社会開発調査部報告書

THE PEOPLE'S REPUBLIC OF BANGLADESH
FLOOD PLAN COORDINATION ORGANIZATION

FEASIBILITY STUDY
ON
GREATER DHAKA PROTECTION PROJECT
(STUDY IN DHAKA METROPOLITAN AREA)
OF
BANGLADESH FLOOD ACTION PLAN No.8A

FAP 8A

DATA BOOK I
[illegible]

JUNE 199[illegible]

JAPAN INTERNATIONAL COOPERATION AGENCY

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DATA BOOK I
SUPPORTING REPORTS C,D,E,F,H AND I

JUNE 1992

JAPAN INTERNATIONAL COOPERATION AGENCY

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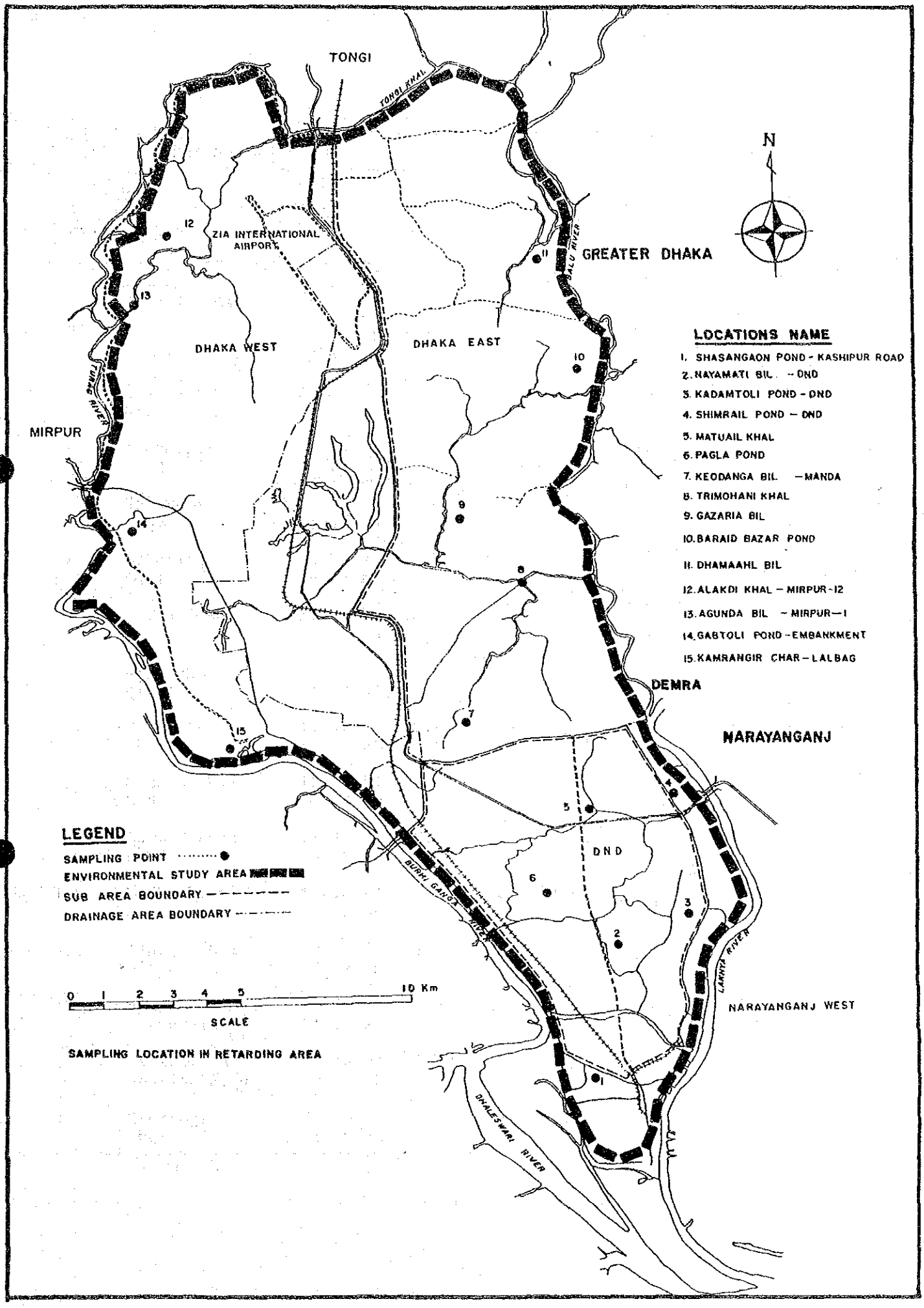
Data CD 1 : Water Quality


TONGI
TONGI KHAL
ZIA INTERNATIONAL AIRPORT
GREATER DHAKA
N
DHAKA WEST
DHAKA EAST
MIRPUR
TURAG RIVER
DEMRA
NARAYANGANJ
NARAYANGANJ WEST
DND
BURHI GANGA RIVER
DHALESWARI RIVER
LAKHYA RIVER
LOCATIONS NAME
1. SHASANGAON POND - KASHIPUR ROAD
2. NAYAMATI BIL - DND
3. KADAMTOLI POND - DND
4. SHIMRAIL POND - DND
5. MATUAIL KHAL
6. PAGLA POND
7. KEODANGA BIL - MANDA
8. TRIMOHANI KHAL
9. GAZARIA BIL
10. BARAID BAZAR POND
11. DHAMAAHL BIL
12. ALAKDI KHAL - MIRPUR-12
13. AGUNDA BIL - MIRPUR-1
14. GABTOLI POND - EMBANKMENT
15. KAMRANGIR CHAR - LALBAG
LEGEND
SAMPLING POINT
ENVIRONMENTAL STUDY AREA
SUB AREA BOUNDARY
DRAINAGE AREA BOUNDARY
0 1 2 3 4 5 10 Km
SCALE
SAMPLING LOCATION IN RETARDING AREA

CD- 1

Table 1 : Result of on-site test of surface water samples collected from different locations at flood season (October, 1991)

Sampling No.	Location	Date Time	Temp cels	Color Pt-Co Colour Unit	Odour	Turbidity NTU/ FTU	pH	EC µ mho /cm	TDS mg/1
1.	Shasongaon Narayanganj	20-10-91 9-20 AM	28.4	122	Not Bad	<25 28	7.7	290.4	148
	"	2-11-91 9-30 AM	28.1	50	" "	30 15	7.7	397.0	156
2.	Nayamati Bil	22-10-91 9-55 AM	29.2	40	"	<25 10	7.0	260.1	134
3.	Kadamtoli Pond	22-10-91 9-25 AM	28-8	185	"	<25 8	7.0	220.0	112.2
4.	Shimrail Pond	22-10-91 8-55 AM	25.9	4	"	<25 8	7.2	190.2	97.2
5.	Matuail Khal	22-10-91 8-25 AM	27.7	170	"	37 40	7.0	120.1	63.7
6.	Pagla Pond	20-10-91 9-45 AM	28.6	80	"	42 26	7.0	380.4	193
7.	Keodanga Bil Manda	12-10-91 11-45 AM	31.4	52	"	<25 16	7.0	167.4	83.8
8.	Trimohani Khal	12-10-91 11-45 AM	30.4	34	"	<25 11	7.6	112.9	56.8
9.	Gazaria Bil Mad	12-10-91 8-43 AM	30.0	58	"	<25 11	7.0	70.5	30
10.	Baraid Bazar Pond	12-10-91 9-39 AM	30.7	41	"	<25 8	7.0	51.3	25.6
11.	Dhamaahl Bil	12-10-91 9-02 AM	31-3	64	"	<25 7	7.3	49.4	24.7
12.	Alakdi Khal Mirpur-12	22-10-91 12-22 PM	29.4	57	"	<25 7	7.1	165.8	82.9
13.	Agunda Bil Mirpur-1	14-10-91 11-10 AM	28.2	209	"	<25 65	7.0	93.7	46.8
14.	Gabtoli Bus Station Pond	14-10-91 10-15 AM	27.9	77	"	60 30	6.9	218.0	109.3
15.	Kamrangir Char	20-10-91 11-30 AM	31.6	191	"	130 44	7.0	90.5	47.7

Table 2 : Results of Laboratory analysis of surface water samples collected from different locations at flood season (October, 1991)

Sampling No.	Location	S.S mg/1	BOD mg/1	COD mg/1	Or-N mg/1	NH-N mg/1	FC No/100 ml	DO mg/1
1.	Shasongoan Pond	46	5.0	16	1.39	1.28	$2.0x10^3$	0.4
	"	52	37.0	84	1.31	1.20	$1.4x10^4$	0.6
2.	Nayamati Bil	34	0.75	16	0.72	1.01	$7.1x10^3$	4.9
3.	Kadamtoli Pond	28	2.85	20	1.05	1.12	$3.5x10^2$	5.8
4.	Shimrail Pond	26	4.0	8	1.42	1.30	$1.0x10^4$	2.9
5.	Matuail Khal	32	5.65	12	0.67	1.38	$9.0x10^4$	3.1
6.	Pagla Pond	42	8.5	20	1.14	1.13	$1.3x10^3$	2.3
7.	Keodanga Bil	26	4.2	24	1.84	0.23	$9.0x10^3$	7.4
8.	Trimohani Khal	23	4.0	14	0.84	1.03	$4.4x10^3$	7.9
9.	Gazaria Bil mad	18	3.9	16	0.97	0.18	$<1.0x10^2$	4.3
10.	Baraid Bazar Pond	20	2.0	20	1.72	0.88	$2.0x10^4$	7.5
11.	Dhamaahl Bil	15	2.0	12	1.19	0.08	$8.0x10^3$	7.1
12.	Alakdi Khal	32	0.65	16	1.55	0.53	$2.5x10^3$	5.1
13.	Agunda Bil	18	2.0	8	1.67	0.24	$7.0x10^2$	4.9
14.	Gabtoli Pond	32	4.0	12	1.95	1.50	$5.7x10^3$	5.8
15.	Kamrangir Char	33	1.3	12	1.52	2.28	$2.0x10^4$	5.8

Table 3 : Result of on-site test of surface water samples collected from different locations at dry season (February, 1992)

Sampling		Date Time	Temp cels	Color Pt-Co Colour Unit	Odour	Turbi-dity NTU/ FTU	pH	EC µ mho /cm	TDS mg/l
No.	Location								
1.	Shasongaon Pond Narayanganj	23-02-92 11.55 AM	24.3	18	Not Bad	<25 18	7.0	406	203
2.	Nayamati Bil, Narayanganj	29-02-92 10.30 AM	21.3	139	"	75 41	7.4	107	536
3.	Kadamtoli Pond.N.gonj.	23-02-92 11-15 AM	23.4	31	"	<25 15	7.3	480	239
4.	Shim rail Pond. N.gonj	23-02-92 10-50 AM	22.9	19	"	<25 67	6.8	751	375
5.	Matuial Khal DND	29-02-92 9-45 AM	20.2	60	"	32 26	7.2	777	389
6.	Pagla pond	29-02-92 11-40 AM	23.2	20	"	<25 27	7.6	543	272
7.	Keodanga Bil,Manda	17-02-92 10-45 AM	23.2	43	Object-ionable	<25 3	7.2	328	263
8.	Trimohani Khal	17-02-92 11-50 AM	23.6	34	"	50 39	7.6	261	230
9.	Gazaria Bil Mad	24-02-92 10-39 AM	22.9	276	Not Bad	110 49	7.0	394	197
10.	Baraid Bozeu Pond	24-02-92 11-13 AM	23.0	258	"	30 90	7.0	382	191
11.	Dhamaahl Bil	24-02-92 12-40 P.M	24.2	200	"	<25 80	7.2	133	64.1
12.	Alakdi Khal Mirpur-12	23-02-92 9-15 AM	21.0	89	"	200 38	7.3	265	132
13.	Agunda Bil Mirpur-1	16-02-92 10-26 AM	22-9	100	"	<25 48	6.9	785	392
14.	Gabtoli Bus Station,Pond	16-02-92 9-10 AM	21.0	19	"	120 77	7.3	851	425
15	Kamrangir Char	16-02-92 12-00 AM	24-0	22	"	<25 6	7.4	558	279

Table 4 : Results of Laboratory analysis of surface water samples collected from different locations at dry season (February, 1992)

Sampling		S.S	BOD	COD	Or-N	NH-N	FC	DO
No.	Location	mg/1	mg/1	mg/1	mg/1	mg/1	No/100 ml	mg/1
1.	Shasongoan Pond Narayanganj	42	1.0	12.0	1.01	0.4	$2.2x10^2$	4.4
2.	Nayamati Bil Narayanganj	92	15.2	36.0	1.12	1.0	$8.0x10^2$	2.3
3.	Kadamtoli Pond	52	2.9	12.0	1.05	0.5	$7x10^4$	6.0
4.	Shimrail Pond	53	2.0	8.0	0.93	0.3	$3x10^4$	5.0
5.	Matuail Khal	95	12.5	27.0	0.64	1.8	$1.0x10^2$	3.6
6.	Pagla Pond	42	1.4	16.0	0.66	0.38	$1.4x10^3$	6.1
7.	Keodanga Bil	110	50.0	125.0	0.96	24.0	$1.8x10^6$	0.0
8.	Trimohani Khal	105	54.5	175.0	1.92	18.5	$2.7x10^6$	0.0
9.	Gazaria Bil mad	88	2.4	12.0	0.54	1.0	$8.0x10^2$	4.6
10.	Baraid Bazar Pond	45	0.7	8.0	0.6	1.5	$1.2x10^3$	6.1
11.	Dhamaahl Bil	49	0.3	4.0	0.58	1.0	$6.0x10^2$	5.9
12.	Alakdi Khal	100	15.05	42.0	1.16	0.7	$3.5x10^4$	1.4
13.	Agunda Bil	24	1.6	8.0	0.36	4.25	$1.4x10^3$	7.1
14.	Gabtoli Pond	43	11.5	44.8	1.44	6.00	$4x10^2$	3.4
15.	Kamrangir Char	22	7.7	10.0	0.41	15.58	$3x10^4$	2.7

Table-5 : General description of the selected sampling locations

Sl. No.	Location	Name of Bil/Khal/ Pond/River	Description of location
1.	Shasongaon	Shasongaon Pond	Pourashava pond, south side of Mannan Brick field, 30 from the electric poll. Kashipur road, Panchaboti, Narayanganj.
2.	Nayamati	Nayamati Bil	Near Ambor Alis Pond 10 m from the electric tower, 8 m from the bank Godnail, Narayangonj.
3.	Kadamtoli	Safar Alis Pond	West side of south Kadamtoli, 8 m from the bank. DND, Narayangonj.
4.	Shimrail	Shimrail Pond	East side of the DND Khal, 10 m back side of Rolling mill. Shimrail, DND.
5.	Matuail	Matuail Khal	Near Sign Board, Dhaka-Narayanganj connecting Road, 30 m away from Dhaka - Chittagong highway.
6.	Pagla	Pagla Pond	South side of WASA Treatment plant, 40 m from the pumping station and 80 m from electric tower. Pagla.
7.	Manda	Keodanga Bil	Near Manda Mosque. Dhaka.
8.	Trimohani	Junction of Debdulal Khal, Dholai Khal and Begunbari Khal	Near village Naserabad, 5 m from the bank. Dhaka.
9.	Mad	Gagaria Bil	North west side of village Fakir Khal and Magairda. Dhaka.
10.	Baraid Bazar	Beraid Bazar Pond	South side of Baraid bazar Big Pond. Dhaka.
11.	Dhamaahl Bil	Dhamaahl Bil	West side of Village Mastul near wooden Bridge.
12.	Alakdi	Alakdi Khal	North-East side of the village Alakdi, Mirpur-12, Dhaka.
13.	Agunda	Agunda Bil	5 m from the Embankment sluice gate Near Botanical Garden, Section-1, Mirpur, Dhaka.
14.	Gabtoli	Gabtoli Pond	South east side of Gabtoli Bus Station, 100 m from corner of embankment. Dhaka.
15.	Kamrangir Char	Buriganga River	Middle of embankment and Hafiz Flour Mills.

Data CD 2 : Ecology

Table 1 : Aquatic plants showing their intensity in the survey area

These can be arbitrarily categorized for convenience as - a) floating, b) completely submerged, c) partly floating and partly submerged, and d) marsh plants on the edges of water body.

Sl. No.	Species	Local/English Name	Intensity in the survey area	Economic Importance
	(a) Floating Species			
1.	Eichhornia crassipes	Kachuri pana / water hyacinth	VC	Organic manure, cattle feed, shelter for fish
2.	Hygroryza aristata	Jangli dhan	C	
3.	Ipomoea aquatica	Kalmi	C	Vegetable green
4.	Lemna spp.	Khudipana/Duckweed	VC	Food for birds
5.	Nymphoides sp.	Chand mola	VC	
6.	Pistia stratiotes	Topa pana	VC	
7.	Spirodela sp.		C	Food for ducks
8.	Salvinia cucullata	Indurkani pana	VC	
9.	S. natans	Indurkani pana	VC	
10.	Wolffia arrhiza	Guri pana/Duck weed	F	Food for many aquatic birds
	(b) Completely submerged			
11.	Ceratophyllum sp.	Jhanghi	C	Shelter for fish fry
12.	Myriophyllum sp.	Jhanghi	C	Shelter for fish fry
13.	Ottelia alismoides	Panikola	C	Fruits edible
14.	Vallisneria spiralis	Patajhangi	VC	Shelter for fish
	(c) Partly submerged			
15.	Aeschynomene aspera	Shola	F	Stems used in cottage industries
16.	Alpinia allughas	Tara	R	Stems edible
17.	Aponogeton appendiculatus	Ghentu	C	Underground stems edible
18.	Hydrilla verticillata	Kureli	VC	Shelter for fish and fish fry
19.	Leersia hexandra	Arali	C	Grains edible
20.	Najas sp.		C	Shelter for fish
21.	Nechamandra alternifolia	Rasna jhangi	C	
22.	Nymphaea nouchali	Shapla/Water lily	VC	Food plant
23.	Panicum paludosum	Barati	C	Good forage for cattle
24.	Potamogeton mucronatus		VC	
25.	Utricularia sp.	Jhangi	C	Shelter for fish
	(d) Marsh plants on the edges of water body			
26.	Alternanthera philoxeroides	Malancha	VC	Vegetable green
27.	Enhydra fluctuans	Helencha	R	Vegetable green
28.	Ipomoea fistulosa	Dhol kalmi	VC	Hedge plant
29.	Limnophila heterophylla		C	
30.	Monochoria hastata	Bara nukha	C	
31.	Sesbania sesban	Joganti	C	Fire wood plant, flowers edible

Table 2 : Terrestrial Species

These can be further classified according to their habitats into a) trees, b) shrubs, c) climbers, and d) herbaceous weeds (including grasses).

Sl. No.	Species	Local/English Name	Intensity in the survey area	Economic Importance
		(a) Tree Species		
1.	Acacia auriculiformis	Akash moni	C	Fire wood plant
2.	A. nilotica	Babla	C	Yields timber, fire wood
3.	Aegle marmelos	Bel	O	Fruits edible
4.	Alangium salvifolium	Ankura	C	
5.	Albizia lebbeck	Siris	C	Yields timber
6.	Artocarpus heterophyllus	Kathal/Jack fruit tree	VC	Edible fruits; timber
7.	Barringtonia sp.	Hijol	C	Timber useful
8.	Bombax ceiba	Shimul/Red silk cotton	C	Yields silk cotton timber
9.	Borassus flabellifer	Tal/Palmyra palm	C	Yields timber fruits
10.	Cassia fistula	Sonali	C	Ornamental tree
11.	Cocos nucifera	Narikel/Coconut	VC	Yields fruits, oil fibre
12.	Dalbergia sissoo	Shishu	C	Timber tree
13.	Diospyros peregrina	Gab	C	Edible fruits
14.	Erythrina variegata	Madar	VC	Bedge plant
15.	Ficus benghalensis	Bot/Banyan tree	VC	Shade tree
16.	F. comosa		VC	
17.	F. hispida	Kak dumur	C	
18.	F. religiosa	Assawath	VC	Shade tree
19.	F. rumphii	Gaya Assawath	VC	Shade tree
20.	Flacourtia indica	Benchi	C	Edible fruits
21.	Gelonium multiflorum		C	
22.	Mangifera indica	Am/Mango	VC	Yields edible fruits, timber
23.	Musa sapientum	Kola/Banana	VC	Food plant
24.	Phoenix sylvestris	Khejur/Country date	VC	Yields juice and jaggery
25.	Samanea saman	Rendigach/Rain tree	VC	Timber tree
26.	Streblus asper	Shoura	VC	Yields firewood
27.	Swietenia mahagoni	Mahogani	VC	Timber tree
28.	Syzygium cumini	Kalojam/Indian black berry	VC	Edible fruits, timber
29.	Tamarindus indica	Tetul/Tamarind	C	Timber, and edible pods
30.	Trewia nudiflora	Pitali	C	
31.	Zanthoxylum rhetsa	Bajna	F	
32.	Zizyphus mauritiana	Kul, Boroi/Indian plum	VC	Food plant, fire wood
		(b) Shrubs		
33.	Bambusa sp.	Bans/Bamboo	VC	Used for construction
34.	Cajanus cajan	Arhar/Pigeon pea	C	Pulse crop
35.	Calamus viminalis var.fasciculatus	Bet/Rattan	C	Used in cottage industry
36.	Derris sp.	Noalata	C	

Sl. No.	Species	Local/English Name	Intensity in the survey area	Economic Importance
37.	Glycosmis arborea	Matkila	VC	Fire wood
38.	Jatropha curcas	Bagh bherenda	VC	
39.	J. gossypifolia	Lal bherenda	VC	
40.	Phyllanthus reticulatus	Sitki	VC	
41.	Sesbania sesban	Bakphul	C	Fire wood, flowers
42.	Vangueria spoinosa	Maina	C	
43.	Vetteveria zizanioides	Bena	VC	Planted as hedge
		(c) Climbers		
44.	Lablab niger	Shim/Bean	VC	Food plant
45.	Luffa cylindrica	Dundul/Bath sponge	VC	Food plant
46.	Merremia hederacea		F	
47.	Momordica charantia	Karela/Bitter gourd	C	Yields vegetable
48.	Pothos scandens	Batilata	F	
49.	Stephania hernandifolia	Nimukha	F	Medicinal plant
50.	Tiliacora racemosa		C	
		Herbeceous weeds		
51.	Achyranthes aspera	Apang	C	Medicinal plant
52.	Ageratum conyzoides	Ochunti	VC	
53.	Alternanthera sessilis	Sachi sak	F	Vegetable green
54.	Aneilema nudiflora		VC	
55.	Axonopus cimicinus		VC	Forage for cattle
56.	Blumea lacera	Kukur singha	C	
57.	B. membranacea		C	
58.	Cassia occidentalis	Bara kalkesunda	C	
59.	C. tora	Chakunda	C	Medicinal
60.	Clerodendrum viscosum	Bhat	VC	
61.	Commelina bengalensis	Kanchira	C	
62.	Cynodon dactylon	Durba/Doob grass	VC	Excellent forage
63.	Cyperus rotundus	Mutha	VC	Medicinal
64.	Datura metel	Dhutra	C	Poisonous plant
65.	Euphorbia thymifolia	Swet karui	C	Medicinal
66.	Hygrophila polysperma		C	
67.	Hyptis suaveolens	Bilati Tulsi	C	
68.	Leucas lavendulifolia	Danda kalas	VC	Medicinal
69.	Lippia geminata		C	
70.	Ludwigia hyssopifolia		VC	
71.	Melochia corchorifolia	Tiki okra	C	
72.	Rotala rotundifolia		C	
73.	Rungia pectinata	Pindi	C	
74.	Scoparia dulcis	Ban dhoni	C	Medicinal
75.	Solanum indicum	Tit begun	C	
76.	Solanum khasianum		F	
77.	S. nigrum	Phuti begun	C	
78.	S. torvum	Goth begun	F	
79.	Sy[illegible]drella nodiflora		C	
80.	Urena lobata	Ban okra	C	
81.	Vernonia patula	Kukshim	VC	

Amphibia

Table ৪ : Amphibian Species in FAP 8A

Order Anura, Family, Ranidae

English Name	Scientific Name	Status	Distribution
Bull Frog	Rana tigrina	FC	W
Crecket Frog	R. limnocharis	FC	W
Skeeper Frog	R. cyanophlictis	C	W
Goat Frog	R. titlery	F	W
	Family - Rhacophoridae		
Tree Frog	Racophorus bimaculatus	F	W
	Family - Microhylidae		
China Frog	Microhyla ornata	F	Fa
	Family - Bufonidae		
Toad	Bufo melanostictus	C	W

C = Common; FC = Fairly Common; F = Few; Fa = Flood area; W = Wide.

Table 4 : STATUS AND DISTRIBUTION OF REPTILES IN FLOOD SEASON OF THE GREATER DHAKA PROTECTION PROJECT AREA FLOD ACTION PLAN NO.8A.

Sl. No.	English Name	Scientific name	Status	Distribution	Habitat
		CLASS REPTILIA ORDER - CHELONI FAMILY - TRIONYCHIDAE			
		Aquatic			
1.	Spotted Flap Shell Tortoise	Lissemys punctata	F	DND	Aquatic muddy soil
2.	Peacock Soft Shell Turtle	Trionyx hurum	F	DND	Aquatic
3.	Common Roofed Tortoise	Kachuga tecta	FC	W	Aquatic
		Terrestrial			
		ORDER - SQUAMATA SUB-ORDER - LACERTILIA FAMILY - GEKKONIDAE			
	Lizards				
4.	Wall Gecko	Geokko gecoko	FC	Cab	Trees
5.	Common House Lizard	Hemidactylus flaviviridis	F	OCa	Walls Hous s Buildings
6.	Common Wall Lizard	Hemidactylus brooki	C	W	Tree House Buildings
7.	Wart/Tree Lizard	Hemidactylus frenatus	FC	W	Trees
		FAMILY - AGAMIDAE			
8.	Common Garden Lizard	Calotes versicolor	FC	W	Garden Woo Land
		FAMILY - VARANIDAE			
9.	Grey Land Monitor	Varanus bengalensis	FC (End)	Bgzk	Wood Land
		FAMILY - SCINCIDAE			
10.	Common Skink	Mabuya carinata	FC	W	Garden Lan
		NON-POISONOUS SNAKES SUB-ORDER - OPHIDIA/SERPENTES FAMILY - TYPHLOPIDAE			
11.	Common Warm Snake	Typhlops barminus	F	W	Dami Soil

Sl. No.	English Name	Scientific name	Status	Distribution	Habitat
12.	Large Warm Snake	Typhlops diardi	F	W	Demi Soil
		FAMILY - COLUBRIDAE			
13.	Common Wolf Snake	Lycodon aulicus	F	KBhMa	Wall,Tree
		Aquatic			
14.	Chickered Keelback Water Snake	Xenochrophis piscator	VC	W	Aquatic
15.	Olive keelback Water Snake	Atretium schistosum	FC	W	Aquatic
16.	Striped keelback Water Snake	Amphiesma stolata	FC	W	Aquatic
		Terrestrial			
17.	Rat Snake	Ptyas mucosus	F	KMa	Wood land
18.	Common Bronzeback Tree Snake	Dendrelaphis Tristis	O	Ma	Wood land
		Poisonous Snakes			
		FAMILY - ELAPIDAE			
19.	Banded Krait	Bungarus fasciatus	F	W	Wood land
20.	Binocellate Cobra	Naja Naja Naja	FC	W	"
21.	Monocellate Cobra	Naja Naja kauothia	FC	W	"
22.	Russell's Viper	Vipera russellii	F	Ch	Land

Table 5 : STATUS (INTENSITY) AND DISTRIBUTION OF RESIDENT AND MIGRATORY BIRDS IN THE STUDY AREA.

Sl. No.	English Name	Scientific Name	Status	Distri-bution	Habitat
		RESIDENT BIRDS			
		Resident Aquatic Birds			
		ORDER - CICONIFORMES FAMILY - ARDEIDAE			
1.	Little Green Heron	Butorides straiatus	RFC	Ba	Water edge
2.	Pond Heron	Ardeola Grayii	RFC	W	"
3.	Small egret	Egretta intermedia	RF	Ba	"
4.	Cattle egret	Bubulcus ibis	RF	Ba	Terrestrial
		ORDER - ANSERIFORMES FAMILY - ANATIDAE			
5.	*Lesser Whisling Teal	Dendrocygna Javanica	RF	P1Z1 Bg1	Aquatic
		ORDER - GRUIFORMES FAMILY - RALLIDAE			
6.	Water Rail	Rallus arquaticus	RExt	Ba Ext.	Aquatic
7.	White breasted water hen	Amaurornis phoenicurus	RF	Bg	"
		ORDER - CHARADRIFORMES FAMILY - CHARADRIDAE			
8.	Red Water Lapwing	Vanellus indicus	RF	W	Water edge
9.	Little stint	Calidris minutus	RF	Wet land	"
		FAMILY - LARIDAE			
10.	Wikskered Tern	Chlidonias hybrida	RO	Ba	"
11.	Black bellied Tern	Sterna acuticauda	F	Ba	"
		ORDER - PASSERIFORMES FAMILY - HIRUNDINIDAE			
12.	Plain Sand Martin	Riparia paludicola	RF	Ba	"
		FAMILY - FALCONIDAE			
13.	Red headed Martin	Falco chicquera	RF	DC	Wood land
14.	Large Whistling Teal	Dendrocygna bicolor	F	R	Z1P1 Aquatic
15.	Comb Duck/Nukhta	Sarcodiornis melanotus	F	R	Z1 "
16.	Spot Bill Duck	Anas poecilorhyncha	F	R	Z1 "
17.	Cotton Teal	Netapus coromandelianus	F	R	Z1P1 "

Sl. No.	English Name	Scientific Name	Status	Distri-bution	Habitat
		Resident Terrestrial Birds ORDER - FALCONIFORMES FAMILY - ACCIPITRIDAE			
18.	Brahminy Kite	Haliastur indus	RFC	W	Watered area
19.	Grey headed Fishing Eagle	Ichthyophaga ichthyaetus	RF	Bg	"
		ORDER - CORACIFORMES FAMILY - ALCEDINIDAE			
20.	Common Kingfisher	Alcedo atthis	RFC	W	Watered area
21.	Slork billed Kingfisher	Pellargepsis capensis	RF	W	"
22.	White breasted Kingfisher	Halcyon smyrnensis	RFC	W	"
		ORDER - APODIFORMES FAMILY - APODIDAE			
23.	White rumped wire tailed swift	Apus pacificus	RFC	Tk Ba	Watered area
		ORDER - FALCONIFORMES FAMILY - ACCIPITRIDAE			
24.	Pariah Kite	Milvus migrans goninda	RFC	W	City area
25.	White backed vulture	Gyps bengalensis	RFC	W	Wood land
26.	Crested Serpent Eagle	Spilornis cheela	F	W	"
		FAMILY - FALCONIDAE			
27.	Green Fruit Pigeon	Treron phoenicoptera	RO	W	Wood land
28.	Thick billed Pigeon	Treron Carvirostra	RO	Rp	"
29.	Blue Rock Pigeon	Columba livia	RVC	W	CaCl "
30	Ring Dove	Streptopelia decaocto	RF	W	Wood land
31.	Red Turtte Dove	Striptopelia tranquibarica	RF	Bg	"
32.	Spotted Dove	Strepatopelia Chinensis	RF	W	Wood land
		ORDER - PSITTACIFORMES FAMILY - PSITTACIDAE			
33.	Rose-ringed Parakeet	Psittacula krameri	RF	W	"
		ORDER - CUCULIFORMES FAMILY - CUCULIDAE			
34.	Pied Crested Cuckoo	Clamator jacobinus	RF	W	"
35.	Common Hawk Cuckoo	Cuculus varius	RFC	W	"

Sl. No.	English Name	Scientific Name	Status	Distri-bution	Habitat
		ORDER - CUCULIFORMES FAMILY - CUCULIDAE			
36.	Bay Cuckoo	Cacomantis sonneratii	RF	SU	"
37.	Pataintive Cuckoo	Cacomantis merulinus	RF	W	"
38.	Koel	Eudynamys scolopacea	RC	W	"
39.	Crow Pheasant	Centropus sinensis	RF	W	Bush "
		ORDER - STRIGIFORMES FAMILY - STRIGIDAE			
40.	Barn owl	Tyto alba stertens	RF	W	Building, Wood land
41.	Brown Fish owl	Bubo zeylonensis	RO	Bg	Wood land
42.	Brown Hawk owl	Ninox scutulata	RF	W	Bldg."
43.	Spotted owlet	Athene brama	RC	W	"
		ORDER - STRIGIFORMES FAMILY - STRIGIDAE			
44.	Great Eared Nightjar	Eurostopodus macrotis	ROC	M	Bamboo jungle
45.	Longtailed Nightjar	Caprimulgus macrurus	RF	MaK	Boj "
		ORDER - APODIFORMES FAMILY - APODIDAE			
46.	House swift	Apus affinis	RC	W	Areal land
47.	Palm swift	Cypsiurus parvus	RC	W	"
		ORDER - CORACIFORMES FAMILY - MEROPIDAE			
48.	Green Bee-eater	Merops orientalis	RF	W	Wl Ca "
		FAMILY - CORACIIDAE			
49.	Indian Roller	Coracias benghalensis	RFC	W	Wl Rs "
50.	Hoopoe	Upupa epops	RO	W	Wl Rs.side
		ORDER - PICIFORMES FAMILY - PICIDAE			
51.	Crimson breasted Barbet	Megalaima asiatica	RC	W	Garden,Wl
		FAMILY - PICIDAE			
52.	Rufous Wood pecker	Micropternus	RF	Bg	Wood land
53.	Little Scally Green Wood pecker	Picus myrmecophoneus	RF	W	"
54.	Lesser Golden backed Wood pecker	Dinopium benghalense	RFC	W	"
55.	Pigmy Wood pecker	Picoides macei	RFC	W	"

