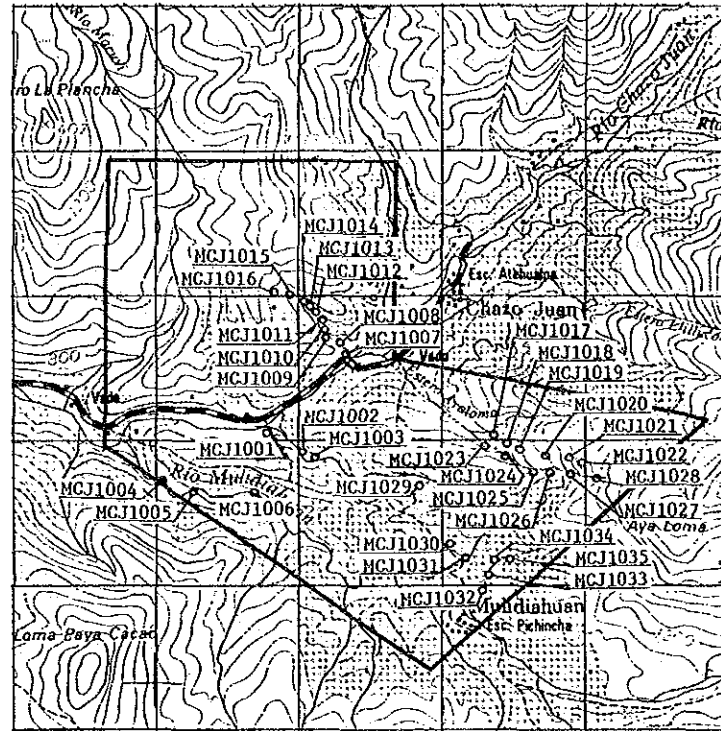
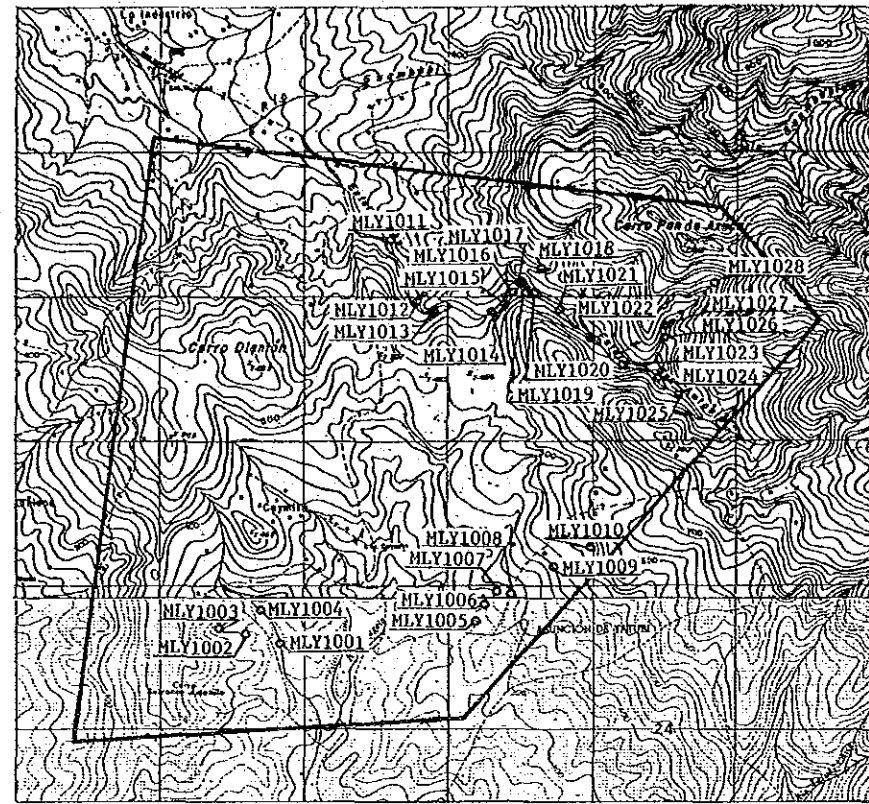


Fig. A-2 Location Map of the Measured Point of the Magnetic Susceptibility

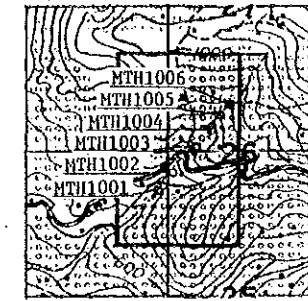
Chaso Juan



La Industria - Yatubi



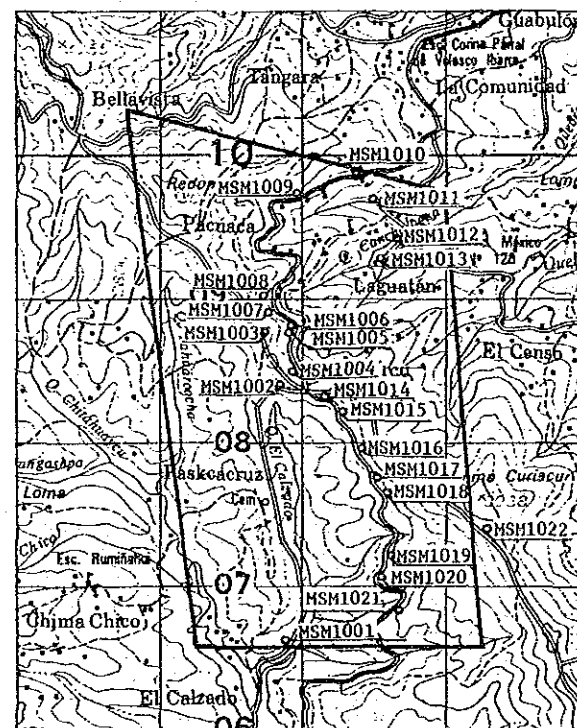
Tres Hermanas



Telimbela



San Miguel



Las Guardias

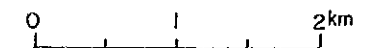
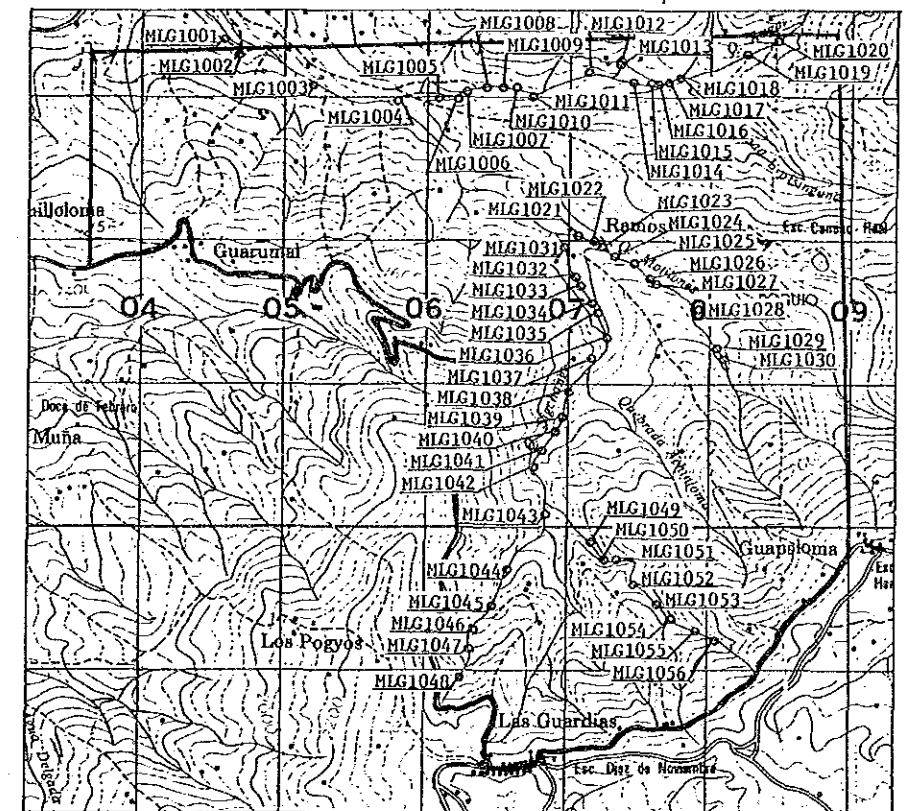
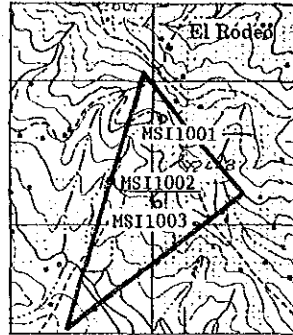
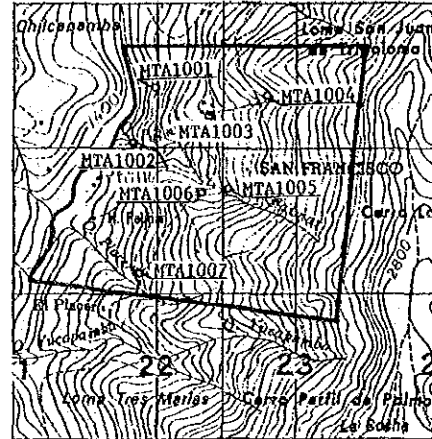


Fig. A-2 Location Map of the Measured Point of the Magnetic Susceptibility

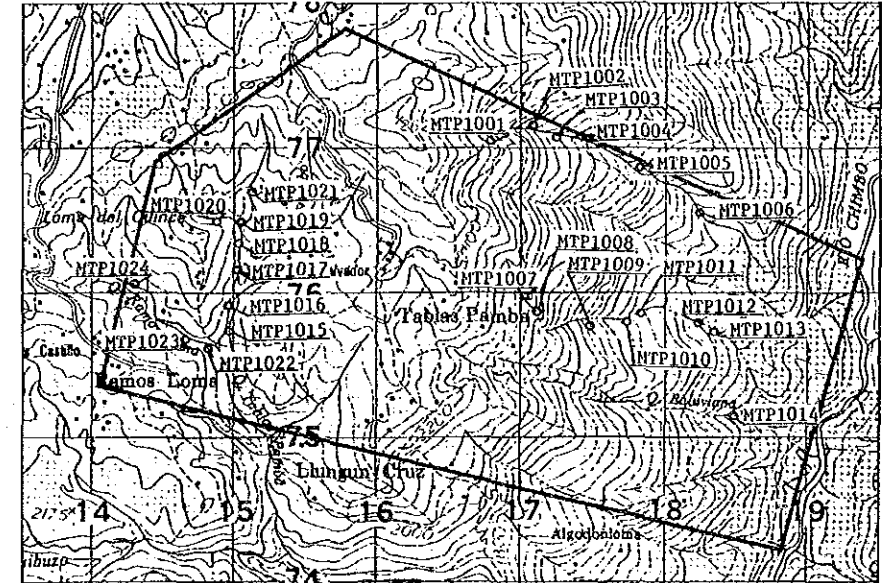
Sicota



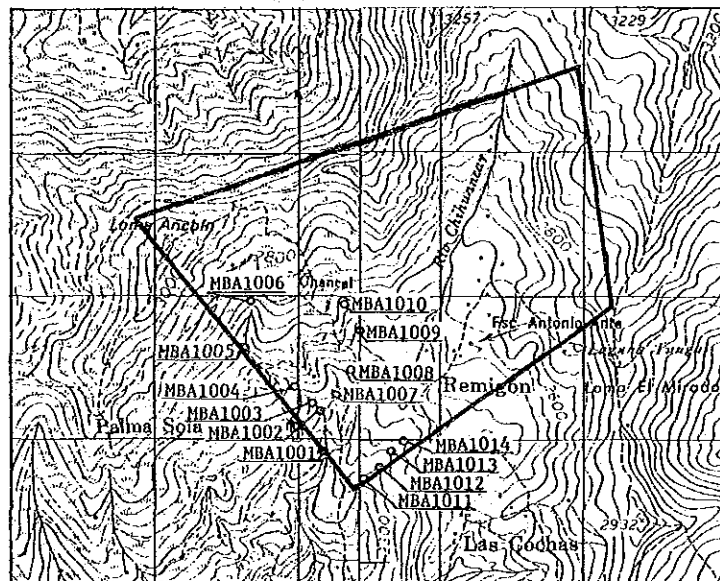
Tambillo



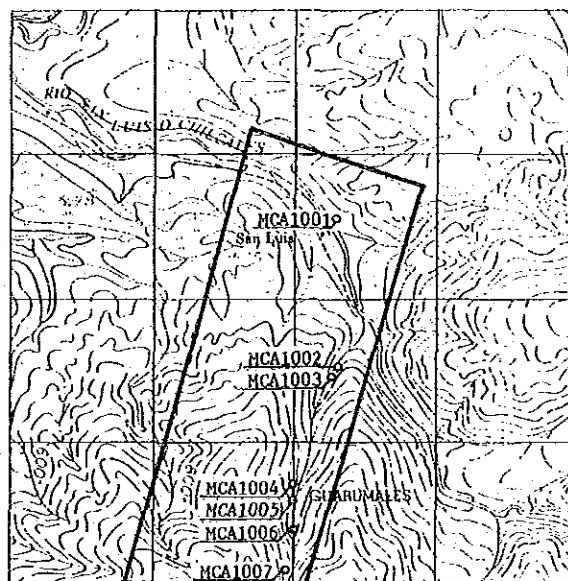
Tablas Pamba



Balaron



Chilcales Alto



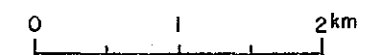
LEGEND

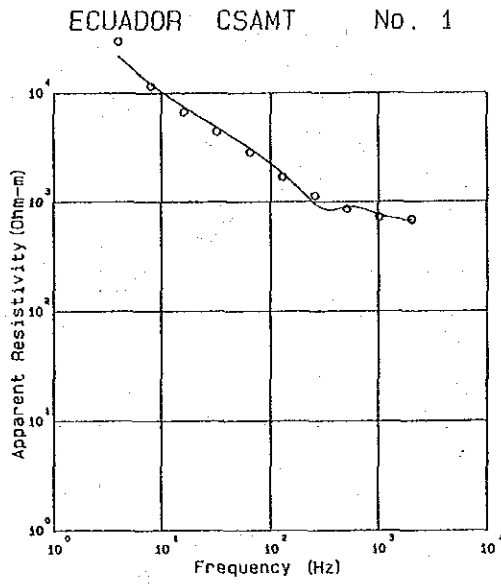
○ MBP1001

Measured point and measured point number of magnetic susceptibility

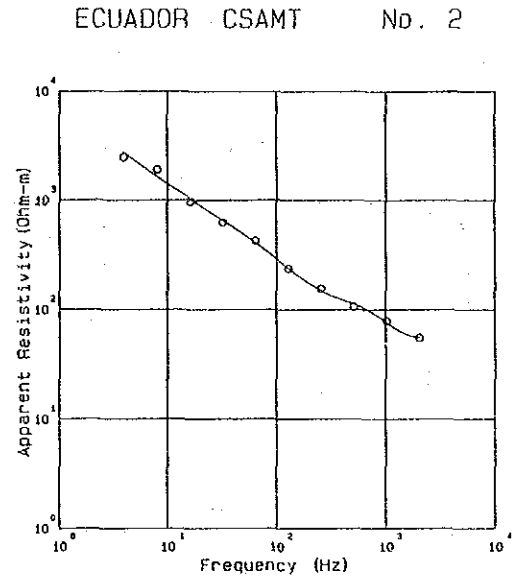


Fig. A-2 Location Map of the Measured Point of the Magnetic Susceptibility

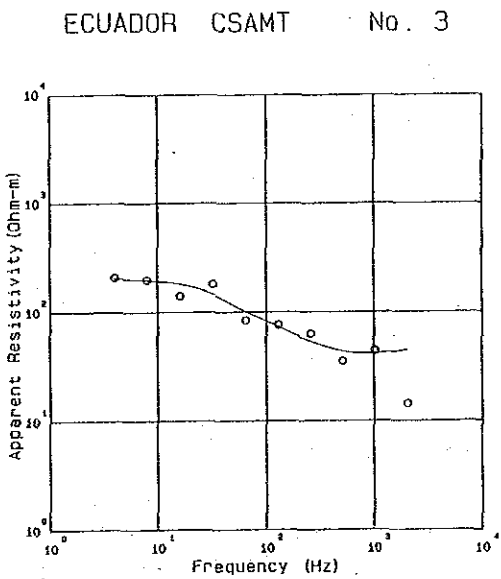




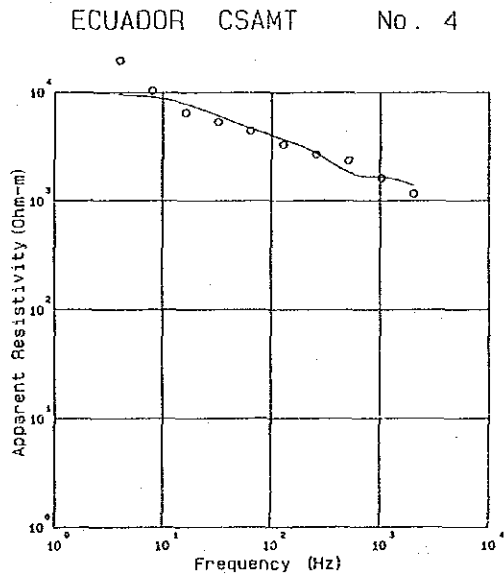
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	688	672	Rho (Ohm-m)	Thickness (a)
1024	728	761		
512	862	899	731.4	394.0
256	1140	970	3197.8 Infinite	
128	1700	1830		
64	2850	3120	Infinite	
32	4440	4950		
16	8690	7490	Infinite	
8	11600	12200		
4	29700	21700	Infinite	



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	55.5	55.7	Rho (Ohm-m)	Thickness (a)
1024	79.5	77.0		
512	106	113	68.9	101.9
256	156	150	8503.3 Infinite	
128	239	240		
64	431	413	Infinite	
32	634	662		
16	981	1030	417.0 Infinite	
8	1910	1850		
4	2480	2780	Infinite	



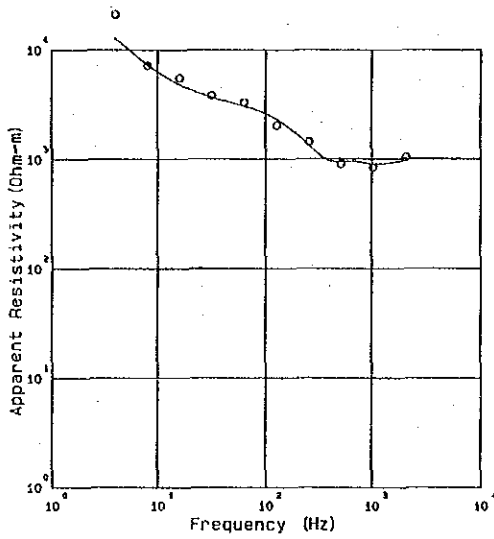
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	14.3	44.6	Rho (Ohm-m)	Thickness (a)
1024	44.5	41.6		
512	35.6	43.7	46.7	133.9
256	63.7	54.1	309.6 Infinite	
128	76.9	74.1		
64	84.6	101	Infinite	
32	183	147		
16	141	184	78.8 Infinite	
8	200	188		
4	211	296	Infinite	



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1170	1380	Rho (Ohm-m)	Thickness (a)
1024	1639	1669		
512	2350	1830	220.1	19.6
256	2690	2750	3018.3 Infinite	
128	3330	3710		
64	4450	4870	Infinite	
32	6340	6100		
16	8930	7840	13124.9 Infinite	
8	10400	9060		
4	19700	9580	1622181.0 Infinite	

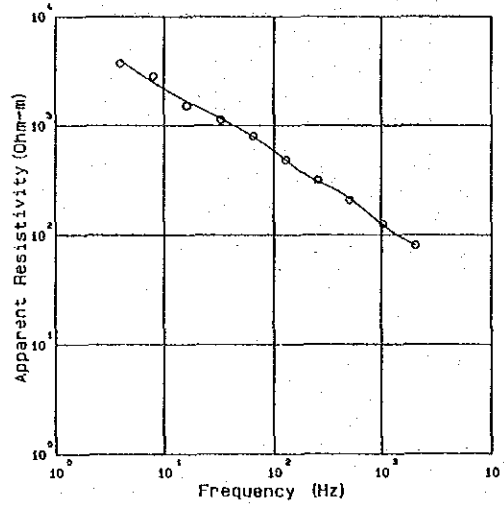
Fig. A-3 Analyzed Resistivity Curve (1)~(6)

ECUADOR CSAMT No. 5



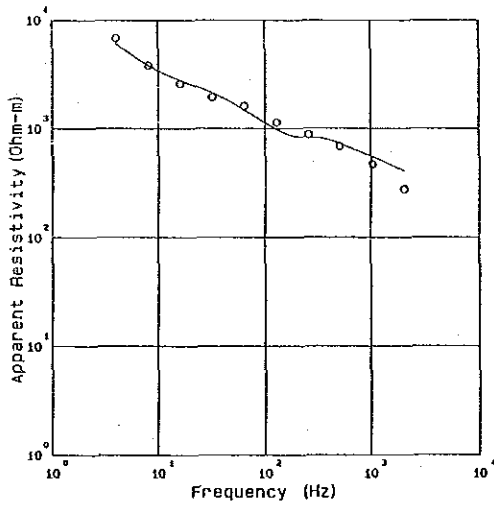
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1030	965	rho (Ohm-a)	Thickness (a)
1024	843	901		
512	902	942	1035.2	589.8
256	1440	1320	9144.6	1901.1
128	2040	2310		
64	3310	3060	271.5	Infinite
32	3820	3670		
16	5540	4820		
8	7190	7340		
4	21200	12700		

ECUADOR CSAMT No. 6



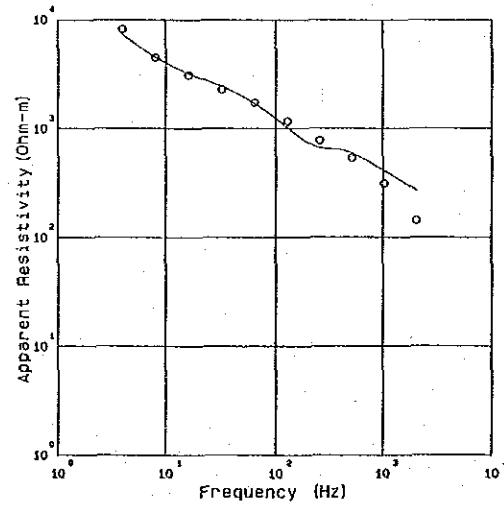
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	80.5	80.9	rho (Ohm-a)	Thickness (a)
1024	127	125		
512	210	217	88.2	88.8
256	318	310	5706.9	1044.4
128	489	482		
64	807	796	614.0	Infinite
32	1130	1160		
16	1530	1680		
8	2850	2510		
4	3730	4010		

ECUADOR CSAMT No. 7



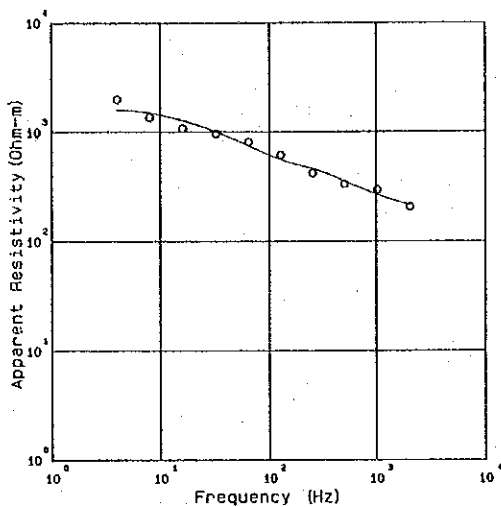
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	275	407	rho (Ohm-a)	Thickness (a)
1024	469	556		
512	688	732	231.8	66.5
256	887	832	1663.7	8880.4
128	1140	988		
64	1620	1490	11498.9	Infinite
32	1950	2130		
16	2600	2800		
8	3830	3840		
4	6870	8060		

ECUADOR CSAMT No. 8



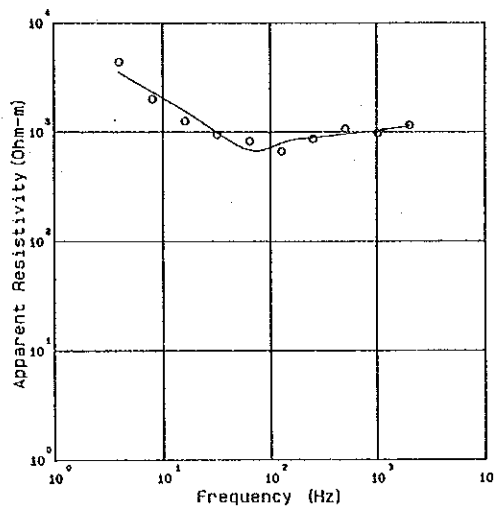
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	142	268	rho (Ohm-a)	Thickness (a)
1024	313	411		
512	938	601	57.0	19.8
256	781	671	1912.1	9115.9
128	1170	1090		
64	1730	1700	13531.0	Infinite
32	2290	2430		
16	3090	3220		
8	4520	4570		
4	8230	7380		

ECUADOR CSAMT No. 9



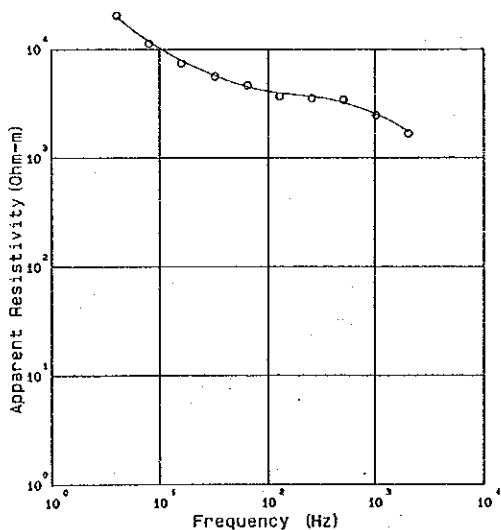
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	207	216	Rho (Ohm-m)	Thickness (m)
1024	298	267		
512	334	356	1202.4	967.7
256	422	464		
128	618	563	684.0	Infinite
64	816	754		
32	968	1010		
16	1080	1280		
8	1370	1510		
4	2000	1600		

