

Apendice 5. Los Otros Datos

1) Resultado de la Prospección Eléctrica

Prospección Eléctrica 25 Sitios

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
PROSPECCION GEOFISICA**

id	SEV	Poblado	Altura (msnm)	X	Y
1	9-1	Yacpamba	2325	696462	9599009
2	18-1	Linderos	1345	690112	9529981
3	19-1	Comunidades	1540	697109	9519651
4	24-1	Cabianga	1600	694924	9532554
5	21-1	Los Huilcos	1640	696861	9528389
6	1-1	Chapanga	1690	651539	9553146
7	12-1	San Vicente del Río	1290	657069	9548811
8	11-1	Las Cochas	1350	660029	9551441
9	3-1	Yamana	1130	644539	9558213
10	2-1	Playas	960	645283	9554541
11	22-1	Casanga	1148	637206	9556605
12	5-1	Zapallal	995	608413	9539165
13	6-1	Patuco	841	607162	9539524
14	6-2	Patuco Alto	864	607708	9539882
15	7-2	El Faique	946	606975	9538378
16	16-1	La Esperanza y Pitayo	682	589414	9557695
17	13-1	Saucillo	260	589299	9527926
18	23-1	Ceiba	253	586918	9523170
19	14-1	Valle Hermoso	154	578120	9511430
20	15-1	Machinguilla	494	612175	9519208
21	27-1	Linderos de Visin	325	597077	9527056
22	4-1	Centinela del Sur	470	617082	9516562
23	10-1	Tambo Negro	575	628041	9514246
24	26-1	Chapamarca	1663	688191	9551175
25	26-2	Chapamarca	1667	687955	9551270

Prospeccion Electromagnetica 22 Sitios

No. ID	Site name	Canton	Line No.	Extension(m)	VLF start point		VLF stop point		VLF start point				VLF stop point							
					X	Y	X	Y	South Lat.		West Long.		South Lat.		West Long.					
					d.	min.	sec.	d.	min.	sec.	d.	min.	sec.	d.	min.	sec.	d.	min.	sec.	
1	Catacocha	Paltas	1	500	651,631	9,553,282	651,286	9,552,977	4	2	25.4	79	38	2.7	4	2	35.3	79	38	13.9
2	Playas	Paltas	1	510	645,006	9,554,531	645,436	9,554,614	4	1	44.7	79	41	28.6	4	1	42.3	79	41	23.6
3	Yamana	Paltas	1	500	644,612	9,558,503	644,535	9,558,087	3	59	35.7	79	41	50.6	3	59	49.3	79	41	53.0
4	Centinela de Sur	Macara	1	280	617,249	9,516,612	617,045	9,516,428	4	22	21.1	79	56	36.0	4	22	27.1	79	56	42.5
4	Centinela de Sur	Macara	2	220	617,047	9,516,542	617,250	9,516,491	4	22	23.4	79	56	42.5	4	22	25.1	79	56	35.9
5	Zapallal	Celica	1	500	608,352	9,539,108	608,752	9,539,310	4	10	9.0	80	1	25.5	4	10	2.4	80	1	12.5
6	Patuco	Celica	1	500	606,923	9,539,418	607,347	9,539,609	4	9	58.9	80	2	11.9	4	9	52.7	80	1	58.1
7	El Faique																			
9	Saraguro	Saraguro	1	500	696,587	9,599,242	696,307	9,598,825	3	37	26.4	79	13	48.3	3	37	40.0	79	13	57.4
10	Tambo Negro	Macara	1	500	627,917	9,514,447	628,270	9,514,235	4	23	31.1	79	50	49.7	4	23	38.0	79	50	38.3
9	Las Cochas	Paltas	1	360	659,969	9,551,403	660,179	9,551,631	4	3	26.1	79	33	32.3	4	3	18.6	79	33	25.5
9	Las Cochas	Paltas	2	150	660,224	9,551,424	660,066	9,551,499	4	3	25.4	79	33	24.0	4	3	22.9	79	33	29.1
10	San Vicente del Rio	Paltas	1	500	656,976	9,548,812	657,324	9,548,661	4	4	50.6	79	35	9.2	4	4	55.5	79	34	57.9
11	Saucillo	Zapotillo	1	500	589,321	9,527,763	589,274	9,528,259	4	16	19.1	80	11	42.4	4	16	3.0	80	11	43.9
12	Valle Hermoso	Zapotillo	1	500	578,051	9,511,346	578,259	9,511,762	4	25	14.1	80	17	47.4	4	25	0.5	80	17	40.7
13	Machanguilla	Macara	1	500	612,201	9,519,588	612,212	9,519,162	4	20	44.4	79	59	19.8	4	20	58.3	79	59	19.4
14	El Pitayo y La Esperanza	Puyango	1	500	589,225	9,557,873	589,613	9,557,619	4	0	3.6	80	11	40.3	4	0	6.8	80	11	33.9
15	Linderos	Loja	1	500	690,110	9,529,981	690,442	9,530,289	4	15	1.5	79	17	13.6	4	14	51.5	79	17	2.8
16	Comunidades	Loja	1	500	696,886	9,519,621	697,374	9,519,680	4	20	38.3	79	13	33.1	4	20	36.3	79	13	17.2
17	Los Huilcos	Loja	1	150	696,848	9,528,418	696,990	9,528,403	4	15	51.9	79	13	35.0	4	15	52.4	79	13	30.4
17	Los Huilcos	Loja	2	350	696,770	9,528,528	696,885	9,528,320	4	15	48.3	79	13	37.5	4	15	58.6	79	13	33.2
18	Casanga	Paltas	1	500	637,213	9,556,640	637,301	9,556,263	4	0	36.8	79	45	50.4	4	0	49.0	79	45	47.5
19	Ceiba Chica	Zapotillo	1	300	586,895	9,523,050	586,919	9,523,170	4	18	52.7	80	13	0.8	4	18	43.3	80	13	0.3
19	Ceiba Chica	Zapotillo	2	200	586,913	9,523,338	586,905	9,523,085	4	18	51.5	80	13	0.6	4	18	49.0	80	13	5.2
20	Cabianga	Loja	1	160	694,923	9,532,561	694,856	9,532,424	4	13	37.2	79	14	37.7	4	13	41.7	79	14	39.9
20	Cabianga	Loja	2	90	694,960	9,532,676	695,017	9,532,607	4	13	33.4	79	14	36.5	4	13	35.7	79	14	34.7
20	Cabianga	Loja	3	90	694,966	9,532,604	695,018	9,532,675	4	13	35.8	79	14	36.3	4	13	33.5	79	14	34.6
20	Cabianga	Loja	4	60	694,964	9,532,633	695,021	9,532,630	4	13	34.8	79	14	36.4	4	13	34.9	79	14	34.5
20	Cabianga	Loja	5	100	694,988	9,532,606	694,986	9,532,703	4	13	35.7	79	14	35.6	4	13	32.6	79	14	35.7
21	Chapamarca	Catamayo	1	510	687,844	9,551,329	688,263	9,551,216	4	3	26.7	79	18	28.6	4	3	30.4	79	18	14.9
22	Linderos de Visin	Macara	1	500	596,865	9,527,045	597,295	9,527,150	4	16	42.2	80	7	37.6	4	16	38.8	80	7	23.7
	Total		30	11,030																

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
PROSPECCION GEOFISICA**

Poblado No.: 9

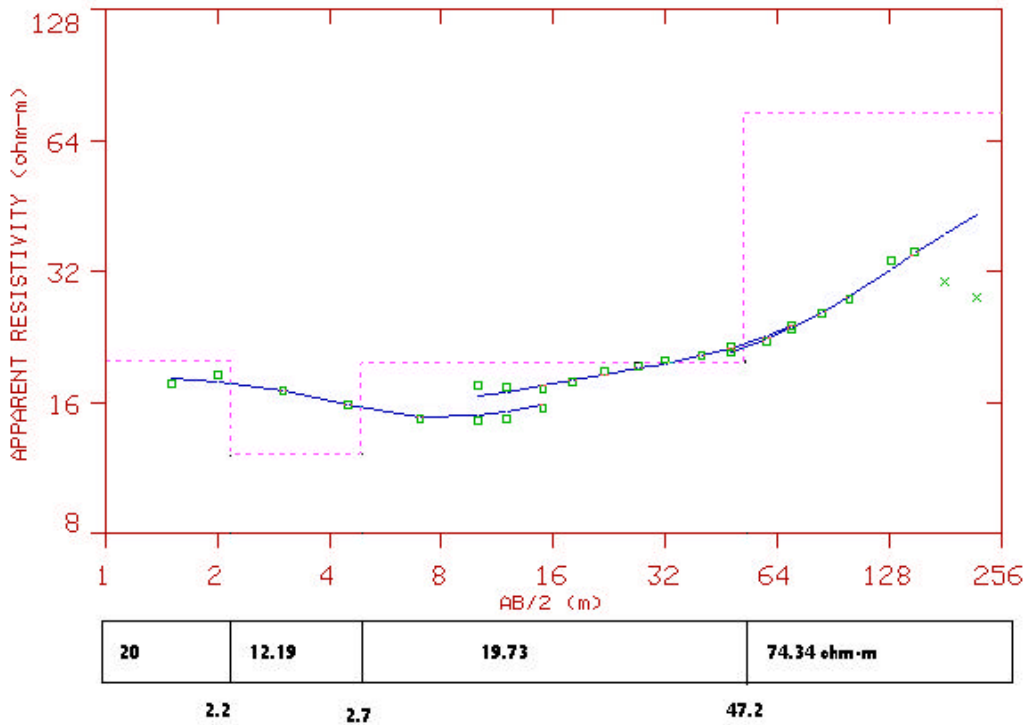
SEV:

9-1

Localidad: Yacpamba

Cantón: Saraguro

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	56.1	19.99	2.806	17.63
2	2	0.5	11.78	78.41	49.98	1.569	18.48
3	3	0.5	27.49	30.86	49.98	0.617	16.97
4	4.5	0.5	62.83	25.16	99.97	0.252	15.81
5	7	0.5	153.15	19.2	199.90	0.096	14.71
6	10	0.5	313.37	9.314	199.90	0.047	14.60
7	10	3	47.65	73.43	199.90	0.367	17.50
8	12	0.5	451.61	6.522	199.90	0.033	14.73
9	12	3	70.69	49.26	199.90	0.246	17.42
10	15	0.5	706.07	4.414	199.90	0.022	15.59
11	15	3	113.10	30.35	199.90	0.152	17.17
12	18	3	164.93	21.55	199.90	0.108	17.78
13	22	3	248.71	15.19	199.90	0.076	18.90
14	27	3	376.99	10.29	199.90	0.051	19.41
15	32	3	531.45	7.555	199.90	0.038	20.09
16	40	3	833.05	4.93	199.90	0.025	20.54
17	48	3	1201.66	3.583	199.90	0.018	21.54
18	48	12	282.74	14.81	200.00	0.074	20.94
19	60	3	1880.25	2.379	200.00	0.012	22.37
20	60	12	452.39	9.798	200.00	0.049	22.16
21	70	3	2560.93	1.888	200.00	0.009	24.18
22	70	12	622.56	7.602	200.00	0.038	23.66
23	84	12	904.78	5.694	200.00	0.028	25.76
24	100	12	1290.15	4.317	200.00	0.022	27.85
25	130	12	2193.36	3.08	200.00	0.015	33.78
26	150	12	2926.40	2.43	200.00	0.012	35.56
27	180	12	4222.31	1.439	200.00	0.007	30.38
28	220	12	6316.71	1.386	200.00	0.007	43.77



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 18

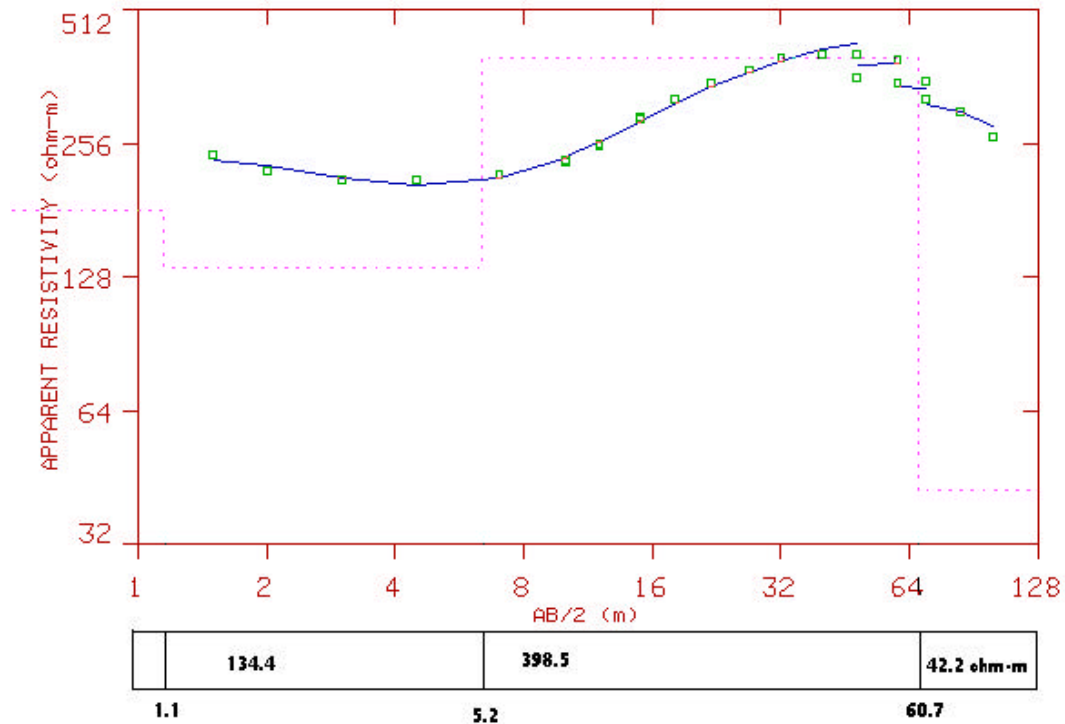
SEV :

