

APPENDICES

APPENDIX A

RESISTIVITY DATA

APPENDIX A1 **RESISTIVITY FIELD DATA**

Station			LIP1		LIP2		LIP3		LIP4		LIP5	
X azimuth			493427		493460		493538		493590		493685	
Y azimuth			2073152		2073104		2073011		2072903		2072851	
L (m)	l (m)	K	R (Ohm)	RES(Ohm.m)	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	29.5	173.77	2.52	14.84	11.11	65.44	20.5	120.75	41	241.51
1.50	0.25	13.74	9.63	132.36	1.124	15.45	4.02	55.25	8.03	110.37	17.2	236.40
2.00	0.25	24.74	4.03	99.70	0.609	15.07	1.731	42.83	4.57	113.06	7.07	174.91
3.00	0.25	56.16	1.401	78.67	0.211	11.85	0.42	23.59	1.857	104.28	1.725	96.87
3.00	1.00	12.57	5.51	69.24	1.227	15.42	2.13	26.77	7.33	92.11	6.72	84.45
4.50	1.00	30.24	1.803	54.52	0.382	11.55	0.443	13.40	2.12	64.10	1.344	40.64
7.00	1.00	75.40	0.441	33.25	0.1022	7.71	0.1123	8.47	0.423	31.89	0.1727	13.02
10.00	1.00	155.51	0.1404	21.83	0.0453	7.04	0.0656	8.24	0.1086	16.89	0.0541	8.41
10.00	2.50	58.90	0.394	23.21	0.1336	7.87	0.1788	8.40	0.342	20.15	0.1399	8.24
15.00	2.50	137.44	0.0946	13.00	0.0591	8.12	0.0517	8.64	0.0806	11.08	0.0574	7.89
20.00	2.50	247.40	0.0498	12.32	0.0397	9.82	0.0382	9.45	0.0421	10.42	0.033	8.16
30.00	2.50	561.56	0.0143	8.03	0.0343	19.26	0.0182	10.22	0.0181	10.16	0.055	15.12
45.00	2.50	1268.42	0.0087	11.04	0.0093	11.80	0.0112	14.21	0.012	15.22	0.0378	23.75

Station			LIP6		LIP7		LIP8		LIP9		LIP10	
X azimuth			493764		493845		493944		494012		494103	
Y azimuth			2072797		2072808		2072735		2072687		2072588	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	30	176.71	18.97	111.74	10.21	60.14	10.61	62.50	8.34	49.13
1.50	0.25	13.74	12.18	167.41	8	109.96	4.26	58.55	4.53	62.26	3.78	51.95
2.00	0.25	24.74	6.46	159.82	3.89	96.24	2.38	58.88	2.77	68.53	2.01	49.73
3.00	0.25	56.16	2.3	129.16	1.374	77.16	1.159	65.08	1.097	61.60	0.879	49.36
3.00	1.00	12.57	9.39	118.00	5.24	65.85	4.09	51.40	4.45	55.92	3.49	43.86
4.50	1.00	30.24	2.21	66.83	2.01	60.78	1.707	51.62	1.701	51.43	1.385	41.88
7.00	1.00	75.40	1.35	101.79	0.303	38.08	0.473	35.66	0.54	40.72	0.588	44.33
10.00	1.00	155.51	0.342	53.18	0.709	33.30	0.222	34.52	0.247	38.41	0.296	46.03
10.00	2.50	58.90	0.718	42.29			0.556	32.75	0.697	41.06	0.703	41.41
15.00	2.50	137.44	0.324	44.53	0.321	44.12	0.266	36.56	0.317	43.57	0.319	43.84
20.00	2.50	247.40	0.1702	42.11	0.205	50.72	0.203	50.22	0.1767	43.72	0.1671	41.34
30.00	2.50	561.56	0.0226	22.63	0.0903	50.71	0.1562	87.72	0.0757	42.51	0.076	42.68
45.00	2.50	1268.42	0.0152	23.82	0.0211	33.06	0.0688	87.27	0.03	38.05	0.0358	45.41

Station			L2P1		L2P2		L2P3		L2P4		L3P1	
X azimuth			493685		493790		493841		494024		493815	
Y azimuth			2073132		2073082		2072905		2072783		2073181	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	30.6	180.25	35.3	207.93	8.64	50.89	4	23.56	5.88	34.64
1.50	0.25	13.74	10.03	137.86	14.03	192.83	4.16	57.18	1.492	20.51	2.63	36.15
2.00	0.25	24.74	3.72	92.03	7.61	188.27	2.43	60.12	0.824	20.39	1.161	28.72
3.00	0.25	56.16	0.719	40.38	2.78	156.11	0.928	52.11	0.371	20.83	0.438	24.60
3.00	1.00	12.57	4.36	54.79	10.92	137.22	4.36	54.79	1.64	20.61	2.4	30.16
4.50	1.00	30.24	0.658	19.90	3.1	93.74	1.453	43.94	0.784	23.71	0.547	16.54
7.00	1.00	75.40	0.1643	12.39	0.537	40.49	0.399	30.08	0.384	28.95	0.1292	9.74
10.00	1.00	155.51	0.0729	11.34	0.1482	23.05	0.1259	19.58	0.235	36.54	0.0541	8.41
10.00	2.50	58.90	0.1967	11.59	0.414	24.39	0.355	20.91	0.595	35.05	0.1304	7.68
15.00	2.50	137.44	0.0922	12.67	0.1091	15.00	0.0905	12.44	0.322	44.26	0.0555	7.63
20.00	2.50	247.40	0.0592	14.65	0.0559	13.83	0.041	10.14	0.1982	49.03	0.0404	9.99
30.00	2.50	561.56	0.0221	12.41	0.0221	12.41	0.0172	9.66	0.0841	47.23	0.0319	17.91
45.00	2.50	1268.42	0.0073	9.26	0.0112	14.21	0.0087	11.04	0.0405	51.37	0.0123	19.27

Station			L3P2		L3P3		L3P4		L3P5		L4P1	
X azimuth			494018		493928		494017		494043		493126	
Y azimuth			2073194		2072997		2072932		2073045		2072907	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	14.32	84.35	24.7	145.50	5.32	31.34	12.88	75.87	16.64	98.02
1.50	0.25	13.74	8.24	113.25	7.21	99.10	2.43	33.40	6.43	88.38	9.25	127.14
2.00	0.25	24.74	4.92	121.72	2.61	64.57	1.262	31.22	2.85	70.51	6.44	159.33
3.00	0.25	56.16	1.567	88.00	0.667	37.46	0.475	26.67	0.685	38.47	3.13	175.77
3.00	1.00	12.57	7.49	94.12	3.07	38.58	2.11	26.52	3.36	42.22	12.25	153.94
4.50	1.00	30.24	1.797	54.34	0.729	22.04	0.735	22.22	0.751	22.71	5.21	157.54
7.00	1.00	75.40	0.185	13.95	0.1618	12.20	0.204	15.38	0.143	10.78	1.662	125.31
10.00	1.00	155.51	0.049	7.62	0.0667	10.37	0.0794	12.35	0.066	10.26	0.575	89.42
10.00	2.50	58.90	0.1797	10.59	0.1535	9.04	0.214	12.61	0.1951	11.49	1.72	101.32
15.00	2.50	137.44	0.064	8.80	0.093	12.78	0.0781	10.73	0.0856	11.77	0.464	63.77
20.00	2.50	247.40	0.037	9.15	0.0691	17.10	0.0449	11.11	0.0593	14.67	0.139	34.39
30.00	2.50	561.56	0.017	9.55	0.0302	16.96	0.0192	10.78	0.0284	15.95	0.046	25.83
45.00	2.50	1268.42	0.008	10.15	0.0235	29.81	0.0113	14.33	0.011	13.95	0.039	49.47

Station			L4P2		L4P3		L5P1		L5P2		L5P3	
X azimuth			493245		493299		493652		493695		493728	
Y azimuth			2072979		2073158		2072748		2072726		2072685	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	4.47	26.33	13.97	82.29	42.4	249.76	22.8	134.30	13.82	81.41
1.50	0.25	13.74	1.741	23.93	4.24	58.28	15.18	208.64	9.91	136.21	4.75	65.29
2.00	0.25	24.74	0.889	21.99	1.56	38.59	6.9	170.71	5.29	130.87	2.61	64.57
3.00	0.25	56.16	0.339	19.04	0.358	20.10	2.54	142.64	2	112.31	1.137	63.85
3.00	1.00	12.57	1.159	14.56	1.574	19.78	11.58	145.52	7.63	95.88	5.47	68.74
4.50	1.00	30.24	0.399	12.06	0.348	10.52	3.3	99.78	5.51	166.61	2.37	71.66
7.00	1.00	75.40	0.1598	12.05	0.1192	8.99	0.862	64.99	0.947	71.40	0.773	58.28
10.00	1.00	155.51	0.0745	11.59	0.0619	9.63	0.345	53.65	0.482	74.96	0.318	49.45
10.00	2.50	58.90	0.1877	11.06	0.1602	9.44	0.978	57.61	1.121	66.03	0.829	48.83
15.00	2.50	137.44	0.0746	10.25	0.0774	10.64	0.262	36.01	0.485	66.66	0.327	44.94
20.00	2.50	247.40	0.0409	10.12	0.044	10.89	0.1175	29.07	0.225	55.67	0.173	42.80
30.00	2.50	561.56	0.0197	11.06	0.021	11.79	0.0348	19.54	0.0689	38.69	0.067	37.62
45.00	2.50	1268.42	0.0093	11.80	0.009	11.42	0.0133	16.87	0.0211	26.76	0.026	32.98

Station			L5P4		L5P5		L5P6		L6P1		L7P1	
X azimuth			493868		493867		494105		493305		493126	
Y azimuth			2072654		2072595		2072429		2072882		2072657	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	44.3	260.95	22.9	134.89	80.6	474.77	1.466	8.64	21.5	126.65
1.50	0.25	13.74	12.23	168.09	7.74	106.38	43.9	603.38	0.804	11.05	9.23	126.86
2.00	0.25	24.74	5.21	128.90	3.63	89.81	26.1	645.72	0.485	12.00	4.72	116.77
3.00	0.25	56.16	1.26	70.76	1.272	71.43	11.11	623.89	0.229	12.86	2.05	115.12
3.00	1.00	12.57	6.38	80.17	5.37	67.48	40.8	512.71	0.936	11.76	7.75	97.39
4.50	1.00	30.24	1.632	49.35	1.704	51.53	15.76	476.55	0.417	12.61	3.24	97.97
7.00	1.00	75.40	0.594	44.79	0.603	45.47	4.27	321.95	0.176	13.27	1.302	98.17
10.00	1.00	155.51	0.284	44.16	0.323	50.23	1.147	178.37	0.0917	14.26	0.62	96.42
10.00	2.50	58.90	0.63	37.11	0.797	46.95	3.26	192.03	0.235	13.84	1.562	92.01
15.00	2.50	137.44	0.31	42.61	0.424	58.28	0.512	70.37	0.1043	14.34	0.511	70.23
20.00	2.50	247.40	0.209	51.71	0.247	61.11	0.206	50.96	0.0572	14.15	0.243	60.12
30.00	2.50	561.56	0.1201	67.44	0.109	61.21	0.0635	35.66	0.0214	12.02	0.0734	41.22
45.00	2.50	1268.42	0.0512	64.94	0.056	71.03	0.0268	33.99	0.0076	9.64	0.0232	29.43