ECUADOR CSAMT No. 10



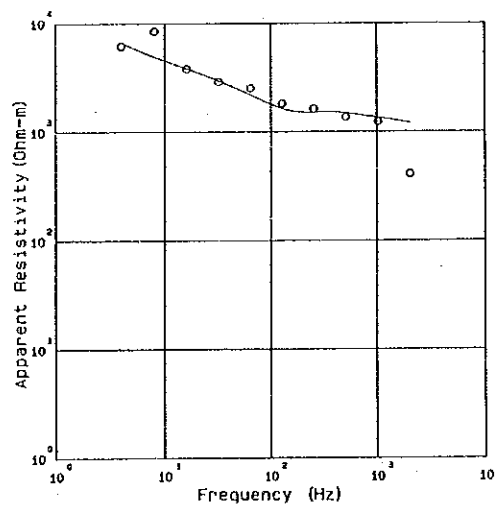
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1150	1130	Rho (Ohm-m)	Thickness (m)
1024	979	1030		
512	1070	957	754.3	1468.1
256	666	887		
128	669	792	1470.0	Infinite
64	630	681		
32	951	992		
16	1260	1550		
8	2010	2340		
4	4410	3530		

ECUADOR CSAMT No. 11



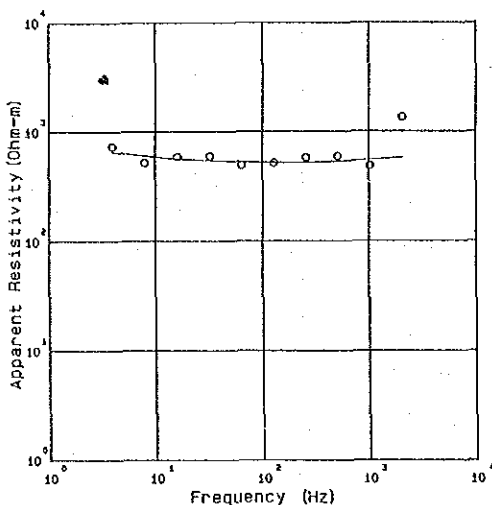
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1670	1720	Rho (Ohm-m)	Thickness (m)
1024	2480	2530		
512	3440	3230	28421.8	1020.5
256	3540	3680		
128	3680	3950	1839.8	Infinite
64	4670	4530		
32	5650	6740		
16	7430	7890		
8	11200	11800		
4	20300	19800		

ECUADOR CSAMT No. 12



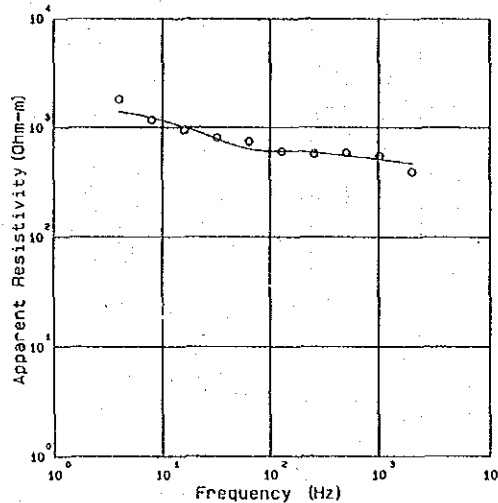
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	409	1200	Rho (Ohm-m)	Thickness (m)
1024	1240	1340		
512	1360	1490	1972.0	Infinite
256	1630	1510		
128	1820	1640		
64	2540	2190		
32	2910	2960		
16	3830	3850		
8	8490	4950		
4	6160	6750		

ECUADOR CSAMT No. 13



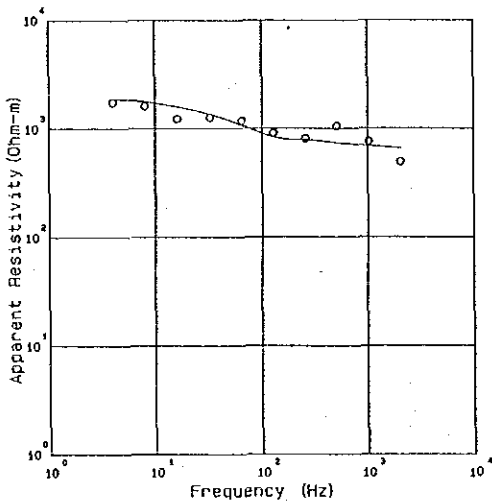
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1360	579	Rho (Ohm-a)	Thickness (a)
1024	487	553		
512	598	534	631.1	74.8
256	581	520	489.4	1596.0
128	518	522		
64	493	530	238.1	Infinite
32	600	547		
16	593	566		
8	522	604		
4	735	655		

ECUADOR CSAMT No. 14



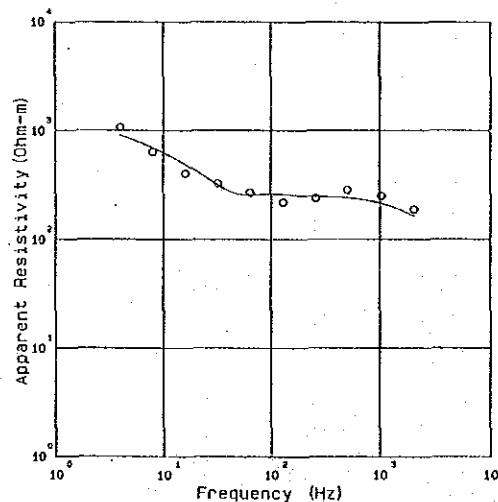
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	394	489	Rho (Ohm-a)	Thickness (a)
1024	553	513		
512	589	553	408.8	97.6
256	578	593	634.7	1025.4
128	605	610		
64	749	639	3491.7	61.4
32	807	788		
16	948	1010		
8	1180	1230		
4	1810	1390	571.5	Infinite

ECUADOR CSAMT No. 15



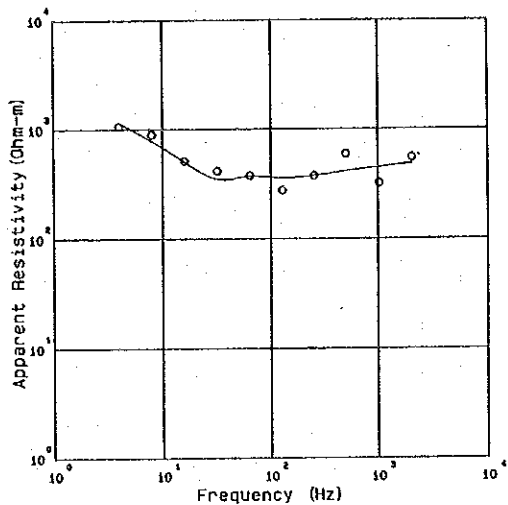
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	494	659	Rho (Ohm-a)	Thickness (a)
1024	760	693		
512	1050	737	435.5	38.0
256	810	789	776.6	344.0
128	909	834		
64	1180	1080	1057.5	1768.4
32	1270	1360		
16	1230	1600		
8	1620	1780		
4	1750	1900	517.2	Infinite

ECUADOR CSAMT No. 16



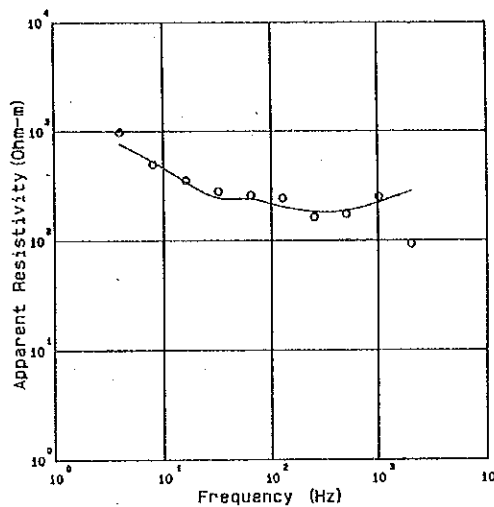
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	188	164	Rho (Ohm-a)	Thickness (a)
1024	292	218		
512	285	242	78.5	43.1
256	239	248	4545.4	147.2
128	218	260		
64	270	255	222.3	327.7
32	327	317		
16	404	490		
8	638	701		
4	1070	910	424.8	Infinite

ECUADOR CSAMT No. 17



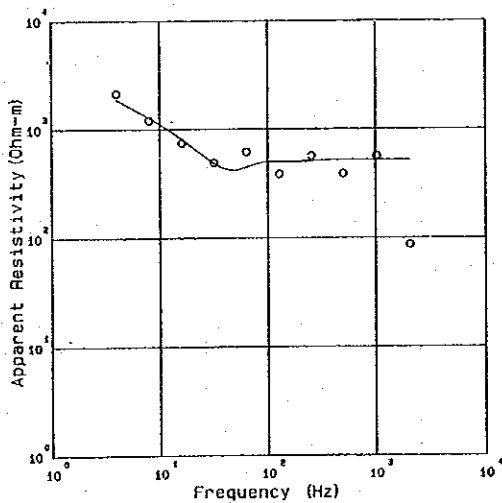
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	550	483	ρ_{ho} (Ohm-a)	Thickness (a)
1024	320	451		
512	597	414	567.7	147.1
256	374	376		
128	276	358	333.1	670.7
64	378	373		
32	417	350		
16	516	505	746.7	Infinite
8	904	788		
4	1070	1150		

ECUADOR CSAMT No. 18



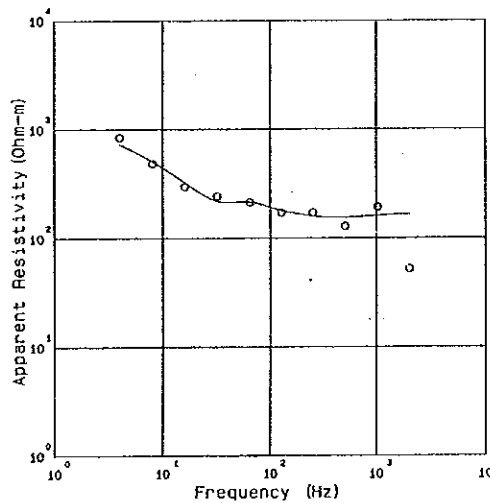
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	93.0	282	ρ_{ho} (Ohm-a)	Thickness (a)
1024	252	225		
512	174	188	304.3	131.9
256	163	183		
128	245	204	105.7	142.6
64	262	242		
32	284	246		
16	357	345	509.9	Infinite
8	499	530		
4	990	768		

ECUADOR CSAMT No. 19



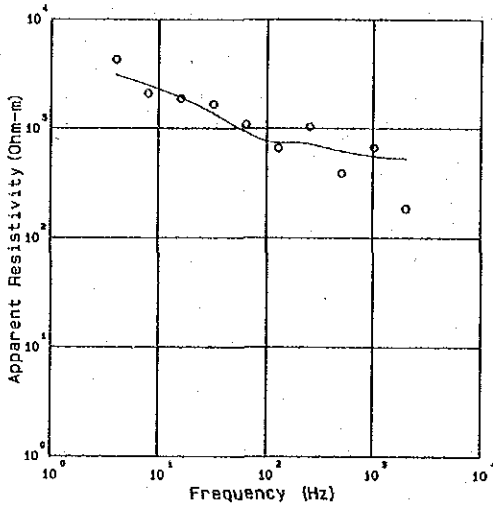
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	65.9	519	ρ_{ho} (Ohm-a)	Thickness (a)
1024	572	519		
512	390	520	519.2	1319.5
256	870	510		
128	387	500	1104.8	Infinite
64	622	447		
32	493	486		
16	751	816		
8	1210	1280		
4	2140	1880		

ECUADOR CSAMT No. 20



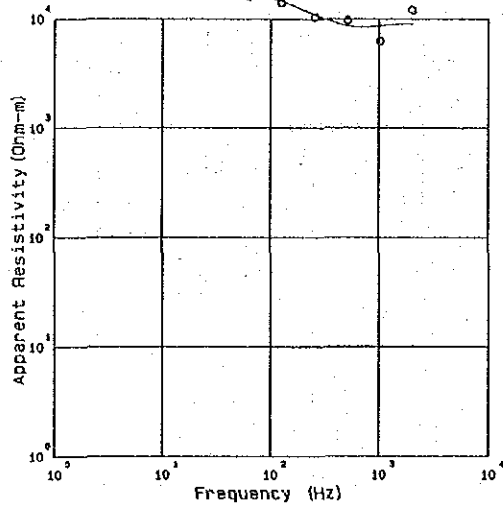
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	52.0	166	ρ_{ho} (Ohm-a)	Thickness (a)
1024	193	161		
512	128	154	165.9	359.2
256	172	159		
128	172	180	491.1	Infinite
64	214	216		
32	244	220		
16	299	326		
8	489	510		
4	846	733		

ECUADOR CSAMT No. 21



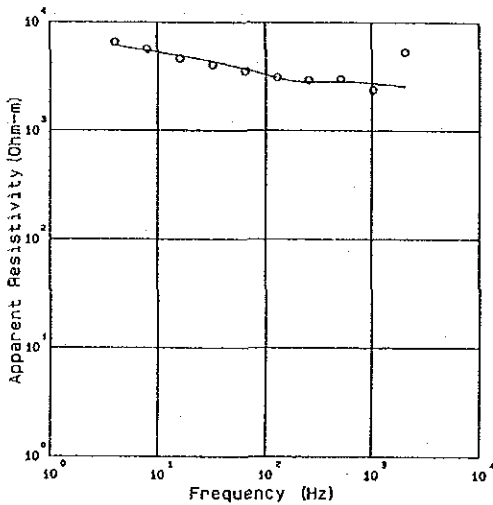
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	186	530	rho (Ohm-m)	Thickness (m)
1024	674	595		
512	390	623	560.7	297.9
256	1040	724	1295.5	Infinite
128	654	742		
64	1090	928		
32	1670	1370		
16	1690	1930		
8	2100	2500		
4	4300	3110		

ECUADOR CSAMT No. 22



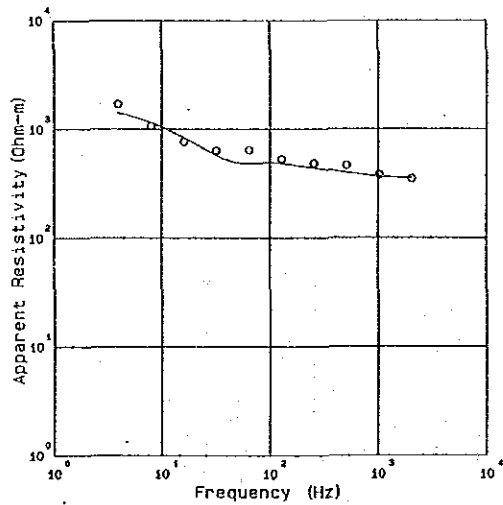
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	12000	8890	rho (Ohm-m)	Thickness (m)
1024	6240	8510		
512	9710	8560	8889.3	12706.8
256	10400	10900	3860931.5	Infinite
128	14100	14600		
64	16200	17200		
32	18100	18800		
16	21600	23000		
8	36500	33800		
4	61600	58100		

ECUADOR CSAMT No. 23



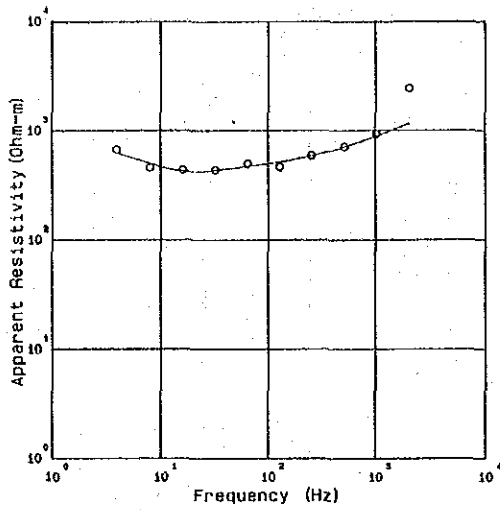
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	5340	2650	rho (Ohm-m)	Thickness (m)
1024	2380	2730		
512	3010	2840	2321.5	211.0
256	2930	2810	3134.4	1025.0
128	3110	3060		
64	3550	3720		
32	4030	4350		
16	4620	4930	2089.2	5938.5
8	5670	5500		
4	6550	6170	4646.3	Infinite

ECUADOR CSAMT No. 24



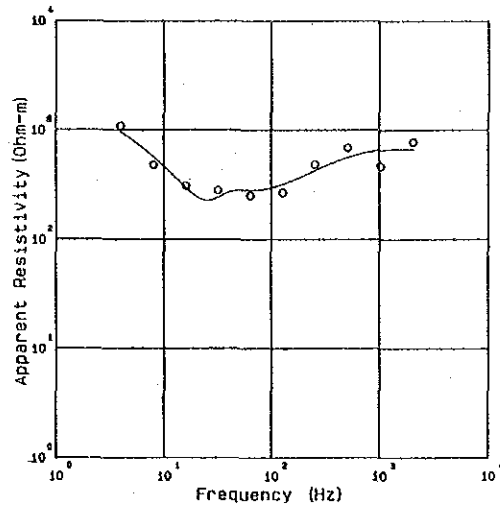
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	349	356	rho (Ohm-m)	Thickness (m)
1024	390	367		
512	465	399	371.6	271.3
256	485	440	1455.2	45.3
128	532	487		
64	646	484		
32	639	578		
16	769	839	658.7	Infinite
8	1070	1180		
4	1710	1420		

ECUADOR CSAMT No. 25



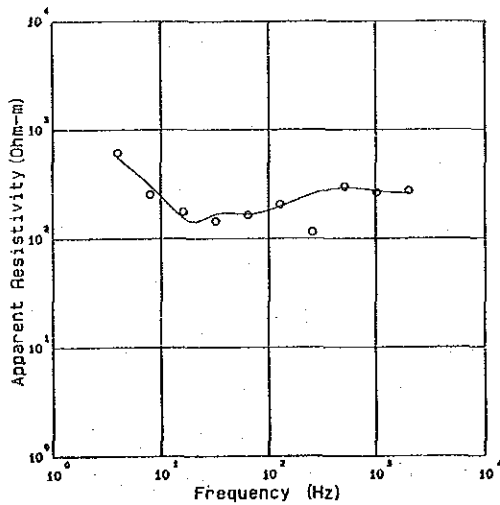
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	2450	1180	Rho (Ohm-m)	Thickness (m)
1024	934	894		
512	714	710	1748.6	198.7
256	593	590	345.6	1334.2
128	487	517		
64	502	473	212.5	Infinite
32	439	433		
16	439	428		
8	451	502		
4	671	627		

ECUADOR CSAMT No. 26



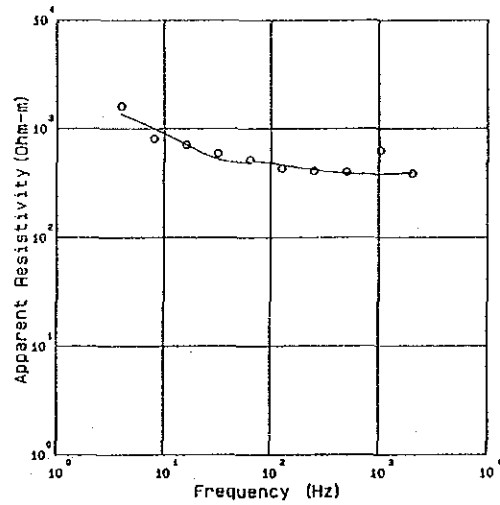
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	779	665	Rho (Ohm-m)	Thickness (m)
1024	466	655		
512	692	584	612.2	367.9
256	487	427	148.0	435.5
128	267	320		
64	252	281	870.1	Infinite
32	281	241		
16	309	296		
8	491	572		
4	1090	968		

ECUADOR CSAMT No. 27



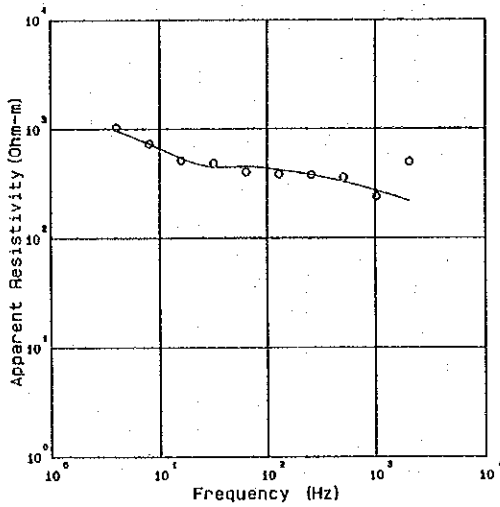
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	274	261	Rho (Ohm-m)	Thickness (m)
1024	264	275		
512	300	292	263.1	483.1
256	114	258	21.9	60.8
128	207	197		
64	184	187	620.7	Infinite
32	144	167		
16	177	184		
8	258	309		
4	619	557		

ECUADOR CSAMT No. 28



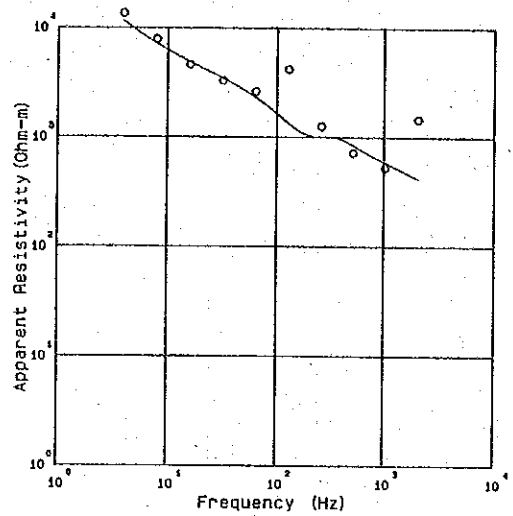
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	388	392	Rho (Ohm-m)	Thickness (m)
1024	634	382		
512	401	388	398.7	397.3
256	409	419	781.2	Infinite
128	431	468		
64	521	499		
32	598	527		
16	718	719		
8	815	1010		
4	1820	1370		

ECUADOR CSAMT No. 29



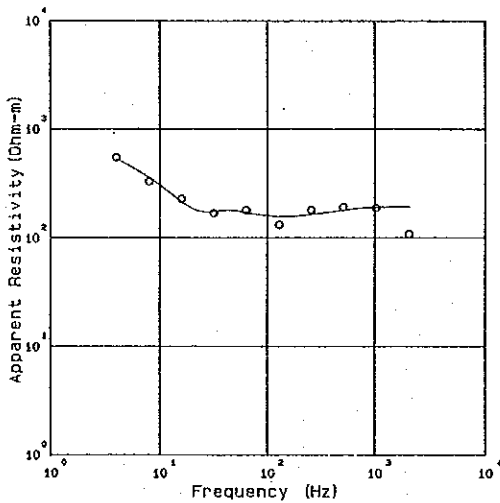
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	900	217	Rho (Ohm-m)	Thickness (a)
1024	239	272		
512	360	328	560.0	Infinite
256	380	381		
128	385	424		
64	404	454		
32	408	450		
16	516	543		
8	737	736		
4	1040	971		

ECUADOR CSAMT No. 30



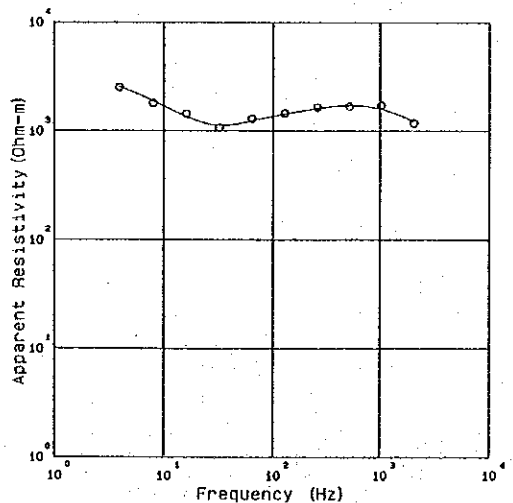
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1460	420	Rho (Ohm-m)	Thickness (a)
1024	528	592		
512	723	845	3182.0	9024.5
256	1270	1020		
128	4210	1340		
64	2630	2320		
32	3300	3450		
16	4630	4680		
8	7910	7190		
4	13900	11500		

ECUADOR CSAMT No. 31



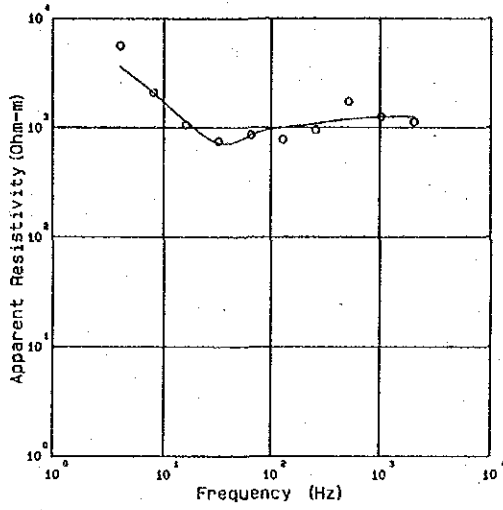
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	108	192	Rho (Ohm-m)	Thickness (a)
1024	189	191		
512	192	179	140.0	320.7
256	180	163		
128	131	157		
64	179	170		
32	168	174		
16	228	213		
8	331	358		
4	552	534		

