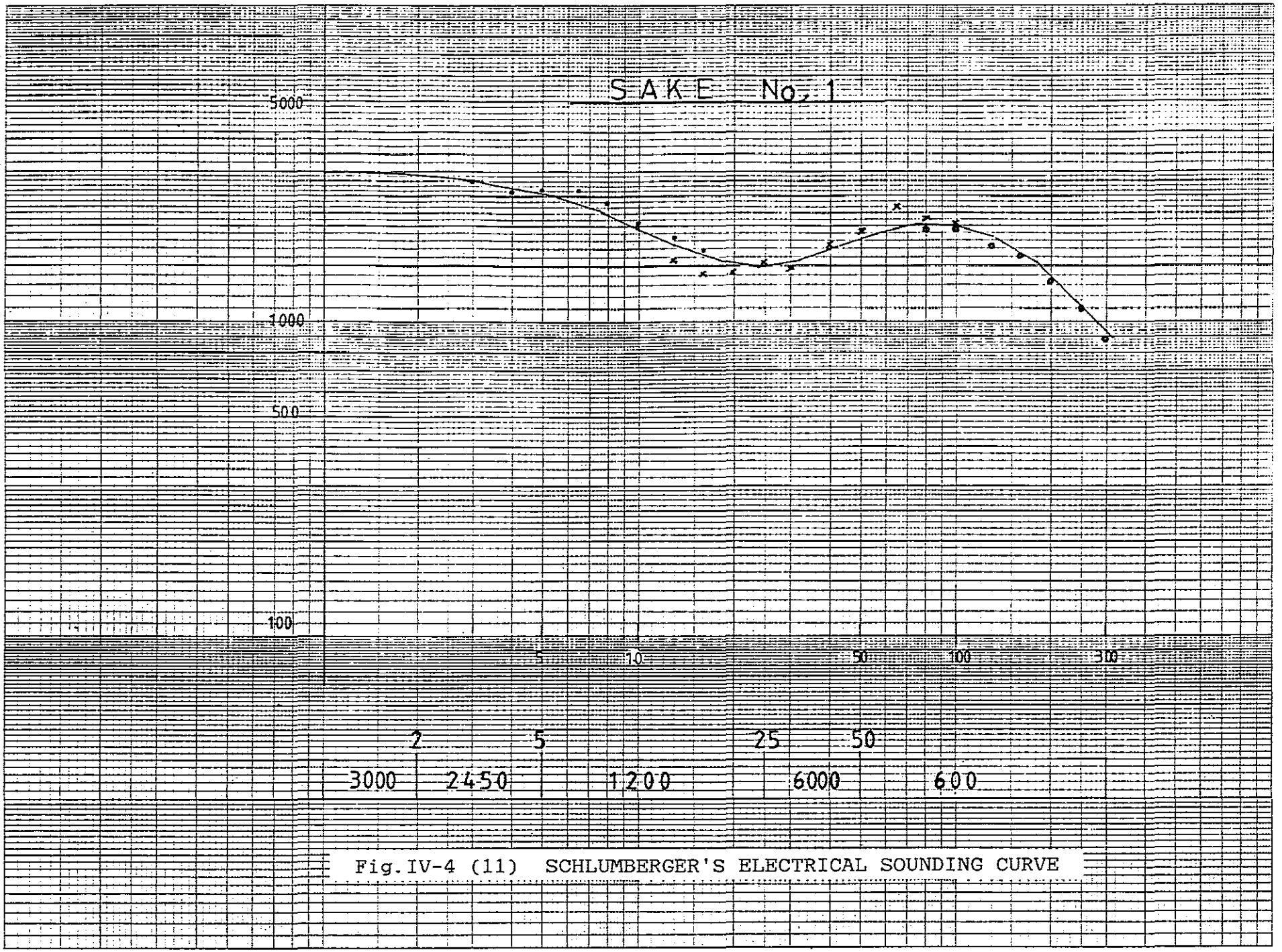

Fig.IV-4 (11) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

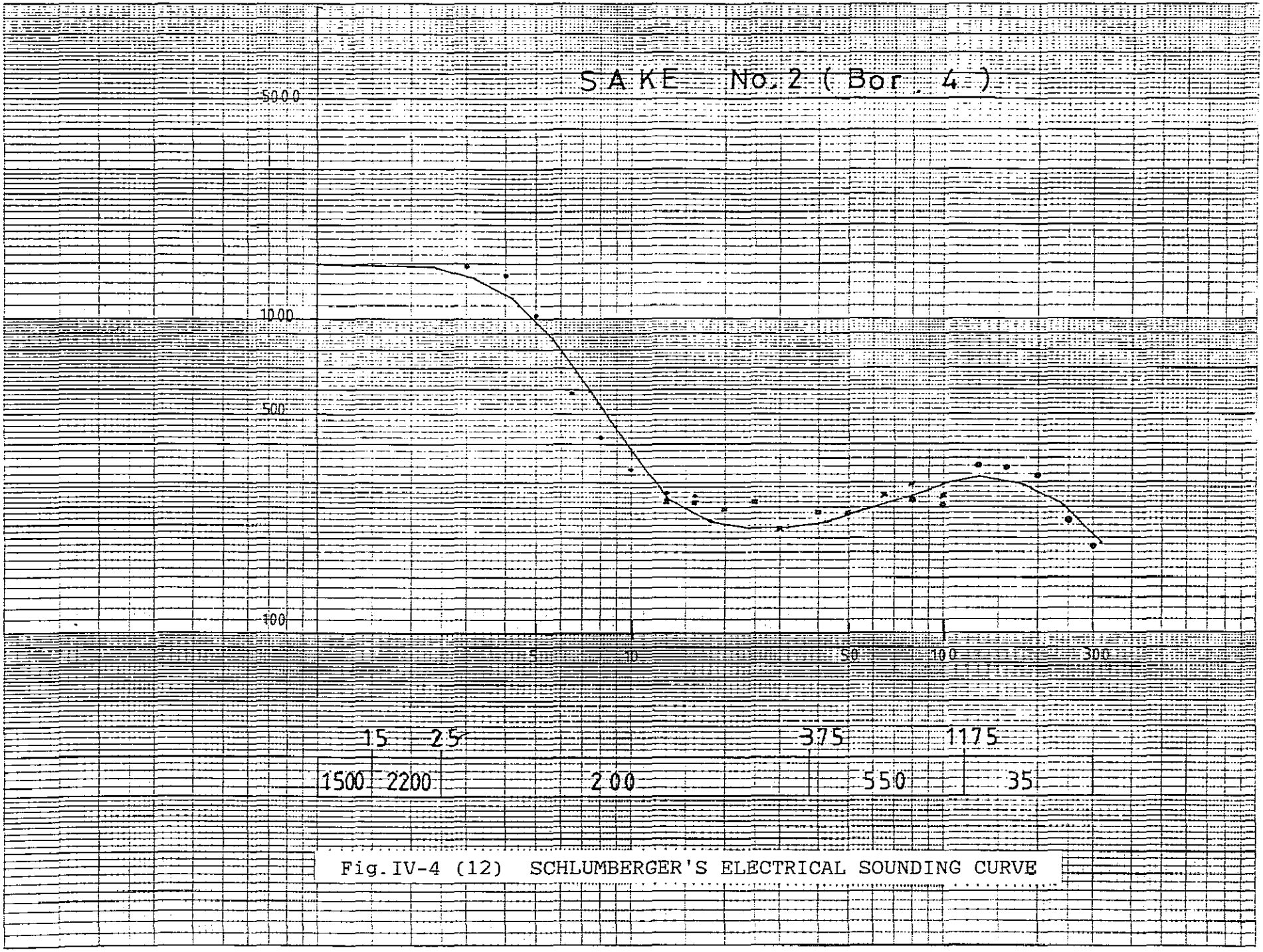

Fig.IV-4 (12) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

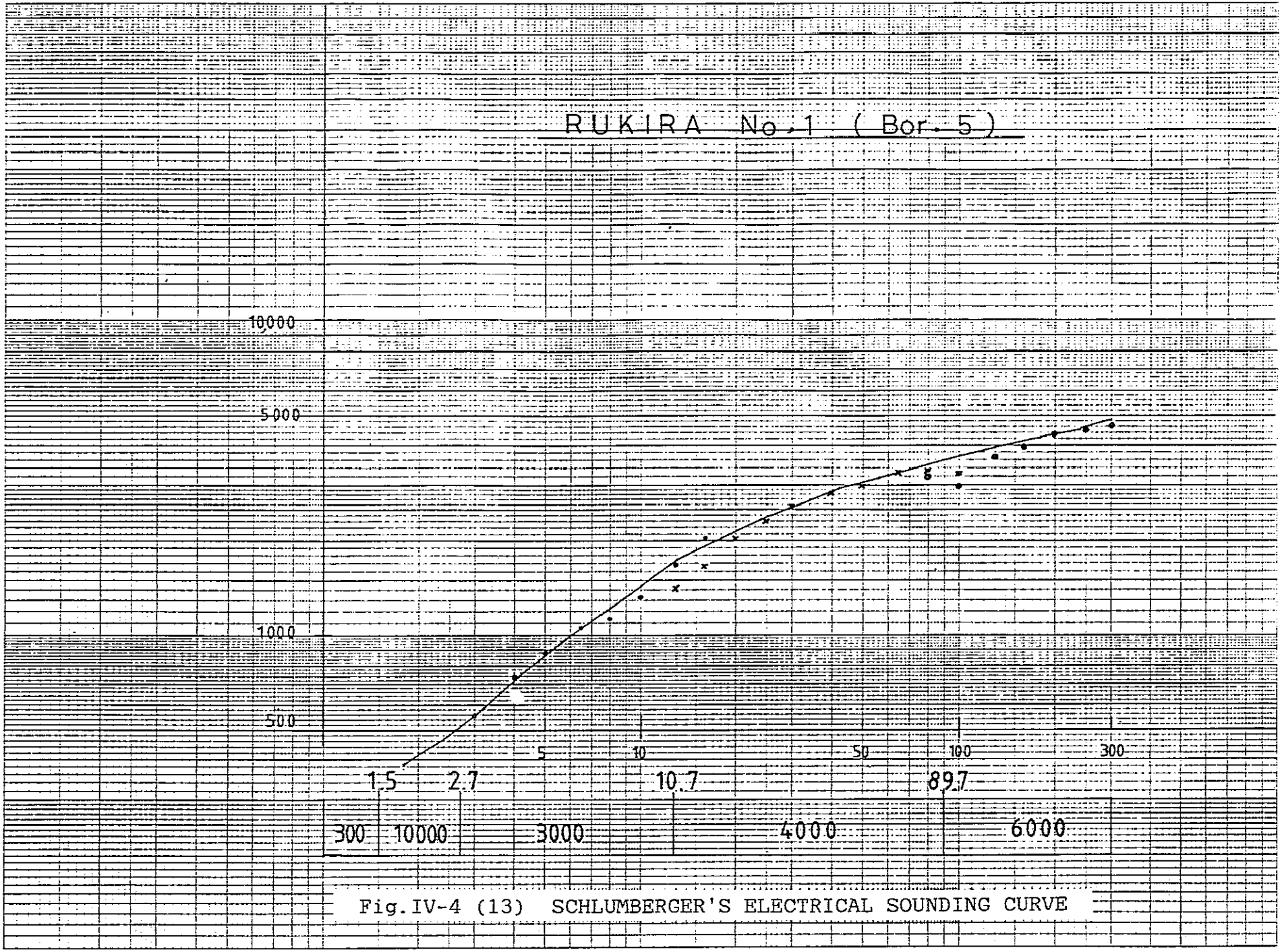

Fig.IV-4 (13) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

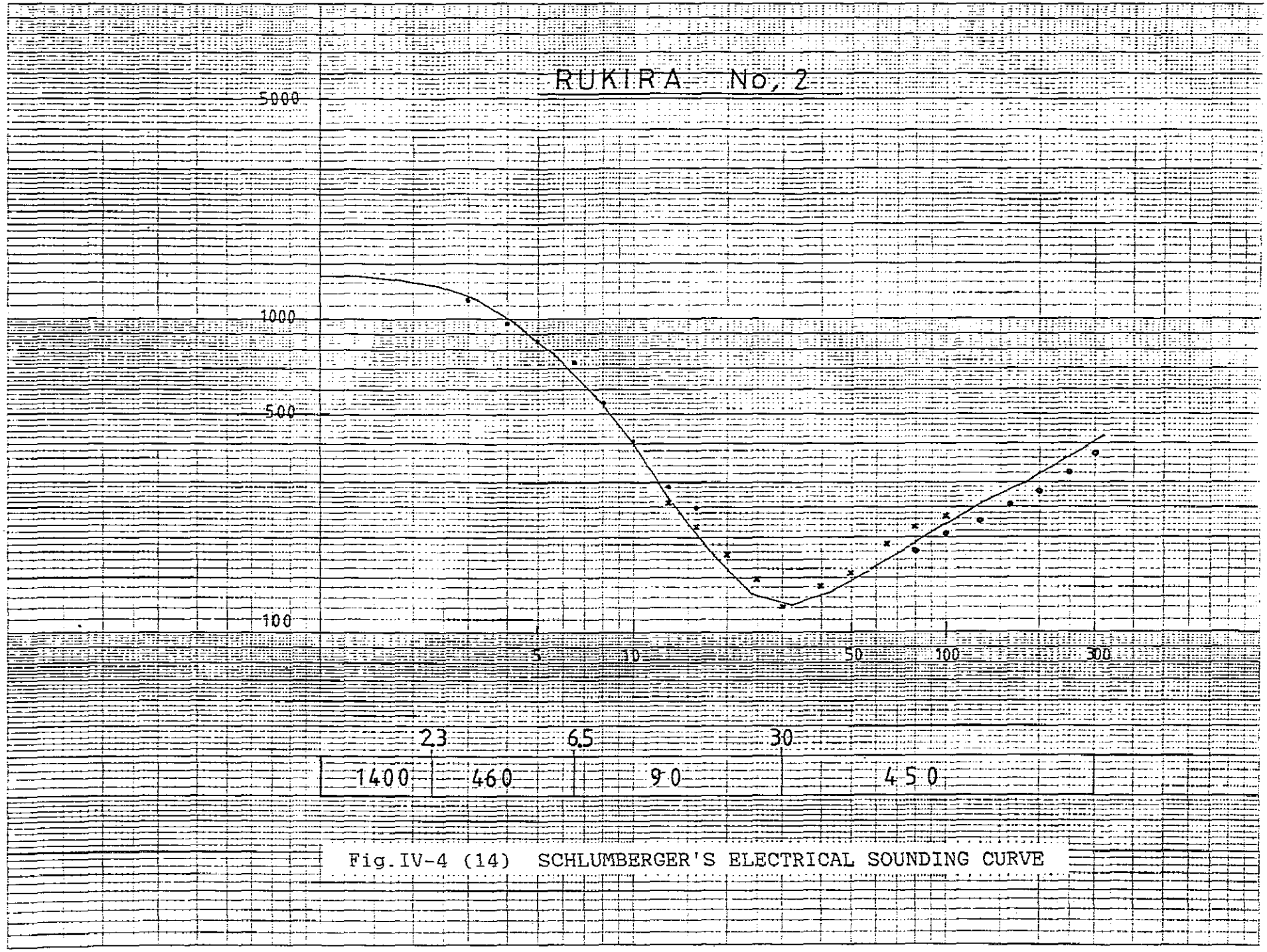

Fig.IV-4 (14) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

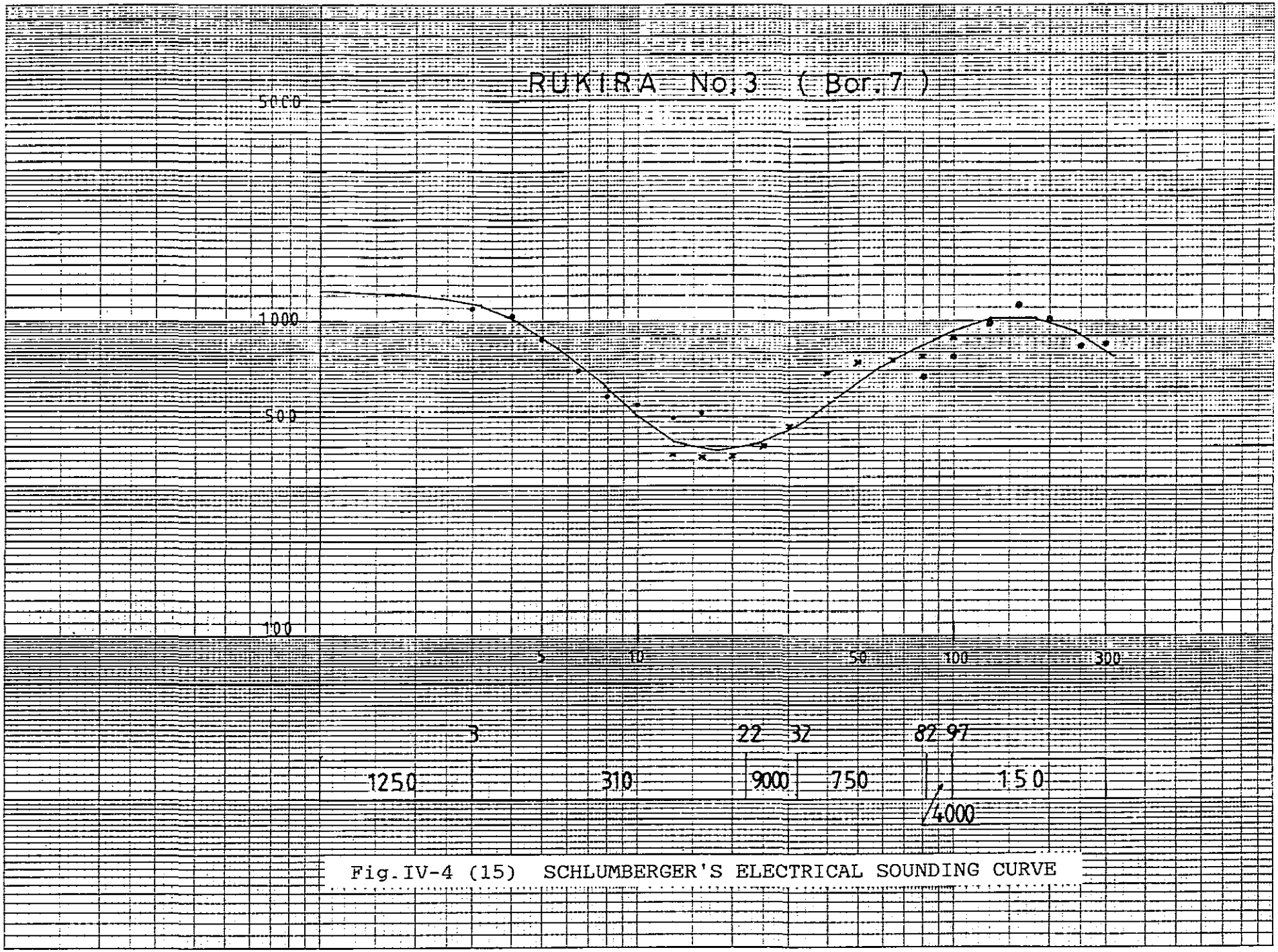