Station			L7P2		L7P3		L7P4		L7P5		L7P6	
X azimuth			493273		493374		493468		493549		493673	
Y azimuth			2072599		2072543		2072495		2072445		2072379	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	9.44	55.61	7.88	46.42	12.54	73.87	12.27	72.28	16.8	98.96
1.50	0.25	13.74	3.91	53.74	2.45	33.67	4.98	68.45	4.43	60.89	7.3	100.33
2.00	0.25	24.74	2	49.48	1.72	42.55	1.428	35.33	1.66	41.07	4.05	100.20
3.00	0.25	56.16	0.79	44.36	0.632	35.49	0.502	28.19	0.831	46.67	1.79	100.52
3.00	1.00	12.57	3.24	40.72	2.9	36.44	1.967	24.72	2.63	33.05	6.89	86.58
4.50	1.00	30.24	0.999	30.21	0.88	26.61	1.196	36.16	0.918	27.76	2.99	90.41
7.00	1.00	75.40	0.34	25.64	0.442	33.33	0.514	38.75	0.485	36.57	1.256	94.70
10.00	1.00	155.51	0.202	31.41	0.2508	39.00	0.322	50.07	0.227	35.30	0.584	90.82
10.00	2.50	58.90	0.52	30.63	0.613	36.11	0.89	52.43	0.56	32.99	1.473	86.77
15.00	2.50	137.44	0.263	36.15	0.263	36.15	0.327	44.94	0.216	29.69	0.518	71.20
20.00	2.50	247.40	0.1709	42.28	0.211	52.20	0.421	49.60	0.353	41.59	0.254	62.84
30.00	2.50	561.56	0.1108	62.22	0.1131	63.51	0.199	54.70	0.188	51.68	0.1033	58.01
45.00	2.50	1268.42	0.0462	58.60	0.0508	64.44	0.0744	46.75	0.079	49.64	0.0404	51.24

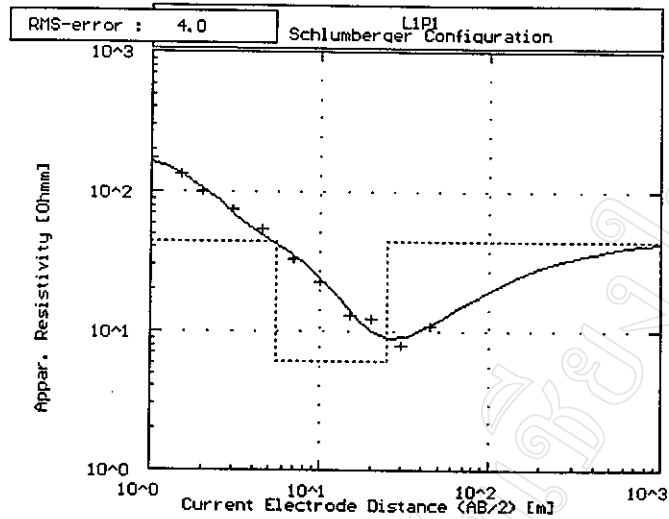
Station			L7P7		L7P8		L8P1		L8P2		L8P3	
X azimuth			493762		493848		494419		494380		494386	
Y azimuth			2072363		2072301		2072410		2072491		2072607	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	11.69	68.86	9.66	56.90	9.43	55.55	6.5	38.29	5.04	29.69
1.50	0.25	13.74	4.79	65.84	3.68	50.58	4.19	57.59	3.49	47.97	2.18	29.96
2.00	0.25	24.74	2.37	58.63	1.799	44.51	2.53	62.59	2.36	58.39	1.304	32.26
3.00	0.25	56.16	0.923	51.83	0.708	39.76	1.048	58.85	1.345	75.53	0.594	33.36
3.00	1.00	12.57	4.63	58.18	3.3	41.47	3.79	47.63	4.63	58.18	2.37	29.78
4.50	1.00	30.24	1.676	50.68	1.217	36.80	1.529	46.23	2.44	73.78	1.154	34.89
7.00	1.00	75.40	0.578	43.58	0.507	38.23	0.675	50.89	0.933	70.35	0.502	37.85
10.00	1.00	155.51	0.2716	42.24	0.266	41.37	0.39	60.65	0.375	58.32	0.242	37.63
10.00	2.50	58.90	0.843	49.66	0.69	40.64	0.956	56.31	0.947	55.78	0.668	39.35
15.00	2.50	137.44	0.286	39.31	0.301	41.37	0.427	58.69	0.335	46.04	0.26	35.74
20.00	2.50	247.40	0.141	34.88	0.1841	45.55	0.1749	43.27	0.1891	46.78	0.1468	36.32
30.00	2.50	561.56	0.026	14.60	0.0827	46.44	0.0438	24.60	0.0746	41.89	0.0615	34.54
45.00	2.50	1268.42	0.01	12.68	0.0417	52.89	0.0607	38.14	0.0292	37.04	0.0272	34.50

Station			18P4		19P1		19P2		19P3		19P4	
X azimuth			494332		493029		493329		493481		493573	
Y azimuth			2072726		2072874		2072653		2072618		2072546	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	29.5	173.77	7.16	42.18	17.79	104.79	12.97	76.40	12.69	74.75
1.50	0.25	13.74	6.23	85.63	3.33	45.77	8.69	119.44	5.78	79.44	5.55	76.28
2.00	0.25	24.74	2.32	57.40	1.748	43.25	5.04	124.69	3.16	78.18	2.92	72.24
3.00	0.25	56.16	0.574	32.23	0.734	41.22	1.665	93.50	1.392	78.17	1.096	61.55
3.00	1.00	12.57	2.74	34.43	3.32	41.72	8.59	107.95	6.66	83.69	6.48	81.43
4.50	1.00	30.24	0.805	24.34	2.32	70.15	2.32	70.15	2.84	85.88	2.09	63.20
7.00	1.00	75.40	0.356	26.84	1.332	100.43	0.803	60.54	1.21	91.23	0.583	43.96
10.00	1.00	155.51	0.201	31.26	0.326	50.70	0.372	57.85	0.528	82.11	0.259	40.28
10.00	2.50	58.90	0.53	31.22	0.723	42.59	0.937	55.19	1.468	86.47	0.722	42.53
15.00	2.50	137.44	0.247	33.95	0.192	26.39	0.448	61.58	0.363	49.89	0.317	43.57
20.00	2.50	247.40	0.1528	37.80	0.0923	22.84	0.252	62.34	0.1479	36.59	0.1498	37.06
30.00	2.50	561.56	0.0687	38.58	0.0321	18.03	0.1248	70.08	0.0582	32.68	0.0769	43.18
45.00	2.50	1268.42	0.0253	32.09	0.0186	23.59	0.0423	53.65	0.0268	33.99	0.0319	40.46

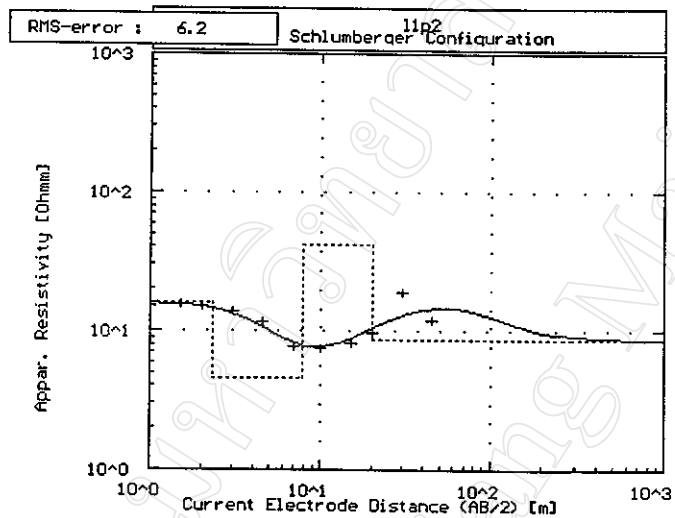
Station			19P5		19P6	
X azimuth			493684		494040	
Y azimuth			2072464		2072272	
L (m)	l (m)	K	R (Ohm)	resistivity	R (Ohm)	resistivity
1.00	0.25	5.89	12.94	76.22	10.21	60.14
1.50	0.25	13.74	5.59	76.83	4.23	58.14
2.00	0.25	24.74	3.1	76.69	2.16	53.44
3.00	0.25	56.16	1.364	76.60	0.742	41.67
3.00	1.00	12.57	6.7	84.19	3.18	39.96
4.50	1.00	30.24	2.39	72.27	1.357	41.03
7.00	1.00	75.40	0.894	67.41	0.429	32.35
10.00	1.00	155.51	0.408	63.45	0.1891	29.41
10.00	2.50	58.90	0.998	58.79	0.488	28.75
15.00	2.50	137.44	0.406	55.80	0.1897	26.07
20.00	2.50	247.40	0.1934	47.85	0.1089	26.94
30.00	2.50	561.56	0.0665	37.34	0.0524	29.43
45.00	2.50	1268.42	0.0267	33.87	0.0186	23.59

APPENDIX A2

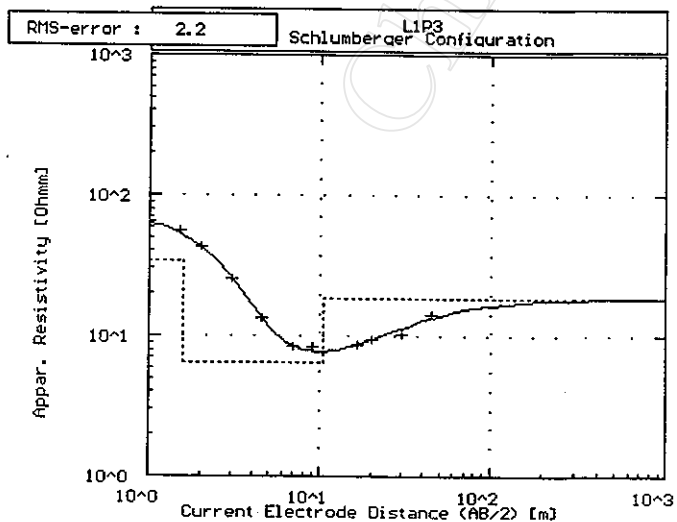
RESISTIVITY MODEL DATA



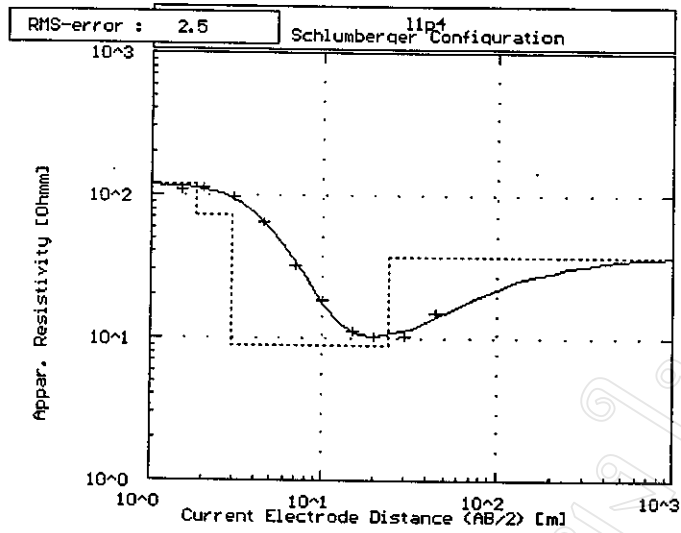
No	Res	Thick	Depth
1	190.5	0.9	0.9
2	44.7	4.5	5.4
3	6.0	19.5	24.8
4	44.8	-	-



