

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

ANEXOS



VISTO Y ADOPTADO INICIALMENTE PLENO:
01.03.97 Y PROVISIONALMENTE
13.12.07
LA SECRETARIA

ATP Ingenieros Consultores S.A.

INDICE ANEXOS

ANEXO I. REPORTAJE FOTOGRÁFICO.

ANEXO II. RESULTADOS DE LA MODELIZACIÓN DE HIDRÁULICA FLUVIAL.

ANEXO III. SECCIONES DE CONTROL

ANEXO IV. PARAMETROS HIDRÁULICOS Y COMPARATIVA DE CALADO E INUNDACIÓN.

ANEXO V. PLANOS.

Plano 1. Plano de situación y localización del Sector.

Plano 2. Topografía

Plano 3. Planta general de Zonificación. Ordenación Propuesta

Plano 4. Cuencas de escorrentía.

Plano 5. Red de Saneamiento. Planta general de aguas pluviales propuesta.

Plano 6. Red de Saneamiento. Planta general de aguas residuales propuesta.

Plano 7. Planta general DPH y bandas de inundación. Situación actual.

Plano 8. Planta general DPH y bandas de inundación. Situación futura.



APROBADO INICIALMENTE PLENO:
0 .01.07 Y PROVISIONALMENTE
PLENO: 10.12.07
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ANEXO I

REPORTAJE FOTOGRÁFICO

ADO INICIALMENTE PLENO;
Y PROVISIONALMENTE
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FOTO 1. Vista panorámica de la parcela desde su límite Noreste (valla) en dirección Sur.



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PLENO: 17.12.07
SECRETARÍA



FOTO 2. Vista panorámica de la parcela tomada desde su extremo Sureste. Se aprecian edificaciones existentes.



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PLENO: 0. 12.07
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FOTO 3. Arroyo de las Arboledas. Vista hacia aguas arriba.



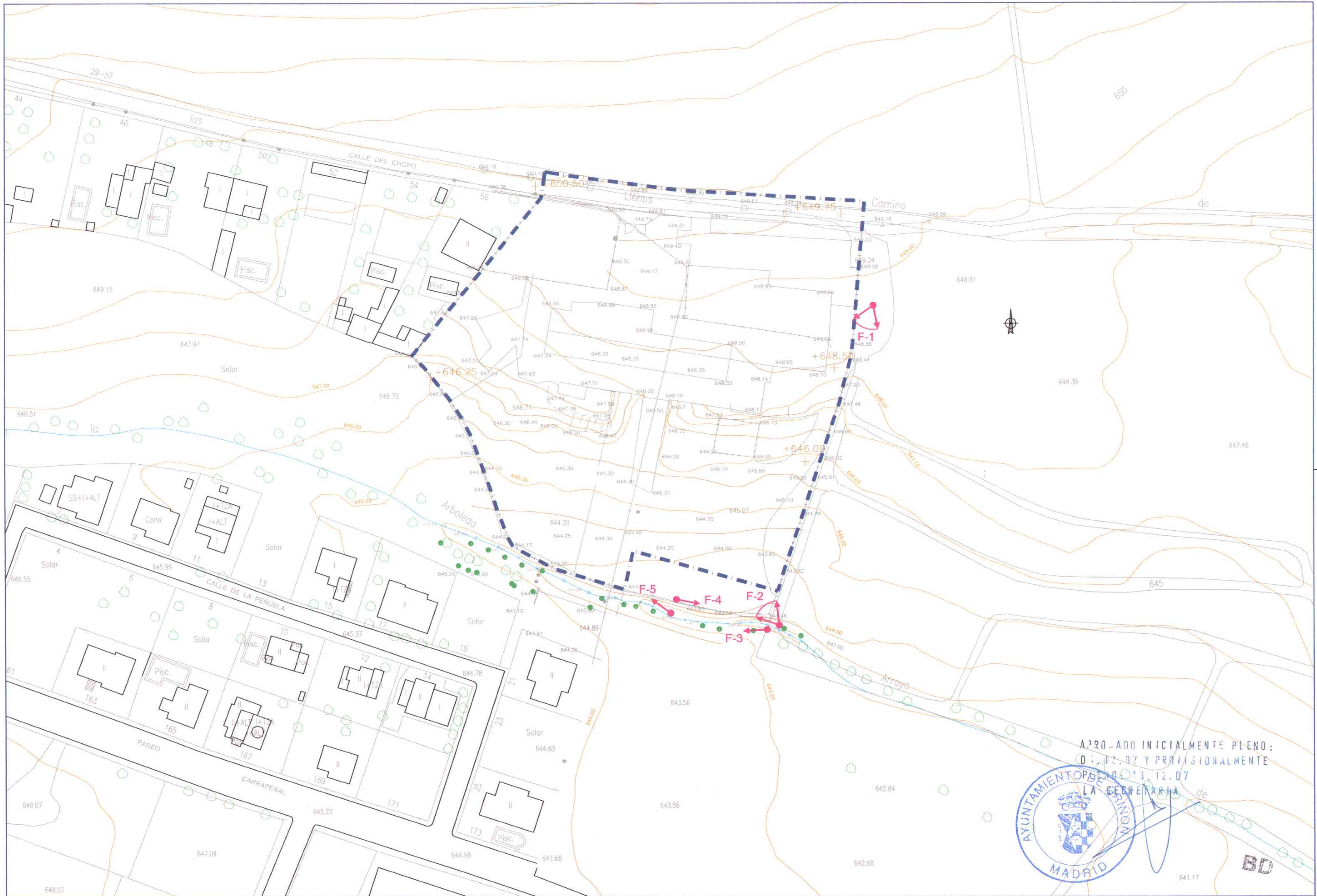
FOTO 4. Arroyo de las Arboledas en la zona donde se prevé incorporar las aguas de lluvia de la nueva actuación. Vista hacia aguas abajo



FOTO 5. Arroyo de las Arboledas en la zona donde se prevé incorporar las aguas de lluvia de la nueva actuación. Vista hacia aguas arriba

APROBADO INICIALMENTE PLENO:
02.02.07 Y PROVISIONALMENTE
PLENO: 13.12.07
LA SECRETARIA





APROBADO INICIALMENTE PLENO:
 03.07.07 Y PROVISIONALMENTE
 13.12.07
 AYUNTAMIENTO DE GRINÓN
 LA SECRETARÍA de
 MADRID

LA PROPIEDAD LONTANA SURESTE S.L.	EMPRESA CONSULTORA ATP Ingenieros Consultores S.A.	EL INGENIERO AUTOR DEL ESTUDIO N.º DE COLEGIADO 12.425 JORGE LUIS ALEXANDRI VARELA	ESCALAS 1/500 ORIGINAL: LINE-A1 GRAFICA	TÍTULO DEL ESTUDIO ESTUDIO HIDROLOGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98 DE LA MODIFICACION PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRINÓN RELATIVA A LA ORDENACION DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA" GRINÓN. MADRID	FECHA ENERO 2007	DENOMINACION REPORTAJE FOTOGRAFICO	PLANO N.º ANEXO N.º 1 HOJA 1 DE 1
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ANEXO II
RESULTADOS DE LA MODELIZACION
DE
HIDRAULICA FLUVIAL



SITUACION ACTUAL

APROBADO INICIALMENTE PLENO:
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ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

HEC-RAS Version 3.1.3 May 2005
 U.S. Army Corp of Engineers
 Hydrologic Engineering Center
 609 Second Street
 Davis, California

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X   X   XXXXXX   XXXX   XXXX   XX   XXXX
X   X   X       X   X   X   X   X   X
X   X   X       X       X   X   X   X
XXXXXXXX XXXX   X       XXX XXXX   XXXXXX   XXXX
X   X   X       X       X   X   X   X   X
X   X   X       X   X   X   X   X   X   X
X   X   XXXXXX   XXXX   X   X   X   X   XXXXX
    