Sl. No.	English Name	Scientific Name	Status	Distri-bution	Habitat
		ORDER - PISSERIFORMES FAMILY - ALAUDIDAE			
56.	Assam Bush Lark	Mirafra assamica	RF	Bg,DND	Agriculture
57.	Ashycrowned Finch Lark	Erymopterix grisea	RO	Bg,DND	Agril.Wl
		FAMILY - LANIDAE			
58.	Blackheaded Shrike	Lanius schach	RC	W	Wl,Rs,Wl & Road
		FAMILY - ORIOLIDAE			
59.	Black headed Oriole	Oriolus xanthornus	RFC	W	Wl,Agril.
		FAMILY - DICRURIDAE			
60.	Black Drongo	Dicrurus adsimilis	RC	W	"
61.	Bronzed Drongo	Dicrurus anacus	RF	W	Wood land
		FAMILY - ARTAMIDAE			
62.	Ashy Swallow Shrike	Artamus fuscus	RF	W	Wl,& Agril.
		FAMILY - STURINIDAE			
63.	Grey headed Myna	Sturnus malabaricus	RFC	W	Wood land
64.	Pied Myna	Sturnus contra	RVC	W	Garden,Road, Drainage
65.	Common Myna	Acridotheres tristis	RCC	W	Garden,Road
66.	Jungle Myna	Acridotheres fuscus	RFC	W	Agril. "
		FAMILY - CORVIDAE			
67.	Tree pie	Dendrocitta vagabunda	RFC	W	Wood land
68.	House Crow	Corvus splendens	RVC	W	Rs.,C.area
69.	Jungle Crow	Corvus macrorhynchos	RC	W	"
		FAMILY - CAMPEPHAGIDAE			
70.	Common Wood Shrike	Tephrodornis pondicerianus	RF	Bg	Wood land
71.	Small Minivet	Pericrocotus cinnamomeus	RO	Bg	"
		FAMILY - IRENIDAE			
72.	Common Lora	Aegithina tiphia	RF	SU	"
		FAMILY - PYCNONOTIDAE			
73.	Redvented Bulbul	Pycnonotus cafer	RC	W	Garden,Wl,Bh
74.	Red Whiskered Bulbul	Pycnonotus jocosus	RF	Dn	Rs, Wl,Bh

Sl. No.	English Name	Scientific Name	Status	Distri-bution	Habitat
		FAMILY - MUSCICAPIDAE			
75.	Common Babbler	Turdoides caudatus	RF	Bg	Wood land
76.	Jungle Babbler	Turdoides striatus	RF	W	Wood land
77.	White throated Fantailed Flycatcher	Raipidura albicollis	RF	Bg	Wl, Bush
78.	Tawny flanked longtailed warbter	Prinia subflava	RF	OP	Agril. "
79.	Brown Bush Warbler	Bradypterus	RFC	W	Wood land
80.	Tailor Bird	Orthotomus satorius	RFC	W	"
81.	Magpie Robin	Copsychus saularis	RC	W	Rs. "
82.	Orange headed ground Thrush	Zoothera citrina	RF	Za	" Zoo
		FAMILY - PARIDAE			
83.	Grey Tit				
		FAMILY - DICAEIDAE			
84.	Tickell's Flower Pecker	Dicaeum erythrorhynchos	RFC	W	Wl Wood land
		FAMILY - DICAEIDAE			
85.	Purple Sunbird	Nectarinia asiatica	RFC	W	Wl Wood land
86.	Purple Rumped Sun	Nectarinia zeylonica	RF	W	Wl Wood land
		FAMILY - PIOCEIDAE			
87.	House Sparrow	Passer domesticus	RC	W	House
88.	Baya	Ploceus philippinus	RF	W	Agril.Wl
89.	White throated Munia	Lonchura malabarica	RF	W	"
90.	Spotted Munia	Lonchura punctulata	RF	W	"
		MIGRATORY BIRDS			
		Migratory Aquatic Birds			
		ORDER - CHARADRIFORMES FAMILY - CHARADRIDAE			
91.	*Marsh Sandpiper	Tringa stagnatilis	MO	Wet land	Water edge
		ORDER - APODIFORMES FAMILY - APODIDAE			
92.	*Nepal Sand Martin	Delichon nipalensis	MO	Ba	"
93.	Common Swallow	Hirundo rustica	MFC	Ba	"
		FAMILY - DICAEIDAE			
94.	Forest Wagtail	Motacilla indica	MO	DUC	Wood land
95.	Yellow Wagtail	Motacilla flava	MFC	W	Wl Wet land
96.	Pied Wagtail	Motacilla alba	MC	W	

Sl. No.	English Name	Scientific Name	Status	Distri-bution	Habitat
		FAMILY - DICAEIDAE			
97.	Pintail	Anas acuta	C	M	GlPl Bgl Aquatic
98.	Common Teal	Anas creeca	F	M	" "
99.	Mallard	A. platyrhynchus	F	M	" "
100	Gadwall	A. strepera	F	M	" "
101	Wigeon	A. penelope	F	M	" "
102	Garganey	A. querquedula	F	M	" "
103	Common Sheld Duck	Tadorna tadorna	F	M	" "
104	Shoveller	Anas clepeata	F	M	" "
105	Common Pochard	Aythya ferina	F	M	" "
106	White eyed Pochard	Aythya nyroca	F	M	" "
107	Tuffted Duck	Aythya fuligula	F	M	" "
108	Little Ringed Plover	Charadrius alexandrinus	F	M	Wl Ba Water edge
109	Kautish Plover	Charadrius dubius	F	M	Wl Ba "
110	Common Sandpiper	Tringa stagnatilis	F	M	Wl Ba "
111	Wood Sandpiper	T. glareola	F	M	Wl Ba "
112	Fantail Suipe	Capella gallinago	F	M	Wl Ba "
113*	Little Stinct *	Calidris minutus	F	M	Wl Ba "
114	Wire Tailed Swallow	Hirundo rustica	F	M	Wl Arial
		Migratory Terrestrial Birds			
		ORDER - FALCONIFORMES FAMILY - ACCIPITRIDAE			
115*	Large Pariah Kite	Milvus migrans lineatus	MVC	W	Dumping and wood areas
116*	Red Kite	Milvus milvus	MO	Ch	"
		FAMILY - FALCONIDAE			
117*	European Kestrel	Falco tinnunculus	MF	W	DND Agril.
		FAMILY - LANIDAE			
118	Brown Shrike	Lanius cristatus	MC	W	Wl,Rs,Wl&Road
		FAMILY - DICRURIDAE			
119	Ashy Drongo	Dicrurus leucophaeus	MF	W	Wood land
		FAMILY - MUSCICAPIDAE			
120	Redbreasted Flycatcher	Muscicapa parva	MFC	W	Wood land
121	Blue throated Flycatcher	Muscicapa rubeculoides	MO	SU	"
		FAMILY - DICAEIDAE			
122	Tree Pipit	Anthus hodgsoni	MF	W	Wood land
123	Pied Harrier	Circus melanoleucos	F	M	Bg Wood land
124	Osprey	Pandion haliactus	F	M	Bg "
125	Wryneck	Jynx torquilla	F	M	Wl Water edge
126	Baybacked Shrike	Lanius vittatua	F	M	Bg Wood land
127	Black Red Star	Phoeniculus ochrurus	F	M	Bg "

* Asterisk marks indicate the birds present in flood and dry seasons.

Table 6 : Status and Distribution of the wild mammalian species in the study area

English Name	Scientific Name	Status	Distribution
White Tailed Shrew	Suncus murinus	C	W
Fruit Bat	Pteropus giganteus	FC	RP
False Vampire	Megaderma lyra	F	W
Lesser Yellow Bat	Scrotophilus temmencki	FC	W
Pipistrelle	Pipistrellus coromandra	C	W
Rhesus Macaque	Macaca mulata	FC	OCa
Jungle Cat	Felis chaus	F	W
Fishing Cat	Felis viverrina	F	W
Jackal	Canis aureus	F	W
Bengal Fox	Vulpes bengalensis	O	W
Large Civet	Viverra zibetha	F	W
Palm Civet	Paradoxurus hermaphroditus	F	W
Grey Mongoose	Herpestes auropunctatus	FC	W
Smooth Coated Otter	Lutra perspicillata	F	Br
Errawaddy Squirrel	Callosciurus pygerythrus	F	M
Three Stripped Palm Squirrel	Funambulus pennanti	FC	Za
House Mouse	Mus musculus	FC	W
Black Rat	Rattus rattus	FC	W
Brown Rat	Rattus norvegicus	FC	W
Lesser Bandicoot	Bandicota bengalensis	C	W
Greater Bandicoot	Bandicota indica	F	W

Note : I. Status : C = Common; FC = Fairly Common; F = Few; O = Occasional Distribution; OCa = Old City Area; RP = Ramna Park; Bra -Ballu. River Area; Za = Zoo Area.

II. All mammals are terrestiral in habit except the otter who is semi-aquatic in habit.

Table 7 : Domestic Mammals in the study area

Name	Status	Distribution
Cow	C	W
Buffalo	F	Va
Horse	F	W
Black goat	C	W
Dog	FC	W
Cat	FC	W

Note : Va = Village area, W = Wide.

Table 8 Species composition of fishes, prawns and crabs, their status and distribution in the study area

Scientific name	Status		Distribution	
	Natural	Cultured	Natural	Cultured
Freshwater fish species				
Family - Clupeidae (clupoid)				
* 1. Gudusia chapra	VC	-	W	DND
2. Corica sobarna	F	-	W	-
Family - Engraulidae (engraulid)				
3. Setipinna phasa	F	-	W	-
Family - Notopteridae (feather back)				
4. Notopterus chitala	F	-	W	DND
* 5. Notopterus notopterus	C	-	W	"
Family - Cyprinidae (carps)				
*■ 6. Labeo rohita (ruhu)	VC	VC	W	"
7. Labeo calbasu	FC	FC	W	"
8. Labeo nandina	FC	F	W	"
*■ 9. Cirrhina mrigala (mrigal)	VC	VC	W	"
10. Cirrhina reba	F	-	W	"
*■11. Catla catla (catla)	VC	VC	W	"
* 12. Puntius sarana	C	-	W	-
* 14. Puntius ticto	C	-	W	-
* 15. Puntius stigna	C	-	W	-
* 16. Amblypharyngodon mola	C	-	W	-
17. Rahtee cotio	R	-	W	-
18. Crossochellus latius	F	-	W	-
19. Oxygaster bacaila	F	-	W	-

Scientific name	Status		Distribution	
	Natural	Cultured	Natural	Cultured
20. Oxygaster phulo	F	-	W	-
21. Chela laubuca	F	-	W	-
22. Rasbora elenga	R	-	W	-
23. Rasbora daniconius	R	-	W	-
24. Botia dario	F	-	W	-
25. Botia dayi	F	-	W	-
26. Lepidocephalus guntia	FC	-	W	-
Family - Bagridae (cat fish)				
* 27. Mystus aor (cat fish)	VC	-	W	-
28. Mystus seengala	C	-	W	-
* 29. M. vittatus (cat fish)	VC	-	W	-
30. M. cavasius	C	-	W	-
31. M. menoda	R	-	W	-
32. M. tengra	R	-	W	-
33. Rama rama	R	-	W	-
34. Rita rita	F(End)	-	W	-
Family - Siluridae (cat fish)				
* 35. Wallago attu (freshwater shark)	VC	-	W	-
* 36. Ompok pabda (cat fish)	VC	-	W	-
37. Ompok bimaculatus	F	-	W	-
Family - Schilbeidae (cat fish)				
38. Clupisoma garua	F	-	W	-
39. Allichthys punctatus	R	-	W	-
40. Entropiichthys vacha	FC	-	W	-
41. Silonia silonda	R	-	W	-

Scientific name	Status		Distribution	
	Natural	Cultured	Natural	Cultured
Family - Bagaridae (cat fish)				
42. Bagarius bagarius (cat fish)	R	-	W	-
Family - Claridae (cat fish)				
*■43. Clarias batrachus (cat fish)	VC	-	W	DND NIL
Family - Heteropneustidae (cat fish)				
* 44. Heteropneustes fossilis (cat fish)	VC	-	W	-
Family - Chacidae (cat fish)				
45. Chaca chaca	R(End)	-	W	-
Family - Belonidae (belone)				
46. Xenentodon cancila	C	-	W	-
Family - Cyprinodontidae (minow)				
47. Apochelus panchax	R	-	W	-
48. Oryzias panchax	R	-	W	-
Family - Syngnatheidae (pipe fish)				
49. Ichthyacampus carce	F	-	W	-
Family - Channidae (snake head)				
* 50. Channa marulius	VC	-	W	-
* 51. Channa striatus	VC	-	W	-
* 52. Channa punctatus	VC	-	W	-
53. Channa gachus	R	-	W	-
Family - Cuchiidae (mud eel)				
54. Cuchia cuchia	F	-	W	-
Family - Centropomidae (perch)				
55. Chanda baculis	F	-	W	-
56. Chanda ranga	F	-	W	-

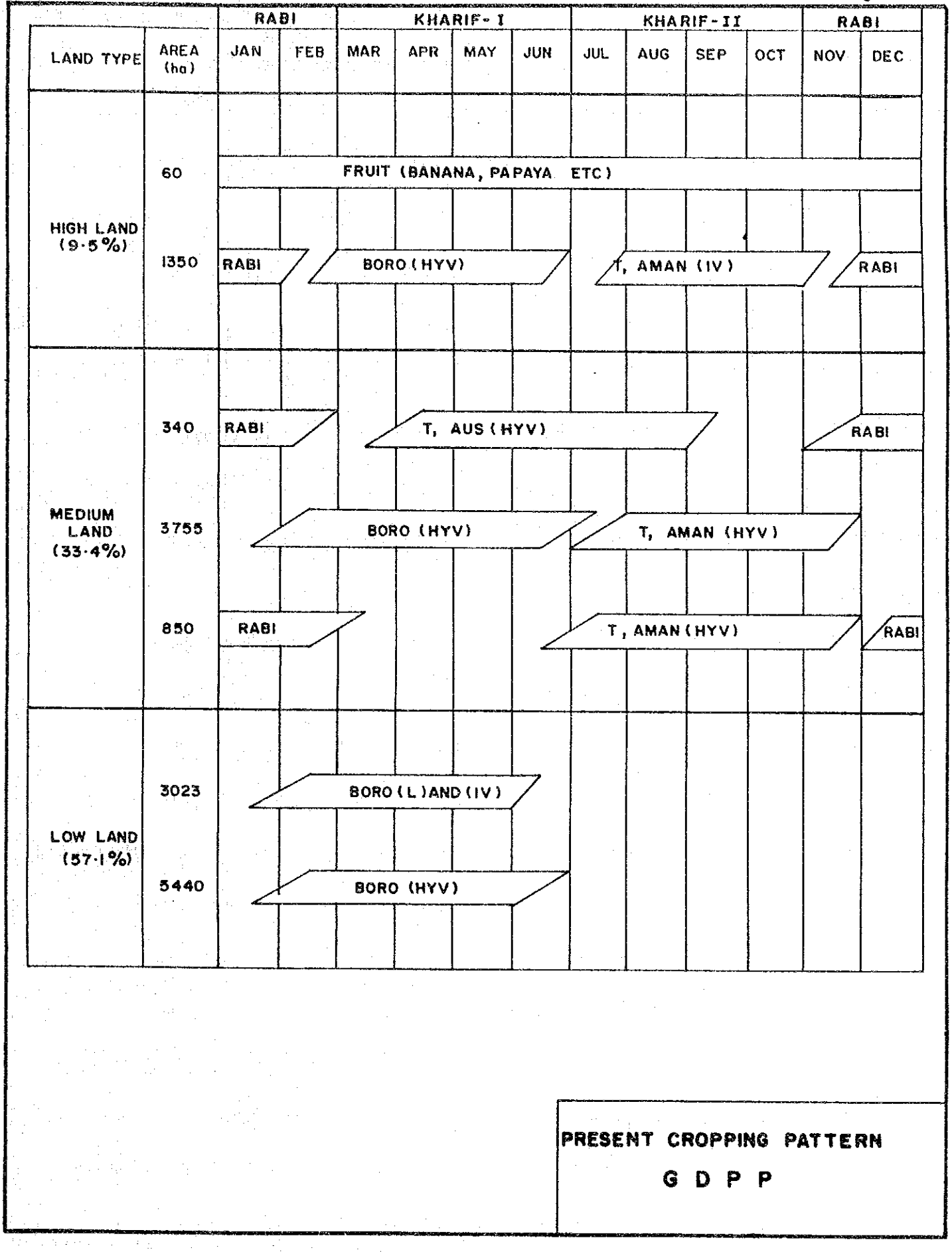
Scientific name	Status		Distribution	
	Natural	Cultured	Natural	Cultured
Family - Nandiidae (perch)				
* 57. Nandus nandus (perch)	VC	-	W	-
Family - Pristolepeidae (perch)				
58. Badis badis	F	-	W	-
Family - Gobiidae (perch)				
* 59. Glossogobius giurius (perch)	VC	-	W	-
60. Gobius melanasonmia	F	-	W	-
61. Apocrypies lanceolatus	F	-	W	-
62. Gobiodes rubicundus	F	-	W	-
Family - Anabantidae (perch)				
* 63. Anabas testudineus (climbing perch)	VC	-	W	-
* 64. Colisa fasciatus (perch)	VC	-	W	-
65. Colisa chuna	R	-	W	-
66. Colisa lalia	R	-	W	-
Family - Mugiliidae (mugil)				
67. Mugil corsula	F	-	W	-
68. Mugil cascasia	F	-	W	-
Family - Polynemidae (thead fins)				
69. Polynemus paradiseus	F	-	W	-
Family - Mastacembelidae (spiny eel)				
70. Mastacembelus armatus	C	-	W	-
71. M. pancalus	C	-	W	-
72. Macrognathus aculeatus	C	-	W	-
Family - Tetraodontidae (globe fish)				
* 73. Tetraodon cutcutia (globe fish)	VC	-	W	-

Scientific name	Status		Distribution	
	Natural	Cultured	Natural	Cultured
74. Tetraodon patoca	C	-	W	-
	Freshwater prawn species			
Family - Palaemonidae				
*■ 1. Macrobrachium rosenbergii	C	C	W	DND NIL
2. M. birmanicus	R	-	W	-
3. M. malcolmsonii	R	-	W	-
4. M. villosimanus	R	-	W	-
5. M. rudis	F	-	W	-
* 6. M. lamarre	C	-	W	-
7. M. dayanus	R	-	W	-
8. M. dolichodactylus	R	-	W	-
9. M. mirabilis	R	-	W	-
10. M. styliferus	R	-	W	-
	Freshwater carb species			
Family - Portunidae				
1. Paratelphusa spinigera	C	-	W	-
2. Paratelphusa lamellifrons	C	-	W	-
	Exotic fish species			
Family Cyprinidae				
*■ 1. Cyprinus carpio ver specularis (mirror carp)	F	F	DND	DND
*■ 2. Hypopthilmichthys molitrix (silver carp)	F	VC	"	"
*■ 3. Ctenopharyngodon idella (grass carp)	F	C	"	"
4. Orechromis niloticus (nile perch)	F	C	"	"
5. O. mossambicus (nite perch)	P	C	"	"

* Species of commercial value, DND = Demra Narayanganj Project, C = Common, VC = Very Common, F = Few, R = Rare, ENd = Endanger, W = Wide.

*■ Species highly profitable for culture.

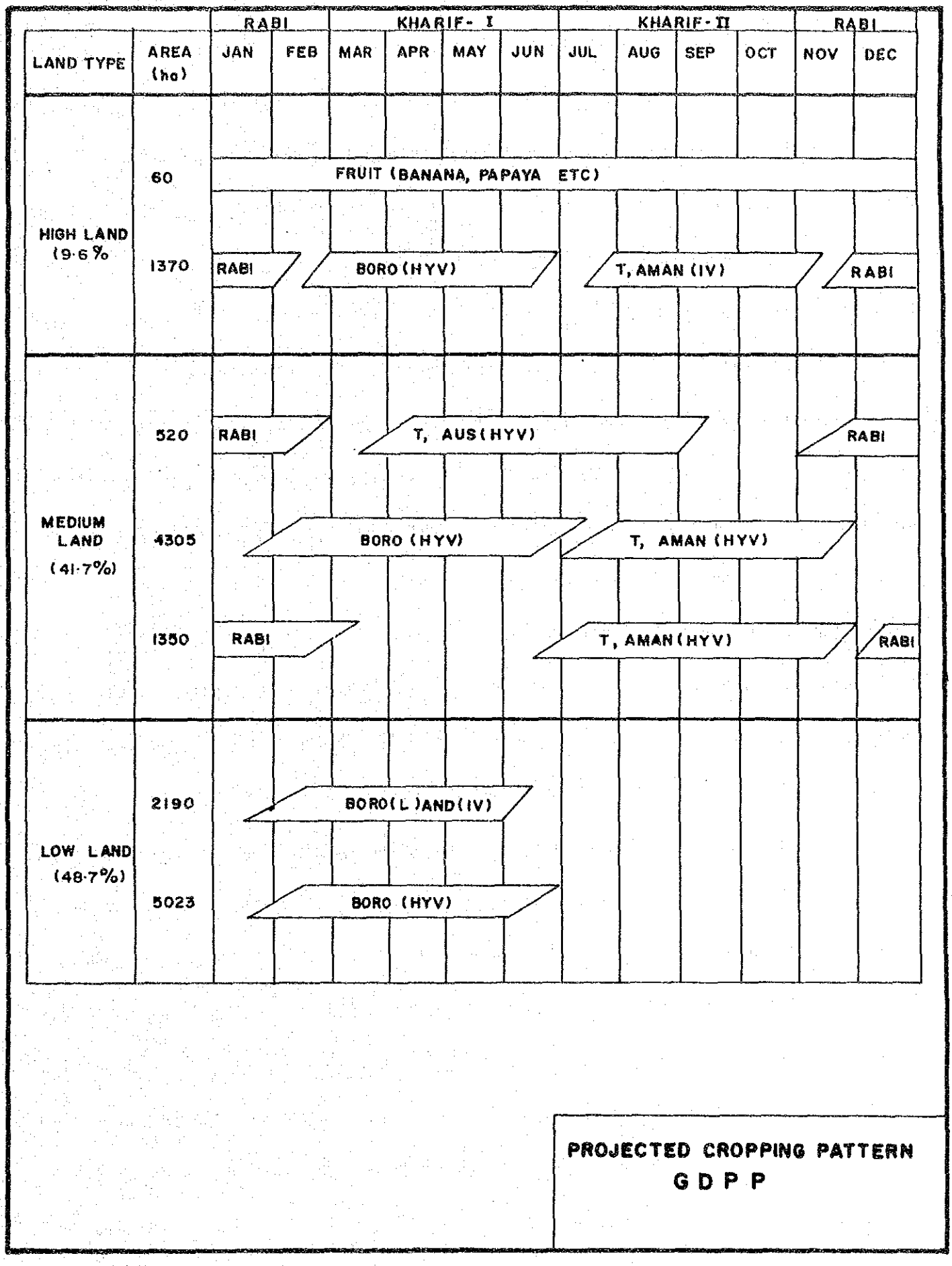
Fig.1



PRESENT CROPPING PATTERN

G D P P

Fig.11



PROJECTED CROPPING PATTERN
G D P P

- Data for Supporting Report D -

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1. Water Level of Narayanganj (BWDB Sta. 180)

1.1 Monthly Maximum Water Level of Narayanganj (BWDB Sta. 180)

MONTHLY MAXIMUM WATER LEVEL

STATION : NO.180 NARAYANGANJ (BWDB AND BIWTA)

RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1947	-	-	-	2.74	2.80	3.87	4.69	5.09	4.75	-	3.51	2.41	-
2	1948	1.79	1.98	2.09	-	3.47	4.45	5.09	5.36	4.97	4.72	3.26	2.38	-
3	1949	1.49	-	2.04	2.62	2.99	4.33	5.03	5.33	5.27	4.79	3.20	1.95	-
4	1950	1.49	1.68	1.80	2.16	2.77	4.18	4.60	5.21	5.27	-	2.83	2.01	-
5	1951	1.58	1.68	1.80	2.44	2.56	4.15	5.27	4.88	4.88	4.63	2.77	-	-
6	1952	-	-	-	1.98	2.50	3.32	5.21	4.85	5.33	4.82	3.60	2.29	-
7	1953	1.49	1.58	2.16	2.38	2.71	3.60	5.00	5.24	5.27	4.82	2.96	1.68	3.24
8	1954	1.46	1.52	1.58	1.89	2.83	4.54	5.39	6.00	6.04	4.63	3.29	1.98	3.43
9	1955	1.65	1.71	2.10	2.19	2.80	4.15	5.12	6.16	5.55	4.72	3.23	2.26	3.47
10	1956	1.89	1.68	1.68	2.13	3.66	5.15	5.24	5.00	5.18	4.24	3.17	2.10	3.43
11	1957	1.74	1.71	1.58	2.19	3.02	3.78	4.42	5.00	5.58	3.44	2.32	1.86	3.05
12	1958	1.58	1.52	1.52	1.83	2.90	3.44	3.90	5.43	5.46	4.45	3.32	2.19	3.13
13	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
15	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1962	-	-	-	2.23	3.20	4.10	5.03	5.90	5.94	5.04	3.15	2.16	-
17	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
18	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1968	-	-	-	2.44	2.84	4.53	5.87	5.90	5.07	4.77	3.00	2.03	3.04
23	1969	1.77	1.83	2.03	2.27	2.87	4.22	5.35	5.58	5.56	4.68	2.85	2.27	3.44
24	1970	1.94	1.81	2.09	-	-	-	-	-	-	-	-	-	-
25	1971	-	-	-	2.23	2.99	4.37	5.18	5.76	5.76	4.97	3.95	-	-
26	1972	2.13	-	2.10	2.45	3.09	4.45	4.75	5.12	4.75	3.90	2.50	2.07	-
27	1973	1.74	1.83	1.71	2.38	3.20	5.00	5.12	5.52	5.17	4.91	3.63	2.87	3.59
28	1974	2.26	1.74	1.95	2.27	3.29	4.39	5.75	6.23	5.55	5.11	3.29	2.53	-
29	1975	2.12	1.84	1.78	2.08	2.88	3.70	4.99	5.36	4.84	4.41	3.74	2.54	3.36
30	1976	1.90	1.81	2.10	2.51	2.84	4.05	5.17	5.15	5.12	4.19	2.56	2.41	3.32
31	1977	1.89	1.80	1.83	-	3.47	4.53	5.18	5.47	5.52	4.36	3.14	2.68	-
32	1978	1.98	1.84	1.86	2.21	3.63	4.58	4.83	5.22	4.82	4.57	2.96	2.47	3.41
33	1979	1.92	1.74	2.00	2.10	2.93	3.35	4.56	5.00	4.74	4.45	3.22	2.33	3.20
34	1980	1.93	1.96	2.17	2.74	3.33	4.38	5.39	6.03	5.79	4.81	3.47	2.40	3.70
35	1981	2.03	1.51	1.91	-	-	-	-	-	-	4.44	2.55	2.75	-
36	1982	1.96	1.79	1.90	2.83	2.97	4.28	4.75	5.20	4.98	4.47	2.83	2.21	3.35
37	1983	1.96	1.94	2.40	2.87	3.13	4.01	4.67	5.20	5.54	5.22	3.59	2.36	3.57
38	1984	2.16	1.92	2.24	2.82	3.79	4.66	5.56	5.77	5.63	5.22	2.92	2.11	3.73
39	1985	1.82	1.95	2.38	2.62	3.19	4.24	5.17	5.33	4.92	4.63	3.51	2.45	3.52
40	1986	1.98	1.74	2.16	2.90	2.96	3.75	4.71	5.03	4.88	4.62	3.73	2.92	3.45
41	1987	2.42	2.36	2.53	3.15	2.64	3.87	5.33	6.09	5.68	5.34	3.32	2.48	3.77
42	1988	2.02	2.08	2.34	2.90	4.17	4.47	5.68	6.42	6.63	4.66	3.41	2.74	3.96
43	1989	2.00	2.24	2.06	2.36	3.34	4.30	5.23	5.06	4.76	4.70	3.37	2.20	3.47
44	1990	1.92	2.00	2.26	2.94	3.25	4.50	5.03	5.18	4.68	5.23	3.60	2.44	3.59
45	1991	2.23	1.88	2.05	2.42	3.44	4.60	5.33	5.18	-	-	-	-	-
	AVER(1)	1.88	1.82	2.01	2.43	3.10	4.21	5.07	5.44	5.29	4.67	3.19	2.32	3.44

Notes: 1) AVER(1) is average of all the data.

1.2 Monthly Average of Daily High Water Level of Narayanganj (BWDB Sta. 180)

MONTHLY AVERAGE HIGH WATER LEVEL
NARAYANG.XLS
STATION : NO.180 NARAYANGANJ (BWDB AND BIWTA)
RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1947	-	-	-	1.98	2.27	3.41	4.26	4.84	4.54	-	2.60	1.66	-
2	1948	1.41	1.47	1.52	-	2.63	3.90	4.68	5.21	4.75	4.06	2.50	1.70	-
3	1949	1.25	-	1.45	1.91	2.64	3.50	4.84	5.04	5.06	4.01	2.53	1.52	-
4	1950	1.23	1.28	1.34	1.78	2.20	3.28	4.50	4.67	4.78	-	2.47	1.69	-
5	1951	1.27	1.23	1.34	1.62	2.17	3.27	4.70	4.64	4.58	3.74	2.03	-	-
6	1952	-	-	-	1.60	1.99	3.05	4.48	4.62	4.99	4.31	2.91	1.84	-
7	1953	1.17	1.21	1.61	1.77	2.17	3.20	4.36	4.98	4.73	4.05	2.26	1.38	2.74
8	1954	1.01	1.19	1.26	1.65	2.32	3.62	4.95	5.78	5.42	4.21	2.51	1.63	2.96
9	1955	1.28	1.18	1.38	1.83	2.23	3.23	4.55	5.83	5.07	3.79	2.62	1.72	2.89
10	1956	1.38	1.20	1.33	1.60	2.86	4.09	4.88	4.79	4.89	3.58	2.48	1.70	2.90
11	1957	1.38	1.33	1.30	1.67	2.45	2.92	4.07	4.75	4.06	3.01	1.95	1.42	2.53
12	1958	1.28	1.19	1.24	1.57	2.45	2.86	3.74	4.71	4.99	3.99	2.61	1.70	2.69
13	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
15	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1962	-	-	-	1.88	2.32	3.53	4.76	5.14	5.61	3.92	2.43	1.86	-
17	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
18	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1968	-	-	-	1.93	2.38	3.62	5.16	5.44	4.64	4.20	2.51	1.78	-
23	1969	1.56	1.48	1.57	1.87	2.19	3.51	4.73	5.20	5.20	2.73	2.41	1.85	2.86
24	1970	1.54	1.48	1.60	-	-	-	-	-	-	-	-	-	-
25	1971	-	-	-	1.87	2.45	3.54	4.77	5.43	5.34	4.46	2.98	-	-
26	1972	1.85	-	1.66	2.03	2.67	3.41	4.38	4.79	4.33	3.28	2.16	1.75	-
27	1973	1.48	1.41	1.48	2.07	2.89	3.82	4.67	5.22	4.80	4.32	2.99	2.17	3.11
28	1974	1.83	1.43	1.58	1.89	2.79	3.51	5.17	5.91	5.35	4.25	2.84	1.94	3.21
29	1975	1.63	1.39	1.48	1.71	2.27	3.09	4.24	5.00	4.73	4.02	2.87	2.04	2.87
30	1976	1.51	1.25	1.64	1.90	2.43	3.56	4.84	4.77	4.66	3.37	2.34	2.03	2.86
31	1977	1.53	1.44	1.51	-	3.05	4.09	4.69	5.20	4.92	3.84	2.75	2.17	-
32	1978	1.64	1.46	1.51	1.84	2.69	3.93	4.62	4.98	4.56	3.65	2.49	1.91	2.94
33	1979	1.59	1.34	1.42	1.78	2.40	2.84	3.90	4.43	4.49	4.03	2.45	1.94	2.72
34	1980	1.56	1.55	1.67	1.93	3.01	3.84	4.70	5.58	5.28	4.12	2.82	2.12	3.18
35	1981	1.55	1.26	1.52	-	-	-	-	-	-	3.22	2.36	2.01	-
36	1982	1.58	1.51	1.52	2.22	2.62	3.44	4.57	4.94	4.81	3.37	2.27	1.79	2.89
37	1983	1.55	1.42	1.87	2.18	2.84	3.39	4.42	4.91	5.27	4.47	2.94	1.97	3.10
38	1984	1.72	1.51	1.76	2.25	2.96	4.20	4.95	5.11	5.18	4.11	2.47	1.88	3.18
39	1985	1.56	1.57	1.95	2.26	2.65	3.84	4.68	4.87	4.69	4.15	2.75	2.05	3.08
40	1986	1.61	1.49	1.66	2.22	2.57	2.92	4.31	4.65	4.64	4.27	3.08	2.21	2.97
41	1987	2.04	2.06	2.11	2.71	2.43	3.27	4.73	5.84	5.53	4.35	2.81	2.17	3.34
42	1988	1.73	1.72	1.85	2.28	3.09	4.20	5.20	5.44	5.93	4.10	-	-	-
43	1989	1.58	-	1.62	-	-	-	-	4.74	4.65	4.21	2.67	-	-
44	1990	1.60	1.60	1.71	2.26	2.74	3.94	4.61	4.95	4.39	-	2.72	-	-
45	1991	1.63	1.53	-	-	-	4.10	4.88	4.91	-	-	-	-	-
AVER(1)		1.52	1.42	1.56	1.94	2.54	3.53	4.62	5.07	4.91	3.91	2.58	1.85	2.95

1.3 Monthly Average of Daily Low Water Level of Narayanganj (BWDB Sta. 180)

MONTHLY AVERAGE LOW WATER LEVEL

NARAYANG.XLS

STATION : NO.180 NARAYANGANJ (BWDB AND BIWTA)

RIVER : LAKHYA

(Unit : PWD in m)

NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
1	1947	-	-	-	-	1.75	3.08	4.11	4.76	4.45	-	2.24	1.17	-
2	1948	0.93	0.86	0.94	-	2.23	3.61	4.36	4.98	4.58	3.91	2.29	1.31	-
3	1949	0.92	-	0.96	1.19	1.72	3.25	4.62	4.83	4.87	3.84	2.39	1.19	-
4	1950	0.87	0.81	0.88	1.04	1.29	2.82	4.16	4.40	4.58	-	2.11	1.39	-
5	1951	0.85	0.77	0.81	0.97	1.42	2.50	4.33	4.36	4.32	3.51	1.66	-	-
6	1952	-	-	-	0.83	1.18	2.41	3.99	4.28	4.66	4.08	2.42	1.24	-
7	1953	0.73	0.66	0.76	0.97	1.40	2.57	3.90	4.70	4.48	3.87	1.89	0.96	2.24
8	1954	0.59	0.62	0.65	0.82	1.50	3.04	4.73	5.67	5.27	4.03	2.16	1.15	2.52
9	1955	0.79	0.68	0.76	1.08	1.55	2.94	4.32	5.72	4.89	3.62	2.27	1.31	2.49
10	1956	0.89	0.67	0.75	0.95	2.40	3.85	4.75	4.66	4.76	3.38	2.20	1.17	2.54
11	1957	0.85	0.76	0.72	0.99	1.81	2.49	3.87	4.60	3.83	2.74	1.50	0.99	2.10
12	1958	0.81	0.62	0.63	0.95	1.90	2.55	3.51	4.60	4.87	3.78	2.33	1.30	2.32
13	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
14	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
15	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
16	1962	-	-	-	1.47	1.99	3.40	4.70	5.09	5.58	3.81	2.14	1.46	-
17	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
18	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
19	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
20	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
21	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
22	1968	-	-	-	1.48	2.02	3.44	5.11	5.39	4.57	4.10	2.19	1.31	-
23	1969	1.09	0.99	1.07	1.38	1.80	3.31	4.66	5.15	5.15	3.56	2.07	1.43	2.64
24	1970	1.10	1.00	1.13	-	-	-	-	-	-	-	-	-	-
25	1971	-	-	-	1.36	1.90	3.21	4.70	5.39	5.30	4.37	2.72	-	-
26	1972	1.42	-	1.15	1.59	2.35	3.22	4.27	4.71	4.23	3.04	0.77	1.30	-
27	1973	0.99	0.92	0.97	1.66	2.67	3.68	4.58	5.16	4.70	4.19	2.73	1.87	2.84
28	1974	1.52	1.13	1.20	1.63	2.65	3.33	5.05	5.84	5.28	4.15	2.64	1.70	3.01
29	1975	1.24	1.15	1.22	1.48	2.14	2.93	4.14	4.88	4.63	3.90	2.61	1.73	2.67
30	1976	1.23	0.98	1.23	1.43	2.07	3.36	4.76	4.70	4.61	3.17	1.94	1.60	2.59
31	1977	1.10	1.00	1.09	-	2.76	3.92	4.59	5.13	4.84	3.70	2.47	1.79	-
32	1978	1.27	0.97	1.00	1.32	2.25	3.77	4.51	4.87	4.43	3.49	2.14	1.53	2.63
33	1979	1.15	0.95	1.02	1.36	1.91	2.27	3.52	4.32	4.39	3.86	2.11	1.53	2.37
34	1980	1.11	1.06	1.18	1.43	2.66	3.63	4.56	5.52	5.20	4.00	2.49	1.65	2.87
35	1981	1.11	0.82	1.10	-	-	-	-	-	-	2.86	2.08	1.67	-
36	1982	1.00	0.90	0.89	1.59	2.09	3.04	4.40	4.79	4.69	3.10	1.81	1.23	2.46
37	1983	0.93	0.79	1.18	1.53	2.34	3.08	4.25	4.77	5.16	4.31	2.53	1.41	2.69
38	1984	1.09	0.86	1.04	1.51	2.55	3.95	4.80	4.96	5.07	3.84	2.00	1.29	2.75
39	1985	0.94	0.86	1.22	1.59	2.00	3.49	4.50	4.71	4.56	3.92	2.29	1.47	2.63
40	1986	0.99	0.82	0.92	1.46	1.95	2.35	4.08	4.47	4.49	4.09	2.67	1.69	2.50
41	1987	1.45	1.38	1.41	2.04	1.88	2.88	4.55	5.74	5.43	4.15	2.40	1.62	2.91
42	1988	1.14	1.07	1.18	1.62	2.56	3.91	5.06	5.35	5.83	3.85	2.27	-	-
43	1989	1.04	-	-	-	-	3.51	-	-	-	-	-	-	-
44	1990	-	-	-	-	2.39	-	4.47	4.86	4.23	-	-	-	-
45	1991	-	-	-	1.58	-	3.88	4.73	4.75	-	-	-	-	-
AVER(1)		1.04	0.89	1.00	1.34	2.03	3.20	4.43	4.94	4.79	3.75	2.20	1.42	2.59

1.4 Monthly Average Water Level of Narayanganj (BWDB Sta. 180)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1		MONTHLY AVERAGE WATER													
2															
3		STATION : NO.180 NARAYANGANJ (BWDB AND BIWTA)													
4		RIVER : LAKHYA													
5												(Unit : PWD in m)			
6	NO.	YEAR	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	AVER.
7	1	1947	-	-	-	-	2.01	3.25	4.19	4.80	4.50	-	2.42	1.42	-
8	2	1948	1.17	1.17	1.23	-	2.43	3.76	4.52	5.10	4.67	3.99	2.40	1.51	-
9	3	1949	1.09	-	1.21	1.55	2.18	3.38	4.73	4.94	4.97	3.93	2.46	1.36	-
10	4	1950	1.05	1.05	1.11	1.41	1.75	3.05	4.33	4.54	4.68	-	2.29	1.54	-
11	5	1951	1.06	1.00	1.06	1.30	1.80	2.89	4.52	4.50	4.45	3.63	1.85	-	-
12	6	1952	-	-	-	1.22	1.59	2.73	4.24	4.45	4.83	4.20	2.67	1.54	-
13	7	1953	0.95	0.94	1.19	1.37	1.79	2.89	4.13	4.84	4.61	3.96	2.08	1.17	2.49
14	8	1954	0.80	0.91	0.96	1.24	1.91	3.33	4.84	5.73	5.35	4.12	2.34	1.39	2.74
15	9	1955	1.04	0.93	1.07	1.46	1.89	3.09	4.44	5.78	4.98	1.81	2.45	1.52	2.54
16	10	1956	1.14	0.94	1.04	1.28	2.63	3.97	4.82	4.73	4.83	3.48	2.34	1.44	2.72
17	11	1957	1.12	1.05	1.01	1.33	2.13	2.71	3.97	4.68	3.95	2.88	1.73	1.21	2.31
18	12	1958	1.05	0.91	0.94	1.26	2.18	2.71	3.63	4.66	4.93	3.89	2.47	1.50	2.51
19	13	1959	-	-	-	-	-	-	-	-	-	-	-	-	-
20	14	1960	-	-	-	-	-	-	-	-	-	-	-	-	-
21	15	1961	-	-	-	-	-	-	-	-	-	-	-	-	-
22	16	1962	-	-	-	1.68	2.16	3.47	4.73	5.12	5.60	3.87	2.29	1.66	-
23	17	1963	-	-	-	-	-	-	-	-	-	-	-	-	-
24	18	1964	-	-	-	-	-	-	-	-	-	-	-	-	-
25	19	1965	-	-	-	-	-	-	-	-	-	-	-	-	-
26	20	1966	-	-	-	-	-	-	-	-	-	-	-	-	-
27	21	1967	-	-	-	-	-	-	-	-	-	-	-	-	-
28	22	1968	-	-	-	1.71	2.20	3.53	5.14	5.42	4.61	4.15	2.35	1.55	-
29	23	1969	1.33	1.24	1.32	1.63	2.00	3.41	4.70	5.18	5.18	3.15	2.24	1.64	2.75
30	24	1970	1.32	1.24	1.37	1.62	2.18	3.38	4.74	5.41	5.32	4.42	2.85	-	-
31	25	1971	1.64	-	1.41	-	-	-	-	-	-	-	-	-	-
32	26	1972	-	-	-	1.81	2.51	3.32	4.33	4.75	4.28	3.16	1.47	1.53	-
33	27	1973	1.24	1.17	1.23	1.87	2.78	3.75	4.63	5.19	4.75	4.26	2.86	2.02	2.98
34	28	1974	1.68	1.28	1.39	1.76	2.72	3.42	5.11	5.88	5.32	4.20	2.74	1.82	3.11
35	29	1975	1.44	1.27	1.35	1.60	2.21	3.01	4.19	4.94	4.68	3.96	2.74	1.89	2.77
36	30	1976	1.37	1.12	1.44	1.67	2.25	3.46	4.80	4.74	4.64	3.27	2.14	1.82	2.73
37	31	1977	1.32	1.22	1.30	-	2.91	4.01	4.64	5.17	4.88	3.77	2.61	1.98	-
38	32	1978	1.46	1.22	1.26	1.58	2.47	3.85	4.56	4.92	4.49	3.57	2.31	1.72	2.78
39	33	1979	1.37	1.15	1.22	1.57	2.15	2.55	3.71	4.37	4.44	3.94	2.28	1.73	2.54
40	34	1980	1.34	1.30	1.43	1.68	2.84	3.74	4.63	5.55	5.24	4.06	2.66	1.89	3.03
41	35	1981	1.33	1.04	1.31	-	-	-	-	-	-	3.04	2.22	1.84	-
42	36	1982	1.29	1.21	1.21	1.91	2.36	3.24	4.49	4.87	4.75	3.24	2.04	1.51	2.68
43	37	1983	1.24	1.11	1.53	1.86	2.59	3.24	4.34	4.84	5.22	4.39	2.74	1.69	2.90
44	38	1984	1.41	1.19	1.50	1.88	2.76	4.08	4.88	5.04	5.13	3.98	2.24	1.59	2.97
45	39	1985	1.25	1.22	1.59	1.93	2.33	3.67	4.59	4.79	4.63	4.04	2.52	1.76	2.86
46	40	1986	1.30	1.16	1.29	1.84	2.26	2.64	4.20	4.56	4.57	4.18	2.88	1.95	2.74
47	41	1987	1.75	1.72	1.76	2.38	2.16	3.08	4.64	5.79	5.48	4.25	2.61	1.79	3.12
48	42	1988	1.44	1.40	1.52	1.95	2.83	4.06	5.13	5.40	5.88	3.98	-	-	-
49	43	1989	1.31	-	-	-	-	-	-	-	-	-	-	-	-
50	44	1990	-	-	-	-	2.57	-	4.54	4.91	4.31	-	-	-	-
51	45	1991	-	-	-	-	-	3.99	4.81	4.83	-	-	-	-	-
52															
53		AVER(1)	1.28	1.15	1.28	1.63	2.29	3.35	4.53	5.01	4.85	3.77	2.38	1.63	2.76

2. Hydraulic Simulation for Drainage Area

- Example of Simulation for DC-2

DC-2 : Case 1-1 Without Retarding Pond and Without Pump Station

```
+------------------------------------------------------------------------+
! J            R E S U L T      P R I N T / P L O T            MIKE 11   !
+------------------------------------------------------------------------+
!
!                      Enter file name:   RES1-1.RRF
!
!         1.  SELECT          result file
!         2.  SELECT          model.........:          HD-model
!         3.  DELETE          result file
!         4.  PRINT           summary
!         5.  TIME SERIES     print / plot
!         6.  PROFILE         plot
!         7.  DIRECTORY
!
!                    Enter option (1-7) :
!
+------------------------------------------------------------------------+
<Esc> Return to Main Menu                                  <F1> Help Menu
```

DC-2 : Case 1-1

GRID POINT RESULT SUMMARY

WATER LEVEL,

	Location	Minimun meter	Maximum meter
KD-5	0.000	2.94	5.48
KD-5	0.200	2.95	5.45
KD-5	0.700	2.95	5.38
KD-5	1.200	2.96	5.31
KD-5	1.700	2.96	5.24
KD-5	2.000	2.97	5.23
KD-5	2.000	2.97	5.23
KD-5	2.200	2.97	5.22
KD-5	2.700	2.97	5.17
KD-5	3.200	2.97	5.14
KD-5	3.700	2.97	5.09
KD-5	4.200	2.98	5.06
KD-5	4.320	2.98	5.05
KD-5	4.570	2.98	5.03
KD-5	4.820	2.98	5.02
KD-5	5.070	2.98	5.00
KD-5	5.200	2.98	4.99
KD-5	5.200	2.98	4.99
KD-5	5.240	2.98	4.99
KD-5	5.440	2.98	4.97
KD-5	5.710	2.98	4.94
KD-5	5.910	2.98	4.92
KD-5	6.260	2.99	4.89
KD-5	6.480	2.99	4.86
KD-5	6.700	2.99	4.84
KD-5	6.950	2.99	4.82
KD-5	7.150	2.99	4.80
KD-5	7.200	2.99	4.80
KD-5	7.200	2.99	4.80
KD-5	7.220	2.99	4.80
KD-5	7.440	2.99	4.77
KD-5	7.680	2.99	4.74
KD-5	7.930	2.99	4.72
KD-5	8.150	3.00	4.69
KD-5	8.510	3.00	4.65
KD-5	8.600	3.00	4.65
KD-5	8.600	3.00	4.65
KD-5	8.710	3.00	4.64
KD-5	9.150	3.00	4.59
KD-5	9.270	3.00	4.57
KD-5	9.300	3.00	4.57
KD-5	9.300	3.00	4.57
KD-5	9.540	3.00	4.47
KD-5	9.790	3.00	4.40
KD-5	10.070	3.00	4.33
KD-5	10.320	3.00	4.26
KD-5	10.620	3.00	4.17
KD-5	10.900	3.00	4.09
KD-5	11.150	3.00	4.02
KD-5	11.400	3.00	3.94
KD-5	11.600	3.00	3.88
KD-5	11.850	3.00	3.09
KD-5	12.000	3.00	3.00
KD-6	0.000	3.00	4.92
KD-6	0.380	3.00	4.84

DC-2 : Case 1-1

	Location	Minimun meter	Maximum meter
KD-6	0.730	3.00	4.77
KD-6	1.080	3.00	4.70
KD-6	1.480	3.00	4.63
KD-6	1.700	3.00	4.60
KD-6	1.800	3.00	4.57
KD-7	0.000	2.99	4.69
KD-7	0.050	2.99	4.69
KD-7	0.260	2.99	4.69
KD-7	0.540	2.99	4.69
KD-7	0.690	2.99	4.68
KD-7	0.940	2.99	4.68
KD-7	1.220	2.99	4.68
KD-7	1.420	2.99	4.67
KD-7	1.720	2.99	4.67
KD-7	1.950	2.99	4.67
KD-7	2.220	2.99	4.67
KD-7	2.720	2.99	4.66
KD-7	3.035	3.00	4.65
KD-7	3.350	3.00	4.65
KD-7	3.720	3.00	4.65
KD-7	3.800	3.00	4.65
KD-8	0.000	2.99	4.82
KD-8	0.140	2.99	4.81
KD-8	0.590	2.99	4.81
KD-8	0.855	2.99	4.80
KD-8	1.120	2.99	4.80
KD-8	1.460	2.99	4.80
KD-8	1.800	2.99	4.80
KD-9	0.000	2.98	5.05
KD-9	0.040	2.98	5.04
KD-9	0.540	2.98	5.02
KD-9	0.840	2.98	5.00
KD-9	1.000	2.98	4.99
KD-10	0.000	2.98	5.59
KD-10	0.100	2.98	5.58
KD-10	0.600	2.98	5.51
KD-10	1.100	2.97	5.45
KD-10	1.600	2.97	5.41
KD-10	2.100	2.97	5.37
KD-10	2.600	2.96	5.30
KD-10	3.100	2.96	5.27
KD-10	3.600	2.97	5.25
KD-10	4.050	2.97	5.23
KD-10	4.100	2.97	5.23

DC-2: Case 1-1

DISCHARGE,

	Location	Minimun m3/sec	Maximum m3/sec
KD-5	0.100	-0.024	37.653
KD-5	0.450	-0.366	37.478
KD-5	0.950	-0.521	42.418
KD-5	1.450	-0.563	43.130
KD-5	1.850	-0.585	43.585
KD-5	2.100	-0.617	80.551
KD-5	2.450	-0.665	79.301
KD-5	2.950	-0.730	77.183
KD-5	3.450	-0.834	98.087
KD-5	3.950	-0.926	95.184
KD-5	4.260	-0.970	93.219
KD-5	4.445	-0.991	92.031
KD-5	4.695	-1.015	90.397
KD-5	4.945	-1.053	88.818
KD-5	5.135	-1.066	87.928
KD-5	5.220	-1.078	115.351
KD-5	5.340	-1.105	115.003
KD-5	5.575	-1.137	114.561
KD-5	5.810	-1.179	114.203
KD-5	6.085	-1.214	113.747
KD-5	6.370	-1.248	113.602
KD-5	6.590	-1.301	114.032
KD-5	6.825	-1.469	114.477
KD-5	7.050	-1.619	114.901
KD-5	7.175	-1.684	115.212
KD-5	7.210	-1.359	128.225
KD-5	7.330	-1.339	130.912
KD-5	7.560	-1.343	131.377
KD-5	7.805	-1.357	131.882
KD-5	8.040	-1.370	132.385
KD-5	8.330	-1.386	133.321
KD-5	8.555	-1.373	134.172
KD-5	8.655	-1.628	159.115
KD-5	8.930	-1.686	160.390
KD-5	9.210	-1.618	161.852
KD-5	9.285	-1.649	162.266
KD-5	9.420	-1.725	243.411
KD-5	9.665	-1.726	242.414
KD-5	9.930	-1.747	241.934
KD-5	10.195	-1.802	241.467
KD-5	10.470	-1.808	240.923
KD-5	10.760	-1.772	240.263
KD-5	11.025	-1.750	239.612
KD-5	11.275	-1.761	239.361
KD-5	11.500	-1.795	239.266
KD-5	11.800	-1.833	239.058
KD-5	11.925	-1.841	239.059
KD-6	0.190	-0.052	56.965
KD-6	0.555	-0.065	56.647
KD-6	0.905	-0.084	56.464
KD-6	1.280	-0.125	56.245
KD-6	1.590	-0.116	55.909
KD-6	1.750	-0.149	55.661
KD-7	0.025	-0.024	38.699
KD-7	0.155	-0.040	38.141

DC-2 : Case 1-1

	Location	Minimun m3/sec	Maximum m3/sec
KD-7	0.400	-0.083	37.268
KD-7	0.615	-0.084	36.462
KD-7	0.815	-0.097	35.662
KD-7	1.080	-0.132	34.511
KD-7	1.320	-0.128	33.452
KD-7	1.570	-0.225	32.354
KD-7	1.835	-0.282	31.180
KD-7	2.085	-0.270	30.131
KD-7	2.470	-0.203	34.167
KD-7	2.878	-0.257	32.129
KD-7	3.193	-0.284	30.571
KD-7	3.535	-0.303	28.857
KD-7	3.760	-0.312	27.615
KD-8	0.070	-0.068	26.863
KD-8	0.365	-0.050	25.528
KD-8	0.723	-0.067	23.879
KD-8	0.988	-0.077	22.623
KD-8	1.290	-0.089	21.602
KD-8	1.630	-0.110	20.372
KD-9	0.020	-0.018	24.447
KD-9	0.290	-0.048	24.421
KD-9	0.690	-0.095	24.491
KD-9	0.920	-0.134	24.482
KD-10	0.050	-0.001	37.682
KD-10	0.350	-0.057	35.922
KD-10	0.850	-0.150	34.278
KD-10	1.350	-0.205	32.834
KD-10	1.850	-0.252	31.198
KD-10	2.350	-0.319	53.829
KD-10	2.850	-0.394	51.384
KD-10	3.350	-0.463	48.580
KD-10	3.825	-0.478	46.467
KD-10	4.075	-0.465	45.364

DC-2 : Case 1-1

GRID POINT RESULT SUMMARY

VELOCITY,

	Location	Minimun m/sec	Maximum m/sec
KD-5	0.000	0.000	0.675
KD-5	0.100	-0.001	0.682
KD-5	0.200	-0.002	0.687
KD-5	0.450	-0.005	0.668
KD-5	0.700	-0.006	0.690
KD-5	0.950	-0.011	0.723
KD-5	1.200	-0.018	0.712
KD-5	1.450	-0.024	0.702
KD-5	1.700	-0.025	0.692
KD-5	1.850	-0.020	0.572
KD-5	2.000	-0.009	0.502
KD-5	2.000	-0.017	0.923
KD-5	2.100	-0.015	0.847
KD-5	2.200	-0.014	0.773
KD-5	2.450	-0.014	0.747
KD-5	2.700	-0.014	0.721
KD-5	2.950	-0.013	0.652
KD-5	3.200	-0.012	0.693
KD-5	3.450	-0.013	0.781
KD-5	3.700	-0.013	0.765
KD-5	3.950	-0.014	0.749
KD-5	4.200	-0.014	0.732
KD-5	4.260	-0.014	0.728
KD-5	4.320	-0.015	0.724
KD-5	4.445	-0.015	0.714
KD-5	4.570	-0.015	0.704
KD-5	4.695	-0.015	0.694
KD-5	4.820	-0.015	0.685
KD-5	4.945	-0.015	0.675
KD-5	5.070	-0.015	0.664
KD-5	5.135	-0.015	0.642
KD-5	5.200	-0.014	0.665
KD-5	5.200	-0.014	0.801
KD-5	5.220	-0.014	0.805
KD-5	5.240	-0.014	0.798
KD-5	5.340	-0.014	0.791
KD-5	5.440	-0.014	0.785
KD-5	5.575	-0.014	0.777
KD-5	5.710	-0.014	0.769
KD-5	5.810	-0.014	0.766
KD-5	5.910	-0.014	0.763
KD-5	6.085	-0.014	0.758
KD-5	6.260	-0.014	0.758
KD-5	6.370	-0.014	0.759
KD-5	6.480	-0.014	0.760
KD-5	6.590	-0.014	0.762
KD-5	6.700	-0.014	0.765
KD-5	6.825	-0.014	0.767
KD-5	6.950	-0.014	0.768
KD-5	7.050	-0.014	0.769
KD-5	7.150	-0.014	0.769
KD-5	7.175	-0.014	0.757
KD-5	7.200	-0.014	0.744
KD-5	7.200	-0.014	0.818
KD-5	7.210	-0.014	0.812

DC-2 : Case 1-1

	Location	Minimun m/sec	Maximum m/sec
KD-5	7.220	-0.014	0.808
KD-5	7.330	-0.014	0.822
KD-5	7.440	-0.014	0.823
KD-5	7.560	-0.014	0.826
KD-5	7.680	-0.014	0.828
KD-5	7.805	-0.014	0.829
KD-5	7.930	-0.014	0.830
KD-5	8.040	-0.014	0.831
KD-5	8.150	-0.013	0.833
KD-5	8.330	-0.013	0.835
KD-5	8.510	-0.013	0.837
KD-5	8.555	-0.013	0.813
KD-5	8.600	-0.013	0.794
KD-5	8.600	-0.014	0.940
KD-5	8.655	-0.014	0.914
KD-5	8.710	-0.013	0.884
KD-5	8.930	-0.013	0.888
KD-5	9.150	-0.013	0.891
KD-5	9.210	-0.013	0.890
KD-5	9.270	-0.013	0.890
KD-5	9.285	-0.013	0.891
KD-5	9.300	-0.013	0.901
KD-5	9.300	-0.013	1.108
KD-5	9.420	-0.013	1.287
KD-5	9.540	-0.013	1.297
KD-5	9.665	-0.013	1.297
KD-5	9.790	-0.013	1.297
KD-5	9.930	-0.013	1.299
KD-5	10.070	-0.013	1.300
KD-5	10.195	-0.013	1.303
KD-5	10.320	-0.013	1.306
KD-5	10.470	-0.013	1.308
KD-5	10.620	-0.013	1.310
KD-5	10.760	-0.013	1.313
KD-5	10.900	-0.013	1.316
KD-5	11.025	-0.013	1.319
KD-5	11.150	-0.013	1.321
KD-5	11.275	-0.013	1.326
KD-5	11.400	-0.013	1.330
KD-5	11.500	-0.012	1.333
KD-5	11.600	-0.012	1.337
KD-5	11.800	-0.032	4.424
KD-5	11.850	-0.012	1.647
KD-5	11.925	-0.012	1.662
KD-5	12.000	-0.012	1.677
KD-6	0.000	0.000	0.975
KD-6	0.190	-0.000	0.984
KD-6	0.380	-0.001	0.993
KD-6	0.555	-0.001	0.979
KD-6	0.730	-0.001	0.964
KD-6	0.905	-0.002	0.950
KD-6	1.080	-0.002	0.936
KD-6	1.280	-0.002	0.920
KD-6	1.480	-0.003	0.904
KD-6	1.590	-0.003	0.893

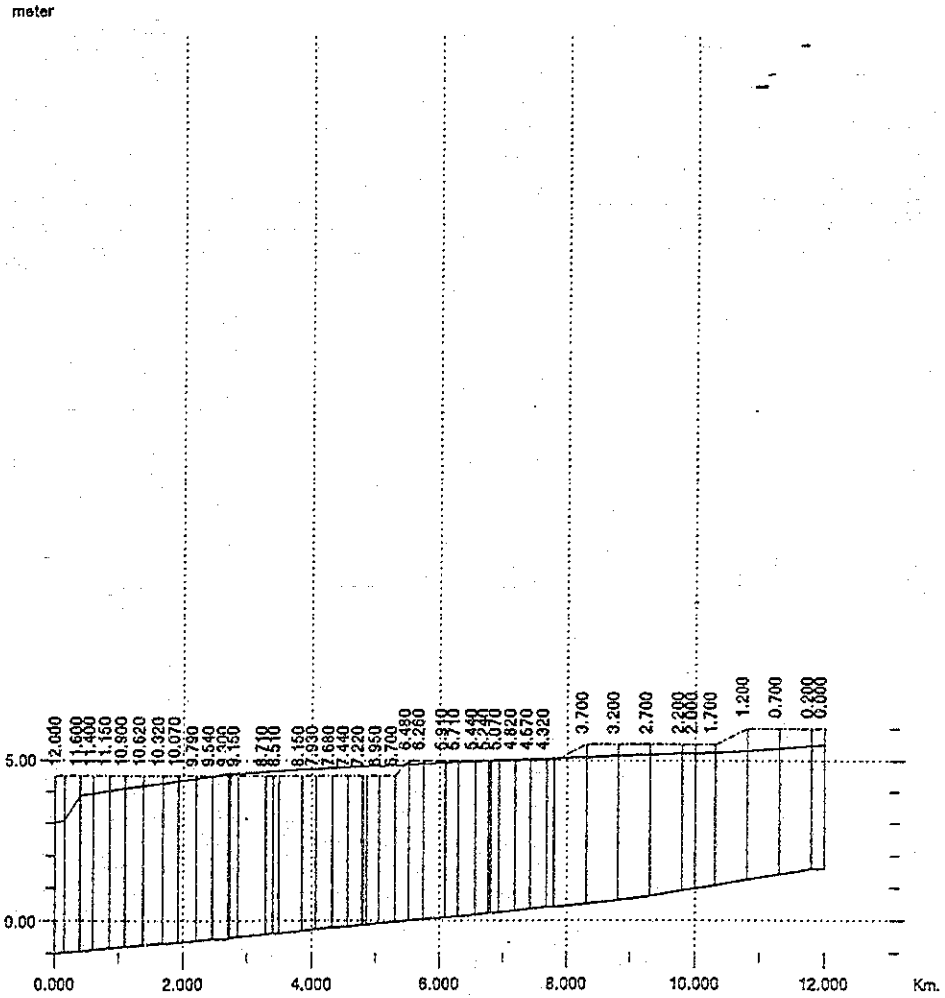
DC-2 : Case 1-1

	Location	Minimun m/sec	Maximum m/sec
KD-6	1.700	-0.003	0.883
KD-6	1.750	-0.003	0.883
KD-6	1.800	-0.003	1.001
KD-7	0.000	0.000	0.725
KD-7	0.025	0.000	0.724
KD-7	0.050	0.000	0.723
KD-7	0.155	-0.000	0.708
KD-7	0.260	-0.001	0.693
KD-7	0.400	-0.001	0.673
KD-7	0.540	-0.001	0.653
KD-7	0.615	-0.002	0.642
KD-7	0.690	-0.002	0.632
KD-7	0.815	-0.002	0.615
KD-7	0.940	-0.002	0.599
KD-7	1.080	-0.003	0.580
KD-7	1.220	-0.003	0.562
KD-7	1.320	-0.003	0.549
KD-7	1.420	-0.003	0.536
KD-7	1.570	-0.003	0.516
KD-7	1.720	-0.004	0.498
KD-7	1.835	-0.004	0.485
KD-7	1.950	-0.004	0.474
KD-7	2.085	-0.004	0.444
KD-7	2.220	-0.004	0.448
KD-7	2.470	-0.004	0.500
KD-7	2.720	-0.005	0.478
KD-7	2.878	-0.005	0.463
KD-7	3.035	-0.005	0.449
KD-7	3.193	-0.006	0.436
KD-7	3.350	-0.006	0.422
KD-7	3.535	-0.006	0.407
KD-7	3.720	-0.006	0.391
KD-7	3.760	-0.006	0.388
KD-7	3.800	-0.006	0.402
KD-8	0.000	0.000	0.602
KD-8	0.070	0.000	0.589
KD-8	0.140	-0.000	0.576
KD-8	0.365	-0.001	0.538
KD-8	0.590	-0.001	0.503
KD-8	0.723	-0.002	0.483
KD-8	0.855	-0.002	0.463
KD-8	0.988	-0.003	0.444
KD-8	1.120	-0.003	0.426
KD-8	1.290	-0.003	0.406
KD-8	1.460	-0.003	0.385
KD-8	1.630	-0.004	0.366
KD-8	1.800	-0.004	0.346
KD-9	0.000	0.000	0.495
KD-9	0.020	0.000	0.496
KD-9	0.040	0.000	0.496
KD-9	0.290	-0.001	0.481
KD-9	0.540	-0.002	0.467
KD-9	0.690	-0.003	0.458
KD-9	0.840	-0.003	0.450
KD-9	0.920	-0.003	0.446

DC-2 : Case 1-1

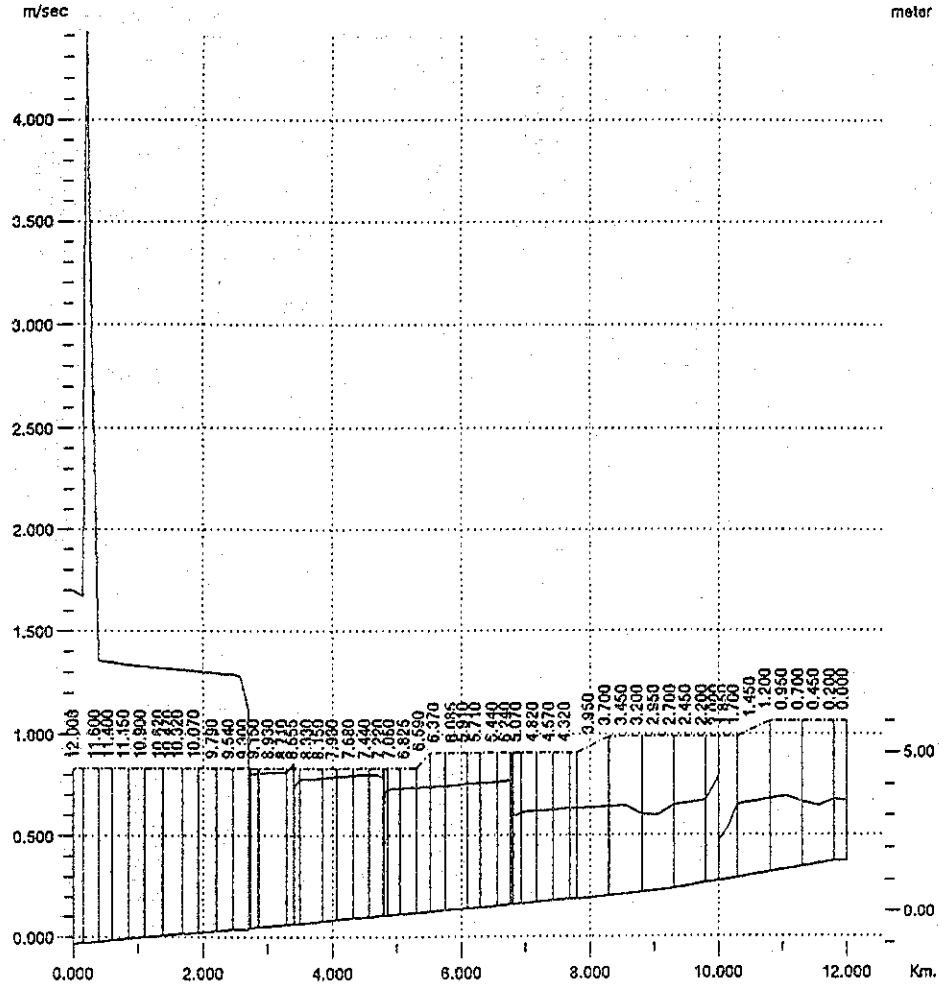
	Location	Minimun m/sec	Maximum m/sec
KD-9	1.000	-0.003	0.476
KD-10	0.000	0.000	0.866
KD-10	0.050	0.000	0.863
KD-10	0.100	-0.001	0.860
KD-10	0.350	-0.007	0.808
KD-10	0.600	-0.010	0.767
KD-10	0.850	-0.013	0.729
KD-10	1.100	-0.016	0.691
KD-10	1.350	-0.018	0.648
KD-10	1.600	-0.019	0.619
KD-10	1.850	-0.018	0.553
KD-10	2.100	-0.017	0.689
KD-10	2.350	-0.018	0.888
KD-10	2.600	-0.018	0.861
KD-10	2.850	-0.018	0.825
KD-10	3.100	-0.017	0.788
KD-10	3.350	-0.017	0.751
KD-10	3.600	-0.017	0.713
KD-10	3.825	-0.016	0.675
KD-10	4.050	-0.016	0.644
KD-10	4.075	-0.016	0.640
KD-10	4.100	-0.016	0.640

DC-2 : Case 1-1



H: 1/75000 V: 1/150	KD-5 (Max. WL)
PARAMETER : WATER LEVEL, DATA FILE : RN1-1.RDF RESULT FILE : RES1-1.RRF	1-AUG-2010, 04:20 (28.33 hrs) BOUNDARY FILE : BN-1.BSF CALCULATED : 2-FEB-1992, 15:11
MIKE 11 Dwg no.:	