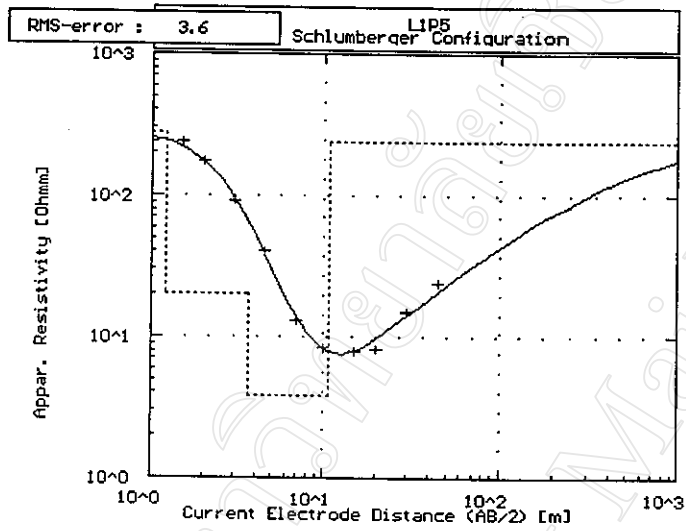
No	Res	Thick	Depth
1	15.9	2.3	2.3
2	41.0	5.6	7.8
3	8.7	11.9	19.7
4	-	-	-



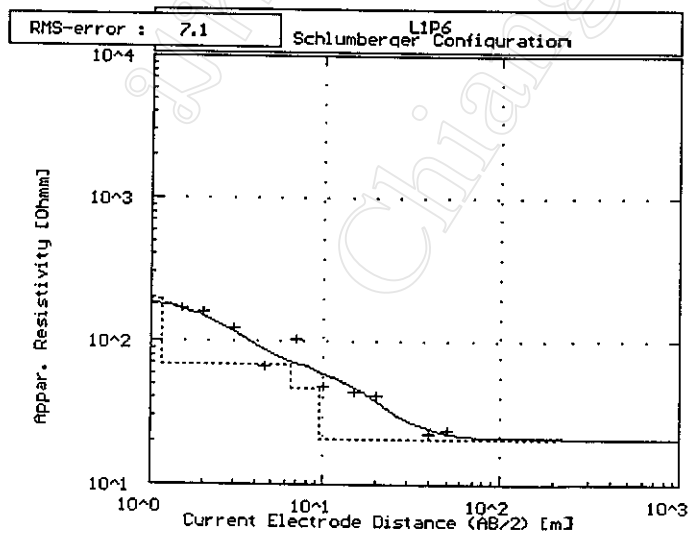
No	Res	Thick	Depth
1	70.9	0.9	0.9
2	34.3	0.7	1.3
3	6.5	8.8	10.3
4	18.4	-	-



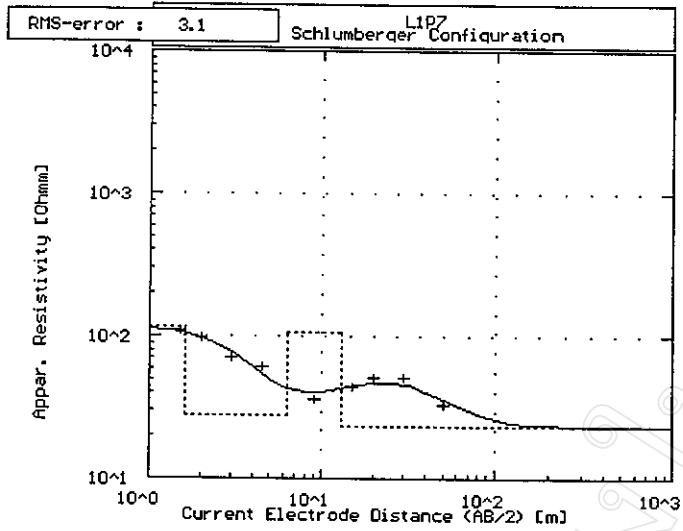
No	Res	Thick	Depth
1	120.5	1.8	1.8
2	73.2	1.1	2.9
3	8.9	21.0	23.9
4	37.4	-	-



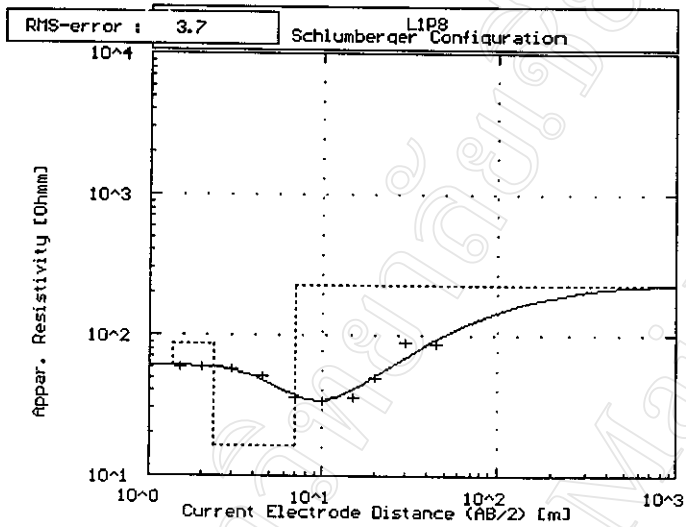
No	Res	Thick	Depth
1	281.1	1.2	1.2
2	20.3	2.5	3.7
3	3.8	7.1	10.7
4	242.5	-	-



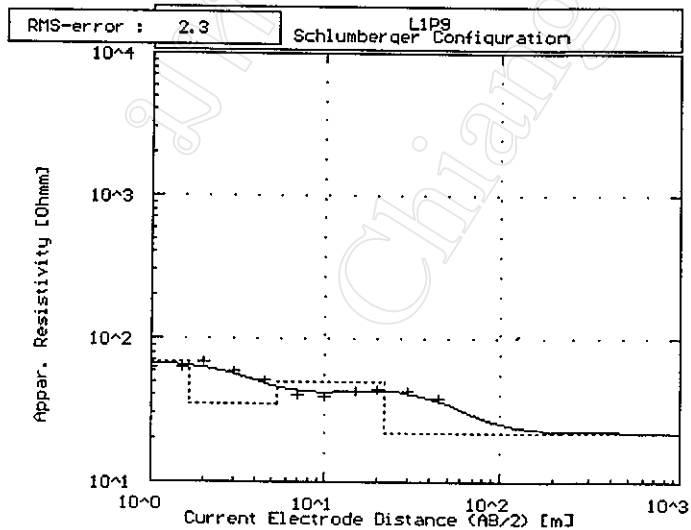
No	Res	Thick	Depth
1	196.0	1.2	1.2
2	69.0	5.3	10.0
3	47.3	3.0	1.0
4	21.0	-	-



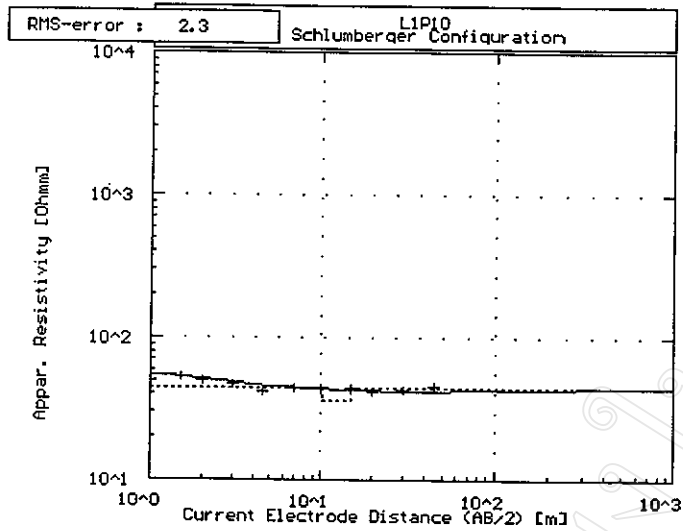
No	Res	Thick	Depth
1	116.3	1.6	1.6
2	28.0	4.8	6.4
3	105.7	6.7	13.0
4	23.2	-	-



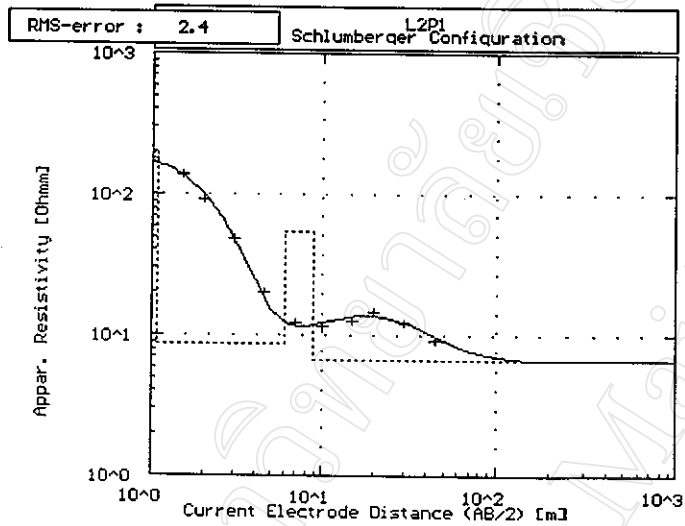
No	Res	Thick	Depth
1	60.2	1.4	1.4
2	85.9	1.0	2.3
3	16.3	4.6	7.0
4	229.3	-	-



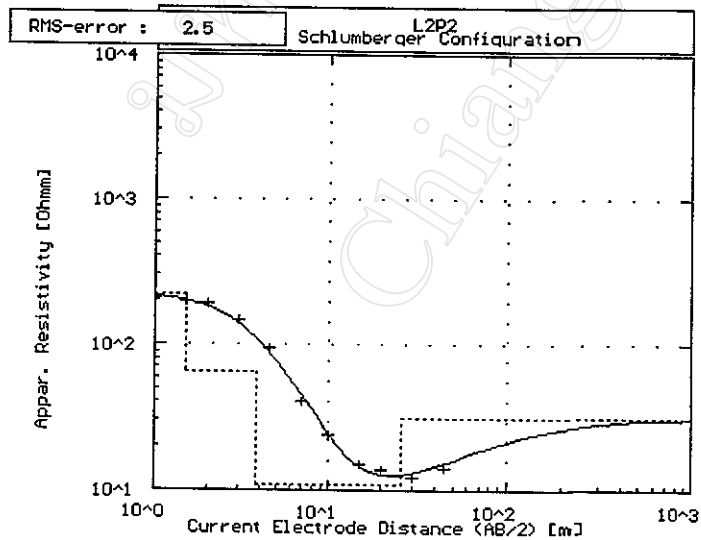
No	Res	Thick	Depth
1	68.2	1.7	1.7
2	34.9	3.6	5.3
3	49.8	16.5	21.8
4	22.1	-	-



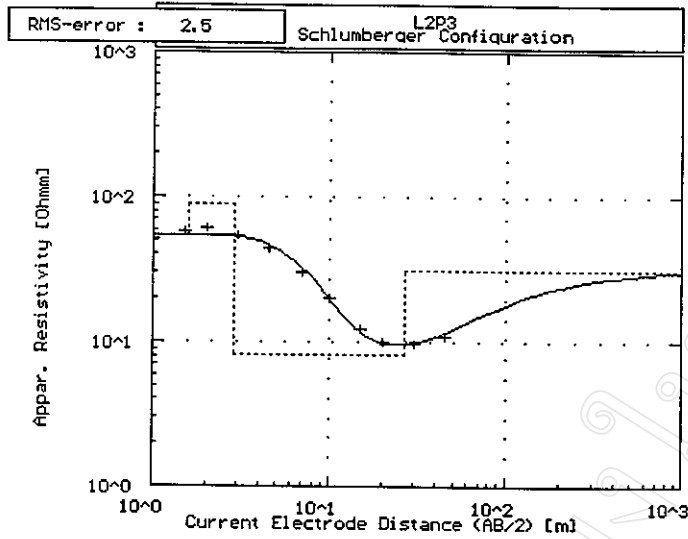
No	Res	Thick	Depth
1	56.1	1.0	1.0
2	49.9	1.0	10.1
3	36.0	9.0	15.0
4	43.7	1.1	1.1