Fig.IV-4 (15) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

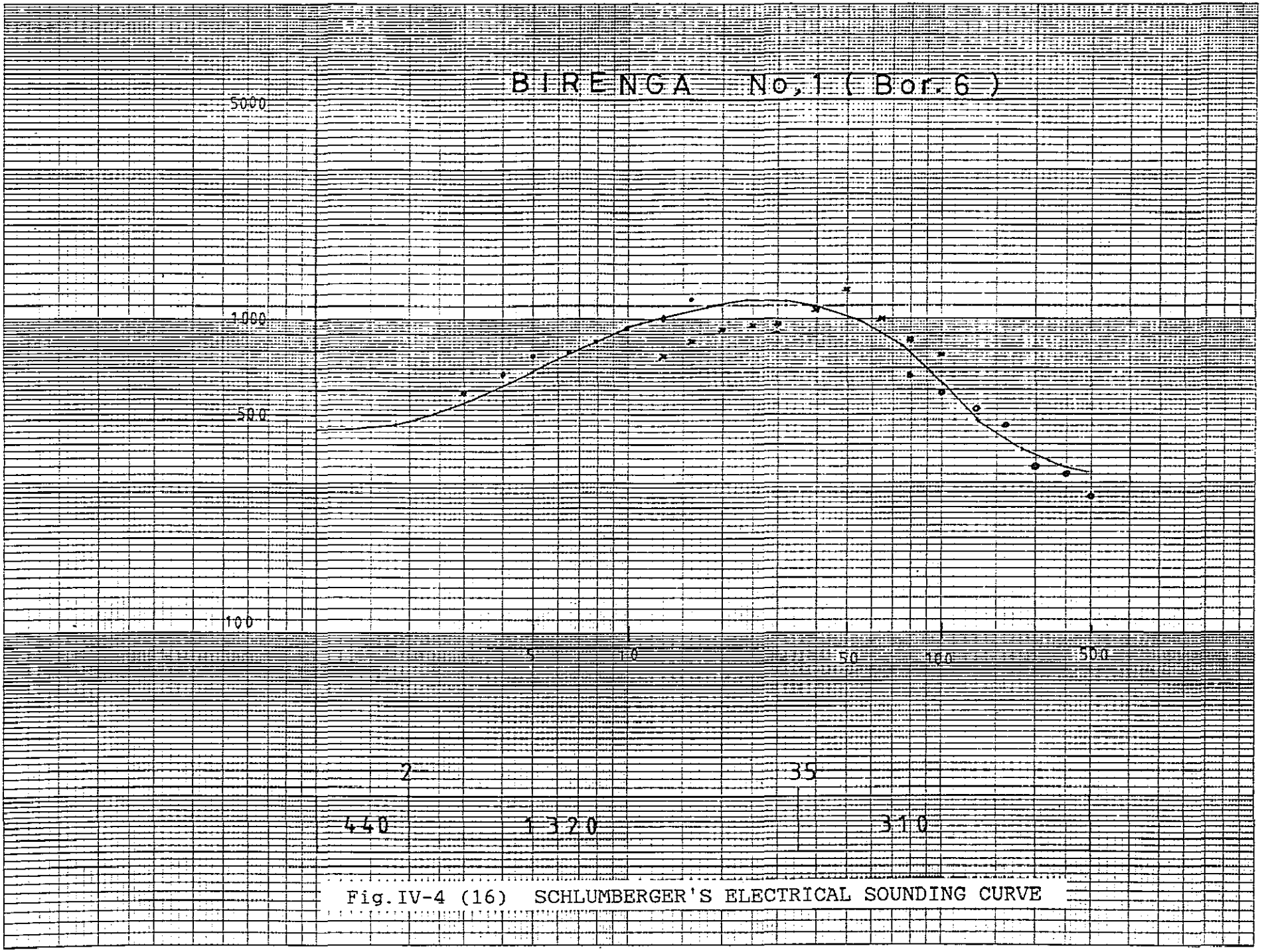

Fig.IV-4 (16) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

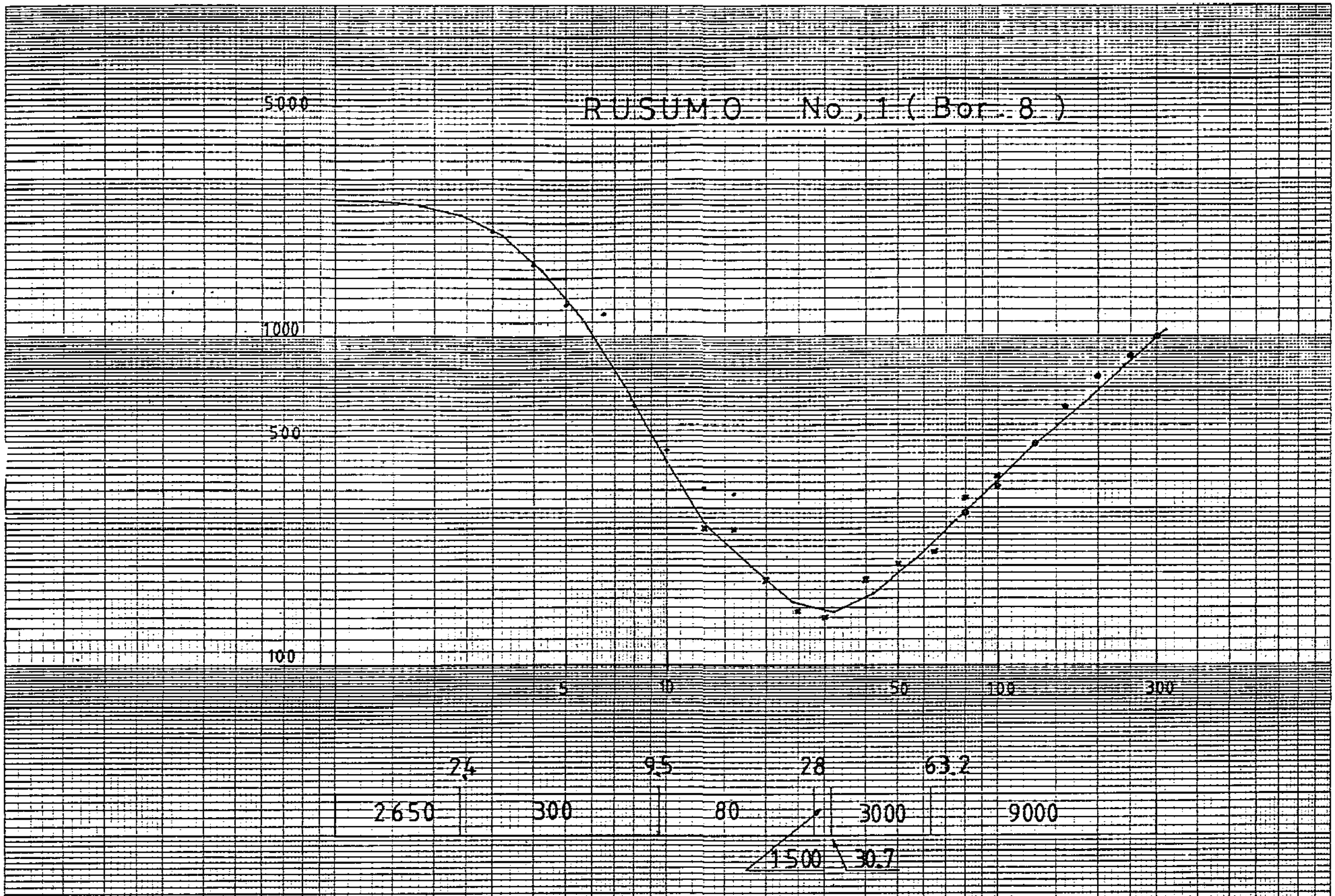

Fig.IV-4 (17) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

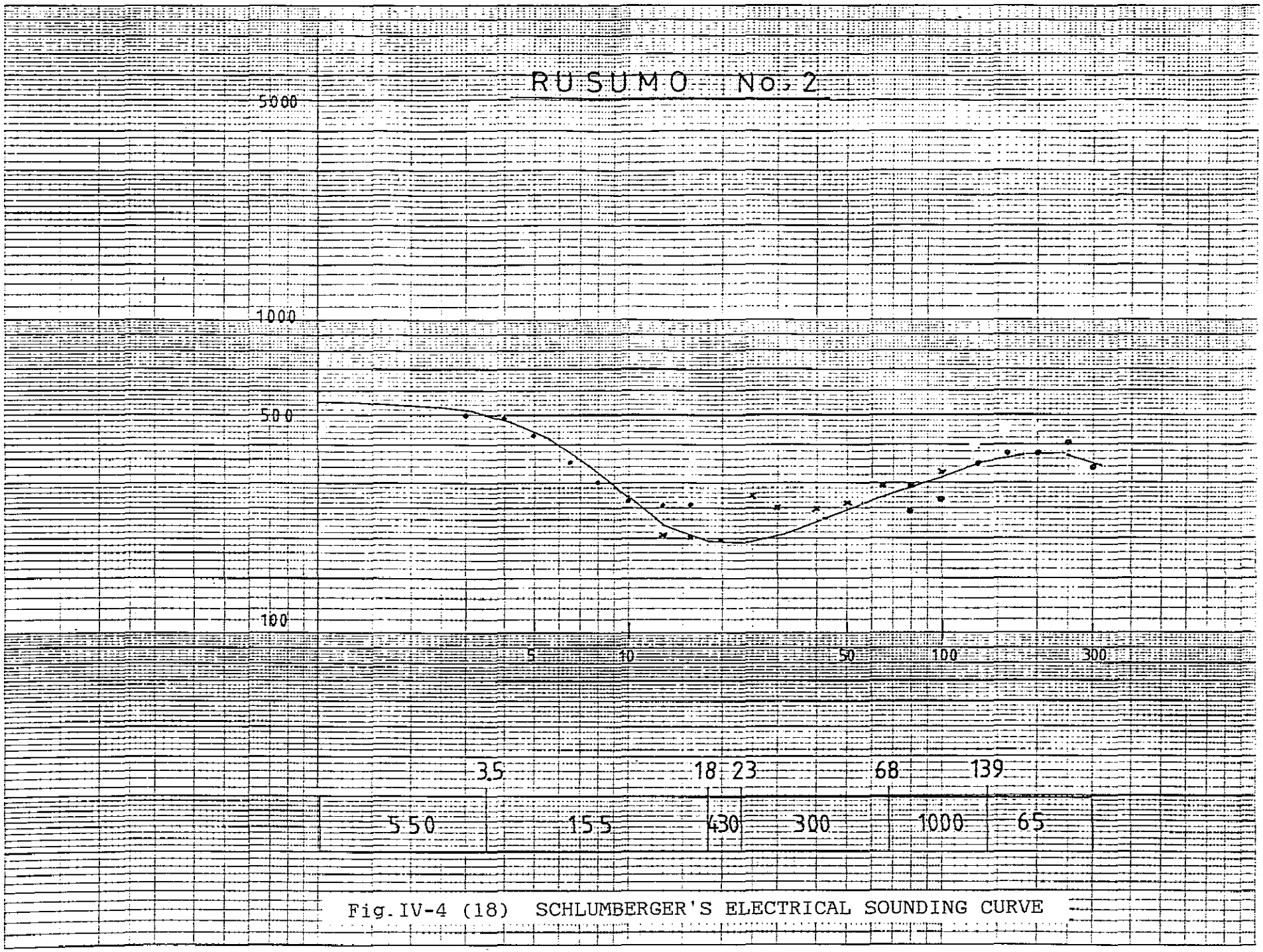

Fig. IV-4 (18) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

Fig. IV-4 (19) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

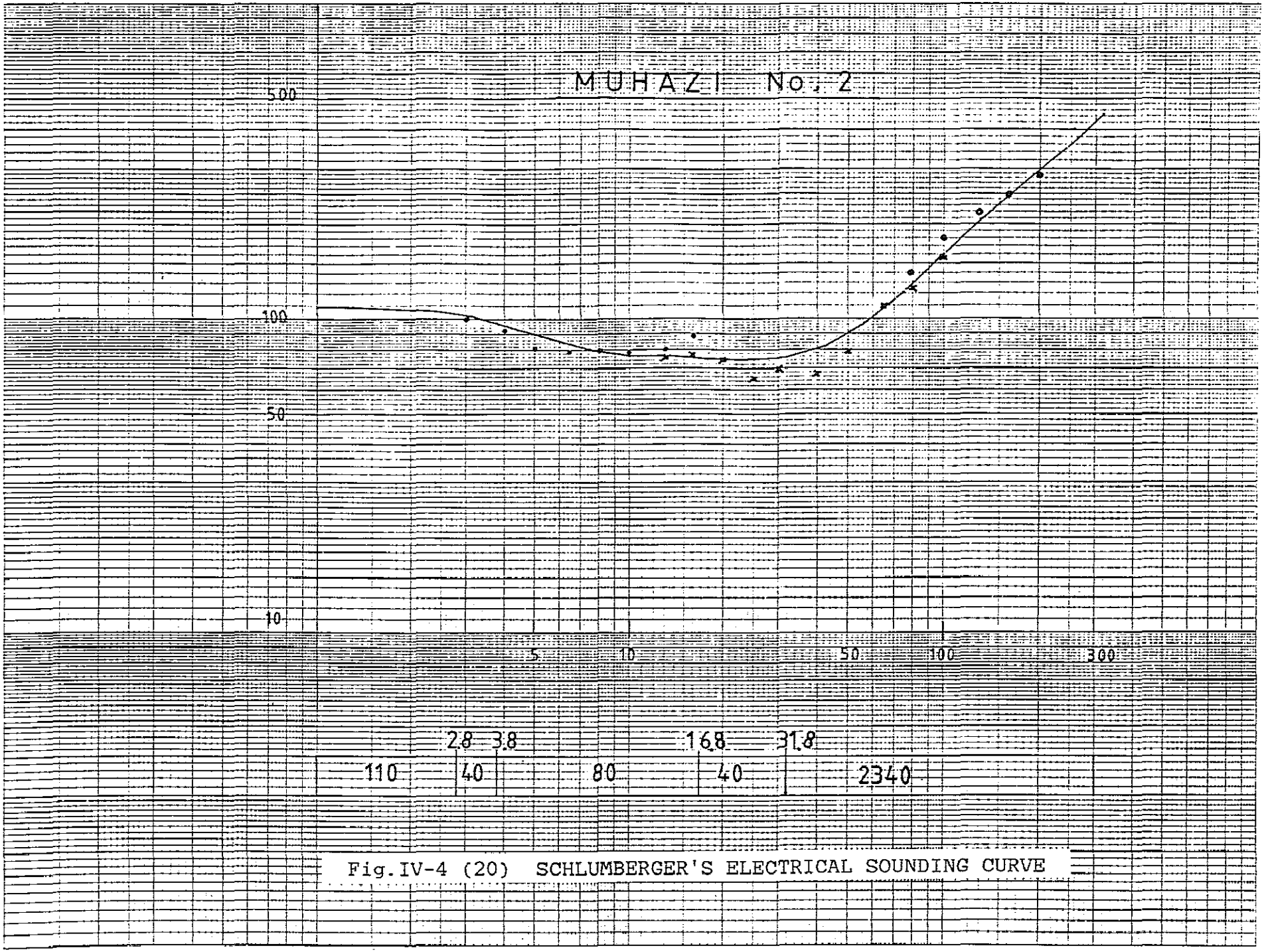