18-1

Localidad: Linderos

Cantón: Loja

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	771.5	19.99	38.594	242.50
2	2	0.5	11.78	375.7	19.99	18.794	221.42
3	3	0.5	27.49	154.1	19.99	7.709	211.91
4	4.5	0.5	62.83	67.39	19.99	3.371	211.82
5	7	0.5	153.15	28.55	19.99	1.428	218.74
6	10	0.5	313.37	14.84	19.99	0.742	232.64
7	10	3	47.65	98.34	20.00	4.917	234.28
8	12	0.5	451.61	11.17	20.00	0.559	252.22
9	12	3	70.69	71.73	20.00	3.587	253.52
10	15	0.5	706.07	8.248	20.00	0.412	291.19
11	15	3	113.10	52.01	20.01	2.599	293.96
12	18	3	164.93	39.09	20.01	1.954	322.20
13	22	3	248.71	28.07	20.01	1.403	348.89
14	27	3	376.99	19.93	20.01	0.996	375.48
15	32	3	531.45	15	20.01	0.750	398.39
16	40	3	833.05	9.724	20.01	0.486	404.83
17	48	3	1201.66	6.756	20.01	0.338	405.72
18	48	12	282.74	25.52	20.01	1.275	360.60
19	60	3	1880.25	4.202	20.01	0.210	394.84
20	60	12	452.39	15.49	20.01	0.774	350.20
21	70	3	2560.93	2.755	20.01	0.138	352.59
22	70	12	622.56	10.39	20.01	0.519	323.26
23	84	12	904.78	6.704	20.01	0.335	303.13
24	100	12	1290.15	4.116	20.01	0.206	265.38



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
PROSPECCION GEOFISICA**

Poblado No.: 19

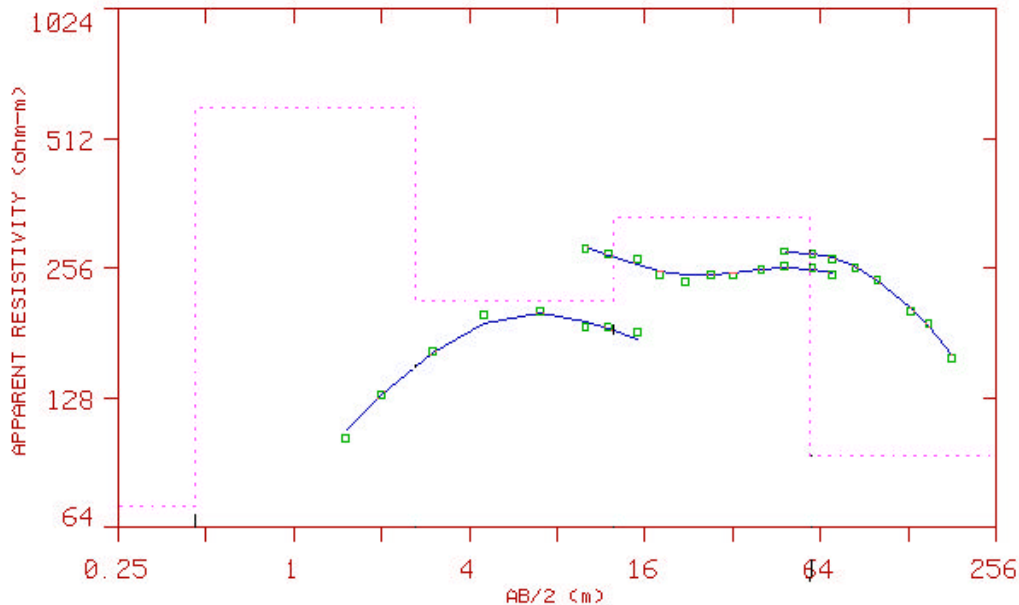
SEV :

19-1

Localidad: Comunidades

Cantón: Loja

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I V	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	327.3	20.01	16.357	102.77
2	2	0.5	11.78	220.9	20.01	11.039	130.06
3	3	0.5	27.49	119.4	20.01	5.967	164.03
4	4.5	0.5	62.83	63.63	20.01	3.180	199.80
5	7	0.5	153.15	26.61	20.01	1.330	203.67
6	10	0.5	313.37	11.93	20.01	0.596	186.83
7	10	3	47.65	118.9	20.01	5.942	283.12
8	12	0.5	451.61	8.313	20.01	0.415	187.62
9	12	3	70.69	78.41	20.01	3.919	276.99
10	15	0.5	706.07	5.13	20.01	0.256	181.02
11	15	3	113.10	119.2	50.04	2.382	269.41
12	18	3	164.93	75.21	50.04	1.503	247.90
13	22	3	248.71	48.04	50.04	0.960	238.77
14	27	3	376.99	32.85	50.04	0.656	247.49
15	32	3	531.45	23.15	50.04	0.463	245.87
16	40	3	833.05	15.22	50.04	0.304	253.38
17	48	3	1201.66	10.82	50.05	0.216	259.78
18	48	12	282.74	49.5	50.05	0.989	279.64
19	60	3	1880.25	6.849	50.04	0.137	257.35
20	60	12	452.39	30.62	50.04	0.612	276.82
21	70	3	2560.93	4.826	50.04	0.096	246.98
22	70	12	622.56	43.28	100.00	0.433	269.44
23	84	12	904.78	28.38	100.00	0.284	256.78
24	100	12	1290.15	18.69	100.00	0.187	241.13
25	130	12	2193.36	9.274	100.00	0.093	203.41
26	150	12	2926.40	13.06	200.10	0.065	191.00
27	180	12	4222.31	6.478	171.80	0.038	159.21



71.5	603.5	214.4	335.6	93.7 ohm·m
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**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 24

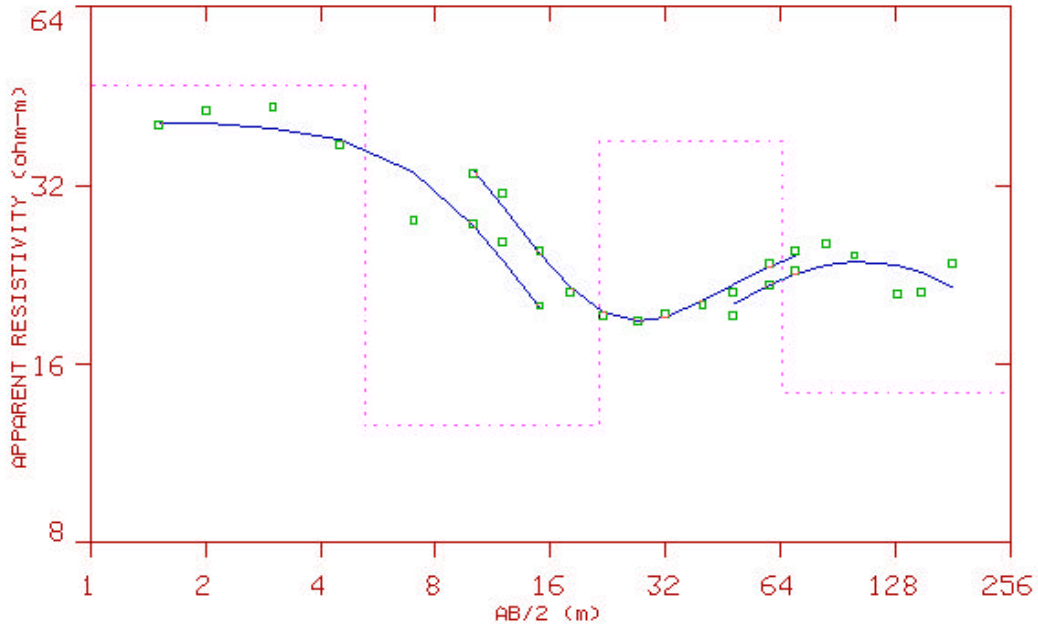
SEV :

24-1

Localidad: Cabianga

Cantón: Loja

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	642.99	100.00	6.430	40.40
2	2	0.5	11.78	362.6	100.10	3.622	42.68
3	3	0.5	27.49	315.3	200.10	1.576	43.31
4	4.5	0.5	62.83	119.4	200.10	0.597	37.49
5	7	0.5	153.15	36.53	200.10	0.183	27.96
6	10	0.5	313.37	17.6	200.10	0.088	27.56
7	10	3	47.65	141	200.10	0.705	33.57
8	12	0.5	451.61	11.42	200.10	0.057	25.77
9	12	3	70.69	87.65	200.10	0.438	30.96
10	15	0.5	706.07	5.699	200.10	0.028	20.11
11	15	3	113.10	43.95	200.10	0.220	24.84
12	18	3	164.93	25.67	200.10	0.128	21.16
13	22	3	248.71	15.51	200.10	0.078	19.28
14	27	3	376.99	10.03	200.10	0.050	18.90
15	32	3	531.45	7.322	200.10	0.037	19.45
16	40	3	833.05	4.833	200.10	0.024	20.12
17	48	3	1201.66	1.77	100.10	0.018	21.25
18	48	12	282.74	6.825	100.00	0.068	19.30
19	60	3	1880.25	2.535	200.10	0.013	23.82
20	60	12	452.39	9.622	200.00	0.048	21.76
21	70	3	2560.93	1.955	200.10	0.010	25.02
22	70	12	622.56	7.419	200.00	0.037	23.09
23	84	12	904.78	5.656	200.10	0.028	25.57
24	100	12	1290.15	3.782	200.10	0.019	24.38
25	130	12	2193.36	1.922	200.10	0.010	21.07
26	150	12	2926.40	1.456	200.10	0.007	21.29
27	180	12	4222.31	1.124	200.10	0.006	23.72



46.98	12.57	37.88	14.31 ohm · m
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5.2

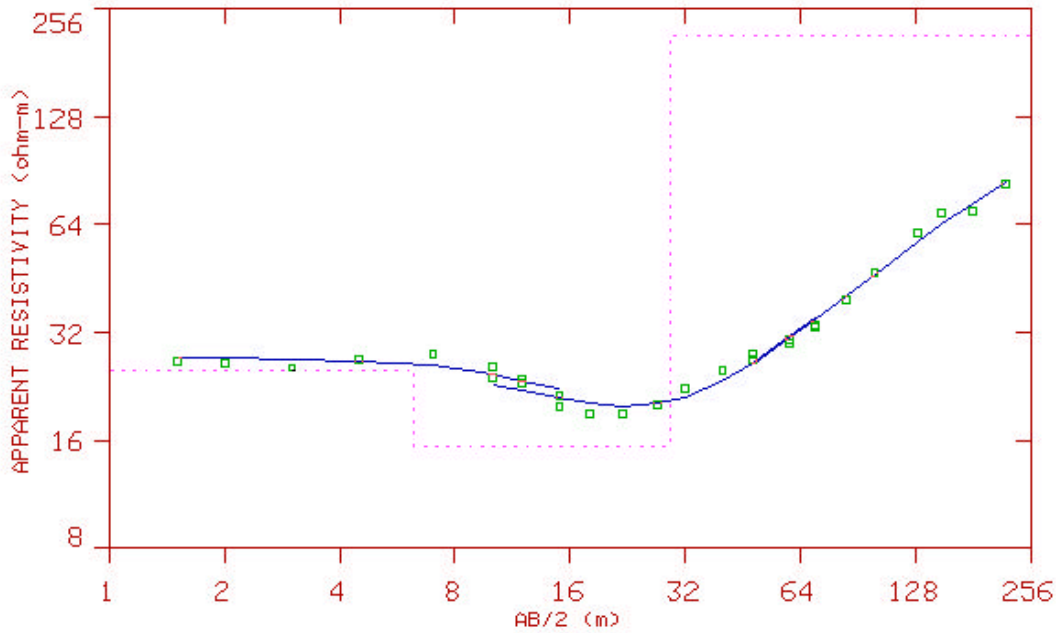
16.3

64.1

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 1 SEV : 1-1
 Localidad: Chapango
 Cantón: Paltas