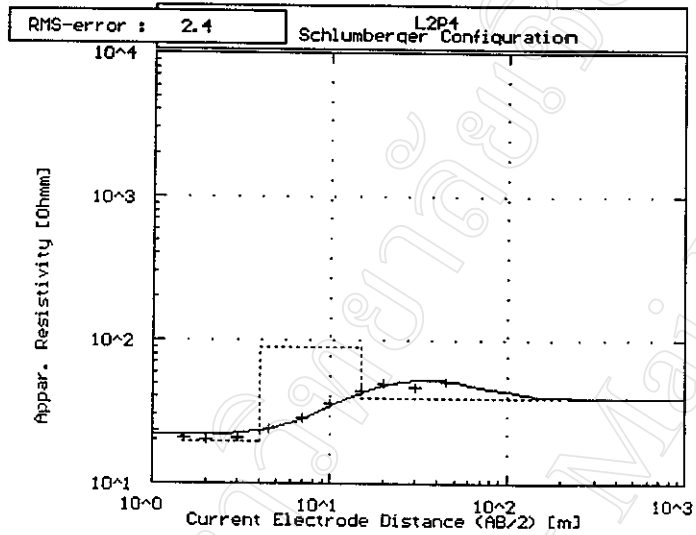
No	Res	Thick	Depth
1	195.4	1.1	1.1
2	51.0	1.0	1.0
3	51.0	1.0	1.0
4	51.0	1.0	1.0



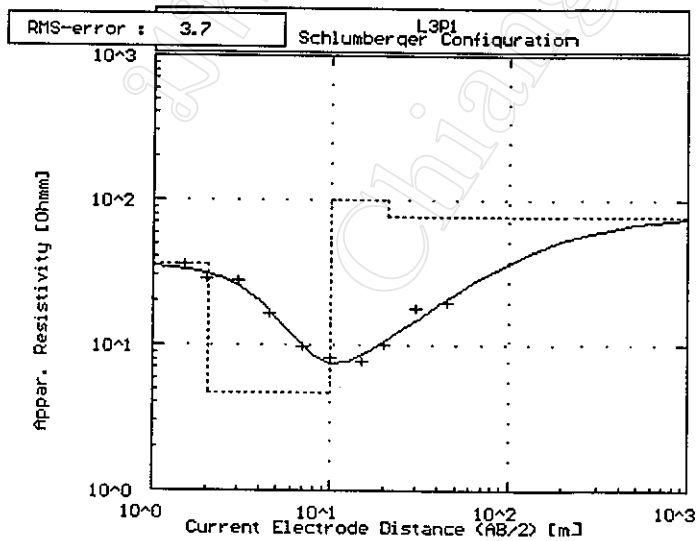
No	Res	Thick	Depth
1	222.6	1.5	1.5
2	60.0	2.4	2.4
3	10.0	22.1	22.1
4	31.1	1.1	1.1



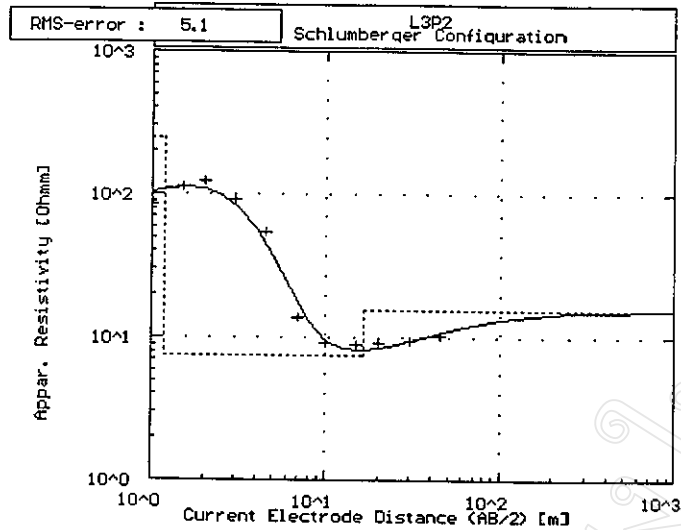
No	Res	Thick	Depth
1	53.9	1.6	1.6
2	89.0	1.3	2.8
3	8.1	23.8	26.6
4	30.8	-	-



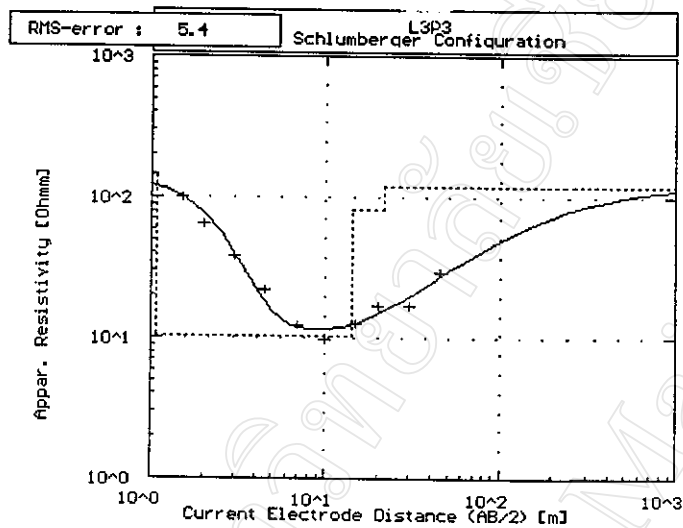
No	Res	Thick	Depth
1	22.2	1.5	1.5
2	19.3	2.5	4.0
3	33.7	10.8	14.8
4	39.2	-	-



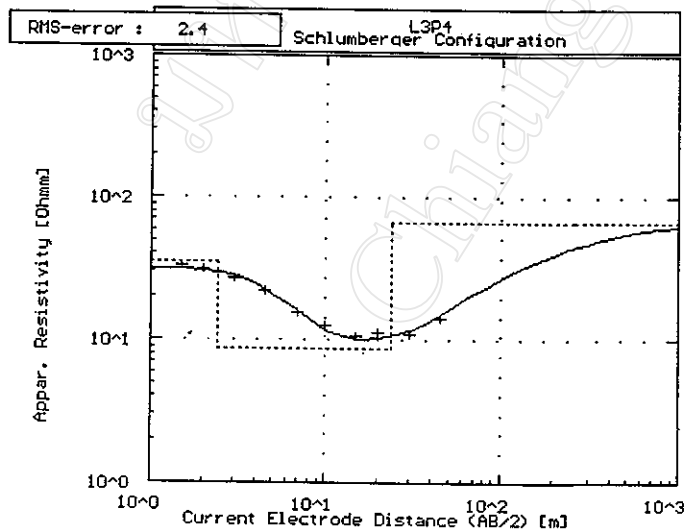
No	Res	Thick	Depth
1	35.6	2.1	2.1
2	4.7	7.7	9.8
3	100.2	11.0	20.8
4	77.5	-	-



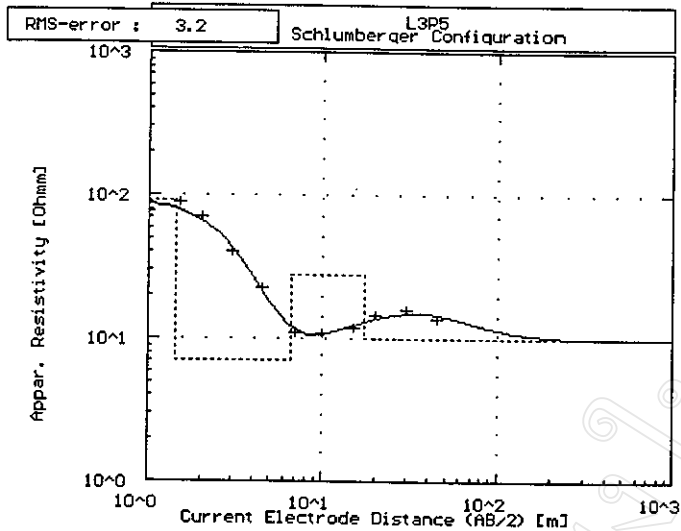
No	Res	Thick	Depth
1	70.6	0.4	0.4
2	24.4	1.2	1.2
3	7.4	16.4	16.4
4	15.4	-	-



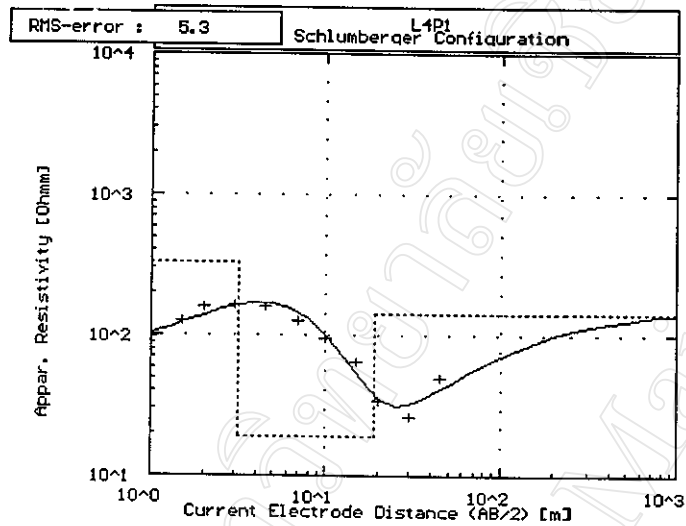
No	Res	Thick	Depth
1	140.1	1.1	1.1
2	10.2	14.1	14.1
3	80.6	7.0	21.1
4	119.3	-	-



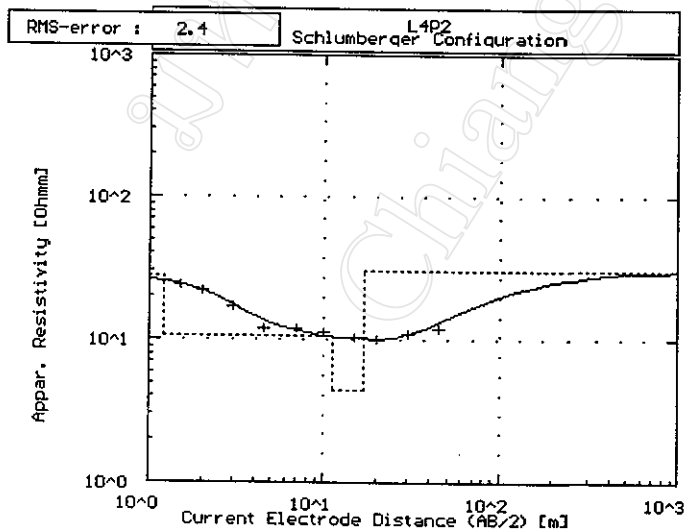
No	Res	Thick	Depth
1	31.6	1.0	1.0
2	35.1	1.4	2.4
3	8.0	20.9	23.3
4	6.0	-	-