Fig.IV-4 (20) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

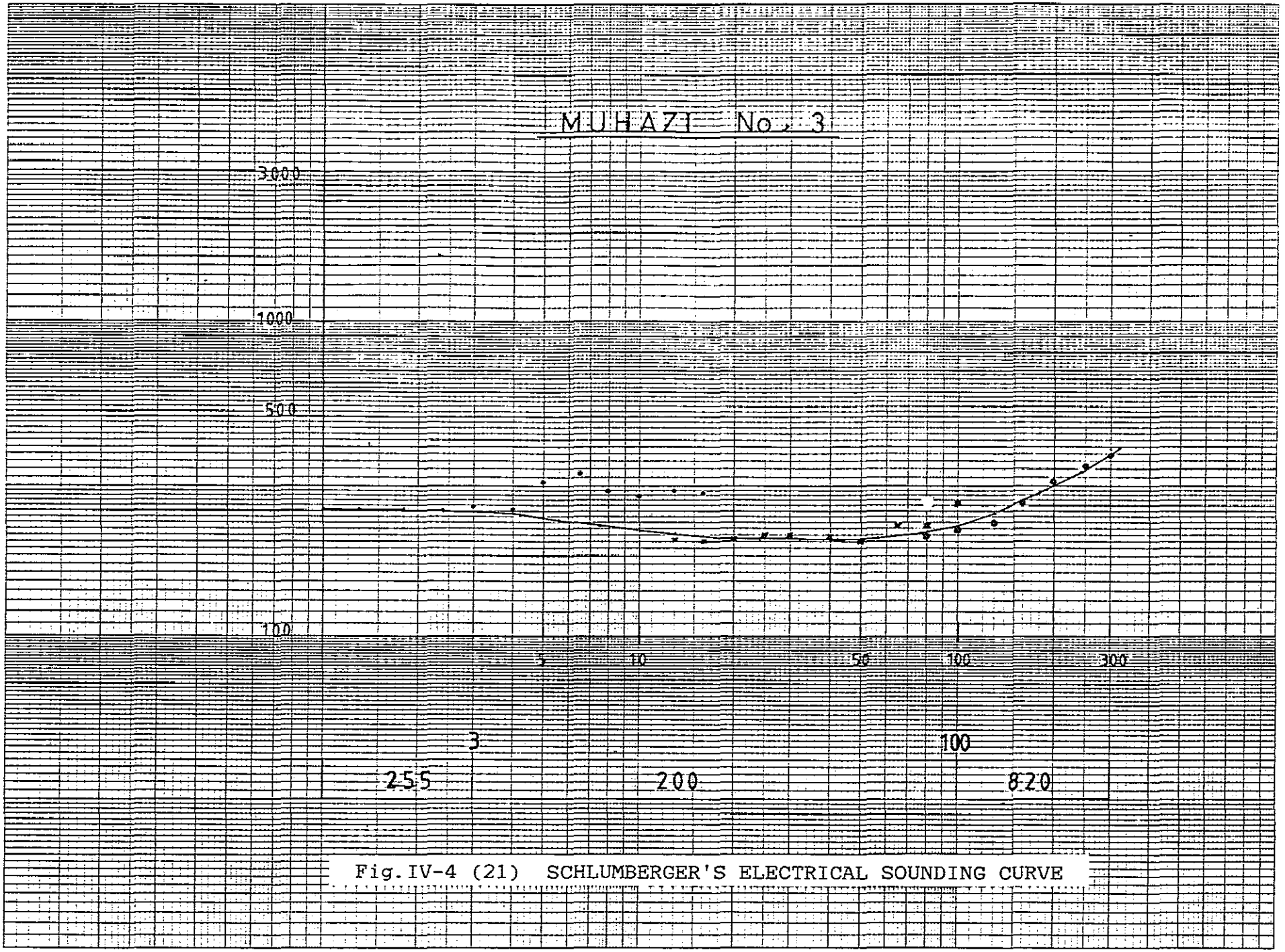

Fig.IV-4 (21) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

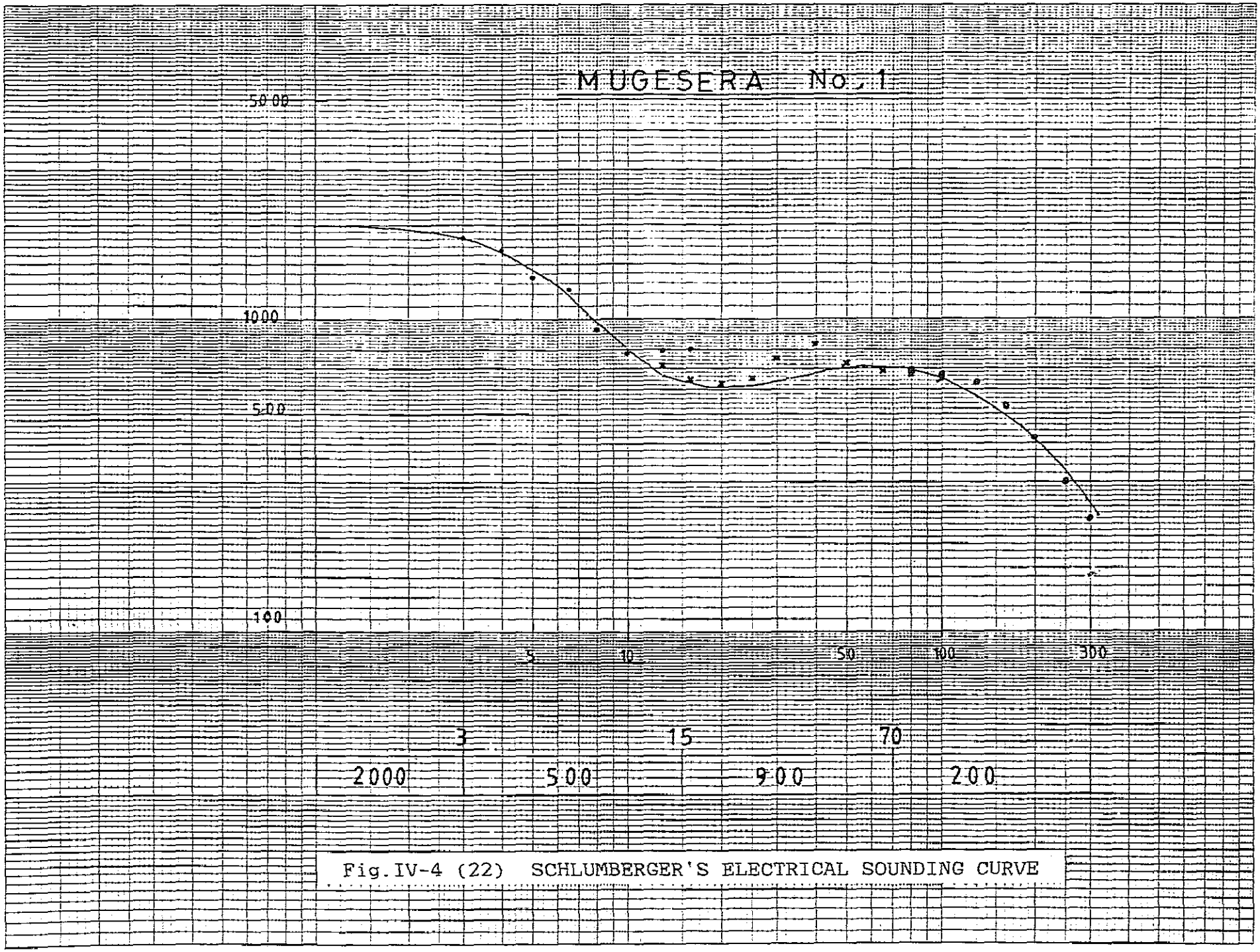

Fig.IV-4 (22) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

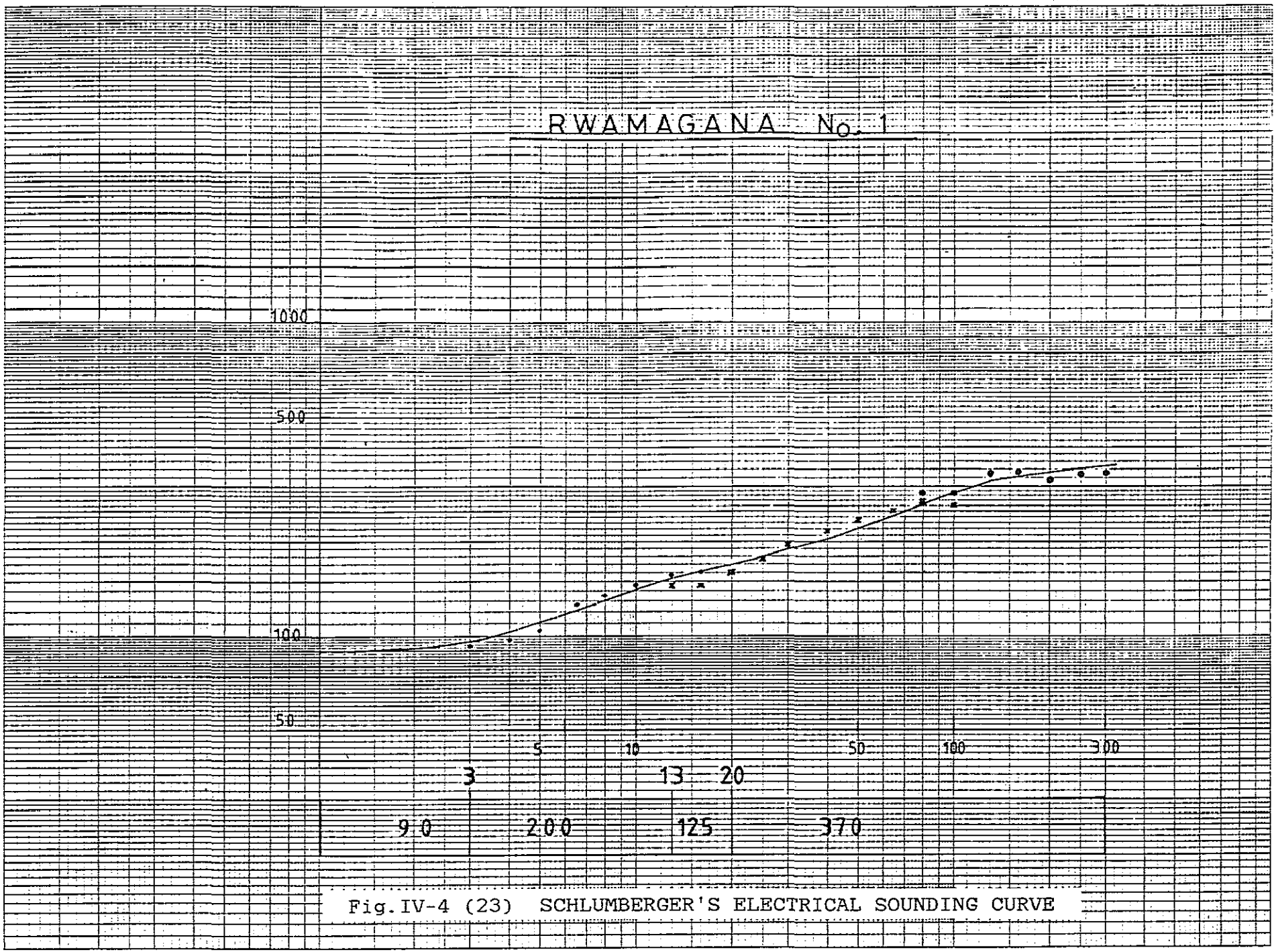

Fig.IV-4 (23) SCHLUMBERGER'S ELECTRICAL SOUNDING CURVE

GEOLOGICAL CONDITION OF THE TEST WELL

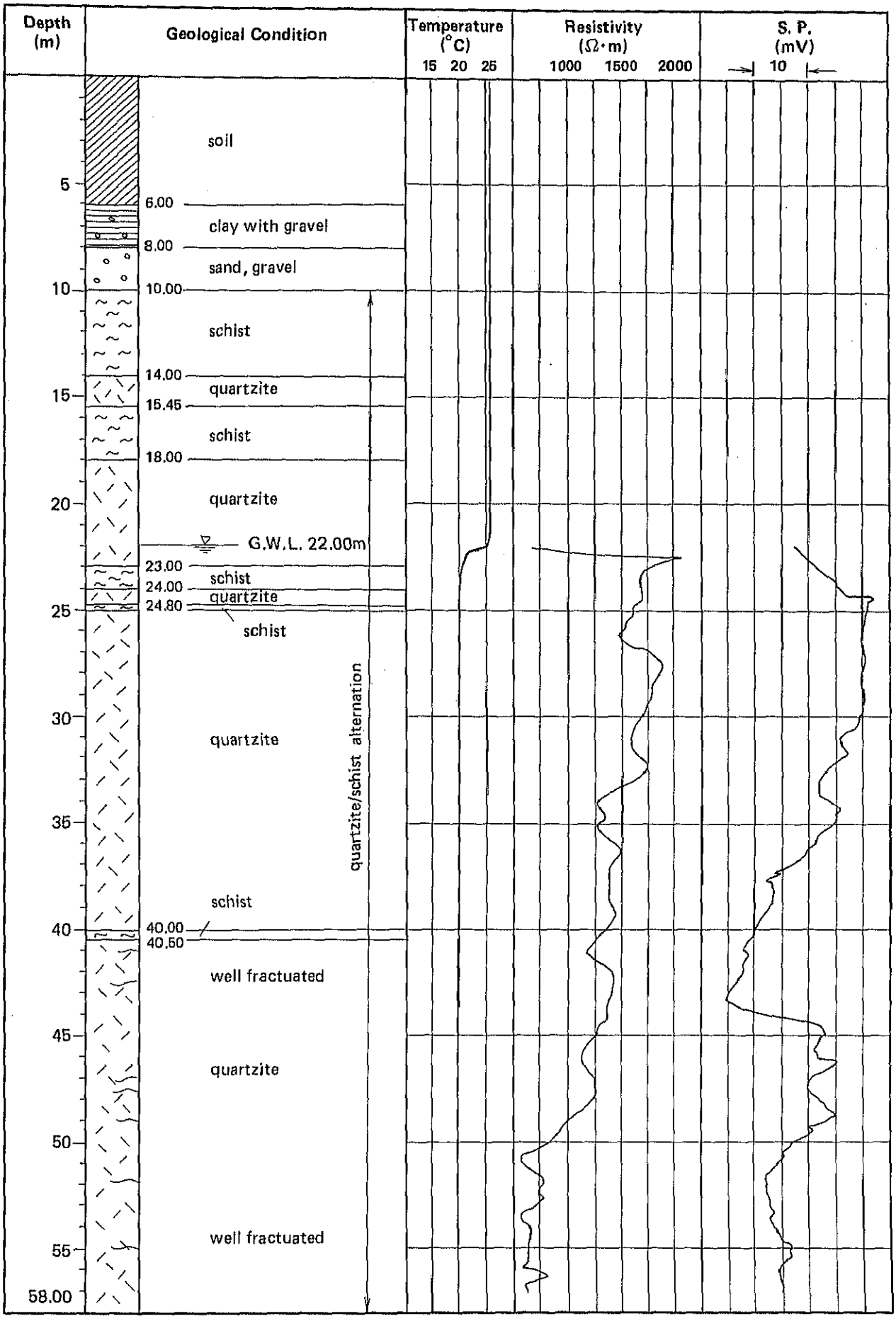

Fig. IV-6 Geological Condition of the Test Well (Birenga)