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	84.64	20.00	4.232	26.59
2	2	0.5	11.78	44.57	20.00	2.229	26.25
3	3	0.5	27.49	18.57	20.00	0.929	25.52
4	4.5	0.5	62.83	8.6	20.00	0.430	27.02
5	7	0.5	153.15	3.638	20.00	0.182	27.86
6	10	0.5	313.37	4.094	50.01	0.082	25.65
7	10	3	47.65	25.16	50.01	0.503	23.97
8	12	0.5	451.61	2.639	50.01	0.053	23.83
9	12	3	70.69	16.32	50.01	0.326	23.07
10	15	0.5	706.07	3.03	100.00	0.030	21.39
11	15	3	113.10	17.66	100.00	0.177	19.97
12	18	3	164.93	11.5	100.00	0.115	18.97
13	22	3	248.71	7.592	100.00	0.076	18.88
14	27	3	376.99	5.362	100.00	0.054	20.21
15	32	3	531.45	4.216	100.00	0.042	22.41
16	40	3	833.05	3.026	100.00	0.030	25.21
17	48	3	1201.66	2.313	100.00	0.023	27.79
18	48	12	282.74	9.484	100.00	0.095	26.82
19	60	3	1880.25	3.275	200.00	0.016	30.79
20	60	12	452.39	6.601	100.00	0.066	29.86
21	70	3	2560.93	2.637	200.00	0.013	33.77
22	70	12	622.56	10.65	200.00	0.053	33.15
23	84	12	904.78	8.706	200.00	0.044	39.39
24	100	12	1290.15	7.279	200.00	0.036	46.96
25	130	12	2193.36	5.558	200.00	0.028	60.95
26	150	12	2926.40	4.74	200.00	0.024	69.36
27	180	12	4222.31	3.34	200.00	0.017	70.51
28	220	12	6316.71	2.642	200.00	0.013	83.44



25.21	15.41	215 ohm · m
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6.3

22.9

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 12

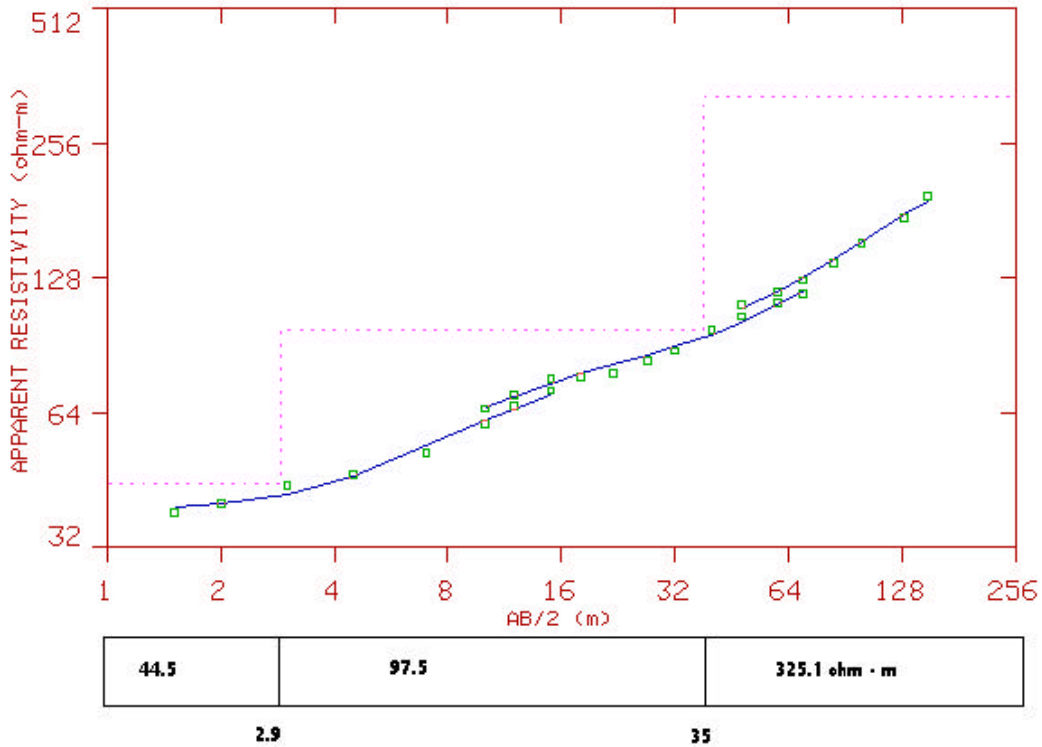
SEV :

12-1

Localidad: San Vicente del Río

Cantón: Catacocha

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (Ω.m)
1	1.5	0.5	6.28	121.8	19.99	6.093	38.28
2	2	0.5	11.78	67.9	19.99	3.397	40.02
3	3	0.5	27.49	31.93	19.99	1.597	43.91
4	4.5	0.5	62.83	14.82	19.99	0.741	46.58
5	7	0.5	153.15	6.813	19.99	0.341	52.20
6	10	0.5	313.37	3.859	19.99	0.193	60.50
7	10	3	47.65	68.56	49.99	1.371	65.35
8	12	0.5	451.61	7.353	49.99	0.147	66.43
9	12	3	70.69	49.7	49.99	0.994	70.28
10	15	0.5	706.07	5.075	49.99	0.102	71.68
11	15	3	113.10	33.75	49.99	0.675	76.36
12	18	3	164.93	23.38	50.00	0.468	77.12
13	22	3	248.71	15.79	50.00	0.316	78.54
14	27	3	376.99	11.1	49.99	0.222	83.71
15	32	3	531.45	8.275	50.00	0.166	87.96
16	40	3	833.05	11.79	100.00	0.118	98.22
17	48	3	1201.66	8.745	99.99	0.087	105.10
18	48	12	282.74	39.45	99.99	0.395	111.55
19	60	3	1880.25	6.007	100.00	0.060	112.95
20	60	12	452.39	26.41	100.00	0.264	119.48
21	70	3	2560.93	4.602	100.00	0.046	117.85
22	70	12	622.56	40.64	200.00	0.203	126.50
23	84	12	904.78	30.54	199.90	0.153	138.23
24	100	12	1290.15	23.73	199.90	0.119	153.15
25	130	12	2193.36	15.91	200.00	0.080	174.48
26	150	12	2926.40	13.31	200.00	0.067	194.75



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
PROSPECCION GEOFISICA**

Poblado No.: 11

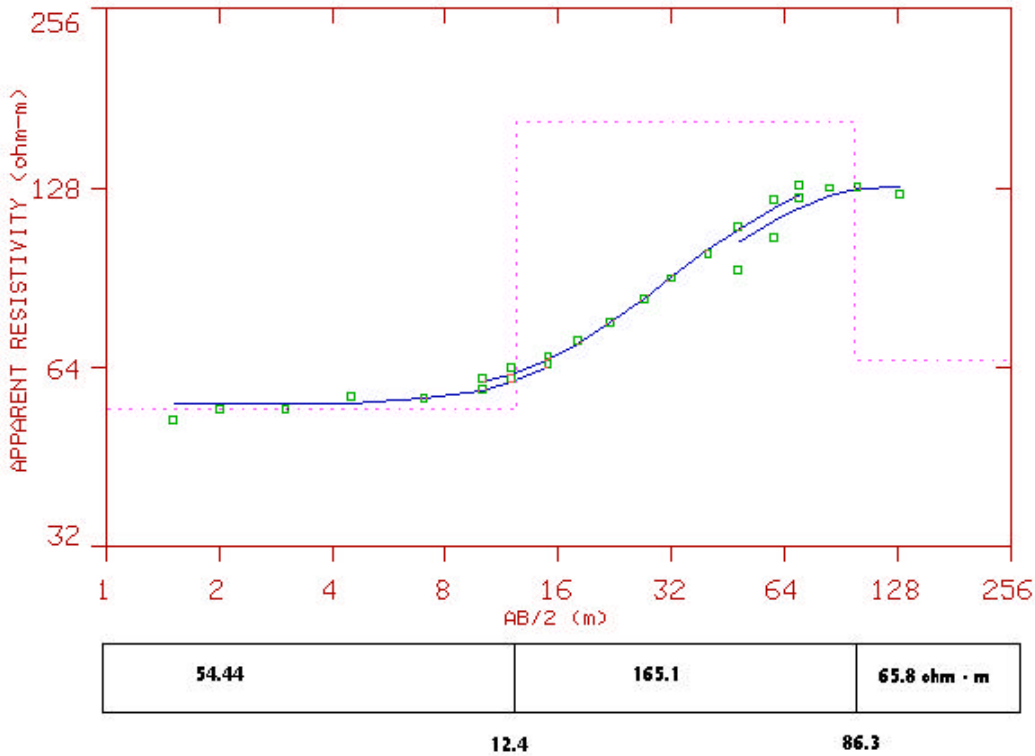
SEV :

11-1

Localidad: Las Cochas

Cantón: Catacocha

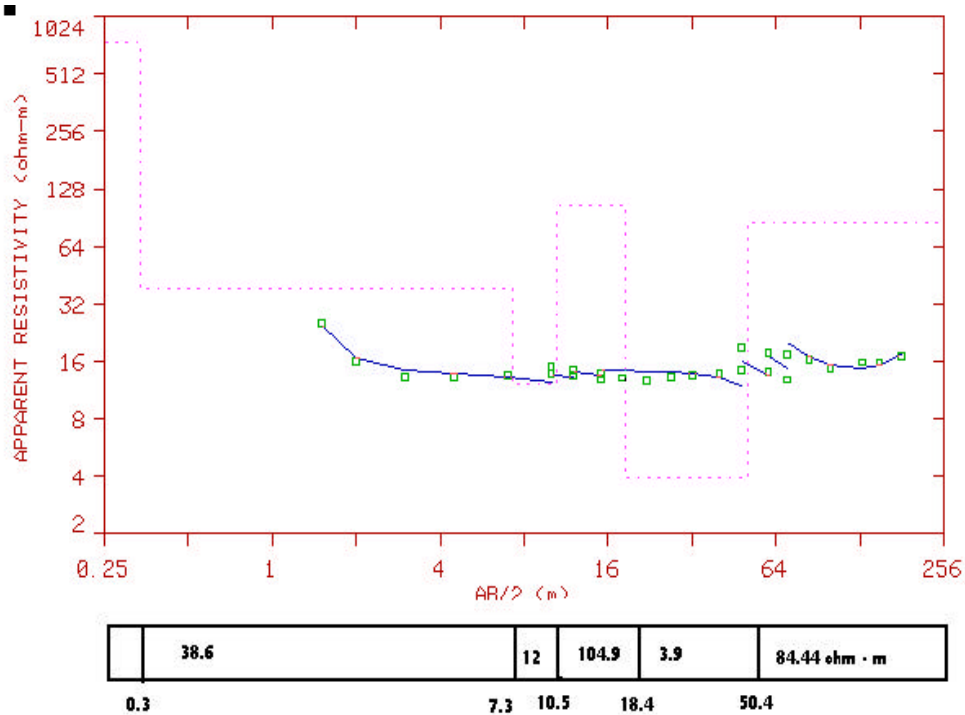
No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (Ω.m)
1	1.5	0.5	6.28	166.5	20.00	8.325	52.31
2	2	0.5	11.78	92.41	20.00	4.621	54.43
3	3	0.5	27.49	39.57	20.00	1.979	54.39
4	4.5	0.5	62.83	18.23	20.00	0.912	57.27
5	7	0.5	153.15	7.425	20.00	0.371	56.86
6	10	0.5	313.37	3.765	20.00	0.188	58.99
7	10	3	47.65	64.35	50.01	1.287	61.31
8	12	0.5	451.61	6.81	50.02	0.136	61.48
9	12	3	70.69	45.15	50.02	0.903	63.80
10	15	0.5	706.07	4.594	50.02	0.092	64.85
11	15	3	113.10	59.18	100.00	0.592	66.93
12	18	3	164.93	42.98	100.00	0.430	70.89
13	22	3	248.71	30.67	100.00	0.307	76.28
14	27	3	376.99	22.17	100.00	0.222	83.58
15	32	3	531.45	17	100.00	0.170	90.35
16	40	3	833.05	11.94	100.00	0.119	99.47
17	48	3	1201.66	9.159	100.00	0.092	110.06
18	48	12	282.74	32.9	100.00	0.329	93.02
19	60	3	1880.25	6.52	100.00	0.065	122.59
20	60	12	452.39	23.37	100.00	0.234	105.72
21	70	3	2560.93	5.056	100.00	0.051	129.48
22	70	12	622.56	19.78	100.00	0.198	123.14
23	84	12	904.78	14.16	100.00	0.142	128.12
24	100	12	1290.15	9.968	100.00	0.100	128.60
25	130	12	2193.36	5.709	100.00	0.057	125.22



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 3 SEV : 3-1
 Localidad: Yamana
 Cantón: Catamayo