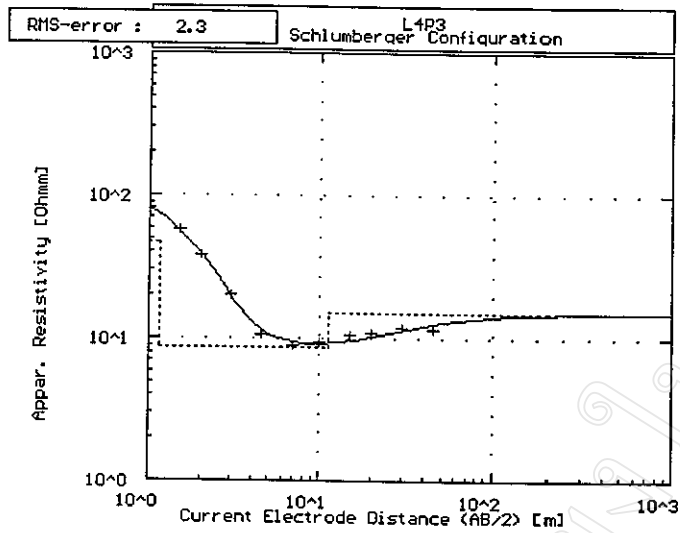
No	Res	Thick	Depth
1	91.9	1.4	1.4
2	28.1	5.2	6.6
3	8.9	10.4	17.1
4	-	-	-



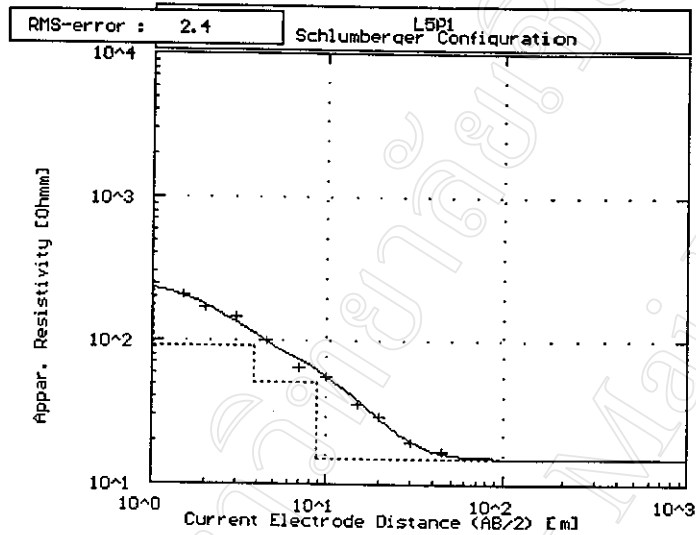
No	Res	Thick	Depth
1	86.3	0.8	0.8
2	32.6	2.3	3.1
3	19.6	15.8	19.0
4	14.3	-	-



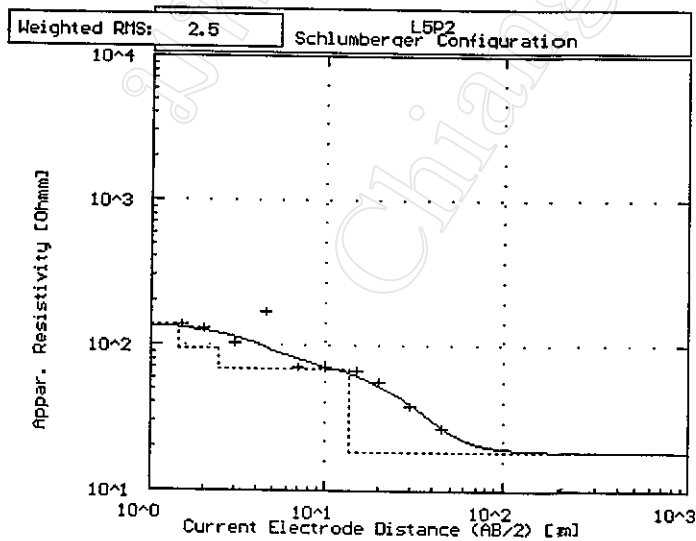
No	Res	Thick	Depth
1	27.7	1.2	1.2
2	10.6	10.0	11.2
3	4.4	5.7	16.9
4	30.4	-	-



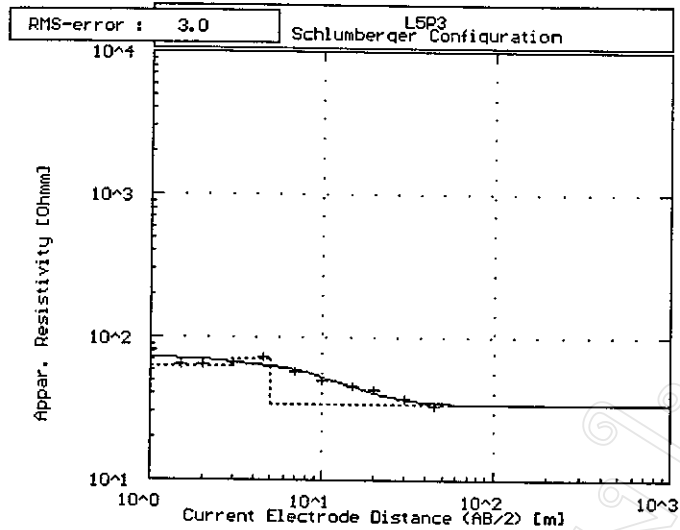
No	Res	Thick	Depth
1	109.4	0.6	0.6
2	46.7	0.6	1.1
3	8.6	10.0	11.2
4	15.0	-	-



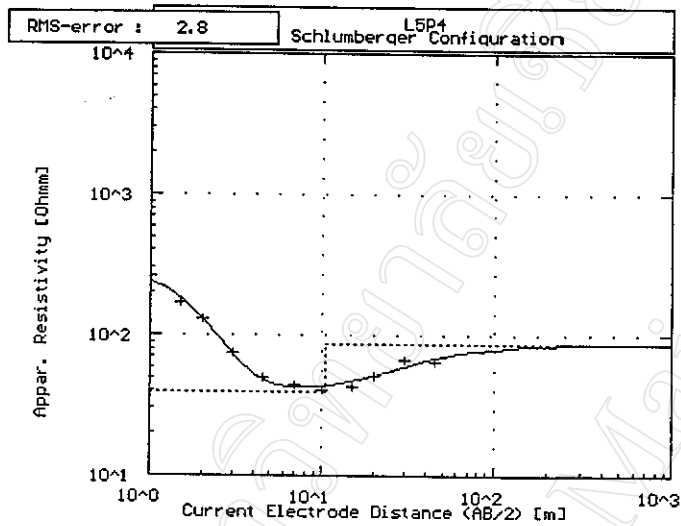
No	Res	Thick	Depth
1	254.7	1.0	1.0
2	80.6	2.8	3.8
3	51.3	4.9	8.7
4	14.9	-	-



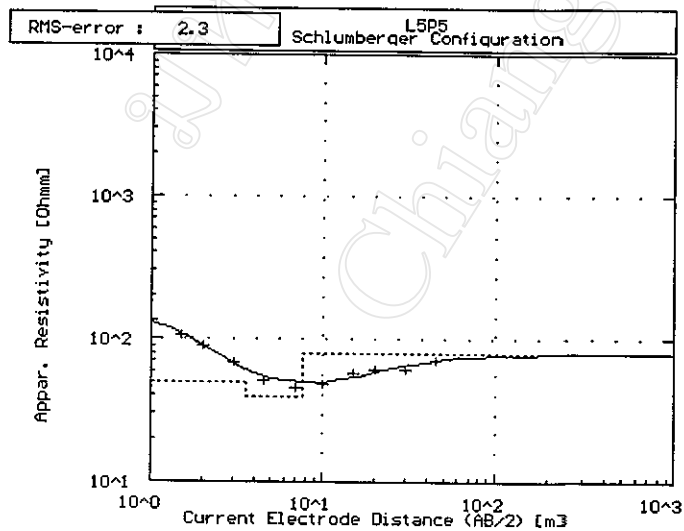
No	Res	Thick	Depth
1	137.2	1.4	1.4
2	94.2	1.0	2.4
3	67.5	11.2	13.6
4	18.4	-	-



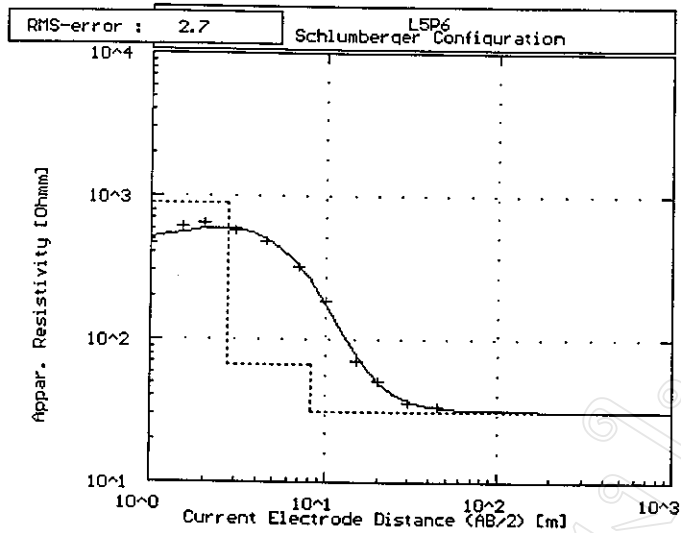
No	Res	Thick	Depth
1	74.4	0.8	0.8
2	63.5	2.0	2.0
3	71.1	2.1	5.0
4	34.0	-	-



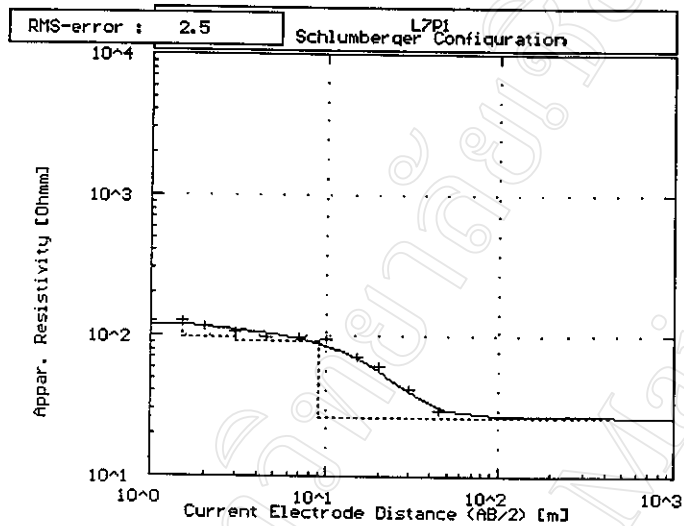
No	Res	Thick	Depth
1	235.0	0.8	0.8
2	66.0	8.6	10.5
3	66.0	-	-



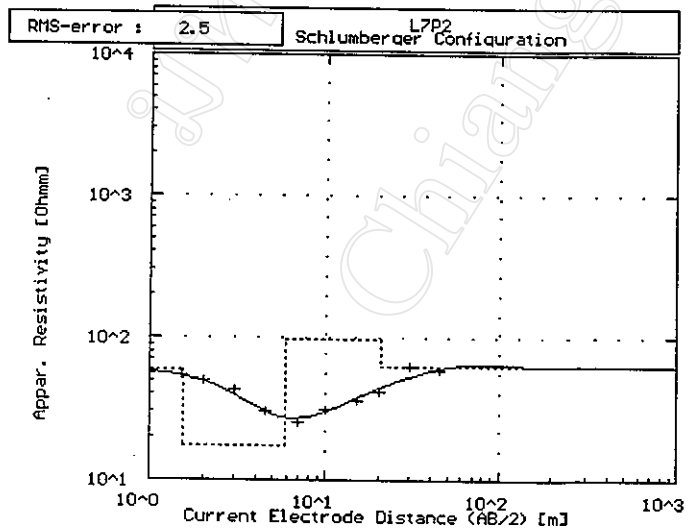
No	Res	Thick	Depth
1	146.3	0.8	0.8
2	146.3	2.1	2.6
3	146.3	-	-