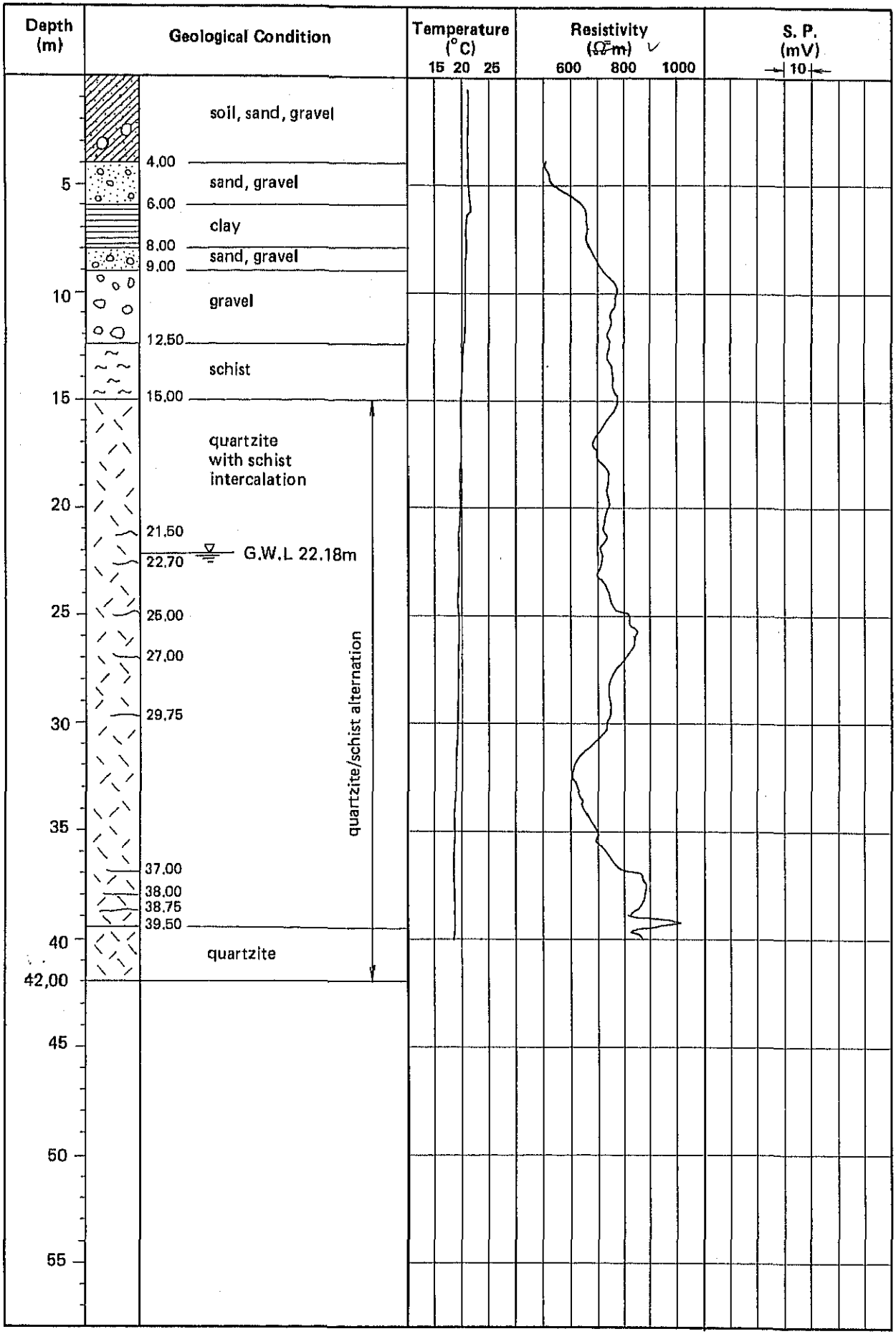

Fig. IV-6 Geological Condition of the Test Well (Rukira)

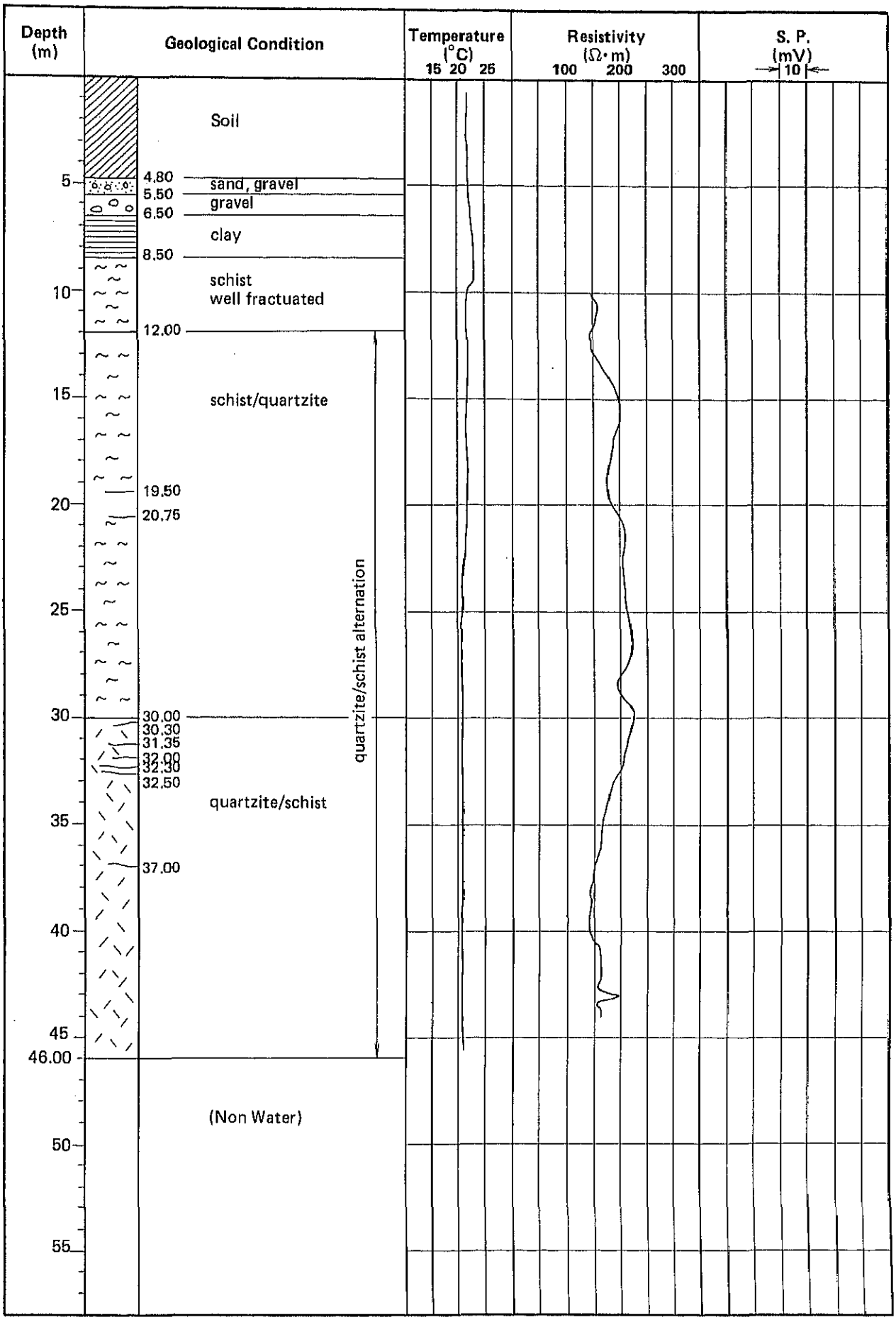

Fig. IV-6 Geological Condition of the Test Well (Rusumo)

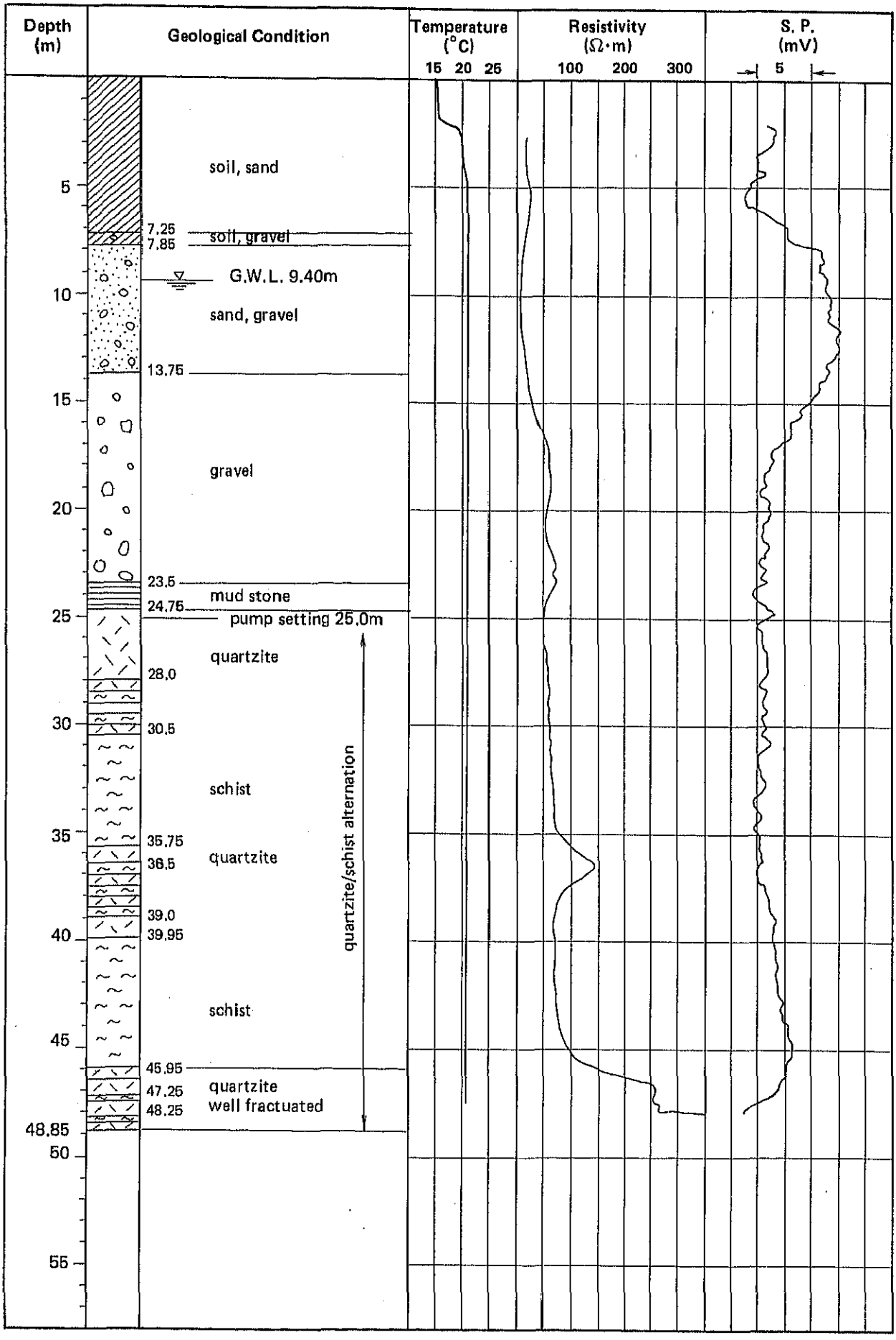

Fig. IV-6 Geological Condition of the Test Well (Kayonza)

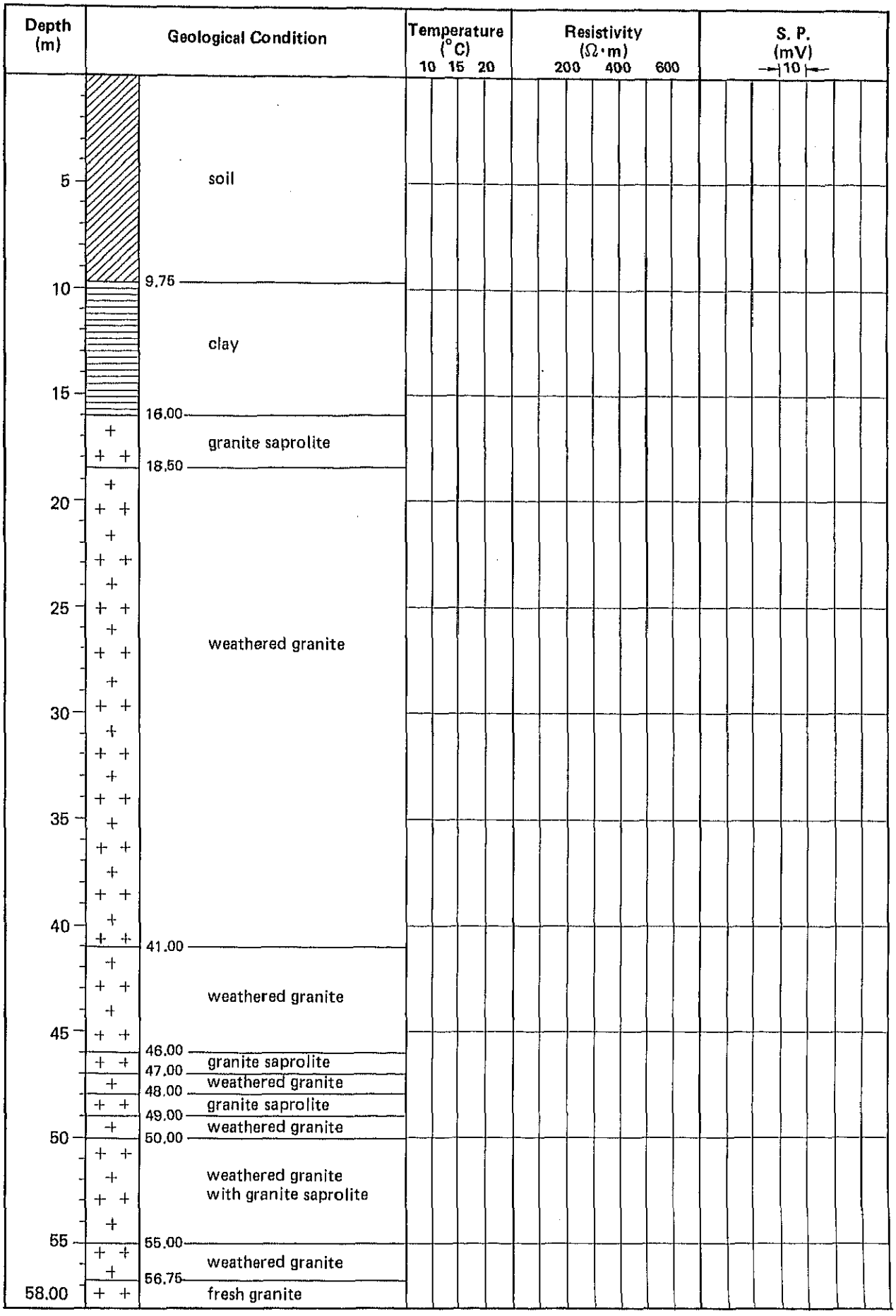

Fig. IV-6 Geological Condition of the Test Well (Sake)

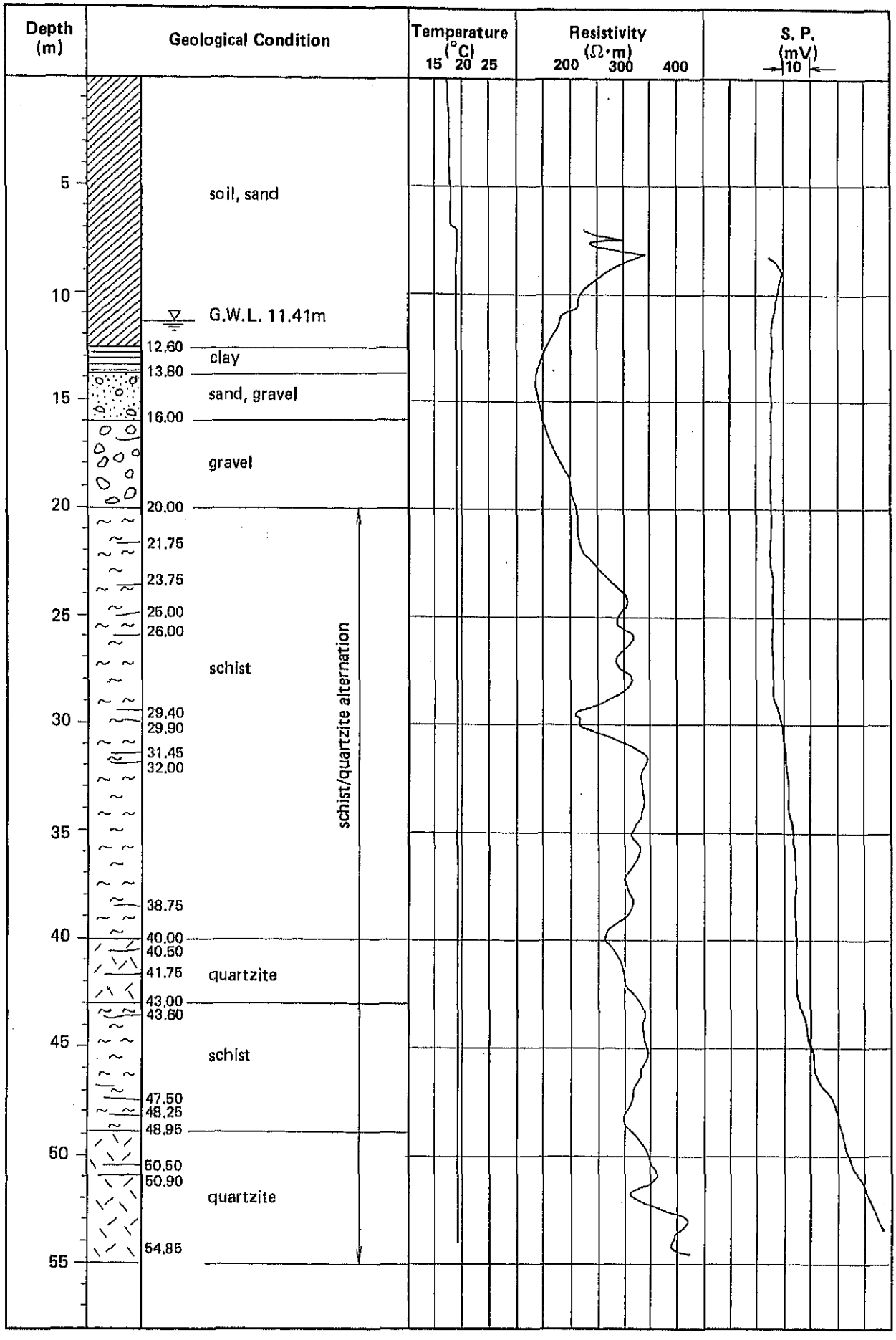

Fig. IV-6 Geological Condition of the Test Well (Kigarama)