ECUADOR CSAMT No. 32



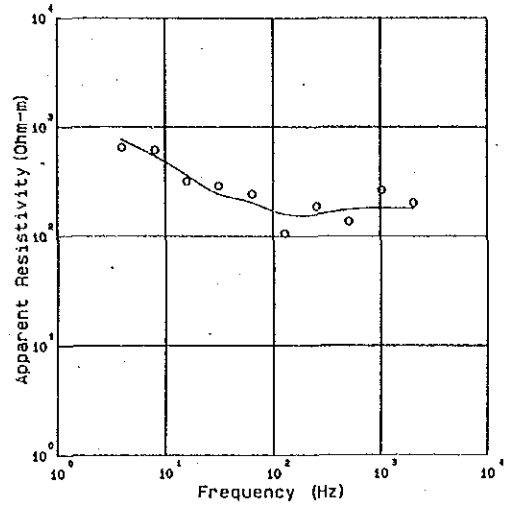
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1180	1220	Rho (Ohm-m)	Thickness (a)
1024	1730	1600		
512	1690	1720	3732.1	654.9
256	1650	1610		
128	1460	1430		
64	1290	1240		
32	1070	1120		
16	1440	1360		
8	1810	1900		
4	2530	2550		

ECUADOR CSAMT No. 33



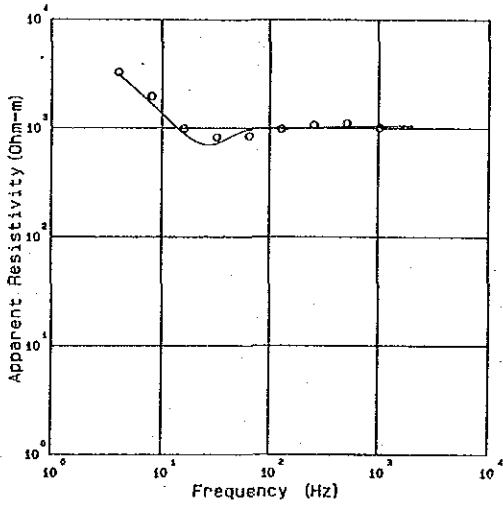
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1130	1240	Rho (Ohm-m)	Thickness (m)
1024	1260	1250		
512	1730	1190	Rho (Ohm-m)	Thickness (m)
256	957	1090		
128	785	1000	Rho (Ohm-m)	Thickness (m)
64	851	855		
32	754	719		
16	1060	1130		
8	2110	2060		
4	5650	3500		

ECUADOR CSAMT No. 34



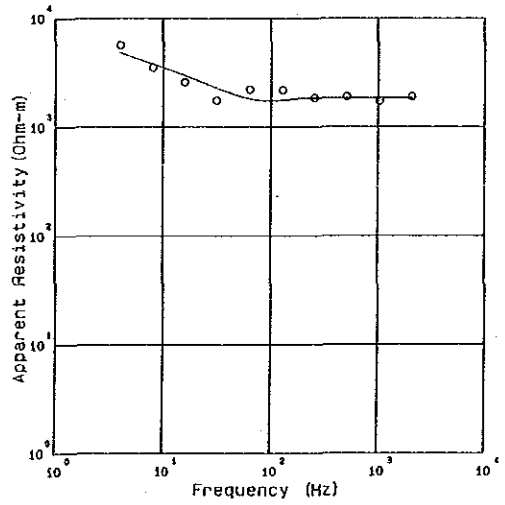
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	201	179	Rho (Ohm-m)	Thickness (m)
1024	264	160		
512	135	175	Rho (Ohm-m)	Thickness (m)
256	188	158		
128	106	150	Rho (Ohm-m)	Thickness (m)
64	244	203		
32	289	243		
16	319	354		
8	517	543		
4	653	767		

ECUADOR CSAMT No. 35



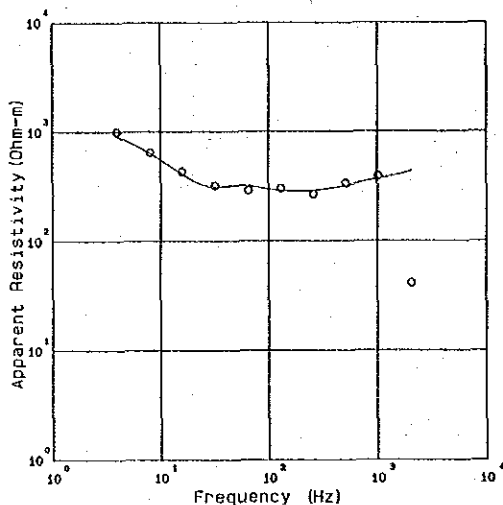
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	147000	1040	Rho (Ohm-m)	Thickness (m)
1024	1010	1040		
512	1110	1030	Rho (Ohm-m)	Thickness (m)
256	1050	1000		
128	981	981	Rho (Ohm-m)	Thickness (m)
64	842	988		
32	822	720		
16	991	891		
8	1950	1680		
4	3250	3130		

ECUADOR CSAMT No. 36



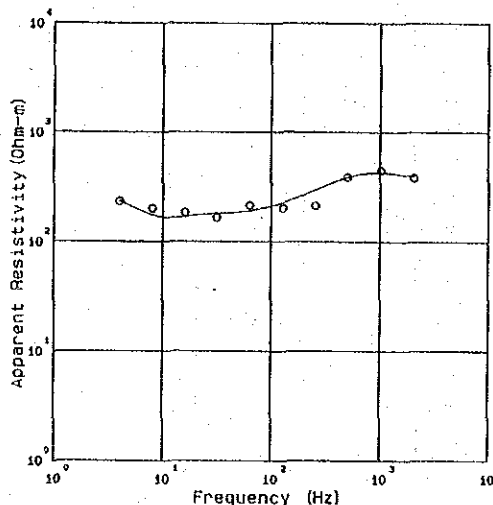
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1900	1830	Rho (Ohm-m)	Thickness (m)
1024	1730	1830		
512	1900	1830		
256	1880	1830		
128	2180	1760		
64	2210	1800		
32	1750	2270		
16	2590	2970		
8	3530	3760		
4	5550	4830		

ECUADOR CSAMT No. 37



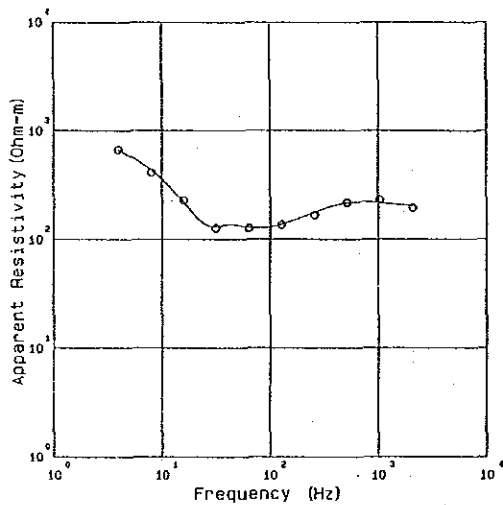
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	41.4	437	1359.2	56.3
1024	395	372		
512	338	320	254.8	523.4
256	258	289		
128	304	290	628.5	Infinite
64	291	349		
32	324	343		
16	437	445		
8	653	641		
4	1000	945		

ECUADOR CSAMT No. 38



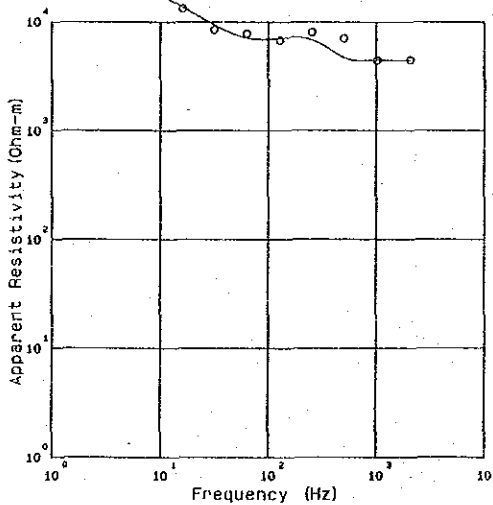
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	385	398	379.2	404.1
1024	449	432		
512	390	390	26.6	56.7
256	214	298		
128	201	228	357.9	55.6
64	216	192		
32	165	160		
16	185	168		
8	201	175		
4	233	235	199.6	Infinite

ECUADOR CSAMT No. 39



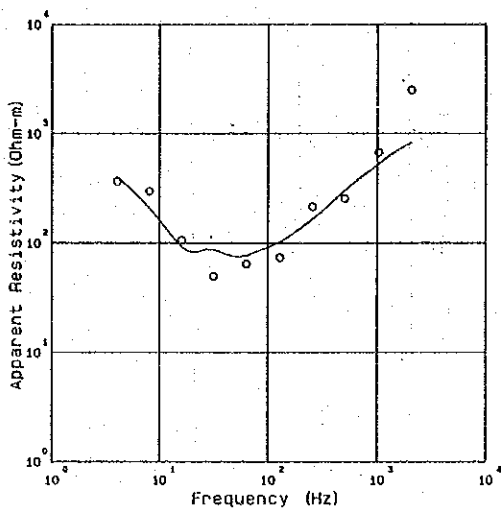
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	194	204	293.1	335.9
1024	232	217		
512	218	217	51.7	165.9
256	166	176		
128	135	137	1195.0	3599.5
64	126	129		
32	127	130		
16	229	220		
8	412	434		
4	674	669	396.8	Infinite

ECUADOR CSAMT No. 40



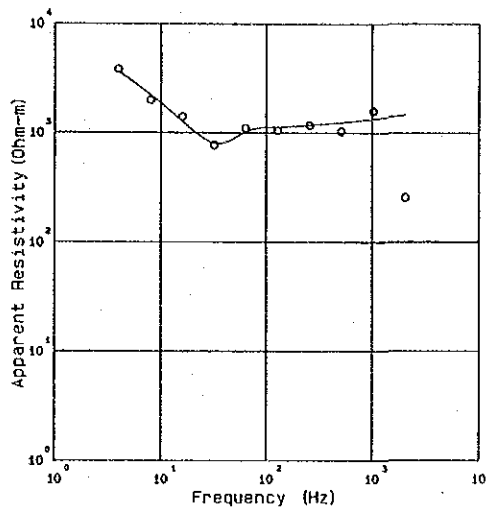
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	4490	4400	4626.6	1002.6
1024	4440	4440		
512	7080	4680	9641.7	2253.5
256	8050	6830		
128	6780	7070	2021.8	1398.3
64	7820	7120		
32	8490	9380		
16	13200	13600		
8	23600	20200		
4	42400	31800	24761.1	Infinite

ECUADOR CSAMT No. 41



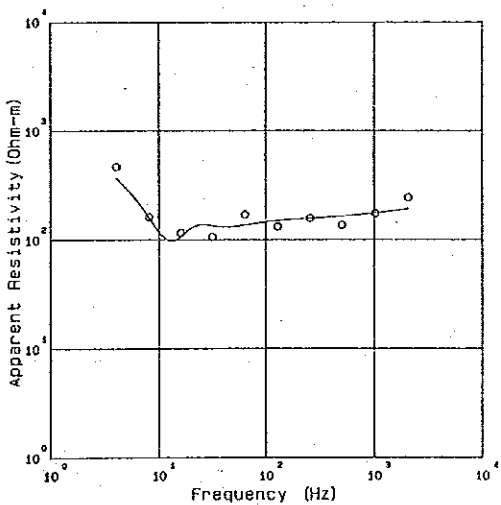
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			Rho (Ohm-m)	Thickness (m)
2048	2500	831	736.5	275.3
1024	675	531		
512	254	301	.2	1.3
256	215	166		
128	73.8	102	625.5	Infinite
64	64.5	76.9		
32	49.8	87.2		
16	107	92.8		
8	300	209		
4	368	402		

ECUADOR CSAMT No. 42



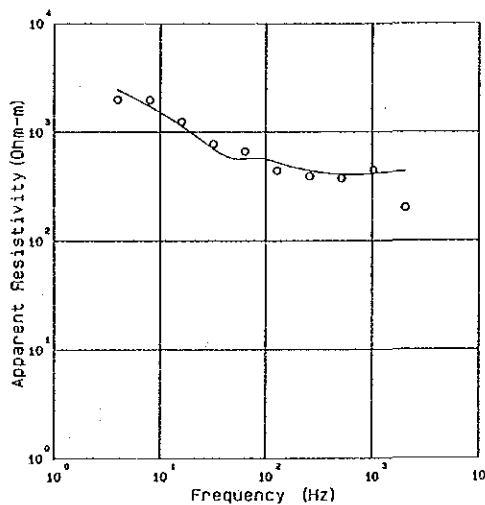
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			Rho (Ohm-m)	Thickness (m)
2048	297	1470	1761.9	178.1
1024	1600	1340		
512	1040	1240	1017.3	3026.1
256	1180	1180		
128	1050	1130	2784.5	Infinite
64	1110	1020		
32	775	801		
16	1410	1270		
8	2000	2210		
4	3820	3650		

ECUADOR CSAMT No. 43



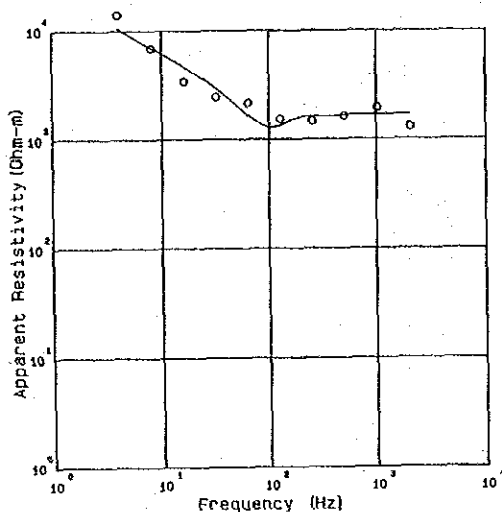
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			Rho (Ohm-m)	Thickness (m)
2048	243	193	321.1	37.1
1024	173	176		
512	138	164	138.7	1105.2
256	168	157		
128	131	149	750.4	Infinite
64	170	136		
32	106	134		
16	116	107		
8	162	159		
4	472	370		

ECUADOR CSAMT No. 44



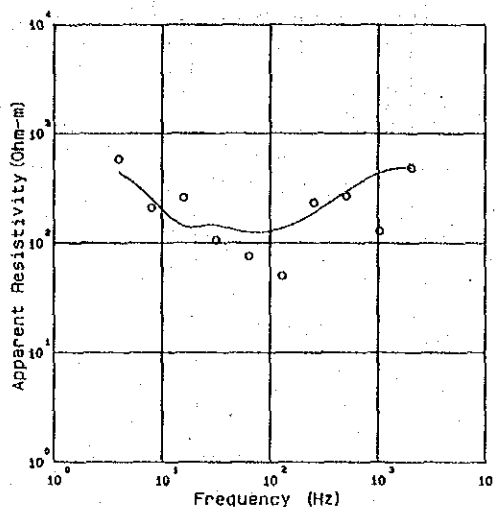
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			Rho (Ohm-m)	Thickness (m)
2048	201	495	438.8	496.5
1024	448	415		
512	377	407	1392.5	Infinite
256	393	443		
128	442	828		
64	666	970		
32	782	703		
16	1250	1140		
8	1970	1730		
4	1990	2460		

ECUADOR CSAMT No. 45



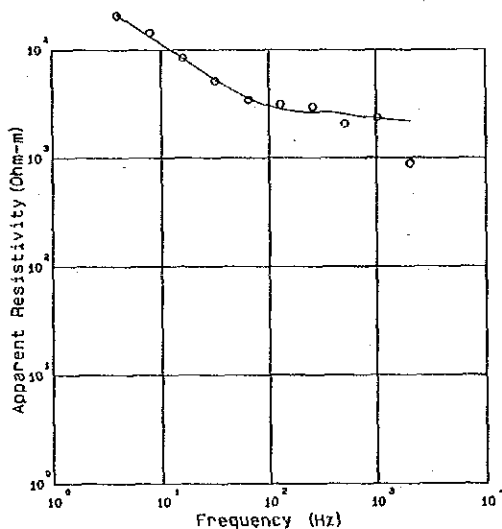
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1300	1670	Rho (Ohm-m)	Thickness (a)
1024	1950	1680		
512	1640	1640	1679.3	1702.5
256	1480	1610	4049.4	Infinite
128	1530	1340		
64	2150	1650		
32	2470	2940		
16	3440	4590		
8	6920	6980		
4	14000	10400		

ECUADOR CSAMT No. 46



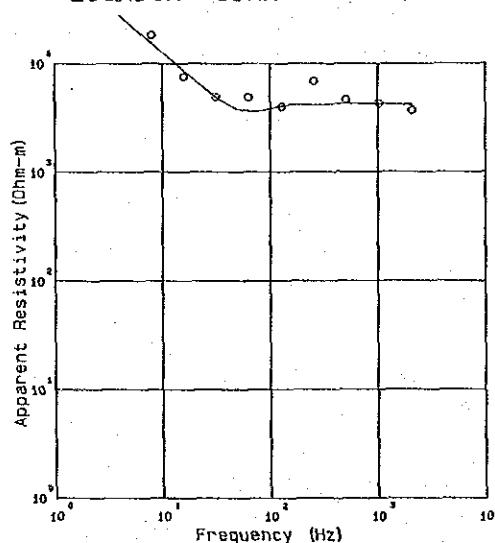
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	489	490	Rho (Ohm-m)	Thickness (a)
1024	128	440		
512	269	298	406.2	304.4
256	234	188	1.7	5.7
128	50.0	136		
64	75.9	125		
32	106	146		
16	260	141		
8	211	254		
4	591	445		

ECUADOR CSAMT No. 47



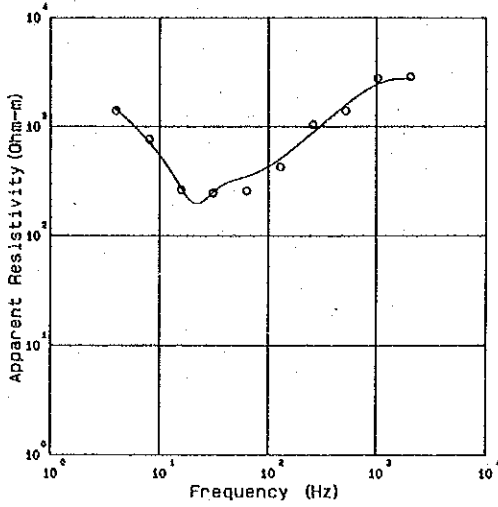
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	892	2190	Rho (Ohm-m)	Thickness (a)
1024	2370	2310		
512	2970	2540	2258.9	512.5
256	2880	2850	3974.6	5968.0
128	3140	2830		
64	3460	3560		
32	5170	5290		
16	8410	8970		
8	14300	13200		
4	20700	21200		

ECUADOR CSAMT No. 48



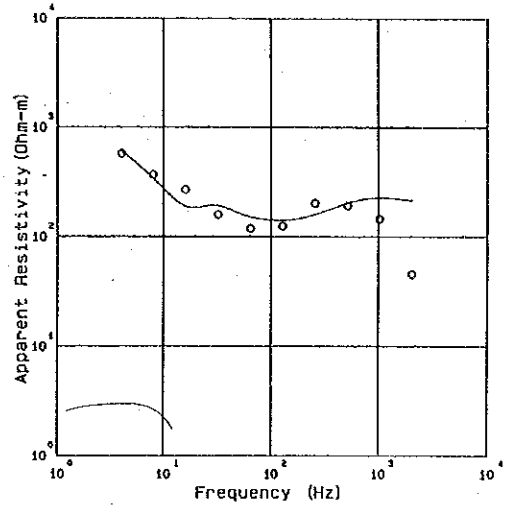
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	3700	4140	Rho (Ohm-m)	Thickness (a)
1024	4270	4200		
512	4640	4240	4141.8	1586.0
256	6880	4130	2930.8	4521.3
128	4000	4010		
64	4870	3600		
32	4920	4870		
16	7570	8530		
8	18200	15300		
4	40500	27700		

ECUADOR CSAMT No. 49



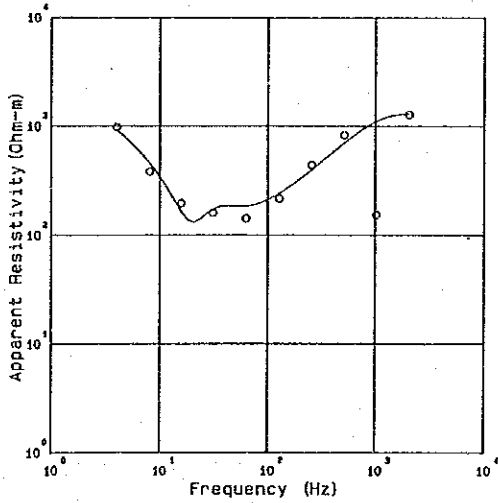
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	2880	2760	Rho (Ohm-a)	Thickness (a)
1024	2800	2450		
512	1400	1580	6.5	24.7
256	1040	883		
128	428	509	1815.5	Infinite
64	259	349		
32	247	251		
16	266	274		
8	771	725		
4	1410	1440		

ECUADOR CSAMT No. 50



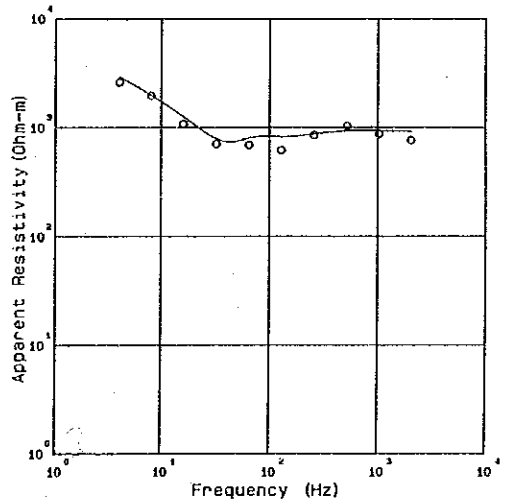
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	45.5	215	Rho (Ohm-a)	Thickness (a)
1024	146	228		
512	194	203	7.3	13.8
256	203	180		
128	125	140	710.8	Infinite
64	119	151		
32	160	193		
16	271	189		
8	371	342		
4	578	607		

ECUADOR CSAMT No. 51



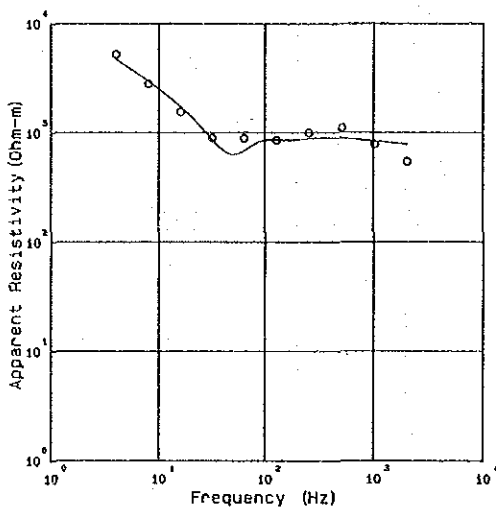
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1260	1310	Rho (Ohm-a)	Thickness (a)
1024	152	1110		
512	836	705	4.3	18.2
256	441	400		
128	216	242	1340.4	Infinite
64	141	184		
32	160	173		
16	195	163		
8	384	460		
4	987	938		

ECUADOR CSAMT No. 52



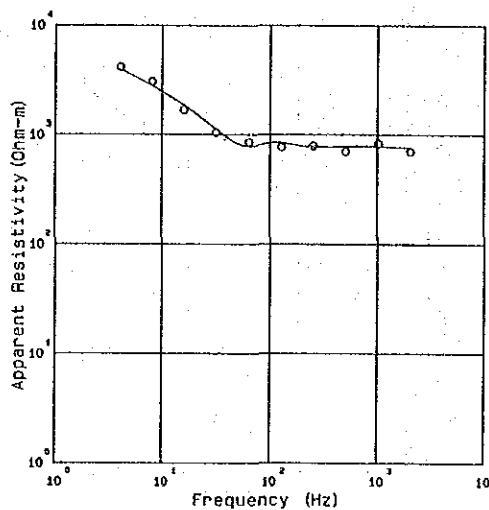
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	784	921	Rho (Ohm-a)	Thickness (a)
1024	673	937		
512	1030	933	646.5	523.4
256	853	872		
128	617	823	1798.5	Infinite
64	692	604		
32	705	786		
16	1080	1260		
8	1970	1990		
4	2820	2920		

ECUADOR CSAMT No. 53



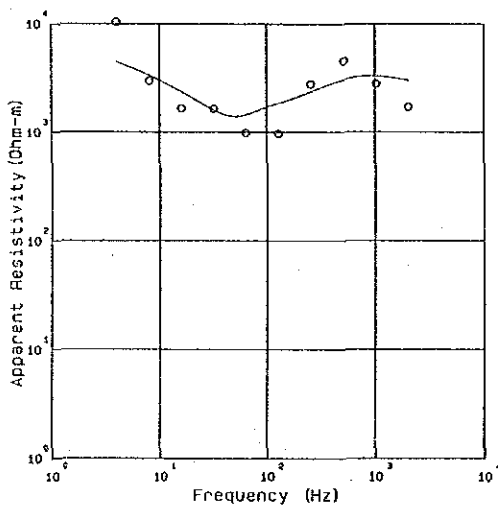
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	546	786	Rho (Ohm-m)	Thickness (m)
1024	784	837		
512	1110	891	1260.5	308.0
256	1000	885		
128	854	856	816.3	1058.0
64	893	684		
32	898	864	2937.9	Infinite
16	1560	1730		
8	2810	2970		
4	5240	4880		

ECUADOR CSAMT No. 54



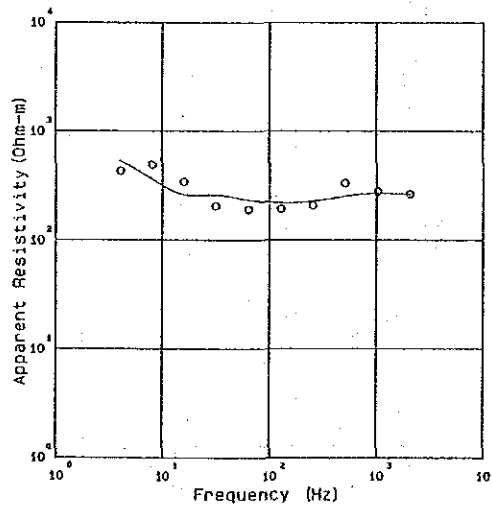
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	704	757	Rho (Ohm-m)	Thickness (m)
1024	835	786		
512	707	784	876.6	977.9
256	795	778		
128	774	844	2076.0	Infinite
64	859	780		
32	1050	1120		
16	1890	1870		
8	3050	2800		
4	4150	3940		

