 $^{\circ}$  - 00.986' E

MAP SHEET : 78 L/3

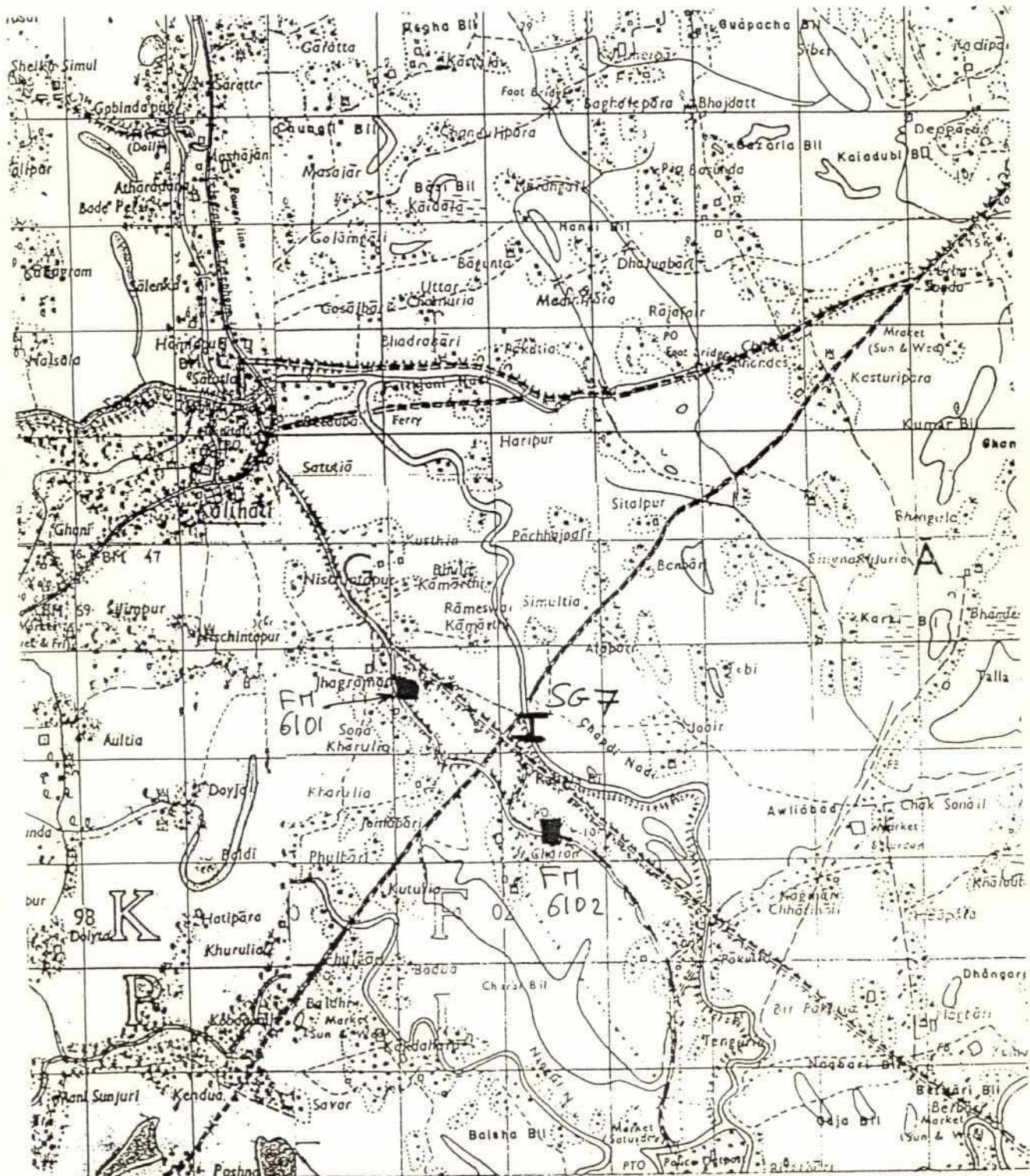
ACCESS : Easy access from Tangail and Kaliati

TEMPORARY BENCH MARK 12.61 m (PWD)

**SKETCH**



## STATION SG7 : CHARAN (KALIATI) SAPA (FUTIKJANI) RIVER



# STATION SG8 : SUROOI

## PUNGLI RIVER

1st INSTALLATION : 08/1992

STATUS : Water Level and Discharges

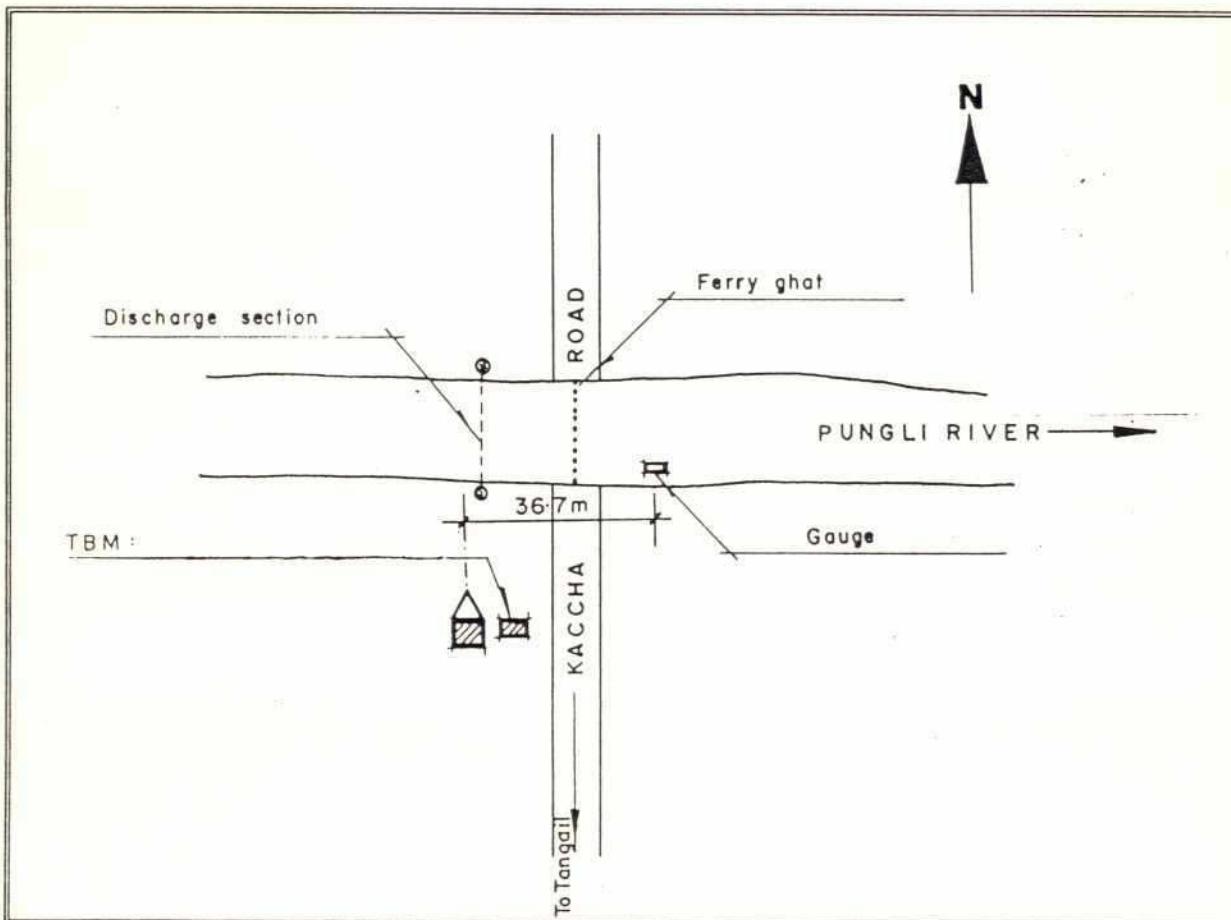
GRID : 24 $\wedge$  - 17.142' N  
89 $\wedge$  - 57.294' E

MAP SHEET : 78 H/15

ACCESS : By road from Tangail. The access is easy

TEMPORARY BENCH MARK 11.14 m (PWD)

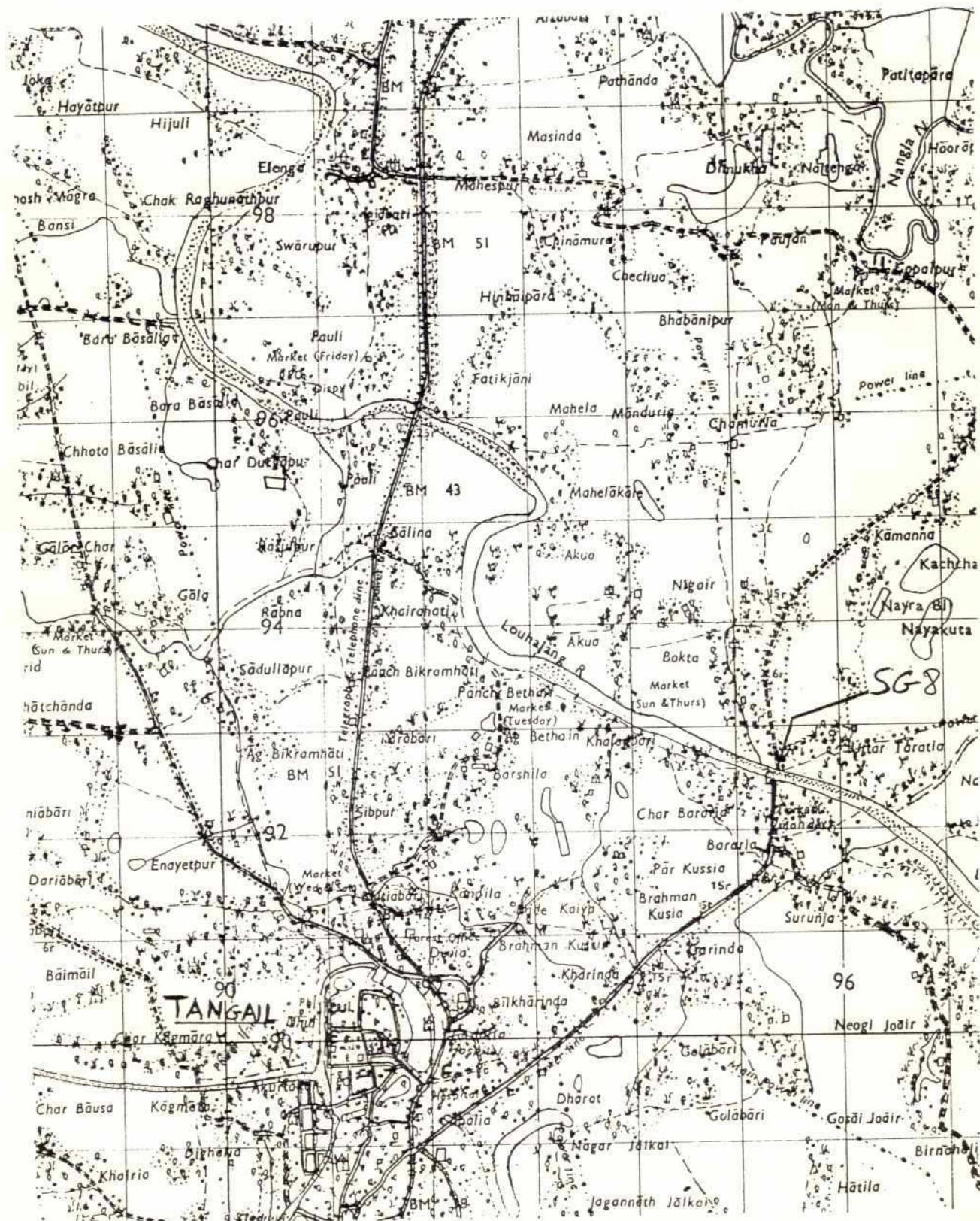
### SKETCH



98

**STATION SG8 : SUROOI**

**PUNGLI RIVER**



**GAUGE READING STATEMENT**  
Station: S1 PATHERGHATA  
River : BANGSHI RIVER  
Year : 1992

SOURCE : FAP3 - North Central Regional Study  
Hydrological Studies-1992

**GAUGE READING STATEMENT**  
**Station: S1 PATHERGHATA**  
**River : BANGSHI RIVER**  
**Year : 1992**

SOURCE : FAP3 - North Central Regional Study  
 Hydrology Study-1992

Month : September						Month : October					
Hour	0600	0900	1200	1500	1800	Hour	0600	0900	1200	1500	1800
Date	WL	WL	WL	WL	WL	Date	WL	WL	WL	WL	WL
1	6.44	6.45	6.46	6.47	6.47	1	6.76	6.76	6.76	6.76	6.76
2	6.50	6.51	6.52	6.52	6.52	2	6.75	6.75	6.74	6.74	6.74
3	6.53	6.53	6.54	6.54	6.54	3	6.76	6.76	6.75	6.74	6.74
4	6.56	6.57	6.58	6.58	6.59	4	6.73	6.73	6.73	6.72	6.73
5	6.61	6.62	6.59	6.59	6.58	5	6.71	6.71	6.71	6.71	6.71
6	6.56	6.55	6.55	6.54	6.54	6	6.70	6.70	6.69	6.69	6.70
7	6.53	6.53	6.53	6.53	6.53	7	6.67	6.67	6.66	6.66	6.66
8	6.49	6.48	6.47	6.47	6.46	8	6.63	6.63	6.62	6.62	6.62
9	6.43	6.42	6.40	6.39	6.37	9	6.57	6.57	6.56	6.55	6.54
10	6.35	6.33	6.33	6.32	6.32	10	6.50	6.48	6.47	6.45	6.45
11	6.31	6.30	6.29	6.28	6.30	11	6.40	6.39	6.39	6.37	6.37
12	6.27	6.27	6.29	6.31	6.32	12	6.32	6.29	6.28	6.25	6.25
13	6.39	6.43	6.45	6.52	6.55	13	6.19	6.18	6.16	6.13	6.16
14	6.56	6.56	6.57	6.57	6.57	14	6.09	6.09	6.08	6.07	6.07
15	6.55	6.54	6.53	6.53	6.52	15	6.06	6.06	6.06	6.05	6.05
16	6.50	6.49	6.49	6.48	6.47	16	6.04	6.04	6.04	6.04	6.04
17	6.46	6.45	6.45	6.44	6.43	17	6.03	6.03	6.03	6.03	6.03
18	6.42	6.41	6.41	6.40	6.42	18	6.03	6.03	6.03	6.03	6.03
19	6.39	6.39	6.39	6.38	6.39	19	6.02	6.02	6.02	6.01	6.02
20	6.40	6.40	6.41	6.41	6.40	20	5.99	5.98	5.97	5.96	5.97
21	6.42	6.42	6.43	6.43	6.43	21	5.96	5.96	5.95	5.95	5.96
22	6.45	6.46	6.46	6.46	6.46	22	5.94	5.94	5.93	5.92	5.93
23	6.40	6.47	6.47	6.48	6.48	23	5.90	5.90	5.89	5.90	5.90
24	6.46	6.46	6.47	6.48	6.46	24	5.86	5.85	5.85	5.82	5.84
25	6.49	6.50	6.50	6.54	6.56	25	5.77	5.76	5.75	5.74	5.75
26	6.50	6.56	6.55	6.55	6.56	26	5.68	5.67	5.66	5.65	5.66
27	6.50	6.50	6.58	6.58	6.59	27	5.57	5.57	5.55	5.52	5.55
28	6.64	6.65	6.66	6.69	6.72	28	5.45	5.44	5.43	5.40	5.43
29	6.74	6.70	6.76	6.77	6.70	29	5.33	5.29	5.27	5.22	5.27
30	6.77	6.76	6.75	6.75	6.77	30	5.17	5.16	5.14	5.12	5.14
31						31	5.03	5.02	5.01	4.98	5.01

**GAUGE READING STATEMENT**  
**Station: S2 BASAI**  
**River : NANGLAI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study  
 Hydrological Studies-1992**

Month : July	Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour Date	0600	0900	1200	1500	1800	Max	Min	Average
	Date	WL		WL														
1	8.62	8.62	8.62	8.62	8.62	8.62	8.62	8.62	8.62	1	8.43	8.41	8.40	8.39	8.38	8.43	8.38	8.40
2	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	2	8.38	8.38	8.37	8.37	8.36	8.38	8.36	8.37
3	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	8.64	3	8.40	8.42	8.43	8.43	8.44	8.44	8.40	8.42
4	8.65	8.65	8.65	8.65	8.65	8.65	8.65	8.65	8.65	4	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
5	8.66	8.67	8.67	8.67	8.67	8.67	8.67	8.67	8.67	5	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
6	8.67	8.68	8.69	8.69	8.70	8.70	8.67	8.67	8.68	6	8.42	8.45	8.46	8.46	8.48	8.49	8.42	8.46
7	8.68	8.70	8.72	8.72	8.70	8.68	8.74	8.74	8.75	7	8.56	8.57	8.57	8.58	8.65	8.65	8.56	8.59
8	8.69	8.71	8.73	8.73	8.72	8.70	8.74	8.74	8.75	8	8.59	8.59	8.59	8.59	8.59	8.59	8.59	8.59
9	8.70	8.72	8.74	8.74	8.73	8.71	8.75	8.75	8.75	9	8.58	8.58	8.58	8.58	8.57	8.58	8.57	8.58
10	8.71	8.74	8.75	8.75	8.75	8.75	8.77	8.77	8.77	10	8.54	8.54	8.55	8.55	8.56	8.56	8.54	8.55
11	8.72	8.75	8.76	8.76	8.75	8.75	8.76	8.76	8.76	11	8.52	8.50	8.49	8.48	8.47	8.52	8.47	8.49
12	8.73	8.76	8.78	8.78	8.77	8.76	8.78	8.78	8.78	12	8.46	8.45	8.45	8.44	8.43	8.43	8.43	8.44
13	8.74	8.77	8.79	8.79	8.78	8.77	8.79	8.79	8.79	13	8.38	8.37	8.37	8.37	8.37	8.38	8.36	8.37
14	8.75	8.78	8.80	8.80	8.79	8.78	8.80	8.80	8.80	14	8.33	8.32	8.31	8.31	8.30	8.29	8.29	8.31
15	8.76	8.79	8.81	8.81	8.80	8.79	8.82	8.82	8.82	15	8.28	8.27	8.27	8.28	8.27	8.28	8.27	8.28
16	8.77	8.80	8.82	8.82	8.81	8.80	8.83	8.83	8.83	16	8.24	8.23	8.22	8.22	8.21	8.20	8.24	8.22
17	8.78	8.81	8.83	8.83	8.82	8.81	8.84	8.84	8.84	17	8.17	8.17	8.16	8.15	8.14	8.13	8.17	8.15
18	8.79	8.82	8.84	8.84	8.83	8.82	8.85	8.85	8.85	18	8.11	8.09	8.09	8.09	8.08	8.07	8.11	8.09
19	8.80	8.83	8.85	8.85	8.84	8.83	8.86	8.86	8.86	19	8.04	8.03	8.03	8.02	8.01	8.00	8.04	8.02
20	8.81	8.84	8.86	8.86	8.85	8.84	8.87	8.87	8.87	20	7.97	7.97	7.97	7.96	7.95	7.97	7.95	7.96
21	8.82	8.85	8.87	8.87	8.86	8.85	8.88	8.88	8.88	21	7.96	7.96	7.96	7.96	7.95	7.95	7.94	7.95
22	8.83	8.86	8.88	8.88	8.87	8.86	8.89	8.89	8.89	22	7.96	7.96	7.95	7.95	7.95	7.96	7.95	7.95
23	8.84	8.87	8.89	8.89	8.88	8.87	8.90	8.90	8.90	23	7.95	7.94	7.94	7.93	7.93	7.93	7.94	7.94
24	8.85	8.88	8.90	8.90	8.89	8.88	8.91	8.91	8.91	24	7.94	7.94	7.94	7.94	7.94	7.94	7.94	7.95
25	8.86	8.89	8.91	8.91	8.90	8.89	8.92	8.92	8.92	25	7.98	7.98	7.98	7.98	7.98	7.98	7.98	8.01
26	8.87	8.90	8.92	8.92	8.91	8.90	8.93	8.93	8.93	26	8.04	8.04	8.05	8.06	8.07	8.08	8.04	8.06
27	8.88	8.91	8.93	8.93	8.92	8.91	8.94	8.94	8.94	27	8.15	8.15	8.15	8.15	8.16	8.16	8.15	8.15
28	8.89	8.92	8.94	8.94	8.93	8.92	8.95	8.95	8.95	28	8.18	8.19	8.20	8.22	8.24	8.24	8.18	8.21
29	8.90	8.93	8.95	8.95	8.94	8.93	8.96	8.96	8.96	29	8.33	8.34	8.35	8.37	8.39	8.39	8.33	8.36
30	8.91	8.94	8.96	8.96	8.95	8.94	8.97	8.97	8.97	30	8.43	8.44	8.46	8.47	8.49	8.49	8.43	8.46
31	8.92	8.95	8.97	8.97	8.96	8.95	8.98	8.98	8.98	31	8.53	8.54	8.53	8.53	8.55	8.55	8.53	8.54

**GAUGE READING STATEMENT**  
**Station: S2 BASAI**  
**River : NANGLAI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

**Month : September**

Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	Date	WL														
1	8.55	8.55	8.54	8.56	8.56	8.54	8.55	8.55	1	8.20	8.18	8.18	8.17	8.17	8.20	8.17	8.18
2	8.47	8.46	8.47	8.46	8.44	8.44	8.46	8.46	2	8.16	8.15	8.15	8.15	8.15	8.16	8.15	8.15
3	8.44	8.45	8.46	8.47	8.48	8.44	8.44	8.46	3	8.12	8.13	8.13	8.13	8.13	8.12	8.13	8.13
4	8.47	8.46	8.45	8.44	8.32	8.47	8.32	8.43	4	8.12	8.13	8.14	8.15	8.16	8.16	8.12	8.14
5	8.37	8.26	8.25	8.24	8.23	8.37	8.23	8.27	5	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15
6	8.30	8.29	8.28	8.27	8.26	8.30	8.26	8.28	6	8.15	8.15	8.15	8.15	8.14	8.14	8.15	8.15
7	8.22	8.31	8.30	8.29	8.27	8.31	8.22	8.28	7	8.10	8.08	8.08	8.07	8.06	8.10	8.06	8.08
8	8.12	8.11	8.10	8.09	8.08	8.12	8.08	8.10	8	8.01	8.00	7.99	7.98	7.97	8.01	7.97	7.99
9	8.06	8.05	8.04	8.04	8.02	8.02	8.02	8.04	9	7.93	7.91	7.90	7.89	7.88	7.93	7.88	7.90
10	7.92	7.91	8.00	7.99	7.98	8.00	7.91	7.96	10	7.83	7.82	7.81	7.80	7.79	7.83	7.79	7.81
11	7.98	7.98	7.97	7.97	7.96	7.98	7.96	7.97	11	7.76	7.74	7.73	7.72	7.71	7.76	7.71	7.73
12	7.99	8.00	8.01	8.02	8.03	8.03	7.99	8.01	12	7.69	7.68	7.67	7.66	7.65	7.69	7.65	7.67
13	8.08	8.07	8.06	8.08	8.10	8.10	8.06	8.08	13	7.62	7.62	7.61	7.60	7.59	7.62	7.59	7.61
14	8.07	8.07	8.07	8.06	8.07	8.06	8.06	8.07	14	7.56	7.57	7.57	7.58	7.59	7.59	7.56	7.57
15	8.06	8.06	8.07	8.08	8.09	8.09	8.06	8.07	15	7.56	7.56	7.55	7.55	7.54	7.56	7.54	7.55
16	8.11	8.10	8.10	8.10	8.09	8.11	8.09	8.10	16	7.53	7.53	7.53	7.53	7.52	7.53	7.52	7.53
17	8.10	8.10	8.10	8.11	8.11	8.10	8.10	8.10	17	7.49	7.49	7.49	7.49	7.49	7.50	7.49	7.49
18	8.11	8.11	8.12	8.15	8.15	8.11	8.12	8.15	18	7.48	7.48	7.49	7.49	7.48	7.48	7.48	7.49
19	8.19	8.20	8.21	8.23	8.25	8.19	8.22	8.25	19	7.47	7.47	7.47	7.47	7.46	7.47	7.46	7.47
20	8.28	8.29	8.30	8.31	8.32	8.32	8.28	8.30	20	7.45	7.45	7.46	7.46	7.46	7.46	7.45	7.45
21	8.35	8.35	8.36	8.36	8.37	8.37	8.35	8.36	21	7.47	7.47	7.48	7.49	7.49	7.50	7.47	7.48
22	8.37	8.36	8.36	8.37	8.37	8.37	8.36	8.37	22	7.51	7.51	7.52	7.53	7.54	7.54	7.51	7.52
23	8.35	8.35	8.34	8.33	8.31	8.35	8.31	8.34	23	7.55	7.55	7.55	7.55	7.54	7.55	7.54	7.55
24	8.27	8.26	8.25	8.24	8.25	8.27	8.24	8.25	24	7.50	7.50	7.49	7.49	7.48	7.50	7.48	7.49
25	8.12	8.20	8.19	8.18	8.17	8.20	8.12	8.17	25	7.44	7.44	7.42	7.41	7.40	7.39	7.44	7.41
26	8.11	8.10	8.08	8.09	8.10	8.11	8.08	8.10	26	7.35	7.35	7.34	7.33	7.32	7.31	7.31	7.33
27	8.09	8.15	8.18	8.16	8.17	8.18	8.09	8.15	27	7.27	7.26	7.25	7.24	7.23	7.27	7.25	
28	8.18	8.19	8.20	8.20	8.20	8.20	8.18	8.19	28	7.18	7.17	7.16	7.15	7.14	7.18	7.14	7.16
29	8.22	8.21	8.23	8.24	8.24	8.24	8.21	8.23	29	7.09	7.08	7.07	7.06	7.05	7.09	7.05	7.07
30	8.25	8.24	8.23	8.23	8.12	8.25	8.12	8.21	30	6.98	6.97	6.97	6.96	6.95	6.98	6.95	6.97
31									31	6.90	6.89	6.89	6.88	6.87	6.90	6.86	6.88

67

**GAUGE READING STATEMENT**  
**Station: S3 : DHALAPARA**  
**River : BANGSHI RIVER**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

Month : September

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL							
1	8.41	8.42	8.43	8.43	8.43	8.42	8.41	8.42
2	8.45	8.46	8.47	8.47	8.47	8.46	8.45	8.46
3	8.49	8.49	8.49	8.49	8.50	8.49	8.49	8.49
4	8.50	8.50	8.50	8.51	8.51	8.50	8.50	8.50
5	8.52	8.52	8.52	8.52	8.53	8.53	8.52	8.52
6	8.54	8.54	8.54	8.54	8.54	8.53	8.54	8.54
7	8.53	8.52	8.52	8.52	8.53	8.52	8.52	8.52
8	8.50	8.50	8.50	8.49	8.49	8.50	8.49	8.49
9	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46
10	8.43	8.46	8.39	8.39	8.39	8.46	8.39	8.41
11	8.37	8.37	8.37	8.37	8.36	8.37	8.36	8.37
12	8.38	8.39	8.40	8.43	8.44	8.44	8.38	8.41
13	8.49	8.51	8.54	8.57	8.59	8.59	8.49	8.54
14	8.66	8.68	8.69	8.69	8.69	8.66	8.68	8.66
15	8.69	8.68	8.68	8.67	8.66	8.66	8.68	8.66
16	8.64	8.63	8.62	8.62	8.61	8.64	8.62	8.62
17	8.55	8.54	8.53	8.52	8.52	8.55	8.52	8.53
18	8.50	8.49	8.48	8.47	8.47	8.50	8.47	8.48
19	8.55	8.54	8.54	8.53	8.52	8.55	8.52	8.54
20	8.49	8.48	8.48	8.47	8.47	8.49	8.47	8.48
21	8.46	8.46	8.46	8.46	8.46	8.45	8.46	8.46
22	8.44	8.44	8.44	8.43	8.43	8.44	8.43	8.44
23	8.43	8.43	8.43	8.43	8.43	8.43	8.43	8.43
24	8.43	8.43	8.43	8.45	8.61	8.43	8.47	8.45
25	8.73	8.73	8.74	8.75	8.76	8.73	8.74	8.74
26	8.78	8.78	8.78	8.79	8.79	8.78	8.78	8.78
27	9.12	9.17	9.19	9.25	9.27	9.12	9.20	9.17
28	9.48	9.49	9.50	9.59	9.63	9.48	9.54	9.54
29	9.66	9.67	9.68	9.68	9.68	9.66	9.67	9.67
30	9.68	9.68	9.68	9.67	9.67	9.68	9.67	9.68
31								

Month : October

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL							
1	9.64	9.63	9.62	9.61	9.60	9.64	9.60	9.62
2	9.56	9.56	9.56	9.55	9.55	9.56	9.55	9.56
3	9.49	9.47	9.47	9.47	9.46	9.45	9.45	9.47
4	9.39	9.38	9.37	9.36	9.35	9.39	9.35	9.37
5	9.31	9.30	9.29	9.28	9.27	9.31	9.27	9.29
6	9.25	9.24	9.23	9.22	9.22	9.23	9.22	9.23
7	9.18	9.18	9.17	9.17	9.15	9.18	9.15	9.17
8	9.10	9.09	9.08	9.07	9.06	9.10	9.06	9.08
9	9.01	9.00	8.99	8.99	8.99	9.01	8.99	9.00
10	8.94	8.93	8.92	8.91	8.94	8.91	8.91	8.93
11	8.86	8.86	8.85	8.85	8.85	8.83	8.83	8.85
12	8.77	8.76	8.75	8.75	8.74	8.77	8.74	8.75
13	8.69	8.67	8.66	8.66	8.64	8.69	8.64	8.66
14	8.77	8.78	8.84	8.84	8.85	8.86	8.77	8.82
15	8.93	8.93	8.94	8.94	8.94	8.94	8.93	8.94
16	8.92	8.97	8.99	9.00	9.03	9.03	8.92	8.98
17	9.03	9.03	9.02	9.02	9.03	9.02	9.02	9.02
18	8.99	8.98	8.97	8.96	8.96	8.99	8.96	8.97
19	8.90	8.89	8.88	8.87	8.85	8.90	8.85	8.88
20	8.80	8.79	8.77	8.76	8.74	8.80	8.74	8.77
21	8.69	8.68	8.66	8.66	8.67	8.69	8.66	8.68
22	8.74	8.73	8.72	8.71	8.70	8.74	8.70	8.72
23	8.61	8.59	8.57	8.55	8.55	8.61	8.53	8.57
24	8.47	8.45	8.43	8.43	8.45	8.35	8.47	8.41
25	8.27	8.26	8.26	8.25	8.24	8.27	8.24	8.26
26	8.23	8.23	8.21	8.23	8.23	8.23	8.23	8.23
27	8.11	8.09	8.06	8.04	8.03	8.11	8.03	8.07
28	7.98	7.97	7.96	7.96	7.96	7.92	7.92	8.16
29	7.87	7.85	7.83	7.83	7.83	7.80	7.83	8.04
30	7.74	7.74	7.73	7.69	7.73	7.69	7.73	7.93
31	7.63	7.61	8.62	8.62	8.62	8.62	8.62	8.01

**GAUGE READING STATEMENT**  
 Station: S3 : DHALAPARA  
 River : BANGSHI RIVER  
 Year : 1992

**SOURCE :** FAP3 - North Central Regional Study  
 Hydrological Studies-1992

Month : July	Month : August					
	Hour Date	0600 WL	0900 WL	1200 WL	1500 WL	1800 WL
	Min WL	Average WL				Hour Date
1	8.94	8.95	8.94	8.94	8.94	8.92
2	9.07	9.16	9.18	9.19	9.19	8.89
3	9.30	9.30	9.29	9.30	9.30	8.86
4	9.28	9.27	9.28	9.29	9.29	8.84
5	9.26	9.26	9.26	9.26	9.26	8.82
6	9.28	9.28	9.27	9.28	9.28	8.81
7	9.26	9.26	9.26	9.27	9.26	8.80
8	9.30	9.30	9.29	9.30	9.30	8.80
9	9.28	9.28	9.27	9.28	9.27	8.81
10	9.26	9.26	9.26	9.27	9.26	8.84
11	9.26	9.26	9.26	9.26	9.26	8.82
12	9.26	9.26	9.25	9.24	9.24	8.82
13	9.23	9.23	9.23	9.23	9.23	8.79
14	9.26	9.26	9.26	9.27	9.26	8.79
15	9.05	9.07	9.16	9.18	9.19	8.86
16	9.26	9.26	9.26	9.26	9.26	8.85
17	9.27	9.27	9.28	9.29	9.30	8.85
18	9.30	9.30	9.30	9.29	9.30	8.83
19	9.28	9.28	9.27	9.28	9.28	8.82
20	9.26	9.26	9.26	9.27	9.26	8.81
21	9.26	9.26	9.26	9.26	9.26	8.80
22	9.26	9.26	9.25	9.24	9.24	8.80
23	9.23	9.23	9.23	9.23	9.23	8.79
24	9.20	9.20	9.20	9.20	9.20	8.78
25	9.18	9.18	9.18	9.16	9.18	8.77
26	9.16	9.16	9.16	9.15	9.16	8.76
27	9.14	9.13	9.12	9.12	9.14	8.75
28	9.09	9.08	9.07	9.06	9.05	8.74
29	9.03	9.02	9.01	9.01	9.03	8.73
30	8.98	8.98	8.97	8.96	8.98	8.72
31	8.94	8.94	8.93	8.93	8.93	8.71



88

GAUGE READING STATEMENT  
 Station: S4 ICHAPUR  
 River : NANGLAI  
 Year : 1992

SOURCE : FAP3 - North Central Regional Study  
 Hydrological Studies-1992

Month : July	Month : August					
	Hour	0600	0900	1200	1500	1800
Date	WL	WL	WL	WL	WL	WL
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