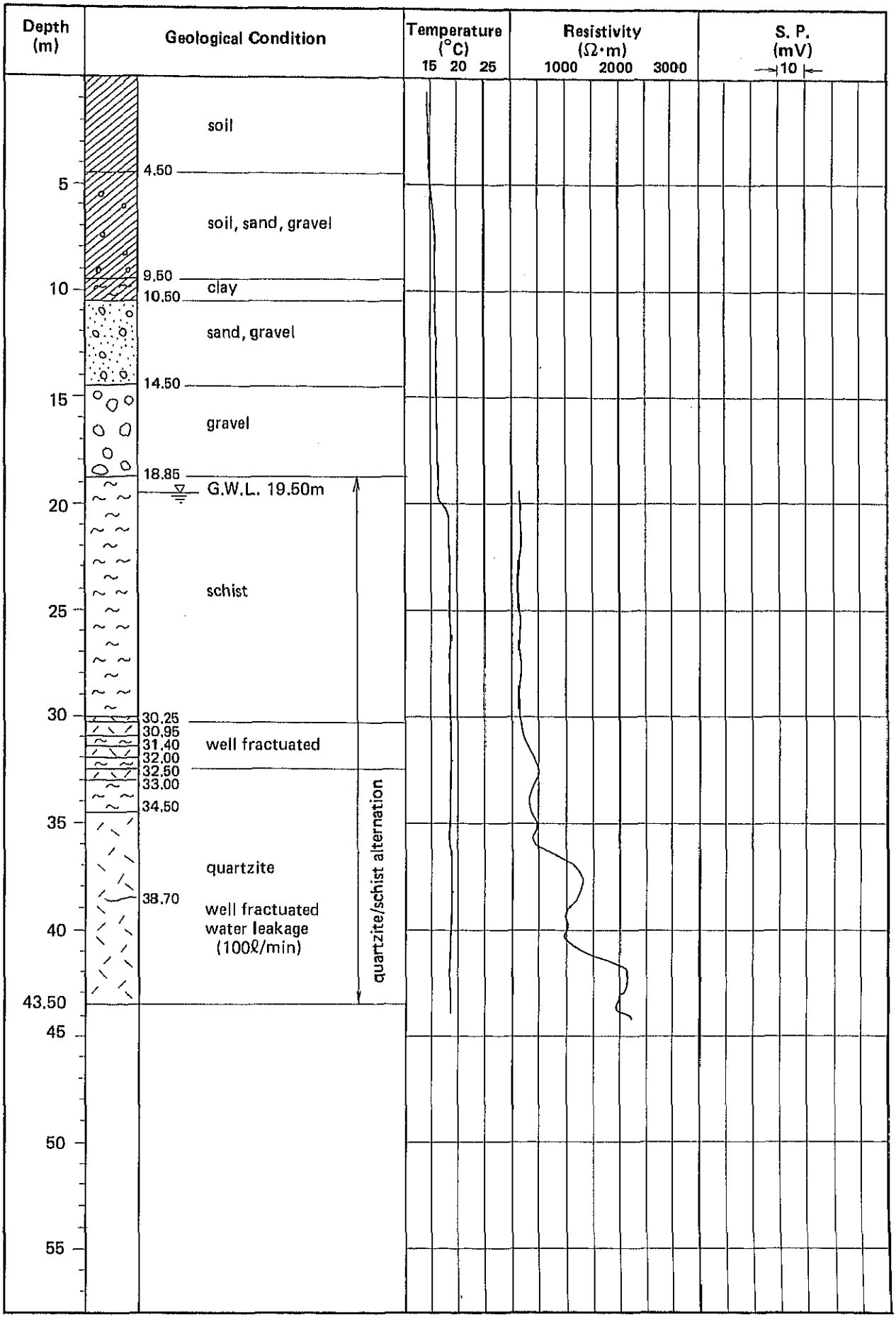

Fig. IV-6 Geological Condition of the Test Well (Kabarondo)

PLAN OF WATER SUPPLY FOR CELLULES

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: BIRENGA (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 No. of Pump & Well Required: Popu-lation	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. BARE	-	635	3.67	-	-	-	-	2.508	2,329	34,935	216,6	F	4	4	$D_1(2),S_1(2)$
1. Karenge	121	-	"	444	6,660	0	0	0	-	-	-	-	1	1	S_1
2. Mutendeli	121	-	"	444	6,660	1	0.54	0.324	-	-	(27,993)	F	-	-	-
3. Mutendali	129	-	"	473	7,095	0	0	0	-	-	0	-	1	1	S_1
4. Rurenge	132	-	"	484	7,260	0	0	0	-	-	0	-	1	1	D_1
5. Muzingira	132	-	"	484	7,260	3	3.64	2.184	0	0	(188,697)	F	(1)	(1)	D_1
2. BIRENGA	-	767	3.35	-	-	-	-	0.630	2,567	38,505	54,431	F	3	3	$S_1(3)$
1. Abarasa	187	-	"	626	9,390	2	0.51	0.306	-	-	(26,438)	F	-	-	-
2. Rwankogoto	154	-	"	515	7,725	1	0.34	0.204	-	-	(17,625)	F	-	-	-
3. Kazo	173	-	"	579	8,685	1	0.20	0.120	-	-	(10,368)	(79.6%)	(1)	(1)	S_1
4. Resebeya	152	-	"	509	7,635	0	0	0	-	-	0	-	1	1	S_1
5. Karenge	101	-	"	338	5,070	0	0	0	-	-	0	-	1	1	S_1
3. GAHARA	-	990	6.75	-	-	-	-	0.246	6,680	100,200	21,254	21.2%	6	6	$D_1(1),S_1(5),R(2)$
1. Mugogo	180	-	"	1,215	18,225	0	0	0	-	-	0	-	2	2	S_1
2. Rubimba	102	-	"	688	10,320	1	0.28	0.168	-	-	(14,515)	F	-	-	-
3. Butanga	115	-	"	776	11,640	0	0	0	-	-	0	-	1	1	S_1
4. Kagarama	80	-	"	540	8,100	0	0	0	-	-	0	-	-	-	R
5. Taraya	115	-	"	776	11,640	0	0	0	-	-	0	-	1	1	S_1
6. Muhamba	125	-	"	843	12,645	0	0	0	-	-	0	-	1	1	S_1
7. Murangara	67	-	"	452	6,780	0	0	0	-	-	0	-	1	1	S_1
8. Murehe	150	-	"	1,012	15,180	0	0	0	-	-	0		-	-	R
9. Nyakagezi	56	-	"	378	5,670	1	0.13	0.078	-	-	(6,738)	F	(1)	(1)	D_1

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: BIRENGA (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
4. GAHULIRE	-	455	7.47	-	-	-	-	0.768	3,396	50,940	66,354	76.8%	2	2	D_1(2),R(2)
1. Irango	117	-	"	873	13,095	0	0	0	-	-	-	-	-	-	R
2. Itambiro	121	-	"	903	13,545	2	1.11	0.666	-	-	(57,541)	F	(1)	(1)	D_1
3. Mpandu	126	-	"	941	14,115	0	0	0	-	-	-	-	-	-	R
4. Rugenge	91	-	"	679	10,185	2	0.17	0.102	-	-	(8,813)	(86.5%)	1	1	D_1
5. GASHONGORA	-	414	12.64	-	-	-	-	0.420	5,157	77,355	36,288	49.9%	5	5	D_1(4),S_1(1), R(1)
1. Kabagera	60	-	"	747	11,205	0	0	0	-	-	-	-	1	1	D_1
2. Rwimondo	150	-	"	1,869	28,035	0	0	0	-	-	-	-	2	2	D_1
3. Nyakabungo	104	-	"	1,295	19,425	0	0	0	-	-	-	-	-	-	R
4. Nyagasenyi	100	-	"	1,246	18,690	2	0.70	0.42	-	-	(36,288)	F	(1)	(1)	S_1
5. Butezi	N	-	"	N	N	N	N	N	-	-	-	-	1	1	D_1
6. KIBARA	-	353	11.87	-	-	-	-	0	4,189	62,835	0	0	5	5	D_1(5)
1. Nyamirindi	136	-	"	1,614	24,210	0	0	0	-	-	-	-	2	2	D_1
2. Nyamugali	80	-	"	949	14,235	0	-	-	-	-	-	-	1	1	D_1
3. Nyagasozi	137	-	"	1,626	24,390	0	0	0	-	-	-	-	2	2	D_1

Note: R: Rainfall storage unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: BIRENGA (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
									No. of Pump & Well Required						
8. KIBIMBA	-	353	10.12	-	-	-	-	2.724	3,622	54,330	235,353	F	5	5	S_1(5)
1. Tunduti	130	-	"	1,315	19,725	0	0	0	-	-	-	-	2	2	S_1
2. Rugarama	126	-	"	1,275	19,125	0	0	0	-	-	-	-	2	2	S_1
3. Kinyonza	102	-	"	1,032	15,480	4	4.54	2.724	-	-	(235,353)	F	(1)	(1)	S_1
9. KIBUNGO	-	N	N	-	-	-	-	-	2,998	-	-	Excluded from Project			
1. Casemakamba	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Karenge	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. Ngoma	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4. Musamvu	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10. MATONGO	-	534	10.12	-	-	-	-	0.12	5,401	81,015	10,368	12.8%	7	7	S_1(7)
1. Mukona	106	-	"	1,072	16,080	1	0.20	0.12	-	-	(10,368)	(64.5%)	1	1	S_1
2. Nyagasozi	124	-	"	1,254	18,810	0	0	0	-	-	-	-	2	2	S_1
3. Karwema	158	-	"	1,598	23,970	0	0	0	-	-	-	-	2	2	S_1
4. Kibaro	146	-	"	1,477	22,155	0	0	0	-	-	-	-	2	2	S_1
11. NADAMIRA	-	467	6.19	-	-	-	-	1.27	2,889	43,335	65,836	F	0	0	R(3)
1. Mahango	117	-	"	724	10,860	0	0	0	-	-	-	-	-	-	R
2.Ruhinga	129	-	"	798	11,970	0	0	0	-	-	-	-	-	-	R
3. Kabimba	77	-	"	476	7,140	2	0.77	0.462	-	-	(39,916)	F	-	-	-
4. Gatoro	90	-	"	557	8,355	1	0.50	0.300	-	-	(25,920)	F	-	-	-
5. Kiziguro	54	-	"	334	5,010	0	0	0	-	-	-	-	-	-	R
12. SAKARA	-	774	6.14	-	-	-	-	1,614	4,748	71,220	139.488	F	3	3	D_1(5),R(3)
1. Muvumba	54	-	"	331	4,965	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: BIRENGA (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Kiyagara	51	-	6.14	313	4,695	0	0	0	-	-	-	-	-	-	R
3. Nyarwanya	71	-	"	435	6,525	0	0	0	-	-	-	-	-	-	R
4. Nyagataba	158	-	"	970	14,550	0	0	0	-	-	-	-	1	1	D_1
5. Kukarambi	110	-	"	675	10,125	0	0	0	-	-	-	-	1	1	D_1
6. Kukarenge	113	-	"	693	10,395	0	0	0	-	-	-	-	1	1	D_1
7. Kabahushi	84	-	"	515	7,725	2	0.92	0.522	-	-	(47,692)	F	(1)	(1)	D_1
8. Gahama	133	-	"	816	12,240	5	1.77	1.522	-	-	(91,756)	F	(1)	(1)	D_1