DC-2 : Case 1-1

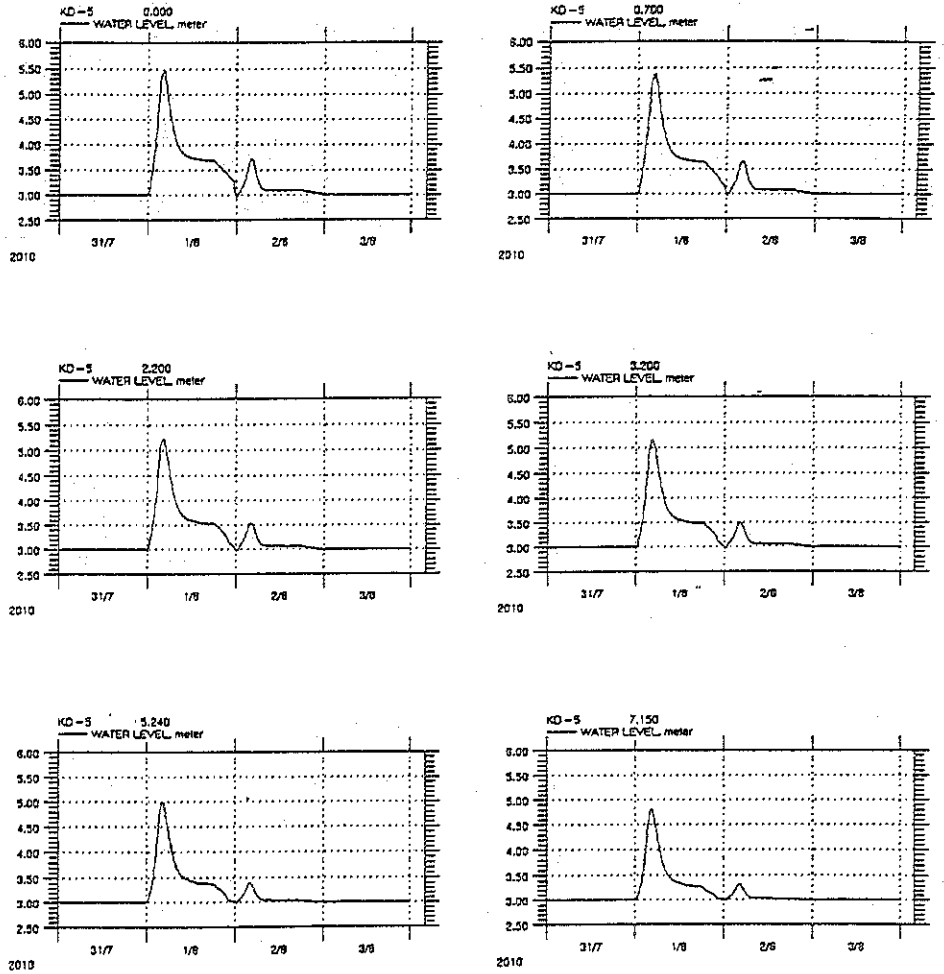


H: 1/75000 V: 1/150	KD-E

PARAMETER : VELOCITY, DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.VRF	1 – AUG – 2010, 04:15 (2.25 hr) BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11	MIKE 11 Dwg no.:

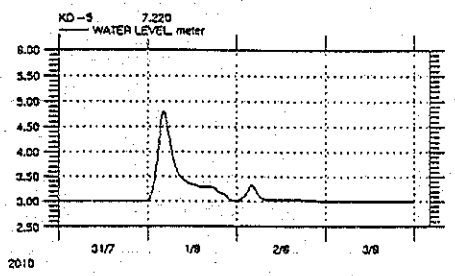
DD-10

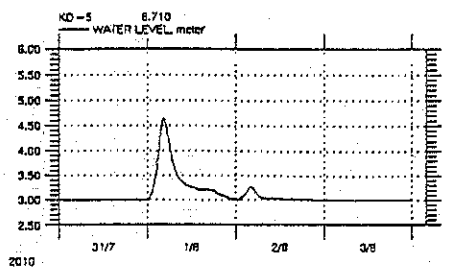
DC-2 : Case 1-1

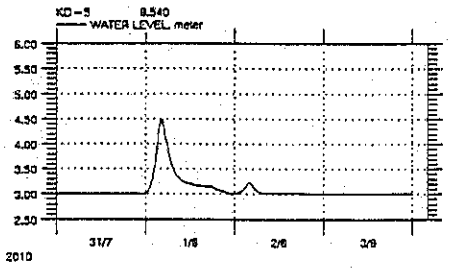


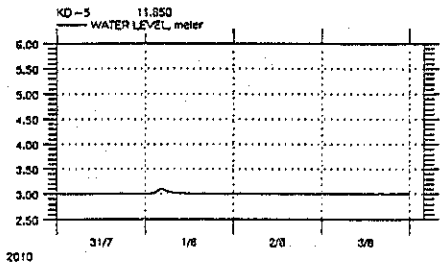
DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11	MIKE 11 Dwg no.:

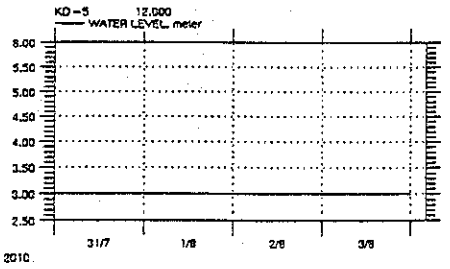
DC-2 : Case 1-1











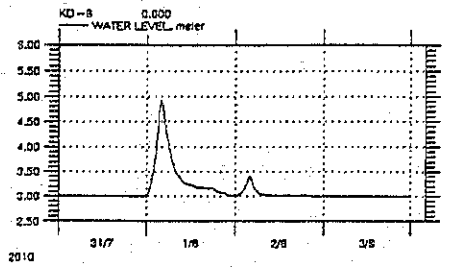
DATA FILE : RN1 – 1.RDF	BOUNDARY FILE : BN – 1.BSF
RESULT FILE : RES1 – 1.RRF	CALCULATED : 2 – FEB – 1992, 15:11

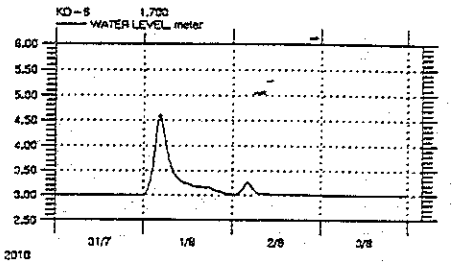
MIKE 11

Dwg no.:

DD- 11

DC-2 : Case 1-1



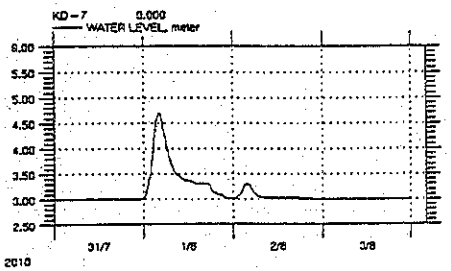


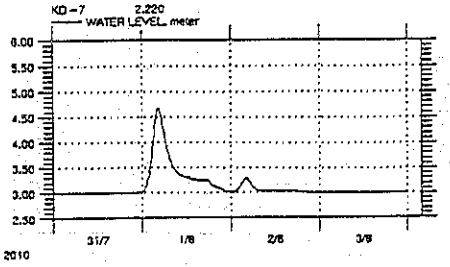
DATA FILE : RN1 – 1.RDF	BOUNDARY FILE : BN – 1.BSF
RESULT FILE : RES1 – 1.RRF	CALCULATED : 2 – FEB – 1992, 15:11

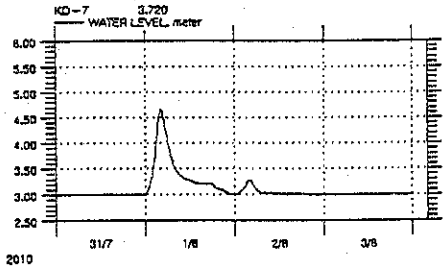
MIKE 11

Dwg no.:

DC-2 : Case 1-1



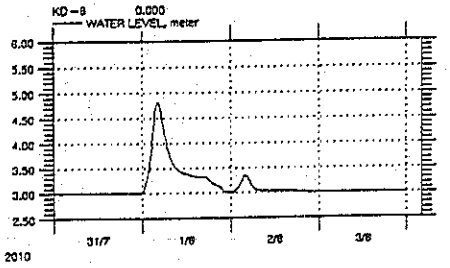


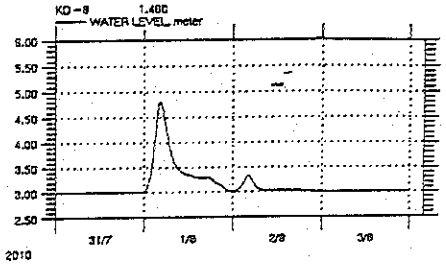


DD- 12

DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11
	MIKE 11 Dwg no.:

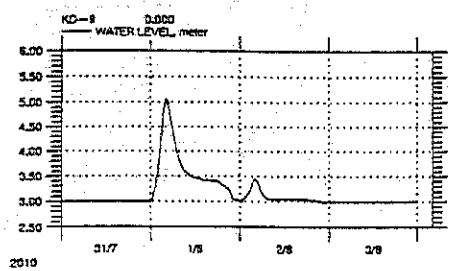
DC-2 : Case 1-1

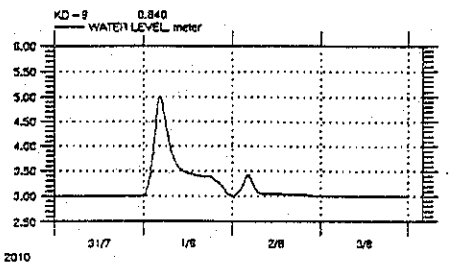




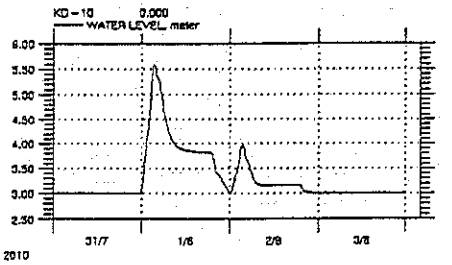
DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11
	MIKE 11 Dwg no.:

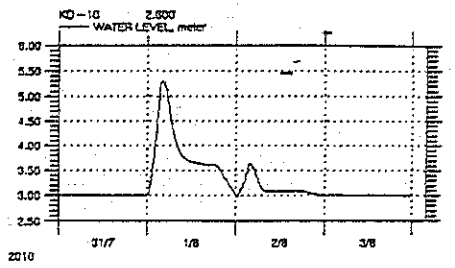
DC-2 : Case 1-1

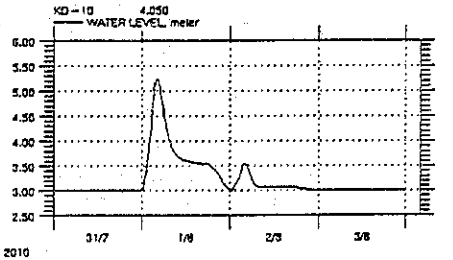




DC-2 : Case 1-1





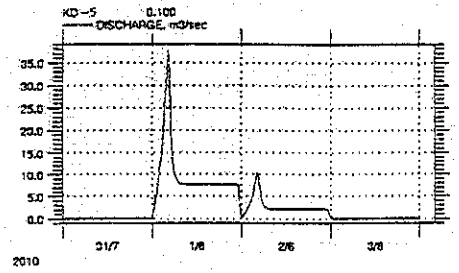


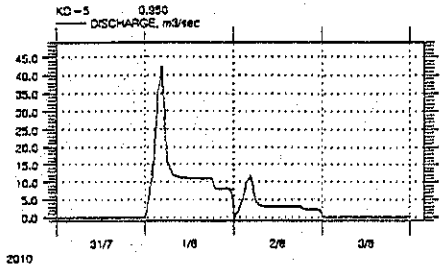
DD- 13

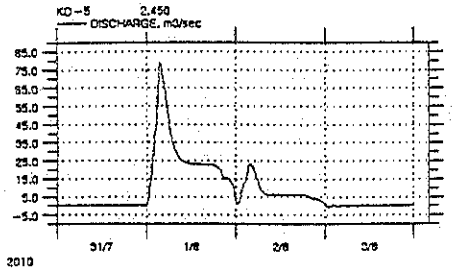
DATA FILE : RN1-1.RDF RESULT FILE : RES1-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 2-FEB-1992, 15:11	MIKE 11 Dwg no.:

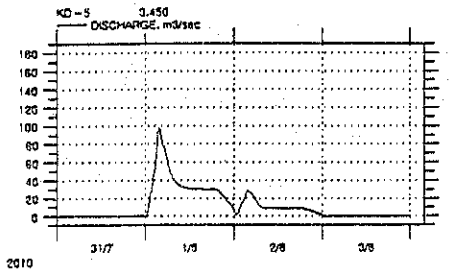
DATA FILE : RN1-1.RDF RESULT FILE : RES1-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 2-FEB-1992, 15:11	MIKE 11 Dwg no.:

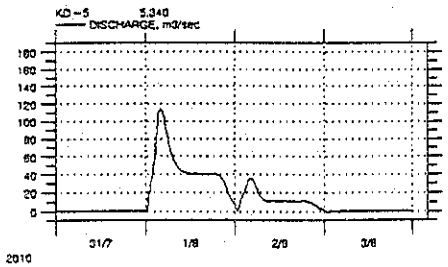
DC-2 : Case 1-1

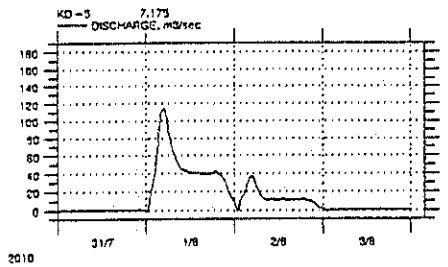






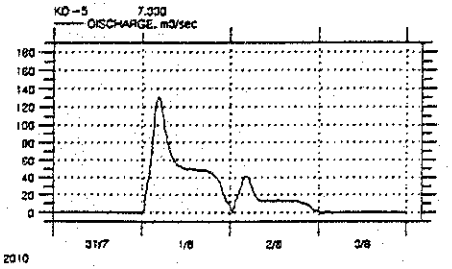


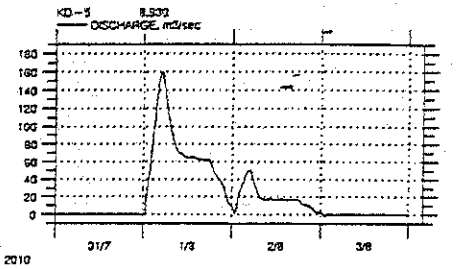


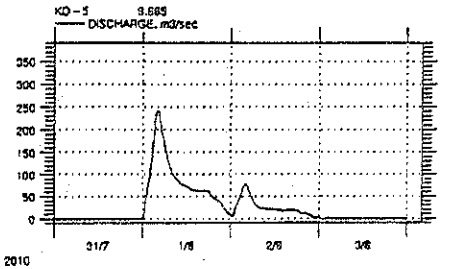


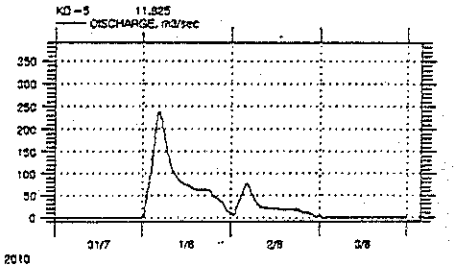
DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11
MIKE 11 Dwg no.:	

DC-2 : Case 1-1



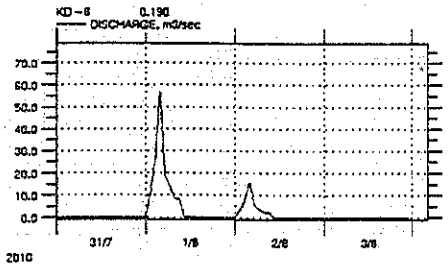


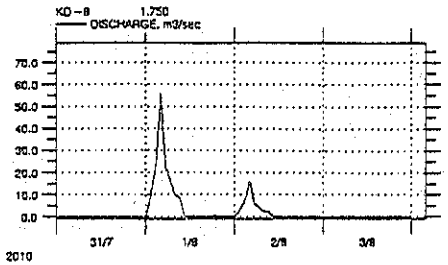




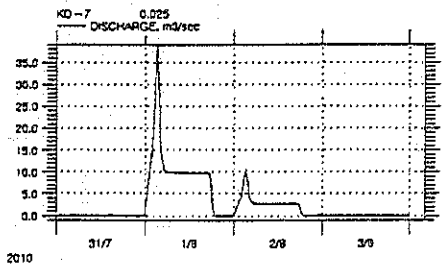
DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11
MIKE 11 Dwg no.:	

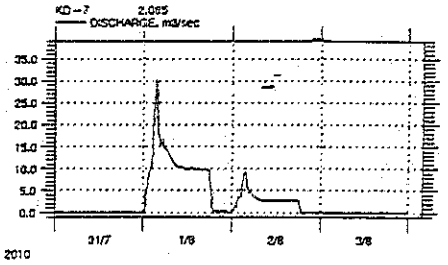
DC-2 : Case 1-1

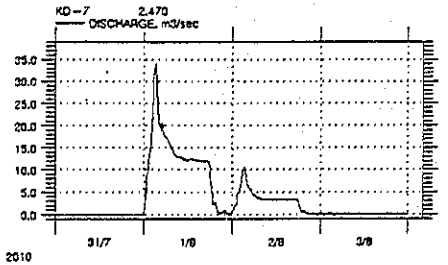


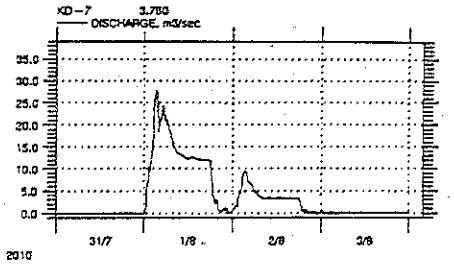


DC-2 : Case 1-1







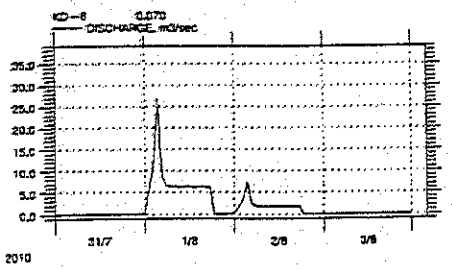


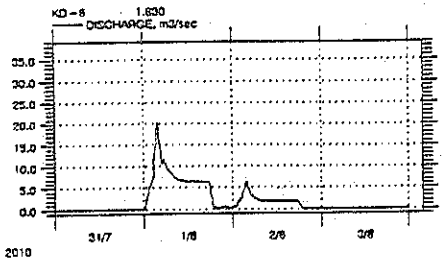
DD- 15

DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11	MIKE 11 Dwg no.:

DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11	MIKE 11 Dwg no.:

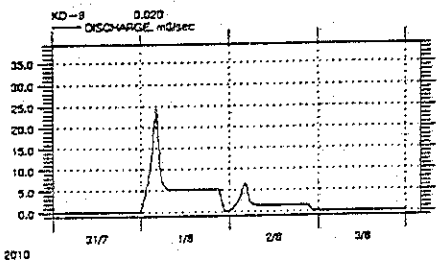
DC-2 : Case 1-1

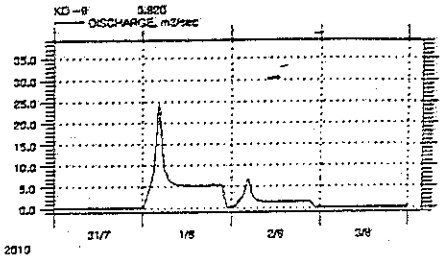




		MIKE 11
DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11	Dwg no.:

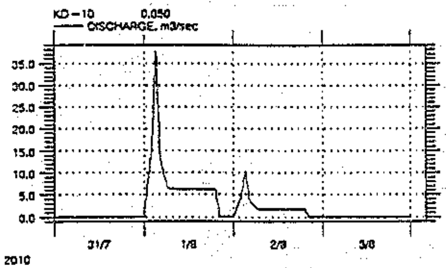
DC-2 : Case 1-1

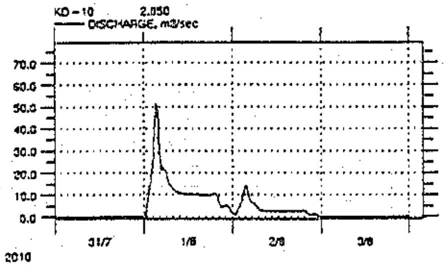


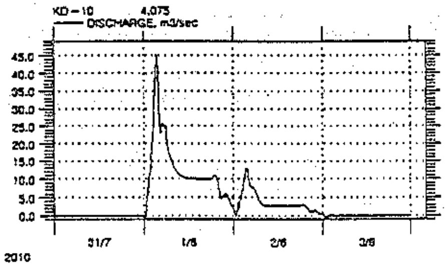


		MIKE 11
DATA FILE : RN1 – 1.RDF RESULT FILE : RES1 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 2 – FEB – 1992, 15:11	Dwg no.:

DC-2 : Case 1-1







		MIKE 11
DATA FILE : RN1-1.RDF RESULT FILE : RES1-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 2-FEB-1992, 15:11	Dwg no.:

DC-2 : Case 1-2 Without Retarding Pond and With Pump Station

```
+------------------------------------------------------------------------+
! RIVER MODEL                 MAIN MENU                      Version 2.10 !
+------------------------------------------------------------------------+
!                                                              File Name  !
!  X   A.  River / Catchment                                 :   RN1-2    !
!  X   B.  Boundaries / Time Series                          :   BN-2     !
!  X   C.  Transport dispersion and cohesive sediment        :            !
!  X   D.  Water quality                                     :            !
!  X   E.  Non cohesive sediment                             :            !
!                                                                         !
!  X   G.  Supplementary data                                :   SUP2     !
!                                                                         !
!  X   H.  Calculation                                                    !
!                                                                         !
!  X   J.  Presentation of results                           :   RES1-2   !
!                                                                         !
! Enter choice:  (,,A-J)                                                  !
+------------------------------------------------------------------------+
!  X : Installed Modules           Data area ............... :   437 Kb   !
!                                  Free disk space ..........:  18452 Kb  !
!  Current directory : C:\PROJECTS\DC-2                                   !
+------------------------------------------------------------------------+
<Esc> Return to Opening Menu                                <F1> Help Menu
```

DC-2 : Case 1-2

```
+-----------------------------------------------------------------------+
! A          R I V E R   S E T U P   D A T A                            !
+-----------------------------------------------------------------------+
!                                                                       !
!                              Enter file name :    RN1-2.RDF           !
!                                                                       !
!                                                                       !
!         1.  LOAD               System File --> Edit File              !
!         2.  SAVE               Edit File   --> System File            !
!         3.  DELETE             Edit File    /  System File            !
!         4.  PRESENT            System File                            !
!         5.  EDIT                                                      !
!         6.  DATA BASE WITH CROSS SECTIONS                             !
!         7.  DIRECTORY                                                 !
!                                                                       !
!                                                                       !
!                              Enter  no. (1-7) :                       !
!                                                                       !
+-----------------------------------------------------------------------+
<Esc> return to MIKE 11 Main Menu                      <F1> Help Menu
```

Edit File is empt

DC-2 : Case 1-2

```
+-----------------------------------------------------------------------+
! B          M O D E L   B O U N D A R I E S                            !
+-----------------------------------------------------------------------+
!                                                                       !
!                              Enter file name :    BN-2.BSF           !
!                                                                       !
!                                                                       !
!         1.  LOAD               System File --> Edit File              !
!         2.  SAVE               Edit File   --> System File            !
!         3.  DELETE             Edit File    /  System File            !
!                                                                       !
!         5.  EDIT               Edit File                              !
!         6.  TIME SERIES DATA BASE                                     !
!         7.  DIRECTORY                                                 !
!                                                                       !
!                                                                       !
!                              Enter no (1-3,5-7) :                     !
!                                                                       !
+-----------------------------------------------------------------------+
<Esc> return to MIKE 11 Main Menu                      <F1> Help Menu
```

Edit File is empt

```
+-----------------------------------------------------------------------+
! MENU A.5       RIVER SYSTEM       GENERAL VIEW                MIKE 11 !
+-----------------------------------------------------------------------+
!                                                              number   !
!       1  RIVER BRANCHES ..............................         6      !
!                                                                       !
!       2  RIVER CROSS-SECTIONS                                         !
!       3  BROADCRESTED WEIRS ..........................         0      !
!       4  SPECIAL WEIRS ...............................         0      !
!       5  CULVERTS ....................................         0      !
!       6  Q = Q(t) ....................................         1      !
!       7  Q = f(Q,h upstream) .........................         0      !
!       8  Q-h BOUNDARIES...............................         0      !
!       9  .............................................         0      !
!       0  CATCHMENTS  .................................         0      !
!       T  TEXT  .......................................         0      !
!                                                                       !
!       D  DATA BASE NAME (cross-sections) .............      CASE-1    !
!       A  ADD ON MODULES                                               !
!                                                                       !
!  Select : <Enter> or (0-9,O,T,D,A)                                    !
+-----------------------------------------------------------------------+
 <Esc> return to Menu A                                <F1> Help Menu
```

DC-2 : Case 1-2

```
18 ! B.5                EXTRACTION FROM THE DATA BASE                        !
---+-------------------------------------------------------------------------+
   !  BOUNDARY  No. 16   at:              Boundary     1: WATER LEVEL        !
   ! River name    : KD-5                type...: 1   2: DISCHARGE          !
   ! Chainage(km) :      12.000                      3: WIND FIELD         !
   !                                                 4: RESISTANCE FACTOR  !
   !                                                 5: GATE LEVEL         !
   !                                                                       !
   !  Name of      Name of                                                 !
   !  Data base !  Event        !     Start time     !     Finish time     !
   ! +----------+---------------+--------------------+--------------------+ !
   ! ! WL       ! BALUHWL       ! 2010  7 31   0  0 ! 2010  8  3  23 59 ! !
   ! +----------+---------------+--------------------+--------------------+ !
   !           Right (y/n) :                                               !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   +-------------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

DC-2 : Case 1-2

```
17 ! B.5                EXTRACTION FROM THE DATA BASE                        !
---+-------------------------------------------------------------------------+
   !  BOUNDARY  No. 17   at:              Boundary     1: WATER LEVEL        !
   ! River name    : KD-5                type...: 2   2: DISCHARGE          !
   ! Chainage(km) :      11.800                      3: WIND FIELD         !
   !                                                 4: RESISTANCE FACTOR  !
   !                                                 5: GATE LEVEL         !
   !                                                                       !
   !  Name of      Name of                                                 !
   !  Data base !  Event        !     Start time     !     Finish time     !
   ! +----------+---------------+--------------------+--------------------+ !
   ! ! PUMP     ! PUMP          ! 2010  7 31   0  0 ! 2010  8  3  23 59 ! !
   ! +----------+---------------+--------------------+--------------------+ !
   !           Right (y/n) :                                               !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   !                                                                       !
   +-------------------------------------------------------------------------+
Enter: (E/I/D/ESC) Edit Insert Delete <esc>=retur
```

DD-19

```
   +-------------------------------------------------------------------------+
   !  B.6.5.E          WATER LEVELS       Data Base Name:          WL        !
   +-------------------------------------------------------------------------+
   ! +-------------------------------------+-------------------+             !
   ! ! IDENTIFICATION : BALUHWL            ! Delta t (hours) !             !
   ! !                                     !       0.00      !             !
   ! +-----------------------+-------------+-------------------+             !
   ! !         Time          ! Water level !                                 !
 2 ! !  YYYY-MM-DD   HH.MM   !    (m)      !                                 !
---! +-----------------------+-------------+                                 !
 1 ! !  2010  7 31    0  0   !      6.15   !                                 !
 2 ! !  2010  8  3   23 59   !      6.15   !                                 !
 3 ! !                       !             !                                 !
 4 ! !                       !             !                                 !
 5 ! !                       !             !                                 !
 6 ! !                       !             !                                 !
 7 ! !                       !             !                                 !
 8 ! !                       !             !                                 !
 9 ! !                       !             !                                 !
10 ! !                       !             !                                 !
   ! +-----------------------+-------------+                                 !
   +-------------------------------------------------------------------------+
Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=retur
```

```
   +-------------------------------------------------------------------------+
   !  B.6.5.E          DISCHARGES         Data Base Name:          PUMP      !
   +-------------------------------------------------------------------------+
   ! +-------------------------------------+-------------------+             !
   ! ! IDENTIFICATION : PUMP                ! Delta t (hours) !             !
   ! !                                     !       0.000     !             !
   ! +-----------------------+-------------+-------------------+             !
   ! !         Time          ! Discharge   !                                 !
 6 ! !  YYYY-MM-DD   HH.MM   !   (m3/s)    !                                 !
---! +-----------------------+-------------+                                 !
 1 ! !  2010  7 31    0  0   !     0.010   !                                 !
 2 ! !  2010  8  1    0  0   !     0.010   !                                 !
 3 ! !  2010  8  1    1  0   !    54.600   !                                 !
 4 ! !  2010  8  2   23 59   !    54.600   !                                 !
 5 ! !  2010  8  3    1  0   !     0.010   !                                 !
 6 ! !  2010  8  3   23 59   !     0.010   !                                 !
 7 ! !                       !             !                                 !
 8 ! !                       !             !                                 !
 9 ! !                       !             !                                 !
10 ! !                       !             !                                 !
   ! +-----------------------+-------------+                                 !
   +-------------------------------------------------------------------------+
Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=retur
```

DC-2 : Case 1-2

```
+-----------------------------------------------------------------------+
!  G              S U P P L E M E N T A R Y    D A T A                   !
+-----------------------------------------------------------------------+
!                                                                       !
!                              Enter file name :      SUP2.SSF          !
!                                                                       !
!                                                                       !
!        1.  LOAD               System File --> Edit File               !
!        2.  SAVE               Edit File   --> System File             !
!        3.  DELETE             Edit File    /  System File             !
!                                                                       !
!        5.  EDIT                                                       !
!                                                                       !
!        7.  DIRECTORY                                                  !
!                                                                       !
!                                                                       !
!                             Enter  no (1-3,5,7) :                     !
!                                                                       !
+-----------------------------------------------------------------------+
<Esc> retun to MIKE 11 Main Menu                        <F1> Help Menu
```

Edit File is empt

DC-2 : Case 1-2