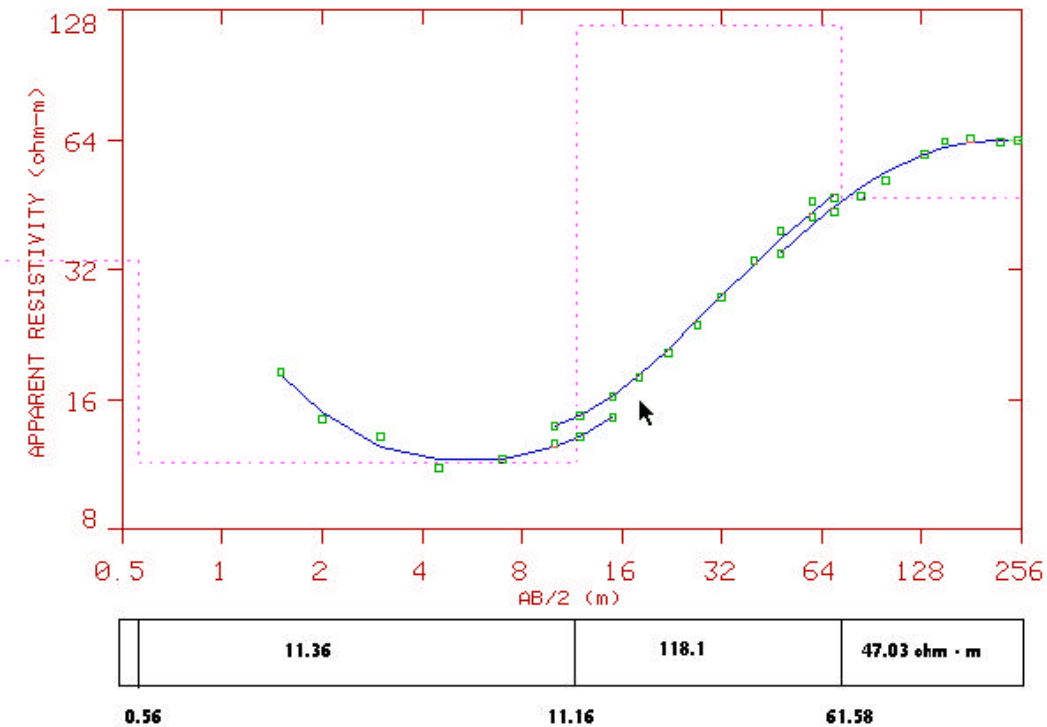
No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	81.03	20.00	4.052	25.46
2	2	0.5	11.78	27.26	20.00	1.363	16.06
3	3	0.5	27.49	9.603	20.00	0.480	13.20
4	4.5	0.5	62.83	4.217	20.00	0.211	13.25
5	7	0.5	153.15	1.775	20.00	0.089	13.59
6	10	0.5	313.37	2.215	50.00	0.044	13.88
7	10	3	47.65	15.82	50.00	0.316	15.08
8	12	0.5	451.61	1.503	50.00	0.030	13.58
9	12	3	70.69	10.2	50.00	0.204	14.42
10	15	0.5	706.07	0.919	50.00	0.018	12.98
11	15	3	113.10	6.129	50.00	0.123	13.86
12	18	3	164.93	3.968	50.10	0.079	13.06
13	22	3	248.71	2.556	50.10	0.051	12.69
14	27	3	376.99	3.493	100.00	0.035	13.17
15	32	3	531.45	2.532	100.00	0.025	13.46
16	40	3	833.05	3.34	200.00	0.017	13.91
17	48	3	1201.66	2.39	200.00	0.012	14.36
18	48	12	282.74	13.39	200.00	0.067	18.93
19	60	3	1880.25	1.517	200.00	0.008	14.26
20	60	12	452.39	7.848	200.00	0.039	17.75
21	70	3	2560.93	1.018	200.00	0.005	13.04
22	70	12	622.56	5.597	200.00	0.028	17.42
23	84	12	904.78	3.602	200.00	0.018	16.30
24	100	12	1290.15	2.289	200.00	0.011	14.77
25	130	12	2193.36	1.449	200.00	0.007	15.89
26	150	12	2926.40	1.085	200.00	0.005	15.88
27	180	12	4222.31	0.802	200.00	0.004	16.93



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 2 SEV : 2-1
 Localidad: Playas
 Cantón: Catacocha

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	59.03	19.99	2.953	18.55
2	2	0.5	11.78	24.39	19.99	1.220	14.37
3	3	0.5	27.49	23.96	49.98	0.479	13.18
4	4.5	0.5	62.83	8.844	49.98	0.177	11.12
5	7	0.5	153.15	3.814	49.99	0.076	11.68
6	10	0.5	313.37	4.039	99.97	0.040	12.66
7	10	3	47.65	29.19	99.98	0.292	13.91
8	12	0.5	451.61	5.816	199.90	0.029	13.14
9	12	3	70.69	20.74	99.98	0.207	14.66
10	15	0.5	706.07	4.129	199.80	0.021	14.59
11	15	3	113.10	28.76	199.90	0.144	16.27
12	18	3	164.93	21.77	199.90	0.109	17.96
13	22	3	248.71	16.5	199.90	0.083	20.53
14	27	3	376.99	12.65	199.90	0.063	23.86
15	32	3	531.45	10.37	199.90	0.052	27.57
16	40	3	833.05	8.085	199.90	0.040	33.69
17	48	3	1201.66	6.566	199.90	0.033	39.47
18	48	12	282.74	24.58	199.90	0.123	34.77
19	60	3	1880.25	4.925	200.00	0.025	46.30
20	60	12	452.39	18.68	200.00	0.093	42.25
21	70	3	2560.93	3.665	200.00	0.018	46.93
22	70	12	622.56	14.03	200.00	0.070	43.67
23	84	12	904.78	10.49	200.00	0.052	47.46
24	100	12	1290.15	8.008	200.00	0.040	51.66
25	130	12	2193.36	5.398	200.00	0.027	59.20
26	150	12	2926.40	4.344	200.00	0.022	63.56
27	180	12	4222.31	3.074	200.00	0.015	64.90
28	220	12	6316.71	2.018	200.00	0.010	63.74
29	250	12	8162.40	1.578	200.00	0.008	64.40



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 22

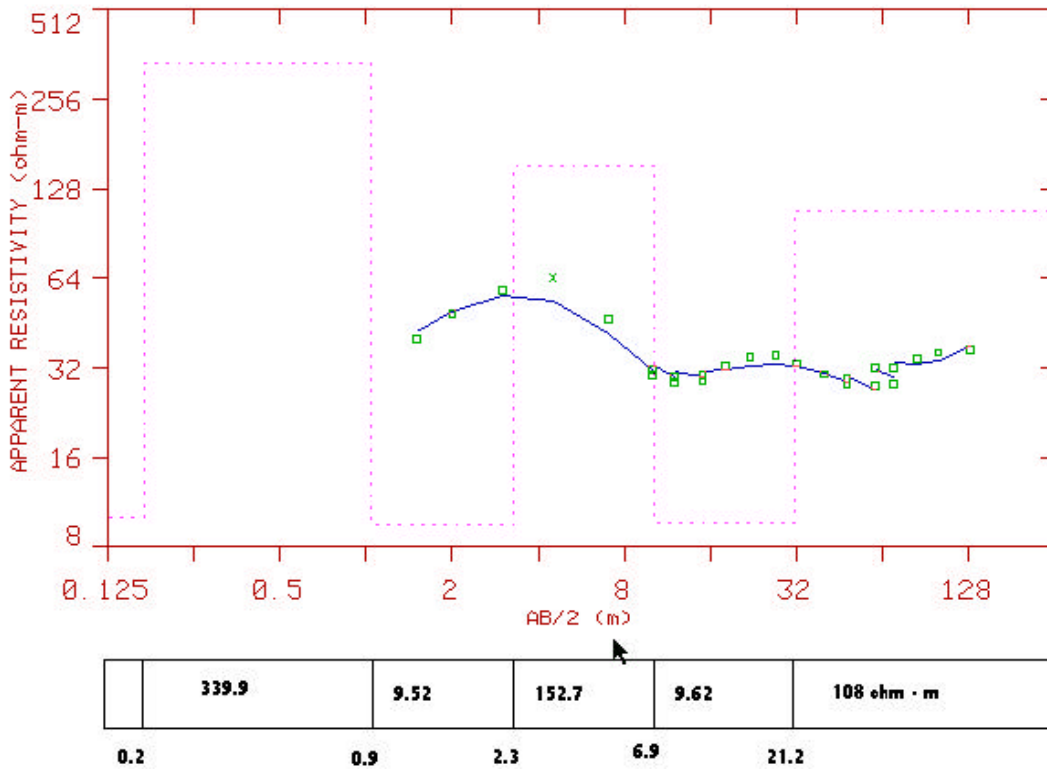
SEV :

22-1

Localidad: Casanga

Cantón: Paltas

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	126.4	19.99	6.323	39.73
2	2	0.5	11.78	82.34	19.99	4.119	48.53
3	3	0.5	27.49	42.42	19.99	2.122	58.33
4	4.5	0.5	62.83	20.44	19.99	1.023	64.25
5	7	0.5	153.15	6.106	19.99	0.305	46.78
6	10	0.5	313.37	4.841	50.00	0.097	30.34
7	10	3	47.65	33.23	49.99	0.665	31.67
8	12	0.5	451.61	6.318	99.98	0.063	28.54
9	12	3	70.69	21.03	49.99	0.421	29.74
10	15	0.5	706.07	4.088	100.00	0.041	28.86
11	15	3	113.10	53.1	199.90	0.266	30.04
12	18	3	164.93	39.4	199.90	0.197	32.51
13	22	3	248.71	28.03	199.90	0.140	34.87
14	27	3	376.99	18.69	199.90	0.093	35.25
15	32	3	531.45	12.43	199.90	0.062	33.05
16	40	3	833.05	7.31	199.90	0.037	30.46
17	48	3	1201.66	4.671	199.90	0.023	28.08
18	48	12	282.74	20.71	200.00	0.104	29.28
19	60	3	1880.25	2.95	199.90	0.015	27.75
20	60	12	452.39	14.09	200.00	0.070	31.87
21	70	3	2560.93	2.207	200.00	0.011	28.26
22	70	12	622.56	10.2	200.00	0.051	31.75
23	84	12	904.78	7.591	200.00	0.038	34.34
24	100	12	1290.15	5.598	200.00	0.028	36.11
25	130	12	2193.36	3.347	200.00	0.017	36.71



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 5

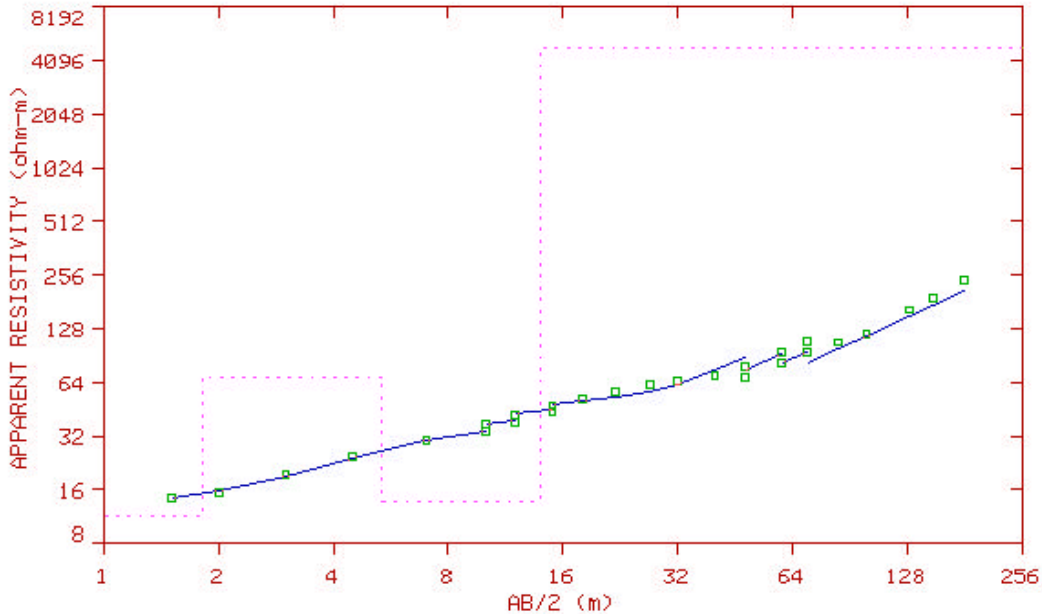
SEV :

5-1

Localidad: Zapallal

Cantón: Celica

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	45.99	19.98	2.302	14.46
2	2	0.5	11.78	26.12	19.99	1.307	15.39
3	3	0.5	27.49	14.11	19.99	0.706	19.40
4	4.5	0.5	62.83	19.64	49.97	0.393	24.70
5	7	0.5	153.15	9.843	49.98	0.197	30.16
6	10	0.5	313.37	5.45	49.98	0.109	34.17
7	10	3	47.65	39.14	49.98	0.783	37.31
8	12	0.5	451.61	4.98	49.98	0.100	45.00
9	12	3	70.69	28.8	49.98	0.576	40.73
10	15	0.5	706.07	3.102	49.98	0.062	43.82
11	15	3	113.10	21.03	49.97	0.421	47.60
12	18	3	164.93	15.82	49.98	0.317	52.21
13	22	3	248.71	23.03	99.97	0.230	57.30
14	27	3	376.99	16.48	99.96	0.165	62.15
15	32	3	531.45	12.17	99.96	0.122	64.70
16	40	3	833.05	8.435	99.96	0.084	70.30
17	48	3	1201.66	13.13	199.90	0.066	78.93
18	48	12	282.74	47.86	199.90	0.239	67.69
19	60	3	1880.25	10.02	199.90	0.050	94.25
20	60	12	452.39	32.26	199.90	0.161	73.01
21	70	3	2560.93	8.486	199.90	0.042	108.71
22	70	12	622.56	30.44	199.90	0.152	94.80
23	84	12	904.78	23.78	199.90	0.119	107.63
24	100	12	1290.15	18.66	199.90	0.093	120.43
25	130	12	2193.36	14.91	199.90	0.075	163.60
26	150	12	2926.40	13.08	199.90	0.065	191.48
27	180	12	4222.31	11.31	199.90	0.057	238.89

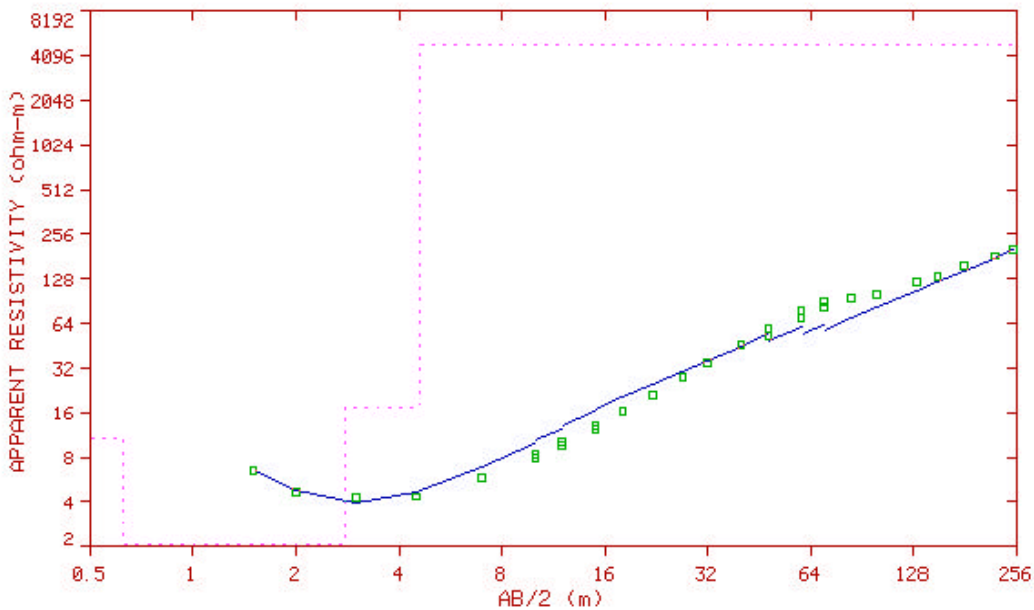


11.45	68.72	13.86	4819.1 ohm · m
1.8	3.5	8.6	

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 6 SEV : 6-1
 Localidad: Patuco
 Cantón: Celica

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	20.9	20.00	1.045	6.57
2	2	0.5	11.78	19.57	50.00	0.391	4.61
3	3	0.5	27.49	15.45	100.00	0.155	4.25
4	4.5	0.5	62.83	6.911	100.00	0.069	4.34
5	7	0.5	153.15	7.549	199.90	0.038	5.78
6	10	0.5	313.37	5.047	199.90	0.025	7.91
7	10	3	47.65	34.94	199.90	0.175	8.33
8	12	0.5	451.61	4.279	199.90	0.021	9.67
9	12	3	70.69	28.51	199.90	0.143	10.08
10	15	0.5	706.07	3.536	199.90	0.018	12.49
11	15	3	113.10	22.85	199.90	0.114	12.93
12	18	3	164.93	19.72	199.90	0.099	16.27
13	22	3	248.71	16.95	199.90	0.085	21.09
14	27	3	376.99	14.74	200.00	0.074	27.78
15	32	3	531.45	13.06	200.00	0.065	34.70
16	40	3	833.05	11.05	200.00	0.055	46.03
17	48	3	1201.66	9.701	200.00	0.049	58.29
18	48	12	282.74	37.02	200.00	0.185	52.34
19	60	3	1880.25	8.235	200.00	0.041	77.42
20	60	12	452.39	30.68	200.00	0.153	69.40
21	70	3	2560.93	7.043	200.00	0.035	90.18
22	70	12	622.56	26.41	200.00	0.132	82.21
23	84	12	904.78	21.01	200.00	0.105	95.05
24	100	12	1290.15	15.52	200.00	0.078	100.12
25	130	12	2193.36	11.1	200.00	0.056	121.73
26	150	12	2926.40	9.115	200.00	0.046	133.37
27	180	12	4222.31	7.458	200.00	0.037	157.45
28	220	12	6316.71	5.8	200.00	0.029	183.18
29	250	12	8162.40	4.961	200.00	0.025	202.47



	2		17		4842.5 ohm · m
0.6	2.2	1.8			

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 6

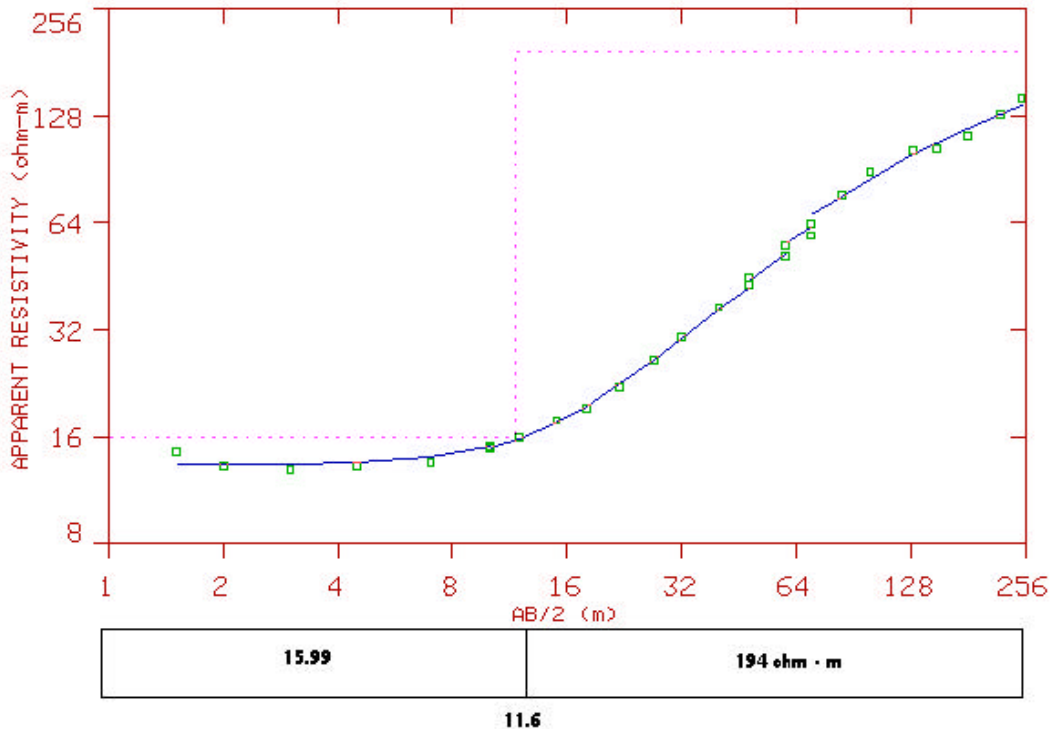
SEV :

6-2

Localidad: Patuco

Cantón: Celica

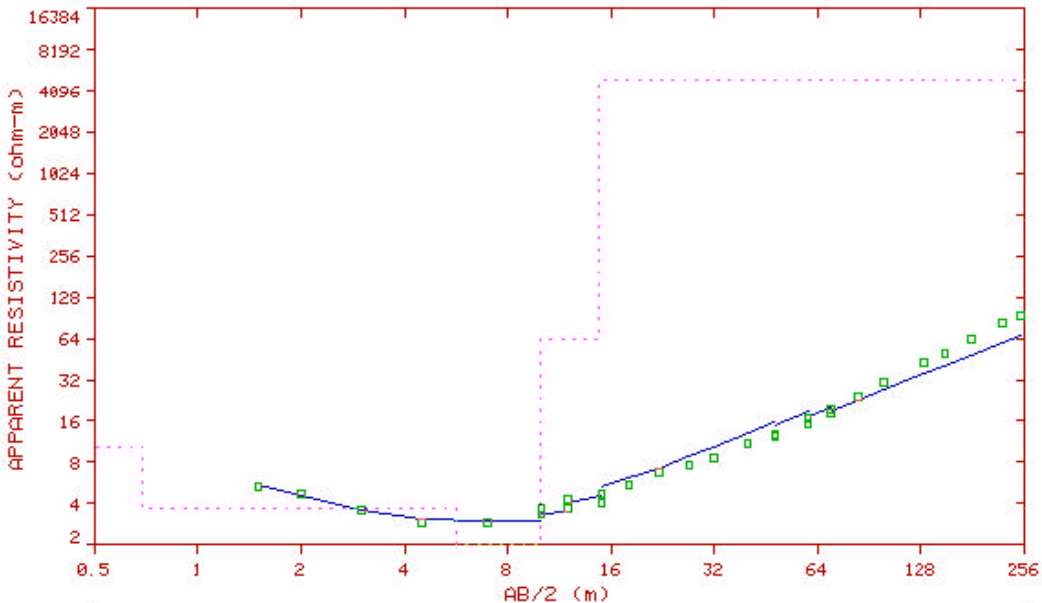
No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	46.06	20.01	2.302	14.46
2	2	0.5	11.78	56.19	50.02	1.123	13.23
3	3	0.5	27.49	23.55	50.02	0.471	12.94
4	4.5	0.5	62.83	21.08	100.00	0.211	13.24
5	7	0.5	153.15	8.844	100.00	0.088	13.54
6	10	0.5	313.37	9.627	200.00	0.048	15.08
7	10	3	47.65	62.59	200.00	0.313	14.91
8	12	0.5	451.61	7.094	200.00	0.035	16.02
9	12	3	70.69	44.96	200.00	0.225	15.89
10	15	0.5	706.07	5.052	200.00	0.025	17.84
11	15	3	113.10	31.48	200.00	0.157	17.80
12	18	3	164.93	23.18	200.00	0.116	19.12
13	22	3	248.71	17.76	200.00	0.089	22.09
14	27	3	376.99	14	200.00	0.070	26.39
15	32	3	531.45	11.54	200.10	0.058	30.65
16	40	3	833.05	8.886	200.10	0.044	36.99
17	48	3	1201.66	7.11	200.10	0.036	42.70
18	48	12	282.74	31.74	200.10	0.159	44.85
19	60	3	1880.25	5.485	200.10	0.027	51.54
20	60	12	452.39	24.44	200.10	0.122	55.25
21	70	3	2560.93	4.612	200.10	0.023	59.03
22	70	12	622.56	20.45	200.10	0.102	63.62
23	84	12	904.78	16.99	200.10	0.085	76.82
24	100	12	1290.15	13.87	200.10	0.069	89.43
25	130	12	2193.36	9.401	200.10	0.047	103.05
26	150	12	2926.40	7.09	200.10	0.035	103.69
27	180	12	4222.31	5.345	200.10	0.027	112.78
28	220	12	6316.71	4.119	200.10	0.021	130.03
29	250	12	8162.40	3.521	200.10	0.018	143.63



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 7 SEV : 7-1
 Localidad: El Faique
 Cantón: Cécica

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	42.52	50.03	0.850	5.34
2	2	0.5	11.78	39.36	100.00	0.394	4.64
3	3	0.5	27.49	12.88	100.00	0.129	3.54
4	4.5	0.5	62.83	9.168	200.00	0.046	2.88
5	7	0.5	153.15	3.769	200.00	0.019	2.89
6	10	0.5	313.37	2.132	200.00	0.011	3.34
7	10	3	47.65	15.38	200.00	0.077	3.66
8	12	0.5	451.61	1.626	200.10	0.008	3.67
9	12	3	70.69	12.08	200.00	0.060	4.27
10	15	0.5	706.07	1.147	200.10	0.006	4.05
11	15	3	113.10	8.389	200.10	0.042	4.74
12	18	3	164.93	6.685	200.10	0.033	5.51
13	22	3	248.71	5.367	200.10	0.027	6.67
14	27	3	376.99	4.017	200.10	0.020	7.57
15	32	3	531.45	3.262	200.10	0.016	8.66
16	40	3	833.05	2.613	200.10	0.013	10.88
17	48	3	1201.66	2.159	200.10	0.011	12.97
18	48	12	282.74	8.733	200.10	0.044	12.34
19	60	3	1880.25	1.774	200.10	0.009	16.67
20	60	12	452.39	6.727	200.10	0.034	15.21
21	70	3	2560.93	1.521	200.10	0.008	19.47
22	70	12	622.56	5.946	200.10	0.030	18.50
23	84	12	904.78	5.285	200.10	0.026	23.90
24	100	12	1290.15	4.762	200.10	0.024	30.70
25	130	12	2193.36	3.855	200.10	0.019	42.26
26	150	12	2926.40	3.423	200.10	0.017	50.06
27	180	12	4222.31	2.988	200.10	0.015	63.05
28	220	12	6316.71	2.626	200.10	0.013	82.90
29	250	12	8162.40	2.329	200.10	0.012	95.00



10	3.7	2	62	4913.3 ohm · m
0.7		4.9	10	14.8

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 16

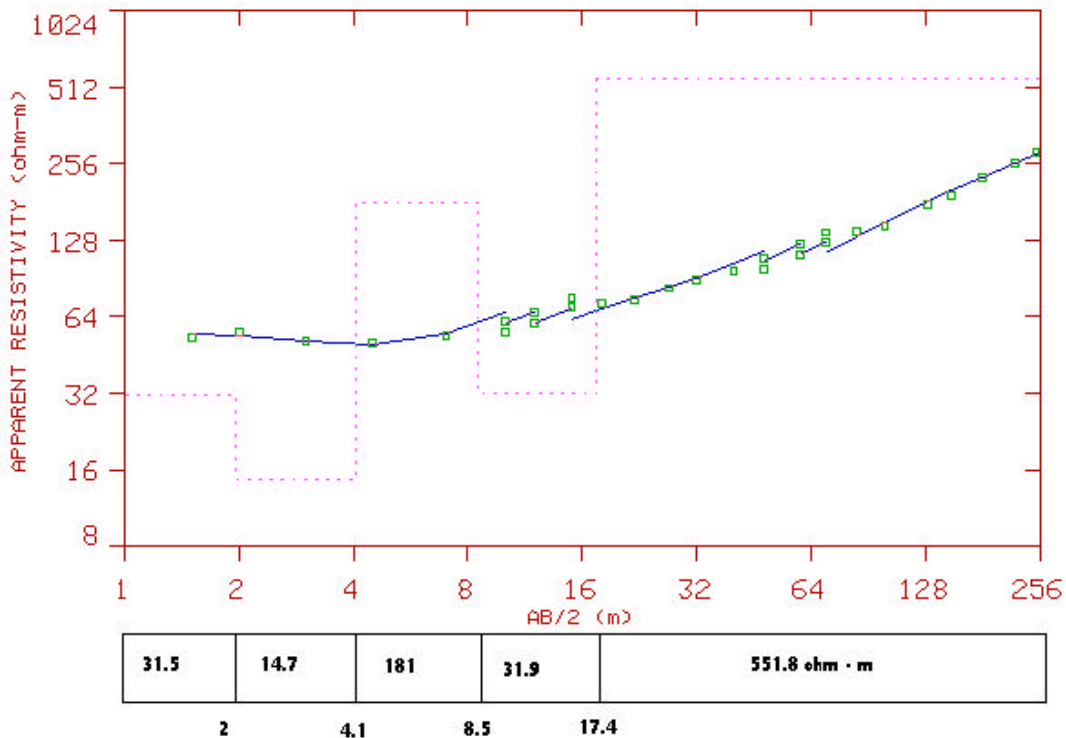
SEV :

16-1

Localidad: La Esperanza y Pitayo

Cantón: Puyango

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	168.5	19.99	8.429	52.96
2	2	0.5	11.78	94.3	19.99	4.717	55.58
3	3	0.5	27.49	37.4	19.99	1.871	51.43
4	4.5	0.5	62.83	39.92	49.98	0.799	50.19
5	7	0.5	153.15	17.57	49.98	0.352	53.84
6	10	0.5	313.37	9.782	49.98	0.196	61.33
7	10	3	47.65	58.14	49.98	1.163	55.43
8	12	0.5	451.61	7.41	49.98	0.148	66.95
9	12	3	70.69	42.72	49.98	0.855	60.42
10	15	0.5	706.07	10.83	99.97	0.108	76.49
11	15	3	113.10	61.62	99.98	0.616	69.70
12	18	3	164.93	44.13	99.99	0.441	72.79
13	22	3	248.71	30.07	99.99	0.301	74.79
14	27	3	376.99	22.02	100.00	0.220	83.01
15	32	3	531.45	16.83	199.90	0.084	44.74
16	40	3	833.05	11.78	199.90	0.059	49.09
17	48	3	1201.66	9.054	199.90	0.045	54.43
18	48	12	282.74	69.8	199.90	0.349	98.73
19	60	3	1880.25	13.11	199.90	0.066	123.31
20	60	12	452.39	49.63	199.90	0.248	112.32
21	70	3	2560.93	10.73	199.90	0.054	137.46
22	70	12	622.56	40.17	199.90	0.201	125.10
23	84	12	904.78	30.72	199.90	0.154	139.04
24	100	12	1290.15	22.72	199.90	0.114	146.63
25	130	12	2193.36	16.23	200.00	0.081	177.99
26	150	12	2926.40	13.14	200.00	0.066	192.26
27	180	12	4222.31	10.65	200.00	0.053	224.84
28	220	12	6316.71	8.212	200.00	0.041	259.36
29	250	12	8162.40	6.945	200.00	0.035	283.44



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 13

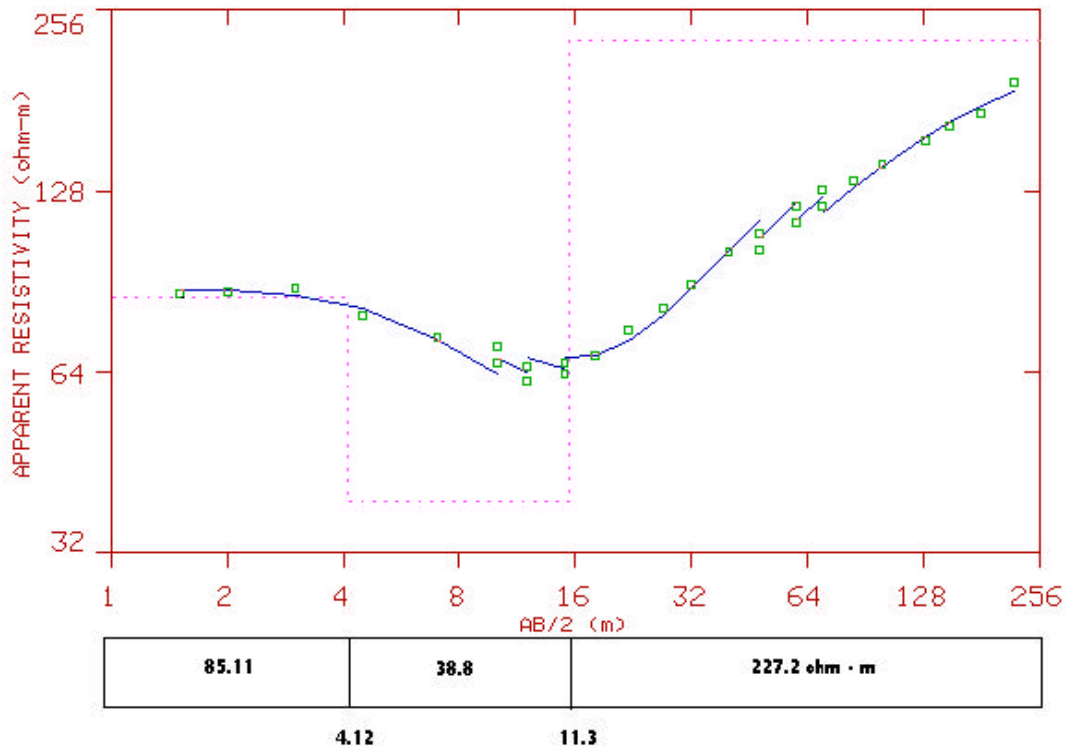
SEV :

13-1

Localidad: Saucillo

Cantón: Zapotillo

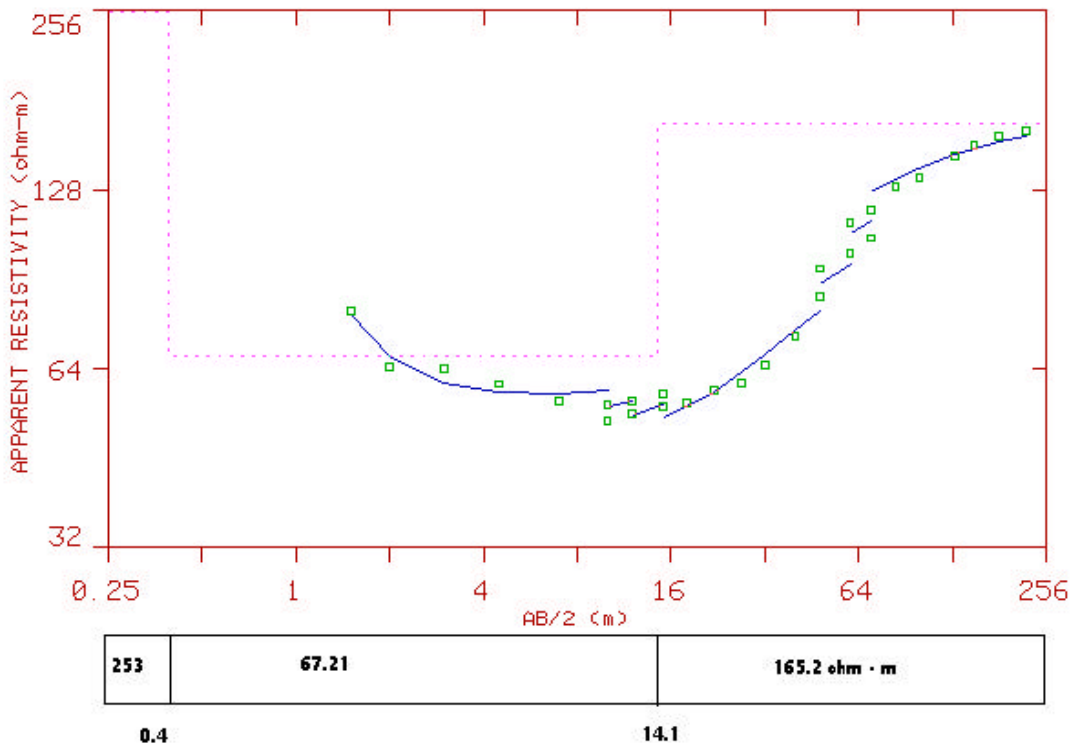
No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	274.5	20.00	13.725	86.24
2	2	0.5	11.78	148	20.00	7.400	87.18
3	3	0.5	27.49	64.28	20.00	3.214	88.35
4	4.5	0.5	62.83	25.19	20.00	1.260	79.14
5	7	0.5	153.15	23.91	50.00	0.478	73.24
6	10	0.5	313.37	10.57	50.00	0.211	66.25
7	10	3	47.65	148	100.00	1.480	70.52
8	12	0.5	451.61	13.69	100.00	0.137	61.82
9	12	3	70.69	92.49	100.00	0.925	65.38
10	15	0.5	706.07	9.013	100.00	0.090	63.64
11	15	3	113.10	58.62	100.00	0.586	66.30
12	18	3	164.93	41.3	100.00	0.413	68.12
13	22	3	248.71	30.22	100.00	0.302	75.16
14	27	3	376.99	21.7	100.00	0.217	81.81
15	32	3	531.45	33.69	200.00	0.168	89.52
16	40	3	833.05	12.19	100.00	0.122	101.55
17	48	3	1201.66	18.15	200.00	0.091	109.05
18	48	12	282.74	72.19	200.00	0.361	102.06
19	60	3	1880.25	12.87	200.00	0.064	120.99
20	60	12	452.39	50.06	200.00	0.250	113.23
21	70	3	2560.93	10.05	200.00	0.050	128.69
22	70	12	622.56	67.91	341.60	0.199	123.76
23	84	12	904.78	40.77	278.00	0.147	132.69
24	100	12	1290.15	27.83	252.60	0.110	142.14
25	130	12	2193.36	14.25	201.90	0.071	154.81
26	150	12	2926.40	19.18	342.70	0.056	163.78
27	180	12	4222.31	14.02	342.10	0.041	173.04
28	220	12	6316.71	8.01	260.00	0.031	194.60



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 23 SEV : 23-1
 Localidad: Ceiba
 Cantón: Zapotillo

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	254.5	19.99	12.731	79.99
2	2	0.5	11.78	109	19.99	5.453	64.24
3	3	0.5	27.49	46.62	20.00	2.331	64.08
4	4.5	0.5	62.83	19.19	20.00	0.960	60.29
5	7	0.5	153.15	7.377	20.00	0.369	56.49
6	10	0.5	313.37	3.541	20.00	0.177	55.48
7	10	3	47.65	53.97	49.33	1.094	52.13
8	12	0.5	451.61	6.258	49.99	0.125	56.53
9	12	3	70.69	37.93	50.00	0.759	53.62
10	15	0.5	706.07	4.116	50.00	0.082	58.12
11	15	3	113.10	24.47	50.00	0.489	55.35
12	18	3	164.93	34	100.00	0.340	56.08
13	22	3	248.71	23.72	100.00	0.237	58.99
14	27	3	376.99	16.08	100.00	0.161	60.62
15	32	3	531.45	12.21	100.00	0.122	64.89
16	40	3	833.05	8.727	100.00	0.087	72.70
17	48	3	1201.66	7.06	100.00	0.071	84.84
18	48	12	282.74	62.25	186.80	0.333	94.22
19	60	3	1880.25	15.7	294.50	0.053	100.24
20	60	12	452.39	49.62	199.90	0.248	112.29
21	70	3	2560.93	12.92	311.60	0.041	106.18
22	70	12	622.56	58.56	307.70	0.190	118.48
23	84	12	904.78	49.86	349.50	0.143	129.08
24	100	12	1290.15	36.3	349.50	0.104	134.00
25	130	12	2193.36	23.24	349.50	0.066	145.85
26	150	12	2926.40	12.35	237.40	0.052	152.24
27	180	12	4222.31	9.025	242.20	0.037	157.33
28	220	12	6316.71	8.892	349.50	0.025	160.71