ECUADOR CSAMT No. 55



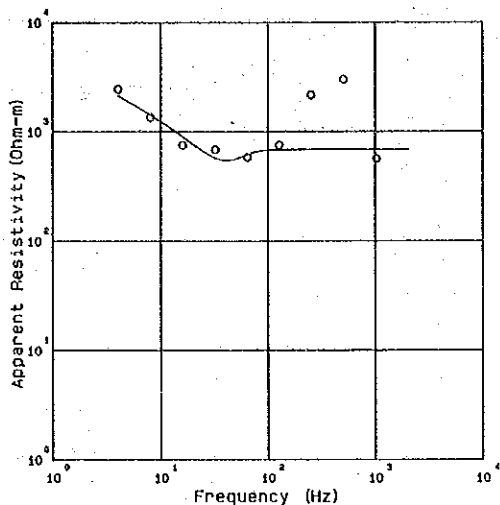
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1720	3010	Rho (Ohm-m)	Thickness (m)
1024	2610	3300		
512	4550	3040	54.5	35.4
256	2780	2350		
128	970	1840	2229.4	Infinite
64	986	1440		
32	1640	1690		
16	1660	2350		
8	2970	3340		
4	10300	4470		

ECUADOR CSAMT No. 56



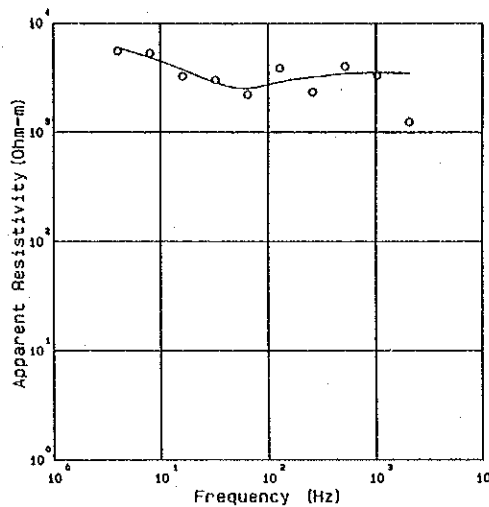
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	263	261	Rho (Ohm-m)	Thickness (m)
1024	278	288		
512	334	252	88.8	86.7
256	207	227		
128	193	219	458.9	Infinite
64	191	239		
32	205	260		
16	344	262		
8	493	363		
4	432	538		

ECUADOR CSAMT No. 57



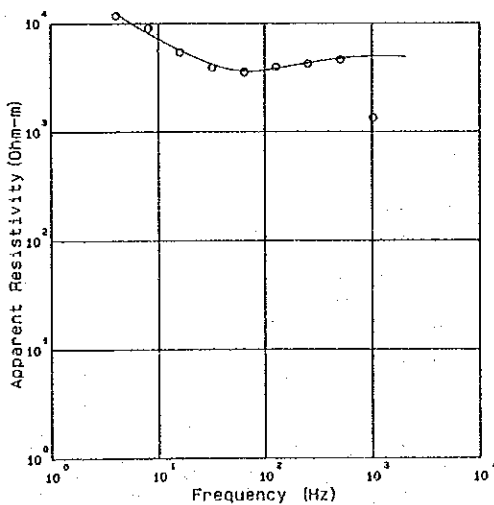
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	27200	688	rho (Ohm-m)	Thickness (a)
1024	567	688		
512	3010	688	688.1	2217.5
256	2160	689	1362.4	Infinite
128	755	695		
64	584	618		
32	689	575		
16	758	904		
8	1360	1430		
4	2470	2140		

ECUADOR CSAMT No. 58



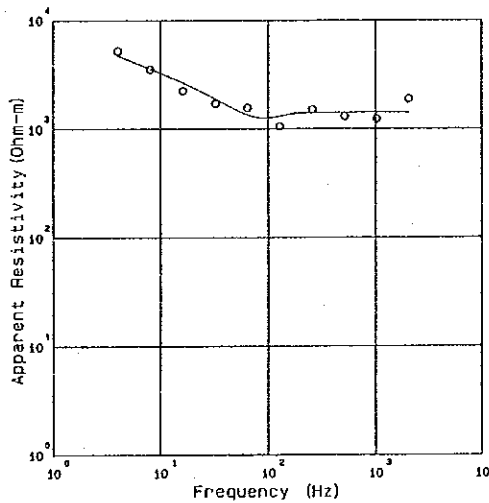
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1250	3470	rho (Ohm-m)	Thickness (a)
1024	3340	3530		
512	4030	3440	3401.5	1066.3
256	2330	3210	1360.0	3211.2
128	3870	2890		
64	2210	2520		
32	3010	2840		
16	3270	3760		
8	5300	4860		
4	5550	5940	2718.2	Infinite

ECUADOR CSAMT No. 101



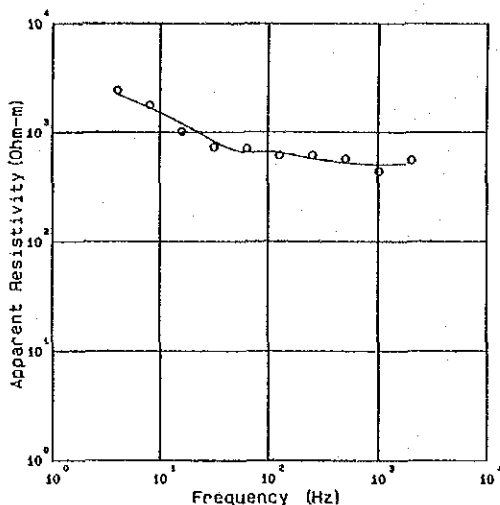
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	35600	4900	rho (Ohm-m)	Thickness (a)
1024	1340	4970		
512	4640	4760	4733.0	1160.9
256	4240	4300	2273.0	4025.6
128	3960	3840		
64	3540	3610		
32	3920	4200		
16	5430	5660		
8	9010	8140		
4	11700	12400	6906.3	Infinite

ECUADOR CSAMT No. 102



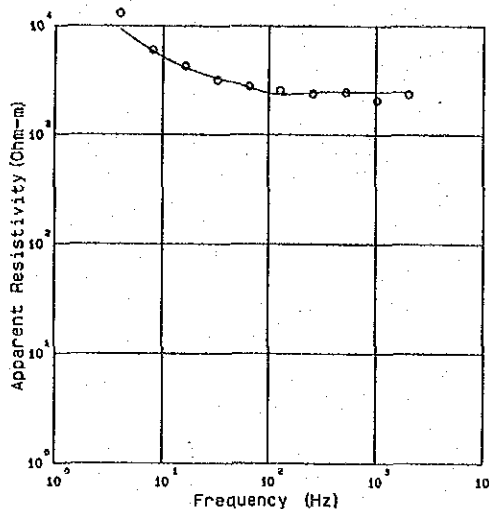
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1890	1420	rho (Ohm-m)	Thickness (a)
1024	1230	1420		
512	1310	1410	1422.0	1850.1
256	1510	1410	1910.6	Infinite
128	1050	1300		
64	1560	1340		
32	1720	1880		
16	2240	2670		
8	3540	3580		
4	5250	4750		

ECUADOR CSAMT No. 103



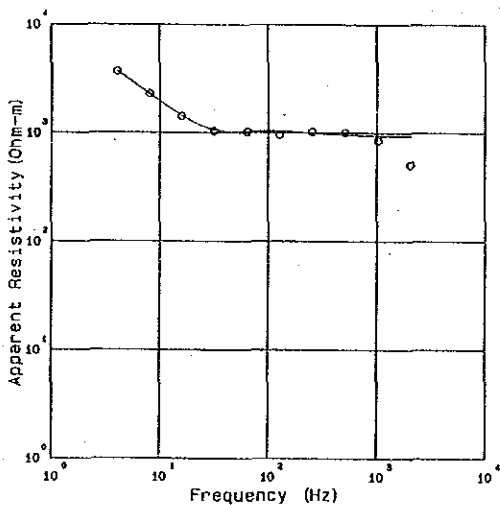
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	556	518	Rho (Ohm-m)	Thickness (a)
1024	441	506		
512	575	524	1110.5	Infinite
256	618	576		
128	620	606		
64	712	662		
32	738	834		
16	1020	1210		
8	1790	1690		
4	2440	2230		

ECUADOR CSAMT No. 104



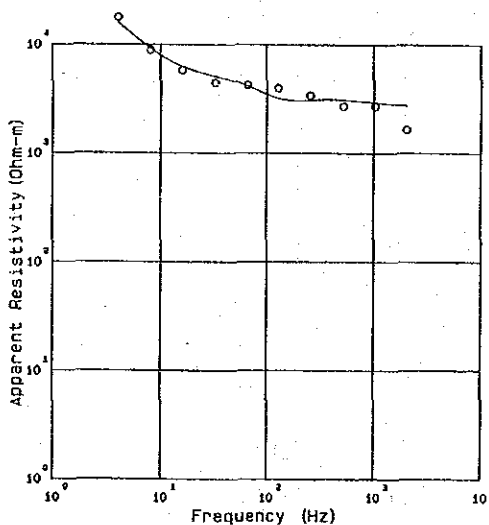
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	2370	2470	Rho (Ohm-m)	Thickness (a)
1024	2080	2470		
512	2480	2470	11053.7	Infinite
256	2390	2450		
128	2370	2330		
64	2750	2710		
32	3190	3300		
16	4280	4150		
8	6040	5870		
4	13000	9270		

ECUADOR CSAMT No. 105



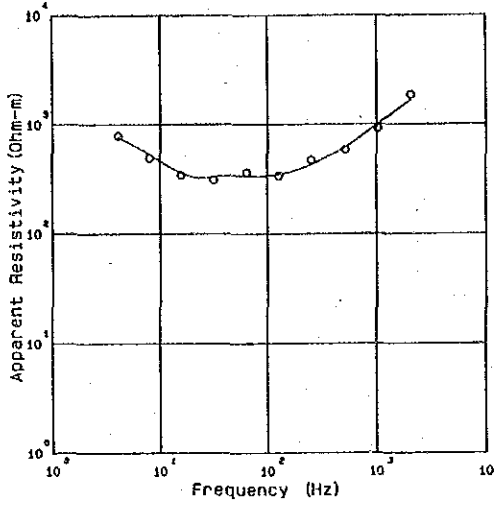
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	509	945	Rho (Ohm-m)	Thickness (a)
1024	859	941		
512	1010	962	1256.8	5041.6
256	1020	1000		
128	962	1040		
64	1030	1020		
32	1040	1050		
16	1430	1430		
8	2300	2290		
4	3700	3710		

ECUADOR CSAMT No. 106



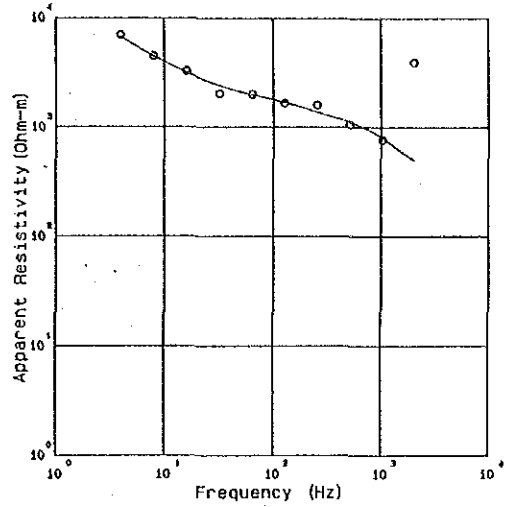
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1660	2730	Rho (Ohm-m)	Thickness (a)
1024	2710	2830		
512	2720	3100	3534.9	11420.7
256	3420	3070		
128	3990	3200		
64	4250	4160		
32	4460	5120		
16	5810	6260		
8	6970	9240		
4	17700	15800		

ECUADOR CSAMT No. 107



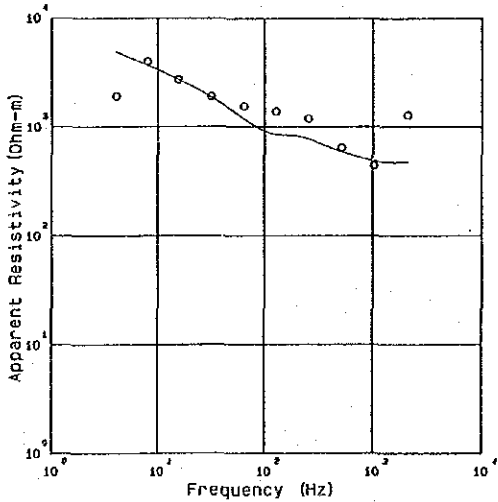
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1870	1680	Rho (Ohm-m)	Thickness (a)
1024	921	1010		
512	590	621	5049.0	268.2
256	471	430	125.6	247.3
128	338	348		
64	366	397	562.4	Infinite
32	311	332		
16	345	361		
8	484	532		
4	795	767		

ECUADOR CSAMT No. 108



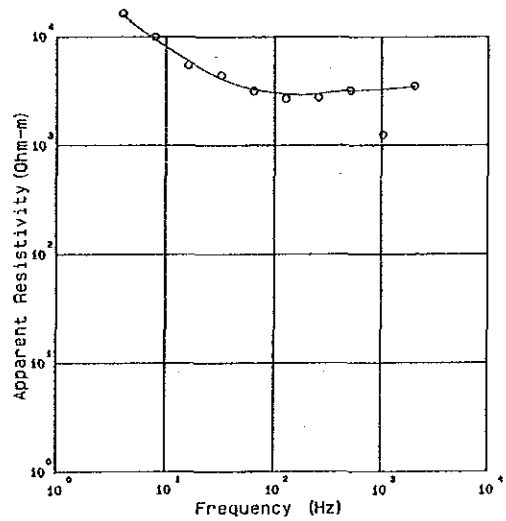
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	3970	501	Rho (Ohm-m)	Thickness (a)
1024	769	803		
512	1050	1120	522.4	222.3
256	1600	1380	28774.3	972.6
128	1670	1700		
64	2000	1990	1157.2	Infinite
32	2040	2410		
16	3270	3190		
8	4500	4490		
4	7010	6770		

ECUADOR CSAMT No. 109



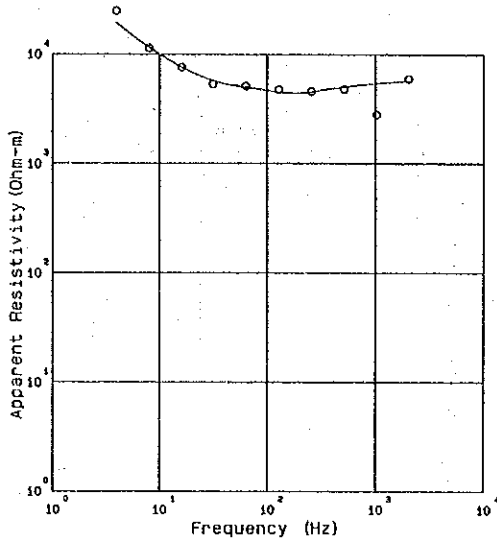
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1280	474	Rho (Ohm-m)	Thickness (a)
1024	442	499		
512	649	592	527.7	350.3
256	1190	777	3819.9	548.2
128	1390	853		
64	1650	1190	1981.6	Infinite
32	1910	1880		
16	2730	2730		
8	4010	3700		
4	1910	4910		

ECUADOR CSAMT No. 110



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	3550	3460	Rho (Ohm-m)	Thickness (a)
1024	1250	3280		
512	3210	3160	8990.1	81.2
256	2760	2980	2370.8	6384.1
128	2690	2950		
64	3170	3260	12411.7	Infinite
32	4430	4110		
16	5470	5930		
8	10000	9440		
4	16400	16800		

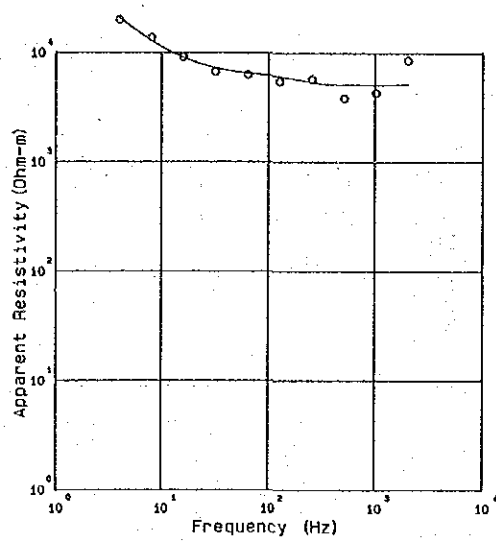
ECUADOR CSAMT No. 111



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)
2048	5970	5960
1024	2810	5390
512	4810	5010
256	4500	4500
128	4750	4480
64	5130	4980
32	5320	5720
16	7620	7620
8	11300	11500
4	25000	19400

MODEL	
ρ_{ho} (Ohm-m)	Thickness (a)
5520.8	788.4
3442.7	7168.0
18759.9	Infinite

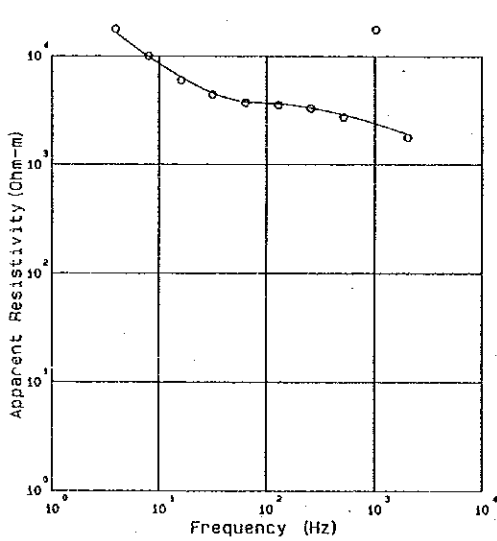
ECUADOR CSAMT No. 112



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)
2048	8590	5150
1024	4320	5070
512	3830	5100
256	5740	5370
128	5480	6040
64	6330	6510
32	6710	7260
16	9140	9060
8	13700	12900
4	20000	20900

MODEL	
ρ_{ho} (Ohm-m)	Thickness (a)
5152.7	2355.2
77548.9	634.7
1508.0	Infinite

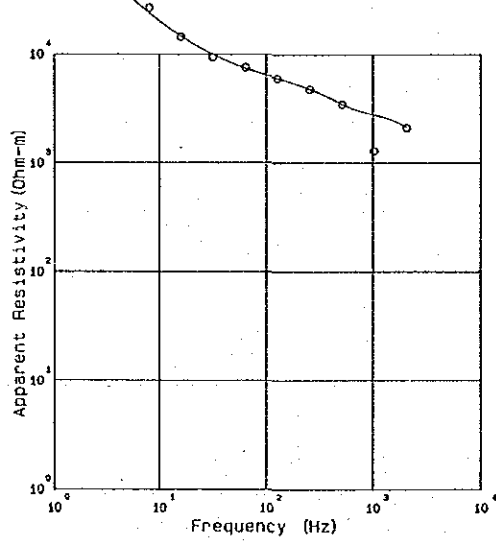
ECUADOR CSAMT No. 113



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)
2048	1780	1910
1024	17500	2370
512	2730	2980
256	3290	3930
128	3550	3650
64	3720	3800
32	4420	4580
16	5970	6440
8	10000	9910
4	17700	16500

MODEL	
ρ_{ho} (Ohm-m)	Thickness (a)
1573.7	138.8
833048.3	134.5
1505.8	Infinite

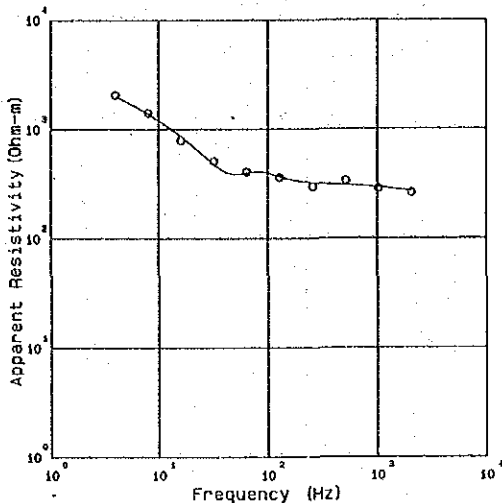
ECUADOR CSAMT No. 114



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)
2048	2110	2130
1024	1290	2770
512	3480	3480
256	4790	4810
128	6020	6030
64	7650	7440
32	9360	9940
16	14300	14600
8	26600	23800
4	40500	42700

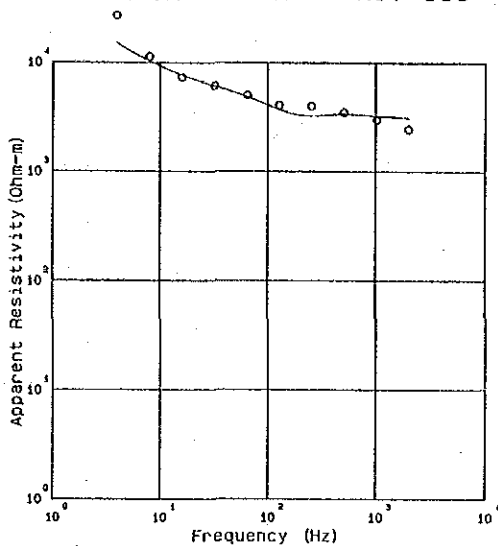
MODEL	
ρ_{ho} (Ohm-m)	Thickness (a)
1824.1	375.0
75144.1	1250.0
2224.4	Infinite

ECUADOR CSAMT No. 115



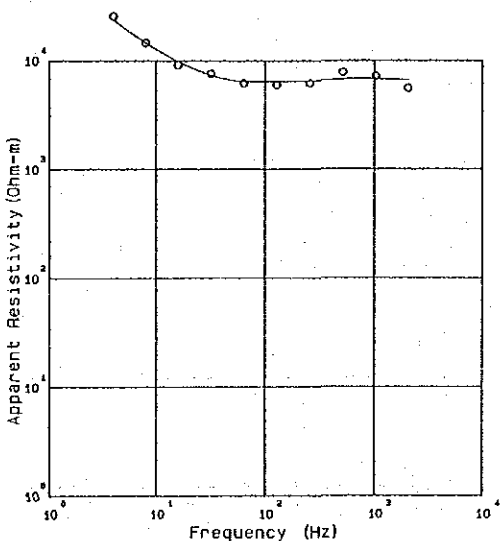
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	281	259	Rho (Ohm-m)	Thickness (m)
1024	287	294		
512	340	308	245.6	91.3
256	298	323	425.1	592.8
128	382	369		
64	408	400	1270.9	Infinite
32	512	480		
16	794	867		
8	1410	1390		
4	2050	2030		

ECUADOR CSAMT No. 116



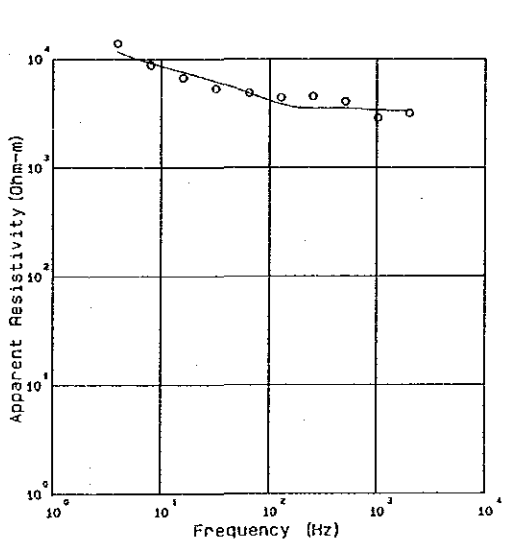
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	2460	3080	Rho (Ohm-m)	Thickness (m)
1024	3000	3240		
512	3520	3370	1542.7	44.0
256	4010	3240	3707.7	8782.7
128	4080	3700		
64	5010	4840	8948.8	Infinite
32	6120	6080		
16	7340	7700		
8	11300	10200		
4	27000	15100		

ECUADOR CSAMT No. 117



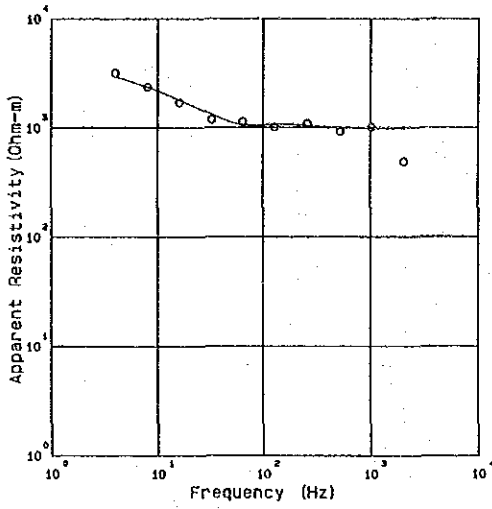
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	5600	6590	Rho (Ohm-m)	Thickness (m)
1024	7220	6770		
512	7890	6740	6517.4	1661.5
256	8210	6470	3512.7	5090.6
128	5980	6420		
64	8220	6410	14344.5	Infinite
32	7620	7350		
16	9140	9880		
8	14600	14600		
4	25600	23900		

ECUADOR CSAMT No. 118



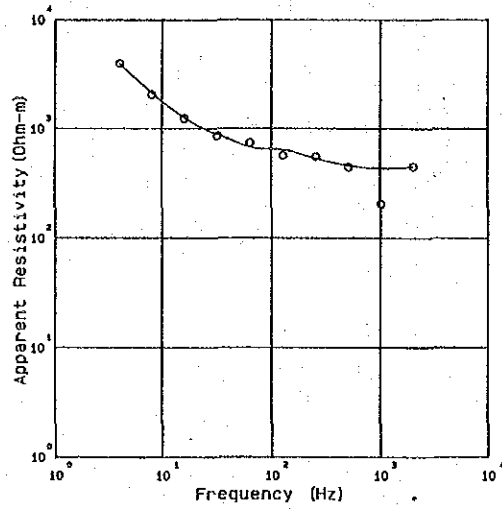
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	3180	3330	Rho (Ohm-m)	Thickness (m)
1024	2870	3380		
512	4050	3510	3411.5	1027.6
256	4540	3490	6322.2	439.3
128	4420	3840		
64	4900	4880	3465.3	Infinite
32	5360	6190		
16	6730	7610		
8	8870	9200		
4	14000	11700		