```
+-----------------------------------------------------------------------+
! G.5          SUPPLEMENTARY  DATA     - GENERAL  OVERVIEW               !
+-----------------------------------------------------------------------+
!                                                                       !
!                                                  Number of -          !
!      1  INITIAL CONDITIONS ....................    2  locations      !
!                                                       -               !
!      2  WIND FACTORS ..........................    0     "            !
!                                                                       !
!      3  RESISTANCE NUMBER .....................    0     "            !
!                                                                       !
!      4  FLOW DESCRIPTION ......................    0     "            !
!                                                                       !
!      5  DEFAULT VALUES ........................    1  page           !
!                                                                       !
!      6  WATER LOSS PARAMETERS .................    0  locations      !
!                                                                       !
!      7  TEXT ...................................    0  lines          !
!                                                                       !
!      Select: <Enter> or (1-7)                                         !
+-----------------------------------------------------------------------+
<Esc> return to Menu G                                  <F1> Help Menu
```

DC-2 : Case 1-2

G.5.1 INITIAL CONDITIONS

		H-initial	Q-initial
Global values :		3.00	0.000

Branches where local values are applicable;

	River name	River chainage	H-initial	Q-initial
1	KD-5	11.810	6.15	0.010
2	KD-5	12.000	6.15	0.010
3				
4				
5				
6				
7				
8				
9				
10				

Entr: (E/I/F/D/T/B/L/ESC) Edit Insert Find Delete Top Bottom Line <esc>=retur

DC-2 : Case 1-2

J RESULT PRINT / PLOT MIKE 11

Enter file name: RES1-2.RRF

1.	SELECT	result file	
2.	SELECT	model.....:	HD-model
3.	DELETE	result file	
4.	PRINT	summary	
5.	TIME SERIES	print / plot	
6.	PROFILE	plot	
7.	DIRECTORY		

Enter option (1-7) :

<Esc> Return to Main Menu <F1> Help Menu

DC-2 : Case 1-2

GRID POINT RESULT SUMMARY

WATER LEVEL,

	Location	Minimun meter	Maximum meter
KD-5	0.000	2.89	7.39
KD-5	0.200	2.89	7.39
KD-5	0.700	2.90	7.39
KD-5	1.200	2.90	7.39
KD-5	1.700	2.90	7.39
KD-5	2.000	2.90	7.39
KD-5	2.000	2.90	7.39
KD-5	2.200	2.91	7.39
KD-5	2.700	2.91	7.39
KD-5	3.200	2.91	7.39
KD-5	3.700	2.92	7.38
KD-5	4.200	2.92	7.38
KD-5	4.320	2.92	7.38
KD-5	4.570	2.93	7.38
KD-5	4.820	2.93	7.38
KD-5	5.070	2.93	7.38
KD-5	5.200	2.93	7.38
KD-5	5.200	2.93	7.38
KD-5	5.240	2.93	7.38
KD-5	5.440	2.93	7.38
KD-5	5.710	2.94	7.38
KD-5	5.910	2.94	7.38
KD-5	6.260	2.94	7.38
KD-5	6.480	2.94	7.38
KD-5	6.700	2.94	7.37
KD-5	6.950	2.94	7.37
KD-5	7.150	2.95	7.37
KD-5	7.200	2.95	7.37
KD-5	7.200	2.95	7.37
KD-5	7.220	2.95	7.37
KD-5	7.440	2.94	7.37
KD-5	7.680	2.94	7.37
KD-5	7.930	2.94	7.37
KD-5	8.150	2.94	7.37
KD-5	8.510	2.94	7.37
KD-5	8.600	2.94	7.37
KD-5	8.600	2.94	7.37
KD-5	8.710	2.94	7.37
KD-5	9.150	2.94	7.37
KD-5	9.270	2.94	7.37
KD-5	9.300	2.94	7.37
KD-5	9.300	2.94	7.37
KD-5	9.540	2.94	7.37
KD-5	9.790	2.94	7.37
KD-5	10.070	2.94	7.37
KD-5	10.320	2.94	7.37
KD-5	10.620	2.94	7.37
KD-5	10.900	2.94	7.37
KD-5	11.150	2.93	7.37
KD-5	11.400	2.92	7.37
KD-5	11.600	2.91	7.37
KD-5	11.850	6.15	6.15
KD-5	12.000	6.15	6.15
KD-6	0.000	2.91	7.37
KD-6	0.380	2.92	7.37

DC-2 : Case 1-2

	Location	Minimun meter	Maximum meter
KD-6	0.730	2.92	7.37
KD-6	1.080	2.93	7.37
KD-6	1.480	2.93	7.37
KD-6	1.700	2.94	7.37
KD-6	1.800	2.94	7.37
KD-7	0.000	2.92	7.37
KD-7	0.050	2.92	7.37
KD-7	0.260	2.92	7.37
KD-7	0.540	2.93	7.37
KD-7	0.690	2.93	7.37
KD-7	0.940	2.93	7.37
KD-7	1.220	2.93	7.37
KD-7	1.420	2.93	7.37
KD-7	1.720	2.93	7.37
KD-7	1.950	2.93	7.37
KD-7	2.220	2.93	7.37
KD-7	2.720	2.94	7.37
KD-7	3.035	2.94	7.37
KD-7	3.350	2.94	7.37
KD-7	3.720	2.94	7.37
KD-7	3.800	2.94	7.37
KD-8	0.000	2.93	7.38
KD-8	0.140	2.93	7.37
KD-8	0.590	2.93	7.38
KD-8	0.855	2.94	7.38
KD-8	1.120	2.94	7.37
KD-8	1.460	2.94	7.37
KD-8	1.800	2.95	7.37
KD-9	0.000	2.93	7.38
KD-9	0.040	2.93	7.38
KD-9	0.540	2.93	7.38
KD-9	0.840	2.93	7.38
KD-9	1.000	2.93	7.38
KD-10	0.000	2.87	7.39
KD-10	0.100	2.86	7.39
KD-10	0.600	2.87	7.39
KD-10	1.100	2.87	7.39
KD-10	1.600	2.88	7.39
KD-10	2.100	2.88	7.39
KD-10	2.600	2.89	7.39
KD-10	3.100	2.89	7.39
KD-10	3.600	2.90	7.39
KD-10	4.050	2.90	7.39
KD-10	4.100	2.90	7.39

DISCHARGE, DC-2 : Case 1-2

	Location	Minimun m3/sec	Maximum m3/sec
KD-5	0.100	-0.117	37.164
KD-5	0.450	-0.293	35.184
KD-5	0.950	-0.617	37.189
KD-5	1.450	-1.001	34.174
KD-5	1.850	-1.257	31.782
KD-5	2.100	-4.614	65.112
KD-5	2.450	-4.927	61.700
KD-5	2.950	-5.336	56.617
KD-5	3.450	-5.661	77.254
KD-5	3.950	-5.796	70.745
KD-5	4.260	-5.891	66.488
KD-5	4.445	-5.924	63.915
KD-5	4.695	-5.883	60.334
KD-5	4.945	-5.829	56.647
KD-5	5.135	-5.926	53.793
KD-5	5.220	-6.105	74.212
KD-5	5.340	-6.149	72.289
KD-5	5.575	-6.199	68.461
KD-5	5.810	-6.177	64.572
KD-5	6.085	-6.099	59.999
KD-5	6.370	-5.983	55.224
KD-5	6.590	-5.876	51.527
KD-5	6.825	-5.755	49.264
KD-5	7.050	-5.627	48.187
KD-5	7.175	-5.566	47.615
KD-5	7.210	-5.071	51.635
KD-5	7.330	-4.976	53.196
KD-5	7.560	-4.871	50.304
KD-5	7.805	-4.784	49.049
KD-5	8.040	-4.678	47.813
KD-5	8.330	-4.560	47.475
KD-5	8.555	-4.461	47.635
KD-5	8.655	-3.617	57.651
KD-5	8.930	-3.393	57.586
KD-5	9.210	-3.168	57.388
KD-5	9.285	-3.122	57.348
KD-5	9.420	-3.426	107.075
KD-5	9.665	-3.401	101.797
KD-5	9.930	-3.437	96.181
KD-5	10.195	-3.471	90.679
KD-5	10.470	-3.433	84.917
KD-5	10.760	-3.220	78.495
KD-5	11.025	-2.698	72.337
KD-5	11.275	-1.921	66.564
KD-5	11.500	-1.035	61.528
KD-5	11.800	0.000	54.600
KD-5	11.925	-0.193	54.810
KD-6	0.190	-0.358	56.050
KD-6	0.555	-1.095	53.840
KD-6	0.905	-1.553	51.788
KD-6	1.280	-1.615	49.292
KD-6	1.590	-1.702	47.004
KD-6	1.750	-1.786	45.789
KD-7	0.025	-0.025	38.578
KD-7	0.155	-0.148	37.380

DC-2 : Case 1-2

	Location	Minimun m3/sec	Maximum m3/sec
KD-7	0.400	-0.423	35.251
KD-7	0.615	-0.474	33.308
KD-7	0.815	-0.526	31.446
KD-7	1.080	-0.721	28.890
KD-7	1.320	-0.918	26.567
KD-7	1.570	-1.078	24.154
KD-7	1.835	-1.156	21.573
KD-7	2.085	-1.307	19.082
KD-7	2.470	-1.346	23.769
KD-7	2.878	-1.756	20.697
KD-7	3.193	-4.899	18.279
KD-7	3.535	-8.496	15.550
KD-7	3.760	-10.791	14.824
KD-8	0.070	-0.094	26.573
KD-8	0.365	-0.247	24.019
KD-8	0.723	-0.474	20.817
KD-8	0.988	-0.591	18.364
KD-8	1.290	-0.696	15.482
KD-8	1.630	-0.761	12.310
KD-9	0.020	-0.015	24.345
KD-9	0.290	-0.133	22.874
KD-9	0.690	-0.321	20.812
KD-9	0.920	-0.414	19.576
KD-10	0.050	-0.066	37.655
KD-10	0.350	-0.328	35.727
KD-10	0.850	-0.765	33.558
KD-10	1.350	-1.156	31.539
KD-10	1.850	-2.250	29.214
KD-10	2.350	-2.029	50.990
KD-10	2.850	-2.411	47.644
KD-10	3.350	-5.822	43.776
KD-10	3.825	-9.268	39.704
KD-10	4.075	-11.025	37.350

DC-2 : Case 1-2

GRID POINT RESULT SUMMARY

VELOCITY,

	Location	Minimun m/sec	Maximum m/sec
KD-5	0.000	0.000	0.544
KD-5	0.100	-0.004	0.537
KD-5	0.200	-0.010	0.529
KD-5	0.450	-0.021	0.487
KD-5	0.700	-0.030	0.484
KD-5	0.950	-0.039	0.575
KD-5	1.200	-0.046	0.526
KD-5	1.450	-0.053	0.482
KD-5	1.700	-0.058	0.442
KD-5	1.850	-0.048	0.353
KD-5	2.000	-0.042	0.330
KD-5	2.000	-0.130	0.715
KD-5	2.100	-0.115	0.653
KD-5	2.200	-0.104	0.586
KD-5	2.450	-0.102	0.546
KD-5	2.700	-0.100	0.508
KD-5	2.950	-0.091	0.443
KD-5	3.200	-0.085	0.492
KD-5	3.450	-0.087	0.575
KD-5	3.700	-0.089	0.543
KD-5	3.950	-0.089	0.512
KD-5	4.200	-0.089	0.483
KD-5	4.260	-0.089	0.475
KD-5	4.320	-0.089	0.468
KD-5	4.445	-0.089	0.452
KD-5	4.570	-0.089	0.436
KD-5	4.695	-0.088	0.421
KD-5	4.820	-0.088	0.406
KD-5	4.945	-0.087	0.391
KD-5	5.070	-0.086	0.375
KD-5	5.135	-0.083	0.358
KD-5	5.200	-0.080	0.389
KD-5	5.200	-0.079	0.480
KD-5	5.220	-0.078	0.490
KD-5	5.240	-0.078	0.484
KD-5	5.340	-0.077	0.471
KD-5	5.440	-0.076	0.459
KD-5	5.575	-0.075	0.442
KD-5	5.710	-0.074	0.425
KD-5	5.810	-0.073	0.413
KD-5	5.910	-0.072	0.401
KD-5	6.085	-0.071	0.379
KD-5	6.260	-0.069	0.357
KD-5	6.370	-0.068	0.344
KD-5	6.480	-0.067	0.331
KD-5	6.590	-0.066	0.318
KD-5	6.700	-0.064	0.305
KD-5	6.825	-0.063	0.291
KD-5	6.950	-0.062	0.276
KD-5	7.050	-0.061	0.266
KD-5	7.150	-0.060	0.265
KD-5	7.175	-0.059	0.261
KD-5	7.200	-0.057	0.256
KD-5	7.200	-0.056	0.297
KD-5	7.210	-0.055	0.294

DC-2 : Case 1-2

	Location	Minimun m/sec	Maximum m/sec
KD-5	7.220	-0.055	0.293
KD-5	7.330	-0.054	0.334
KD-5	7.440	-0.053	0.324
KD-5	7.560	-0.052	0.314
KD-5	7.680	-0.051	0.304
KD-5	7.805	-0.050	0.297
KD-5	7.930	-0.049	0.291
KD-5	8.040	-0.048	0.293
KD-5	8.150	-0.047	0.295
KD-5	8.330	-0.046	0.298
KD-5	8.510	-0.044	0.300
KD-5	8.555	-0.042	0.291
KD-5	8.600	-0.040	0.283
KD-5	8.600	-0.027	0.351
KD-5	8.655	-0.025	0.358
KD-5	8.710	-0.024	0.343
KD-5	8.930	-0.024	0.332
KD-5	9.150	-0.023	0.327
KD-5	9.210	-0.022	0.327
KD-5	9.270	-0.022	0.328
KD-5	9.285	-0.022	0.328
KD-5	9.300	-0.022	0.328
KD-5	9.300	-0.023	0.421
KD-5	9.420	-0.023	0.542
KD-5	9.540	-0.022	0.533
KD-5	9.665	-0.022	0.521
KD-5	9.790	-0.021	0.509
KD-5	9.930	-0.020	0.497
KD-5	10.070	-0.019	0.484
KD-5	10.195	-0.018	0.474
KD-5	10.320	-0.016	0.465
KD-5	10.470	-0.015	0.453
KD-5	10.620	-0.013	0.446
KD-5	10.760	-0.012	0.440
KD-5	10.900	-0.010	0.434
KD-5	11.025	-0.008	0.427
KD-5	11.150	-0.007	0.421
KD-5	11.275	-0.005	0.416
KD-5	11.400	-0.004	0.411
KD-5	11.500	-0.003	0.407
KD-5	11.600	-0.002	0.404
KD-5	11.800	0.000	0.255
KD-5	11.850	0.000	0.187
KD-5	11.925	-0.000	0.187
KD-5	12.000	-0.000	0.186
KD-6	0.000	0.000	0.762
KD-6	0.190	-0.010	0.739
KD-6	0.380	-0.019	0.718
KD-6	0.555	-0.027	0.687
KD-6	0.730	-0.033	0.660
KD-6	0.905	-0.039	0.633
KD-6	1.080	-0.042	0.606
KD-6	1.280	-0.046	0.577
KD-6	1.480	-0.047	0.547
KD-6	1.590	-0.048	0.530

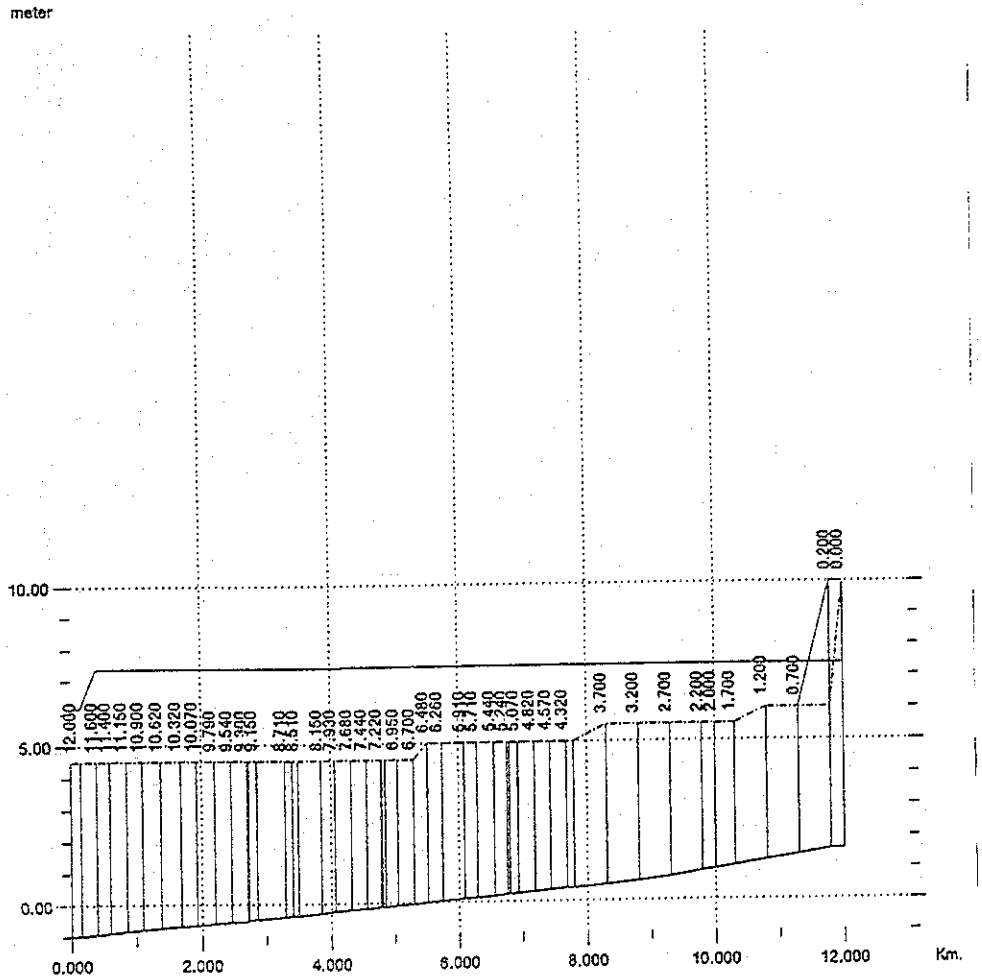
DC-2 : Case 1-2

	Location	Minimun m/sec	Maximum m/sec
KD-6	1.700	-0.048	0.514
KD-6	1.750	-0.048	0.508
KD-6	1.800	-0.048	0.591
KD-7	0.000	0.000	0.615
KD-7	0.025	-0.000	0.612
KD-7	0.050	-0.001	0.609
KD-7	0.155	-0.003	0.589
KD-7	0.260	-0.005	0.569
KD-7	0.400	-0.008	0.541
KD-7	0.540	-0.011	0.515
KD-7	0.615	-0.012	0.502
KD-7	0.690	-0.014	0.488
KD-7	0.815	-0.016	0.466
KD-7	0.940	-0.018	0.444
KD-7	1.080	-0.020	0.420
KD-7	1.220	-0.021	0.397
KD-7	1.320	-0.023	0.380
KD-7	1.420	-0.024	0.363
KD-7	1.570	-0.025	0.338
KD-7	1.720	-0.027	0.314
KD-7	1.835	-0.028	0.298
KD-7	1.950	-0.029	0.282
KD-7	2.085	-0.029	0.252
KD-7	2.220	-0.028	0.270
KD-7	2.470	-0.030	0.332
KD-7	2.720	-0.032	0.301
KD-7	2.878	-0.033	0.281
KD-7	3.035	-0.034	0.261
KD-7	3.193	-0.043	0.242
KD-7	3.350	-0.057	0.223
KD-7	3.535	-0.074	0.200
KD-7	3.720	-0.089	0.189
KD-7	3.760	-0.092	0.187
KD-7	3.800	-0.091	0.206
KD-8	0.000	0.000	0.487
KD-8	0.070	-0.001	0.471
KD-8	0.140	-0.003	0.455
KD-8	0.365	-0.008	0.409
KD-8	0.590	-0.012	0.365
KD-8	0.723	-0.014	0.340
KD-8	0.855	-0.016	0.315
KD-8	0.988	-0.018	0.291
KD-8	1.120	-0.019	0.267
KD-8	1.290	-0.021	0.238
KD-8	1.460	-0.021	0.209
KD-8	1.630	-0.023	0.182
KD-8	1.800	-0.023	0.158
KD-9	0.000	0.000	0.362
KD-9	0.020	0.000	0.360
KD-9	0.040	-0.000	0.358
KD-9	0.290	-0.005	0.326
KD-9	0.540	-0.009	0.297
KD-9	0.690	-0.011	0.280
KD-9	0.840	-0.013	0.264
KD-9	0.920	-0.014	0.256

DC-2 : Case 1-2

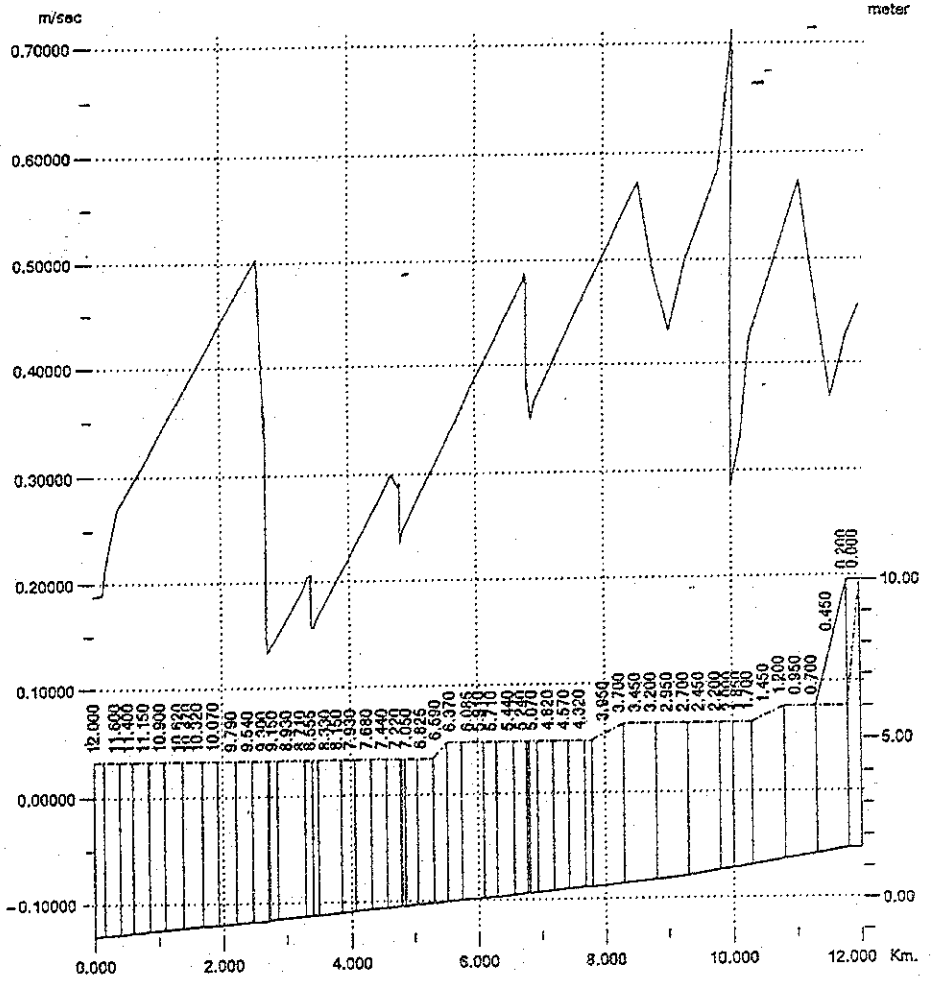
	Location	Minimun m/sec	Maximum m/sec
KD-9	1.000	-0.015	0.274
KD-10	0.000	0.000	0.860
KD-10	0.050	-0.007	0.856
KD-10	0.100	-0.015	0.852
KD-10	0.350	-0.047	0.796
KD-10	0.600	-0.072	0.746
KD-10	0.850	-0.090	0.699
KD-10	1.100	-0.103	0.657
KD-10	1.350	-0.113	0.610
KD-10	1.600	-0.122	0.564
KD-10	1.850	-0.115	0.486
KD-10	2.100	-0.112	0.634
KD-10	2.350	-0.116	0.832
KD-10	2.600	-0.118	0.794
KD-10	2.850	-0.120	0.745
KD-10	3.100	-0.121	0.698
KD-10	3.350	-0.122	0.651
KD-10	3.600	-0.122	0.604
KD-10	3.825	-0.122	0.558
KD-10	4.050	-0.121	0.514
KD-10	4.075	-0.121	0.510
KD-10	4.100	-0.120	0.509

DC-2 : Case 1-2



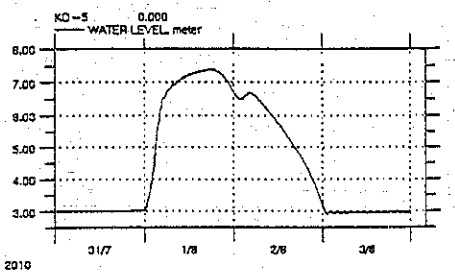
H: 1/75000 V: 1/150	KD-5 (Max. WL)
PARAMETER : WATER LEVEL, DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	1-AUG-2010, 17:40 BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37
MIKE 11 Dwg no.:	

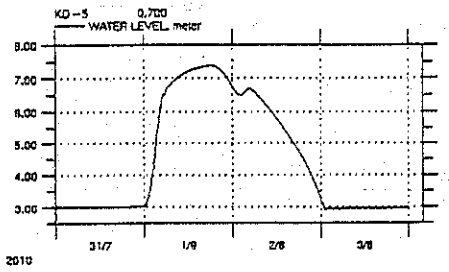
DC-2 : Case 1-2

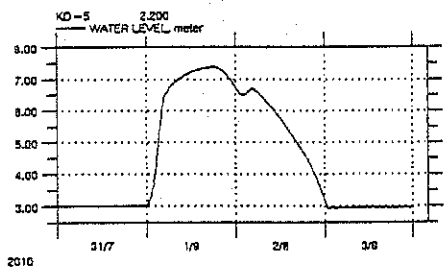


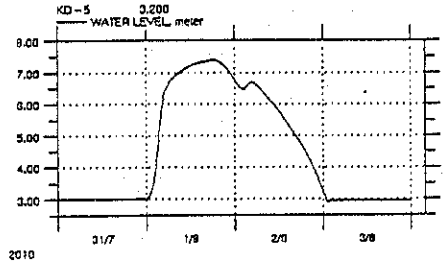
H: 1/75000 V: 1/150	KD-5
PARAMETER : VELOCITY, DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.VRF	1-AUG-2010, 03:15 BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37
MIKE 11 Dwg no.:	

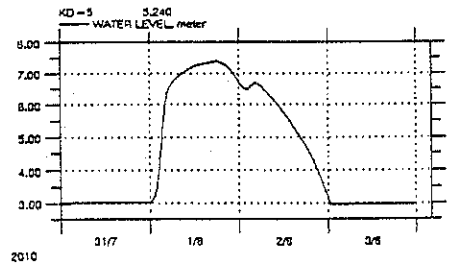
DC-2 : Case 1-2

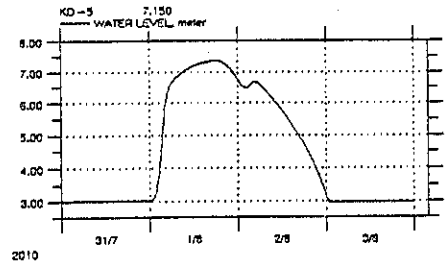










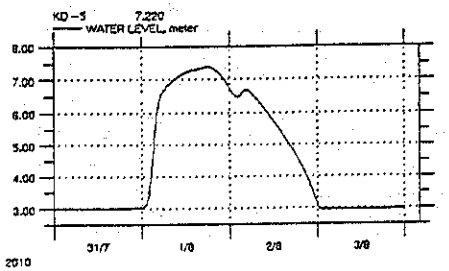


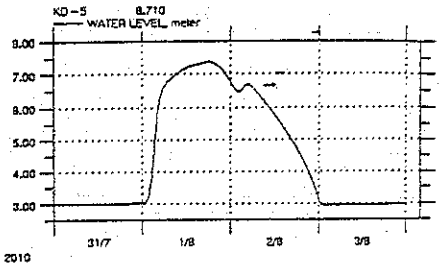
DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37

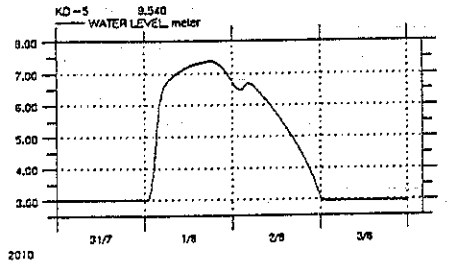
MIKE 11

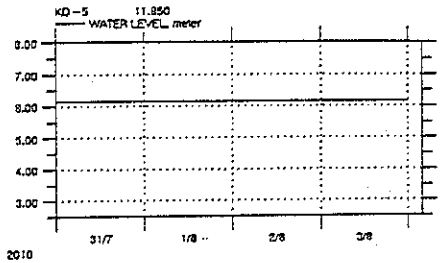
Dwg no.:

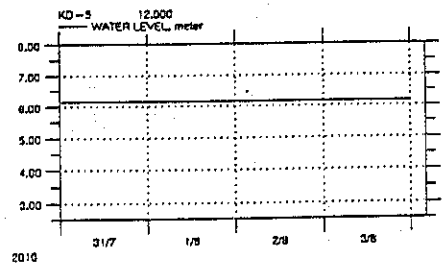
DC-2 : Case 1-2











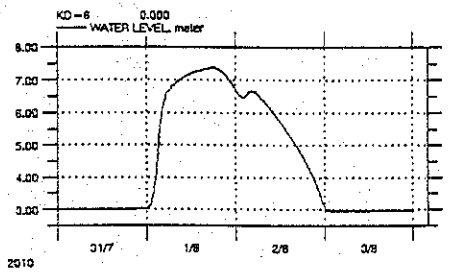
DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37

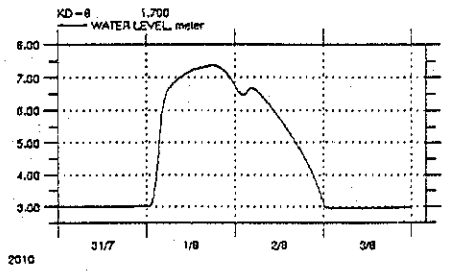
MIKE 11

Dwg no.:

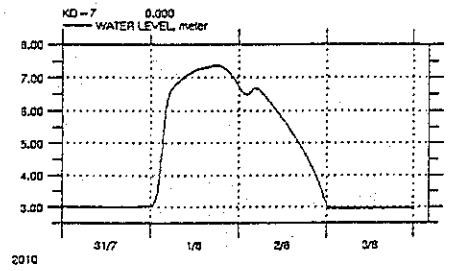
DD-27

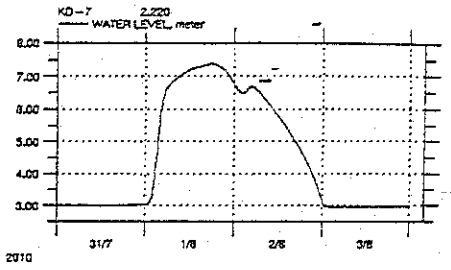
DC-2 : Case 1-2

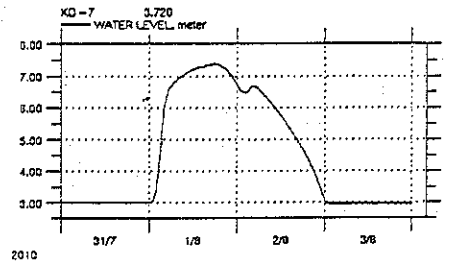




DC-2 : Case 1-2





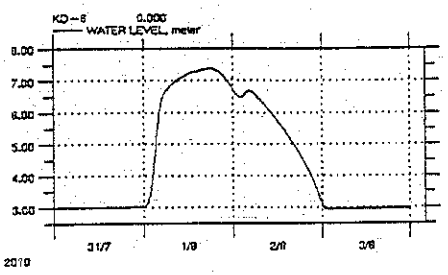


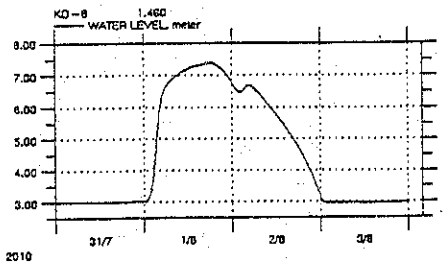
DD-28

DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37	MIKE 11 Dwg no.:

DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37	MIKE 11 Dwg no.:

DC-2 : Case 1-2



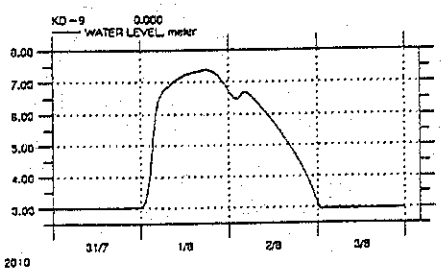


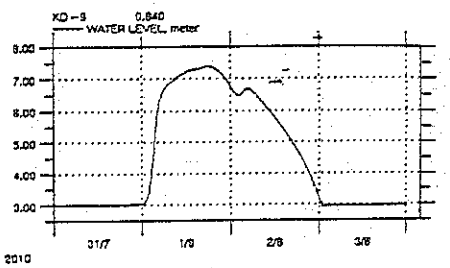
DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37

MIKE 11

Dwg no.:

DC-2 : Case 1-2





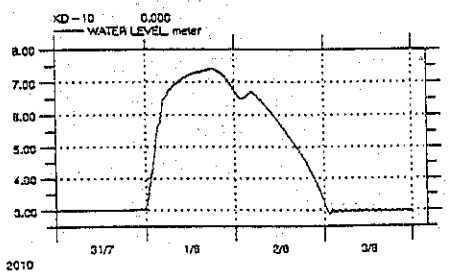
DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37

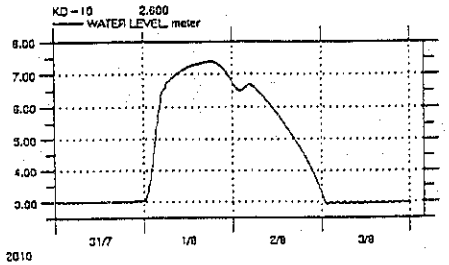
MIKE 11

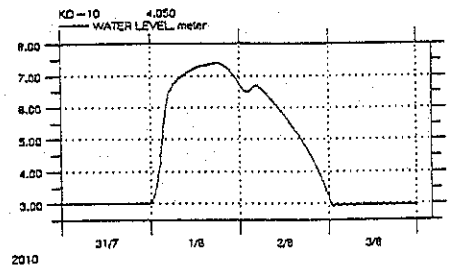
Dwg no.:

DD-30

OC-2 : Case 1-2





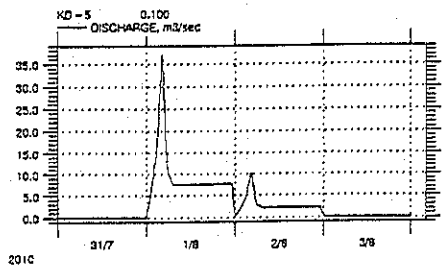


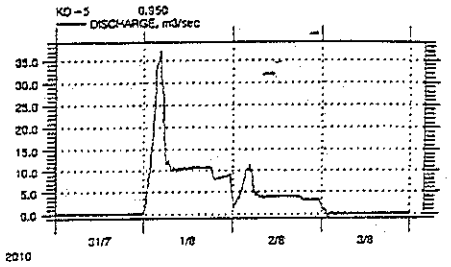
DATA FILE : RN1-2.RDF	BOUNDARY FILE : BN-2.BSF
RESULT FILE : RES1-2.RRF	CALCULATED : 3-FEB-1992, 10:37

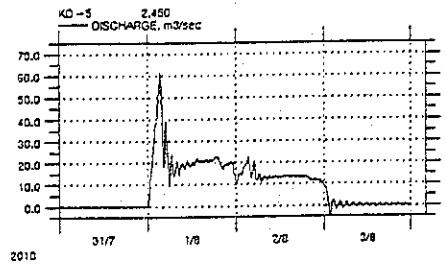
MIKE 11

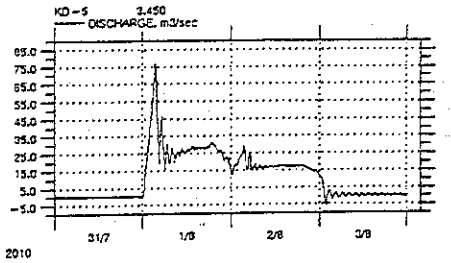
Dwg no.:

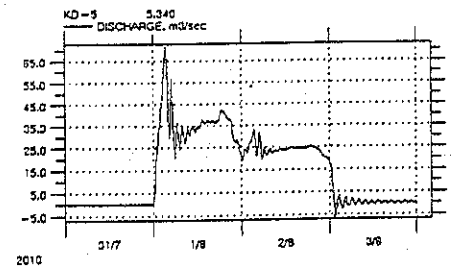
OC-2 : Case 1-2

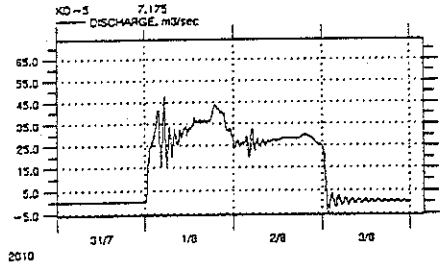










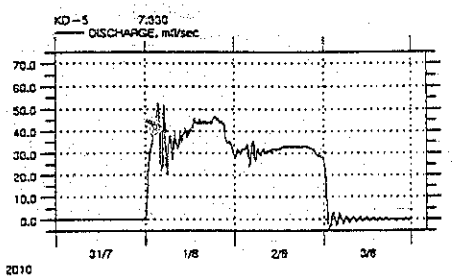


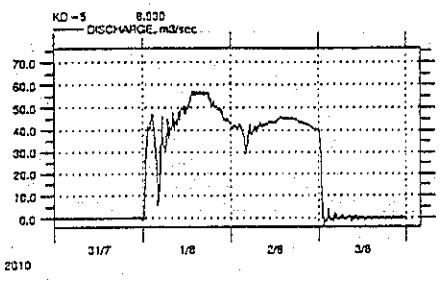
DATA FILE : RN1-2.RDF	BOUNDARY FILE : BN-2.BSF
RESULT FILE : RES1-2.RRF	CALCULATED : 3-FEB-1992, 10:37

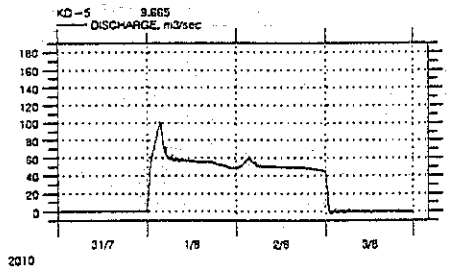
MIKE 11

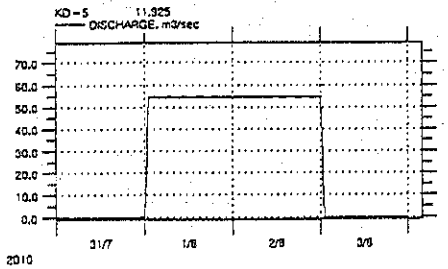
Dwg no.:

DC-2 : Case 1-2







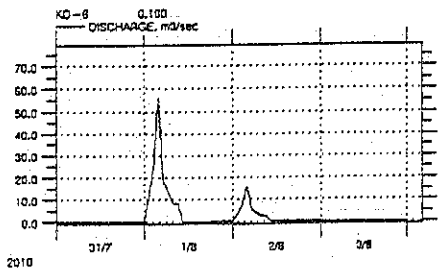


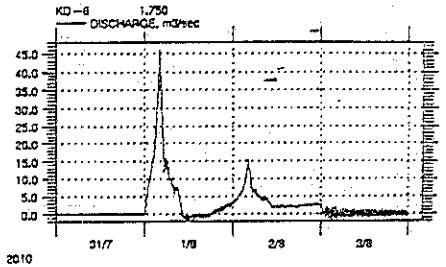
DD-31

DATA FILE : RN1-2.RDF	BOUNDARY FILE : BN-2.BSF
RESULT FILE : RES1-2.RRF	CALCULATED : 3-FEB-1992, 10:37

MIKE 11
Dwg no.:

DC-2 : Case 1-2

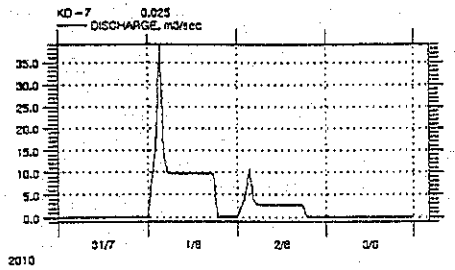


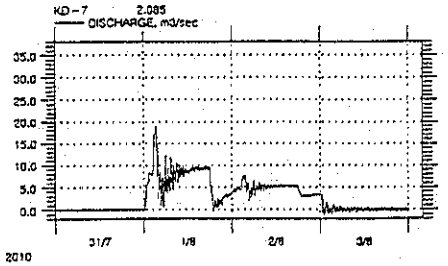


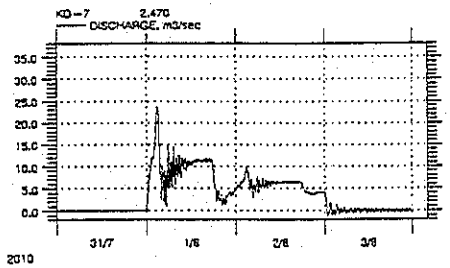
DATA FILE : RN1-2.RDF	BOUNDARY FILE : BN-2.BSF
RESULT FILE : RES1-2.RRF	CALCULATED : 3-FEB-1992, 10:37

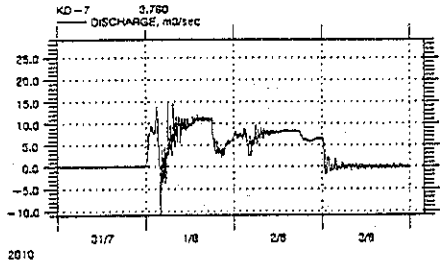
MIKE 11
Dwg no.:

DC-2 : Case 1-2





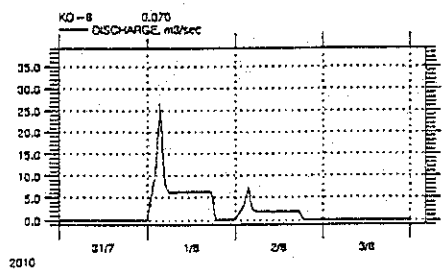


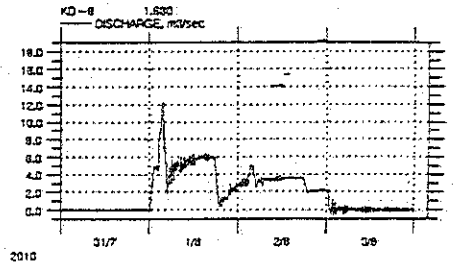


DD-32

		MIKE 11
DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37	Dwg no.:

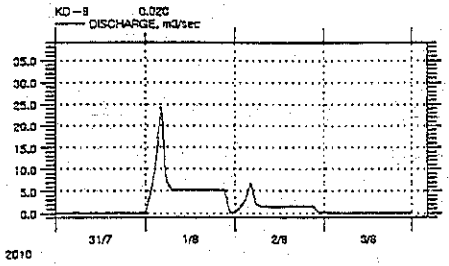
DC-2 : Case 1-2

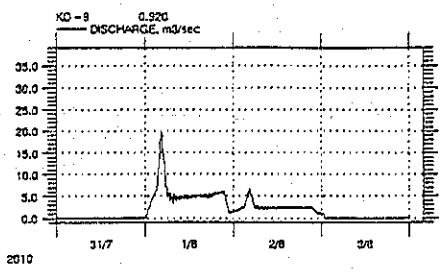




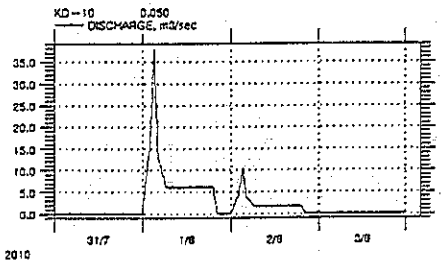
		MIKE 11
DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37	Dwg no.:

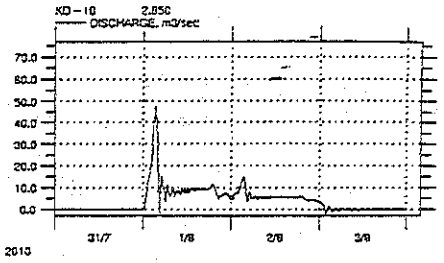
DC-2 : Case 1-2

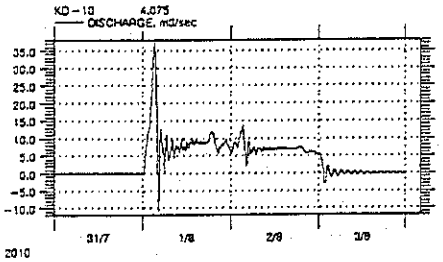




DC-2 : Case 1-2







DD-33

DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37	MIKE 11 Dwg no.:

DATA FILE : RN1-2.RDF RESULT FILE : RES1-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:37	MIKE 11 Dwg no.:

DC-2 : Case 2-1 With Retarding Pond and Without Pump Station