```

PROJECT DATA

Project Title: PEUELA
 Project File : PEUELA.prj
 Run Date and Time: 12/01/2007 9:49:16

Project in SI units

PLAN DATA

Plan Title: Plan 22
 Plan File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.p22

Geometry Title: trasfotos
 Geometry File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.g04

Flow Title : PRE_UE-24_SIMPL
 Flow File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.f04

Plan Summary Information:

Number of: Cross Sections = 19 Multiple Openings = 0
 Culverts = 0 Inline Structures = 0
 Bridges = 0 Lateral Structures = 0

Computational Information

Water surface calculation tolerance = 0.003
 Critical depth calculation tolerance = 0.003
 Maximum number of iterations = 20
 Maximum difference tolerance = 0.1
 Flow tolerance factor = 0.001

Computation Options

Critical depth computed only where necessary
 Conveyance Calculation Method: At breaks in n values only
 Friction Slope Method: Average Conveyance
 Computational Flow Regime: Mixed Flow

PROBADO INICIALMENTE PLENO:
 0.03.07 Y PROVISIONALMENTE

PLENO: 13.12.07

LA SECRETARIA



FLOW DATA

Flow Title: PRE_UE-24_SIMPL
 Flow File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.f04

Flow Data (m3/s)

River	Reach	RS	T=5	T=500
PEÑUELA	UNICO	-300	.0045	1.47

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
PEÑUELA	UNICO	T=5	Normal S = 0.0099	Normal S = 0.0129
PEÑUELA	UNICO	T=500	Normal S = 0.0099	Normal S = 0.0129

GEOMETRY DATA

Geometry Title: trasfotos
 Geometry File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.g04

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Anexo II

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -300

INPUT

Description:

Station Elevation Data		num=		17					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-71.24	651.07	-70.61	651	-39.17	649	-31.44	648	-23.83	647.59
-15.37	647	-.75	646.5	-.75	646	0	646	.75	646
.75	646.45	11.23	646.62	39.51	647	62.82	648.15	71.44	648.28
72.83	648	93.4	649						

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-71.24	.07	-.75	.05	.75	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	-.75	.75		10	10		.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -310

INPUT

Description:

Station Elevation Data		num=		15					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-71.36	651	-71.28	650.99	-40.25	649	-32.75	648	-23.14	647.41
-15.97	647	-.75	646.36	-.75	645.91	0	645.91	.75	645.91
.75	646.36	10.19	646.48	15.03	647.67	78.34	648.84	84.78	648

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-71.36	.07	-.75	.05	.75	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	-.75	.75		20	20		.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -330

INPUT

Description:

Station Elevation Data		num=		17					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-74.95	651	-68.63	650.51	-57.79	650	-47.42	649	-36.13	648
-34.11	647.84	-20.76	647	-17.52	646.91	0	646.17	.17	646.16
.19	645.71	1.5	645.71	1.7	646.17	10.87	646.25	21.75	647.41
84.35	648.56	94.64	648						

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-74.95	.07	0	.05	1.7	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	1.7		16	16		.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -346

INPUT

Description:

Station Elevation Data		num=		21					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-66.94	650	-64.65	649.89	-54.55	649	-42.13	648	-29.13	647
-24.4	646.83	-8.41	646.36	-.03	646.01	0	646.01	.05	645.55
.55	645.55	.6	646	.65	646	.65	645.55	1.65	645.65
2	645.9	3.58	646	9.65	646.08	24.72	647.25	35.88	648.22
95.96	648								

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-66.94	.07	-.03	.05	2	.07

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13.12.07

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ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	-03	2		14	14	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -360

INPUT

Description:

Station	Elevation	Data	num=	17					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-95.8	650	-63.61	649.29	-60	649	-45.48	648	-32.97	647
-22.53	646.51	-5.92	645.92	-5.89	645.85	0	645.41	.03	645.4
.1	645	1.6	645	1.8	645.4	7.07	645.9	10.05	646
24.07	647.07	85.19	648.29						

Manning's n	Values	num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
-95.8	.07	0	.05	1.8	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	0	1.8		20	20	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -380

INPUT

Description:

Station	Elevation	Data	num=	19					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-98.11	650	-85.58	649	-59.27	648.77	-43.98	648	-29.99	647
-15.48	646.11	-12.41	646	-5.4	645.01	-5.27	645	0	644.91
.21	644.91	.3	644.46	1.8	644.46	2	644.92	6.38	645
11.73	645.63	22.38	646	28.85	647.06	91.2	647.04		

Manning's n	Values	num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
-98.11	.07	0	.05	2	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	0	2		20	20	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -400

INPUT

Description:

Station	Elevation	Data	num=	16					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-91.75	649	-67.35	648	-53	647.72	-35.21	647	-22.36	646
-20.52	645.86	-4.89	645	0	644.75	.02	644.75	.1	644.3
1.7	644.3	1.9	644.8	7.98	645	15.49	645.38	32.19	646.78
93.68	646.18								

Manning's n	Values	num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
-91.75	.07	0	.05	1.9	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	0	1.9		40	40	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -440

INPUT

Description:

Station	Elevation	Data	num=	18					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-56.13	647.05	-52.36	647	-37.56	646	-12.36	645	-5.27	644.77
-1.1	644.45	-1	644	-2	644	-1.17	644.42	0	644.44
.23	644.42	.3	643.97	1.8	643.97	2	644.42	644.87	
25.37	645	35.17	646.05	95.77	646				

Manning's n	Values	num=	3		
Sta	n Val	Sta	n Val	Sta	n Val



ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

-56.13	.07	-1.1	.05	2	.07				
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.		
-1.1	2	50	50	50	.1	.3			

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -490

INPUT

Description:

Station Elevation Data num= 19									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-70.11	647.28	-46.27	647	-34.77	646	-20.49	645.06	-19.64	645
-15.57	644.58	-3.26	644.09	-1.5	644	-1.3	643.57	-.5	643.57
-.48	644.02	0	644.02	.1	643.55	1.6	643.55	1.7	644
16.45	644.15	63.02	644.26	92.52	646	95.75	645		

Manning's n Values

num= 3					
Sta	n Val	Sta	n Val	Sta	n Val
-70.11	.07	-1.5	.05	1.7	.07

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
-1.5	1.7	10	10	10	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -500

INPUT

Description:

Station Elevation Data num= 21									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-71.17	647.3	-48.03	647	-37.51	646	-21.03	645	-20.46	644.85
-16	644.48	-3.38	644	-3.09	643.93	-1.3	643.85	-1.2	643.4
-.4	643.4	-.37	643.82	0	643.82	.05	643.35	1.6	643.35
1.7	643.85	16.37	643.98	22.73	644	37.27	644	56.81	644
91.99	646								

Manning's n Values

num= 3					
Sta	n Val	Sta	n Val	Sta	n Val
-71.17	.07	-1.3	.05	1.7	.07

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
-1.3	1.7	10	10	10	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -510

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-71.85	647.32	-49.92	647	-39.5	646	-22.68	645	-20.61	644.69
-15.79	644.38	-3.92	644	-3.63	643.71	-.8	643.6	-.75	643.15
-.3	643.15	-.27	643.59	0	643.59	.1	643.6	.15	643.1
1.6	643.1	1.7	643.65	16.46	643.75	85.94	644	92.08	645.35

Manning's n Values

num= 3					
Sta	n Val	Sta	n Val	Sta	n Val
-71.85	.07	-.8	.05	1.7	.07

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
-.8	1.7	10	10	10	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -520

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-72.82	647.36	-56.85	647	-41.04	646	-24.91	645	-20.37	644.5
-15.14	644.27	-3.85	644	-3.76	643.49	-1	643.35	-.9	643
-.2	643	-.1	643.35	0	643.36	.26	643.35	.26	643.98
1.8	642.95	2	643.35	16.97	643.55	93.18	645	93.18	644



APROBADO INICIALMENTE PLENO:
03.07 Y PROVISIONALMENTE
PLENO: 13.12.07
SECRETARIA

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -72.82 .07 -1 .05 2 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -1 2 20 20 20 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -540

INPUT

Description:

Station Elevation Data num= 19
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -69.17 647 -53.67 646 -35.27 645 -20.34 644.11 -14.27 644.04
 -10.58 644 -4.5 643.04 -3.54 643 -.61 642.93 -.55 642.61
 -.15 642.6 0 642.94 .15 642.5 1.5 642.5 1.6 642.95
 6.81 643 17.5 643.16 94.96 645 96.59 644

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -69.17 .07 -.61 .05 1.6 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -.61 1.6 40 40 40 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -580

INPUT

Description:

Station Elevation Data num= 17
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -70.67 648 -60.33 647 -46.8 646 -35.03 645 -28.66 644
 -21.67 643.68 -11.77 643.38 -11.16 643 -4.55 642.49 0 642.37
 .15 642.36 .2 641.93 1.8 641.93 2 642.4 19.14 642.7
 67.77 643 97.44 645

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -70.67 .07 0 .05 2 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 0 2 20 20 20 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -600

INPUT

Description:

Station Elevation Data num= 18
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -75.55 648 -55.41 647 -44.68 646 -29.74 645 -27.41 644
 -23.31 643.5 -11.42 643.04 -10.37 643 -5.51 642.22 -.18 642.08
 0 642.08 .5 641.58 2 641.58 2.1 642.1 19.31 642.52
 78.56 643 97.19 645 99.67 644

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -75.55 .07 -.18 .05 2.1 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -.18 2.1 20 20 20 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -620

INPUT

Description:

Station Elevation Data num= 19
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -59.2 647 -46.7 646 -35.42 645 -32.72 644
 -18.64 643 -8.72 642 -6.72 641.95 0 641.8



APROBADO INICIALMENTE PLENO:
 0 .02.07 Y PROVISIONALMENTE
 PLENO: 13.12.07

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

.5	641.3	2	641.3	2.1	641.9	5.3	642	18.83	642.34
80.9	643	81.01	643	93.73	644	95.23	645		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-59.2	.07	0	.05	2.1	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	2.1		30	30		.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -650

INPUT

Description:

Station Elevation Data num= 19

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-78.95	647	-69.49	646	-52.64	645	-44.54	644	-29.58	643.06
-27.88	643	-19.7	642	-6.49	641.56	0	641.41	.31	641.4
.4	641	2	641	2.15	641.5	14.76	642	17.36	642.04
79.32	643	80.42	644.08	90.92	644	98.92	645		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-78.95	.07	0	.05	2.15	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	2.15		25	25		.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -675

INPUT

Description:

Station Elevation Data num= 20

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-73.59	647	-66.17	646	-53.24	645	-42.34	644	-30.09	643
-22.05	642.13	-20.45	642	-3.92	641.23	-.8	641.1	-.4	640.68
0	641.08	.36	641.07	.4	640.6	2	640.75	2.1	641.1
19.77	641.56	48.05	642	76.64	643.85	81.05	643	94.15	644

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-73.59	.07	-.8	.05	2.1	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	-.8	2.1		25	25		.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -700

INPUT

Description:

Station Elevation Data num= 20

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-98.82	647	-72.82	647	-51.6	646	-50.39	645	-40.88	644
-30.12	643.09	-29.4	643	-21.14	642	-8.98	641	-4.89	640.8
0	640.62	.33	640.61	.4	640.15	1.9	640.2	2	640.6
17.69	640.98	21.48	641	60.39	642	73.33	643.52	82.89	643

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-98.82	.07	0	.05	2	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	2		1169	1169		.1	.3

SUMMARY OF MANNING'S N VALUES

River: PEÑUELA

Reach	River Sta.	n1	n2
UNICO	-300	.07	.05
UNICO	-310	.07	.05

APROBADO INICIALMENTE PLENO:
01.02.07 Y PROVISIONALMENTE

PLENO: 13.12.07

SECRETARIA



ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

UNICO	-330	.07	.05	.07
UNICO	-346	.07	.05	.07
UNICO	-360	.07	.05	.07
UNICO	-380	.07	.05	.07
UNICO	-400	.07	.05	.07
UNICO	-440	.07	.05	.07
UNICO	-490	.07	.05	.07
UNICO	-500	.07	.05	.07
UNICO	-510	.07	.05	.07
UNICO	-520	.07	.05	.07
UNICO	-540	.07	.05	.07
UNICO	-580	.07	.05	.07
UNICO	-600	.07	.05	.07
UNICO	-620	.07	.05	.07
UNICO	-650	.07	.05	.07
UNICO	-675	.07	.05	.07
UNICO	-700	.07	.05	.07

SUMMARY OF REACH LENGTHS

River: PEÑUELA

Reach	River Sta.	Left	Channel	Right
UNICO	-300	10	10	10
UNICO	-310	20	20	20
UNICO	-330	16	16	16
UNICO	-346	14	14	14
UNICO	-360	20	20	20
UNICO	-380	20	20	20
UNICO	-400	40	40	40
UNICO	-440	50	50	50
UNICO	-490	10	10	10
UNICO	-500	10	10	10
UNICO	-510	10	10	10
UNICO	-520	20	20	20
UNICO	-540	40	40	40
UNICO	-580	20	20	20
UNICO	-600	20	20	20
UNICO	-620	30	30	30
UNICO	-650	25	25	25
UNICO	-675	25	25	25
UNICO	-700	1169	1169	1169

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS

River: PEÑUELA

Reach	River Sta.	Contr.	Expan.
UNICO	-300	.1	.3
UNICO	-310	.1	.3
UNICO	-330	.1	.3
UNICO	-346	.1	.3
UNICO	-360	.1	.3
UNICO	-380	.1	.3
UNICO	-400	.1	.3
UNICO	-440	.1	.3
UNICO	-490	.1	.3
UNICO	-500	.1	.3
UNICO	-510	.1	.3
UNICO	-520	.1	.3
UNICO	-540	.1	.3
UNICO	-580	.1	.3
UNICO	-600	.1	.3
UNICO	-620	.1	.3
UNICO	-650	.1	.3
UNICO	-675	.1	.3
UNICO	-700	.1	.3

APROBADO INICIALMENTE PLENO:
0 . J. 97 Y PROVISIONALMENTE

PLENO: 13.12.07

LA SECRETARÍA

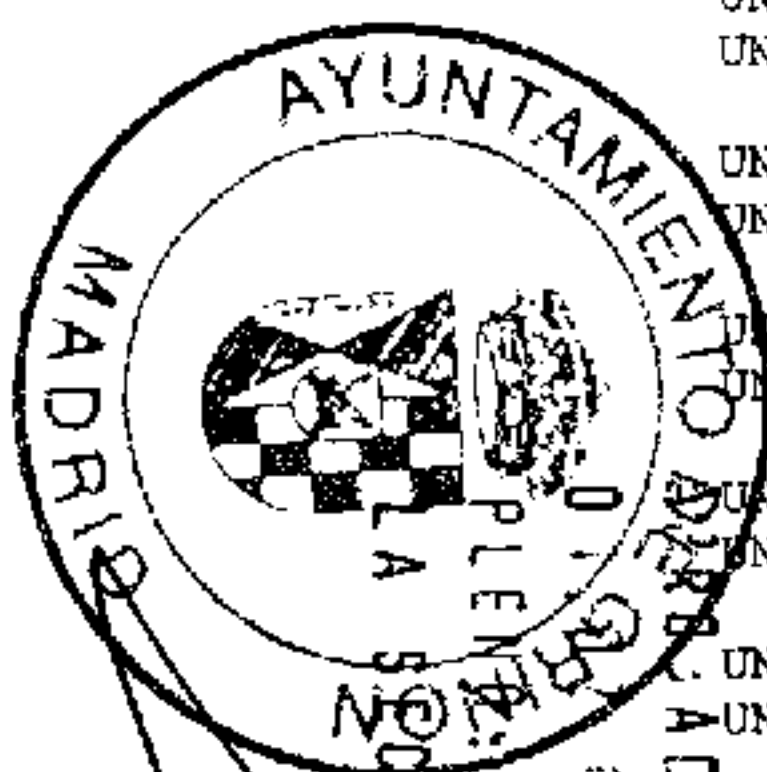


ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1684/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

Profile Output Table - Standard Table 1

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
UNICO	-300	T=5	0.00	646.00	646.02	646.01	646.02	0.009607	0.15	0.03	1.50	0.32
UNICO	-300	T=500	1.47	646.00	646.64	646.59	646.68	0.011053	1.12	2.31	17.23	0.45
UNICO	-310	T=5	0.00	645.91	645.93		645.93	0.008954	0.14	0.03	1.50	0.31
UNICO	-310	T=500	1.47	645.91	646.53		646.57	0.011253	1.12	2.26	15.08	0.46
UNICO	-330	T=5	0.00	645.71	645.73		645.73	0.011278	0.16	0.03	1.32	0.35
UNICO	-330	T=500	1.47	645.71	646.35		646.38	0.007622	0.94	2.75	16.22	0.40
UNICO	-346	T=5	0.00	645.55	645.57	645.56	645.57	0.008941	0.13	0.03	1.76	0.30
UNICO	-346	T=500	1.47	645.55	646.05	645.98	646.15	0.033165	1.49	1.18	8.03	0.70
UNICO	-360	T=5	0.00	645.00	645.01	645.01	645.02	0.232652	0.38	0.01	1.51	1.37
UNICO	-360	T=500	1.47	645.00	645.47	645.47	645.65	0.038603	1.87	0.83	3.35	0.90
UNICO	-380	T=5	0.00	644.46	644.48	644.47	644.48	0.009487	0.14	0.03	1.51	0.32
UNICO	-380	T=500	1.47	644.46	645.12	645.02	645.15	0.005431	0.84	2.84	13.57	0.35
UNICO	-400	T=5	0.00	644.30	644.32	644.31	644.32	0.006774	0.13	0.04	1.61	0.27
UNICO	-400	T=500	1.47	644.30	644.93		644.99	0.011087	1.19	1.65	9.15	0.50
UNICO	-440	T=5	0.00	643.97	643.99	643.98	643.99	0.010468	0.15	0.03	1.51	0.34
UNICO	-440	T=500	1.47	643.97	644.61		644.64	0.006729	0.83	2.11	10.29	0.36
UNICO	-490	T=5	0.00	643.55	643.57	643.56	643.58	0.006822	0.11	0.04	2.31	0.27
UNICO	-490	T=500	1.47	643.55	644.05		644.12	0.018030	1.13	1.44	9.54	0.57
UNICO	-500	T=5	0.00	643.35	643.36	643.36	643.37	0.349608	0.42	0.01	1.55	1.64
UNICO	-500	T=500	1.47	643.35	643.88		643.94	0.017248	1.13	1.34	6.66	0.55
UNICO	-510	T=5	0.00	643.10	643.12	643.11	643.12	0.006301	0.13	0.03	1.46	0.27
UNICO	-510	T=500	1.47	643.10	643.68	643.50	643.75	0.020631	1.23	1.31	8.60	0.57
UNICO	-520	T=5	0.00	642.95	642.98	642.97	642.98	0.065145	0.28	0.02	1.29	0.78
UNICO	-520	T=500	1.47	642.95	643.39	643.32	643.49	0.033095	1.43	1.08	6.57	0.79
UNICO	-540	T=5	0.00	642.50	642.52	642.51	642.52	0.011486	0.16	0.03	1.36	0.35
UNICO	-540	T=500	1.47	642.50	643.08	642.92	643.12	0.010777	1.00	2.33	17.08	0.45
UNICO	-580	T=5	0.00	641.93	641.95	641.94	641.95	0.018662	0.17	0.03	1.61	0.43
UNICO	-580	T=500	1.47	641.93	642.48	642.37	642.57	0.017918	1.37	1.44	11.19	0.62
UNICO	-600	T=5	0.00	641.58	641.60	641.59	641.60	0.016224	0.17	0.03	1.52	0.41
UNICO	-600	T=500	1.47	641.58	642.18		642.25	0.014114	1.26	1.42	9.12	0.57
UNICO	-620	T=5	0.00	641.30	641.32	641.31	641.32	0.011923	0.15	0.03	1.52	0.36
UNICO	-620	T=500	1.47	641.30	641.92		641.99	0.011838	1.20	1.51	8.47	0.52
UNICO	-650	T=5	0.00	641.00	641.02	641.01	641.02	0.008542	0.14	0.03	1.61	0.30
UNICO	-650	T=500	1.47	641.00	641.59		641.65	0.011197	1.12	1.91	11.95	0.50



SECRETARIA

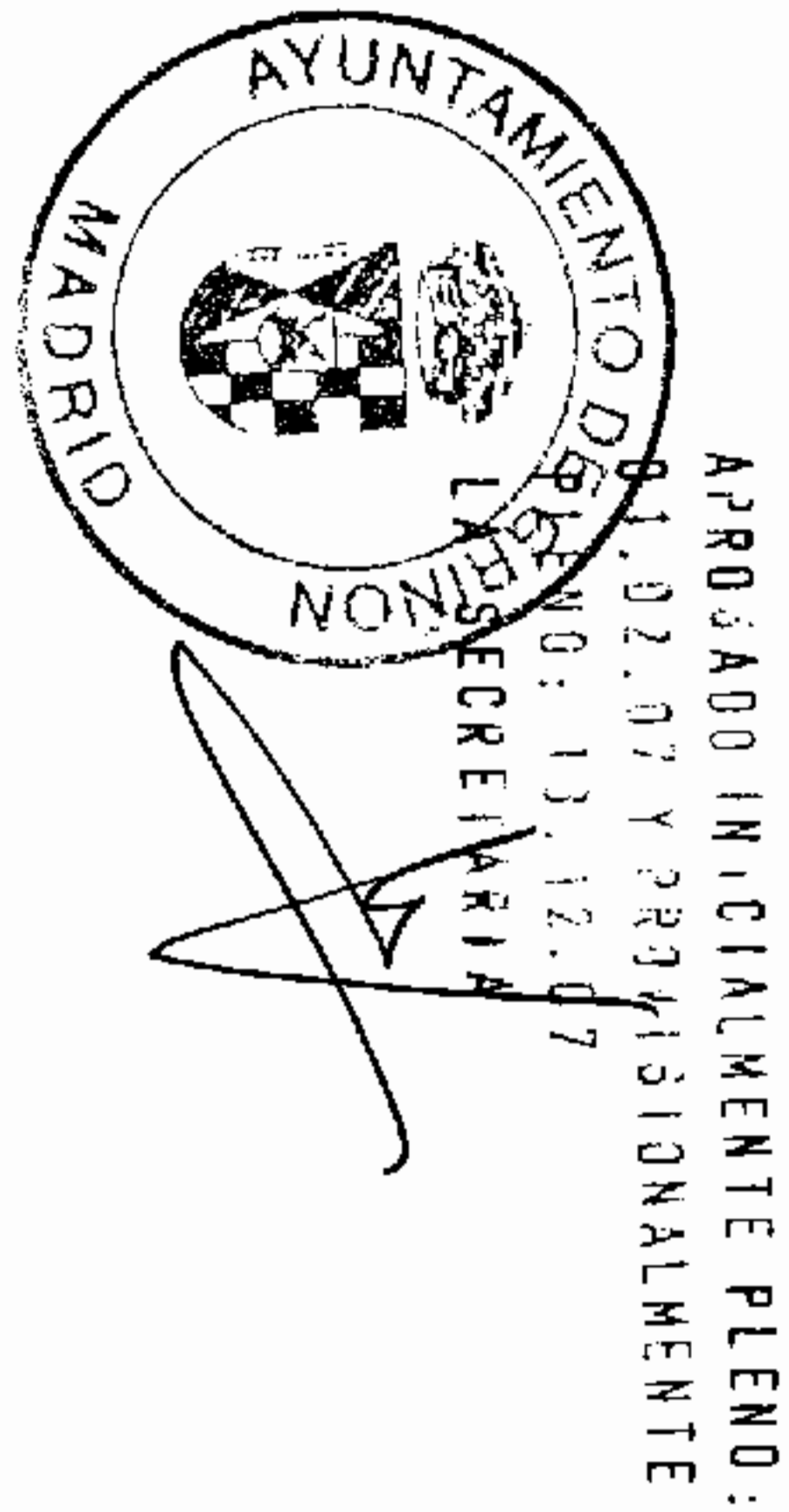
TP Ingenieros Consultores S.A.

BD

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

UNICO	-675	T=5	0.00	640.60	640.65	640.64	640.66	0.029306	0.29	0.02	0.58	0.56
UNICO	-675	T=500	1.47	640.60	641.17	641.09	641.26	0.022711	1.29	1.28	7.58	0.67
UNICO	-700	T=5	0.00	640.15	640.19	640.18	640.19	0.012899	0.17	0.03	1.27	0.37
UNICO	-700	T=500	1.47	640.15	640.77	640.72	640.83	0.012914	1.18	1.93	13.17	0.53



SITUACION FUTURA



ADICIONALMENTE PLENO:
Y PROVISIONALMENTE
PLENO: 12.07
SECRETARIA

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

HEC-RAS Version 3.1.3 May 2005
 U.S. Army Corp of Engineers
 Hydrologic Engineering Center
 609 Second Street
 Davis, California

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X   X XXXXXX   XXXX   XXXX   XX   XXXX
X   X X       X   X   X   X   X   X
X   X X       X       X   X   X   X   X
XXXXXXXX XXXX   X       XXX XXXX XXXXXX XXXX
X   X X       X       X   X   X   X   X
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PROJECT DATA

Project Title: PEUELA
 Project File : PEUELA.prj
 Run Date and Time: 12/01/2007 8:41:14

Project in SI units

PLAN DATA

Plan Title: Plan 21
 Plan File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.p21

Geometry Title: trasfotos
 Geometry File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.g04

Flow Title : POST_UE-24_SIMPL
 Flow File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.f05

Plan Summary Information:

Number of: Cross Sections = 19 Multiple Openings = 0
 Culverts = 0 Inline Structures = 0
 Bridges = 0 Lateral Structures = 0

Computational Information

Water surface calculation tolerance = 0.003
 Critical depth calculation tolerance = 0.003
 Maximum number of iterations = 20
 Maximum difference tolerance = 0.1
 Flow tolerance factor = 0.001

Computation Options

Critical depth computed only where necessary
 Conveyance Calculation Method: At breaks in n values only
 Friction Slope Method: Average Conveyance
 Computational Flow Regime: Mixed Flow

APROBADO INICIALMENTE PLENO:
 0.32.07 Y PROVISIONALMENTE

PLENO: 13.12.07
 LA SECRETARIA



FLOW DATA

Flow Title: POST_UE-24_SIMPL
 Flow File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.f05

Flow Data (m3/s)

River	Reach	RS	T=5	T=500
PEÑUELA	UNICO	-300	.0045	1.47
PEÑUELA	UNICO	-500	.0825	1.65

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
PEÑUELA	UNICO	T=5	Normal S = 0.0099	Normal S = 0.0129
PEÑUELA	UNICO	T=500	Normal S = 0.0099	Normal S = 0.0129

GEOMETRY DATA

Geometry Title: trasfotos

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/96. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÓN (MADRID).

Anexo II

Geometry File : o:\2006-37_EH_UE34 LA RINCONERA\ESTUDIO HIDROLOGICO\HEC-RAS\PEUELA.g04

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -300

INPUT

Description:

Station Elevation Data num= 17									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-71.24	651.07	-70.61	651	-39.17	649	-31.44	648	-23.83	647.59
-15.37	647	-.75	646.5	-.75	646	0	646	.75	646
.75	646.45	11.23	646.62	39.51	647	62.82	648.15	71.44	648.28
72.83	648	93.4	649						

Manning's n Values num= 3					
Sta	n Val	Sta	n Val	Sta	n Val
-71.24	.07	-.75	.05	.75	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	-.75	.75		10	10	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -310

INPUT

Description:

Station Elevation Data num= 15									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-71.36	651	-71.28	650.99	-40.25	649	-32.75	648	-23.14	647.41
-15.97	647	-.75	646.36	-.75	645.91	0	645.91	.75	645.91
.75	646.36	10.19	646.48	15.03	647.67	78.34	648.84	84.78	648

Manning's n Values num= 3					
Sta	n Val	Sta	n Val	Sta	n Val
-71.36	.07	-.75	.05	.75	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	-.75	.75		20	20	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -330

INPUT

Description:

Station Elevation Data num= 17									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-74.95	651	-60.63	650.51	-57.79	650	-47.42	649	-36.13	648
-34.11	647.84	-20.76	647	-17.52	646.91	0	646.17	.17	646.16
.19	645.71	1.5	645.71	1.7	646.17	10.87	646.25	21.75	647.41
84.35	648.56	94.64	648						

Manning's n Values num= 3					
Sta	n Val	Sta	n Val	Sta	n Val
-74.95	.07	0	.05	1.7	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	0	1.7		16	16	.1	.3

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -346

INPUT

Description:

Station Elevation Data num= 21									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-66.94	650	-64.65	649.89	-54.55	649	-42.13	648	-.75	647.5
-24.4	646.83	-8.41	646.36	-.03	646.01	0	646.01	.65	645.55
.55	645.55	.6	646	.65	646	.65	645.55	1.9	645.55
2	645.9	3.58	646	9.65	646.08	24.72	647.25	85.88	648.92
95.96	648								

Manning's n Values num= 3					
Sta	n Val	Sta	n Val	Sta	n Val

APROBADO INICIALMENTE PLENO:
01.11.07 Y PROVISIONALMENTE
PLENO: 13.12.07



BD

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

-66.94	.07	-.03	.05	2	.07		
Bank Sta: Left	Right	Lengths: Left Channel		Right	Coeff Contr.	Expan.	
	-.03	2	14	14	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -360

INPUT

Description:

Station Elevation Data		num=		17			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-95.8	650	-63.61	649.29	-60	649	-45.48	648
-22.53	646.51	-5.92	645.92	-5.89	645.85	0	645.41
.1	645	1.6	645	1.8	645.4	7.07	645.9
24.07	647.07	85.19	648.29			10.05	646

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-95.8	.07	0	.05	1.8	.07

Bank Sta: Left	Right	Lengths: Left Channel		Right	Coeff Contr.	Expan.	
	0	1.8	20	20	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -380

INPUT

Description:

Station Elevation Data		num=		19			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-98.11	650	-85.58	649	-59.27	648.77	-43.98	648
-15.48	646.11	-12.41	646	-5.4	645.01	-5.27	645
.21	644.91	.3	644.46	1.8	644.46	2	644.92
11.73	645.63	22.38	646	28.85	647.06	91.2	647.04

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-98.11	.07	0	.05	2	.07

Bank Sta: Left	Right	Lengths: Left Channel		Right	Coeff Contr.	Expan.	
	0	2	20	20	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -400

INPUT

Description:

Station Elevation Data		num=		16			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-91.75	649	-67.35	648	-53	647.72	-35.21	647
-20.52	645.86	-4.89	645	0	644.75	.02	644.75
1.7	644.3	1.9	644.8	7.98	645	15.49	645.38
93.68	646.18					32.19	646.78

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-91.75	.07	0	.05	1.9	.07

Bank Sta: Left	Right	Lengths: Left Channel		Right	Coeff Contr.	Expan.	
	0	1.9	40	40	.1	.3	

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -440

INPUT

Description:

Station Elevation Data		num=		18			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-56.13	647.05	-52.36	647	-37.56	646	-12.36	645
-1.1	644.45	-1	644	-.2	644	-.17	644.42
.23	644.42	.3	643.97	1.8	643.97	2	644.5
25.37	645	35.17	646.05	95.77	646		



ADO INICIALMENTE PLENO:
12.07 Y PROVISIONALMENTE
13.12.07
LA SECRETARIA

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ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 64 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -56.13 .07 -1.1 .05 2 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -1.1 2 50 50 50 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -490

INPUT

Description:

Station Elevation Data num= 19
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -70.11 647.28 -46.27 647 -34.77 646 -20.49 645.06 -19.64 645
 -15.57 644.58 -3.26 644.09 -1.5 644 -1.3 643.57 -.5 643.57
 -.48 644.02 0 644.02 .1 643.55 1.6 643.55 1.7 644
 16.45 644.15 63.02 644.26 92.52 646 95.75 645

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -70.11 .07 -1.5 .05 1.7 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -1.5 1.7 10 10 10 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -500

INPUT

Description:

Station Elevation Data num= 21
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -71.17 647.3 -48.03 647 -37.51 646 -21.03 645 -20.46 644.85
 -16 644.48 -3.38 644 -3.09 643.93 -1.3 643.85 -1.2 643.4
 -.4 643.4 -.37 643.82 0 643.82 .05 643.35 1.6 643.35
 1.7 643.85 16.37 643.98 22.73 644 37.27 644 56.81 644
 91.99 646

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -71.17 .07 -1.3 .05 1.7 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -1.3 1.7 10 10 10 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -510

INPUT

Description:

Station Elevation Data num= 20
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -71.85 647.32 -49.92 647 -39.5 646 -22.68 645 -20.61 644.69
 -15.79 644.38 -3.92 644 -3.63 643.71 -.8 643.6 -.75 643.15
 -.3 643.15 -.27 643.59 0 643.59 .1 643.6 .15 643.1
 1.6 643.1 1.7 643.65 16.46 643.75 85.94 644 92.08 645.35

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -71.85 .07 -.8 .05 1.7 .07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 -.8 1.7 10 10 10 .1 .3

CROSS SECTION

RIVER: PEÑUELA
 REACH: UNICO RS: -520

INPUT

Description:

Station Elevation Data num= 20
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev

APROBADO INICIALMENTE PLENO:
 0.22.07 Y PROVISIONALMENTE



BD

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

-72.82	647.36	-56.85	647	-41.04	646	-24.91	645	-20.37	644.5
-15.14	644.27	-3.85	644	-3.76	643.49	-1	643.35	-.9	643
-.2	643	-.1	643.35	0	643.36	.26	643.35	.3	642.98
1.8	642.95	2	643.35	16.97	643.55	93.18	645	93.6	644

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-72.82	.07	-1	.05	2	.07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

-1	2	20	20	20	.1	.3
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CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -540

INPUT

Description:

Station Elevation Data num= 19

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-69.17	647	-53.67	646	-35.27	645	-20.34	644.11	-14.27	644.04
-10.58	644	-4.5	643.04	-3.54	643	-.61	642.93	-.55	642.61
-.15	642.6	0	642.94	.15	642.5	1.5	642.5	1.6	642.95
6.81	643	17.5	643.16	94.96	645	96.59	644		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-69.17	.07	-.61	.05	1.6	.07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

-.61	1.6	40	40	40	.1	.3
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CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -580

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-70.67	648	-60.33	647	-46.8	646	-35.03	645	-28.66	644
-21.67	643.68	-11.77	643.38	-11.16	643	-4.55	642.49	0	642.37
.15	642.36	.2	641.93	1.8	641.93	2	642.4	19.14	642.7
67.77	643	97.44	645						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-70.67	.07	0	.05	2	.07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

0	2	20	20	20	.1	.3
---	---	----	----	----	----	----

CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -600

INPUT

Description:

Station Elevation Data num= 18

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-75.55	648	-55.41	647	-44.68	646	-29.74	645	-27.41	644
-23.31	643.5	-11.42	643.04	-10.37	643	-5.51	642.22	-.18	642.08
0	642.08	.5	641.58	2	641.58	2.1	642.1	19.31	642.52
78.56	643	97.19	645	99.67	644				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-75.55	.07	-.18	.05	2.1	.07

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

-.18	2.1	20	20	20	.1	.3
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CROSS SECTION

RIVER: PEÑUELA
REACH: UNICO RS: -620

INPUT

30 ADD INICIALMENTE PLENO:
J. 07 Y PROVISIONALMENTE
17, 12.07



ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

Description:

Station Elevation Data num= 19									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-59.2	647	-46.7	646	-35.42	645	-32.72	644	-25.66	643.31
-18.64	643	-8.72	642	-6.72	641.95	0	641.8	.01	641.8
.5	641.3	2	641.3	2.1	641.9	5.3	642	18.83	642.34
80.9	643	81.01	643	93.73	644	95.23	645		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-59.2	.07	0	.05	2.1	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	2.1		30	30		.1	.3

CROSS SECTION

RIVER: PEÑUELA

REACH: UNICO RS: -650

INPUT

Description:

Station Elevation Data num= 19									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-78.95	647	-69.49	646	-52.64	645	-44.54	644	-29.58	643.06
-27.88	643	-19.7	642	-6.49	641.56	0	641.41	.31	641.4
.4	641	2	641	2.15	641.5	14.76	642	17.36	642.04
79.32	643	80.42	644.08	90.92	644	98.92	645		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-78.95	.07	0	.05	2.15	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	2.15		25	25		.1	.3

CROSS SECTION

RIVER: PEÑUELA

REACH: UNICO RS: -675

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-73.59	647	-66.17	646	-53.24	645	-42.34	644	-30.09	643
-22.05	642.13	-20.45	642	-3.92	641.23	-.8	641.1	-.4	640.68
0	641.08	.36	641.07	.4	640.6	2	640.75	2.1	641.1
19.77	641.56	48.05	642	76.64	643.85	81.05	643	94.15	644

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-73.59	.07	-.8	.05	2.1	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	-.8	2.1		25	25		.1	.3

CROSS SECTION

RIVER: PEÑUELA

REACH: UNICO RS: -700

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-98.82	647	-72.82	647	-51.6	646	-50.39	645	-40.88	644
-30.12	643.09	-29.4	643	-21.14	642	-8.98	641	-4	640.8
0	640.62	.33	640.61	.4	640.15	1.9	640.2	2	640.8
17.69	640.98	21.48	641	60.39	642	73.33	643		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-98.82	.07	0	.05	2	.07

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	2		1169	1169		.1	.3

SUMMARY OF MANNING'S N VALUES



ADO INICIALMENTE PLENO:
...07 Y PROVISIONALMENTE
...13.12.07

SECRETARIA

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

River: PEÑUELA

Reach	River Sta.	n1	n2	n3
UNICO	-300	.07	.05	.07
UNICO	-310	.07	.05	.07
UNICO	-330	.07	.05	.07
UNICO	-346	.07	.05	.07
UNICO	-360	.07	.05	.07
UNICO	-380	.07	.05	.07
UNICO	-400	.07	.05	.07
UNICO	-440	.07	.05	.07
UNICO	-490	.07	.05	.07
UNICO	-500	.07	.05	.07
UNICO	-510	.07	.05	.07
UNICO	-520	.07	.05	.07
UNICO	-540	.07	.05	.07
UNICO	-580	.07	.05	.07
UNICO	-600	.07	.05	.07
UNICO	-620	.07	.05	.07
UNICO	-650	.07	.05	.07
UNICO	-675	.07	.05	.07
UNICO	-700	.07	.05	.07

SUMMARY OF REACH LENGTHS

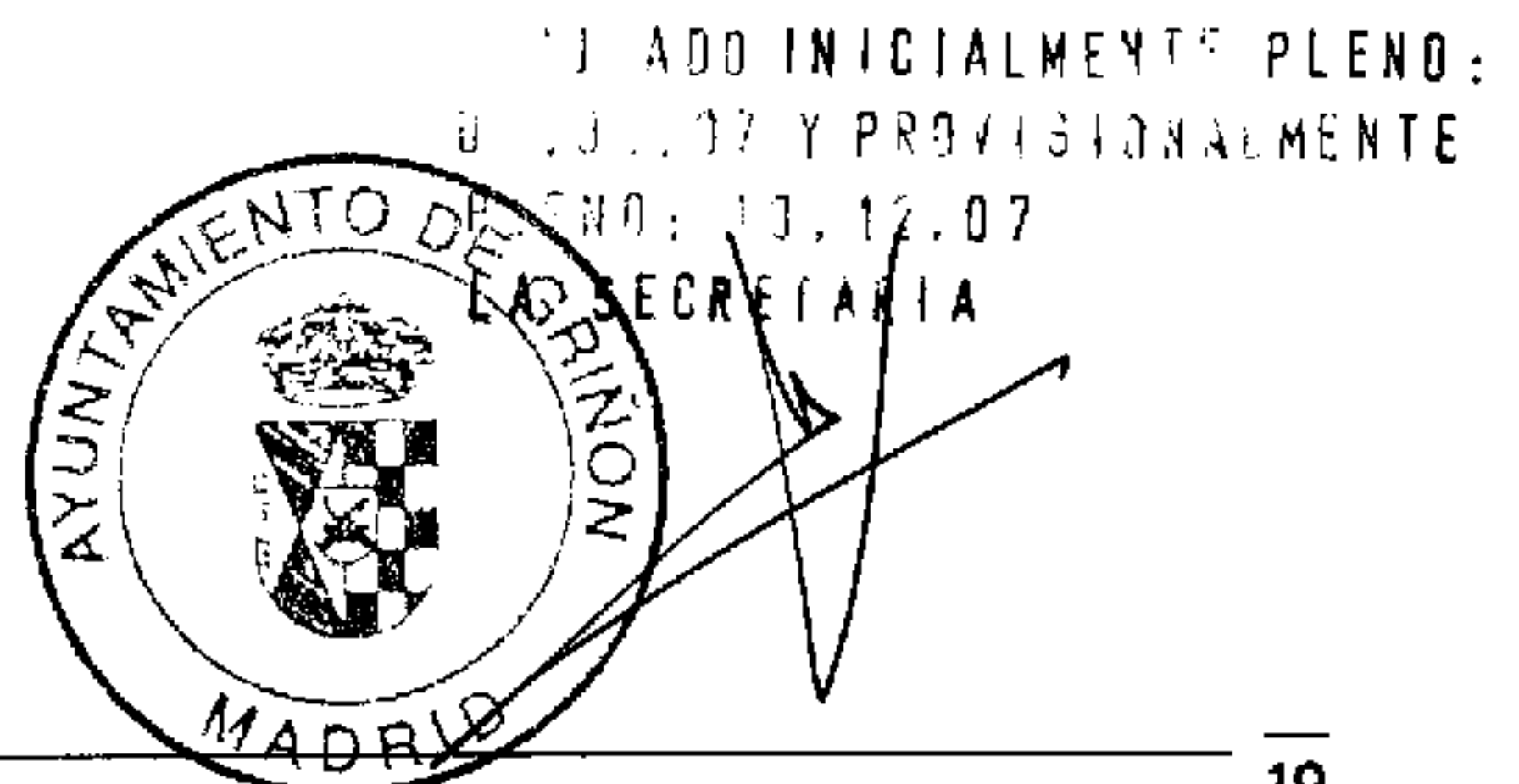
River: PEÑUELA

Reach	River Sta.	Left	Channel	Right
UNICO	-300	10	10	10
UNICO	-310	20	20	20
UNICO	-330	16	16	16
UNICO	-346	14	14	14
UNICO	-360	20	20	20
UNICO	-380	20	20	20
UNICO	-400	40	40	40
UNICO	-440	50	50	50
UNICO	-490	10	10	10
UNICO	-500	10	10	10
UNICO	-510	10	10	10
UNICO	-520	20	20	20
UNICO	-540	40	40	40
UNICO	-580	20	20	20
UNICO	-600	20	20	20
UNICO	-620	30	30	30
UNICO	-650	25	25	25
UNICO	-675	25	25	25
UNICO	-700	1169	1169	1169

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS

River: PEÑUELA

Reach	River Sta.	Contr.	Expan.
UNICO	-300	.1	.3
UNICO	-310	.1	.3
UNICO	-330	.1	.3
UNICO	-346	.1	.3
UNICO	-360	.1	.3
UNICO	-380	.1	.3
UNICO	-400	.1	.3
UNICO	-440	.1	.3
UNICO	-490	.1	.3
UNICO	-500	.1	.3
UNICO	-510	.1	.3
UNICO	-520	.1	.3
UNICO	-540	.1	.3
UNICO	-580	.1	.3
UNICO	-600	.1	.3
UNICO	-620	.1	.3
UNICO	-650	.1	.3
UNICO	-675	.1	.3
UNICO	-700	.1	.3

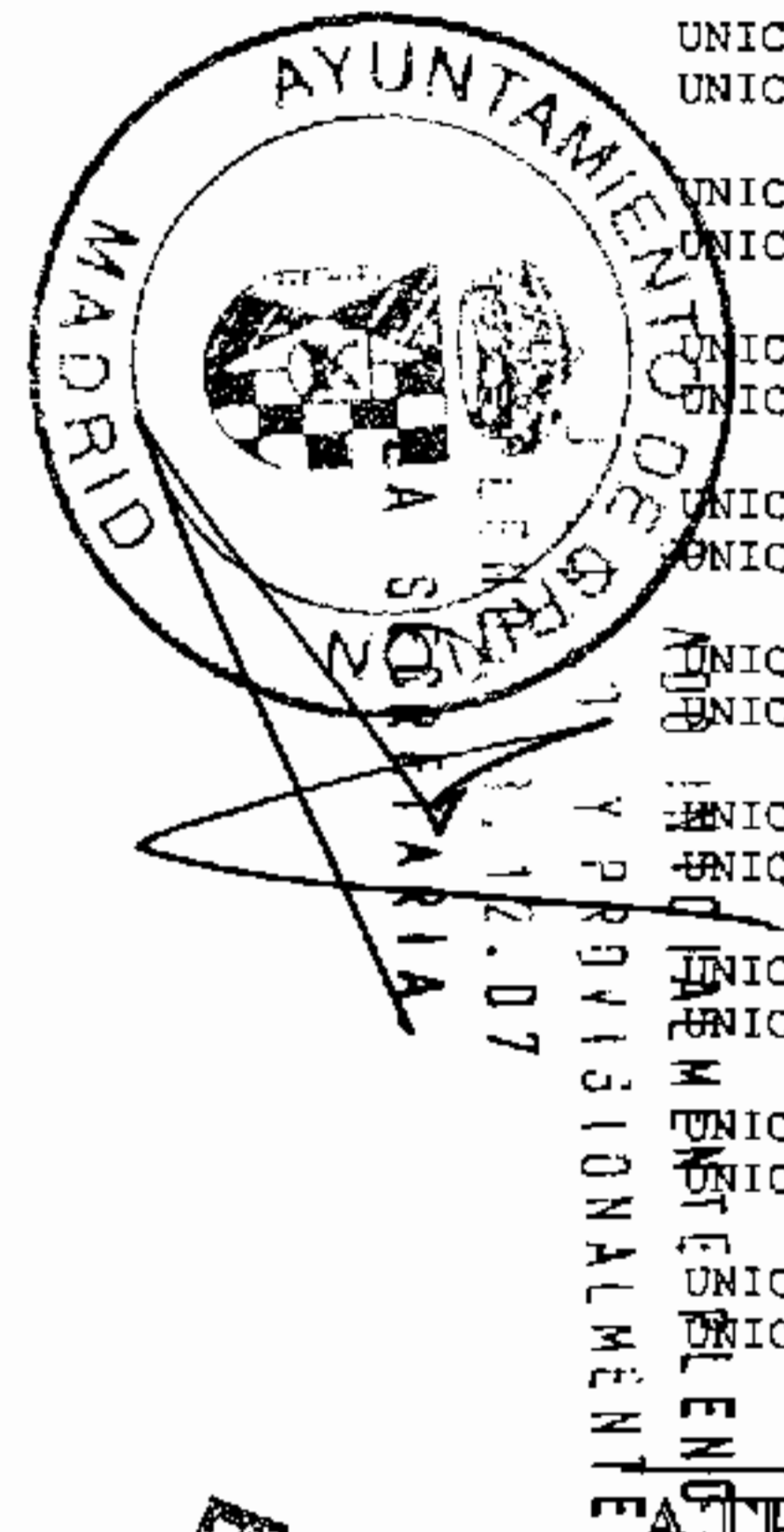


ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

Profile Output Table - Standard Table 1

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
UNICO	-300	T=5	0.00	646.00	646.03	646.01	646.03	0.004629	0.12	0.04	1.50	0.23
UNICO	-300	T=500	1.47	646.00	646.64	646.59	646.68	0.011053	1.12	2.31	17.23	0.45
UNICO	-310	T=5	0.00	645.91	645.92	645.92	645.93	0.032071	0.21	0.02	1.50	0.56
UNICO	-310	T=500	1.47	645.91	646.53	646.57	646.57	0.011253	1.12	2.26	15.08	0.46
UNICO	-330	T=5	0.00	645.71	645.74	645.72	645.74	0.004355	0.12	0.04	1.32	0.23
UNICO	-330	T=500	1.47	645.71	646.35	646.38	646.38	0.007622	0.94	2.75	16.22	0.40
UNICO	-346	T=5	0.00	645.55	645.56	645.56	645.56	0.064178	0.24	0.02	1.76	0.75
UNICO	-346	T=500	1.47	645.55	646.05	645.98	646.15	0.033165	1.49	1.18	8.03	0.70
UNICO	-360	T=5	0.00	645.00	645.02	645.01	645.02	0.018564	0.18	0.03	1.51	0.44
UNICO	-360	T=500	1.47	645.00	645.47	645.47	645.65	0.038603	1.87	0.83	3.35	0.90
UNICO	-380	T=5	0.00	644.46	644.47	644.47	644.48	0.043994	0.23	0.02	1.51	0.64
UNICO	-380	T=500	1.47	644.46	645.12	645.02	645.15	0.005444	0.85	2.84	13.57	0.35
UNICO	-400	T=5	0.00	644.30	644.33	644.31	644.33	0.002865	0.10	0.05	1.62	0.19
UNICO	-400	T=500	1.47	644.30	644.93	644.99	644.99	0.010654	1.17	1.70	9.38	0.49
UNICO	-440	T=5	0.00	643.97	643.98	643.98	643.98	0.124389	0.31	0.01	1.51	1.03
UNICO	-440	T=500	1.47	643.97	644.59	644.63	644.63	0.007473	0.86	1.98	9.52	0.38
UNICO	-490	T=5	0.00	643.55	643.61	643.56	643.61	0.000158	0.03	0.13	2.35	0.05
UNICO	-490	T=500	1.47	643.55	644.08	644.13	644.13	0.013938	1.04	1.71	12.43	0.51
UNICO	-500	T=5	0.08	643.35	643.42	643.42	643.44	0.071593	0.70	0.12	2.38	1.00
UNICO	-500	T=500	1.65	643.35	643.90	643.73	643.97	0.017931	1.19	1.53	9.66	0.56
UNICO	-510	T=5	0.08	643.10	643.22	643.17	643.23	0.009150	0.39	0.21	1.95	0.38
UNICO	-510	T=500	1.65	643.10	643.71	643.53	643.78	0.019619	1.25	1.65	13.79	0.56
UNICO	-520	T=5	0.08	642.95	643.04	643.03	643.06	0.042351	0.60	0.14	2.27	0.79
UNICO	-520	T=500	1.65	642.95	643.40	643.38	643.52	0.035402	1.53	1.19	7.97	0.82
UNICO	-540	T=5	0.08	642.50	642.63	642.57	642.64	0.012339	0.45	0.19	1.84	0.45
UNICO	-540	T=500	1.65	642.50	643.10	643.14	643.14	0.010661	1.02	2.66	18.45	0.45
UNICO	-580	T=5	0.08	641.93	642.03	641.99	642.04	0.018523	0.53	0.16	1.65	0.55
UNICO	-580	T=500	1.65	641.93	642.51	642.50	642.60	0.017756	1.40	1.70	12.85	0.62
UNICO	-600	T=5	0.08	641.58	641.68	641.70	641.70	0.015829	0.51	0.16	1.62	0.52
UNICO	-600	T=500	1.65	641.58	642.20	642.28	642.28	0.013742	1.28	1.70	11.31	0.57
UNICO	-620	T=5	0.08	641.30	641.41	641.37	641.42	0.011977	0.47	0.18	1.63	0.46
UNICO	-620	T=500	1.65	641.30	641.95	642.02	642.02	0.012349	1.26	1.72	10.18	0.53
UNICO	-650	T=5	0.08	641.00	641.12	641.06	641.13	0.008159	0.41	0.20	1.66	0.38
UNICO	-650	T=500	1.65	641.00	641.62	641.67	641.67	0.010902	1.14	2.22	13.27	0.50

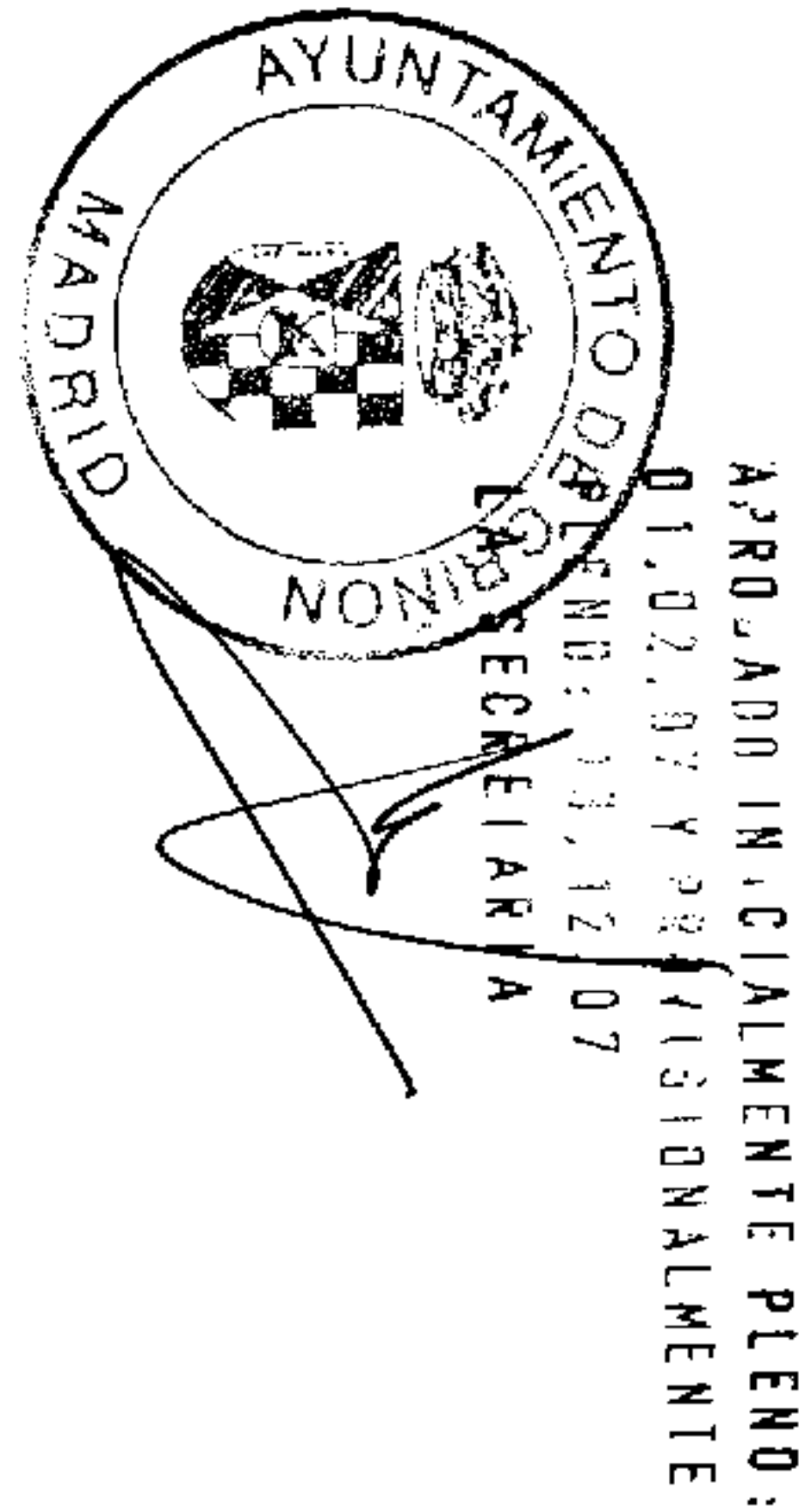


BD

ESTUDIO HIDROLÓGICO EN CUMPLIMIENTO DEL DECRETO 170/98 Y R.D. 1664/98. DE LA MODIFICACIÓN PUNTUAL DE LAS NN.SS. DE PLANEAMIENTO DE GRIÑÓN RELATIVA A LA ORDENACIÓN DE LA PARCELA SITA EN CALLE DEL CHOPO 54 "GRANJA LA RINCONERA". GRIÑÓN (MADRID).

Anexo II

UNICO	-675	T=5	0.08	640.60	640.76	640.74	640.78	0.030576	0.59	0.14	1.77	0.68
UNICO	-675	T=500	1.65	640.60	641.20	641.12	641.28	0.023115	1.35	1.45	8.84	0.68
UNICO	-700	T=5	0.08	640.15	640.29	640.24	640.30	0.012903	0.48	0.17	1.54	0.47
UNICO	-700	T=500	1.65	640.15	640.79	640.75	640.85	0.012919	1.21	2.20	14.54	0.53



ANEXO III
SECCIONES DE CONTROL

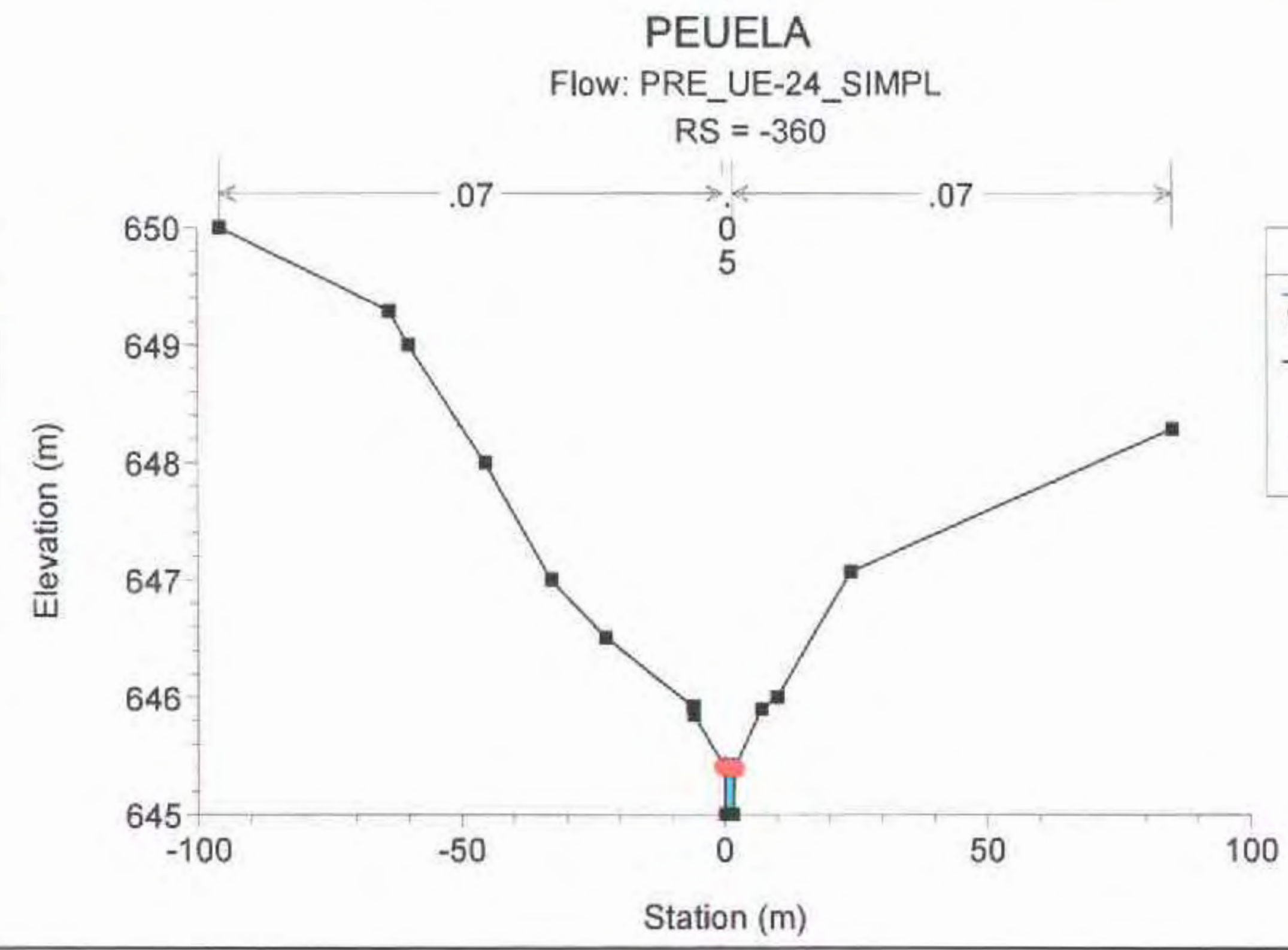
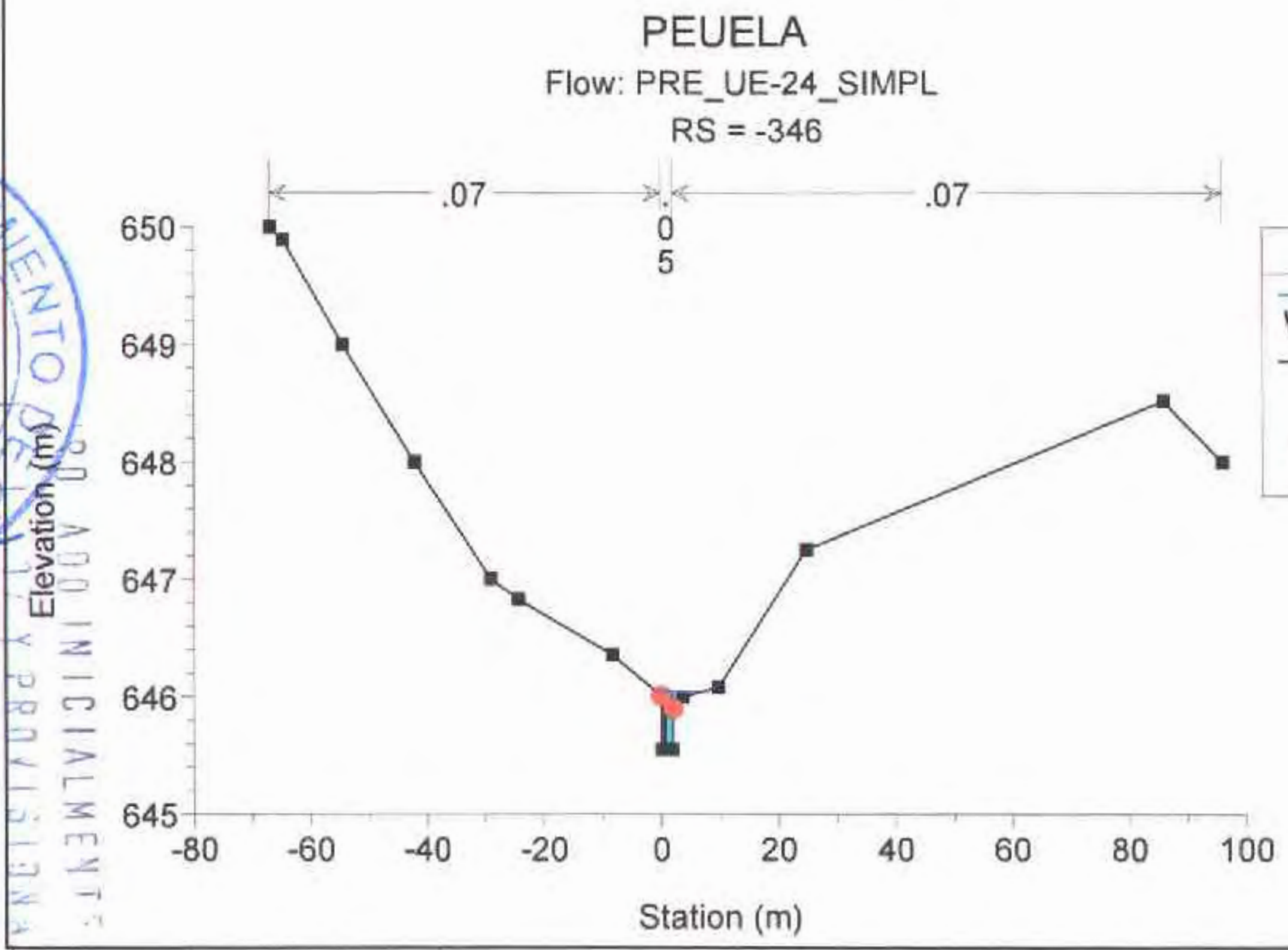
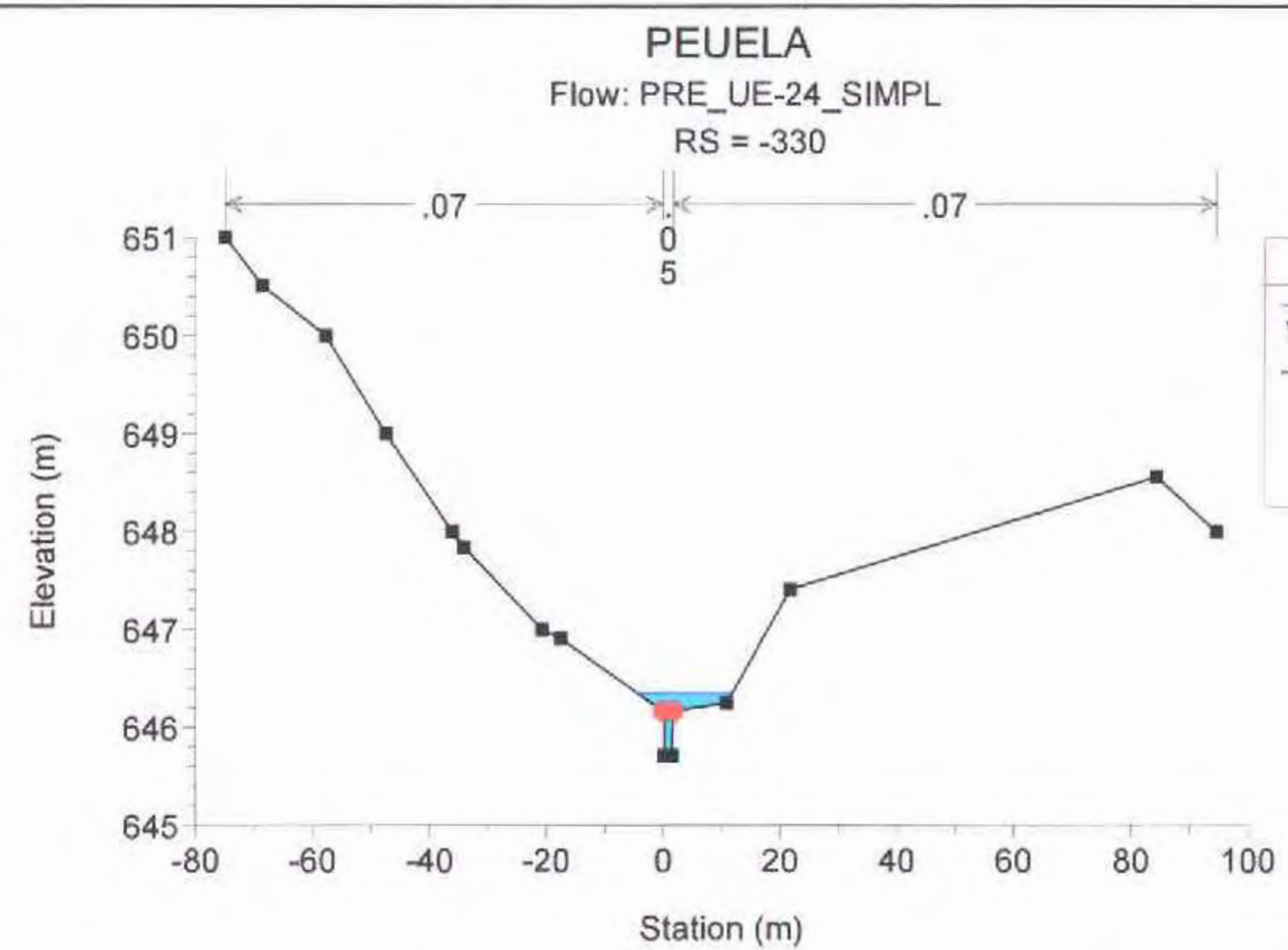
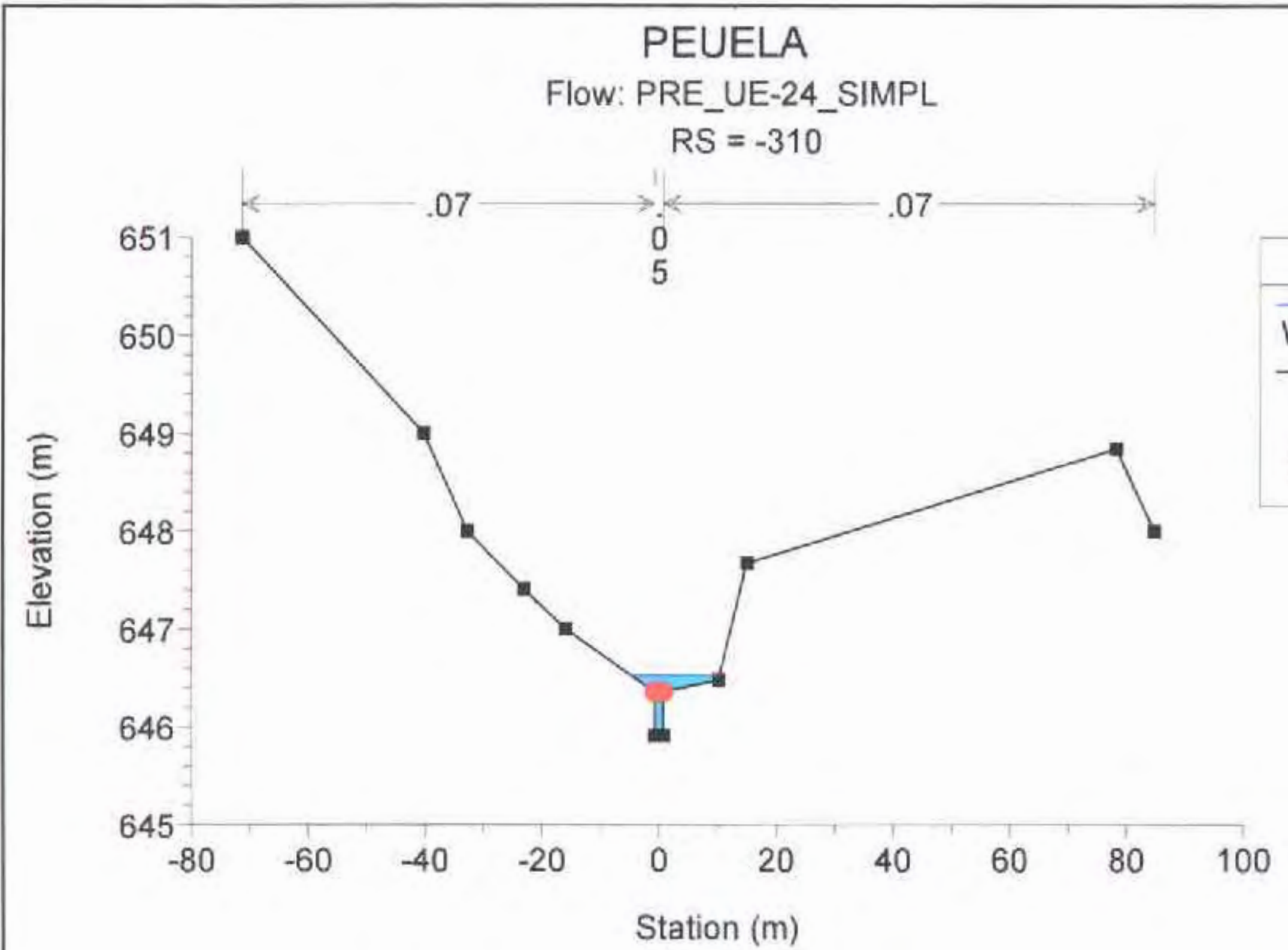
ADO INICIALMENTE PLENO:
17 Y PROVISIONALMENTE
13/12/07
SECRETARIA



ESTADO ACTUAL

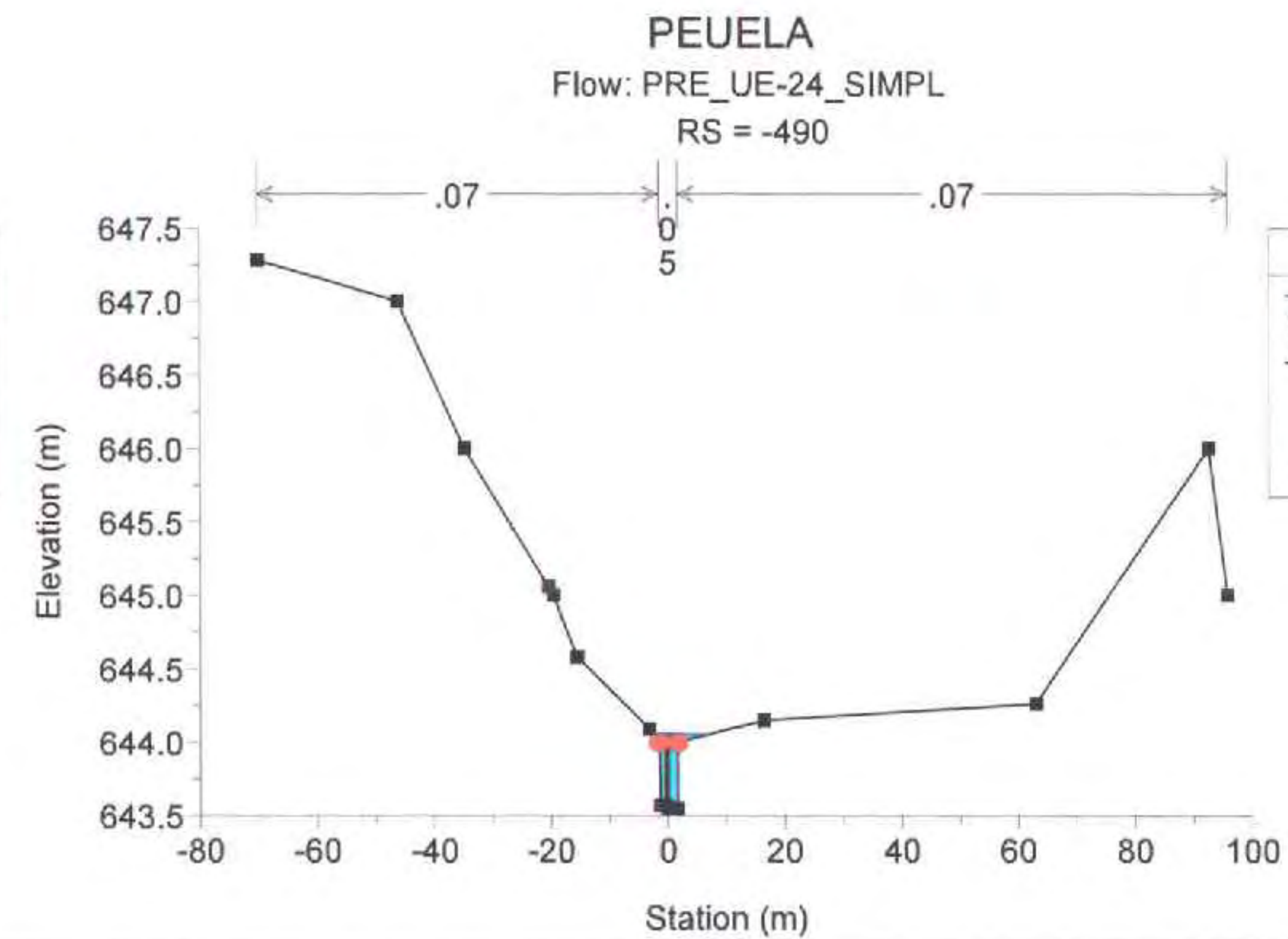
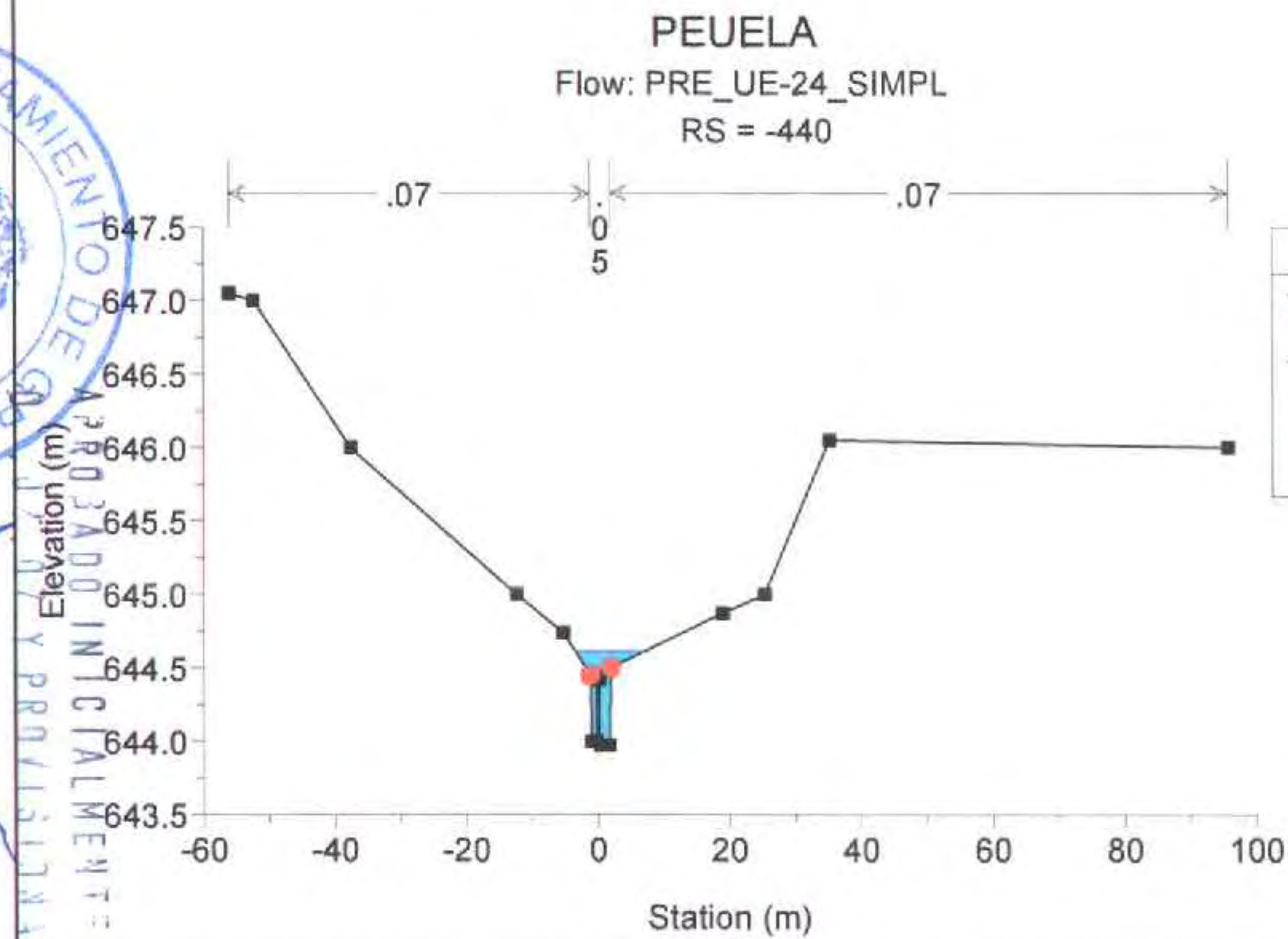
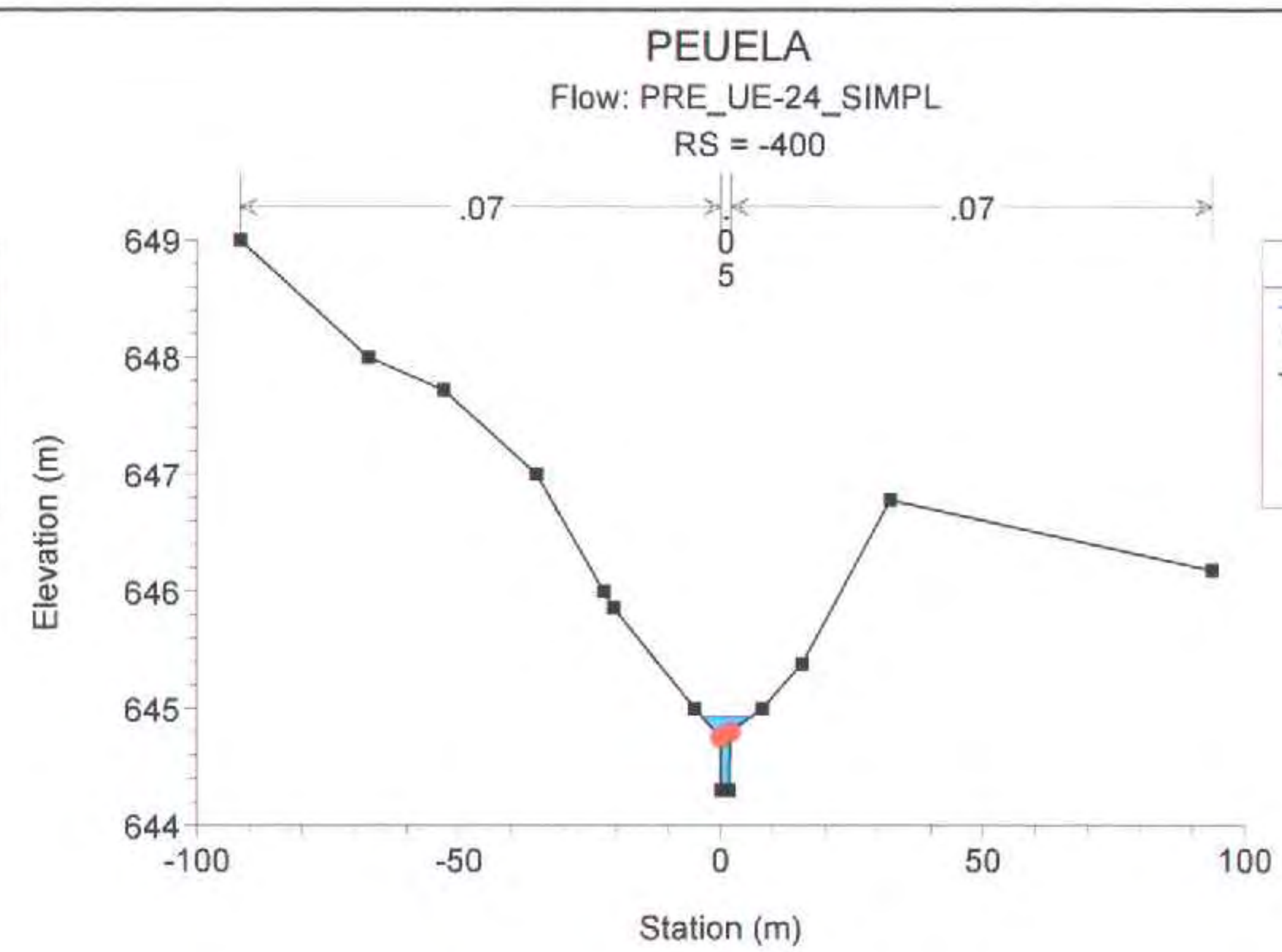
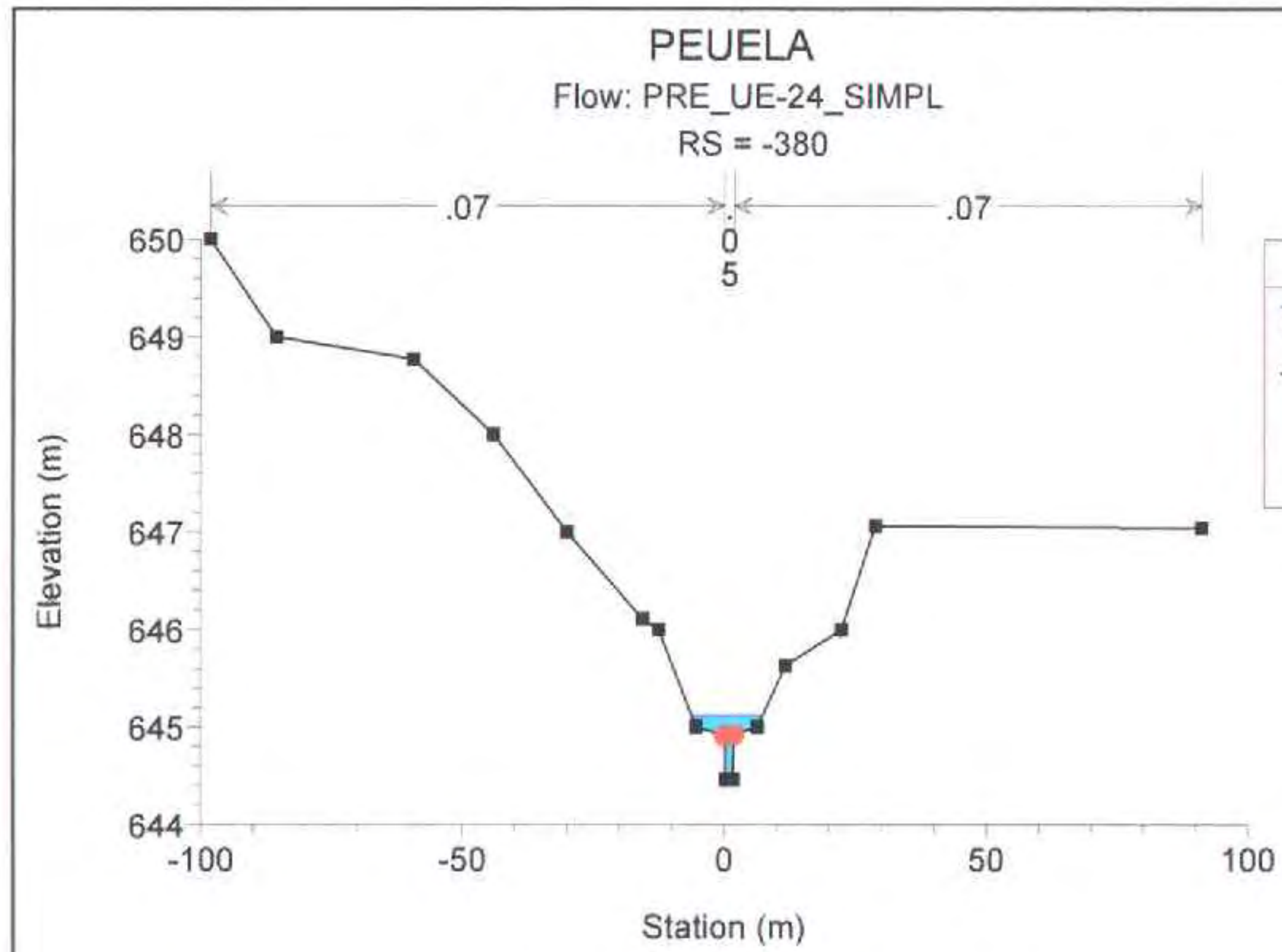
20 AGO INICIALMENTE PLENO:
11.17 Y PROVISIONALMENTE
13.12.07
SECRETARIA





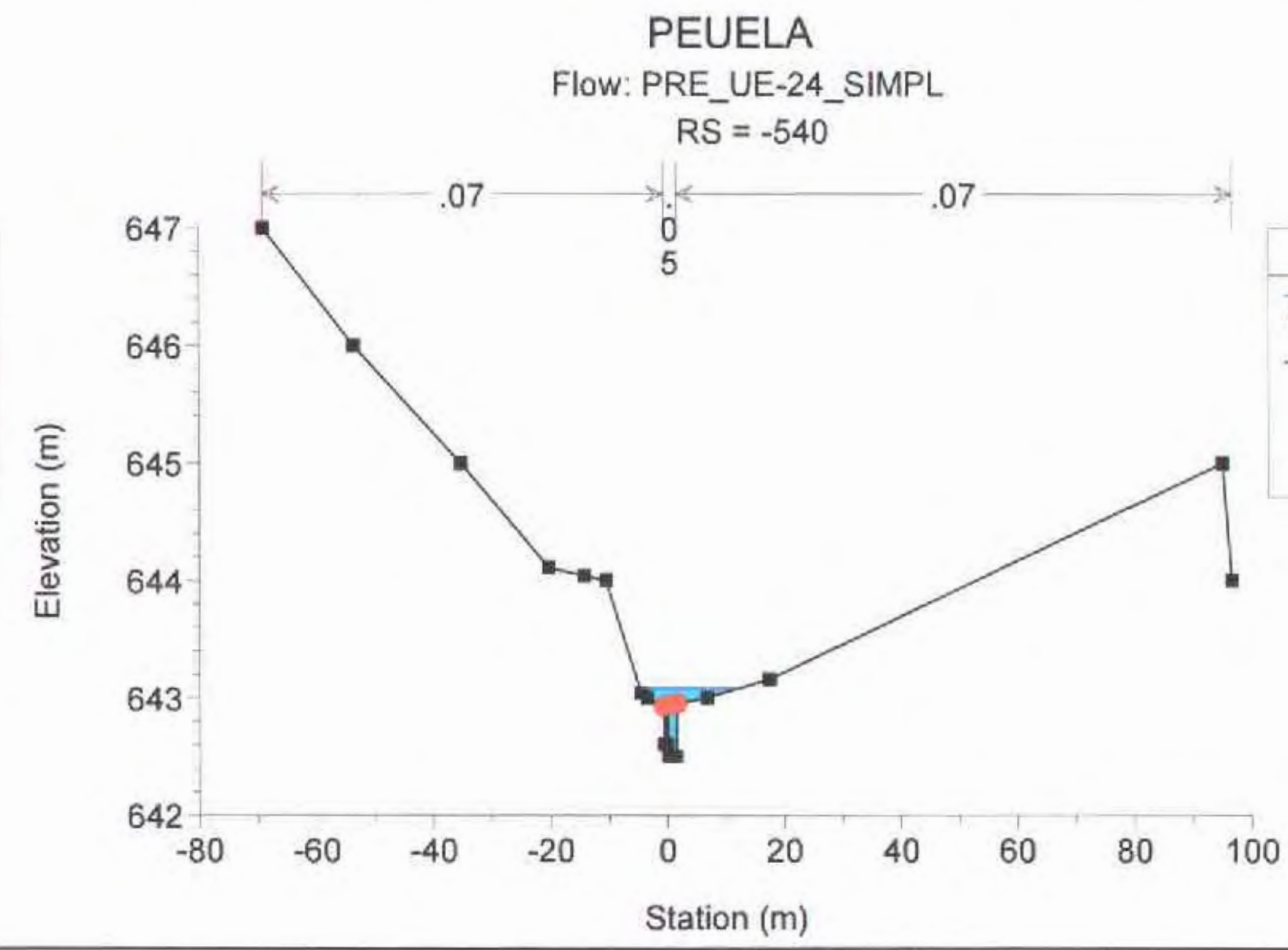
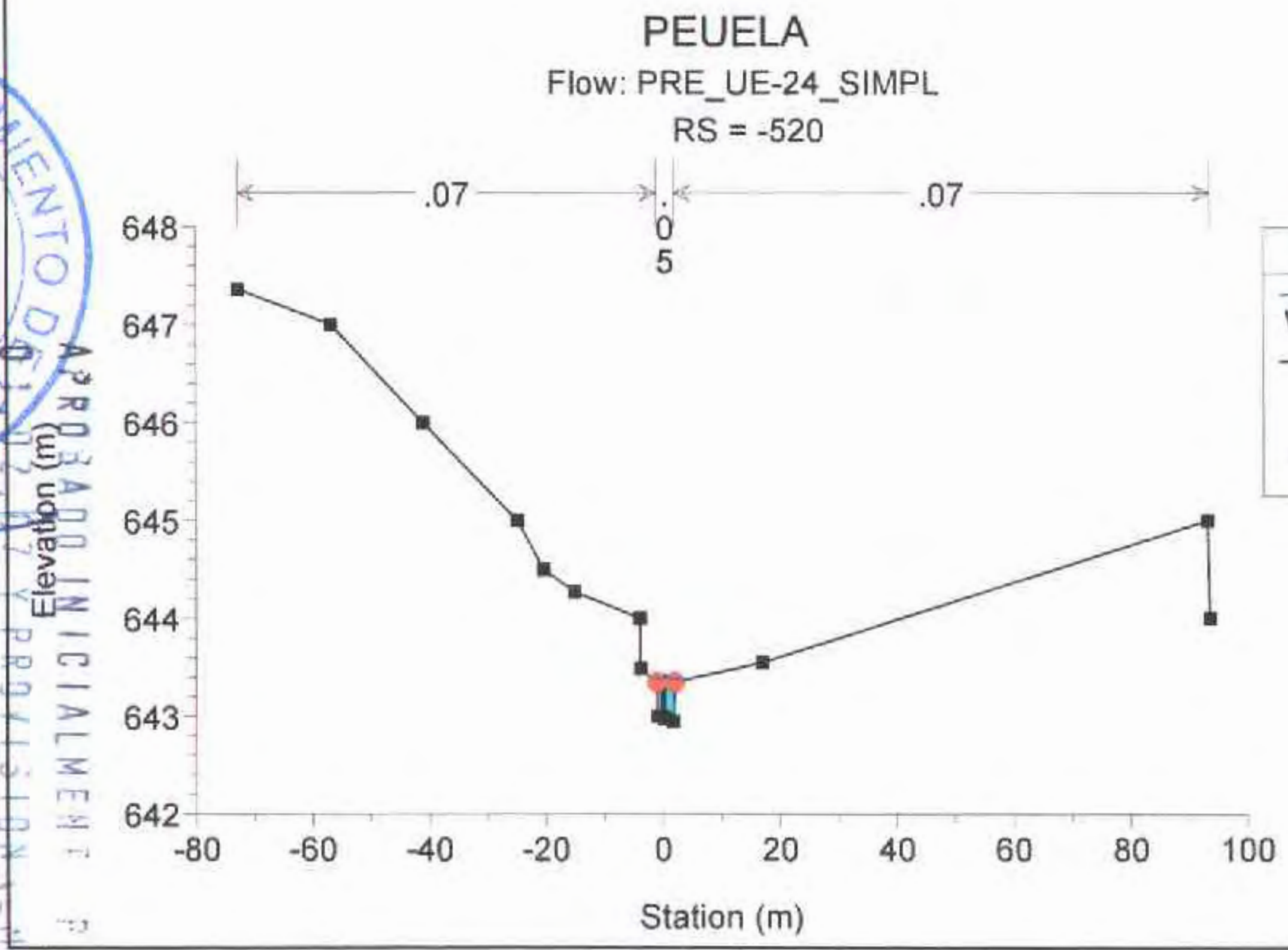
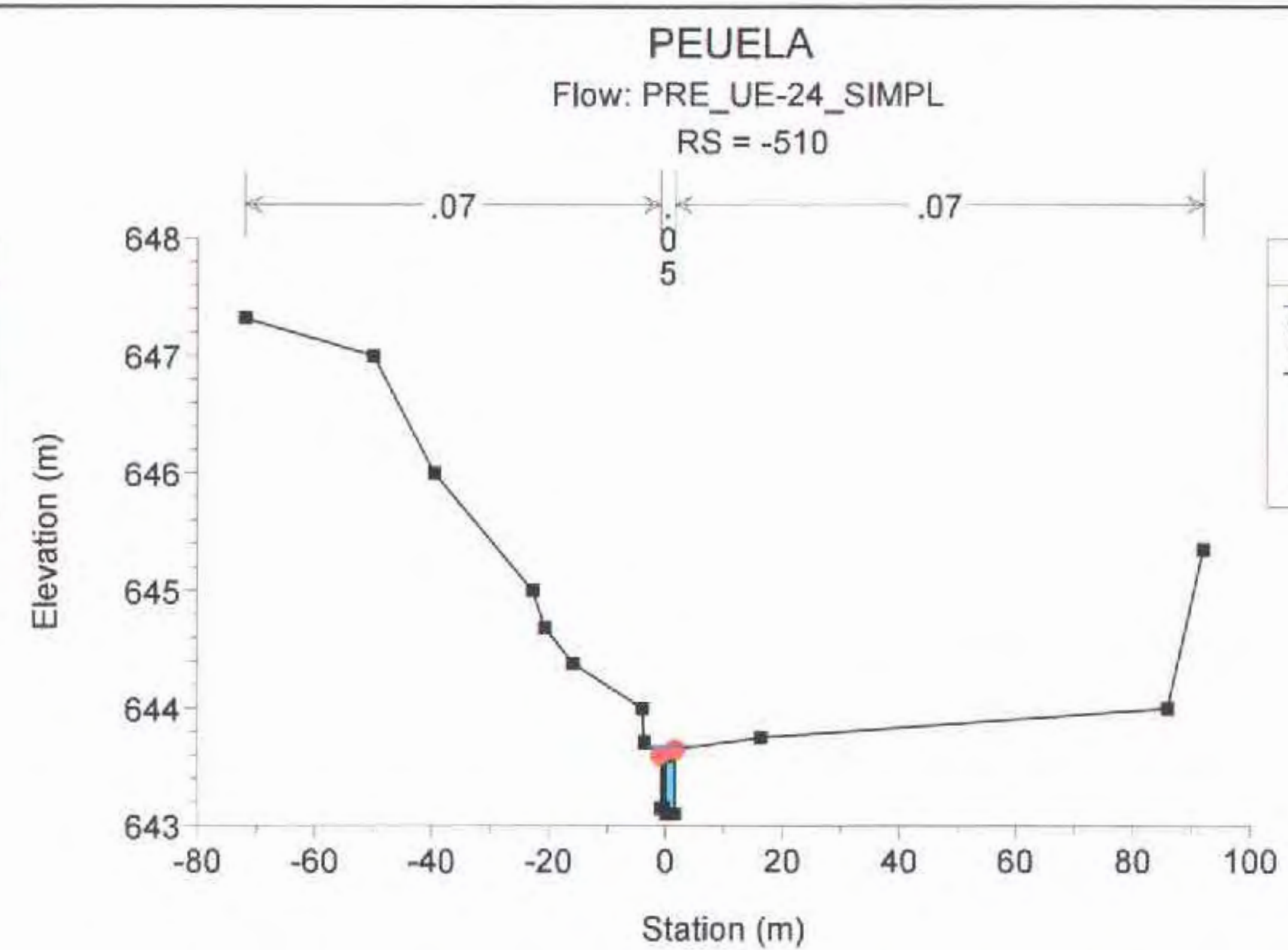
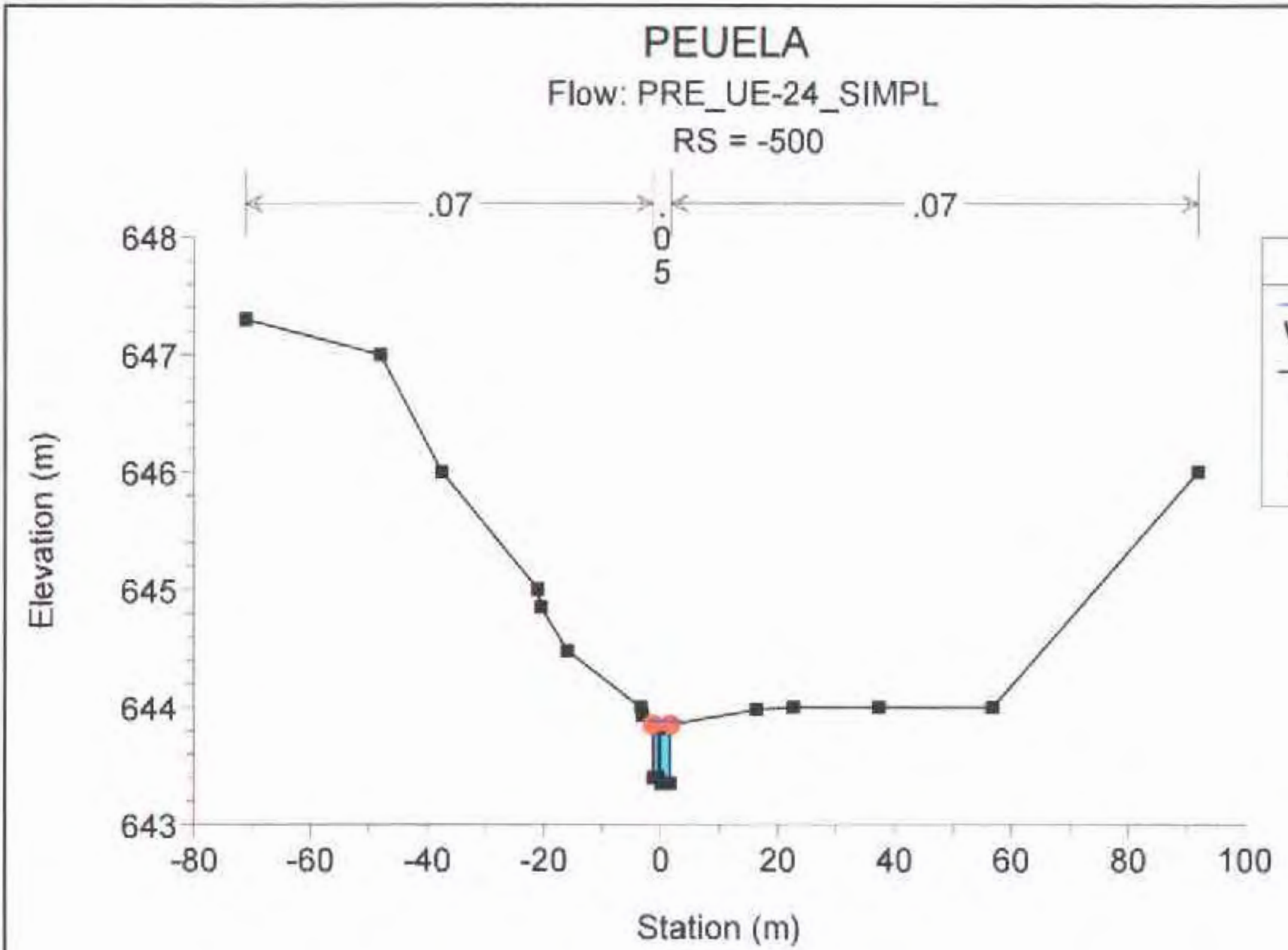
PLENO :

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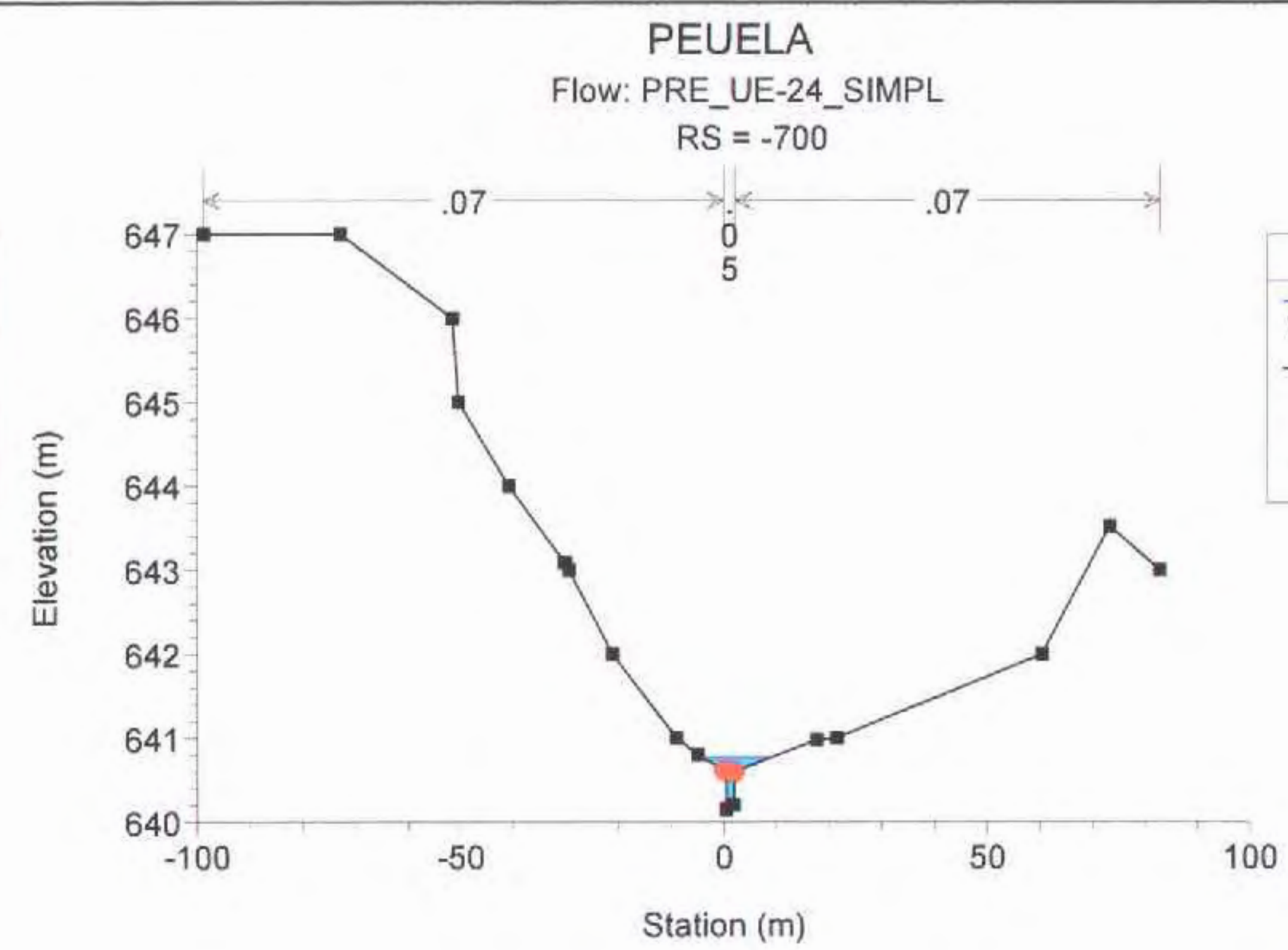
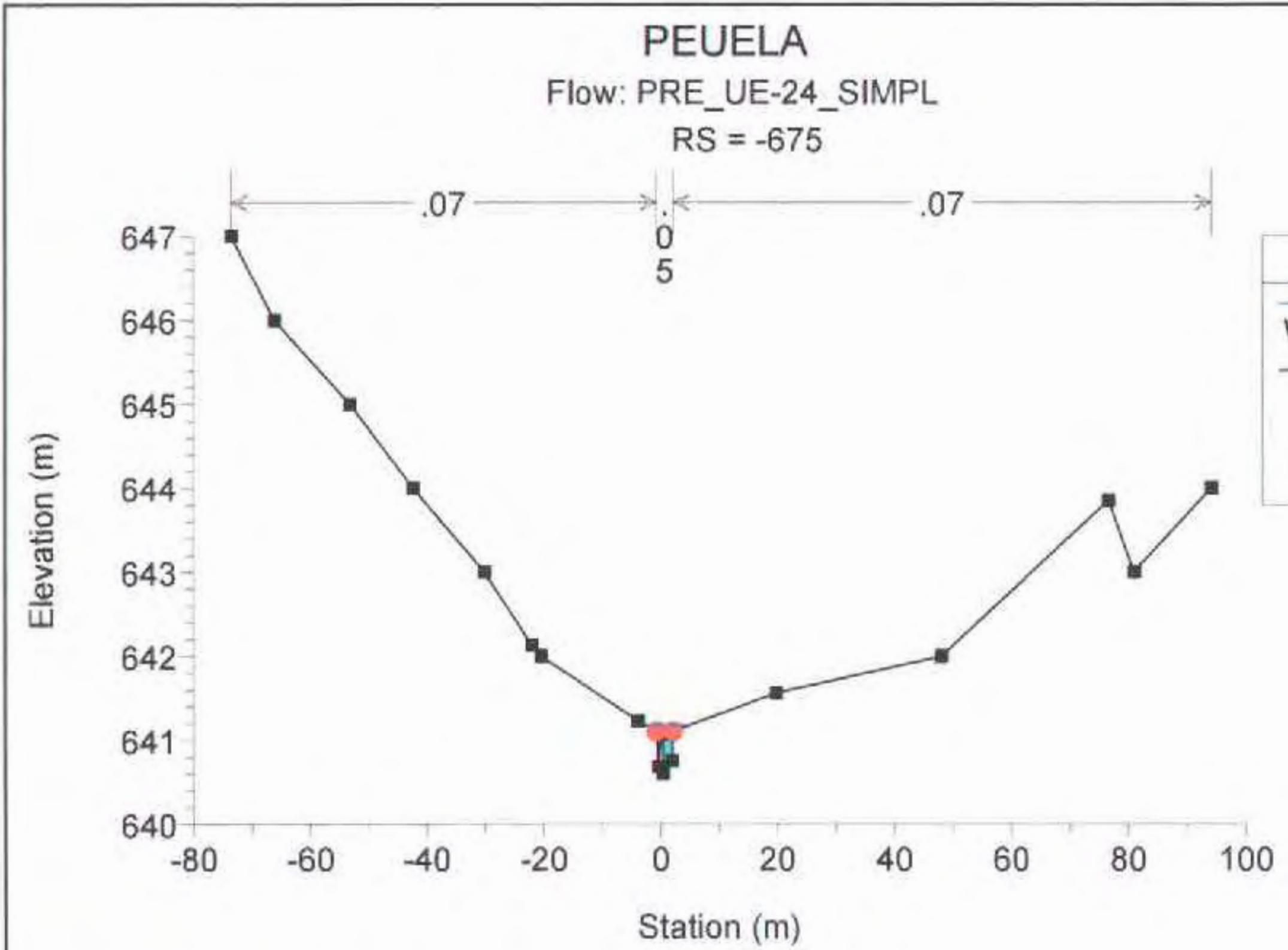
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PLEND :
MENTE



APPROBADO INICIALMENTE
 LA COMISION DE
 PLANIFICACION URBANA
 EN SU REUNION DEL DIA 13.12.07
 CON EL FIN DE
 APROBACION PRELIMINAR
 DEL PLAN DE
 ORDENACION URBANA

BD

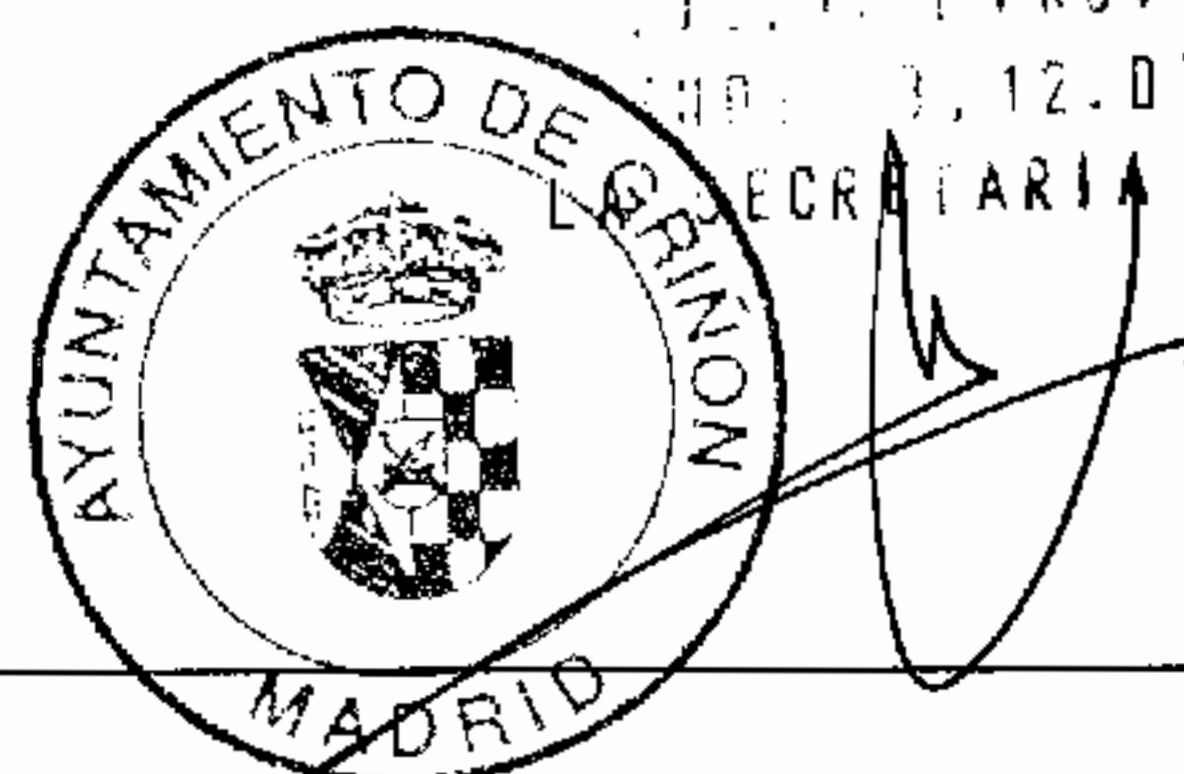


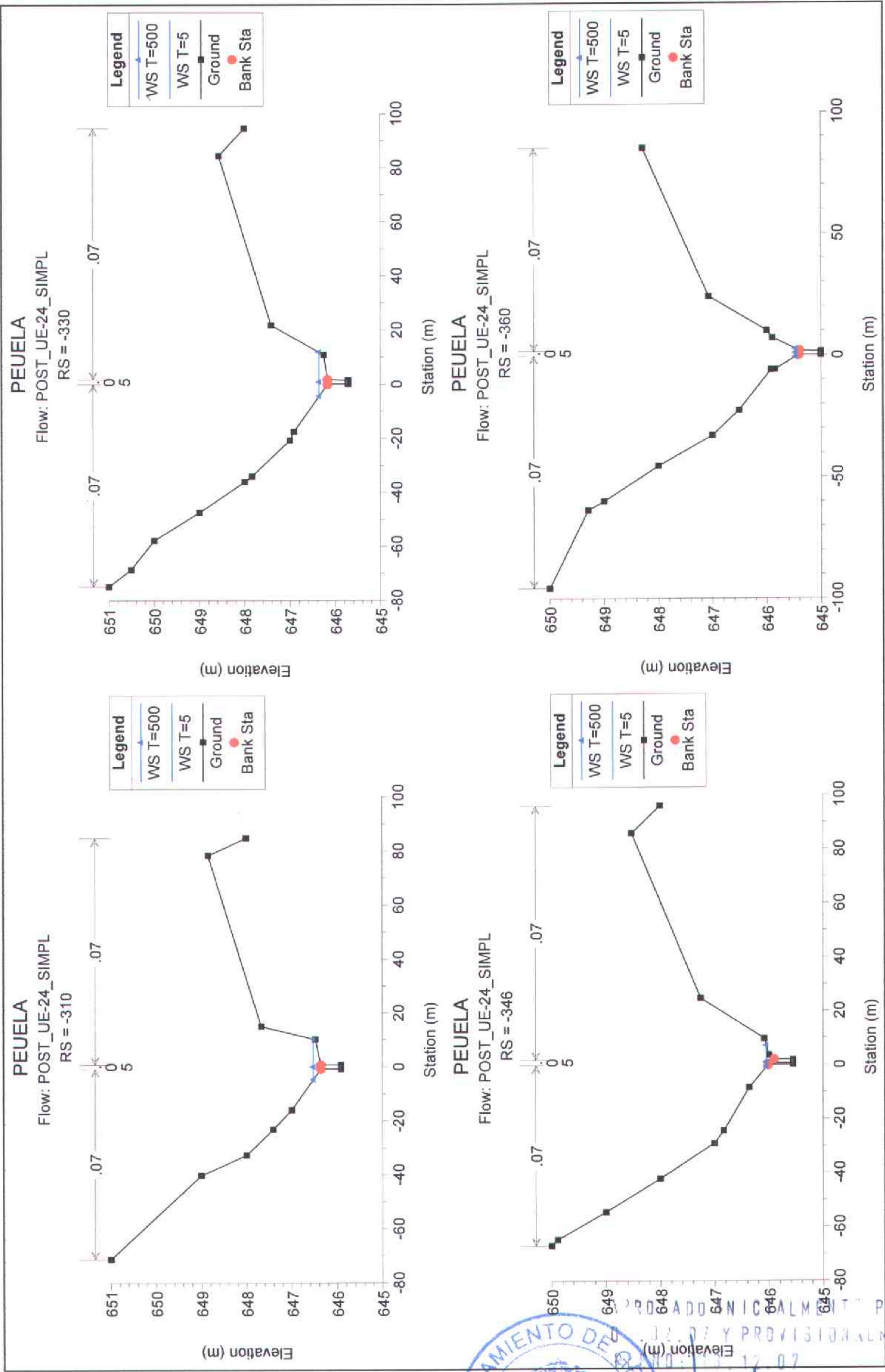
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 2013.07 Y PROVISIONALMENTE
 SECRETARIA
 13.12.07

BD

ESTADO FUTURO

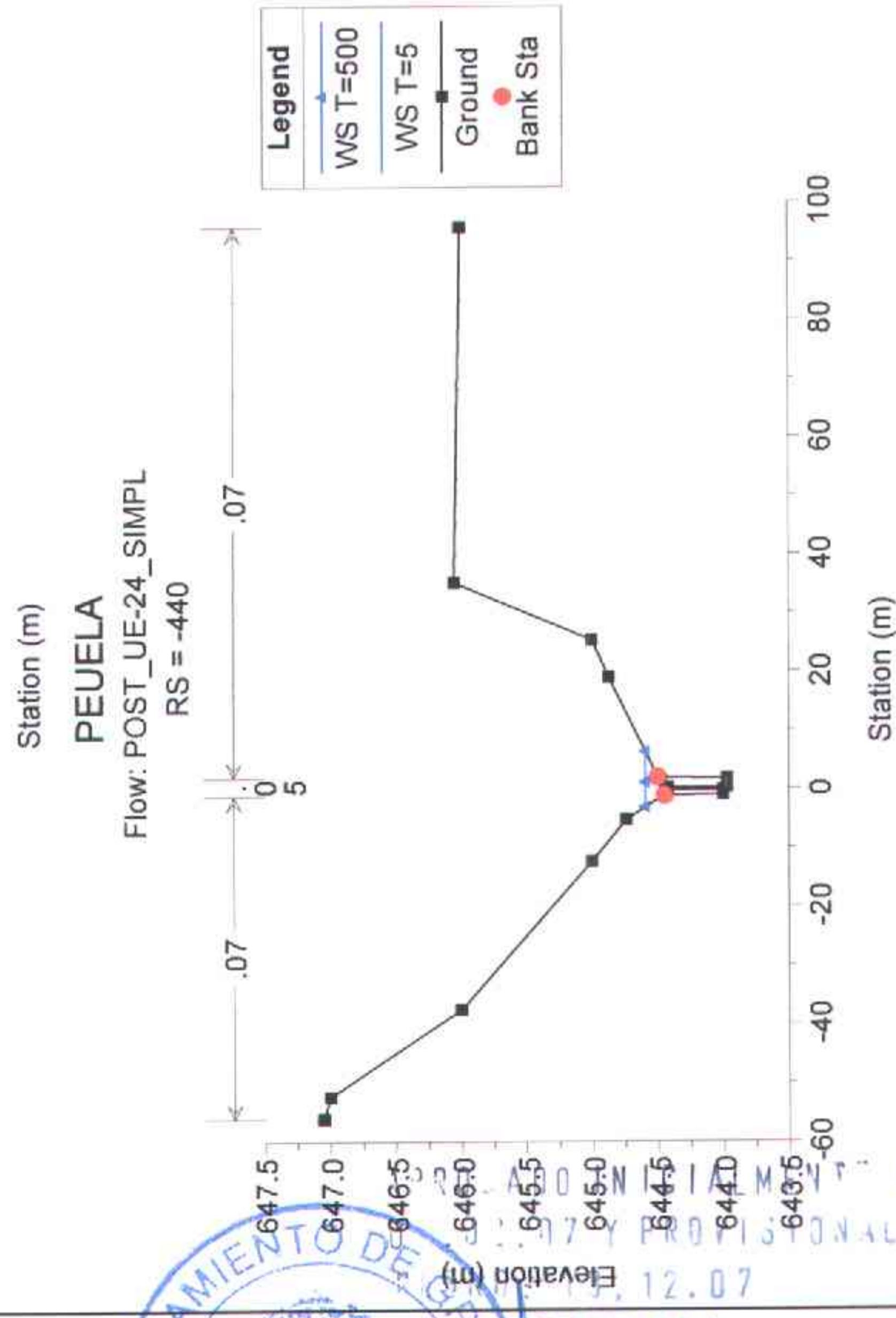
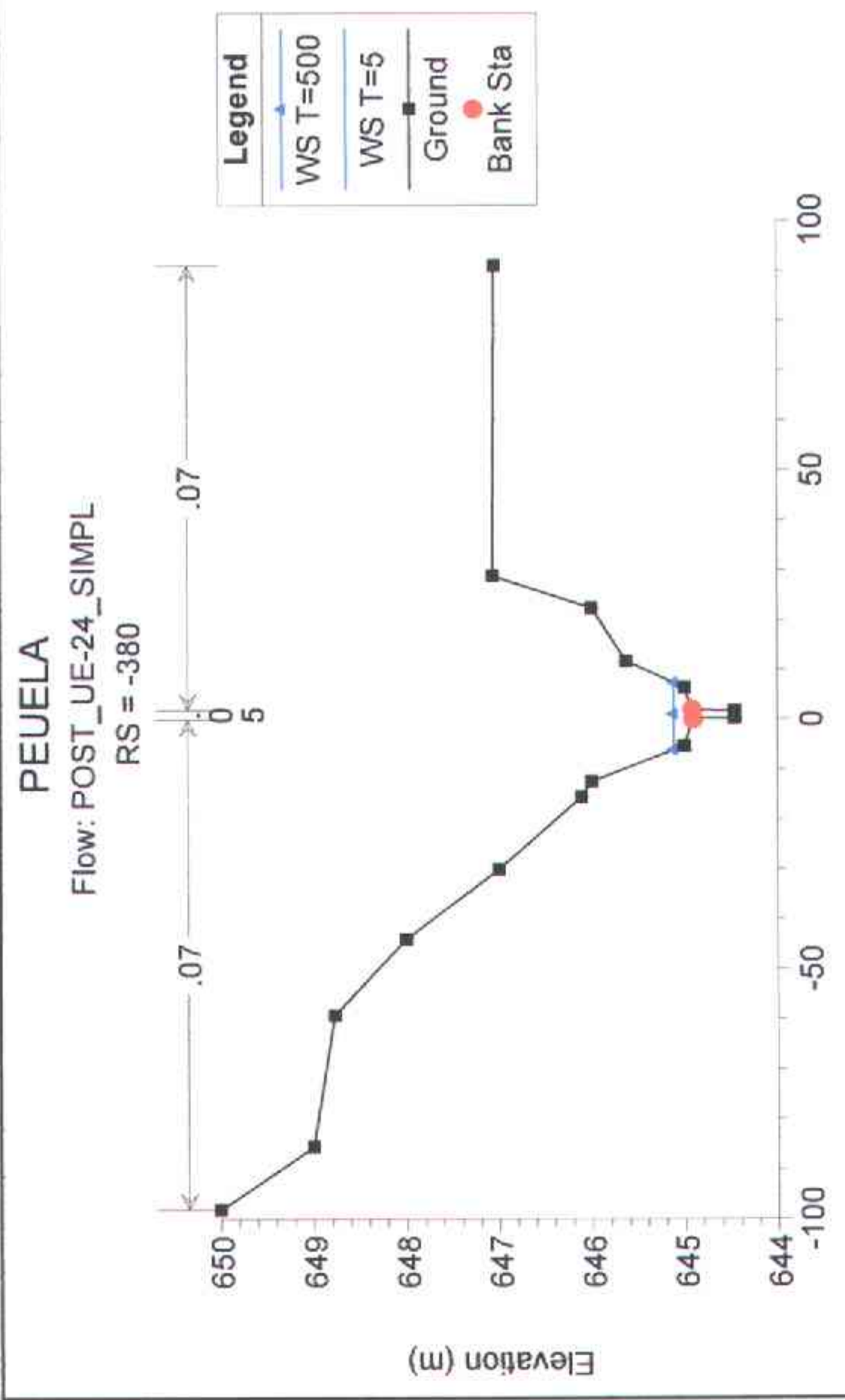
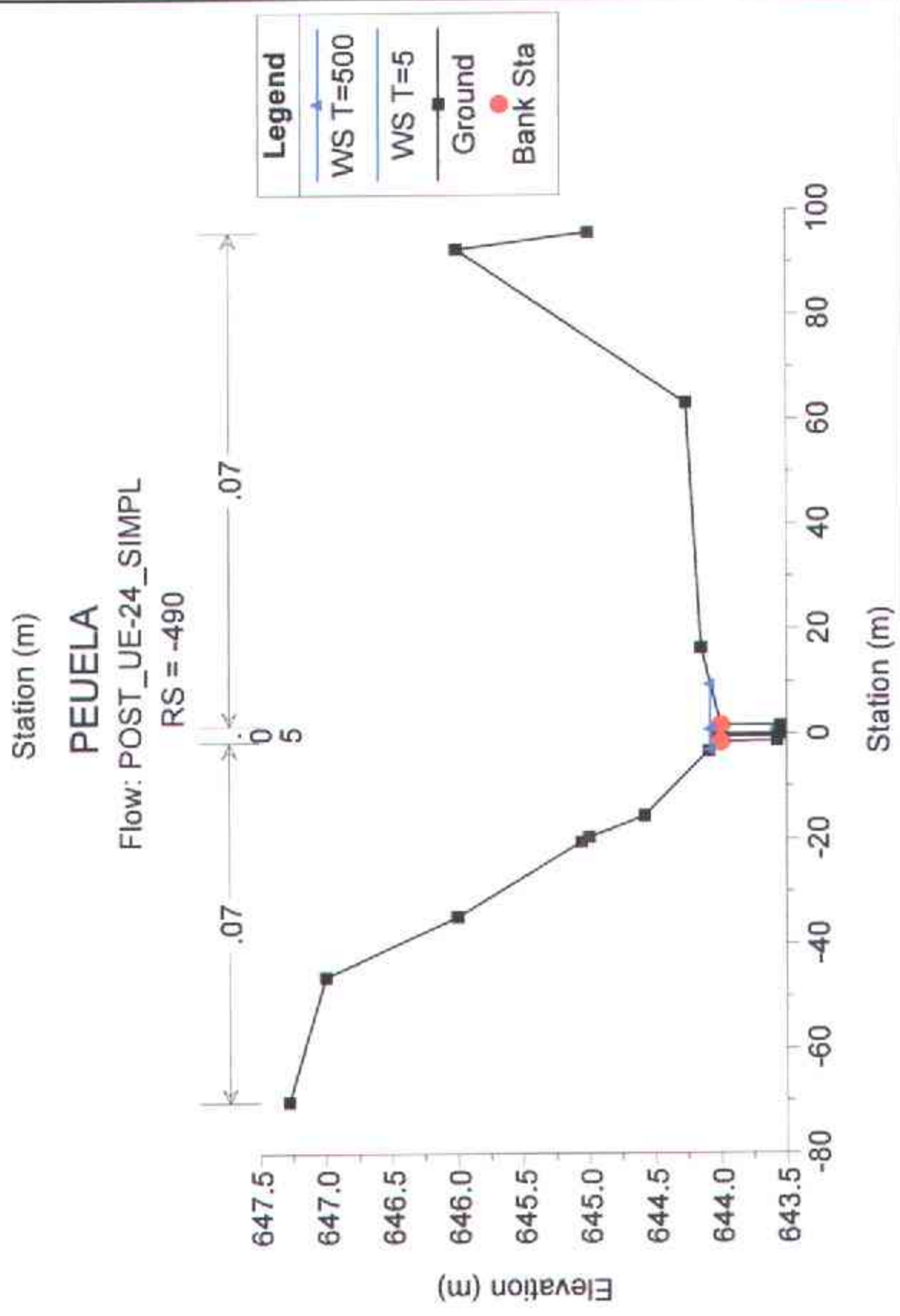
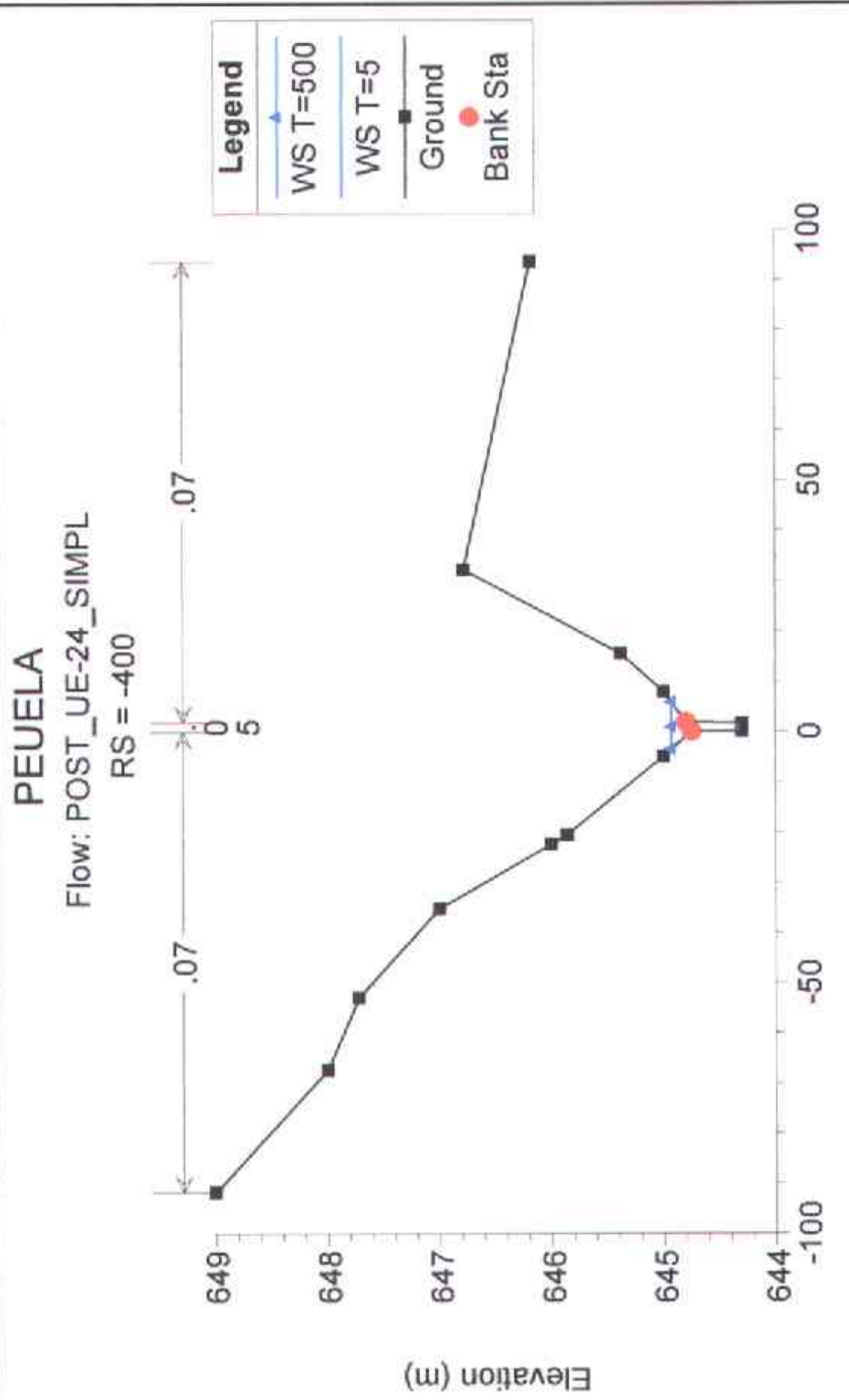
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Y PROVISIONALMENTE
3, 12.07
SECRETARIA





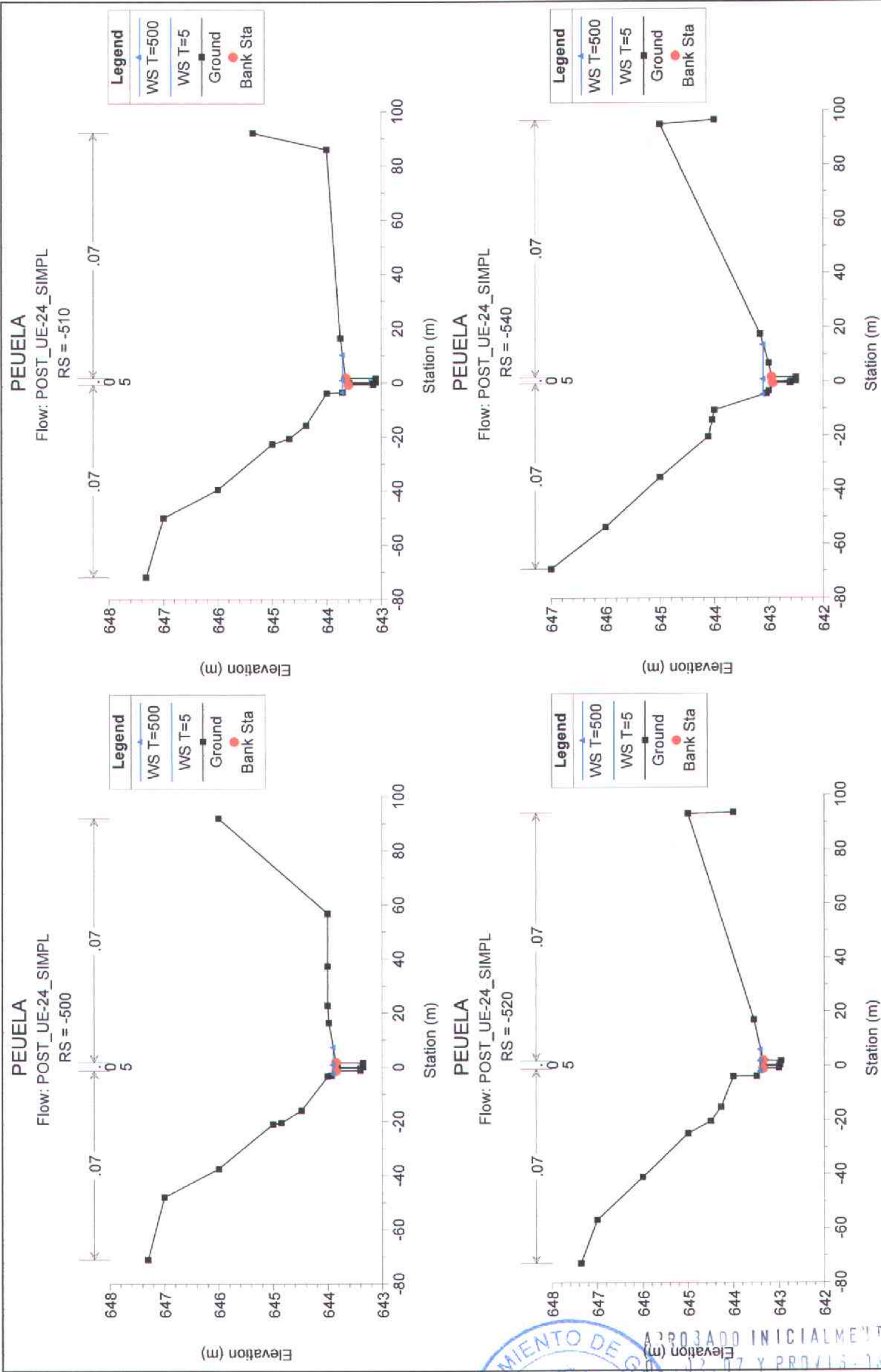
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 PROBADO NÚMERO 12.07
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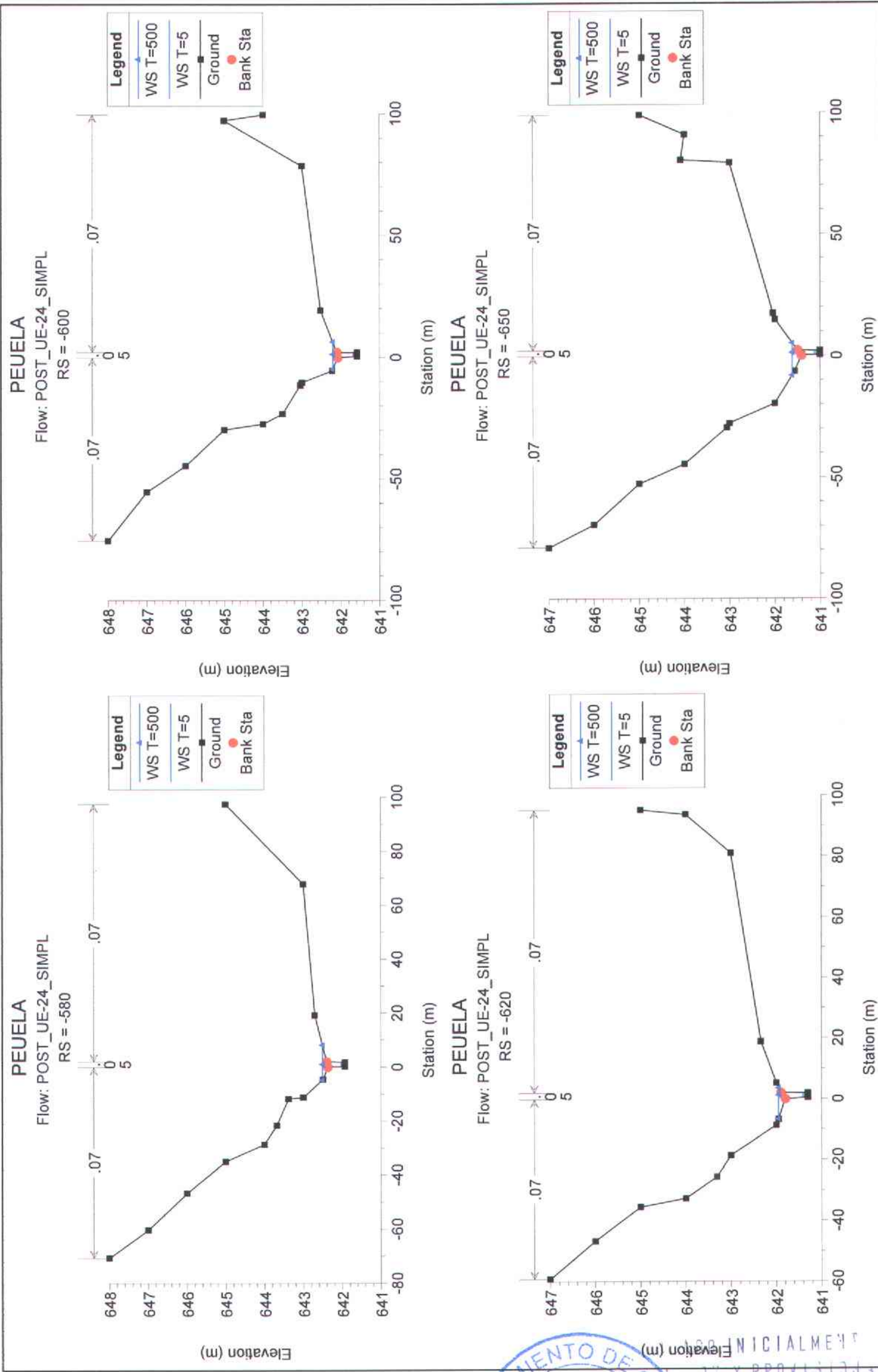
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12.07
RENO: ... PROVISIONALMENTE

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AYUNTAMIENTO DE MADRID
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 12.07 Y PROVISORIALMENTE
 ENO: 13.12.07
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BD

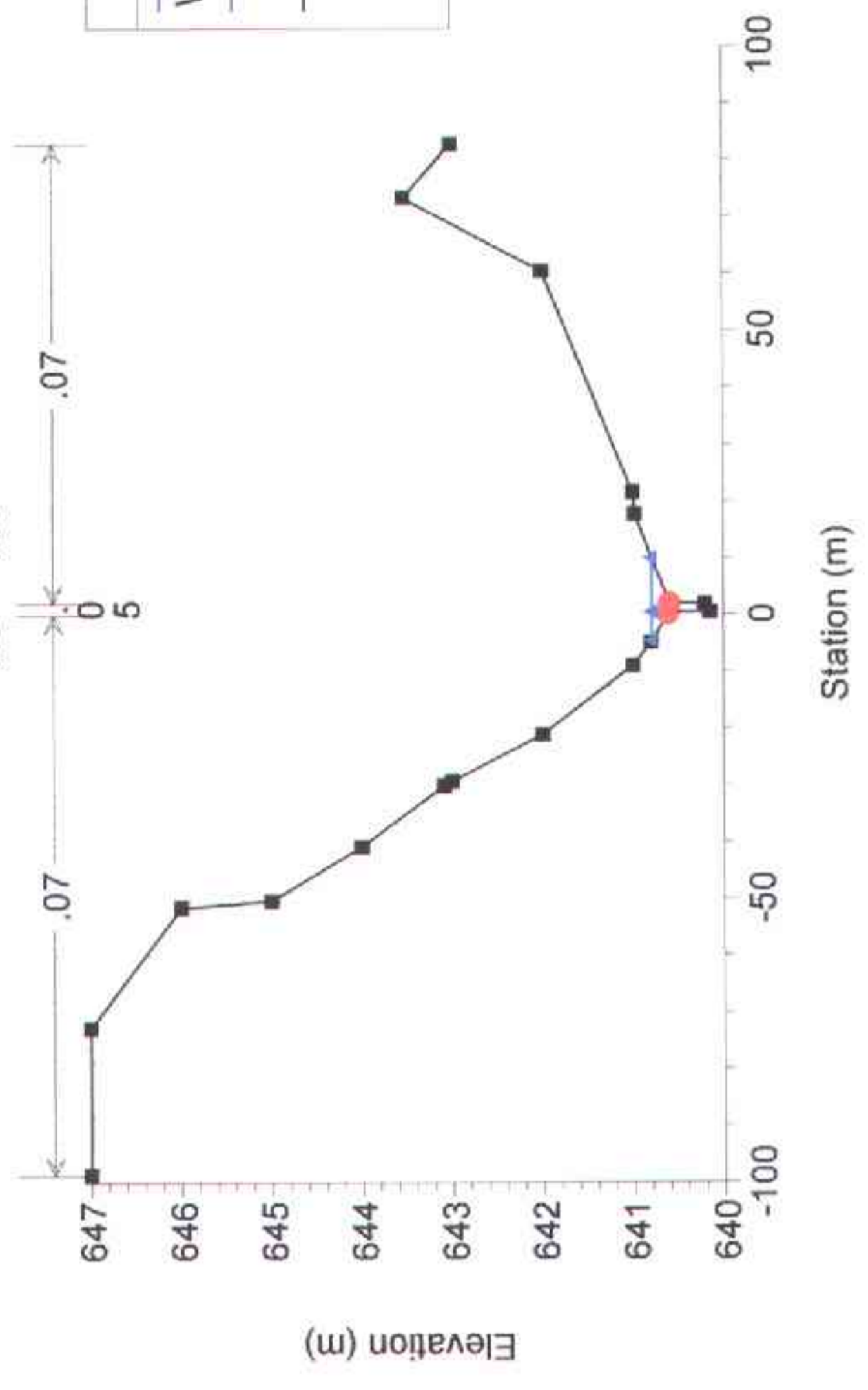


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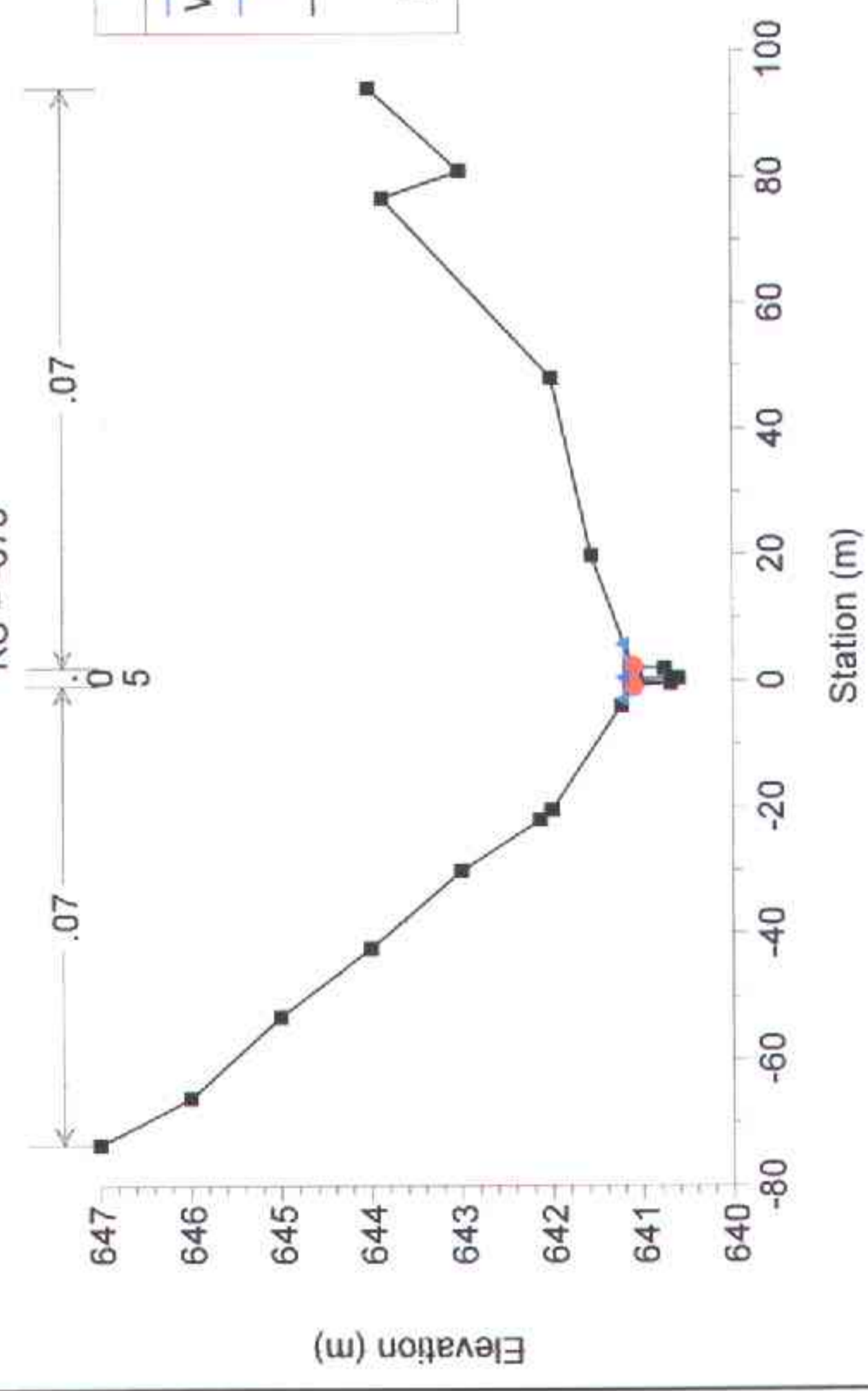
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PEUELA

Flow: POST_UE-24_SIMPL
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AYUNTAMIENTO DE GINER
MADRID
SECRETARIA
1129 ADO INICIALMENTE EN PLENO:
11.17 Y PROVISORIALMENTE
13.12.07