ECUADOR CSAMT No. 119



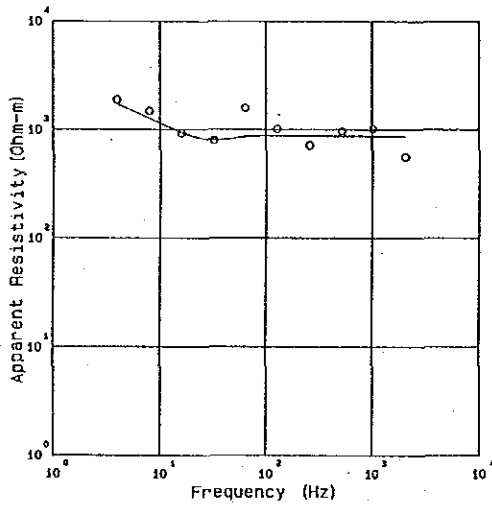
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-m)	Thickness (a)
2048	488	988	1001.0	518.6
1024	1020	983		
512	926	1000	1317.3	Infinite
256	1090	1040		
128	1000	1080		
64	1140	1060		
32	1190	1320		
16	1710	1810		
8	2380	2370		
4	3190	2960		

ECUADOR CSAMT No. 120



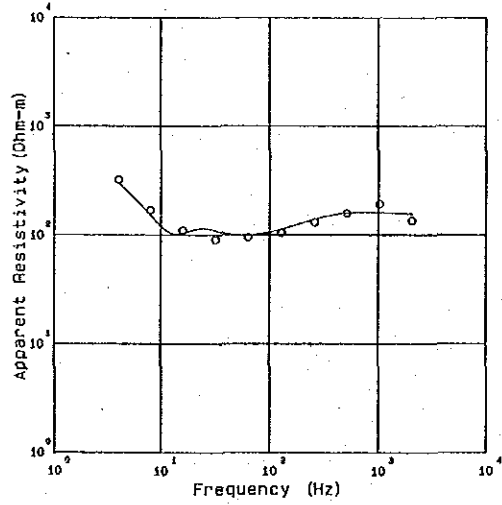
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-m)	Thickness (a)
2048	452	449	459.5	394.0
1024	205	434		
512	447	460	1452.1	7681.3
256	558	532		
128	570	544		
64	748	581		
32	862	869		
16	1250	1260		
8	2060	2150		
4	3980	3940		

ECUADOR CSAMT No. 201



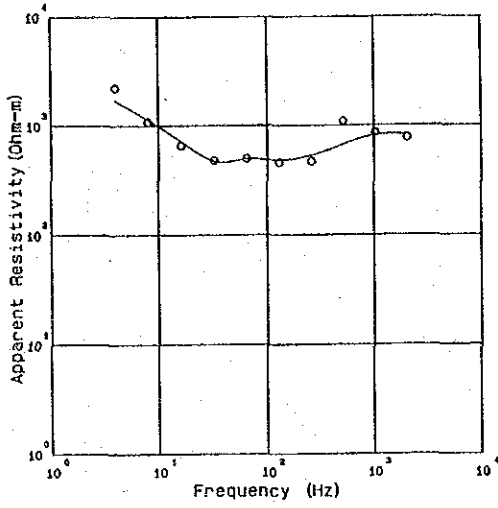
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-m)	Thickness (a)
2048	562	872	872.6	2296.8
1024	1020	672		
512	970	872	685.1	491.1
256	715	872		
128	1010	878		
64	1560	859		
32	793	801		
16	934	947		
8	1490	1270		
4	1890	1730		

ECUADOR CSAMT No. 202



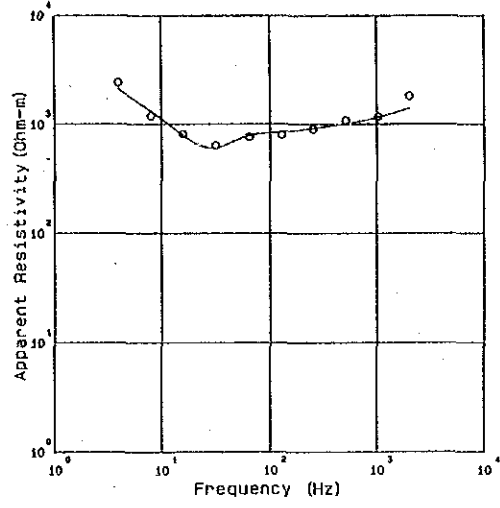
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-m)	Thickness (a)
2048	135	155	153.1	213.7
1024	193	160		
512	158	159	114.0	61.4
256	130	139		
128	104	112		
64	95.5	99.8		
32	90.8	109		
16	110	103		
8	169	152		
4	324	299		

ECUADOR CSAMT No. 203



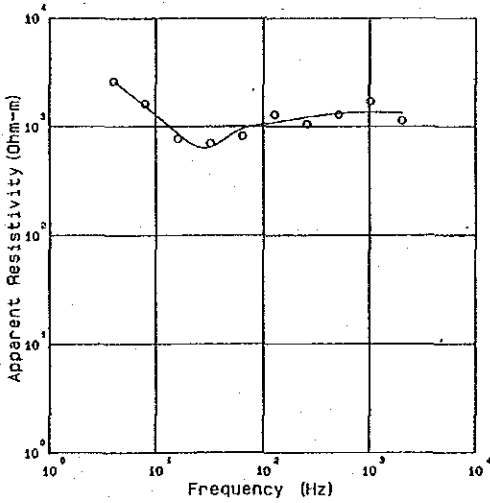
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	777	820	Rho (Ohm-m)	Thickness (a)
1024	862	818		
512	1090	671	755.4	506.1
256	470	534	46.3	41.7
128	458	481		
64	502	498	1088.4	Infinite
32	482	474		
16	560	722		
8	1090	1150		
4	2240	1710		

ECUADOR CSAMT No. 204



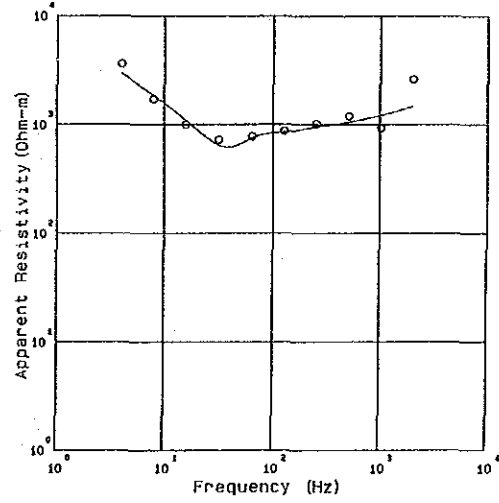
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1020	1400	Rho (Ohm-m)	Thickness (a)
1024	1170	1160		
512	1090	1010	7239.3	115.7
256	905	916	710.9	2605.4
128	802	849		
64	759	790	1617.5	Infinite
32	640	605		
16	816	795		
8	1190	1920		
4	2490	2100		

ECUADOR CSAMT No. 205



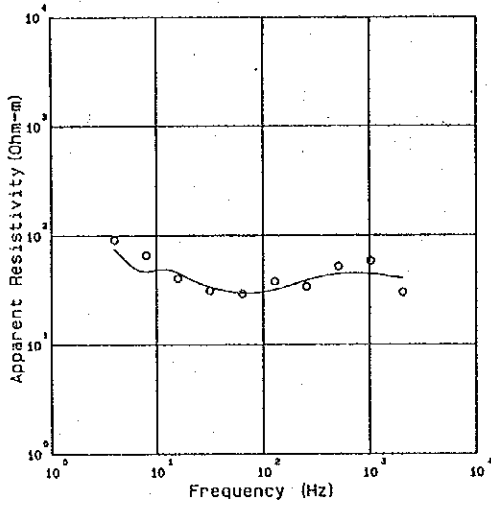
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1130	1330	Rho (Ohm-m)	Thickness (a)
1024	1720	1350		
512	1290	1320	1305.3	678.2
256	1050	1220	684.0	2227.7
128	1290	1090		
64	819	958	2349.1	Infinite
32	703	647		
16	776	863		
8	1830	1550		
4	2520	2640		

ECUADOR CSAMT No. 206



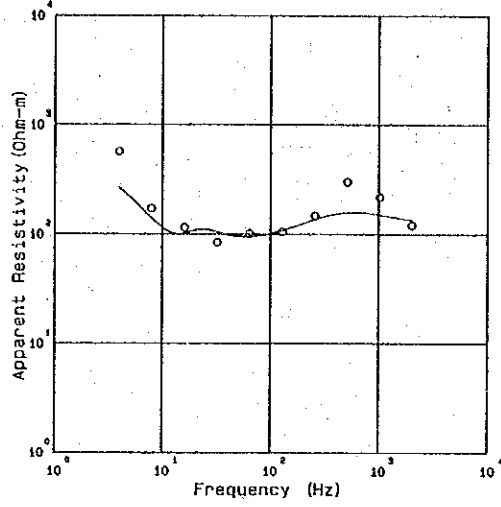
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	2820	1470	Rho (Ohm-m)	Thickness (a)
1024	931	1210		
512	1200	1050	4630.1	131.6
256	1020	958	736.0	1805.4
128	878	853		
64	779	753	1936.5	Infinite
32	728	643		
16	1000	1090		
8	1720	1850		
4	3620	2950		

ECUADOR CSAMT No. 207



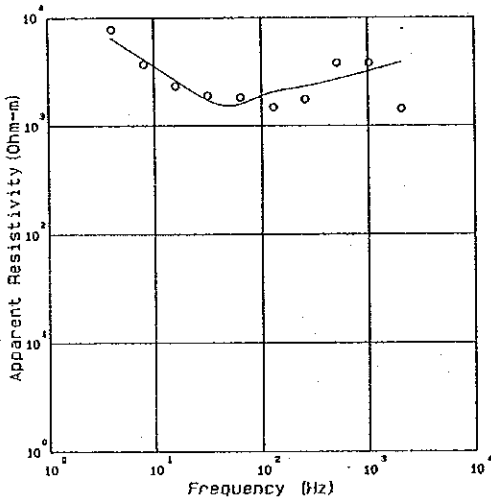
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-a)	Thickness (a)
2048	30.3	40.5	36.6	50.0
1024	59.0	44.7		
512	52.2	44.8	97.1	51.5
256	34.1	39.0		
128	38.1	32.0	22.5	198.8
64	29.3	29.8		
32	31.4	34.0	196.6	Infinite
16	40.6	45.7		
8	66.6	46.8		
4	91.9	75.3		

ECUADOR CSAMT No. 208



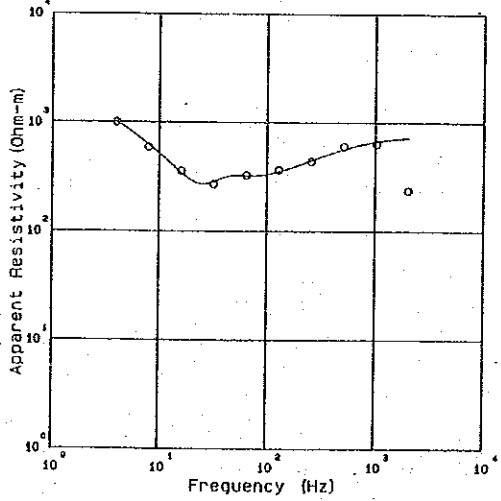
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-a)	Thickness (a)
2048	121	134	135.1	155.0
1024	219	151		
512	302	159	543.3	93.4
256	147	137		
128	105	108	49.3	234.9
64	101	95.5		
32	84.4	104	392.6	Infinite
16	115	102		
8	172	141		
4	572	268		

ECUADOR CSAMT No. 209



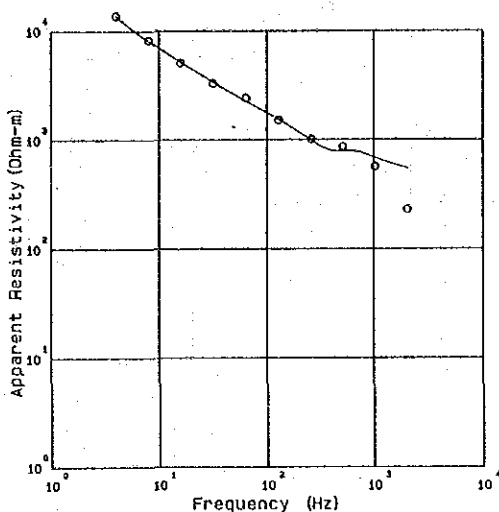
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-a)	Thickness (a)
2048	1440	3880	2756.0	75.4
1024	3620	3210		
512	3620	2690	6206.1	323.3
256	1760	2320		
128	1480	2050	1484.2	3192.6
64	1830	1890		
32	1910	1730	3355.6	Infinite
16	2340	2640		
8	3710	4120		
4	7780	6470		

ECUADOR CSAMT No. 210



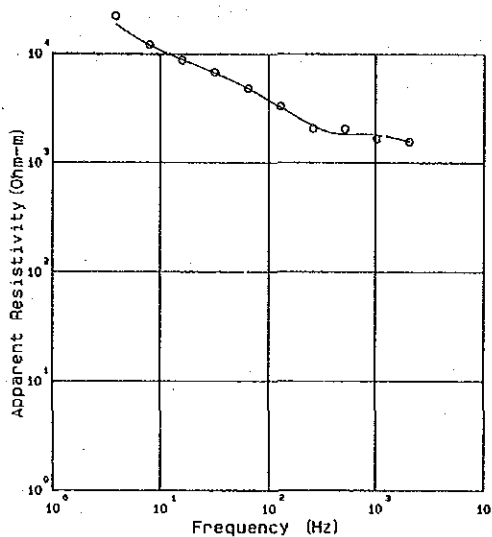
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
			ρ_{ho} (Ohm-a)	Thickness (a)
2048	237	721	670.0	320.0
1024	640	672		
512	610	572	211.9	589.6
256	441	450		
128	367	356	688.3	Infinite
64	327	324		
32	270	280		
16	359	345		
8	595	629		
4	1000	1030		

ECUADOR CSAMT No. 301



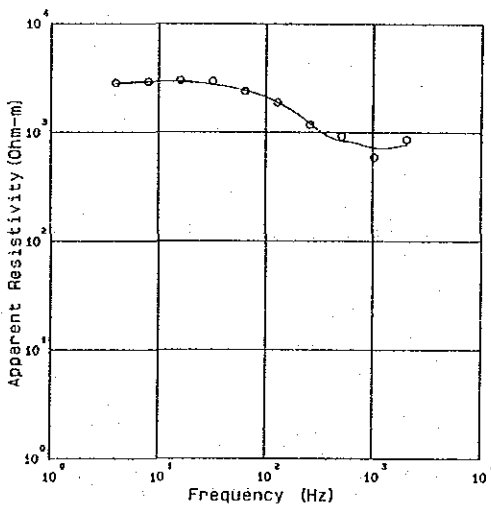
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	229	547	Rho (Ohm-m)	Thickness (m)
1024	573	689		
512	866	793	504.8	165.2
256	1010	992	2098.8	3781.0
128	1520	1540		
64	2420	2270	9169.5	Infinite
32	3320	3410		
16	5110	5190		
8	8300	8160		
4	13800	13800		

ECUADOR CSAMT No. 302



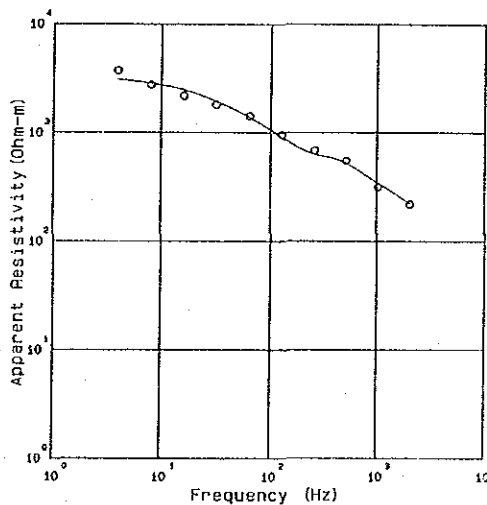
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1560	1560	Rho (Ohm-m)	Thickness (m)
1024	1670	1800		
512	2050	1820	870.7	80.1
256	2060	2170	2691.9	2482.1
128	3310	3240		
64	4830	4810	5257.0	Infinite
32	6800	6700		
16	8780	8570		
8	12100	12000		
4	22200	18400		

ECUADOR CSAMT No. 303



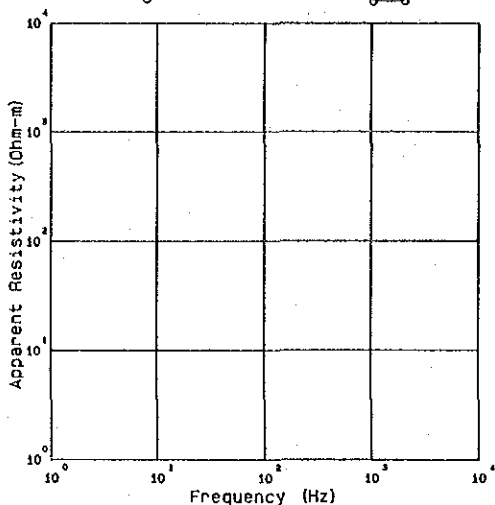
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	863	770	Rho (Ohm-m)	Thickness (m)
1024	692	722		
512	928	842	837.8	515.4
256	1180	1210	7733.0	1358.6
128	1890	1900		
64	2400	2440	1053.6	Infinite
32	2960	2770		
16	3010	2940		
8	2930	2940		
4	2840	2820		

ECUADOR CSAMT No. 304



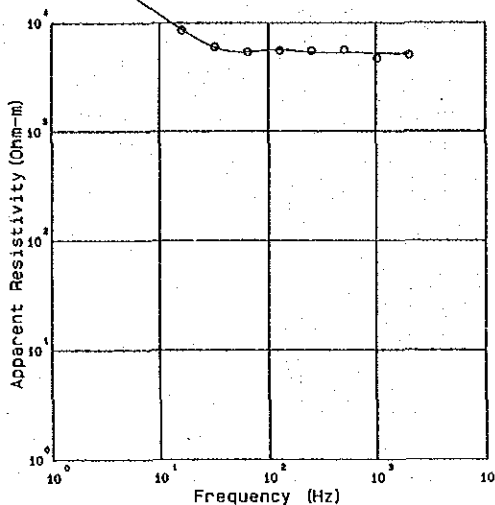
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	219	222	Rho (Ohm-m)	Thickness (m)
1024	316	345		
512	549	524	156.6	79.4
256	687	636	3556.8	475.5
128	961	907		
64	1430	1390	1409.6	Infinite
32	1810	1950		
16	2190	2480		
8	2760	2860		
4	3790	3100		

ECUADOR CSAMT No. 401



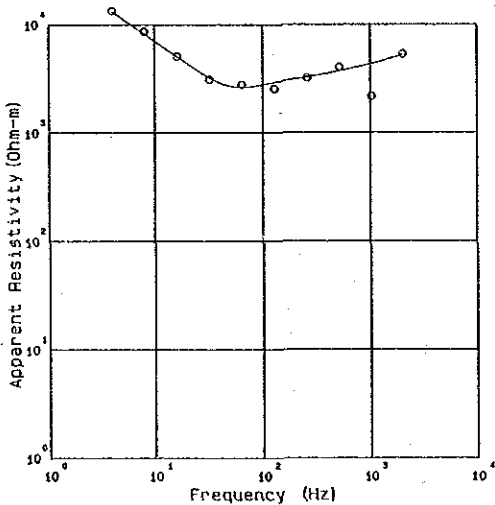
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	16000	15100	rho (Ohm-m)	Thickness (m)
1024	15800	15300		
512	22100	20400	16323.6	3431.3
256	20000	21900	5890.7	2343.0
128	21800	20900		
64	20700	22200	23063.9	Infinite
32	24700	25400		
16	33300	29900		
8	16600	34800		
4	12000	47600		

ECUADOR CSAMT No. 402



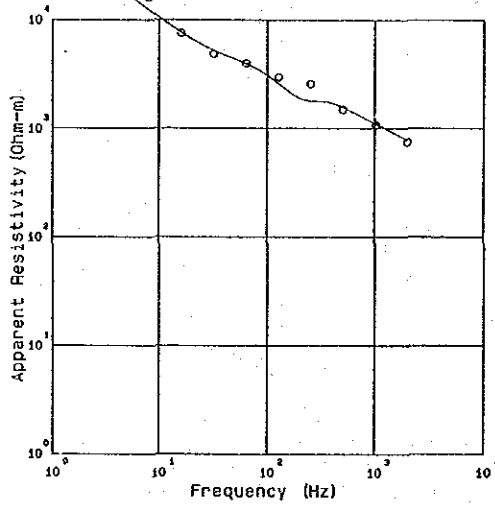
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	5050	5130	rho (Ohm-m)	Thickness (m)
1024	4600	5190		
512	5690	5270	5140.6	2066.1
256	5520	5280	3111.8	4819.9
128	5530	5600		
64	5370	5320	58025.2	Infinite
32	5970	5900		
16	8510	6520		
8	18500	13800		
4	32400	23300		

ECUADOR CSAMT No. 403



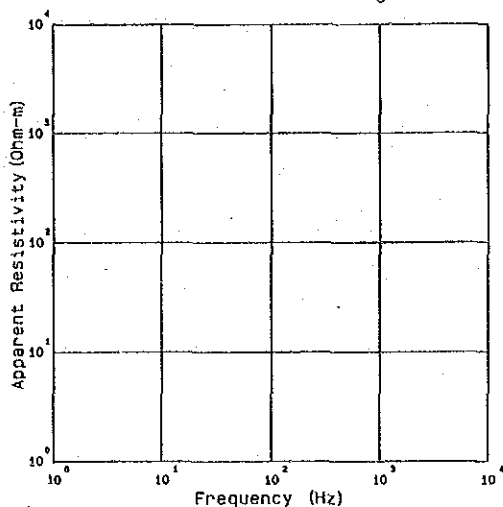
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	5350	5230	rho (Ohm-m)	Thickness (m)
1024	2170	4320		
512	4040	3710	7699.9	357.4
256	3210	3260	2341.6	5268.7
128	2568	2920		
64	2800	2610	15319.7	Infinite
32	3110	3220		
16	5120	5090		
8	8630	8240		
4	13400	13200		

ECUADOR CSAMT No. 404



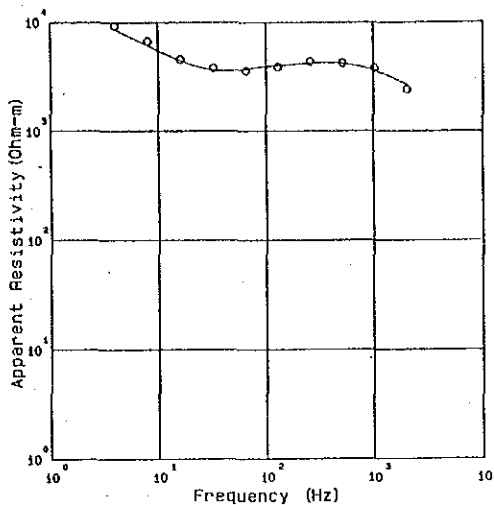
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	749	774	rho (Ohm-m)	Thickness (m)
1024	1080	1100		
512	1490	1970	464.4	107.6
256	2580	1790	4844.2	9826.4
128	2980	2590		
64	3980	3950	976238.3	Infinite
32	4870	5250		
16	7570	7680		
8	16200	12400		
4	21400	21100		

ECUADOR CSAMT No. 405



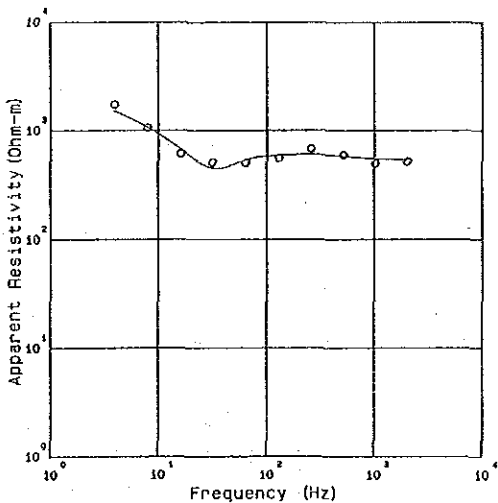
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	20700	18900	rho (Ohm-m)	Thickness (a)
1024	17200	18300		
512	24700	23200	19283.1	10042.4
256	28400	31700	19738.4	5043.0
128	34400	39100		
64	39300	41200	1744728.3	Infinite
32	39800	42900		
16	52100	50400		
8	84400	71200		
4	161000	120000		

ECUADOR CSAMT No. 408



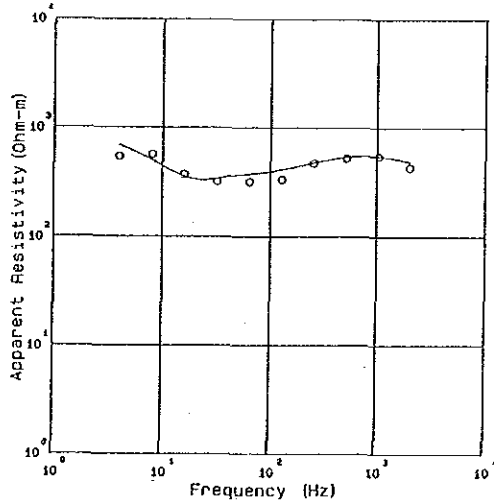
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	2420	2660	rho (Ohm-m)	Thickness (a)
1024	3810	3600		
512	4230	4200	1312.4	149.6
256	4360	4820	9758.7	1013.1
128	3990	4020		
64	3580	3710	2035.3	5005.5
32	3820	3620		
16	4550	4450		
8	6700	6130		
4	9330	8680	15803.4	Infinite