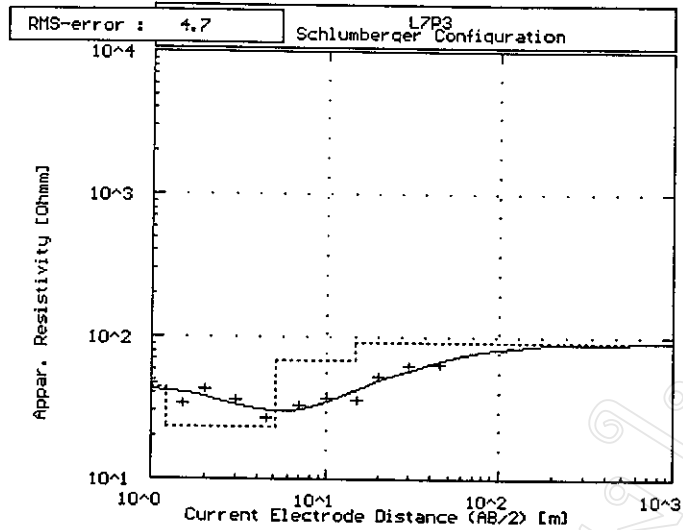
No	Res	Thick	Depth
1	472.6	0.8	0.8
2	893.4	1.4	1.4
3	67.1	5.1	5.1
4	31.5	14.4	14.4



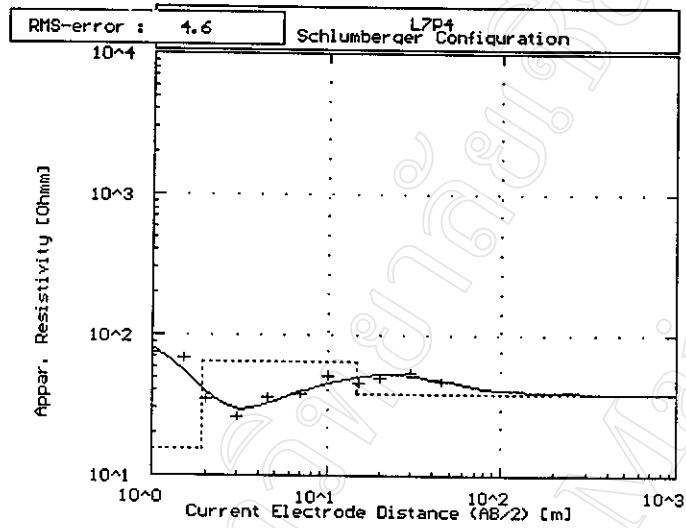
No	Res	Thick	Depth
1	120.8	1.5	1.5
2	97.9	1.5	3.0
3	92.3	6.1	9.1
4	26.5	-	-



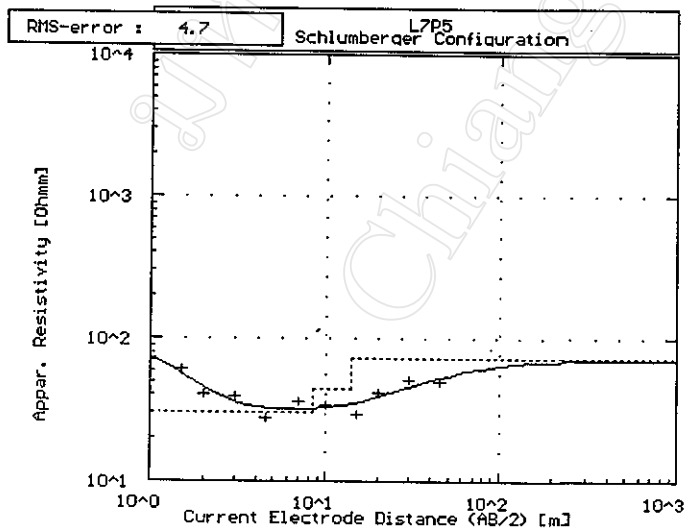
No	Res	Thick	Depth
1	58.8	1.5	1.5
2	17.5	4.3	5.8
3	97.1	14.2	20.1
4	61.6	-	-



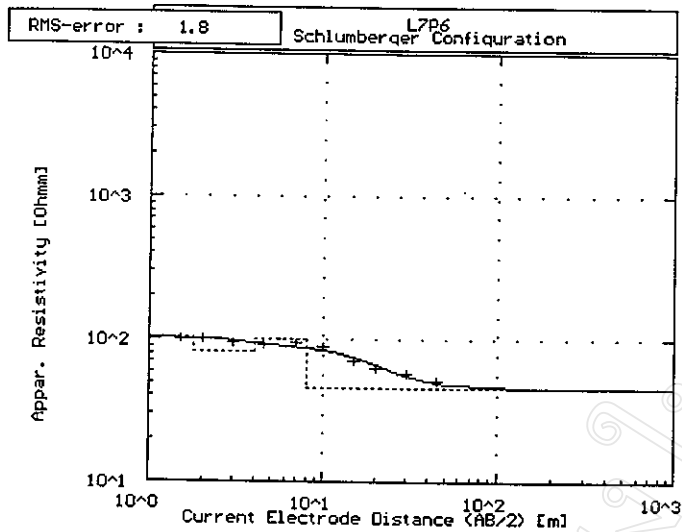
No	Res	Thick	Depth
1	44	1	1.2
2	22	1	1.1
3	99	1	1.1
4	99	1	1.1



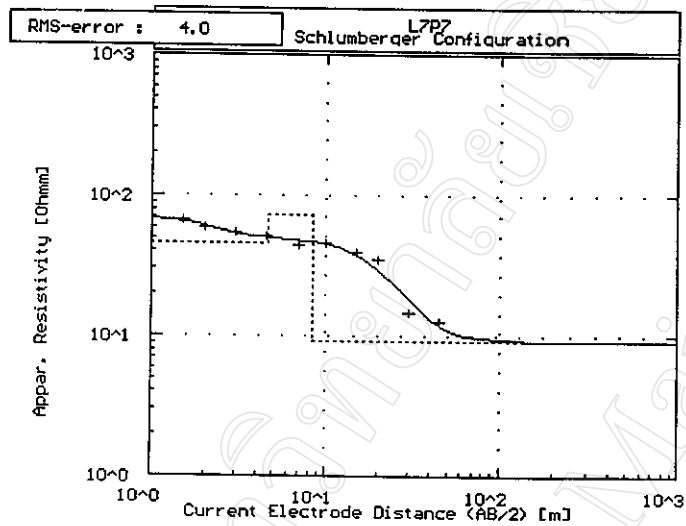
No	Res	Thick	Depth
1	115.2	0.7	0.7
2	15.3	1.3	1.3
3	54.0	12.6	14.6
4	59.5	-	-



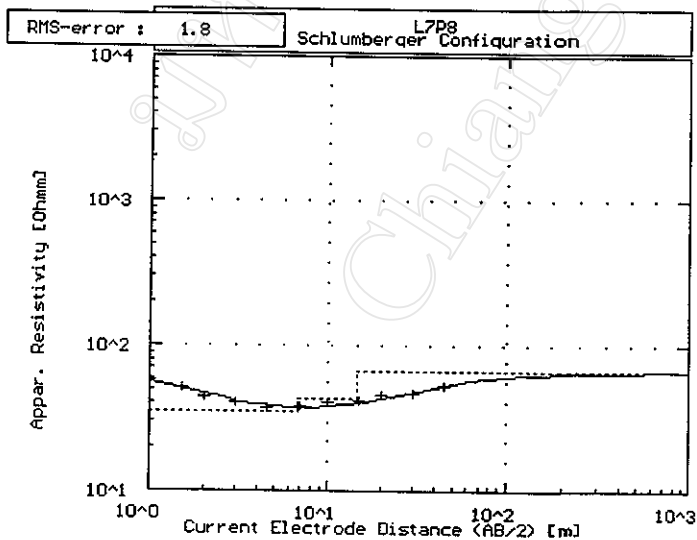
No	Res	Thick	Depth
1	95.8	0.6	0.6
2	30.1	5.7	13.0
3	44.1	1.6	1.6
4	71.6	-	-



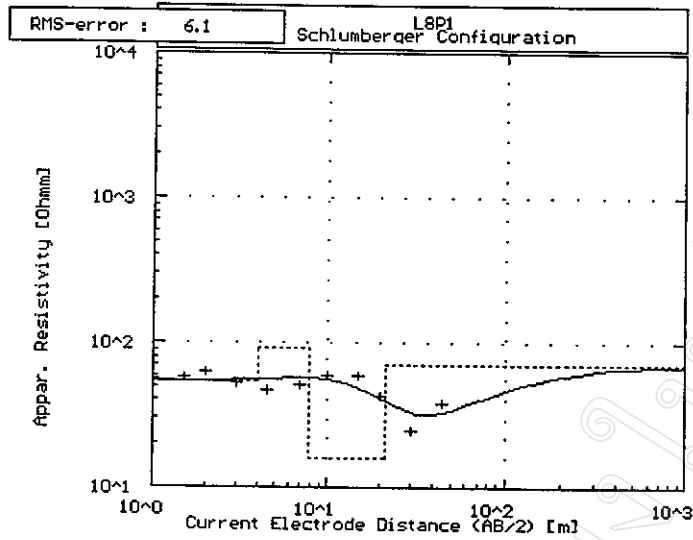
No	Res	Thick	Depth
1	102.3	1.8	1.8
2	82.7	2.2	4.0
3	100.1	4.0	7.9
4	45.7	-	-



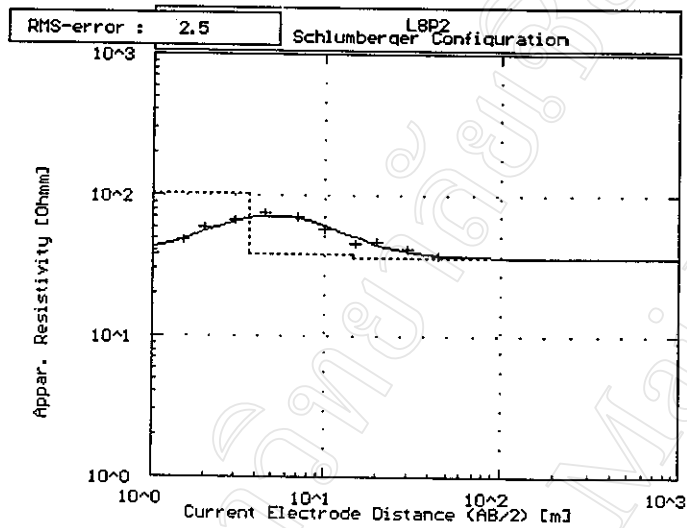
No	Res	Thick	Depth
1	72.4	0.9	0.9
2	45.3	3.7	1.6
3	33.3	3.9	8.6
4	9.2	-	-



