PROVINCIA DI OLBIA TEMPIO
COMUNE SAN TEODORO

ADEGUAMENTO DEL PIANO URBANISTICO COMUNALE AL P.A.I.

PERIMETRAZIONE DELLE AREE A PERICOLOSITA' IDRAULICA IN APPLICAZIONE DELL'ART.8 COMMA 2 DELLE NORME DI ATTUAZIONE DEL P.A.I.

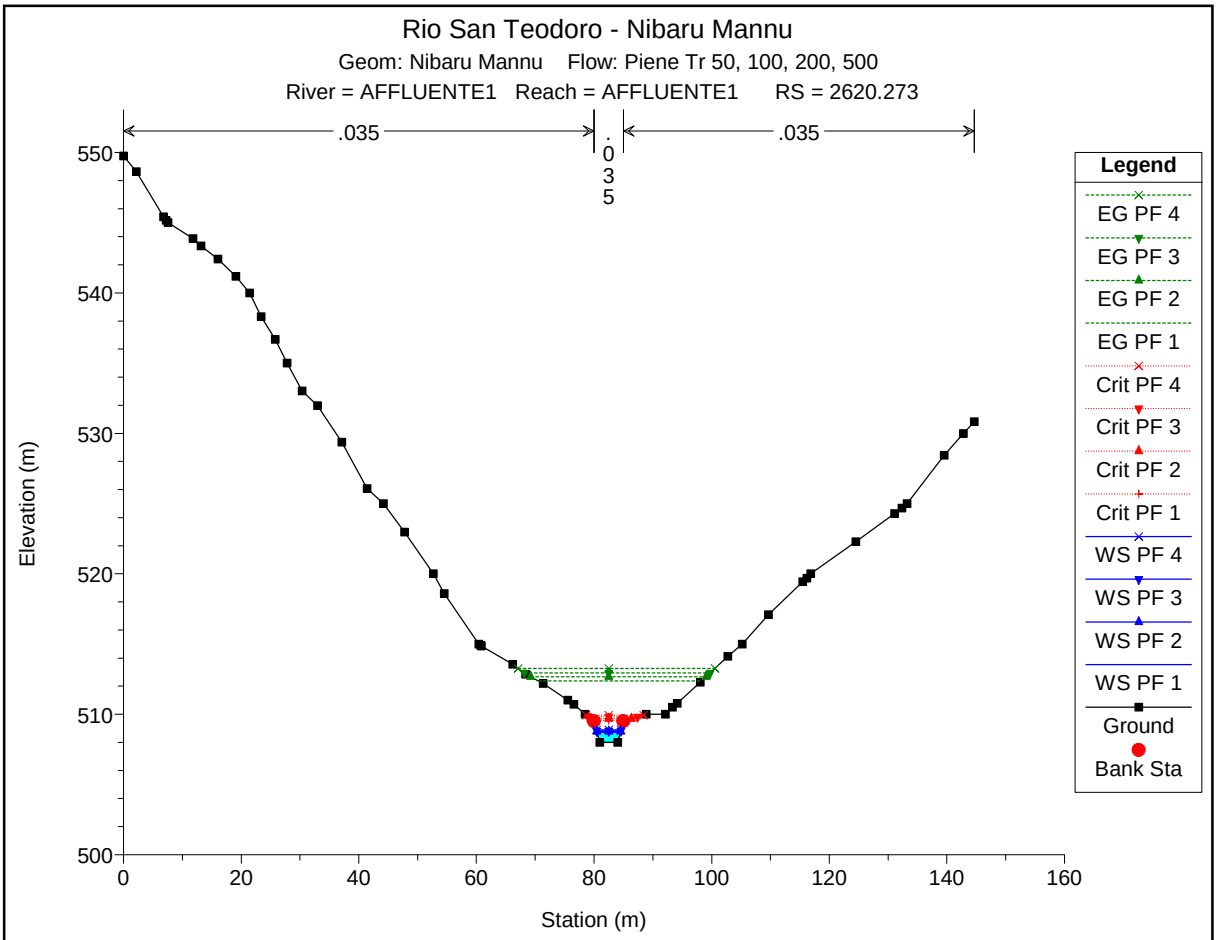
RIO SAN TEODORO
VERIFICHE IDRAULICHE

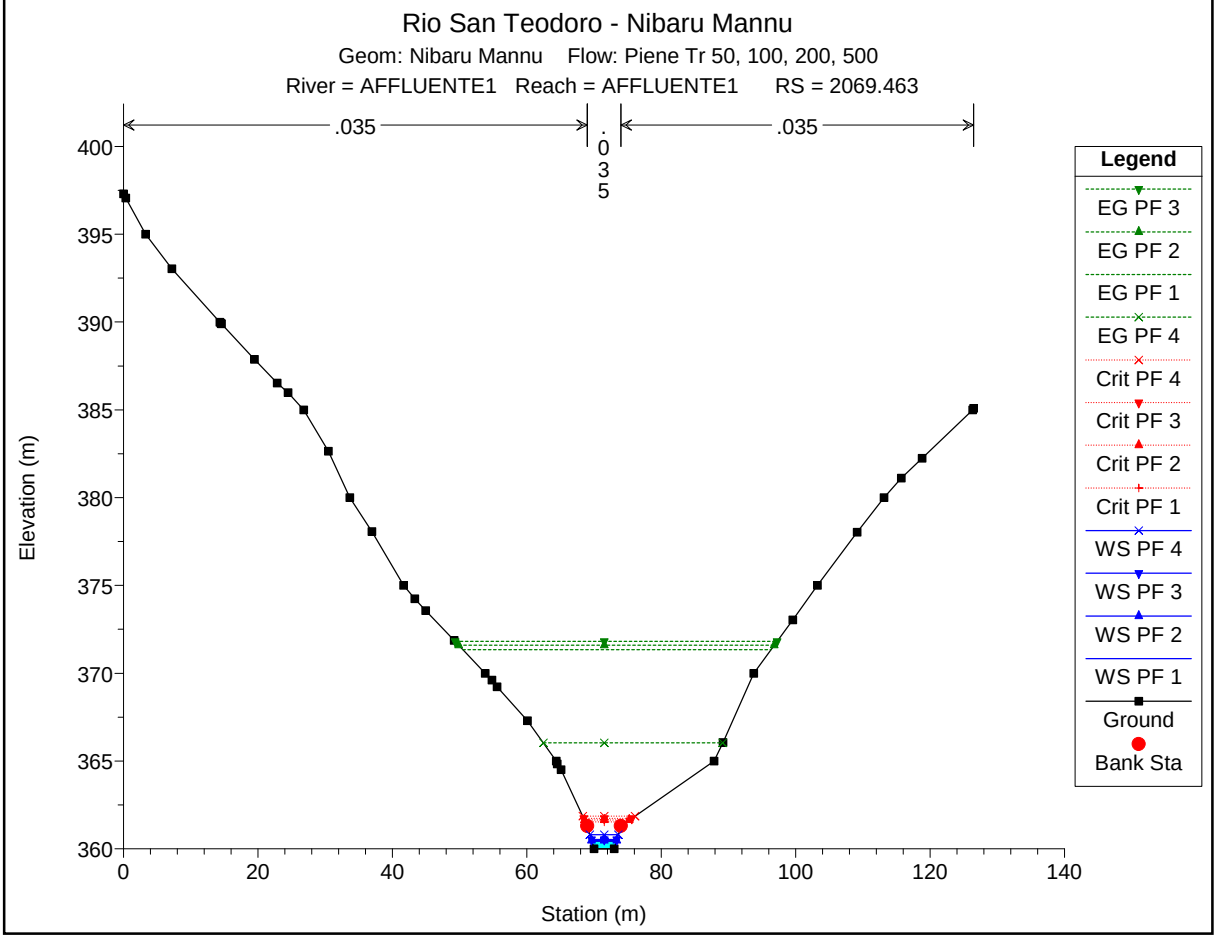
TAVOLA N°	SCALA	DATA
7.2		Ottobre 2012

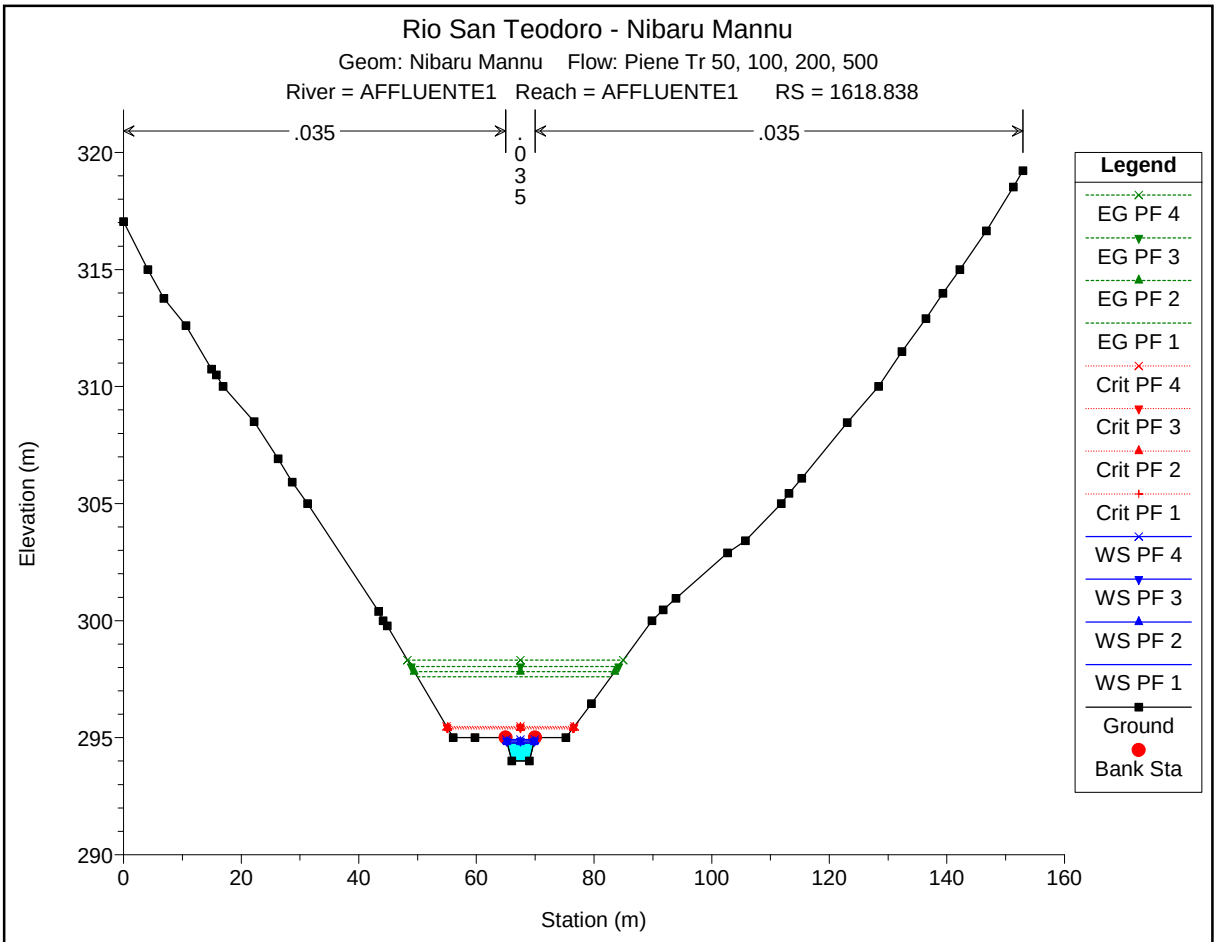
I TECNICI INCARICATI
Ing. Maddalena Idili
Geol. Andrea Selis

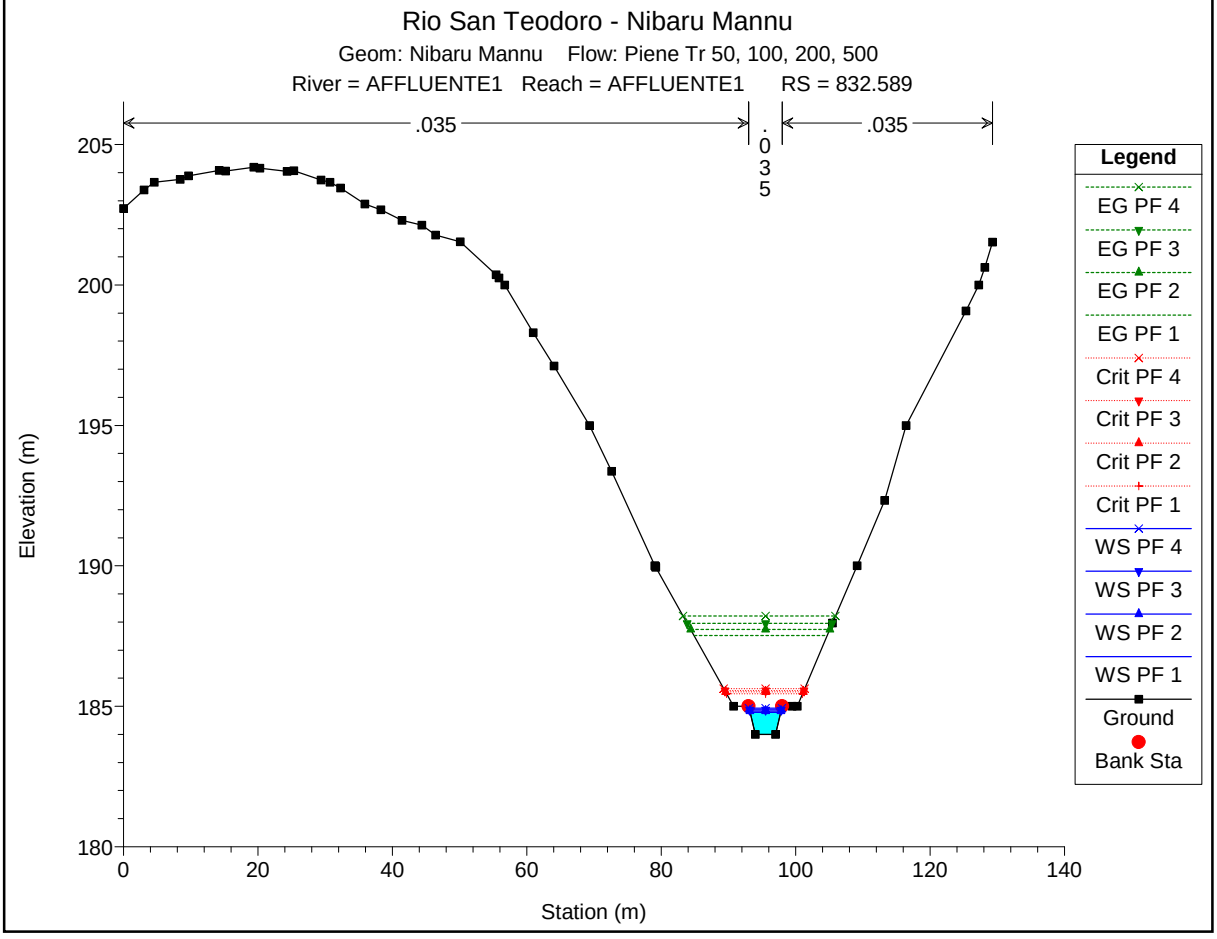
IL RESPONSABILE DEL PROCEDIMENTO
Geom. Riccardo Inzaina

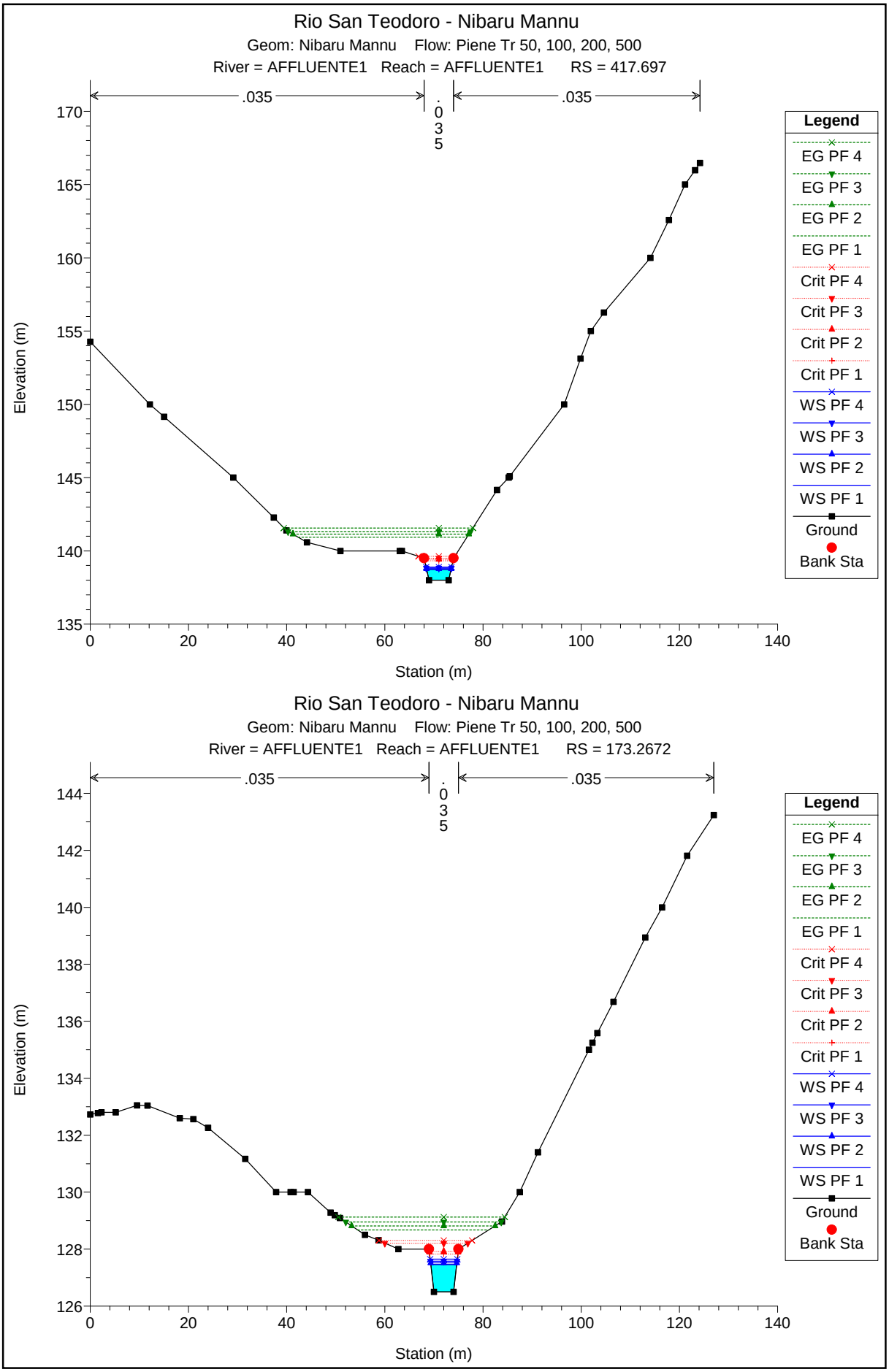
Ing. Maddalena Idili, via Stazione n. 28 - 08012 Bortigali, cell. 3285388170 - email idili.m@tiscali.it
Geol. Andrea Selis, via Toscana n.3 - 08100 Nuoro, cell. 3493193280 - email andreaselis@gmail.it

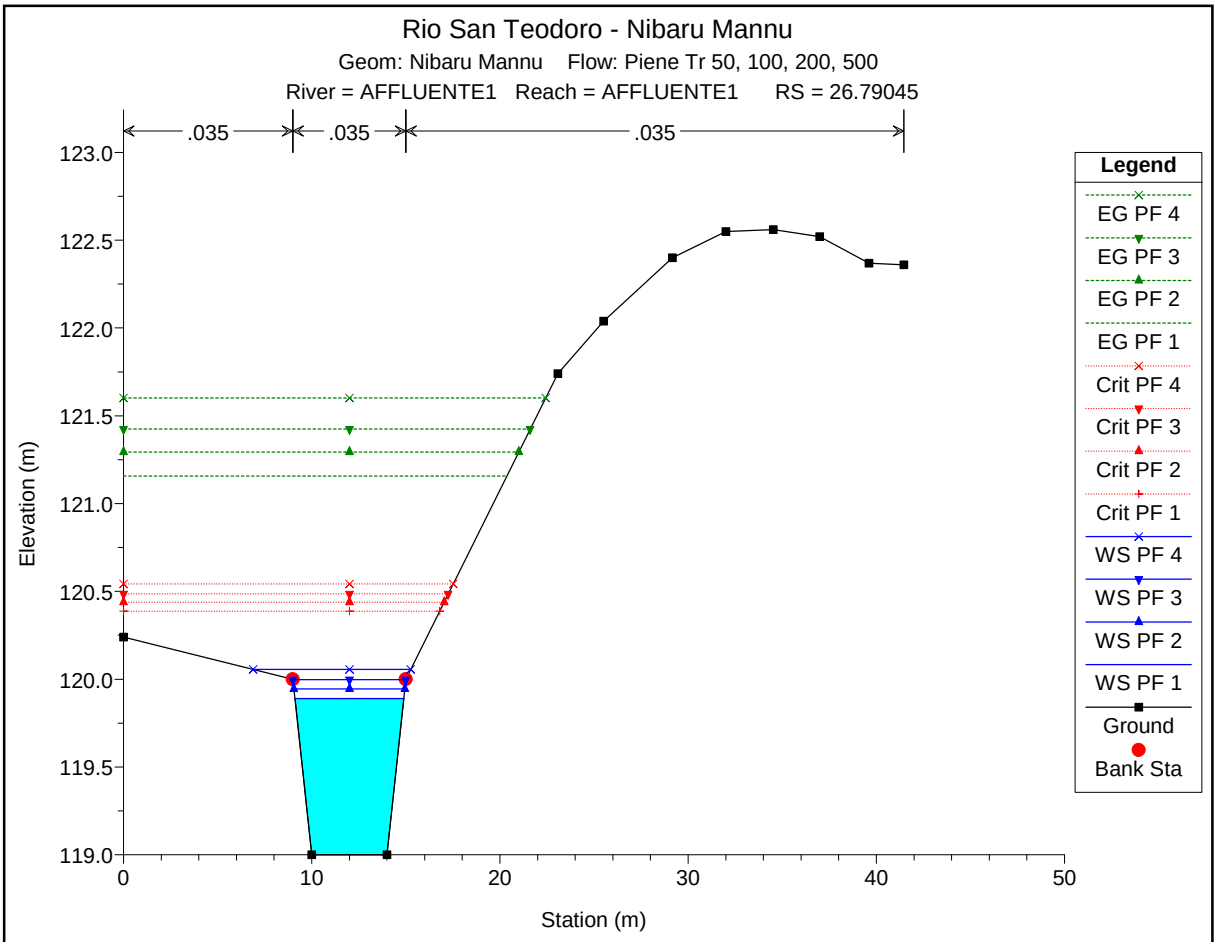

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 2620.273
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

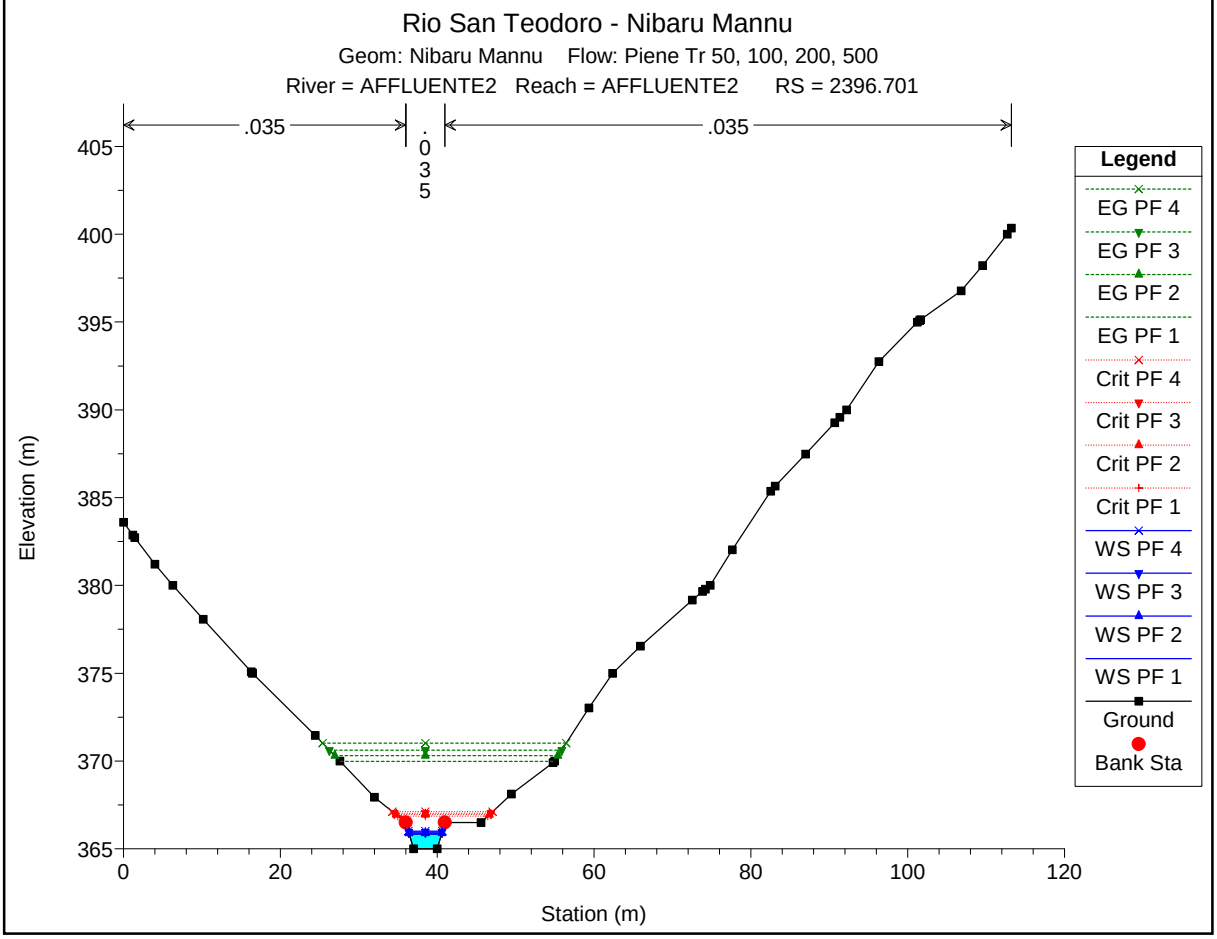

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 2069.463
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 3
EG PF 2
EG PF 1
EG PF 4
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

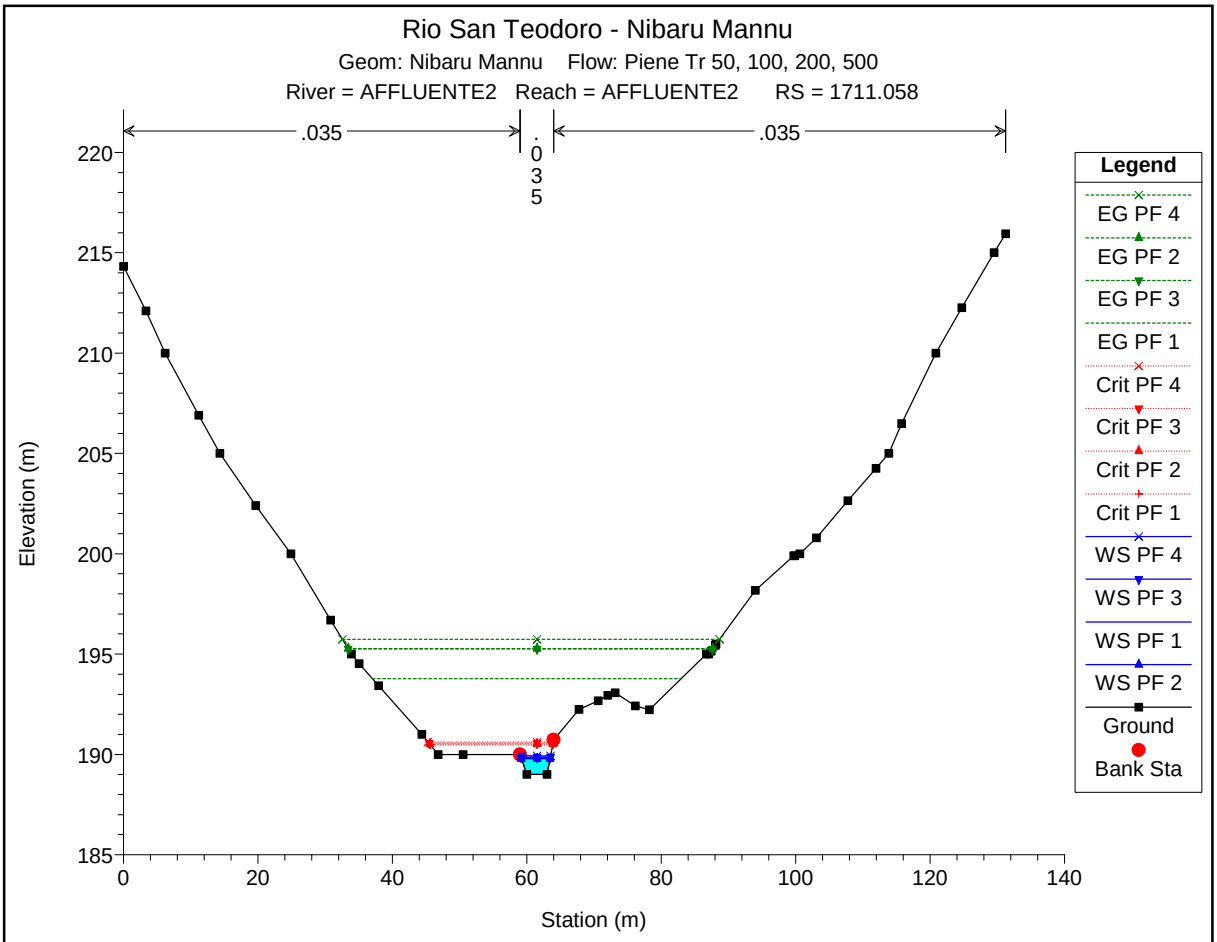

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 1618.838
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