ECUADOR CSAMT No. 409



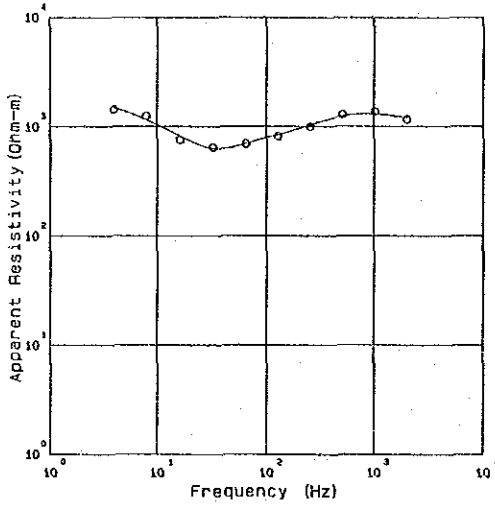
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	620	544	rho (Ohm-m)	Thickness (a)
1024	498	550		
512	598	581	556.5	480.7
256	684	606	6521.4	120.3
128	560	594		
64	506	541	453.5	1398.8
32	513	492		
16	615	680		
8	1080	1070		
4	1740	1510	1668.9	Infinite

ECUADOR CSAMT No. 410



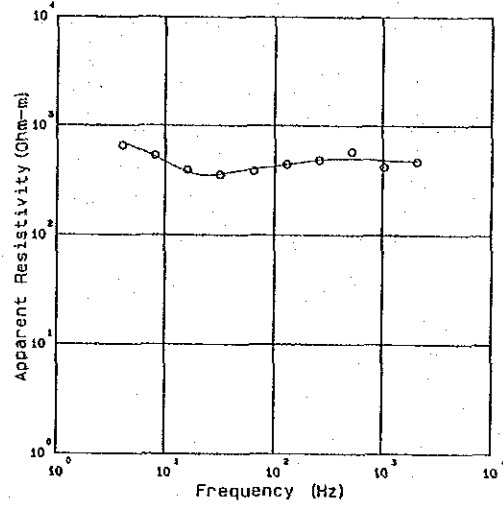
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	431	489	rho (Ohm-m)	Thickness (a)
1024	550	560		
512	529	545	424.8	128.9
256	474	478	779.3	273.1
128	334	413		
64	318	377	221.7	377.4
32	320	341		
16	372	358		
8	570	504		
4	545	695	388.1	Infinite

ECUADOR CSAMT No. 411



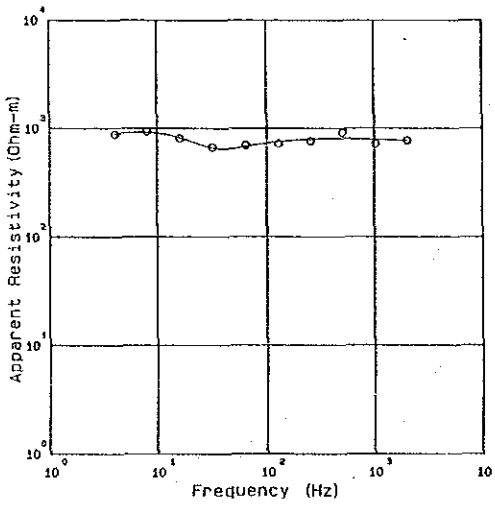
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	1160	1210	1186.4	769.0
1024	1380	1300		
512	1290	1250	158.5	138.6
256	1000	1040		
128	816	842	634.1	Infinite
64	695	703		
32	647	630		
16	758	828		
8	1250	1160		
4	1440	1490		

ECUADOR CSAMT No. 412



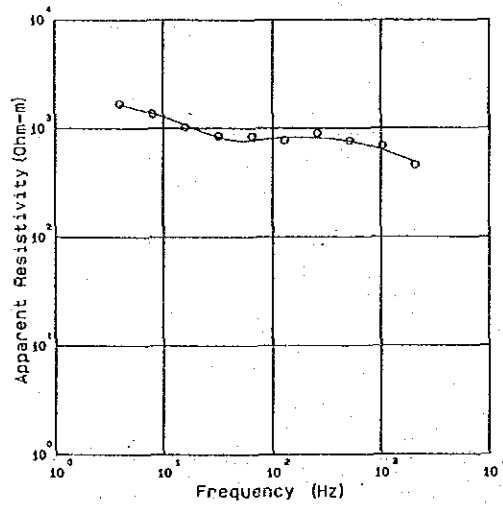
Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	469	477	478.7	730.6
1024	420	485		
512	583	503	79.7	57.8
256	485	487		
128	443	441	378.5	Infinite
64	385	403		
32	356	359		
16	395	379		
8	537	524		
4	660	708		

ECUADOR CSAMT No. 413



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	775	778	779.9	790.5
1024	723	789		
512	920	808	471.0	2307.6
256	765	797		
128	725	754	127.2	Infinite
64	702	681		
32	673	665		
16	814	826		
8	941	929		
4	885	890		

ECUADOR CSAMT No. 414



Freq. (Hz)	Obs. (Ohm-m)	Cal. (Ohm-m)	MODEL	
2048	459	485	363.3	115.7
1024	692	634		
512	787	760	1972.2	380.1
256	903	818		
128	776	823	702.1	Infinite
64	849	772		
32	856	833		
16	1020	1080		
8	1370	1390		
4	1690	1640		

Table A-1 Microscopic Observation (Thin Section)

No.	Sample No.	Location		Geological Unit	Rock Name	Texture	Minerals																	
		Coordinates					Alteration minerals																	
		E	N				Quartz	Forash feldspar	Plagioclase	Biotite	Hornblende	Pyroxene	Apatite	Allanite	Sphene	Quartz	Albite	Biotite (Fine-grained)	Muscovite	Actinolite	Epidote	Chlorite	Calcite	Leucoxene
1	A1011	707.97	9808.01	Di	bt quartz dio.	holocrystalline granular	•	•	•	•														
2	A1019	707.95	9807.74	Gd	bt granodio.	ditto	•	•	•	•														
3	A1131	707.56	9807.83	Gd	bt-hb quartz dio.	ditto	•	•	•	•														
4	B1033	706.98	9807.72	Gd	bt-hb quartz dio.	ditto	•	•	•	•														
5	C1016	708.63	9810.47	Tf (D-Mem.)	dacitic lap. tuff	clastic	•	•	•	•				•										
6	C1031	709.54	9810.11	Qan-1 (B-Mem.)	por. dacite	porphyritic	•	•	•	chl epi				•										Py
7	E1003	703.46	9806.99	An-1 (A-Mem.)	mafic hornfels	granoblastic (hornfelsic)	•	•	•	•														
8	B1092	705.05	9844.86	Gd	hb-bt granodio.	holocrystalline granular	•	•	•	•														
9	B1093	704.04	9844.73	An	altered hornfels	porphyritic	•	•	•	•				•										Py
10	B1109	706.17	9845.14	Gd	bt grano dio.	holocrystalline granular	•	•	•	•														
11	C1079	690.97	9825.26	Qd	bt-hb quartz dio.	ditto	•	•	•	•				•										
12	D1062	688.54	9826.03	Di	ditto	ditto	•	•	•	•				•										
13	B1149	703.59	9816.55	Qd	hb-bt quartz dio.	ditto	•	•	•	•				•										Py
14	B1154	703.09	9815.75	Qp	quartz por.	porphyritic	•	•	•	chl epi														
15	B1166	703.68	9816.01	Qd	bt-hb quartz dio.	holocrystalline granular	•	•	•	•														
16	B1071	708.14	9798.66	Gd	hb quartz dio	ditto	•	•	•	chl epi				•										
17	B1078	707.34	9801.28	Di	hb dio.	ditto	•	•	•	chl epi														
18	B1086	717.71	9775.81	Ba-1	altered basaltic andesite	porphyritic		•	•					•										
19	G1027	715.43	9776.16	Ba-2	altered basalt	porphyritic		•	•					•										

• abundant ○ common ● a little * rare

Table A-2 Microscopic Observation (Polished Section)

No.	Sample No. and Hole No.	Location and Depth		Occurrence	Minerals										
					Chalcopyrite	Bornite	Molybdenite	Sphalerite	Pyrite	Magnetite	Hematite	Pyrrhotite	Gangue minerals	Pyrite(secondary)	
1	A1011	Balza-pamba	707.97	9808.01	dissemination			⊙	
2	A1021	do.	707.95	9807.74	veinlet and dissemination	.				●	.	.		⊙	
3	A1124	do.	707.38	9805.98	dissemination	●				.	.	.		⊙	
4	E1002	do.	707.57	9806.04	veinlets	.	.							⊙	
5	A1113	Chaso Juan	706.43	9844.18	dissemination	●				.				⊙	
6	B1108	do.	707.07	9844.73	Quartz veinlet	.		●						⊙	Q
7	B1142	Telimbela	703.36	9816.23	veinlets and dissemination	.				●	●			⊙	
8	E1056	do.	702.92	9815.23	veinlets and dissemination	.		●		●	●	●		⊙	
9	A1077	Las Guardias	707.33	9799.72	dissemination	●				●	.	.		⊙	
10	MJE-1	53.20m (A)		veinlets and dissemination	●	.		.	●	⊙	
11	"	" (B)		dissemination	●				●	.	.			⊙	
12	"	53.30m		veinlets and dissemination	●			.	●	.		.		⊙	
13	"	92.60m		veinlets and dissemination	●		.	.	⊙	.		○	⊙	.	
14	MJE-2	21.70m		dissemination	●				●	●	.			⊙	
15	"	91.60m		veinlets and dissemination	.		●		⊙	●	.			⊙	
16	"	177.55m		veinlets and dissemination	●			.	⊙	.				○	
17	MJE-3	203m		veinlets and dissemination	●				⊙	.	.	.		○	
18	"	229.20m		veinlets and dissemination	●			.	○				○	○	.
19	"	235.50m		veinlets and dissemination	●				●	.	.		○	⊙	.

Remarks ⊙ abundant ○ common ● little . rare

Table A-3 Assay Results of Ore Samples(Geological Survey and Drill Core)(1)~(3)

(1)

No.	Sample No.	Area	Location		Description	Assay Results							
			Coordinates			(g/t)	(g/t)	(%)	(%)	(%)	(%)	(%)	
			E	N		Au	Ag	Cu	Pb	Zn	Mo	Wo	
1	A1004	Balzapamba	Q. Esperanza		Mo-Py-Q-Chl v.	Tr	Tr	0.01	0.00	0.01	0.06	0.00	
2	A1008		708.05	9807.90	in altered gr. dio.	(D)	Tr	Tr	0.00	0.00	0.00	0.03	0.00
3	A1011		Q. Esperanza		Py-Mo-chl-Q v.	(D)	Tr	Tr	0.03	0.00	0.07	0.00	0.00
4	A1019		707.97	9808.01	Cp-Py diss. in second. bt rich melano. dio.	(B)	Tr	Tr	0.03	0.00	0.04	0.00	0.00
5	A1024		Q. Teresa		Cp-Py-Mo diss. in second bt rich gr. dio.	(D)	Tr	Tr	0.13	0.00	0.01	0.00	0.00
6	A1035		707.93	9807.76	Cp-Mo-Py-Q vlets in trachande dyke	(A)	0.2	2.0	0.66	0.00	0.00	0.01	0.00
7	A1037		Q. Teresa		Cp-Py-Q v. (w:2m)	(A)	0.1	7.7	0.43	0.00	0.00	0.42	0.00
8	A1045		707.83	9807.98	Mo-Py-Q v.	(A)	Tr	Tr	0.01	0.00	0.01	0.00	0.00
9	A1062		Q. Osohuayco		ande. hornfels, Cp-Py diss.		Tr	Tr	0.01	0.00	0.01	0.00	0.00
10	A1105		709.53	9806.63	hornfels, Cp-Py diss.		Tr	Tr	0.01	0.00	0.01	0.00	0.00
11	A1106		Juana de Oro		Py-Cp-chl-Q v. and Py-Mo diss. in gr. dio.	(A)	Tr	Tr	0.11	0.00	0.01	0.00	0.00
12	A1107		704.61	9807.64	Cp-Py diss in gr. dio.	(A)	Tr	Tr	0.09	0.00	0.00	0.00	0.00
13	A1124		Q. Esperanza		Cp-Py diss in melano. dio.	(A)	Tr	Tr	0.17	0.00	0.00	0.00	0.00
14	A1128		707.92	9808.09	Py-Cp diss in gr. dio.	(A)	Tr	Tr	0.08	0.00	0.00	0.01	0.00
15	B1015		Osohuayco		Cp-Py diss and film in gnt-Q v.		Tr	Tr	0.02	0.00	0.01	0.00	0.00
16	B1016		707.72	9805.33	Py diss. zone (w:0.80m)		Tr	Tr	0.08	0.00	0.00	0.00	-
17	B1017		El Cristal		ditto (w:1.80m)		0.1	2.1	0.16	0.00	0.03	0.00	-
18	B1019		703.74	9805.34	Py. rich zone (w:1.80m)		Tr	Tr	0.11	0.00	0.00	0.00	0.00
19	B1021		El Cristal		limo. rich zone (w:0.70m)		Tr	Tr	0.05	0.00	0.00	0.00	0.00
20	C1008		703.74	9805.34	Py diss zone (w:2.70m)		Tr	Tr	0.05	0.00	0.01	0.00	-
21	C1010		703.74	9805.34	limo-Py v. in argi. zone		0.1	1.1	0.11	0.00	0.03	0.00	-
22	C1025		703.74	9805.34	Cp-Cc diss in gnt-Q v.		0.4	27.8	2.60	0.00	0.10	0.00	0.00
23	E1002		Q. Las Palmas		ditto		Tr	Tr	0.16	0.00	0.08	0.00	0.00
24	E1013		707.57	9806.04									
25	A1113	Chaso Juan	Mulidiahuan		Cp diss. in gr. dio.	(S)	0.2	1.8	0.44	0.00	0.00	0.00	0.00
26	A1115		706.43	9844.18	Cp diss. in gr. dio.	(S)	Tr	2.9	0.50	0.00	0.04	0.00	0.00
27	A1116		Mulidiahuan		Cp-Mo-chl Q v.	(S)	0.1	7.6	1.46	0.00	0.03	0.02	0.00
28	A1118		706.46	9844.18	Cp-limo. v. (w:0.10m)	(S)	1.5	160.9	9.03	0.00	0.03	0.01	0.00
29	B1101		705.94	9844.20	bt gr. dio., Cp-Py diss.	(E)	0.1	1.7	0.26	0.00	0.00	0.00	0.00
30	B1108		E. Araloma		bt-hb gr. dio., Cp-Mo diss.	(E)	Tr	1.2	0.24	0.00	0.01	0.01	0.00
31	C1062		707.07	9844.73	bt-hb gr. dio, Py-Cp-Q vlet, Py-Cp diss.	(N)	Tr	1.3	0.10	0.00	0.00	0.00	0.00
32	C1063		705.32	9845.64	bt-hb gr. dio, Cp-Py diss.	(N)	Tr	Tr	0.02	0.00	0.00	0.00	0.00
33	C1072		706.54	9844.93	bt-hb gr. dio, Cp-Py vlet, diss.	(E)	Tr	Tr	0.13	0.00	0.00	0.00	0.00
34	E1024		Río San Pablo		limo-goe. gossan		Tr	1.3	0.03	0.00	0.00	0.02	-
			705.43	9847.17									

No.	Sample No.	Area	Location		Description	Assay Results						
			Coordinates			(g/t)	(g/t)	(%)	(%)	(%)	(%)	(%)
			E	N		Au	Ag	Cu	Pb	Zn	Mo	W
35	B1110	La Industria	688.83	9824.58	Hm-Goe-limo-Qtz gossan	Tr	0.8	0.03	0.00	0.00	0.01	—
36	B1111		688.57	9824.68	ditto	Tr	Tr	0.02	0.00	0.00	0.01	—
37	B1112		688.39	9824.70	tourmaline-Q v.	0.3	16.3	0.00	0.00	0.00	0.00	0.00
38	B1114		688.59	9824.92	ditto	Tr	Tr	0.01	0.00	0.02	0.00	0.00
39	B1116	E. San Antonio	690.51	9827.02	hb qtz-dio. Py-Cp diss.	Tr	Tr	0.05	0.00	0.01	0.00	—
40	E1030		689.45	9827.29	limo-Q v. in qtz-dio.	Tr	Tr	0.01	0.00	0.00	0.00	—
41	D1071	Tres Hermans	700.03	9825.77	ba. ande, Py-Cp film, diss.	0.1	4.6	0.03	0.00	0.00	0.00	—
42	B1140	Telimbela	703.44	9816.13	hb-bt qtz-dio, Cp-Py diss. (I)	Tr	Tr	0.04	0.00	0.05	0.00	—
43	B1142		703.36	9816.23	qtz-dio., very strongly Cp-Py diss. (I)	Tr	Tr	0.37	0.00	0.01	0.00	0.00
44	B1145		703.36	9816.46	melano. dio., Py-Cp stringer and diss. (I)	Tr	Tr	1.60	0.00	0.02	0.04	0.00
45	B1149		703.59	9816.54	hb-bt gr. dio., Cp-Py diss. and film (I)	Tr	Tr	0.09	0.00	0.01	0.00	0.00
46	B1151		703.59	9816.38	hb qtz dio., Cp-Py diss., second, bt (I)	Tr	Tr	0.05	0.00	0.00	0.00	0.00
47	B1159		703.63	9815.71	hb-bt gr. dio. Py diss. and film (II)	Tr	Tr	0.01	0.00	0.01	0.00	0.00
48	E1045		704.00	9816.66	melano. dio., Cp-Py diss. (II)	Tr	Tr	0.04	0.00	0.17	0.00	—
49	E1049		703.94	9816.94	aplite dyke in bt hornfels, Py-Cp film (II)	Tr	Tr	0.01	0.00	0.01	0.00	—
50	E1051		703.92	9817.04	bt hornfels, Cp-Py-Q v., Cp-Py (II)	Tr	Tr	0.01	0.00	0.01	0.00	—
51	E1056		702.92	9815.23	qtz-dio, Py-Cp-Mo-Q ntwk (IV)	Tr	Tr	0.05	0.00	0.00	0.03	0.00
52	E1057	703.00	9815.16	hb qtz-dio. Py diss, Py-Q stringer/film (IV)	Tr	Tr	0.01	0.00	0.00	0.00	0.00	
53	A1086	San Miguel	715.80	9808.91	Cp-Py-Q network v.	Tr	Tr	0.01	0.00	0.06	0.00	—
54	A1100		716.51	9807.77	Hm-clay v. (w:0.20 ~ 0.50m)	Tr	Tr	0.00	0.00	0.00	0.00	—
55	A1103		717.35	9807.32	Hm-Q network	Tr	Tr	0.00	0.00	0.00	0.00	—
56	A1063	Las Guardias	705.84	9802.92	Py-Cp diss. in altered gr. dio. (N)	Tr	Tr	0.01	0.00	0.01	0.00	0.00
57	A1068		706.45	9803.05	Cp-Py diss in gr. dio. (N)	Tr	0.6	0.02	0.00	0.01	0.00	0.00
58	A1075		707.56	9799.63	Cp-Py diss in melano. dio. (S)	Tr	Tr	0.03	0.00	0.01	0.00	0.00
59	A1076		707.37	9799.73	Cp-Py-Mo diss in gr. dio. (S)	Tr	Tr	0.00	0.00	0.01	0.00	0.00
60	A1077		707.33	9799.72	Cp-Py diss in gr. dio. (S)	Tr	Tr	0.06	0.00	0.00	0.00	—
61	A1078		707.14	9799.93	ditto (S)	Tr	Tr	0.02	0.00	0.01	0.00	0.10
62	C1042		707.18	9802.00	melano. dio., Cp-Q v. and Py diss. (C)	Tr	Tr	0.01	0.00	0.00	0.00	0.00
63	C1043		707.24	9801.94	altered rock, Cp-Py-bt-Q lenze (C)	Tr	Tr	0.09	0.00	0.01	0.00	0.00
64	C1046		707.60	9801.74	sili. rock, Cp-Py diss, v let. (C)	Tr	Tr	0.01	0.00	0.01	0.00	0.00
65	A1122		Tambillo	713.02	9798.14	Py diss. in strongly sili. rock	0.2	3.9	0.09	0.01	0.01	0.00
66	C1090	722.43		9784.75	sil-chl rock, Cp-Py film, diss.	Tr	Tr	0.07	0.00	0.02	0.00	—
67	G1019	Tablas Pared	715.80	9776.59	basaltic hornfels, Cp-Py diss,	Tr	Tr	0.02	0.00	0.01	0.00	—
68	G1025		715.09	9776.01	Cp-Py-epi-Q ntwk ba. ande, Cp-Py film diss.	Tr	Tr	0.02	0.00	0.01	0.00	—
69	E1064	Batacon	722.79	9752.33	ba. ande, malachite	0.1	7.3	1.47	0.00	0.01	0.00	—
70	C1100		706.02	9742.36	sili. ande, Q-ntwk	Tr	Tr	0.01	0.00	0.03	0.00	—

No.	Hole No.	Depth (m)	Description	Assay Results						
				(g/l) Au	(g/t) Ag	(%) Cu	(%) Pb	(%) Zn	(%) Mo	(%) W
1	MJE-1	36.2 - 37.2	cp-py-chl-bi-Q ntwk in grdio	Tr	1.0	0.11	0.00	0.01	0.00	0.06
2		41 - 42	cp-py-mo-chl-bi-Q ntwk in grdio	Tr	Tr	0.05	0.00	0.00	0.01	0.04
3		47 - 48	ditto	Tr	Tr	0.06	0.00	0.01	0.01	0.05
4		51 - 52	cp-py-chl ntwk and diss in grdio	Tr	Tr	0.06	0.00	0.00	0.00	0.06
5		60 - 61	cp-py-Q ntwk in grdio	Tr	Tr	0.01	0.00	0.00	0.00	0.06
6		82 - 83	cp-py diss & film in grdio	Tr	Tr	0.06	0.00	0.04	0.00	0.09
7		118 - 119	cp-py diss in grdio	Tr	Tr	0.02	0.00	0.03	0.00	0.06
8		212 - 213	ditto	Tr	Tr	0.01	0.00	0.00	0.00	0.05
9		238.5 - 239.5	cp-py-chl lens & diss in grdio	Tr	Tr	0.02	0.00	0.00	0.00	0.05
10		263.5 - 264.6	ditto	Tr	Tr	0.04	0.00	0.00	0.01	0.07
11		274 - 275	cp-py-mo-chl-Q ntwk in grdio	Tr	Tr	0.07	0.00	0.00	0.03	0.04
12		284 - 285	cp-py-chl ntwk in grdio	Tr	Tr	0.04	0.00	0.04	0.02	0.06
13		292 - 293	cp-py-mo-chl-Q ntwk in grdio	Tr	Tr	0.05	0.00	0.00	0.01	0.05
14		304 - 305	cp-py-ep-chl-bi-Q ntwk in grdio	Tr	Tr	0.17	0.00	0.00	0.01	0.06
15	MJE-2	19.5 - 20.5	cp-py-mo-bi-chl-Q ntwk in arg rk	Tr	1.6	0.05	0.00	0.05	0.31	0.05
16		24.5 - 25.5	cp-py-bi-chl-Q ntwk in arg rk	Tr	Tr	0.03	0.00	0.00	0.05	0.07
17		91.5 - 92.5	cp-py-mo-chl-Q ntwk in grdio	Tr	0.5	0.13	0.00	0.00	0.0	0.03
18		137 - 138	cp-py-bi-chl-Q ntwk in grdio	Tr	Tr	0.06	0.00	0.00	0.00	0.06
19		141.5 - 142.5	ditto	Tr	Tr	0.03	0.00	0.00	0.01	0.08
20		169 - 170	cp-py-mo-chl-bi-Q ntwk in grdio	Tr	Tr	0.08	0.00	0.00	0.00	0.06
21		174 - 175	cp-py-chl-bi-Q ntwk in grdio	Tr	Tr	0.07	0.00	0.04	0.00	0.07
22		180 - 181	ditto	Tr	Tr	0.05	0.00	0.04	0.00	0.06
23		185 - 186	ditto	Tr	Tr	0.07	0.00	0.00	0.00	0.06
24		200 - 201	cp-py-ep-bi-chl ntwk in arg rk	Tr	Tr	0.21	0.00	0.01	0.00	0.04
25		260 - 261	cp-py diss in grdio	Tr	Tr	0.02	0.00	0.01	0.00	0.05
26		264.5 - 265.5	ditto	Tr	Tr	0.04	0.00	0.01	0.00	0.04
27		278 - 279	cp-py diss & film in grdio	Tr	Tr	0.03	0.00	0.01	0.00	0.05
28		284 - 285	ditto	Tr	Tr	0.02	0.00	0.01	0.00	0.06
29	MJE-3	30 - 31	cp-py-mo-chl-bi-Q ntwk in arg rk	Tr	1.0	0.08	0.00	0.01	0.05	0.00
30		36 - 37	ditto	Tr	Tr	0.07	0.00	0.00	0.04	0.00
31		42 - 43	ditto	Tr	Tr	0.04	0.00	0.00	0.19	0.00
32		52 - 53	cp-py-mo-chl-bi-Q ntwk in grdio	Tr	Tr	0.06	0.00	0.00	0.13	0.00
33		57 - 58	cp-py-chl-Q ntwk in grdio	Tr	Tr	0.07	0.00	0.04	0.00	0.00
34		62 - 63	ditto	Tr	Tr	0.07	0.00	0.00	0.00	0.00
35		210.5 - 211.5	cp-py-chl-bi-Q ntwk in tuff	Tr	Tr	0.14	0.00	0.01	0.00	0.00
36		229 - 230	cp-py-chl-ep-bi-Q ntwk in tuff	Tr	Tr	0.08	0.00	0.00	0.00	0.00
37		235.5 - 236.5	cp-py-po-chl-bi-Q ntwk in tuff	Tr	Tr	0.10	0.00	0.01	0.00	0.00
38		246.5 - 247.5	cp-py-chl-bi-Q ntwk in tuff	Tr	Tr	0.14	0.00	0.00	0.00	0.00
39		251.5 - 252.5	cp-py-chl-Q ntwk in tuff	Tr	Tr	0.36	0.00	0.00	0.00	0.00
40		269.5 - 270.5	cp-py diss in melano dio	Tr	Tr	0.09	0.00	0.00	0.00	0.00
41		276.5 - 277.5	cp-py-chl-bi-Q ntwk in altrk	Tr	Tr	0.16	0.00	0.00	0.00	0.00
42		290 - 291	cp-py diss in grdio	Tr	Tr	0.09	0.00	0.00	0.00	0.00