**GAUGE READING STATEMENT**  
**Station: S4 ICHAPUR**  
**River : NANGLAI**  
**Year : 1992**

**SOURCE :** FAP3 - North Central Regional Study  
 Hydrological Studies-1992

Month : September						Month : October					
Hour	0600	0900	1200	1500	1800	Hour	0600	0900	1200	1500	1800
Date	WL	WL	WL	WL	WL	Date	WL	WL	WL	WL	WL
1	9.19	9.19	9.20	9.20	9.20	1	9.98	9.98	9.96	9.95	9.95
2	9.22	9.22	9.23	9.23	9.23	2	9.92	9.91	9.91	9.92	9.90
3	9.24	9.25	9.25	9.25	9.25	3	9.85	9.85	9.84	9.83	9.83
4	9.26	9.27	9.27	9.27	9.27	4	9.79	9.79	9.79	9.77	9.77
5	9.27	9.27	9.27	9.28	9.28	5	9.71	9.71	9.71	9.70	9.70
6	9.29	9.29	9.29	9.29	9.29	6	9.71	9.71	9.70	9.70	9.70
7	9.28	9.28	9.28	9.28	9.28	7	9.66	9.65	9.65	9.64	9.64
8	9.27	9.27	9.27	9.26	9.27	8	9.60	9.60	9.59	9.58	9.58
9	9.24	9.24	9.24	9.23	9.24	9	9.56	9.56	9.55	9.55	9.55
10	9.20	9.19	9.19	9.18	9.20	10	9.51	9.51	9.50	9.49	9.49
11	9.16	9.16	9.15	9.14	9.16	11	9.45	9.45	9.44	9.43	9.43
12	9.20	9.21	9.27	9.29	9.31	9.20	9.26	9.29	9.30	9.30	9.30
13	9.42	9.43	9.44	9.45	9.46	9.42	9.44	9.42	9.39	9.38	9.38
14	9.49	9.49	9.49	9.49	9.48	9.49	9.48	9.49	9.45	9.45	9.44
15	9.47	9.46	9.46	9.46	9.45	9.47	9.45	9.46	9.45	9.45	9.44
16	9.43	9.43	9.42	9.41	9.41	9.43	9.41	9.42	9.39	9.38	9.38
17	9.40	9.40	9.39	9.38	9.38	9.40	9.38	9.39	9.32	9.32	9.31
18	9.34	9.34	9.33	9.31	9.31	9.34	9.31	9.33	9.33	9.32	9.32
19	9.30	9.30	9.29	9.28	9.27	9.30	9.27	9.29	9.29	9.28	9.28
20	9.26	9.25	9.24	9.23	9.23	9.26	9.23	9.24	9.23	9.22	9.23
21	9.22	9.22	9.21	9.21	9.22	9.21	9.21	9.21	9.21	9.21	9.21
22	9.21	9.20	9.20	9.20	9.21	9.20	9.20	9.18	9.17	9.16	9.17
23	9.20	9.20	9.19	9.19	9.20	9.19	9.19	9.15	9.15	9.14	9.14
24	9.20	9.21	9.23	9.26	9.27	9.20	9.23	9.11	9.11	9.11	9.11
25	9.29	9.29	9.28	9.33	9.35	9.28	9.31	9.04	9.03	9.02	9.03
26	9.38	9.38	9.39	9.43	9.45	9.45	9.38	9.41	8.97	8.96	8.95
27	9.86	9.87	9.96	10.00	10.01	10.01	9.86	9.94	8.91	8.89	8.88
28	10.06	10.07	10.07	10.07	10.07	10.06	10.07	10.07	8.85	8.83	8.80
29	10.05	10.05	10.04	10.04	10.04	10.04	10.04	10.01	8.77	8.74	8.73
30	10.02	10.02	10.01	10.01	10.01	10.02	10.01	10.01	8.71	8.69	8.68
31									8.64	8.64	8.63

**GAUGE READING STATEMENT**  
**Station: S5 BHUAPUR**  
**River : FUTIKJANI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

Month : July

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL

Month : August

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL

1	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85
2	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85
3	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85
4	10.87	10.87	10.87	10.87	10.88	10.88	10.87	10.87
5	10.89	10.89	10.90	10.90	10.93	10.89	10.90	10.90
6	10.92	10.92	10.94	10.94	10.94	10.92	10.93	10.92
7	10.95	10.95	10.95	10.94	10.94	10.95	10.94	10.95
8	10.96	10.96	10.96	10.96	10.96	10.96	10.96	10.96
9	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97
10	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
11	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
12	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
13	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
14	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
15	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
16	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
17	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
18	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
19	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
20	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
21	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
22	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
23	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
24	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
25	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
26	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
27	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
28	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
29	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
30	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98
31	10.98	10.98	10.98	10.98	10.98	10.98	10.98	10.98

1	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63
2	10.58	10.58	10.58	10.58	10.58	10.58	10.58	10.58
3	10.64	10.64	10.64	10.64	10.62	10.62	10.62	10.63
4	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63
5	10.64	10.64	10.64	10.64	10.64	10.65	10.64	10.64
6	10.65	10.68	10.74	10.74	10.76	10.76	10.65	10.72
7	10.82	10.82	10.84	10.86	10.93	10.93	10.82	10.85
8	10.96	10.96	10.96	10.96	10.88	10.96	10.88	10.94
9	10.94	10.88	10.88	10.87	10.86	10.94	10.86	10.88
10	10.86	10.86	10.86	10.85	10.85	10.86	10.85	10.85
11	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83
12	10.47	10.47	10.47	10.47	10.46	10.43	10.43	10.46
13	10.38	10.38	10.38	10.33	10.31	10.27	10.27	10.33
14	10.18	10.17	10.17	10.15	10.13	10.11	10.11	10.15
15	10.01	10.00	10.00	10.02	10.02	10.01	10.02	10.01
16	10.33	10.33	10.33	10.33	10.33	10.32	10.32	10.33
17	10.30	10.29	10.28	10.28	10.21	10.21	10.21	10.26
18	10.19	10.18	10.18	10.17	10.16	10.15	10.15	10.17
19	10.10	10.08	10.08	10.07	10.06	10.05	10.10	10.07
20	10.00	9.99	9.98	9.97	9.97	10.00	9.97	9.98
21	9.95	9.94	9.94	9.94	9.94	9.93	9.93	9.94
22	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92
23	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91
24	9.92	9.92	9.93	9.94	9.95	9.96	9.92	9.94
25	10.00	10.01	10.01	10.02	10.03	10.16	10.00	10.04
26	10.20	10.22	10.23	10.24	10.25	10.25	10.20	10.23
27	10.31	10.32	10.33	10.33	10.34	10.34	10.31	10.33
28	10.37	10.38	10.39	10.40	10.42	10.42	10.37	10.39
29	10.47	10.48	10.53	10.57	10.59	10.47	10.53	10.53
30	10.64	10.65	10.66	10.67	10.69	10.64	10.66	10.66
31	10.73	10.73	10.74	10.74	10.75	10.76	10.73	10.74

**GAUGE READING STATEMENT**  
Station: S5 BHUAPUR  
River : FUTIKJANI  
Year : 1992

SOURCE : FAP3 - North Central Regional Study  
Hydrological Studies-1992

Month : October	2023						2024					
	Hour	Date	0600	0900	1200	1500	1800	WL	WL	WL	WL	WL
			WL									
	1	10.85	10.84	10.83	10.82	10.81	10.85	10.81	10.81	10.83	10.81	10.83
	2	10.78	10.77	10.76	10.75	10.74	10.78	10.74	10.74	10.76	10.74	10.76
	3	10.68	10.67	10.66	10.65	10.64	10.68	10.64	10.64	10.66	10.64	10.66
	4	10.59	10.58	10.57	10.56	10.55	10.59	10.55	10.55	10.57	10.55	10.57
	5	10.48	10.47	10.46	10.45	10.44	10.48	10.44	10.44	10.46	10.44	10.46
	6	10.42	10.42	10.42	10.41	10.40	10.42	10.40	10.40	10.40	10.40	10.41
	7	10.31	10.30	10.29	10.27	10.25	10.31	10.25	10.25	10.28	10.25	10.28
	8	10.16	10.14	10.12	10.10	10.08	10.16	10.16	10.08	10.12	10.08	10.12
	9	9.97	9.95	9.93	9.91	9.90	9.97	9.90	9.90	9.93	9.90	9.93
	10	9.86	9.85	9.84	9.82	9.82	9.86	9.82	9.82	9.84	9.82	9.84
	11	9.77	9.76	9.75	9.74	9.73	9.77	9.73	9.73	9.75	9.73	9.75
	12	9.69	9.68	9.67	9.66	9.65	9.69	9.65	9.65	9.67	9.65	9.67
	13	9.61	9.60	9.59	9.58	9.57	9.61	9.57	9.57	9.59	9.57	9.59
	14	9.53	9.53	9.53	9.52	9.51	9.53	9.51	9.51	9.52	9.51	9.52
	15											
	16											
	17	9.81	9.80	9.79	9.79	9.79	9.85	9.85	9.85	9.85	9.85	9.85
	18	9.78	9.78	9.78	9.78	9.77	9.78	9.77	9.77	9.78	9.77	9.78
	19	9.71	9.70	9.69	9.67	9.66	9.71	9.71	9.66	9.69	9.66	9.69
	20	9.53	9.52	9.50	9.48	9.47	9.53	9.47	9.47	9.50	9.47	9.50
	21	9.42	9.41	9.40	9.40	9.41	9.42	9.42	9.40	9.41	9.40	9.41
	22	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
	23	9.43	9.42	9.41	9.41	9.40	9.43	9.40	9.40	9.41	9.40	9.41
	24	9.37	9.36	9.35	9.35	9.34	9.37	9.34	9.34	9.35	9.34	9.35
	25	9.29	9.28	9.27	9.26	9.24	9.29	9.24	9.24	9.27	9.24	9.27
	26	9.18	9.17	9.16	9.15	9.13	9.18	9.13	9.13	9.16	9.13	9.16
	27	9.07	9.06	9.05	9.04	9.04	9.07	9.04	9.04	9.05	9.04	9.05
	28	9.04	9.04	9.05	9.04	9.03	9.05	9.03	9.03	9.04	9.03	9.04
	29	9.00	8.99	8.99	8.98	8.97	9.00	8.97	8.97	8.97	8.96	8.97
	30	8.95	8.94	8.93	8.93	8.92	8.95	8.92	8.92	8.93	8.92	8.93
	31	8.88	8.88	8.87	8.87	8.86	8.88	8.86	8.86	8.87	8.86	8.87

**GAUGE READING STATEMENT**  
**Station: S6 SAKHARIA**  
**River : BOALBARI KHAL**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study  
 Hydrology Study-1992**

**Month : July**

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL

1	12.62	12.62	12.63	12.63	12.63	12.63	12.62	12.63
2	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58
3	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59
4	12.64	12.64	12.65	12.65	12.65	12.65	12.64	12.65
5	12.68	12.68	12.66	12.66	12.66	12.66	12.68	12.66
6	12.54	12.52	12.52	12.51	12.50	12.48	12.54	12.51
7	12.72	12.74	12.74	12.74	12.75	12.76	12.72	12.74
8	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59
9	12.64	12.64	12.65	12.65	12.65	12.68	12.64	12.65
10	12.72	12.74	12.74	12.74	12.75	12.76	12.72	12.74
11	12.58	12.58	12.58	12.58	12.59	12.59	12.58	12.58
12	12.64	12.64	12.65	12.65	12.65	12.68	12.64	12.65
13	12.68	12.68	12.66	12.66	12.66	12.62	12.68	12.66
14	12.62	12.62	12.63	12.63	12.63	12.63	12.62	12.63
15	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58
16	12.59	12.59	12.59	12.59	12.59	12.59	12.59	12.59
17	12.64	12.64	12.65	12.65	12.65	12.68	12.64	12.65
18	12.72	12.74	12.74	12.74	12.75	12.76	12.72	12.74
19	12.68	12.68	12.66	12.66	12.66	12.62	12.68	12.66
20	12.72	12.74	12.74	12.74	12.75	12.76	12.72	12.74
21	12.58	12.58	12.59	12.59	12.59	12.59	12.58	12.59
22	12.64	12.64	12.65	12.65	12.65	12.68	12.64	12.65
23	12.54	12.52	12.52	12.51	12.50	12.48	12.54	12.51
24	12.44	12.44	12.44	12.42	12.41	12.44	12.41	12.43
25	12.38	12.37	12.36	12.35	12.35	12.34	12.38	12.36
26	12.34	12.32	12.32	12.31	12.31	12.26	12.34	12.31
27	12.29	12.29	12.28	12.28	12.27	12.29	12.27	12.28
28	12.27	12.27	12.27	12.26	12.26	12.27	12.26	12.27
29	12.25	12.25	12.25	12.27	12.30	12.30	12.25	12.27
30	12.26	12.26	12.26	12.26	12.26	12.26	12.26	12.26
31	12.31	12.31	12.30	12.30	12.31	12.30	12.31	12.31

**Month : August**

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL							
1	12.16	12.16	12.16	12.16	12.16	12.15	12.16	12.16
2	12.14	12.14	12.14	12.14	12.15	12.15	12.14	12.15
3	12.18	12.18	12.18	12.18	12.18	12.17	12.18	12.18
4	12.21	12.21	12.21	12.21	12.22	12.22	12.21	12.21
5	12.24	12.25	12.25	12.24	12.24	12.25	12.24	12.24
6	12.24	12.25	12.25	12.25	12.32	12.39	12.24	12.29
7	12.52	12.54	12.55	12.55	12.56	12.57	12.52	12.55
8	12.58	12.59	12.59	12.59	12.59	12.59	12.58	12.59
9	12.54	12.54	12.54	12.54	12.54	12.55	12.54	12.54
10	12.45	12.45	12.44	12.44	12.42	12.45	12.42	12.44
11	12.52	12.32	12.31	12.30	12.27	12.52	12.27	12.34
12	12.21	12.21	12.16	12.15	13.14	13.14	12.15	12.37
13	11.47	12.06	12.06	12.04	12.04	12.06	11.47	11.93
14	12.01	12.01	12.00	12.00	12.00	12.01	12.00	12.00
15	11.98	11.98	11.97	11.97	11.97	11.98	11.97	11.97
16	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97
17	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96
18	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96
19	11.96	11.96	11.96	11.96	11.96	11.96	11.96	11.96
20	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95
21	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95
22	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95
23	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95
24	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95
25	11.95	11.95	11.95	11.95	11.95	11.98	12.00	11.95
26	12.07	12.09	12.11	12.12	12.13	12.13	12.07	12.10
27	12.21	13.22	12.23	12.24	12.24	13.22	12.21	12.43
28	12.34	12.35	12.38	12.38	12.39	12.39	12.34	12.37
29	12.58	12.59	12.61	12.62	12.63	12.63	12.58	12.61
30	12.68	12.69	12.66	12.66	12.72	12.72	12.66	12.69
31	12.75	12.76	12.77	12.78	12.78	12.78	12.77	12.77

**GAUGE READING STATEMENT**  
**Station: S6 SAKHARIA**  
**River : BOALBARI KHAL**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study  
 Hydrology Study-1992**

**Month : September**

	Hour	0600	0900	1200	1500	1800	Max	Min	Average	
	Date	WL								
1	12.81	12.81	12.81	12.81	12.81	12.81	12.81	12.81	12.81	
2	12.77	12.76	12.76	12.75	12.75	12.75	12.76	12.76	12.76	
3	12.71	12.71	12.69	12.68	12.66	12.71	12.66	12.69	12.69	
4	12.63	12.62	12.61	12.58	12.55	12.63	12.55	12.60	12.58	
5	12.48	12.47	12.43	12.41	12.39	12.48	12.39	12.44	12.41	
6	12.25	12.22	12.19	12.18	12.15	12.25	12.15	12.20	12.20	
7	12.08	12.06	12.05	12.05	12.05	12.08	12.05	12.06	12.05	
8	12.03	12.03	12.02	12.02	12.02	12.03	12.02	12.02	12.02	
9	12.01	12.01	12.01	12.01	12.01	12.01	12.01	12.01	12.01	
10	11.99	11.99	11.98	11.98	11.98	11.99	11.98	11.98	11.98	
11	11.98	11.98	11.98	11.98	11.98	11.98	11.98	11.98	11.98	
12	11.98	11.98	11.98	11.98	11.98	11.98	11.98	11.98	11.98	
13	11.99	11.99	11.98	11.98	11.98	11.99	11.98	11.98	11.98	
14	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	
15	12.05	12.05	12.05	12.05	12.04	12.05	12.04	12.05	12.05	
16	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	
17	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	
18	12.02	12.02	12.02	12.02	12.02	12.02	12.02	12.02	12.02	
19	12.07	12.08	12.08	12.13	12.17	12.17	12.07	12.11	12.08	
20	12.28	12.32	12.35	12.37	12.39	12.39	12.28	12.34	12.32	
21	12.46	12.47	12.47	12.48	12.37	12.48	12.37	12.45	12.42	
22	12.53	12.53	12.53	12.52	12.52	12.53	12.52	12.53	12.52	
23	12.49	12.48	12.46	12.45	12.44	12.49	12.44	12.46	12.45	
24	12.38	12.36	12.34	12.38	12.36	12.38	12.34	12.36	12.35	
25	12.22	12.19	12.18	12.17	12.16	12.22	12.16	12.18	12.19	
26	12.12	12.11	12.12	12.13	12.15	12.15	12.11	12.13	12.12	
27	12.47	12.47	12.65	12.73	12.73	12.47	12.61	12.47	12.47	
28	12.63	12.63	12.61	12.55	12.53	12.63	12.53	12.59	12.59	
29	12.45	12.44	12.42	12.41	12.39	12.45	12.39	12.42	12.42	
30	12.29	12.28	12.27	12.26	12.25	12.29	12.25	12.27	12.27	
31										

**Month : October**

	Hour	0600	0900	1200	1500	1800	Max	Min	Average	
	Date	WL								
1	12.19	12.18	12.17	12.17	12.17	12.18	12.17	12.19	12.16	
2	12.12	12.11	12.11	12.11	12.11	12.11	12.09	12.12	12.09	
3	12.07	12.07	12.07	12.06	12.06	12.06	12.06	12.07	12.06	
4	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	
5	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	
6	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	
7	12.06	12.06	12.06	12.06	12.06	12.06	12.05	12.06	12.05	
8	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	
9	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	
10	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	
11	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	
12	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	
13	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	
14	12.16	12.17	12.17	12.17	12.17	12.17	12.17	12.19	12.16	
15	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.13	12.14	
16	12.09	12.09	12.09	12.09	12.09	12.09	12.09	12.11	12.09	
17	12.22	12.21	12.21	12.21	12.21	12.21	12.21	12.22	12.21	
18	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.14	
19	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.15	12.14	
20	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	12.16	
21	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.18	12.17	
22	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	
23	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.17	
24	12.17	12.17	12.17	12.17	12.17	12.17	12.17	12.18	12.17	
25	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	12.19	
26	12.14	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	
27	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	
28	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.14	12.14	
29	12.14	12.13	12.13	12.13	12.13	12.13	12.13	12.13	12.13	
30	12.06	12.06	12.06	12.06	12.06	12.06	12.06	12.06	12.06	
31	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	



87

**GAUGE READING STATEMENT**  
**Station: SG2 KAYRA**  
**River : JHENAI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

**Month : July**

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL

1	12.82	12.82	12.82	12.82	12.82	12.82	12.82	12.82
2	12.81	12.81	12.80	12.79	12.81	12.79	12.80	12.80
3	12.78	12.78	12.78	12.78	12.78	12.78	12.78	12.78
4	12.78	12.77	12.77	12.77	12.77	12.77	12.77	12.77
5	12.79	12.79	12.80	12.80	12.81	12.79	12.80	12.80
6	12.85	12.86	12.86	12.87	12.87	12.85	12.86	12.86
7	12.90	12.90	12.90	12.90	12.90	12.90	12.90	12.90
8	12.89	12.88	12.88	12.87	12.86	12.85	12.87	12.87
9	12.81	12.80	12.79	12.78	12.77	12.81	12.77	12.79
10	12.78	12.78	12.78	12.78	12.78	12.78	12.78	12.78
11	12.78	12.77	12.77	12.77	12.77	12.77	12.77	12.77
12	12.79	12.79	12.80	12.80	12.81	12.79	12.80	12.80
13	12.85	12.86	12.86	12.87	12.87	12.85	12.86	12.86
14	12.82	12.82	12.82	12.82	12.82	12.82	12.82	12.82
15	12.81	12.82	12.82	12.82	12.82	12.82	12.82	12.82
16	12.81	12.81	12.80	12.79	12.81	12.79	12.80	12.80
17	12.78	12.78	12.78	12.78	12.78	12.78	12.78	12.78
18	12.78	12.77	12.77	12.77	12.77	12.77	12.77	12.77
19	12.79	12.79	12.80	12.80	12.81	12.79	12.80	12.80
20	12.85	12.86	12.86	12.87	12.87	12.85	12.86	12.86
21	12.90	12.90	12.90	12.90	12.90	12.90	12.90	12.90
22	12.89	12.88	12.88	12.87	12.86	12.85	12.87	12.87
23	12.81	12.80	12.79	12.78	12.77	12.81	12.77	12.79
24	12.72	12.71	12.70	12.69	12.68	12.72	12.68	12.70
25	12.64	12.62	12.61	12.60	12.59	12.64	12.59	12.61
26	12.57	12.56	12.55	12.55	12.55	12.57	12.55	12.56
27	12.52	12.56	12.55	12.50	12.49	12.56	12.49	12.51
28	12.50	12.50	12.49	12.49	12.49	12.50	12.49	12.49
29	12.48	12.48	12.48	12.48	12.48	12.48	12.48	12.48
30	12.47	12.47	12.47	12.46	12.46	12.47	12.46	12.47
31	12.45	12.45	12.45	12.44	12.44	12.45	12.44	12.45

**Month : August**

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL							
1	12.40	12.40	12.39	12.38	12.38	12.40	12.38	12.39
2	12.37	12.37	12.37	12.37	12.37	12.37	12.37	12.37
3	12.38	12.38	12.38	12.39	12.39	12.39	12.38	12.38
4	12.41	12.41	12.41	12.42	12.42	12.42	12.41	12.41
5	12.43	12.43	12.43	12.44	12.44	12.44	12.43	12.43
6	12.45	12.45	12.48	12.51	12.57	12.45	12.49	12.49
7	12.67	12.68	12.69	12.70	12.71	12.67	12.69	12.69
8	12.73	12.74	12.75	12.75	12.76	12.73	12.75	12.75
9	12.75	12.75	12.74	12.74	12.73	12.75	12.73	12.74
10	12.70	12.69	12.68	12.67	12.66	12.70	12.66	12.68
11	12.61	12.60	12.59	12.58	12.57	12.61	12.57	12.59
12	12.51	12.50	12.49	12.48	12.47	12.51	12.47	12.49
13	12.39	12.38	12.38	12.36	12.34	12.32	12.32	12.36
14	12.28	12.26	12.24	12.24	12.22	12.21	12.28	12.24
15	12.19	12.17	12.17	12.16	12.16	12.15	12.19	12.15
16	12.12	12.11	12.11	12.10	12.10	12.09	12.12	12.11
17	11.99	11.98	11.97	11.96	11.95	11.99	11.95	11.97
18	12.04	12.03	12.02	12.02	12.01	12.00	12.04	12.02
19	11.90	11.89	11.86	11.85	11.84	11.90	11.84	11.87
20	11.83	11.82	11.82	11.83	11.83	11.83	11.82	11.83
21	11.85	11.86	11.86	11.86	11.86	11.86	11.85	11.86
22	11.88	11.89	11.89	11.89	11.89	11.89	11.88	11.89
23	11.91	11.91	11.91	11.91	11.91	11.91	11.91	11.91
24	11.95	11.95	11.96	11.98	12.00	12.00	11.95	11.97
25	12.07	12.09	12.09	12.11	12.13	12.13	12.07	12.10
26	12.18	12.18	12.18	12.19	12.19	12.20	12.18	12.19
27	12.27	12.28	12.29	12.30	12.31	12.31	12.27	12.29
28	12.37	12.39	12.41	12.43	12.46	12.46	12.37	12.41
29	12.54	12.55	12.56	12.57	12.58	12.58	12.54	12.56
30	12.63	12.64	12.65	12.66	12.67	12.67	12.63	12.65
31	12.71	12.72	12.73	12.73	12.73	12.73	12.71	12.71

89

**GAUGE READING STATEMENT**  
**Station: SG2 KAYRA**  
**River : JHENAI**  
**Year : 1992**

## GAUGE READING STATEMENT

Station: SG2 KAYRA

Biver • IHÉNAI

Yves : 1000 . 11/11

Month : September

Month : October

SOURCE : FAP3 - North Central Regional Study  
Hydrological Studies-1992

**GAUGE READING STATEMENT**

Station: SG5 BELUA BAZAR

River : ATAI

Year : 1992

SOURCE : FAP3 - North Central Regional Study  
Hydrological Studies-1992

Month : July

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Month : August

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

82

**GAUGE READING STATEMENT**  
**Station: SG5 BELUA BAZAR**  
**River : ATAL**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

**Month : September**

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL

1	11.17	11.18	11.19	11.20	11.21	11.21	11.17	11.19
2	11.22	11.22	11.23	11.23	11.24	11.24	11.22	11.23
3	11.26	11.26	11.26	11.26	11.26	11.26	11.26	11.26
4	11.25	11.25	11.25	11.24	11.24	11.24	11.25	11.25
5	11.20	11.19	11.18	11.17	11.16	11.16	11.16	11.18
6	11.11	11.10	11.08	11.07	11.05	11.11	11.05	11.08
7	10.98	10.97	10.95	10.93	10.93	10.91	10.91	10.95
8	10.83	10.81	10.79	10.77	10.77	10.75	10.75	10.79
9	10.67	10.65	10.63	10.61	10.59	10.59	10.63	10.67
10	10.52	10.50	10.48	10.46	10.45	10.52	10.45	10.48
11	10.39	10.38	10.37	10.36	10.35	10.39	10.35	10.37
12	10.33	10.33	10.37	10.40	10.41	10.41	10.33	10.37
13	10.44	10.46	10.47	10.47	10.48	10.48	10.44	10.46
14	10.48	10.47	10.47	10.46	10.46	10.48	10.46	10.47
15	10.41	10.40	10.40	10.40	10.40	10.41	10.40	10.40
16	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40
17	10.40	10.40	10.40	10.41	10.41	10.41	10.40	10.40
18	10.41	10.42	10.42	10.43	10.44	10.44	10.41	10.42
19	10.48	10.50	10.52	10.54	10.56	10.56	10.48	10.52
20	10.65	10.67	10.69	10.71	10.72	10.72	10.65	10.69
21	10.80	10.81	10.83	10.84	10.85	10.85	10.80	10.83
22	10.90	10.90	10.91	10.91	10.92	10.92	10.90	10.91
23	10.85	10.92	10.92	10.91	10.91	10.92	10.85	10.90
24	10.92	10.84	10.86	10.86	10.85	10.92	10.84	10.87
25	10.77	10.75	10.73	10.71	10.69	10.77	10.69	10.73
26	10.62	10.60	10.59	10.62	10.66	10.66	10.59	10.62
27	10.82	10.84	10.96	11.02	11.06	11.06	10.82	10.94
28	11.13	11.14	11.15	11.16	11.17	11.17	11.13	11.15
29	11.22	11.23	11.24	11.24	11.25	11.25	11.22	11.24
30	11.22	11.21	11.19	11.18	11.18	11.16	11.16	11.19
31								

**Month : October**

Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	WL	WL	WL	WL	WL	WL	WL

1	11.10	11.09	11.08	11.07	11.07	11.10	11.07	11.08
2	11.05	11.04	11.03	11.02	11.02	11.05	11.01	11.03
3	10.91	10.89	10.85	10.83	10.80	10.91	10.80	10.86
4	10.73	10.71	10.69	10.68	10.67	10.73	10.67	10.70
5	10.63	10.62	10.61	10.60	10.59	10.63	10.59	10.61
6	10.55	10.54	10.53	10.52	10.51	10.55	10.51	10.53
7	10.45	10.44	10.42	10.42	10.40	10.45	10.37	10.42
8	10.26	10.24	10.22	10.20	10.18	10.26	10.18	10.22
9	10.08	10.06	10.04	10.04	10.02	10.08	10.02	10.05
10	9.94	9.92	9.90	9.88	9.86	9.94	9.86	9.90
11	9.68	9.76	9.74	9.72	9.70	9.76	9.68	9.72
12	9.64	9.63	9.61	9.60	9.58	9.64	9.58	9.61
13	9.51	9.50	9.48	9.46	9.46	9.51	9.44	9.48
14	9.56	9.62	9.70	9.77	9.83	9.83	9.56	9.70
15	9.91	9.93	9.94	9.95	9.95	9.96	9.91	9.94
16	9.94	9.94	9.94	9.93	9.92	9.94	9.92	9.93
17	9.89	9.91	9.94	9.97	10.00	10.00	9.89	9.94
18	10.04	10.04	10.04	10.03	10.02	10.04	10.02	10.03
19	9.94	9.92	9.89	9.86	9.84	9.94	9.84	9.89
20	9.64	9.60	9.57	9.56	9.56	9.64	9.56	9.59
21	9.50	9.50	9.51	9.51	9.52	9.50	9.50	9.51
22	9.55	9.56	9.56	9.56	9.56	9.56	9.55	9.56
23	9.55	9.55	9.54	9.54	9.55	9.54	9.54	9.55
24	9.52	9.51	9.50	9.49	9.48	9.52	9.48	9.50
25	9.44	9.43	9.41	9.40	9.39	9.44	9.39	9.41
26	9.33	9.32	9.31	9.30	9.33	9.33	9.29	9.31
27	9.23	9.23	9.24	9.25	9.26	9.23	9.22	9.24
28	9.34	9.34	9.35	9.35	9.34	9.35	9.34	9.34
29	9.29	9.29	9.28	9.28	9.27	9.29	9.27	9.28
30	9.23	9.23	9.22	9.22	9.21	9.21	9.21	9.22
31	9.19	9.19	9.18	9.18	9.17	9.19	9.17	9.18



20

GAUGE READING STATEMENT  
Station: SG7 CHARAN KALIATI  
River : FATIKJANI  
Year : 1992

SOURCE : FAP3 - North Central Regional Study  
Hydrological Studies-1992

**GAUGE READING STATEMENT**  
**Station: SG7 CHARAN KALIATI**  
**River : FATIKJANI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

Month : September						Month : October					
Hour	0600	0900	1200	1500	1800	Hour	0600	0900	1200	1500	1800
Date	WL	WL	WL	WL	WL	Date	WL	WL	WL	WL	WL
1	9.54	9.54	9.55	9.56	9.56	1	9.82	9.82	9.81	9.80	9.80
2	9.58	9.59	9.59	9.59	9.59	2	9.77	9.77	9.77	9.76	9.76
3	9.60	9.60	9.60	9.60	9.60	3	9.75	9.75	9.74	9.72	9.72
4	9.60	9.60	9.60	9.60	9.61	4	9.69	9.69	9.68	9.67	9.66
5	9.61	9.61	9.62	9.64	9.64	5	9.63	9.62	9.62	9.61	9.61
6	9.62	9.62	9.61	9.61	9.62	6	9.63	9.62	9.62	9.61	9.62
7	9.59	9.58	9.58	9.57	9.56	7	9.57	9.56	9.55	9.54	9.55
8	9.53	9.53	9.52	9.51	9.51	8	9.50	9.49	9.48	9.47	9.46
9	9.47	9.47	9.46	9.45	9.45	9	9.42	9.42	9.41	9.40	9.39
10	9.40	9.40	9.39	9.39	9.38	10	9.36	9.35	9.34	9.33	9.32
11	9.34	9.33	9.33	9.32	9.32	11	9.27	9.26	9.24	9.23	9.22
12	9.33	9.33	9.34	9.35	9.36	12	9.17	9.16	9.14	9.13	9.12
13	9.41	9.43	9.43	9.44	9.45	13	9.06	9.05	9.04	9.03	9.03
14	9.45	9.45	9.45	9.45	9.45	14	9.01	9.01	9.05	9.07	9.09
15	9.43	9.42	9.42	9.42	9.43	15	9.17	9.18	9.20	9.21	9.22
16	9.40	9.39	9.39	9.39	9.40	16	9.24	9.24	9.24	9.24	9.24
17	9.37	9.37	9.37	9.36	9.36	17	9.23	9.23	9.22	9.22	9.22
18	9.35	9.35	9.35	9.35	9.35	18	9.20	9.20	9.19	9.19	9.20
19	9.35	9.35	9.35	9.36	9.36	19	9.16	9.16	9.15	9.14	9.13
20	9.37	9.38	9.38	9.39	9.39	20	9.08	9.07	9.06	9.05	9.06
21	9.42	9.42	9.43	9.44	9.44	21	9.01	9.01	9.00	8.99	9.00
22	9.45	9.45	9.46	9.47	9.47	22	8.96	8.96	8.95	8.94	8.95
23	9.48	9.48	9.48	9.49	9.49	23	8.92	8.92	8.91	8.90	8.91
24	9.47	9.47	9.47	9.47	9.47	24	8.90	8.90	8.89	8.89	8.90
25	9.47	9.48	9.48	9.48	9.48	25	8.84	8.83	8.82	8.81	8.82
26	9.49	9.49	9.49	9.50	9.51	26	8.75	8.74	8.72	8.71	8.72
27	9.60	9.61	9.63	9.66	9.68	27	8.64	8.63	8.61	8.60	8.61
28	9.77	9.78	9.78	9.79	9.79	28	8.55	8.54	8.53	8.52	8.53
29	9.81	9.82	9.82	9.82	9.81	29	8.48	8.47	8.46	8.45	8.46
30	9.83	9.83	9.83	9.83	9.83	30	8.41	8.40	8.39	8.38	8.39
31	9.83	9.83	9.83	9.83	9.83	31	8.34	8.34	8.33	8.34	8.33

**GAUGE READING STATEMENT**  
**Station: SG8 SURROI**  
**River : PUNG LI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