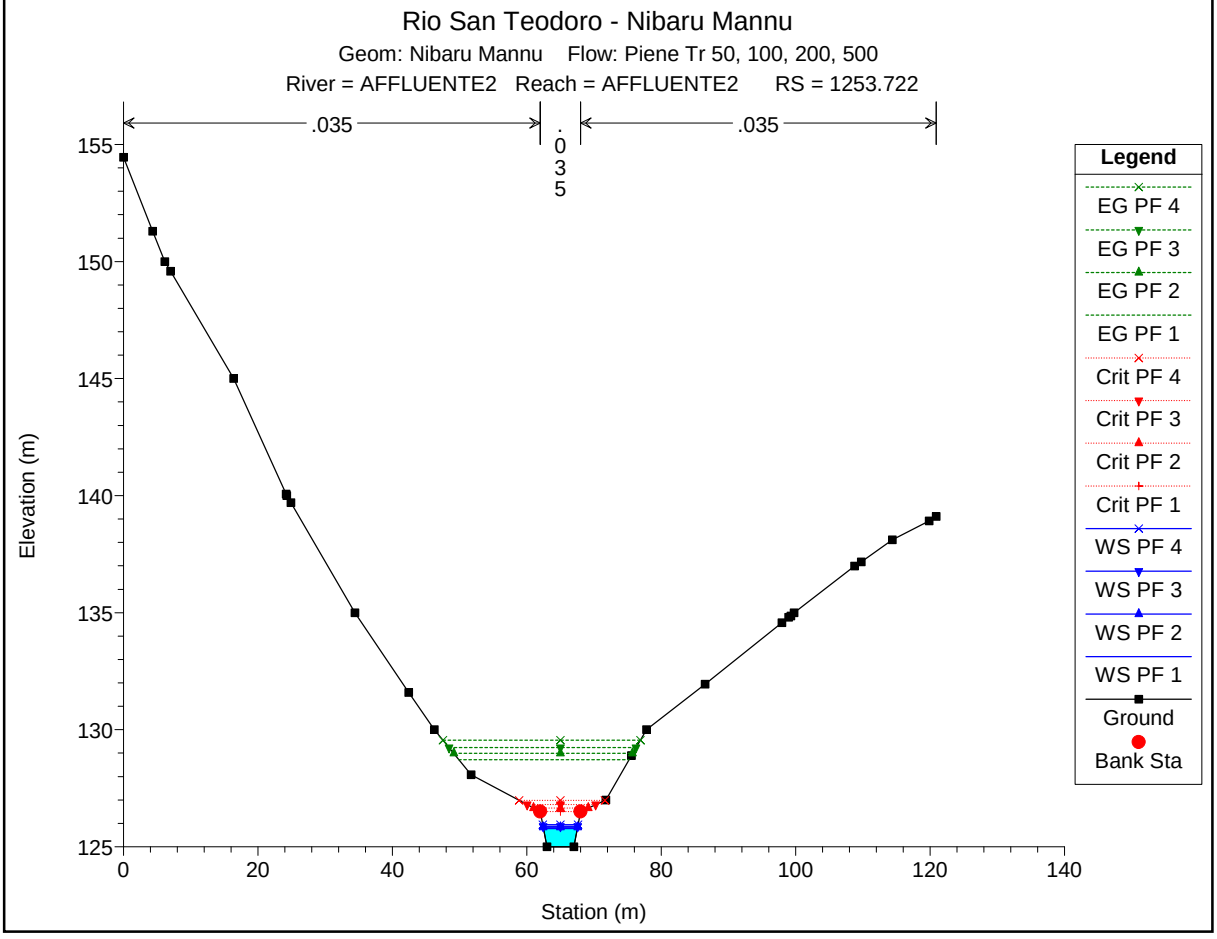

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 832.589
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

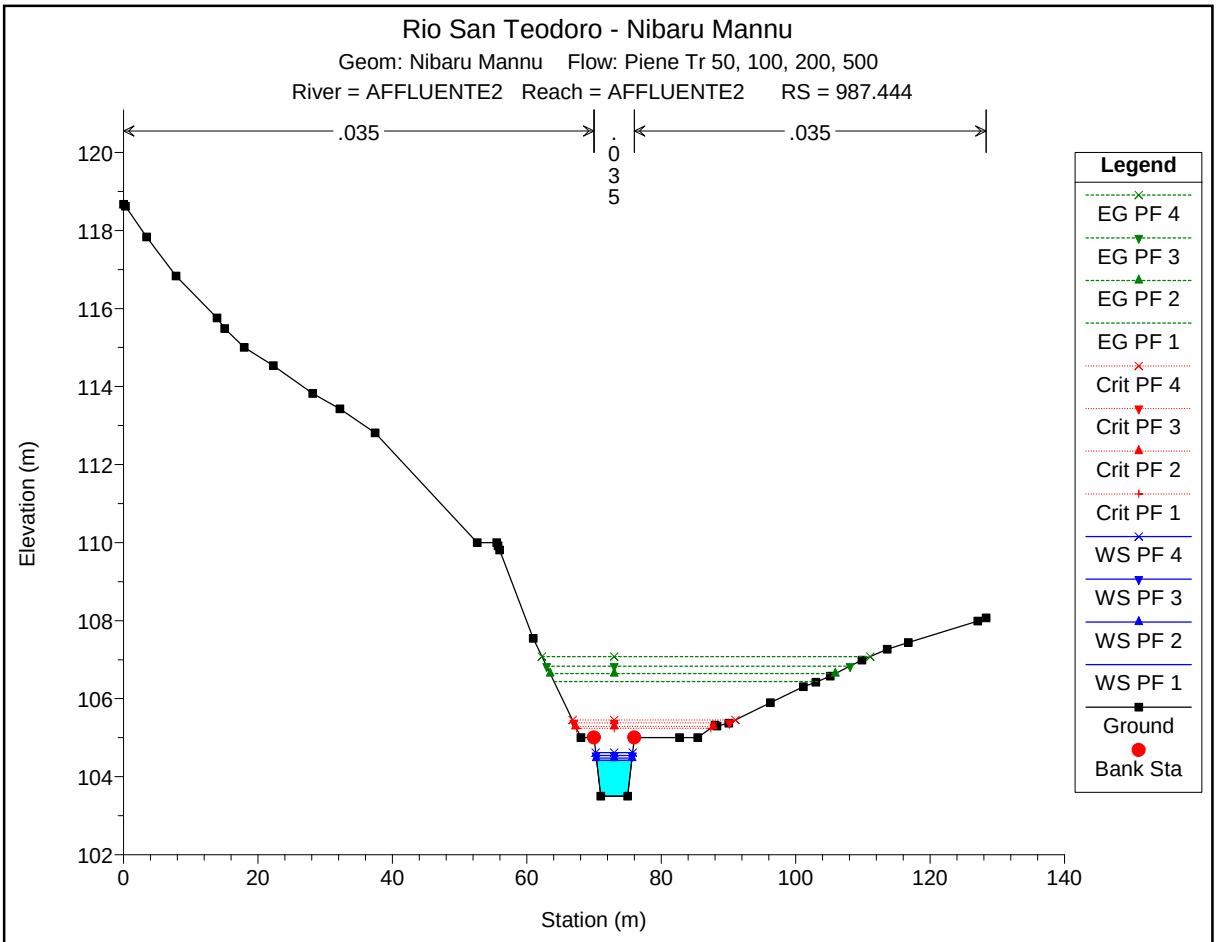

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 417.697
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 173.2672
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

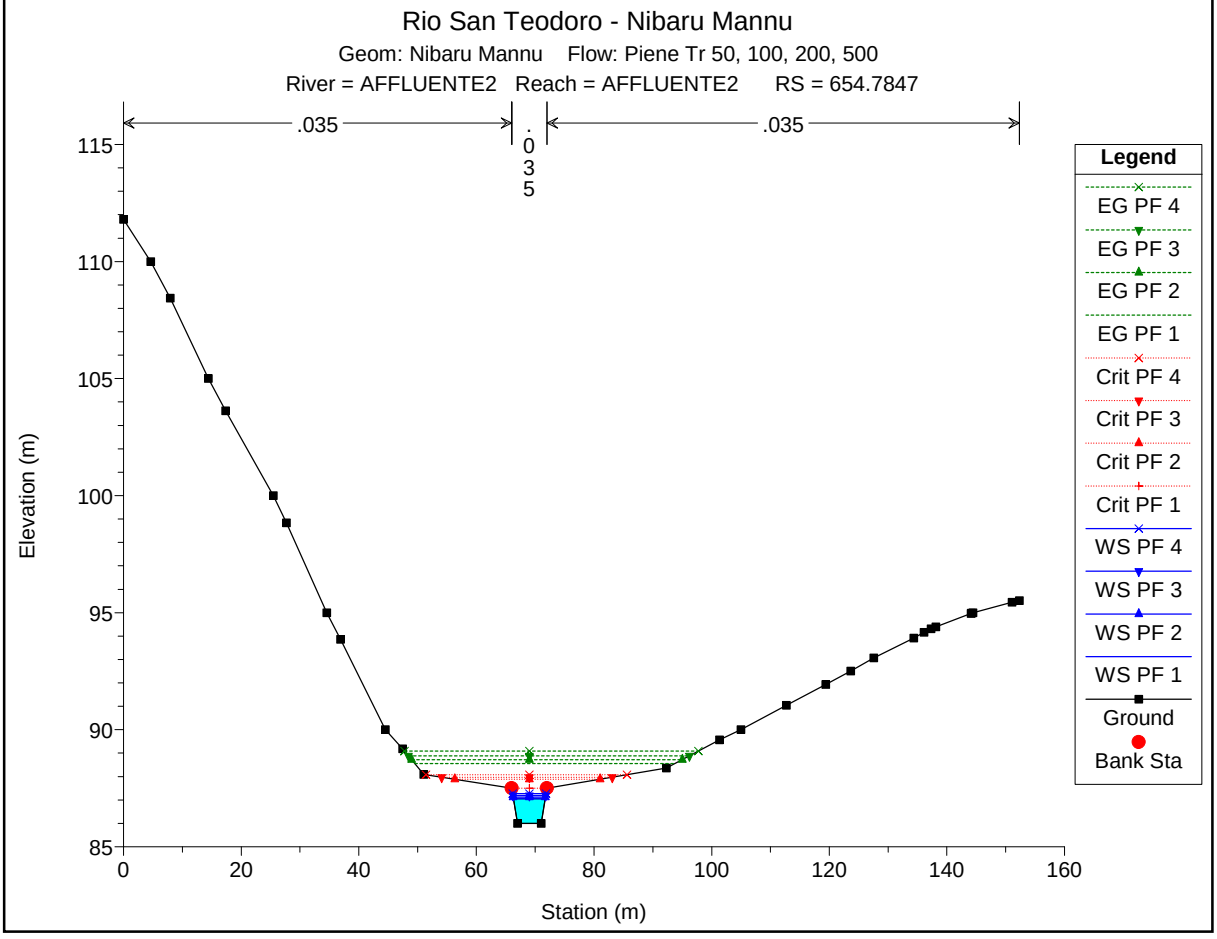

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE1 Reach = AFFLUENTE1 RS = 26.79045
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

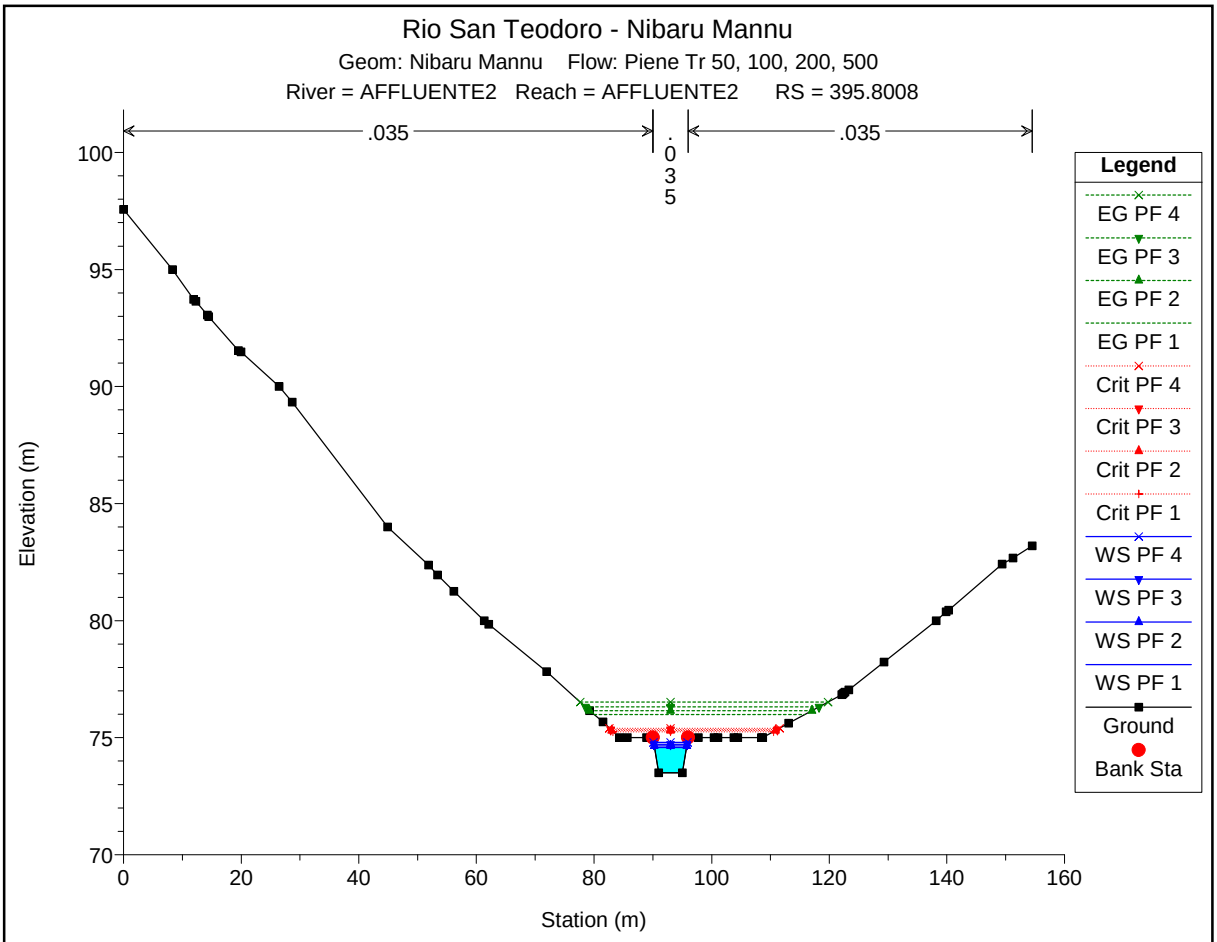

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 2396.701
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

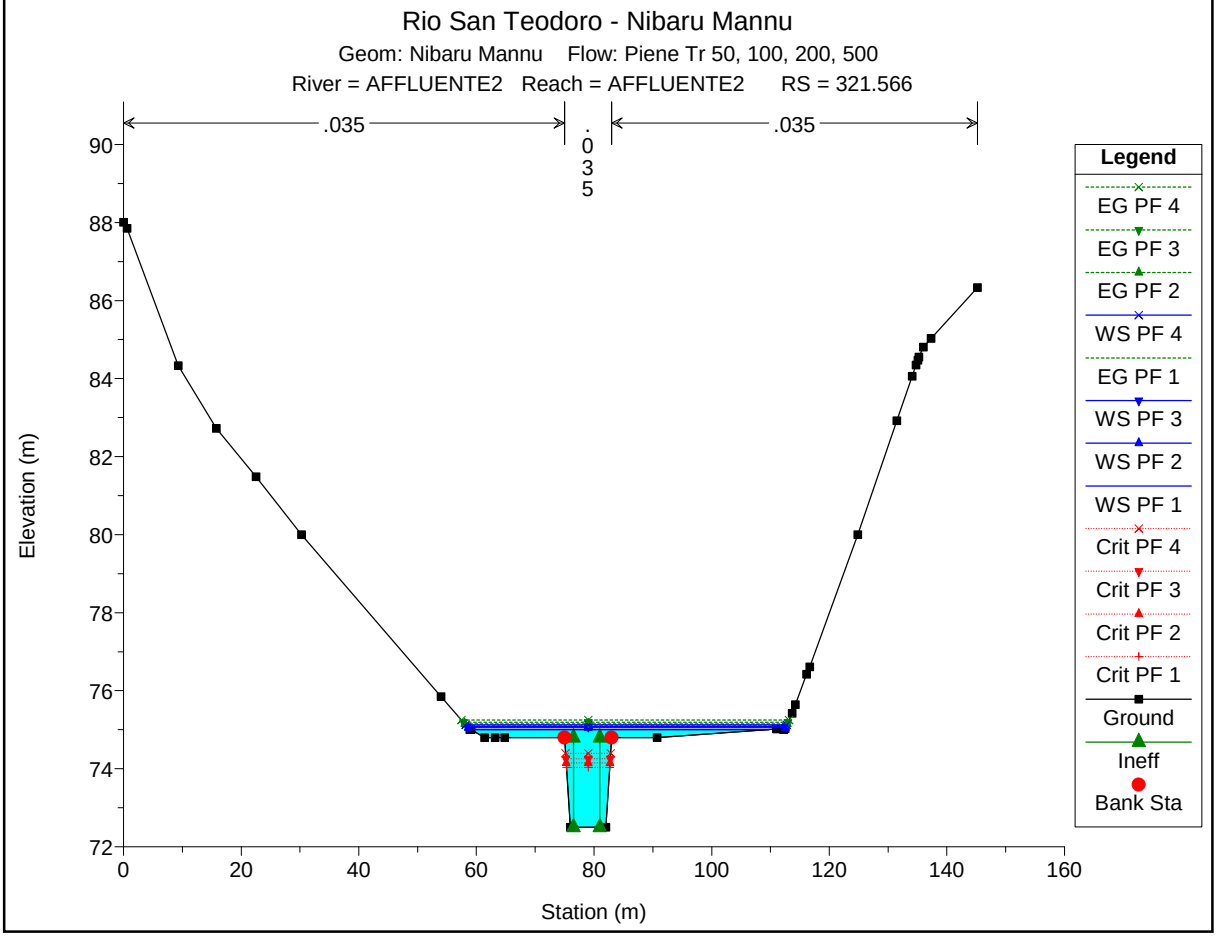

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 1711.058
.035
.035
.035
Legend
EG PF 4
EG PF 2
EG PF 3
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 1
WS PF 2
Ground
Bank Sta
Elevation (m)
Station (m)

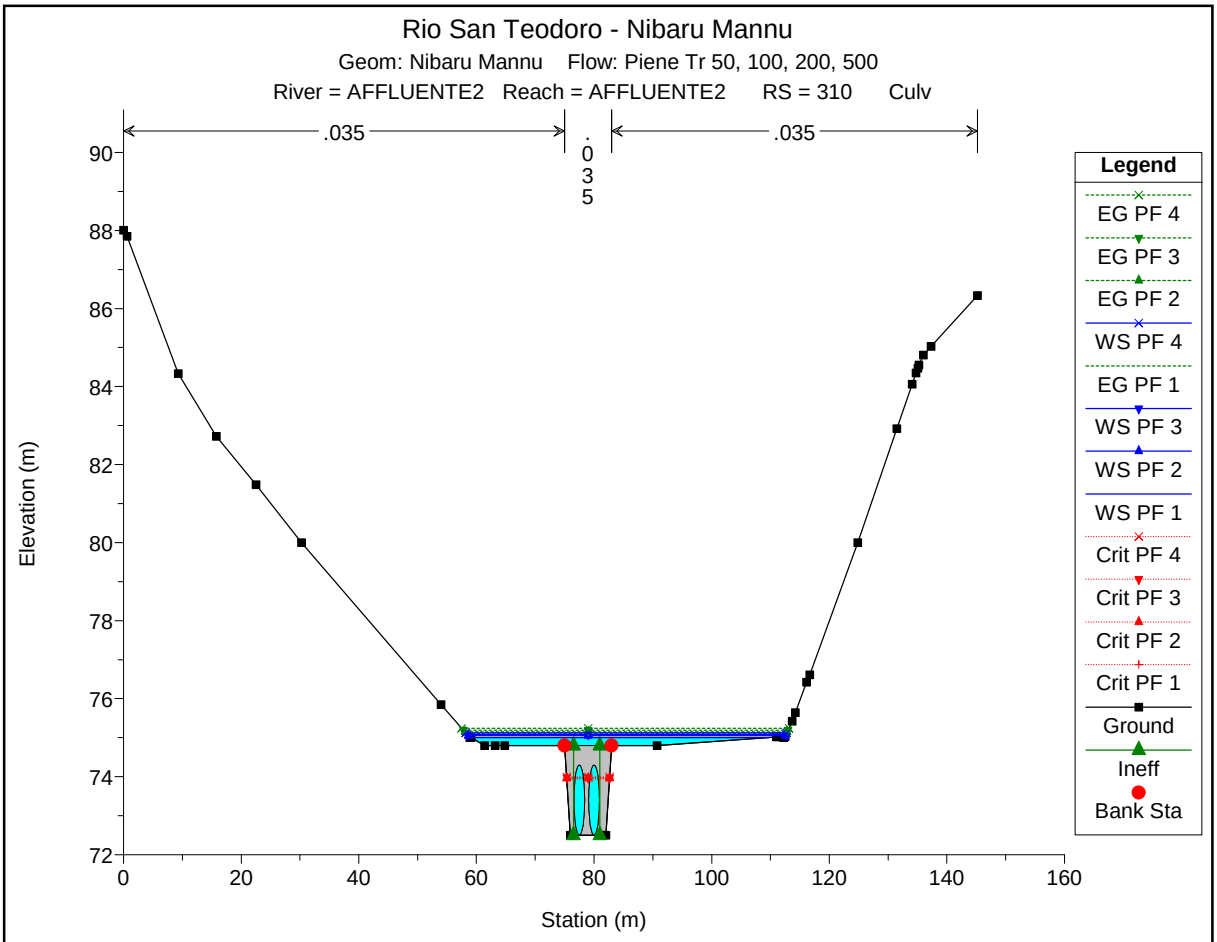

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 1253.722
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

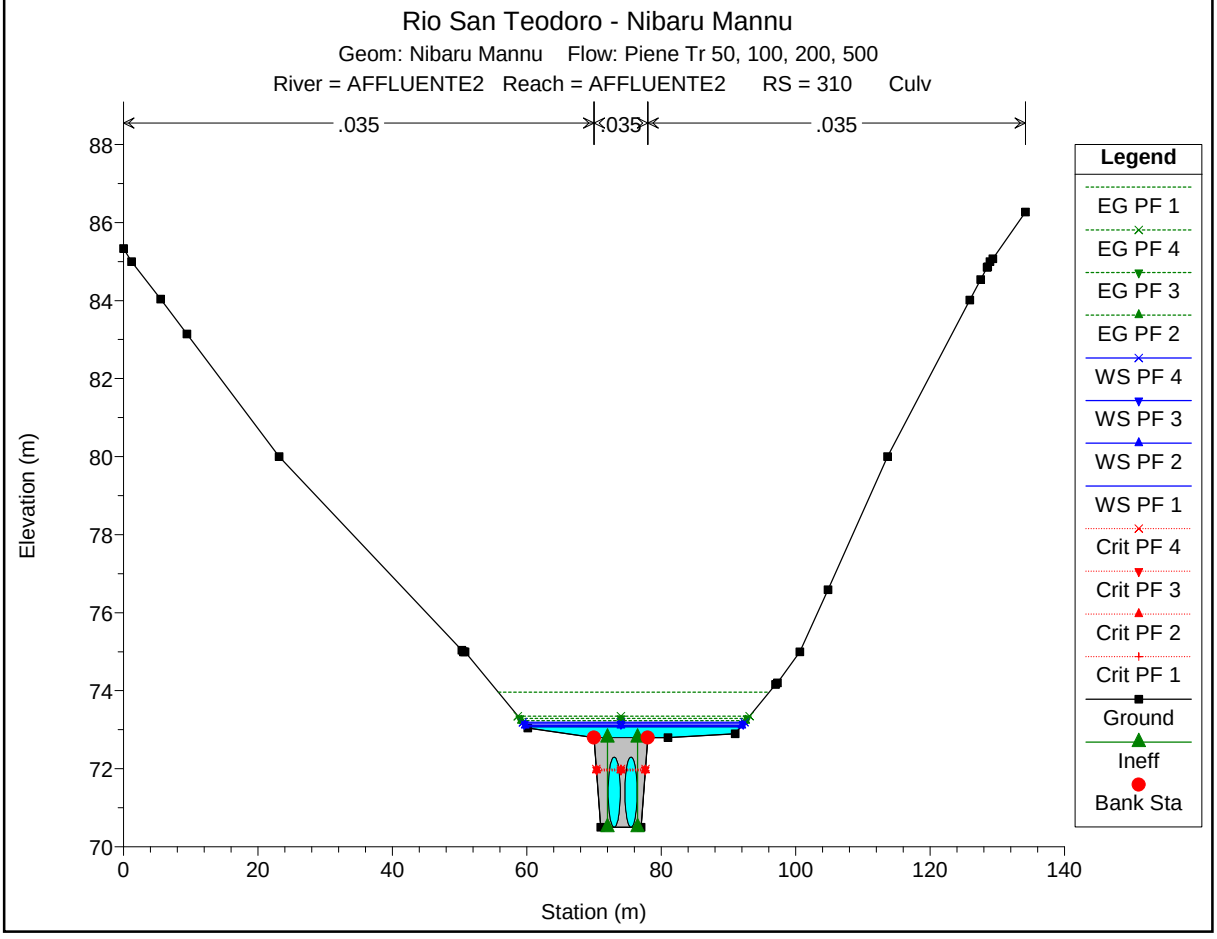

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 987.444
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

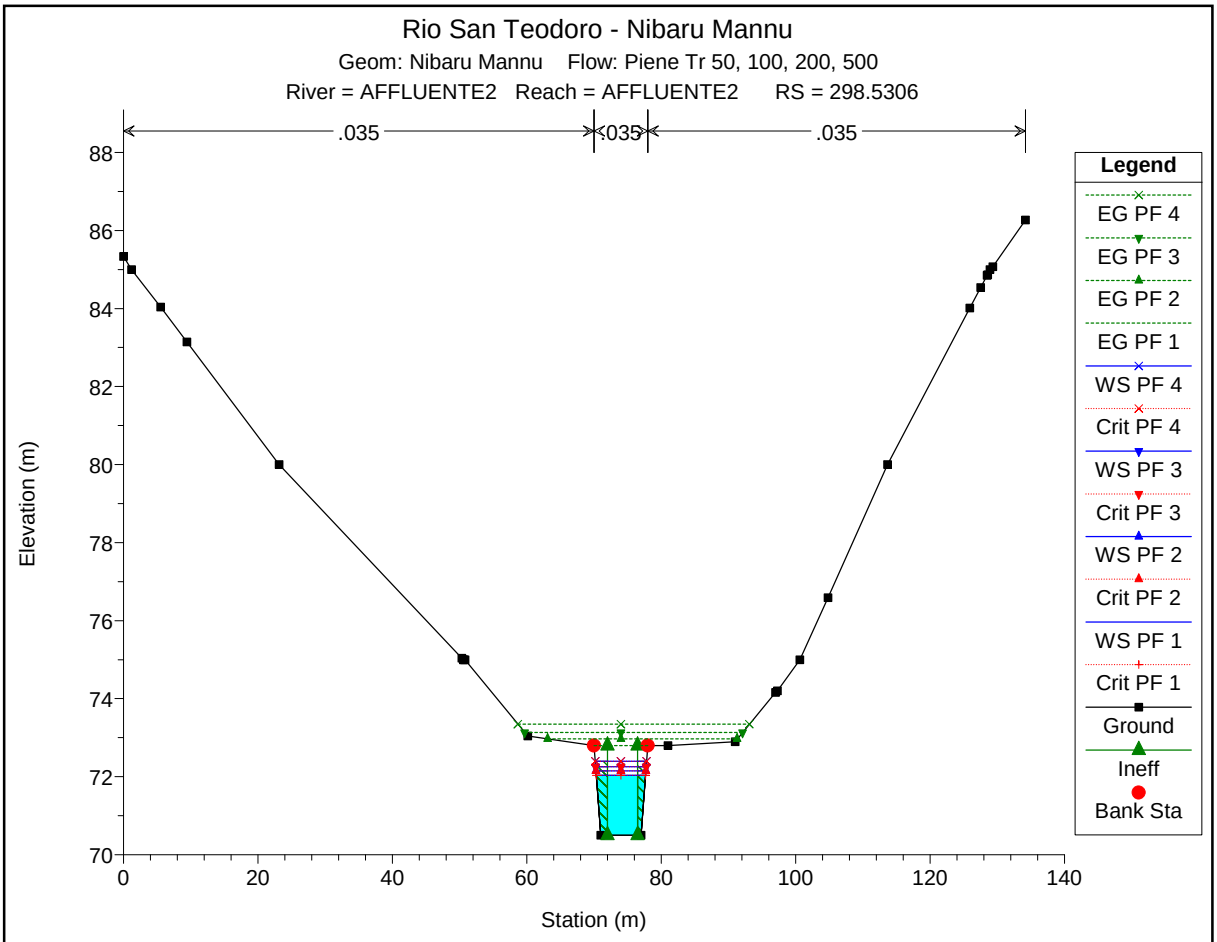

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 654.7847
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