Table A-4 Results of X-ray Diffractive Analysis (1)-(2)

(1)

No.	Sample No.	Coordinates		Rock name	Gd	quartz	plagioclase	K-feldspar	hornblende	actinolite	clino pyroxene	biotite	sericite	chlorite	montmorillonite	calcite	laumontite	stilbite	kaolinite	halloysite	pyrite	chalcocopyrite	molybdenite	Remarks		
		X	Y																							
1	A1007 (D)	[Balzapamba]		granodiorite white argil/Py diss.	Gd	C	C					C				L	L									
2	A1011 (B)	707.97	9808.01	Cp-Py diss. in 2nd bt melano. dio	Di	A	A					A	R										R			
3	A1019 (D)	707.95	9807.74	Cp-Py-Mo diss. in 2nd bt gr. dio.	Gd	A	A					L				R										
4	A1020 (L)	707.95	9807.74	Cp-Py-Mo diss in white altered rock	Gd	L	A	C				L						R				R	R		editote (R)	
5	A1021 (D)	707.95	9807.78	Cp-Py-Mo-chl-qtz Vlots in altered rock	Gd	C	A	L				C	C	L		L		L	L			R	R	R		
6	A1044	709.22	9806.37	andesitic hornfels Cp-Py diss	An	A	A		L	L				R					R			R	L	(R)		
7	A1062	704.61	9807.64	hornfels Cp-Py diss	An	A	C					L		C		R						L	R			
8	A1109	708.71	9810.41	hemite clay	Tf	A							L								L					
9	A1124	707.38	9805.98	Py-Cp diss in coarse granodio.	Gd	A	C		R			L	L	L		R			L			L	R	R		
10	B1002	708.12	9807.80	bt hornfels	An		L		C			A		L												
11	B1022	703.74	9805.34	white clay zone	An	A			C																	
12	B1052	709.61	9811.57	qtz-andesite	Qan	A	A				L			C												
13	B1053	709.45	9811.52	brownish white clay	Qan	A								L	L				L							
14	C1004	708.22	9808.25	hb-bt granodio, second. bt	Gd	A	A		L			C	L			L							L			
15	C1009	708.18	9809.02	hb diorite, Py diss.	Di	A	A						C	L	L											
16	C1010	708.08	9809.57	silicified rock. Py-qtz ntwk/Py diss.	Tf	A	A						L	R									L			
17	C1013	707.96	9810.43	silicified rock (lap. t?) in clay-Py	Tf	A	C						L	L					L	L	L					
18	C1017	708.76	9810.54	white clay zone	Tf	A	C												L	L						
19	C1025	706.57	9808.55	Py-limo-sil hornfels in argi. zone	An	A										L							L			
20	C1032	709.25	9810.38	Py-argi. rock.	Qan	A	C							L	C		R					L	L			
21	A1115	[Chaso Juan]		Cp. diss. in coarse granodio.	Gd	A	A		R		L	C		L									L			
22	B1101	706.43	9844.18	medium bt granodio, Cp-Py diss	Gd	A	A	A				L	R	R									R			
23	B1104	706.74	9844.80	bt-hb granodio. chl.	Gd	A	A	C						L												
24	B1108	707.07	9844.73	bt-hb granodio. Cp-Mo diss	Gd	A	A					L		L									L	R		
25	C1066	705.10	9845.90	bt-hb granodio, Cp-Py-Mo diss/white clay	Gd	A	A					C	L					R	R			L	L	R		
26	C1073	706.73	9844.87	hb-by granodio, Py-Mo. diss/second. bt	Gd	A	A	C				C												R		
27	B1116	[La Industria]		hb-qtz dio. Py-Cp diss	Qd	A	A							L									L	R		epistilbite (L)
28	B1117	690.56	9827.01	hb qtz dio Py diss	Qd	A	A							L	L								L	L		
29	B1122	691.44	9826.43	qtz dio. silic-chl/Py film	Qd	A	A							L	L											
30	D1063	688.52	9826.05	qtz-dio silic-clay/Py diss	Qd	A								L						L	L	L				
31	B1141	[Telimbeta]		qtz dio/melano. dio Py-Cp diss	Di	A	C	L			R	L	L	L		R							L	L		
32	B1143	703.37	9816.33	hb qtz dio. Py-(Cp) diss	Qd	A	A							L	L		R						R	R		
33	B1145	703.36	9816.46	melano. dio. chl/Py-Cp stringer/Py-Cp diss	Di	A	A					L	L	L		L							L	L		
34	B1150	703.59	9816.48	hb qtz-dio, second bt/ chl/Cp-Py diss. film	Qd	A	A					L	L	L		R							L	L	R	
35	E1055	702.90	9815.25	hb qtz dio, chl-sil/Py-Cp film, Py diss	Qd	A	A							C		L							L	L	R	

No.	Sample No.	Coordinates		Rock name	Qd	quartz	plagioclase	K-feldspar	hornblende	actinolite	cline pyroxene	biotite	sericite	chlorite	montmorillonite	calcite	laumontite	stilbite	kaolinite	halloysite	pyrite	chalcopyrite	molybdenite	Remarks	
		X	Y																						
36	E1056	[Telimbela]	702.92	9815.23	qtz dio, sil-chl/ Py-Cp-Mo-qtz veinlet	A	A		R				R	C		R				R	R	L		R	
37	E1057		703.00	9815.16	hb qtz dio, sil-chl/ Py diss, Py-qtz stringer	A	L						L	L	L							L			
38	A1085	[San Miguel]	715.75	9808.91	dacitic pumice tuff	Da	A	C					L	L						L	L				
39	A1088		715.72	9809.02	Sili. rock with Py veinlet	Da	A						L	L						L	L	L			
40	A1092		716.27	9808.22	white arg. rock	Da	A														C				crystalite (C)
41	A1098		716.45	9807.88	white clay-Py diss	Da	A	C																	
42	A1099		716.45	9807.88	chl. rock	Da	A	A					R	L						L	L	L			
43	A1103		717.35	9807.32	hematite-qtz ntwk.	Da	A	L					L									L			hematite (L)
44	A1075	[Las Guardias]	707.56	9799.63	Cp-Py diss in melano. granodio.	Di	A	A		L		L	L			L						L	L		
45	A1076		707.37	9799.73	Cp-Py-Mo diss in Coarse granodio.	Gd	A	C		L				R						R		L	L	R	
46	B1079		707.27	9801.46	hornfels, sili/Py diss	An	A	A						L		R						L			
47	B1080		707.24	9801.51	ditto	An	A	A						R	L		R					L			
48	C1047		707.63	9801.68	Py-qtz-clay (f. clay)	Gd	A						L									L			
49	A1120	[Sicota]	712.71	9798.31	altered rock sili-clay	Gd	A													C	C				epistilbite (R)
50	C1090	[Tambillo]	722.43	9784.75	sili-chl. rock Cp-Py film/diss	An	A	A					L			R					L	R	R		
51	D1076		721.51	9784.37	sili andesite Py-Cp diss	An	A	C	L	L												R			
52	C1060	[Tablas Pamba]	714.96	9775.90	ande. hornfels sil.	An-3	L	A		L	L										L		L	L	
53	G1024		715.15	9776.13	chl. basalt	Ba-2	C			L															
54	E1064	[Balazón]	722.79	9752.33	basaltic andesite malachite	Ba	L	C			L		L	L											malachite (R)
55	C1100	[Chilcales]	706.02	9742.36	sili. andesite qtz ntwk.	An	C				L														prhenite (L)

Table A-5 Results of the Measured Value of the Magnetic Susceptibility (1)~(5)

No.	Measured		Remarks	No.	Measured		Remarks	No.	Measured		Remarks	No.	Measured		Remarks
	Point No.	Value			Point No.	Value			Point No.	Value			Point No.	Value	
1	MBP1001	35		39	MBP1039	25		77	MBP1077	3					
2	MBP1002	40		40	MBP1040	9		78	MBP1078	4					
3	MBP1003	4		41	MBP1041	0.4		79	MBP1079	0.5					
4	MBP1004	3		42	MBP1042	51		80	MBP1080	32					
5	MBP1005	9		43	MBP1043	0.4		81	MBP1081	61					
6	MBP1006	33		44	MBP1044	20		82	MBP1082	0.2					
7	MBP1007	50		45	MBP1045	12		83	MBP1083	0.2					
8	MBP1008	44		46	MBP1046	45		84	MBP1084	0.7					
9	MBP1009	6		47	MBP1047	0.01		85	MBP1085	7					
10	MBP1010	34		48	MBP1048	3		86	MBP1086	11					
11	MBP1011	24		49	MBP1049	16		87	MBP1087	0.2					
12	MBP1012	24		50	MBP1050	3		88	MBP1088	0.2					
13	MBP1013	22		51	MBP1051	2		89	MBP1089	0.3					
14	MBP1014	0.6		52	MBP1052	3		90	MBP1090	51					
15	MBP1015	2		53	MBP1053	1		91	MBP1091	1.2					
16	MBP1016	1.3		54	MBP1054	0.7		92	MBP1092	0.6					
17	MBP1017	24		55	MBP1055	0.3		93	MBP1093	0.3					
18	MBP1018	38		56	MBP1056	6		94	MBP1094	0.5					
19	MBP1019	39		57	MBP1057	0.4		95	MBP1095	25					
20	MBP1020	1.5		58	MBP1058	0.3		96	MBP1096	1					
21	MBP1021	2		59	MBP1059	0.5		97	MBP1097	0.4					
22	MBP1022	5		60	MBP1060	0.3		98	MBP1098	45					
23	MBP1023	42		61	MBP1061	0.3		99	MBP1099	54					
24	MBP1024	68		62	MBP1062	3		100	MBP1100	32					
25	MBP1025	69		63	MBP1063	0.5		101	MBP1101	102					
26	MBP1026	27		64	MBP1064	0.6		102	MBP1102	55					
27	MBP1027	37		65	MBP1065	0.3		103	MBP1103	50					
28	MBP1028	20		66	MBP1066	0.7		104	MBP1104	35					
29	MBP1029	31		67	MBP1067	0.3		105	MBP1105	29					
30	MBP1030	6		68	MBP1068	0.4		106	MBP1106	28					
31	MBP1031	21		69	MBP1069	0.6		107	MBP1107	40					
32	MBP1032	22		70	MBP1070	0.7		108	MBP1108	27					
33	MBP1033	11		71	MBP1071	0.3		109	MBP1109	28					
34	MBP1034	14		72	MBP1072	3		110	MBP1110	8					
35	MBP1035	72		73	MBP1073	4		111	MBP1111	10					
36	MBP1036	50		74	MBP1074	20		112	MBP1112	17					
37	MBP1037	40		75	MBP1075	0.9		113	MBP1113	30					
38	MBP1038	0.4		76	MBP1076	14		114	MBP1114	49					

(2)

No.	Measured		Remarks	No.	Measured		Remarks	No.	Measured		Remarks	No.	Measured		Remarks
	Point No.	Value			Point No.	Value			Point No.	Value			Point No.	Value	
115	MBP1115	28		153	MBP1153	38		191	MBP1191	170					
116	MBP1116	36		154	MBP1154	42		192	MBP1192	125					
117	MBP1117	45		155	MBP1155	25		193	MBP1193	127					
118	MBP1118	156		156	MBP1156	32		194	MBP1194	116					
119	MBP1119	46		157	MBP1157	35		195	MBP1195	117					
120	MBP1120	47		158	MBP1158	45		196	MBP1196	81					
121	MBP1121	156		159	MBP1159	42		197	MBP1197	132					
122	MBP1122	35		160	MBP1160	41		198	MBP1198	80					
123	MBP1123	85		161	MBP1161	42		199	MBP1199	33					
124	MBP1124	45		162	MBP1162	46		200	MBP1200	117					
125	MBP1125	43		163	MBP1163	48		201	MBP1201	50					
126	MBP1126	34		164	MBP1164	44		202	MBP1202	75					
127	MBP1127	13		165	MBP1165	42		203	MBP1203	1					
128	MBP1128	53		166	MBP1166	40		204	MBP1204	30					
129	MBP1129	45		167	MBP1167	43									
130	MBP1130	73		168	MBP1168	49									
131	MBP1131	65		169	MBP1169	48		205	MCJ1001	75					
132	MBP1132	57		170	MBP1170	45		206	MCJ1002	36					
133	MBP1133	42		171	MBP1171	48		207	MCJ1003	25					
134	MBP1134	73		172	MBP1172	31		208	MCJ1004	75					
135	MBP1135	70		173	MBP1173	42		209	MCJ1005	61					
136	MBP1136	118		174	MBP1174	0.8		210	MCJ1006	84					
137	MBP1137	38		175	MBP1175	62		211	MCJ1007	35					
138	MBP1138	48		176	MBP1176	1		212	MCJ1008	35					
139	MBP1139	0.6		177	MBP1177	5		213	MCJ1009	28					
140	MBP1140	12		178	MBP1178	2		214	MCJ1010	73					
141	MBP1141	2		179	MBP1179	2		215	MCJ1011	40					
142	MBP1142	3		180	MBP1180	0.4		216	MCJ1012	0.5					
143	MBP1143	0.4		181	MBP1181	8		217	MCJ1013	7					
144	MBP1144	30		182	MBP1182	8		218	MCJ1014	28					
145	MBP1145	46		183	MBP1183	84		219	MCJ1015	42					
146	MBP1146	63		184	MBP1184	3		220	MCJ1016	78					
147	MBP1147	42		185	MBP1185	13		221	MCJ1017	33					
148	MBP1148	32		186	MBP1186	18		222	MCJ1018	29					
149	MBP1149	22		187	MBP1187	20		223	MCJ1019	26					
150	MBP1150	20		188	MBP1188	40		224	MCJ1020	5					
151	MBP1151	6		189	MBP1189	67		225	MCJ1021	15					
152	MBP1152	17		190	MBP1190	78		226	MCJ1022	28					
								227	MCJ1023	28					

(3)

No.	Measured Point No.	Measured Value	Remarks	No.	Measured Point No.	Measured Value	Remarks	No.	Measured Point No.	Measured Value	Remarks
228	MCJ1024	0.5		265	MLY1026	58		301	MTE1028	16	
229	MCJ1025	6		266	MLY1027	56		302	MTE1029	7	
230	MCJ1026	8		267	MLY1028	113		303	MTE1030	18	
231	MCJ1027	17						304	MTE1031	30	
232	MCJ1028	27		268	MTH1001	24		305	MTE1032	28	
233	MCJ1029	14		269	MTH1002	86		306	MTE1033	0.8	
234	MCJ1030	14		270	MTH1003	1		307	MTE1034	14	
235	MCJ1031	16		271	MTH1004	21		308	MTE1035	20	
236	MCJ1032	12		272	MTH1005	36		309	MTE1036	25	
237	MCJ1033	20		273	MTH1006	1		310	MTE1037	26	
238	MCJ1034	14						311	MTE1038	35	
239	MCJ1035	24		274	MTE1001	104		312	MTE1039	45	
240	MLY1001	1		275	MTE1002	76		313	MTE1040	54	
241	MLY1002	0.4		276	MTE1003	23		314	MTE1041	83	
242	MLY1003	0.3		277	MTE1004	29		315	MTE1042	28	
243	MLY1004	30		278	MTE1005	8		316	MTE1043	12	
244	MLY1005	43		279	MTE1006	5		317	MTE1044	10	
245	MLY1006	48		280	MTE1007	37		318	MTE1045	28	
246	MLY1007	58		281	MTE1008	24		319	MTE1046	32	
247	MLY1008	40		282	MTE1009	9		320	MTE1047	53	
248	MLY1009	32		283	MTE1010	37		321	MTE1048	5	
249	MLY1010	28		284	MTE1011	48		322	MTE1049	6	
250	MLY1011	23		285	MTE1012	17		323	MTE1050	16	
251	MLY1012	19		286	MTE1013	16					
252	MLY1013	15		287	MTE1014	28					
253	MLY1014	37		288	MTE1015	0.7		324	MSM1001	5	
254	MLY1015	50		289	MTE1016	7		325	MSM1002	0.3	
255	MLY1016	0.6		290	MTE1017	1		326	MSM1003	0.02	
256	MLY1017	46		291	MTE1018	21		327	MSM1004	1.1	
257	MLY1018	20		292	MTE1019	36		328	MSM1005	0.01	
258	MLY1019	0.5		293	MTE1020	37		329	MSM1006	0.3	
259	MLY1020	6		294	MTE1021	22		330	MSM1007	0.4	
260	MLY1021	24		295	MTE1022	17		331	MSM1008	0.1	
261	MLY1022	21		296	MTE1023	4		332	MSM1009	41	
262	MLY1023	0.1		297	MTE1024	40		333	MSM1010	4	
263	MLY1024	0.6		298	MTE1025	24		334	MSM1011	37	
264	MLY1025	80		299	MTE1026	21		335	MSM1012	0.5	
				300	MTE1027	21		336	MSM1013	15	
								337	MSM1014	4	

(4)

No.	Measured		Remarks		No.	Measured		Remarks		No.	Measured		Remarks	
	Point No.	Value	Value			Point No.	Value	Value			Point No.	Value	Value	
338	MSM1015	0.1			375	MLG1030	28			411	MTA1007	9		
339	MSM1016	17			376	MLG1031	25			412	MTP1001	0.8		
340	MSM1017	0.1			377	MLG1032	90			413	MTP1002	0.7		
341	MSM1018	1.5			378	MLG1033	42			414	MTP1003	0.5		
342	MSM1019	9			379	MLG1034	2			415	MTP1004	1.2		
343	MSM1020	8			380	MLG1035	8			416	MTP1005	0.3		
344	MSM1021	7			381	MLG1036	89			417	MTP1006	6		
345	MSM1022	0.05			382	MLG1037	34			418	MTP1007	17		
346	MLG1001	21			383	MLG1038	35			419	MTP1008	8		
347	MLG1002	14			384	MLG1039	38			420	MTP1009	13		
348	MLG1003	29			385	MLG1040	24			421	MTP1010	23		
349	MLG1004	46			386	MLG1041	37			422	MTP1011	36		
350	MLG1005	5			387	MLG1042	20			423	MTP1012	31		
351	MLG1006	7			388	MLG1043	28			424	MTP1013	33		
352	MLG1007	0.6			389	MLG1044	27			425	MTP1014	0.3		
353	MLG1008	40			390	MLG1045	17			426	MTP1015	63		
354	MLG1009	37			391	MLG1046	73			427	MTP1016	52		
355	MLG1010	70			392	MLG1047	8			428	MTP1017	33		
356	MLG1011	0.5			393	MLG1048	97			429	MTP1018	36		
357	MLG1012	27			394	MLG1049	35			430	MTP1019	41		
358	MLG1013	90			395	MLG1050	27			431	MTP1020	35		
359	MLG1014	87			396	MLG1051	29			432	MTP1021	7		
360	MLG1015	0.5			397	MLG1052	41			433	MTP1022	0.4		
361	MLG1016	30			398	MLG1053	30			434	MTP1023	26		
362	MLG1017	0.2			399	MLG1054	32			435	MTP1024	20		
363	MLG1018	7			400	MLG1055	34			436	MBA1001	31		
364	MLG1019	42			401	MLG1056	28			437	MBA1002	30		
365	MLG1020	45			402	MSI1001	0.03			438	MBA1003	0.3		
366	MLG1021	35			403	MSI1002	0.01			439	MBA1004	13		
367	MLG1022	0.5			404	MSI1003	0.15			440	MBA1005	8		
368	MLG1023	0.3			405	MTA1001	20			441	MBA1006	15		
369	MLG1024	42			406	MTA1002	18			442	MBA1007	10		
370	MLG1025	37			407	MTA1003	9			443	MBA1008	16		
371	MLG1026	0.5			408	MTA1004	14			444	MBA1009	22		
372	MLG1027	2			409	MTA1005	5			445	MBA1010	16		
373	MLG1028	47			410	MTA1006	6			446	MBA1011	10		
374	MLG1029	29												

(5)

No.	Measured Point No.	Measured Value	Remarks	No.	Measured Point No.	Measured Value	Remarks	No.	Measured Point No.	Measured Value	Remarks
447	MBA1012	4									
448	MBA1013	15									
449	MBA1014	4									
450	MCA1001	0.35									
451	MCA1002	0.38									
452	MCA1003	2									
453	MCA1004	14									
454	MCA1005	36									
455	MCA1006	0.78									
456	MCA1007	50									

Table A-6 Results of Geochemical Analysis

Ser. No.	Sample No.	Geol. Unit	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Mo ppm	Co ppm	Ni ppm	1	Factor 2	Scores 3	4		
1	A1002	G	0.0	84	1	41	0	10	10	-335	-489	-127	.216	El Torneado	
2	A1003	G	0.1	475	3	34	1	15	8	-373	.261	.559	-.216		
3	A1004	G	0.0	358	2	27	0	12	8	-272	-.210	.278	-.077		
4	A1006	G	0.0	28	2	7	5	1	3	1.786	-.490	-.561	-1.015		
5	A1007	G	0.1	7	2	11	0	8	1	1.060	-.863	-.017	-.153		
6	A1008	G	0.0	62	0	31	270	4	4	.567	-.453	-.086	-1.200		
7	A1011	D	0.1	154	2	57	1	9	6	-.055	.072	.433	.141		
8	A1014	G	0.1	7	0	39	31	8	9	-.108	-.595	-.594	-.617		
9	A1016	G	0.2	147	17	119	0	13	7	-.355	.446	1.318	.460		
10	A1017	G	0.1	128	1	36	0	13	9	-.355	-.011	-.067	.090		
11	A1018	G	0.0	130	1	35	0	9	7	-.104	-.402	-.020	.152		
12	A1019	G	0.1	131	3	28	0	8	5	.224	.013	.319	-.038		
13	A1123	G	0.3	11	0	25	0	10	4	.301	.060	-.613	-.078	Osohuayco	
14	A1126	G	0.5	166	0	22	0	12	10	-.123	1.085	-.560	-.252		
15	B1024	M	0.2	67	0	12	1	1	9	1.356	.714	-1.222	-.569	El Cristal	
16	B1025	M	0.4	822	3	35	1	4	32	-.064	1.637	-.123	-.468		
17	B1026	M	1.1	3353	7	29	8	14	67	-.957	2.455	.317	-1.301		
18	B1027	M	0.0	28	0	10	0	4	1	1.375	-.833	-.393	-.138		
19	B1051	M	0.1	22	4	57	1	5	1	1.036	-.462	.857	.375	Gualazay do.	
20	B1052	M	0.0	34	2	52	0	6	4	.305	-.699	.254	.425		
21	C1004	G	0.1	15	0	35	0	8	6	.096	-.472	-.568	.267	O. San Cristobal	
22	C1007	M	0.1	250	0	51	0	2	5	.875	.448	-.235	.319		
23	C1009	D	0.2	128	2	46	0	1	4	1.471	.816	-.001	.193	Las Palmas	
24	C1012	M	0.0	3	3	6	0	8	3	.663	-1.421	-.520	-.474		
25	C1013	M	0.0	18	3	85	1	21	25	-1.239	-.895	.120	.335		
26	C1016	M	0.2	6	1	71	0	13	11	-.471	-.273	-.389	.501		
27	C1018	G	0.0	162	3	38	0	13	4	-.083	-.474	.649	.170	Las Juntas	
28	C1022	G	0.0	11	0	17	0	1	1	2.076	-.794	-.605	.165		
29	C1023	D	0.1	111	1	64	0	7	4	.229	.007	.251	.450		
30	C1028	M	0.0	28	0	37	0	23	135	-1.860	-.659	-1.240	.015	Gualazay East do.	
31	C1032	M	0.1	211	5	75	0	21	12	-.854	.056	.768	.293		
32	C1038	M	0.1	26	1	36	1	8	14	-.253	-.262	-.497	-.027		
33	C1041	M	0.0	33	2	23	0	12	42	-.907	-.634	-.654	-.189		
34	B1101	G	1.1	3113	1	24	0	5	6	.636	2.396	.079	-.413	Chaso Juan	
35	B1102	G	0.2	442	0	21	0	9	10	-.045	.793	-.434	-.255		
36	B1104	G	0.0	256	8	33	0	4	2	.908	-.227	1.003	.090		
37	C1072	G	0.3	809	0	21	4	10	7	.064	1.152	-.146	-.755		
38	C1073	G	0.0	191	0	17	0	7	3	.501	-.356	-.199	-.091	La Industria - Yatubi	
39	B1115	Q	0.0	261	4	60	2	17	24	-1.057	-.225	.489	-.140		
40	B1117	Q	0.2	232	2	64	1	22	16	-.922	.542	.334	.027		
41	B1118	Q	0.2	59	3	48	2	9	16	-.352	.366	.045	-.219		
42	C1083	Q	0.1	39	0	37	0	11	28	-.732	-.155	-.855	.096	Telimbela	
43	B1147	P	0.2	882	0	215	0	7	4	.056	.980	.675	.907		
44	B1148	Q	0.0	245	0	73	0	10	6	-.246	-.258	.152	.525		
45	B1149	Q	0.2	654	0	45	0	13	8	-.301	.820	.010	.110		
46	B1150	Q	0.3	683	13	50	1	8	5	.234	1.111	1.195	-.173	San Miguel	
47	E1044	Q	0.0	33	2	28	0	5	4	.519	-.689	.014	.132		
48	E1046	Q	0.1	122	3	25	135	7	2	.664	-.041	.788	-1.271		
49	A1098	L	0.1	104	2	116	0	24	11	-.981	-.127	.560	.599		
50	A1099	L	0.2	3545	2	50	7	14	9	-.414	1.229	.833	-.619	Las Guardias	
51	A1100	L	0.0	18	4	13	0	3	1	1.527	-.897	.262	-.110		
52	A1101	L	0.0	26	2	7	0	2	1	1.855	-.746	-.189	-.384		
53	A1074	G	0.0	21	0	30	0	10	2	.377	-.975	-.134	.334		
54	A1075	D	0.2	86	0	26	0	9	7	.073	.371	-.483	-.033	Tambillo	
55	A1076	G	0.1	26	0	25	0	7	5	.302	-.341	-.564	.096		
56	C1044	G	0.2	348	0	24	3	26	21	-.985	.625	-.395	-.657		
57	C1049	G	0.0	222	0	29	1	9	6	-.025	-.284	-.152	-.068		
58	C1054	G	0.0	19	0	34	0	3	17	.165	-.580	-1.021	.195	Tablas Pamba	
59	C1088	M	0.0	8	0	115	0	4	2	.667	-1.007	.000	1.026		
60	C1089	P	0.0	1236	0	48	2	7	7	-.049	.206	.192	-.089		
61	D1076	M	0.1	142	2	570	0	7	7	-.379	.169	1.047	1.387		
62	C1060	M	0.3	248	2	50	0	17	10	-.497	.807	.315	.078	Balaron Chilcales Alto	
63	G1024	M	0.0	72	1	85	0	30	19	-1.351	-.646	.080	.510		
64	G1025	M	0.0	190	0	59	0	19	16	-.973	-.350	-.156	.342		
65	C1104	M	0.1	135	1	42	0	13	17	-.643	.065	-.215	.099		
66	C1097	M	0.1	109	0	95	0	24	94	-1.845	.089	-.652	.375		
67	C1099	M	0.0	140	3	88	0	30	22	-1.405	-.480	.501	.414		

G : gr. dio. M : Macuchi. F.
 Q : qtz-dio. L : Lourdes V.
 D : melano. dio.
 P : por. qtz-dio
 gr. por.