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 14

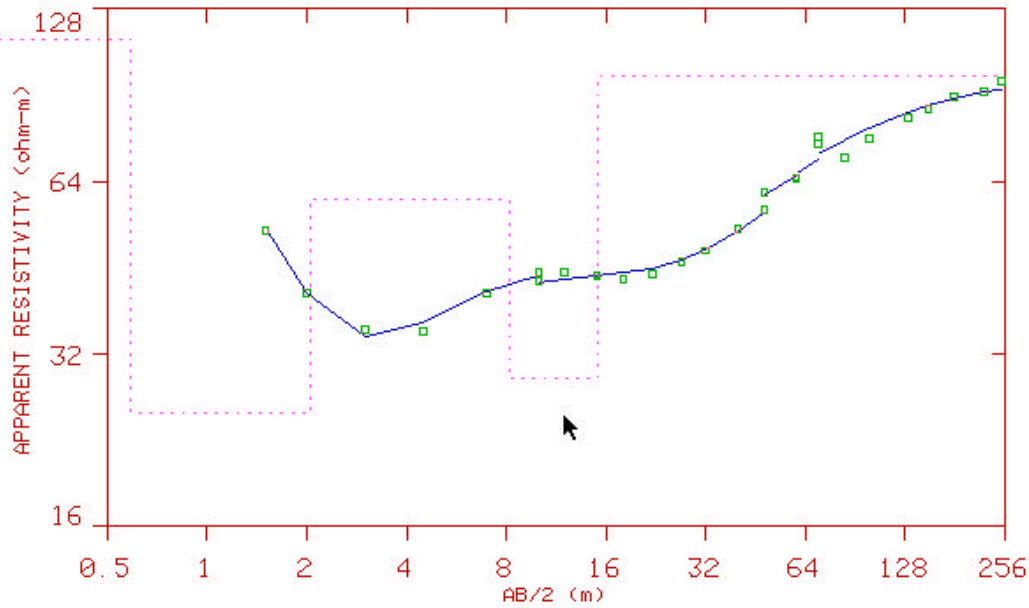
SEV :

14-1

Localidad: Valle Hermoso

Cantón: Zapotillo

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	164.4	19.99	8.224	51.67
2	2	0.5	11.78	69.47	19.99	3.475	40.94
3	3	0.5	27.49	64.03	49.99	1.281	35.21
4	4.5	0.5	62.83	27.81	49.99	0.556	34.95
5	7	0.5	153.15	26.99	99.99	0.270	41.34
6	10	0.5	313.37	14.14	99.98	0.141	44.32
7	10	3	47.65	90.18	99.98	0.902	42.98
8	12	0.5	451.61	19.66	199.99	0.098	44.39
9	12	3	70.69	62.66	99.99	0.627	44.30
10	15	0.5	706.07	12.38	199.99	0.062	43.71
11	15	3	113.10	77.63	199.99	0.388	43.90
12	18	3	164.93	52.34	199.99	0.262	43.17
13	22	3	248.71	35.36	199.99	0.177	43.97
14	27	3	376.99	24.55	199.99	0.123	46.28
15	32	3	531.45	18.21	199.99	0.091	48.39
16	40	3	833.05	12.71	199.99	0.064	52.94
17	48	3	1201.66	9.526	199.99	0.048	57.24
18	48	12	282.74	43.2	199.99	0.216	61.08
19	60	3	1880.25	6.877	199.99	0.034	64.66
20	60	12	452.39	28.7	199.99	0.144	64.92
21	70	3	2560.93	5.82	199.99	0.029	74.53
22	70	12	622.56	24.52	200.00	0.123	76.33
23	84	12	904.78	15.59	199.99	0.078	70.53
24	100	12	1290.15	11.76	199.99	0.059	75.86
25	130	12	2193.36	7.523	199.99	0.038	82.51
26	150	12	2926.40	5.847	200.00	0.029	85.55
27	180	12	4222.31	4.278	200.00	0.021	90.32
28	220	12	6316.71	2.915	200.00	0.015	92.07
29	250	12	8162.40	2.3	200.00	0.012	93.87



0.6	25.2	59.6	28.9	97.7 ohm · m
0.6	2	8.1	15	

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 15

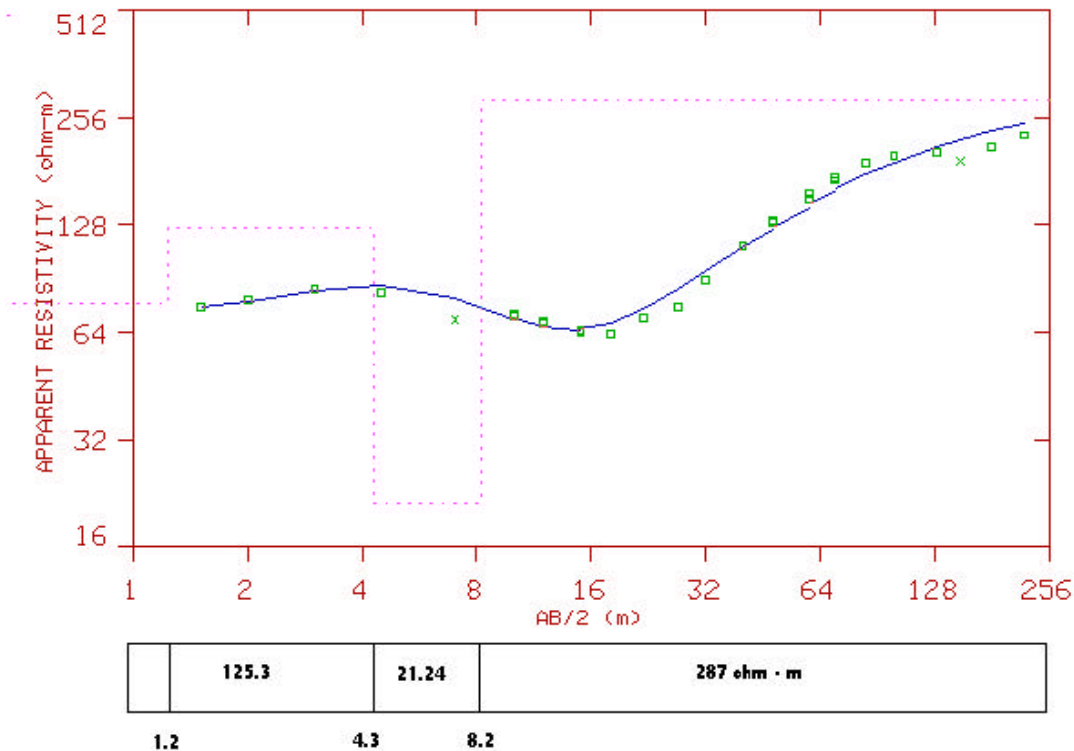
SEV :

15-1

Localidad: Machinguilla

Cantón: Macara

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ _a (W.m)
1	1.5	0.5	6.28	598.9	50.00	11.978	75.26
2	2	0.5	11.78	335.9	50.00	6.718	79.14
3	3	0.5	27.49	153.6	50.00	3.072	84.45
4	4.5	0.5	62.83	65.75	50.00	1.315	82.62
5	7	0.5	153.15	90.27	199.90	0.452	69.16
6	10	0.5	313.37	22.59	100.00	0.226	70.79
7	10	3	47.65	150.1	100.00	1.501	71.52
8	12	0.5	451.61	15.08	100.00	0.151	68.10
9	12	3	70.69	97.06	100.00	0.971	68.61
10	15	0.5	706.07	18.15	199.90	0.091	64.11
11	15	3	113.10	114	199.90	0.570	64.50
12	18	3	164.93	77.06	200.00	0.385	63.55
13	22	3	248.71	56.43	199.90	0.282	70.21
14	27	3	376.99	39.78	199.90	0.199	75.02
15	32	3	531.45	33.7	199.90	0.169	89.59
16	40	3	833.05	26.81	199.90	0.134	111.73
17	48	3	1201.66	21.6	200.00	0.108	129.78
18	48	12	282.74	93.07	200.00	0.465	131.57
19	60	3	1880.25	16.16	199.90	0.081	152.00
20	60	12	452.39	68.97	200.00	0.345	156.01
21	70	3	2560.93	13.36	200.00	0.067	171.07
22	70	12	622.56	77.6	277.30	0.280	174.22
23	84	12	904.78	47.28	224.10	0.211	190.89
24	100	12	1290.15	54.36	349.50	0.156	200.67
25	130	12	2193.36	32.79	349.50	0.094	205.78
26	150	12	2926.40	23.11	349.50	0.066	193.50
27	180	12	4222.31	15.85	316.20	0.050	211.65
28	220	12	6316.71	12.68	349.50	0.036	229.17



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

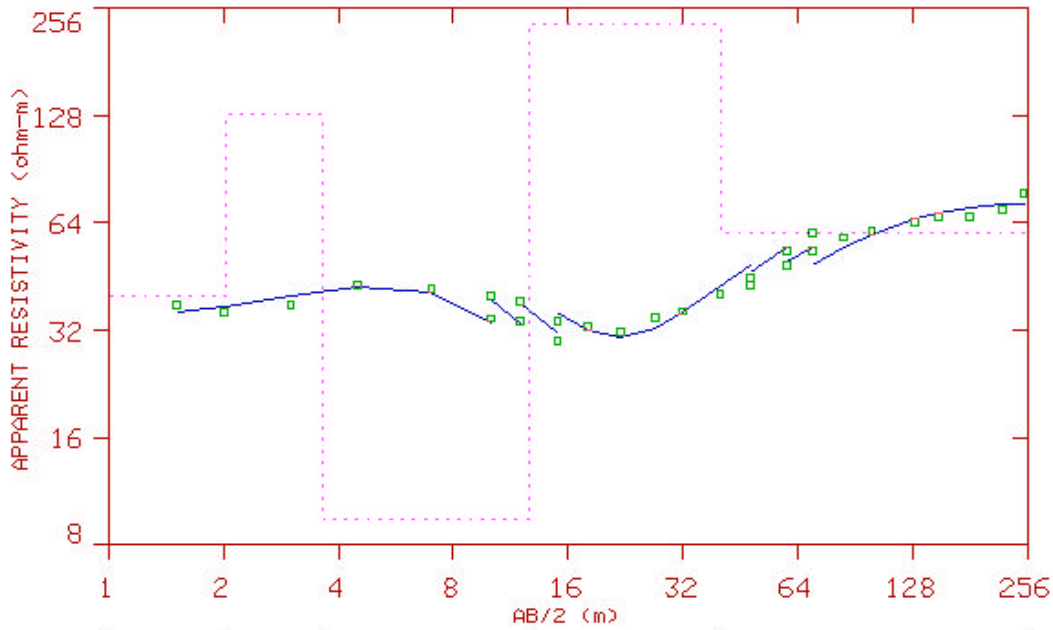
Poblado No.: 27

SEV : 27-1

Localidad: Linderos de Visin

Cantón: Macara

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	120.4	20.00	6.020	37.82
2	2	0.5	11.78	60.74	19.99	3.039	35.80
3	3	0.5	27.49	27.44	19.99	1.373	37.73
4	4.5	0.5	62.83	34.09	49.99	0.682	42.85
5	7	0.5	153.15	13.62	50.00	0.272	41.72
6	10	0.5	313.37	11	99.99	0.110	34.47
7	10	3	47.65	83.63	100.00	0.836	39.85
8	12	0.5	451.61	7.508	100.00	0.075	33.91
9	12	3	70.69	54.33	99.99	0.543	38.41
10	15	0.5	706.07	8.472	199.90	0.042	29.92
11	15	3	113.10	59.69	199.90	0.299	33.77
12	18	3	164.93	39.52	199.90	0.198	32.61
13	22	3	248.71	25.46	199.90	0.127	31.68
14	27	3	376.99	32.07	349.50	0.092	34.59
15	32	3	531.45	23.78	349.60	0.068	36.15
16	40	3	833.05	17.05	349.60	0.049	40.63
17	48	3	1201.66	13.02	349.60	0.037	44.75
18	48	12	282.74	52.66	349.60	0.151	42.59
19	60	3	1880.25	9.984	349.60	0.029	53.70
20	60	12	452.39	37.77	349.60	0.108	48.88
21	70	3	2560.93	8.242	349.40	0.024	60.41
22	70	12	622.56	30.14	350.30	0.086	53.57
23	84	12	904.78	22.53	349.60	0.064	58.31
24	100	12	1290.15	16.52	349.60	0.047	60.96
25	130	12	2193.36	10.31	349.60	0.029	64.68
26	150	12	2926.40	11.43	499.50	0.023	66.96
27	180	12	4222.31	7.883	499.50	0.016	66.64
28	220	12	6316.71	4.599	415.70	0.011	69.88
29	250	12	8162.40	4.748	499.50	0.010	77.59

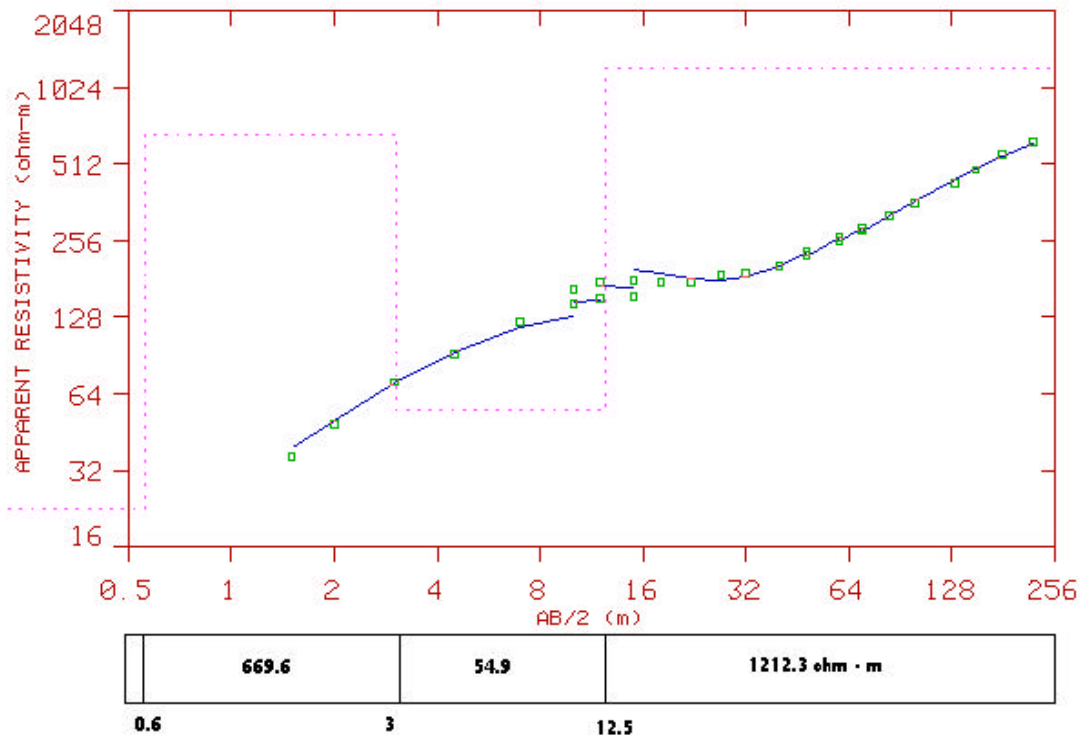


39.85	128.9	9.38	230	59.74 ohm · m
2	3.6	12.6	40.4	

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 4 SEV : 4-1
 Localidad: Centinela del Sur
 Cantón: Macara