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KABARONDO (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. BISENGA	-	476	5.50	-	-	-	-	0	2,617	39,255	0	0	3	3	D_1(3),R(2)
1. Mutsmba	97	-	"	533	7,995	0	0	0	-	-	-	-	-	-	R
2. Ngoma	68	-	"	374	5,610	0	0	0	-	-	-	-	-	-	R
3. Nyakanazi	91	-	"	500	7,500	0	0	0	-	-	-	-	1	1	D_1
4. Rulenge	110	-	"	605	9,075	0	0	0	-	-	-	-	1	1	D_1
5. Muko	110	-	"	605	9,075	0	0	0	-	-	-	-	1	1	D_1
2. CYINZOVO	-	484	6.22	-	-	-	-	1.158	3,007	45,105	100,050	F	2	2	D_1(2),R(3)
1. Rurenge	100	-	"	622	9,330	1	0.59	0.354	-	-	(30,585)	F	(1)	(1)	D_1
2. Rugazi	90	-	"	559	8,385	0	0	0	-	-	-	-	1	1	D_1
3. Cyenzovu	95	-	"	590	8,850	0	0	0	-	-	-	-	-	-	R
4. Nyakabungo	95	-	"	590	8,850	0	0	0	-	-	-	-	-	-	R
5. Nyabisenga	104	-	"	646	9,690	1	1.34	0.804	-	-	(69,465)	-	-	-	R
3. KABARONDO	-	301	5.88	-	-	-	-	0	3,620	54,300	0	0	3	3	D_1(3),R(2)
1. Kabarondo	77	-	"	687	10,305	0	0	0	-	-	-	-	1	1	D_1
2. Rugazi	53	-	"	676	10,140	0	0	0	-	-	-	-	1	1	D_1
3. Cyabajwa	57	-	"	887	13,305	0	0	0	-	-	-	-	1	1	D_1
4. Bitoma	58	-	"	782	11,730	0	0	0	-	-	-	-	-	-	R
5. Busindu	56	-	"	588	8,820	0	0	0	-	-	-	-	-	-	R
4. MURAMA	-	284	6.04	-	-	-	-	0.486	1,714	25,710	41,990	F	5	5	R(5)
1. Murama	54	-	"	326	4,890	0	0	0	-	-	-	-	1	1	R
2. Rwabugengeri	60	-	"	362	5,430	1	0.31	0.186	-	-	(16,070)	-	-	-	R
3. Rusaro I	51	-	"	308	4,620	1	0.50	0.300	-	-	(25,920)	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KABARONDO (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
4. Rusaro II	60	-	6.04	362	5,430	0	0	0	-	-	-	-	-	-	R
5. Bubindi	59	0	"	356	5,340	0	0	0	-	-	-	-	-	-	R
5. NKAMBA	-	628	5,86	-	-	-	-	1,026	3,678	55,170	88,646	F	2	2	D_1(2),R(3)
1. Cyemo	109	-	"	638	9,570	2	0.46	0.276	-	-	(23,846)	F	(1)	(1)	D_1
2. Mabuga	166	-	"	972	14,580	0	0	0	-	-	0	-	1	1	D_1
3. Gitwa	107	-	"	627	9,405	1	1.25	0.750	-	-	(64,800)	-	-	-	R
4. Agatare	132	-	"	773	11,595	0	0	0	-	-	0	-	-	-	R
5. Ryamakaza	114	-	"	668	10,020	0	0	0	-	-	0	-	-	-	R
6. RUBIRA	-	362	7.90	-	-	-	-	0.354	2,857	42,855	30,585	71.4%	0	0	R(4)
1. Nyabikenke	(2)82	-	"	647	9,705	0	0	0	-	-	0	-	-	-	R
2. Rubira	66	-	"	521	7,815	0	0	0	-	-	0	-	-	-	R
3. Agasharu	86	-	"	679	10,185	0	0	0	-	-	0	-	-	-	R
4. Nyabikenke	(1)62	-	"	489	7,335	0	0	0	-	-	0	-	-	-	R
5. Akagarama	66	-	"	521	7,815	2	0.59	0.354	-	-	(30,585)	-	F	-	-
7. RUKIRA	-	350	6.98	-	-	-	-	0	2,440	36,600	0	0	5	5	D_1(5)
1. Murambi	78	-	-	544	8,160	0	0	0	-	-	-	-	1	1	D_1
2. Buhoro	78	-	-	544	8,160	0	0	0	-	-	-	-	1	1	D_1
3. Mashya	64	-	-	446	6,690	0	0	0	-	-	-	-	1	1	D_1
4. Agasharu	78	-	-	544	8,160	0	0	0	-	-	-	-	1	1	D_1
5. Ngatare	52	-	-	362	5,430	0	0	0	-	-	-	-	1	1	D_1
8. RUNDY	-	616	5.88	-	-	-	-	0	3,620	54,300	0	0	1	1	D_1(1),R(4)
1. Murambi	117	-	"	687	10,305	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KABARONDO (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Lyagahoro	115	-	5.88	676	10,140	0	0	0	-	-	-	-	-	-	R
3. Gisoro	151	-	"	887	13,305	0	0	0	-	-	-	-	1	1	D_1
4. Kabuye	133	-	"	782	11,730	0	0	0	-	-	-	-	-	-	R
5. Gashoyi	100	-	"	588	8,820	0	0	0	-	-	-	-	-	-	R
9. RURAMIRA	-	612	5,83	-	-	-	-	0.036	3,566	53,490	3,110	5.8%	1	1	D_1(1),R(4)
1. Abiyahuzi	134	-	"	781	11,715	0	0	0	-	-	-	-	1	1	D_1
2. Akinkubito	80	-	"	466	6,990	0	0	0	-	-	-	-	-	-	R
3. Mwazinze	150	-	"	874	13,110	0	0	0	-	-	-	-	-	-	R
4. Umubuga	123	-	"	717	10,755	1	0.06	0.036	-	-	(3,110)	-	-	-	R
5. Ntarembo	125	-	"	728	10,920	0	0	0	-	-	-	-	-	-	R
10. RUSERA	-	480	4.86	-	-	-	-	1.134	2,332	34,980	97,977	F	0	0	R(4)
1. Munkuba	100	-	"	486	7,290	0	0	0	-	-	-	-	-	-	R
2. Rugwagwa	100	-	"	486	7,290	0	0	0	-	-	-	-	-	-	R
3. Butabagire	100	-	"	486	7,290	2	1.89	1.134	-	-	(97,977)	-	-	-	-
4. Rurama	70	-	"	340	5,100	0	0	0	-	-	-	-	-	-	R
5. Rusera	110	-	"	534	8,010	0	0	0	-	-	-	-	-	-	R
11. RUYONZA	-	349	7.98	-	-	-	-	0.852	2,782	40,730	73,612	F	0	0	R(3)
1. Itaba	69	-	"	550	8,250	1	0.59	0.354	-	-	(30,585)	-	-	-	-
2. Igitwa	69	-	"	550	8,250	1	0.83	0.498	-	-	(43,027)	-	-		-
3. Rubona I	69	-	"	558	8,370	0	0	0	-	-	-	-	-	-	R
4. Rubona II	69	-	"	550	8,250	0	0	0	-	-	-	-	-	-	R
5. Igisenge	72	-	"	574	8,610	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KABARONDO (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
12. SHYANDA	-	315	9.27	-	-	-	-	0	2.918	65,655	0	0	2	2	D_1(2),R(3)
1. Shyanda	N	-	"	N	N	0	0	0	-	-	-	N	1	1	D_1
2. Nyakagezi	119	-	"	1.103	16,545	0	0	0	-	-	-	-	1	1	D_1
3. Rusave	91	-	"	843	12,645	0	0	0	-	-	-	-	-	-	R
4. Bunyatongo	32	-	"	296	4,440	0	0	0	-	-	-	-	-	-	R
5. Sehengeli	73	-	"	676	10,140	0	0	-	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KAYONZA (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. GASOGI	-	543	5.47	-	-	-	-	0	2,967	43,695	0	0	0	0	R(5)
1. Gasura	102	-	"	557	8,335	0	0	0	-	-	-	-	-	-	R
2. Gasogi	117	-	"	585	8,775	0	0	0	-	-	-	-	-	-	R
3. Kinkoron	107	-	"	585	8,775	0	0	0	-	-	-	-	-	-	R
4. Karambi	101	-	"	552	8,280	0	0	0	-	-	-	-	-	-	R
5. Kabuya	116	-	"	634	9,510	0	0	0	-	-	-	-	-	-	R
2. KAYONZA		530	6.13	-	-	-	0	0	3.519	52,785	0	0	0	0	R(5)
1. Munazi	100	-	"	664	9,960	0	0	0	-	-	-	-	-	-	R
2. Kucyeru	100	-	"	664	9,960	0	0	0	-	-	-	-	-	-	R
3. Gasogororo	100	-	"	664	9,960	0	0	0	-	-	-	-	-	-	R
4. Miyange	130	-	"	863	12,945	0	0	0	-	-	-	-	-	-	R
5. Buhondi	100	-	"	664	9,960	0	0	0	-	-	-	-	-	-	R
3. MBRABUTURO	-	365	5.89	-	-	-	-	0.456	2,149	32,235	39,398	F	0	0	R(3)
1. Bwingeye	108	-	"	636	9,540	1	0.68	0.408	-	-	(35,251)	F	(1)	(1)	-
2. Gihima	106	-	"	624	9,360	1	0.08	0.048	-	-	(4,147)	(44.3%)	-	-	R
3. Mburabuturo	51	-	"	300	4,500	0	0	0	-	-	-	-	-	-	R
4. Kinunga	100	-	"	589	6,835	0	0	0	-	-	-	-	-	-	R
4. MUSUMBA	-	324	8.21	-	-	-	-	0.186	2,659	39,885	16,070	26.9%	0	0	R(3)
1. Musumba	110	-	"	903	13,545	1	0.31	0.186	2,659	-	16,070	(26.9%)	0	0	-
2. Kanango	65	-	"	550	7,995	0	0	0	-	-	-	-	-	-	R
3. Rusera	67	-	"	533	8,250	0	0	0	-	-	-	-	-	-	R
4. Nyagasambu	82	-	"	673	10,095	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KAYONZA (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
5. NYAMIRAMA	-	298	12.8	-	-	-	-	0.276	3,812	57,180	23,845	41.7%	0	0	R(3)
1. Ntemyi	38	-	"	486	7,290	0	0	0	-	-	0	-	-	-	R
2. Rurambi	64	-	"	819	12,285	0	0	0	-	-	0	-	-	-	R
3. Muruvumu	56	-	"	716	10,740	1	0.27	0.162	-	-	(13,996)	F	-	-	-
4. Kabuya	42	-	"	537	8,055	0	0	0	-	-	0	-	-	-	R
5. Kabuye	98	-	"	1,254	18,810	1	0.19	0.114	-	-	(9,849)	(52.4%)	-	-	-
6. RUTARE	95	354	7.38	-	-	-	-	0.732	2,611	39,165	63,244	F	0	0	R(3)
1. Rutare	95	-	"	701	10,515	0	0	0	-	-	0	-	-	-	R
2. Kanyamasha	58	-	"	428	6,420	0	0	0	-	-	0	-	-	-	R
3. Rugendabali	70	-	"	516	7,740	0	0	0	-	-	0	-	-	-	R
4. gikumba	80	-	"	590	8,850	1	0.22	0.132	-	-	(11,404)	F	-	-	-
5. Karambo	51	-	"	376	5,640	1	1.00	0.600	-		(51,840)	F	-	-	-
7. RWINKWAVU	-	557	9.31	-	-	-	-	0	5,183	77,745	0	0	3	3	E(1),D1(2) R(1)
1. Mukayoyo	183	-	"	1,703	25,545	0	0	0	-	-	-	-	1	-	D_1*
2. Gishanda	92	-	"	856	12,840	0	0	0	-	-	-	-	-	-	-
3. Cyabajwa	89	-	"	828	12,420	0	0	0	-	-	-	-	1	1	D_1
4. Gihinga	84	-	"	782	11,730	0	0	0	-	-	-	-	-	-	R
5. Nkondo	109	-	"	1,014	15,210	0	0	0	-	-	-	-	1	1	D_1
8. SHYOKO	-	409	6.95	-	-	-	-	0.084	2,840	42,600	7,257	17.0%	0	0	R(4)
1. Mugatoki	94	-	"	653	9,795	0	0	0	-	-	-	-	-	-	R
2. Rwinyana	72	-	"	500	7,500	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit E: Electric Pump System *: Electric Pump System

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KAYONZA (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
3. Murugagi	7.4	-	6.95	514	7,710	0	0	0	-	-	-	-	-	-	R
4. Nyakagaruma	86	-	"	597	8,955	0	0	0	-	-	-	-	-	-	R
5. Gasharu	83	-	"	576	8,640	1	0.14	0.084	-	-	7,257	(84%)	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KIGARAMA (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
									No. of Pump & Well Required						
1. FUKWE	-	552	9.30	-	-	-	-	0.036	5,131	76,965	3,110	2.7%	0	0	R(5)
1. Kabimba	87	-	"	809	12,135	0	0	0	-	-	-	-	-	-	R
2. Karenge	81	-	"	753	11,295	0	0	0	-	-	-	-	-	-	R
3. Kagusa	112	-	"	1,041	15,615	0	0	0	-	-	-	-	-		R
4. Mumukamba	115	-	"	1,069	16,035	0	0.06	0.036	-	-	(3,110)	(19.4%)	-	-	-
5. Rugazi	78	-	"	725	10,875	0	0	0	-	-	-	-	-	-	R
6. Akabaya	79	-	"	734	11,010	0	0	0	-	-	-	-	-	-	R
2. GASETSA	-	553	6.04	-	-	-	-	0.396	3,338	50,070	34,214	F	4	4	D1(4),R(2)
1. Kurutari	101	-	"	610	9,150	0	0	0	-	-	-	-	1	1	D_1
2. Murukore	101	-	"	610	9,150	0	0	0	-	-	-	-	1	1	D_1
3. Kiyovu	98	-	"	591	8,865	0	0	0	-	-	-	-	-	-	R
4. Mundekwe	118	-	"	712	10,680	0	0	0	-	-	-	-	1	1	D_1
5. Munkeke	56	-	"	477	5,070	3	0.66	0.396	-	-	34,214	F	-	-	R
6. Gikomero	79	-	"	477	7,155	0	0	0	-	-	-	-	1	1	D_1
3. GASHANDA	-	451	7.98	-	-	-	-	0.330	3,598	53,970	28,511	52.8%	0	0	R(3)
1. Cyerwa	100	-	"	798	11,970	0	0	0	-	-	-	-	-	-	R
2. Rwambohero	80	-	"	638	9,570	0	0	0	-	-	-	-	-	-	R
3. Nyakabande	91	-	"	726	10,890	0	0	0	-	-	-	-	-	-	R
4. Rubambantare	91	-	"	686	10,290	1	0.36	0.216	-	-	(18,662)	(F)	-	-	-
5. Rwanymugono	94	-	"	750	11,250	1	0.19	0.114	-	-	(9,849)	(87.5%)	-	-	-
4. KABARE	-	638	5.32	-	-	-	-	1.932	3,392	50,880	166,925	F	0	0	R(3)
1. Ruhwama	82	-	"	436	6,540	1	0.28	0.168	-	-	(14,515)	(F)	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KIGARAMA (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Kabuye	122	-	5.32	649	9,735	0	0	0	-	-	-	-	-	-	R
3. Kukinunga	117	-	"	622	9,330	0	0	0	-	-	-	-	-	-	R
4. Nyamagana	96	-	"	510	7,650	1	1.19	0.714	-	-	(61,689)	F	(1)	(1)	-
5. Nyamugali	126	-	"	670	10,050	0	0	0	-	-	-	-	-	-	R
6. Kinanira	95	-	"	505	7,575	2	1.75	1.05	-	-	(90,720)	-	-		-
5. KABARE II	-	908	6.28	-	-	-	-	1.302	5,699	85,485	112,492	87.7%	5	5	D_1(5),R(2)
1. Murugunga	129	-	"	810	12,150	0	0	0	-	-	-	-	1	1	D_1
2. Cyarubare	100	-	"	628	9,420	0	0	0	-	-	-	-	1	1	D_1
3. Gishanda	100	-	"	628	9,420	1	0.92	0.552	-	-	(47,692)	F	-	-	*
4. Rubumba	156	-	"	979	14,685	1	1.25	0.750	-	-	(64,800)	F	-	-	R
5. Rushenyi	114	-	"	715	10,725	0	0	0	-	-	-	-	1	1	D_1
6. Bare	113	-	"	709	10,635	0	0	0	-	-	-	-	1	1	D_1
7. Rubimba	88	-	"	552	8,280	0	0	0	-	-	-	-	1	1	D_1
8. Gitare	108	-	"	678	10,170	0	0	0	-	-	-	-	-	-	R
6. KABERANGWE	-	691	6.68	-	-	-	-	0.522	4,613	69,195	45,100	65.2%	2	2	D_1(2),R(3)
1. Gasave	129	-	"	861	12,915	0	0	0	-	-	-	-	-	-	R
2. Rugese	133	-	"	888	13,320	0	0	0	-	-	-	-	1	1	D_1
3. Rwikubo	100	-	"	668	170,020	1	0.17	0.102	-	-	(8,812)	(87.9%)	-	-	R_1
4. Rwaromba	106	-	"	708	10,620	0	0	0	-	-	-	-	-	-	R
5. Kabashumba	88	-	"	587	8,805	1	0.70	0.420	-	-	(36,288)	F	-	-	-
6. Bugarama	135	-	"	901	13,515	0	0	0	-	-	-	-	1	1	D_1