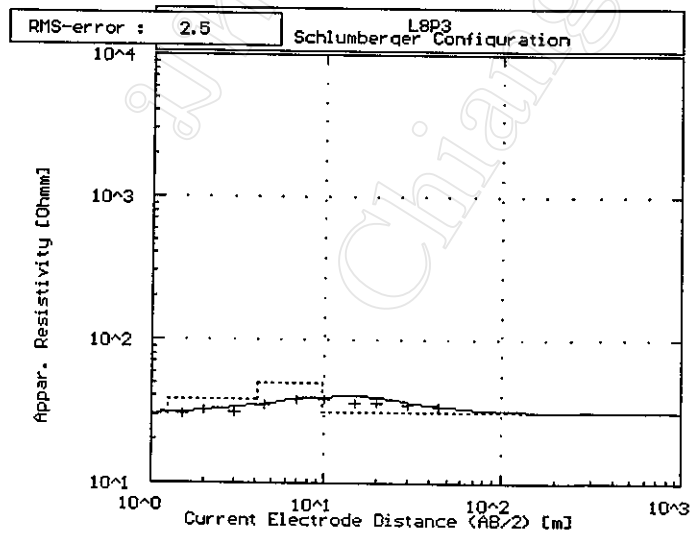
No	Res	Thick	Depth
1	58.9	0.0	0.0
2	35.0	0.0	14.0
3	42.0	1.0	1.1
4	65.0	-	-



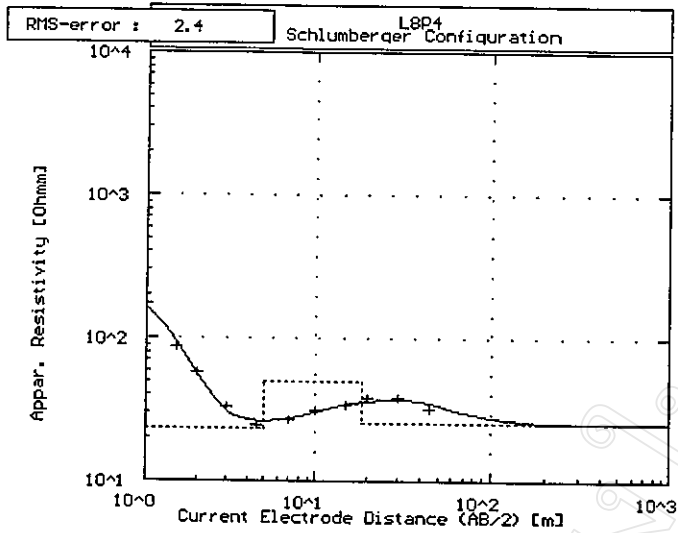
No	Res	Thick	Depth
1	54.6	4.0	4.0
2	90.4	3.0	7.0
3	15.4	13.7	21.5
4	70.9	-	-



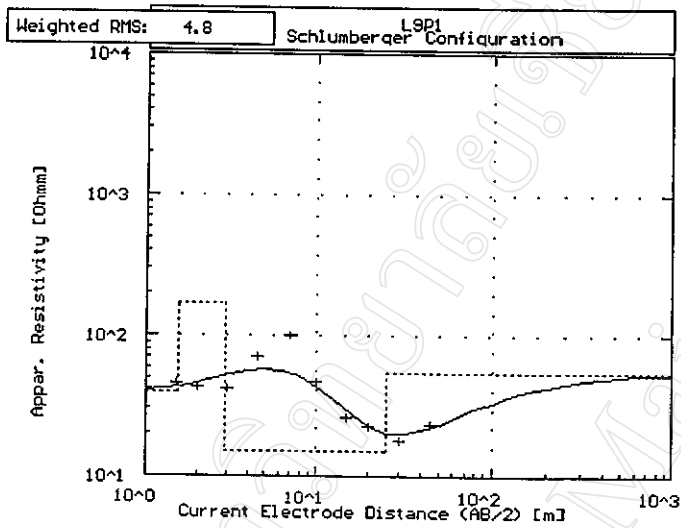
No	Res	Thick	Depth
1	32.6	0.8	0.8
2	103.6	2.0	3.6
3	32.2	11.0	14.6
4	36.2	-	-



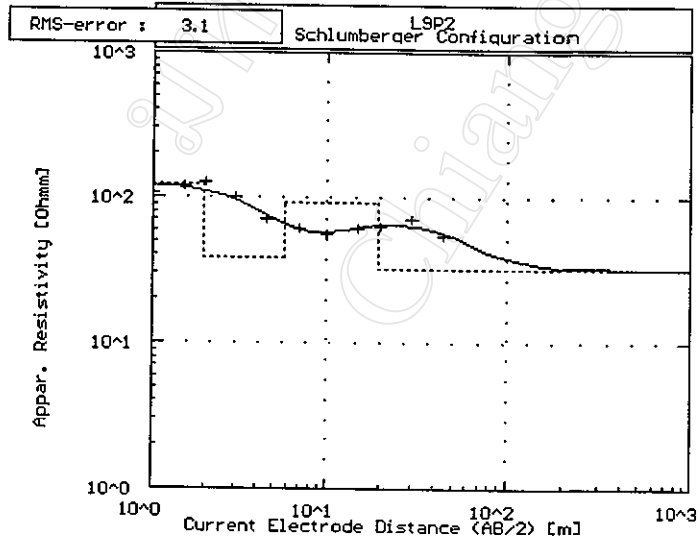
No	Res	Thick	Depth
1	30.2	1.2	1.2
2	48.0	2.0	4.1
3	40.2	5.0	9.7
4	31.4	-	-



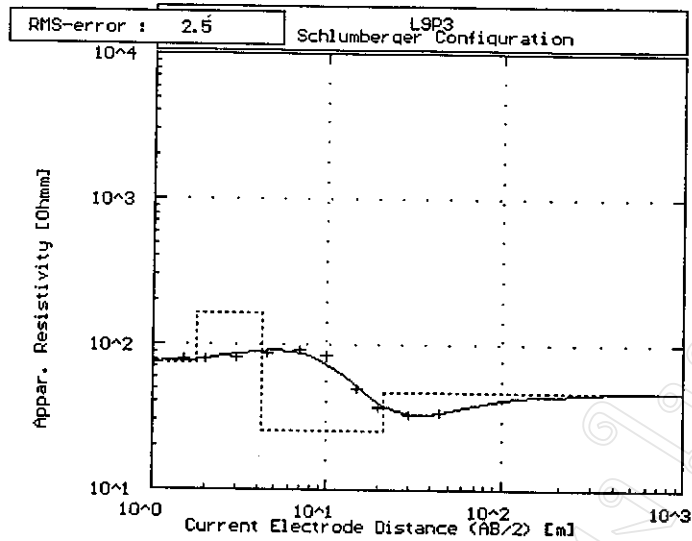
No	Res	Thick	Depth
1	261.8	0.6	0.6
2	23.0	4.4	5.0
3	48.1	13.4	18.4
4	25.1	-	-



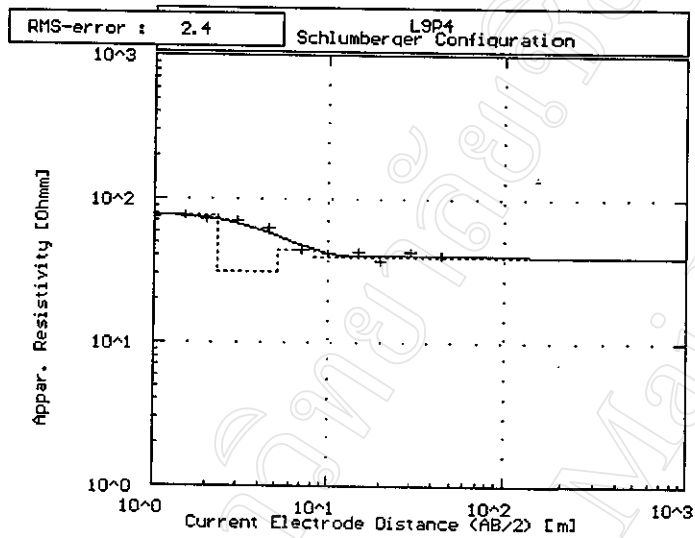
No	Res	Thick	Depth
1	39.5	1.5	1.5
2	167.0	1.4	3.0
3	54.3	22.0	24.9
4	54.3	-	-



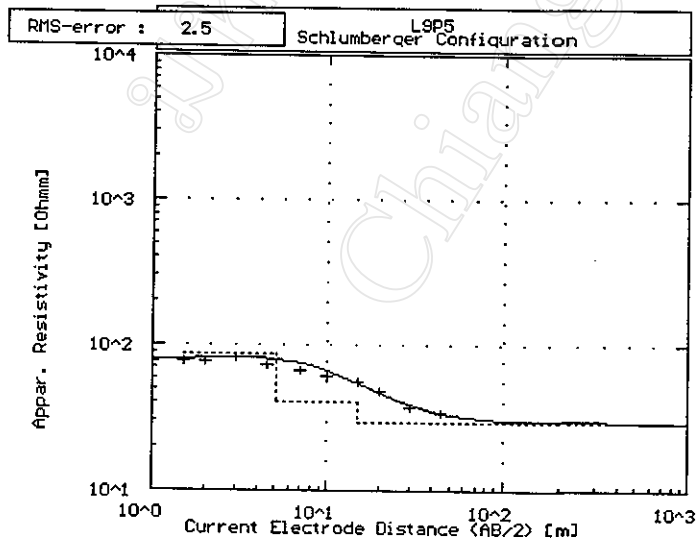
No	Res	Thick	Depth
1	121.9	1.9	1.9
2	37.9	3.8	5.7
3	91.7	13.7	19.4
4	32.3	-	-



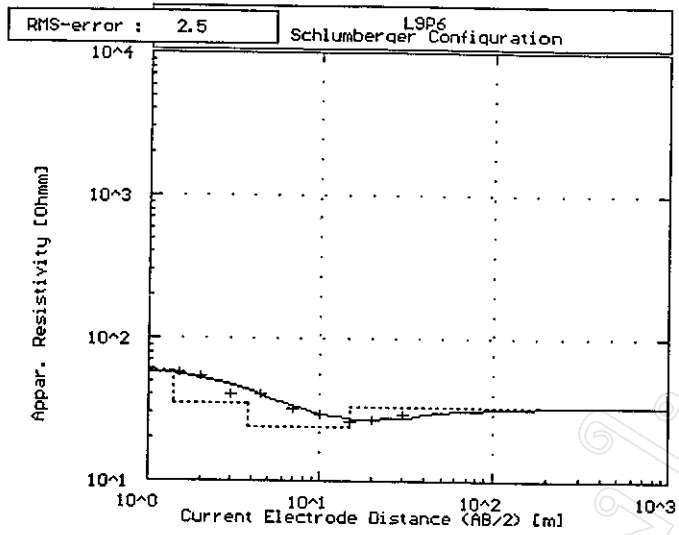
No	Res	Thick	Depth
1	74.1	1.8	1.8
2	162.6	12.3	4.2
3	23.1	16.8	21.1
4	17.0	-	-



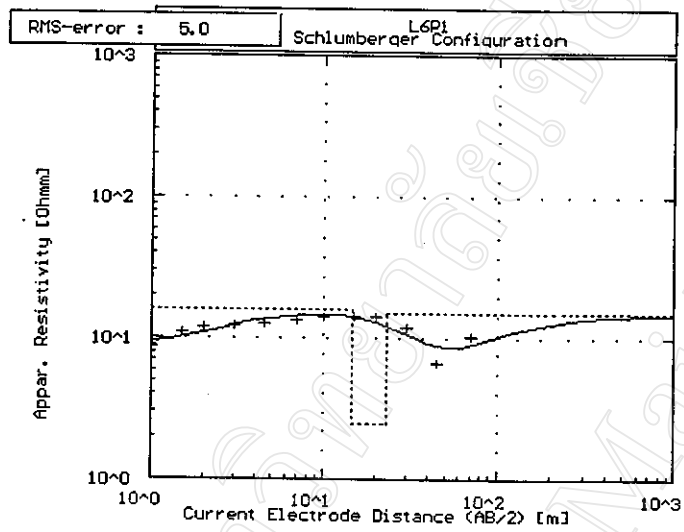
No	Res	Thick	Depth
1	77.9	2.3	2.3
2	31.3	2.8	8.1
3	44.7	3.0	85.1
4	39.9	-	-