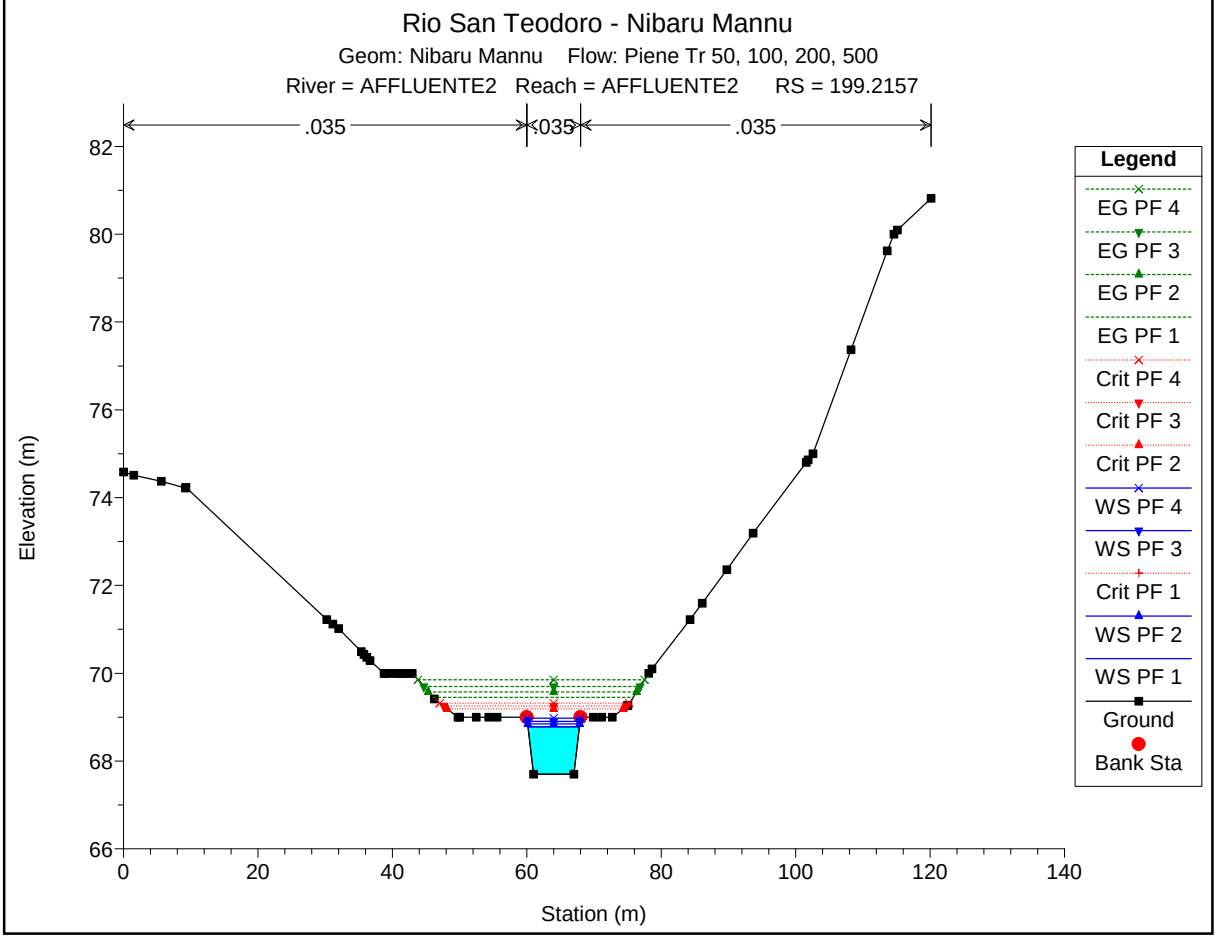

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 395.8008
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

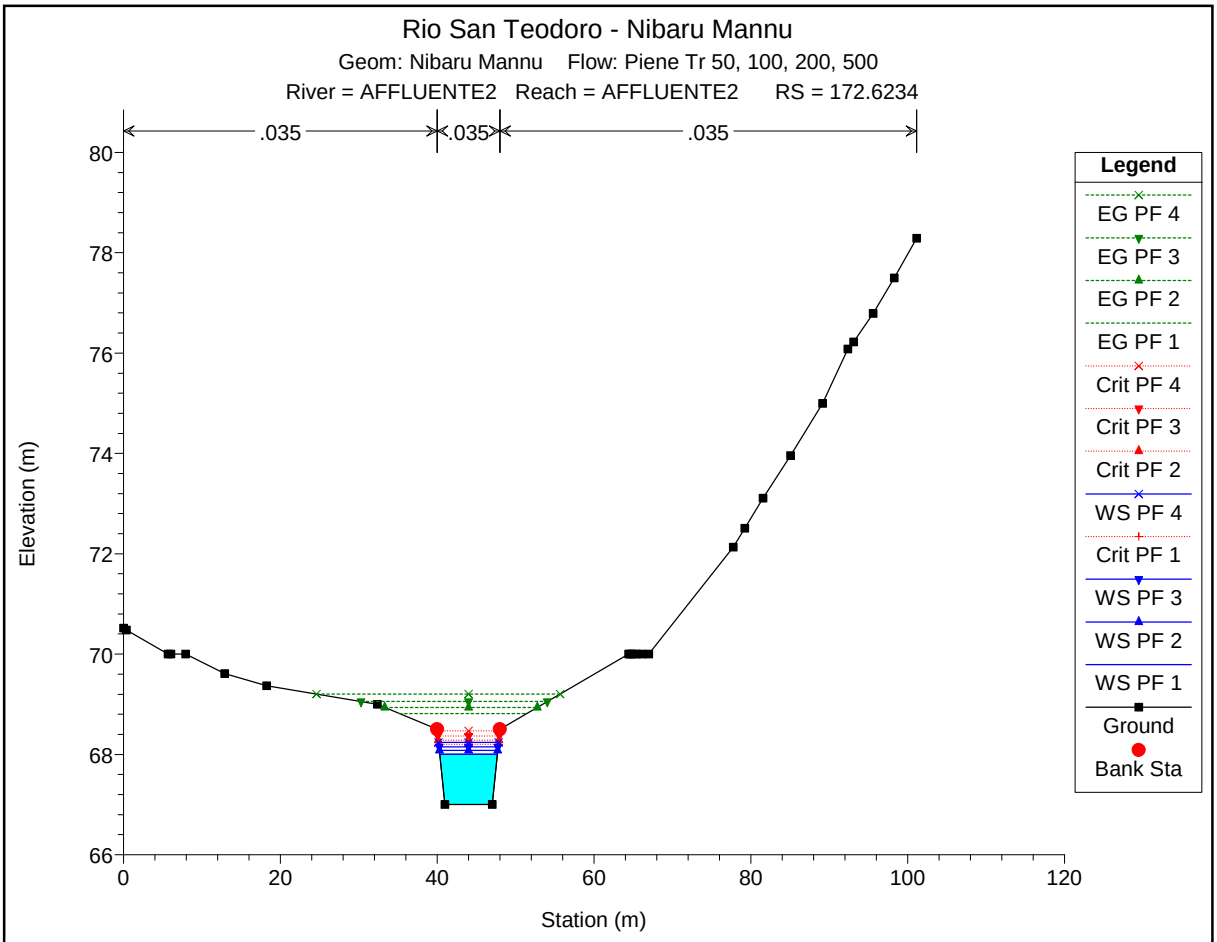

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 321.566
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
WS PF 4
EG PF 1
WS PF 3
WS PF 2
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)

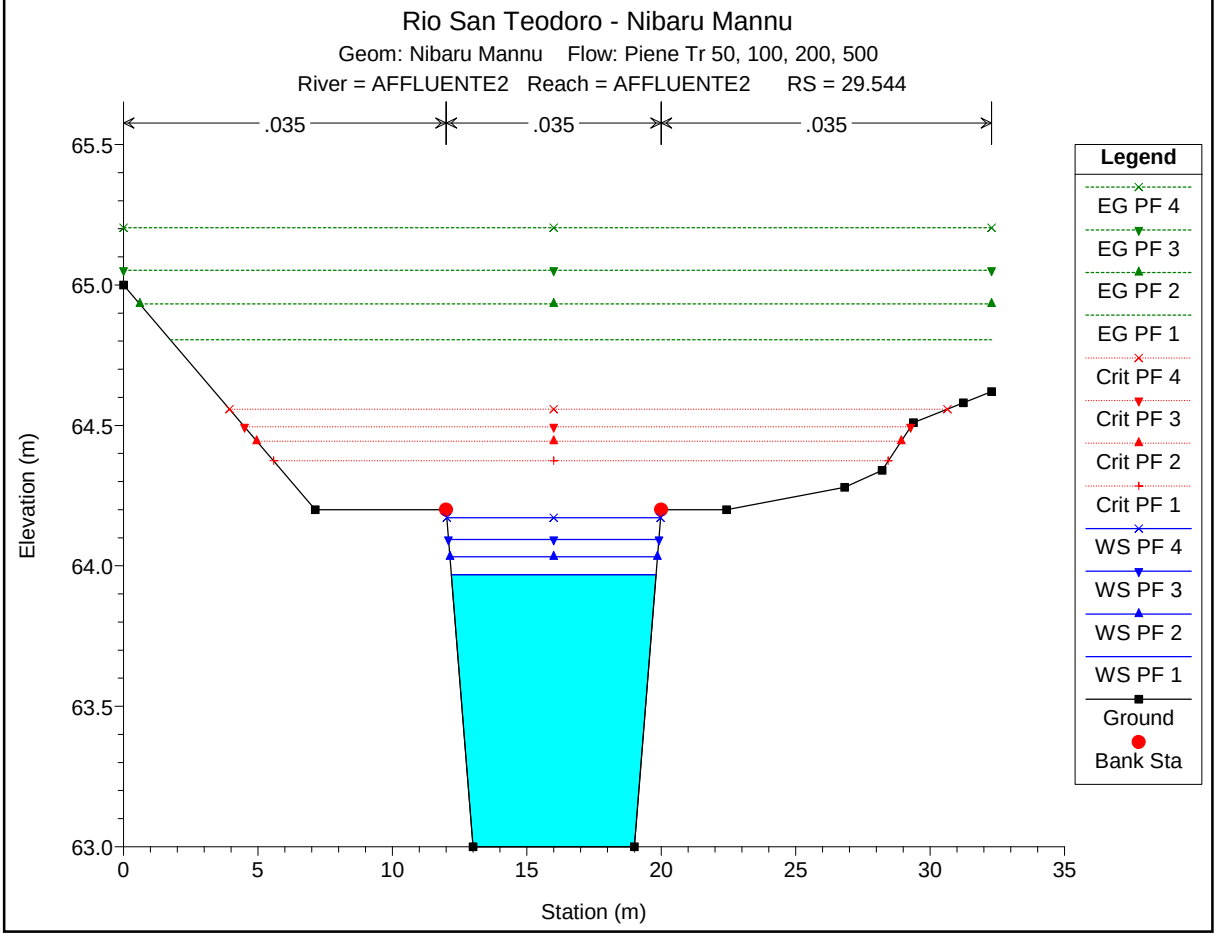

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 310 Culv
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
WS PF 4
EG PF 1
WS PF 3
WS PF 2
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)

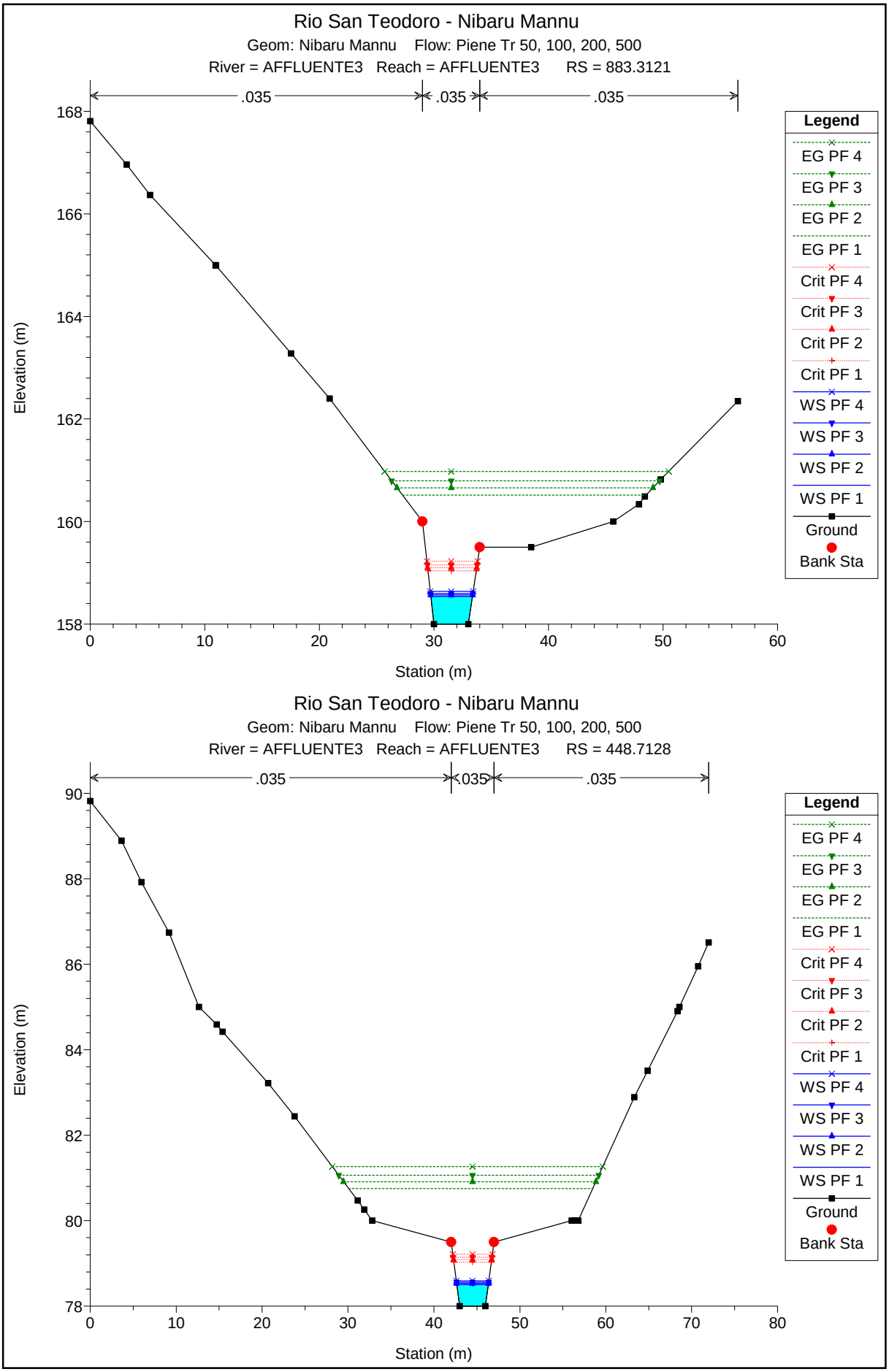

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 310 Culv
.035
.035
.035
Legend
EG PF 1
EG PF 4
EG PF 3
EG PF 2
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)

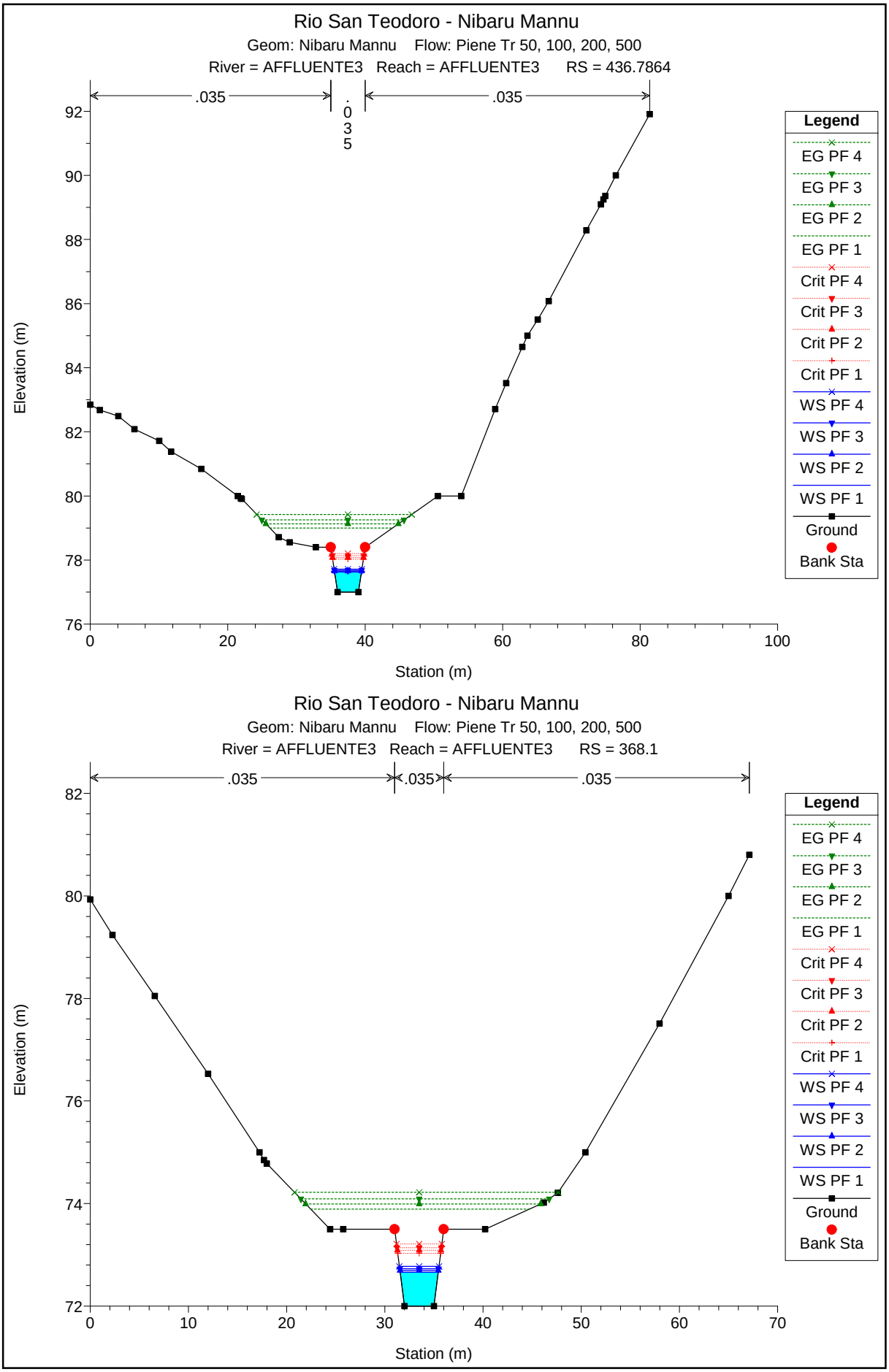

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 298.5306
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
Crit PF 4
WS PF 3
Crit PF 3
WS PF 2
Crit PF 2
WS PF 1
Crit PF 1
Ground
Ineff
Bank Sta

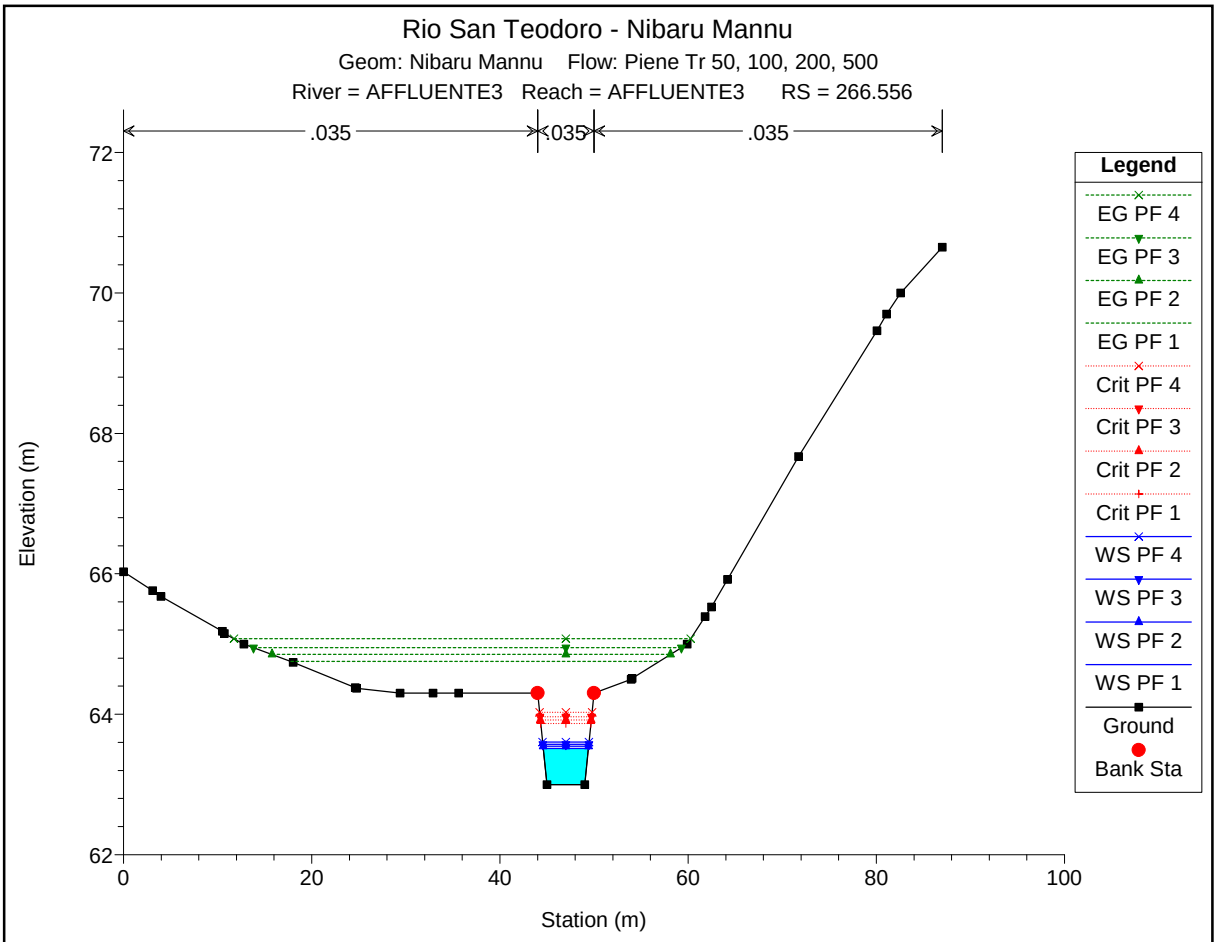

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 199.2157
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
WS PF 4
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Bank Sta

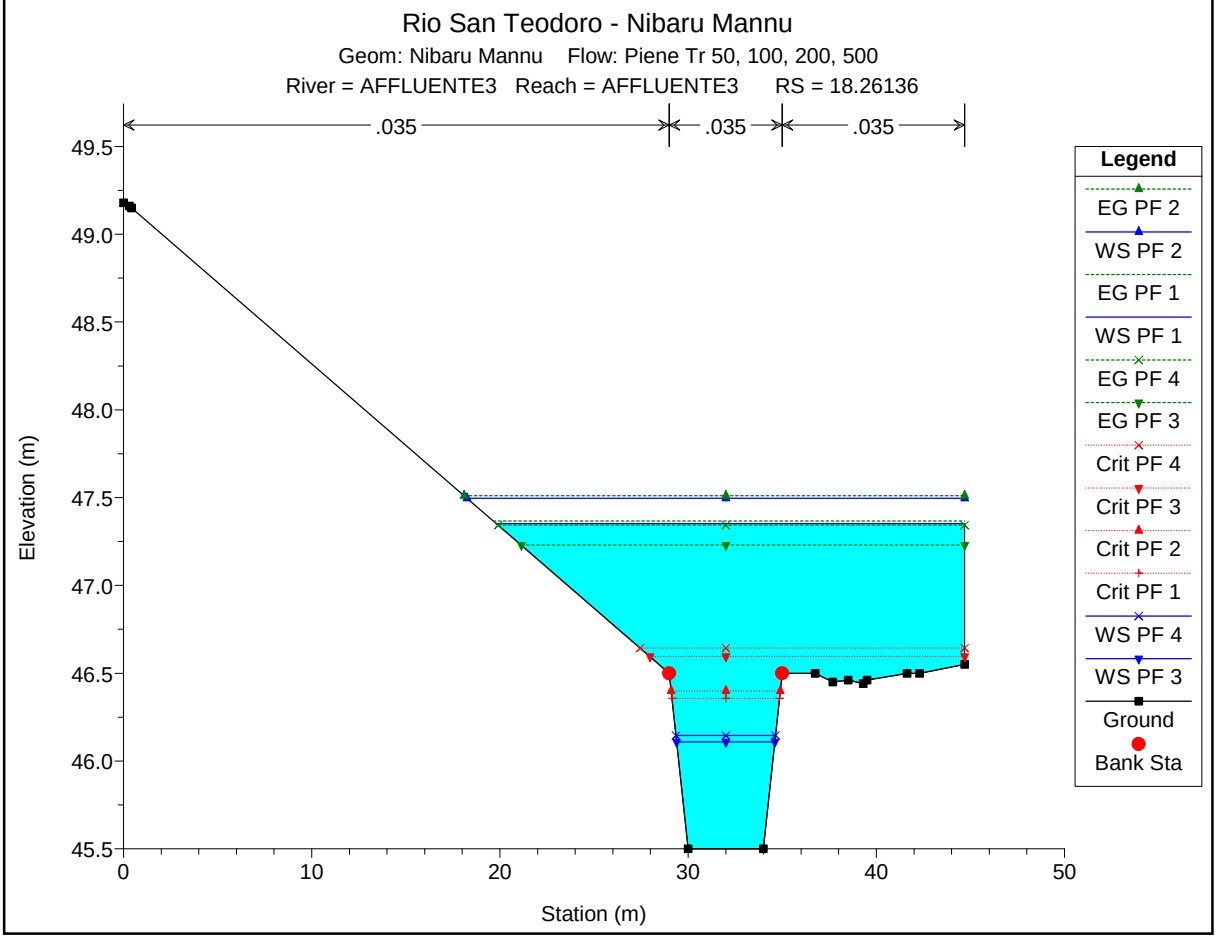

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 172.6234
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
WS PF 4
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

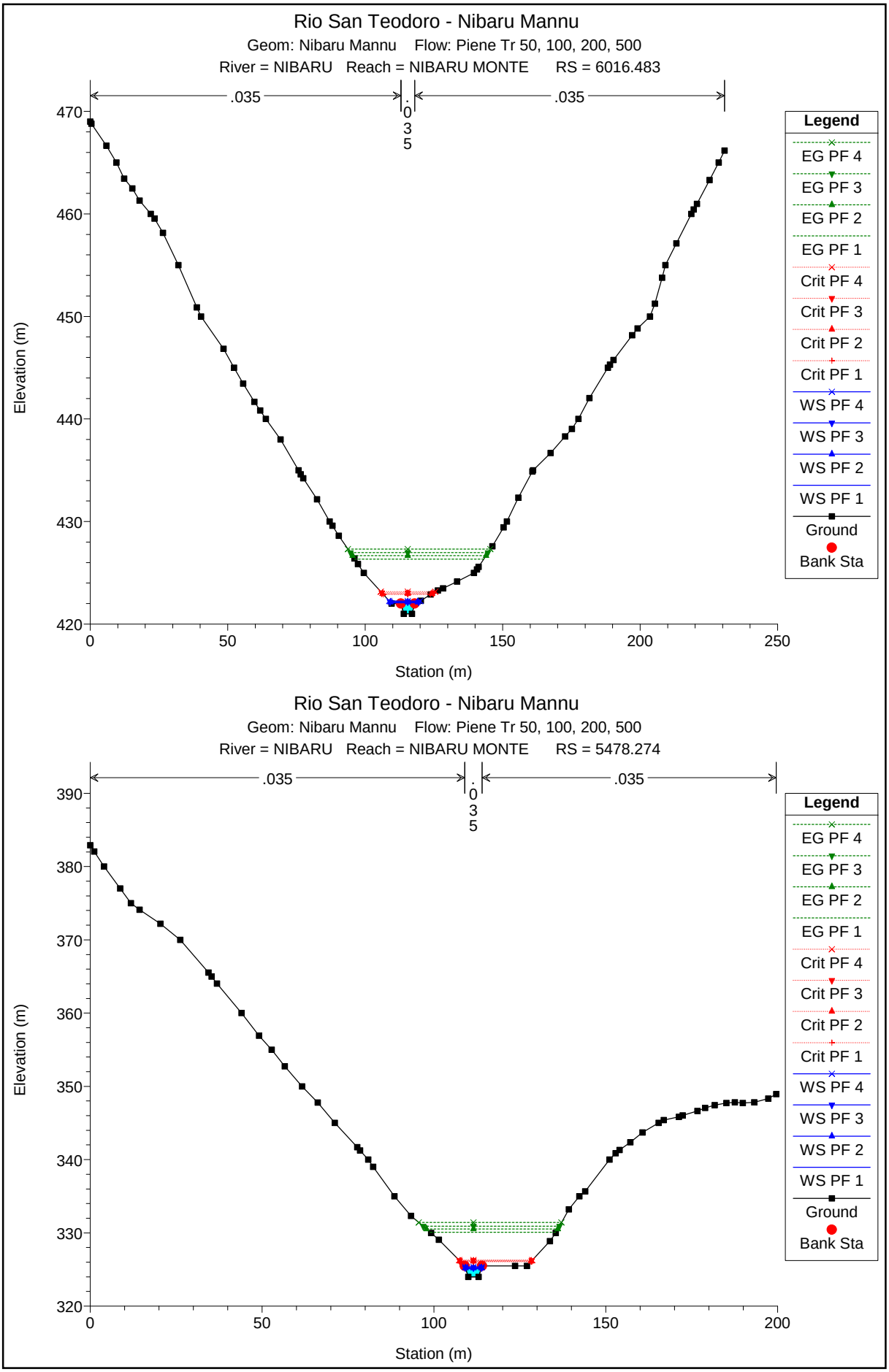

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE2 Reach = AFFLUENTE2 RS = 29.544
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

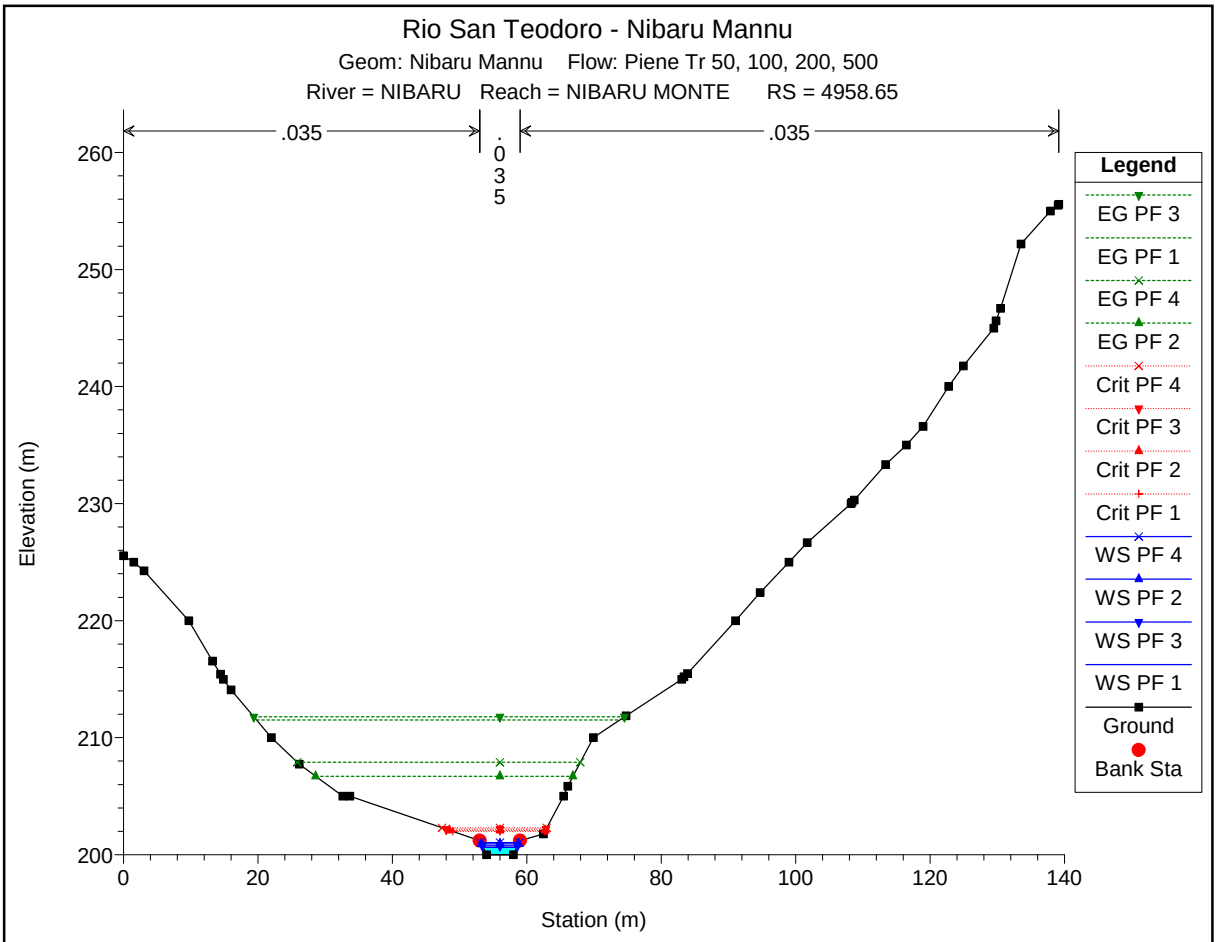

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE3 Reach = AFFLUENTE3 RS = 883.3121
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE3 Reach = AFFLUENTE3 RS = 448.7128
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