Note: R: Rainfall Storage Unit *: Electric Pump System

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KIGARAMA (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
7. KANSANA	-	573	8.29	-	-	-	-	3,804	4,747	71,205	328,664	F	-	-	R(1)
1. Kanyinya	93	-	"	770	11,550	1	1.26	0.756	-	-	(65,318)	F	-	-	-
2. Kumutsindo	90	-	"	746	11,190	2	2.64	1.584	-	-	(136,857)	F	-	-	-
3. Cyanama	116	-	"	961	14,415	1	0.56	0.336	-	-	(29,030)	F	-	-	-
4. Kirundo	85	-	"	704	10,560	0	0	0	-	-	-	-	-	-	R
5. Gisenyi	83	-	"	688	10,320	3	1.78	1.068	-	-	(92,275)	F	-	-	-
6. Giseli	106	-	"	878	13,170	1	0.10	0.060	-	-	(5,184)	(39.4%)	-	-	-
8. REMERA	-	506	6.31	-	-	-	-	0.672	3,192	47,880	58,060	F	1	1	D_1(1),R(2)
1. Kugatare	126	-	"	795	11,925	0	0	0	-	-	-	-	-	-	R
2. Kaneka	130	-	"	820	12,300	1	0.75	0.450	-	-	(38,880)	F	-	-	-
3. Rugera	110	-	"	694	10,410	0	0	0	-	-	-	-	-	-	R
4. Kamvumba	140	-	"	883	13,245	2	0.35	0.222	-	-	(19,180)	F	(1)	(1)	D_1
9. RUBONA	-	625	11.83	-	-	-	-	0	7,391	110,865	0	0	2	2	D_1(1),R(5)
1. Gasoro	108	-	"	1,277	19,155	0	0	0	-	-	-	-	-	-	R
2. Giteme	110	-	"	1,301	19,515	0	0	0	-	-	-	-	-	-	R
3. Muliza	107	-	"	1,265	18,975	0	0	0	-	-	-	-	-	-	R
4. Nyamigina	105	-	"	1,242	18,630	0	0	0	-	-	-	-	-	-	R
5. Catande	88	-	"	1,159	17,385	0	0	0	-	-	-	-	-	-	R
6. Nyagatovu	97	-	"	1,147	17,205	0	0	0	-	-	-	-	2	2	D_1
10. RURENGE	-	615	4.84	-	-	-	-	0.630	2,973	44,595	54,431	F	1	1	D_1(1),R(4)
1. Nyamata	100	-	"	484	7,260	1	0.14	0.084	-	-	(7,257)	F	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: KIGARAMA (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Muhulire	97	-	4.84	469	7,035	0	0	0	-	-	-	-	-	-	R
3. Gitobe	69	-	4.84	333	4,995	1	0.91	0.546	-	-	(47,174)	F	-	-	-
4. Mahyoza	57	-	"	275	4,125	0	0	0	-	-	-	-	-	-	R
5. Sata	116	-	"	561	8,415	0	0	0	-	-	-	-	1	1	D_1
6. Rujambara	64	-	"	309	4,635	0	0	0	-	-	-	-	-	-	R
7. Gitaraga	112	-	"	542	8,130	0	0	0	-	-	-	-	-	-	R
11. VUMWE	-	-	-	-	-	-	-	0.414	4,735	71,025	35,769	33.6%	-	-	R(4)
1. Akagarama	125	-	7.05	881	13,215	1	0.36	0,216	-	-	(18,662)	F	-	-	-
2. Rucucu	74	-	"	521	7,815	1	0.33	0.198	-	-	(17,107)	F	-	-	-
3. Kuwimana	94	-	"	662	9,930	0	0	0	-	-	-	-	-	-	R
4. Musya	172	-	"	1,212	18,180	0	0	0	-	-	-	-	-	-	R
5. Kamugundu	102	-	"	719	10,785	0	0	0	-	-	-	-	-	-	R
6. Rwasaburo	105	-	"	740	11,100	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUGESERA (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. CYIZIHIZA	-	506	7.49	-	-	-	-	0.432	3,789	56,835	37,324	65.7%	0	0	R(3)
1.Rwibumba	100	-	"	749	11,235	0	0	0	-	-	-	-	-	-	R
2. Kilira	100	-	"	749	11,235	0	0	0	-	-	-	-	-	-	R
3. Cyerwa	98	-	"	734	11,010	0	0	0	-	-	-	-	-	-	R
4. Nyagatugunda	107	-	"	801	12,015	2	0.41	0.246	-	-	(21,254)	F	-	-	-
5. Nyabahanda	101	-	"	756	11,340	1	0.31	0.186	-	-	(16,070)	F	-	-	-
2. GATARE	-	538	7.28	-	-	-	-	0	3,912	58,680	0	0	0	0	R(5)
1. Rusazi	110	-	-	800	12,000	0	0	0	-	-	-	-	-	-	R
2. Nyakibande	107	-	-	778	11,670	0	0	0	-	-	-	-	-	-	R
3. Nyandama	107	-	-	778	11,670	0	0	0	-	-	-	-	-	-	R
4. Kukabungo	107	-	-	778	11,690	0	0	0	-	-	-	-	-	-	R
5. Rudasuma	107	-	-	778	11,670	0	0	0	-	-	-	-	-	-	R
3. KAGASHI	-	587	7.82	-	-	-	-	0	4,587	68,805	0	0	0	0	R(6)
1. Rugarame	107	-	"	836	12,540	0	0	0	-	-	-	-	-	-	R
2. Kazomyi	100	-	"	782	11,730	0	0	0	-	-	-	-	-	-	R
3. Rwinkuba	92	-	"	719	10,785	0	0	0	-	-	-	-	-	-	R
4. Butaka	90	-	"	703	10,545	0	0	0	-	-	-	-	-	-	R
5. Cyinyo	102	-	"	797	11,955	0	0	0	-	-	-	-	-	-	R
6. Rubirizi	96	-	"	750	11,250	0	0	0	-	-	-	-	-	-	R
4. KAREMBO	-	299	9.08	-	-	-	-	0.996	2,714	40,710	86,054	F	0	0	R(2)
1. Karaba	100	-	"	908	13,620	0	0	0	-	-	-	-	-	-	R
2. Rwamishiba	100	-	"	908	13,620	0	0	-	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUGESERA (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
3. Rwamuhimbura	99	-	9.08	898	13,470	3	1.66	0.996	-	-	(86,054)	F	-	-	-
5. KIBARE	-	483	9.26	-	-	-	-	1.434	4,468	67,020	123,896	F	0	0	R(1)
1. Kimanama	115	-	"	1,064	15,960	0	0	0	-	-	0	-	-	-	R
2. Nyamugali	92	-	"	851	12,765	2	0.34	0.204	-	-	(17,625)	F	-	-	-
3. Gisenyi	92	-	"	851	12,765	2	0.31	0.186	-	-	(16,070)	F	-	-	-
4. Gishondaro	92	-	"	851	12,765	1	1.00	0.600	-	-	(51,840)	F	-	-	-
5. Nyamabuye	92	-	"	851	12,765	4	0.74	0.444	-	-	(38,361)	F	-	-	-
6-1. KABILIZI I	-	485	8.19	-	-	-	-	2.904	3,972	49,140	250,903	F	3	3	D_1(3)
1. Rwakayango	100	-	"	819	12,285	1	0.47	0.282	0	0	(24,364)	F	(1)	(1)	D_1
2. Kalibu	100	-	"	819	12,285	2	1.33	0.798	-	-	(68,947)	F	(1)	(1)	D_1
3. Kashekashi	85	-	"	819	12,285	3	1.62	0.972	-	-	(83,930)	F	(1)	(1)	D_1
4. Gitaraga I	100	-	"	819	12,285	3	1.62	0.972	-	-	(83,930)	F	-	-	-
5. Gitaraga II	100	-	"	819	12,285	1	0.90	0.540	-	-	(46,656)	F	-	-	-
6-2 KABILIZI II	-	330	8.19	-	-	-	-	0.240	2,701	40,515	20,735	51.2%	1	1	D_1(1),R(3)
1. Gashekasheke	70	-	"	573	8,595	1	0.22	0.132	-	-	(11,404)	F	(1)	(1)	D_1
2. Kibugangoma B	60	-	"	491	7,365	0	0	0	-	-	0	-	-	-	R
3. Kibugangoma A	60	-	"	491	7,365	1	0.18	0.108	-	-	(9,331)	F	-	-	-
4. Muramoi	70	-	"	573	8,595	0	0	0	-	-	0	-	-	-	R
5. Kabonobono	70	-	"	573	8,595	0	0	0	-	-	0	-	-	-	R
7. KIRAMBO	-	327	9.74	-	-	-	-	1.938	3,182	47,730	167,441	F	-	-	R(2)
1. Nyagacekeli	64	-	"	623	9,345	0	0	0	-	-	0	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUGESERA (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Nyaruteja	67	-	9.74	652	9,780	1	0.72	0.432	-	-	(37,324)	F	-	-	-
3. Rugarama	56	-	"	545	8,175	3	2.39	1.434	-	-	(123,897)	F	-	-	-
4. Ruhinga	70	-	"	681	10,215	1	0.12	0.072	-	-	(6,220)	(60.9%)	-	-	-
5. Karenge	70	-	"	681	10,215	0	0	0	-	-	-	-	-	-	R
8. KUKABUYE	-	653	6.81	-	-	-	-	1.374	4,445	66,675	118,712	F	0	0	R(2)
1. Rugarama	100	-	"	681	10,215	0	0	0	-	-	-	-	-	-	R
2. Kizenga	100	-	"	681	10,215	1	0.63	0.378	-	-	(32,659)	F	-	-	-
3. Nyagahinga	100	-	"	544	8,160	1	0.51	0.306	-	-	(26,438)	-	-	-	-
4. Kumuyange	109	-	"	742	11,130	0	0	0	-	-	0	-	-	-	R
5. Rubari	80	-	"	544	8,160	2	0.59	0.354	-	-	(30,285)	F	-	-	-
6. Rwimbirwa	84	-	"	572	8,580	1	0.25	0.150	-	-	(12,960)	F	-	-	-
7. Rwamubugu	100	-	"	681	10,215	1	0.31	0.186	-	-	(16,070)	F	-	-	-
9. MATONGO	-	422	7.95	-	-	-	-	0.258	3,352	50,280	22,290	44.3%	0	0	R(3)
1. Mugacekeli	84	-	"	667	10,005	2	0.21	0.126	-	-	(10,886)	F	-	-	-
2. Nyagasave	83	-	"	659	9,885	0	0	0	-	-	0	-	-	-	R
3. Ruhira	102	-	"	810	12,150	1	0.22	0.132	-	-	(11,404)	(93.4%)	-	-	-
4. Nyaminaga	79	-	"	628	9,420	0	0	0	-	-	0	-	-	-	R
5. Mugatare	74	-	"	588	8,820	0	0	0	-	-	0	-	-	-	R
10. NGARA	-	459	-	-	-	-	-	4.482	3,758	56,370	387,243	F	0	0	0
1. Nyimbyi	88	-	8.19	720	10,800	2	0.96	0.576	-	-	(49,766)	F	-	-	-
2. Murakizi	71	-	"	581	8,715	1	1.65	0.990	-	-	(85,536)	F	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUGESERA (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
3. Murubumba	100	-	8.19	819	12,285	2	3.98	2.388	-	-	(206,323)	F	-	-	-
4. Mukaziba	100	-	"	819	12,285	3	0.74	0.444	-	-	(38,361)	F	-	-	-
5. Nyagasozi	100	-	8.19	819	12,285	1	0.14	0.084	-	-	(4,482)	(36.5%)	-	-	-
11. NYANGE	-	462	5.86	-	-	-	-	0	2,705	40,575	0	0	0	0	R(4)
1. Inunga	72	-	"	421	6,315	0	0	0	-	-	-	-	-	-	R
2. Igomero	80	-	"	468	7,020	0	0	0	-	-	-	-	-	-	R
3. Rwamuswa	96	-	"	562	8,430	0	0	0	-	-	-	-	-	-	R
4. Rugazi	100	-	"	586	8,790	0	0	0	-	-	-	-	-	-	R
5.	114	-	"	668	10,020	0	0	0	-	-	-	-	-	-	-
12. SANGAZA	-	502	7.34	-	-	-	-	0	3,684	55,260	0	0	0	0	R(5)
1. Rurenge	102	-	"	748	11,220	0	0	0	-	-	-	-	-	-	R
2. Kagarama	100	-	"	734	11,010	0	0	0	-	-	-	-	-	-	R
3. Ruhororo	100	-	"	734	11,010	0	0	0	-	-	-	-	-	-	R
4 Nyakaliba	100	-	"	734	11,010	0	0	0	-	-	-	-	-	-	R
5. Ruhinga	100	-	"	734	11,010	0	0	0	-	-	-	-	-	-	R
13. SHYWA	-	419	8.34	-	-	-	-	2.214	3,493	52,395	191,288	F	-	-	R(2)
1. Kumuyange	81	-	"	675	10,125	2	1.13	0.678	-	-	(58,579)	F	-	-	-
2. Gihoshi	81	-	"	675	10,125	0	0	0	-	-	-	-	-	-	R
3. Rwamuhigi	83	-	"	692	10,380	0	0	0	-	-	-	-	-	-	R
4. Rwancuro	103	-	"	859	12,885	1	0.09	0.054	-	-	(4,665)	(36.2%)	-	-	-
5. Nyagasozi	71	-	"	592	8,880	3	2.47	1.482	-	-	(128,044)	F	-	-	-
14. ZAZA	-	329	9.40	-	-	-	-	2.628	3,091	46,365	227,058	Excluded from the Project			
1. Rusenyi	74	-	"	695	10,425	2	1.11	0.666	-	-	-	-	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUGESERA (5)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Makoma	70	-	9.40	658	9,870	0	0	0	-	-	-	-	-	-	-
3. Nyabiku	76	-	"	714	10,710	2	1.48	0.888	-	-	Excluded from the project				-
4. Ruhembe	109	-	"	1,024	15,360	3	1.79	1.074	-	-	-	-	-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUHAZI (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Population	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. GATI	-	700	5.79	-	-	-	-	0.03	4,048	60,720	2,592	4.3%	0	0	R(7)
1. Agatare	88	-	"	509	7,635	0	0	0	-	-	0	-	-	-	R
2. Uruhuha	88	-	"	509	7,635	0	0	0	-	-	0	-	-	-	R
3. Umunanira	88	-	"	509	7,635	1	0.05	0.03	-	-	(2,592)	-	(33.9%)	-	-
4. Nyamabuye	88	-	"	509	7,635	0	0	0	-	-	0	-	-	-	R
5. Kibonde	87	-	"	503	7,545	0	0	0	-	-	0	-	-	-	R
6. Akabuga	87	-	"	503	7,545	0	0	0	-	-	0	-	-	-	R
7. Imgeyo	87	-	"	503	7,545	0	0	0	-	-	0	-	-	-	R
8. Ruyenzi	87	-	"	503	7,545	0	0	0	-	-	0	-	-	-	R
2. GISHALI	_	722	6.67	-	-	-	-	0.090	4,815	72,225	7,775	10.8%	0	0	R(7)
1. Bwinsanga	114	-	"	760	11,400	1	0.09	0.54	-	-	(4,665)	(40.9%)	-	-	R
2. Rwagahaya	108	-	"	720	10,800	0	0	0	-	-	-	-	-	-	R
3. Akanogo	100	-	"	667	10,005	0	0	0	-	-	-	-	-	-	R
4. Shaburondo	100	-	"	"	10,005	0	0	0	-	-	-	-	-	-	R
5. Mukili	100	-	"	"	10,005	1	0.06	0.036	-	-	-	-	-	-	R
6. Rubona	100	-	"	"	10,005	0	0	0	-	-	-	-	-	-	R
7. Mugusha	100	-	"	"	10,005	0	0	0	-	-	-	-	-	-	R
3. KABARE	_	402	9.27	-	-	-	-	0	3,724	55,860	0	0	-	-	R(5)
1. Gatobotobo	55	-	"	509	7,635	0	0	0	-	-	-	-	-	-	R
2 Rukomo	90	-	"	834	12,510	0	0	0	-	-	-	-	-	-	R
3. Ibyeza	74	-	"	685	10,275	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUHAZI (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
4. Nyarukombe	53	-	"	491	7,365	0	0	0	-	-	-	-	-	-	R
5. Migogo	130	-	9.27	1,205	18,075	0	0	0	-	-	-	-	-	-	R
4. KITAZIGURWA	-	466	6.24	-	-	-	-	0	2,906	44,340	0	0	0	0	R(5)
1. Gasharu	100	-	"	624	9,360	0	0	0	-	-	-	-	-	-	R
2. Buhanya	77	-	"	480	7,200	0	0	0	-	-	-	-	-	-	R
3. Karwiru	77	-	"	480	7,200	0	0	0	-	-	-	-	-	-	R
4. Mwuma	96	-	"	599	8,985	0	0	0	-	-	-	-	-	-	R
5. Ntebe	116	-	"	773	11,595	0	0	0	-	-	-	-	-	-	R
5. MUKARANGE	-	438	6.24	-	-	-	-	0	2,731	40,965	0	0	0	0	R(5)
1. Kabuya	111	-	"	692	10,380	0	0	0	-	-	-	-	-	-	R
2. Kinyemera	75	-	"	468	7,020	0	0	0	-	-	-	-	-	-	R
3. Bwiza	85	-	"	530	7,950	0	0	0	-	-	-	-	-	-	R
4. Karamarara	82	-	"	511	7,665	0	0	0	-	-	-	-	-	-	R
5. Nyabubare	85	-	"	530	7,950	0	0	0	-	-	-	-	-	-	R
6. MUNYIGINYA	-	522	6.08	-	-	-	-	0.192	3,172	47,580	16,588	34.9%	0	0	R(4)
1. Byamugina	104	-	"	632	9,480	0	0	0	-	-	0	-	-	-	R
2. Kacyuma	104	-	"	632	9,480	0	0	0	-	-	0	-	-	-	R
3. Binunga	104	-	"	632	9,480	0	0	0	-	-	0	-	-	-	R
4. Kabatasi	105	-	"	638	9,570	2	0.32	0.192	-	-	(16,588)	F	-	-	R
5. Iviro	105	-	"	638	9,570	0	0	0	-	-	0	-	-	-	-
7. MURAMBI	-	525	7.34	-	-	-	-	0.12	3,850	57,750	10,368	18.0%	-	-	R(5)
1. Gasharu	93	-	"	682	10,230	0	0	0	-	-	0	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUHAZI (3)