```
+-------------------------------------------------------------------------+
! RIVER MODEL                  MAIN MENU                    Version 2.10  !
+-------------------------------------------------------------------------+
!                                                              File Name  !
!   X    A.  River / Catchment                          :        RN2-1   !
!   X    B.  Boundaries / Time Series                   :        BN-1    !
!   X    C.  Transport dispersion and cohesive sediment :                 !
!   X    D.  Water quality                              :                 !
!   X    E.  Non cohesive sediment                      :                 !
!                                                                         !
!   X    G.  Supplementary data                         :        SUP1    !
!                                                                         !
!   X    H.  Calculation                                                  !
!                                                                         !
!   X    J.  Presentation of results                    :        RES2-1  !
!                                                                         !
! Enter choice:  (,,A-J)                                                  !
+-------------------------------------------------------------------------+
!   X : Installed Modules          Data area ..............:     437 Kb   !
!                                  Free disk space ........:   18444 Kb   !
!   Current directory : C:\PROJECTS\DC-2                                  !
+-------------------------------------------------------------------------+
<Esc> Return to Opening Menu                              <F1> Help Menu
```

```
+-------------------------------------------------------------------------+
! A          R I V E R   S E T U P   D A T A                              !
+-------------------------------------------------------------------------+
!                                                                         !
!                              Enter file name :    RN2-1.RDF           !
!                                                                         !
!                                                                         !
!        1.  LOAD               System File --> Edit File                !
!        2.  SAVE               Edit File   --> System File              !
!        3.  DELETE             Edit File   /   System File              !
!        4.  PRESENT            System File                              !
!        5.  EDIT                                                        !
!        6.  DATA BASE WITH CROSS SECTIONS                               !
!        7.  DIRECTORY                                                   !
!                                                                         !
!                                                                         !
!                              Enter  no. (1-7) :                         !
!                                                                         !
+-------------------------------------------------------------------------+
<Esc> return to MIKE 11 Main Menu                         <F1> Help Menu
```

Edit File is empt

```
+-------------------------------------------------------------------------+
! MENU A.5       RIVER SYSTEM       GENERAL VIEW                 MIKE 11  !
+-------------------------------------------------------------------------+
!                                                                 number  !
!      1  RIVER BRANCHES ..............................             6     !
!                                                                         !
!      2  RIVER CROSS-SECTIONS                                            !
!      3  BROADCRESTED WEIRS ..........................             0     !
!      4  SPECIAL WEIRS ...............................             0     !
!      5  CULVERTS ....................................             1     !
!      6  Q = Q(t) ....................................             0     !
!      7  Q = f(Q,h upstream) .........................             0     !
!      8  Q-h BOUNDARIES...............................             0     !
!      9  .............................................             0     !
!      0  CATCHMENTS  .................................             0     !
!      T  TEXT  .......................................             0     !
!                                                                         !
!      D  DATA BASE NAME (cross-sections) .............          CASE-2   !
!      A  ADD ON MODULES                                                  !
!                                                                         !
!  Select : <Enter> or (0-9,0,T,D,A)                                      !
+-------------------------------------------------------------------------+
 <Esc> return to Menu A                                   <F1> Help Menu
```

DC-2 : Case 2-1

```
+-----------------------------------------------------------------------+
! A6      C R O S S   S E C T I O N   D A T A   B A S E                 !
+-----------------------------------------------------------------------+
!                                                                       !
!                              DATA BASE NAME    CASE-2                 !
!                                                                       !
!            1.  CREATE              new data base                      !
!            2.                                                         !
!            3.  DELETE              data base                          !
!                                                                       !
!            4.  PRINT / PLOT        data base                          !
!            5.  EDIT                data base                          !
!            6.  CONVERT             text files <==> data base          !
!                                                                       !
!            7.  DATA BASE DIRECTORY                                    !
!                                                                       !
!                                  Select (1,3-7) :                     !
!                                                                       !
+-----------------------------------------------------------------------+
<ESC> return to menu A                                  <F1> Help menu
```

DC-2 : Case 2-1

```
CASE-2
KD-5
          9.540
COORDINATES
     1          90.465          23.809
FLOW DIRECTION
0
PROCESSED DATA
      Level       Cross sec   Hydraulic     Width       Add. fl.       Resist.
       (m)       area  (m2)  radius (m)      (m)       areas (m2)     factor
     -0.55           0.00        0.00         0.00              0        1
      0.50          31.08        1.02        31.70         375000        1
      1.00          47.43        1.49        33.70        1000000        1
      1.50          64.78        1.94        35.70        2087000        1
      2.00          83.13        2.39        37.70        4090000        1
      2.50         102.48        2.83        39.70        5060000        1
      3.00         122.83        3.26        41.70        5580000        1
      3.50         144.18        3.69        43.70        5580000        1
      4.00         166.53        4.11        45.70        5580000        1
      4.50         189.88        4.52        47.70        5580000        1
*******************************
```

DC-2 : Case 2-1

```
+------------------------------------------------------------------------+
! J            R E S U L T      P R I N T / P L O T             MIKE 11  !
+------------------------------------------------------------------------+
!
!                           Enter file name:   RES2-1.RRF
!
!        1.  SELECT          result file
!        2.  SELECT          model.........:              HD-model
!        3.  DELETE          result file
!        4.  PRINT           summary
!        5.  TIME SERIES     print / plot
!        6.  PROFILE         plot
!        7.  DIRECTORY
!
!                     Enter option (1-7) :
!
+------------------------------------------------------------------------+
<Esc> Return to Main Menu                                   <F1> Help Menu
```

DC-2 : Case 2-1

GRID POINT RESULT SUMMARY

WATER LEVEL,

	Location	Minimun meter	Maximum meter
KD-5	0.000	2.98	5.25
KD-5	0.200	2.98	5.22
KD-5	0.700	2.98	5.13
KD-5	1.200	2.98	5.05
KD-5	1.700	2.99	4.98
KD-5	2.000	2.99	4.96
KD-5	2.000	2.99	4.96
KD-5	2.200	2.99	4.93
KD-5	2.700	2.99	4.86
KD-5	3.200	2.99	4.79
KD-5	3.700	2.99	4.70
KD-5	4.200	2.99	4.63
KD-5	4.320	2.99	4.61
KD-5	4.570	2.99	4.57
KD-5	4.820	2.99	4.54
KD-5	5.070	2.99	4.50
KD-5	5.200	2.99	4.48
KD-5	5.200	2.99	4.48
KD-5	5.240	2.99	4.48
KD-5	5.440	2.99	4.43
KD-5	5.710	2.99	4.38
KD-5	5.910	2.99	4.33
KD-5	6.260	2.99	4.26
KD-5	6.480	2.99	4.21
KD-5	6.700	3.00	4.16
KD-5	6.950	3.00	4.10
KD-5	7.150	3.00	4.06
KD-5	7.200	3.00	4.05
KD-5	7.200	3.00	4.05
KD-5	7.220	3.00	4.04
KD-5	7.440	3.00	3.98
KD-5	7.680	3.00	3.91
KD-5	7.930	3.00	3.83
KD-5	8.150	3.00	3.77
KD-5	8.510	3.00	3.65
KD-5	8.600	3.00	3.63
KD-5	8.600	3.00	3.63
KD-5	8.710	3.00	3.60
KD-5	9.150	3.00	3.43
KD-5	9.270	3.00	3.40
KD-5	9.300	3.00	3.40
KD-5	9.300	3.00	3.40
KD-5	9.540	3.00	3.36
KD-5	9.790	3.00	3.36
KD-5	10.070	3.00	3.32
KD-5	10.320	3.00	3.29
KD-5	10.620	3.00	3.26
KD-5	10.900	3.00	3.23
KD-5	11.150	3.00	3.20
KD-5	11.400	3.00	3.17
KD-5	11.600	3.00	3.15
KD-5	11.850	3.00	3.02
KD-5	12.000	3.00	3.00
KD-6	0.000	3.00	4.36
KD-6	0.380	3.00	4.20

MIKE 11 SYSTEM   Page: 1

DC-2 : Case 2-1

	Location	Minimun meter	Maximum meter
KD-6	0.730	3.00	4.03
KD-6	1.080	3.00	3.85
KD-6	1.480	3.00	3.62
KD-6	1.700	3.00	3.48
KD-6	1.800	3.00	3.40
KD-7	0.000	3.00	4.10
KD-7	0.050	3.00	4.09
KD-7	0.260	3.00	4.05
KD-7	0.540	3.00	4.00
KD-7	0.690	3.00	3.97
KD-7	0.940	3.00	3.93
KD-7	1.220	3.00	3.89
KD-7	1.420	3.00	3.86
KD-7	1.720	3.00	3.82
KD-7	1.950	3.00	3.79
KD-7	2.220	3.00	3.77
KD-7	2.720	3.00	3.71
KD-7	3.035	3.00	3.69
KD-7	3.350	3.00	3.66
KD-7	3.720	3.00	3.64
KD-7	3.800	3.00	3.63
KD-8	0.000	2.99	4.16
KD-8	0.140	3.00	4.15
KD-8	0.590	3.00	4.11
KD-8	0.855	3.00	4.10
KD-8	1.120	3.00	4.08
KD-8	1.460	3.00	4.06
KD-8	1.800	3.00	4.05
KD-9	0.000	2.99	4.59
KD-9	0.040	2.99	4.58
KD-9	0.540	2.99	4.53
KD-9	0.840	2.99	4.50
KD-9	1.000	2.99	4.48
KD-10	0.000	2.98	5.53
KD-10	0.100	2.98	5.51
KD-10	0.600	2.98	5.43
KD-10	1.100	2.98	5.36
KD-10	1.600	2.98	5.30
KD-10	2.100	2.98	5.24
KD-10	2.600	2.98	5.13
KD-10	3.100	2.98	5.06
KD-10	3.600	2.99	5.00
KD-10	4.050	2.99	4.96
KD-10	4.100	2.99	4.96

DISCHARGE,

DC-2 : Case 2-1

	Location	Minimun m3/sec	Maximum m3/sec
KD-5	0.100	-0.031	37.698
KD-5	0.450	-0.274	37.676
KD-5	0.950	-0.398	42.949
KD-5	1.450	-0.433	44.044
KD-5	1.850	-0.392	44.866
KD-5	2.100	-1.154	85.308
KD-5	2.450	-1.252	84.491
KD-5	2.950	-1.337	83.387
KD-5	3.450	-1.386	104.799
KD-5	3.950	-1.464	102.764
KD-5	4.260	-1.508	101.622
KD-5	4.445	-1.538	101.185
KD-5	4.695	-1.570	100.570
KD-5	4.945	-1.581	99.928
KD-5	5.135	-1.602	99.619
KD-5	5.220	-1.675	128.938
KD-5	5.340	-1.710	128.833
KD-5	5.575	-1.749	128.921
KD-5	5.810	-1.794	129.068
KD-5	6.085	-1.839	129.217
KD-5	6.370	-1.895	129.334
KD-5	6.590	-1.936	129.433
KD-5	6.825	-1.966	129.506
KD-5	7.050	-1.985	129.580
KD-5	7.175	-1.999	129.634
KD-5	7.210	-2.053	147.664
KD-5	7.330	-2.081	150.567
KD-5	7.560	-2.101	150.637
KD-5	7.805	-2.104	150.706
KD-5	8.040	-2.115	150.767
KD-5	8.330	-2.128	150.806
KD-5	8.555	-2.179	150.818
KD-5	8.655	-2.313	183.152
KD-5	8.930	-2.349	183.199
KD-5	9.210	-2.266	183.176
KD-5	9.285	-2.285	183.169
KD-5	9.420	-2.298	287.911
KD-5	9.665	-0.093	104.407
KD-5	9.930	-0.097	104.309
KD-5	10.195	-0.096	104.280
KD-5	10.470	-0.094	104.285
KD-5	10.760	-0.093	104.282
KD-5	11.025	-0.100	104.261
KD-5	11.275	-0.097	104.228
KD-5	11.500	-0.093	104.191
KD-5	11.800	-0.095	104.185
KD-5	11.925	-0.096	104.189
KD-6	0.190	-0.048	57.145
KD-6	0.555	-0.061	56.983
KD-6	0.905	-0.098	57.082
KD-6	1.280	-0.207	57.108
KD-6	1.590	-0.129	57.118
KD-6	1.750	-0.109	57.096
KD-7	0.025	-0.026	38.749
KD-7	0.155	-0.074	38.451

DC-2 : Case 2-1

	Location	Minimun m3/sec	Maximum m3/sec
D-7	0.400	-0.198	38.047
D-7	0.615	-0.249	37.651
D-7	0.815	-0.298	37.244
D-7	1.080	-0.336	36.649
D-7	1.320	-0.378	36.327
D-7	1.570	-0.523	36.250
D-7	1.835	-0.639	36.050
D-7	2.085	-0.680	35.823
D-7	2.470	-0.209	40.358
D-7	2.878	-0.210	39.727
D-7	3.193	-0.219	39.153
D-7	3.535	-0.226	38.434
D-7	3.760	-0.235	37.961
D-8	0.070	-0.078	26.973
D-8	0.365	-0.081	26.132
D-8	0.723	-0.111	25.132
D-8	0.988	-0.160	24.440
D-8	1.290	-0.193	24.092
D-8	1.630	-0.163	23.530
D-9	0.020	-0.016	24.464
D-9	0.290	-0.040	24.652
D-9	0.690	-0.065	25.060
D-9	0.920	-0.083	25.253
D-10	0.050	-0.003	37.702
D-10	0.350	-0.072	36.014
D-10	0.850	-0.182	34.538
D-10	1.350	-0.272	33.230
D-10	1.850	-0.356	32.032
D-10	2.350	-0.448	54.627
D-10	2.850	-0.541	52.403
D-10	3.350	-0.651	50.410
D-10	3.825	-0.721	48.710
D-10	4.075	-0.740	47.769

DC-2 : Case 2-1

GRID POINT RESULT SUMMARY

VELOCITY,

	Location	Minimun m/sec	Maximum m/sec
KD-5	0.000	0.000	0.744
KD-5	0.100	-0.001	0.754
KD-5	0.200	-0.003	0.764
KD-5	0.450	-0.007	0.748
KD-5	0.700	-0.010	0.780
KD-5	0.950	-0.012	0.824
KD-5	1.200	-0.014	0.821
KD-5	1.450	-0.015	0.814
KD-5	1.700	-0.017	0.809
KD-5	1.850	-0.014	0.667
KD-5	2.000	-0.012	0.585
KD-5	2.000	-0.032	1.040
KD-5	2.100	-0.029	0.956
KD-5	2.200	-0.026	0.873
KD-5	2.450	-0.026	0.854
KD-5	2.700	-0.026	0.836
KD-5	2.950	-0.024	0.766
KD-5	3.200	-0.023	0.800
KD-5	3.450	-0.023	0.903
KD-5	3.700	-0.023	0.895
KD-5	3.950	-0.023	0.883
KD-5	4.200	-0.023	0.871
KD-5	4.260	-0.023	0.868
KD-5	4.320	-0.023	0.866
KD-5	4.445	-0.023	0.861
KD-5	4.570	-0.023	0.855
KD-5	4.695	-0.023	0.851
KD-5	4.820	-0.023	0.847
KD-5	4.945	-0.023	0.842
KD-5	5.070	-0.023	0.837
KD-5	5.135	-0.022	0.813
KD-5	5.200	-0.021	0.829
KD-5	5.200	-0.022	1.014
KD-5	5.220	-0.022	1.015
KD-5	5.240	-0.022	1.007
KD-5	5.340	-0.022	1.007
KD-5	5.440	-0.022	1.008
KD-5	5.575	-0.022	1.009
KD-5	5.710	-0.022	1.010
KD-5	5.810	-0.022	1.012
KD-5	5.910	-0.022	1.015
KD-5	6.085	-0.022	1.017
KD-5	6.260	-0.022	1.020
KD-5	6.370	-0.022	1.022
KD-5	6.480	-0.022	1.025
KD-5	6.590	-0.023	1.027
KD-5	6.700	-0.023	1.030
KD-5	6.825	-0.023	1.034
KD-5	6.950	-0.023	1.039
KD-5	7.050	-0.023	1.042
KD-5	7.150	-0.023	1.044
KD-5	7.175	-0.022	1.026
KD-5	7.200	-0.022	1.009
KD-5	7.200	-0.022	1.136
KD-5	7.210	-0.022	1.129

DC-2 : Case 2-1

	Location	Minimun m/sec	Maximum m/sec
KD-5	7.220	-0.022	1.123
KD-5	7.330	-0.022	1.148
KD-5	7.440	-0.022	1.153
KD-5	7.560	-0.022	1.159
KD-5	7.680	-0.022	1.165
KD-5	7.805	-0.022	1.171
KD-5	7.930	-0.022	1.176
KD-5	8.040	-0.022	1.182
KD-5	8.150	-0.021	1.188
KD-5	8.330	-0.021	1.198
KD-5	8.510	-0.021	1.208
KD-5	8.555	-0.020	1.171
KD-5	8.600	-0.020	1.144
KD-5	8.600	-0.021	1.360
KD-5	8.655	-0.020	1.324
KD-5	8.710	-0.019	1.282
KD-5	8.930	-0.019	1.300
KD-5	9.150	-0.019	1.318
KD-5	9.210	-0.019	1.320
KD-5	9.270	-0.018	1.323
KD-5	9.285	-0.018	1.327
KD-5	9.300	-0.018	1.366
KD-5	9.300	-0.018	1.818
KD-5	9.420	-0.018	2.129
KD-5	9.540	-0.006	1.484
KD-5	9.665	-0.001	0.768
KD-5	9.790	-0.001	0.748
KD-5	9.930	-0.001	0.746
KD-5	10.070	-0.001	0.744
KD-5	10.195	-0.001	0.742
KD-5	10.320	-0.001	0.741
KD-5	10.470	-0.001	0.737
KD-5	10.620	-0.001	0.733
KD-5	10.760	-0.001	0.731
KD-5	10.900	-0.001	0.730
KD-5	11.025	-0.001	0.727
KD-5	11.150	-0.001	0.725
KD-5	11.275	-0.001	0.724
KD-5	11.400	-0.001	0.722
KD-5	11.500	-0.001	0.720
KD-5	11.600	-0.001	0.718
KD-5	11.800	-0.002	1.936
KD-5	11.850	-0.001	0.737
KD-5	11.925	-0.001	0.735
KD-5	12.000	-0.001	0.734
KD-6	0.000	0.000	1.195
KD-6	0.190	-0.000	1.231
KD-6	0.380	-0.001	1.268
KD-6	0.555	-0.001	1.276
KD-6	0.730	-0.001	1.284
KD-6	0.905	-0.002	1.297
KD-6	1.080	-0.001	1.314
KD-6	1.280	-0.001	1.346
KD-6	1.480	-0.001	1.377
KD-6	1.590	-0.001	1.398

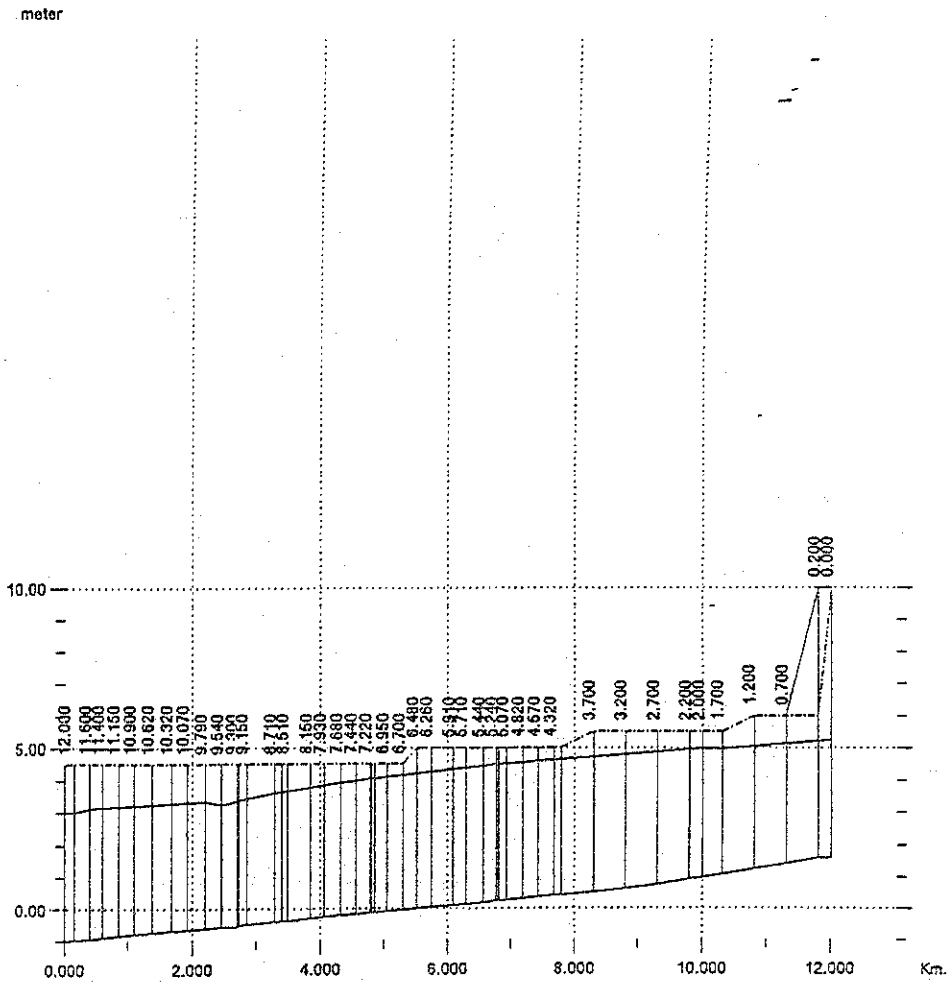
DC-2 : Case 2-1

	Location	Minimun m/sec	Maximum m/sec
KD-6	1.700	-0.001	1.419
KD-6	1.750	-0.001	1.454
KD-6	1.800	-0.001	1.640
KD-7	0.000	0.000	0.845
KD-7	0.025	0.000	0.846
KD-7	0.050	-0.000	0.847
KD-7	0.155	-0.001	0.837
KD-7	0.260	-0.002	0.827
KD-7	0.400	-0.003	0.812
KD-7	0.540	-0.004	0.797
KD-7	0.615	-0.005	0.790
KD-7	0.690	-0.006	0.784
KD-7	0.815	-0.007	0.777
KD-7	0.940	-0.008	0.769
KD-7	1.080	-0.009	0.759
KD-7	1.220	-0.009	0.749
KD-7	1.320	-0.010	0.741
KD-7	1.420	-0.010	0.732
KD-7	1.570	-0.011	0.720
KD-7	1.720	-0.012	0.708
KD-7	1.835	-0.012	0.695
KD-7	1.950	-0.012	0.683
KD-7	2.085	-0.012	0.648
KD-7	2.220	-0.004	0.650
KD-7	2.470	-0.004	0.703
KD-7	2.720	-0.005	0.693
KD-7	2.878	-0.005	0.685
KD-7	3.035	-0.005	0.677
KD-7	3.193	-0.005	0.669
KD-7	3.350	-0.005	0.661
KD-7	3.535	-0.005	0.652
KD-7	3.720	-0.005	0.642
KD-7	3.760	-0.005	0.640
KD-7	3.800	-0.005	0.651
KD-8	0.000	0.000	0.735
KD-8	0.070	-0.000	0.723
KD-8	0.140	-0.000	0.711
KD-8	0.365	-0.001	0.679
KD-8	0.590	-0.002	0.649
KD-8	0.723	-0.002	0.633
KD-8	0.855	-0.003	0.619
KD-8	0.988	-0.003	0.605
KD-8	1.120	-0.003	0.590
KD-8	1.290	-0.004	0.569
KD-8	1.460	-0.004	0.549
KD-8	1.630	-0.004	0.529
KD-8	1.800	-0.004	0.510
KD-9	0.000	0.000	0.596
KD-9	0.020	0.000	0.597
KD-9	0.040	0.000	0.598
KD-9	0.290	-0.001	0.587
KD-9	0.540	-0.002	0.575
KD-9	0.690	-0.002	0.568
KD-9	0.840	-0.003	0.561
KD-9	0.920	-0.003	0.558

DC-2 : Case 2-1

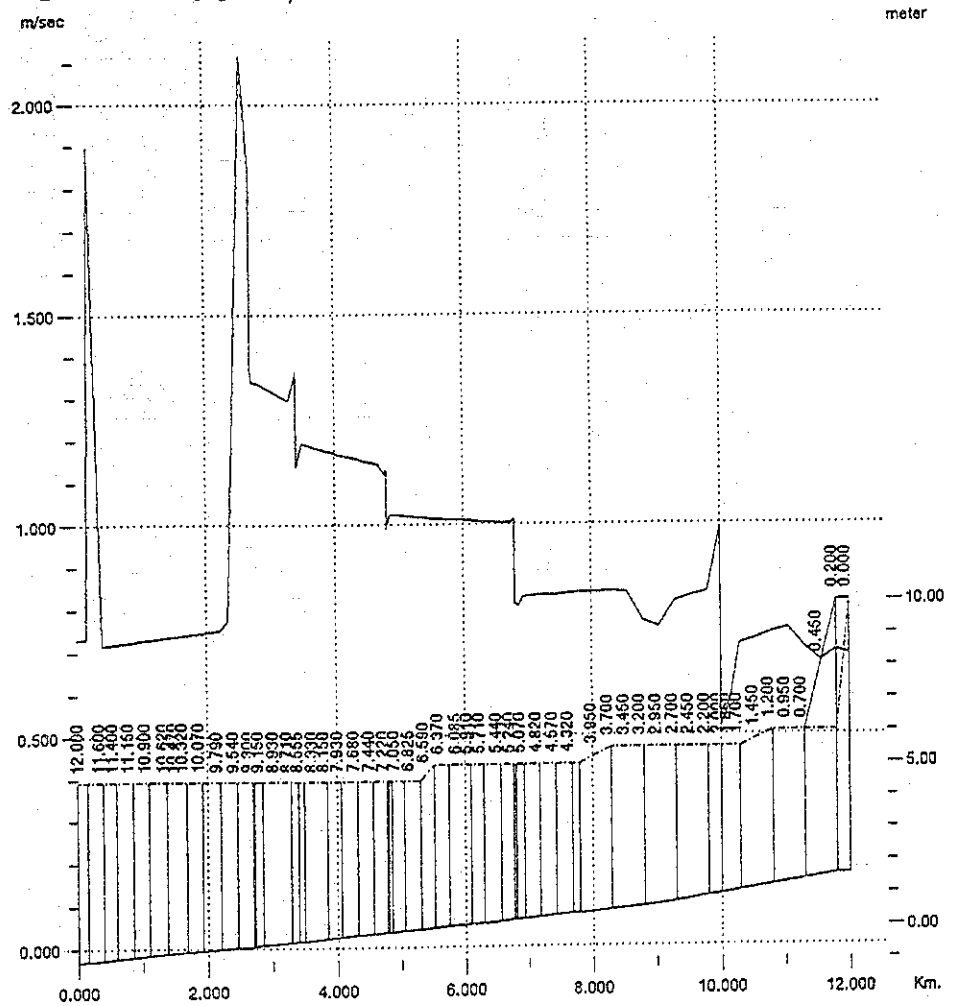
	Location	Minimun m/sec	Maximum m/sec
D-9	1.000	-0.003	0.596
D-10	0.000	0.000	0.883
D-10	0.050	-0.000	0.880
D-10	0.100	-0.002	0.878
D-10	0.350	-0.009	0.828
D-10	0.600	-0.014	0.790
D-10	0.850	-0.018	0.754
D-10	1.100	-0.021	0.718
D-10	1.350	-0.024	0.682
D-10	1.600	-0.026	0.655
D-10	1.850	-0.025	0.589
D-10	2.100	-0.024	0.729
D-10	2.350	-0.025	0.940
D-10	2.600	-0.026	0.920
D-10	2.850	-0.027	0.887
D-10	3.100	-0.027	0.854
D-10	3.350	-0.027	0.818
D-10	3.600	-0.027	0.785
D-10	3.825	-0.027	0.753
D-10	4.050	-0.027	0.722
D-10	4.075	-0.027	0.718
D-10	4.100	-0.027	0.718

DC-2 : Case 2-1



H: 1/75000 V: 1/150	Max. (W.L)
PARAMETER : WATER LEVEL DATA FILE : RN2 – 1.RDF RESULT FILE : RES2 – 1.RRF	1 – AUG – 2010, 04:00 (23 hrs) BOUNDARY FILE : BN – 1.BSF CALCULATED : 3 – FEB – 1992, 10:52
MIKE 11 Dwg no.:	

DC-2 : Case 2-1



H : 1/75000
V : 1/150

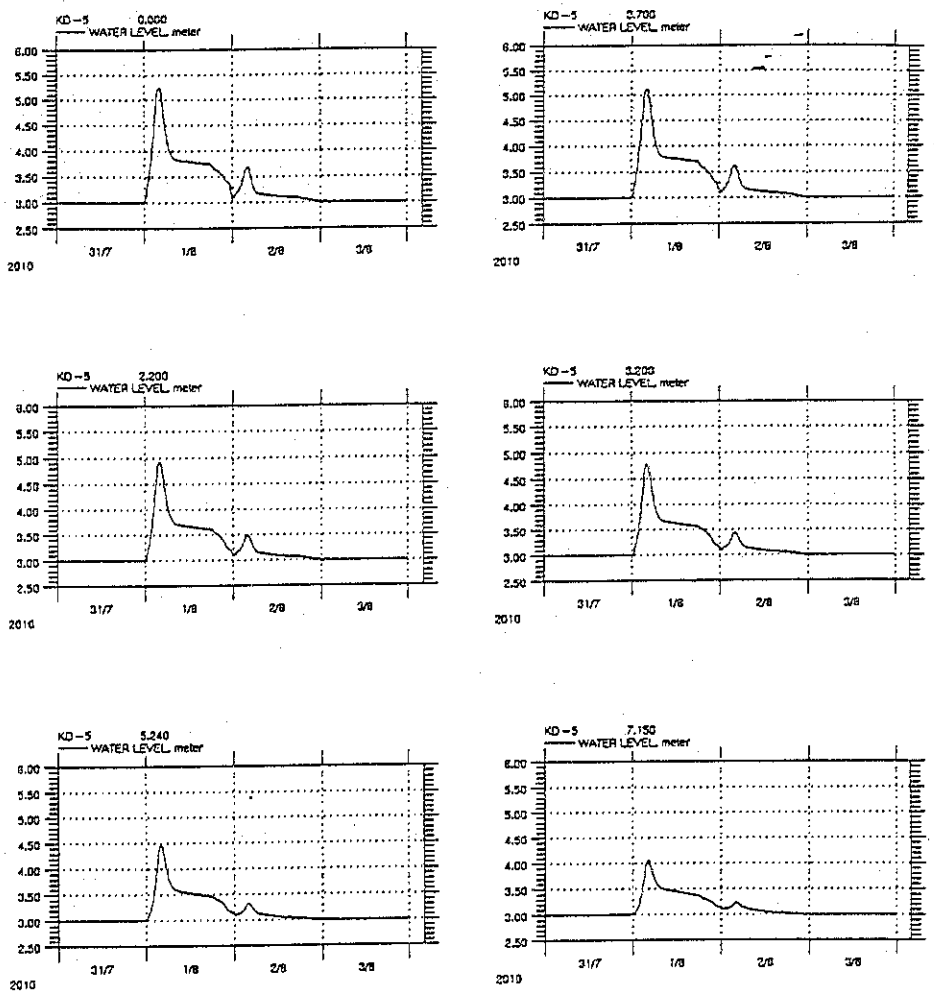
KD-5

PARAMETER : VELOCITY,
DATA FILE : RN2 – 1.RDF
RESULT FILE : RES2 – 1.VRF

1 – AUG – 2010, 04:05 (28.03 hrs)
BOUNDARY FILE : BN – 1.BSF
CALCULATED : 3 – FEB – 1992, 10:52

MIKE 11
Dwg no.:

DC-2 : Case 2-1

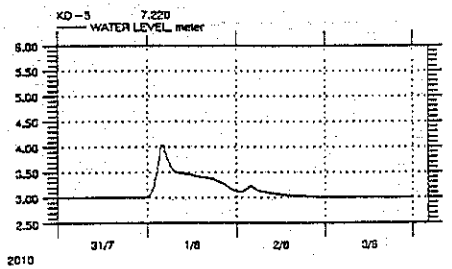


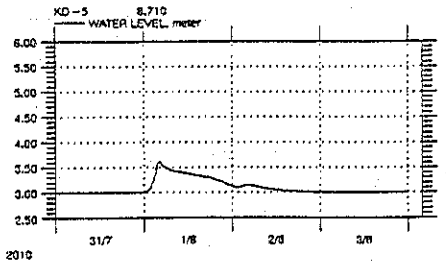
DATA FILE : RN2 – 1.RDF
RESULT FILE : RES2 – 1.RRF

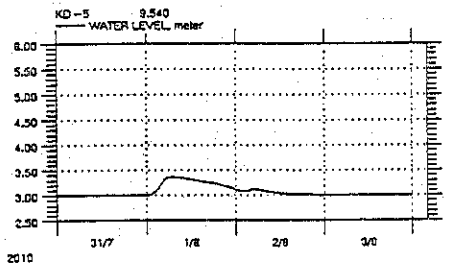
BOUNDARY FILE : BN – 1.BSF
CALCULATED : 3 – FEB – 1992, 10:52

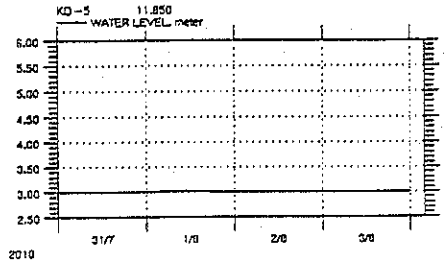
MIKE 11
Dwg no.:

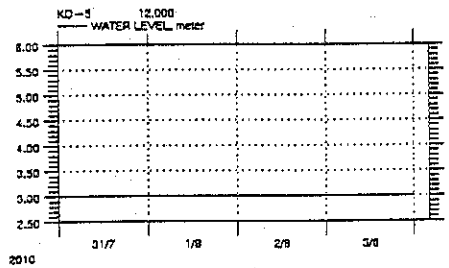
DC-2 : Case 2-1





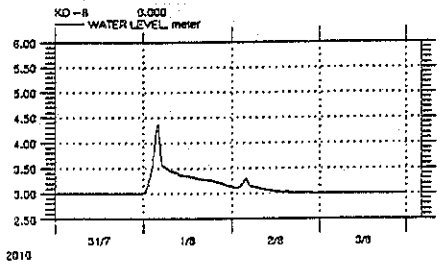


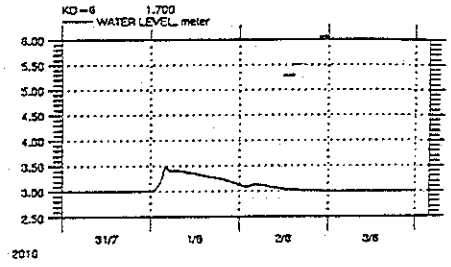




DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52
	MIKE 11 Dwg no.:

DC-2 : Case 2-1

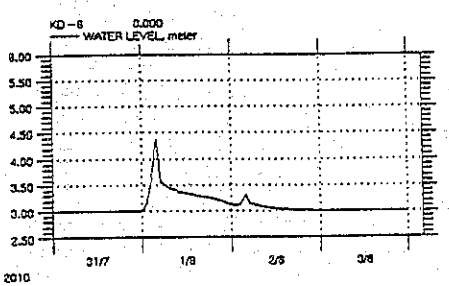


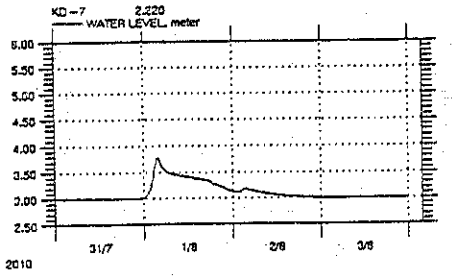


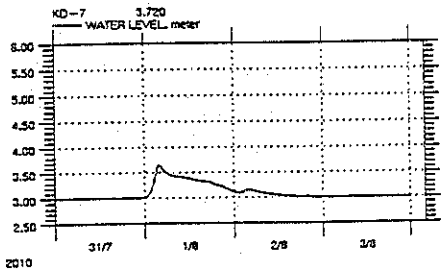
DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52
	MIKE 11 Dwg no.:

DD-42

DC-2 : Case 2-1







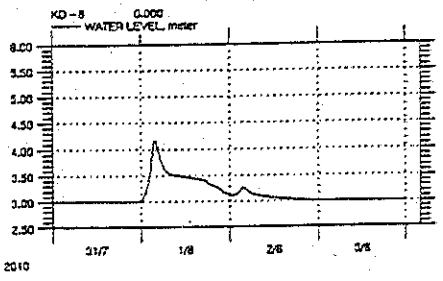
DD-43

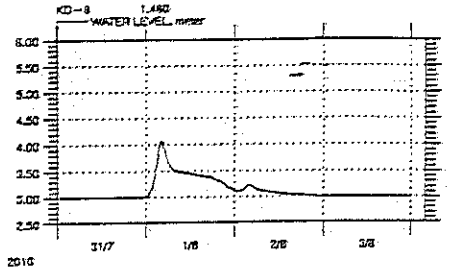
DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52

MIKE 11

Dwg no.:

DC-2 : Case 2-1



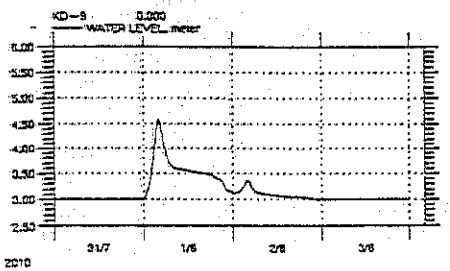


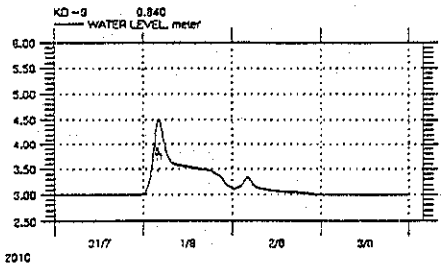
DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52

MIKE 11

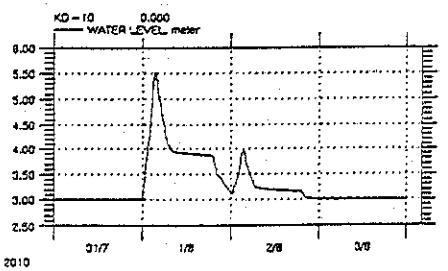
Dwg no.:

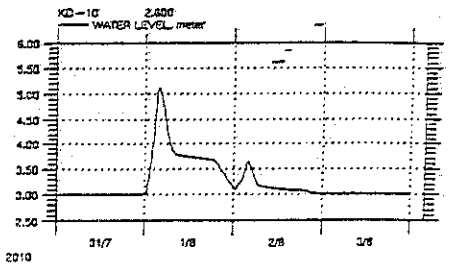
DC-2 : Case 2-1

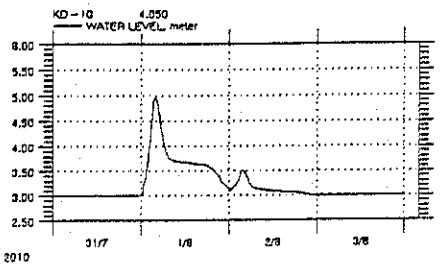




DC-2 : Case 2-1





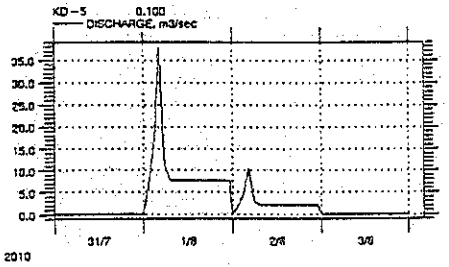


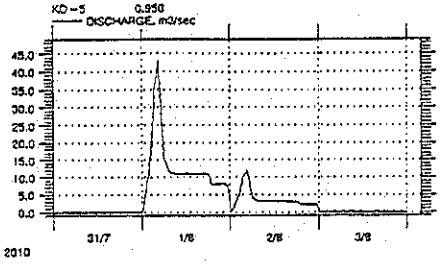
DD- 4.4

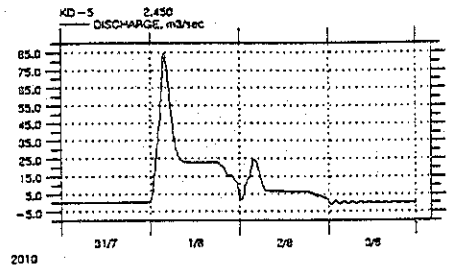
DATA FILE : RN2 – 1.RDF RESULT FILE : RES2 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 3 – FEB – 1992, 10:52	MIKE 11 Dwg no.:

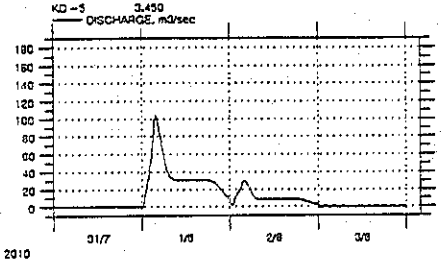
DATA FILE : RN2 – 1.RDF RESULT FILE : RES2 – 1.RRF	BOUNDARY FILE : BN – 1.BSF CALCULATED : 3 – FEB – 1992, 10:52	MIKE 11 Dwg no.:

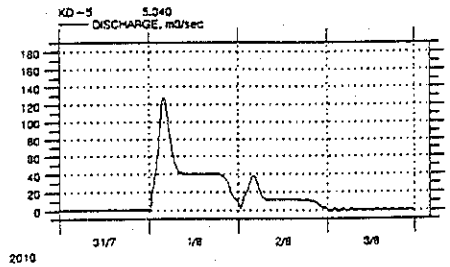
DC-2 : Case 2-1

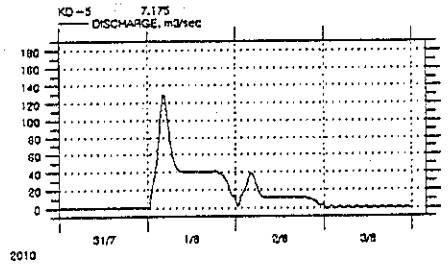








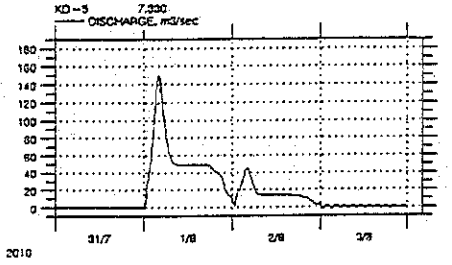


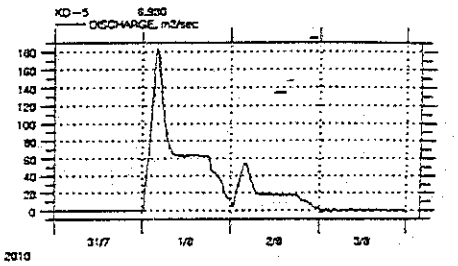


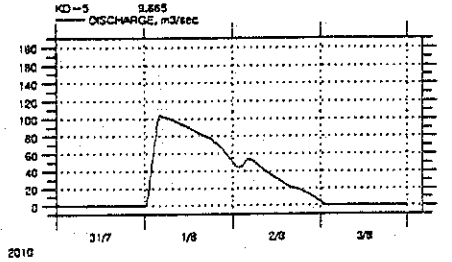
DD-45

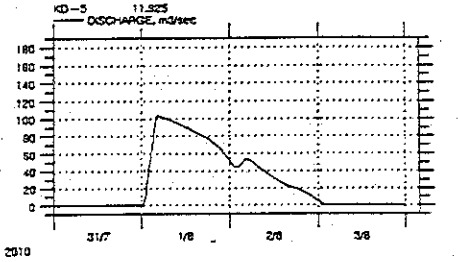
DATA FILE : RN2-1.RDF
RESULT FILE : RES2-1.RRF
BOUNDARY FILE : BN-1.BSF
CALCULATED : 3-FEB-1992, 10:52
MIKE 11
Dwg no.:

DC-2 : Case 2-1



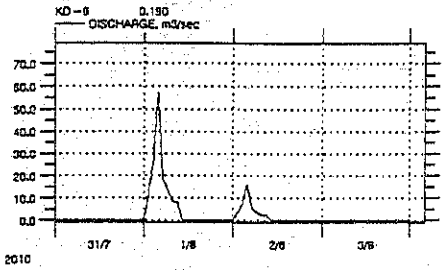


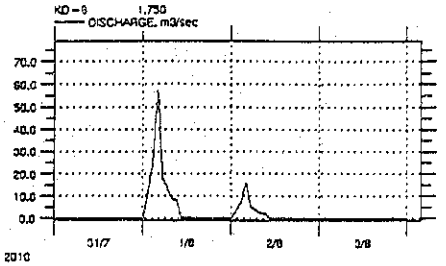




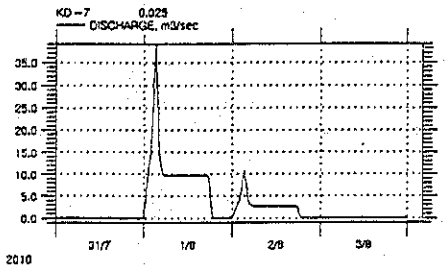
DATA FILE : RN2-1.RDF
RESULT FILE : RES2-1.RRF
BOUNDARY FILE : BN-1.BSF
CALCULATED : 3-FEB-1992, 10:52
MIKE 11
Dwg no.:

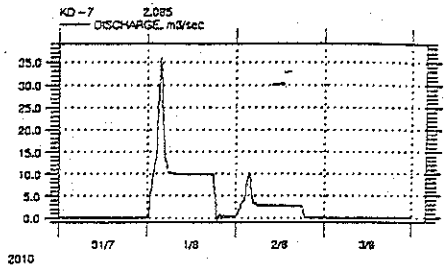
DC-2 : Case 2-1

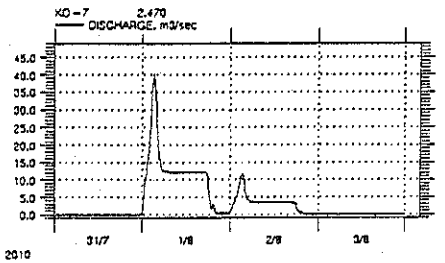


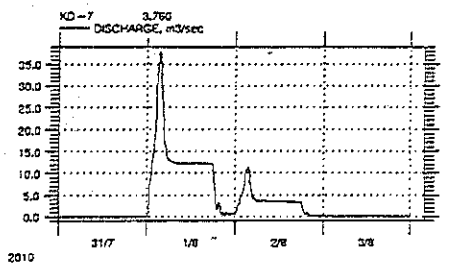


DC-2 : Case 2-1







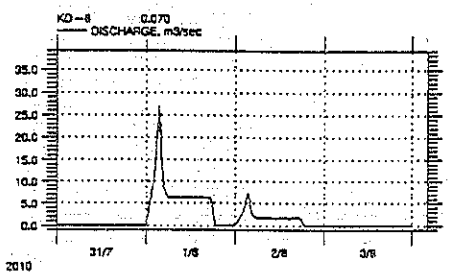


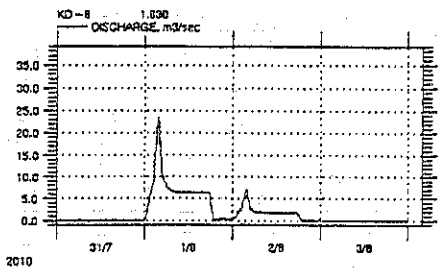
DD-46

		MIKE 11
DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52	Dwg no.:

		MIKE 11
DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52	Dwg no.:

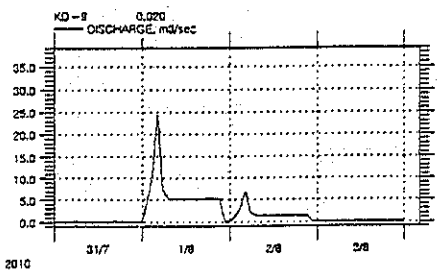
DC-2 : Case 2-1

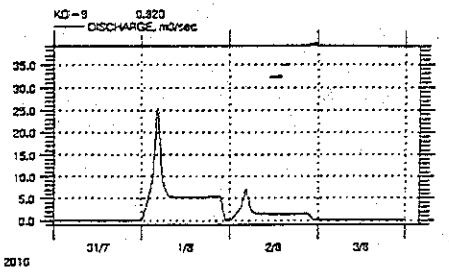




DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52	MIKE 11 Dwg no.:

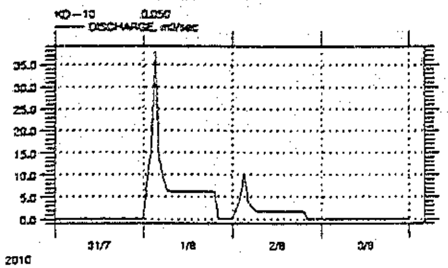
DC-2 : Case 2-1

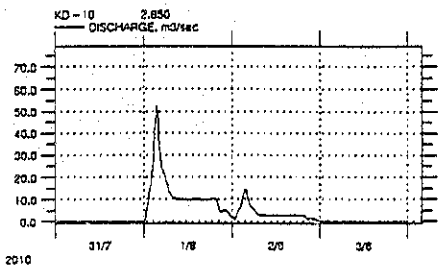


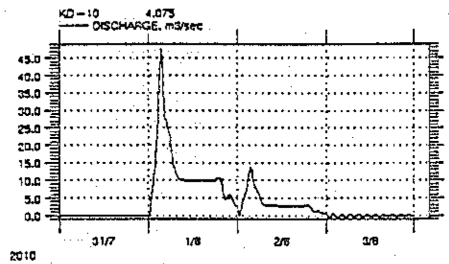


DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52	MIKE 11 Dwg no.:

DC-2 : Case 2-1







DC-2 : Case 2-2 With Retarding Pond and With Pump station