No	Res	Thick	Depth
1	79.6	1.5	1.5
2	87.4	3.5	5.0
3	40.6	10.0	15.0
4	28.8	-	-



No	Res	Thick	Depth
1	59.1	1.4	1.4
2	35.3	2.4	3.8
3	24.0	10.9	14.7
4	33.0	-	-



No	Res	Thick	Depth
1	9.0	1.0	1.0
2	16.0	13.4	14.4
3	12.5	8.7	23.1
4	15.0	-	-

APPENDIX B

VERY LOW FREQUENCY ELECTROMAGNETIC DATA

APPENDIX B1
WADI VLF DATA FORMAT

0100N	Survey line}	
19.8	Frequency}	
13	{No. of measurement points}	
1	-20.2	-0.2
11	-19.1	-2.2
21	-36.3	-0.5
31	-45.9	0.9
41	-53.4	0.8
51	-31.2	-1
61	-29.2	-0.7
71	-16.7	-3.9
81	-21.6	-1
91	-9.8	0
101	-13.4	-1.9
111	-40.2	-2.9
121	-33.4	-0.6
0200N		
19.8		
25		
0	-80.4	2.2
10	13.9	0.4
20	-2.1	-1.3
30	-6.6	2.4
40	-28.4	-6.3
50	-1.4	-11.1
60	-26	-8
70	1.1	-3.5
80	-10	-3.1
90	-22.5	1.5
100	-12.8	-4.9
110	-15.4	-3.6
120	-14.4	-7.2
130	-21.3	-13.5
140	-30.4	-11.1
150	-5.5	-21.8
160	-33.5	-15.1
170	-16.3	-13.7
180	-38.2	-10.1
190	-40.2	-7.9
200	-0.6	-14
210	-19.8	-19.2
220	-6.7	-11.9
230	-32.5	-19
240	24.9	-24.1
0300N		
19.8		
19		
0	-37.3	3.6
10	22.6	-8.6

20	22.1	-24.7
30	25	-24
40	31.1	-30.5
50	37.1	-30.5
60	39.2	-29.6
70	57.2	-22.5
80	31.6	-24.9
90	-32.1	1.1
100	-47.9	23
110	-91.6	22.3
120	-58.7	10.5
130	-99.9	29.8
150	-47.6	-4.6
160	32.7	-25.4
170	77.8	-39.3
180	29.6	-20.6
190	-10.8	-18.2
0400N		
19.8		
41		
0	-56.7	-40.4
10	-99.9	-41.5
20	-81.2	-41.7
30	-60	-37.9
40	-84.2	-42.8
50	-91.5	-48.5
60	-63.3	-54.6
70	-34.9	-58.6
80	-29.8	-93.2
90	-11.9	-58.8
100	-27.7	-60.2
110	-84.8	-57.4
120	-95.9	-41.6
130	-35.5	-55.4
140	-21.3	-44
150	-33.8	-25.4
160	-20	-24
170	-35.9	-16.2
180	-36.7	-29.6
190	-50.3	-52.8
200	-49.2	-33.4
210	-39	-41.6
220	-18.4	-33.8
230	-67.4	-32.6
240	-66.3	-13.9
250	-51	1.2
260	-66.5	4.6
270	-35.5	-12.1
280	-29.8	-4.8

290	-48	-13.9
300	-42.4	-0.4
310	-75.5	-5.7
320	-64.9	-9.6
330	-44.2	-8.7
340	-42.5	-4.1
350	-32	-10.2
360	-72.3	14.2
370	-99.9	-37.7
380	-31	-10.3
390	-27.3	-8
400	-72.6	-9.9
0500N		
19.8		
14		
0	-16.3	-1.8
10	-24.1	-1
20	-13.4	-1.7
30	-30.1	-1.5
40	-7.6	-2.3
50	-19	0.2
60	-8.7	-2
70	-11.9	-3.5
80	-20.6	-6.8
90	-39.6	-7.7
100	-7	-4.1
110	-23.2	-1.6
120	-51.4	-5.4
130	-46.1	-4.5
0600N		
19.8		
13		
0	-61.8	13.2
10	-44.2	-2.3
20	-43.3	0.8
30	-38.5	1
40	-27.3	2.7
50	-21.5	1.2
60	-23	1.6
70	-33.6	-0.9
80	-13.3	-2
90	-9.9	0
100	-43	-0.4
110	-7.6	3.1
120	-43.8	3.6

0700N		
19.8		
19		
0	-99.9	-1.9
10	-41.1	2.2
20	-46.3	3
30	-32.7	1.4
40	-29.9	0.7
50	-36	1.1
60	-23.3	0.3
70	-42	-3
80	-59.6	1.4
90	-22.4	3.2
100	-53.4	0.7
110	-51.7	-1.6
120	-79.1	-1.2
130	-32.1	-1.9
140	-29.7	0.2
150	-37.2	-6.3
160	-39	-3.8
170	-14.1	-1.1
180	-20.8	0.1
0800N		
19.8		
23		
0	-46.2	-3.3
10	-1.4	-10.5
20	-16.8	-27.7
30	26	-20
40	-25.2	-12.4
50	-53.1	-36.7
60	4.8	-16.7
70	-57	4.8
80	13.1	-12.1
90	23	-28.8
100	-10.1	-21
110	-39.4	-3.2
120	-26.6	-1.5
130	-25.7	3.5
140	-43.4	3.3
150	-55.2	7
160	-47.3	6.9
170	-54	-4.7
180	-3.3	-3.9
190	-21.2	0.5
200	-27.8	-1.3
210	-31.1	-1.9
220	-22	-3.6

0900N		
19.8		
14		
0	-56.9	-12.7
20	-51.9	9.4
30	-1.6	0.7
40	28.4	13.4
50	-19.9	3.1
60	-43	10.7
70	-47.1	7.7
80	-38.7	15
90	-32.5	-3.4
100	-52.2	9.1
110	-8.9	-4.6
120	-24.5	-0.3
130	5	8.4
140	77.4	2.2

APPENDIX B2
VLF TRANSMITTING STATIONS

Location	Designation	Frequency (kHz)	Power (kW)
Bordeaux, France	FUO	15.1	500
Rugby, Great Britain	GBR	16	750
Helgeland, Norway	JXN	16.4	350
Gorki, USSR	ROR	17	315
Moscow, USSR	UMS	17.1	1000
Yosamai, Japan	NDT	17.4	500
Oxford, Great Britain	GBZ	19.6	550
Annapolis, USA	NSS	21.4	400
Northwest Cape, Australia	NWC	22.3 / 19.8	1000
Hauderfehn, V. Germany	DMB	23.4	
Laulualei, Hawaii, UAS	NPM	23.4	600
Buenos Aires, Argentina	LPZ	23.6	
Cutler, Maine, USA	NAA	24	1000
Seattle, USA	NLK	24.8	125
Aguada, Puerto Rico	NAU	28.5	100

APPENDIX C

HYDROCHEMICAL DATA OF SHALLOW WELL WATER

APPENDIX C

HYDROCHEMICAL DATA OF SHALLOW WELL WATER

Well no.	October, 1989			October, 1995			November, 1997	
	conductivity $\mu\text{S/cm}$	chloride (mg/l)	TDS (mg/l)	conductivity $\mu\text{S/cm}$	chloride (mg/l)	TDS (mg/l)	conductivity $\mu\text{S/cm}$	chloride (mg/l)
1	91	4	240					
2	560	86	500					
3	11000	2300	6600	3330	23	3497		
4	1500	210					400-1000	55
5	1100	210	610	618	71.5	831	2700	660
6	1700	290	970	1050	238	1415		
7	2200	400						
8	5300	960	3300					
9	880	150	480	428	150.5	1033		
10	1000	210					400-1000	55
11	1500	90						
12	1200	230	810	1420	284	2155	2700	800
13	950	130	530	974	121	1797	400-1000	55
14	320	24						
15	360	53						
16	440	63						
17	620	44	370					
18	2300	190	1500	1500	312	1803		
19	1600	190					1000-3000	335
20	1900	340	1500	2030	407	1540	1000-3000	335
21	2200	320					1000-3000	335
22	370	49						
23	690	88	420	868	84.5	2232	400-1000	55
24	390	41	250					
25	410	19	270					
26	260	55	210					
27	220	6.7	160					
28	370	16						
29	220	1						
30	630	28						
31	780	27						
32	930	56	620					
33	590	49						
34	610	38						
35	710	55						
36	1400	100	950					
37	400	20	310					
38	1400	120						
39	610	66						
40	1300	190		161	293	1773		

APPENDIX D

BOREHOLE DATA

APPENDIX D

BOREHOLE DATA

Well-No. : CMM-008

Location : Chiang Mai training collage

Coordinates (UTM) E:498500, N:2079450

Depth	Lithology	Description
0.0-5.0	clay	dark gray
5.0-21.0	clay	white
21.0-30.0	gravel	white sandy

Well-No. : CMM-014

Location : Wat Chang Khian

Coordinates (UTM) E:496200, N:2079314

Depth	Lithology	Description
0.0-46.0	clay	
46.0-107.0	clay and gravel	

Well-No. : CMM-016

Location : Ratcha Mongkhon

Coordinates (UTM) E:495300, N:2079800

Depth	Lithology	Description
0.0-3.0	sand and gravel	white and pale gray clayey
3.0-16.8	sand	yellowish orange sandy
16.8-29.0	gravel	pale gray sandy
29.0-39.6	sand and gravel	pale gray
39.6-79.3	sand	pale gray gravelly

Well-No. : CMM-017

Location : Wat Ban Tha Kham

Coordinates (UTM) E:494750, N:2072050

Depth	Lithology	Description
0.0-1.5	sand and clay	brown
1.5-3.0	sand	grayish brown
3.0-4.6	clay	purplish brown, silty
4.6-9.2	filleddepo	filled deposits brownish gray clayey
9.2-15.2	clay	brown, sandy
15.2-33.6	sand and clay	grayish brown

Well-No. : CMM-024

Location : Wat Umong

Coordinates (UTM) E:495250, N:2076426

Depth	Lithology	Description
0.0-4.5	siltstone	
4.5-22.5	sand and clay	
22.5-27.0	samplelost	

Well-No. : HDM-017

Location : Wat Doi Kaeo

Coordinates (UTM) E:492232, N:2071655

Depth	Lithology	Description
0.0-3.0	clay	light reddish brown, sandy
3.0-6.1	clay	light yellowish brown, sandy
6.1-35.1	clay	dark yellowish brown, sandy, gravelly
35.1-41.2	gravel	various colors, sandy, clayey
41.2-56.4	sand	various colors, gravelly
56.4-71.7	gravel	various colors, sandy, clayey
71.7-74.7	gravel	various colors, sandy
74.7-102.2	sand	various colors, gravelly

Well-No. : HDP-019

Location : Ban Rai

Coordinates (UTM) E:491850, N:20689 16

Depth	Lithology	Description
0.0-0.1	clay	top soil gray
0.1-5.0	sand	brown
5.0-12.0	clay	gray
12.0-27.0	pebble	gray
27.0-47.0	clay	gray

CURRICULUM VITAE

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1990 Primary high school at Thungwa Worrawit, Satun

1993 Senior high school at Thungwa Worrawit, Satun

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