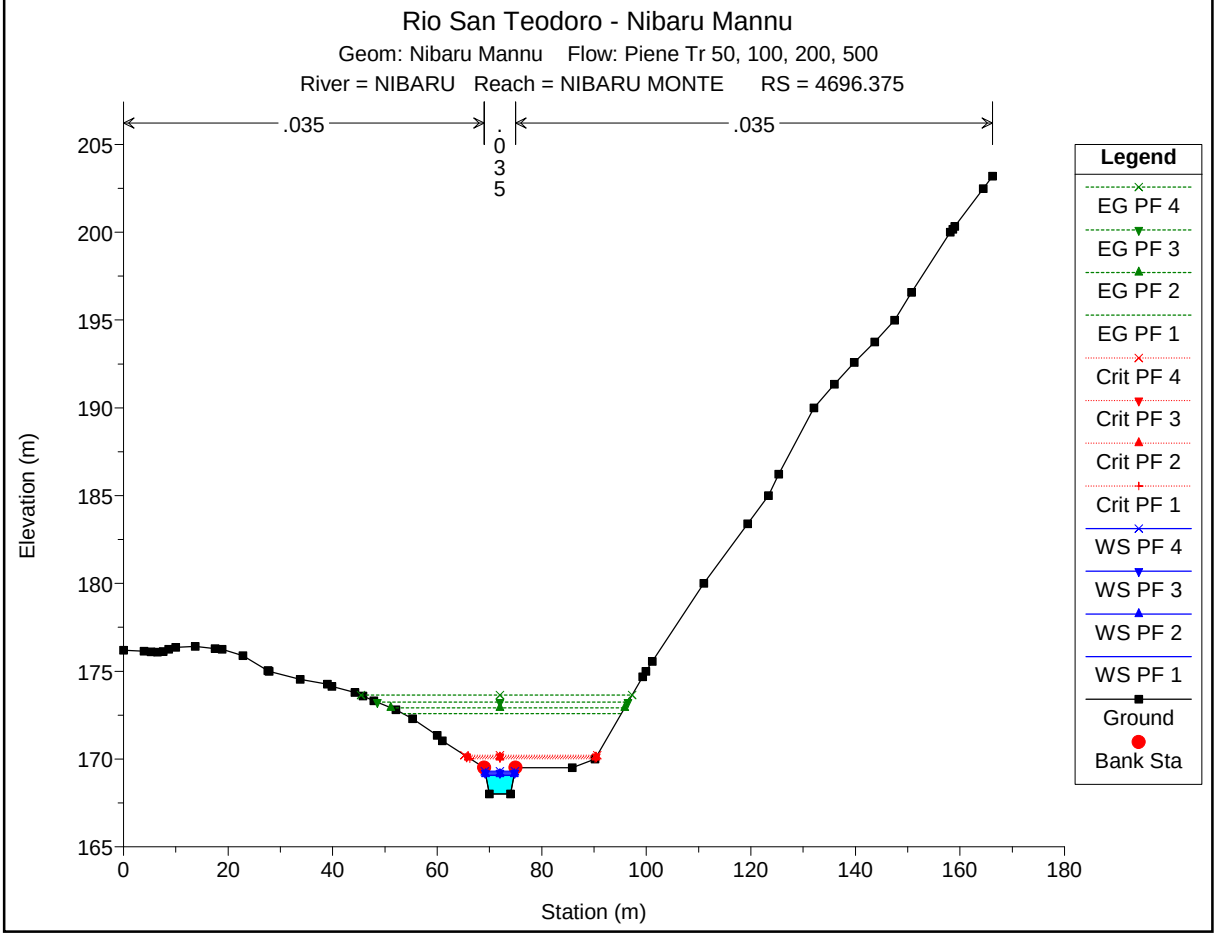

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE3 Reach = AFFLUENTE3 RS = 436.7864
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE3 Reach = AFFLUENTE3 RS = 368.1
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

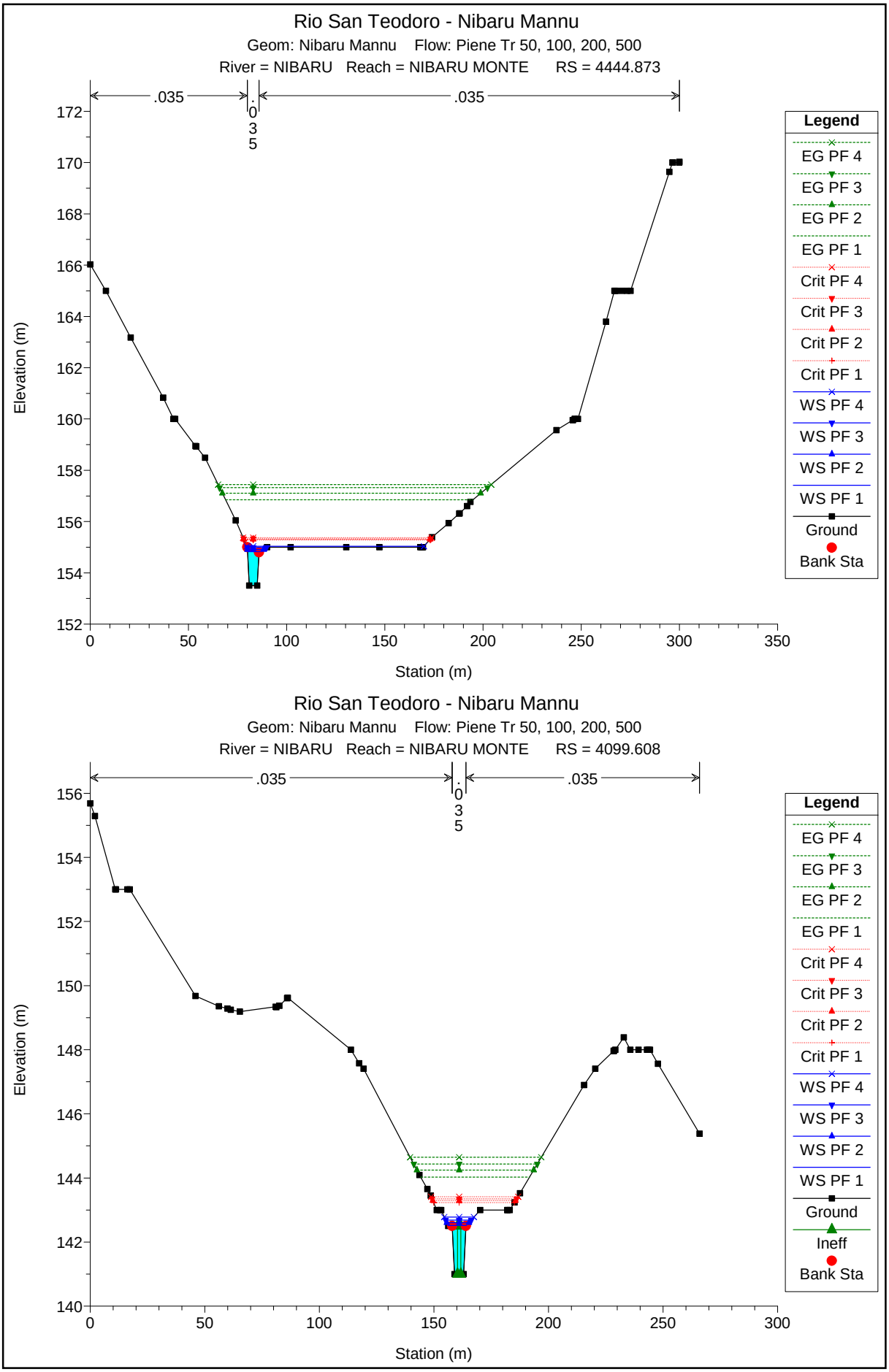

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE3 Reach = AFFLUENTE3 RS = 266.556
.035
.035
.035
Elevation (m)
72
70
68
66
64
62
0
20
40
60
80
100
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

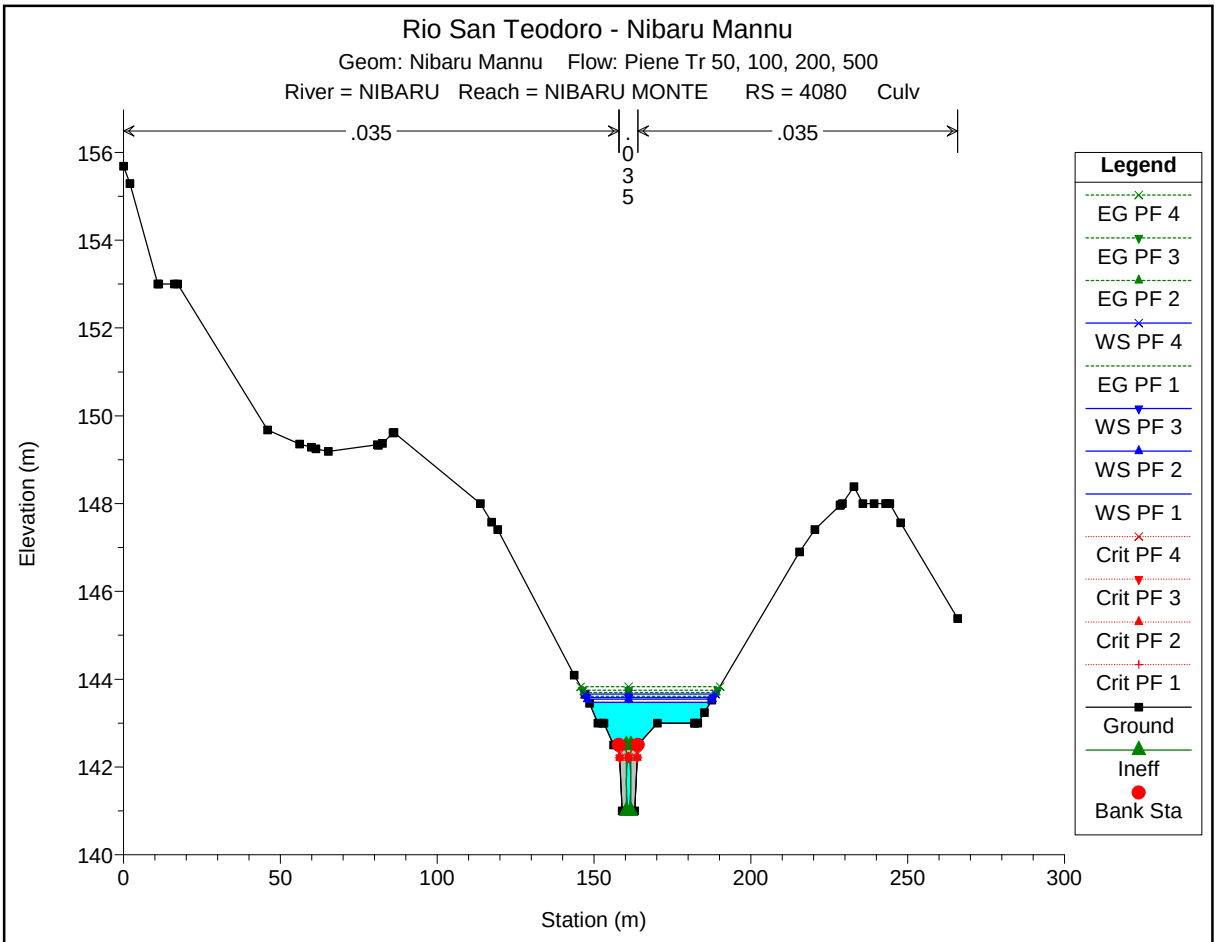

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = AFFLUENTE3 Reach = AFFLUENTE3 RS = 18.26136
.035
.035
.035
Elevation (m)
49.5
49.0
48.5
48.0
47.5
47.0
46.5
46.0
45.5
0
10
20
30
40
50
Station (m)
Legend
EG PF 2
WS PF 2
EG PF 1
WS PF 1
EG PF 4
EG PF 3
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
Ground
Bank Sta

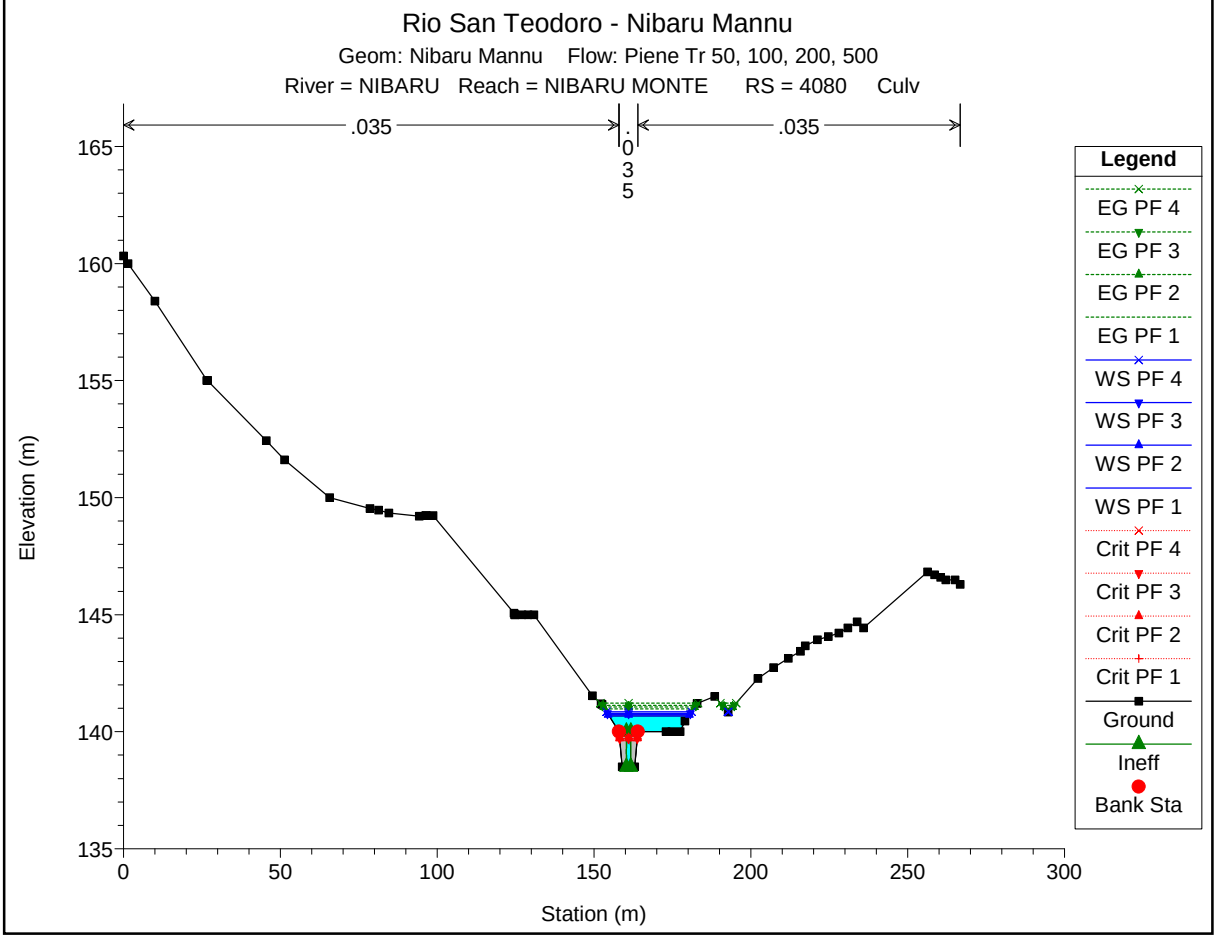

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 6016.483
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 5478.274
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

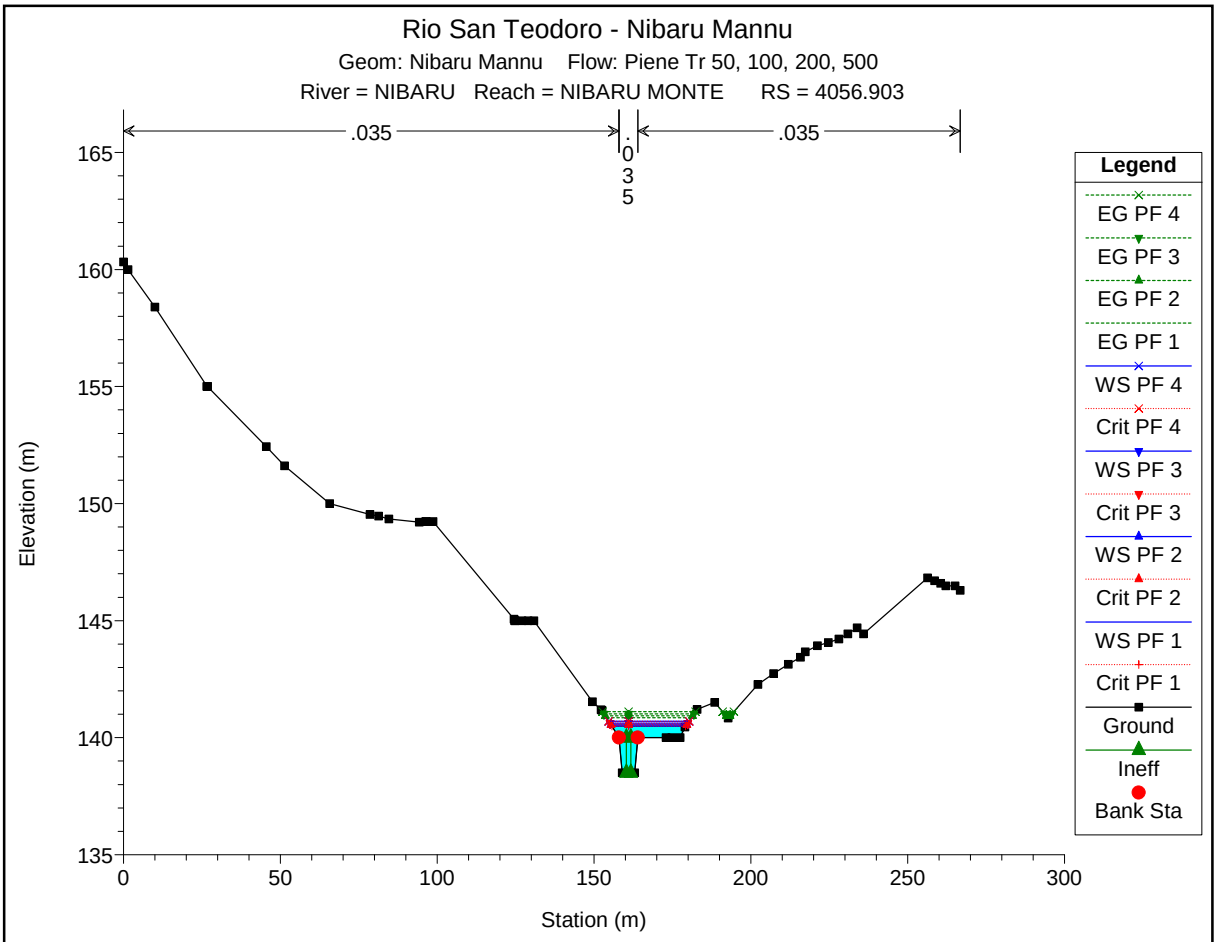

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4958.65
.035
.035
.035
Legend
EG PF 3
EG PF 1
EG PF 4
EG PF 2
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 2
WS PF 3
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

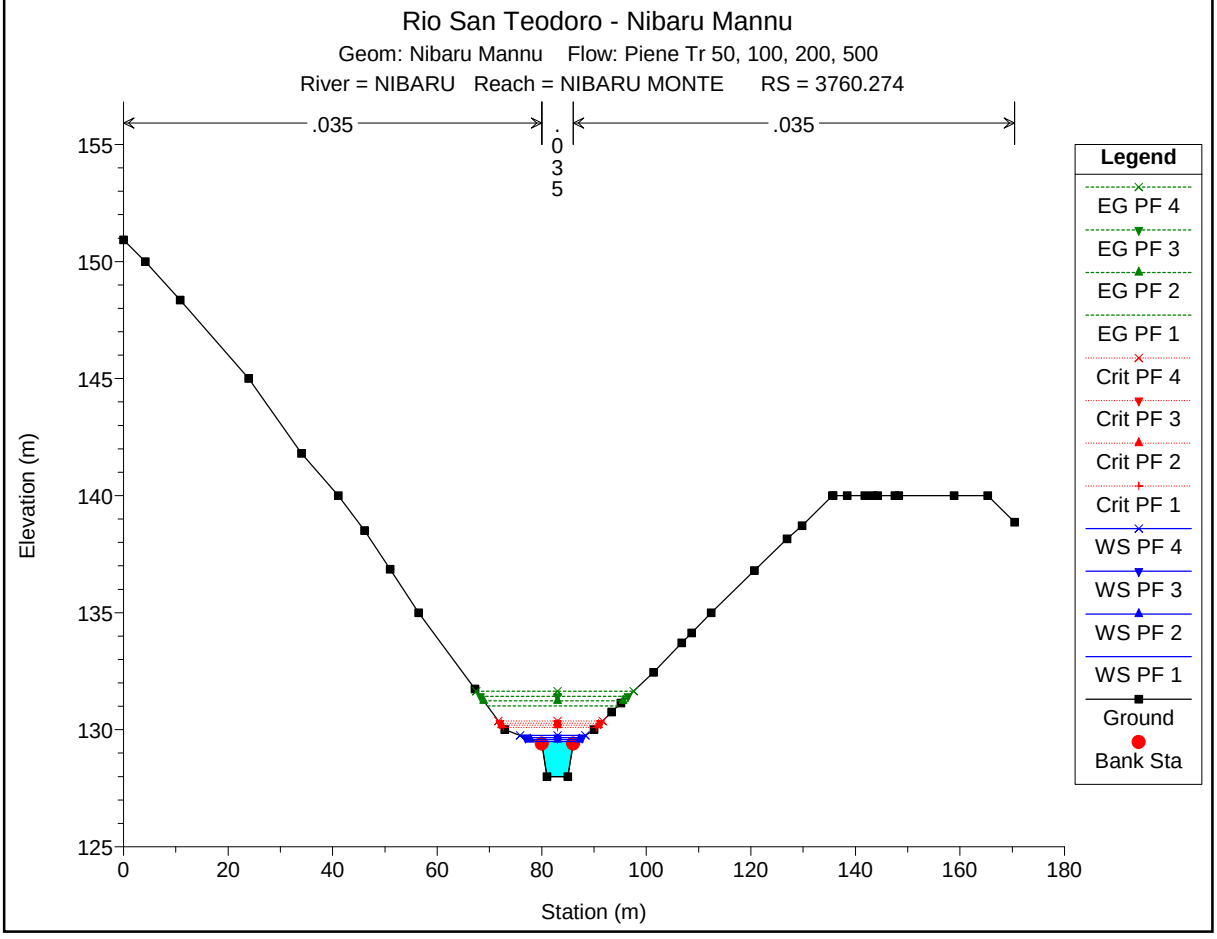

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4696.375
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

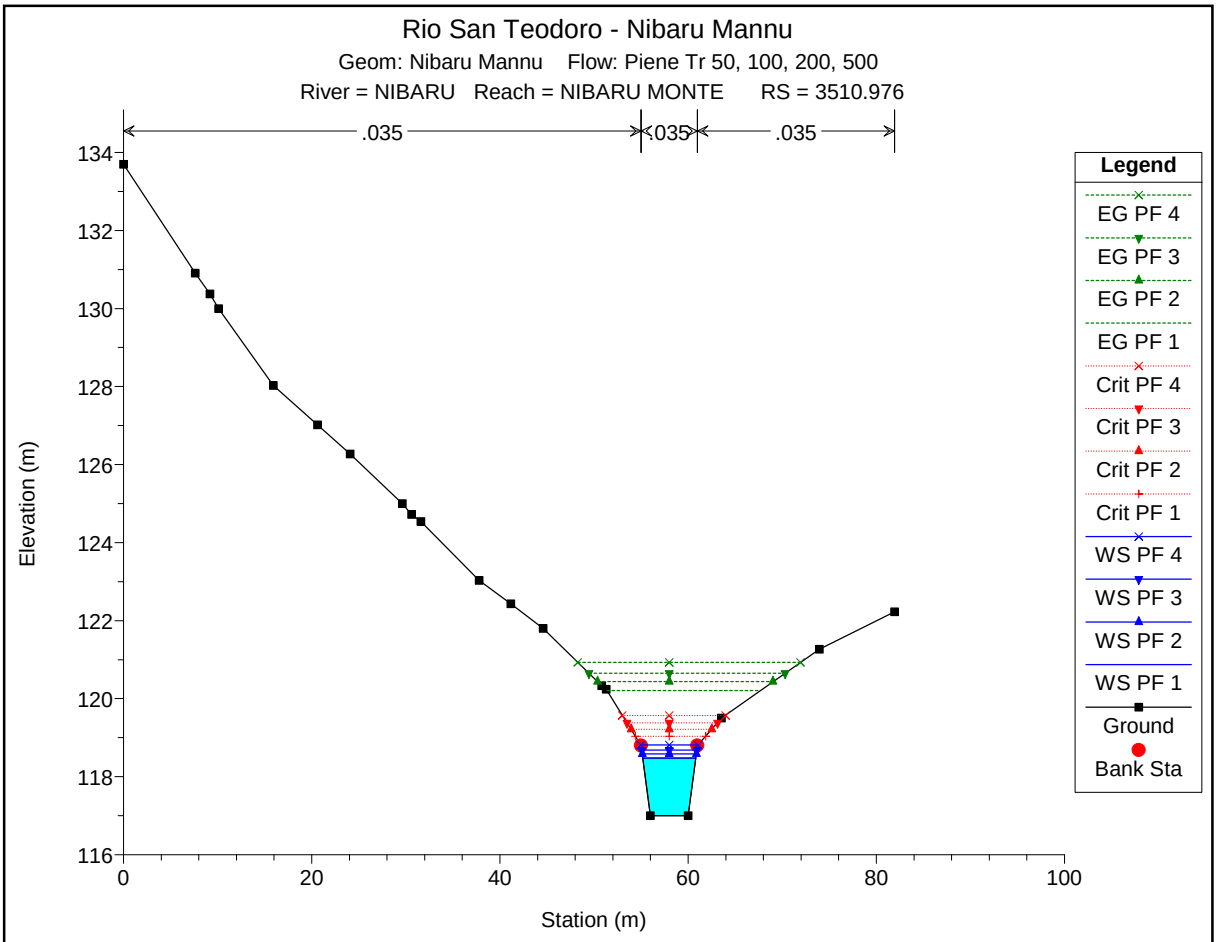

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4444.873
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4099.608
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)

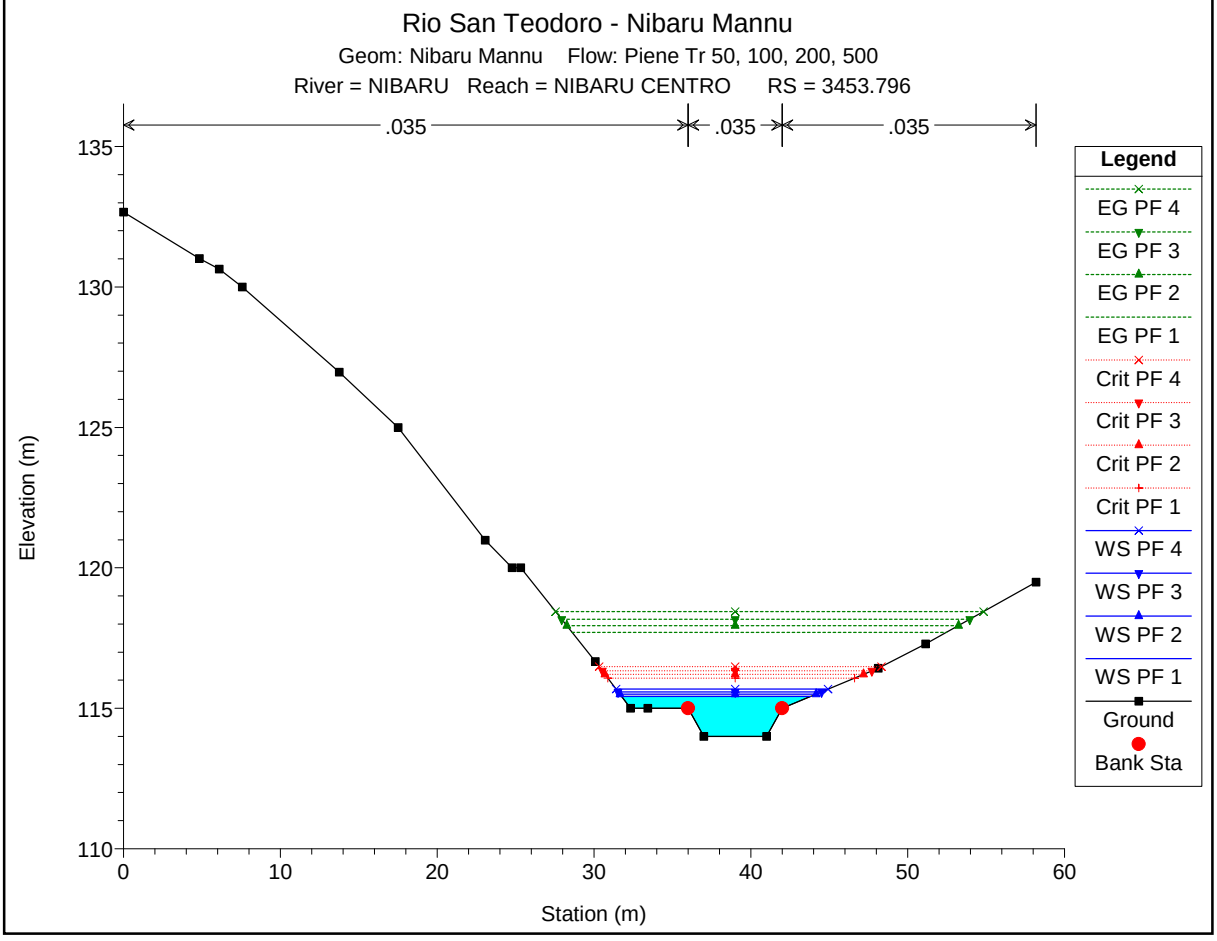

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4080 Culv
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
WS PF 4
EG PF 1
WS PF 3
WS PF 2
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
Ground
Ineff
Bank Sta

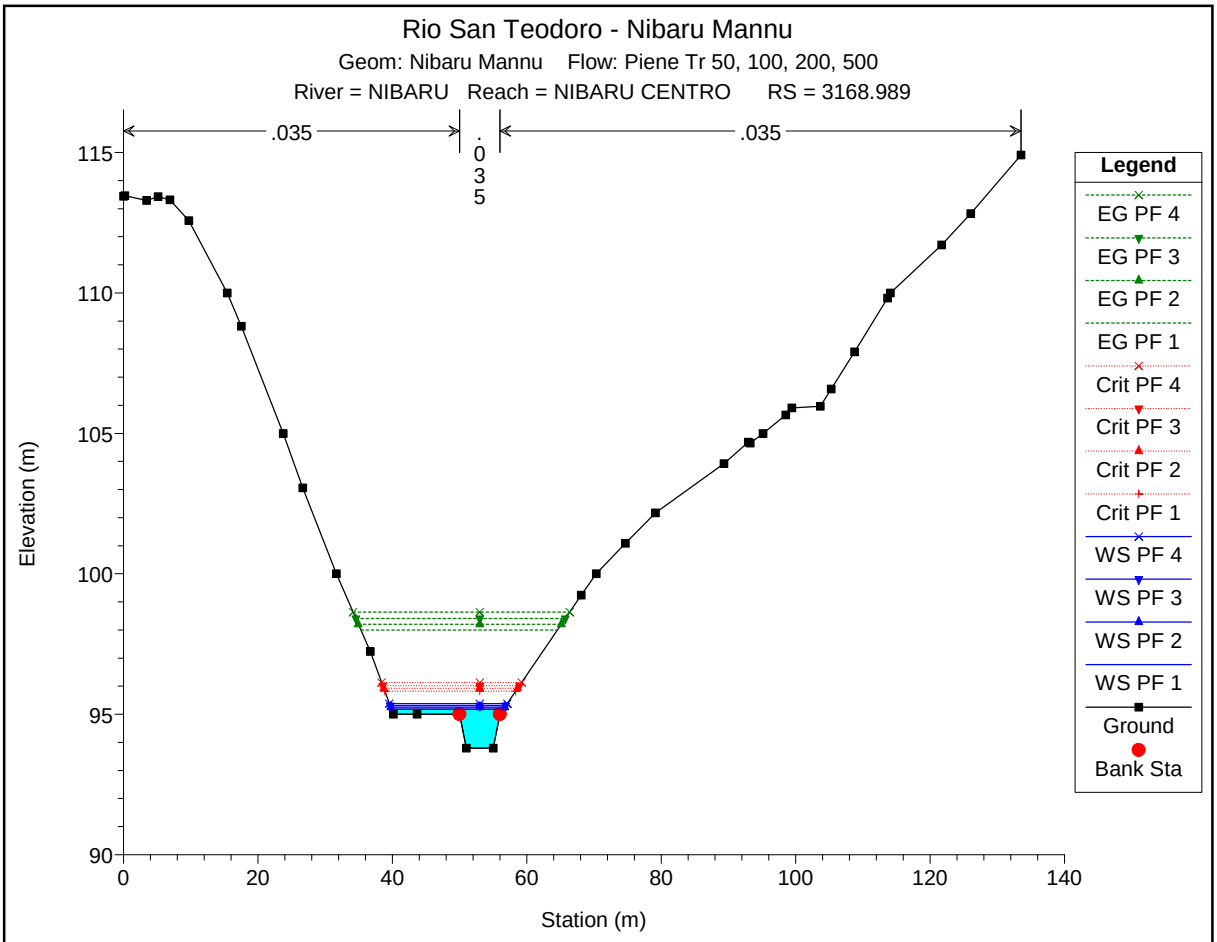

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4080 Culv
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
Ground
Ineff
Bank Sta

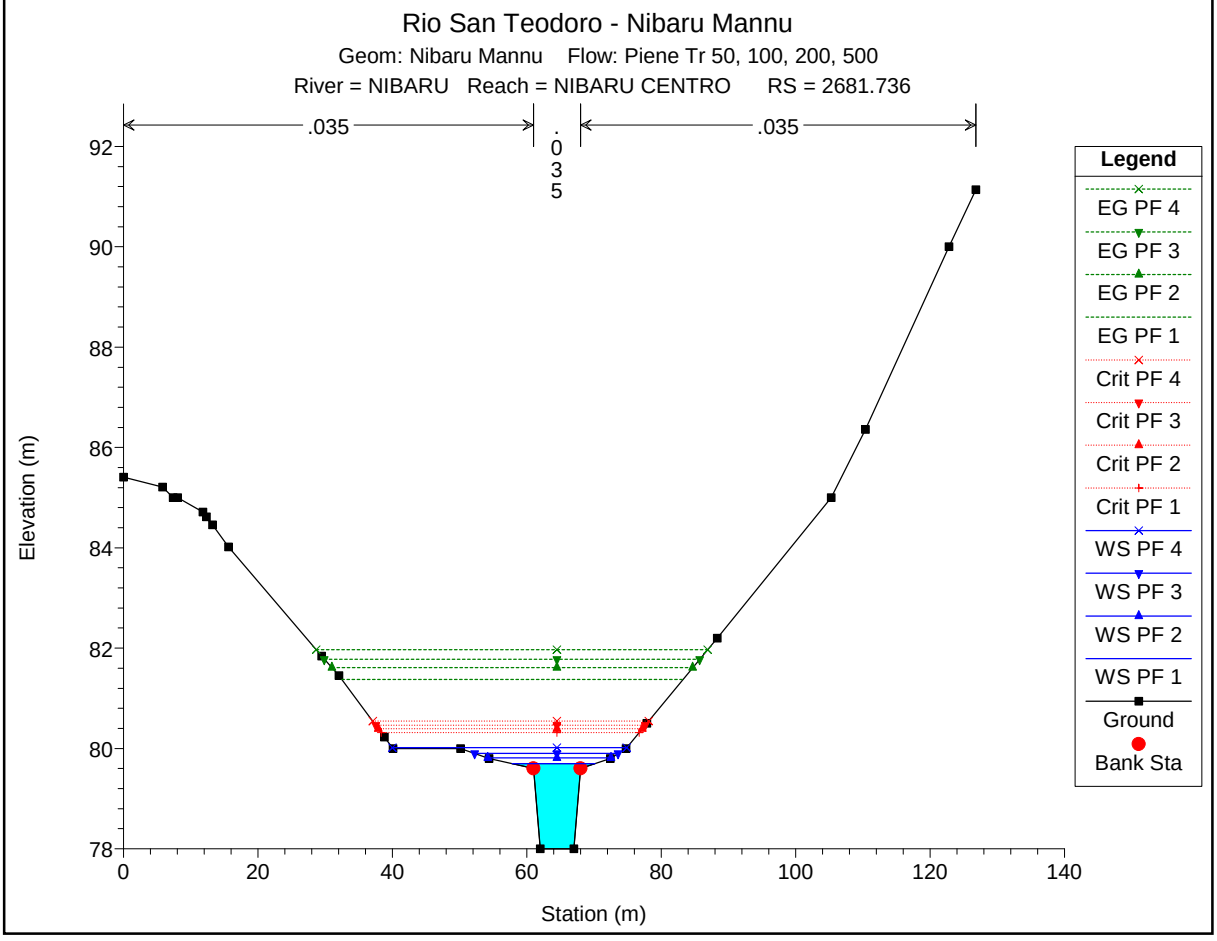

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 4056.903
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
Crit PF 4
WS PF 3
Crit PF 3
WS PF 2
Crit PF 2
WS PF 1
Crit PF 1
Ground
Ineff
Bank Sta

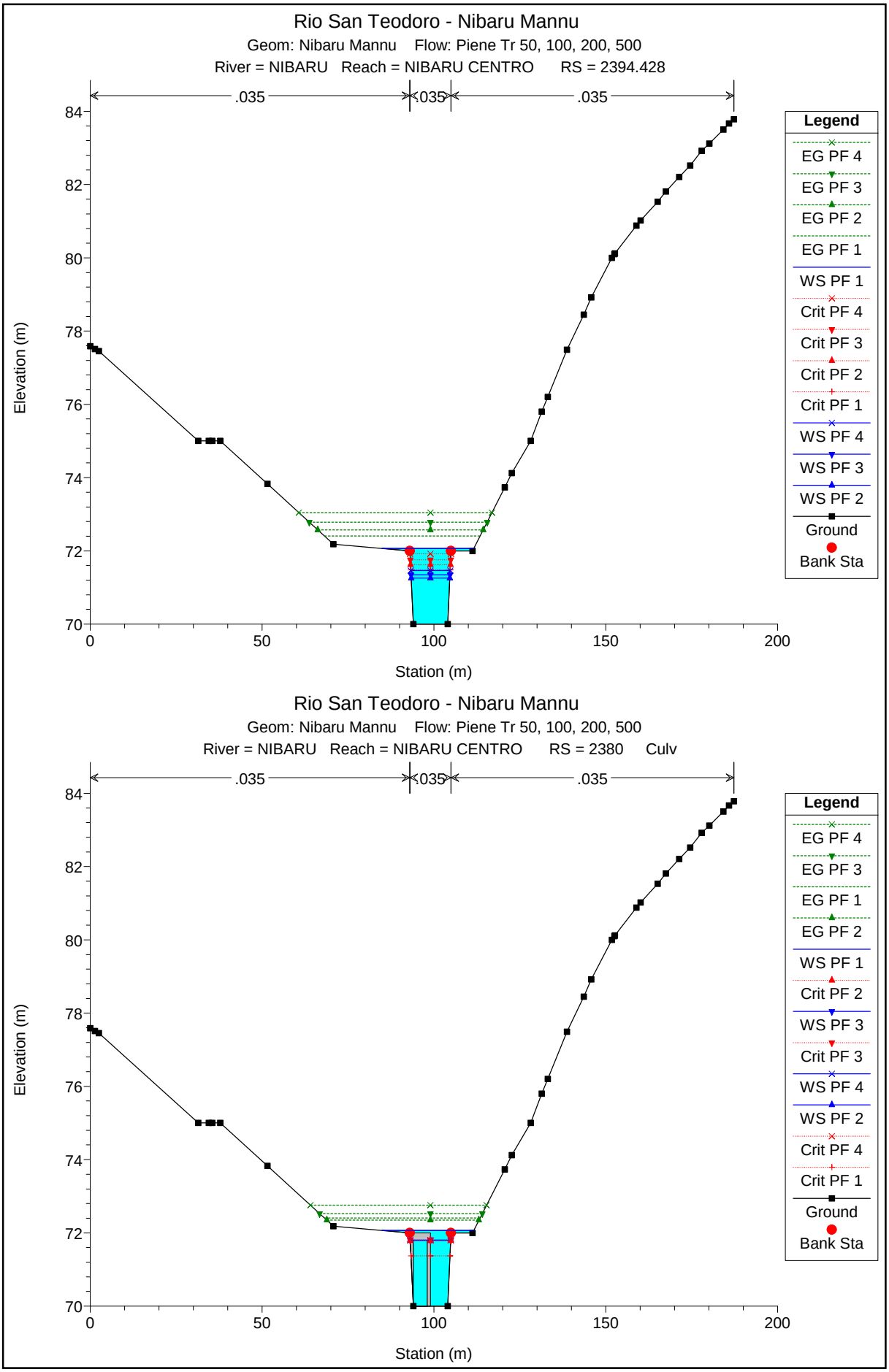

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 3760.274
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

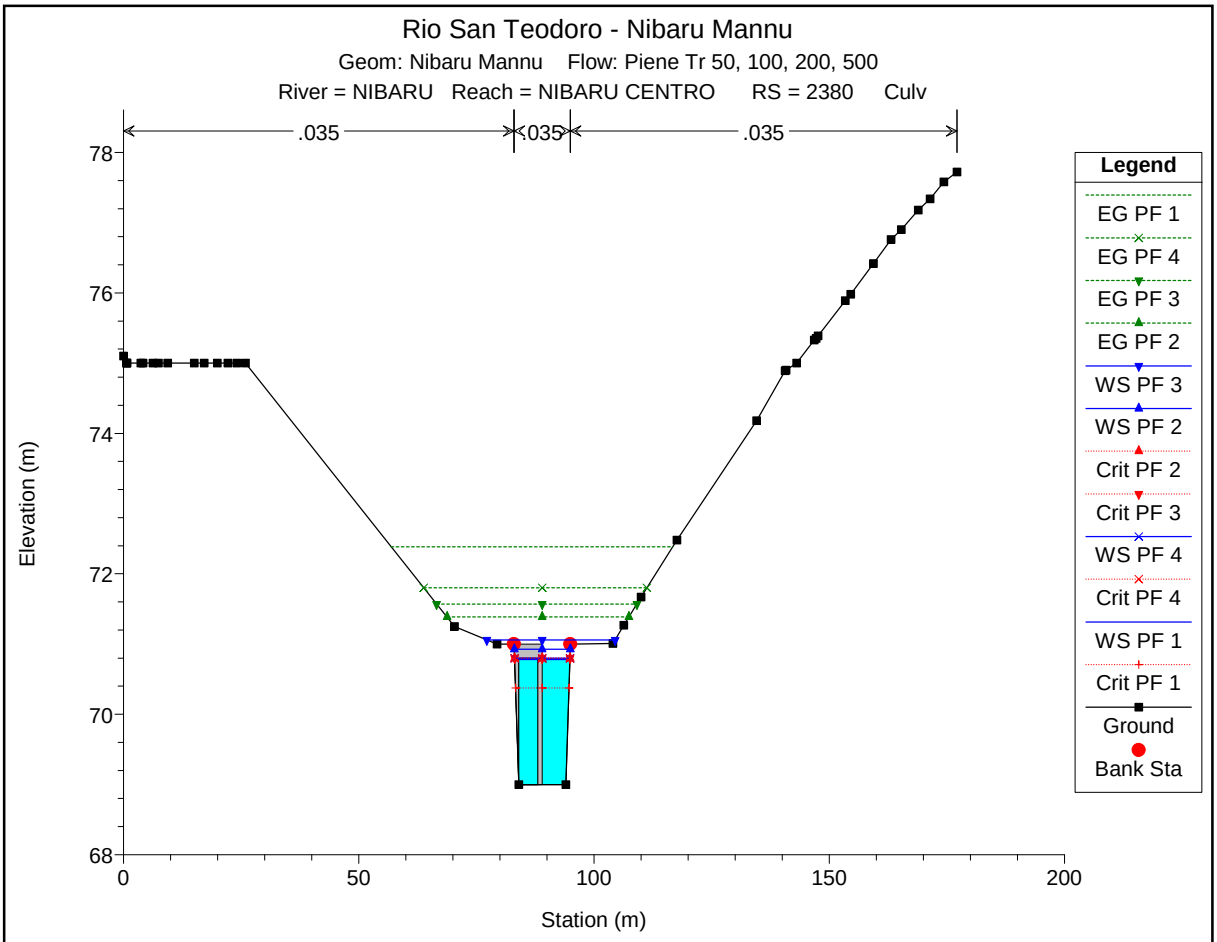

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU MONTE RS = 3510.976
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

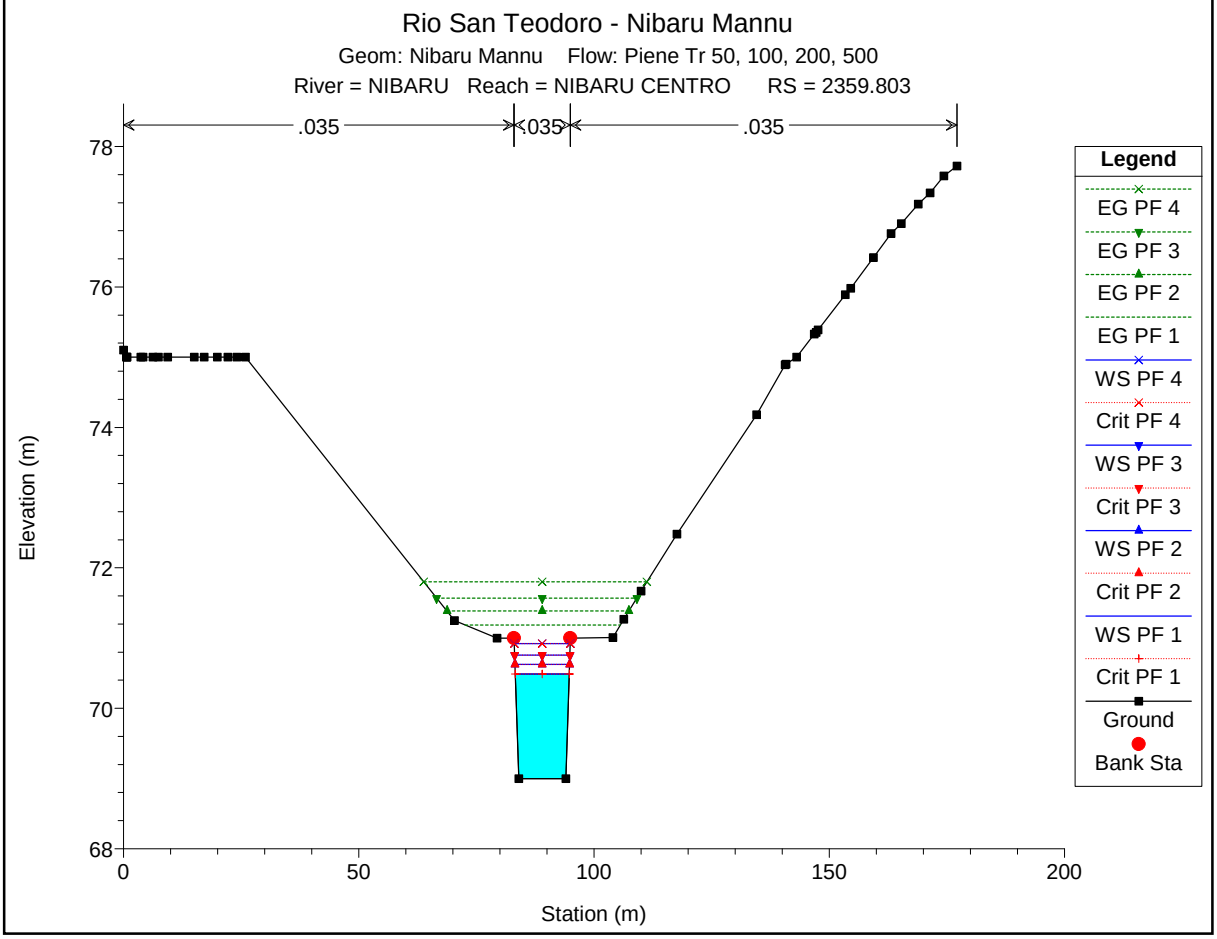

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 3453.796
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

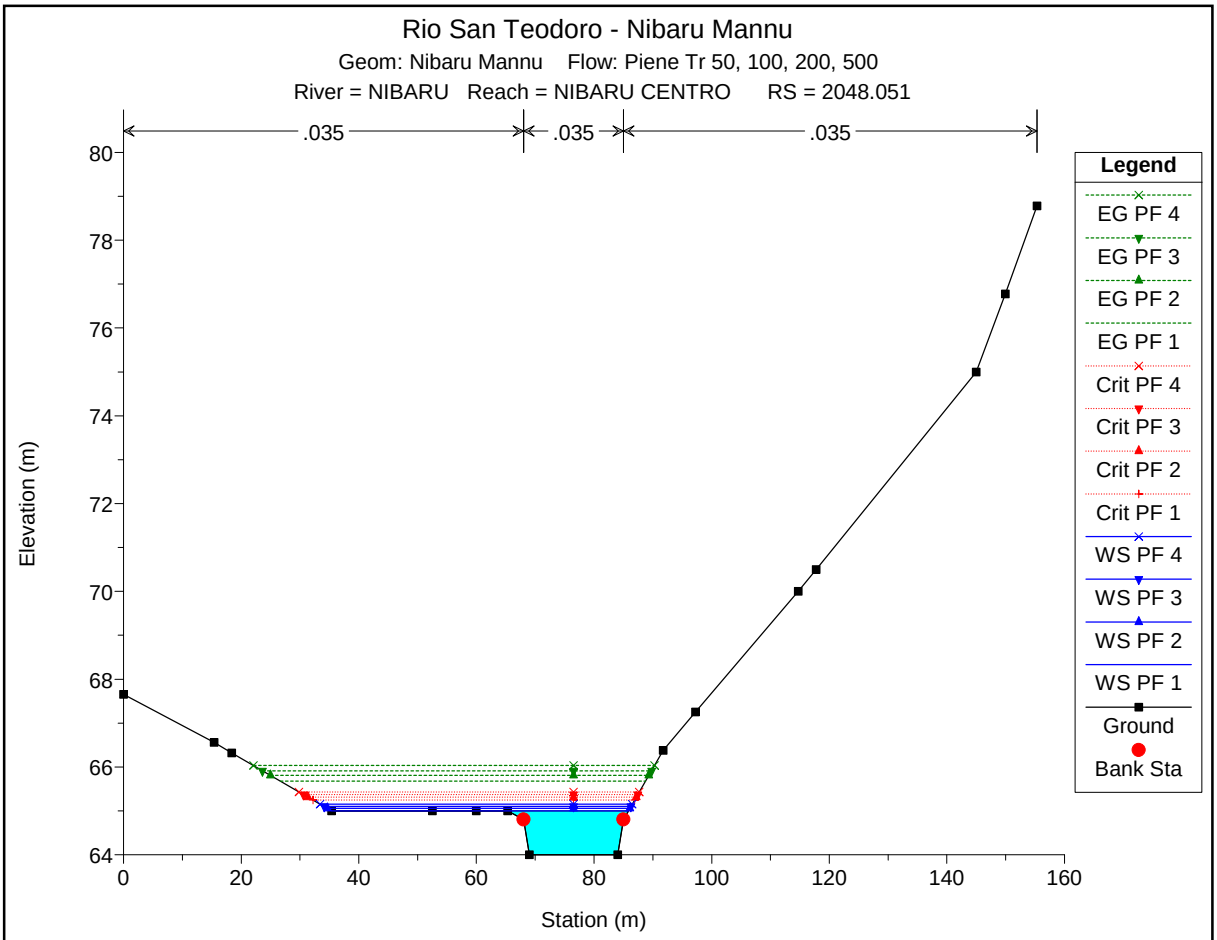

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 3168.989
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
90
95
100
105
110
115
0
20
40
60
80
100
120
140

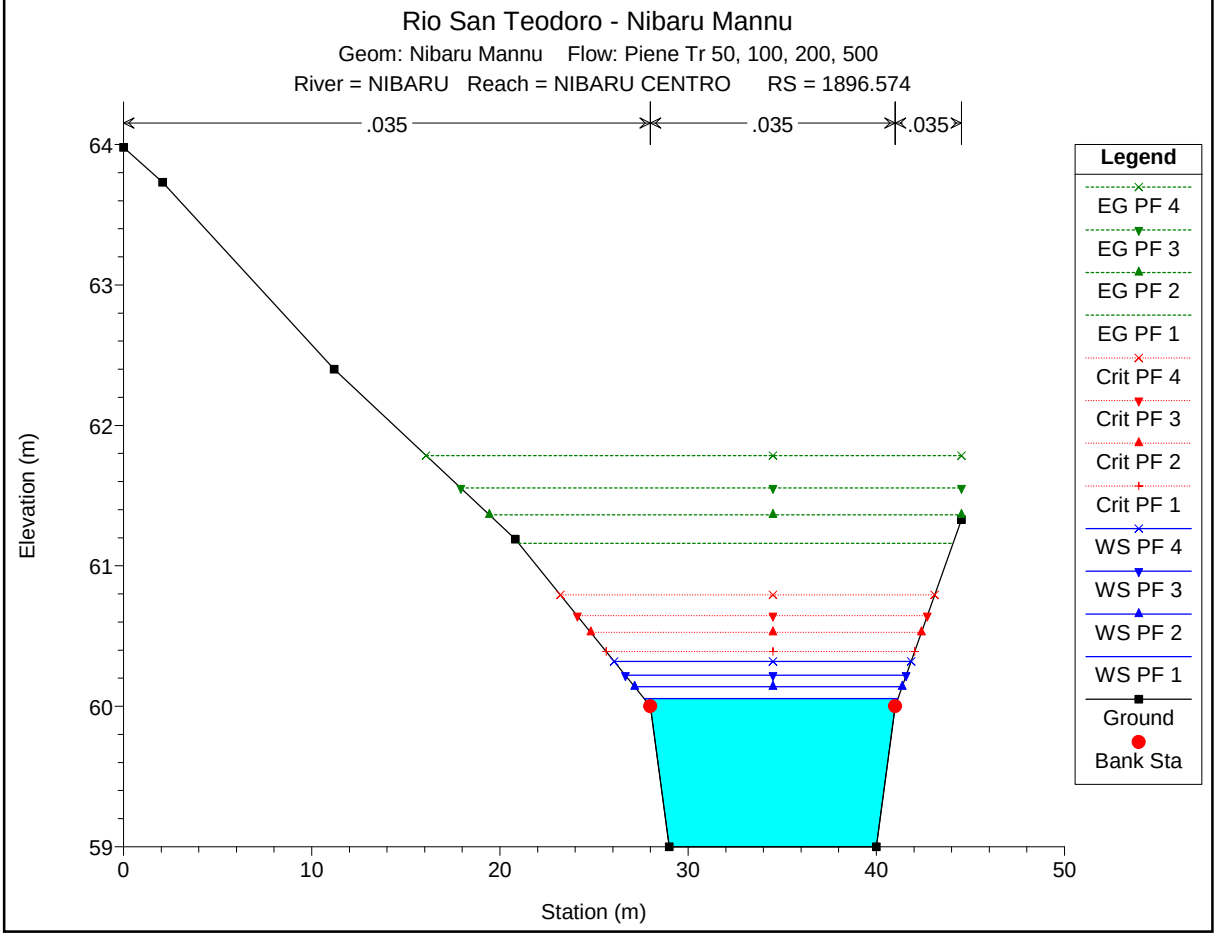

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 2681.736
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
78
80
82
84
86
88
90
92
0
20
40
60
80
100
120
140

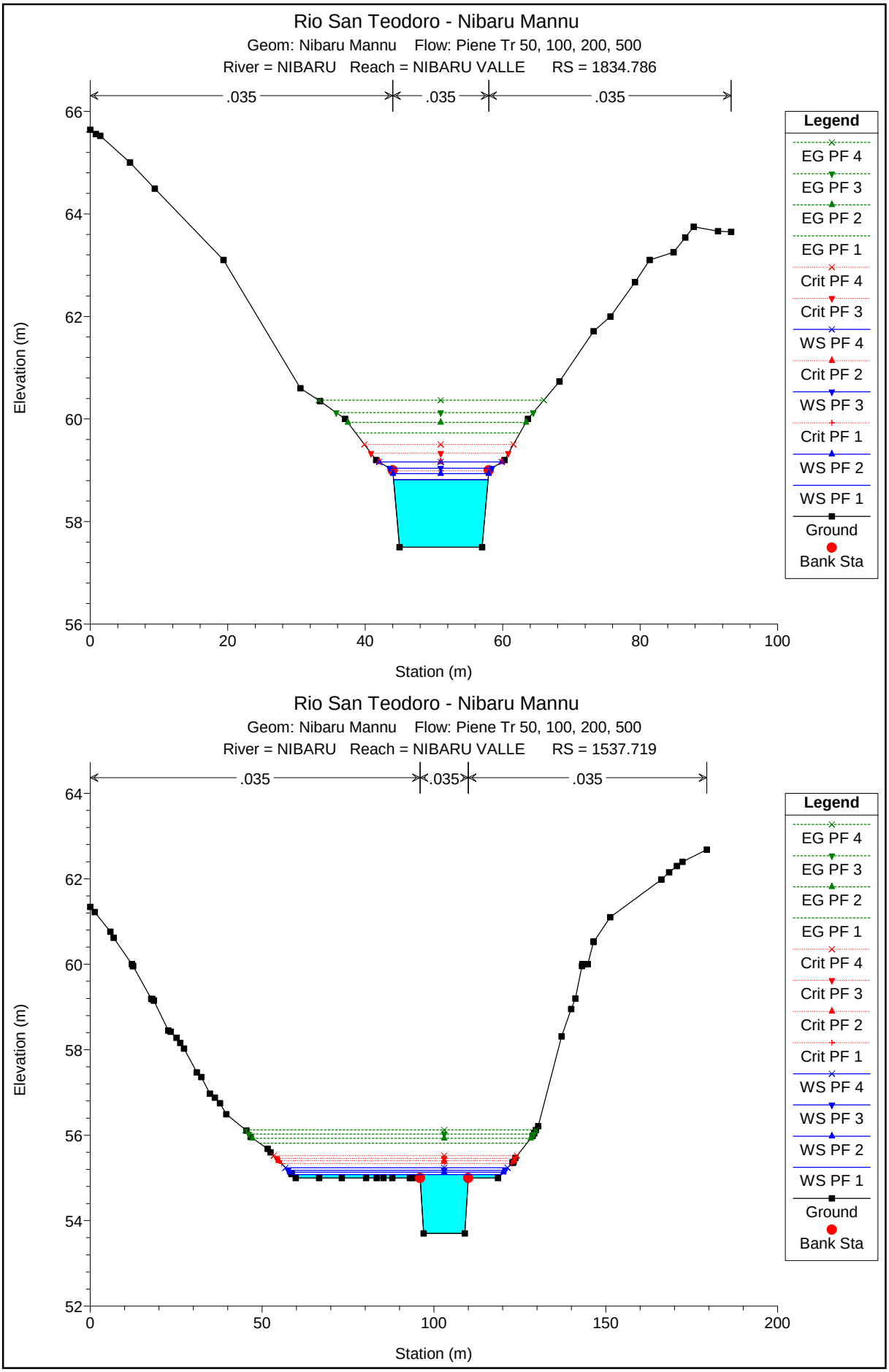

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 2394.428
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
Ground
Bank Sta
Elevation (m)
Station (m)
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 2380 Culv
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 1
EG PF 2
WS PF 1
Crit PF 2
WS PF 3
Crit PF 3
WS PF 4
WS PF 2
Crit PF 4
Crit PF 1
Ground
Bank Sta
Elevation (m)
Station (m)

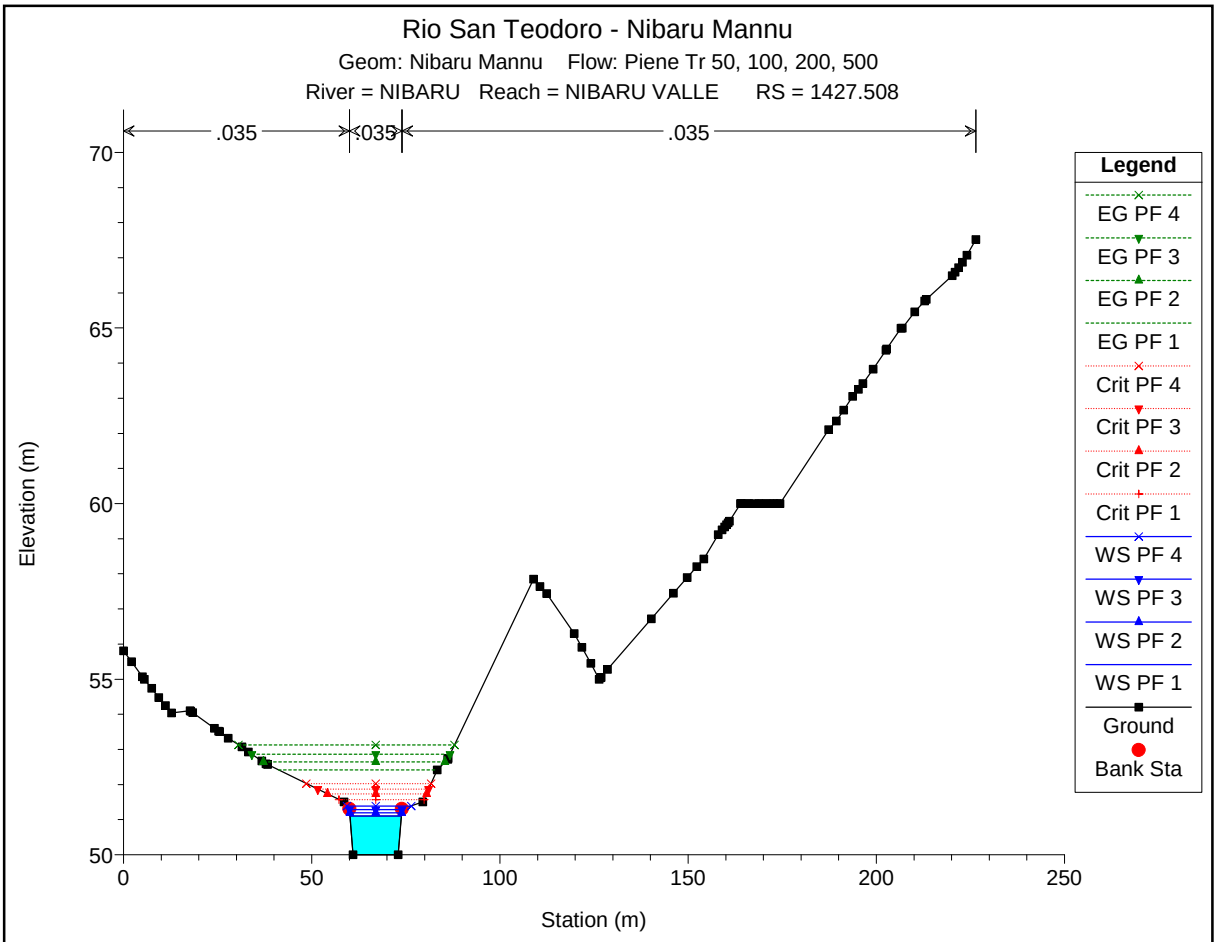

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 2380 Culv
.035
.035
.035
Elevation (m)
78
76
74
72
70
68
0
50
100
150
200
Station (m)
Legend
EG PF 1
EG PF 4
EG PF 3
EG PF 2
WS PF 3
WS PF 2
Crit PF 2
Crit PF 3
WS PF 4
Crit PF 4
WS PF 1
Crit PF 1
Ground
Bank Sta

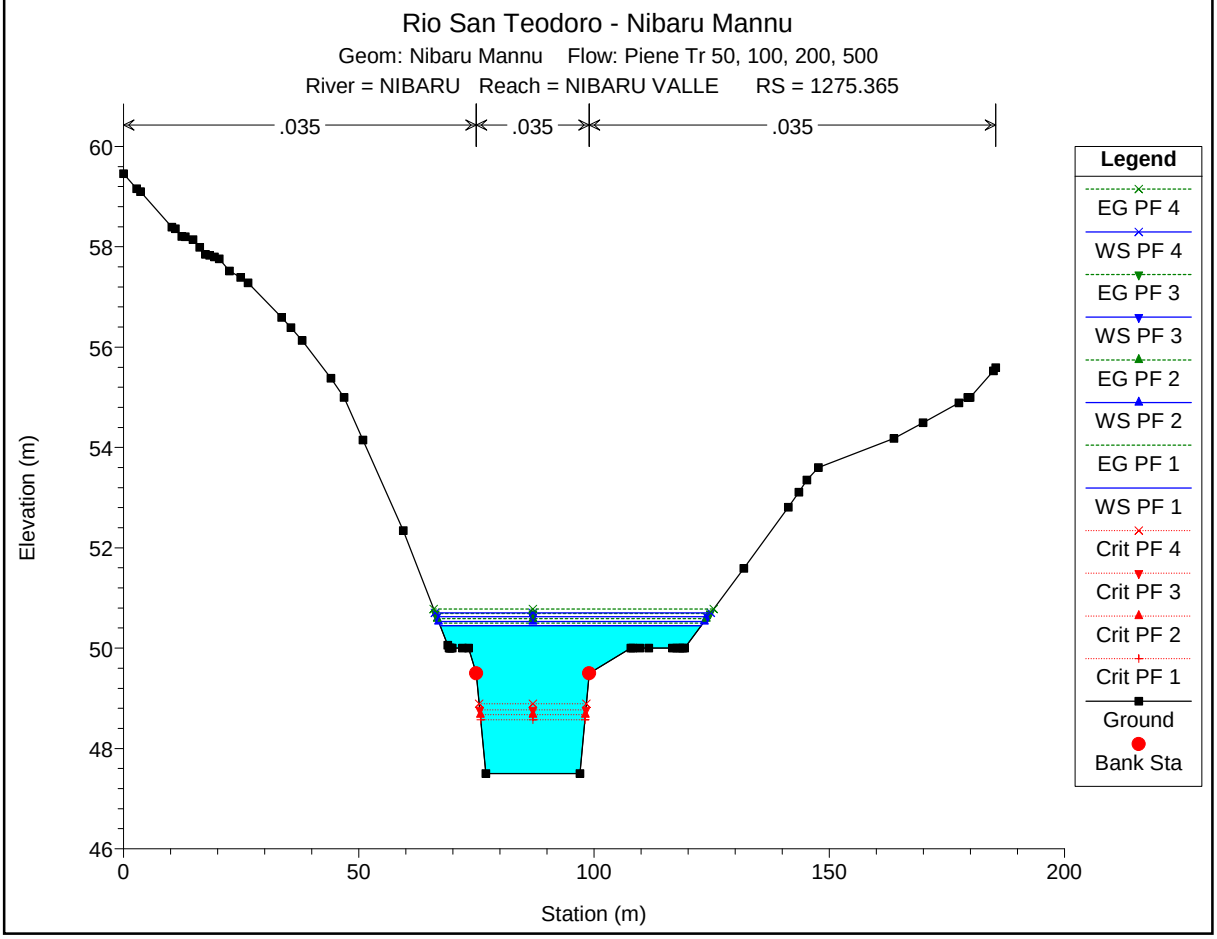

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 2359.803
.035
.035
.035
Elevation (m)
78
76
74
72
70
68
0
50
100
150
200
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
Crit PF 4
WS PF 3
Crit PF 3
WS PF 2
Crit PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

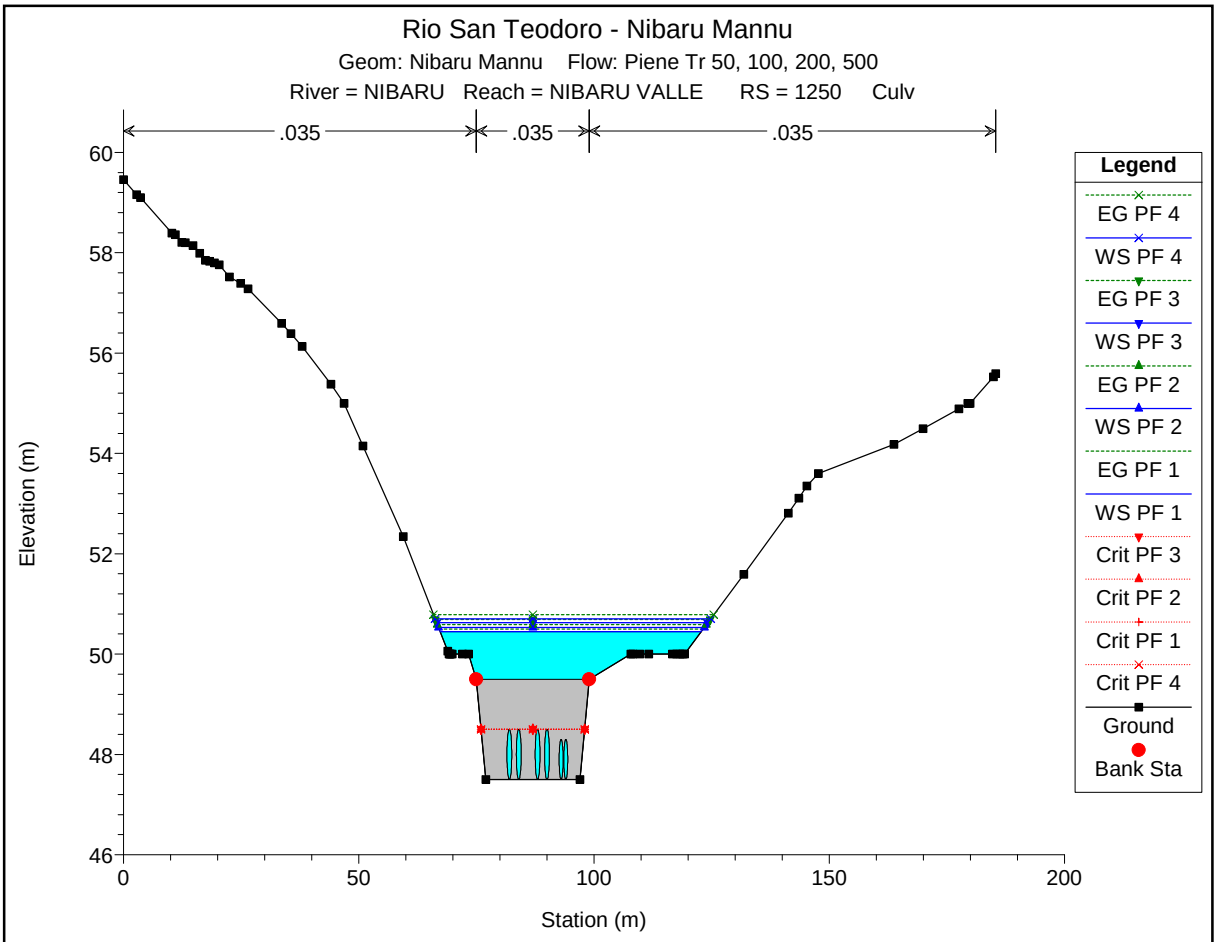

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 2048.051
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

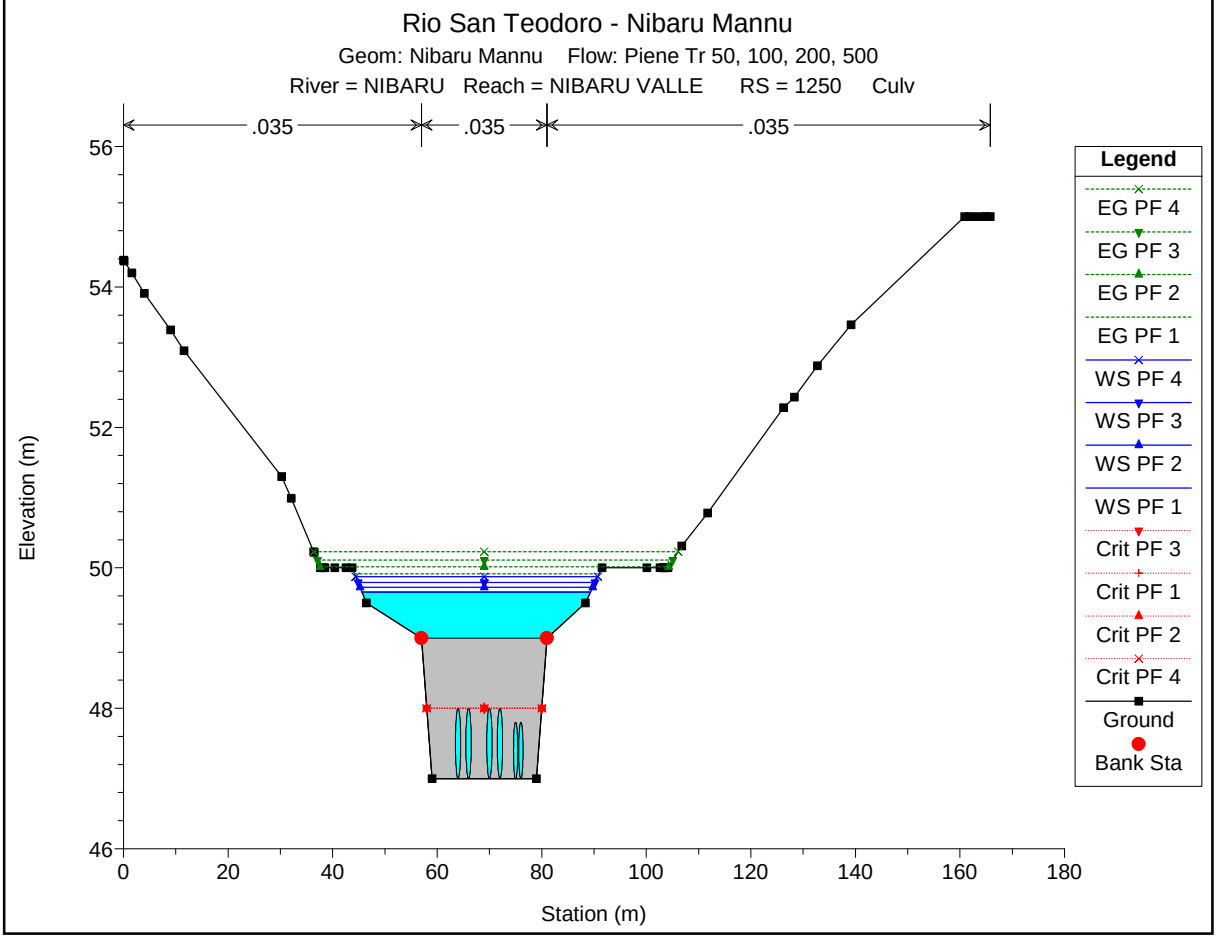

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU CENTRO RS = 1896.574
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

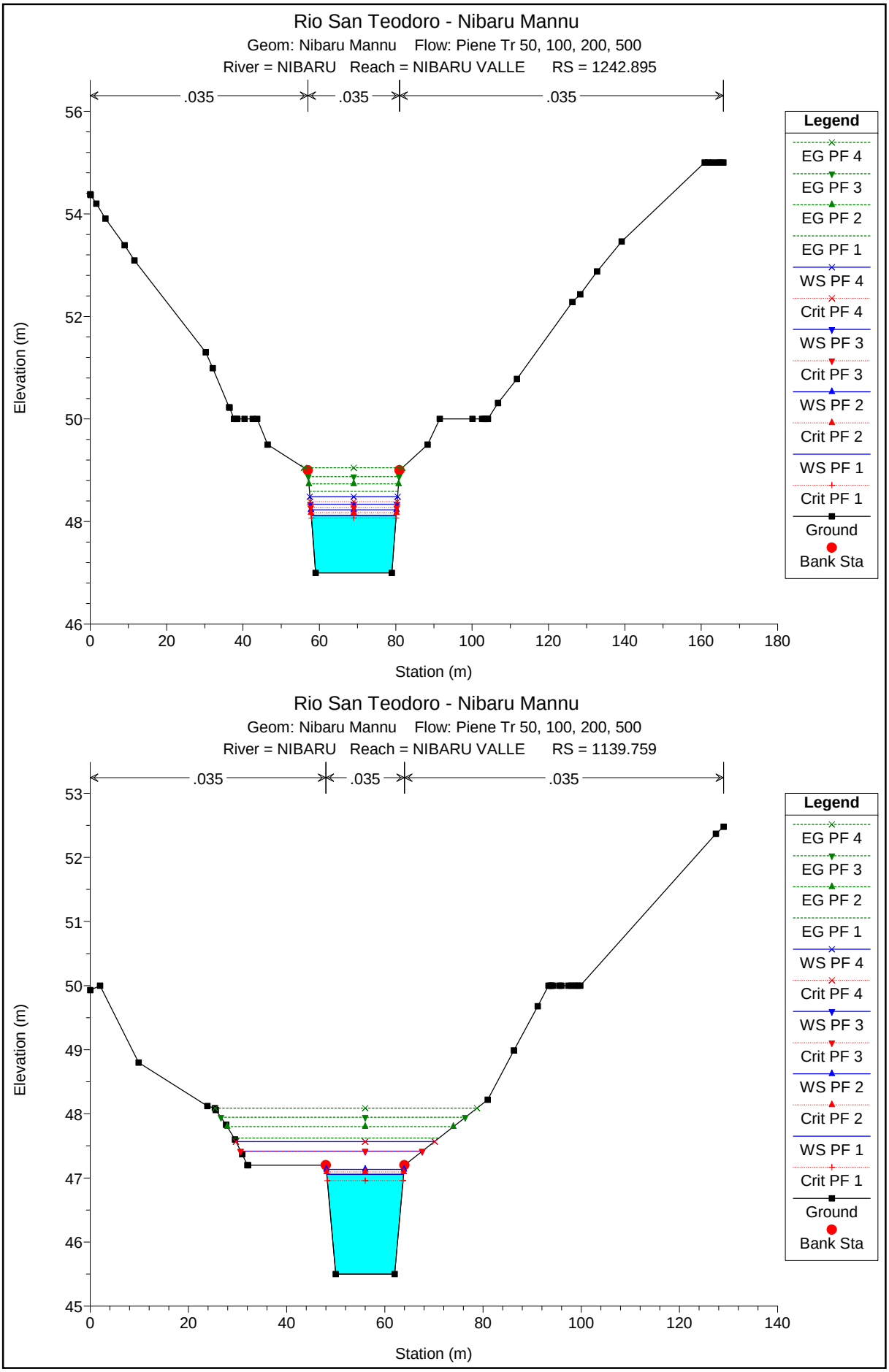

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1834.786
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
WS PF 4
Crit PF 2
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Bank Sta
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1537.719
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

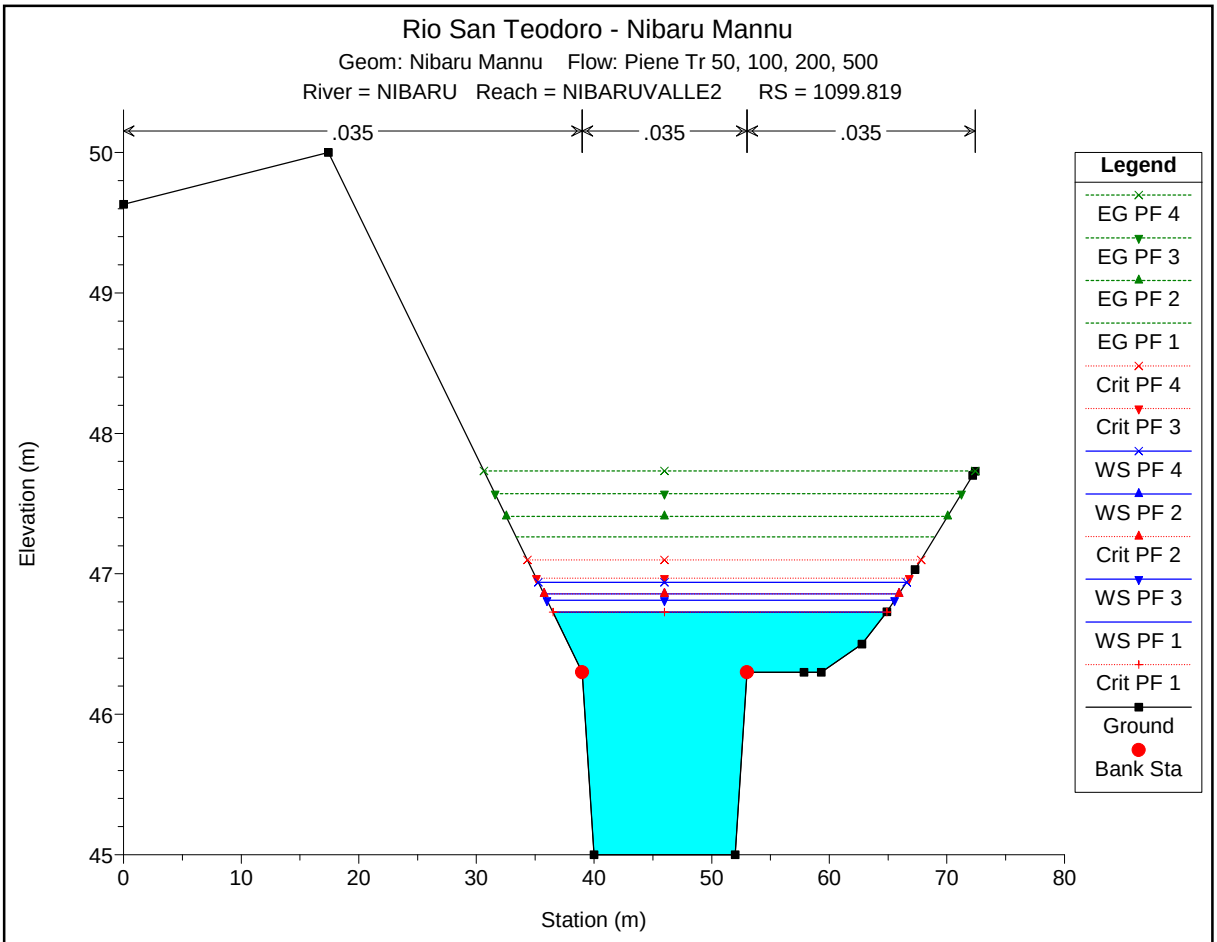

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1427.508
.035
.035
.035
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
70
65
60
55
50
0
50
100
150
200
250

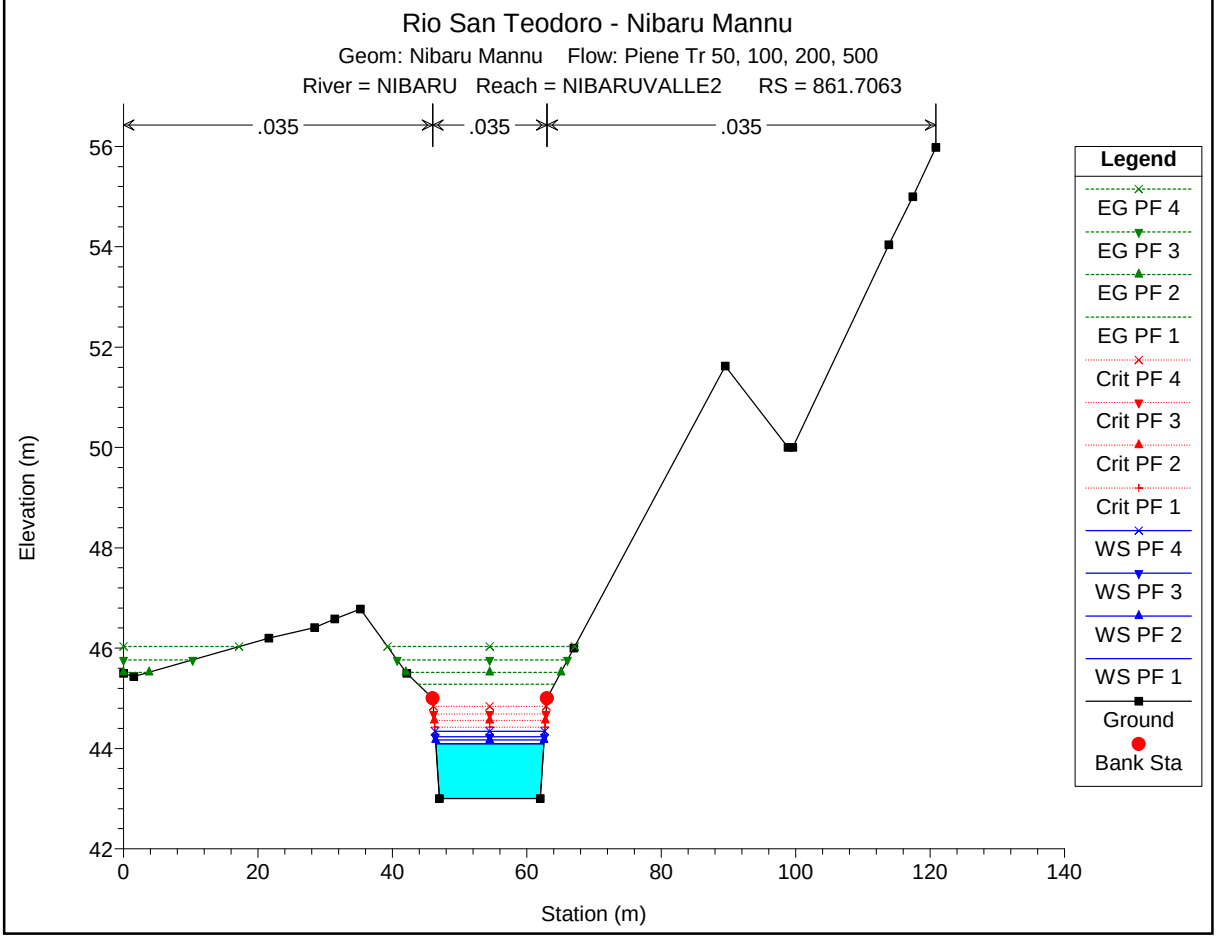

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1275.365
.035
.035
.035
Legend
EG PF 4
WS PF 4
EG PF 3
WS PF 3
EG PF 2
WS PF 2
EG PF 1
WS PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
Ground
Bank Sta
Elevation (m)
Station (m)
60
58
56
54
52
50
48
46
0
50
100
150
200

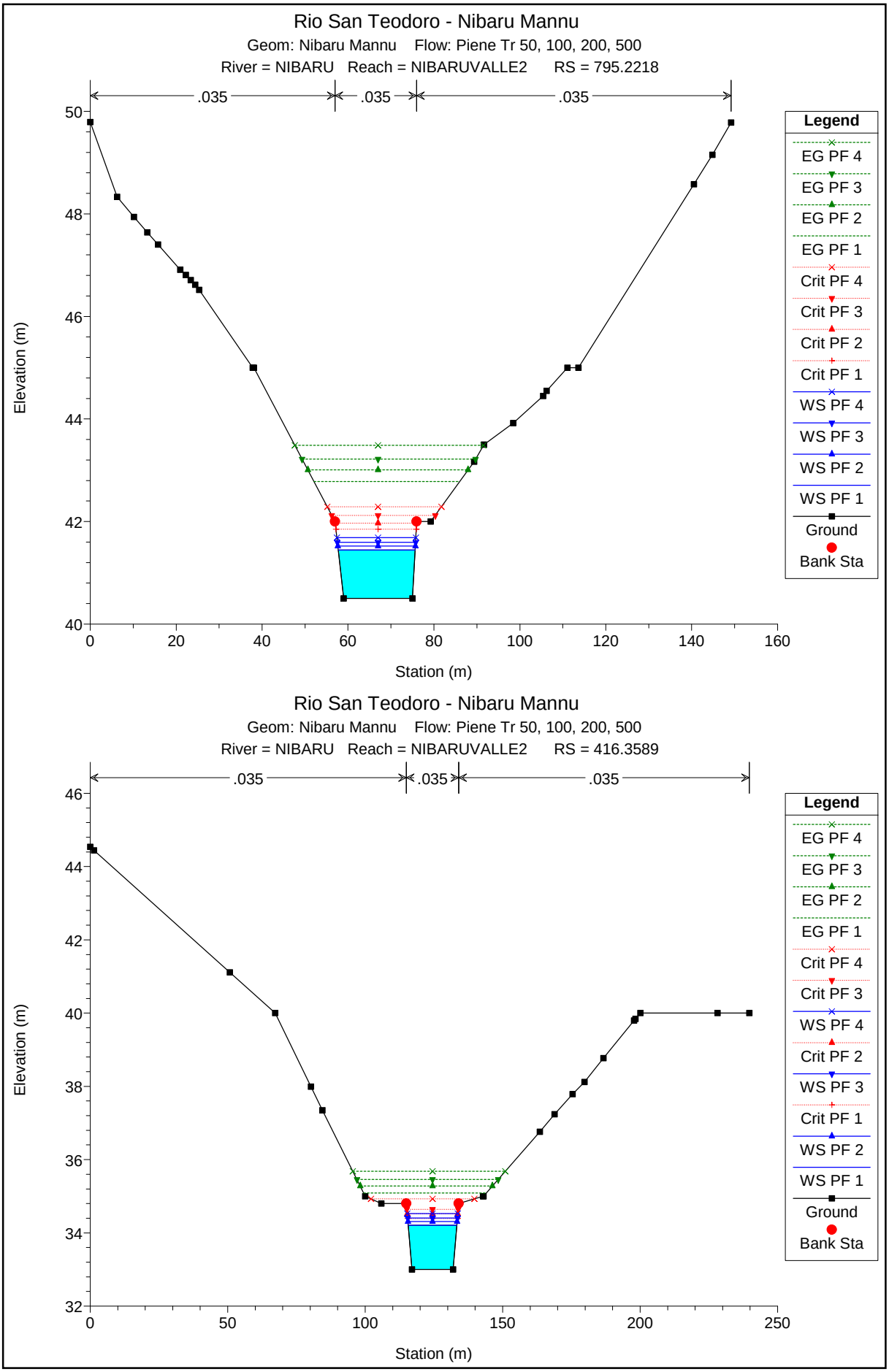

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1250 Culv
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
WS PF 4
EG PF 3
WS PF 3
EG PF 2
WS PF 2
EG PF 1
WS PF 1
Crit PF 3
Crit PF 2
Crit PF 1
Crit PF 4
Ground
Bank Sta

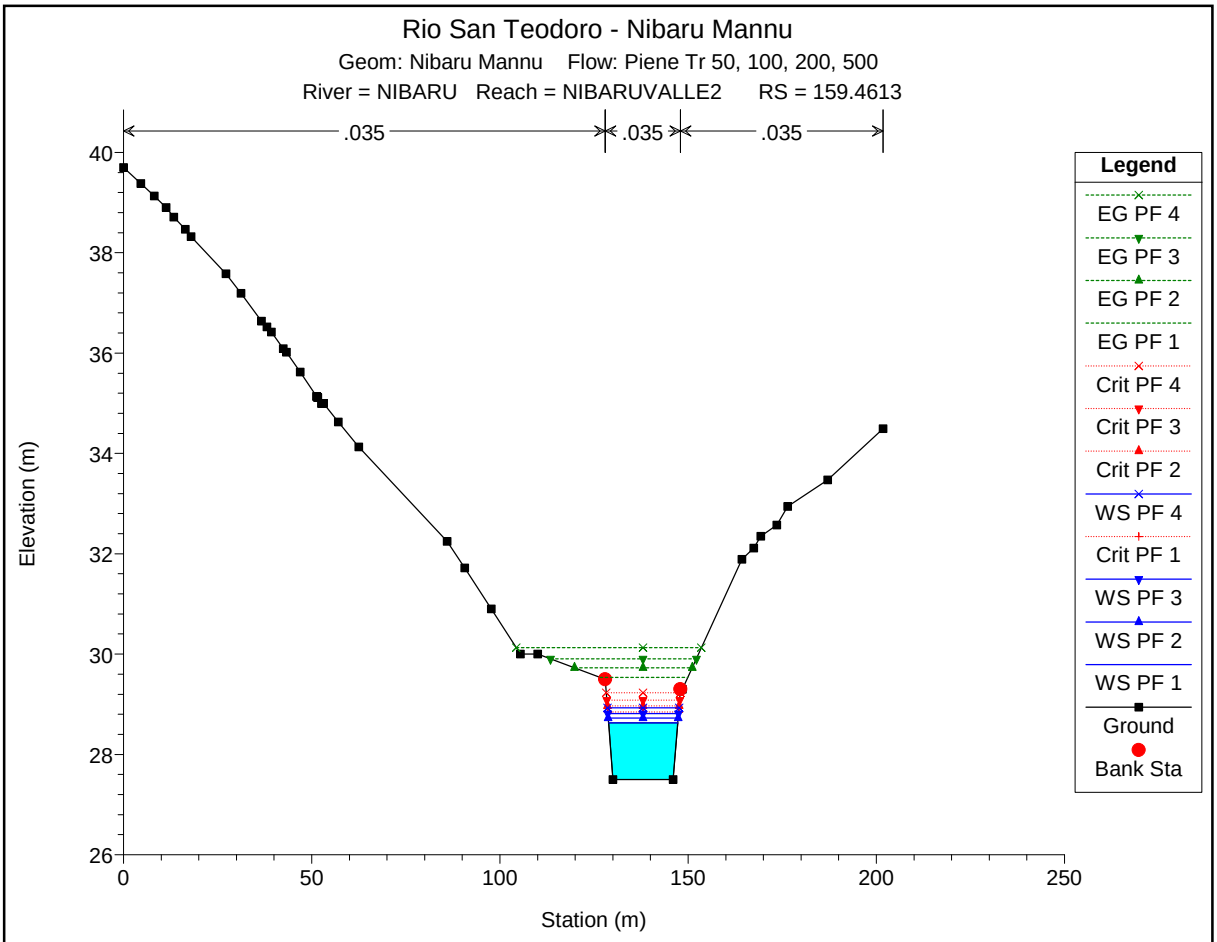

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1250 Culv
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Crit PF 3
Crit PF 1
Crit PF 2
Crit PF 4
Ground
Bank Sta

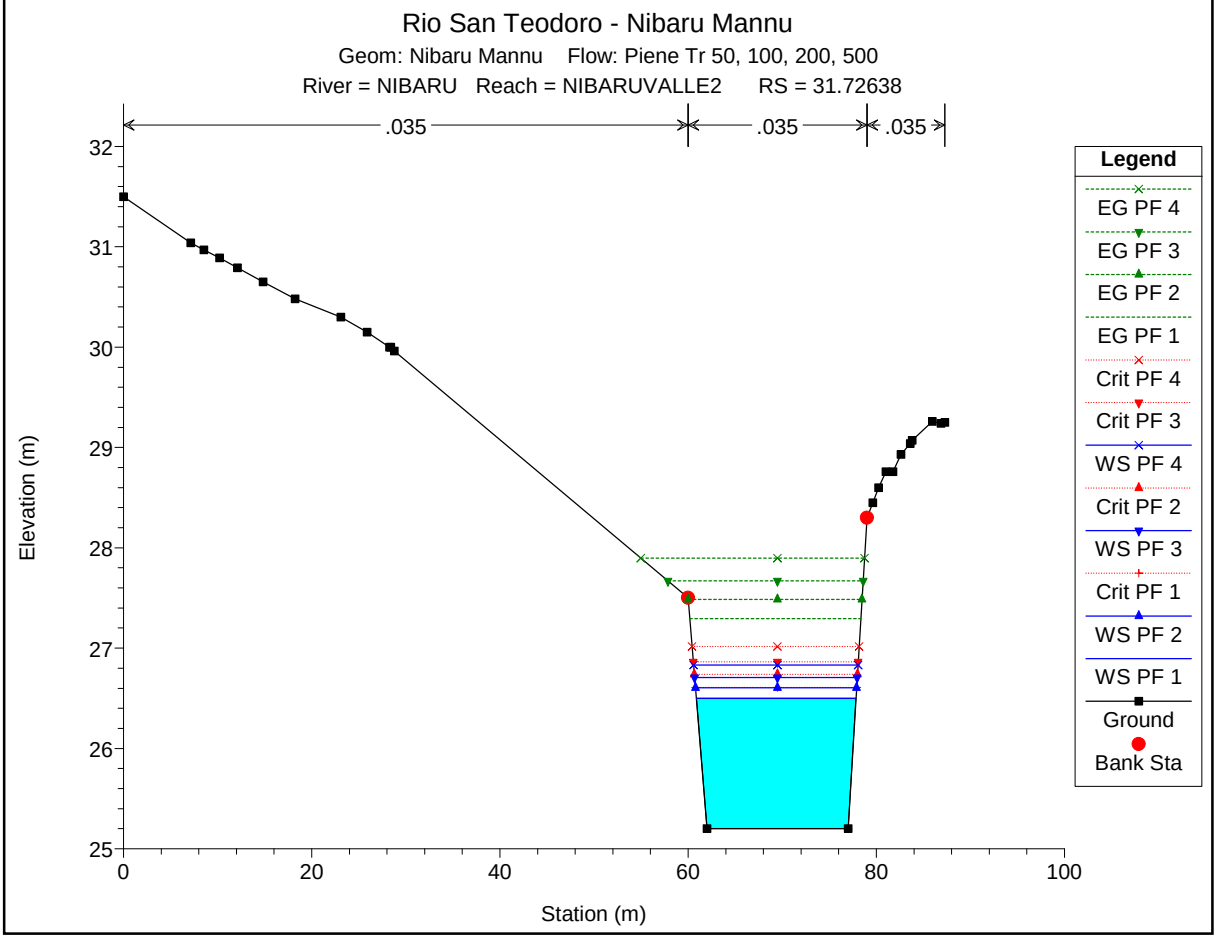

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1242.895
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
Crit PF 4
WS PF 3
Crit PF 3
WS PF 2
Crit PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARU VALLE RS = 1139.759
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
WS PF 4
Crit PF 4
WS PF 3
Crit PF 3
WS PF 2
Crit PF 2
WS PF 1
Crit PF 1
Ground
Bank Sta

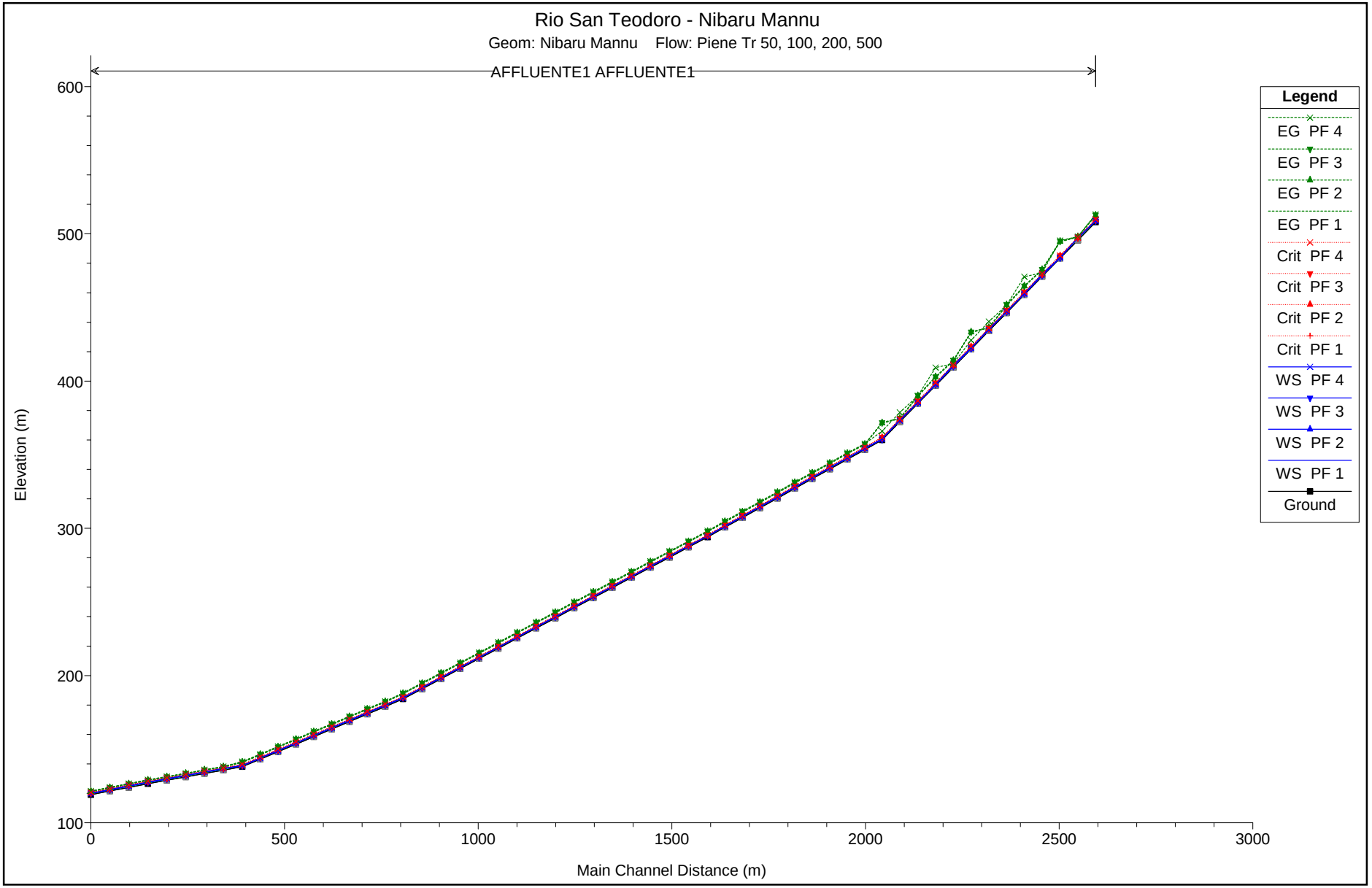

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARUVALLE2 RS = 1099.819
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
WS PF 4
WS PF 2
Crit PF 2
WS PF 3
WS PF 1
Crit PF 1
Ground
Bank Sta

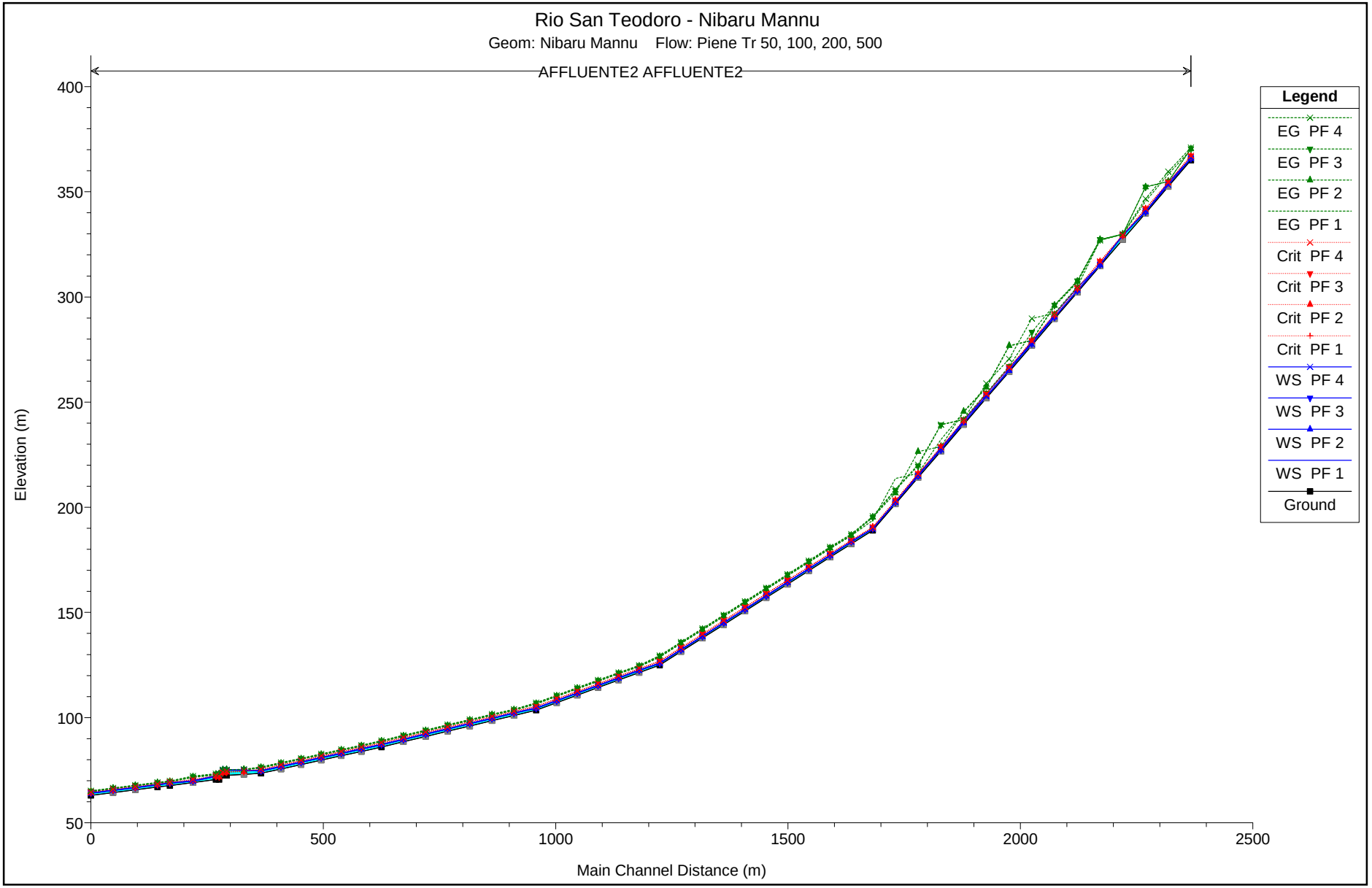

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARUVALLE2 RS = 861.7063
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta

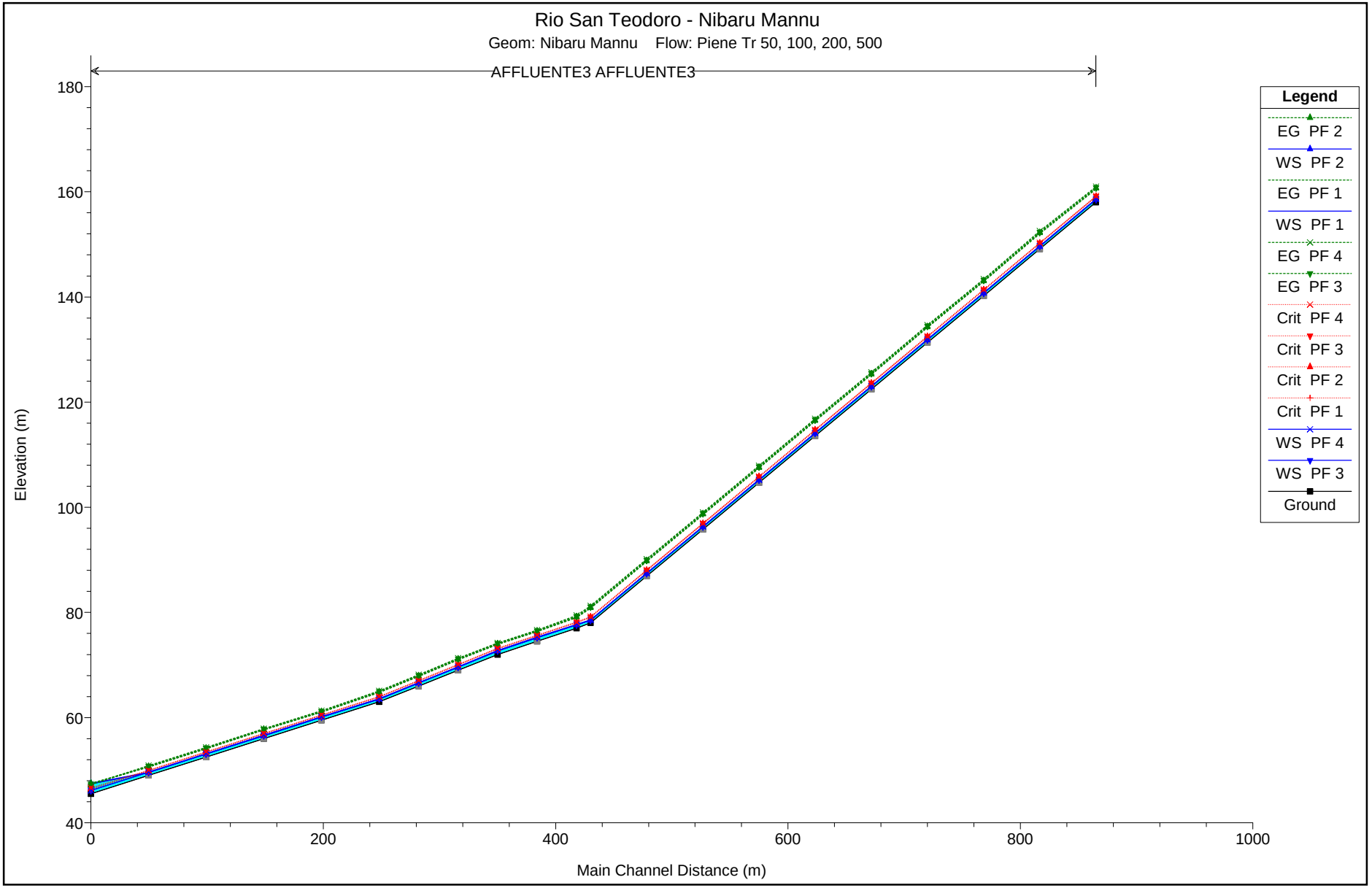

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARUVALLE2 RS = 795.2218
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta
Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARUVALLE2 RS = 416.3589
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
WS PF 4
Crit PF 2
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Bank Sta

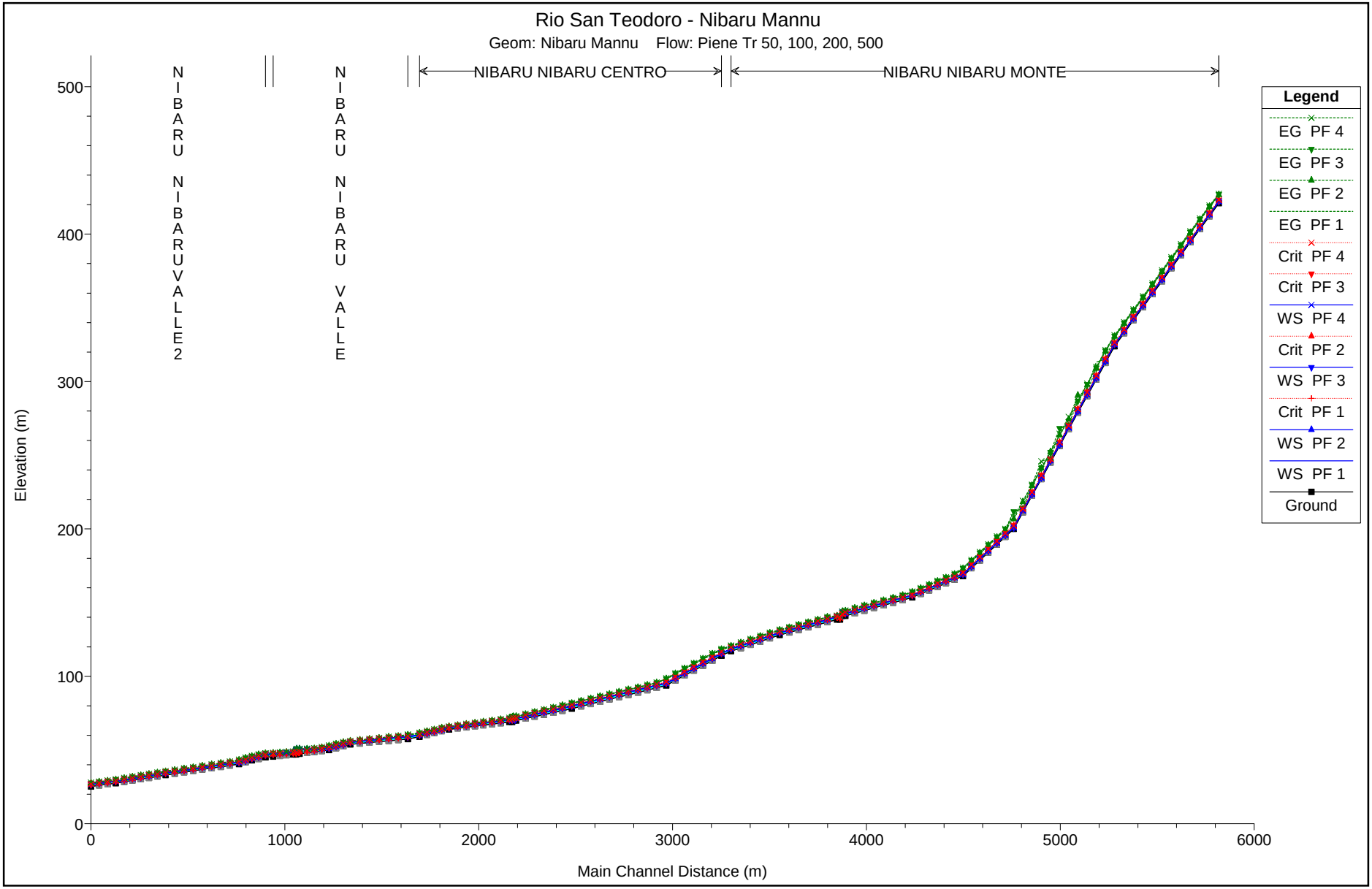

Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARUVALLE2 RS = 159.4613
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
WS PF 4
Crit PF 1
WS PF 3
WS PF 2
WS PF 1
Ground
Bank Sta


Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
River = NIBARU Reach = NIBARUVALLE2 RS = 31.72638
.035
.035
.035
Elevation (m)
Station (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
WS PF 4
Crit PF 2
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Bank Sta


Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
AFFLUENTE1 AFFLUENTE1
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground
Elevation (m)
600
500
400
300
200
100
0
500
1000
1500
2000
2500
3000
Main Channel Distance (m)


Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
AFFLUENTE2 AFFLUENTE2
Elevation (m)
400
350
300
250
200
150
100
50
0
500
1000
1500
2000
2500
Main Channel Distance (m)
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
WS PF 2
WS PF 1
Ground


Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
AFFLUENTE3 AFFLUENTE3
Elevation (m)
180
160
140
120
100
80
60
40
0
200
400
600
800
1000
Main Channel Distance (m)
Legend
EG PF 2
WS PF 2
EG PF 1
WS PF 1
EG PF 4
EG PF 3
Crit PF 4
Crit PF 3
Crit PF 2
Crit PF 1
WS PF 4
WS PF 3
Ground


Rio San Teodoro - Nibaru Mannu
Geom: Nibaru Mannu Flow: Piene Tr 50, 100, 200, 500
NIBARU NIBARU VALLE 2
NIBARU NIBARU VALLE
NIBARU NIBARU CENTRO
NIBARU NIBARU MONTE
Legend
EG PF 4
EG PF 3
EG PF 2
EG PF 1
Crit PF 4
Crit PF 3
WS PF 4
Crit PF 2
WS PF 3
Crit PF 1
WS PF 2
WS PF 1
Ground
Elevation (m)
0
100
200
300
400
500
0
1000
2000
3000
4000
5000
6000
Main Channel Distance (m)

HEC-RAS Plan: Plan 01

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
NIBARU	NIBARU MONTE	6016.483	PF 1	41.42	421.00	422.08	422.89	426.34	0.150205	9.21	4.75	9.35	3.13
NIBARU	NIBARU MONTE	6016.483	PF 2	46.58	421.00	422.14	422.97	426.68	0.150159	9.59	5.28	9.97	3.16
NIBARU	NIBARU MONTE	6016.483	PF 3	51.72	421.00	422.19	423.05	426.97	0.150140	9.92	5.78	10.53	3.18
NIBARU	NIBARU MONTE	6016.483	PF 4	58.47	421.00	422.25	423.16	427.31	0.150130	10.31	6.42	11.20	3.22
NIBARU	NIBARU MONTE	5478.274	PF 1	41.42	324.00	325.12	326.08	330.10	0.179986	9.89	4.19	4.49	3.27
NIBARU	NIBARU MONTE	5478.274	PF 2	46.58	324.00	325.20	326.14	330.52	0.179964	10.22	4.56	4.60	3.28
NIBARU	NIBARU MONTE	5478.274	PF 3	51.72	324.00	325.28	326.21	330.92	0.179932	10.53	4.91	4.70	3.29
NIBARU	NIBARU MONTE	5478.274	PF 4	58.47	324.00	325.37	326.27	331.42	0.179898	10.89	5.37	4.83	3.30
NIBARU	NIBARU MONTE	4958.65	PF 1	41.42	200.00	200.63	201.98	211.50	0.653031	14.61	2.84	5.04	6.22
NIBARU	NIBARU MONTE	4958.65	PF 2	46.58	200.00	200.92	202.09	206.70	0.230373	10.65	4.37	5.53	3.82
NIBARU	NIBARU MONTE	4958.65	PF 3	51.72	200.00	200.76	202.18	211.79	0.538143	14.71	3.51	5.26	5.75
NIBARU	NIBARU MONTE	4958.65	PF 4	58.47	200.00	201.04	202.31	207.89	0.240819	11.60	5.04	5.73	3.95
NIBARU	NIBARU MONTE	4696.375	PF 1	41.42	168.00	169.06	170.02	172.58	0.121851	8.31	4.98	5.41	2.77
NIBARU	NIBARU MONTE	4696.375	PF 2	46.58	168.00	169.14	170.09	172.92	0.121824	8.62	5.41	5.52	2.78
NIBARU	NIBARU MONTE	4696.375	PF 3	51.72	168.00	169.21	170.15	173.24	0.121791	8.89	5.82	5.61	2.79
NIBARU	NIBARU MONTE	4696.375	PF 4	58.47	168.00	169.30	170.22	173.63	0.121757	9.22	6.34	5.74	2.80
NIBARU	NIBARU MONTE	4444.873	PF 1	41.42	153.50	154.83	155.28	156.85	0.055317	6.30	6.58	6.42	1.90
NIBARU	NIBARU MONTE	4444.873	PF 2	46.58	153.50	154.91	155.30	157.10	0.055429	6.57	7.20	8.17	1.92
NIBARU	NIBARU MONTE	4444.873	PF 3	51.72	153.50	154.99	155.33	157.32	0.055519	6.80	7.89	9.76	1.93
NIBARU	NIBARU MONTE	4444.873	PF 4	58.47	153.50	155.04	155.37	157.44	0.057023	7.06	11.53	90.06	1.97
NIBARU	NIBARU MONTE	4099.608	PF 1	41.42	141.00	142.52	143.23	144.03	0.036223	5.44	7.65	8.07	1.54
NIBARU	NIBARU MONTE	4099.608	PF 2	46.58	141.00	142.61	143.29	144.25	0.036315	5.69	8.42	9.68	1.56
NIBARU	NIBARU MONTE	4099.608	PF 3	51.72	141.00	142.68	143.35	144.43	0.036230	5.91	9.24	11.16	1.57
NIBARU	NIBARU MONTE	4099.608	PF 4	58.47	141.00	142.78	143.42	144.64	0.036133	6.15	10.37	12.90	1.59
NIBARU	NIBARU MONTE	4080		Culvert									
NIBARU	NIBARU MONTE	4056.903	PF 1	41.42	138.50	140.49	140.49	140.85	0.007036	2.96	18.02	23.53	0.72
NIBARU	NIBARU MONTE	4056.903	PF 2	46.58	138.50	140.56	140.56	140.94	0.007194	3.07	19.63	24.19	0.73
NIBARU	NIBARU MONTE	4056.903	PF 3	51.72	138.50	140.62	140.62	141.02	0.007294	3.16	21.21	24.82	0.74
NIBARU	NIBARU MONTE	4056.903	PF 4	58.47	138.50	140.70	140.70	141.12	0.007492	3.29	23.10	25.56	0.75
NIBARU	NIBARU MONTE	3760.274	PF 1	41.42	128.00	129.50	130.10	131.01	0.035478	5.45	7.67	7.80	1.55
NIBARU	NIBARU MONTE	3760.274	PF 2	46.58	128.00	129.58	130.20	131.23	0.035653	5.71	8.41	9.37	1.57
NIBARU	NIBARU MONTE	3760.274	PF 3	51.72	128.00	129.66	130.28	131.43	0.035691	5.93	9.20	10.82	1.58
NIBARU	NIBARU MONTE	3760.274	PF 4	58.47	128.00	129.75	130.38	131.65	0.035868	6.20	10.27	12.50	1.60
NIBARU	NIBARU MONTE	3510.976	PF 1	41.42	117.00	118.47	119.03	120.21	0.043811	5.83	7.10	5.64	1.66
NIBARU	NIBARU MONTE	3510.976	PF 2	46.58	117.00	118.58	119.21	120.43	0.043704	6.03	7.73	5.76	1.66
NIBARU	NIBARU MONTE	3510.976	PF 3	51.72	117.00	118.69	119.38	120.65	0.043738	6.21	8.33	5.87	1.66
NIBARU	NIBARU MONTE	3510.976	PF 4	58.47	117.00	118.81	119.57	120.93	0.043934	6.45	9.07	6.07	1.67
NIBARU	NIBARU CENTRO	3453.796	PF 1	59.26	114.00	115.42	116.08	117.71	0.052955	7.01	9.55	12.03	2.00
NIBARU	NIBARU CENTRO	3453.796	PF 2	67.83	114.00	115.51	116.21	117.95	0.052548	7.30	10.61	12.52	2.01
NIBARU	NIBARU CENTRO	3453.796	PF 3	76.40	114.00	115.59	116.33	118.17	0.052157	7.56	11.63	12.97	2.03
NIBARU	NIBARU CENTRO	3453.796	PF 4	87.57	114.00	115.68	116.48	118.44	0.051887	7.88	12.91	13.51	2.04
NIBARU	NIBARU CENTRO	3168.989	PF 1	59.26	93.80	95.18	95.83	97.99	0.072976	7.70	8.98	16.67	2.26
NIBARU	NIBARU CENTRO	3168.989	PF 2	67.83	93.80	95.25	95.92	98.21	0.073806	8.03	10.08	16.96	2.29
NIBARU	NIBARU CENTRO	3168.989	PF 3	76.40	93.80	95.31	96.02	98.41	0.074474	8.32	11.10	17.22	2.32
NIBARU	NIBARU CENTRO	3168.989	PF 4	87.57	93.80	95.38	96.13	98.64	0.074861	8.64	12.36	17.54	2.35
NIBARU	NIBARU CENTRO	2681.736	PF 1	59.26	78.00	79.70	80.32	81.38	0.032787	5.75	10.54	12.34	1.51
NIBARU	NIBARU CENTRO	2681.736	PF 2	67.83	78.00	79.81	80.40	81.61	0.032404	6.00	12.27	18.33	1.52
NIBARU	NIBARU CENTRO	2681.736	PF 3	76.40	78.00	79.90	80.46	81.78	0.032262	6.22	14.07	21.33	1.54
NIBARU	NIBARU CENTRO	2681.736	PF 4	87.57	78.00	80.02	80.54	81.97	0.031536	6.43	16.99	34.88	1.54
NIBARU	NIBARU CENTRO	2394.428	PF 1	59.26	70.00	72.07	71.49	72.41	0.004497	2.59	23.47	26.66	0.60
NIBARU	NIBARU CENTRO	2394.428	PF 2	67.83	70.00	71.25	71.62	72.57	0.030102	5.09	13.32	11.25	1.49
NIBARU	NIBARU CENTRO	2394.428	PF 3	76.40	70.00	71.35	71.75	72.78	0.030224	5.31	14.39	11.35	1.51
NIBARU	NIBARU CENTRO	2394.428	PF 4	87.57	70.00	71.46	71.92	73.05	0.030378	5.57	15.71	11.46	1.52
NIBARU	NIBARU CENTRO	2380		Culvert									
NIBARU	NIBARU CENTRO	2359.803	PF 1	59.26	69.00	70.49	70.49	71.19	0.013126	3.70	16.02	11.49	1.00
NIBARU	NIBARU CENTRO	2359.803	PF 2	67.83	69.00	70.63	70.63	71.38	0.012957	3.85	17.60	11.63	1.00
NIBARU	NIBARU CENTRO	2359.803	PF 3	76.40	69.00	70.76	70.76	71.57	0.012820	4.00	19.12	11.76	1.00
NIBARU	NIBARU CENTRO	2359.803	PF 4	87.57	69.00	70.92	70.92	71.80	0.012679	4.16	21.04	11.92	1.00
NIBARU	NIBARU CENTRO	2048.051	PF 1	59.26	64.00	65.00	65.25	65.68	0.018087	3.64	16.63	50.51	1.19
NIBARU	NIBARU CENTRO	2048.051	PF 2	67.83	64.00	65.05	65.31	65.81	0.019053	3.88	19.33	51.42	1.23
NIBARU	NIBARU CENTRO	2048.051	PF 3	76.40	64.00	65.10	65.37	65.91	0.020002	4.09	21.59	52.17	1.27
NIBARU	NIBARU CENTRO	2048.051	PF 4	87.57	64.00	65.15	65.43	66.03	0.020913	4.32	24.33	53.06	1.31
NIBARU	NIBARU CENTRO	1896.574	PF 1	59.26	59.00	60.06	60.39	61.16	0.029744	4.66	12.73	13.48	1.50
NIBARU	NIBARU CENTRO	1896.574	PF 2	67.83	59.00	60.14	60.53	61.36	0.029458	4.90	13.91	14.22	1.52
NIBARU	NIBARU CENTRO	1896.574	PF 3	76.40	59.00	60.22	60.65	61.55	0.029200	5.12	15.08	14.92	1.53
NIBARU	NIBARU CENTRO	1896.574	PF 4	87.57	59.00	60.32	60.79	61.79	0.028841	5.38	16.60	15.78	1.54
NIBARU	NIBARU VALLE	1834.786	PF 1	71.80	57.50	58.82	58.99	59.73	0.018875	4.23	16.97	13.76	1.22
NIBARU	NIBARU VALLE	1834.786	PF 2	82.22	57.50	58.93	59.16	59.93	0.018784	4.43	18.57	13.91	1.22
NIBARU	NIBARU VALLE	1834.786	PF 3	92.63	57.50	59.04	59.33	60.13	0.018706	4.62	20.07	14.92	1.23
NIBARU	NIBARU VALLE	1834.786	PF 4	106.19	57.50	59.16	59.50	60.36	0.018518	4.86	22.12	17.83	1.24
NIBARU	NIBARU VALLE	1537.719	PF 1	71.80	53.70	55.08	55.34	55.81	0.014547	3.85	21.76	60.86	1.08
NIBARU	NIBARU VALLE	1537.719	PF 2	82.22	53.70	55.13	55.40	55.93	0.015569	4.09	24.91	62.10	1.13
NIBARU	NIBARU VALLE	1537.719	PF 3	92.63	53.70	55.18	55.45	56.02	0.016339	4.28	27.84	63.21	1.16
NIBARU	NIBARU VALLE	1537.719	PF 4	106.19	53.70	55.24	55.52	56.12	0.016874	4.48	31.61	64.61	1.19
NIBARU	NIBARU VALLE	1427.508	PF 1	71.80	50.00	51.10	51.57	52.42	0.033647	5.09	14.12	13.69	1.60
NIBARU	NIBARU VALLE	1427.508	PF 2	82.22	50.00	51.19	51.74	52.64	0.033563	5.33	15.43	13.84	1.61
NIBARU	NIBARU VALLE	1427.508	PF 3	92.63	50.00	51.28	51.87	52.86	0.033677	5.56	16.65	13.97	1.63
NIBARU	NIBARU VALLE	1427.508	PF 4	106.19	50.00	51.39	52.03	53.13	0.033302	5.85	18.28	17.08	1.64
NIBARU	NIBARU VALLE	1275.365	PF 1	71.80	47.50	50.45	48.57	50.50	0.000341	1.00	82.33	55.54	0.19
NIBARU	NIBARU VALLE	1275.365	PF 2	82.22	47.50	50.53	48.68	50.59	0.000395	1.10	86.85	56.51	0.21

HEC-RAS Plan: Plan 01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
NIBARU	NIBARU VALLE	1275.365	PF 3	92.63	47.50	50.62	48.77	50.69	0.000435	1.17	92.21	57.64	0.22
NIBARU	NIBARU VALLE	1275.365	PF 4	106.19	47.50	50.71	48.89	50.78	0.000506	1.29	96.99	58.63	0.24
NIBARU	NIBARU VALLE	1250		Culvert									
NIBARU	NIBARU VALLE	1242.895	PF 1	71.80	47.00	48.12	48.07	48.59	0.010973	3.03	23.66	22.24	0.94
NIBARU	NIBARU VALLE	1242.895	PF 2	82.22	47.00	48.23	48.17	48.73	0.010562	3.15	26.09	22.46	0.93
NIBARU	NIBARU VALLE	1242.895	PF 3	92.63	47.00	48.34	48.27	48.87	0.010145	3.25	28.52	22.67	0.92
NIBARU	NIBARU VALLE	1242.895	PF 4	106.19	47.00	48.48	48.39	49.05	0.009403	3.33	31.89	22.97	0.90
NIBARU	NIBARU VALLE	1139.759	PF 1	71.80	45.50	47.06	46.96	47.62	0.009818	3.34	21.51	15.66	0.91
NIBARU	NIBARU VALLE	1139.759	PF 2	82.22	45.50	47.13	47.09	47.80	0.010894	3.61	22.75	15.84	0.96
NIBARU	NIBARU VALLE	1139.759	PF 3	92.63	45.50	47.42	47.42	47.95	0.007131	3.27	31.30	36.98	0.80
NIBARU	NIBARU VALLE	1139.759	PF 4	106.19	45.50	47.57	47.57	48.09	0.006493	3.31	37.14	40.44	0.77
NIBARU	NIBARUVALLE2	1099.819	PF 1	82.00	45.00	46.73	46.73	47.26	0.007969	3.34	27.50	28.39	0.83
NIBARU	NIBARUVALLE2	1099.819	PF 2	93.89	45.00	46.86	46.86	47.41	0.007611	3.43	31.28	30.17	0.83
NIBARU	NIBARUVALLE2	1099.819	PF 3	105.75	45.00	46.81	46.97	47.57	0.010755	4.01	29.94	29.55	0.98
NIBARU	NIBARUVALLE2	1099.819	PF 4	121.19	45.00	46.94	47.10	47.73	0.010437	4.14	33.82	31.31	0.97
NIBARU	NIBARUVALLE2	861.7063	PF 1	82.00	43.00	44.09	44.43	45.28	0.029514	4.82	17.00	16.09	1.50
NIBARU	NIBARUVALLE2	861.7063	PF 2	93.89	43.00	44.17	44.56	45.52	0.030856	5.14	18.26	16.17	1.54
NIBARU	NIBARUVALLE2	861.7063	PF 3	105.75	43.00	44.24	44.68	45.77	0.032977	5.48	19.29	16.24	1.61
NIBARU	NIBARUVALLE2	861.7063	PF 4	121.19	43.00	44.34	44.84	46.03	0.032916	5.75	21.06	16.34	1.62
NIBARU	NIBARUVALLE2	795.2218	PF 1	82.00	40.50	41.45	41.85	42.78	0.039395	5.12	16.03	17.89	1.72
NIBARU	NIBARUVALLE2	795.2218	PF 2	93.89	40.50	41.52	41.97	43.01	0.039980	5.40	17.39	18.04	1.76
NIBARU	NIBARUVALLE2	795.2218	PF 3	105.75	40.50	41.60	42.12	43.22	0.040221	5.65	18.73	18.19	1.78
NIBARU	NIBARUVALLE2	795.2218	PF 4	121.19	40.50	41.69	42.29	43.49	0.040580	5.95	20.38	18.37	1.80
NIBARU	NIBARUVALLE2	416.3589	PF 1	82.00	33.00	34.21	34.40	35.09	0.019611	4.16	19.72	17.68	1.26
NIBARU	NIBARUVALLE2	416.3589	PF 2	93.89	33.00	34.31	34.52	35.28	0.019639	4.36	21.52	17.91	1.27
NIBARU	NIBARUVALLE2	416.3589	PF 3	105.75	33.00	34.40	34.64	35.46	0.019619	4.55	23.25	18.12	1.28
NIBARU	NIBARUVALLE2	416.3589	PF 4	121.19	33.00	34.52	34.93	35.68	0.019552	4.76	25.45	18.39	1.29
NIBARU	NIBARUVALLE2	159.4613	PF 1	82.00	27.50	28.63	28.84	29.54	0.021660	4.22	19.41	18.38	1.31
NIBARU	NIBARUVALLE2	159.4613	PF 2	93.89	27.50	28.72	28.97	29.73	0.021683	4.43	21.17	18.58	1.33
NIBARU	NIBARUVALLE2	159.4613	PF 3	105.75	27.50	28.81	29.08	29.91	0.021706	4.63	22.85	18.77	1.34
NIBARU	NIBARUVALLE2	159.4613	PF 4	121.19	27.50	28.93	29.23	30.13	0.021702	4.86	24.96	19.01	1.35
NIBARU	NIBARUVALLE2	31.72638	PF 1	82.00	25.20	26.50	26.61	27.29	0.016080	3.95	20.77	16.97	1.14
NIBARU	NIBARUVALLE2	31.72638	PF 2	93.89	25.20	26.60	26.74	27.49	0.016326	4.16	22.56	17.13	1.16
NIBARU	NIBARUVALLE2	31.72638	PF 3	105.75	25.20	26.71	26.86	27.67	0.016409	4.35	24.33	17.28	1.17
NIBARU	NIBARUVALLE2	31.72638	PF 4	121.19	25.20	26.83	27.02	27.90	0.016556	4.57	26.50	17.47	1.19
AFFLUENTE3	AFFLUENTE3	883.3121	PF 1	11.16	158.00	158.54	159.04	160.51	0.150161	6.22	1.79	3.63	2.83
AFFLUENTE3	AFFLUENTE3	883.3121	PF 2	12.17	158.00	158.57	159.10	160.66	0.150163	6.40	1.90	3.67	2.84
AFFLUENTE3	AFFLUENTE3	883.3121	PF 3	13.17	158.00	158.60	159.15	160.80	0.150157	6.57	2.01	3.70	2.85
AFFLUENTE3	AFFLUENTE3	883.3121	PF 4	14.54	158.00	158.64	159.23	160.98	0.150165	6.78	2.14	3.74	2.86
AFFLUENTE3	AFFLUENTE3	448.7128	PF 1	11.16	78.00	78.50	79.03	80.75	0.184215	6.65	1.68	3.67	3.14
AFFLUENTE3	AFFLUENTE3	448.7128	PF 2	12.17	78.00	78.53	79.09	80.91	0.184167	6.84	1.78	3.71	3.15
AFFLUENTE3	AFFLUENTE3	448.7128	PF 3	13.17	78.00	78.56	79.14	81.06	0.184133	7.01	1.88	3.74	3.16
AFFLUENTE3	AFFLUENTE3	448.7128	PF 4	14.54	78.00	78.59	79.21	81.26	0.184095	7.24	2.01	3.79	3.18
AFFLUENTE3	AFFLUENTE3	436.7864	PF 1	11.16	77.00	77.62	78.03	79.00	0.089667	5.20	2.15	3.89	2.23
AFFLUENTE3	AFFLUENTE3	436.7864	PF 2	12.17	77.00	77.65	78.08	79.13	0.091728	5.39	2.26	3.93	2.27
AFFLUENTE3	AFFLUENTE3	436.7864	PF 3	13.17	77.00	77.68	78.14	79.25	0.093637	5.56	2.37	3.97	2.30
AFFLUENTE3	AFFLUENTE3	436.7864	PF 4	14.54	77.00	77.72	78.21	79.42	0.096066	5.79	2.51	4.02	2.34
AFFLUENTE3	AFFLUENTE3	368.1	PF 1	11.16	72.00	72.66	73.03	73.89	0.075477	4.91	2.27	3.88	2.05
AFFLUENTE3	AFFLUENTE3	368.1	PF 2	12.17	72.00	72.70	73.09	73.99	0.075354	5.05	2.41	3.93	2.06
AFFLUENTE3	AFFLUENTE3	368.1	PF 3	13.17	72.00	72.73	73.14	74.09	0.075199	5.17	2.55	3.97	2.06
AFFLUENTE3	AFFLUENTE3	368.1	PF 4	14.54	72.00	72.78	73.21	74.22	0.074962	5.32	2.73	4.04	2.07
AFFLUENTE3	AFFLUENTE3	266.556	PF 1	11.16	63.00	63.52	63.87	64.75	0.092284	4.93	2.27	4.79	2.29
AFFLUENTE3	AFFLUENTE3	266.556	PF 2	12.17	63.00	63.54	63.92	64.85	0.092029	5.07	2.40	4.84	2.30
AFFLUENTE3	AFFLUENTE3	266.556	PF 3	13.17	63.00	63.57	63.97	64.95	0.091875	5.20	2.53	4.88	2.30
AFFLUENTE3	AFFLUENTE3	266.556	PF 4	14.54	63.00	63.61	64.03	65.08	0.091713	5.37	2.71	4.93	2.32
AFFLUENTE3	AFFLUENTE3	18.26136	PF 1	11.16	45.50	47.35	46.36	47.37	0.000301	0.64	22.38	24.89	0.16
AFFLUENTE3	AFFLUENTE3	18.26136	PF 2	12.17	45.50	47.50	46.40	47.51	0.000237	0.60	26.11	26.45	0.14
AFFLUENTE3	AFFLUENTE3	18.26136	PF 3	13.17	45.50	46.11	46.60	47.23	0.069604	4.69	2.81	5.22	2.04
AFFLUENTE3	AFFLUENTE3	18.26136	PF 4	14.54	45.50	46.15	46.64	47.34	0.069842	4.85	3.00	5.29	2.06
AFFLUENTE2	AFFLUENTE2	2396.701	PF 1	26.71	365.00	365.83	366.86	369.97	0.200063	9.01	2.96	4.11	3.39
AFFLUENTE2	AFFLUENTE2	2396.701	PF 2	29.76	365.00	365.89	366.94	370.31	0.200051	9.31	3.20	4.19	3.40
AFFLUENTE2	AFFLUENTE2	2396.701	PF 3	32.79	365.00	365.94	367.02	370.62	0.200031	9.58	3.42	4.26	3.41
AFFLUENTE2	AFFLUENTE2	2396.701	PF 4	36.80	365.00	366.01	367.11	371.03	0.200356	9.92	3.71	4.35	3.43
AFFLUENTE2	AFFLUENTE2	1711.058	PF 1	26.71	189.00	189.83	190.48	193.77	0.190881	8.80	3.04	4.31	3.35
AFFLUENTE2	AFFLUENTE2	1711.058	PF 2	29.76	189.00	189.79	190.52	195.27	0.278720	10.37	2.87	4.25	4.03
AFFLUENTE2	AFFLUENTE2	1711.058	PF 3	32.79	189.00	189.87	190.56	195.25	0.250187	10.28	3.19	4.37	3.84
AFFLUENTE2	AFFLUENTE2	1711.058	PF 4	36.80	189.00	189.92	190.62	195.73	0.252279	10.67	3.45	4.46	3.87
AFFLUENTE2	AFFLUENTE2	1253.722	PF 1	26.71	125.00	125.78	126.51	128.72	0.140460	7.60	3.51	5.04	2.91
AFFLUENTE2	AFFLUENTE2	1253.722	PF 2	29.76	125.00	125.83	126.65	128.99	0.140515	7.87	3.78	5.11	2.92
AFFLUENTE2	AFFLUENTE2	1253.722	PF 3	32.79	125.00	125.88	126.80	129.24	0.140440	8.12	4.04	5.17	2.93
AFFLUENTE2	AFFLUENTE2	1253.722	PF 4	36.80	125.00	125.94	126.98	129.56	0.140463	8.42	4.37	5.26	2.95
AFFLUENTE2	AFFLUENTE2	987.444	PF 1	26.71	103.50	104.42	105.24	106.44	0.080913	6.30	4.24	5.23	2.23
AFFLUENTE2	AFFLUENTE2	987.444	PF 2	29.76	103.50	104.48	105.29	106.64	0.080833	6.52	4.57	5.31	2.24
AFFLUENTE2	AFFLUENTE2	987.444	PF 3	32.79	103.50	104.54	105.38	106.84	0.080792	6.71	4.89	5.39	2.25
AFFLUENTE2	AFFLUENTE2	987.444	PF 4	36.80	103.50	104.62	105.45	107.08	0.080873	6.96	5.29	5.49	2.26
AFFLUENTE2	AFFLUENTE2	654.7847	PF 1	26.71	86.00	87.05	87.50	88.55	0.052588	5.43	4.92	5.40	1.82
AFFLUENTE2	AFFLUENTE2	654.7847	PF 2	29.76	86.00	87.12	87.88	88.72	0.052524	5.61	5.30	5.49	1.82
AFFLUENTE2	AFFLUENTE2	654.7847	PF 3	32.79	86.00	87.18	87.97	88.89	0.052564	5.78	5.67	5.58	1.83
AFFLUENTE2	AFFLUENTE2	654.7847	PF 4	36.80	86.00	87.27	88.08	89.09	0.052585	5.98	6.15	5.69	1.84
AFFLUENTE2	AFFLUENTE2	395.8008	PF 1	26.71	73.50	74.57	75.26	75.99	0.048261	5.27	5.07	5.43	1.74

HEC-RAS Plan: Plan 01 (Continued)

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
AFFLUENTE2	AFFLUENTE2	395.8008	PF 2	29.76	73.50	74.65	75.31	76.16	0.048260	5.45	5.46	5.53	1.75
AFFLUENTE2	AFFLUENTE2	395.8008	PF 3	32.79	73.50	74.72	75.35	76.32	0.048266	5.61	5.85	5.62	1.76
AFFLUENTE2	AFFLUENTE2	395.8008	PF 4	36.80	73.50	74.80	75.40	76.52	0.048316	5.81	6.34	5.74	1.76
AFFLUENTE2	AFFLUENTE2	321.566	PF 1	26.71	72.50	75.01	74.03	75.10	0.001260	1.39	24.37	51.36	0.30
AFFLUENTE2	AFFLUENTE2	321.566	PF 2	29.76	72.50	75.05	74.15	75.15	0.001375	1.48	26.73	53.92	0.31
AFFLUENTE2	AFFLUENTE2	321.566	PF 3	32.79	72.50	75.09	74.26	75.19	0.001498	1.56	28.62	54.23	0.33
AFFLUENTE2	AFFLUENTE2	321.566	PF 4	36.80	72.50	75.13	74.40	75.25	0.001662	1.66	30.82	54.59	0.35
AFFLUENTE2	AFFLUENTE2	310		Culvert									
AFFLUENTE2	AFFLUENTE2	298.5306	PF 1	26.71	70.50	72.03	72.03	72.80	0.010407	3.87	6.89	7.33	1.00
AFFLUENTE2	AFFLUENTE2	298.5306	PF 2	29.76	70.50	72.15	72.15	72.97	0.010161	4.02	7.41	7.43	1.00
AFFLUENTE2	AFFLUENTE2	298.5306	PF 3	32.79	70.50	72.26	72.26	73.13	0.009949	4.15	7.90	7.53	1.00
AFFLUENTE2	AFFLUENTE2	298.5306	PF 4	36.80	70.50	72.40	72.40	73.34	0.009680	4.31	8.54	7.65	1.00
AFFLUENTE2	AFFLUENTE2	199.2157	PF 1	26.71	67.70	68.78	68.89	69.45	0.020084	3.62	7.38	7.66	1.18
AFFLUENTE2	AFFLUENTE2	199.2157	PF 2	29.76	67.70	68.84	69.19	69.57	0.020717	3.79	7.85	7.76	1.20
AFFLUENTE2	AFFLUENTE2	199.2157	PF 3	32.79	67.70	68.90	69.25	69.69	0.021328	3.95	8.31	7.85	1.22
AFFLUENTE2	AFFLUENTE2	199.2157	PF 4	36.80	67.70	68.97	69.32	69.85	0.022116	4.15	8.88	7.96	1.25
AFFLUENTE2	AFFLUENTE2	172.6234	PF 1	26.71	67.00	68.00	68.20	68.81	0.026473	3.99	6.69	7.34	1.33
AFFLUENTE2	AFFLUENTE2	172.6234	PF 2	29.76	67.00	68.08	68.29	68.94	0.025895	4.11	7.25	7.44	1.33
AFFLUENTE2	AFFLUENTE2	172.6234	PF 3	32.79	67.00	68.15	68.37	69.05	0.025433	4.21	7.79	7.53	1.32
AFFLUENTE2	AFFLUENTE2	172.6234	PF 4	36.80	67.00	68.24	68.47	69.20	0.025095	4.35	8.46	7.65	1.32
AFFLUENTE2	AFFLUENTE2	29.544	PF 1	26.71	63.00	63.97	64.37	64.80	0.028291	4.05	6.59	7.61	1.39
AFFLUENTE2	AFFLUENTE2	29.544	PF 2	29.76	63.00	64.03	64.44	64.93	0.028415	4.20	7.08	7.72	1.40
AFFLUENTE2	AFFLUENTE2	29.544	PF 3	32.79	63.00	64.09	64.49	65.05	0.028441	4.34	7.56	7.82	1.41
AFFLUENTE2	AFFLUENTE2	29.544	PF 4	36.80	63.00	64.17	64.56	65.20	0.028423	4.50	8.18	7.95	1.42
AFFLUENTE1	AFFLUENTE1	2620.273	PF 1	21.70	508.00	508.74	509.55	512.38	0.200007	8.46	2.57	3.98	3.36
AFFLUENTE1	AFFLUENTE1	2620.273	PF 2	24.04	508.00	508.78	509.68	512.66	0.200019	8.73	2.75	4.04	3.37
AFFLUENTE1	AFFLUENTE1	2620.273	PF 3	26.37	508.00	508.83	509.81	512.93	0.200056	8.98	2.94	4.10	3.39
AFFLUENTE1	AFFLUENTE1	2620.273	PF 4	29.46	508.00	508.88	509.94	513.27	0.200047	9.28	3.17	4.18	3.40
AFFLUENTE1	AFFLUENTE1	2069.463	PF 1	21.70	360.00	360.44	361.53	371.34	1.022563	14.62	1.48	3.68	7.35
AFFLUENTE1	AFFLUENTE1	2069.463	PF 2	24.04	360.00	360.48	361.63	371.60	0.951264	14.77	1.63	3.74	7.15
AFFLUENTE1	AFFLUENTE1	2069.463	PF 3	26.37	360.00	360.52	361.73	371.81	0.889848	14.89	1.77	3.80	6.96
AFFLUENTE1	AFFLUENTE1	2069.463	PF 4	29.46	360.00	360.80	361.86	366.03	0.260957	10.13	2.91	4.24	3.90
AFFLUENTE1	AFFLUENTE1	1618.838	PF 1	21.70	294.00	294.77	295.37	297.60	0.146587	7.45	2.91	4.54	2.97
AFFLUENTE1	AFFLUENTE1	1618.838	PF 2	24.04	294.00	294.82	295.41	297.83	0.146599	7.68	3.13	4.64	2.99
AFFLUENTE1	AFFLUENTE1	1618.838	PF 3	26.37	294.00	294.86	295.45	298.04	0.146614	7.90	3.34	4.73	3.00
AFFLUENTE1	AFFLUENTE1	1618.838	PF 4	29.46	294.00	294.92	295.49	298.31	0.146643	8.16	3.61	4.84	3.02
AFFLUENTE1	AFFLUENTE1	832.589	PF 1	21.70	184.00	184.78	185.45	187.52	0.139955	7.33	2.96	4.57	2.91
AFFLUENTE1	AFFLUENTE1	832.589	PF 2	24.04	184.00	184.83	185.51	187.74	0.139963	7.56	3.18	4.66	2.92
AFFLUENTE1	AFFLUENTE1	832.589	PF 3	26.37	184.00	184.88	185.56	187.95	0.139966	7.77	3.39	4.75	2.93
AFFLUENTE1	AFFLUENTE1	832.589	PF 4	29.46	184.00	184.93	185.63	188.22	0.139959	8.03	3.67	4.87	2.95
AFFLUENTE1	AFFLUENTE1	417.697	PF 1	21.70	138.00	138.74	139.33	140.94	0.111398	6.57	3.30	4.98	2.58
AFFLUENTE1	AFFLUENTE1	417.697	PF 2	24.04	138.00	138.78	139.42	141.14	0.111417	6.80	3.54	5.04	2.59
AFFLUENTE1	AFFLUENTE1	417.697	PF 3	26.37	138.00	138.83	139.50	141.32	0.111330	7.00	3.77	5.10	2.60
AFFLUENTE1	AFFLUENTE1	417.697	PF 4	29.46	138.00	138.89	139.62	141.56	0.111341	7.25	4.06	5.18	2.61
AFFLUENTE1	AFFLUENTE1	173.2672	PF 1	21.70	126.50	127.46	127.83	128.67	0.046656	4.89	4.44	5.28	1.70
AFFLUENTE1	AFFLUENTE1	173.2672	PF 2	24.04	126.50	127.52	127.92	128.82	0.046821	5.05	4.76	5.36	1.71
AFFLUENTE1	AFFLUENTE1	173.2672	PF 3	26.37	126.50	127.58	128.21	128.95	0.046927	5.20	5.07	5.43	1.72
AFFLUENTE1	AFFLUENTE1	173.2672	PF 4	29.46	126.50	127.65	128.30	129.12	0.046980	5.38	5.48	5.53	1.73
AFFLUENTE1	AFFLUENTE1	26.79045	PF 1	21.70	119.00	119.89	120.39	121.16	0.052177	4.99	4.35	5.78	1.83
AFFLUENTE1	AFFLUENTE1	26.79045	PF 2	24.04	119.00	119.94	120.44	121.29	0.052181	5.15	4.67	5.89	1.84
AFFLUENTE1	AFFLUENTE1	26.79045	PF 3	26.37	119.00	120.00	120.49	121.42	0.052164	5.29	4.98	5.99	1.85
AFFLUENTE1	AFFLUENTE1	26.79045	PF 4	29.46	119.00	120.06	120.54	121.60	0.051654	5.51	5.41	8.38	1.86