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (W.m)
1	1.5	0.5	6.28	116.2	19.99	5.813	36.52
2	2	0.5	11.78	207.6	49.98	4.154	48.93
3	3	0.5	27.49	129.5	49.98	2.591	71.23
4	4.5	0.5	62.83	72.48	49.98	1.450	91.12
5	7	0.5	153.15	40.25	49.98	0.805	123.34
6	10	0.5	313.37	23.08	49.98	0.462	144.71
7	10	3	47.65	174	49.98	3.481	165.88
8	12	0.5	451.61	16.81	49.98	0.336	151.89
9	12	3	70.69	124	49.98	2.481	175.37
10	15	0.5	706.07	10.87	49.99	0.217	153.53
11	15	3	113.10	158.7	99.98	1.587	179.52
12	18	3	164.93	106.9	99.98	1.069	176.35
13	22	3	248.71	70.16	99.98	0.702	174.53
14	27	3	376.99	49.47	99.99	0.495	186.52
15	32	3	531.45	35.86	99.98	0.359	190.62
16	40	3	833.05	48.97	199.90	0.245	204.07
17	48	3	1201.66	38.43	199.90	0.192	231.01
18	48	12	282.74	158	199.90	0.790	223.48
19	60	3	1880.25	27.93	199.90	0.140	262.71
20	60	12	452.39	112.6	199.90	0.563	254.82
21	70	3	2560.93	22.5	199.90	0.113	288.25
22	70	12	622.56	157	349.40	0.449	279.74
23	84	12	904.78	123.1	349.40	0.352	318.77
24	100	12	1290.15	97.68	349.40	0.280	360.68
25	130	12	2193.36	68.75	349.40	0.197	431.58
26	150	12	2926.40	58.09	349.40	0.166	486.53
27	180	12	4222.31	46.41	349.40	0.133	560.84
28	220	12	6316.71	34.45	349.40	0.099	622.81



**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 10

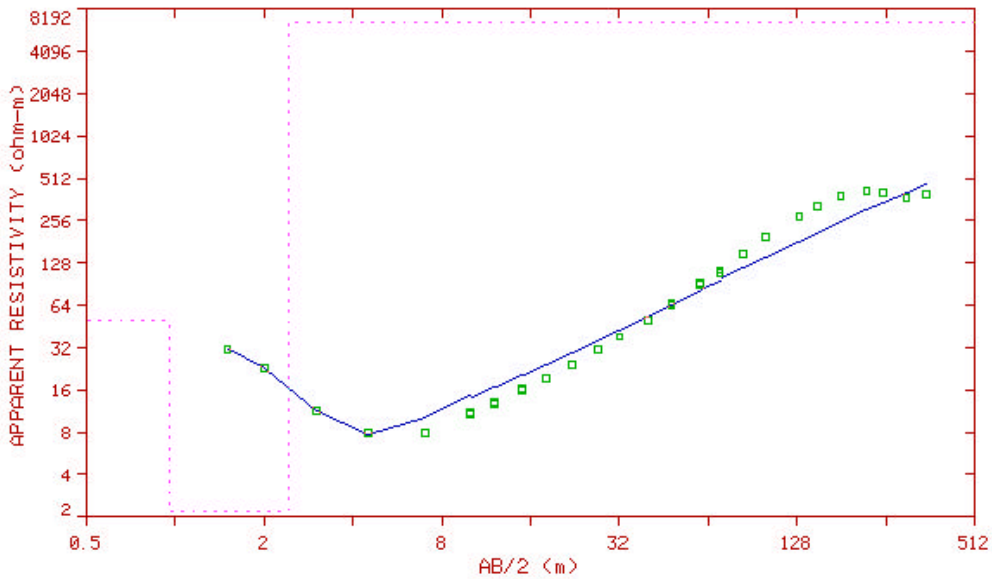
SEV :

10-1

Localidad: Tambo Negro

Cantón: Macara

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (Ω.m)
1	1.5	0.5	6.28	99.88	19.99	4.996	31.39
2	2	0.5	11.78	38.34	19.99	1.918	22.60
3	3	0.5	27.49	8.285	20.00	0.414	11.39
4	4.5	0.5	62.83	6.287	49.99	0.126	7.90
5	7	0.5	153.15	10.38	199.90	0.052	7.95
6	10	0.5	313.37	7.039	199.90	0.035	11.03
7	10	3	47.65	78.29	349.50	0.224	10.67
8	12	0.5	451.61	10.2	349.50	0.029	13.18
9	12	3	70.69	63.39	349.50	0.181	12.82
10	15	0.5	706.07	8.089	349.50	0.023	16.34
11	15	3	113.10	70.57	499.40	0.141	15.98
12	18	3	164.93	46.72	401.10	0.116	19.21
13	22	3	248.71	35.23	363.20	0.097	24.12
14	27	3	376.99	36.07	435.90	0.083	31.20
15	32	3	531.45	28.37	394.30	0.072	38.24
16	40	3	833.05	30.13	499.50	0.060	50.25
17	48	3	1201.66	26.79	498.60	0.054	64.57
18	48	12	282.74	115.2	499.30	0.231	65.24
19	60	3	1880.25	21.95	462.80	0.047	89.18
20	60	12	452.39	93.55	463.50	0.202	91.31
21	70	3	2560.93	21.35	499.50	0.043	109.46
22	70	12	622.56	91.15	499.50	0.182	113.61
23	84	12	904.78	74	447.80	0.165	149.52
24	100	12	1290.15	39.47	263.80	0.150	193.03
25	130	12	2193.36	40.07	319.60	0.125	274.99
26	150	12	2926.40	41.23	371.50	0.111	324.78
27	180	12	4222.31	37.55	415.40	0.090	381.67
28	220	12	6316.71	26.1	397.00	0.066	415.28
29	250	12	8162.40	14.38	286.90	0.050	409.12
30	300	12	11762.15	5.532	174.30	0.032	373.31
31	350	12	16016.40	8.847	362.30	0.024	391.10



49.3	2.18	6654.1 ohm · m
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0.95 2.42

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
PROSPECCION GEOFISICA**

Poblado No.: 26

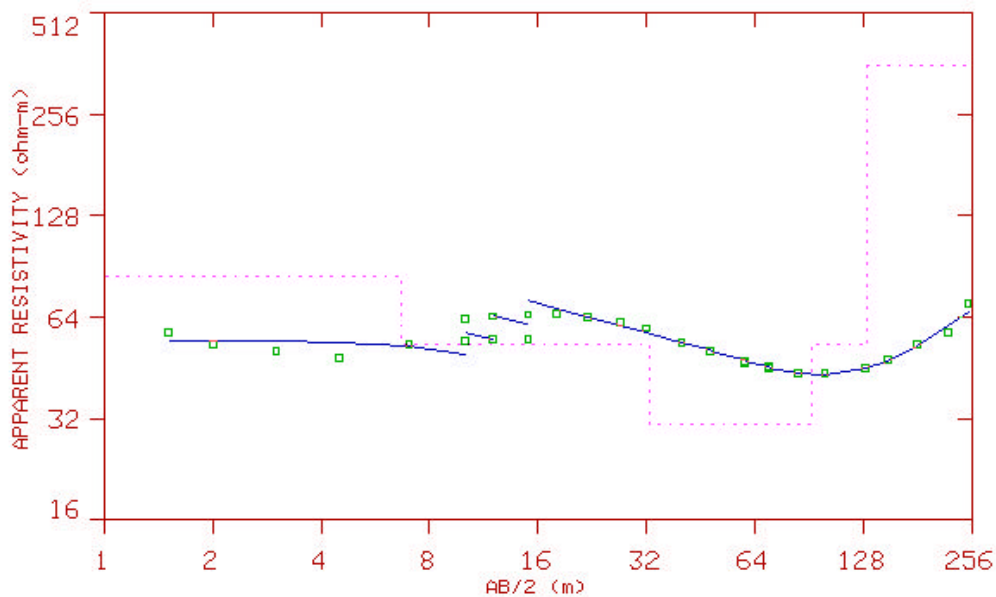
SEV :

26-1

Localidad: Chapamarca

Cantón: Catamayo

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (Ω.m)
1	1.5	0.5	6.28	457.8	49.96	9.163	57.58
2	2	0.5	11.78	224.6	49.97	4.495	52.95
3	3	0.5	27.49	92	49.97	1.841	50.61
4	4.5	0.5	62.83	38.6	49.97	0.772	48.54
5	7	0.5	153.15	17.37	49.97	0.348	53.24
6	10	0.5	313.37	17.32	99.95	0.173	54.30
7	10	3	47.65	132.4	99.95	1.325	63.12
8	12	0.5	451.61	12.18	99.96	0.122	55.03
9	12	3	70.69	91.01	99.95	0.911	64.36
10	15	0.5	706.07	7.835	99.96	0.078	55.34
11	15	3	113.10	115.1	199.90	0.576	65.12
12	18	3	164.93	79.04	199.90	0.395	65.21
13	22	3	248.71	51.62	199.80	0.258	64.26
14	27	3	376.99	32.87	199.80	0.165	62.02
15	32	3	531.45	22.31	199.90	0.112	59.31
16	40	3	833.05	12.89	199.90	0.064	53.72
17	48	3	1201.66	8.494	199.90	0.042	51.06
18	48	12	282.74	35.76	199.90	0.179	50.58
19	60	3	1880.25	5.044	199.90	0.025	47.44
20	60	12	452.39	20.68	199.90	0.103	46.80
21	70	3	2560.93	6.227	349.60	0.018	45.61
22	70	12	622.56	25.27	349.60	0.072	45.00
23	84	12	904.78	16.86	349.60	0.048	43.63
24	100	12	1290.15	15.36	452.00	0.034	43.84
25	130	12	2193.36	10.26	499.50	0.021	45.05
26	150	12	2926.40	8.231	499.50	0.016	48.22
27	180	12	4222.31	6.327	499.50	0.013	53.48
28	220	12	6316.71	3.178	347.30	0.009	57.80
29	250	12	8162.40	4.028	467.60	0.009	70.31



84.6	ohm · m	53.1	30.7	53	357.5
6.7		32.6		91.6 131.6	

**PROYECTO DE DESARROLLO DE AGUAS SUBTERRANEAS
 PROVINCIA DE LOJA. REPUBLICA DEL ECUADOR
 PROSPECCION GEOFISICA**

Poblado No.: 26

SEV :

26-2

Localidad: Chapamarca

Cantón: Catamayo

No.	AB/2 (m)	MN/2 (m)	K (m)	V (mV)	I (mA)	V/I (Ω)	ρ_a (Ω.m)
1	1.5	0.5	6.28	110	20.00	5.500	34.56
2	2	0.5	11.78	48.78	20.00	2.439	28.73
3	3	0.5	27.49	13.06	20.00	0.653	17.95
4	4.5	0.5	62.83	10.28	50.00	0.206	12.92
5	7	0.5	153.15	6.86	100.00	0.069	10.51
6	10	0.5	313.37	7.739	199.90	0.039	12.13
7	10	3	47.65	59.89	199.90	0.300	14.28
8	12	0.5	451.61	5.268	199.90	0.026	11.90
9	12	3	70.69	39.42	199.90	0.197	13.94
10	15	0.5	706.07	3.332	199.90	0.017	11.77
11	15	3	113.10	23.51	199.90	0.118	13.30
12	18	3	164.93	15.04	200.00	0.075	12.40
13	22	3	248.71	8.853	200.00	0.044	11.01
14	27	3	376.99	5.544	200.00	0.028	10.45
15	32	3	531.45	7.071	349.60	0.020	10.75
16	40	3	833.05	4.515	349.60	0.013	10.76
17	48	3	1201.66	4.696	499.50	0.009	11.30
18	48	12	282.74	21.36	499.50	0.043	12.09
19	60	3	1880.25	3.045	499.50	0.006	11.46
20	60	12	452.39	13.98	499.50	0.028	12.66
21	70	3	2560.93	1.875	459.60	0.004	10.45
22	70	12	622.56	8.338	460.50	0.018	11.27
23	84	12	904.78	4.996	482.90	0.010	9.36
24	100	12	1290.15	3.379	480.50	0.007	9.07
25	130	12	2193.36	1.859	437.80	0.004	9.31