Month : July	Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour	0600	0900	1200	1500	1800	Max	Min	Average
	Date	WL	Date	WL														
1	1	9.49	9.49	9.49	9.49	9.49	9.49	9.48	9.49	1	9.16	9.15	9.14	9.14	9.13	9.13	9.14	9.14
2	2	9.50	9.49	9.49	9.50	9.50	9.50	9.49	9.50	2	9.15	9.15	9.14	9.14	9.14	9.15	9.14	9.14
3	3	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	3	9.22	9.19	9.19	9.19	9.19	9.22	9.19	9.20
4	4	9.50	9.49	9.49	9.49	9.49	9.49	9.49	9.49	4	9.24	9.24	9.22	9.24	9.27	9.27	9.22	9.24
5	5	9.57	9.56	9.56	9.56	9.56	9.56	9.57	9.56	5	9.26	9.25	9.24	9.24	9.25	9.26	9.24	9.25
6	6	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	6	9.22	9.27	9.31	9.33	9.37	9.37	9.22	9.30
7	7	9.64	9.66	9.67	9.67	9.67	9.67	9.66	9.66	7	9.47	9.47	9.47	9.48	9.50	9.50	9.47	9.48
8	8	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	8	9.52	9.53	9.53	9.54	9.54	9.54	9.52	9.53
9	9	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	9	9.51	9.50	9.50	9.50	9.49	9.51	9.50	9.50
10	10	9.64	9.66	9.67	9.67	9.67	9.67	9.66	9.66	10	9.43	9.42	9.42	9.40	9.40	9.39	9.39	9.41
11	11	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	11	9.35	9.33	9.33	9.31	9.30	9.29	9.29	9.32
12	12	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	12	9.24	9.23	9.23	9.21	9.20	9.20	9.20	9.22
13	13	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	13	9.15	9.14	9.14	9.13	9.13	9.14	9.13	9.14
14	14	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	14	9.07	9.07	9.07	9.07	9.06	9.05	9.05	9.06
15	15	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	15	9.03	9.03	9.03	9.02	9.01	9.00	9.03	9.00
16	16	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	16	8.99	8.99	8.99	8.97	8.97	8.96	8.96	8.98
17	17	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	17	8.92	8.91	8.91	8.90	8.90	8.92	8.90	8.91
18	18	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	18	8.87	8.86	8.86	8.85	8.84	8.82	8.82	8.85
19	19	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	19	8.77	8.76	8.76	8.75	8.75	8.77	8.74	8.76
20	20	9.64	9.66	9.67	9.67	9.67	9.67	9.66	9.66	20	8.73	8.73	8.73	8.73	8.72	8.73	8.72	8.73
21	21	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	21	8.75	8.75	8.75	8.75	8.76	8.76	8.75	8.75
22	22	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	22	8.77	8.77	8.77	8.77	8.78	8.78	8.77	8.77
23	23	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	23	8.77	8.77	8.77	8.77	8.78	8.78	8.77	8.77
24	24	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	24	8.79	8.79	8.79	8.80	8.81	8.83	8.83	8.80
25	25	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	25	8.88	8.88	8.88	8.89	8.93	8.94	8.94	8.91
26	26	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	26	9.02	9.02	9.02	9.03	9.04	9.05	9.05	9.03
27	27	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	27	9.12	9.13	9.14	9.15	9.16	9.16	9.12	9.14
28	28	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	28	9.19	9.19	9.21	9.24	9.28	9.28	9.19	9.22
29	29	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	29	9.40	9.41	9.43	9.45	9.45	9.45	9.40	9.43
30	30	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	30	9.56	9.57	9.58	9.60	9.60	9.60	9.56	9.68
31	31	9.64	9.66	9.66	9.66	9.66	9.66	9.65	9.65	31	9.65	9.66	9.66	9.67	9.69	9.70	9.68	9.68

26

**GAUGE READING STATEMENT**  
**Station: SG8 SUROOI**  
**River : PUNGLI**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

Month : September						Month : October					
Hour	0600	0900	1200	1500	1800	Hour	0600	0900	1200	1500	1800
Date	WL	WL	WL	WL	WL	Date	WL	WL	WL	WL	WL
1	9.70	9.71	9.72	9.73	9.73	9.73	9.70	9.70	9.72	9.72	9.72
2	9.70	9.70	9.68	9.66	9.63	9.70	9.63	9.67	9.62	9.63	9.67
3	9.61	9.60	9.62	9.61	9.59	9.62	9.59	9.61	9.54	9.55	9.54
4	9.58	9.56	9.53	9.52	9.50	9.58	9.50	9.54	9.42	9.42	9.34
5	9.42	9.40	9.39	9.38	9.34	9.42	9.34	9.39	9.25	9.25	9.27
6	9.30	9.29	9.27	9.26	9.25	9.30	9.25	9.27	9.19	9.19	9.15
7	9.19	9.17	9.17	9.14	9.10	9.19	9.10	9.15	9.02	9.02	9.00
8	9.02	9.01	9.00	8.98	8.97	8.97	8.97	8.97	8.90	8.93	8.90
9	8.93	8.92	8.92	8.91	8.90	8.92	8.91	8.90	8.92	8.93	8.90
10	8.89	8.88	8.87	8.85	8.83	8.89	8.83	8.86	8.87	8.85	8.86
11	8.86	8.85	8.85	8.86	8.86	8.87	8.85	8.86	8.87	8.85	8.86
12	8.92	8.92	8.94	8.96	8.98	8.92	8.94	8.96	8.97	8.95	8.97
13	8.98	8.98	9.00	8.99	9.00	8.98	8.99	8.99	9.02	9.02	9.01
14	8.93	8.93	8.92	8.91	8.91	8.93	8.91	8.92	8.97	8.95	8.96
15	8.95	8.95	8.95	8.96	8.96	8.97	8.95	8.96	9.02	9.02	9.01
16	8.99	9.00	9.01	9.01	9.02	9.02	9.00	9.01	9.03	9.03	9.02
17	9.02	9.02	9.02	9.03	9.03	9.03	9.02	9.02	9.04	9.04	9.03
18	9.06	9.07	9.09	9.12	9.13	9.13	9.13	9.13	9.06	9.06	9.09
19	9.21	9.22	9.23	9.25	9.28	9.28	9.21	9.24	9.24	9.24	9.21
20	9.35	9.37	9.39	9.40	9.42	9.42	9.35	9.39	9.41	9.41	9.39
21	9.45	9.46	9.47	9.47	9.48	9.48	9.45	9.47	9.48	9.48	9.47
22	9.48	9.48	9.48	9.48	9.48	9.48	9.48	9.48	9.48	9.48	9.48
23	9.43	9.42	9.41	9.41	9.39	9.43	9.39	9.43	9.41	9.41	9.41
24	9.30	9.29	9.28	9.27	9.26	9.30	9.26	9.28	9.28	9.28	9.28
25	9.18	9.16	9.14	9.13	9.12	9.18	9.12	9.15	9.13	9.13	9.12
26	9.00	8.99	8.97	8.95	8.98	9.00	8.95	8.98	9.04	9.04	9.04
27	9.00	9.01	9.02	9.03	9.04	9.04	9.00	9.02	9.04	9.04	9.04
28	9.08	9.09	9.09	9.10	9.11	9.11	9.08	9.09	9.09	9.09	9.09
29	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12
30	9.09	9.09	9.07	9.06	9.06	9.07	9.04	9.07	9.04	9.04	9.07
31	7.70	7.70	7.69	7.69	7.68	7.68	7.67	7.67	7.66	7.66	7.68



24

**GAUGE READING STATEMENT**  
**Month : November**  
**Year : 1992**

**SOURCE : FAP3 - North Central Regional Study**  
**Hydrological Studies-1992**

**STATION : S1 PATHERGATA**

Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	Date	WL														
1	4.92	4.91	4.89	4.87	4.86	4.92	4.86	4.89	1	6.81	6.80	6.79	6.78	6.77	6.81	6.77	6.79
2	4.79	4.77	4.76	4.75	4.74	4.79	4.74	4.76	2	6.71	6.70	6.69	6.68	6.67	6.71	6.67	6.69
3	4.68	4.66	4.65	4.64	4.63	4.68	4.63	4.65	3	6.62	6.61	6.60	6.59	6.58	6.62	6.58	6.60
4	4.59	4.57	4.55	4.54	4.53	4.59	4.53	4.56	4	6.55	6.54	6.54	6.54	6.43	6.55	6.43	6.52
5	4.46	4.45	4.44	4.43	4.42	4.46	4.42	4.44	5	6.43	6.43	6.43	6.43	6.43	6.54	6.43	6.45
6	4.37	4.35	4.33	4.32	4.32	4.37	4.32	4.34	6	6.56	6.56	6.56	6.56	6.54	6.56	6.54	6.56
7	4.26	4.25	4.24	4.23	4.23	4.26	4.23	4.24	7	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.54
8	4.20	4.19	4.18	4.17	4.17	4.20	4.17	4.18	8	6.54	6.55	6.55	6.55	6.55	6.55	6.54	6.55
9	4.13	4.12	4.11	4.11	4.11	4.13	4.10	4.11	9	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.54
10	4.07	4.07	4.06	4.05	4.05	4.07	4.05	4.06	10	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43
11	4.03	4.02	4.02	4.01	4.01	4.03	4.01	4.02	11	6.56	6.56	6.52	6.52	6.52	6.56	6.51	6.53
12	4.00	4.00	3.99	3.99	3.97	4.00	3.97	3.99	12	6.51	6.51	6.51	6.51	6.51	6.51	6.51	6.51
13	3.96	3.95	3.95	3.95	3.94	3.96	3.94	3.95	13	6.51	6.51	6.50	6.50	6.50	6.51	6.50	6.51
14	3.94	3.94	3.93	3.92	3.92	3.94	3.92	3.93	14	6.50	6.50	6.49	6.49	6.49	6.50	6.49	6.49
15	3.90	3.87	3.85	3.85	3.85	3.90	3.85	3.87	15	6.48	6.48	6.48	6.48	6.48	6.47	6.48	6.48

**STATION : S2 BASAI**

Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	Date	WL														
1	4.92	4.91	4.89	4.87	4.86	4.92	4.86	4.89	1	6.81	6.80	6.79	6.78	6.77	6.81	6.77	6.79
2	4.79	4.77	4.76	4.75	4.74	4.79	4.74	4.76	2	6.71	6.70	6.69	6.68	6.67	6.71	6.67	6.69
3	4.68	4.66	4.65	4.64	4.63	4.68	4.63	4.65	3	6.62	6.61	6.60	6.59	6.58	6.62	6.58	6.60
4	4.59	4.57	4.55	4.54	4.53	4.59	4.53	4.56	4	6.55	6.54	6.54	6.54	6.43	6.55	6.43	6.52
5	4.46	4.45	4.44	4.43	4.42	4.46	4.42	4.44	5	6.43	6.43	6.43	6.43	6.43	6.54	6.43	6.45
6	4.37	4.35	4.33	4.32	4.32	4.37	4.32	4.34	6	6.56	6.56	6.56	6.56	6.54	6.56	6.54	6.56
7	4.26	4.25	4.24	4.23	4.23	4.26	4.23	4.24	7	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.55
8	4.20	4.19	4.18	4.17	4.17	4.20	4.17	4.18	8	6.54	6.55	6.55	6.55	6.55	6.55	6.54	6.55
9	4.13	4.12	4.11	4.11	4.11	4.13	4.10	4.11	9	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.54
10	4.07	4.07	4.06	4.05	4.05	4.07	4.05	4.06	10	6.43	6.43	6.43	6.43	6.43	6.43	6.43	6.43
11	4.03	4.02	4.02	4.01	4.01	4.03	4.01	4.02	11	6.56	6.56	6.52	6.52	6.52	6.56	6.51	6.53
12	4.00	4.00	3.99	3.99	3.97	4.00	3.97	3.99	12	6.51	6.51	6.51	6.51	6.51	6.51	6.51	6.51
13	3.96	3.95	3.95	3.95	3.94	3.96	3.94	3.95	13	6.51	6.51	6.50	6.50	6.50	6.51	6.50	6.51
14	3.94	3.94	3.93	3.92	3.92	3.94	3.92	3.93	14	6.50	6.50	6.49	6.49	6.49	6.50	6.49	6.49
15	3.90	3.87	3.85	3.85	3.85	3.90	3.85	3.87	15	6.48	6.48	6.48	6.48	6.48	6.47	6.48	6.48

**STATION : S4 ICCHAPUR**

Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	Date	WL														
1	8.59	8.59	8.58	8.58	8.58	8.59	8.58	8.58	1	8.84	8.83	8.83	8.83	8.83	8.84	8.81	8.83
2	8.57	8.57	8.57	8.56	8.56	8.57	8.56	8.57	2	8.80	8.80	8.80	8.80	8.80	8.80	8.78	8.79
3	8.55	8.55	8.54	8.54	8.54	8.55	8.54	8.54	3	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79
4	8.53	8.53	8.52	8.52	8.52	8.53	8.51	8.52	4	8.79	8.79	8.79	8.79	8.79	8.77	8.77	8.78
5	8.47	8.47	8.47	8.47	8.47	8.47	8.47	8.47	5	8.74	8.73	8.72	8.72	8.71	8.74	8.71	8.72
6	8.47	8.47	8.46	8.46	8.46	8.47	8.46	8.47	6	8.67	8.66	8.66	8.66	8.66	8.67	8.66	8.66
7	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	7	8.66	8.67	8.67	8.66	8.66	8.67	8.66	8.66
8	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8.46	8	8.82	8.81	8.80	8.80	8.80	8.82	8.80	8.81
9	8.46	8.46	8.44	8.44	8.44	8.46	8.44	8.44	9	8.77	8.76	8.76	8.76	8.75	8.77	8.75	8.76
10	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	10	8.71	8.70	8.70	8.70	8.69	8.71	8.69	8.70
11	8.42	8.42	8.43	8.43	8.43	8.43	8.42	8.42	11	8.67	8.67	8.66	8.66	8.66	8.67	8.66	8.66
12	7.94	7.94	8.43	8.43	8.43	7.94	8.23	8.23	12	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66
13	8.42	8.42	8.42	8.41	8.41	8.42	8.41	8.42	13	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66
14	8.40	8.40	8.40	8.39	8.39	8.40	8.39	8.39	14	8.66	8.66	8.66	8.66	8.66	8.66	8.66	8.66
15	8.39	8.39	8.38	8.38	8.38	8.39	8.38	8.38	15	8.65	8.65	8.65	8.65	8.65	8.65	8.65	8.65

**STATION : S5 BHUAPUR**

Hour	0600	0900	1200	1500	1800	Max	Min	Average	Hour	0600	0900	1200	1500	1800	Max	Min	Average
Date	WL	Date	WL														
1	8.59	8.59	8.58	8.58	8.58	8.59	8.58	8.58	1	8.84	8.83	8.83	8.83	8.83	8.84	8.81	8.83
2	8.57	8.57	8.57	8.56	8.56	8.57	8.56	8.57	2	8.80	8.80	8.80	8.80	8.80	8.80	8.78	8.79
3	8.55	8.55	8.54	8.54	8.54	8.55	8.54	8.54	3	8.79	8.79	8.79	8.79	8.79	8.79	8.79	8.79
4	8.53	8.53	8.52	8.52	8.52	8.53	8.51	8.52	4	8.79	8.79	8.78	8.78	8.78	8.77	8.77	8.78
5	8																



## GAUGE READING STATEMENT

Month : November

Year : 1992

STATION : SG8 SUROOI

Hour Date	0600	0900	1200	1500	1800	Max WL	Min WL	Average WL
	WL	WL	WL	WL	WL			
1	7.64	7.63	7.61	7.60	7.59	7.64	7.59	7.61
2	7.52	7.52	7.51	7.50	7.49	7.52	7.49	7.51
3	7.43	7.42	7.41	7.40	7.39	7.43	7.39	7.41
4	7.34	7.33	7.32	7.31	7.30	7.34	7.30	7.32
5	7.29	7.29	7.29	7.29	7.29	7.29	7.29	7.29
6	7.28	7.28	7.27	7.27	7.27	7.28	7.27	7.27
7	7.26	7.26	7.25	7.25	7.24	7.26	7.24	7.25
8	7.23	7.23	7.22	7.22	7.22	7.23	7.22	7.22
9	7.19	7.19	7.18	7.18	6.97	7.19	6.97	7.14
10	7.15	7.15	7.14	7.14	7.14	7.15	7.14	7.14
11	7.12	7.12	7.11	7.10	7.10	7.12	7.10	7.11
12	7.07	7.07	7.06	7.06	7.05	7.07	7.05	7.06
13	7.03	7.03	7.02	7.02	7.02	7.03	7.02	7.02
14	6.99	6.99	6.98	6.97	6.97	6.99	6.97	6.98
15	6.95	6.95	6.94	6.94	6.94	6.95	6.94	6.94

29

## FLOW MEASUREMENT TABLE

Date: 27-07-92

Station: Dhalapara S3

CT

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 3.50	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	7.50	1.60		0.8	8	100	0.08	0.057
				0.2	10	"	0.10	0.070
2	9.50	2.50		0.8	12	"	0.12	0.084
				0.2	14	"	0.14	0.097
3	11.50	3.10		0.8	13	"	0.13	0.090
				0.2	18	"	0.18	0.123
4	13.50	3.50		0.8	18	"	0.18	0.123
				0.2	26	"	0.26	0.176
5	15.50	3.50		0.8	24	"	0.24	0.163
				0.2	26	"	0.26	0.176
6	17.50	3.55		0.8	22	"	0.22	0.140
				0.2	26	"	0.26	0.176
7	19.50	3.55		0.8	22	"	0.22	0.149
				0.2	26	"	0.26	0.176
8	21.50	3.70		0.8	18	"	0.18	0.123
				0.2	26	"	0.26	0.176
9	23.50	3.90		0.8	20	"	0.20	0.136
				0.2	26	"	0.26	0.176
10	24.50	3.90		0.8	28	"	0.28	0.189
				0.2	30	"	0.30	0.202
11	22.50	4.00		0.8	30	"	0.30	0.202
				0.2	32	"	0.32	0.215
12	26.50	4.00		0.8	28	"	0.28	0.189
				0.2	30	"	0.30	0.202
13	27.50	4.00		0.8	24	"	0.24	0.163
				0.2	26	"	0.26	0.176
14	28.50	4.00		0.8	20	"	0.20	0.136
				0.2	22	"	0.22	0.149
15	29.50	3.90		0.8	30	"	0.30	0.202
				0.2	32	"	0.32	0.215
16	30.50	3.90		0.8	20	"	0.20	0.136
				0.2	22	"	0.22	0.149
17	31.50	3.80		0.8	22	"	0.22	0.149
				0.2	26	"	0.26	0.176
18	32.50	3.60		0.8	18	"	0.18	0.123
				0.2	20	"	0.20	0.136
19	34.50	3.50		0.8	22	"	0.22	0.149
				0.2	24	"	0.24	0.163
20	36.50	3.40		0.8	20	"	0.20	0.136
				0.2	22	"	0.22	0.149
21	38.50	3.30		0.8	20	"	0.20	0.136
				0.2	22	"	0.22	0.149
22	40.50	2.70		0.8	18	"	0.18	0.123
				0.2	20	"	0.20	0.136
23	42.50	2.00		0.8	12	"	0.12	0.084
				0.2	14	"	0.14	0.097
24	46.50	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 27-07-92

Station: Dhalapara S3



No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area A (m <sup>2</sup> )	Pocket Dis- charge Q (m <sup>3</sup> )	
1	2	3	4	5	6	7	8	
V-O	0.000	0.000		0.032	4.00	0.80	3.20	0.10
1	0.057	0.064		0.078	2.00	2.05	4.10	0.32
2	0.084	0.091		0.099	2.00	2.80	5.60	0.55
3	0.090	0.107		0.129	2.00	3.30	6.60	0.85
4	0.123	0.150		0.160	2.00	3.50	7.00	1.12
5	0.163	0.170		0.167	2.00	3.53	7.06	1.18
6	0.149	0.163		0.163	2.00	3.55	7.10	1.16
7	0.149	0.163		0.157	2.00	3.63	7.26	1.14
8	0.123	0.150		0.153	2.00	3.80	7.60	1.16
9	0.136	0.156		0.176	1.00	3.90	3.90	0.69
10	0.189	0.196		0.203	1.00	3.95	3.95	0.80
11	0.202	0.209		0.203	1.00	4.00	4.00	0.81
12	0.189	0.196		0.183	1.00	4.00	4.00	0.73
13	0.163	0.170		0.157	1.00	4.00	4.00	0.63
14	0.136	0.143		0.176	1.00	3.95	3.95	0.70
15	0.202	0.209		0.176	1.00	3.90	3.90	0.69
16	0.136	0.143		0.153	1.00	3.85	3.85	0.59
17	0.149	0.163		0.147	1.00	3.70	3.70	0.54
18	0.123	0.130		0.143	2.00	3.55	7.10	1.02
19	0.136	0.156		0.150	2.00	3.45	6.90	1.04
20	0.136	0.143		0.143	2.00	3.35	6.70	0.96
21	0.138	0.143		0.14	2.00	3.00	6.00	0.82
22	0.123	0.130		0.11	2.00	2.35	4.70	0.52
23	0.084	0.091		0.05	4.00	1.00	4.00	0.18
24	0.000	0.000			43.00		126.17	18.30

## FLOW MEASUREMENT TABLE

Date: 10-08-92

Station: Dhalapara S3

CD

No of Vert.	Dist. from Initial Pt	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.	
1 V-O	2 3.80	3 0.00 (R.E.W.)	4	5	6	7	8	9 0.000
1	6.80	1.30	0.6	-	100	-	0.000	
2	9.80	2.50	0.8	-	"	-	0.000	
			0.2	30	"	0.30	0.202	
3	11.80	3.20	0.8	-	"	-	0.000	
			0.2	40	"	0.40	0.268	
4	13.80	3.00	0.8	-	"	-	0.000	
			0.2	50	"	0.50	0.334	
5	15.80	3.40	0.8	-	"	-	0.000	
			0.2	54	"	0.54	0.360	
6	17.80	3.50	0.8	-	"	-	0.000	
			0.2	52	"	0.52	0.347	
7	19.80	3.80	0.8	-	"	-	0.000	
			0.2	62	"	0.62	0.413	
8	20.80	3.70	0.8	-	"	-	0.000	
			0.2	60	"	0.60	0.400	
9	21.80	3.70	0.8	-	"	-	0.000	
			0.2	60	"	0.60	0.400	
10	22.80	3.80	0.8	-	"	-	0.000	
			0.2	54	"	0.54	0.360	
11	23.80	3.90	0.8	-	"	-	0.000	
			0.2	58	"	0.58	0.387	
12	24.80	3.90	0.8	-	"	-	0.000	
			0.2	60	"	0.60	0.400	
13	25.80	3.90	0.8	-	"	-	0.000	
			0.2	58	"	0.58	0.387	
14	26.80	3.90	0.8	-	"	-	0.000	
			0.2	60	"	0.60	0.400	
15	27.80	3.90	0.8	-	"	-	0.000	
			0.2	60	"	0.60	0.400	
16	29.80	3.90	0.8	-	"	-	0.000	
			0.2	60	"	0.60	0.400	
17	31.80	3.80	0.8	-	"	-	0.000	
			0.2	62	"	0.62	0.413	
18	33.80	3.60	0.8	-	"	-	0.000	
			0.2	58	"	0.58	0.387	
19	36.80	3.50	0.8	-	"	-	0.000	
			0.2	46	"	0.46	0.308	
20	39.80	3.20	0.8	-	"	-	0.000	
			0.2	46	"	0.46	0.308	
21	42.80	2.40	0.8	-	"	-	0.000	
			0.2	22	"	0.22	0.149	
22	45.80	0.70	0.6	-	"	-	0.000	
23	48.80	0.00 (L.E.W.)	-	-	-	-	0.000	

52

## FLOW COMPUTATION TABLE

Date: 10-08-92

Station: Dhalapara S3

No of Vert. 1	Corrected Vel 2	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
V-O	0.000	0.000		3.00	0.65	1.95	0.00
1	0.000	0.000	0.051	3.00	1.90	5.70	0.29
2	0.000	0.101	0.118	2.00	2.85	5.70	0.67
3	0.000	0.134	0.151	2.00	3.10	6.20	0.94
4	0.000	0.167	0.174	2.00	3.20	6.40	1.11
5	0.000	0.180	0.177	2.00	3.45	6.90	1.22
6	0.000	0.174	0.191	2.00	3.65	7.30	1.39
7	0.000	0.207	0.204	1.00	3.75	3.75	0.77
8	0.000	0.200	0.200	1.00	3.70	3.70	0.74
9	0.000	0.200	0.190	1.00	3.75	3.75	0.71
10	0.000	0.180	0.187	1.00	3.85	3.85	0.72
11	0.000	0.194	0.197	1.00	3.90	3.90	0.77
12	0.000	0.200	0.197	1.00	3.90	3.90	0.77
13	0.000	0.194	0.197	1.00	3.90	3.90	0.77
14	0.000	0.200	0.200	1.00	3.90	3.90	0.78
15	0.000	0.200	0.200	2.00	3.90	7.80	1.56
16	0.000	0.200	0.204	2.00	3.85	7.70	1.57
17	0.000	0.207	0.201	2.00	3.70	7.40	1.49
18	0.000	0.194	0.174	3.00	3.55	10.65	1.85
19	0.000	0.154	0.154	3.00	3.35	10.05	1.55
20	0.000	0.154	0.115	3.00	2.80	8.40	0.97
21	0.000	0.075	0.038	3.00	1.55	4.65	0.18
22	0.000	0.000		3.00	0.35	1.05	0.00
23	0.000	0.000		45.00		128.50	20.82

$$\begin{aligned} M.V. &= 0.82/128.50 \\ &= 0.16 \text{ M/Sec.} \end{aligned}$$

## FLOW MEASUREMENT TABLE

Date: 24-08-92

Station: Dhalapara S3

No of Vert.	Dist. from Initial Pt	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.	
1 V-O	2 5.00	3 0.00 (R.E.W.)	4	5	6	7	8	9 0.000
1	8.00	0.80	0.6	-	100	-	0.000	
2	11.00	2.10	0.8	0	"	0.00	0.000	
			0.2	0	"	0.00	0.000	
3	14.00	2.60	0.8	18	"	0.18	0.125	
			0.2	20	"	0.20	0.138	
4	16.00	2.60	0.8	20	"	0.20	0.138	
			0.2	24	"	0.24	0.164	
5	18.00	2.70	0.8	22	"	0.22	0.151	
			0.2	24	"	0.24	0.164	
6	20.00	2.80	0.8	26	"	0.26	0.178	
			0.2	28	"	0.28	0.191	
7	22.00	2.90	0.8	26	"	0.26	0.178	
			0.2	30	"	0.30	0.204	
8	23.00	2.90	0.8	24	"	0.24	0.164	
			0.2	28	"	0.28	0.191	
9	24.00	3.00	0.8	26	"	0.26	0.178	
			0.2	30	"	0.30	0.204	
10	25.00	3.10	0.8	28	"	0.28	0.191	
			0.2	30	"	0.30	0.204	
11	26.00	3.10	0.8	22	"	0.22	0.151	
			0.2	24	"	0.24	0.164	
12	28.00	3.10	0.8	20	"	0.20	0.138	
			0.2	22	"	0.22	0.151	
13	30.00	3.10	0.8	28	"	0.28	0.191	
			0.2	30	"	0.30	0.204	
14	32.00	3.00	0.8	20	"	0.20	0.138	
			0.2	24	"	0.24	0.164	
15	34.00	2.90	0.8	20	"	0.20	0.138	
			0.2	22	"	0.22	0.151	
16	36.00	2.80	0.8	26	"	0.26	0.178	
			0.2	30	"	0.30	0.204	
17	38.00	2.70	0.8	18	"	0.18	0.125	
			0.2	24	"	0.24	0.164	
18	40.00	2.50	0.8	20	"	0.20	0.138	
			0.2	22	"	0.22	0.151	
19	42.00	2.20	0.8	16	"	0.16	0.111	
			0.2	18	"	0.18	0.125	
20	44.00	1.60	0.8	0	"	0.00	0.000	
			0.2	0	"	0.00	0.000	
21	47.00	0.00 (L.E.W.)	-	-	-	-	0.000	

## FLOW COMPUTATION TABLE

Date: 24-08-92

Station: Dhalapara S3



No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area A (m <sup>2</sup> )	Pocket Dis- charge Q (m <sup>3</sup> )	
1	2	3	4	5	6	7	8	
V-O	0.000	0.000		0.000	3.00	0.40	1.20	0.00
1	0.000	0.000		0.000	3.00	1.45	4.35	0.00
2	0.000	0.000		0.066	3.00	2.35	7.05	0.47
3	0.125	0.132		0.142	2.00	2.60	5.20	0.74
4	0.138	0.151		0.155	2.00	2.65	5.30	0.82
5	0.151	0.158		0.172	2.00	2.75	5.50	0.95
6	0.178	0.185		0.188	2.00	2.85	5.70	1.07
7	0.178	0.191		0.185	1.00	2.90	2.90	0.54
8	0.164	0.178		0.185	1.00	2.95	2.95	0.55
9	0.178	0.191		0.195	1.00	3.05	3.05	0.59
10	0.191	0.198		0.178	1.00	3.10	3.10	0.55
11	0.151	0.158		0.152	2.00	3.10	6.20	0.94
12	0.138	0.145		0.172	2.00	3.10	6.20	1.07
13	0.191	0.198		0.175	2.00	3.05	6.10	1.07
14	0.138	0.151		0.175	2.00	3.05	6.10	1.07
15	0.164	0.145		0.148	2.00	2.95	5.90	0.87
16	0.138	0.145		0.168	2.00	2.85	5.70	0.96
17	0.178	0.191		0.168	2.00	2.75	5.50	0.92
18	0.125	0.145		0.145	2.00	2.60	5.20	0.75
19	0.138	0.145		1.320	2.00	2.35	4.70	0.62
20	0.111	0.118		0.059	2.00	1.90	3.80	0.22
21	0.000	0.000		0.000	3.00	0.80	2.40	0.00
				42.00		98.00	13.70	

$$\begin{aligned} M.V. &= 13.72 / 98.00 \\ &= 0.14 \text{ M/Sec.} \end{aligned}$$

68

## FLOW MEASUREMENT TABLE

Date: 07-09-92

Station: Dhalapara S3

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 5.50	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	9.00	1.40		0.6	4.0	100	-	0.032
2	11.00	2.00		0.8	4.0	"	0.04	0.032
3	13.00	2.60		0.2	6.0	"	0.06	0.045
3	13.00	2.60		0.8	0.0	"	0.00	0.000
4	15.00	2.90		0.2	8.0	"	0.08	0.059
4	15.00	2.90		0.8	0.0	"	0.00	0.000
5	17.00	2.90		0.2	12.0	"	0.10	0.072
5	17.00	2.90		0.8	10.0	"	0.12	0.085
6	19.00	3.00		0.2	6.0	"	0.06	0.045
6	19.00	3.00		0.8	0.0	"	0.00	0.000
7	20.00	3.00		0.2	20.0	"	0.20	0.138
7	20.00	3.00		0.8	12.0	"	0.12	0.085
8	21.00	3.00		0.2	10.0	"	0.10	0.072
9	22.00	3.50		0.2	10.0	"	0.10	0.072
10	23.00	3.20		0.8	0.0	"	0.00	0.000
10	23.00	3.20		0.2	10.0	"	0.10	0.072
11	24.00	3.20		0.8	0.0	"	0.00	0.000
11	24.00	3.20		0.2	6.0	"	0.06	0.045
12	25.00	3.30		0.8	0.0	"	0.00	0.000
12	25.00	3.30		0.2	6.0	"	0.06	0.045
13	26.00	3.30		0.8	0.0	"	0.00	0.000
13	26.00	3.30		0.2	0.0	"	0.00	0.000
14	27.00	3.40		0.8	0.0	"	0.00	0.000
14	27.00	3.40		0.2	4.0	"	0.04	0.032
15	29.00	3.40		0.8	0.0	"	0.00	0.000
15	29.00	3.40		0.2	4.0	"	0.04	0.032
16	31.00	3.40		0.8	0.0	"	0.00	0.000
16	31.00	3.40		0.2	8.0	"	0.08	0.059
17	33.00	3.20		0.8	0.0	"	0.00	0.000
17	33.00	3.20		0.2	0.0	"	0.00	0.000
18	35.00	3.10		0.8	0.0	"	0.00	0.000
18	35.00	3.10		0.2	0.0	"	0.00	0.000
19	37.00	3.00		0.8	0.0	"	0.00	0.000
19	37.00	3.00		0.2	0.0	"	0.00	0.000
20	39.00	2.80		0.8	0.0	"	0.00	0.000
20	39.00	2.80		0.2	0.0	"	0.00	0.000
21	41.00	2.50		0.8	0.0	"	0.00	0.000
21	41.00	2.50		0.2	0.0	"	0.00	0.000
22	43.00	2.10		0.8	0.0	"	0.00	0.000
22	43.00	2.10		0.2	0.0	"	0.00	0.000
23	47.00	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 07-09-92