Secteurs and Cellules	Total No. of Family (1982)	Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Muyabaranda	114	-	7.34	836	12,540	1	0.20	0.12	-	-	(10,368)	82.7%	-	-	-
3. Iragwa	98	-	"	719	10,785	0	0	0	-	-	-	-	-	-	R
4. Akayenzi	80	-	"	587	8,805	0	0	0	-	-	-	-	-	-	R
5. Karambi	70	-	"	513	7,695	0	0	0	-	-	-	-	-	-	R
6. Mubirembo	70	-	"	"	7,695	0	0	0	-	-	-	-	-		R
8. NKOMANGWA	-	457	6.12	-	-	-	-	0	2,795	41,925	0	0	0	0	R(5)
1. Nyagahanga	84	-	"	514	7,710	0	0	0	-	-	-	-	-	-	R
2. Bakannyi	90	-	"	550	8,250	0	0	0	-	-	-	-	-	-	R
3. Kabuya	92	-	"	563	8,445	0	0	0	-	-	-	-	-	-	R
4. Karubisha	94	-	"	575	8,625	0	0	0	-	-	-	-	-	-	R
5. Ryamirenge	97	-	"	593	8,895	0	0	0	-	-	-	-	-	-	R
9. NYAGATOVU	-	504	6.60	-	-	-	-	0.108	3,324	49,860	9,331	18.7%	0	0	R(4)
1. Byange	128	-	"	844	12,660	0	0	0	-	-	-	-	-	-	R
2. Nyagatovu	70	-	"	462	6,930	0	0	0	-	-	-	-	-	-	R
3 Mugatagara	140	-	"	686	10,290	1	0.18	0.108	-	-	9,331	90.7%	-	-	-
4. Kazirabwayi	109	-	"	719	10,785	0	0	0	-	-	-	-	-	-	R
5. Iragwe	93	-	"	613	9,195	0	0	0	-	-	-	-	-	-	R
10. NYARUBUYE	-	512	6.76	-	-	-	-	0	3,458	51,870	0	0	0	0	R(5)
1. Buyanja	116	-	"	784	11,760	0	0	0	-	-	-	-	-	-	R
2. Kirebe	76	-	"	513	7,695	0	0	0	-	-	-	-	-	-	R
3. Mazinga	105	-	"	709	10,635	0	0	0	-	-	-	-	-	-	R
4. Kimara	96	-	"	648	9,720	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: MUHAZI (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
5 Babasha	119	-	6.76	804	12,060	0	0	0	-	-	-	-	-	-	R
11. NYARUGALI	-	525	5.63	-	-	-	-	0	2,954	44,310	0	0	0	0	R(5)
1. Syinyana	104	-	"	585	8,775	0	0	0	-	-	-	-	-	-	R
2. Nyagacyamo	104	-	"	585	8,775	0	0	0	-	-	-	-	-	-	R
3. Umunini	104	-	"	585	8,775	0	0	0	-	-	-	-	-	-	R
4. Abakina	100	-	"	563	8,445	0	0	0	-	-	-	-	-	-	R
5 Nyakagarama	113	-	"	636	9,540	0	0	0	-	-	-	-	-	-	R
12. RUHUNDA	-	538	6.45	-	-	-	-	0.132	3,468	52,020	11,404	21.9%	0	0	R(4)
1. Binunga	108	-	"	696	10,440	0	0	0	-	-	0	-	-	-	R
2. Mpungwa	120	-	"	774	11,610	0	0	0	-	-	0	-	-	-	R
3. Nyagakombe	88	-	"	567	8,505	0	0	0	-	-	0	-	-	-	R
4. Nagashinga	96	-	"	619	9,285	0	0	0	-	-	0	-	-	-	R
5. Rulindimura	126	-	"	812	12,180	1	0.22	0.132	-	-	(11,404)(93.6%)		-	-	-

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKARA (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. GAHINI	-	521	11.14	-	-	-	-	0	5,800	87,000	0	0	0	0	R(6)
1. Rugarama	109	-	"	1,214	18,210	0	0	0	-	-	-	-	-	-	R
2. Ibiza	84	-	"	935	14,025	0	0	0	-	-	-	-	-	-	R
3. Umwiga	105	-	"	1,169	17,535	0	0	0	-	-	-	-	-	-	R
4. Rwinkuba	92	-	"	1,024	15,360	0	0	0	-	-	-	-	-	-	R
5. Micanzigo	75	-	"	835	12,525	0	0	0	-	-	-	-	-	-	R
6. Buganja	56	-	"	623	9,345	0	0	0	-	-	-	-	-	-	R
2. KAWANGIRE	-	553	7.17	-	-	-	-	0	3,961	59,415	0	0	0	0	R(6)
1. Karama	86	-	"	616	9,240	0	0	0	-	-	-	-	-	-	R
2. Kinunga	105	-	"	752	11,280	0	0	0	-	-	-	-	-	-	R
3. Gitega	50	-	"	358	5,370	0	0	0	-	-	-	-	-	-	R
4. Butimba	123	-	"	881	13,215	0	0	0	-	-	-	-	-	-	R
5. Kigogo	110	-	"	788	11,820	0	0	0	-	-	-	-	-	-	R
6. Gakenyeli	79	-	"	566	8,490	0	0	0	-	-	-	-	-	-	R
3. KIYENZI	-	331	11.51	-	-	-	-	0	3,808	57,120	0	0	0	0	R(4)
1. Kiyenzi	71	-	"	817	12,255	0	0	0	-	-	-	-	-	-	R
2. Kinyinya	65	-	"	748	11,220	0	0	0	-	-	-	-	-	-	R
3. Kabuye	99	-	"	1,139	17,085	0	0	0	-	-	-	-	-	-	R
4. Nyagahandagazi	96	-	"	1,104	16,560	0	0	0	-	-	-	-	-	-	R
4. NYAKABUNGO	-	340	8.89	-	-	-	-	0.33	3,202	45,300	28,511	62.9%	0	0	-
1. Nyakabungo	70	-	"	622	9,330	0	0	0	-	-	-	-	-	-	R
2. Nyamiyaga	55	-	"	488	7,320	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKARA (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
3. Rwazana	53	-	8.89	471	7,065	1	0.14	0.084	-	-	(7,257)	F	-	-	R
4. Kamudonga	52	-	"	462	6,930	0	0	0	-	-	0	-	1	1	D_2
5. Juru	50	-	"	444	6,660	1	0.41	0.246	-	-	(21,254)	F	-	-	R
6. Rubaliro	60	-	"	533	7,995	0	0	0	-	-	0	-	-	-	R
5. NYAWERA	-	350	12.35	-	-	-	-	0.102	4,319	64,785	8,812	13.6%	-	D 4	D_1,D_2,R 1,1,3
1. Murehe	55	-	"	679	10,185	0	0	0	-	-	-	-	-	-	R
2. Muhozi	70	-	"	864	12,960	0	0	0	-	-	-	-	1	2	D_2
3. Cyanyabugashi	51	-	"	629	9,435	0	0	0	-	-	-	-	1	2	D_1
4. Muroli	64	-	"	790	11,850	1	0.17	0.102	-	-	(8,812)	(74.4%)	-	-	R
5. Nyamugali	57	-	"	703	10,545	0	0	0	-	-	-	-	-	-	R
6. Mwili	53	-	"	654	9,810	0	0	0	-	-	-	-	-	-	R
6. RUKARA	-	745	9.22	-	-	-	-	0.102	6,864	102,960	8,812	5.7%	3	D(S) 6(2)	$D_2,(S_2),R$ 3,(1),5
1. Buyonza	82	-	"	756	11,340	0	0	0	-	-	-	-	-	-	R
2. Karambo	51	-	"	470	7,050	0	0	0	-	-	-	1.4	1	2	D_2
3. Butimba	108	-	"	995	14,925	0	0	0	-	-	-	2.8	1	2	$(S_2),D_2$
4. Ryakirenzi	86	-	"	792	11,880	0	0	0	-	-	-	-	-	-	R
5. Muzizi	109	-	"	1,004	15,060	1	0.17	0.102	-	-	(8,812)	-	-	-	R
6. Mitungu	92	-	"	848	12,720	0	0	0	-	-	-	-	-	-	R
7. Mumuli	49	-	"	451	6,765	0	0	0	-	-	-	-	-	-	R
8. Kinunga	90	-	"	829	12,435	0	0	0	-	-	-	-	-	-	R
9. Gacaca	78	-	"	719	10,785	0	0	0	-	-	-	2.0	1	2	D_2

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKARA (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required: Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
7. RWIMISHINYA	-	638	8.20	-	-	-	-	0	5,227	78,405	0	0	4	D 8	D_3,R 4,5
1. Nyabigega	52	-	"	426	6,390	0	0	0	-	-	-	-	-	-	R
2. Nyarunazi	83	-	"	680	10,200	0	0	0	-	-	-	-	-	-	R
3. Karagali	62	-	"	508	7,620	0	0	0	-	-	-	-	1	2	D_3
4. Rwibikona	52	-	"	426	6,390	0	0	0	-	-	-	-	-	-	R
5. Mumirambi	91	-	"	746	11,190	0	0	0	-	-	-	-	1	2	D_3
6. Kukabare	54	-	"	442	6,630	0	0	0	-	-	-	-	-	-	R
7. Kinunga	96	-	"	787	11,805	0	0	0	-	-	-	-	1	2	D_3
8. Kigwene	54	-	"	442	6,630	0	0	0	-	-	-	-	-	-	R
9. Nyarutunga	94	-	"	770	11,550	0	0	0	-	-	-	-	1	2	D_3
8. RYAMANYONI	-	377	7.39	-	-	-	-	0.504	2,783	41,745	43,544	F	5(2)	D 7	D_1,D_3,R 3,2,1
1. Ryamanyoni	65	-	"	480	7,200	0	0	0	-	-	-	1.3	1	1	D_1
2. Kibali	52	-	"	384	5,760	0	0	0	-	-	-	-	-	-	R
3. Rwinsheke	71	-	"	524	7,860	0	0	0	-	-	-	1.5	1	2	D_3
4. Rwakabanda	65	-	"	480	7,200	0	0	0	-	-	-	1.4	1	2	D_1
5. Kayongo	58	-	"	428	6,420	1	0.27	0.167	-	-	(13,996)	F	(1)	(1)	D_1
6. Karambi	66	-	"	487	7,305	1	0.57	0.342	-	-	(29,548)	F	(1)	(1)	D_3

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKIRA (1)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
1. GASHIRU	-	505	9.13	-	-	-	-	0	4,609	69,135	0	0	0	0	R 5
1. Bugarama	100	-	"	913	13,695	0	0	0	-	-	-	-	-	-	R
2. Rugoma	112	-	"	1,022	15,330	0	0	0	-	-	-	-	-	-	R
3. Rubirizi	143	-	"	1,305	19,575	0	0	0	-	-	-	-	-	-	R
4. Mutahira	65	-	"	593	8,895	0	0	0	-	-	-	-	-	-	R
5. Kirehe	85	-	"	776	11,640	0	0	0	-	-	-	-	-	-	R
2. GITUKU	-	483	8.99	-	-	-	-	1,530	4,341	65,115	132,191	F	4(1)	D(S) 7(2)	D_1,(S_2) 4,(1)
1. Gafunzo	92	-	"	827	12,405	0	0	0	-	-	-	-	1	2	(S_2),D_1
2. Nyarusanga	100	-	"	899	13,485	1	0.68	0.408	-	-	(35,251)	F	(1)	(1)	D_1
3. Rwamuyaga	89	-	"	800	12,000	2	1.87	1,122	-	-	(96,940)	F	-	-	R
4. Rwimpongo	93	-	"	836	12,540	0	0	0	-	-	-	-	1	2	D_1
5. Rugoligondi	109	-	"	979	14,685	0	0	0	-	-	-	-	1	2	D_1
3. GITWE	-	477	10.58	-	-	-	-	0.132	5,043	75,645	11,404	15.1%		D 11	D_2,R 6,1
1. Cyabayagara	54	-	"	571	8,565	0	0	0	-	-	-	-	1	2	D_2
2. Rwagakobe	65	-	"	687	10,305	0	0	0	-	-	-	-	1	2	D_2
3. Kabimba	82	-	"	867	13,005	1	0.22	0.132	-	-	11,404	(87.7%)	1	1	D_2
4. Ruhama	65	-	"	687	10,305	0	0	0	-	-	-	-	1	2	D_2
5. Bweranka	59	-	"	624	9,360	0	0	0	-	-	-	-	1	2	D_2
6. Rwamukobwa	65	-	"	687	10,305	0	0	0	-	-	-	-	1	2	D_2
7. Rusenyi	87	-	"	920	13,800	0	0	0	-	-	-	-	-	-	R
4. MUBAGO	-	611	8.06	-	-	-	-	0.456	4,921	73,815	39,398	35.6%	1	1	D_1(1),R(7)
1. Resenyi	61	-	"	491	7,365	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKIRA (2)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Nyagateme	73	-	8.06	588	8,820	0	0	0	-	-	0	-	1	1	D_1
3. Karenge	61	-	"	491	7,365	0	0	0	-	-	0	-	-	-	R
4. Nterere	84	-	"	677	10,155	0	0	0	-	-	0	-	-	-	R
5. Ntungamo	118	-	"	951	14,265	1	0.76	0.456	-	-	(39,398)	F	-	-	R
6. Rubimba	78	-	"	628	9,420	0	0	0	-	-	0	-	-	-	R
7. Rutoma	80	-	"	644	9,660	0	0	0	-	-	0	-	-	-	R
8. Cyeru	56	-	"	451	6,765	0	0	0	-	-	-	-	-	-	R
5. MURAMA	-	565	7.88	-	-	-	-	0.456	4,449	66,735	39,398	59.0%	5	5	$D_1(5),R(1)$
1. Kigabiro	119	-	"	937	14,055	0	0	0	-	-	0	-	-	-	R
2. Tonero	66	-	"	520	7,800	0	0	0	-	-	0	-	1	1	D_1
3. Mutara	119	-	"	937	14,055	0	0	0	-	-	0	-	1	1	D_1
4. Nyakabanga	62	-	"	488	7,320	0	0	0	-	-	0	-	1	1	D_1
5. Nyakasozi	122	-	"	961	14,415	1	0.76	0.456	-	-	(39,398)	F	(1)	(1)	D_1
6. Rukizi	77	-	"	606	9,090	0	0	0	-	-	0	1.6	1	1	D_1
6. MUSHIKIRI	-	459	9.27	-	-	-	-	0	4,252	63,780	0	0	4	4	$D_1(3),R(2)$
1. Rwayikona	71	-	"	658	9,870	0	0	0	-	-	-	-	-	-	R
2. Butezi	91	-	"	843	12,645	0	0	0	-	-	-	-	-	-	R
3. Gatongo	107	-	"	991	14,865	0	0	0	-	-	-	-	1	1	D_1
4. Rwamuhigi	72	-	"	667	10,005	0	0	0	-	-	-	-	1	1	D_1
5. Bisagara	118	-	"	1,093	16,395	0	0	0	-	-	-	-	2	2	D_1
7. NUTARUKA	-	458	7.16	-	-	-	-	0	3,278	49,170	0	0	3	D S 2 4	D_2,S_2,R 2,1,2
1. Ruseke	100	-	"	716	10,740	0	0	0	-	-	-	-	-	-	R

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKIRA (3)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Popu-lation	Daily WAter Demand (ℓ/day)	No. of Pump & Well Required Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
2. Cyambwe	170	-	7.16	1,217	18,255	0	0	0	-	-	-	-	2	4	S_2
3. Nyamikoni	120	-	"	859	12,885	0	0	0	-	-	-	-	1	2	D_2
4. Kiruhura	68	-	"	486	7,290	0	0	0	-	-	-	-	-	-	R
8. RUGARAMA	-	367	8.40	-	-	-	-	2,652	3,081	46,215	229,132	F	1	D 2	D_2,(R) 1,(1)
1. Murehe	107	-	"	898	13,470	1	0.62	0.372	-	-	(32,140)	-	-	-	R
2. Kanyami	74	-	"	621	9,315	0	0	0	-	-	-	-	-	-	R
3. Tomi	83	-	"	697	10,455	2	3.80	2.28	-	-	(196,992)	-	-	-	R
4. Karambi	103	-	"	865	12,975	0	0	0	-	-	-	-	1	2	D_2
9. RURAMA	-	572	7.82	-	-	-	-	0.36	4,473	67,095	31,104	46.4%	6(1)	D 11	D_1 6
1. Runyinya	100	-	"	782	11,730	0	0	0	-	-	-	-	1	2	D_1
2. Tonero	100	-	"	782	11,730	0	0	0	-	-	-	-	1	2	D_1
3. Kibizi	100	-	"	782	11,730	0	0	0	-	-	-	-	1	2	D_1
4. Nyakabande	100	-	"	782	11,730	0	0	0	-	-	-	-	1	2	D_1
5. Humure	100	-	"	782	11,730	1	0.06	0.36	-	-	(31,104)	F	(1)	(1)	D_1
6. Kugatsi	72	-	"	563	8,445	0	0	0	-	-	-	-	1	2	D_1
10. RURENGE	-	642	5.08	-	-	-	-	0	4,624	69,360	0	0	7	7	D_1(7),R(1)
1. Ruzinga II	71	-	"	511	7,665	0	0	0	-	-	-	-	1	1	D_1
2. Ruvuzi I	81	-	"	584	8,760	0	0	-	-	-	-	-	-	-	R
3. Ruzinga I	84	-	"	605	9,075	0	0	0	-	-	-	-	1	1	D_1
4. Ruvuzi II	74	-	"	533	7,995	0	0	0	-	-	-	-	1	1	D_1
5. Nyakazinga	90	-	"	648	9,720	0	0	0	-	-	-	-	1	1	D_1
6. Ntara	68	-	"	490	7,350	0	0	0	-	-	-	-	1	1	D_1

Note: R: Rainfall Storage Unit

PLAN OF WATER SUPPLY FOR CELLULES

COMMUNE: RUKIRA (4)

Secteurs and Cellules	No. of Family (1982)	Total No. of Family (1982)	Family Structure (1990)	Estimated Population in Cellule (1990)	Estimated Daily Water Demand (ℓ/day)	No. of Spring	Discharge of Exist. Springs (ℓ/s)	Available Dis.(60%) (ℓ/s)	Total for Secteur in 1990 Population	Daily WAter Demand (ℓ/day)	Discharge from Springs (ℓ/day)	Capacity of Spring Supply	No. of Well	No. of Pump	Type of Well
7. Rugombe	70	-	7.21	504	7,560	0	0	0	-	-	-	-	1	1	- D_1
8. Kizenga	104	-	"	749	11,235	0	0	0	-	-	-	-	1	1	- D_1

Note: R: Rainfall Storage Unit