```
+------------------------------------------------------------------------+
! RIVER MODEL                 MAIN MENU                     Version 2.10 !
+------------------------------------------------------------------------+
!                                                             File Name  !
!  X   A.  River / Catchment                              :     RN2-2    !
!  X   B.  Boundaries / Time Series                       :     BN-2     !
!  X   C.  Transport dispersion and cohesive sediment     :              !
!  X   D.  Water quality                                  :              !
!  X   E.  Non cohesive sediment                          :              !
!                                                                        !
!  X   G.  Supplementary data                             :     SUP2     !
!                                                                        !
!  X   H.  Calculation                                                   !
!                                                                        !
!  X   J.  Presentation of results                        :     RES2-2   !
!                                                                        !
! Enter choice:  (,,A-J)                                                !
+------------------------------------------------------------------------+
!  X : Installed Modules          Data area ............... :    437 Kb !
!                                 Free disk space ..........:  18444 Kb !
!  Current directory : C:\PROJECTS\DC-2                                  !
+------------------------------------------------------------------------+
<Esc> Return to Opening Menu                                <F1> Help Menu
```

DATA FILE : RN2-1.RDF RESULT FILE : RES2-1.RRF	BOUNDARY FILE : BN-1.BSF CALCULATED : 3-FEB-1992, 10:52	MIKE 11 Dwg no.:

DC-2 : Case 2-2

```
+-----------------------------------------------------------------------+
! A          R I V E R   S E T U P   D A T A                            !
+-----------------------------------------------------------------------+
!                                                                       !
!                          Enter file name :    RN2-2.RDF               !
!                                                                       !
!                                                                       !
!        1.  LOAD              System File --> Edit File                !
!        2.  SAVE              Edit File   --> System File              !
!        3.  DELETE            Edit File    /  System File              !
!        4.  PRESENT           System File                              !
!        5.  EDIT                                                       !
!        6.  DATA BASE WITH CROSS SECTIONS                              !
!        7.  DIRECTORY                                                  !
!                                                                       !
!                                                                       !
!                          Enter  no. (1-7) :                           !
!                                                                       !
+-----------------------------------------------------------------------+
<Esc> return to MIKE 11 Main Menu                    <F1> Help Menu
```

Edit File is empt

DC-2 : Case 2-2

```
+-----------------------------------------------------------------------+
! J          R E S U L T     P R I N T / P L O T          MIKE 11       !
+-----------------------------------------------------------------------+
!                                                                       !
!                          Enter file name:  RES2-2.RRF                 !
!                                                                       !
!                                                                       !
!        1.  SELECT            result file                              !
!        2.  SELECT            model.........:          HD-model        !
!        3.  DELETE            result file                              !
!        4.  PRINT             summary                                  !
!        5.  TIME SERIES       print / plot                             !
!        6.  PROFILE           plot                                     !
!        7.  DIRECTORY                                                  !
!                                                                       !
!                                                                       !
!                          Enter option (1-7) :                         !
!                                                                       !
+-----------------------------------------------------------------------+
<Esc> Return to Main Menu                            <F1> Help Menu
```