F1 Co-Ni-Zn
 F2 Ag-Cu
 F3 Pb-Zn-Cu
 F4 Mo

Table A-7 List of Apparent Resistivity (1)~(2)

No.	2048Hz	1024Hz	512Hz	256Hz	128Hz	64Hz	32Hz	16Hz	8Hz	4Hz	(1)
1	.689E+03	.728E+03	.863E+03	.115E+04	.170E+04	.286E+04	.444E+04	.670E+04	.116E+05	.298E+05	
2	.555E+02	.795E+02	.106E+03	.157E+03	.240E+03	.431E+03	.635E+03	.982E+03	.196E+04	.249E+04	
3	.143E+02	.445E+02	.356E+02	.637E+02	.769E+02	.846E+02	.183E+03	.562E+03	.356E+03	.212E+03	
4	.117E+04	.164E+04	.235E+04	.269E+04	.333E+04	.446E+04	.585E+04	.654E+04	.104E+05	.197E+05	
5	.104E+04	.843E+03	.902E+03	.145E+04	.204E+04	.332E+04	.382E+04	.431E+04	.720E+04	.212E+05	
6	.805E+02	.128E+03	.211E+03	.318E+03	.489E+03	.807E+03	.114E+04	.153E+04	.277E+04	.373E+04	
7	.275E+03	.470E+03	.689E+03	.887E+03	.115E+04	.163E+04	.196E+04	.261E+04	.383E+04	.687E+04	
8	.143E+03	.314E+03	.539E+03	.782E+03	.118E+04	.174E+04	.229E+04	.310E+04	.453E+04	.823E+04	
9	.208E+03	.298E+03	.334E+03	.422E+03	.618E+03	.817E+03	.969E+03	.109E+04	.137E+04	.201E+04	
10	.116E+04	.979E+03	.107E+04	.867E+03	.669E+03	.830E+03	.951E+03	.127E+04	.202E+04	.438E+04	
11	.168E+04	.248E+04	.336E+04	.354E+04	.368E+04	.468E+04	.565E+04	.744E+04	.113E+05	.204E+05	
12	.409E+03	.124E+04	.137E+04	.164E+04	.183E+04	.254E+04	.292E+04	.383E+04	.849E+04	.618E+04	
13	.136E+04	.488E+03	.598E+03	.581E+03	.518E+03	.494E+03	.600E+03	.593E+03	.523E+03	.736E+03	
14	.395E+03	.554E+03	.589E+03	.576E+03	.606E+03	.746E+03	.808E+03	.948E+03	.118E+04	.181E+04	
15	.505E+03	.761E+03	.105E+04	.811E+03	.909E+03	.119E+04	.127E+04	.123E+04	.162E+04	.176E+04	
16	.191E+03	.253E+03	.286E+03	.239E+03	.219E+03	.270E+03	.327E+03	.405E+03	.638E+03	.108E+04	
17	.558E+03	.321E+03	.598E+03	.375E+03	.276E+03	.379E+03	.417E+03	.516E+03	.904E+03	.107E+04	
18	.930E+02	.253E+03	.175E+03	.164E+03	.245E+03	.262E+03	.284E+03	.357E+03	.500E+03	.101E+04	
19	.652E+02	.573E+03	.390E+03	.571E+03	.387E+03	.623E+03	.493E+03	.751E+03	.122E+04	.215E+04	
20	.520E+02	.197E+03	.129E+03	.172E+03	.173E+03	.215E+03	.244E+03	.299E+03	.489E+03	.847E+03	
21	.186E+03	.674E+03	.614E+03	.104E+04	.664E+03	.110E+04	.167E+04	.189E+04	.211E+04	.430E+04	
22	.121E+05	.625E+04	.103E+05	.104E+05	.141E+05	.163E+05	.181E+05	.216E+05	.365E+05	.616E+05	
23	.116E+05	.239E+04	.301E+04	.293E+04	.311E+04	.356E+04	.404E+04	.462E+04	.568E+04	.655E+04	
24	.349E+03	.380E+03	.465E+03	.486E+03	.533E+03	.647E+03	.640E+03	.769E+03	.108E+04	.172E+04	
25	.246E+04	.934E+03	.715E+03	.594E+03	.468E+03	.505E+03	.439E+03	.440E+03	.462E+03	.672E+03	
26	.779E+03	.467E+03	.692E+03	.487E+03	.268E+03	.252E+03	.281E+03	.310E+03	.485E+03	.110E+04	
27	.275E+03	.264E+03	.300E+03	.115E+03	.211E+03	.165E+03	.144E+03	.177E+03	.257E+03	.620E+03	
28	.386E+03	.635E+03	.401E+03	.409E+03	.432E+03	.521E+03	.596E+03	.719E+03	.816E+03	.162E+04	
29	.500E+03	.239E+03	.361E+03	.380E+03	.386E+03	.404E+03	.488E+03	.527E+03	.737E+03	.104E+04	
30	.147E+04	.528E+03	.724E+03	.127E+04	.421E+04	.263E+04	.330E+04	.464E+04	.791E+04	.142E+05	
31	.108E+03	.189E+03	.172E+03	.180E+03	.132E+03	.180E+03	.169E+03	.229E+03	.331E+03	.552E+03	
32	.119E+04	.174E+04	.169E+04	.167E+04	.146E+04	.129E+04	.107E+04	.145E+04	.181E+04	.253E+04	
33	.113E+04	.127E+04	.174E+04	.958E+03	.835E+03	.862E+03	.754E+03	.107E+04	.211E+04	.565E+04	
34	.201E+03	.265E+03	.136E+03	.189E+03	.106E+03	.244E+03	.289E+03	.319E+03	.617E+03	.654E+03	
35	.147E+06	.101E+04	.111E+04	.107E+04	.981E+03	.842E+03	.822E+03	.991E+03	.197E+04	.327E+04	
36	.190E+04	.173E+04	.191E+04	.187E+04	.210E+04	.222E+04	.175E+04	.259E+04	.354E+04	.566E+04	
37	.406E+02	.396E+03	.339E+03	.268E+03	.305E+03	.292E+03	.325E+03	.437E+03	.653E+03	.101E+04	
38	.386E+03	.450E+03	.390E+03	.214E+03	.202E+03	.216E+03	.166E+03	.185E+03	.202E+03	.234E+03	
39	.195E+03	.232E+03	.219E+03	.167E+03	.136E+03	.127E+03	.127E+03	.232E+03	.413E+03	.675E+03	
40	.440E+04	.444E+04	.709E+04	.806E+04	.678E+04	.783E+04	.849E+04	.133E+05	.236E+05	.424E+05	
41	.250E+04	.676E+03	.255E+03	.215E+03	.738E+02	.645E+02	.498E+02	.107E+03	.301E+03	.368E+03	
42	.257E+03	.160E+04	.104E+04	.119E+04	.106E+04	.111E+04	.775E+03	.141E+04	.200E+04	.382E+04	
43	.244E+03	.174E+03	.136E+03	.158E+03	.131E+03	.167E+03	.106E+03	.116E+03	.162E+03	.473E+03	
44	.201E+03	.448E+03	.377E+03	.393E+03	.443E+03	.666E+03	.782E+03	.125E+04	.198E+04	.199E+04	
45	.131E+04	.196E+04	.164E+04	.148E+04	.153E+04	.216E+04	.247E+04	.344E+04	.693E+04	.140E+05	
46	.489E+03	.128E+03	.270E+03	.235E+03	.500E+02	.759E+02	.107E+03	.260E+03	.211E+03	.292E+03	
47	.893E+03	.237E+04	.208E+04	.299E+04	.314E+04	.347E+04	.518E+04	.842E+04	.144E+05	.202E+05	
48	.371E+04	.428E+04	.465E+04	.689E+04	.401E+04	.487E+04	.492E+04	.758E+04	.312E+04	.405E+05	
49	.288E+04	.280E+04	.140E+04	.104E+04	.429E+03	.259E+03	.248E+03	.261E+03	.772E+03	.141E+04	
50	.455E+02	.235E+03	.194E+03	.204E+03	.125E+03	.119E+03	.160E+03	.271E+03	.373E+03	.578E+03	
51	.128E+04	.153E+03	.837E+03	.442E+03	.216E+03	.142E+03	.175E+03	.196E+03	.384E+03	.987E+03	
52	.765E+03	.874E+03	.104E+04	.854E+03	.618E+03	.692E+03	.706E+03	.108E+04	.199E+04	.263E+04	
53	.546E+03	.785E+03	.111E+04	.100E+04	.854E+03	.894E+03	.899E+03	.156E+04	.282E+04	.497E+04	
54	.705E+03	.835E+03	.708E+03	.796E+03	.774E+03	.859E+03	.105E+04	.169E+04	.307E+04	.416E+04	
55	.172E+04	.282E+04	.711E+04	.278E+04	.971E+03	.987E+03	.146E+04	.166E+04	.297E+04	.104E+05	
56	.264E+03	.280E+03	.334E+03	.207E+03	.193E+03	.191E+03	.206E+03	.344E+03	.493E+03	.454E+03	
57	.269E+05	.568E+03	.301E+04	.217E+04	.756E+03	.584E+03	.690E+03	.758E+03	.136E+04	.247E+04	
58	.137E+04	.334E+04	.403E+04	.234E+04	.388E+04	.221E+04	.301E+04	.327E+04	.530E+04	.792E+04	
101	.367E+05	.134E+04	.464E+04	.424E+04	.397E+04	.354E+04	.393E+04	.543E+04	.902E+04	.118E+05	
102	.189E+04	.124E+04	.131E+04	.152E+04	.105E+04	.157E+04	.172E+04	.225E+04	.355E+04	.525E+04	
103	.557E+03	.441E+03	.555E+03	.619E+03	.620E+03	.712E+03	.738E+03	.103E+04	.179E+04	.245E+04	
104	.231E+04	.208E+04	.248E+04	.240E+04	.257E+04	.280E+04	.320E+04	.428E+04	.604E+04	.131E+05	
105	.509E+03	.860E+03	.101E+04	.103E+04	.962E+03	.103E+04	.106E+04	.144E+04	.231E+04	.370E+04	
106	.166E+04	.272E+04	.273E+04	.342E+04	.400E+04	.426E+04	.446E+04	.580E+04	.887E+04	.178E+05	

No.	2048Hz	1024Hz	512Hz	256Hz	128Hz	64Hz	32Hz	16Hz	8Hz	4Hz
107	.187E+04	.921E+03	.590E+03	.483E+03	.339E+03	.367E+03	.311E+03	.345E+03	.494E+03	.795E+03
108	.385E+04	.770E+03	.106E+04	.161E+04	.167E+04	.201E+04	.205E+04	.328E+04	.451E+04	.702E+04
109	.129E+04	.442E+03	.644E+03	.120E+04	.139E+04	.156E+04	.190E+04	.273E+04	.401E+04	.191E+04
110	.356E+04	.125E+04	.322E+04	.277E+04	.269E+04	.318E+04	.449E+04	.547E+04	.100E+05	.164E+05
111	.595E+04	.281E+04	.482E+04	.460E+04	.475E+04	.513E+04	.533E+04	.763E+04	.114E+05	.250E+05
112	.875E+04	.433E+04	.384E+04	.574E+04	.548E+04	.634E+04	.672E+04	.915E+04	.138E+05	.200E+05
113	.179E+04	.176E+05	.273E+04	.333E+04	.955E+04	.372E+04	.443E+04	.598E+04	.100E+05	.178E+05
114	.211E+04	.129E+04	.348E+04	.479E+04	.602E+04	.757E+04	.936E+04	.144E+05	.266E+05	.406E+05
115	.264E+03	.287E+03	.340E+03	.299E+03	.363E+03	.409E+03	.512E+03	.795E+03	.142E+04	.207E+04
116	.247E+04	.301E+04	.380E+04	.401E+04	.408E+04	.501E+04	.612E+04	.734E+04	.114E+05	.271E+05
117	.560E+04	.722E+04	.786E+04	.621E+04	.598E+04	.622E+04	.763E+04	.914E+04	.149E+05	.257E+05
118	.319E+04	.288E+04	.406E+04	.454E+04	.430E+04	.491E+04	.536E+04	.674E+04	.887E+04	.140E+05
119	.488E+03	.102E+04	.927E+03	.110E+04	.101E+04	.113E+04	.119E+04	.172E+04	.238E+04	.320E+04
120	.453E+03	.207E+03	.448E+03	.558E+03	.570E+03	.733E+03	.862E+03	.125E+04	.207E+04	.398E+04
201	.562E+03	.103E+04	.970E+03	.732E+03	.102E+04	.159E+04	.794E+03	.935E+03	.149E+04	.190E+04
202	.135E+03	.193E+03	.158E+03	.131E+03	.104E+03	.955E+02	.908E+02	.110E+03	.170E+03	.319E+03
203	.778E+03	.862E+03	.110E+04	.476E+03	.459E+03	.503E+03	.483E+03	.660E+03	.110E+04	.225E+04
204	.185E+04	.118E+04	.109E+04	.906E+03	.802E+03	.769E+03	.641E+03	.817E+03	.120E+04	.306E+04
205	.114E+04	.172E+04	.129E+04	.106E+04	.130E+04	.825E+03	.703E+03	.776E+03	.164E+04	.262E+04
206	.263E+04	.934E+03	.121E+04	.102E+04	.878E+03	.779E+03	.729E+03	.101E+04	.172E+04	.362E+04
207	.303E+02	.590E+02	.522E+02	.341E+02	.381E+02	.293E+02	.314E+02	.406E+02	.666E+02	.919E+02
208	.121E+03	.215E+03	.303E+03	.147E+03	.105E+03	.101E+03	.844E+02	.116E+03	.172E+03	.573E+03
209	.144E+04	.383E+04	.383E+04	.180E+04	.149E+04	.184E+04	.191E+04	.234E+04	.371E+04	.778E+04
210	.238E+03	.640E+03	.611E+03	.442E+03	.368E+03	.328E+03	.271E+03	.360E+03	.589E+03	.101E+04
301	.230E+03	.574E+03	.867E+03	.101E+04	.153E+04	.243E+04	.332E+04	.511E+04	.830E+04	.139E+05
302	.157E+04	.167E+04	.206E+04	.207E+04	.331E+04	.484E+04	.681E+04	.879E+04	.121E+05	.221E+05
303	.863E+03	.593E+03	.100E+04	.119E+04	.189E+04	.241E+04	.296E+04	.302E+04	.294E+04	.285E+04
304	.220E+03	.316E+03	.550E+03	.688E+03	.961E+03	.143E+04	.182E+04	.219E+04	.277E+04	.373E+04
401	.160E+05	.159E+05	.222E+05	.200E+05	.218E+05	.209E+05	.248E+05	.334E+05	.167E+05	.120E+06
402	.497E+04	.470E+04	.566E+04	.552E+04	.554E+04	.537E+04	.598E+04	.852E+04	.185E+05	.324E+05
403	.535E+04	.217E+04	.404E+04	.333E+04	.256E+04	.280E+04	.312E+04	.513E+04	.864E+04	.134E+05
404	.749E+03	.108E+04	.150E+04	.258E+04	.299E+04	.399E+04	.488E+04	.758E+04	.162E+05	.214E+05
405	.208E+05	.173E+05	.248E+05	.284E+05	.344E+05	.393E+05	.398E+05	.521E+05	.845E+05	.162E+06
408	.242E+04	.381E+04	.424E+04	.437E+04	.389E+04	.359E+04	.379E+04	.456E+04	.671E+04	.934E+04
409	.503E+03	.499E+03	.599E+03	.684E+03	.560E+03	.506E+03	.513E+03	.616E+03	.107E+04	.175E+04
410	.432E+03	.551E+03	.529E+03	.475E+03	.334E+03	.319E+03	.321E+03	.372E+03	.570E+03	.522E+03
411	.116E+04	.138E+04	.129E+04	.100E+04	.817E+03	.695E+03	.647E+03	.758E+03	.126E+04	.144E+04
412	.470E+03	.421E+03	.584E+03	.486E+03	.443E+03	.385E+03	.356E+03	.395E+03	.537E+03	.661E+03
413	.776E+03	.723E+03	.921E+03	.766E+03	.726E+03	.703E+03	.674E+03	.815E+03	.942E+03	.886E+03
414	.459E+03	.693E+03	.768E+03	.903E+03	.776E+03	.849E+03	.856E+03	.103E+04	.137E+04	.170E+04

Table A - 8 Summary Record of Drilling Results (1)~(3)

Drilling Period	Planned Length	Increase or Decrease in Length	Periods		Number of Days	Actual Working Days	Pay off	Total Number of Workers
			300 m	Overburden				
Preparation			Sep. 16, 1988 ~ Sep. 26, 1988	30.00 m	11	11	-	315
Drilling			Sep. 27, 1988 ~ Oct. 10, 1988	274.70 m	14	14	-	262
Removing			Oct. 11, 1988 ~ Oct. 15, 1988		5	5	-	108
Total			Sep. 16, 1988 ~ Oct. 15, 1988		30	30	-	685
Drilling Length	300 m		Overburden		Core Recovery for Each 100m Section			
	+5.40m		Core Length	274.70 m	Section (m)	Core Length(m)		Core Recovery(%)
	305.40m		Core Recovery	99.7 %	30.00 ~102.70	72.00	72.00	99.0
	131°			58.2 %	102.70~206.60	103.90	103.90	100
	94°			41.8 %	206.60~ 05.40	98.80	98.80	100
	0°			-				
	225°			100 %				
Sub Total				47.2 %	Drilling Efficiency			
Preparation	41°			8.6%	$\frac{305.40}{14}$	Total Length (Drilling Days)		21.81 m/Day
Moving	32°			6.7 %	$\frac{305.40}{30}$	Total Length (Total Working Days)		10.18 m/Day
Others	178°			37.5 %	$\frac{262}{305.40}$	Net Drilling Workers (Total Length)		0.86 men/m
Grand Total	476°			100 %	$\frac{685}{305.40}$	Total Workers (Total Length)		2.24 men/m
Pipe Size & Inserted Length		$\frac{\text{Inserted Length}}{\text{Drilled Length}} \times 100$	Recovery of Casing Pipe		Remarks			
NQ-NUCP 30.00 m		9.8 %	100 %					
BWCP 237.40 m.		77.7 %	100 %					

MJE-1

MJE-2

Drilling Period	Preparation	Periods				Number of Days	Actual Working Days	Pay off	Total Number of Workers
		Oct. 16, 1988 ~ Oct. 18, 1988	Oct. 19, 1988 ~ Oct. 26, 1988	Oct. 27, 1988 ~ Oct. 29, 1988	Oct. 16, 1988 ~ Oct. 29, 1988				
Preparation					3	3	-	63	
Drilling					8	8	-	114	
Removing					3	3	-	54	
Total					14	14	-	231	
Drilling Length	Planned Length	300 m	Overburden	16.00 m	Core Recovery for Each 100m Section				
	Increase or Decrease in Length	+5.40 m	Core Length	289.40 m	Depth (m)	Section (m)	Core Length(m)	Core Recovery(%)	
Working Time	Drilled Length	305.40 m	Core Recovery	100 %	16.00~104.00	88.00	88.00	100	
	Drilling	120°	68.2 %	42.8 %	104.00~216.80	112.80	112.80	100	
	Accompanying	56°	31.8 %	20.0 %	216.80~305.40	88.60	88.60	100	
	Repairing	0°	-	-					
	Sub Total	176°	100 %	62.8 %					
Inserted Casing Pipe	Preparation	24°		8.6 %	$\frac{305.40}{8}$	Total Length (Drilling Days)		38.18 m/Day	
	Moving	24°		8.6 %	$\frac{305.40}{14}$	Total Length (Total Working Days)		21.81 m/Day	
	Others	56°		20.0%	$\frac{114}{305.40}$	Net Drilling Workers (Total Length)		0.37 men/m	
	Grand Total	280°		100 %	$\frac{231}{305.40}$	Total Workers (Total Length)		0.76 men/m	
Inserted Casing Pipe	Pipe Size & Inserted Length	Inserted Length Drilled Length	$\frac{\quad}{\quad} \times 100$	Recovery of Casing Pipe	Remarks				
	NQ-NUCP 16.00 m	5.2 %	100 %						
	BWCP 201.60 m	66.0 %	100 %						

Drilling Period	Preparation	Periods		Number of Days	Actual Working Days	Pay off	Total Number of Workers
		Oct. 30, 1988 ~ Nov. 2, 1988	Nov. 3, 1988 ~ Nov. 15, 1988				
Drilling				4	4	-	81
Removing				13	13	-	192
Total				7	7	-	137
				24	24	-	410
Planned Length	300 m	Overburden	29.50 m	Core Recovery for Each 100m Section			
Increase or Decrease in Length	+3.30 m	Core Length	273.70 m	Depth (m)	Section (m)	Core Length(m)	Core Recovery(%)
Drilled Length	303.30 m	Core Recovery	100 %	29.50~104.80	75.30	75.20	99.9
Drilling	148°	63.8 %	41.1 %	104.80~215.60	110.80	110.80	100
Accompanying	84°	36.2 %	23.3 %	215.60~303.30	87.70	87.70	100
Repairing	-	-	-				
Sub Total	232°	100 %	64.4 %	Drilling Efficiency			
Preparation	32°			$\frac{303.30}{13}$	$\frac{\text{Total Length}}{\text{Drilling Days}}$		23.33 m/Day
Moving	56°			$\frac{303.30}{24}$	$\frac{\text{Total Length}}{\text{Total Working Days}}$		12.64 m/Day
Others	40°			192	Net Drilling Workers		0.63 men/Day
Grand Total	360°			$\frac{303.30}{410}$	$\frac{\text{Total Length}}{\text{Total Workers}}$		1.35 men/m
Pipe Size & Inserted Length		$\frac{\text{Inserted Length}}{\text{Drilled Length}} \times 100$	Recovery of Casing Pipe	Remarks			
NQ-NUCP 29.50 m		9.7 %	100 %				
BWCP 201.60 m		66.0 %	100 %				

Table A-9 Drilling Equipments and Consumed Materials

A. Drilling Equipments

Article	Model	Specification	Quantity
Drilling Machine	D 900	Maker : Craelius Capacity : BQWL 700 m Dimensions : Height 1,550 mm Length 2,600 mm Width 900 mm Weight (without Power unit) : 850 kg	1 set
Diesel Engine	F3L 912	Maker : Mitsui Deutz Horse Power : 41 HP/1800 rpm	1 set
Drilling Pump & Water Supply Pump	520 RQ	Maker : Longyear Piston Diameter 57 mm Stroke 57 mm Max. Capacity 76 l/min Max. Pressure 49 kg/cm ² Weight (without Power unit) : 395 kg	2 sets
Diesel Engine	FIL 210	Maker : Mitsui Deutz Horse Power : 8.5 HP/1800rpm	2 sets
Mixer	Jet Type	Run by Drilling pump	1 set
Drill Rod		NQWL (3.00 m/joint)	85 joints
		BQWL (3.00 m/joint)	120 joints
Casing Pipe		NQ-NU (2.50 m/joint)	18 joints
		BW (2.80 m/joint)	100 joints
Wireline Hoist		Attached to Drilling Machine	1 set

B. Consumed Materials

Article	Specification	Unit	Quantity			
			MJE-1	MJE-2	MJE-3	Total
Light oil	Engine	ℓ	710	730	690	2,130
Cement	40 Kg/Sx	Sx	6	6	6	18
Bentonite	25 Kg/Sx	Sx	81	91	83	255
Libonite	20 Kg/Sx	Sx	16	16	19	51
C. M. C	10 Kg/Sx	Kg	48	49	51	148
TK60B	20 Kg/Sx	Sx	3	2	3	8

C. Consumed Bit

Hole No. Bit Type		MJE-1		MJE-2		MJE-3		Total	
		Drilled Length	Quantity	Drilled Length	Quantity	Drilled Length	Quantity	Drilled Length	Quantity
101 mm Single	Metal Bit	30.00 m	5 pcs	16.00 m	2 pcs	29.50 m	5 pcs	75.50 m	12 pcs
	Reamer	—	—	—	—	—	—	—	—
NQWL	Dia. Bit	207.40	6	185.60	4	172.10	6	565.10	16
	Dia. Reamer	207.40	3	185.60	3	172.10	3	565.10	9
BWQL	Dia. Bit	68.00	2	103.80	3	101.70	4	273.50	9
	Dia. Reamer	68.00	1	103.80	2	101.70	4	273.50	7

Dia: Diamond

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