Station: Dhalapara S3

No of Vert.	Corrected Vel	M.Velocity in Vert.	M.Velocity in Pocket	Pocket Width	M.Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )	
1	2	3	4	5	6	7 (m <sup>2</sup> )	8 (m <sup>3</sup> )	
V-O	0.000	0.000		0.036	3.50	0.70	2.45	0.04
1	0.032	0.032		0.036	2.00	1.70	3.40	0.12
2	0.032	0.039		0.035	2.00	2.30	4.60	0.16
3	0.000	0.030		0.030	2.00	2.75	5.50	0.17
4	0.000	0.030		0.055	2.00	2.90	5.80	0.32
5	0.072	0.079		0.051	2.00	2.95	5.90	0.30
6	0.000	0.023		0.068	1.00	3.00	3.00	0.20
7	0.085	0.112		0.074	1.00	3.00	3.00	0.22
8	0.000	0.036		0.036	1.00	3.25	3.25	0.12
9	0.000	0.036		0.036	1.00	3.35	3.35	0.12
10	0.000	0.036		0.036	1.00	3.35	3.35	0.12
11	0.000	0.023		0.036	1.00	3.20	3.20	0.10
12	0.000	0.023		0.023	1.00	3.25	3.25	0.70
13	0.000	0.000		0.012	1.00	3.30	3.30	0.04
14	0.000	0.016		0.008	1.00	3.35	3.35	0.03
15	0.000	0.016		0.016	2.00	3.40	6.80	0.11
16	0.000	0.030		0.023	2.00	3.40	6.80	0.16
17	0.000	0.000		0.015	2.00	3.30	6.60	0.10
18	0.000	0.000		0.000	2.00	3.15	6.30	0.00
19	0.000	0.000		0.000	2.00	3.05	6.10	0.00
20	0.000	0.000		0.000	2.00	2.90	5.80	0.00
21	0.000	0.000		0.000	2.00	2.65	5.30	0.00
22	0.000	0.000		0.000	2.00	2.30	4.60	0.00
23	0.000	0.000		0.000	4.00	1.05	4.20	0.00
				41.50		105.85	3.01	

$$\begin{aligned} M.V. &= 3.01 / 105.85 \\ &= 0.03 \text{ M/Sec.} \end{aligned}$$

66

## FLOW MEASUREMENT TABLE

Date: 21-09-92

Station: Dhalapara S3

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 5.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	8.00	1.22		0.6	0	100	0.000	0.000
2	11.00	2.59		0.8 0.2	0 12	-	0.000 0.120	0.084
3	13.00	2.80		0.8 0.2	0 16	-	0.000 0.160	0.110
4	15.00	3.14		0.8 0.2	6 14	-	0.060 0.140	0.044 0.097
5	17.00	3.26		0.8 0.2	8 24	-	0.080 0.240	0.057 0.163
6	19.00	3.45		0.8 0.2	0 34	-	0.000 0.340	0.000 0.229
7	20.00	3.54		0.8 0.2	0 28	-	0.000 0.280	0.000 0.189
8	21.00	3.57		0.8 0.2	4 26	-	0.040 0.260	0.031 0.176
9	22.00	3.60		0.6 0.2	8 24	-	0.080 0.240	0.057 0.163
10	23.00	3.63		0.8 0.2	2 24	-	0.020 0.240	0.018 0.163
11	24.00	3.69		0.6 0.2	4 20	-	0.040 0.200	0.031 0.136
12	25.00	3.72		0.8 0.2	0 22	-	0.000 0.220	0.000 0.149
13	26.00	3.72		0.6 0.2	6 26	-	0.060 0.260	0.044 0.176
14	27.00	3.72		0.6 0.2	8 26	-	0.080 0.260	0.157 0.176
15	29.00	3.75		0.8 0.2	0 24	-	0.000 0.240	0.000 0.163
16	31.00	3.66		0.8 0.2	2 20	-	0.020 0.200	0.018 0.136
17	33.00	3.57		0.8 0.2	0 18	-	0.000 0.180	0.000 0.123
18	35.00	3.48		0.6 0.2	4 20	-	0.040 0.200	0.031 0.136
19	37.00	3.32		0.8 0.2	6 24	-	0.060 0.240	0.044 0.163
20	40.00	2.90		0.8 0.2	0 12	-	0.000 0.120	0.000 0.084
21	43.00	2.13		0.8 0.2	0 10	-	0.000 0.100	0.000 0.070
22	46.50	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 21-09-92

Station: Dhalapara S3

No of Vert.	Corrected Vel V-O	M. Velocit in Vert. 3	M. Velocit in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Ar A 7 (m <sup>2</sup> )	Pocket Dis charge Q 8 (m <sup>3</sup> )	
1	0.000	0.000	0	3.00	0.61	1.83	0.00	
1	0.000	0.000	0.021	3.00	1.91	5.72	0.12	
2	0.000	0.042	0.005	0.048	2.00	2.70	5.39	0.26
3	0.000	0.055	0.110	0.063	2.00	2.97	5.94	0.37
4	0.044	0.071	0.097	0.090	2.00	3.20	6.40	0.58
5	0.057	0.110	0.163	0.112	2.00	3.36	6.71	0.75
6	0.000	0.115	0.229	0.105	1.00	3.50	3.50	0.37
7	0.000	0.095	0.189	0.099	1.00	3.56	3.56	0.35
8	0.031	0.104	0.176	0.107	1.00	3.59	3.59	0.38
9	0.057	0.110	0.163	0.100	1.00	3.62	3.62	0.36
10	0.018	0.091	0.163	0.087	1.00	3.66	3.66	0.32
11	0.031	0.084	0.136	0.079	1.00	3.71	3.71	0.29
12	0.000	0.075	0.149	0.092	1.00	3.72	3.72	0.34
13	0.044	0.110	0.176	0.138	1.00	3.72	3.72	0.51
14	0.157	0.167	0.176	0.124	2.00	3.74	7.47	0.93
15	0.000	0.082	0.163	0.079	2.00	3.71	7.41	0.59
16	0.018	0.077	0.136	0.069	2.00	3.62	7.23	0.50
17	0.000	0.062	0.123	0.073	2.00	3.53	7.05	0.51
18	0.031	0.084	0.136	0.094	2.00	3.40	6.80	0.64
19	0.044	0.104	0.163	0.073	3.00	3.11	9.33	0.68
20	0.000	0.042	0.084	0.039	3.00	2.52	7.55	0.29
21	0.000	0.035	0.070	0.018	3.50	1.07	3.73	0.07
22	0.000	0.000			41.50	117.60	9.21	

M.V. = 0.08

## FLOW MEASUREMENT TABLE

Date: 05-10-92

Station: Dhalapara S3

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 3.00	0.00 (R.E.W.)		-	-	-	-	0.000
1	10.00	2.50		0.8	-	100	-	0.000
				0.2	-	"	-	0.000
2	14.00	3.20		0.8	20	"	0.20	0.138
				0.2	23	"	0.23	0.158
3	16.00	3.30		0.8	38	"	0.38	0.257
				0.2	40	"	0.40	0.270
4	18.00	3.30		0.8	28	"	0.28	0.191
				0.2	31	"	0.31	0.211
5	20.00	3.50		0.8	42	"	0.42	0.283
				0.2	46	"	0.46	0.310
6	22.00	3.70		0.8	43	"	0.43	0.290
				0.2	47	"	0.47	0.316
7	24.00	3.80		0.8	45	"	0.45	0.303
				0.2	48	"	0.48	0.323
8	26.00	3.90		0.8	50	"	0.50	0.336
				0.2	55	"	0.55	0.369
9	28.00	3.90		0.8	49	"	0.49	0.329
				0.2	56	"	0.56	0.376
10	30.00	3.90		0.8	50	"	0.50	0.336
				0.2	52	"	0.52	0.349
11	32.00	3.90		0.8	54	"	0.54	0.362
				0.2	58	"	0.58	0.389
12	34.00	3.80		0.8	53	"	0.53	0.356
				0.2	57	"	0.57	0.382
13	36.00	3.70		0.8	48	"	0.48	0.323
				0.2	50	"	0.50	0.336
14	38.00	3.60		0.8	42	"	0.42	0.283
				0.2	46	"	0.46	0.310
15	40.00	3.40		0.8	24	"	0.24	0.164
				0.2	28	"	0.28	0.191
16	42.00	3.30		0.8	30	"	0.30	0.204
				0.2	32	"	0.32	0.217
17	44.00	3.00		0.8	27	"	0.27	0.184
				0.2	30	"	0.30	0.204
18	46.00	2.50		0.8	20	"	0.20	0.138
				0.2	24	"	0.24	0.164
19	48.00	1.50		0.6	15	"	0.15	0.105
20	50.00	0.50		0.6	12	"	0.12	0.085
21	53.00	0.00 (L.E.W.)		-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 05-10-92

Station: Dhalapara S3

No of Vert.	Corrected V-O	M.Veloci- ty in Vert.	M.Veloci- ty in Pocket	Pocket Width	M.Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.000	7.00	1.25	8.75	0.00
1	0.000	0.000	0.074	4.00	2.85	11.40	0.84
2	0.138	0.148	0.206	2.00	3.25	6.50	1.34
3	0.257	0.263	0.232	2.00	3.30	6.60	1.53
4	0.191	0.201	0.249	2.00	3.40	6.80	1.69
5	0.283	0.296	0.300	2.00	3.60	7.20	2.16
6	0.290	0.303	0.308	2.00	3.75	7.50	2.31
7	0.303	0.313	0.333	2.00	3.85	7.70	2.56
8	0.336	0.353	0.353	2.00	3.90	7.80	2.75
9	0.329	0.353	0.348	2.00	3.90	7.80	2.71
10	0.336	0.343	0.359	2.00	3.90	7.80	2.80
11	0.362	0.376	0.372	2.00	3.85	7.70	2.87
12	0.356	0.369	0.349	2.00	3.75	7.50	2.62
13	0.323	0.329	0.313	2.00	3.65	7.30	2.28
14	0.283	0.296	0.237	2.00	3.50	7.00	1.66
15	0.164	0.178	0.194	2.00	3.35	6.70	1.30
16	0.204	0.211	0.202	2.00	3.15	6.30	1.27
17	0.184	0.194	0.173	2.00	2.75	5.50	0.95
18	0.138	0.151	0.128	2.00	2.00	4.00	0.51
19	0.105	0.105	0.095	2.00	1.00	2.00	0.19
20	0.085	0.085	0.043	3.00	0.25	0.75	0.03
21	0.000	0.000		50.00		140.60	34.38

M.V. = 0.24

90

## FLOW MEASUREMENT TABLE

Date: 19-10-92

Station: Dhalapara S3

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 4.20	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	6.20	0.80		0.6	0	100	-	0.000
2	8.20	1.40		0.6	0	"	0.00	0.000
3	10.20	2.10		0.8	20	"	0.20	0.138
				0.2	22	"	0.22	0.151
4	12.20	2.90		0.8	24	"	0.24	0.164
				0.2	24	"	0.24	0.164
5	14.20	3.25		0.8	30	"	0.30	0.204
				0.2	38	"	0.38	0.257
6	16.20	3.30		0.8	34	"	0.34	0.230
				0.2	42	"	0.42	0.283
7	18.20	3.40		0.8	38	"	0.38	0.257
				0.2	46	"	0.46	0.310
8	20.20	3.50		0.8	48	"	0.48	0.323
				0.2	48	"	0.48	0.323
9	22.20	3.75		0.8	42	"	0.42	0.283
				0.2	56	"	0.56	0.376
10	24.20	3.80		0.8	42	"	0.42	0.283
				0.2	56	"	0.56	0.376
11	26.20	3.90		0.8	44	"	0.44	0.296
				0.2	56	"	0.56	0.376
12	28.20	3.90		0.8	50	"	0.50	0.336
				0.2	60	"	0.60	0.402
13	30.20	3.90		0.8	44	"	0.44	0.296
				0.2	62	"	0.62	0.415
14	32.20	3.80		0.8	54	"	0.54	0.362
				0.2	56	"	0.56	0.376
15	34.20	3.70		0.8	46	"	0.46	0.310
				0.2	48	"	0.48	0.323
16	36.20	3.60		0.8	48	"	0.48	0.323
				0.2	50	"	0.50	0.336
17	38.20	3.40		0.8	46	"	0.46	0.310
				0.2	48	"	0.48	0.323
18	40.20	3.20		0.8	44	"	0.44	0.296
				0.2	46	"	0.46	0.310
19	42.20	2.80		0.8	38	"	0.38	0.257
				0.2	42	"	0.42	0.283
20	44.20	2.10		0.8	36	"	0.36	0.244
				0.2	40	"	0.40	0.270
21	48.20	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 19-10-92

Station: Dhalapara S3

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.000	2.00	0.40	0.80	0.00
1	0.000	0.000	0.000	2.00	1.10	2.20	0.00
2	0.006	0.000	0.072	2.00	1.75	3.50	0.25
3	0.138	0.145	0.154	2.00	2.50	5.00	0.77
4	0.164	0.164	0.197	2.00	3.08	6.15	1.21
5	0.204	0.230	0.244	2.00	3.28	6.55	1.60
6	0.230	0.257	0.270	2.00	3.35	6.70	1.81
7	0.257	0.283	0.303	2.00	3.45	6.90	2.09
8	0.323	0.323	0.326	2.00	3.63	7.25	2.36
9	0.283	0.329	0.329	2.00	3.78	7.55	2.49
10	0.283	0.329	0.333	2.00	3.85	7.70	2.56
11	0.296	0.336	0.353	2.00	3.90	7.80	2.75
12	0.336	0.369	0.362	2.00	3.90	7.80	2.83
13	0.296	0.356	0.362	2.00	3.85	7.70	2.79
14	0.362	0.369	0.343	2.00	3.75	7.50	2.57
15	0.310	0.316	0.323	2.00	3.65	7.30	2.36
16	0.323	0.329	0.323	2.00	3.50	7.00	2.26
17	0.310	0.316	0.310	2.00	3.30	6.60	2.04
18	0.296	0.303	0.287	2.00	3.00	6.00	1.72
19	0.257	0.270	0.263	2.00	2.45	4.90	1.29
20	0.244	0.257	0.128	4.00	1.05	4.20	0.54
21	0.000	0.000		44.00		127.10	36.30

M.V. = 0.29

## FLOW MEASUREMENT TABLE

Date: 03-11-92

Station: Dhalapara S3

92

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 5.80	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	9.80	0.50		0.6	0	100	0.00	0.000
2	11.80	1.20		0.6	8	"	0.08	0.059
3	13.80	1.50		0.6	14	"	0.14	0.098
4	15.80	1.70		0.8	18	"	0.18	0.125
5	17.80	1.80		0.8	20	"	0.20	0.138
6	18.80	1.80		0.8	22	"	0.22	0.151
7	19.80	1.90		0.8	26	"	0.26	0.178
8	20.80	1.90		0.8	32	"	0.32	0.217
9	21.80	2.10		0.8	34	"	0.34	0.230
10	22.80	2.10		0.8	42	"	0.42	0.283
11	23.80	2.15		0.8	42	"	0.42	0.283
12	24.80	2.20		0.8	38	"	0.38	0.257
13	25.80	2.30		0.8	40	"	0.40	0.270
14	27.80	2.30		0.8	46	"	0.46	0.310
15	29.80	2.30		0.8	38	"	0.38	0.257
16	31.80	2.20		0.8	40	"	0.40	0.270
17	33.80	2.10		0.8	38	"	0.38	0.257
18	35.80	2.00		0.8	42	"	0.42	0.283
19	37.80	1.80		0.8	40	"	0.40	0.270
20	39.80	1.40		0.6	38	"	0.38	0.257
21	41.80	1.00		0.6	36	"	0.36	0.244
22	43.80	0.50		0.6	34	"	0.34	0.230
23	46.80	0.00	(L.E.W.)	-	-	-	-	0.000

96

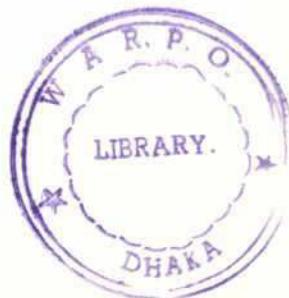
## FLOW COMPUTATION TABLE

Date: 03-11-92

Station: Dhalapara S3

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 2	M. Velocity in Pocket 3	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.000	4.00	0.25	1.00	0.00
1	0.000	0.000	0.015	2.00	0.85	1.70	0.02
2	0.059	0.029	0.039	2.00	1.35	2.70	0.11
3	0.098	0.049	0.090	2.00	1.60	3.20	0.29
4	0.125	0.131	0.138	2.00	1.75	3.50	0.48
5	0.138	0.145	0.154	1.00	1.80	1.80	0.28
6	0.151	0.164	0.178	1.00	1.85	1.85	0.33
7	0.178	0.191	0.214	1.00	1.90	1.90	0.41
8	0.204	0.237	0.247	1.00	2.00	2.00	0.49
9	0.230	0.257	0.273	1.00	2.10	2.10	0.57
10	0.283	0.290	0.300	1.00	2.13	2.13	0.64
11	0.283	0.310	0.303	1.00	2.18	2.18	0.66
12	0.257	0.296	0.303	1.00	2.25	2.25	0.68
13	0.270	0.310	0.323	2.00	2.30	4.60	1.49
14	0.310	0.336	0.323	2.00	2.30	4.60	1.49
15	0.257	0.310	0.296	2.00	2.25	4.50	1.33
16	0.270	0.283	0.277	2.00	2.15	4.30	1.19
17	0.257	0.270	0.280	2.00	2.05	4.10	1.15
18	0.283	0.290	0.283	2.00	1.90	3.80	1.08
19	0.270	0.277	0.203	2.00	1.60	3.20	0.65
20	0.257	0.128	0.186	2.00	1.20	2.40	0.45
21	0.244	0.244	0.237	2.00	0.75	1.50	0.36
22	0.230	0.230	0.115	3.00	0.25	0.75	0.09
23	0.000	0.000		41.00		62.05	14.21

M.V. = 0.23



## FLOW MEASUREMENT TABLE

Date: 18-07-92

Station: Bhuapur S-5

98

No of Vert.	Dist. from Initial Pt	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.	
1 V-O	2 10.60	3 0.00 (R.E.W.)	4	5	6	7	8	9 0.000
1	14.60	1.50		0.6	24	100	0.24	0.163
2	16.60	1.80		0.8	50	"	0.50	0.334
3	18.60	1.80		0.8	70	"	0.70	0.466
4	20.60	1.90		0.8	72	"	0.72	0.479
5	22.60	1.90		0.8	66	"	0.66	0.439
6	24.60	2.00		0.8	76	"	0.76	0.505
7	26.60	2.10		0.8	74	"	0.74	0.492
8	28.60	2.10		0.8	88	"	0.88	0.584
9	30.60	2.50		0.8	80	"	0.80	0.532
10	32.60	2.10		0.8	88	"	0.88	0.584
11	34.60	1.90		0.8	84	"	0.84	0.558
12	36.60	2.40		0.8	86	"	0.86	0.571
13	38.60	2.20		0.8	84	"	0.84	0.558
14	40.60	2.00		0.8	86	"	0.86	0.571
15	42.60	2.00		0.8	88	"	0.88	0.584
16	44.60	1.80		0.8	100	"	1.06	0.703
17	46.60	1.70		0.8	80	"	0.80	0.532
18	48.60	1.40		0.6	74	"	0.74	0.492
19	50.60	0.60		0.6	66	"	0.66	0.439
20	52.60	0.50		0.6	44	"	0.44	0.294
21	58.60	0.00 (L.E.W.)		-	-	-	-	0.000

70

## FLOW COMPUTATION TABLE

Date: 18-07-92

Station: Bhuapur S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 2	M.Velocity in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.081	4.00	0.75	3.00	0.24
1	0.163	0.163	0.268	2.00	1.65	3.30	0.88
2	0.334	0.374	0.423	2.00	1.80	3.60	1.52
3	0.466	0.472	0.479	2.00	1.85	3.70	1.77
4	0.479	0.486	0.479	2.00	1.90	3.80	1.82
5	0.439	0.472	0.492	2.00	1.95	3.90	1.92
6	0.492	0.512	0.512	2.00	2.05	4.10	2.10
7	0.466	0.512	0.548	2.00	2.10	4.20	2.30
8	0.584	0.584	0.578	2.00	2.30	4.60	2.66
9	0.532	0.571	0.578	2.00	2.30	4.60	2.66
10	0.584	0.584	0.598	2.00	2.00	4.00	2.39
11	0.558	0.611	0.624	2.00	2.15	4.30	2.68
12	0.571	0.637	0.631	2.00	2.30	4.60	2.90
13	0.558	0.624	0.631	2.00	2.10	4.20	2.65
14	0.571	0.637	0.640	2.00	2.00	4.00	2.56
15	0.584	0.644	0.660	2.00	1.90	3.80	2.51
16	0.664	0.677	0.611	2.00	1.75	3.50	2.14
17	0.532	0.545	0.519	2.00	1.55	3.10	1.61
18	0.492	0.492	0.466	2.00	1.00	2.00	0.93
19	0.005		0.367	2.00	0.55	1.10	0.40
20	0.294	0.294	0.147	6.00	0.25	1.50	0.22
21	0.000	0.000					
				48.00		74.90	38.87

M.V. = 0.52

95

## FLOW MEASUREMENT TABLE

Date: 01-08-92

Station: Bhuapur S-5

No of Vert.	Dist. from Initial Pt	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.	
1 V-O	2 15.00	3 0.00 (R.E.W.)	4	5	6	7	8	9 0.000
1	17.00	0.50	0.6	20	100	0.20	0.136	
2	19.00	1.00	0.6	31	"	0.31	0.209	
3	21.00	1.00	0.6	35	"	0.35	0.235	
4	23.00	1.00	0.6	37	"	0.37	0.248	
5	25.00	1.20	0.6	41	"	0.41	0.275	
6	27.00	1.20	0.6	56	"	0.56	0.374	
7	29.00	1.30	0.6	57	"	0.57	0.380	
8	31.00	1.50	0.6	66	"	0.66	0.439	
9	33.00	1.30	0.6	66	"	0.66	0.439	
10	35.00	1.30	0.6	62	"	0.62	0.413	
11	37.00	1.50	0.6	63	"	0.63	0.420	
12	39.00	1.20	0.6	65	"	0.65	0.433	
13	41.00	1.50	0.6	64	"	0.64	0.426	
14	43.00	1.50	0.6	67	"	0.67	0.446	
15	45.00	1.80	0.8	70	"	0.70	0.466	
			0.2	76	"	0.76	0.505	
16	47.00	1.80	0.8	80	"	0.80	0.532	
			0.2	86	"	0.86	0.571	
17	49.00	1.60	0.8	78	"	0.78	0.519	
			0.2	90	"	0.90	0.598	
18	51.00	1.80	0.8	75	"	0.75	0.499	
			0.2	82	"	0.82	0.545	
19	53.00	2.20	0.8	76	"	0.76	0.505	
			0.2	80	"	0.80	0.532	
20	55.00	1.50	0.6	65	"	0.65	0.433	
21	57.00	0.00 (L.E.W.)	-	-	-	-	0.000	

99

## FLOW COMPUTATION TABLE

Date: 01-08-92

Station: Bhuapur S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 2 0.000	M.Velocity in Pocket 3 0.000	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.136	0.136		0.068	2.00	0.25	0.50
					0.173	2.00	0.75
2	0.209	0.209			0.222	2.00	1.00
					0.242	2.00	1.00
3	0.235	0.235			0.262	2.00	1.10
					0.324	2.00	1.20
4	0.248	0.248			0.377	2.00	1.25
					0.410	2.00	1.40
5	0.275	0.275			0.439	2.00	1.40
					0.439	2.00	1.40
6	0.374	0.374			0.426	2.00	1.30
					0.426	2.00	1.40
7	0.380	0.380			0.426	2.00	1.40
					0.426	2.00	1.40
8	0.439	0.439			0.426	2.00	1.30
					0.426	2.00	1.40
9	0.439	0.439			0.426	2.00	1.30
					0.426	2.00	1.40
10	0.413	0.413			0.426	2.00	1.30
					0.426	2.00	1.40
11	0.420	0.420			0.426	2.00	1.35
					0.426	2.00	1.40
12	0.433	0.433			0.426	2.00	1.35
					0.426	2.00	1.40
13	0.426	0.426			0.426	2.00	1.50
					0.426	2.00	1.65
14	0.446	0.446			0.426	2.00	1.65
					0.426	2.00	1.80
15	0.466	0.486			0.426	2.00	1.80
					0.426	2.00	1.80
16	0.532	0.551			0.426	2.00	1.70
					0.426	2.00	1.70
17	0.519	0.558			0.426	2.00	1.70
					0.426	2.00	1.70
18	0.499	0.522			0.426	2.00	1.70
					0.426	2.00	1.70
19	0.505	0.519			0.426	2.00	1.85
					0.426	2.00	1.85
20	0.433	0.433			0.426	2.00	1.85
					0.426	2.00	1.85
21	0.000	0.000			0.216	2.00	0.75
					0.216	2.00	0.75
					42.00		55.40
							23.08

M.V. = 0.42 M2



75

## FLOW MEASUREMENT TABLE

Date: 15-08-92

Station: Bhuapur S-5

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 17.10	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	21.10	0.70		0.6	50	100	0.50	0.334
2	23.10	0.91		0.6	56	"	0.56	0.374
3	25.10	1.07		0.6	62	"	0.62	0.413
4	27.10	1.01		0.6	66	"	0.66	0.439
5	29.10	0.98		0.6	78	"	0.78	0.519
6	31.10	1.07		0.6	78	"	0.78	0.519
7	33.10	1.19		0.6	78	"	0.78	0.519
8	35.10	1.01		0.6	82	"	0.82	0.545
9	37.10	1.19		0.6	80	"	0.80	0.532
10	39.10	1.28		0.6	86	"	0.86	0.571
11	41.10	1.19		0.6	86	"	0.86	0.571
12	43.10	1.25		0.6	96	"	0.96	0.637
13	45.10	1.28		0.6	94	"	0.94	0.624
14	47.10	1.43		0.6	88	"	0.88	0.584
15	49.10	1.59		0.8	86	"	0.86	0.571
				0.2	110	"	1.10	0.729
16	51.10	1.49		0.6	92	"	0.92	0.611
17	53.10	1.74		0.8	86	"	0.86	0.571
				0.2	110	"	1.10	0.729
18	55.10	1.83		0.8	82	"	0.82	0.545
				0.2	114	"	1.14	0.756
19	59.10	1.74		0.8	88	"	0.88	0.584
				0.2	112	"	1.12	0.743
20	63.10	1.52		0.6	96	"	0.96	0.637
21	67.10	1.28 (L.E.W.)		0.6	80	"	0.80	0.532
22	69.10	0.70		0.6	62	"	0.62	0.413
23	70.60	0.00 (L.E.W.)		-	-	-	-	0.000

92

## FLOW COMPUTATION TABLE

Date: 15-08-92

Station: Bhuapur S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 0.000	M.Velocity in Pocket 0.000	Pocket Width 0.167	M.Depth in Pocket 4.00	Pocket Area A 1.40	Pocket Dis- charge Q 0.23
1	0.334	0.334		0.354	2.00	0.81	1.61 0.57
2	0.374	0.374		0.393	2.00	0.99	1.98 0.78
3	0.413	0.413		0.426	2.00	1.04	2.08 0.89
4	0.439	0.439		0.479	2.00	1.00	1.99 0.95
5	0.519	0.519		0.519	2.00	1.03	2.05 1.06
6	0.519	0.519		0.519	2.00	1.13	2.26 1.17
7	0.519	0.519		0.532	2.00	1.10	2.20 1.17
8	0.545	0.545		0.538	2.00	1.10	2.20 1.18
9	0.532	0.532		0.551	2.00	1.24	2.47 1.36
10	0.571	0.571		0.571	2.00	1.24	2.47 1.41
11	0.571	0.571		0.604	2.00	1.22	2.44 1.47
12	0.637	0.637		0.631	2.00	1.27	2.53 1.60
13	0.624	0.624		0.604	2.00	1.36	2.71 1.64
14	0.584	0.584		0.617	2.00	1.51	3.02 1.86
15	0.571	0.650		0.631	2.00	1.54	3.08 1.94
16	0.611	0.611		0.631	2.00	1.62	3.23 2.04
17	0.571	0.650		0.650	2.00	1.79	3.57 2.32
18	0.545	0.650		0.657	4.00	1.79	7.14 4.69
19	0.584	0.664		0.650	4.00	1.63	6.52 4.24
20	0.637	0.637		0.585	4.00	1.40	5.60 3.27
21	0.532	0.532		0.473	2.00	0.99	1.98 0.94
22	0.413	0.413		0.207	1.50	0.35	0.53 0.11
23	0.000	0.000			53.50		65.06 36.90

M.V. = 0.57

2

27	70.50	0.76	0.6	76	"	0.76	0.507
28	73.00	0.00 (L.E.W.)	-	-	-	-	0.000

62

## FLOW COMPUTATION TABLE

Date: 29-08-92

Station: Bhuapur S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 3	M.Velocity in Pocket 4	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.234	4.50	0.35	1.58	0.37
1	0.468	0.468	0.481	2.00	0.86	1.71	0.82
2	0.494	0.494	0.494	2.00	1.04	2.08	1.03
3	0.494	0.494	0.514	2.00	1.12	2.23	1.15
4	0.534	0.534	0.534	2.00	1.27	2.53	1.35
5	0.534	0.534	0.534	2.00	1.37	2.74	1.46
6	0.534	0.534	0.540	2.00	1.39	2.77	1.50
7	0.547	0.547	0.540	2.00	1.40	2.80	1.51
8	0.534	0.534	0.567	2.00	1.42	2.83	1.60
9	0.600	0.600	0.573	2.00	1.43	2.86	1.64
10	0.547	0.547	0.593	2.00	1.46	2.92	1.73
11	0.639	0.639	0.653	2.00	1.56	3.11	2.03
12	0.573	0.666	0.659	2.00	1.56	3.11	2.05
13	0.758	0.653	0.663	2.00	1.60	3.20	2.12
14	0.600	0.672	0.699	2.00	1.79	3.57	2.49
15	0.745	0.725	0.722	2.00	1.89	3.78	2.73
16	0.613	0.719	0.729	2.00	1.95	3.90	2.84
17	0.639	0.738	0.725	2.00	2.00	3.99	2.89
18	0.837	0.712	0.729	2.00	2.01	4.02	2.93
19	0.837	0.745	0.738	2.00	2.00	3.99	2.95
20	0.639	0.732	0.742	2.00	2.00	3.99	2.96
21	0.626	0.752	0.758	2.00	2.01	4.02	3.05
22	0.639	0.765	0.735	2.00	1.94	3.87	2.84
23	0.573	0.705	0.682	2.00	1.80	3.60	2.46
24	0.547	0.659	0.649	2.00	1.56	3.11	2.02
25	0.639	0.639	0.626	2.00	1.19	2.38	1.49
26	0.613	0.613					

52

			0.560	2.00	0.89	1.77	0.99
27	0.507	0.507	0.254	2.50	0.38	0.95	0.24
28	0.000	0.000		59.00		83.41	53.25
					M.V. =		0.64

## FLOW MEASUREMENT TABLE

Date: 12-09-92

Station: Bhuapur S-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 18.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	21.50	0.60		0.6	50	100	0.50	0.336
2	24.50	0.70		0.6	50	"	0.50	0.336
3	27.50	0.80		0.6	46	"	0.46	0.310
4	30.50	0.90		0.6	60	"	0.60	0.402
5	33.50	0.90		0.6	60	"	0.60	0.402
6	36.50	1.00		0.6	60	"	0.60	0.402
7	39.50	1.00		0.6	64	"	0.64	0.429
8	42.50	1.50		0.6	72	"	0.72	0.481
9	45.50	1.30		0.6	70	"	0.70	0.468
10	47.50	1.40		0.6	86	"	0.86	0.574
11	49.50	1.40		0.6	80	"	0.80	0.534
12	51.50	1.40		0.6	78	"	0.78	0.521
13	52.50	1.40		0.6	84	"	0.84	0.561
14	53.50	1.50		0.6	90	"	0.90	0.600
15	54.50	1.50		0.6	66	"	0.66	0.442
16	55.50	1.50		0.6	80	"	0.80	0.534
17	56.50	1.50		0.6	85	"	0.85	0.567
18	57.50	1.50		0.6	78	"	0.78	0.521
19	59.50	1.50		0.6	82	"	0.82	0.547
20	61.50	1.40		0.6	94	"	0.94	0.627
21	63.50	1.40		0.6	88	"	0.88	0.587
22	65.50	1.30		0.6	82	"	0.82	0.547
23	67.50	0.80		0.6	102	"	1.02	0.680
24	69.50	0.50		0.6	82	"	0.82	0.547
25	72.50	0.00	(L.E.W.)	-	-	-	-	0.000



## FLOW COMPUTATION TABLE

Date: 12-09-92

Station: Bhuapur S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 3	M.Velocity in Pocket 4	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.168	3.50	0.30	1.05	0.18
1	0.336	0.336	0.336	3.00	0.65	1.95	0.66
2	0.336	0.336	0.323	3.00	0.75	2.25	0.73
3	0.310	0.310	0.356	3.00	0.85	2.55	0.91
4	0.402	0.402	0.402	3.00	0.90	2.70	1.09
5	0.402	0.402	0.402	3.00	0.95	2.85	1.15
6	0.402	0.402	0.415	3.00	1.00	3.00	1.25
7	0.429	0.429	0.455	3.00	1.25	3.75	1.71
8	0.481	0.481	0.475	3.00	1.40	4.20	1.99
9	0.468	0.468	0.521	2.00	1.35	2.70	1.41
10	0.574	0.574	0.554	2.00	1.40	2.80	1.55
11	0.534	0.534	0.528	2.00	1.40	2.80	1.48
12	0.521	0.521	0.541	1.00	1.40	1.40	0.76
13	0.561	0.561	0.580	1.00	1.45	1.45	0.84
14	0.600	0.600	0.521	1.00	1.50	1.50	0.78
15	0.442	0.442	0.488	1.00	1.50	1.50	0.73
16	0.534	0.534	0.551	1.00	1.50	1.50	0.83
17	0.567	0.567	0.544	1.00	1.50	1.50	0.82
18	0.521	0.521	0.534	2.00	1.50	3.00	1.60
19	0.547	0.547	0.587	2.00	1.45	2.90	1.70
20	0.627	0.627	0.607	2.00	1.40	2.80	1.70
21	0.587	0.587	0.567	2.00	1.35	2.70	1.53
22	0.547	0.547	0.613	2.00	1.05	2.10	1.29
23	0.680	0.680	0.613	2.00	0.65	1.30	0.80
24	0.547	0.547	0.274	3.00	0.25	0.75	0.21
25	0.000	0.000		54.50		57.00	27.66

## FLOW MEASUREMENT TABLE

Date: 26-09-92

Station: Bhupur S-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth (R.E.W.)	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 14.00	3 0.00	4	5	6	7	8	9 0.000
1	18.00	0.91		0.6	36	100	0.36	0.242
2	22.00	1.10		0.6	40	"	0.40	0.268
3	25.00	1.19		0.6	36	"	0.36	0.242
4	28.00	1.22		0.6	46	"	0.46	0.308
5	31.00	1.40		0.6	46	"	0.46	0.308
6	34.00	1.28		0.6	44	"	0.44	0.294
7	37.00	1.25		0.6	50	"	0.50	0.334
8	40.00	1.34		0.6	54	"	0.54	0.360
9	42.00	1.52		0.8	42	"	0.42	0.281
				0.2	52	"	0.52	0.347
10	44.00	1.59		0.8	52	"	0.52	0.347
				0.2	54	"	0.54	0.360
11	46.00	1.52		0.8	46	"	0.46	0.308
				0.2	56	"	0.56	0.374
12	48.00	1.52		0.8	50	"	0.50	0.334
				0.2	62	"	0.62	0.413
13	50.00	1.59		0.8	50	"	0.50	0.334
				0.2	62	"	0.62	0.413
14	52.00	1.83		0.8	54	"	0.54	0.360
				0.2	56	"	0.56	0.374
15	54.00	1.89		0.8	50	"	0.50	0.334
				0.2	60	"	0.60	0.400
16	56.00	1.71		0.8	52	"	0.52	0.347
				0.2	60	"	0.60	0.400
17	58.00	1.71		0.8	54	"	0.54	0.360
				0.2	62	"	0.62	0.413
18	60.00	1.77		0.8	56	"	0.56	0.374
				0.2	60	"	0.60	0.400
19	62.00	1.65		0.8	54	"	0.54	0.360
				0.2	66	"	0.66	0.439
20	64.00	1.46		0.6	74	"	0.74	0.492
21	66.00	1.28		0.6	54	"	0.54	0.360
22	68.00	1.22		0.6	46	"	0.46	0.308
23	72.00	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 26-09-92

Station: Bhuapur S-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 2	M. Velocity in Pocket 3	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )	
1	0.000	0.000	0.121	4.00	0.46	1.82	0.22	
1	0.242	0.242	0.255	4.00	1.01	4.02	1.02	
2	0.268	0.268	0.255	3.00	1.15	3.44	0.88	
3	0.242	0.242	0.275	3.00	1.21	3.62	0.99	
4	0.308	0.308	0.308	3.00	1.31	3.93	1.21	
5	0.308	0.308	0.301	3.00	1.34	4.02	1.21	
6	0.294	0.294	0.314	3.00	1.27	3.80	1.19	
7	0.334	0.334	0.347	3.00	1.30	3.89	1.35	
8	0.360	0.360	0.337	2.00	1.43	2.86	0.96	
9	0.281	0.314	0.347	2.00	1.56	3.11	1.04	
10	0.347	0.354	0.334	2.00	1.56	3.11	1.08	
11	0.308	0.341	0.360	0.347	2.00	1.56	3.11	1.08
12	0.374	0.374	0.357	2.00	1.52	3.04	1.09	
13	0.334	0.374	0.413	0.374	2.00	1.56	3.11	1.16
14	0.334	0.374	0.413	0.370	2.00	1.71	3.42	1.27
15	0.360	0.367	0.374	0.367	2.00	1.86	3.72	1.37
16	0.374	0.374	0.400	0.370	2.00	1.80	3.60	1.33
17	0.360	0.387	0.400	0.380	2.00	1.71	3.42	1.30
18	0.413	0.387	0.400	0.387	2.00	1.74	3.48	1.35
19	0.376	0.387	0.400	0.393	2.00	1.71	3.42	1.35
20	0.400	0.400	0.439	0.446	2.00	1.56	3.11	1.39
21	0.492	0.492	0.492	0.426	2.00	1.37	2.74	1.17
22	0.360	0.360	0.360	0.334	2.00	1.25	2.50	0.84
23	0.308	0.308	0.308	0.154	4.00	0.61	2.44	0.38
	0.000	0.000			58.00		75.60	25.12

M.V. = 0.33

## FLOW MEASUREMENT TABLE

Date: 10-10-92

Station: Bhuapur Regulator S-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 22.40	3 0.00	4 (R.E.W.)	5	6	7	8	9
1	27.40	0.35		SUR	8	100	0.08	0.059
2	29.40	0.36		SUR	12	"	0.12	0.085
3	31.40	0.37		0.6	14	"	0.14	0.098
4	33.40	0.38		0.6	16	"	0.16	0.111
5	35.40	0.40		0.6	20	"	0.20	0.138
6	37.40	0.40		0.6	28	"	0.28	0.191
7	39.40	0.40		0.6	20	"	0.20	0.138
8	41.40	0.40		0.6	24	"	0.24	0.164
9	43.40	0.40		0.6	22	"	0.22	0.151
10	45.40	0.40		0.6	32	"	0.32	0.217
11	47.40	0.41		0.6	36	"	0.36	0.244
12	49.40	0.42		0.6	40	"	0.40	0.270
13	51.40	0.42		0.6	34	"	0.34	0.230
14	53.40	0.42		0.6	40	"	0.40	0.270
15	55.40	0.44		0.6	48	"	0.48	0.323
16	57.40	0.45		0.6	50	"	0.50	0.336
17	59.40	0.44		0.6	50	"	0.50	0.336
18	61.40	0.44		0.6	32	"	0.32	0.217
19	63.40	0.43		0.6	36	"	0.36	0.244
20	65.40	0.42		0.6	38	"	0.38	0.257
21	67.40	0.41		0.6	26	"	0.26	0.178
21	69.4	0.39		0.6	24	"	0.24	0.164
23	71.4	0.37		0.6	12	"	0.12	0.085
24	73.40	0.00	(L.E.W.)	-	-	-	-	0.000

BF

## FLOW MEASUREMENT TABLE

Date: 10-10-92

Station: Bhuapur Regulator S-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth <sup>4</sup>	Point of Obs. <sup>5</sup>	Number of Rev. <sup>6</sup>	Times of Rev. <sup>7</sup>	Rate of Rev. <sup>8</sup>	Velocity M/Sec. <sup>9</sup>
1 V-O	2 22.40	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	27.40	0.35		SUR	8	100	0.08	0.059
2	29.40	0.36		SUR	12	"	0.12	0.085
3	31.40	0.37		0.6	14	"	0.14	0.098
4	33.40	0.38		0.6	16	"	0.16	0.111
5	35.40	0.40		0.6	20	"	0.20	0.138
6	37.40	0.40		0.6	28	"	0.28	0.191
7	39.40	0.40		0.6	20	"	0.20	0.138
8	41.40	0.40		0.6	24	"	0.24	0.164
9	43.40	0.40		0.6	22	"	0.22	0.151
10	45.40	0.40		0.6	32	"	0.32	0.217
11	47.40	0.41		0.6	36	"	0.36	0.244
12	49.40	0.42		0.6	40	"	0.40	0.270
13	51.40	0.42		0.6	34	"	0.34	0.230
14	53.40	0.42		0.6	40	"	0.40	0.270
15	55.40	0.44		0.6	48	"	0.48	0.323
16	57.40	0.45		0.6	50	"	0.50	0.336
17	59.40	0.44		0.6	50	"	0.50	0.336
18	61.40	0.44		0.6	32	"	0.32	0.217
19	63.40	0.43		0.6	36	"	0.36	0.244
20	65.40	0.42		0.6	38	"	0.38	0.257
21	67.40	0.41		0.6	26	"	0.26	0.178
21	69.4	0.39		0.6	24	"	0.24	0.164
23	71.4	0.37		0.6	12	"	0.12	0.085
24	73.40	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 10-10-92

Station: Bhuapur Regulator S-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 2	M. Velocity in Pocket 3	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000		0.026	5.00	0.18	0.88
1	0.051	0.051		0.068	2.00	0.36	0.71
2	0.085	0.085		0.092	2.00	0.37	0.73
3	0.098	0.098		0.105	2.00	0.38	0.75
4	0.111	0.111		0.125	2.00	0.39	0.78
5	0.138	0.138		0.164	2.00	0.40	0.80
6	0.191	0.191		0.164	2.00	0.40	0.80
7	0.138	0.138		0.151	2.00	0.40	0.80
8	0.164	0.164		0.158	2.00	0.40	0.80
9	0.151	0.151		0.184	2.00	0.40	0.80
10	0.217	0.217		0.230	2.00	0.41	0.81
11	0.244	0.244		0.257	2.00	0.42	0.83
12	0.270	0.270		0.250	2.00	0.42	0.84
13	0.230	0.230		0.250	2.00	0.42	0.84
14	0.270	0.270		0.296	2.00	0.43	0.86
15	0.323	0.323		0.329	2.00	0.45	0.89
16	0.336	0.336		0.336	2.00	0.45	0.89
17	0.336	0.336		0.277	2.00	0.44	0.88
18	0.217	0.217		0.230	2.00	0.44	0.87
19	0.244	0.244		0.250	2.00	0.43	0.85
20	0.257	0.257		0.217	2.00	0.42	0.83
21	0.178	0.178		0.171	2.00	0.40	0.80
22	0.164	0.164		0.125	2.00	0.38	0.76
23	0.085	0.085		0.043	2.00	0.19	0.37
24	0.000	0.000					

51.00 19.17 3.72

M.V. = 0.19

70

## FLOW MEASUREMENT TABLE

Date: 24-10-92

Station: Bhuapur Regulator S-5

No of Vert.	Dist. from Initial Pt	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 37.00	3 0.00 (R.E.W.)	4	5	6	7	9 0.000
1	46.00	0.43	0.6	0	100	0.00	0.000
2	48.00	0.38	0.6	0	-	0.00	0.000
3	50.00	0.38	0.6	0	-	0.00	0.000
4	52.00	0.63	0.6	0	-	0.00	0.000
5	53.00	0.66	0.6	0	-	0.00	0.000
6	54.00	0.61	0.6	0	-	0.00	0.000
7	55.00	0.63	0.6	0	-	0.00	0.000
8	56.00	0.61	0.6	0	-	0.00	0.000
9	57.00	0.61	0.6	0	-	0.00	0.000
10	58.00	0.71	0.6	0	-	0.00	0.000
11	59.00	0.76	0.6	0	-	0.00	0.000
12	60.00	0.76	0.6	0	-	0.00	0.000
13	61.00	0.79	0.6	0	-	0.00	0.000
14	62.00	0.74	0.6	0	-	0.00	0.000
15	63.00	0.74	0.6	0	-	0.00	0.000
16	64.00	0.66	0.6	6	-	0.06	0.045
17	65.00	0.71	0.6	18	-	0.18	0.125
18	66.00	0.69	0.6	16	-	0.16	0.111
19	67.00	0.61	0.6	20	-	0.20	0.138
20	68.00	0.61	0.6	18	-	0.18	0.125
21	69.00	0.49	0.6	14	-	0.14	0.098
22	70.00	0.46	0.6	12	-	0.12	0.085
23	72.00	0.00 (L.E.W.)	-	-	-	-	0.000



22

## FLOW COMPUTATION TABLE

Date: 24-10-92

Station: Bhuapur Regulator S-5

No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
V.O	0.000	0.000	0.000	9.00	0.22	1.94	0.00
1	0.000	0.000	0.000	2.00	0.41	0.81	0.00
2	0.000	0.000	0.000	2.00	0.38	0.76	0.00
3	0.000	0.000	0.000	2.00	0.51	1.01	0.00
4	0.000	0.000	0.000	1.00	0.65	0.65	0.00
5	0.000	0.000	0.000	1.00	0.64	0.64	0.00
6	0.000	0.000	0.000	1.00	0.62	0.62	0.00
7	0.000	0.000	0.000	1.00	0.62	0.62	0.00
8	0.000	0.000	0.000	1.00	0.61	0.61	0.00
9	0.000	0.000	0.000	1.00	0.66	0.66	0.00
10	0.000	0.000	0.000	1.00	0.74	0.74	0.00
11	0.000	0.000	0.000	1.00	0.76	0.76	0.00
12	0.000	0.000	0.000	1.00	0.78	0.78	0.00
13	0.000	0.000	0.000	1.00	0.77	0.77	0.00
14	0.000	0.000	0.000	1.00	0.74	0.74	0.00
15	0.000	0.000	0.023	1.00	0.70	0.70	0.02
16	0.045	0.045	0.085	1.00	0.69	0.69	0.06
17	0.125	0.125	0.118	1.00	0.70	0.70	0.08
18	0.111	0.111	0.125	1.00	0.65	0.65	0.08
19	0.138	0.138	0.131	1.00	0.61	0.61	0.08
20	0.125	0.125	0.111	1.00	0.55	0.55	0.06
21	0.098	0.098	0.092	1.00	0.48	0.48	0.04
22	0.085	0.085	0.043	2.00	0.23	0.46	0.02
23	0.000	0.000					

35.00 16.91 0.44

M.V. = 0.03

## FLOW MEASUREMENT TABLE

Date: 25-07-92

Station: Kayra SG-2

No of Vert.	Dist from Initial Pt	Depth		Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 2.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	3.00	0.70		0.6	32	100	0.32	0.215
2	4.00	1.10		0.6	44	"	0.44	0.294
3	5.00	1.50		0.6	54	"	0.54	0.360
4	6.00	1.60		0.8	54	"	0.54	0.360
				0.2	56	"	0.56	0.374
5	7.00	1.60		0.8	54	"	0.54	0.360
				0.2	55	"	0.55	0.367
6	8.00	1.70		0.8	52	"	0.52	0.347
				0.2	54	"	0.54	0.360
7	9.00	2.00		0.8	44	"	0.44	0.294
				0.2	48	"	0.48	0.321
8	10.00	2.00		0.8	44	"	0.44	0.294
				0.2	45	"	0.45	0.301
9	11.00	2.00		0.8	44	"	0.44	0.294
				0.2	46	"	0.46	0.308
10	12.00	2.00		0.8	36	"	0.36	0.242
				0.2	44	"	0.44	0.294
11	12.50	2.00		0.8	32	"	0.32	0.215
				0.2	46	"	0.46	0.308
12	13.00	2.00		0.8	31	"	0.31	0.209
				0.2	45	"	0.45	0.301
13	13.50	2.00		0.8	30	"	0.30	0.202
				0.2	44	"	0.44	0.294
14	14.00	2.00		0.8	32	"	0.32	0.215
				0.2	40	"	0.40	0.268
15	15.00	2.00		0.8	40	"	0.40	0.268
				0.2	42	"	0.42	0.281
16	15.50	2.00		0.8	38	"	0.38	0.255
				0.2	44	"	0.44	0.294
17	16.00	2.00		0.8	40	"	0.40	0.268
				0.2	42	"	0.42	0.281
18	16.50	1.90		0.8	36	"	0.36	0.242
				0.2	50	"	0.50	0.334
19	17.00	1.70		0.8	36	"	0.36	0.242
				0.2	46	"	0.46	0.308
20	18.00	1.50		0.6	46	"	0.46	0.308
21	19.00	1.10		0.6	38	"	0.38	0.255
22	21.00	0.00	(L.E.W.)	-	-	-	-	0.00

126

## FLOW COMPUTATION TABLE

Date: 25-07-92

Station: Kayra SG-2

No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area	Pocket Dis- charge Q
1	2	3	4	5	6	7	8
V-O	0.000	0.000		0.108	1.00	0.35	0.35
1	0.215	0.215		0.255	1.00	0.90	0.90
2	0.294	0.294		0.327	1.00	1.30	1.30
3	0.360	0.360		0.364	1.00	1.55	1.55
4	0.360	0.367		0.366	1.00	1.60	1.60
5	0.360	0.364		0.359	1.00	1.65	1.65
6	0.347	0.354		0.331	1.00	1.85	1.85
	0.360						0.61
7	0.294	0.308		0.303	1.00	2.00	2.00
	0.321						0.61
8	0.294	0.298		0.300	1.00	2.00	2.00
	0.301						0.60
9	0.294	0.301		0.285	1.00	2.00	2.00
	0.308						0.57
10	0.242	0.268		0.265	0.50	2.00	1.00
	0.294						0.27
11	0.215	0.262		0.259	0.50	2.00	1.00
	0.308						0.26
12	0.209	0.255		0.252	0.50	2.00	1.00
	0.301						0.25
13	0.202	0.248		0.245	0.50	2.00	1.00
	0.294						0.25
14	0.215	0.242		0.259	1.00	2.00	1.00
	0.268						0.26
15	0.268	0.275		0.275	0.50	2.00	1.00
	0.281						0.28
16	0.255	0.275		0.275	0.50	2.00	1.00
	0.294						0.28
17	0.268	0.275		0.282	0.50	1.95	0.98
	0.281						0.28
18	0.242	0.288		0.282	0.50	1.80	0.90
	0.334						0.25
19	0.242	0.275		0.292	1.00	1.60	1.60
	0.308						0.47
20	0.308	0.308		0.282	1.00	1.30	1.30
							0.37
21	0.255	0.255		0.128	2.00	0.55	1.10
							0.14
22	0.000	0.000			19.00		28.08
							8.19

$$\text{M.V.} = \frac{8.19}{28.08}$$

0.29

## FLOW MEASUREMENT TABLE

Date: 08-08-92

Station: Kayra SG-2

No of Vert.	Dist. from Initial Pt	Depth		Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 4.80	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	6.80	1.80		0.8	16	100	0.16	0.110
				0.2	20		0.20	0.136
2	7.80	1.90		0.8	25	"	0.25	0.169
				0.2	30		0.30	0.202
3	8.80	1.90		0.8	52	"	0.52	0.347
				0.2	55		0.55	0.367
4	9.80	1.90		0.8	64	"	0.64	0.426
				0.2	66		0.66	0.439
5	10.80	1.90		0.8	60	"	0.60	0.400
				0.2	64		0.64	0.426
6	11.80	2.00		0.8	44	"	0.44	0.294
				0.2	64		0.64	0.426
7	12.80	2.10		0.8	52	"	0.52	0.347
				0.2	56		0.56	0.374
8	13.80	2.10		0.8	46	"	0.46	0.308
				0.2	48		0.48	0.321
9	14.80	2.20		0.8	48	"	0.48	0.321
				0.2	50	"	0.50	0.334
10	15.30	2.20		0.8	46	"	0.46	0.308
				0.2	56	"	0.56	0.374
11	15.80	2.20		0.8	50	"	0.50	0.334
				0.2	56	"	0.56	0.374
12	16.30	2.20		0.8	50	"	0.50	0.334
				0.2	52	"	0.52	0.347
13	16.80	2.20		0.8	42	"	0.42	0.281
				0.2	48	"	0.48	0.321
14	17.30	2.20		0.8	42	"	0.42	0.281
				0.2	48	"	0.48	0.321
15	17.80	2.10		0.8	36	"	0.36	0.242
				0.2	46	"	0.46	0.308
16	18.30	2.00		0.8	48	"	0.48	0.321
				0.2	50	"	0.50	0.334
17	18.80	2.00		0.8	50	"	0.50	0.334
				0.2	54	"	0.54	0.360
18	19.80	1.90		0.8	48	"	0.48	0.321
				0.2	50	"	0.50	0.334
19	20.80	1.80		0.8	42	"	0.42	0.281
				0.2	46	"	0.46	0.308
20	21.80	1.00		0.6	36	"	0.36	0.242
21	22.80	0.80		0.6	28	"	0.28	0.189
22	24.60	0.00	(L.E.W.)	-	-	-	-	0.00

100

## FLOW COMPUTATION TABLE

Date: 08-08-92

Station: Kayra SG-2

No of Vert.	Corrected Vel I	M. Velocity in Vert. 2	M. Velocity in Pocket 3	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7	Pocket Dis- charge Q 8
V-O	0.110	0.000					
	0.136		0.062	2.00	0.90	1.80	0.11
1	0.169	0.123					
	0.202		0.155	1.00	1.85	1.85	0.29
2	0.169	0.186					
	0.202		0.272	1.00	1.90	1.90	0.52
3	0.347	0.357					
	0.367		0.395	1.00	1.90	1.90	0.75
4	0.426	0.433					
	0.439		0.423	1.00	1.90	1.90	0.80
5	0.400	0.413					
	0.426		0.387	1.00	1.95	1.95	0.75
6	0.294	0.360					
	0.426		0.361	1.00	2.05	2.05	0.74
7	0.347	0.301					
	0.374		0.338	1.00	2.10	2.10	0.71
8	0.308	0.315					
	0.321		0.322	1.00	2.15	2.15	0.69
9	0.321	0.328					
	0.334		0.335	0.50	2.20	1.10	0.37
10	0.308	0.341					
	0.374		0.348	0.50	2.20	1.10	0.38
11	0.334	0.354					
	0.374		0.348	0.50	2.20	1.10	0.38
12	0.334	0.341					
	0.347		0.321	0.50	2.20	1.10	0.35
13	0.281	0.301					
	0.321		0.301	0.50	2.20	1.10	0.33
14	0.281	0.301					
	0.321		0.288	0.50	2.15	1.08	0.31
15	0.242	0.275					
	0.308		0.302	0.50	2.05	1.03	0.31
16	0.321	0.328					
	0.334		0.338	0.50	2.00	1.00	0.34
17	0.334	0.347					
	0.360		0.338	0.50	1.95	1.95	0.66
18	0.321	0.328					
	0.334		0.312	1.00	1.85	1.85	0.58
19	0.281	0.295					
	0.308		0.269	1.00	1.40	1.40	0.38
20	0.242	0.242					
	0.189	0.189	0.216	1.00	0.90	0.90	0.19
21	0.000	0.000	0.095	1.80	0.40	0.72	0.07
22				19.30		33.03	10.01

$$\text{M.V.} = \frac{10.01}{33.03} = 0.30$$

22

## FLOW MEASUREMENT TABLE

Date: 22-08-92

Station: Kayra SG-2

No of Vert.	Dist. from Initial Pt	Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 6.00	3 0.00 (R.E.W.)	4	5	6	7	8 0.000
1	8.00	0.70	0.6	12	100	0.12	0.085
2	9.00	0.90	0.6	20	"	0.20	0.138
3	10.00	0.90	0.6	24	"	0.24	0.164
4	11.00	0.90	0.6	28	"	0.28	0.191
5	12.00	0.90	0.6	24	"	0.24	0.164
6	13.00	1.20	0.6	20	"	0.20	0.138
7	14.00	1.40	0.6	18	"	0.18	0.125
8	15.00	1.40	0.6	12	"	0.12	0.085
9	16.00	1.40	0.6	16	"	0.16	0.111
10	17.00	1.30	0.6	22	"	0.22	0.151
11	17.50	1.40	0.6	12	"	0.12	0.085
12	18.00	1.40	0.6	16	"	0.16	0.111
13	18.50	1.40	0.6	18	"	0.18	0.125
14	19.00	1.30	0.6	18	"	0.18	0.125
15	19.50	1.30	0.6	18	"	0.18	0.125
16	20.00	1.30	0.6	18	"	0.18	0.125
17	20.50	1.20	0.6	24	"	0.24	0.164
18	21.00	1.10	0.6	26	"	0.26	0.178
19	21.50	1.00	0.6	30	"	0.30	0.204
20	22.00	0.80	0.6	26	"	0.26	0.178
21	22.50	0.60	0.6	18	"	0.18	0.125
22	25.50	0.00 (L.E.W.)	-	-	-	-	0.00

29

## FLOW COMPUTATION TABLE

Date: 22-08-92

Station: Kayra SG-2

No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	2	3	4	5	6	7 (m <sup>2</sup> )	8 (m <sup>3</sup> )
V-O	0.000	0.000		0.043	2.00	0.35	0.70
1	0.085	0.085		0.112	1.00	0.80	0.09
2	0.138	0.138		0.151	1.00	0.90	0.14
3	0.164	0.164		0.178	1.00	0.90	0.16
4	0.191	0.191		0.178	1.00	0.90	0.16
5	0.164	0.164		0.151	1.00	1.05	1.05
6	0.138	0.138		0.132	1.00	1.30	1.30
7	0.125	0.125		0.105	1.00	1.40	1.40
8	0.085	0.085		0.098	1.00	1.40	1.40
9	0.111	0.111		0.131	1.00	1.35	1.35
10	0.151	0.151		0.118	0.50	1.35	0.68
11	0.085	0.085		0.098	0.50	1.40	0.70
12	0.111	0.111		0.118	0.50	1.40	0.70
13	0.125	0.125		0.125	0.50	1.35	0.68
14	0.125	0.125		0.125	0.50	1.30	0.65
15	0.125	0.125		0.125	0.50	1.30	0.65
16	0.125	0.125		0.145	0.50	1.25	0.63
17	0.164	0.164		0.171	0.50	1.15	0.58
18	0.178	0.178		0.191	0.50	1.05	0.53
19	0.204	0.204		0.191	0.50	0.90	0.45
20	0.178	0.178		0.152	0.50	0.70	0.35
21	0.125	0.125		0.063	3.00	0.30	0.90
22	0.000	0.000			19.50		18.20
							2.35

$$\begin{aligned} M.V. &= 2.35 / 18.20 \\ &= 0.13 \end{aligned}$$

## FLOW MEASUREMENT TABLE

Date: 05-09-92

Station: Kayra SG-2

No of Vert.	Dist. from Initial Pt	Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.	
1 V-O	2 4.70	3 0.00 (R.E.W.)	4	5	6	7	8	9 0.000
1	6.70	0.90	0.6	30	100	0.30	0.204	
2	7.70	1.30	0.6	46	"	0.46	0.310	
3	8.70	1.40	0.6	48	"	0.48	0.323	
4	9.70	1.40	0.6	54	"	0.54	0.362	
5	10.70	1.50	0.8	44	"	0.44	0.296	
			0.2	52	"	0.52	0.349	
6	11.20	1.80	0.8	44	"	0.44	0.298	
			0.2	48	"	0.48	0.323	
7	11.70	1.90	0.8	44	"	0.44	0.296	
			0.2	48	"	0.48	0.323	
8	12.20	1.90	0.8	42	"	0.42	0.283	
			0.2	44	"	0.44	0.296	
9	12.70	1.80	0.8	38	"	0.38	0.257	
			0.2	42	"	0.42	0.283	
10	13.20	1.80	0.8	32	"	0.32	0.217	
			0.2	40	"	0.40	0.270	
11	13.70	1.80	0.8	22	"	0.22	0.151	
			0.2	28	"	0.28	0.191	
12	14.20	1.90	0.8	26	"	0.26	0.178	
			0.2	34	"	0.34	0.230	
13	14.70	1.90	0.8	26	"	0.26	0.178	
			0.2	32	"	0.32	0.217	
14	15.20	1.90	0.8	28	"	0.28	0.191	
			0.2	34	"	0.34	0.230	
15	15.70	1.90	0.8	26	"	0.26	0.178	
			0.2	32	"	0.32	0.217	
16	16.20	1.90	0.8	28	"	0.28	0.191	
			0.2	34	"	0.34	0.230	
17	16.70	1.90	0.8	32	"	0.32	0.217	
			0.2	30	"	0.30	0.204	
18	17.70	1.80	0.8	30	"	0.30	0.204	
			0.2	36	"	0.36	0.244	
19	18.70	1.60	0.8	38	"	0.38	0.257	
			0.2	20	"	0.20	0.138	
20	19.70	1.50	0.8	38	"	0.38	0.257	
			0.2	40	"	0.40	0.270	
21	20.70	1.20	0.6	36	"	0.36	0.244	
22	23.00	0.00 (L.E.W.)	-	-	-	-	0.00	

n 2

## FLOW COMPUTATION TABLE

Date: 05-09-92

Station: Kayra SG-2

No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	2	3	4	5	6	7 (m <sup>2</sup> )	8 (m <sup>3</sup> )
V-O	0.000	0.000		0.102	2.00	0.45	0.90
1	0.204	0.204		0.257	1.00	1.10	0.28
2	0.310	0.310		0.317	1.00	1.35	0.43
3	0.323	0.323		0.343	1.00	1.40	0.48
4	0.362	0.362		0.343	1.00	1.45	0.50
5	0.296	0.323		0.317	0.50	1.65	0.83
	0.349						0.26
6	0.296	0.310		0.310	0.50	1.85	0.93
	0.323						0.29
7	0.296	0.310		0.300	0.50	1.90	0.95
	0.323						0.29
8	0.283	0.290		0.280	0.50	1.85	0.93
	0.296						0.26
9	0.257	0.270		0.257	0.50	1.80	0.90
	0.283						0.23
10	0.217	0.244		0.208	0.50	1.80	0.90
	0.270						0.19
11	0.151	0.171		0.188	0.50	1.85	0.93
	0.191						0.17
12	0.178	0.204		0.201	0.50	1.90	0.95
	0.230						0.19
13	0.178	0.198		0.205	0.50	1.90	0.95
	0.217						0.19
14	0.191	0.211		0.205	0.50	1.90	0.95
	0.230						0.19
15	0.178	0.198		0.205	0.50	1.90	0.95
	0.217						0.19
16	0.191	0.211		0.211	0.50	1.90	0.95
	0.230						0.20
17	0.217	0.211		0.218	1.00	1.85	1.85
	0.204						0.40
18	0.204	0.224		0.211	1.00	1.70	1.70
	0.244						0.36
19	0.257	0.198		0.231	1.00	1.55	1.55
	0.138						0.36
20	0.257	0.264		0.254	1.00	1.35	1.35
	0.270						0.34
21	0.244	0.244		0.122	2.30	0.60	1.38
							0.17
22	0.000	0.000			18.30		25.15
							6.06

$$\begin{aligned} M.V. &= 6.06/25.15 \\ &= 0.24 \text{ M/Sec.} \end{aligned}$$

200

## FLOW MEASUREMENT TABLE

Date: 19-09-92

Station: Kayra SG-2

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 5.50	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	7.00	0.70		0.6	12	100	0.12	0.085
2	8.00	0.90		0.6	24	"	0.24	0.164
3	9.00	1.10		0.6	34	"	0.34	0.230
4	10.00	1.10		0.6	32	"	0.32	0.217
5	11.00	1.10		0.6	38	"	0.38	0.257
6	11.50	1.40		0.6	36	"	0.36	0.244
7	12.00	1.50		0.6	30	"	0.30	0.204
8	12.50	1.60		0.8	26	"	0.26	0.178
				0.2	32	"	0.32	0.217
9	13.00	1.60		0.8	28	"	0.28	0.191
				0.2	28	"	0.28	0.191
10	13.50	1.70		0.8	22	"	0.22	0.151
				0.2	24	"	0.24	0.164
11	14.00	1.60		0.8	26	"	0.26	0.178
				0.2	28	"	0.28	0.191
12	14.50	1.70		0.8	28	"	0.28	0.191
				0.2	34	"	0.34	0.230
13	15.00	1.70		0.8	20	"	0.20	0.138
				0.2	22	"	0.22	0.151
14	16.00	1.70		0.8	18	"	0.18	0.125
				0.2	20	"	0.20	0.138
15	17.00	1.70		0.8	18	"	0.18	0.125
				0.2	20	"	0.20	0.138
16	18.00	1.70		0.8	12	"	0.12	0.085
				0.2	14	"	0.14	0.098
17	19.00	1.60		0.8	12	"	0.12	0.085
				0.2	14	"	0.14	0.098
18	20.00	1.30		0.6	16	"	0.16	0.111
19	21.00	1.10		0.6	24	"	0.24	0.164
20	22.00	0.80		0.6	12	"	0.12	0.085
21	24.00	0.00	(L.E.W.)	-	-	-	-	0.00

## FLOW COMPUTATION TABLE

Date: 19-09-92

Station: Kayra SG-2

No of Vert.	Corrected Vel	M. Velocity in Vert.	M. Velocity in Pocket	Pocket Width	M. Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000					
V-O			0.043	1.50	0.35	0.53	0.02
1	0.085	0.085		1.00	0.80	0.80	0.10
2	0.164	0.164		1.00	1.00	1.00	0.20
3	0.230	0.230		1.00	1.10	1.10	0.25
4	0.217	0.217		1.00	1.10	1.10	0.26
5	0.257	0.257		0.50	1.25	0.63	0.16
6	0.244	0.244		0.50	1.45	0.73	0.16
7	0.204	0.204		0.50	1.55	0.78	0.16
8	0.178	0.198		0.50	1.60	0.80	0.16
	0.217		0.195	0.50	1.65	0.83	0.15
9	0.191	0.191		0.50	1.65	0.83	0.15
10	0.151	0.158		0.50	1.65	0.83	0.14
	0.164		0.172	0.50	1.65	0.83	0.14
11	0.178	0.185		0.50	1.65	0.83	0.14
	0.191		0.173	0.50	1.65	0.83	0.14
12	0.191	0.161		0.50	1.70	0.85	0.13
	0.130		0.153	0.50	1.70	0.85	0.13
13	0.138	0.145		0.50	1.70	0.85	0.13
	0.151		0.139	1.00	1.70	1.70	0.24
14	0.125	0.132		1.00	1.70	1.70	0.22
	0.138		0.132	1.00	1.70	1.70	0.22
15	0.125	0.132		1.00	1.70	1.70	0.19
	0.138		0.112	1.00	1.70	1.70	0.19
16	0.085	0.092		1.00	1.65	1.65	0.15
	0.098		0.092	1.00	1.45	1.45	0.15
17	0.085	0.092		1.00	1.45	1.45	0.15
	0.098		0.102	1.00	1.20	1.20	0.17
18	0.111	0.111		1.00	0.95	0.95	0.12
	0.164		0.138	1.00	0.40	0.80	0.03
19	0.164	0.164		2.00	0.40	21.96	3.30
20	0.085	0.085	0.043	18.50			
21	0.000	0.000					

$$\begin{aligned} M.V. &= 3.30/21.96 \\ &= 0.15 \text{ M/Sec.} \end{aligned}$$

702

## FLOW MEASUREMENT TABLE

Date: 03-10-92

Station: Kayra SG2

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 5.55	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	6.55	0.50		0.6	20	100	0.20	0.138
2	7.55	0.60		0.6	25	"	0.25	0.171
3	8.55	0.70		0.6	30	"	0.30	0.204
4	9.55	0.90		0.6	32	"	0.32	0.217
5	10.55	0.90		0.6	34	"	0.34	0.230
6	11.55	1.00		0.6	34	"	0.34	0.230
7	12.55	1.40		0.6	36	"	0.36	0.244
8	13.05	1.50		0.6	34	"	0.34	0.230
9	13.55	1.50		0.6	30	"	0.30	0.204
10	14.05	1.50		0.6	32	"	0.32	0.217
11	14.55	1.50		0.6	32	"	0.32	0.217
12	15.55	1.50		0.6	27	"	0.27	0.184
13	16.55	1.50		0.6	27	"	0.27	0.184
14	17.55	1.50		0.6	26	"	0.26	0.178
15	18.55	1.50		0.6	23	"	0.23	0.158
16	19.55	1.40		0.6	24	"	0.24	0.164
17	20.55	1.40		0.6	26	"	0.26	0.178
18	21.55	1.20		0.6	25	"	0.25	0.171
19	22.55	1.10		0.6	29	"	0.29	0.197
20	23.55	0.90		0.6	29	"	0.29	0.197
21	24.55	0.75		0.6	23	"	0.23	0.158
22	26.80	0.00	(L.E.W.)	-	-	-	-	0.000

206

## FLOW COMPUTATION TABLE

Date: 03-10-92

Station: Kayra S6

No of Vert.	Corrected Vel V-O	M.Veloci- ty in Vert. 2	M.Veloci- ty in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.069	1.00	0.25	0.25	0.02
1	0.138	0.138	0.154	1.00	0.55	0.55	0.08
2	0.171	0.171	0.187	1.00	0.65	0.65	0.12
3	0.204	0.204	0.211	1.00	0.80	0.80	0.17
4	0.217	0.217	0.224	1.00	0.90	0.90	0.20
5	0.230	0.230	0.230	1.00	0.95	0.95	0.22
6	0.230	0.230	0.237	1.00	1.20	1.20	0.28
7	0.244	0.244	0.237	0.50	1.45	0.73	0.17
8	0.230	0.230	0.217	0.50	1.50	0.75	0.16
9	0.204	0.204	0.211	0.50	1.50	0.75	0.16
10	0.217	0.217	0.217	0.50	1.50	0.75	0.16
11	0.217	0.217	0.201	1.00	1.50	1.50	0.30
12	0.184	0.184	0.184	1.00	1.50	1.50	0.28
13	0.184	0.184	0.181	1.00	1.50	1.50	0.27
14	0.178	0.178	0.168	1.00	1.50	1.50	0.25
15	0.158	0.158	0.161	1.00	1.45	1.45	0.23
16	0.164	0.164	0.171	1.00	1.40	1.40	0.24
17	0.178	0.178	0.174	1.00	1.30	1.30	0.23
18	0.171	0.171	0.184	1.00	1.15	1.15	0.21
19	0.197	0.197	0.197	1.00	1.00	1.00	0.20
20	0.197	0.197	0.178	1.00	0.83	0.83	0.15
21	0.158	0.158	0.079	2.25	0.38	0.84	0.07
22	0.000	0.000		21.25		22.24	4.17

M.V. = 0.19

208



## FLOW MEASUREMENT TABLE

Date: 17-10-92

Station: Kayra SG-2

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth (R.E.W.)	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 6.30	3 0.00	4	5	6	7	8	9 0.000
1	7.30	0.30		0.6	0	100	0.00	0.000
2	7.80	0.35		0.6	0	"	0.00	0.000
3	9.00	0.50		0.6	0	"	0.00	0.000
4	9.50	0.50		0.6	0	"	0.00	0.000
5	10.00	0.55		0.6	20	"	0.20	0.138
6	10.50	0.55		0.6	20	"	0.20	0.138
7	11.00	0.80		0.6	22	"	0.22	0.151
8	11.50	1.00		0.6	24	"	0.24	0.164
9	12.00	1.00		0.6	24	"	0.24	0.164
10	12.50	1.00		0.6	24	"	0.24	0.164
11	13.00	1.00		0.6	24	"	0.24	0.164
12	13.50	1.02		0.6	20	"	0.20	0.138
13	14.00	1.00		0.6	16	"	0.16	0.111
14	14.50	1.00		0.6	16	"	0.16	0.111
15	15.00	1.00		0.6	12	"	0.12	0.085
16	15.50	0.90		0.6	10	"	0.10	0.072
17	16.00	0.90		0.6	10	"	0.10	0.072
18	16.50	0.80		0.6	8	"	0.08	0.059
19	17.00	0.70		0.6	4	"	0.04	0.032
20	17.50	0.60		0.6	0	"	0.00	0.006
21	18.00	0.60		0.6	0	"	0.00	0.006
22	19.50	0.00	(L.E.W.)	-	-	-	-	0.000

20

## FLOW COMPUTATION TABLE

Date: 17-10-92

Station: Kayra SG-2

No of Vert.	Corrected Vel	M.Velocity in Vert.	M.Velocity in Pocket	Pocket Width	M.Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1 V-O	0.000	0.000	-	1.00	0.15	0.15	0.00
1	0.006	0.000	0.000	0.50	0.33	0.16	0.00
2	0.006	0.000	0.000	1.20	0.43	0.51	0.00
3	0.006	0.000	0.000	0.50	0.50	0.25	0.00
4	0.006	0.000	0.069	0.50	0.53	0.26	0.02
5	0.138	0.138	0.138	0.50	0.55	0.28	0.04
6	0.138	0.138	0.145	0.50	0.68	0.34	0.05
7	0.151	0.151	0.158	0.50	0.90	0.45	0.07
8	0.164	0.164	0.164	0.50	1.00	0.50	0.08
9	0.164	0.164	0.164	0.50	1.00	0.50	0.08
10	0.164	0.164	0.164	0.50	1.00	0.50	0.08
11	0.164	0.164	0.151	0.50	1.01	0.51	0.08
12	0.138	0.138	0.125	0.50	1.01	0.51	0.06
13	0.111	0.111	0.111	0.50	1.00	0.50	0.06
14	0.111	0.111	0.098	0.50	1.00	0.50	0.05
15	0.085	0.085	0.078	0.50	0.95	0.48	0.04
16	0.072	0.072	0.072	0.50	0.90	0.45	0.03
17	0.072	0.072	0.065	0.50	0.85	0.43	0.03
18	0.059	0.059	0.045	0.50	0.75	0.38	0.02
19	0.032	0.032	0.019	0.50	0.65	0.33	0.01
20	0.006	0.006	0.006	0.50	0.60	0.30	0.00
21	0.006	0.006	0.003	1.50	0.30	0.45	0.00
22	0.000	0.000		13.20		8.71	0.79

M.V. = 0.09

205

## FLOW MEASUREMENT TABLE

Date: 26-07-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 7.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	9.00	0.50		0.6	32	100	0.32	0.215
2	11.00	1.20		0.6	62	"	0.62	0.413
3	13.00	2.00		0.8	65	"	0.65	0.433
				0.2	70		0.70	0.466
4	15.00	2.50		0.8	75	"	0.75	0.499
				0.2	80		0.80	0.532
5	17.00	2.50		0.8	66	"	0.66	0.439
				0.2	76		0.76	0.505
6	19.00	3.50		0.8	80	"	0.80	0.532
				0.2	82		0.82	0.545
7	21.00	3.50		0.8	78	"	0.78	0.519
				0.2	80		0.80	0.532
8	23.00	3.00		0.8	78	"	0.78	0.519
				0.2	82		0.82	0.545
9	25.00	3.50		0.8	70	"	0.70	0.466
				0.2	74		0.74	0.492
10	27.00	3.20		0.8	60	"	0.60	0.400
				0.2	62	"	0.62	0.413
11	29.00	3.10		0.8	56	"	0.56	0.374
				0.2	58	"	0.58	0.387
12	31.00	3.50		0.8	52	"	0.52	0.347
				0.2	56	"	0.56	0.374
13	32.00	2.50		0.8	56	"	0.56	0.374
				0.2	60	"	0.60	0.400
14	33.00	2.60		0.8	56	"	0.56	0.374
				0.2	60	"	0.60	0.400
15	34.00	3.10		0.8	46	"	0.46	0.308
				0.2	48	"	0.48	0.321
16	35.00	3.10		0.8	46	"	0.46	0.308
				0.2	50	"	0.50	0.334
17	37.00	2.50		0.8	46	"	0.46	0.308
				0.2	48	"	0.48	0.321
18	39.00	3.40		0.8	40	"	0.40	0.268
				0.2	44	"	0.44	0.294
19	41.00	2.80		0.8	50	"	0.50	0.334
				0.2	52	"	0.52	0.347
20	43.00	1.50		0.6	32	"	0.32	0.215
21	45.00	0.90		0.6	30	"	0.30	0.202
22	47.00	0.00	(L.E.W.)	-	-	-	-	0.000

209

## FLOW COMPUTATION TABLE

Date: 26-07-92

Station: Belua Bazar S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 2	M.Velocity in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.108	2.00	0.25	0.50	0.05
1	0.215	0.215	0.314	2.00	0.85	1.70	0.53
2	0.413	0.413	0.431	2.00	1.60	3.20	1.38
3	0.433	0.449	0.431	2.00	1.60	3.20	1.38
	0.466		0.482	2.00	2.25	4.50	2.17
4	0.499	0.515	0.494	2.00	2.50	5.00	2.47
	0.532		0.505	2.00	3.00	6.00	3.03
5	0.439	0.472	0.532	2.00	3.50	7.00	3.72
	0.505		0.528	2.00	3.25	6.50	3.43
6	0.532	0.538	0.505	2.00	3.00	6.00	3.03
	0.545		0.532	2.00	3.50	7.00	3.72
7	0.519	0.525	0.528	2.00	3.25	6.50	3.43
	0.532		0.505	2.00	3.25	6.50	3.28
8	0.519	0.532	0.479	2.00	3.35	6.70	2.97
	0.466		0.443	2.00	3.15	6.30	2.48
10	0.400	0.406	0.393	2.00	3.30	6.60	2.44
	0.413		0.370	2.00	3.30	6.60	1.12
11	0.374	0.380	0.374	1.00	3.00	3.00	0.99
	0.387		0.387	1.00	2.55	2.55	0.40
12	0.347	0.360	0.387	1.00	2.85	2.85	1.00
	0.374		0.350	1.00	3.10	3.10	0.98
13	0.374	0.387	0.321	1.00	2.80	5.60	1.78
	0.400		0.318	1.00	2.95	5.90	1.76
14	0.374	0.387	0.334	2.00	3.10	6.20	1.93
	0.400		0.314	2.00	2.95	4.30	1.20
15	0.308	0.314	0.321	2.00	3.10	2.40	0.50
	0.308		0.318	2.00	1.20	0.90	0.09
16	0.308	0.321	0.281	2.00	0.45	40.00	97.30
	0.308		0.311	2.00	0.45	97.30	39.31
17	0.308	0.314	0.298	2.00	0.45		
	0.321		0.311	2.00	0.45		
18	0.268	0.281	0.278	2.00	0.45		
	0.294		0.278	2.00	0.45		
19	0.334	0.341	0.215	2.00	0.45		
	0.347		0.209	2.00	0.45		
20	0.215	0.215	0.101	2.00	0.45		
	0.202		0.101	2.00	0.45		
21	0.202	0.202					
	0.000	0.000					

M.V. = 0.40

YD

## FLOW MEASUREMENT TABLE

Date: 09-08-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4 (R.E.W.)	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 6.60	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	8.60	0.50		0.6	30	100	0.30	0.202
2	10.60	1.40		0.6	40	"	0.40	0.268
3	12.60	2.40		0.8	50	"	0.50	0.334
4	14.60	2.50		0.8	50	"	0.50	0.334
				0.2	52	"	0.52	0.347
5	16.60	3.20		0.8	70	"	0.70	0.466
				0.2	70	"	0.70	0.466
6	18.60	3.90		0.8	78	"	0.78	0.519
				0.2	80	"	0.80	0.532
7	20.60	3.80		0.8	88	"	0.88	0.584
				0.2	90	"	0.90	0.598
8	22.60	3.80		0.8	0	"	0.00	0.005
				0.2	80	"	0.80	0.532
9	23.60	3.90		0.8	0	"	0.00	0.005
				0.2	74	"	0.74	0.492
10	24.60	3.40		0.8	0	"	0.00	0.005
				0.2	76	"	0.76	0.505
11	25.60	4.00		0.8	0	"	0.00	0.005
				0.2	60	"	0.60	0.400
12	26.60	3.50		0.8	0	"	0.00	0.005
				0.2	66	"	0.66	0.439
13	27.60	2.90		0.8	0	"	0.00	0.005
				0.2	54	"	0.54	0.360
14	28.60	2.50		0.8	0	"	0.00	0.005
				0.2	54	"	0.54	0.360
15	30.60	2.60		0.8	0	"	0.00	0.005
				0.2	46	"	0.46	0.308
16	32.60	3.30		0.8	0	"	0.00	0.005
				0.2	54	"	0.54	0.360
17	34.60	2.90		0.8	0	"	0.00	0.005
				0.2	48	"	0.48	0.321
18	36.60	3.00		0.8	54	"	0.54	0.360
				0.2	58	"	0.58	0.387
19	38.60	2.60		0.8	0	"	0.00	0.005
				0.2	60	"	0.60	0.400
20	40.60	2.90		0.8	48	"	0.48	0.321
				0.2	54	"	0.54	0.360
21	42.60	1.50		0.6	48	"	0.48	0.321
22	44.60	1.00		0.6	38	"	0.38	0.255
23	47.60	0.00 (L.E.W.)		-	-	-	-	0.000

202

## FLOW COMPUTATION TABLE

Date: 09-08-92

Station: Belua Bazar S-5

No of Vert.	Corrected V-O	M.Vel. in Vert.	M.Vel. in Pocket	Pocket Width	M.Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.101	2.00	0.25	0.50	0.05
1	0.202	0.202	0.235	2.00	0.95	1.90	0.45
2	0.268	0.268	0.301	2.00	1.90	3.80	1.14
3	0.334	0.334	0.337	2.00	2.45	4.90	1.65
4	0.334	0.341	0.403	2.00	2.85	5.70	2.30
5	0.466	0.466	0.495	2.00	3.55	7.10	3.52
6	0.519	0.525	0.558	2.00	3.85	7.70	4.30
7	0.584	0.591	0.430	2.00	3.80	7.60	3.26
8	0.005	0.268	0.258	1.00	3.85	3.85	0.99
9	0.005	0.248	0.252	1.00	3.65	3.65	0.92
10	0.005	0.255	0.229	1.00	3.70	3.70	0.85
11	0.005	0.202	0.212	1.00	3.75	3.75	0.80
12	0.005	0.222	0.202	1.00	3.20	3.20	0.65
13	0.005	0.182	0.182	1.00	2.70	2.70	0.49
14	0.005	0.182	0.169	2.00	2.55	5.10	0.86
15	0.005	0.156	0.169	2.00	2.95	5.90	1.00
16	0.005	0.182	0.173	2.00	3.10	6.20	1.07
17	0.005	0.163	0.268	2.00	2.95	5.90	1.58
18	0.360	0.374	0.288	2.00	2.80	5.60	1.61
19	0.005	0.202	0.271	2.00	2.75	5.50	1.49
20	0.321	0.341	0.331	2.00	2.20	4.40	1.46
21	0.321	0.321	0.288	2.00	1.25	2.50	0.72
22	0.255	0.255	0.127	3.00	0.50	1.50	0.19
23	0.000	0.000		41.00		102.65	31.35

M.V. = 0.31

220

## FLOW MEASUREMENT TABLE

Date: 23-08-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4 (R.E.W.)	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
V-O	10.00	0.00		-	-	-	-	0.000
1	12.00	0.80		0.6	32	100	0.32	0.215
2	14.00	1.40		0.6	44	"	0.44	0.294
3	16.00	1.40		0.6	62	"	0.62	0.413
4	18.00	2.20		0.8	66	"	0.66	0.439
5	20.00	2.40		0.8	66	"	0.66	0.439
6	22.00	2.00		0.8	62	"	0.62	0.413
7	24.00	1.70		0.8	56	"	0.56	0.374
8	25.00	1.80		0.8	56	"	0.56	0.374
9	26.00	1.90		0.8	46	"	0.46	0.308
10	27.00	2.20		0.8	34	"	0.34	0.229
11	28.00	2.40		0.8	34	"	0.34	0.229
12	30.00	2.30		0.8	30	"	0.30	0.202
13	32.00	2.10		0.8	28	"	0.28	0.189
14	34.00	2.10		0.8	26	"	0.26	0.176
15	36.00	1.90		0.8	30	"	0.30	0.202
16	37.00	2.00		0.8	28	"	0.28	0.189
17	38.00	1.70		0.8	38	"	0.38	0.255
18	40.00	1.90		0.8	44	"	0.44	0.294
19	42.00	1.70		0.8	34	"	0.34	0.229
20	44.00	0.60		0.6	18	"	0.18	0.123
21	46.00	0.00 (L.E.W.)		-	-	-	-	0.000

222

## FLOW COMPUTATION TABLE

Date: 23-08-92

Station: Belua Bazar S-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.108	2.00	0.40	0.80	0.09
1	0.215	0.215	0.255	2.00	1.10	2.20	0.56
2	0.294	0.294	0.354	2.00	1.40	2.80	0.99
3	0.413	0.413	0.433	2.00	1.80	3.60	1.56
4	0.439	0.453	0.453	2.00	2.30	4.60	2.08
	0.466		0.436	2.00	2.20	4.40	1.92
5	0.439	0.453	0.466	2.00			
6	0.413	0.420	0.426	2.00	1.85	3.70	1.48
7	0.374	0.380	0.387	1.00	1.75	1.75	0.67
8	0.374	0.387	0.400	1.00	1.85	1.85	0.65
9	0.308	0.314	0.321	1.00	2.05	2.05	0.57
10	0.229	0.242	0.255	1.00	2.30	2.30	0.55
11	0.229	0.235	0.242	2.00	2.35	4.70	1.04
12	0.202	0.209	0.215	2.00	2.20	4.40	0.89
13	0.189	0.196	0.202	2.00	2.10	4.20	0.81
14	0.176	0.189	0.202	2.00	2.00	4.00	0.81
15	0.202	0.215	0.229	1.00	1.95	1.95	0.41
16	0.189	0.202	0.215	1.00	1.85	1.85	0.44
17	0.255	0.275	0.294	2.00	1.80	3.60	1.05
18	0.294	0.308	0.321	2.00	1.80	3.60	0.98
19	0.229	0.235	0.242	2.00	1.15	2.30	0.41
20	0.123	0.123	0.123	2.00	0.30	0.60	0.04
21	0.000	0.000		36.00		61.25	17.99

M.V. = 0.29

## FLOW MEASUREMENT TABLE

Date: 06-09-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 7.60	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	10.00	1.10		0.6	26	100	0.26	0.178
2	12.00	1.70		0.8	44	"	0.44	0.296
3	14.00	2.30		0.8	50	"	0.50	0.336
				0.2	52	"	0.52	0.349
4	16.00	2.30		0.8	62	"	0.62	0.415
				0.2	72	"	0.72	0.481
5	18.00	3.50		0.8	72	"	0.72	0.481
				0.2	78	"	0.78	0.521
6	20.00	3.40		0.8	0	"	0.00	0.006
				0.2	76	"	0.76	0.508
7	22.00	3.40		0.8	0	"	0.00	0.006
				0.2	68	"	0.68	0.455
8	24.00	3.30		0.8	0	"	0.00	0.006
				0.2	74	"	0.74	0.495
9	26.00	3.10		0.8	0	"	0.00	0.006
				0.2	64	"	0.64	0.429
10	28.00	2.80		0.8	0	"	0.00	0.006
				0.2	56	"	0.56	0.376
11	30.00	2.40		0.8	42	"	0.42	0.283
				0.2	44	"	0.44	0.296
12	32.00	2.50		0.8	48	"	0.48	0.323
				0.2	50	"	0.50	0.336
13	34.00	3.00		0.8	50	"	0.50	0.336
				0.2	52	"	0.52	0.349
14	35.00	2.60		0.8	50	"	0.50	0.336
				0.2	54	"	0.54	0.362
15	36.00	2.40		0.8	48	"	0.48	0.323
				0.2	50	"	0.50	0.336
16	37.00	2.50		0.8	52	"	0.52	0.349
				0.2	48	"	0.48	0.323
17	38.00	2.40		0.8	52	"	0.52	0.349
				0.2	56	"	0.56	0.376
18	40.00	2.60		0.8	54	"	0.54	0.362
				0.2	56	"	0.56	0.376
19	42.00	2.20		0.8	48	"	0.48	0.323
				0.2	50	"	0.50	0.336
20	44.00	1.30		0.6	38	"	0.38	0.257
21	47.70	0.00	(L.E.W.)	-	-	-	-	0.000

226

## FLOW COMPUTATION TABLE

Date: 06-09-92

Station: Belua Bazar S-5

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 3	M.Velocity in Pocket 4	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.089	2.40	0.55	1.32	0.12
2	0.178	0.178	0.240	2.00	1.40	2.80	0.67
3	0.296	0.303	0.323	2.00	2.00	4.00	1.29
4	0.310						
5	0.336	0.343	0.395	2.00	2.30	4.60	1.82
6	0.349						
7	0.415	0.448	0.475	2.00	2.90	5.80	2.75
8	0.481	0.501	0.379	2.00	3.45	6.90	2.61
9	0.521						
10	0.006	0.257	0.244	2.00	3.40	6.80	1.66
11	0.508						
12	0.006	0.230	0.240	2.00	3.35	6.70	1.61
13	0.455						
14	0.006	0.250	0.234	2.00	3.20	6.40	1.50
15	0.495						
16	0.006	0.217	0.204	2.00	2.95	5.90	1.20
17	0.429						
18	0.006	0.191	0.240	2.00	2.60	5.20	1.25
19	0.376						
20	0.283	0.290	0.240	2.00	2.45	4.90	1.52
21	0.296						
22	0.323	0.329	0.310	2.00	2.45	5.50	1.85
23	0.336						
24	0.336	0.343	0.336	2.00	2.75	2.80	0.97
25	0.349						
26	0.336	0.349	0.346	1.00	2.80	2.50	0.85
27	0.362						
28	0.323	0.329	0.339	1.00	2.50	2.45	0.82
29	0.336						
30	0.323	0.329	0.333	1.00	2.45	2.45	0.86
31	0.349						
32	0.362	0.369	0.349	1.00	2.45	2.45	0.83
33	0.376						
34	0.362	0.369	0.366	2.00	2.50	5.00	1.68
35	0.376						
36	0.323	0.329	0.349	2.00	2.40	4.80	1.03
37	0.336						
38	0.323	0.329	0.293	2.00	1.75	3.50	0.31
39	0.336						
40	0.257	0.257	0.128	3.70	0.65	2.41	0.31
41	0.000	0.000		40.10		92.73	28.18

M.V.= 0.30

228

## FLOW MEASUREMENT TABLE

Date: 20-09-92  
 Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 8.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	11.00	1.10		0.6	38	100	0.38	0.255
2	13.00	1.70		0.8 0.2	56 58	" "	0.56 0.58	0.374 0.387
3	15.00	1.90		0.8 0.2	60 62	" "	0.60 0.62	0.400 0.413
4	17.00	2.40		0.8 0.2	66 66	" "	0.66 0.66	0.439 0.439
5	18.00	3.20		0.8 0.2	60 66	" "	0.60 0.66	0.400 0.439
6	19.00	3.50		0.8 0.2	76 78	" "	0.76 0.78	0.505 0.519
7	20.00	3.40		0.8 0.2	64 68	" "	0.64 0.68	0.426 0.453
8	21.00	3.40		0.8 0.2	66 72	" "	0.66 0.72	0.439 0.479
9	23.00	3.40		0.8 0.2	60 64	" "	0.60 0.64	0.400 0.426
10	25.00	3.10		0.6 0.2	0 50	" "	0.00 0.50	0.005 0.334
11	27.00	2.90		0.6 0.2	44 48	" "	0.44 0.48	0.294 0.321
12	29.00	2.00		0.6 0.2	48 50	" "	0.48 0.50	0.321 0.334
13	31.00	2.20		0.8 0.2	42 44	" "	0.42 0.44	0.281 0.294
14	33.00	2.60		0.8 0.2	42 44	" "	0.42 0.44	0.281 0.294
15	35.00	2.20		0.8 0.2	48 48	" "	0.48 0.48	0.321 0.321
16	37.00	3.20		0.8 0.2	64 68	" "	0.64 0.68	0.426 0.453
17	39.00	3.00		0.8 0.2	50 54	" "	0.50 0.54	0.334 0.360
18	40.00	2.30		0.8 0.2	48 48	" "	0.48 0.48	0.321 0.321
19	41.00	2.00		0.8 0.2	52 54	" "	0.52 0.54	0.347 0.360
20	43.00	1.00		0.6	34	"	0.34	0.229
21	46.00	0.00	(L.E.W.)	-	-	-	-	0.000

202

## FLOW COMPUTATION TABLE

Date: 20-09-92

Station: Belua Bazar S-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 0.000	M. Velocity in Pocket 0.000	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.255	0.255	0.127	3.00	0.55	1.65	0.21
2	0.374	0.380	0.318	2.00	1.40	2.80	0.89
3	0.387		0.393	2.00	1.80	3.60	1.42
4	0.400	0.406	0.423	2.00	2.15	4.30	1.82
5	0.413		0.439	1.00	2.80	2.80	1.20
6	0.439	0.439	0.430	1.00	3.35	3.35	1.56
7	0.440	0.420	0.466	1.00	3.45	3.45	1.64
8	0.453		0.449	1.00	3.40	3.40	1.53
9	0.459	0.459	0.436	2.00	3.40	6.80	2.97
10	0.479		0.476	1.00	3.45		
11	0.400	0.413	0.291	2.00	3.25	6.50	1.89
12	0.426		0.238	2.00	3.00	6.00	1.43
13	0.334	0.308	0.318	2.00	2.45	4.90	1.56
14	0.321		0.327	2.00	2.10	4.20	1.29
15	0.321	0.334	0.308	2.00	2.40	4.80	1.38
16	0.321	0.281	0.288	2.00	2.40	4.80	1.46
17	0.321	0.294	0.321	2.00	2.70	5.40	2.05
18	0.321	0.281	0.304	2.00	2.40	6.20	2.44
19	0.321	0.321	0.334	1.00	2.65	2.65	0.89
20	0.321	0.360	0.321	1.00	2.15	2.15	0.73
21	0.354	0.347	0.337	1.00	1.50	3.00	0.87
	0.229	0.360	0.291	2.00	0.50	1.50	0.17
	0.229	0.347	0.321	3.00	0.50	84.25	29.39
			0.114				
				38.00			
					M.V. =	0.35	

224

## FLOW MEASUREMENT TABLE

Date: 04-10-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 8.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	12.00	0.80		0.6	28	100	0.28	0.191
2	14.00	1.40		0.6	39	"	0.39	0.263
3	16.00	1.40		0.6	42	"	0.42	0.283
4	18.00	2.00		0.8	42	"	0.42	0.283
				0.2	50	"	0.50	0.336
5	20.00	3.00		0.8	46	"	0.46	0.310
				0.2	52	"	0.52	0.349
6	22.00	3.10		0.8	50	"	0.50	0.336
				0.2	56	"	0.56	0.376
7	24.00	3.10		0.8	52	"	0.52	0.349
				0.2	58	"	0.58	0.389
8	26.00	3.40		0.8	53	"	0.53	0.356
				0.2	60	"	0.60	0.402
9	27.00	3.00		0.8	46	"	0.46	0.310
				0.2	50	"	0.50	0.336
10	28.00	2.60		0.8	42	"	0.42	0.283
				0.2	48	"	0.48	0.323
11	29.00	2.00		0.8	48	"	0.48	0.323
				0.2	47	"	0.47	0.316
12	30.00	1.80		0.8	42	"	0.42	0.283
				0.2	45	"	0.45	0.303
13	32.00	1.80		0.8	40	"	0.40	0.270
				0.2	44	"	0.44	0.296
14	34.00	2.20		0.8	36	"	0.36	0.244
				0.2	38	"	0.38	0.257
15	36.00	2.10		0.8	38	"	0.38	0.257
				0.2	40	"	0.40	0.270
16	38.00	1.90		0.8	36	"	0.36	0.244
				0.2	40	"	0.40	0.270
17	40.00	1.80		0.8	35	"	0.35	0.237
				0.2	41	"	0.41	0.277
18	42.00	1.90		0.8	34	"	0.34	0.230
				0.2	38	"	0.38	0.257
19	44.00	1.50		0.6	40	"	0.40	0.270
20	46.00	0.50		0.6	32	"	0.32	0.217
21	49.00	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 04-10-92

Station: Belua Bazar SG-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.095	4.00	0.40	1.60	0.15
1	0.191	0.191	0.227	2.00	1.10	2.20	0.50
2	0.263	0.263	0.273	2.00	1.40	2.80	0.77
3	0.283	0.283	0.296	2.00	1.70	3.40	1.01
4	0.283	0.310	0.320	2.00	2.50	5.00	1.60
5	0.310	0.329	0.343	2.00	3.05	6.10	2.09
6	0.336	0.356	0.362	2.00	3.10	6.20	2.25
7	0.349	0.369	0.374	2.00	3.25	6.50	2.43
8	0.356	0.379	0.351	1.00	3.20	3.20	1.12
9	0.310	0.323	0.313	1.00	2.80	2.80	0.88
10	0.283	0.303	0.311	1.00	2.30	2.30	0.72
11	0.323	0.320	0.306	1.00	1.90	1.90	0.58
12	0.283	0.293	0.288	2.00	1.80	3.60	1.04
13	0.270	0.283	0.267	2.00	2.00	4.00	1.07
14	0.244	0.250	0.257	2.00	2.15	4.30	1.10
15	0.257	0.263	0.260	2.00	2.00	4.00	1.04
16	0.244	0.257	0.257	2.00	1.85	3.70	0.95
17	0.237	0.257	0.250	2.00	1.85	3.70	0.93
18	0.230	0.244	0.257	2.00	1.70	3.40	0.87
19	0.270	0.270	0.244	2.00	1.00	2.00	0.49
20	0.217	0.217	0.109	3.00	0.25	0.75	0.08
21	0.000	0.000					

41.00 73.45 21.65

M.V. = 0.29

## FLOW MEASUREMENT TABLE

Date: 18-10-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 10.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	12.00	0.50		0.6	28	100	0.28	0.191
2	13.50	1.25		0.6	40	"	0.40	0.270
3	15.00	1.25		0.6	33	"	0.33	0.224
4	16.50	1.25		0.6	42	"	0.42	0.283
5	18.00	2.20		0.8	54	"	0.54	0.362
				0.2	60	"	0.60	0.402
6	19.50	2.80		0.8	26	"	0.26	0.178
				0.2	60	"	0.60	0.402
7	21.00	2.80		0.8	12	"	0.12	0.085
				0.2	60	"	0.60	0.402
8	22.50	2.00		0.8	64	"	0.64	0.429
				0.2	66	"	0.66	0.442
9	24.00	1.60		0.8	56	"	0.56	0.376
				0.2	60	"	0.60	0.402
10	25.50	1.60		0.8	56	"	0.56	0.376
				0.2	56	"	0.56	0.376
11	27.00	2.00		0.8	46	"	0.46	0.310
				0.2	50	"	0.50	0.336
12	28.50	1.80		0.8	40	"	0.40	0.270
				0.2	42	"	0.42	0.283
13	30.00	2.00		0.8	38	"	0.38	0.257
				0.2	38	"	0.38	0.257
14	31.50	1.80		0.8	32	"	0.32	0.217
				0.2	38	"	0.38	0.257
15	33.00	2.00		0.8	32	"	0.32	0.217
				0.2	34	"	0.34	0.230
16	34.50	2.10		0.8	34	"	0.34	0.230
				0.2	40	"	0.40	0.270
17	36.00	1.80		0.8	38	"	0.38	0.257
				0.2	52	"	0.52	0.349
18	37.50	1.80		0.8	42	"	0.42	0.283
				0.2	52	"	0.52	0.349
19	39.00	2.00		0.8	48	"	0.48	0.323
				0.2	56	"	0.56	0.376
20	40.50	1.80		0.8	46	"	0.46	0.310
				0.2	48	"	0.48	0.323
21	42.00	1.25		0.6	42	"	0.42	0.283
22	45.00	0.00	(L.E.W.)	-	-	-	-	0.000



222

## FLOW COMPUTATION TABLE

Date: 18-10-92

Station: Belua Bazar SG-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 2	M. Velocity in Pocket 3	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.055	2.00	0.25	0.50	0.03
1	0.110	0.110	0.190	1.50	0.88	1.31	0.25
2	0.270	0.270	0.247	1.50	1.25	1.88	0.46
3	0.224	0.224	0.253	1.50	1.25	1.88	0.48
4	0.283	0.283	0.333	1.50	1.73	2.59	0.86
5	0.362	0.382	0.336	1.50	2.50	3.75	1.26
	0.402		0.267	1.50	2.80	4.20	1.12
6	0.178	0.290	0.339	1.50	2.40	3.60	1.22
	0.402		0.412	1.50	1.80	2.70	1.11
7	0.085	0.244	0.389	1.50	1.60	2.40	0.92
	0.402		0.382	1.50	1.80	2.70	0.94
8	0.429	0.435	0.349	1.50	1.90	2.85	0.85
	0.442		0.267	1.50	1.90	2.85	0.76
9	0.376	0.376	0.300	1.50	1.90	2.85	0.70
	0.336		0.237	1.50	1.90	2.85	0.66
10	0.376	0.376	0.230	1.50	1.90	2.85	0.73
	0.376		0.237	1.50	2.05	3.08	0.73
11	0.310	0.323	0.257	1.50	1.90	2.85	0.81
	0.336		0.257	1.50	1.90	2.85	0.84
12	0.270	0.277	0.257	1.50	1.90	2.85	0.76
	0.283		0.257	1.50	1.90	2.85	0.70
13	0.257	0.257	0.230	1.50	1.90	2.85	0.66
	0.257		0.237	1.50	1.90	2.85	0.66
14	0.217	0.237	0.230	1.50	1.90	2.85	0.66
	0.257		0.237	1.50	2.05	3.08	0.73
15	0.217	0.224	0.230	1.50	1.90	2.85	0.73
	0.230		0.237	1.50	2.05	3.08	0.73
16	0.230	0.250	0.277	1.50	1.95	2.93	0.81
	0.270		0.277	1.50	1.80	2.70	0.84
17	0.257	0.303	0.310	1.50	1.90	2.85	0.95
	0.349		0.333	1.50	1.90	2.85	0.95
18	0.283	0.316	0.349	1.50	1.90	2.85	0.95
	0.349		0.333	1.50	1.90	2.85	0.95
19	0.323	0.349	0.333	1.50	1.90	2.85	0.95
	0.376		0.333	1.50	1.90	2.85	0.95
20	0.310	0.316	0.300	1.50	1.53	2.29	0.69
	0.323		0.300	1.50	1.63	1.88	0.27
21	0.283	0.283	0.142	3.00	0.63	1.88	0.27
22	0.000	0.000					
				35.00		57.46	16.85
					M.V. =	0.29	

22

## FLOW MEASUREMENT TABLE

Date: 01-11-92

Station: Belua Bazar SG-5

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 13.50	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	17.50	0.50		0.6	18	100	0.18	0.125
2	19.50	1.30		0.6	38	"	0.38	0.257
3	21.50	1.30		0.6	38	"	0.38	0.257
4	22.50	1.20		0.6	42	"	0.42	0.283
5	23.50	1.00		0.6	46	"	0.46	0.310
6	24.50	1.00		0.6	46	"	0.46	0.310
7	25.50	1.20		0.6	44	"	0.44	0.296
8	26.50	1.00		0.6	40	"	0.40	0.270
9	27.50	1.10		0.6	38	"	0.38	0.257
10	28.50	1.10		0.6	38	"	0.38	0.257
11	29.50	0.70		0.6	36	"	0.36	0.244
12	30.50	0.50		0.6	34	"	0.34	0.230
13	31.50	0.60		0.6	32	"	0.32	0.217
14	32.50	0.70		0.6	30	"	0.30	0.204
15	33.50	0.70		0.6	30	"	0.30	0.204
16	34.50	0.90		0.6	30	"	0.30	0.204
17	35.50	1.10		0.6	28	"	0.28	0.191
18	36.50	0.80		0.6	30	"	0.30	0.204
19	37.50	0.60		0.6	32	"	0.32	0.217
20	38.50	0.70		0.6	26	"	0.26	0.178
21	39.50	0.7		0.6	28	"	0.28	0.191
22	43.50	0.00	(L.E.W.)	-	-	-	-	0.000

729

## FLOW COMPUTATION TABLE

Date: 01-11-92

Station: Belua Bazar SG-5

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.062	4.00	0.25	1.00	0.06
1	0.125	0.125	0.191	2.00	0.80	1.60	0.31
2	0.257	0.257	0.257	2.00	1.30	2.60	0.67
3	0.257	0.257	0.270	1.00	1.25	1.25	0.34
4	0.283	0.283	0.296	1.00	1.10	1.10	0.33
5	0.310	0.310	0.310	1.00	1.00	1.00	0.31
6	0.310	0.310	0.303	1.00	1.10	1.10	0.33
7	0.296	0.296	0.283	1.00	1.10	1.10	0.31
8	0.270	0.270	0.263	1.00	1.05	1.05	0.28
9	0.257	0.257	0.257	1.00	1.10	1.10	0.28
10	0.257	0.257	0.250	1.00	0.90	0.90	0.23
11	0.244	0.244	0.237	1.00	0.60	0.60	0.14
12	0.230	0.230	0.224	1.00	0.55	0.55	0.12
13	0.217	0.217	0.211	1.00	0.65	0.65	0.14
14	0.204	0.204	0.204	1.00	0.70	0.70	0.14
15	0.204	0.204	0.204	1.00	0.80	0.80	0.16
16	0.204	0.204	0.197	1.00	1.00	1.00	0.20
17	0.191	0.191	0.197	1.00	0.95	0.95	0.19
18	0.204	0.204	0.211	1.00	0.70	0.70	0.15
19	0.217	0.217	0.197	1.00	0.65	0.65	0.13
20	0.178	0.178	0.184	1.00	0.70	0.70	0.13
21	0.191	0.191	0.095	4.00	0.35	1.40	0.13
22	0.000	0.000					
			30.00		22.50	5.07	
					M.V. =	0.23	

## FLOW MEASUREMENT TABLE

Date: 15-07-92

Station: Kalihati SG-7

22

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 7.80	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	11.80	1.50		0.6	114	100	1.14	0.756
2	14.80	2.00		0.8	102	"	1.02	0.677
3	17.80	3.00		0.2	118	"	1.18	0.782
4	20.80	3.00		0.8	100	"	1.00	0.664
5	23.80	3.00		0.2	116	"	1.16	0.769
6	26.80	3.00		0.8	110	"	1.10	0.729
7	29.80	3.10		0.2	123	"	1.23	0.815
8	32.80	2.20		0.8	110	"	1.10	0.729
9	35.80	2.10		0.2	126	"	1.26	0.835
10	38.80	2.00		0.8	108	"	1.08	0.716
11	41.80	1.70		0.2	122	"	1.22	0.808
12	44.80	1.70		0.8	116	"	1.16	0.769
13	47.80	1.60		0.2	128	"	1.28	0.848
14	50.80	1.60		0.8	110	"	1.10	0.729
15	52.80	1.60		0.2	128	"	1.28	0.848
16	54.80	1.40		0.8	104	"	1.04	0.690
17	56.80	1.20		0.2	120	"	1.20	0.795
18	58.80	1.00		0.8	102	"	1.02	0.677
19	60.80	1.00		0.2	102	"	1.02	0.677
20	62.80	0.80		0.8	100	"	1.00	0.664
21	67.80	0.00	(L.E.W.)	0.6	86	"	0.86	0.571
				-	-	-	-	0.000

XG

## FLOW COMPUTATION TABLE

Date: 15-07-92

Station: Kalihat SG-7

No of Vert.	Corrected Vel V-O	M.Veloci- ty in Vert. 2	M.Veloci- ty in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.378	4.00	0.75	3.00	1.13
1	0.756	0.756	0.743	3.00	1.75	5.25	3.90
2	0.677	0.729	0.723	3.00	2.50	7.50	5.42
3	0.664	0.716	0.744	3.00	3.00	9.00	6.70
4	0.729	0.772	0.777	3.00	3.00	9.00	6.99
5	0.729	0.782	0.772	3.00	3.00	9.00	6.95
6	0.716	0.762	0.785	3.00	3.05	9.15	7.19
7	0.769	0.808	0.815	3.00	2.65	7.95	6.48
8	0.808	0.822	0.805	3.00	2.15	6.45	5.19
9	0.729	0.789	0.792	3.00	2.05	6.15	4.87
10	0.743	0.795	0.769	3.00	1.85	5.55	4.27
11	0.690	0.743	0.710	3.00	1.70	5.10	3.62
12	0.677	0.677	0.687	3.00	1.65	4.95	3.40
13	0.664	0.696	0.662	3.00	1.60	4.80	3.18
14	0.591	0.627	0.599	2.00	1.60	3.20	1.92
15	0.571	0.571	0.551	2.00	1.50	3.00	1.65
16	0.532	0.532	0.551	2.00	1.30	2.60	1.43
17	0.571	0.571	0.571	2.00	1.10	2.20	1.26
18	0.571	0.571	0.519	2.00	1.00	2.00	1.04
19	0.466	0.466	0.433	2.00	0.90	1.80	0.78
20	0.400	0.400	0.200	5.00	0.40	2.00	0.40
21	0.000	0.000					
				60		109.65	77.77
						M.V. =	0.71

R8

## FLOW MEASUREMENT TABLE

Date: 29-07-92

Station: Charanhat SG-7

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 8.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	11.00	1.00		0.6	88	100	0.88	0.584
2	14.00	1.60		0.8	84	"	0.84	0.558
3	16.00	2.60		0.8	92	"	0.92	0.611
4	18.00	3.00		0.8	100	"	1.00	0.664
5	20.00	3.00		0.8	98	"	0.98	0.650
6	22.00	2.90		0.8	106	"	1.06	0.703
7	24.00	2.90		0.8	104	"	1.04	0.690
8	26.00	2.90		0.8	100	"	1.00	0.664
9	28.00	3.00		0.8	104	"	1.04	0.690
10	30.00	3.00		0.8	96	"	0.96	0.637
11	32.00	2.25		0.8	100	"	1.00	0.664
12	34.00	2.10		0.8	98	"	0.98	0.650
13	36.00	2.10		0.8	96	"	0.96	0.637
14	38.00	2.00		0.8	98	"	0.98	0.650
15	40.00	1.80		0.8	100	"	1.00	0.664
16	42.00	1.80		0.8	92	"	0.92	0.611
17	44.00	1.80		0.8	90	"	0.90	0.598
18	46.00	1.60		0.8	98	"	0.98	0.650
19	49.00	1.60		0.8	92	"	0.92	0.611
20	52.00	1.60		0.8	88	"	0.88	0.584
21	55.00	1.20		0.6	92	"	0.92	0.611
22	58.00	1.10		0.6	70	"	0.70	0.466
23	61.00	0.70		0.6	64	"	0.64	0.426
24	65.50	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

R.D.

Date: 29-07-92

Station: Charanhat SG-7

No of Vert.	Corrected Vel V-O	M.Veloci- ty in Vert. 2	M.Veloci- ty in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.292	3.00	0.50	1.50	0.44
1	0.584	0.584	0.598	3.00	1.30	3.90	2.33
2	0.558	0.611	0.614	2.00	2.10	4.20	2.58
3	0.611	0.617	0.647	2.00	2.80	5.60	3.62
4	0.664	0.677	0.667	2.00	3.00	6.00	4.00
5	0.650	0.657	0.687	2.00	2.95	5.90	4.05
6	0.703	0.716	0.706	2.00	2.90	5.80	4.10
7	0.690	0.696	0.687	2.00	2.90	5.80	3.98
8	0.664	0.677	0.683	2.00	2.95	5.90	4.03
9	0.690	0.690	0.670	2.00	3.00	6.00	4.02
10	0.637	0.650	0.664	2.00	2.63	5.25	3.48
11	0.664	0.677	0.667	2.00	2.18	4.35	2.90
12	0.650	0.657	0.654	2.00	2.10	4.20	2.75
13	0.637	0.650	0.652	2.00	2.05	4.10	2.67
14	0.650	0.654	0.665	2.00	1.90	3.80	2.53
15	0.664	0.677	0.634	2.00	1.80	3.60	2.28
16	0.611	0.591	0.607	2.00	1.80	3.60	2.19
17	0.598	0.624	0.627	2.00	1.70	3.40	2.13
18	0.624	0.631	0.624	3.00	1.60	4.80	3.00
19	0.611	0.617	0.604	3.00	1.60	4.80	2.90
20	0.584	0.591	0.601	3.00	1.40	4.20	2.52
21	0.611	0.611	0.538	3.00	1.15	3.45	1.86
22	0.466	0.466	0.446	3.00	0.90	2.70	1.20
23	0.426	0.426	0.213	4.50	0.35	1.58	0.34
24	0.000	0.000		57.50		104.43	65.90

M.V. = 0.63

## FLOW MEASUREMENT TABLE

Date: 12-08-92

Station: Charanhat SG-7

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 9.70	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	12.70	1.00		0.6	100	100	1.00	0.664
2	14.70	1.30		0.6	106	"	1.06	0.703
3	16.70	2.00		0.5	92	"	0.92	0.611
4	18.70	2.50		0.5	100	"	1.00	0.664
5	20.70	2.90		0.5	104	"	1.04	0.690
6	22.70	2.90		0.5	108	"	1.08	0.716
7	24.70	2.80		0.5	104	"	1.04	0.690
8	26.70	2.50		0.5	112	"	1.12	0.743
9	28.70	2.60		0.5	108	"	1.08	0.716
10	30.70	2.70		0.5	106	"	1.06	0.703
11	32.70	2.50		0.5	102	"	1.02	0.677
12	34.70	2.40		0.5	106	"	1.06	0.703
13	36.70	2.20		0.5	100	"	1.00	0.664
14	39.70	2.10		0.5	104	"	1.04	0.690
15	41.70	1.80		0.5	96	"	0.96	0.637
16	44.70	1.50		0.5	98	"	0.98	0.650
17	47.70	1.40		0.5	84	"	0.84	0.558
18	50.70	1.30		0.5	102	"	1.02	0.677
19	53.70	1.30		0.5	96	"	0.96	0.637
20	56.70	1.00		0.5	98	"	0.98	0.650
21	59.70	0.90		0.5	86	"	0.86	0.571
22	62.70	0.60		0.5	90	"	0.90	0.598
23	65.70	0.30		SGR	78	"	0.78	0.519
24	67.70	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 12-08-92

Station: Charanhat SG-7

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 2	M.Velocity in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.332	3.00	0.50	1.50	0.50
1	0.664	0.664	0.683	2.00	1.15	2.30	1.57
2	0.703	0.703	0.670	2.00	1.65	3.30	2.21
3	0.611	0.637	0.670	2.00	2.25	4.50	3.02
4	0.690	0.703	0.703	2.00	2.70	5.40	3.80
5	0.690	0.703	0.710	2.00	2.90	5.80	4.12
6	0.690	0.716	0.723	2.00	2.85	5.70	4.12
7	0.716	0.729	0.723	2.00	2.65	5.30	3.83
8	0.703	0.716	0.703	2.00	2.55	5.10	3.59
9	0.664	0.690	0.690	2.00	2.65	5.30	3.66
10	0.677	0.690	0.683	2.00	2.60	5.20	3.55
11	0.664	0.677	0.660	2.00	2.45	4.90	3.24
12	0.637	0.644	0.657	2.00	2.30	4.60	3.02
13	0.624	0.670	0.644	3.00	2.15	6.45	4.15
14	0.558	0.617	0.631	2.00	1.95	3.90	2.46
15	0.637	0.644	0.607	3.00	1.65	4.95	3.01
16	0.571	0.571	0.584	3.00	1.45	4.35	2.54
17	0.598	0.598	0.558	3.00	1.35	4.05	2.26
18	0.519	0.519	0.512	3.00	1.30	3.90	2.00
19	0.505	0.505	0.486	3.00	1.15	3.45	1.68
20	0.466	0.466	0.426	3.00	0.95	2.85	1.21
21	0.387	0.387	0.380	3.00	0.75	2.25	0.86
22	0.374	0.374	0.302	3.00	0.45	1.35	0.41
23	0.230	0.230	0.115	2.00	0.15	0.30	0.03
24	0.000	0.000		58.00		96.70	60.81

M.V. = 0.63

## FLOW MEASUREMENT TABLE

Date: 26-08-92

Station: Charanhat SG-7

YRJ

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 11.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	15.00	0.80		0.6	100	100	1.00	0.666
2	17.00	1.20		0.6	106	"	1.06	0.706
3	19.00	1.70		0.8	106	"	1.06	0.706
				0.2	110	"	1.10	0.732
4	21.00	2.30		0.8	116	"	1.16	0.772
				0.2	118	"	1.18	0.785
5	23.00	2.40		0.8	120	"	1.20	0.798
				0.2	122	"	1.22	0.812
6	25.00	2.80		0.8	116	"	1.16	0.772
				0.2	116	"	1.16	0.772
7	27.00	2.10		0.8	112	"	1.12	0.746
				0.2	116	"	1.16	0.772
8	29.00	2.10		0.8	108	"	1.08	0.719
				0.2	110	"	1.10	0.732
9	31.00	2.20		0.8	116	"	1.16	0.772
				0.2	118	"	1.18	0.785
10	33.00	2.10		0.8	110	"	1.10	0.732
				0.2	112	"	1.12	0.746
11	35.00	2.20		0.8	110	"	1.10	0.732
				0.2	112	"	1.12	0.746
12	37.00	2.00		0.8	110	"	1.10	0.732
				0.2	112	"	1.12	0.746
13	39.00	1.80		0.8	110	"	1.10	0.732
				0.2	112	"	1.12	0.746
14	41.00	1.70		0.8	98	"	0.98	0.653
				0.2	106	"	1.06	0.706
15	43.00	1.50		0.8	102	"	1.02	0.680
				0.2	108	"	1.08	0.719
16	45.00	1.30		0.6	110	"	1.10	0.732
17	47.00	1.30		0.6	104	"	1.04	0.693
18	49.00	1.20		0.6	100	"	1.00	0.666
19	52.00	1.20		0.6	106	"	1.06	0.706
20	55.00	1.10		0.6	84	"	0.84	0.561
21	58.00	1.00		0.6	72	"	0.72	0.481
22	61.00	0.80		0.6	70	"	0.70	0.468
23	64.00	0.50		0.6	60	"	0.60	0.402
24	69.00	0.00	(L.E.W.)	-	-	-	-	0.000

820

## FLOW COMPUTATION TABLE

Date: 26-08-92

Station: Charanhat SG-7

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 2	M.Velocity in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.333	4.00	0.40	1.60	0.53
1	0.666	0.666	0.686	2.00	1.00	2.00	1.37
2	0.706	0.706	0.713	2.00	1.45	2.90	2.07
3	0.706	0.719	0.749	2.00	2.00	4.00	3.00
4	0.772	0.779	0.792	2.00	2.35	4.70	3.72
5	0.798	0.805	0.788	2.00	2.60	5.20	4.10
6	0.772	0.772	0.765	2.00	2.45	4.90	3.75
7	0.746	0.759	0.742	2.00	2.10	4.20	3.12
8	0.719	0.726	0.752	2.00	2.15	4.30	3.23
9	0.772	0.779	0.759	2.00	2.15	4.30	3.26
10	0.732	0.739	0.739	2.00	2.15	4.30	3.18
11	0.732	0.739	0.739	2.00	2.10	4.20	3.10
12	0.732	0.739	0.739	2.00	1.90	3.80	2.81
13	0.732	0.739	0.709	2.00	1.75	3.50	2.48
14	0.653	0.680	0.689	2.00	1.60	3.20	2.21
15	0.680	0.699	0.716	2.00	1.40	2.80	2.00
16	0.732	0.732	0.713	2.00	1.30	2.60	1.85
17	0.693	0.693	0.680	2.00	1.25	2.50	1.70
18	0.666	0.666	0.686	3.00	1.20	3.60	2.47
19	0.706	0.706	0.633	3.00	1.15	3.45	2.18
20	0.561	0.561	0.521	3.00	1.05	3.15	1.64
21	0.481	0.481	0.475	3.00	0.90	2.70	1.28
22	0.468	0.468	0.435	3.00	0.65	1.95	0.85
23	0.402	0.402	0.201	5.00	0.25	1.25	0.25
24	0.000	0.000		58.00		81.10	56.16

M.V. = 0.69

## FLOW MEASUREMENT TABLE

Date: 09-09-92

Station: Charanhat SG-7

260

No of Vert.	Dist. from Initial Pt	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.	
1 V-O	2 9.80	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	13.30	0.90	0.6	100	100	1.00	0.666	
2	16.30	1.50	0.8	98	"	0.98	0.653	
3	18.30	2.30	0.8	106	"	1.06	0.706	
4	20.30	2.70	0.8	104	"	1.04	0.693	
5	22.30	2.60	0.8	102	"	1.02	0.680	
6	24.30	2.40	0.8	108	"	1.08	0.719	
7	26.30	2.40	0.8	106	"	1.06	0.706	
8	28.30	2.10	0.8	102	"	1.02	0.680	
9	30.30	2.30	0.8	104	"	1.04	0.693	
10	32.30	2.30	0.8	100	"	1.00	0.666	
11	34.30	2.20	0.8	100	"	1.00	0.666	
12	36.30	1.90	0.8	94	"	0.94	0.627	
13	38.30	1.70	0.8	84	"	0.84	0.561	
14	40.30	1.60	0.8	84	"	0.84	0.561	
15	42.30	1.40	0.6	106	"	1.06	0.706	
16	45.30	1.40	0.6	100	"	1.00	0.666	
17	48.30	1.30	0.6	92	"	0.92	0.613	
18	51.30	1.20	0.6	72	"	0.72	0.481	
19	54.30	1.10	0.6	80	"	0.80	0.534	
20	57.30	0.90	0.6	76	"	0.76	0.508	
21	60.30	0.70	0.6	64	"	0.64	0.429	
22	63.30	0.40	0.6	44	"	0.44	0.296	
23	66.00	0.00	(L.E.W.)	-	-	-	0.000	

262

## FLOW COMPUTATION TABLE

Date: 09-09-92

Station: Charanhat SG-7

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 2	M. Velocity in Pocket 3	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.333	3.50	0.45	1.58	0.52
1	0.666	0.666	0.673	3.00	1.20	3.60	2.42
2	0.653	0.680	0.696	2.00	1.90	3.80	2.65
3	0.706	0.713	0.706	2.00	2.50	5.00	3.53
4	0.693	0.699	0.706	2.00	2.65	5.30	3.74
5	0.680	0.713	0.719	2.00	2.50	5.00	3.60
	0.746		0.719	2.00	2.50	5.00	3.60
6	0.719	0.726	0.719	2.00	2.40	4.80	3.45
	0.732		0.719	2.00	2.40	4.80	3.45
7	0.706	0.713	0.703	2.00	2.25	4.50	3.16
	0.719		0.703	2.00	2.25	4.50	3.16
8	0.680	0.693	0.699	2.00	2.20	4.40	3.08
	0.706		0.699	2.00	2.20	4.40	3.08
9	0.693	0.706	0.699	2.00	2.30	4.60	3.22
10	0.666	0.693	0.693	2.00	2.25	4.50	3.12
	0.719		0.693	2.00	2.25	4.50	3.12
11	0.666	0.693	0.663	2.00	2.05	4.10	2.72
	0.719		0.663	2.00	2.05	4.10	2.72
12	0.627	0.633	0.617	2.00	1.80	3.60	2.22
	0.640		0.617	2.00	1.65	3.30	2.04
13	0.561	0.600	0.617	2.00	1.50	3.00	2.01
	0.640		0.617	2.00	1.50	3.00	2.01
14	0.561	0.633	0.670	2.00	1.50	3.00	2.01
	0.706		0.670	2.00	1.50	3.00	2.01
15	0.706	0.706	0.686	3.00	1.40	4.20	2.88
	0.666		0.686	3.00	1.35	4.05	2.59
16	0.666	0.666	0.640	3.00	1.35	4.05	2.59
	0.613		0.547	3.00	1.25	3.75	2.05
17	0.613	0.613	0.508	3.00	1.15	3.45	1.75
	0.481		0.508	3.00	1.15	3.45	1.75
18	0.481	0.481	0.521	3.00	1.00	3.00	1.56
	0.534		0.521	3.00	1.00	3.00	1.56
19	0.534	0.534	0.468	3.00	0.80	2.40	1.12
	0.508		0.468	3.00	0.80	2.40	1.12
20	0.429	0.429	0.362	3.00	0.55	1.65	0.60
	0.296		0.148	2.70	0.20	0.54	0.08
21	0.000	0.000					
22							
23							

56.20      84.12      54.11

M.V. = 0.64

262

## FLOW MEASUREMENT TABLE

Date: 23-09-92  
 Station: Charanhat SG-7

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 10.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	13.00	0.90		0.6	102	100	1.02	0.680
2	15.00	1.30		0.6	106	"	1.06	0.706
3	17.00	1.70		0.8 0.2	108 110	"	1.08 1.10	0.719 0.732
4	19.00	1.60		0.8 0.2	104 110	"	1.04 1.10	0.693 0.732
5	21.00	2.40		0.8 0.2	108 116	"	1.08 1.16	0.719 0.772
6	23.00	2.80		0.8 0.2	106 110	"	1.06 1.10	0.706 0.732
7	25.00	2.70		0.8 0.2	114 120	"	1.14 1.20	0.759 0.798
8	27.00	2.70		0.8 0.2	114 120	"	1.14 1.20	0.759 0.798
9	29.00	2.50		0.8 0.2	110 118	"	1.10 1.18	0.732 0.785
10	32.00	2.50		0.8 0.2	106 110	"	1.06 1.10	0.706 0.732
11	35.00	2.60		0.8 0.2	100 106	"	1.00 1.06	0.666 0.706
12	38.00	2.20		0.8 0.2	102 108	"	1.02 1.08	0.680 0.719
13	41.00	1.90		0.8 0.2	102 112	"	1.02 1.12	0.680 0.746
14	44.00	1.70		0.8 0.2	90 108	"	0.90 1.08	0.600 0.719
15	47.00	1.45		0.6	96	"	0.96	0.640
16	50.00	1.50		0.6	88	"	0.88	0.587
17	53.00	1.40		0.6	92	"	0.92	0.613
18	56.00	1.40		0.6	82	"	0.82	0.547
19	59.00	1.10		0.6	76	"	0.76	0.508
20	63.00	0.80		0.6	72	"	0.72	0.481
21	67.00	0.50		0.6	52	"	0.52	0.349
22	70.50	0.00	(L.E.W.)	-	-	-	-	0.000

266

## FLOW COMPUTATION TABLE

Date: 23-09-92

Station: Charanhat SG-7

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 3	M.Velocity in Pocket 4	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.340	3.00	0.45	1.35	0.46
1	0.680	0.680	0.680	2.00	1.10	2.20	1.50
2	0.706	0.680	0.703	2.00	1.50	3.00	2.11
3	0.719	0.726	0.719	2.00	1.65	3.30	2.37
4	0.693	0.713	0.729	2.00	2.00	4.00	2.92
5	0.719	0.746	0.732	2.00	2.60	5.20	3.81
6	0.706	0.719	0.749	2.00	2.75	5.50	4.12
7	0.759	0.779	0.779	2.00	2.70	5.40	4.20
8	0.759	0.779	0.769	2.00	2.60	5.20	4.00
9	0.732	0.759	0.739	3.00	2.50	7.50	5.54
10	0.706	0.719	0.703	3.00	2.55	7.65	5.38
11	0.666	0.686	0.693	3.00	2.40	7.20	4.99
12	0.680	0.699	0.706	3.00	2.05	6.15	4.34
13	0.680	0.713	0.686	3.00	1.80	5.40	3.71
14	0.600	0.660	0.650	3.00	1.58	4.73	3.07
15	0.640	0.640	0.613	3.00	1.48	4.43	2.71
16	0.587	0.587	0.600	3.00	1.45	4.35	2.61
17	0.613	0.613	0.580	3.00	1.40	4.20	2.44
18	0.547	0.547	0.528	3.00	1.25	3.75	1.98
19	0.508	0.508	0.495	4.00	0.95	3.80	1.88
20	0.481	0.481	0.415	4.00	0.65	2.60	1.08
21	0.349	0.349	0.175	3.50	0.25	0.88	0.15
22	0.000	0.000					



60.50      97.78      65.36

M.V. = 0.67

268

## FLOW MEASUREMENT TABLE

Date: 07-10-92

Station: Charan Hat SG-7

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 10.00	3 0.00	4 (L.E.W.)	5	6	7	8	9 0.000
1	13.00	0.95		0.6	104	100	1.04	0.690
2	15.00	1.35		0.6	108	"	1.08	0.716
3	17.00	1.75		0.8	110	"	1.10	0.729
				0.2	112	"	1.12	0.743
4	19.00	1.65		0.8	106	"	1.06	0.703
				0.2	112	"	1.12	0.743
5	21.00	2.45		0.8	110	"	1.10	0.729
				0.2	118	"	1.18	0.782
6	23.00	2.85		0.8	108	"	1.08	0.716
				0.2	112	"	1.12	0.743
7	25.00	2.70		0.8	116	"	1.16	0.769
				0.2	122	"	1.22	0.808
8	27.00	2.75		0.8	116	"	1.16	0.769
				0.2	122	"	1.22	0.808
9	29.00	2.55		0.8	112	"	1.12	0.743
				0.2	120	"	1.20	0.795
10	32.00	2.50		0.8	108	"	1.08	0.716
				0.2	112	"	1.12	0.743
11	35.00	2.60		0.8	102	"	1.02	0.677
				0.2	108	"	1.08	0.716
12	38.00	2.25		0.8	104	"	1.04	0.690
				0.2	110	"	1.10	0.729
13	41.00	1.95		0.8	104	"	1.04	0.690
				0.2	114	"	1.14	0.756
14	44.00	1.75		0.8	90	"	0.90	0.598
				0.2	110	"	1.10	0.729
15	47.00	1.52		0.8	98	"	0.98	0.650
				0.2	105	"	1.05	0.696
16	50.00	1.50		0.6	98	"	0.98	0.650
17	53.00	1.45		0.6	92	"	0.92	0.611
18	56.00	1.40		0.6	84	"	0.84	0.558
19	59.00	1.30		0.6	78	"	0.78	0.519
20	63.00	0.85		0.6	74	"	0.74	0.492
21	67.00	0.55		0.6	54	"	0.54	0.360
22	70.50	0.00		-	-	-	-	0.000

20/8

## FLOW COMPUTATION TABLE

Date: 07-10-92

Station: Charan Hat SG-7

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.345	3.00	0.48	1.43	0.49
1	0.690	0.690	0.703	2.00	1.15	2.30	1.62
2	0.716	0.716	0.726	2.00	1.55	3.10	2.25
3	0.729	0.736	0.729	2.00	1.70	3.40	2.48
4	0.703	0.723	0.739	2.00	2.05	4.10	3.03
5	0.729	0.756	0.743	2.00	2.65	5.30	3.94
6	0.716	0.729	0.759	2.00	2.78	5.55	4.21
7	0.769	0.789	0.789	2.00	2.73	5.45	4.30
8	0.769	0.789	0.779	2.00	2.65	5.30	4.13
9	0.743	0.769	0.749	3.00	2.53	7.58	5.67
10	0.716	0.729	0.713	3.00	2.55	7.65	5.45
11	0.677	0.696	0.703	3.00	2.43	7.28	5.11
12	0.690	0.710	0.716	3.00	2.10	6.30	4.51
13	0.690	0.723	0.693	3.00	1.85	5.55	3.85
14	0.598	0.664	0.668	3.00	1.64	4.91	3.28
15	0.650	0.673	0.662	3.00	1.51	4.53	3.00
16	0.650	0.650	0.631	3.00	1.48	4.43	2.79
17	0.611	0.611	0.584	3.00	1.43	4.28	2.50
18	0.558	0.558	0.538	3.00	1.35	4.05	2.18
19	0.519	0.519	0.505	4.00	1.08	4.30	2.17
20	0.492	0.492	0.426	4.00	0.70	2.80	1.19
21	0.360	0.360	0.180	3.50	0.28	0.96	0.17
22	0.005	0.000					

60.50      100.52      68.33

M.V. = 0.68

## FLOW MEASUREMENT TABLE

Date: 21-10-92

Station: Charan Hat SG-7

267

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 11.30	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	15.30	0.50		0.6	12	100	0.12	0.085
2	18.30	1.50		0.8	22	"	0.22	0.151
3	21.30	2.40		0.8	56	"	0.56	0.376
4	23.30	2.40		0.8	50	"	0.50	0.336
				0.2	68	"	0.68	0.455
5	25.30	2.40		0.8	60	"	0.60	0.402
				0.2	70	"	0.70	0.468
6	27.30	2.10		0.8	58	"	0.58	0.389
				0.2	68	"	0.68	0.455
7	29.30	1.00		0.8	56	"	0.56	0.376
				0.2	64	"	0.64	0.429
8	31.30	1.90		0.8	54	"	0.54	0.362
				0.2	58	"	0.58	0.389
9	33.30	1.50		0.8	60	"	0.60	0.402
				0.2	66	"	0.66	0.442
10	35.30	1.70		0.8	54	"	0.54	0.362
				0.2	62	"	0.62	0.415
11	37.30	1.50		0.8	60	"	0.60	0.402
				0.2	60	"	0.60	0.402
12	39.30	1.20		0.6	54	"	0.54	0.362
				0.6	56	"	0.56	0.376
13	41.30	1.20		0.6	56	"	0.56	0.376
14	43.30	0.90		0.6	56	"	0.56	0.376
15	45.30	0.90		0.6	56	"	0.56	0.376
16	47.30	1.00		0.6	42	"	0.42	0.283
17	49.30	0.90		0.6	24	"	0.24	0.164
18	51.30	0.90		0.6	24	"	0.24	0.164
19	53.30	0.80		0.6	34	"	0.34	0.230
20	55.30	0.60		0.6	40	"	0.40	0.270
21	58.30	0.40		0.6	40	"	0.40	0.270
22	61.30	0.25		0.6	18	"	0.18	0.125
23	65.30	0.00	(L.E.W.)	-	-	-	-	0.000

269

## FLOW COMPUTATION TABLE

Date: 21-10-92

Station: Charan Hat SG-7

No of Vert.	Corrected Vel V-Q	M.Velocity in Vert. 2	M.Velocity in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
I	0.000	0.000	0.043	4.00	0.25	1.00	0.04
1	0.085	0.085	0.191	3.00	1.00	3.00	0.57
2	0.151	0.296	0.349	3.00	1.95	5.85	2.04
3	0.442	0.402	0.399	2.00	2.40	4.80	1.91
4	0.376	0.429	0.415	2.00	2.40	4.80	1.99
5	0.429	0.455	0.429	2.00	2.25	4.50	1.93
6	0.336	0.389	0.412	2.00	1.55	3.10	1.28
7	0.366	0.455	0.389	2.00	1.45	2.90	1.13
8	0.389	0.362	0.399	2.00	1.70	3.40	1.36
9	0.402	0.429	0.405	2.00	1.60	3.20	1.30
10	0.362	0.442	0.389	2.00	1.60	3.20	1.27
11	0.402	0.415	0.402	2.00	1.35	2.70	1.03
12	0.362	0.402	0.362	2.00	1.20	2.40	0.89
13	0.376	0.362	0.369	2.00	1.05	2.10	0.79
14	0.376	0.376	0.376	2.00	0.90	1.80	0.68
15	0.376	0.376	0.329	2.00	0.95	1.90	0.63
16	0.283	0.283	0.224	2.00	0.95	1.90	0.43
17	0.164	0.164	0.164	2.00	0.90	1.80	0.30
18	0.164	0.164	0.197	2.00	0.85	1.70	0.34
19	0.230	0.230	0.250	2.00	0.70	1.40	0.35
20	0.270	0.270	0.270	3.00	0.50	1.50	0.41
21	0.270	0.270	0.197	3.00	0.33	0.98	0.19
22	0.125	0.125	0.062	4.00	0.13	0.50	0.03
23	0.000	0.000					
			54.00		60.43	20.86	
					M.V. =	0.35	

267

## FLOW MEASUREMENT TABLE

Date: 04-11-92

Station: Charan Hat SG-7

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 12.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	17.00	0.40		0.6	22	100	0.22	0.151
2	18.00	0.50		0.6	28	"	0.28	0.191
3	19.00	0.70		0.6	34	"	0.34	0.230
4	20.00	1.20		0.6	40	"	0.40	0.270
5	21.00	1.40		0.6	44	"	0.44	0.296
6	22.00	1.40		0.6	46	"	0.46	0.310
7	23.00	1.40		0.6	48	"	0.48	0.323
8	24.00	1.40		0.6	50	"	0.50	0.336
9	25.00	1.30		0.6	44	"	0.44	0.296
10	26.00	1.20		0.6	38	"	0.38	0.257
11	27.00	1.10		0.6	34	"	0.34	0.230
12	28.00	1.10		0.6	32	"	0.32	0.217
13	29.00	1.00		0.6	28	"	0.28	0.191
14	31.00	0.90		0.6	28	"	0.28	0.191
15	33.00	0.90		0.6	28	"	0.28	0.191
16	35.00	0.70		0.6	26	"	0.26	0.178
17	37.00	0.50		0.6	26	"	0.26	0.178
18	39.00	0.40		0.6	24	"	0.24	0.164
19	41.00	0.30		SUR	22	"	0.22	0.151
20	43.00	0.20		SUR	22	"	0.22	0.151
21	45.50	0.00	(L.E.W.)	-	-	-	-	0.000

22

## FLOW COMPUTATION TABLE

Date: 04-11-92

Station: Charan Hat SG-7

No of Vert.	Corrected Vel V-O	M.Veloci- ty in Vert.	M.Veloci- ty in Pocket	Pocket Width	M.Depth in Pocket	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.076	5.00	0.20	1.00	0.08
2	0.151	0.151	0.171	1.00	0.45	0.45	0.08
3	0.191	0.191	0.211	1.00	0.60	0.60	0.13
4	0.230	0.230	0.250	1.00	0.95	0.95	0.24
5	0.270	0.270	0.283	1.00	1.30	1.30	0.37
6	0.296	0.296	0.303	1.00	1.40	1.40	0.42
7	0.310	0.310	0.316	1.00	1.40	1.40	0.44
8	0.323	0.323	0.329	1.00	1.40	1.40	0.46
9	0.336	0.336	0.316	1.00	1.35	1.35	0.43
10	0.296	0.296	0.277	1.00	1.25	1.25	0.35
11	0.257	0.257	0.244	1.00	1.15	1.15	0.28
12	0.230	0.230	0.224	1.00	1.10	1.10	0.25
13	0.217	0.217	0.204	1.00	1.05	1.05	0.21
14	0.191	0.191	0.191	2.00	0.95	1.90	0.36
15	0.191	0.191	0.191	2.00	0.90	1.80	0.34
16	0.178	0.178	0.184	2.00	0.80	1.60	0.29
17	0.178	0.178	0.178	2.00	0.60	1.20	0.21
18	0.164	0.164	0.171	2.00	0.45	0.90	0.15
19	0.130	0.130	0.147	2.00	0.35	0.70	0.10
20	0.130	0.130	0.130	2.00	0.25	0.50	0.07
21	0.000	0.000	0.065	2.50	0.10	0.25	0.02

33.50      23.25      5.28

M.V. = 0.23

280

## FLOW MEASUREMENT TABLE

Date: 17-07-92

Station: Shurus SG-8

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 7.30	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	13.30	0.50		0.6	34	100	0.34	0.229
2	19.30	1.00		0.6	71	"	0.71	0.472
3	25.30	1.50		0.6	94	"	0.00	0.005
4	31.30	1.50		0.6	114	"	0.94	0.624
5	34.30	1.75		0.8	115	"	0.00	0.005
6	37.30	2.00		0.2	120	"	1.14	0.756
7	40.30	2.25		0.8	128	"	0.28	0.475
8	43.30	2.50		0.2	138	"	1.20	0.848
9	46.30	2.50		0.8	129	"	1.38	0.914
10	49.30	2.50		0.2	150	"	1.29	0.855
11	52.30	2.60		0.8	128	"	1.50	0.993
12	55.30	2.80		0.8	125	"	1.28	0.848
13	58.30	3.00		0.2	140	"	1.52	1.006
14	61.30	3.00		0.8	120	"	1.25	0.828
15	64.30	2.75		0.2	100	"	1.40	0.927
16	67.30	2.60		0.8	121	"	1.20	0.795
17	70.30	2.80		0.2	152	"	1.00	0.664
18	73.30	2.25		0.8	120	"	1.21	0.802
19	79.30	2.25		0.2	156	"	1.52	1.006
20	85.30	2.40		0.8	122	"	1.28	0.848
21	91.30	2.40		0.2	160	"	1.22	0.808
22	97.30	2.40		0.8	130	"	1.60	1.059
23	103.3	2.40		0.2	127	"	1.30	0.861
24	109.30	2.40		0.8	130	"	1.30	0.861
				0.2	127	"	1.27	0.841
				0.2	130	"	1.30	0.861
				0.8	114	"	1.14	0.756
				0.2	128	"	1.28	0.848
				0.8	116	"	1.16	0.769
				0.2	120	"	1.20	0.795
				0.8	102	"	1.02	0.677
				0.2	120	"	1.20	0.795
				0.6	98	"	0.98	0.650
				0.6	72	"	0.72	0.479
				0.6	65	"	0.65	0.433
				-	-	-	-	0.000

282

## FLOW MEASUREMENT TABLE

Date: 31-07-92

Station: Shurus SG-8

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 7.00	3 0.00	4 (L.E.W.)	5	6	7	8	9 0.000
1	13.00	0.25			42	100	0.42	0.281
2	19.00	1.00		0.6	86	"	0.86	0.571
3	23.00	1.25		0.6	96	"	0.96	0.637
4	27.00	1.60		0.8	94	"	0.94	0.624
				0.2	116	"	1.16	0.769
5	31.00	1.90		0.8	98	"	0.98	0.650
				0.2	110	"	1.10	0.729
6	35.00	2.00		0.8	108	"	1.08	0.716
				0.2	130	"	1.30	0.861
7	39.00	2.00		0.8	112	"	1.12	0.743
				0.2	136	"	1.36	0.901
8	43.00	2.25		0.8	124	"	1.24	0.822
				0.2	136	"	1.36	0.901
9	47.00	2.25		0.8	134	"	1.34	0.888
				0.2	140	"	1.40	0.927
10	51.00	2.50		0.8	132	"	1.32	0.874
				0.2	152	"	1.52	1.006
11	55.00	2.50		0.8	140	"	1.40	0.927
				0.2	158	"	1.58	1.046
12	59.00	2.25		0.8	134	"	1.34	0.888
				0.2	152	"	1.52	1.006
13	63.00	2.25		0.8	120	"	1.20	0.795
				0.2	132	"	1.32	0.874
14	67.00	2.25		0.8	114	"	1.14	0.756
				0.2	120	"	1.20	0.795
15	71.00	2.10		0.8	115	"	1.15	0.762
				0.2	126	"	1.26	0.835
16	75.00	2.10		0.8	116	"	1.16	0.769
				0.2	126	"	1.26	0.835
17	79.00	2.00		0.8	104	"	1.04	0.690
				0.2	110	"	1.10	0.729
18	83.00	1.60		0.8	108	"	1.08	0.716
				0.2	112	"	1.12	0.743
19	87.00	1.50		0.6	96	"	0.96	0.637
20	91.00	1.25		0.6	92	"	0.92	0.611
21	95.00	1.10		0.6	76	"	0.76	0.505
22	99.00	0.90		0.6	54	"	0.54	0.360

282

## FLOW COMPUTATION TABLE

Date: 17-07-92

Station: Shurus SG-8

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 2	M.Velocity in Pocket 3	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000		0.121	6.00	0.13	0.75
1	0.242	0.242		0.407	6.00	0.63	3.75
2	0.571	0.571		0.604	4.00	1.13	4.50
3	0.637	0.637		0.667	4.00	1.43	5.70
4	0.624	0.697		0.693	4.00	1.75	7.00
	0.769			0.739	4.00	1.95	7.80
5	0.650	0.690					5.77
	0.729						
6	0.716	0.789		0.805	4.00	2.00	8.00
	0.861						6.44
7	0.743	0.822		0.841	4.00	2.13	8.50
	0.901						7.15
8	0.822	0.861		0.884	4.00	2.25	9.00
	0.901						7.96
9	0.888	0.907		0.924	4.00	2.38	9.50
	0.927						8.78
10	0.874	0.940		0.963	4.00	2.50	10.00
	1.006						9.63
11	0.927	0.986		0.967	4.00	2.38	9.50
	1.046						9.18
12	0.888	0.947		0.891	4.00	2.25	9.00
	1.006						8.02
13	0.795	0.835		0.805	4.00	2.25	9.00
	0.874						7.25
14	0.756	0.776		0.787	4.00	2.18	8.70
	0.795						6.85
15	0.762	0.799		0.800	4.00	2.10	8.40
	0.835						6.72
16	0.769	0.802		0.756	4.00	2.05	8.20
	0.835						6.20
17	0.690	0.710		0.720	4.00	1.80	7.20
	0.729						5.18
18	0.716	0.729		0.683	4.00	1.55	6.20
	0.743						4.24
19	0.637	0.637		0.624	4.00	1.38	5.50
							3.43
20	0.611	0.611		0.558	4.00	1.18	4.70
							2.62
21	0.505	0.505		0.433	4.00	1.00	4.00
							1.73
22	0.360	0.360		0.180	6.50	0.45	2.93
							0.53
23	0.000	0.000			98.50		157.83
							120.66

M.V. = 0.76

## FLOW MEASUREMENT TABLE

Date: 14-08-92

Station: Shurus SG-8



No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 10.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	14.00	0.20			22	100	0.22	0.149
2	18.00	0.60		0.6	48	"	0.48	0.321
3	22.00	0.90		0.6	58	"	0.58	0.387
4	26.00	1.00		0.6	68	"	0.68	0.453
5	30.00	1.30		0.6	76	"	0.76	0.505
6	34.00	1.50		0.6	84	"	0.84	0.558
7	38.00	1.90		0.8	104	"	1.04	0.690
				0.2	80	"	0.80	0.532
8	42.00	2.00		0.8	92	"	0.92	0.611
				0.2	96	"	0.96	0.637
9	46.00	2.00		0.8	102	"	1.02	0.677
				0.2	106	"	1.06	0.703
10	50.00	2.50		0.8	103	"	1.03	0.683
				0.2	110	"	1.10	0.729
11	54.00	2.20		0.8	0	"	0.00	0.005
				0.2	120	"	1.20	0.795
12	58.00	2.30		0.8	0	"	0.00	0.005
				0.2	104	"	1.04	0.690
13	62.00	2.30		0.8	0	"	0.00	0.005
				0.2	124	"	1.24	0.822
14	66.00	2.10		0.8	0	"	0.00	0.005
				0.2	120	"	1.20	0.795
15	70.00	2.30		0.8	110	"	1.10	0.729
				0.2	130	"	1.30	0.861
16	74.00	2.20		0.8	112	"	1.12	0.743
				0.2	134	"	1.34	0.888
17	78.00	2.10		0.8	130	"	1.30	0.861
				0.2	140	"	1.40	0.927
18	82.00	2.00		0.8	130	"	1.30	0.861
				0.2	144	"	1.44	0.953
19	86.00	1.80		0.8	110	"	1.10	0.729
				0.2	112	"	1.12	0.743
20	90.00	1.40		0.6	110	"	1.10	0.729
21	96.00	1.00		0.6	108	"	1.08	0.716
22	102.00	0.5		0.6	0	"	0.00	0.000
23	103.50	0.00	(L.E.W.)	-	-	-	-	0.000

288

## FLOW COMPUTATION TABLE

Date: 14-08-92

Station: Shurus SG-8

No of Vert.	Corrected Vel V-O	M.Velocity in Vert. 3	M.Velocity in Pocket 4	Pocket Width 5	M.Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.064	4.00	0.10	0.40	0.03
1	0.128	0.128	0.225	4.00	0.40	1.60	0.36
2	0.321	0.321	0.354	4.00	0.75	3.00	1.06
3	0.387	0.387	0.420	4.00	0.95	3.80	1.60
4	0.453	0.453	0.479	4.00	1.15	4.60	2.20
5	0.505	0.505	0.532	4.00	1.40	5.60	2.98
6	0.558	0.558	0.584	4.00	1.70	6.80	3.97
7	0.690	0.611	0.617	4.00	1.95	7.80	4.82
	0.532		0.657	4.00	2.00	8.00	5.26
8	0.611	0.624					
	0.637		0.698	4.00	2.25	9.00	6.28
9	0.677	0.690					
	0.703		0.553	4.00	2.35	9.40	5.20
10	0.683	0.706					
	0.729		0.374	4.00	2.25	9.00	3.36
11	0.005	0.400					
	0.795		0.380	4.00	2.30	9.20	3.50
12	0.005	0.347					
	0.690		0.406	4.00	2.20	8.80	3.58
13	0.005	0.413					
	0.822		0.598	4.00	2.20	8.80	5.26
14	0.005	0.400					
	0.795		0.805	4.00	2.25	9.00	7.25
15	0.729	0.795					
	0.861		0.888	4.00	2.15	8.60	7.35
16	0.743	0.815					
	0.927		0.855	4.00	2.05	8.20	7.39
17	0.861	0.894					
	0.861		0.901	4.00	1.90	7.60	6.24
18	0.953		0.736				
	0.743		0.822	4.00	1.60	6.40	4.69
19	0.729	0.729					
	0.729		0.733	4.00	1.20	7.20	5.20
20	0.716	0.716					
	0.953		0.723	6.00	0.75	4.50	1.61
21	0.000	0.000					
	0.000		0.000	1.50	0.25	0.38	0.00
22	0.000	0.000					
	0.000			93.50		147.68	89.18
						M.V. =	0.60

## FLOW MEASUREMENT TABLE

Date: 28-08-92

Station: Shurus SG-8

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 8.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	14.00	0.60		0.6	40	100	0.40	0.270
2	20.00	0.80		0.6	72	"	0.72	0.481
3	26.00	0.90		0.6	96	"	0.96	0.640
4	32.00	1.20		0.6	94	"	0.94	0.627
5	36.00	1.90		0.8	96	"	0.96	0.640
				0.2	136	"	1.36	0.904
6	40.00	2.00		0.8	102	"	1.02	0.680
				0.2	136	"	1.36	0.904
7	44.00	2.10		0.8	126	"	1.26	0.838
				0.2	140	"	1.40	0.930
8	48.00	2.25		0.8	150	"	1.50	0.997
				0.2	162	"	1.62	1.076
9	52.00	2.50		0.8	110	"	1.10	0.732
				0.2	144	"	1.44	0.957
10	56.00	2.10		0.8	132	"	1.32	0.878
				0.2	154	"	1.54	1.023
11	60.00	2.10		0.8	140	"	1.40	0.930
				0.2	162	"	1.62	1.076
12	64.00	2.40		0.8	140	"	1.40	0.930
				0.2	156	"	1.56	1.036
13	68.00	2.40		0.8	142	"	1.42	0.944
				0.2	178	"	1.78	1.181
14	72.00	2.40		0.8	130	"	1.30	0.864
				0.2	154	"	1.54	1.023
15	76.00	2.40		0.8	120	"	1.20	0.798
				0.2	160	"	1.60	1.063
16	80.00	2.10		0.8	110	"	1.10	0.732
				0.2	144	"	1.44	0.957
17	84.00	2.40		0.8	100	"	1.00	0.666
				0.2	140	"	1.40	0.930
18	88.00	2.00		0.8	90	"	0.90	0.600
				0.2	116	"	1.16	0.772
19	92.00	1.90		0.8	94	"	0.94	0.627
				0.2	118	"	1.18	0.785
20	96.00	1.60		0.8	84	"	0.84	0.561
				0.2	122	"	1.22	0.812
21	100.00	1.40		0.6	88	"	0.88	0.587
22	104.00	0.90		0.6	66	"	0.66	0.442
23	108.00	0.30			26	"	0.26	0.178
24	112.00	0.00	(R.E.W.)		-	-	-	0.000

28/

## FLOW COMPUTATION TABLE

Date: 28-08-92

Station: Shurus SG-8

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.135	6.00	0.30	1.80	0.24
1	0.270	0.270	0.376	6.00	0.70	4.20	1.58
2	0.481	0.481	0.561	6.00	0.85	5.10	2.86
3	0.640	0.640	0.633	6.00	1.05	6.30	3.99
4	0.627	0.627	0.699	4.00	1.55	6.20	4.34
5	0.640	0.772	0.782	4.00	1.95	7.80	6.10
	0.904						
6	0.680	0.792	0.838	4.00	2.05	8.20	6.87
	0.904						
7	0.838	0.884	0.960	4.00	2.18	8.70	8.35
	0.930						
8	0.997	1.036	0.940	4.00	2.38	9.50	8.93
	1.076						
9	0.732	0.845	0.897	4.00	2.30	9.20	8.26
	0.957						
10	0.878	0.950	0.977	4.00	2.10	8.40	8.20
	1.023						
11	0.930	1.003	0.993	4.00	2.25	9.00	8.94
	1.076						
12	0.930	0.983	1.023	4.00	2.40	9.60	9.82
	1.036						
13	0.944	1.063	1.003	4.00	2.40	9.60	9.63
	1.181						
14	0.864	0.944	0.937	4.00	2.40	9.60	9.00
	1.023						
15	0.798	0.931	0.888	4.00	2.25	9.00	7.99
	1.063						
16	0.732	0.845	0.822	4.00	2.25	9.00	7.39
	0.957						
17	0.666	0.798	0.742	4.00	2.20	8.80	6.53
	0.930						
18	0.600	0.686	0.696	4.00	1.95	7.80	5.43
	0.772						
19	0.627	0.706	0.696	4.00	1.75	7.00	4.87
	0.785						
20	0.561	0.686	0.637	4.00	1.50	6.00	3.82
	0.812						
21	0.587	0.587	0.514	4.00	1.15	4.60	2.37
	0.442						
22	0.442	0.442	0.198	4.00	0.60	2.40	0.48
	0.153						
23	0.153	0.153	0.077	4.00	0.15	0.60	0.05
	0.000						
24	0.000	0.000		104.00		168.40	136.03
						M.V. =	0.81

## FLOW MEASUREMENT TABLE

Date: 11-09-92

Station: Shurus SG-8

289

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 15.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	20.00	0.70		0.6	54	100	0.54	0.362
2	24.00	0.90		0.6	72	"	0.72	0.481
3	28.00	1.20		0.6	80	"	0.80	0.534
4	32.00	1.40		0.6	86	"	0.86	0.574
5	36.00	1.60		0.8	92	"	0.92	0.613
				0.2	98	"	0.98	0.653
6	40.00	1.80		0.8	104	"	1.04	0.693
				0.2	110	"	1.10	0.732
7	44.00	1.90		0.8	102	"	1.02	0.680
				0.2	112	"	1.12	0.746
8	48.00	1.90		0.8	110	"	1.10	0.732
				0.2	120	"	1.20	0.798
9	52.00	2.00		0.8	108	"	1.08	0.719
				0.2	120	"	1.20	0.798
10	56.00	2.10		0.8	120	"	1.20	0.798
				0.2	146	"	1.46	0.970
11	60.00	2.20		0.8	122	"	1.22	0.812
				0.2	134	"	1.34	0.891
12	64.00	2.10		0.8	134	"	1.34	0.891
				0.2	144	"	1.44	0.957
13	68.00	2.10		0.8	130	"	1.30	0.864
				0.2	140	"	1.40	0.930
14	72.00	2.10		0.8	116	"	1.16	0.772
				0.2	130	"	1.30	0.864
15	76.00	2.00		0.8	128	"	1.28	0.851
				0.2	120	"	1.20	0.798
16	80.00	1.90		0.8	104	"	1.04	0.693
				0.2	116	"	1.16	0.772
17	84.00	1.70		0.8	92	"	0.92	0.613
				0.2	102	"	1.02	0.680
18	88.00	1.50		0.8	94	"	0.94	0.627
				0.2	114	"	1.14	0.759
19	92.00	1.30		0.6	98	"	0.98	0.653
20	96.00	1.10		0.6	84	"	0.84	0.561
21	100.00	0.80		0.6	60	"	0.60	0.402
22	107.00	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 11-09-92

Station: Shurus SG-8

26 A

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.181	5.00	0.35	1.75	0.32
1	0.362	0.362	0.422	4.00	0.80	3.20	1.35
2	0.481	0.481	0.508	4.00	1.05	4.20	2.13
3	0.534	0.534	0.554	4.00	1.30	5.20	2.88
4	0.574	0.574	0.604	4.00	1.50	6.00	3.62
5	0.613	0.633	0.673	4.00	1.70	6.80	4.58
6	0.693	0.713	0.713	4.00	1.85	7.40	5.27
7	0.680	0.713	0.739	4.00	1.90	7.60	5.62
8	0.746	0.765	0.762	4.00	1.95	7.80	5.94
9	0.719	0.759	0.822	4.00	2.05	8.20	6.74
10	0.798	0.884	0.868	4.00	2.15	8.60	7.46
11	0.812	0.851	0.888	4.00	2.15	8.60	7.63
12	0.891	0.924	0.911	4.00	2.10	8.40	7.65
13	0.864	0.897	0.858	4.00	2.10	8.40	7.21
14	0.772	0.818	0.822	4.00	2.05	8.20	6.74
15	0.851	0.825	0.779	4.00	1.95	7.80	6.07
16	0.693	0.732	0.689	4.00	1.80	7.20	4.96
17	0.613	0.646	0.670	4.00	1.60	6.40	4.29
18	0.627	0.693	0.673	4.00	1.40	5.60	3.77
19	0.653	0.653	0.607	4.00	1.20	4.80	2.91
20	0.561	0.561	0.481	4.00	0.95	3.80	1.83
21	0.402	0.402	0.201	7.00	0.40	2.80	0.56
22	0.000	0.000		92.00		138.75	99.53
					M.V. =		0.72

## FLOW MEASUREMENT TABLE

Date: 25-09-92

Station: Shurus SG-8

280

No of Vert.	Dist. from Initial Pt	Depth 3	Corrected Depth 4	Point of Obs. 5	Number of Rev. 6	Times of Rev. 7	Rate of Rev. 8	Velocity M/Sec. 9
1 V-O	2 9.00	3 0.00	4 (R.E.W.)	5	6	7	8	9 0.000
1	15.00	0.20			30	100	0.30	0.202
2	19.00	0.70		0.6	62	"	0.62	0.413
3	23.00	1.20		0.6	80	"	0.80	0.532
4	27.00	1.50		0.6	57	"	0.57	0.380
5	31.00	1.70		0.8	90	"	0.90	0.598
				0.2	94	"	0.94	0.624
6	35.00	1.90		0.8	86	"	0.86	0.571
				0.2	112	"	1.12	0.743
7	39.00	2.00		0.8	88	"	0.88	0.584
				0.2	116	"	1.16	0.769
8	43.00	2.20		0.8	100	"	1.00	0.664
				0.2	106	"	1.06	0.703
9	47.00	2.20		0.8	78	"	0.78	0.519
				0.2	104	"	1.04	0.690
10	51.00	2.30		0.8	60	"	0.60	0.400
				0.2	104	"	1.04	0.690
11	55.00	2.30		0.8	84	"	0.84	0.558
				0.2	120	"	1.20	0.795
12	59.00	1.90		0.8	104	"	1.04	0.690
				0.2	138	"	1.38	0.914
13	63.00	2.00		0.8	118	"	1.18	0.782
				0.2	140	"	1.40	0.927
14	67.00	2.00		0.8	110	"	1.10	0.729
				0.2	132	"	1.32	0.874
15	71.00	2.20		0.8	104	"	1.04	0.690
				0.2	116	"	1.16	0.769
16	75.00	1.90		0.8	110	"	1.10	0.729
				0.2	116	"	1.16	0.769
17	79.00	2.00		0.8	102	"	1.02	0.677
				0.2	126	"	1.26	0.835
18	83.00	2.00		0.8	102	"	1.02	0.677
				0.2	120	"	1.20	0.795
19	87.00	1.90		0.8	102	"	1.02	0.677
				0.2	112	"	1.12	0.743
20	91.00	1.70		0.8	84	"	0.84	0.558
				0.2	110	"	1.10	0.729
21	95.00	1.40		0.6	94	"	0.94	0.624
22	99.00	0.80		0.6	66.0	"	0.66	0.439
22	105.00	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 25-09-92

Station: Shurus SG-8

270

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.101	6.00	0.10	0.60	0.06
1	0.202	0.202	0.308	4.00	0.45	1.80	0.55
2	0.413	0.413	0.472	4.00	0.95	3.80	1.80
3	0.532	0.532	0.456	4.00	1.35	5.40	2.46
4	0.380	0.380	0.495	4.00	1.60	6.40	3.17
5	0.598	0.611	0.634	4.00	1.80	7.20	4.56
6	0.624	0.657	0.667	4.00	1.95	7.80	5.20
7	0.571	0.677	0.680	4.00	2.10	8.40	5.71
8	0.743	0.683	0.644	4.00	2.20	8.80	5.66
9	0.519	0.604	0.575	4.00	2.25	9.00	5.17
10	0.400	0.545	0.611	4.00	2.30	9.20	5.62
11	0.690	0.677	0.739	4.00	2.10	8.40	6.21
12	0.558	0.802	0.828	4.00	1.95	7.80	6.46
13	0.914	0.855	0.828	4.00	2.00	8.00	6.63
14	0.782	0.802	0.766	4.00	2.10	8.40	6.43
15	0.927	0.729	0.739	4.00	2.05	8.20	6.06
16	0.690	0.729	0.752	4.00	1.95	7.80	5.87
17	0.769	0.749	0.746	4.00	2.00	8.00	5.97
18	0.677	0.756	0.723	4.00	1.95	7.80	5.64
19	0.677	0.736	0.677	4.00	1.80	7.20	4.87
20	0.677	0.710	0.644	4.00	1.55	6.20	3.93
21	0.743	0.644	0.634	4.00	1.10	4.40	2.34
22	0.624	0.624	0.532	4.00	0.40	2.40	0.53
23	0.000	0.000	0.220	6.00	96.00	153.00	100.91

M.V. = 0.66



## FLOW MEASUREMENT TABLE

Date: 09-10-92

Station: Shuroj SG-8

202

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 18.00	3 0.00	4 (R.E.W.)	5 -	6 -	7 -	8 -	9 0.000
1	24.00	0.70		0.6	50	100	0.50	0.336
2	30.00	1.00		0.6	68	"	0.68	0.455
3	36.00	1.10		0.6	70	"	0.70	0.468
4	42.00	1.10		0.6	70	"	0.70	0.468
5	48.00	1.50		0.6	76	"	0.76	0.508
6	52.00	1.50		0.6	78	"	0.78	0.521
7	56.00	1.50		0.6	78	"	0.78	0.521
8	60.00	1.60		0.8	74	"	0.74	0.495
				0.2	84	"	0.84	0.561
9	64.00	1.60		0.8	88	"	0.88	0.587
				0.2	90	"	0.90	0.600
10	68.00	1.70		0.8	86	"	0.86	0.574
				0.2	100	"	1.00	0.666
11	72.00	1.70		0.8	82	"	0.82	0.547
				0.2	92	"	0.92	0.613
12	76.00	1.80		0.8	88	"	0.88	0.587
				0.2	94	"	0.94	0.627
13	80.00	1.40		0.6	80	"	0.80	0.534
14	84.00	1.40		0.6	76	"	0.76	0.508
15	88.00	1.35		0.6	70	"	0.70	0.468
16	92.00	1.30		0.6	68	"	0.68	0.455
17	96.00	1.00		0.6	68	"	0.68	0.455
18	100.00	0.70		0.6	58	"	0.58	0.389
19	104.00	0.50		0.6	42	"	0.42	0.283
20	108.00	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 09-10-92

Station: Shuroj SG-8

202

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.168	6.00	0.35	2.10	0.35
1	0.336	0.336	0.395	6.00	0.85	5.10	2.02
2	0.455	0.455	0.462	6.00	1.05	6.30	2.91
3	0.468	0.468	0.468	6.00	1.10	6.60	3.09
4	0.468	0.468	0.488	6.00	1.30	7.80	3.81
5	0.508	0.508	0.514	4.00	1.50	6.00	3.09
6	0.521	0.521	0.521	4.00	1.50	6.00	3.13
7	0.521	0.521	0.524	4.00	1.55	6.20	3.25
8	0.495	0.528	0.561	4.00	1.60	6.40	3.59
9	0.587	0.594	0.607	4.00	1.65	6.60	4.01
10	0.574	0.620	0.600	4.00	1.70	6.80	4.08
11	0.547	0.580	0.594	4.00	1.75	7.00	4.16
12	0.587	0.607	0.571	4.00	1.60	6.40	3.65
13	0.534	0.534	0.521	4.00	1.40	5.60	2.92
14	0.508	0.508	0.488	4.00	1.38	5.50	2.68
15	0.468	0.468	0.462	4.00	1.33	5.30	2.45
16	0.455	0.455	0.455	4.00	1.15	4.60	2.09
17	0.455	0.455	0.422	4.00	0.85	3.40	1.43
18	0.389	0.389	0.336	4.00	0.60	2.40	0.81
19	0.283	0.283	0.142	4.00	0.25	1.00	0.14
20	0.000	0.000					
				90.00		107.10	53.64

M.V. = 0.50

20

## FLOW MEASUREMENT TABLE

Date: 23-10-92  
 Station: Shuroj SG-8

No of Vert.	Dist. from Initial Pt	Depth	Corrected Depth	Point of Obs.	Number of Rev.	Times of Rev.	Rate of Rev.	Velocity M/Sec.
1 V-O	2 19.10	3 0.00	4 (R.E.W.)	5 -	6 -	7 -	8 -	9 0.000
1	25.10	0.50		0.6	18	100	0.18	0.125
2	29.10	0.60		0.6	52	"	0.52	0.349
3	33.10	0.85		0.6	58	"	0.58	0.389
4	37.10	1.00		0.6	60	"	0.60	0.402
5	41.10	1.00		0.6	64	"	0.64	0.429
6	45.10	1.10		0.6	62	"	0.62	0.415
7	49.10	1.20		0.6	72	"	0.72	0.481
8	53.10	1.70		0.8	70	"	0.70	0.468
				0.2	78	"	0.78	0.521
9	57.10	1.70		0.8	78	"	0.78	0.521
				0.2	86	"	0.86	0.574
10	61.10	1.40		0.6	94	"	0.94	0.627
11	65.10	1.40		0.6	88	"	0.88	0.587
12	69.10	1.45		0.6	90	"	0.90	0.600
13	73.10	1.45		0.6	92	"	0.92	0.613
14	77.10	1.40		0.6	76	"	0.76	0.508
15	81.10	1.40		0.6	68	"	0.68	0.455
16	83.10	1.45		0.6	70	"	0.70	0.468
17	85.10	1.30		0.6	72	"	0.72	0.481
18	87.10	1.30		0.6	68	"	0.68	0.455
19	91.10	1.20		0.6	70	"	0.70	0.468
20	95.10	0.70		0.6	68	"	0.68	0.455
21	99.10	0.60		0.6	52	"	0.52	0.349
22	103.10	0.30		0.6	36	"	0.36	0.244
23	108.10	0.00	(L.E.W.)	-	-	-	-	0.000

## FLOW COMPUTATION TABLE

Date: 23-10-92

Station: Shuroj SG-8

276

No of Vert.	Corrected Vel V-O	M. Velocity in Vert. 3	M. Velocity in Pocket 4	Pocket Width 5	M. Depth in Pocket 6	Pocket Area A 7 (m <sup>2</sup> )	Pocket Dis- charge Q 8 (m <sup>3</sup> )
1	0.000	0.000	0.062	6.00	0.25	1.50	0.09
1	0.125	0.125	0.237	4.00	0.55	2.20	0.52
2	0.349	0.349	0.369	4.00	0.73	2.90	1.07
3	0.389	0.389	0.395	4.00	0.93	3.70	1.46
4	0.402	0.402	0.415	4.00	1.00	4.00	1.66
5	0.429	0.429	0.422	4.00	1.05	4.20	1.77
6	0.415	0.415	0.448	4.00	1.15	4.60	2.06
7	0.481	0.481	0.488	4.00	1.45	5.80	2.83
8	0.468	0.495	0.521	4.00	1.70	6.80	3.54
9	0.521	0.547	0.587	4.00	1.55	6.20	3.64
10	0.627	0.627	0.607	4.00	1.40	5.60	3.40
11	0.587	0.587	0.594	4.00	1.43	5.70	3.38
12	0.600	0.600	0.607	4.00	1.45	5.80	3.52
13	0.613	0.613	0.561	4.00	1.43	5.70	3.20
14	0.508	0.508	0.481	4.00	1.40	5.60	2.70
15	0.455	0.455	0.462	2.00	1.43	2.85	1.32
16	0.468	0.468	0.475	2.00	1.38	2.75	1.31
17	0.481	0.481	0.468	2.00	1.30	2.60	1.22
18	0.455	0.455	0.462	4.00	1.25	5.00	2.31
19	0.468	0.468	0.462	4.00	0.56	2.24	1.03
20	0.455	0.455	0.402	4.00	0.65	2.60	1.05
21	0.349	0.349	0.280	4.00	0.45	1.80	0.50
22	0.210	0.210	0.105	5.00	0.15	0.75	0.08
23	0.000	0.000					

89.00 90.89 43.66

0.48