```
+-----------------------------------------------------------------------+
! MENU A.5       RIVER SYSTEM       GENERAL VIEW              MIKE 11   !
+-----------------------------------------------------------------------+
!                                                          number       !
!      1  RIVER BRANCHES ..............................      6           !
!                                                                       !
!      2  RIVER CROSS-SECTIONS                                          !
!      3  BROADCRESTED WEIRS ..........................      0           !
!      4  SPECIAL WEIRS ...............................      0           !
!      5  CULVERTS ....................................      0           !
!      6  Q = Q(t) ....................................      1           !
!      7  Q = f(Q,h upstream) .........................      0           !
!      8  Q-h BOUNDARIES...............................      0           !
!      9  ..............................................      0           !
!      0  CATCHMENTS  .................................      0           !
!      T  TEXT  .......................................      0           !
!                                                                       !
!      D  DATA BASE NAME (cross-sections) .............    CASE-2        !
!      A  ADD ON MODULES                                                !
!                                                                       !
!  Select : <Enter> or (0-9,O,T,D,A)                                    !
+-----------------------------------------------------------------------+
 <Esc> return to Menu A                              <F1> Help Menu
```

DC-2 : Case 2-2

GRID POINT RESULT SUMMARY

WATER LEVEL,

	Location	Minimun meter	Maximum meter
KD-5	0.000	2.99	5.25
KD-5	0.200	2.99	5.21
KD-5	0.700	2.99	5.13
KD-5	1.200	2.99	5.04
KD-5	1.700	2.99	4.97
KD-5	2.000	2.99	4.95
KD-5	2.000	2.99	4.95
KD-5	2.200	2.99	4.92
KD-5	2.700	2.99	4.85
KD-5	3.200	2.99	4.78
KD-5	3.700	2.99	4.69
KD-5	4.200	2.99	4.62
KD-5	4.320	2.99	4.60
KD-5	4.570	2.99	4.56
KD-5	4.820	2.99	4.52
KD-5	5.070	2.99	4.49
KD-5	5.200	2.99	4.47
KD-5	5.200	2.99	4.47
KD-5	5.240	2.99	4.46
KD-5	5.440	2.99	4.42
KD-5	5.710	2.99	4.36
KD-5	5.910	2.99	4.31
KD-5	6.260	2.99	4.24
KD-5	6.480	2.99	4.19
KD-5	6.700	2.99	4.14
KD-5	6.950	2.99	4.08
KD-5	7.150	2.99	4.03
KD-5	7.200	2.99	4.02
KD-5	7.200	2.99	4.02
KD-5	7.220	2.99	4.02
KD-5	7.440	2.99	3.95
KD-5	7.680	2.99	3.88
KD-5	7.930	2.99	3.80
KD-5	8.150	2.99	3.73
KD-5	8.510	2.99	3.62
KD-5	8.600	2.99	3.59
KD-5	8.600	2.99	3.59
KD-5	8.710	2.99	3.56
KD-5	9.150	2.99	3.55
KD-5	9.270	3.00	3.54
KD-5	9.300	3.00	3.54
KD-5	9.300	3.00	3.54
KD-5	9.540	3.00	3.54
KD-5	9.790	2.99	3.53
KD-5	10.070	2.97	3.52
KD-5	10.320	2.96	3.52
KD-5	10.620	2.94	3.51
KD-5	10.900	2.93	3.50
KD-5	11.150	2.91	3.49
KD-5	11.400	2.90	3.49
KD-5	11.600	2.89	3.48
KD-5	11.850	6.15	6.15
KD-5	12.000	6.15	6.15
KD-6	0.000	2.98	4.35
KD-6	0.380	2.98	4.18

DC-2 : Case 2-2

	Location	Minimun meter	Maximum meter
KD-6	0.730	2.99	4.01
KD-6	1.080	2.99	3.83
KD-6	1.480	2.99	3.59
KD-6	1.700	2.99	3.54
KD-6	1.800	3.00	3.54
KD-7	0.000	2.99	4.09
KD-7	0.050	2.99	4.08
KD-7	0.260	2.99	4.03
KD-7	0.540	2.99	3.98
KD-7	0.690	2.99	3.96
KD-7	0.940	2.99	3.91
KD-7	1.220	2.99	3.87
KD-7	1.420	2.99	3.84
KD-7	1.720	2.99	3.80
KD-7	1.950	2.99	3.77
KD-7	2.220	2.99	3.74
KD-7	2.720	2.99	3.68
KD-7	3.035	2.99	3.65
KD-7	3.350	2.99	3.63
KD-7	3.720	2.99	3.60
KD-7	3.800	2.99	3.59
KD-8	0.000	2.99	4.14
KD-8	0.140	2.99	4.13
KD-8	0.590	2.99	4.09
KD-8	0.855	2.99	4.07
KD-8	1.120	2.99	4.06
KD-8	1.460	2.99	4.04
KD-8	1.800	2.99	4.02
KD-9	0.000	2.99	4.58
KD-9	0.040	2.99	4.57
KD-9	0.540	2.99	4.52
KD-9	0.840	2.99	4.49
KD-9	1.000	2.99	4.47
KD-10	0.000	2.99	5.53
KD-10	0.100	2.99	5.51
KD-10	0.600	2.99	5.43
KD-10	1.100	2.99	5.36
KD-10	1.600	2.99	5.30
KD-10	2.100	2.99	5.24
KD-10	2.600	2.99	5.13
KD-10	3.100	2.99	5.05
KD-10	3.600	2.99	5.00
KD-10	4.050	2.99	4.96
KD-10	4.100	2.99	4.95

DISCHARGE,

DC-2 : Case 2-2

	Location	Minimun m3/sec	Maximum m3/sec
KD-5	0.100	-0.024	37.698
KD-5	0.450	-0.168	37.673
KD-5	0.950	-0.310	42.949
KD-5	1.450	-0.438	44.044
KD-5	1.850	-0.395	44.866
KD-5	2.100	-0.424	85.383
KD-5	2.450	-0.463	84.570
KD-5	2.950	-0.496	83.500
KD-5	3.450	-0.547	104.887
KD-5	3.950	-0.584	102.872
KD-5	4.260	-0.628	101.746
KD-5	4.445	-0.646	101.310
KD-5	4.695	-0.643	100.707
KD-5	4.945	-0.684	100.067
KD-5	5.135	-0.698	99.759
KD-5	5.220	-0.712	129.075
KD-5	5.340	-0.729	128.970
KD-5	5.575	-0.796	129.050
KD-5	5.810	-0.840	129.185
KD-5	6.085	-0.885	129.340
KD-5	6.370	-0.932	129.459
KD-5	6.590	-0.981	129.564
KD-5	6.825	-1.039	129.628
KD-5	7.050	-1.073	129.698
KD-5	7.175	-1.098	129.748
KD-5	7.210	-1.129	147.765
KD-5	7.330	-1.147	150.664
KD-5	7.560	-1.166	150.740
KD-5	7.805	-1.176	150.818
KD-5	8.040	-1.193	150.879
KD-5	8.330	-1.216	150.900
KD-5	8.555	-1.221	150.904
KD-5	8.655	-1.293	183.564
KD-5	8.930	-1.305	183.647
KD-5	9.210	-1.193	183.775
KD-5	9.285	-1.230	183.800
KD-5	9.420	-1.324	288.362
KD-5	9.665	-7.530	60.753
KD-5	9.930	-7.108	60.028
KD-5	10.195	-6.592	59.358
KD-5	10.470	-6.220	58.916
KD-5	10.760	-5.531	58.193
KD-5	11.025	-4.528	57.466
KD-5	11.275	-3.188	56.655
KD-5	11.500	-1.786	55.731
KD-5	11.800	0.000	54.600
KD-5	11.925	-0.193	54.810
KD-6	0.190	-0.170	57.148
KD-6	0.555	-0.436	56.942
KD-6	0.905	-0.661	57.045
KD-6	1.280	-0.863	57.062
KD-6	1.590	-0.940	57.082
KD-6	1.750	-0.974	57.085
KD-7	0.025	-0.025	38.749
KD-7	0.155	-0.085	38.453

DC-2 : Case 2-2

	Location	Minimun m3/sec	Maximum m3/sec
KD-7	0.400	-0.201	38.045
KD-7	0.615	-0.251	37.651
KD-7	0.815	-0.296	37.250
KD-7	1.080	-0.331	36.669
KD-7	1.320	-0.404	36.369
KD-7	1.570	-0.533	36.301
KD-7	1.835	-0.646	36.117
KD-7	2.085	-0.699	35.904
KD-7	2.470	-0.192	40.472
KD-7	2.878	-0.182	39.877
KD-7	3.193	-0.192	39.322
KD-7	3.535	-0.187	38.616
KD-7	3.760	-0.185	38.156
KD-8	0.070	-0.109	26.977
KD-8	0.365	-0.080	26.152
KD-8	0.723	-0.132	25.161
KD-8	0.988	-0.190	24.467
KD-8	1.290	-0.238	24.131
KD-8	1.630	-0.246	23.583
KD-9	0.020	-0.013	24.463
KD-9	0.290	-0.068	24.656
KD-9	0.690	-0.097	25.065
KD-9	0.920	-0.133	25.253
KD-10	0.050	-0.003	37.702
KD-10	0.350	-0.080	36.017
KD-10	0.850	-0.125	34.545
KD-10	1.350	-0.177	33.242
KD-10	1.850	-0.213	32.054
KD-10	2.350	-0.242	54.650
KD-10	2.850	-0.272	52.432
KD-10	3.350	-0.339	50.446
KD-10	3.825	-0.444	48.749
KD-10	4.075	-0.585	47.810

DC-2 : Case 2-2

GRID POINT RESULT SUMMARY

VELOCITY,

	Location	Minimun m/sec	Maximum m/sec
KD-5	0.000	0.000	0.746
KD-5	0.100	-0.000	0.757
KD-5	0.200	-0.001	0.766
KD-5	0.450	-0.004	0.751
KD-5	0.700	-0.005	0.782
KD-5	0.950	-0.007	0.827
KD-5	1.200	-0.008	0.824
KD-5	1.450	-0.009	0.817
KD-5	1.700	-0.009	0.812
KD-5	1.850	-0.007	0.670
KD-5	2.000	-0.006	0.587
KD-5	2.000	-0.012	1.044
KD-5	2.100	-0.011	0.959
KD-5	2.200	-0.010	0.876
KD-5	2.450	-0.010	0.857
KD-5	2.700	-0.010	0.839
KD-5	2.950	-0.009	0.769
KD-5	3.200	-0.008	0.803
KD-5	3.450	-0.008	0.907
KD-5	3.700	-0.008	0.899
KD-5	3.950	-0.009	0.888
KD-5	4.200	-0.009	0.876
KD-5	4.260	-0.009	0.873
KD-5	4.320	-0.009	0.871
KD-5	4.445	-0.009	0.865
KD-5	4.570	-0.009	0.860
KD-5	4.695	-0.009	0.856
KD-5	4.820	-0.010	0.852
KD-5	4.945	-0.010	0.847
KD-5	5.070	-0.010	0.842
KD-5	5.135	-0.009	0.818
KD-5	5.200	-0.009	0.834
KD-5	5.200	-0.010	1.020
KD-5	5.220	-0.009	1.021
KD-5	5.240	-0.009	1.013
KD-5	5.340	-0.010	1.013
KD-5	5.440	-0.010	1.014
KD-5	5.575	-0.010	1.015
KD-5	5.710	-0.010	1.016
KD-5	5.810	-0.010	1.019
KD-5	5.910	-0.011	1.022
KD-5	6.085	-0.011	1.024
KD-5	6.260	-0.011	1.027
KD-5	6.370	-0.011	1.029
KD-5	6.480	-0.011	1.032
KD-5	6.590	-0.011	1.034
KD-5	6.700	-0.011	1.037
KD-5	6.825	-0.012	1.041
KD-5	6.950	-0.012	1.046
KD-5	7.050	-0.012	1.049
KD-5	7.150	-0.012	1.051
KD-5	7.175	-0.012	1.033
KD-5	7.200	-0.011	1.016
KD-5	7.200	-0.012	1.145
KD-5	7.210	-0.012	1.137

DC-2 : Case 2-2

	Location	Minimun m/sec	Maximum m/sec
KD-5	7.220	-0.012	1.131
KD-5	7.330	-0.012	1.157
KD-5	7.440	-0.012	1.162
KD-5	7.560	-0.012	1.169
KD-5	7.680	-0.012	1.175
KD-5	7.805	-0.012	1.181
KD-5	7.930	-0.012	1.187
KD-5	8.040	-0.012	1.193
KD-5	8.150	-0.012	1.199
KD-5	8.330	-0.012	1.210
KD-5	8.510	-0.012	1.221
KD-5	8.555	-0.012	1.184
KD-5	8.600	-0.011	1.156
KD-5	8.600	-0.010	1.379
KD-5	8.655	-0.010	1.343
KD-5	8.710	-0.010	1.300
KD-5	8.930	-0.010	1.320
KD-5	9.150	-0.009	1.341
KD-5	9.210	-0.009	1.344
KD-5	9.270	-0.009	1.347
KD-5	9.285	-0.009	1.351
KD-5	9.300	-0.009	1.390
KD-5	9.300	-0.010	1.847
KD-5	9.420	-0.010	2.152
KD-5	9.540	-0.020	1.333
KD-5	9.665	-0.040	0.460
KD-5	9.790	-0.039	0.455
KD-5	9.930	-0.037	0.452
KD-5	10.070	-0.035	0.449
KD-5	10.195	-0.033	0.446
KD-5	10.320	-0.031	0.443
KD-5	10.470	-0.030	0.438
KD-5	10.620	-0.027	0.432
KD-5	10.760	-0.024	0.428
KD-5	10.900	-0.021	0.425
KD-5	11.025	-0.018	0.422
KD-5	11.150	-0.015	0.419
KD-5	11.275	-0.013	0.416
KD-5	11.400	-0.010	0.413
KD-5	11.500	-0.007	0.410
KD-5	11.600	-0.005	0.406
KD-5	11.800	0.000	0.256
KD-5	11.850	0.000	0.187
KD-5	11.925	-0.000	0.187
KD-5	12.000	-0.000	0.186
KD-6	0.000	0.000	1.202
KD-6	0.190	-0.004	1.238
KD-6	0.380	-0.008	1.277
KD-6	0.555	-0.011	1.286
KD-6	0.730	-0.014	1.295
KD-6	0.905	-0.016	1.309
KD-6	1.080	-0.018	1.328
KD-6	1.280	-0.019	1.364
KD-6	1.480	-0.020	1.399
KD-6	1.590	-0.020	1.423

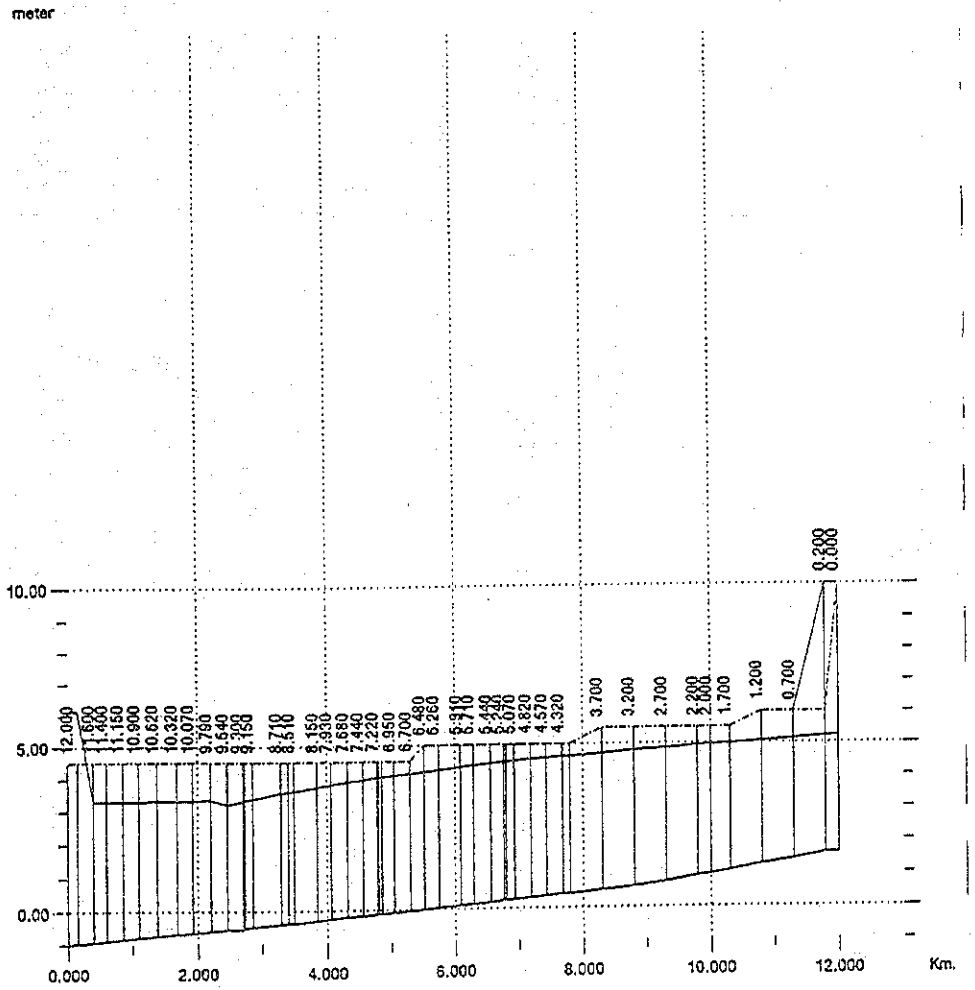
DC-2 : Case 2-2

	Location	Minimun m/sec	Maximum m/sec
KD-6	1.700	-0.020	1.448
KD-6	1.750	-0.020	1.486
KD-6	1.800	-0.020	1.678
KD-7	0.000	0.000	0.851
KD-7	0.025	0.000	0.852
KD-7	0.050	-0.000	0.853
KD-7	0.155	-0.001	0.843
KD-7	0.260	-0.002	0.833
KD-7	0.400	-0.003	0.818
KD-7	0.540	-0.004	0.804
KD-7	0.615	-0.004	0.796
KD-7	0.690	-0.005	0.791
KD-7	0.815	-0.006	0.784
KD-7	0.940	-0.007	0.776
KD-7	1.080	-0.008	0.767
KD-7	1.220	-0.009	0.757
KD-7	1.320	-0.009	0.749
KD-7	1.420	-0.010	0.741
KD-7	1.570	-0.010	0.728
KD-7	1.720	-0.011	0.716
KD-7	1.835	-0.011	0.703
KD-7	1.950	-0.011	0.691
KD-7	2.085	-0.011	0.656
KD-7	2.220	-0.004	0.657
KD-7	2.470	-0.004	0.712
KD-7	2.720	-0.004	0.702
KD-7	2.878	-0.004	0.695
KD-7	3.035	-0.004	0.687
KD-7	3.193	-0.004	0.679
KD-7	3.350	-0.004	0.671
KD-7	3.535	-0.004	0.662
KD-7	3.720	-0.004	0.653
KD-7	3.760	-0.004	0.651
KD-7	3.800	-0.004	0.662
KD-8	0.000	0.000	0.742
KD-8	0.070	-0.000	0.729
KD-8	0.140	-0.001	0.718
KD-8	0.365	-0.002	0.685
KD-8	0.590	-0.003	0.656
KD-8	0.723	-0.003	0.640
KD-8	0.855	-0.004	0.626
KD-8	0.988	-0.004	0.612
KD-8	1.120	-0.004	0.597
KD-8	1.290	-0.004	0.576
KD-8	1.460	-0.005	0.555
KD-8	1.630	-0.005	0.535
KD-8	1.800	-0.005	0.516
KD-9	0.000	0.000	0.600
KD-9	0.020	0.000	0.601
KD-9	0.040	0.000	0.602
KD-9	0.290	-0.001	0.590
KD-9	0.540	-0.002	0.578
KD-9	0.690	-0.003	0.571
KD-9	0.840	-0.003	0.565
KD-9	0.920	-0.004	0.562

DC-2 : Case 2-2

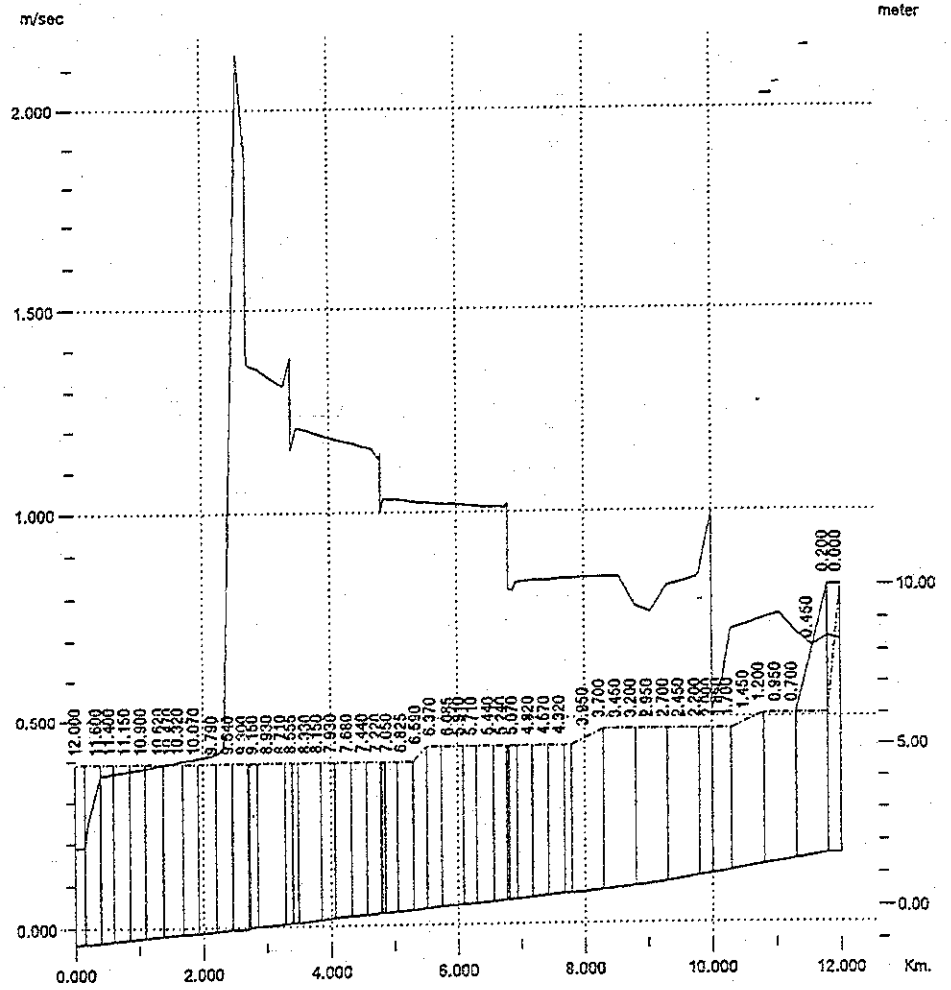
	Location	Minimun m/sec	Maximum m/sec
KD-9	1.000	-0.004	0.599
KD-10	0.000	0.000	0.884
KD-10	0.050	0.000	0.881
KD-10	0.100	-0.001	0.879
KD-10	0.350	-0.006	0.829
KD-10	0.600	-0.010	0.791
KD-10	0.850	-0.013	0.755
KD-10	1.100	-0.015	0.719
KD-10	1.350	-0.017	0.683
KD-10	1.600	-0.017	0.656
KD-10	1.850	-0.015	0.590
KD-10	2.100	-0.013	0.730
KD-10	2.350	-0.012	0.942
KD-10	2.600	-0.012	0.922
KD-10	2.850	-0.013	0.890
KD-10	3.100	-0.013	0.856
KD-10	3.350	-0.013	0.821
KD-10	3.600	-0.013	0.788
KD-10	3.825	-0.013	0.756
KD-10	4.050	-0.013	0.725
KD-10	4.075	-0.013	0.721
KD-10	4.100	-0.013	0.721

DC-2 : Case 2-2



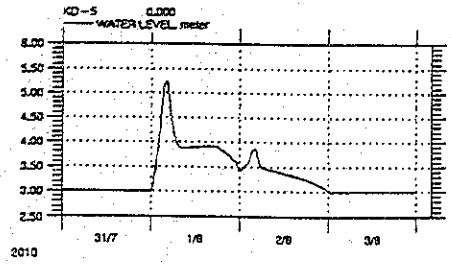
H : 1/75000 V : 1/150	K1-5 (Max. W.L.)
PARAMETER : WATER LEVEL, DATA FILE : RN2 – 2.RDF RESULT FILE : RES2 – 2.RRF	1 – AUG – 2010, 04:00 (28.0 hrs) BOUNDARY FILE : BN – 2.BSF CALCULATED : 3 – FEB – 1992, 10:45
MIKE 11 Dwg no.:	

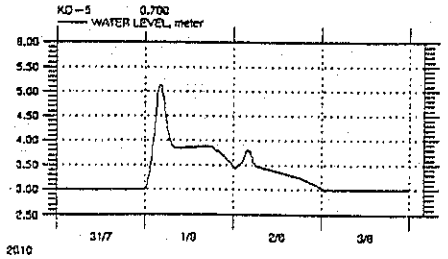
DC-2 : Case 2-2

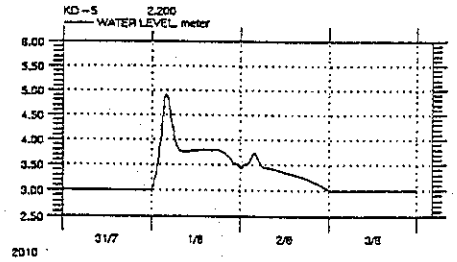


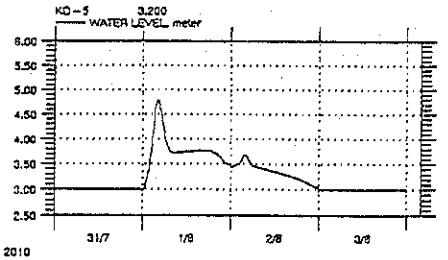
H : 1/75000 V : 1/150	K2-5
PARAMETER : VELOCITY, DATA FILE : RN2 – 2.RDF RESULT FILE : RES2 – 2.VRF	1 – AUG – 2010, 04:05 (28.05 hrs) BOUNDARY FILE : BN – 2.BSF CALCULATED : 3 – FEB – 1992, 10:45
MIKE 11 Dwg no.:	

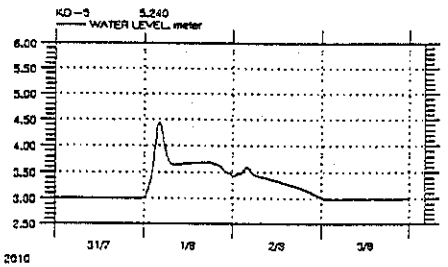
DC-2 : Case 2-2

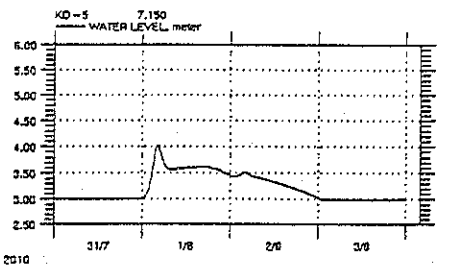










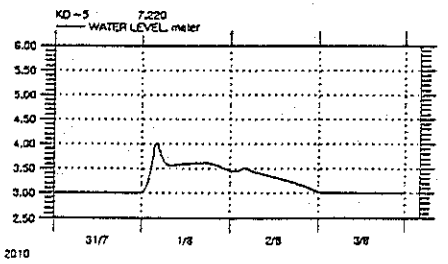


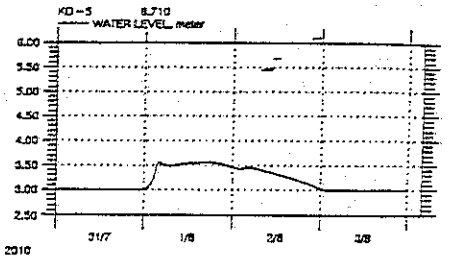
DATA FILE : RN2-2.RDF	BOUNDARY FILE : BN-2.BSF
RESULT FILE : RES2-2.RRF	CALCULATED : 3-FEB-1992, 10:45

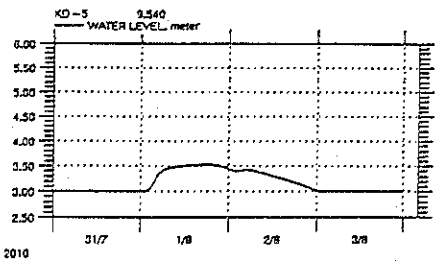
MIKE 11

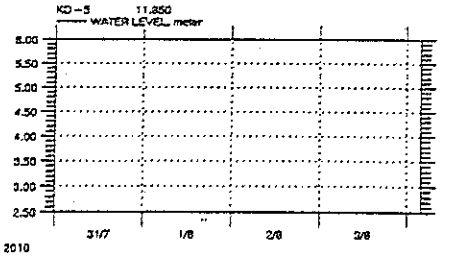
Dwg no.:

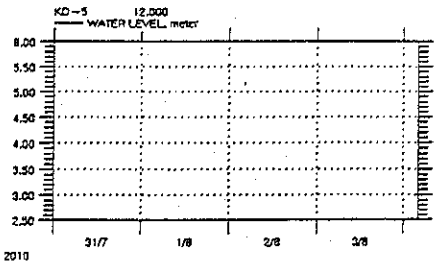
DC-2 : Case 2-2









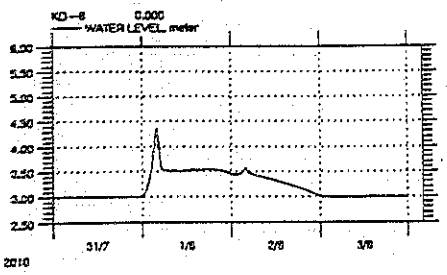


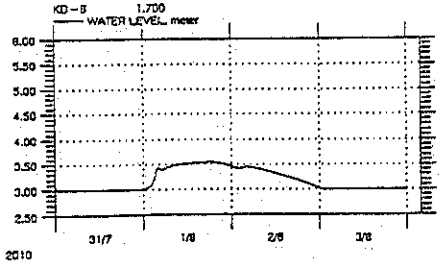
DATA FILE : RN2-2.RDF	BOUNDARY FILE : BN-2.BSF
RESULT FILE : RES2-2.RRF	CALCULATED : 3-FEB-1992, 10:45

MIKE 11

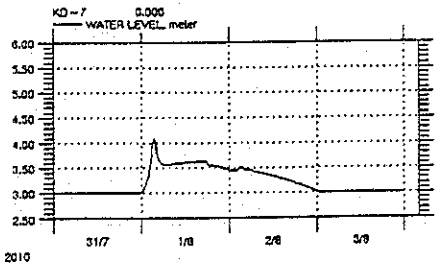
Dwg no.:

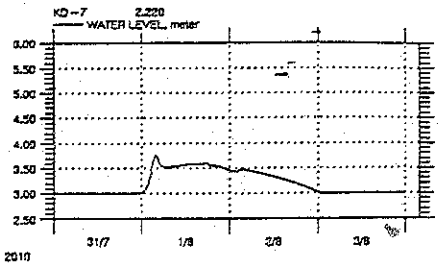
DC-2 : Case 2-2

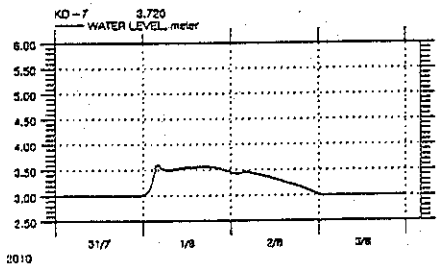




DC-2 : Case 2-2





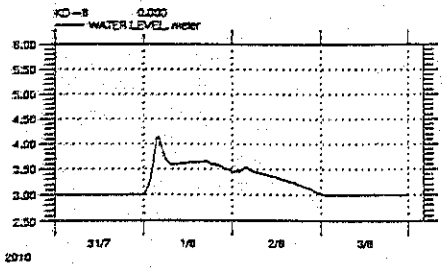


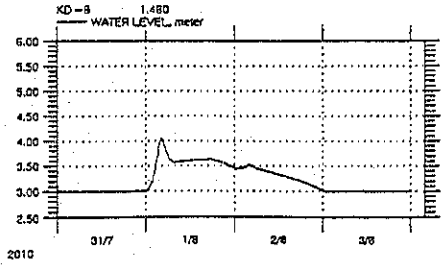
DD-56

DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

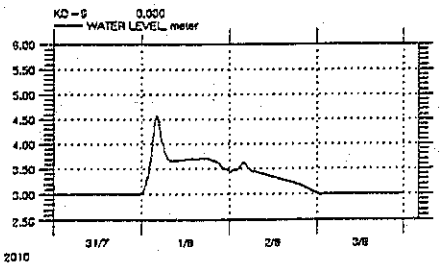
DC-2 : Case 2-2

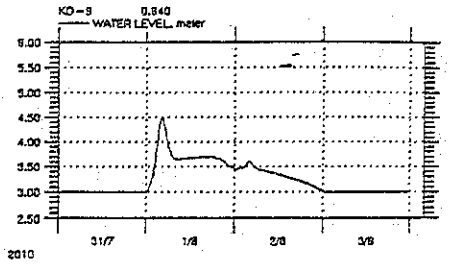




DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

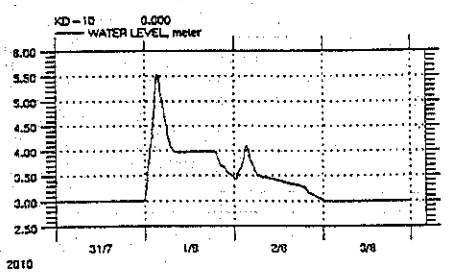
DC-2 : Case 2-2

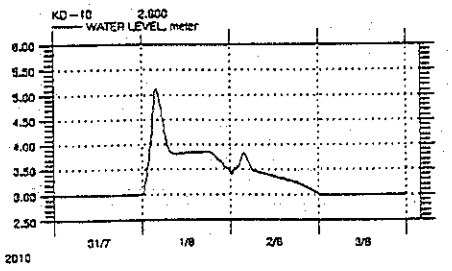


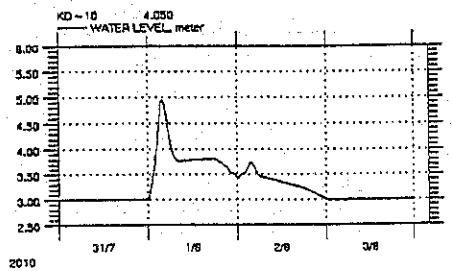


DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

DC-2 : Case 2-2





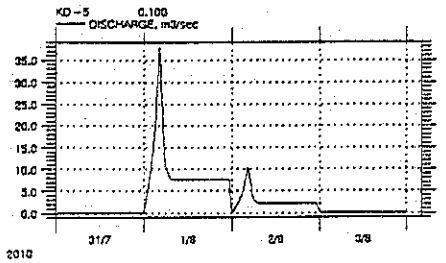


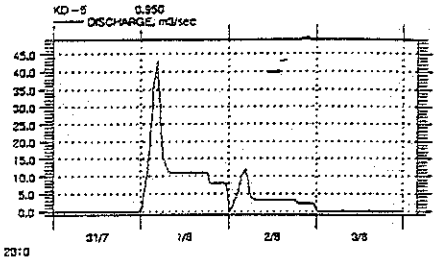
DD-58

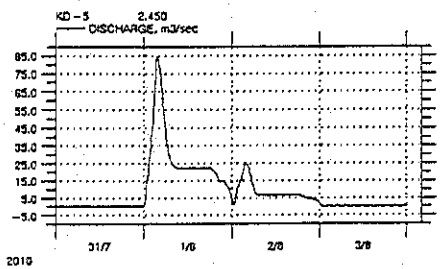
DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45

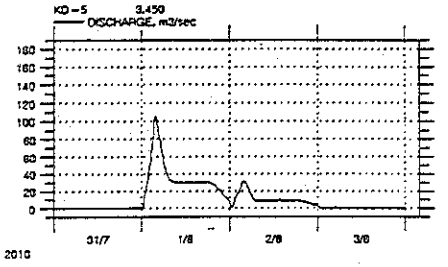
MIKE 11
Dwg no.:

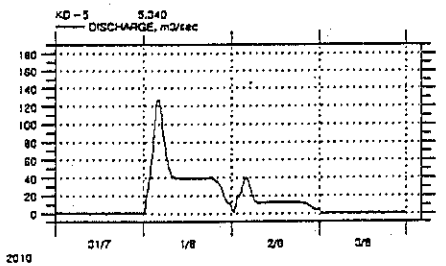
DC-2 : Case 2-2

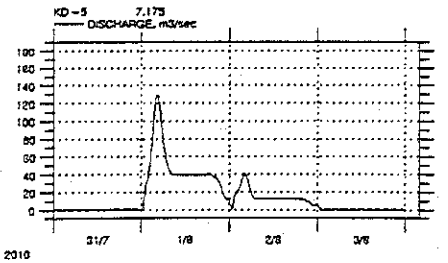








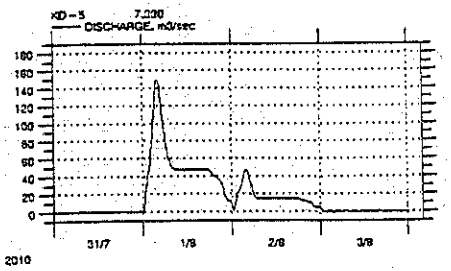


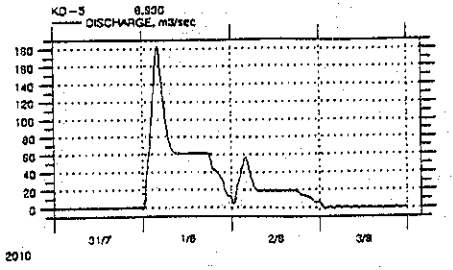


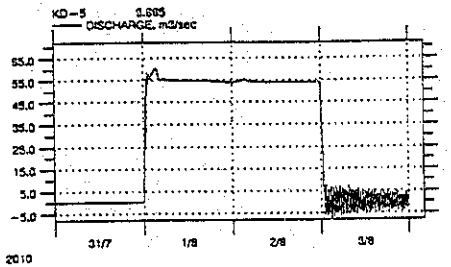
DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45

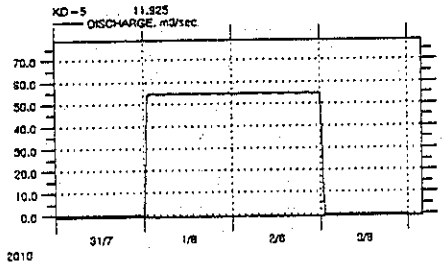
MIKE 11
Dwg no.:

DC-2 : Case 2-2





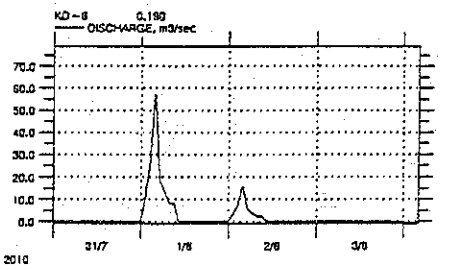


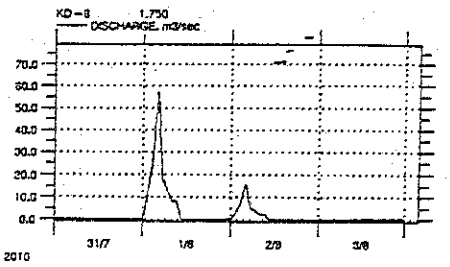


DD-59

DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

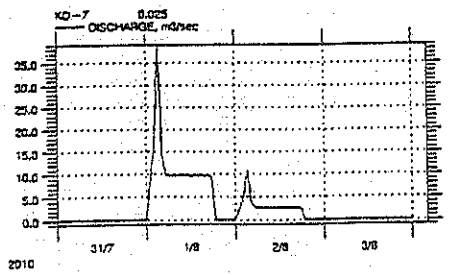
DC-2 : Case 2-2

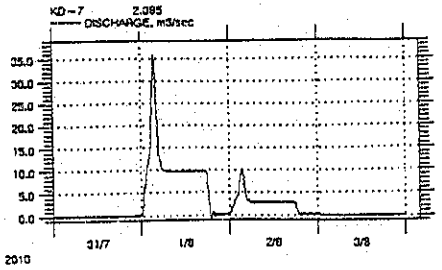


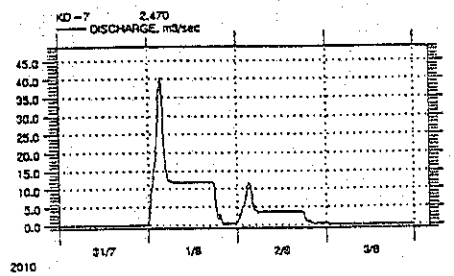


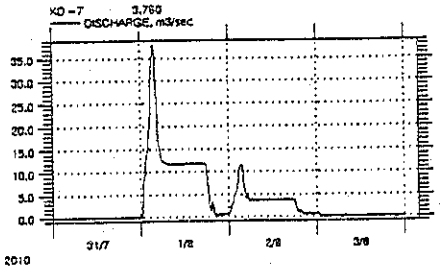
DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

DC-2 : Case 2-2





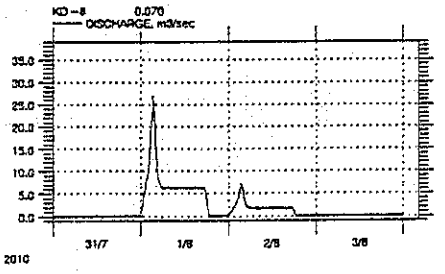


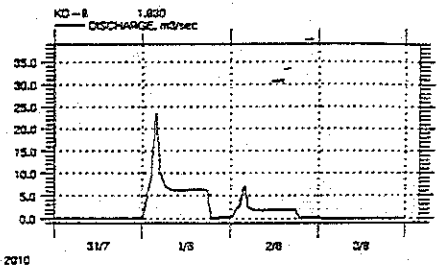


DD-60

DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

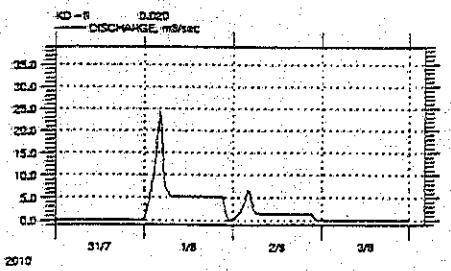
DC-2 : Case 2-2

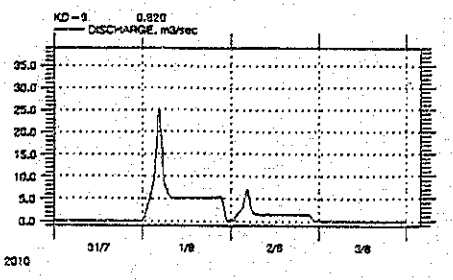




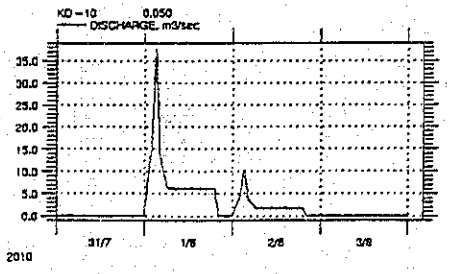
DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

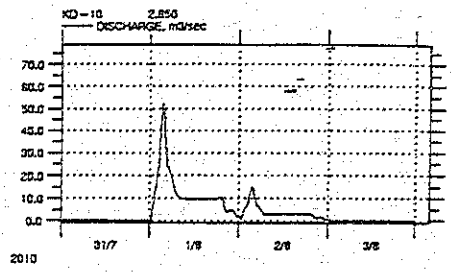
DC-2 : Case 2-2

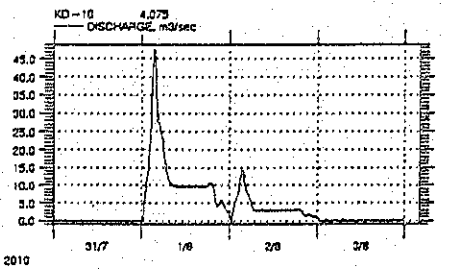




DC-2 : Case 2-2







DD-6.1

DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.:

DATA FILE : RN2-2.RDF RESULT FILE : RES2-2.RRF	BOUNDARY FILE : BN-2.BSF CALCULATED : 3-FEB-1992, 10:45	MIKE 11 Dwg no.: