

L.5 Results of Resistivity Sounding

No. E-01 Cton. San Pablo, San Ramon

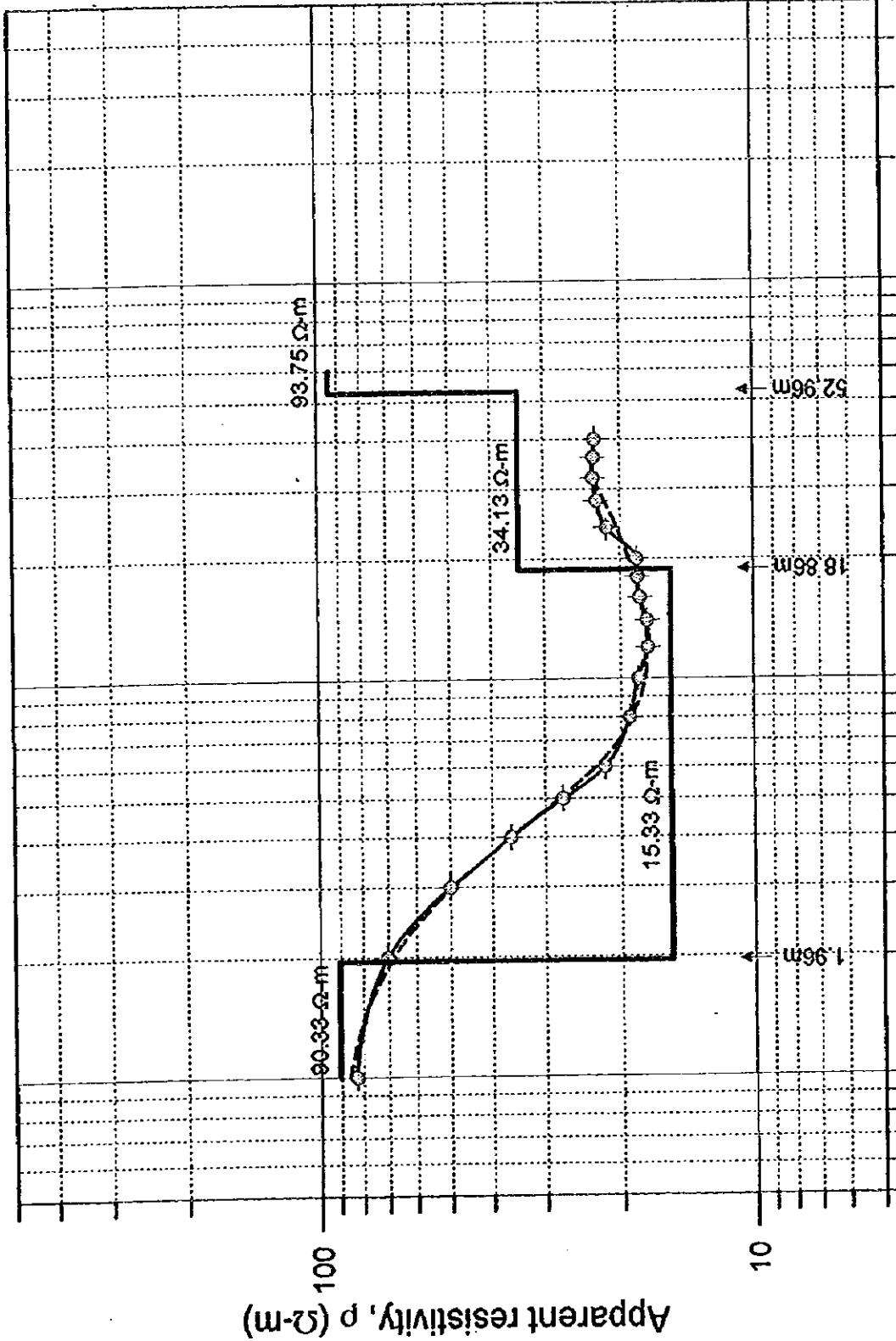
Electrode array:
Wenner

Coordinates:
E: 508413m
N: 285575m

Elevation:
633 m

Legend

- ◆ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ▭ Model result

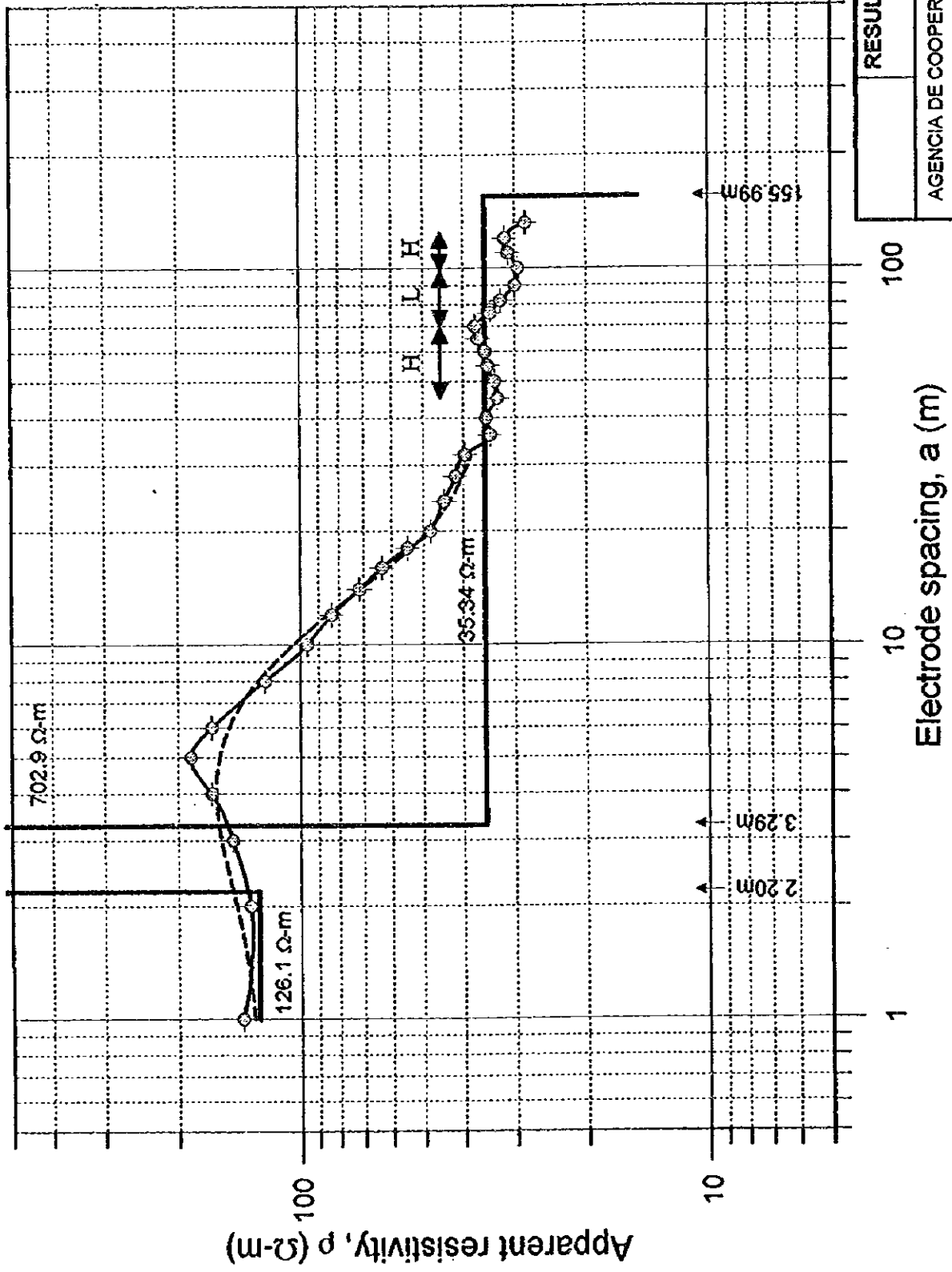


Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω -m)
	from	to	
1	0.00	1.96	90.33
2	1.96	18.86	15.33
3	18.86	52.96	34.13
4	52.96	INFINITY	93.75

RESULT OF RESISTIVITY SOUNDING
(E-01)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-02 Cton. El Carmen, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 495350m
N: 264813m

Elevation:
82 m

Legend
◆ Field data

— Sounding curve (field)

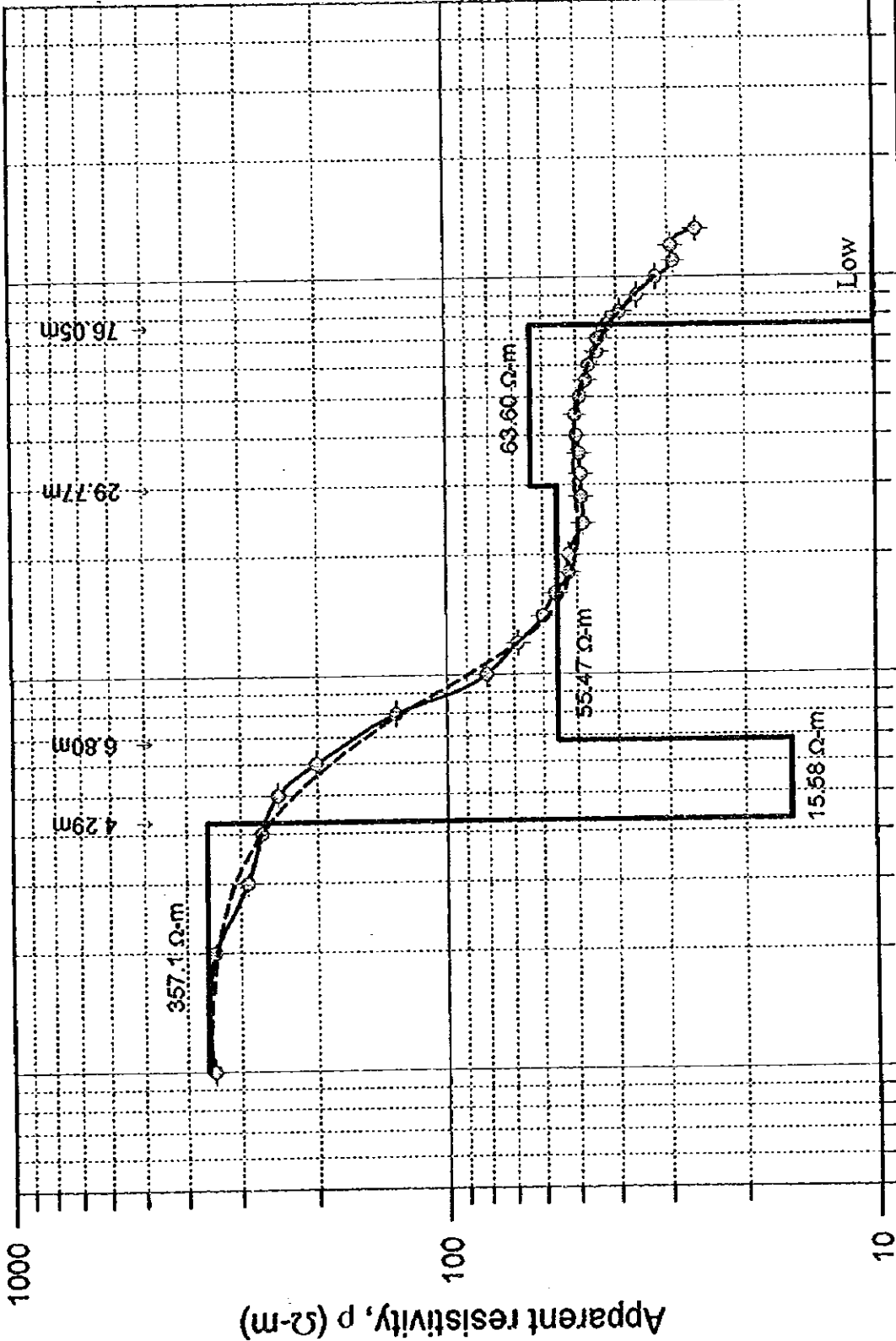
- - - Sounding curve (model)

⌊ Model result

↔ Result of direct analysis

RESULT OF RESISTIVITY SOUNDING (E-02)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-03 Cton. El Carmen, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 495138m
N: 265350m

Elevation:
88 m

Legend

- ◆ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ⌊ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	4.27	357.1
2	4.27	6.80	15.58
3	6.80	29.77	55.47
4	29.77	76.05	63.60
5	76.05	INFINITY	Low

RESULT OF RESISTIVITY SOUNDING (E-03)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-04 Hda. Las Flores, San Pedro Masahuat

Electrode array:
Wenner

Coordinates:
E: 495400m
N: 262963m

Elevation:
69 m

Legend

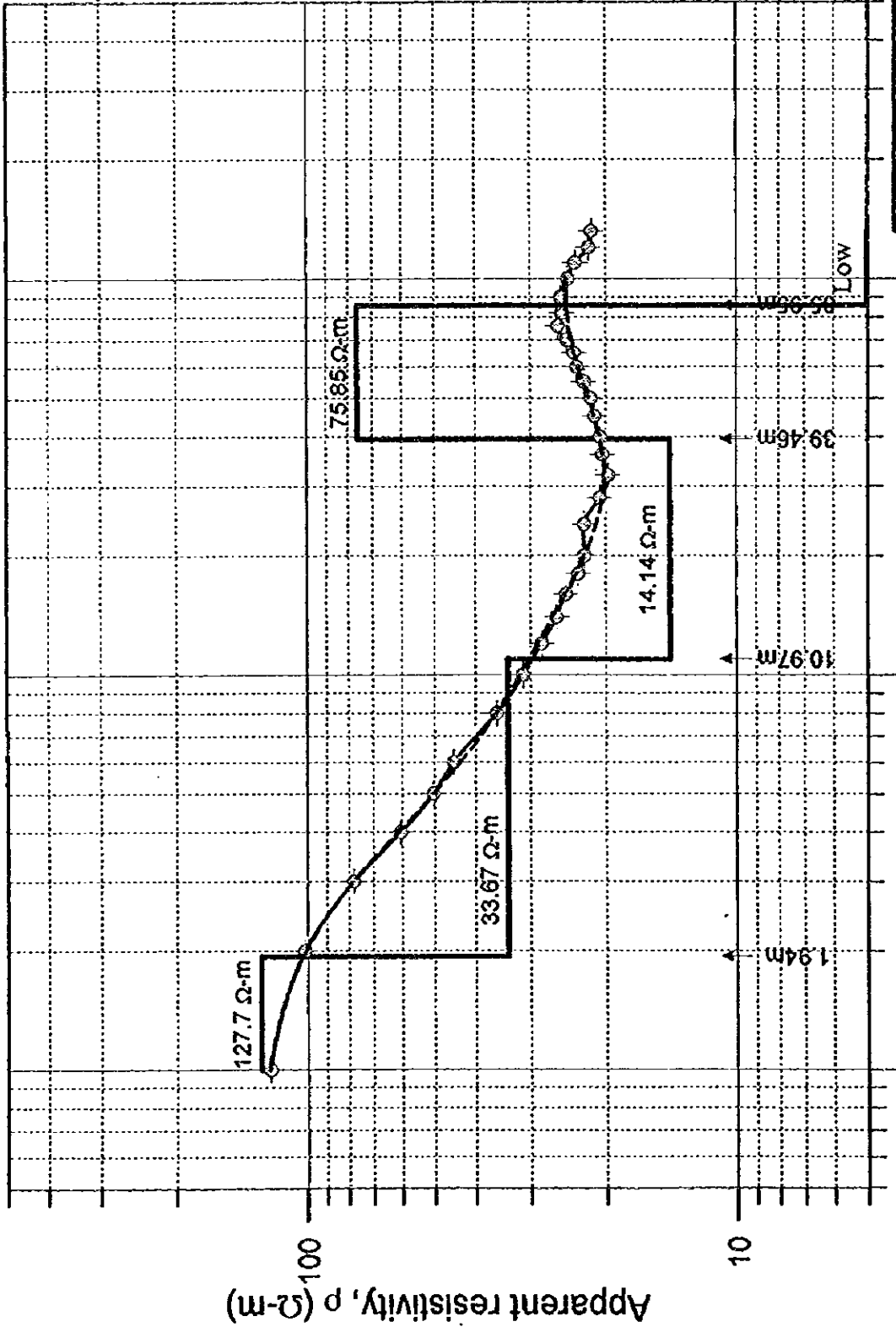
◆ Field data

— Sounding curve (field)

- - - Sounding curve (model)

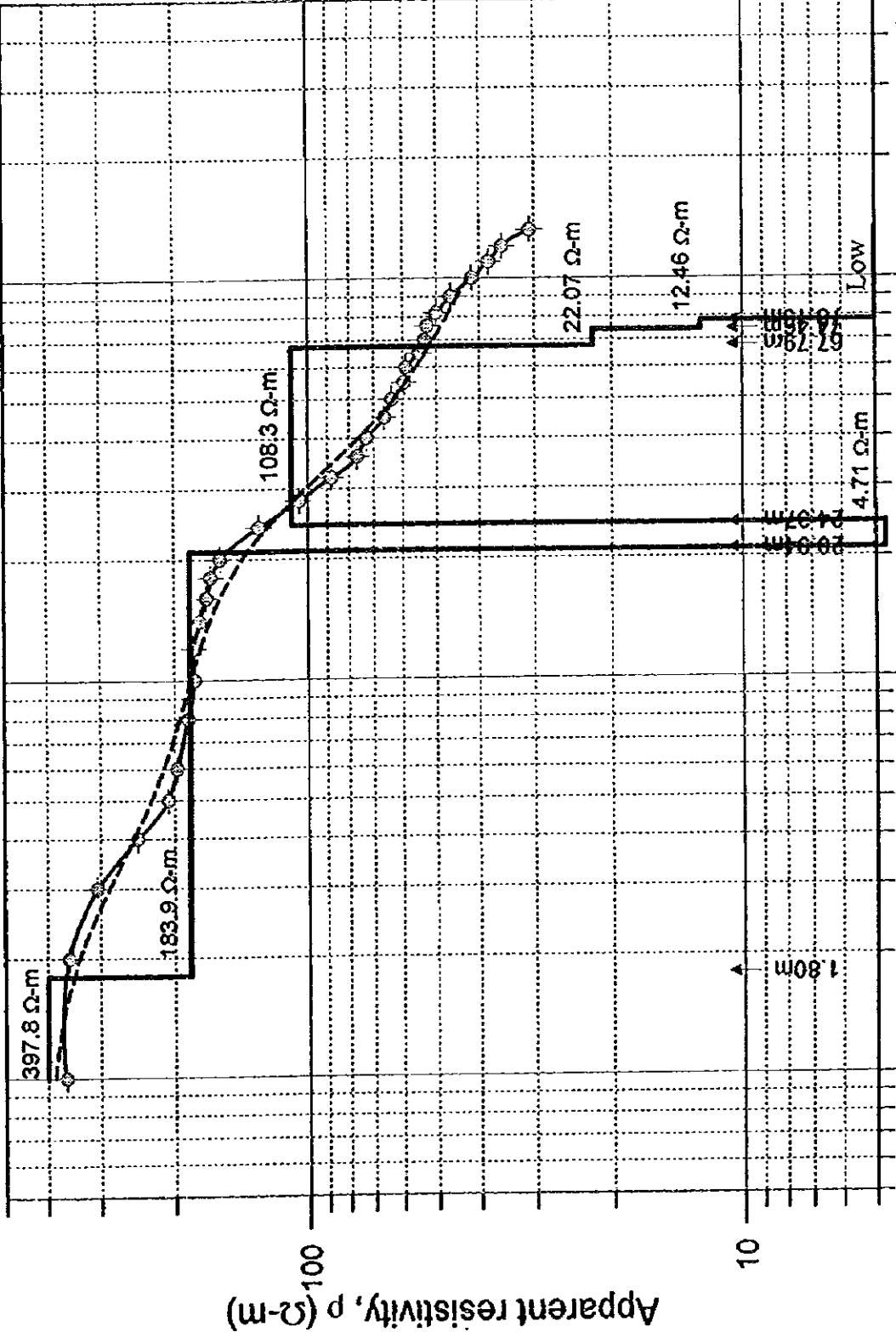
▭ Model result

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	1.94	127.7
2	1.94	10.97	33.67
3	10.97	39.46	14.14
4	39.46	85.95	75.85
5	85.95	INFINITY	Low



RESULT OF RESISTIVITY SOUNDING (E-04)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-05 Hda. San Mauricio, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 496000m
N: 261750m

Elevation:
56 m

Legend

◇ Field data

— Sounding curve (field)

- - - Sounding curve (model)

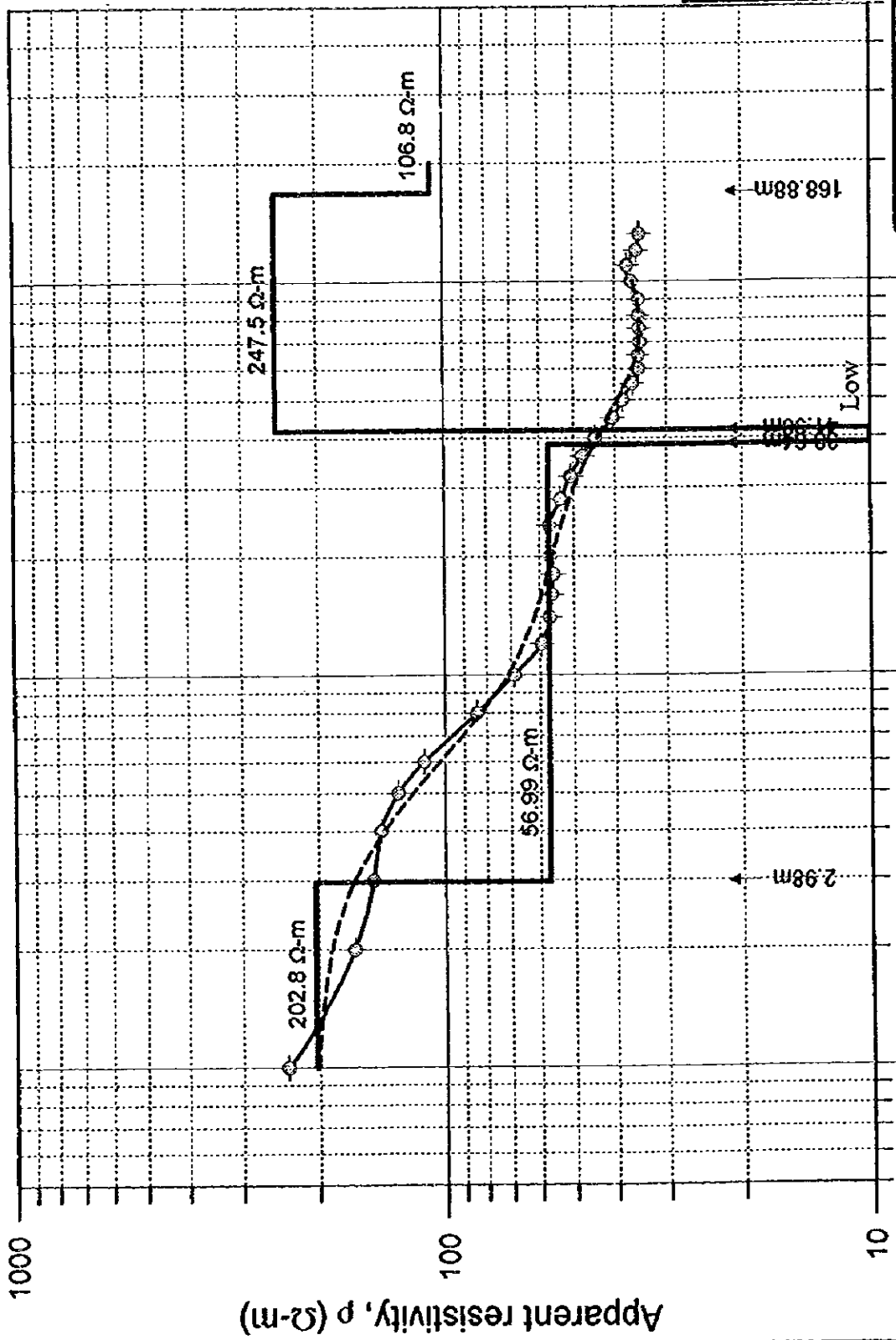
▭ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	1.80	397.8
2	1.80	20.94	183.9
3	20.94	24.37	4.71
4	24.37	67.79	108.3
5	67.79	74.46	22.07
6	74.46	78.13	12.46
7	78.13	INFINITY	Low

RESULT OF RESISTIVITY SOUNDING (E-05)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-06 Cton. Las Flores, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 495675m
N: 261125m

Elevation:
46 m

Legend

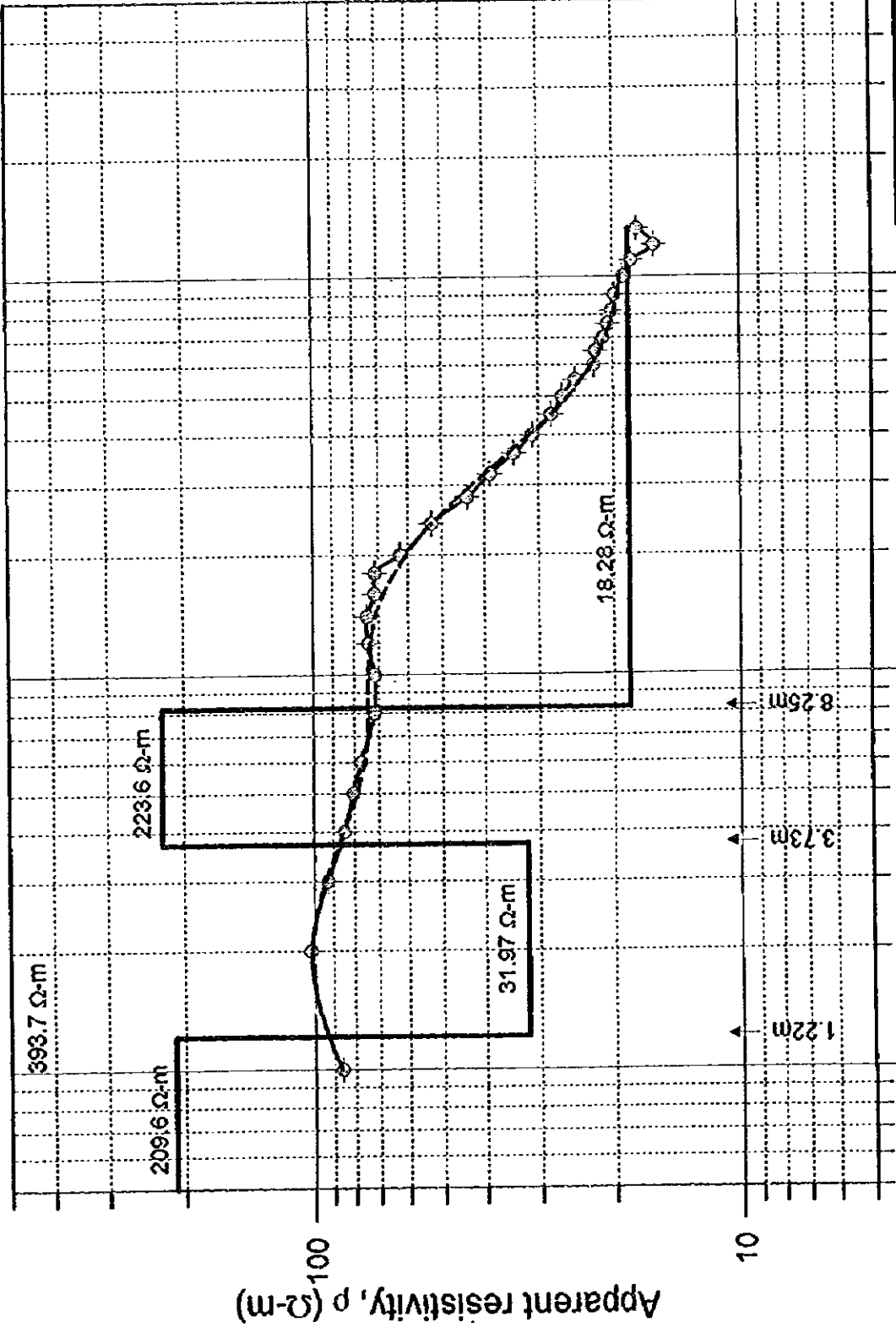
- ◆ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ▭ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	2.98	202.8
2	2.98	38.64	56.99
3	38.64	41.98	Low
4	41.98	168.88	247.5
5	168.88	INFINITY	106.8

RESULT OF RESISTIVITY SOUNDING (E-06)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-07 Cton. Las Isletas, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 498725m
N: 254450m

Elevation:
21 m

Legend
◆ Field data

— Sounding curve (field)
- - - Sounding curve (model)

Model result

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.09	10.20
2	0.09	1.22	209.6
3	1.22	3.73	31.97
4	3.73	8.25	223.6
5	8.25	INFINITY	18.28

RESULT OF RESISTIVITY SOUNDING
(E-07)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-08 Hda. La Zorra, San Pedro Masahuat

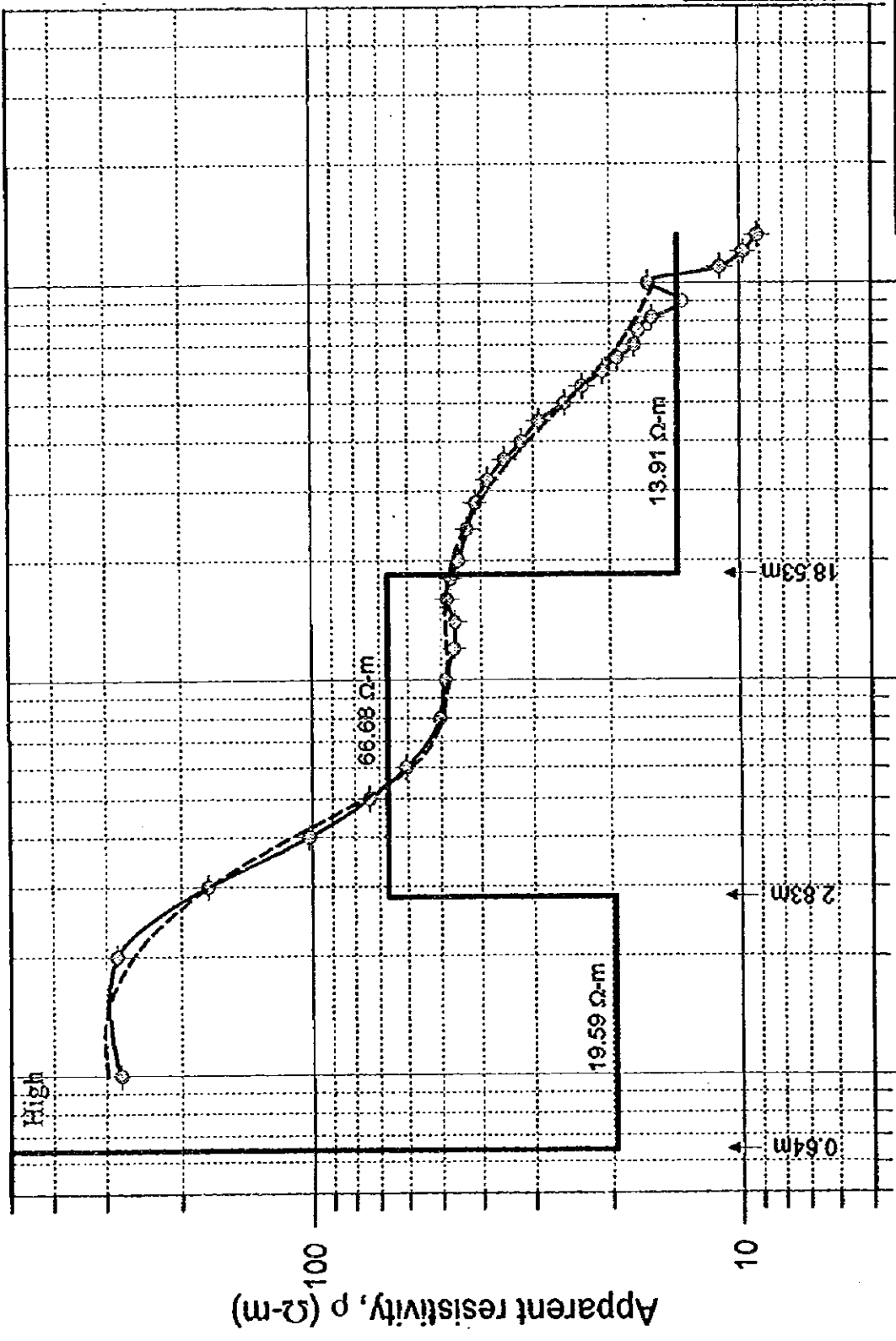
Electrode array:
Wenner

Coordinates:
E: 496700m
N: 249875m

Elevation:
6 m

Legend

- ◇ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ▭ Model result



Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.64	19.59
2	0.64	2.83	66.68
3	2.83	18.53	13.91
4	18.53	INFINITY	13.91

RESULT OF RESISTIVITY SOUNDING
(E-08)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-09 Benef. Molineros, Tepetitan

Electrode array:
Wenner

Coordinates:
E: 515300m
N: 281550m

Elevation:
603 m

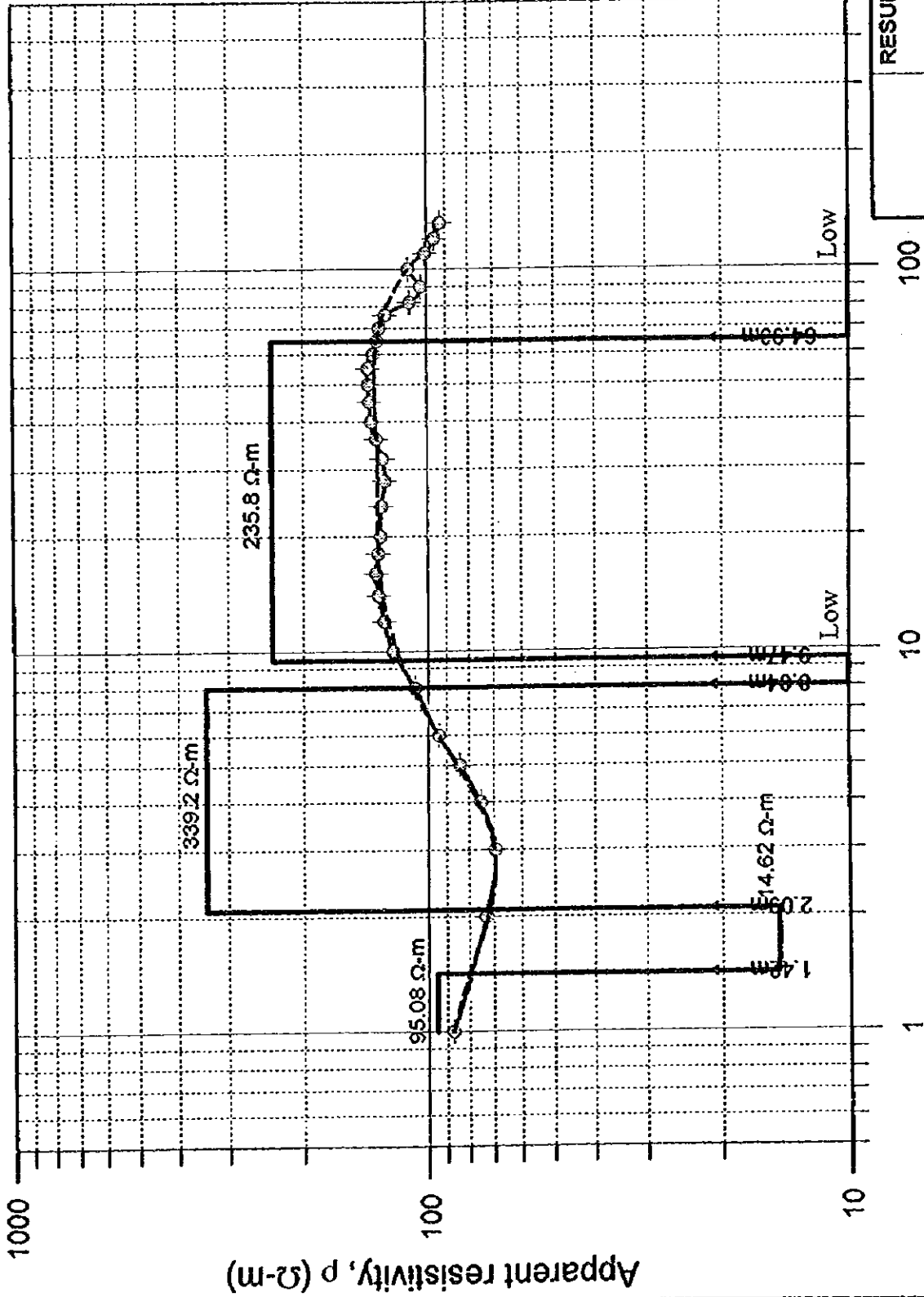
Legend

Field data

Sounding curve (field)

Sounding curve (model)

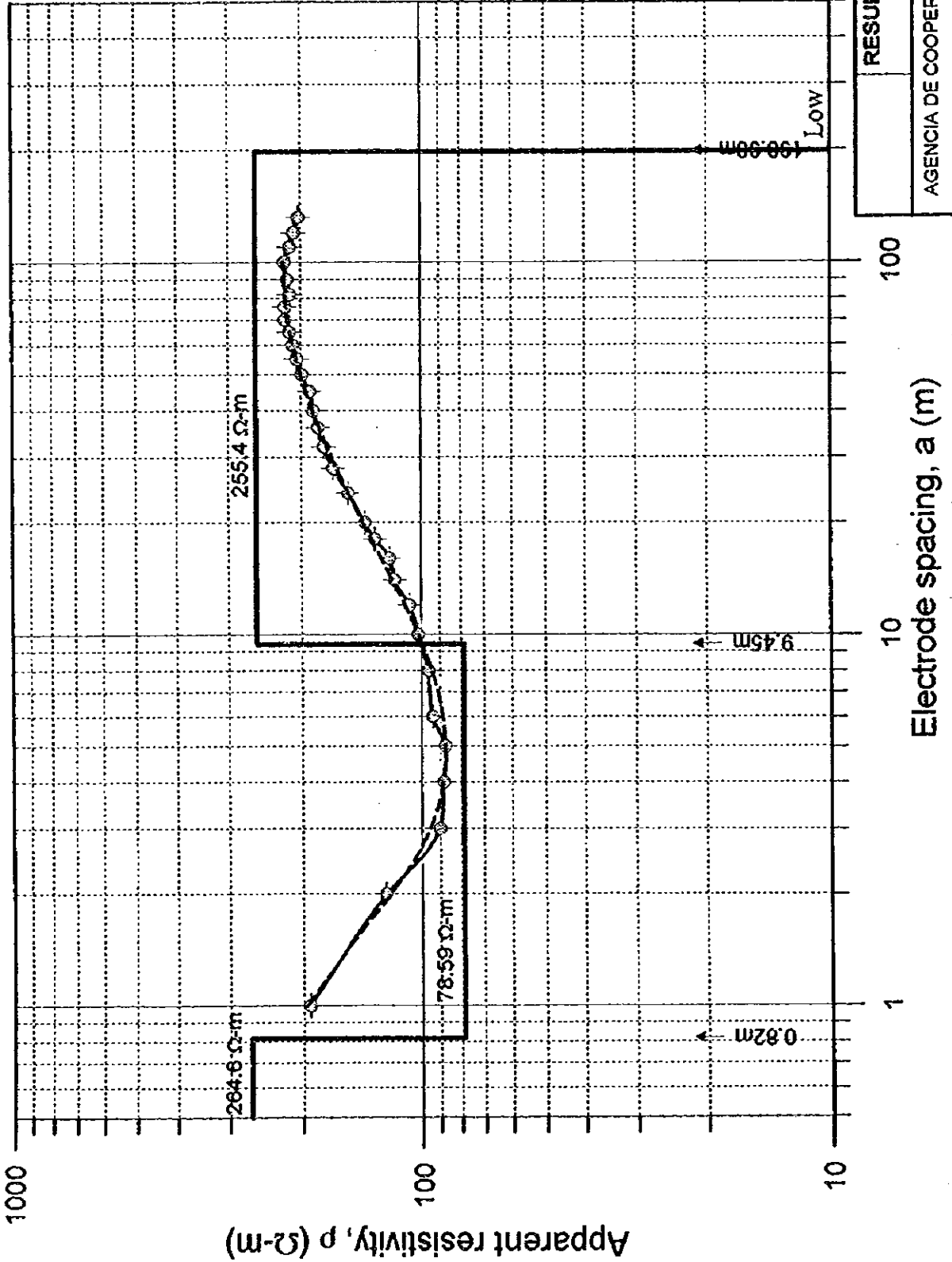
Model result



RESULT OF RESISTIVITY SOUNDING
(E-09)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-10 Benef. Molineros, Tepetitan



Electrode array:
Wenner

Coordinates:
E: 515520m
N: 280950m

Elevation:
610 m

Legend

◇ Field data

— Sounding curve (field)

- - - Sounding curve (model)

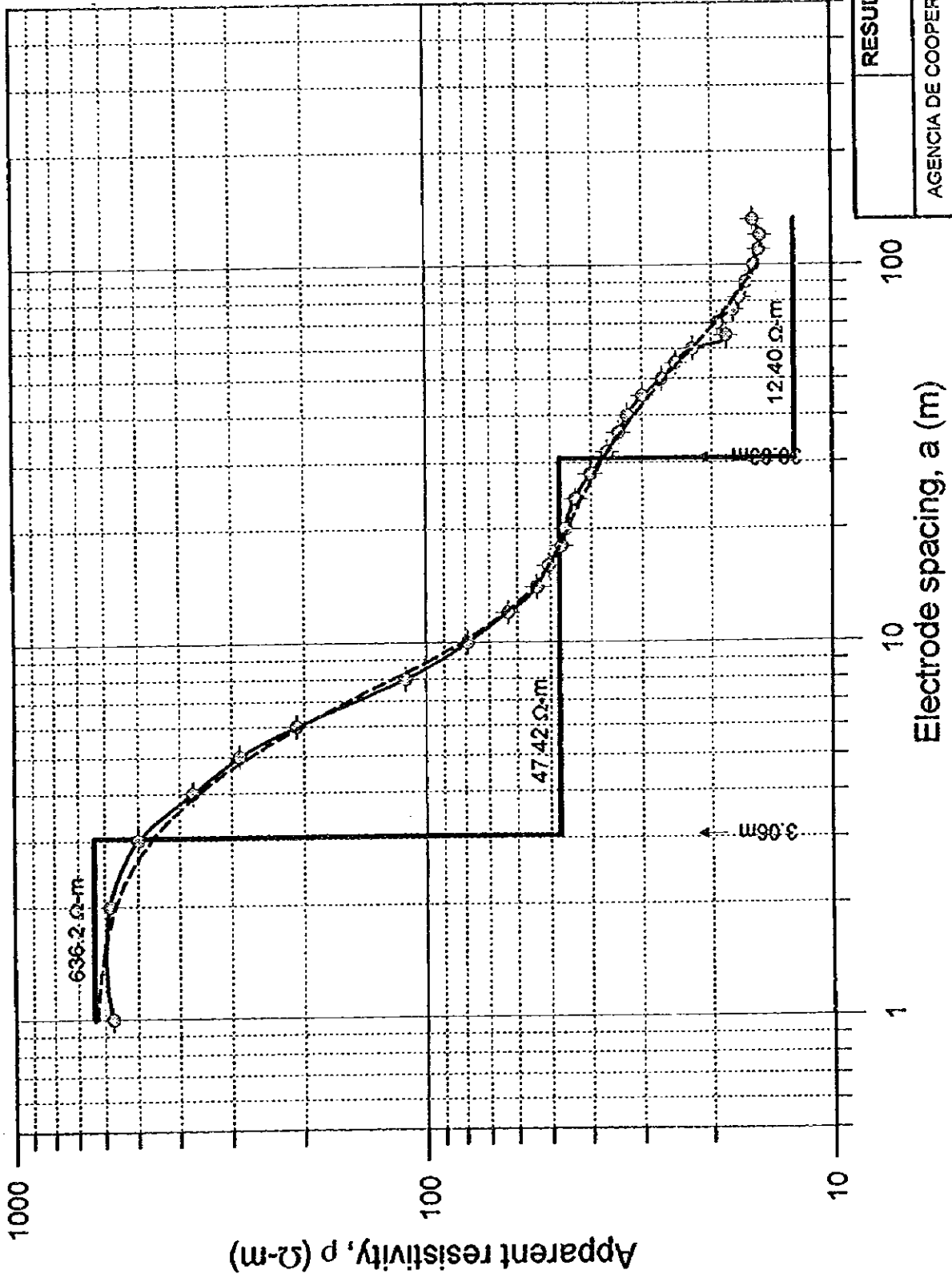
▭ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.82	264.6
2	0.82	9.45	78.59
3	9.45	198.98	255.4
4	198.98	INFINITY	Low

RESULT OF RESISTIVITY SOUNDING (E-10)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-11 Hda. Santa Emilia, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 498050m
N: 253363m

Elevation: 17 m

Legend

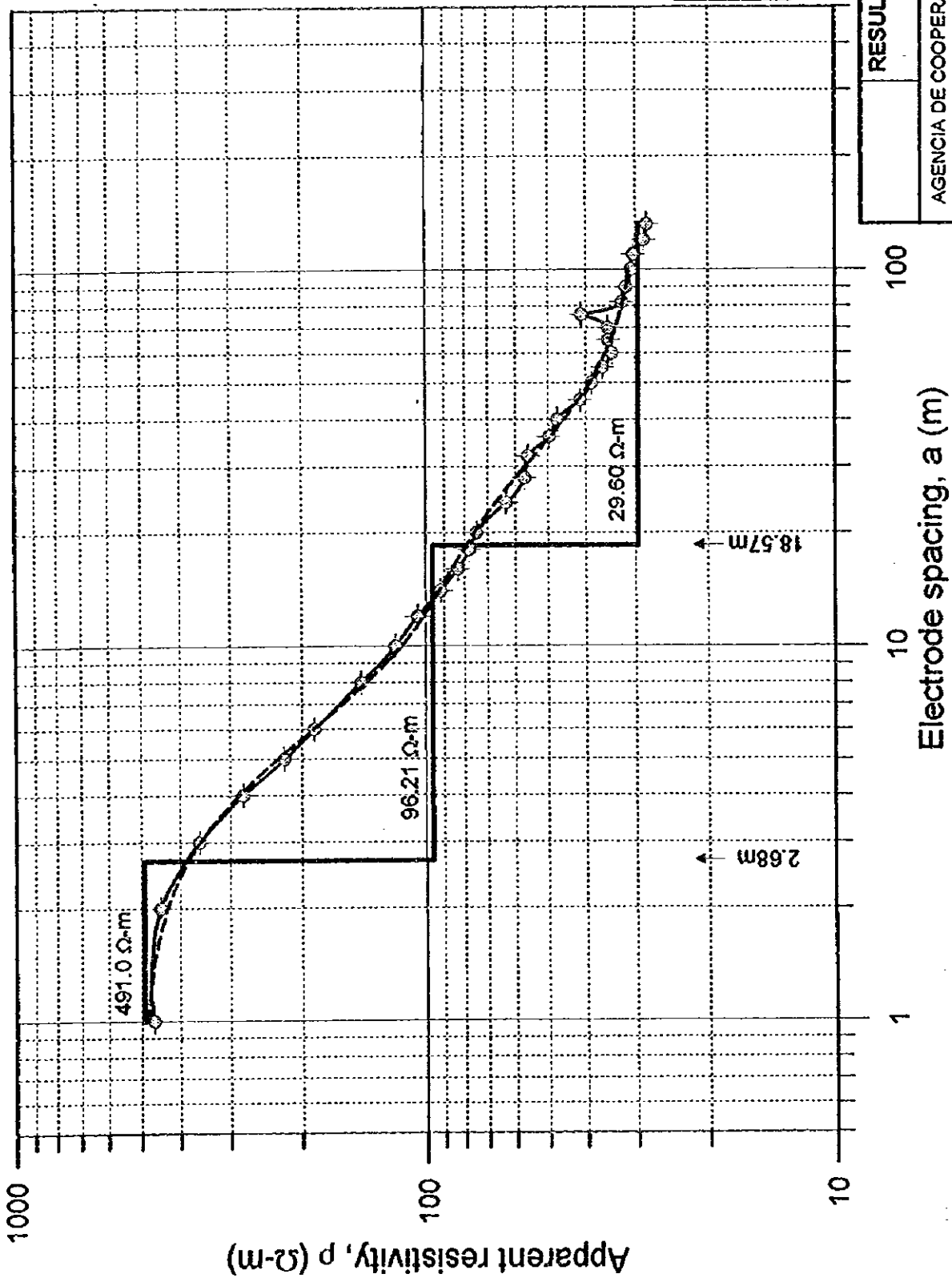
- \diamond Field data
- Sounding curve (field)
- - - Sounding curve (model)
- Model result

Inverse Modelling Results			
Layer	Depth (m)		Resistivity (Ω -m)
	from	to	
1	0.00	3.06	636.2
2	3.06	30.83	47.42
3	30.83	INFINITY	12.40

RESULT OF RESISTIVITY SOUNDING
(E-11)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-12 Desvio Las Tres Puertas, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 499150m
N: 258325m

Elevation: 34 m

Legend

◆ Field data

— Sounding curve (field)

- - - Sounding curve (model)

⌊ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	2.68	491.0
2	2.68	18.57	96.21
3	18.57	INFINITY	29.60

RESULT OF RESISTIVITY SOUNDING (E-12)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-13 San Ramon

Electrode array:
Wenner

Coordinates:
E: 507650m
N: 285200m

Elevation: 633 m

Legend

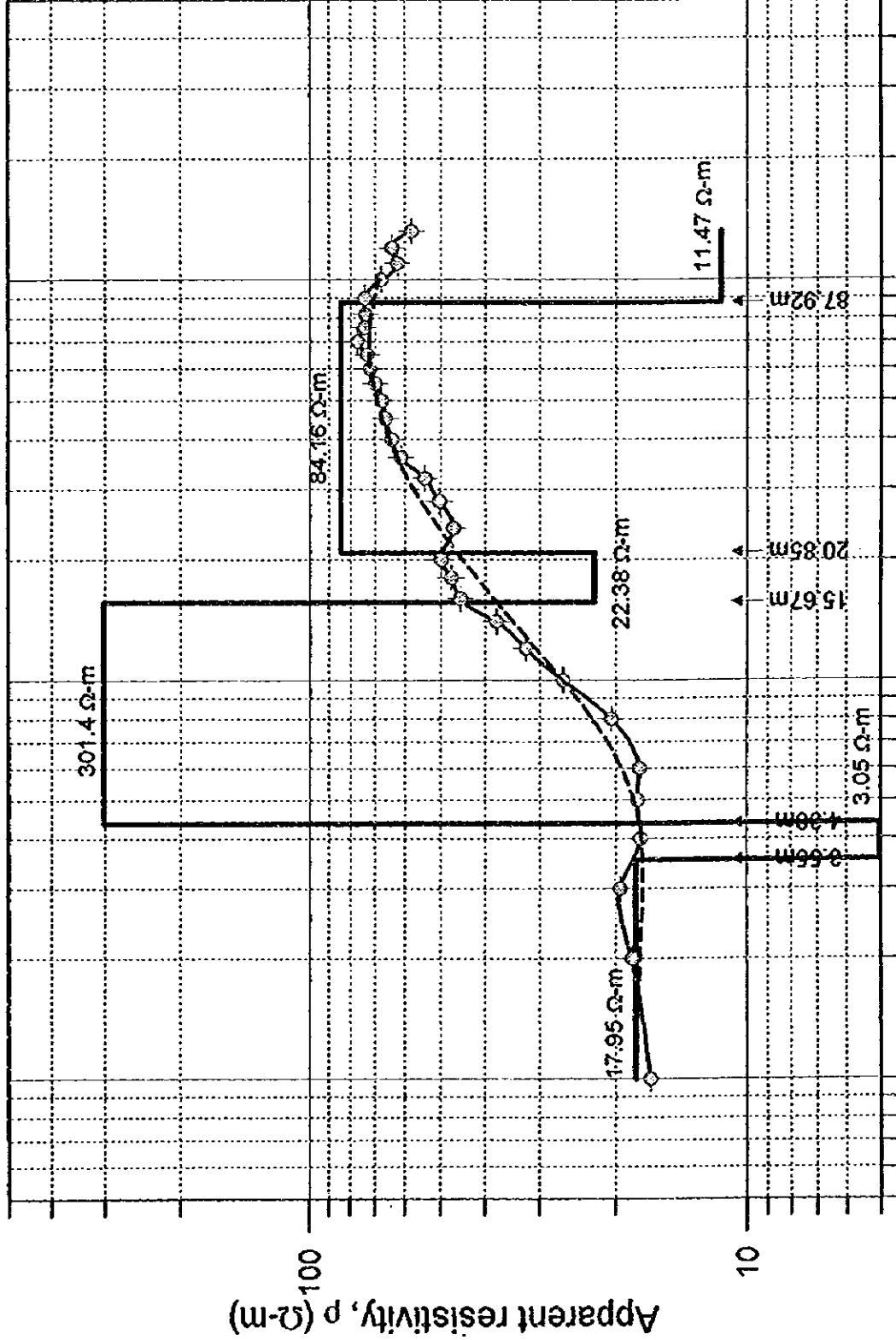
◊ Field data

— Sounding curve (field)

- - - Sounding curve (model)

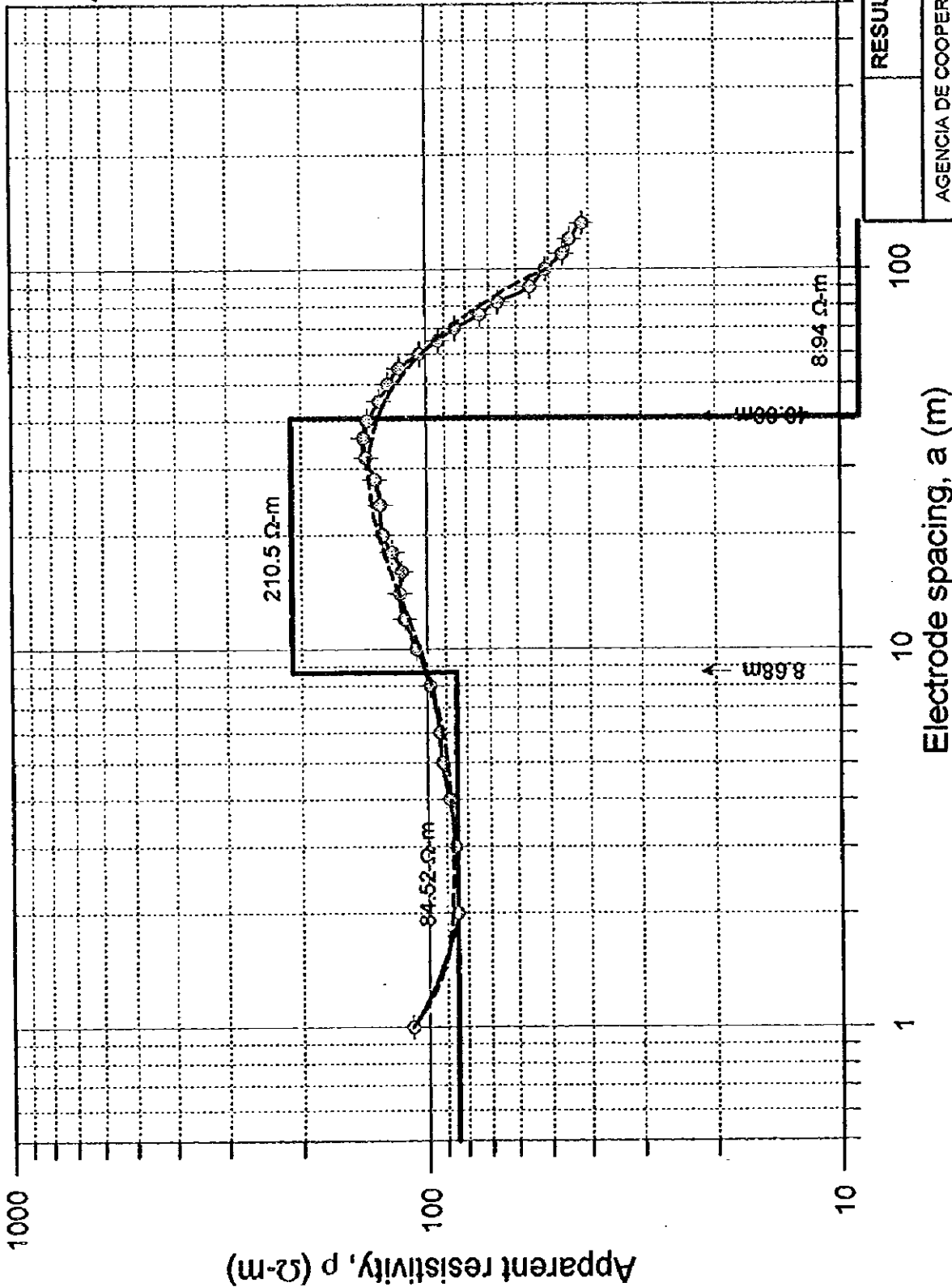
▭ Model result

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	3.55	17.95
2	3.55	4.38	3.05
3	4.38	15.67	301.4
4	15.67	20.85	22.38
5	20.85	87.92	84.16
6	87.92	INFINITY	11.47



RESULT OF RESISTIVITY SOUNDING (E-13)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-14 Cton. San Pabro, San Ramon



Electrode array:
Wenner

Coordinates:
E: 508738m
N: 287250m

Elevation: 775 m

Legend

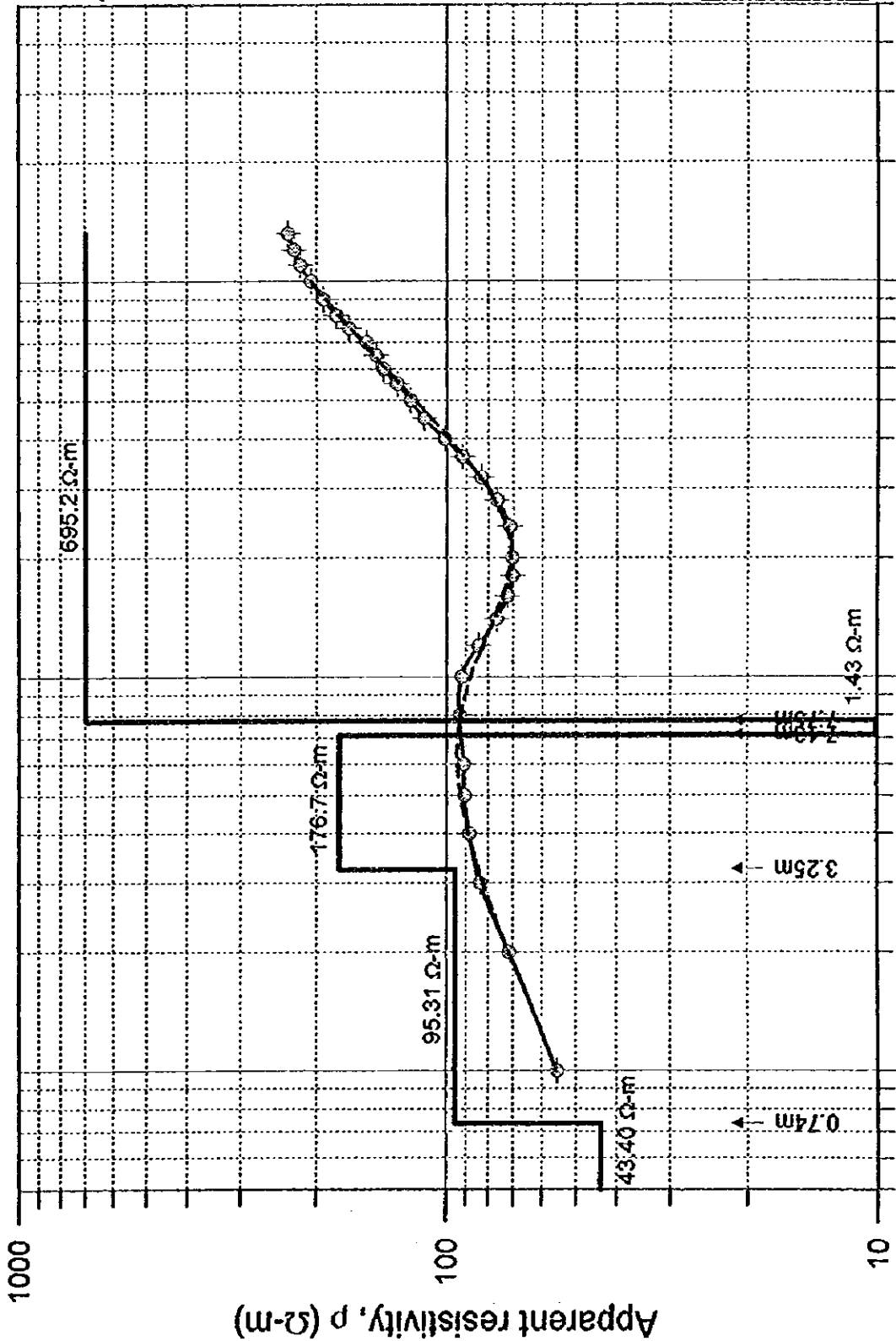
- \diamond Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ▭ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω -m)
	from	to	
1	0.00	0.24	1051
2	0.24	8.68	84.52
3	8.68	40.80	210.5
4	40.80	INFINITY	8.94

RESULT OF RESISTIVITY SOUNDING (E-14)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-15 Cton. San Antonio, San Cristobal



Electrode array:
Wenner

Coordinates:
E: 511763m
N: 285175m

Elevation: 635 m

Legend

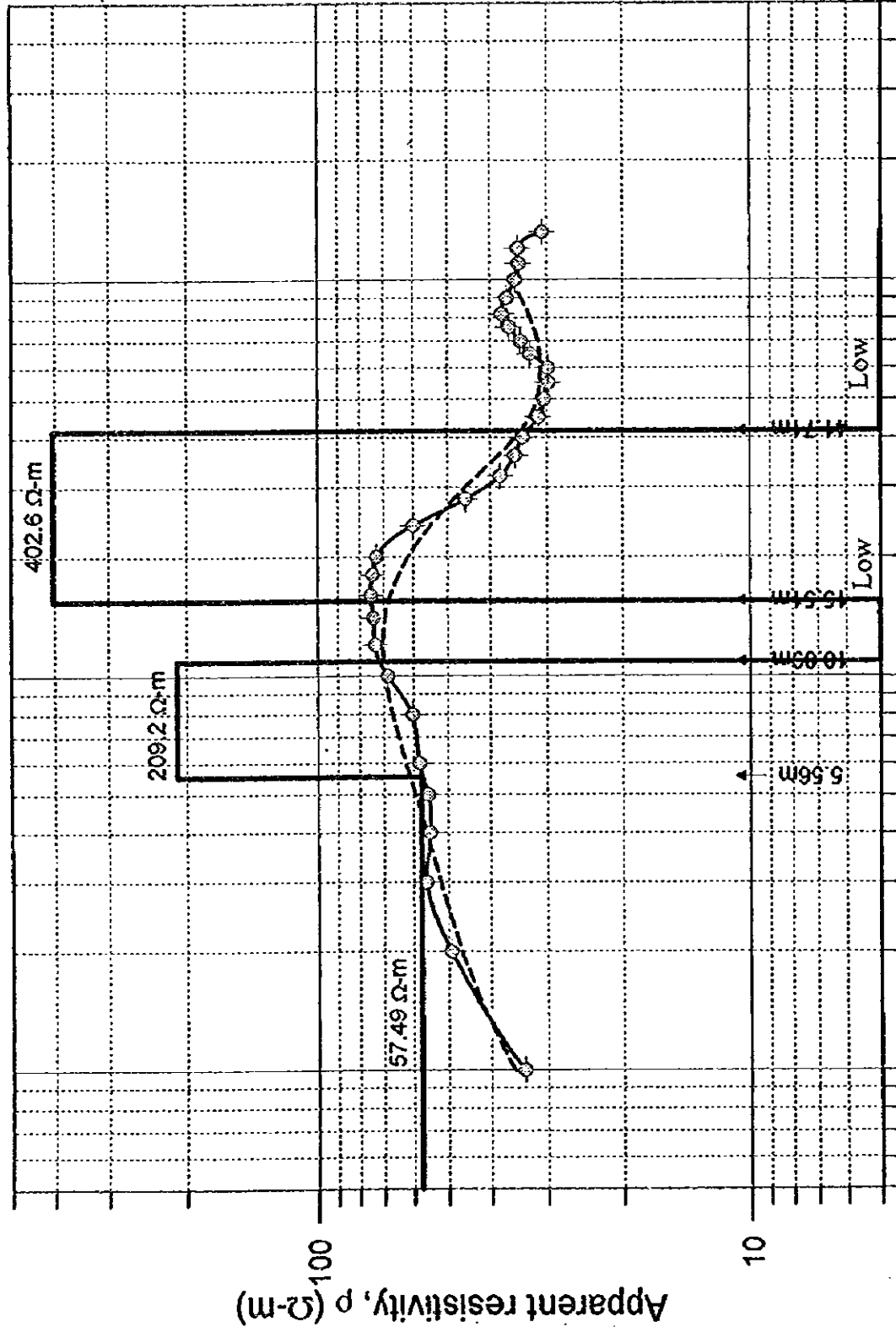
- ⊕ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ⌚ Model result

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.74	43.40
2	0.74	3.25	95.31
3	3.25	7.13	176.7
4	7.13	7.75	1.43
5	7.75	INFINITY	695.2

RESULT OF RESISTIVITY SOUNDING
(E-16)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-16 Cton. Santa Cruz, San Cristobal



Electrode array:
Wenner

Coordinates:
E: 511125m
N: 285913m

Elevation: 641 m

Legend

◇ Field data

— Sounding curve (field)

- - - Sounding curve (model)

⌊ Model result

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.03	1.57
2	0.03	5.56	57.49
3	5.56	10.89	209.2
4	10.89	15.51	1.92
5	15.51	41.71	402.6
6	41.71	INFINITY	Low

RESULT OF RESISTIVITY SOUNDING (E-16)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-17 Cton. Santa Anita, San Cristobal

Electrode array:
Wenner

Coordinates:
E: 509475m
N: 282975m

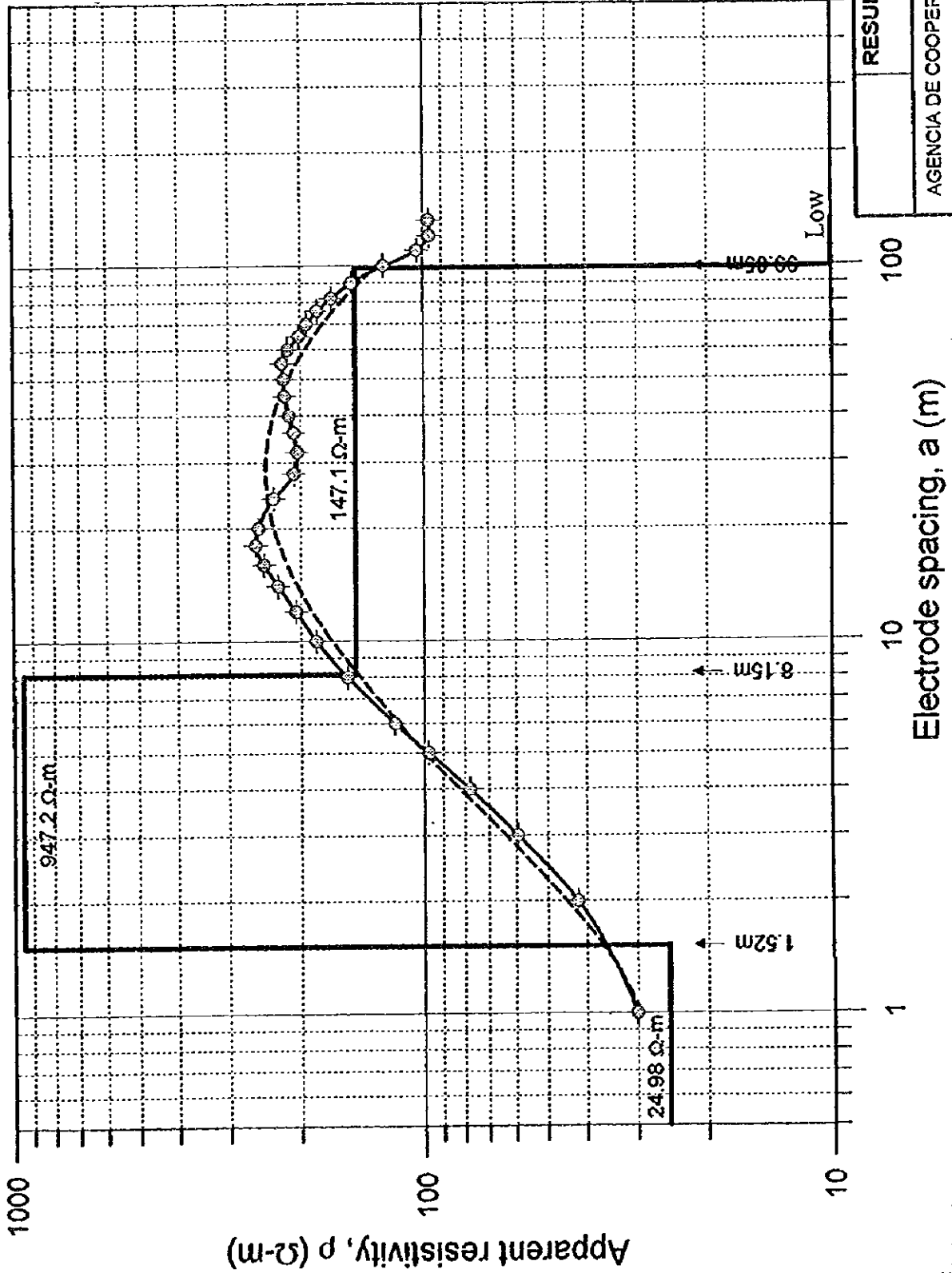
Elevation: 495 m

Legend

- ◆ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ⌚ Model result

Inverse Modelling Results

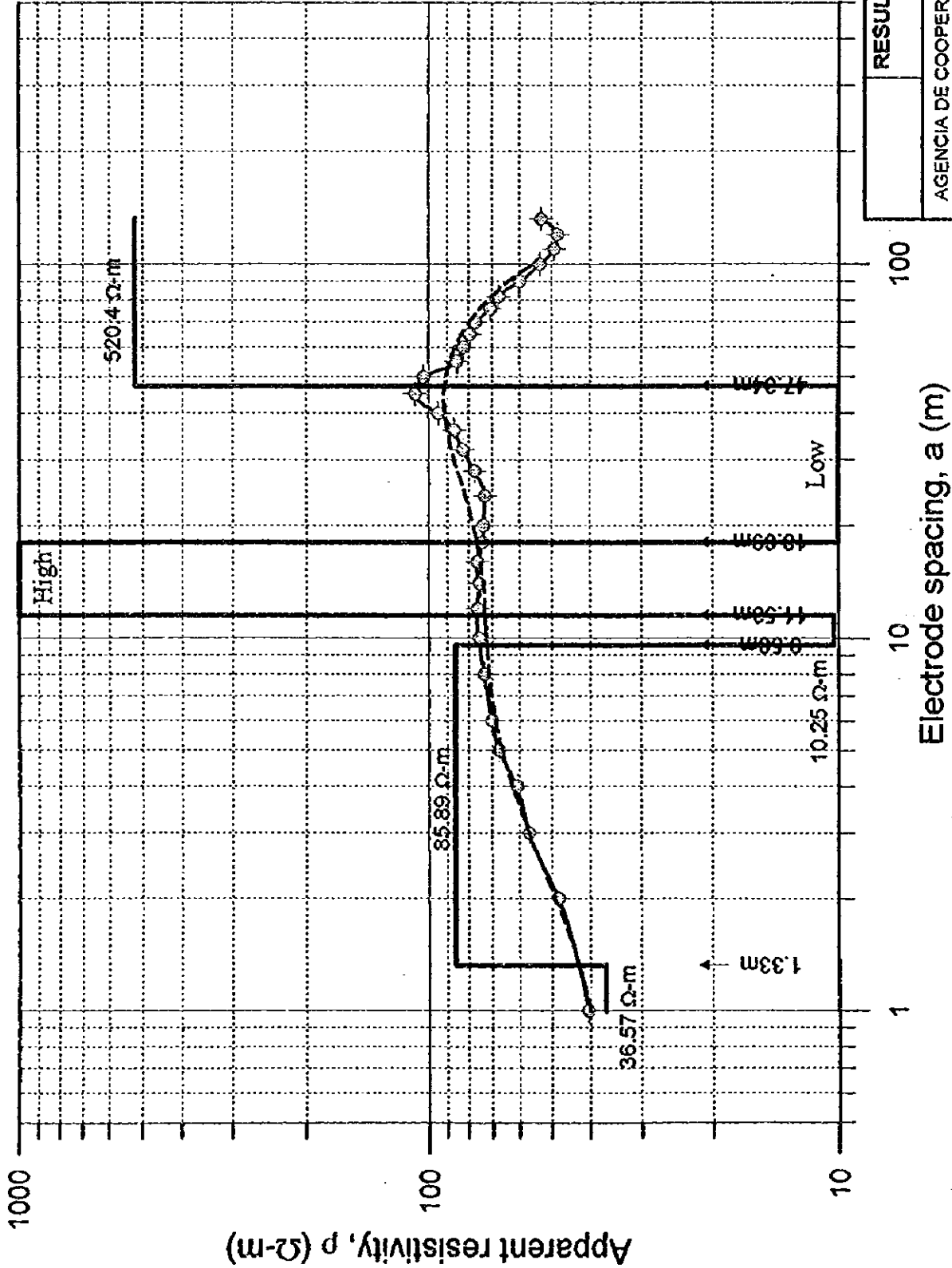
Layer	Depth (m)		Resistivity (%)
	from	to	
1	0.00	1.52	24.98
2	1.52	8.15	947.2
3	8.15	99.05	147.1
4	99.05	INFINITY	Low



RESULT OF RESISTIVITY SOUNDING
(E-17)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-18 Finca El Cocal, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 495963m
N: 270350m

Elevation: 232 m

Legend

Field data

Sounding curve (field)

Sounding curve (model)

Model result

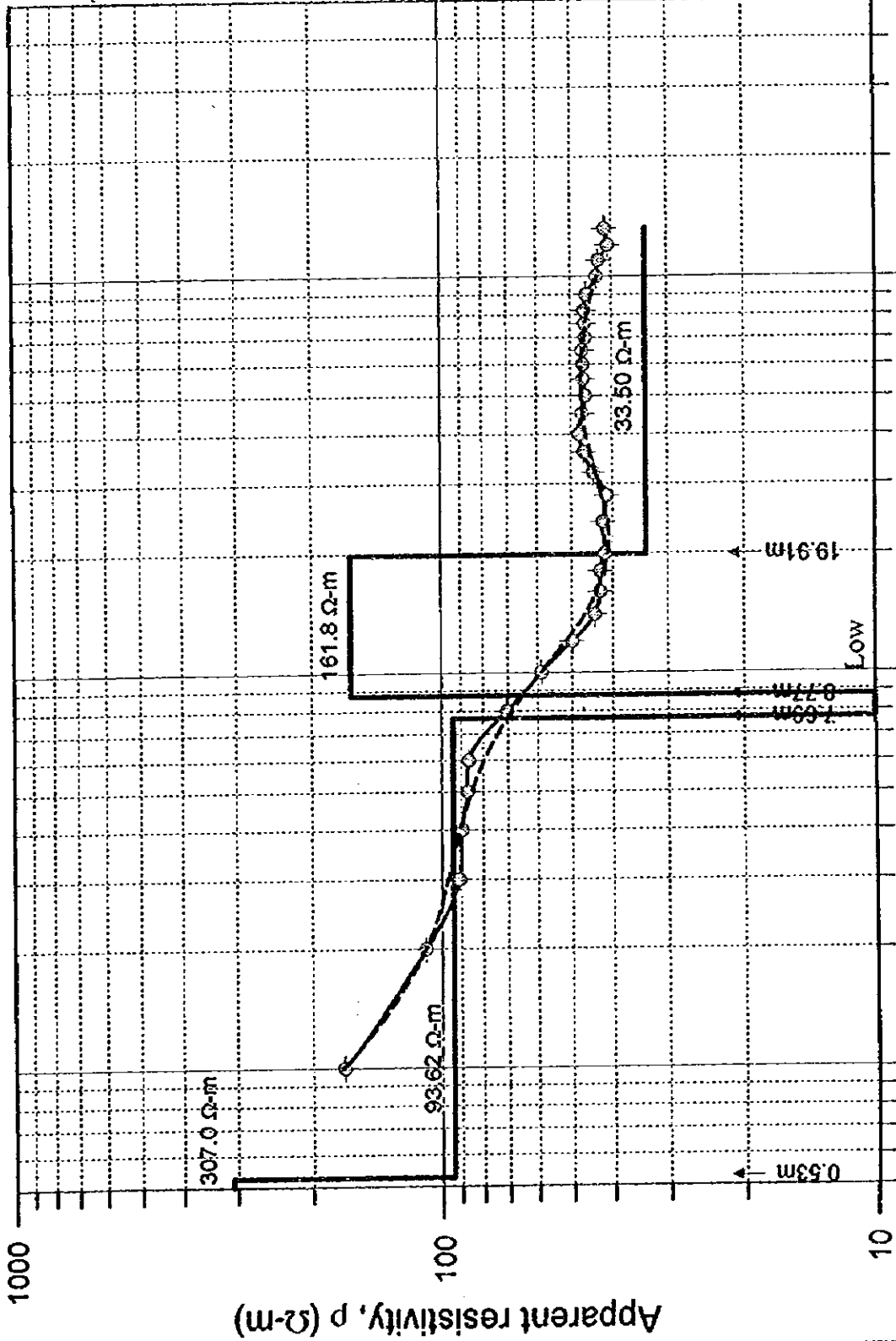
Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω -m)
	from	to	
1	0.00	1.33	36.57
2	1.33	9.58	85.89
3	9.58	11.53	10.25
4	11.53	18.09	High
5	18.09	47.34	Low
6	47.34	INFINITY	520.4

RESULT OF RESISTIVITY SOUNDING
(E-18)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-19 Barrio San Jose, San Pedro Masahuat



Electrode array:
Wenner

Coordinates:
E: 495288m
N: 268100m

Elevation: 170 m

Legend

- ◆ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ⌊ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.53	307.0
2	0.53	7.69	93.62
3	7.69	8.77	2.21
4	8.77	19.91	161.8
5	19.91	INFINITY	33.50

RESULT OF RESISTIVITY SOUNDING (E-19)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-20 Cton. Belen, San Antonio Masahuat

Electrode array:
Wenner

Coordinates:
E: 499600m
N: 272700m

Elevation: 287 m

Legend

⊕ Field data

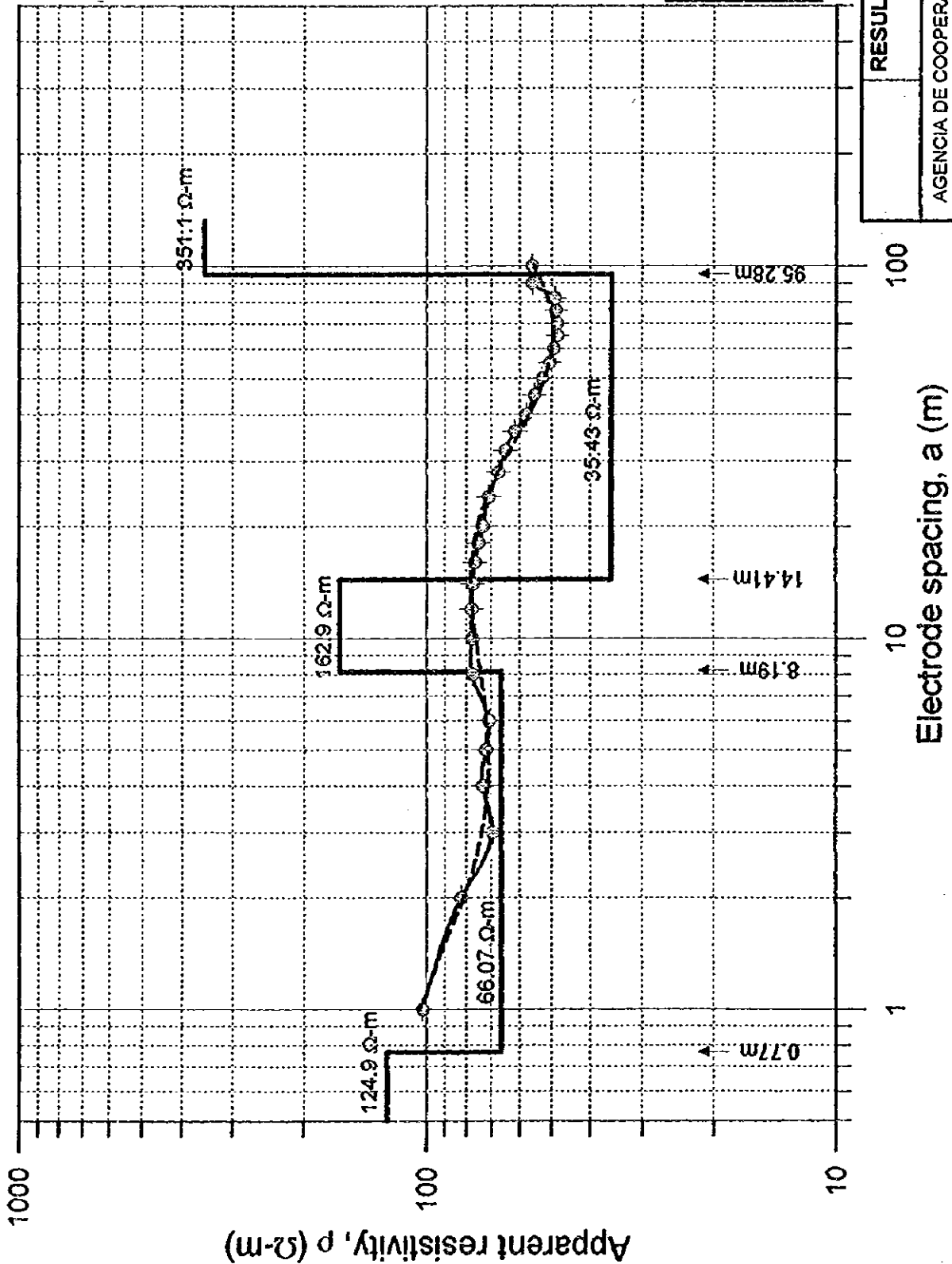
— Sounding curve (field)

- - - Sounding curve (model)

⌚ Model result

Inverse Modeling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.77	124.9
2	0.77	8.19	66.07
3	8.19	14.41	162.9
4	14.41	95.28	35.43
5	95.28	INFINITY	351.1



RESULT OF RESISTIVITY SOUNDING (E-20)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-21 Camp. El Cacao, San Pedro Masahuat

Electrode array:
Wenner

Coordinates:
E: 494975m
N: 257625m

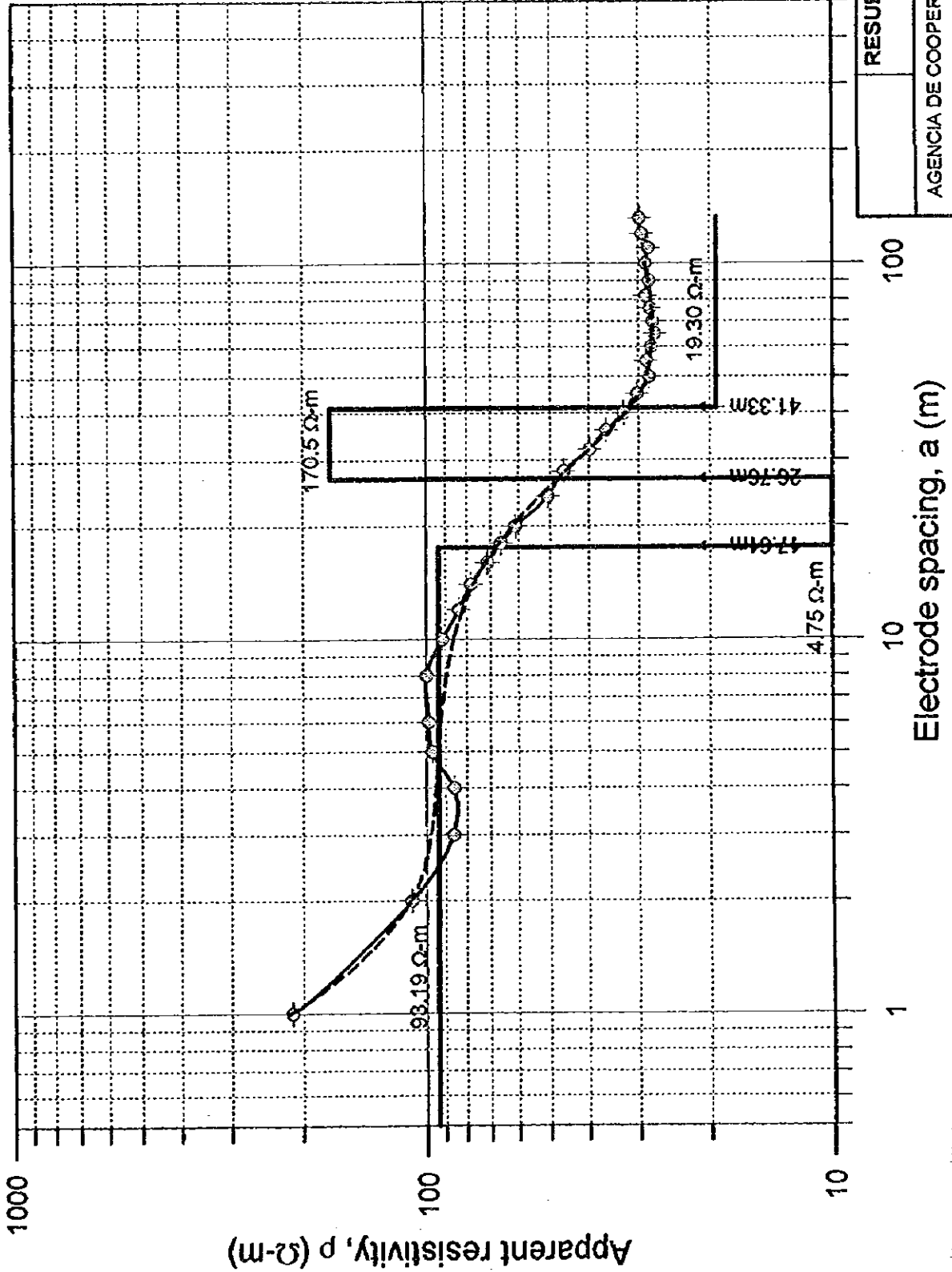
Elevation: 24 m

Legend

- ◇ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ▭ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	0.45	636.2
2	0.45	17.61	93.19
3	17.61	26.76	4.75
4	26.76	41.33	170.5
5	41.33	INFINITY	19.30



RESULT OF RESISTIVITY SOUNDING
(E-21)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-22 Camp. San Jose Luna, San Pedro Masahuat

Electrode array:
Wenner

Coordinates:
E: 495763m
N: 254700m

Elevation: 16 m

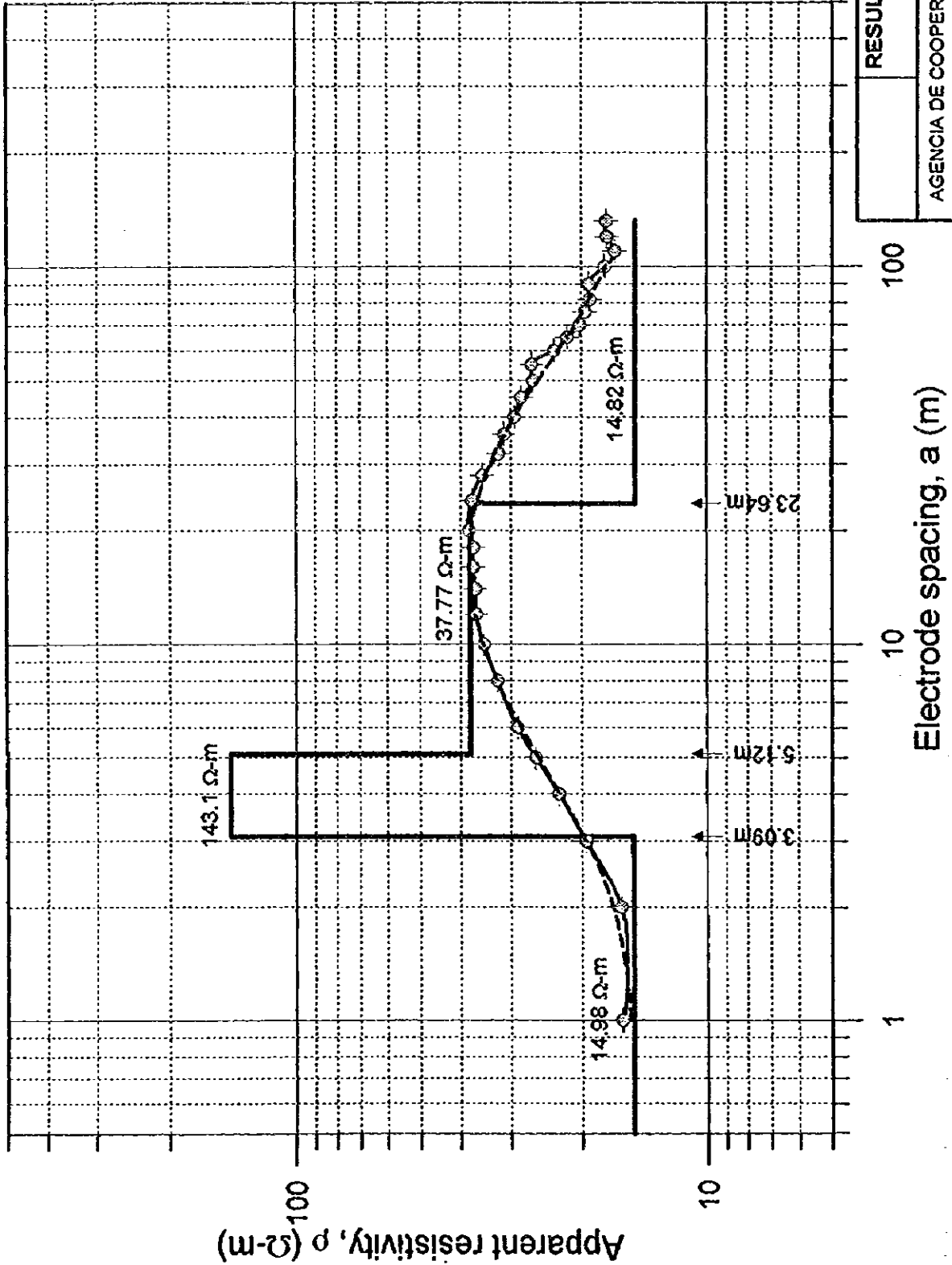
Legend

⊕ Field data

— Sounding curve (field)

- - - Sounding curve (model)

Model result



Layer	Depth (m)		Resistivity (Ω -m)
	from	to	
1	0.00	3.09	14.98
2	3.09	5.12	143.1
3	5.12	23.64	37.77
4	23.64	INFINITY	14.82

RESULT OF RESISTIVITY SOUNDING
(E-22)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-23 Cton. Las Hojas, San Pedro Masahuat

Electrode array:
Wenner

Coordinates:
E: 494925m
N: 250425m

Elevation: 5 m

Legend

◇ Field data

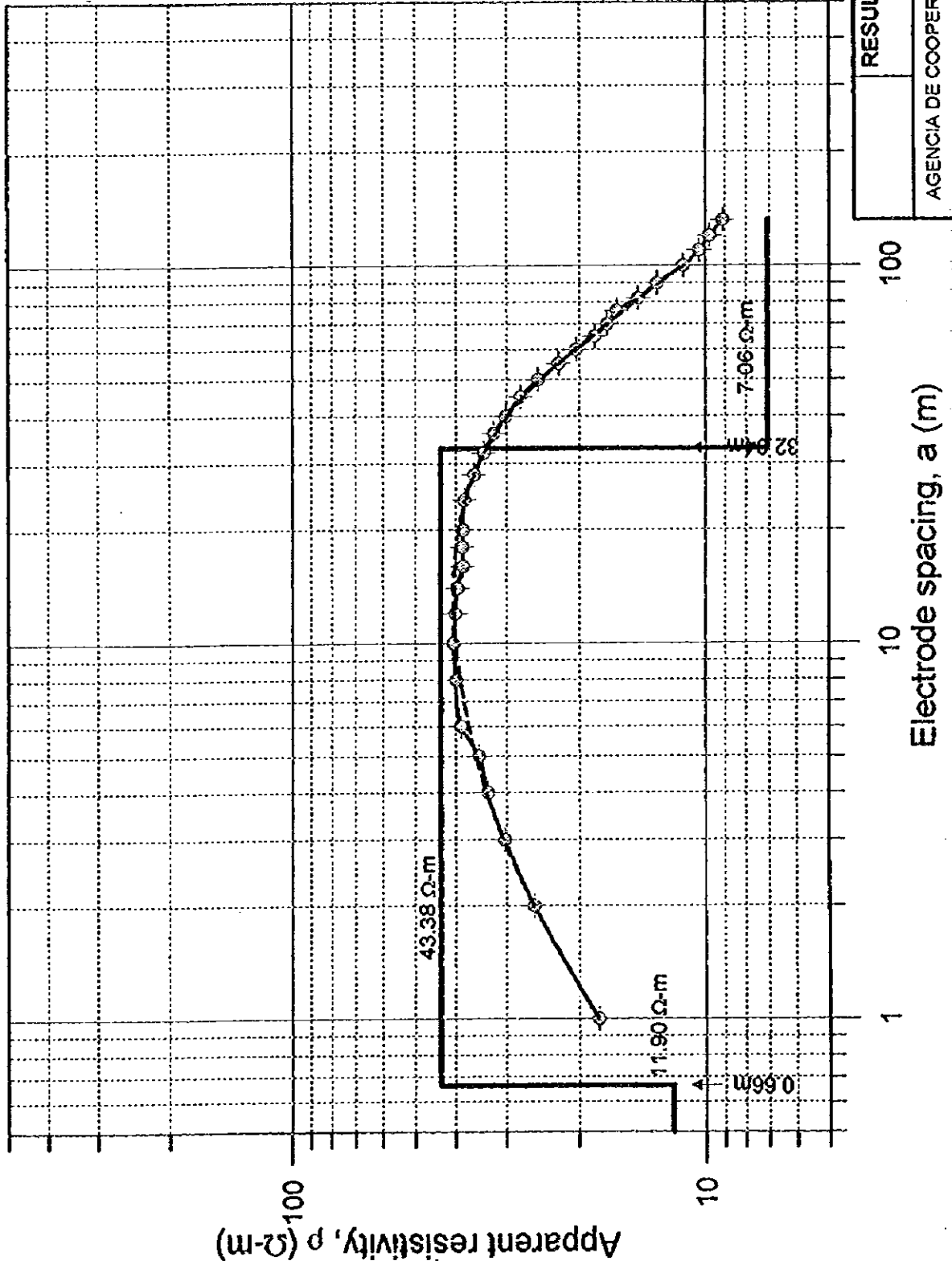
— Sounding curve (field)

- - - Sounding curve (model)

⌊ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity ($\Omega\text{-m}$)
	from	to	
1	0.00	0.66	11.90
2	0.66	32.92	43.38
3	32.92	INFINITY	7.06



No. E-24 Cton. Concepcion, El Carmen

Electrode array:
Wenner

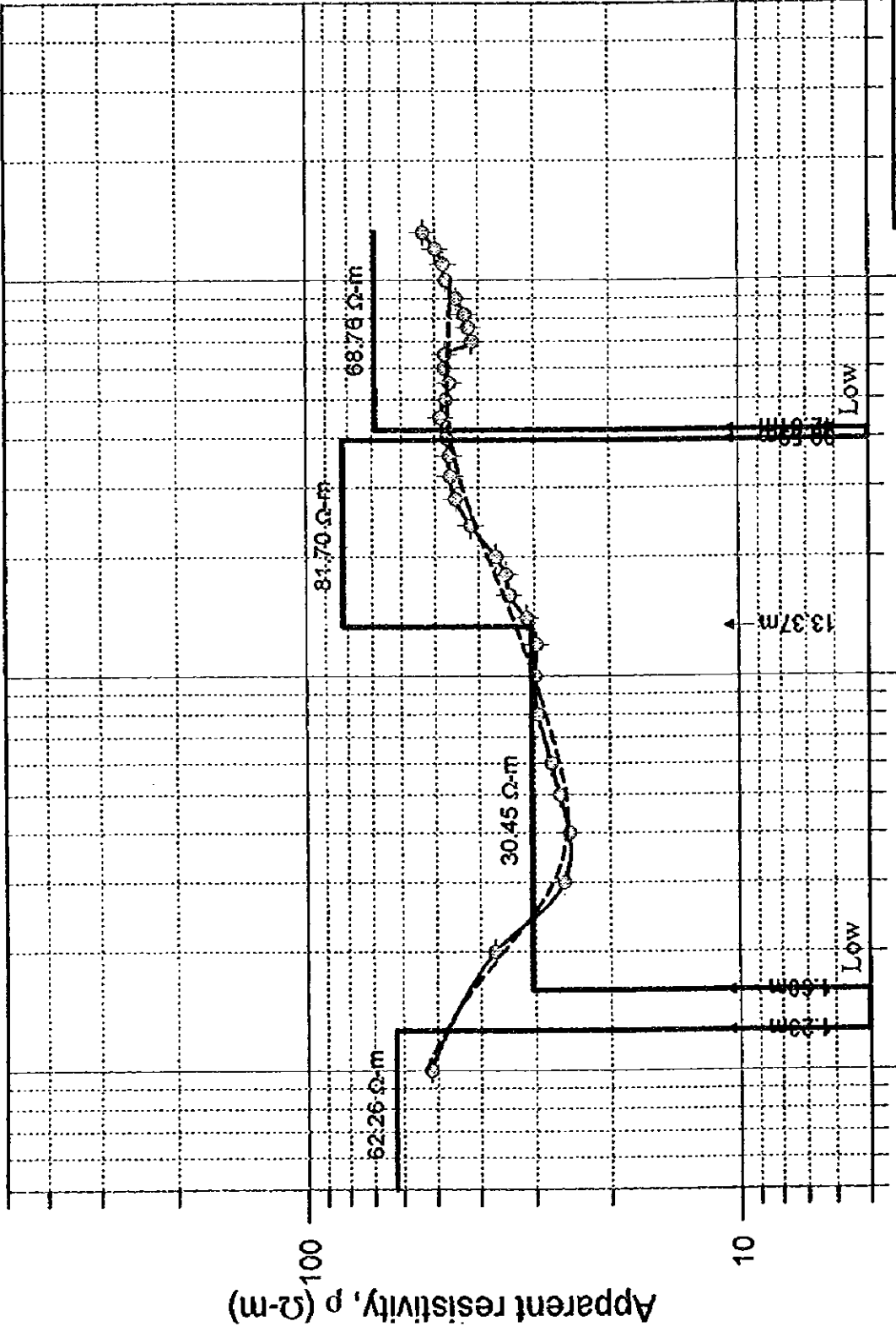
Coordinates:
E: 509913m
N: 289650m

Elevation: 772 m

Legend

- ◇ Field data
- Sounding curve (field)
- - - Sounding curve (model)
- ▭ Model result

Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	1.27	62.26
2	1.27	1.60	4.05
3	1.60	13.37	30.45
4	13.37	39.59	81.78
5	39.59	42.01	1.71
6	42.01	INFINITY	68.76



RESULT OF RESISTIVITY SOUNDING (E-24)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

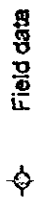
No. E-25 El Llano, Candelaria

Electrode array:
Wenner

Coordinates:
E: 505688m
N: 286075m

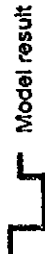
Elevation: 667 m

Legend



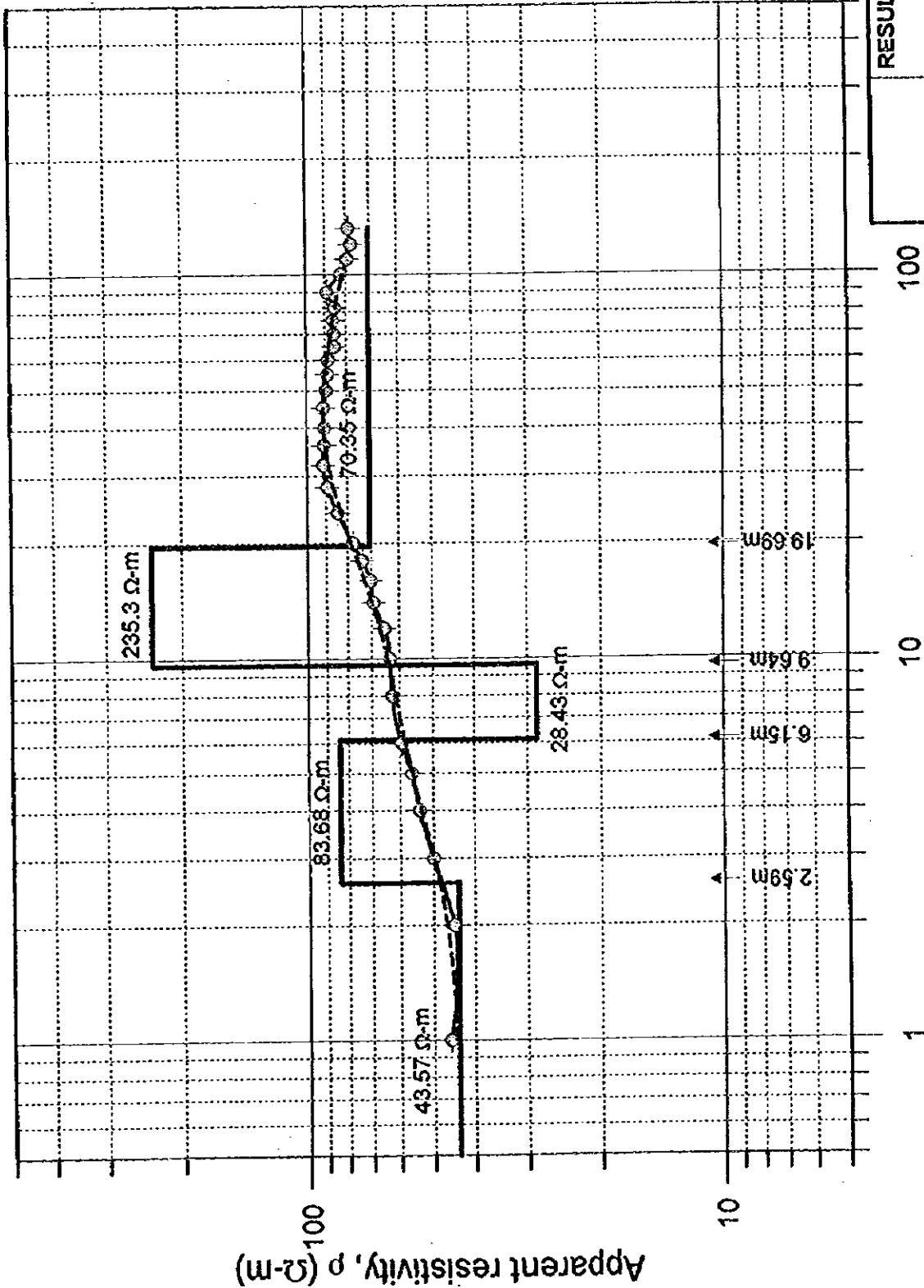
— Sounding curve (field)

- - - Sounding curve (model)



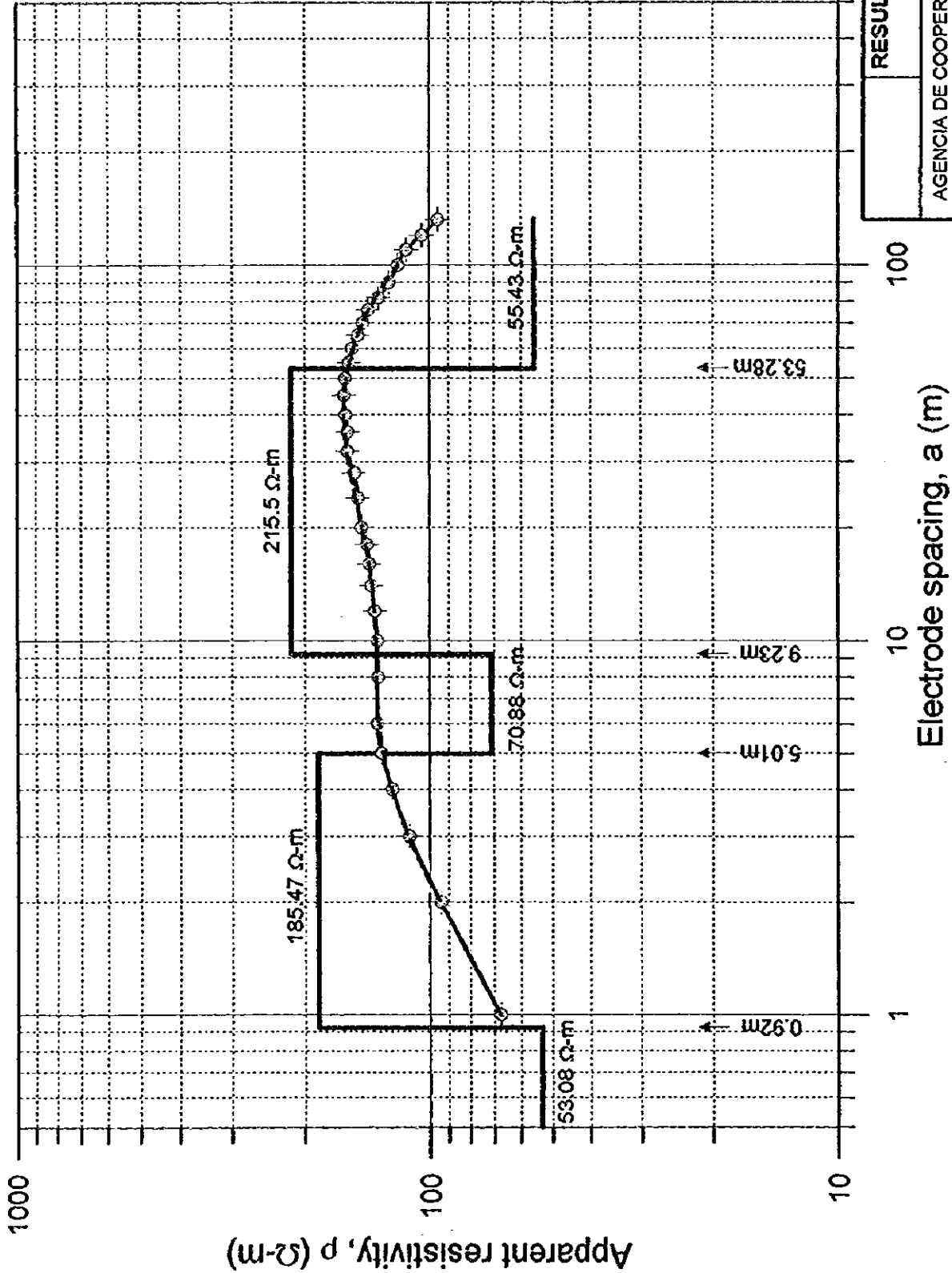
Inverse Modelling Results

Layer	Depth (m)		Resistivity ($\Omega\text{-m}$)
	from	to	
1	0.00	2.59	43.57
2	2.59	6.15	83.68
3	6.15	9.64	28.43
4	9.64	19.69	235.3
5	19.69	INFINITY	70.35



RESULT OF RESISTIVITY SOUNDING
(E-25)
AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-26 Cton. El Rosario, Candelaria



Electrode array:
Wenner

Coordinates:
E: 502125m
N: 284488m

Elevation: 645 m

Legend

◆ Field data

— Sounding curve (field)

— Sounding curve (model)

⌋ Model result

Inverse Modelling Results

Layer	Depth (m)		Resistivity ($\Omega\text{-m}$)
	from	to	
1	0.00	0.92	53.08
2	0.92	5.01	185.5
3	5.01	9.23	70.88
4	9.23	53.28	215.5
5	53.28	INFINITY	55.43

RESULT OF RESISTIVITY SOUNDING
(E-26)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-27 Cton. Buena Vista, Tapalhuaca

Electrode array:
Wenner

Coordinates:
E: 494375m
N: 270425m

Elevation: 352 m

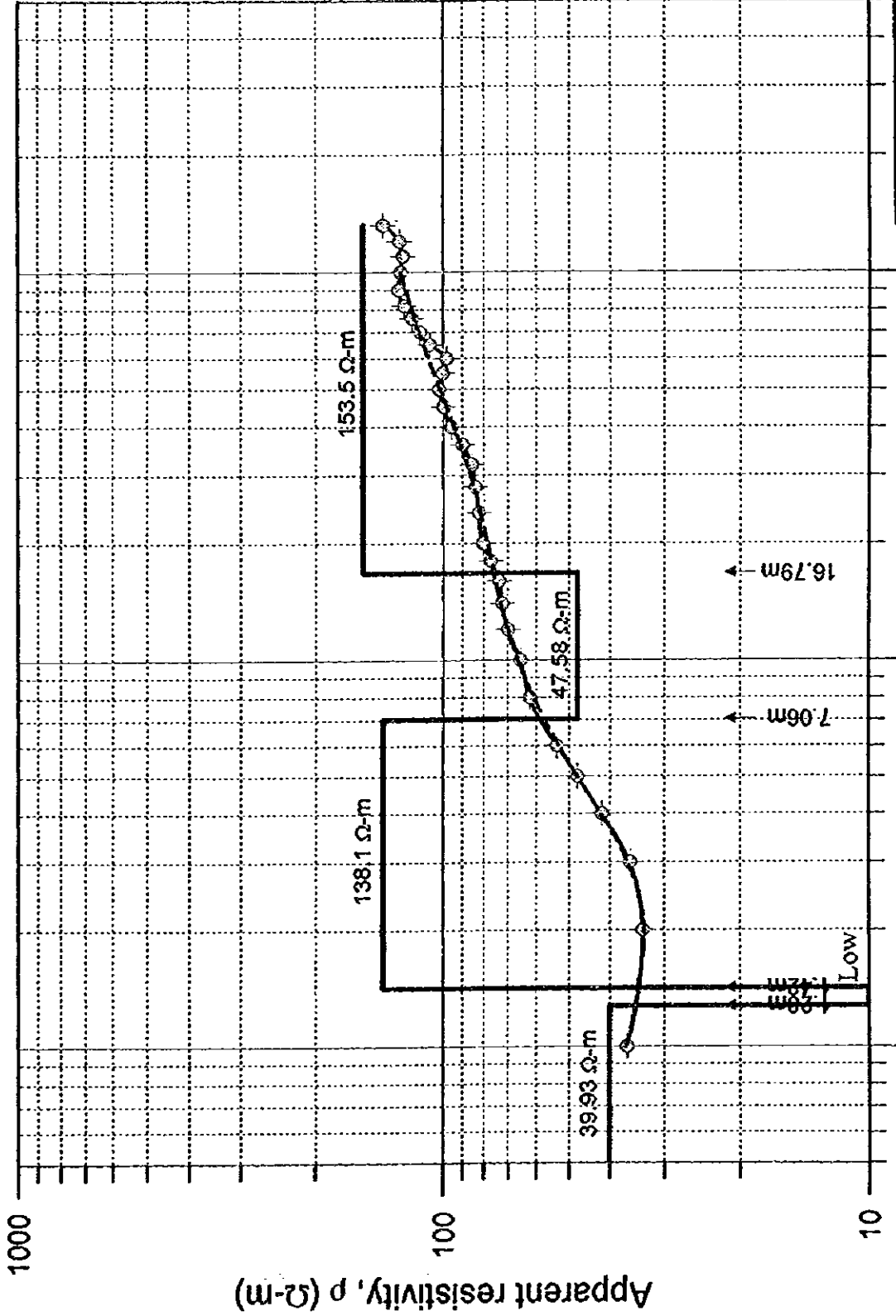
Legend

◆ Field data

— Sounding curve (field)

- - - Sounding curve (model)

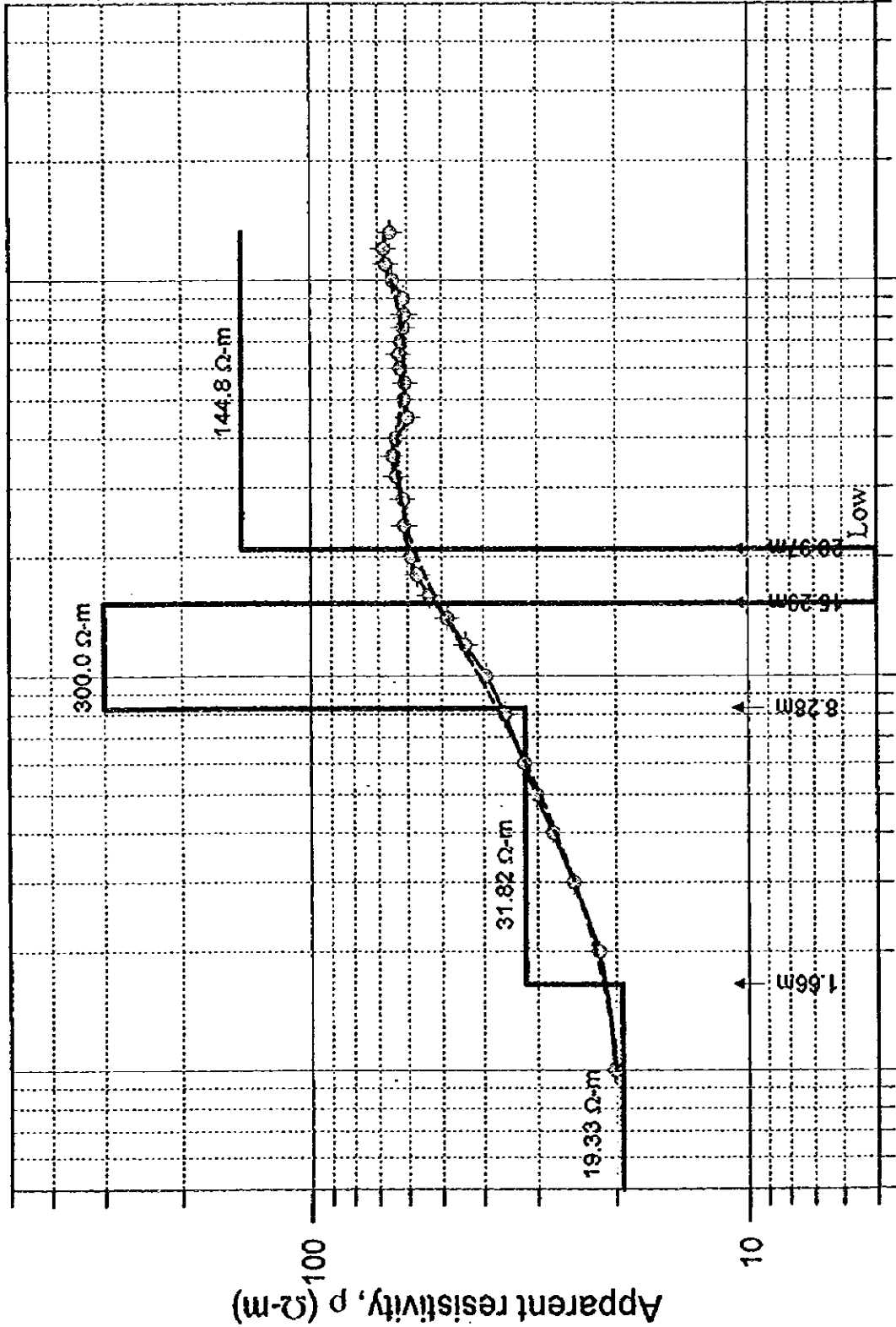
⌋ Model result



Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	1.28	39.93
2	1.28	1.42	2.19
3	1.42	7.06	138.1
4	7.06	16.79	47.58
5	16.79	INFINITY	153.5

RESULT OF RESISTIVITY SOUNDING (E-27)
 AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

No. E-28 Cton. El Socorro, San Antonio Masahuat



Electrode array:
Wenner

Coordinates:
E: 496275m
N: 273463m

Elevation: 381 m

Legend

◆ Field data

— Sounding curve (field)

- - - Sounding curve (model)

⌚ Model result

Inverse Modelling Results

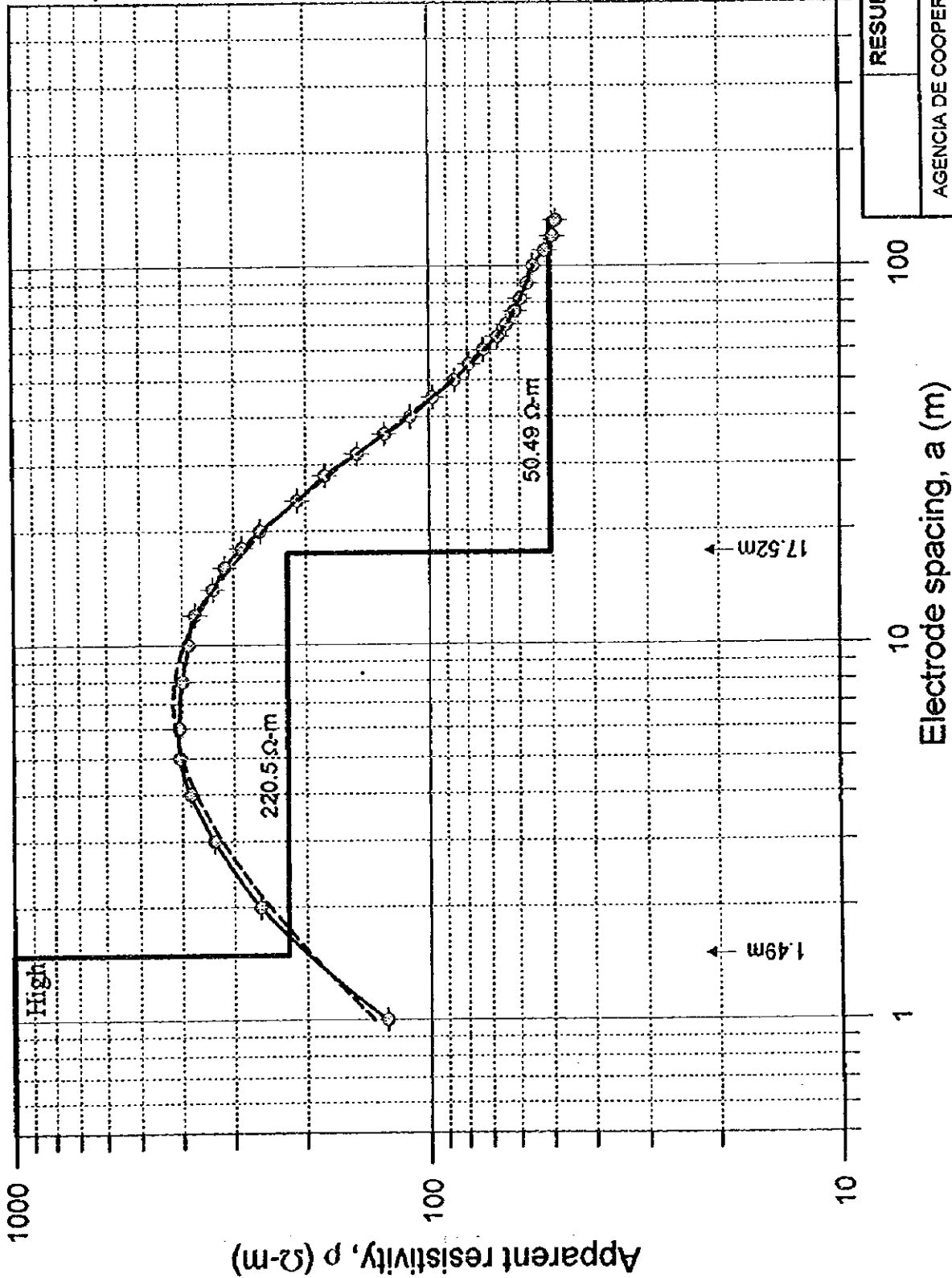
Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	1.66	19.33
2	1.66	8.28	31.82
3	8.28	15.29	300.0
4	15.29	20.97	4.68
5	20.97	INFINITY	144.8

RESULT OF RESISTIVITY SOUNDING
(E-28)

Electrode spacing, a (m)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-29 El Planon, Santa Cruz Analquito



Electrode array:
Wenner

Coordinates:
E: 503538m
N: 282613m

Elevation: 530 m

Legend

- \diamond Field data
- Sounding curve (field)
- - - Sounding curve (model)
- Model result

Layer	Depth (m)		Resistivity (Ω -m)
	from	to	
1	0.00	0.00	Low
2	0.00	1.42	2005
3	1.42	17.52	220.5
4	17.52	INFINITY	50.49

RESULT OF RESISTIVITY SOUNDING
(E-29)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-30 Cton. San Antonio Los Ranchos, Guadalupe

Electrode array:
Wenner

Coordinates:
E: 514190m
N: 279150m

Elevation: 672 m

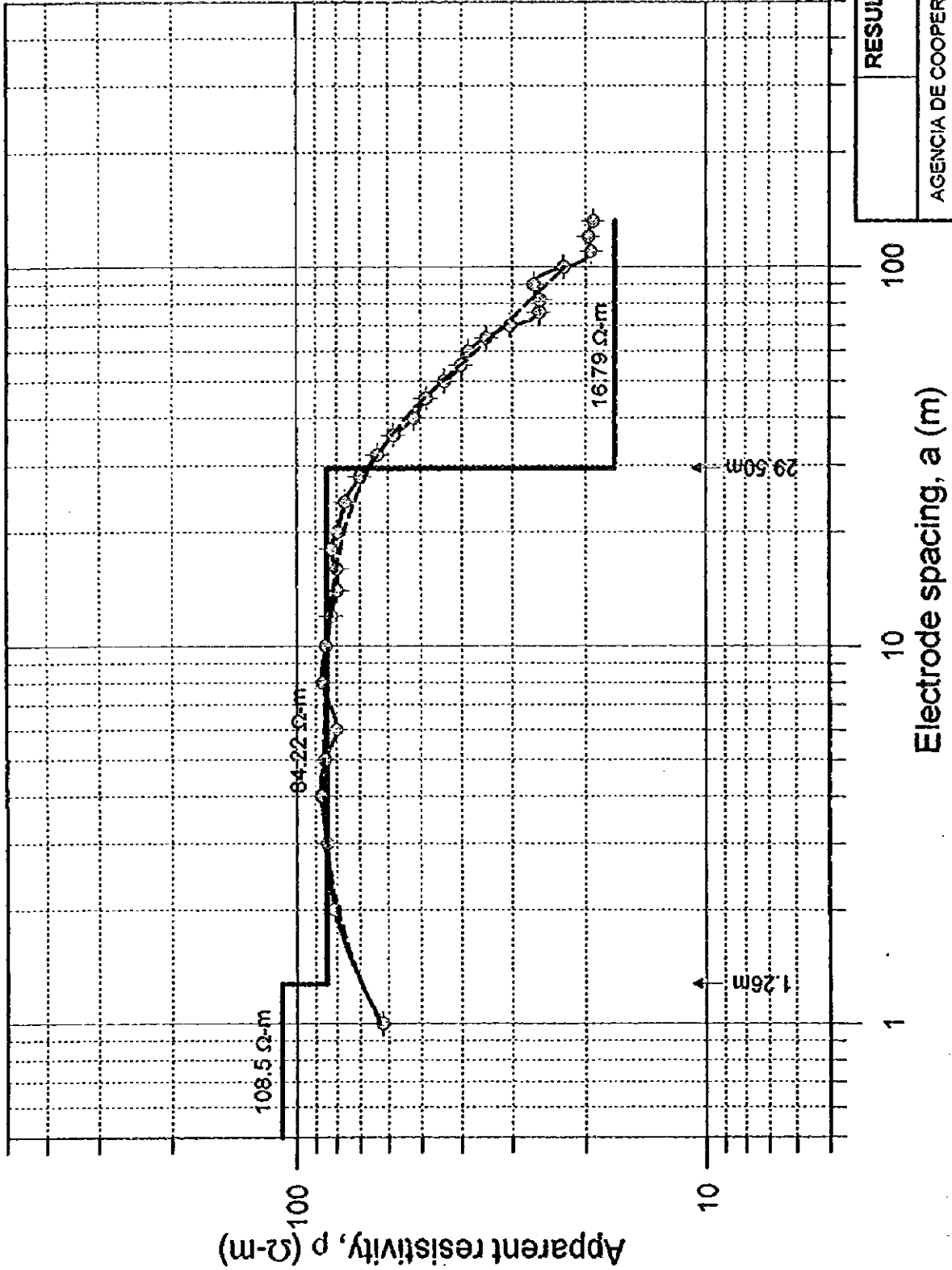
Legend

Field data

Sounding curve (field)

Sounding curve (model)

Model result



RESULT OF RESISTIVITY SOUNDING
(E-30)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON
(JICA)

No. E-31 Cton. La Comunidad, San Pedro Nonualco

Electrode array:
Wenner

Coordinates:
E: 505050m
N: 274663m

Elevation: 505 m

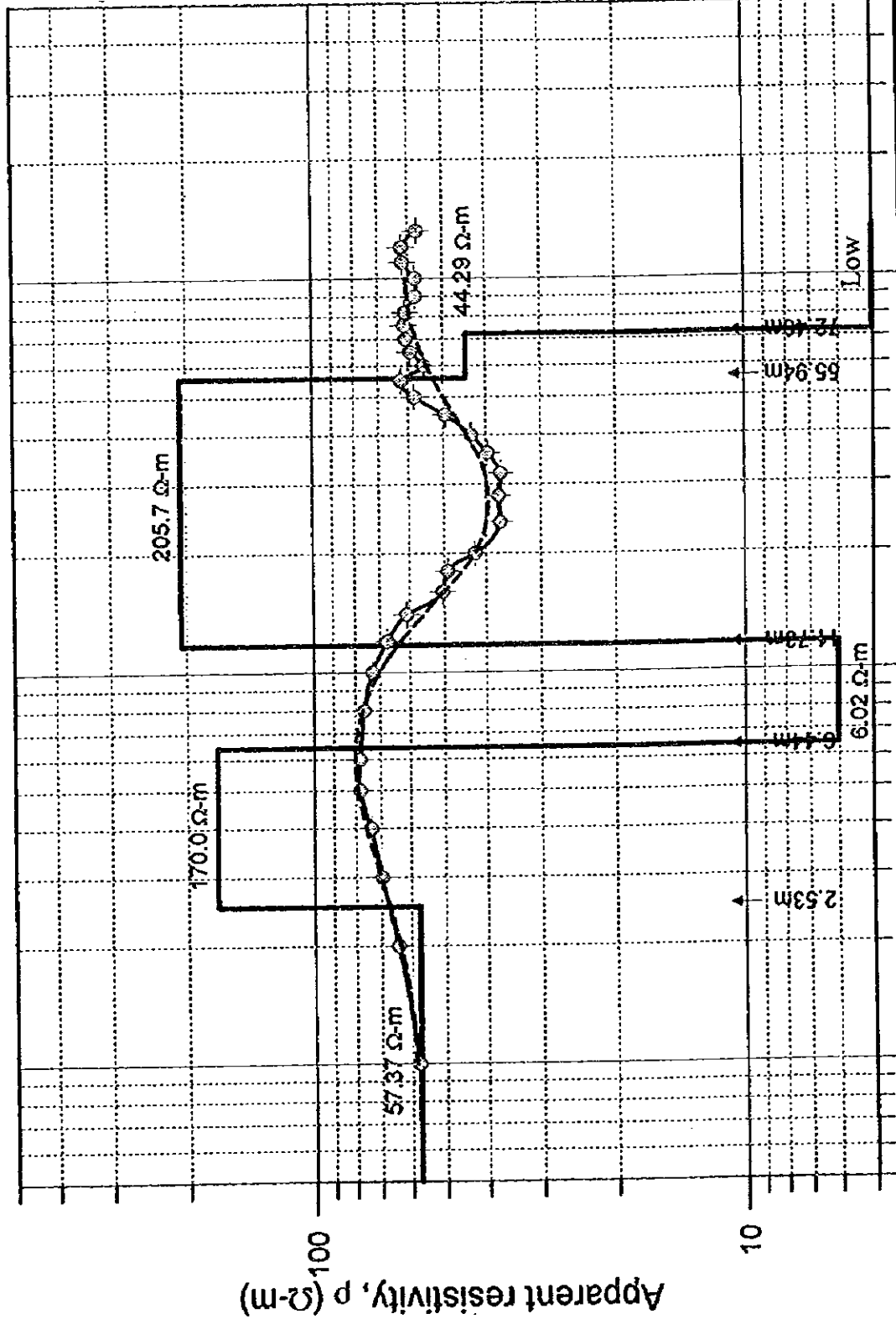
Legend

◇ Field data

— Sounding curve (field)

- - - Sounding curve (model)

⌊ Model result



Layer	Depth (m)		Resistivity (Ω-m)
	from	to	
1	0.00	2.53	57.37
2	2.53	6.44	170.0
3	6.44	11.73	6.02
4	11.73	55.94	205.7
5	55.94	72.46	44.29
6	72.46	INFINITY	Low

RESULT OF RESISTIVITY SOUNDING (E-31)

AGENCIA DE COOPERACION INTERNACIONAL DEL JAPON (JICA)

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Ramon (Cton. San Pablo) No.: E-01 Date: 1996/8/26

Geology and surface condition: Hill slope, farm land Operated by: N.S. & J.W.

Coordinate E: 508412.5 m Coordinate N: 285575 m Elevation: 633 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	13.21	83.00	
2	2	1	3	12.57	5.597	70.33	
3	3	1.5	4.5	18.85	2.653	50.01	
4	4	2	6	25.13	1.431	35.96	
5	5	2.5	7.5	31.42	0.871	27.36	
6	6	3	9	37.70	0.580	21.87	
7	8	4	12	50.27	0.380	19.10	
8	10	5	15	62.83	0.290	18.22	
9	12	6	18	75.40	0.230	17.34	
10	14	7	21	87.96	0.198	17.42	
11	16	8	24	100.53	0.180	18.10	
12	18	9	27	113.10	0.162	18.32	
13	20	10	30	125.66	0.146	18.35	
14	24	12	36	150.80	0.143	21.56	
15	28	14	42	175.93	0.129	22.69	
16	32	16	48	201.06	0.115	23.12	
17	36	18	54	226.19	0.102	23.07	
18	40	20	60	251.33	0.091	22.87	
19	45	22.5	67.5	282.74			Terminated
20	50	25	75	314.16			due to rough
21	55	27.5	82.5	345.58			topography
22	60	30	90	376.99			
23	65	32.5	97.5	408.41			
24	70	35	105	439.82			
25	76	38	114	477.52			
26	82	41	123	515.22			
27	90	45	135	565.49			
28	100	50	150	628.32			
29	110	55	165	691.15			
30	120	60	180	753.98			
31	132	66	198	829.38			

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Cton. El Carmen) No.: E-02 Date: 1996/9/2

Geology and surface condition: Along N-S road, on the terrace Operated by: N.S. & J.W.

Coordinate E: 495350 m Coordinate N: 264812.5 m Elevation: 82 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	22.08	138.73	
2	2	1	3	12.57	10.54	132.45	
3	3	1.5	4.5	18.85	7.779	146.63	
4	4	2	6	25.13	6.578	165.32	
5	5	2.5	7.5	31.42	5.927	186.20	
6	6	3	9	37.70	4.386	165.35	
7	8	4	12	50.27	2.423	121.79	
8	10	5	15	62.83	1.530	96.13	
9	12	6	18	75.40	1.107	83.47	
10	14	7	21	87.96	0.815	71.69	
11	16	8	24	100.53	0.630	63.33	
12	18	9	27	113.10	0.486	54.97	
13	20	10	30	125.66	0.382	48.00	
14	24	12	36	150.80	0.295	44.48	
15	28	14	42	175.93	0.237	41.70	
16	32	16	48	201.06	0.197	39.61	
17	36	18	54	226.19	0.152	34.38	
18	40	20	60	251.33	0.140	35.19	
19	45	22.5	67.5	282.74	0.117	33.08	
20	50	25	75	314.16	0.107	33.62	
21	55	27.5	82.5	345.58	0.101	34.90	
22	60	30	90	376.99	0.094	35.44	
23	65	32.5	97.5	408.41	0.090	36.76	
24	70	35	105	439.82	0.085	37.38	
25	76	38	114	477.52	0.072	34.38	
26	82	41	123	515.22	0.063	32.46	
27	90	45	135	565.49	0.053	29.97	
28	100	50	150	628.32	0.047	29.53	
29	110	55	165	691.15	0.045	31.10	
30	120	60	180	753.98	0.042	31.67	
31	132	66	198	829.38	0.034	28.20	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masabuat (Cton. El Carmen) No.: E-03 Date: 1996/9/4

Geology and surface condition: Along N-S road, on the terrace Operated by: N.S. & J.W.

Coordinate E: 495137.5 m Coordinate N: 265350 m Elevation: 88 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	54.95	345.26	
2	2	1	3	12.57	27.29	342.94	
3	3	1.5	4.5	18.85	15.28	288.02	
4	4	2	6	25.13	10.65	267.66	
5	5	2.5	7.5	31.42	7.824	245.80	
6	6	3	9	37.70	5.341	201.35	
7	8	4	12	50.27	2.593	130.34	
8	10	5	15	62.83	1.291	81.12	
9	12	6	18	75.40	0.911	68.69	
10	14	7	21	87.96	0.682	59.99	
11	16	8	24	100.53	0.558	56.10	
12	18	9	27	113.10	0.462	52.25	
13	20	10	30	125.66	0.416	52.28	
14	24	12	36	150.80	0.321	48.41	
15	28	14	42	175.93	0.277	48.73	
16	32	16	48	201.06	0.243	48.86	
17	36	18	54	226.19	0.218	49.31	
18	40	20	60	251.33	0.199	50.01	
19	45	22.5	67.5	282.74	0.178	50.33	
20	50	25	75	314.16	0.156	49.01	
21	55	27.5	82.5	345.58	0.137	47.34	
22	60	30	90	376.99	0.124	46.75	
23	65	32.5	97.5	408.41	0.109	44.52	
24	70	35	105	439.82	0.101	44.42	
25	76	38	114	477.52	0.088	42.02	
26	82	41	123	515.22	0.076	39.16	
27	90	45	135	565.49	0.063	35.63	
28	100	50	150	628.32	0.051	32.04	
29	110	55	165	691.15	0.042	29.03	
30	120	60	180	753.98	0.039	29.41	
31	132	66	198	829.38	0.031	25.71	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Hacienda Las Flor) No.: E-04 Date: 1996/9/4

Geology and surface condition: Near old airport, on flat terrace Operated by: N.S. & J.W.

Coordinate E: 495400 m Coordinate N: 262962.5 m Elevation: 69 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω·m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	19.43	122.08	
2	2	1	3	12.57	8.081	101.55	
3	3	1.5	4.5	18.85	4.135	77.94	
4	4	2	6	25.13	2.403	60.39	
5	5	2.5	7.5	31.42	1.602	50.33	
6	6	3	9	37.70	1.191	44.90	
7	8	4	12	50.27	0.711	35.74	
8	10	5	15	62.83	0.496	31.16	
9	12	6	18	75.40	0.375	28.27	
10	14	7	21	87.96	0.296	26.04	
11	16	8	24	100.53	0.246	24.73	
12	18	9	27	113.10	0.205	23.18	
13	20	10	30	125.66	0.178	22.37	
14	24	12	36	150.80	0.149	22.47	
15	28	14	42	175.93	0.117	20.58	
16	32	16	48	201.06	0.098	19.70	
17	36	18	54	226.19	0.090	20.36	
18	40	20	60	251.33	0.082	20.61	
19	45	22.5	67.5	282.74	0.075	21.21	
20	50	25	75	314.16	0.069	21.68	
21	55	27.5	82.5	345.58	0.065	22.46	
22	60	30	90	376.99	0.062	23.37	
23	65	32.5	97.5	408.41	0.058	23.69	
24	70	35	105	439.82	0.056	24.63	
25	76	38	114	477.52	0.054	25.79	
26	82	41	123	515.22	0.049	25.25	
27	90	45	135	565.49	0.045	25.45	
28	100	50	150	628.32	0.039	24.50	
29	110	55	165	691.15	0.034	23.50	
30	120	60	180	753.98	0.029	21.87	
31	132	66	198	829.38	0.026	21.56	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Hdad. San Mauricio) No.: E-05 Date: 1996/9/5

Geology and surface condition: Firm land, flat plain Operated by: N.S. & J.W.

Coordinate E: 496000 m Coordinate N: 261750 m Elevation: 56 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	57.62	362.04	
2	2	1	3	12.57	28.30	355.63	
3	3	1.5	4.5	18.85	16.17	304.80	
4	4	2	6	25.13	9.734	244.64	
5	5	2.5	7.5	31.42	6.593	207.13	
6	6	3	9	37.70	5.225	196.98	
7	8	4	12	50.27	3.704	186.18	
8	10	5	15	62.83	2.863	179.89	
9	12	6	18	75.40	2.391	180.28	
10	14	7	21	87.96	1.988	174.87	
11	16	8	24	100.53	1.678	168.69	
12	18	9	27	113.10	1.457	164.78	
13	20	10	30	125.66	1.246	156.58	
14	24	12	36	150.80	0.848	127.88	
15	28	14	42	175.93	0.593	104.33	
16	32	16	48	201.06	0.437	87.86	
17	36	18	54	226.19	0.339	76.68	
18	40	20	60	251.33	0.290	72.88	
19	45	22.5	67.5	282.74	0.234	66.16	
20	50	25	75	314.16	0.202	63.46	
21	55	27.5	82.5	345.58	0.172	59.44	
22	60	30	90	376.99	0.156	58.81	
23	65	32.5	97.5	408.41	0.134	54.73	
24	70	35	105	439.82	0.121	53.22	
25	76	38	114	477.52	0.110	52.53	
26	82	41	123	515.22	0.097	49.98	
27	90	45	135	565.49	0.082	46.37	
28	100	50	150	628.32	0.066	41.47	
29	110	55	165	691.15	0.055	38.01	
30	120	60	180	753.98	0.047	35.44	
31	132	66	198	829.38	0.037	30.69	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Cton. Las Flores) No.: E-06 Date: 1996/9/5
 Geology and surface condition: Firm land, flat plain Operated by: N.S. & J.W.
 Coordinate E: 495675 m Coordinate N: 261125 m Elevation: 46 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	37.55	235.93	
2	2	1	3	12.57	13.06	164.12	
3	3	1.5	4.5	18.85	7.861	148.18	
4	4	2	6	25.13	5.653	142.08	
5	5	2.5	7.5	31.42	4.121	129.47	
6	6	3	9	37.70	2.979	112.31	
7	8	4	12	50.27	1.676	84.24	
8	10	5	15	62.83	1.099	69.05	
9	12	6	18	75.40	0.789	59.49	
10	14	7	21	87.96	0.646	56.83	
11	16	8	24	100.53	0.559	56.20	
12	18	9	27	113.10	0.492	55.64	
13	20	10	30	125.66	0.451	56.67	
14	24	12	36	150.80	0.377	56.85	
15	28	14	42	175.93	0.304	53.48	
16	32	16	48	201.06	0.252	50.67	
17	36	18	54	226.19	0.211	47.73	
18	40	20	60	251.33	0.177	44.48	
19	45	22.5	67.5	282.74	0.143	40.43	
20	50	25	75	314.16	0.122	38.33	
21	55	27.5	82.5	345.58	0.105	36.29	
22	60	30	90	376.99	0.093	35.06	
23	65	32.5	97.5	408.41	0.086	35.12	
24	70	35	105	439.82	0.079	34.75	
25	76	38	114	477.52	0.073	34.86	
26	82	41	123	515.22	0.068	35.04	
27	90	45	135	565.49	0.062	35.06	
28	100	50	150	628.32	0.058	36.44	
29	110	55	165	691.15	0.054	37.32	
30	120	60	180	753.98	0.047	35.44	
31	132	66	198	829.38	0.042	34.83	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Cton. Las Isletas) No.: E-07 Date: 1996/9/6

Geology and surface condition: Firm land, flat plain Operated by: N.S. & J.W.

Coordinate E: 498725 m Coordinate N: 254450 m Elevation: 21 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	13.66	85.83	
2	2	1	3	12.57	8.088	101.64	
3	3	1.5	4.5	18.85	4.925	92.83	
4	4	2	6	25.13	3.364	84.55	
5	5	2.5	7.5	31.42	2.563	80.52	
6	6	3	9	37.70	2.047	77.17	
7	8	4	12	50.27	1.426	71.68	
8	10	5	15	62.83	1.139	71.57	
9	12	6	18	75.40	0.981	73.97	
10	14	7	21	87.96	0.845	74.33	
11	16	8	24	100.53	0.710	71.38	
12	18	9	27	113.10	0.630	71.25	
13	20	10	30	125.66	0.496	62.33	
14	24	12	36	150.80	0.351	52.93	
15	28	14	42	175.93	0.248	43.63	
16	32	16	48	201.06	0.193	38.80	
17	36	18	54	226.19	0.151	34.16	
18	40	20	60	251.33	0.123	30.91	
19	45	22.5	67.5	282.74	0.099	27.99	
20	50	25	75	314.16	0.084	26.39	
21	55	27.5	82.5	345.58	0.071	24.54	
22	60	30	90	376.99	0.059	22.24	
23	65	32.5	97.5	408.41	0.054	22.05	
24	70	35	105	439.82	0.048	21.11	
25	76	38	114	477.52	0.043	20.53	
26	82	41	123	515.22	0.039	20.09	
27	90	45	135	565.49	0.035	19.79	
28	100	50	150	628.32	0.030	18.85	
29	110	55	165	691.15	0.026	17.97	
30	120	60	180	753.98	0.021	15.83	
31	132	66	198	829.38	0.021	17.42	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Hda. La Zorra) No.: E-08 Date: 1996/9/6

Geology and surface condition: Along road, flat plain Operated by: N.S. & J.W.

Coordinate E: 496700 m Coordinate N: 249875 m Elevation: 6 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	44.05	276.77	
2	2	1	3	12.57	22.46	282.24	
3	3	1.5	4.5	18.85	9.143	172.34	
4	4	2	6	25.13	4.040	101.54	
5	5	2.5	7.5	31.42	2.353	73.92	
6	6	3	9	37.70	1.607	60.58	
7	8	4	12	50.27	1.001	50.32	
8	10	5	15	62.83	0.776	48.76	
9	12	6	18	75.40	0.616	46.45	
10	14	7	21	87.96	0.525	46.18	
11	16	8	24	100.53	0.480	48.25	
12	18	9	27	113.10	0.418	47.27	
13	20	10	30	125.66	0.360	45.24	
14	24	12	36	150.80	0.286	43.13	
15	28	14	42	175.93	0.234	41.17	
16	32	16	48	201.06	0.191	38.40	
17	36	18	54	226.19	0.155	35.06	
18	40	20	60	251.33	0.127	31.92	
19	45	22.5	67.5	282.74	0.103	29.12	
20	50	25	75	314.16	0.081	25.45	
21	55	27.5	82.5	345.58	0.067	23.15	
22	60	30	90	376.99	0.055	20.73	
23	65	32.5	97.5	408.41	0.047	19.20	
24	70	35	105	439.82	0.040	17.59	
25	76	38	114	477.52	0.036	17.19	
26	82	41	123	515.22	0.031	15.97	
27	90	45	135	565.49	0.024	13.57	
28	100	50	150	628.32	0.026	16.34	
29	110	55	165	691.15	0.016	11.06	
30	120	60	180	753.98	0.013	9.80	
31	132	66	198	829.38	0.011	9.12	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Tepetitan (Benef. Molineros) No.: E-09 Date: 1996/9/6

Geology and surface condition: Firm land, slightly undulated Operated by: N.S. & J.W.

Coordinate E: 515300 m Coordinate N: 281550 m Elevation: 602 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	13.87	87.15	
2	2	1	3	12.57	5.805	72.95	
3	3	1.5	4.5	18.85	3.683	69.42	
4	4	2	6	25.13	2.983	74.97	
5	5	2.5	7.5	31.42	2.673	83.97	
6	6	3	9	37.70	2.498	94.17	
7	8	4	12	50.27	2.142	107.67	
8	10	5	15	62.83	1.937	121.71	
9	12	6	18	75.40	1.697	127.95	
10	14	7	21	87.96	1.498	131.77	
11	16	8	24	100.53	1.331	133.81	
12	18	9	27	113.10	1.169	132.21	
13	20	10	30	125.66	1.038	130.44	
14	24	12	36	150.80	0.861	129.84	
15	28	14	42	175.93	0.722	127.02	
16	32	16	48	201.06	0.641	128.88	
17	36	18	54	226.19	0.590	133.45	
18	40	20	60	251.33	0.545	136.97	
19	45	22.5	67.5	282.74	0.488	137.98	
20	50	25	75	314.16	0.443	139.17	
21	55	27.5	82.5	345.58	0.403	139.27	
22	60	30	90	376.99	0.359	135.34	
23	65	32.5	97.5	408.41	0.324	132.32	
24	70	35	105	439.82	0.298	131.07	
25	76	38	114	477.52	0.265	126.54	
26	82	41	123	515.22	0.214	110.26	
27	90	45	135	565.49	0.183	103.48	
28	100	50	150	628.32	0.177	111.21	
29	110	55	165	691.15	0.146	100.91	
30	120	60	180	753.98	0.127	95.76	
31	132	66	198	829.38	0.112	92.89	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Tepetitán (Benef. Molineros) No.: E-10 Date: 1996/9/9

Geology and surface condition: Along rod, slightly undulated, gravelly Operated by: N.S. & J.W.

Coordinate E: 515520 m Coordinate N: 280950 m Elevation: 610 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω·m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	30.65	192.58	
2	2	1	3	12.57	9.803	123.19	
3	3	1.5	4.5	18.85	4.787	90.23	
4	4	2	6	25.13	3.505	88.09	
5	5	2.5	7.5	31.42	2.784	87.46	
6	6	3	9	37.70	2.488	93.80	
7	8	4	12	50.27	1.914	96.21	
8	10	5	15	62.83	1.620	101.79	
9	12	6	18	75.40	1.418	106.91	
10	14	7	21	87.96	1.325	116.55	
11	16	8	24	100.53	1.192	119.83	
12	18	9	27	113.10	1.157	130.85	
13	20	10	30	125.66	1.105	138.86	
14	24	12	36	150.80	1.017	153.36	
15	28	14	42	175.93	0.949	166.96	
16	32	16	48	201.06	0.877	176.33	
17	36	18	54	226.19	0.805	182.09	
18	40	20	60	251.33	0.743	186.74	
19	45	22.5	67.5	282.74	0.673	190.29	
20	50	25	75	314.16	0.632	198.55	
21	55	27.5	82.5	345.58	0.590	203.89	
22	60	30	90	376.99	0.554	208.85	
23	65	32.5	97.5	408.41	0.520	212.37	
24	70	35	105	439.82	0.495	217.71	
25	76	38	114	477.52	0.455	217.27	
26	82	41	123	515.22	0.411	211.76	
27	90	45	135	565.49	0.380	214.88	
28	100	50	150	628.32	0.347	218.03	
29	110	55	165	691.15	0.306	211.49	
30	120	60	180	753.98	0.275	207.35	
31	132	66	198	829.38	0.244	202.37	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Hda. Santa Emilia) No.: E-11 Date: 1996/9/10

Geology and surface condition: Firm land, flat plain Operated by: N.S. & J.W.

Coordinate E: 498050 m Coordinate N: 253362.5 m Elevation: 17 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	91.16	572.78	
2	2	1	3	12.57	46.34	582.33	
3	3	1.5	4.5	18.85	26.43	498.19	
4	4	2	6	25.13	14.78	371.46	
5	5	2.5	7.5	31.42	9.125	286.67	
6	6	3	9	37.70	5.527	208.36	
7	8	4	12	50.27	2.237	112.44	
8	10	5	15	62.83	1.256	78.92	
9	12	6	18	75.40	0.837	63.11	
10	14	7	21	87.96	0.612	53.83	
11	16	8	24	100.53	0.502	50.47	
12	18	9	27	113.10	0.416	47.05	
13	20	10	30	125.66	0.366	45.99	
14	24	12	36	150.80	0.289	43.58	
15	28	14	42	175.93	0.228	40.11	
16	32	16	48	201.06	0.182	36.59	
17	36	18	54	226.19	0.152	34.38	
18	40	20	60	251.33	0.130	32.67	
19	45	22.5	67.5	282.74	0.106	29.97	
20	50	25	75	314.16	0.085	26.70	
21	55	27.5	82.5	345.58	0.071	24.54	
22	60	30	90	376.99	0.059	22.24	
23	65	32.5	97.5	408.41	0.045	18.38	
24	70	35	105	439.82	0.044	19.35	
25	76	38	114	477.52	0.037	17.67	
26	82	41	123	515.22	0.033	17.00	
27	90	45	135	565.49	0.029	16.40	
28	100	50	150	628.32	0.025	15.71	
29	110	55	165	691.15	0.022	15.21	
30	120	60	180	753.98	0.020	15.08	
31	132	66	198	829.38	0.019	15.76	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Desvio Las Tres Pt No.: E-12 Date: 1996/9/10

Geology and surface condition: Firm land, flat plain Operated by: N.S. & J.W.

Coordinate E: 499150 m Coordinate N: 258325 m Elevation: 34 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω·m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	74.03	465.14	
2	2	1	3	12.57	35.65	447.99	
3	3	1.5	4.5	18.85	18.98	357.76	
4	4	2	6	25.13	11.08	278.47	
5	5	2.5	7.5	31.42	7.020	220.54	
6	6	3	9	37.70	4.927	185.74	
7	8	4	12	50.27	2.839	142.70	
8	10	5	15	62.83	1.878	118.00	
9	12	6	18	75.40	1.387	104.58	
10	14	7	21	87.96	1.045	91.92	
11	16	8	24	100.53	0.829	83.34	
12	18	9	27	113.10	0.689	77.92	
13	20	10	30	125.66	0.593	74.52	
14	24	12	36	150.80	0.419	63.18	
15	28	14	42	175.93	0.324	57.00	
16	32	16	48	201.06	0.278	55.90	
17	36	18	54	226.19	0.219	49.54	
18	40	20	60	251.33	0.188	47.25	
19	45	22.5	67.5	282.74	0.146	41.28	
20	50	25	75	314.16	0.123	38.64	
21	55	27.5	82.5	345.58	0.105	36.29	
22	60	30	90	376.99	0.091	34.31	
23	65	32.5	97.5	408.41	0.086	35.12	
24	70	35	105	439.82	0.080	35.19	
25	76	38	114	477.52	0.086	41.07	
26	82	41	123	515.22	0.063	32.46	
27	90	45	135	565.49	0.056	31.67	
28	100	50	150	628.32	0.049	30.79	
29	110	55	165	691.15	0.044	30.43	
30	120	60	180	753.98	0.038	28.65	
31	132	66	198	829.38	0.034	28.20	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Ramon No.: E-13 Date: 1996/9/12

Geology and surface condition: Along road, consolidated pumice tuff expos Operated by: N.S. & J.W.

Coordinate E: 507650 m Coordinate N: 285200 m Elevation: 633 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	2.652	16.66	
2	2	1	3	12.57	1.461	18.36	
3	3	1.5	4.5	18.85	1.036	19.53	
4	4	2	6	25.13	0.699	17.57	
5	5	2.5	7.5	31.42	0.569	17.88	
6	6	3	9	37.70	0.469	17.68	
7	8	4	12	50.27	0.407	20.46	
8	10	5	15	62.83	0.423	26.58	
9	12	6	18	75.40	0.429	32.35	
10	14	7	21	87.96	0.429	37.74	
11	16	8	24	100.53	0.451	45.34	
12	18	9	27	113.10	0.420	47.50	
13	20	10	30	125.66	0.397	49.89	
14	24	12	36	150.80	0.311	46.90	
15	28	14	42	175.93	0.286	50.32	
16	32	16	48	201.06	0.269	54.09	
17	36	18	54	226.19	0.271	61.30	
18	40	20	60	251.33	0.255	64.09	
19	45	22.5	67.5	282.74	0.234	66.16	
20	50	25	75	314.16	0.215	67.54	
21	55	27.5	82.5	345.58	0.202	69.81	
22	60	30	90	376.99	0.191	72.01	
23	65	32.5	97.5	408.41	0.179	73.10	
24	70	35	105	439.82	0.175	76.97	
25	76	38	114	477.52	0.155	74.02	
26	82	41	123	515.22	0.143	73.68	
27	90	45	135	565.49	0.131	74.08	
28	100	50	150	628.32	0.108	67.86	
29	110	55	165	691.15	0.090	62.20	
30	120	60	180	753.98	0.085	64.09	
31	132	66	198	829.38	0.070	58.06	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Ramon (Cton. San Pablo) No.: E-14 Date: 1996/9/12

Geology and surface condition: Along road, consolidated pumice tuff expos Operated by: N.S. & J.W.

Coordinate E: 508737.5 m Coordinate N: 287250 m Elevation: 775 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	17.43	109.52	
2	2	1	3	12.57	6.731	84.58	
3	3	1.5	4.5	18.85	4.536	85.50	
4	4	2	6	25.13	3.513	88.29	
5	5	2.5	7.5	31.42	2.930	92.05	
6	6	3	9	37.70	2.476	93.34	
7	8	4	12	50.27	1.955	98.27	
8	10	5	15	62.83	1.689	106.12	
9	12	6	18	75.40	1.504	113.40	
10	14	7	21	87.96	1.324	116.47	
11	16	8	24	100.53	1.144	115.01	
12	18	9	27	113.10	1.072	121.24	
13	20	10	30	125.66	1.014	127.42	
14	24	12	36	150.80	0.857	129.23	
15	28	14	42	175.93	0.754	132.65	
16	32	16	48	201.06	0.694	139.54	
17	36	18	54	226.19	0.626	141.60	
18	40	20	60	251.33	0.549	137.98	
19	45	22.5	67.5	282.74	0.458	129.50	
20	50	25	75	314.16	0.393	123.46	
21	55	27.5	82.5	345.58	0.336	116.11	
22	60	30	90	376.99	0.275	103.67	
23	65	32.5	97.5	408.41	0.228	93.12	
24	70	35	105	439.82	0.193	84.89	
25	76	38	114	477.52	0.154	73.54	
26	82	41	123	515.22	0.129	66.46	
27	90	45	135	565.49	0.098	55.42	
28	100	50	150	628.32	0.081	50.89	
29	110	55	165	691.15	0.067	46.31	
30	120	60	180	753.98	0.059	44.48	
31	132	66	198	829.38	0.050	41.47	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Cristobal (Cton. San Antonio) No.: E-15 Date: 1996/9/13

Geology and surface condition: Along road, reddish tuff breccia Operated by: N.S. & J.W.

Coordinate E: 511762.5 m Coordinate N: 285175 m Elevation: 635 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	8.789	55.22	
2	2	1	3	12.57	5.678	71.35	
3	3	1.5	4.5	18.85	4.422	83.35	
4	4	2	6	25.13	3.518	88.42	
5	5	2.5	7.5	31.42	2.886	90.67	
6	6	3	9	37.70	2.419	91.19	
7	8	4	12	50.27	1.852	93.09	
8	10	5	15	62.83	1.468	92.24	
9	12	6	18	75.40	1.117	84.22	
10	14	7	21	87.96	0.871	76.62	
11	16	8	24	100.53	0.718	72.18	
12	18	9	27	113.10	0.622	70.35	
13	20	10	30	125.66	0.560	70.37	
14	24	12	36	150.80	0.473	71.33	
15	28	14	42	175.93	0.434	76.35	
16	32	16	48	201.06	0.413	83.04	
17	36	18	54	226.19	0.406	91.84	
18	40	20	60	251.33	0.403	101.28	
19	45	22.5	67.5	282.74	0.399	112.81	
20	50	25	75	314.16	0.387	121.58	
21	55	27.5	82.5	345.58	0.377	130.28	
22	60	30	90	376.99	0.372	140.24	
23	65	32.5	97.5	408.41	0.357	145.80	
24	70	35	105	439.82	0.349	153.50	
25	76	38	114	477.52	0.352	168.09	
26	82	41	123	515.22	0.349	179.81	
27	90	45	135	565.49	0.341	192.83	
28	100	50	150	628.32	0.328	206.09	
29	110	55	165	691.15	0.315	217.71	
30	120	60	180	753.98	0.298	224.69	
31	132	66	198	829.38	0.281	233.06	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Cristobal (Cton. Santa Cruz) No.: E-16 Date: 1996/9/13

Geology and surface condition: Along road, consolidated pumice tuff Operated by: N.S. & J.W.

Coordinate E: 511125 m Coordinate N: 285912.5 m Elevation: 641 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	5.373	33.76	
2	2	1	3	12.57	3.910	49.13	
3	3	1.5	4.5	18.85	2.974	56.06	
4	4	2	6	25.13	2.188	54.99	
5	5	2.5	7.5	31.42	1.769	55.57	
6	6	3	9	37.70	1.543	58.17	
7	8	4	12	50.27	1.199	60.27	
8	10	5	15	62.83	1.093	68.68	
9	12	6	18	75.40	0.976	73.59	
10	14	7	21	87.96	0.843	74.15	
11	16	8	24	100.53	0.748	75.20	
12	18	9	27	113.10	0.660	74.64	
13	20	10	30	125.66	0.579	72.76	
14	24	12	36	150.80	0.398	60.02	
15	28	14	42	175.93	0.258	45.39	
16	32	16	48	201.06	0.189	38.00	
17	36	18	54	226.19	0.156	35.29	
18	40	20	60	251.33	0.135	33.93	
19	45	22.5	67.5	282.74	0.111	31.38	
20	50	25	75	314.16	0.097	30.47	
21	55	27.5	82.5	345.58	0.086	29.72	
22	60	30	90	376.99	0.079	29.78	
23	65	32.5	97.5	408.41	0.080	32.67	
24	70	35	105	439.82	0.078	34.31	
25	76	38	114	477.52	0.076	36.29	
26	82	41	123	515.22	0.073	37.61	
27	90	45	135	565.49	0.065	36.76	
28	100	50	150	628.32	0.056	35.19	
29	110	55	165	691.15	0.050	34.56	
30	120	60	180	753.98	0.046	34.68	
31	132	66	198	829.38	0.037	30.69	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Cristobal (Cton. Santa Anita) No.: E-17 Date: 1996/9/13

Geology and surface condition: Along road, consolidated pumice tuff Operated by: N.S. & J.W.

Coordinate E: 509475 m Coordinate N: 282975 m Elevation: 495 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	4.788	30.08	
2	2	1	3	12.57	3.344	42.02	
3	3	1.5	4.5	18.85	3.151	59.39	
4	4	2	6	25.13	3.094	77.76	
5	5	2.5	7.5	31.42	3.106	97.58	
6	6	3	9	37.70	3.135	118.19	
7	8	4	12	50.27	3.073	154.47	
8	10	5	15	62.83	2.917	183.28	
9	12	6	18	75.40	2.724	205.38	
10	14	7	21	87.96	2.583	227.21	
11	16	8	24	100.53	2.447	246.00	
12	18	9	27	113.10	2.279	257.75	
13	20	10	30	125.66	2.018	253.59	
14	24	12	36	150.80	1.544	232.83	
15	28	14	42	175.93	1.178	207.24	
16	32	16	48	201.06	1.011	203.27	
17	36	18	54	226.19	0.919	207.87	
18	40	20	60	251.33	0.848	213.13	
19	45	22.5	67.5	282.74	0.773	218.56	
20	50	25	75	314.16	0.700	219.91	
21	55	27.5	82.5	345.58	0.641	221.51	
22	60	30	90	376.99	0.569	214.51	
23	65	32.5	97.5	408.41	0.494	201.75	
24	70	35	105	439.82	0.439	193.08	
25	76	38	114	477.52	0.380	181.46	
26	82	41	123	515.22	0.326	167.96	
27	90	45	135	565.49	0.266	150.42	
28	100	50	150	628.32	0.200	125.66	
29	110	55	165	691.15	0.150	103.67	
30	120	60	180	753.98	0.128	96.51	
31	132	66	198	829.38	0.117	97.04	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Finca El Cocal) No.: E-18 Date: 1996/9/16

Geology and surface condition: Along road, on terrace Operated by: N.S. & S.R.

Coordinate E: 495962.5 m Coordinate N: 270350 m Elevation: 232 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	6.434	40.43	
2	2	1	3	12.57	3.811	47.89	
3	3	1.5	4.5	18.85	3.016	56.85	
4	4	2	6	25.13	2.423	60.90	
5	5	2.5	7.5	31.42	2.145	67.39	
6	6	3	9	37.70	1.858	70.04	
7	8	4	12	50.27	1.458	73.29	
8	10	5	15	62.83	1.199	75.34	
9	12	6	18	75.40	1.009	76.08	
10	14	7	21	87.96	0.856	75.30	
11	16	8	24	100.53	0.757	76.10	
12	18	9	27	113.10	0.656	74.19	
13	20	10	30	125.66	0.586	73.64	
14	24	12	36	150.80	0.484	72.99	
15	28	14	42	175.93	0.439	77.23	
16	32	16	48	201.06	0.411	82.64	
17	36	18	54	226.19	0.384	86.86	
18	40	20	60	251.33	0.377	94.75	
19	45	22.5	67.5	282.74	0.382	108.01	
20	50	25	75	314.16	0.328	103.04	
21	55	27.5	82.5	345.58	0.247	85.36	
22	60	30	90	376.99	0.218	82.18	
23	65	32.5	97.5	408.41	0.194	79.23	
24	70	35	105	439.82	0.175	76.97	
25	76	38	114	477.52	0.148	70.67	
26	82	41	123	515.22	0.131	67.49	
27	90	45	135	565.49	0.106	59.94	
28	100	50	150	628.32	0.085	53.41	
29	110	55	165	691.15	0.071	49.07	
30	120	60	180	753.98	0.064	48.25	
31	132	66	198	829.38	0.064	53.08	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Barrio San Jose) No.: E-19 Date: 1996/9/16

Geology and surface condition: Along road, on terrace Operated by: N.S. & S.R.

Coordinate E: 495287.5 m Coordinate N: 268100 m Elevation: 170 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	26.81	168.45	
2	2	1	3	12.57	8.695	109.26	
3	3	1.5	4.5	18.85	4.821	90.87	
4	4	2	6	25.13	3.565	89.60	
5	5	2.5	7.5	31.42	2.767	86.93	
6	6	3	9	37.70	2.291	86.37	
7	8	4	12	50.27	1.401	70.42	
8	10	5	15	62.83	0.936	58.81	
9	12	6	18	75.40	0.663	49.84	
10	14	7	21	87.96	0.501	44.07	
11	16	8	24	100.53	0.425	42.73	
12	18	9	27	113.10	0.378	42.75	
13	20	10	30	125.66	0.331	41.59	
14	24	12	36	150.80	0.279	42.07	
15	28	14	42	175.93	0.234	41.17	
16	32	16	48	201.06	0.220	44.23	
17	36	18	54	226.19	0.206	46.60	
18	40	20	60	251.33	0.190	47.75	
19	45	22.5	67.5	282.74	0.166	46.94	
20	50	25	75	314.16	0.147	46.18	
21	55	27.5	82.5	345.58	0.135	46.65	
22	60	30	90	376.99	0.124	46.75	
23	65	32.5	97.5	408.41	0.115	46.97	
24	70	35	105	439.82	0.105	46.18	
25	76	38	114	477.52	0.097	46.32	
26	82	41	123	515.22	0.090	46.37	
27	90	45	135	565.49	0.081	45.80	
28	100	50	150	628.32	0.069	43.35	
29	110	55	165	691.15	0.062	42.85	
30	120	60	180	753.98	0.054	40.72	
31	132	66	198	829.38	0.050	41.47	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Antonio Masahuat (Con. Belen) No.: E-20 Date: 1996/9/16

Geology and surface condition: On hill, unconsolidated pumice tuff Operated by: N.S. & S.R.

Coordinate E: 499600 m Coordinate N: 272700 m Elevation: 287 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	16.26	102.16	
2	2	1	3	12.57	6.539	82.17	
3	3	1.5	4.5	18.85	3.685	69.46	
4	4	2	6	25.13	2.906	73.04	
5	5	2.5	7.5	31.42	2.295	72.10	
6	6	3	9	37.70	1.877	70.76	
7	8	4	12	50.27	1.539	77.36	
8	10	5	15	62.83	1.233	77.47	
9	12	6	18	75.40	1.032	77.81	
10	14	7	21	87.96	0.879	77.32	
11	16	8	24	100.53	0.759	76.30	
12	18	9	27	113.10	0.663	74.98	
13	20	10	30	125.66	0.583	73.26	
14	24	12	36	150.80	0.470	70.87	
15	28	14	42	175.93	0.382	67.20	
16	32	16	48	201.06	0.322	64.74	
17	36	18	54	226.19	0.272	61.52	
18	40	20	60	251.33	0.230	57.81	
19	45	22.5	67.5	282.74	0.195	55.13	
20	50	25	75	314.16	0.168	52.78	
21	55	27.5	82.5	345.58	0.146	50.45	
22	60	30	90	376.99	0.131	49.39	
23	65	32.5	97.5	408.41	0.118	48.19	
24	70	35	105	439.82	0.110	48.38	
25	76	38	114	477.52	0.102	48.71	
26	82	41	123	515.22	0.095	48.95	
27	90	45	135	565.49	0.099	55.98	
28	100	50	150	628.32	0.089	55.92	
29	110	55	165	691.15			Terminated
30	120	60	180	753.98			due to steep
31	132	66	198	829.38			slope

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Camp. El Cacao) No.: E-21 Date: 1996/9/17

Geology and surface condition: Along road, flat plain Operated by: N.S. & S.R.

Coordinate E: 494975 m Coordinate N: 257625 m Elevation: 24 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	33.88	212.87	
2	2	1	3	12.57	8.627	108.41	
3	3	1.5	4.5	18.85	4.570	86.14	
4	4	2	6	25.13	3.412	85.75	
5	5	2.5	7.5	31.42	3.087	96.98	
6	6	3	9	37.70	2.618	98.70	
7	8	4	12	50.27	1.983	99.68	
8	10	5	15	62.83	1.457	91.55	
9	12	6	18	75.40	1.106	83.39	
10	14	7	21	87.96	0.889	78.20	
11	16	8	24	100.53	0.709	71.28	
12	18	9	27	113.10	0.585	66.16	
13	20	10	30	125.66	0.485	60.95	
14	24	12	36	150.80	0.336	50.67	
15	28	14	42	175.93	0.262	46.09	
16	32	16	48	201.06	0.198	39.81	
17	36	18	54	226.19	0.160	36.19	
18	40	20	60	251.33	0.130	32.67	
19	45	22.5	67.5	282.74	0.107	30.25	
20	50	25	75	314.16	0.090	28.27	
21	55	27.5	82.5	345.58	0.083	28.68	
22	60	30	90	376.99	0.074	27.90	
23	65	32.5	97.5	408.41	0.067	27.36	
24	70	35	105	439.82	0.063	27.71	
25	76	38	114	477.52	0.059	28.17	
26	82	41	123	515.22	0.056	28.85	
27	90	45	135	565.49	0.050	28.27	
28	100	50	150	628.32	0.046	28.90	
29	110	55	165	691.15	0.041	28.34	
30	120	60	180	753.98	0.039	29.41	
31	132	66	198	829.38	0.036	29.86	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Camp. San Jose La No.: E-22 Date: 1996/9/17

Geology and surface condition: Along road, flat plain Operated by: N.S. & S.R.

Coordinate E: 495762.5 m Coordinate N: 254700 m Elevation: 16 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	2.543	15.98	
2	2	1	3	12.57	1.279	16.07	
3	3	1.5	4.5	18.85	1.036	19.53	
4	4	2	6	25.13	0.905	22.75	
5	5	2.5	7.5	31.42	0.828	26.01	
6	6	3	9	37.70	0.765	28.84	
7	8	4	12	50.27	0.645	32.42	
8	10	5	15	62.83	0.557	35.00	
9	12	6	18	75.40	0.484	36.49	
10	14	7	21	87.96	0.417	36.68	
11	16	8	24	100.53	0.370	37.20	
12	18	9	27	113.10	0.329	37.21	
13	20	10	30	125.66	0.303	38.08	
14	24	12	36	150.80	0.249	37.55	
15	28	14	42	175.93	0.201	35.36	
16	32	16	48	201.06	0.160	32.17	
17	36	18	54	226.19	0.138	31.21	
18	40	20	60	251.33	0.117	29.41	
19	45	22.5	67.5	282.74	0.100	28.27	
20	50	25	75	314.16	0.084	26.39	
21	55	27.5	82.5	345.58	0.077	26.61	
22	60	30	90	376.99	0.062	23.37	
23	65	32.5	97.5	408.41	0.053	21.65	
24	70	35	105	439.82	0.046	20.23	
25	76	38	114	477.52	0.041	19.58	
26	82	41	123	515.22	0.037	19.06	
27	90	45	135	565.49	0.034	19.23	
28	100	50	150	628.32	0.028	17.59	
29	110	55	165	691.15	0.024	16.59	
30	120	60	180	753.98	0.023	17.34	
31	132	66	198	829.38	0.021	17.42	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Masahuat (Cton. Las Hojas) No.: E-23 Date: 1996/9/17

Geology and surface condition: Along road, flat plain Operated by: N.S. & S.R.

Coordinate E: 494925 m Coordinate N: 250425 m Elevation: 5 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	2.856	17.94	
2	2	1	3	12.57	2.042	25.66	
3	3	1.5	4.5	18.85	1.609	30.33	
4	4	2	6	25.13	1.328	33.38	
5	5	2.5	7.5	31.42	1.118	35.12	
6	6	3	9	37.70	1.028	38.75	
7	8	4	12	50.27	0.795	39.96	
8	10	5	15	62.83	0.645	40.53	
9	12	6	18	75.40	0.532	40.11	
10	14	7	21	87.96	0.450	39.58	
11	16	8	24	100.53	0.382	38.40	
12	18	9	27	113.10	0.342	38.68	
13	20	10	30	125.66	0.306	38.45	
14	24	12	36	150.80	0.253	38.15	
15	28	14	42	175.93	0.205	36.07	
16	32	16	48	201.06	0.170	34.18	
17	36	18	54	226.19	0.143	32.35	
18	40	20	60	251.33	0.120	30.16	
19	45	22.5	67.5	282.74	0.098	27.71	
20	50	25	75	314.16	0.080	25.13	
21	55	27.5	82.5	345.58	0.065	22.46	
22	60	30	90	376.99	0.054	20.36	
23	65	32.5	97.5	408.41	0.045	18.38	
24	70	35	105	439.82	0.039	17.15	
25	76	38	114	477.52	0.034	16.24	
26	82	41	123	515.22	0.028	14.43	
27	90	45	135	565.49	0.023	13.01	
28	100	50	150	628.32	0.018	11.31	
29	110	55	165	691.15	0.015	10.37	
30	120	60	180	753.98	0.013	9.80	
31	132	66	198	829.38	0.011	9.12	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: El Carmen (Cton. Concepcion) No.: E-24 Date: 1996/9/18

Geology and surface condition: Along road, pumice tuff Operated by: N.S. & J.W.

Coordinate E: 509912.5 m Coordinate N: 289650 m Elevation: 772 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	8.226	51.69	
2	2	1	3	12.57	2.943	36.98	
3	3	1.5	4.5	18.85	1.361	25.65	
4	4	2	6	25.13	0.992	24.93	
5	5	2.5	7.5	31.42	0.837	26.30	
6	6	3	9	37.70	0.728	27.44	
7	8	4	12	50.27	0.585	29.41	
8	10	5	15	62.83	0.476	29.91	
9	12	6	18	75.40	0.393	29.63	
10	14	7	21	87.96	0.355	31.23	
11	16	8	24	100.53	0.339	34.08	
12	18	9	27	113.10	0.308	34.83	
13	20	10	30	125.66	0.291	36.57	
14	24	12	36	150.80	0.276	41.62	
15	28	14	42	175.93	0.255	44.86	
16	32	16	48	201.06	0.230	46.24	
17	36	18	54	226.19	0.205	46.37	
18	40	20	60	251.33	0.187	47.00	
19	45	22.5	67.5	282.74	0.172	48.63	
20	50	25	75	314.16	0.150	47.12	
21	55	27.5	82.5	345.58	0.134	46.31	
22	60	30	90	376.99	0.126	47.50	
23	65	32.5	97.5	408.41	0.116	47.38	
24	70	35	105	439.82	0.094	41.34	
25	76	38	114	477.52	0.088	42.02	
26	82	41	123	515.22	0.083	42.76	
27	90	45	135	565.49	0.079	44.67	
28	100	50	150	628.32	0.075	47.12	
29	110	55	165	691.15	0.069	47.69	
30	120	60	180	753.98	0.066	49.76	
31	132	66	198	829.38	0.064	53.08	

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Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Candelaria (El Llano) No.: E-25 Date: 1996/9/18

Geology and surface condition: Along road, pumice tuff Operated by: N.S. & J.W.

Coordinate E: 505687.5 m Coordinate N: 286075 m Elevation: 667 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	7.270	45.68	
2	2	1	3	12.57	3.562	44.76	
3	3	1.5	4.5	18.85	2.650	49.95	
4	4	2	6	25.13	2.142	53.83	
5	5	2.5	7.5	31.42	1.788	56.17	
6	6	3	9	37.70	1.575	59.38	
7	8	4	12	50.27	1.244	62.53	
8	10	5	15	62.83	1.006	63.21	
9	12	6	18	75.40	0.862	64.99	
10	14	7	21	87.96	0.786	69.14	
11	16	8	24	100.53	0.699	70.27	
12	18	9	27	113.10	0.652	73.74	
13	20	10	30	125.66	0.617	77.53	
14	24	12	36	150.80	0.559	84.30	
15	28	14	42	175.93	0.507	89.20	
16	32	16	48	201.06	0.454	91.28	
17	36	18	54	226.19	0.402	90.93	
18	40	20	60	251.33	0.360	90.48	
19	45	22.5	67.5	282.74	0.322	91.04	
20	50	25	75	314.16	0.285	89.54	
21	55	27.5	82.5	345.58	0.257	88.81	
22	60	30	90	376.99	0.235	88.59	
23	65	32.5	97.5	408.41	0.209	85.36	
24	70	35	105	439.82	0.195	85.77	
25	76	38	114	477.52	0.180	85.95	
26	82	41	123	515.22	0.165	85.01	
27	90	45	135	565.49	0.157	88.78	
28	100	50	150	628.32	0.131	82.31	
29	110	55	165	691.15	0.115	79.48	
30	120	60	180	753.98	0.103	77.66	
31	132	66	198	829.38	0.095	78.79	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Candelaria (Cton. El Rosario) No.: E-26 Date: 1996/9/18

Geology and surface condition: Along road, on hill Operated by: N.S. & J.W.

Coordinate E: 502125 m Coordinate N: 284488 m Elevation: 645 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω·m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	10.74	67.48	
2	2	1	3	12.57	7.489	94.11	
3	3	1.5	4.5	18.85	5.929	111.76	
4	4	2	6	25.13	4.897	123.08	
5	5	2.5	7.5	31.42	4.155	130.53	
6	6	3	9	37.70	3.547	133.72	
7	8	4	12	50.27	2.645	132.95	
8	10	5	15	62.83	2.126	133.58	
9	12	6	18	75.40	1.798	135.57	
10	14	7	21	87.96	1.571	138.19	
11	16	8	24	100.53	1.389	139.64	
12	18	9	27	113.10	1.254	141.82	
13	20	10	30	125.66	1.161	145.90	
14	24	12	36	150.80	0.990	149.29	
15	28	14	42	175.93	0.864	152.00	
16	32	16	48	201.06	0.785	157.83	
17	36	18	54	226.19	0.698	157.88	
18	40	20	60	251.33	0.636	159.84	
19	45	22.5	67.5	282.74	0.569	160.88	
20	50	25	75	314.16	0.510	160.22	
21	55	27.5	82.5	345.58	0.453	156.55	
22	60	30	90	376.99	0.409	154.19	
23	65	32.5	97.5	408.41	0.364	148.66	
24	70	35	105	439.82	0.330	145.14	
25	76	38	114	477.52	0.294	140.39	
26	82	41	123	515.22	0.257	132.41	
27	90	45	135	565.49	0.221	124.97	
28	100	50	150	628.32	0.189	118.75	
29	110	55	165	691.15	0.164	113.35	
30	120	60	180	753.98	0.138	104.05	
31	132	66	198	829.38	0.115	95.38	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Tapalhuaca (Cton. Buena Vista) No.: E-27 Date: 1996/9/19

Geology and surface condition: Along road, on hill, tuff Operated by: N.S. & J.W.

Coordinate E: 494375 m Coordinate N: 270425 m Elevation: 352 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor {K = 2πa}	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω·m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	5.818	36.56	
2	2	1	3	12.57	2.672	33.58	
3	3	1.5	4.5	18.85	1.907	35.95	
4	4	2	6	25.13	1.664	41.82	
5	5	2.5	7.5	31.42	1.519	47.72	
6	6	3	9	37.70	1.419	53.50	
7	8	4	12	50.27	1.236	62.13	
8	10	5	15	62.83	1.040	65.35	
9	12	6	18	75.40	0.928	69.97	
10	14	7	21	87.96	0.821	72.22	
11	16	8	24	100.53	0.730	73.39	
12	18	9	27	113.10	0.680	76.91	
13	20	10	30	125.66	0.640	80.42	
14	24	12	36	150.80	0.545	82.18	
15	28	14	42	175.93	0.476	83.74	
16	32	16	48	201.06	0.425	85.45	
17	36	18	54	226.19	0.398	90.03	
18	40	20	60	251.33	0.380	95.50	
19	45	22.5	67.5	282.74	0.353	99.81	
20	50	25	75	314.16	0.326	102.42	
21	55	27.5	82.5	345.58	0.290	100.22	
22	60	30	90	376.99	0.260	98.02	
23	65	32.5	97.5	408.41	0.263	107.41	
24	70	35	105	439.82	0.258	113.47	
25	76	38	114	477.52	0.248	118.43	
26	82	41	123	515.22	0.240	123.65	
27	90	45	135	565.49	0.225	127.23	
28	100	50	150	628.32	0.201	126.29	
29	110	55	165	691.15	0.180	124.41	
30	120	60	180	753.98	0.168	126.67	
31	132	66	198	829.38	0.167	138.51	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Antonio Masahuat (Cton. El Socorro) No.: E-28 Date: 1996/9/19
 Geology and surface condition: Along road, on hill, pumice tuff Operated by: N.S. & J.W.
 Coordinate E: 496275 m Coordinate N: 273462.5 m Elevation: 381 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	3.206	20.14	
2	2	1	3	12.57	1.737	21.83	
3	3	1.5	4.5	18.85	1.318	24.84	
4	4	2	6	25.13	1.100	27.65	
5	5	2.5	7.5	31.42	0.960	30.16	
6	6	3	9	37.70	0.851	32.08	
7	8	4	12	50.27	0.708	35.59	
8	10	5	15	62.83	0.626	39.33	
9	12	6	18	75.40	0.585	44.11	
10	14	7	21	87.96	0.553	48.64	
11	16	8	24	100.53	0.533	53.58	
12	18	9	27	113.10	0.504	57.00	
13	20	10	30	125.66	0.468	58.81	
14	24	12	36	150.80	0.404	60.92	
15	28	14	42	175.93	0.348	61.22	
16	32	16	48	201.06	0.316	63.54	
17	36	18	54	226.19	0.286	64.69	
18	40	20	60	251.33	0.253	63.59	
19	45	22.5	67.5	282.74	0.211	59.66	
20	50	25	75	314.16	0.194	60.95	
21	55	27.5	82.5	345.58	0.175	60.48	
22	60	30	90	376.99	0.165	62.20	
23	65	32.5	97.5	408.41	0.153	62.49	
24	70	35	105	439.82	0.141	62.02	
25	76	38	114	477.52	0.128	61.12	
26	82	41	123	515.22	0.118	60.80	
27	90	45	135	565.49	0.108	61.07	
28	100	50	150	628.32	0.103	64.72	
29	110	55	165	691.15	0.097	67.04	
30	120	60	180	753.98	0.090	67.86	
31	132	66	198	829.38	0.079	65.52	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Santa Cruz Analquito (El Planon) No.: E-29 Date: 1996/9/20

Geology and surface condition: Along road, on terrace Operated by: N.S. & J.W.

Coordinate E: 503537.5 m Coordinate N: 282612.5 m Elevation: 520 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	20.39	128.11	
2	2	1	3	12.57	20.56	258.36	
3	3	1.5	4.5	18.85	17.77	334.96	
4	4	2	6	25.13	15.20	382.02	
5	5	2.5	7.5	31.42	12.87	404.32	
6	6	3	9	37.70	10.79	406.77	
7	8	4	12	50.27	7.939	399.06	
8	10	5	15	62.83	6.140	385.79	
9	12	6	18	75.40	4.937	372.24	
10	14	7	21	87.96	3.829	336.82	
11	16	8	24	100.53	3.130	314.66	
12	18	9	27	113.10	2.529	286.02	
13	20	10	30	125.66	2.048	257.36	
14	24	12	36	150.80	1.386	209.00	
15	28	14	42	175.93	1.021	179.62	
16	32	16	48	201.06	0.746	149.99	
17	36	18	54	226.19	0.571	129.16	
18	40	20	60	251.33	0.443	111.34	
19	45	22.5	67.5	282.74	0.346	97.83	
20	50	25	75	314.16	0.275	86.39	
21	55	27.5	82.5	345.58	0.229	79.14	
22	60	30	90	376.99	0.194	73.14	
23	65	32.5	97.5	408.41	0.165	67.39	
24	70	35	105	439.82	0.146	64.21	
25	76	38	114	477.52	0.128	61.12	
26	82	41	123	515.22	0.115	59.25	
27	90	45	135	565.49	0.101	57.11	
28	100	50	150	628.32	0.088	55.29	
29	110	55	165	691.15	0.075	51.84	
30	120	60	180	753.98	0.066	49.76	
31	132	66	198	829.38	0.059	48.93	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: Guadalupe (Cton. San Antonio Los Rancel No.: E-30 Date: 1996/9/20

Geology and surface condition: Along road, foot of Mt. San Vicente Operated by: N.S. & J.W.

Coordinate E: 514190 m Coordinate N: 279150 m Elevation: 672 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	9.832	61.78	
2	2	1	3	12.57	6.431	80.81	
3	3	1.5	4.5	18.85	4.476	84.37	
4	4	2	6	25.13	3.468	87.16	
5	5	2.5	7.5	31.42	2.714	85.26	
6	6	3	9	37.70	2.126	80.15	
7	8	4	12	50.27	1.719	86.41	
8	10	5	15	62.83	1.352	84.95	
9	12	6	18	75.40	1.095	82.56	
10	14	7	21	87.96	0.906	79.70	
11	16	8	24	100.53	0.795	79.92	
12	18	9	27	113.10	0.729	82.45	
13	20	10	30	125.66	0.633	79.55	
14	24	12	36	150.80	0.506	76.30	
15	28	14	42	175.93	0.398	70.02	
16	32	16	48	201.06	0.316	63.54	
17	36	18	54	226.19	0.257	58.13	
18	40	20	60	251.33	0.207	52.02	
19	45	22.5	67.5	282.74	0.172	48.63	
20	50	25	75	314.16	0.140	43.98	
21	55	27.5	82.5	345.58	0.116	40.09	
22	60	30	90	376.99	0.102	38.45	
23	65	32.5	97.5	408.41	0.085	34.71	
24	70	35	105	439.82	0.069	30.35	
25	76	38	114	477.52	0.054	25.79	
26	82	41	123	515.22	0.050	25.76	
27	90	45	135	565.49	0.047	26.58	
28	100	50	150	628.32	0.036	22.62	
29	110	55	165	691.15	0.028	19.35	
30	120	60	180	753.98	0.026	19.60	
31	132	66	198	829.38	0.023	19.08	

Data Sheet for Resistivity Sounding (Wenner's Configuration)

Site name: San Pedro Nonualco (Cton. La Comunida No.: E-31 Date: 1996/9/20

Geology and surface condition: Along road, on hill Operated by: N.S. & J.W.

Coordinate E: 505050 m Coordinate N: 274662.5 m Elevation: 505 m

Number (Tag No.)	Investigation Depth (m) [a]	Center-Electrode Distance (m)		Electrode Configuration Factor [K = 2πa]	Resistance Reading (Ω) [R = V/I]	Apparent Resistivity (Ω-m) [ρ = 2πaR]	Remarks
		Inner [P ₁ , P ₂]	Outer [C ₁ , C ₂]				
1	1	0.5	1.5	6.28	9.223	57.95	
2	2	1	3	12.57	5.099	64.08	
3	3	1.5	4.5	18.85	3.699	69.72	
4	4	2	6	25.13	2.935	73.76	
5	5	2.5	7.5	31.42	2.484	78.04	
6	6	3	9	37.70	2.071	78.07	
7	8	4	12	50.27	1.519	76.35	
8	10	5	15	62.83	1.159	72.82	
9	12	6	18	75.40	0.893	67.33	
10	14	7	21	87.96	0.693	60.96	
11	16	8	24	100.53	0.502	50.47	
12	18	9	27	113.10	0.434	49.08	
13	20	10	30	125.66	0.337	42.35	
14	24	12	36	150.80	0.246	37.10	water in
15	28	14	42	175.93	0.212	37.30	right side
16	32	16	48	201.06	0.184	37.00	
17	36	18	54	226.19	0.175	39.58	
18	40	20	60	251.33	0.172	43.23	
19	45	22.5	67.5	282.74	0.175	49.48	
20	50	25	75	314.16	0.185	58.12	
21	55	27.5	82.5	345.58	0.180	62.20	
22	60	30	90	376.99	0.147	55.42	
23	65	32.5	97.5	408.41	0.145	59.22	
24	70	35	105	439.82	0.138	60.70	
25	76	38	114	477.52	0.128	61.12	
26	82	41	123	515.22	0.118	60.80	
27	90	45	135	565.49	0.102	57.68	
28	100	50	150	628.32	0.092	57.81	
29	110	55	165	691.15	0.089	61.51	
30	120	60	180	753.98	0.082	61.83	
31	132	66	198	829.38	0.069	57.23	

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