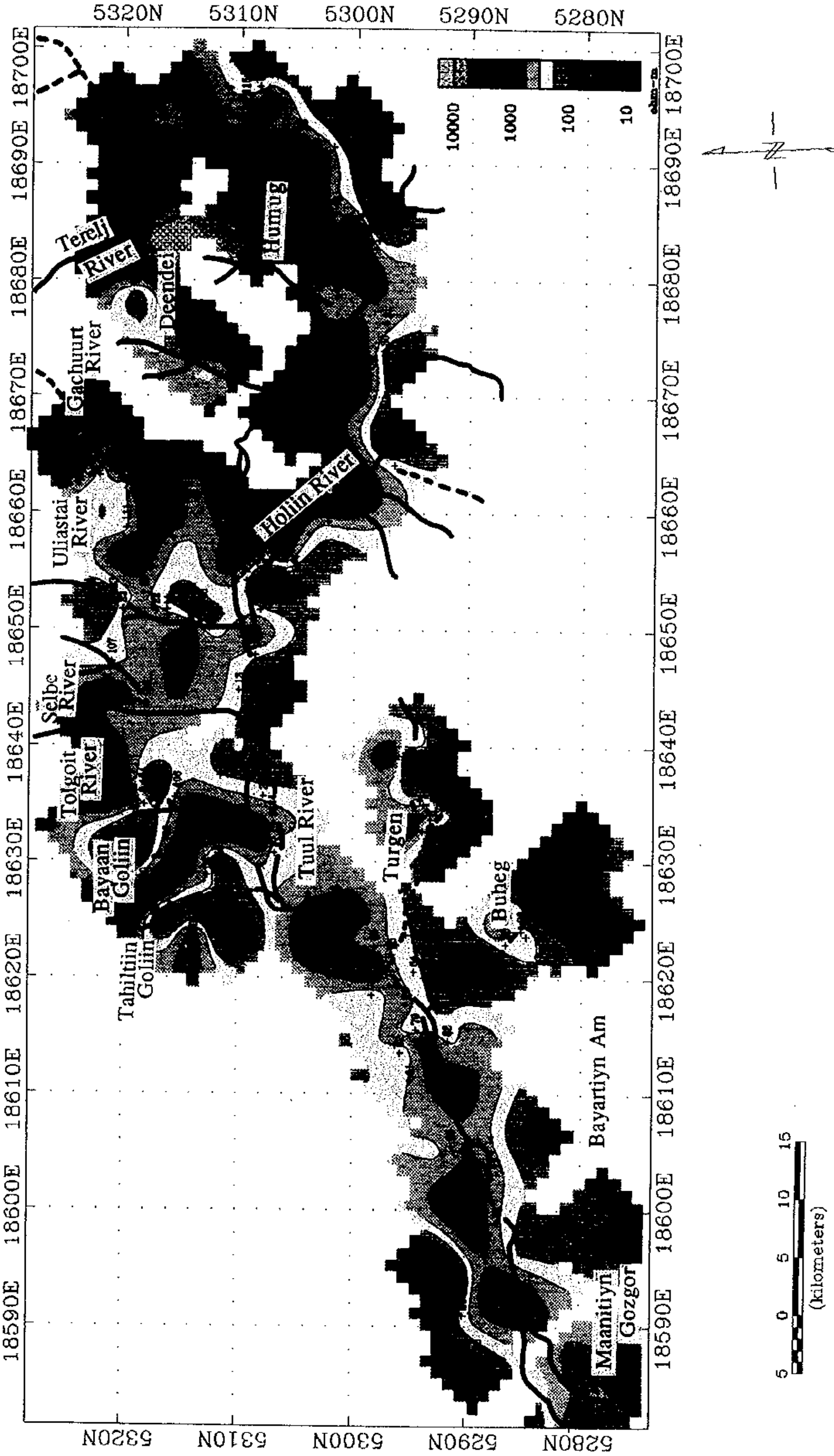
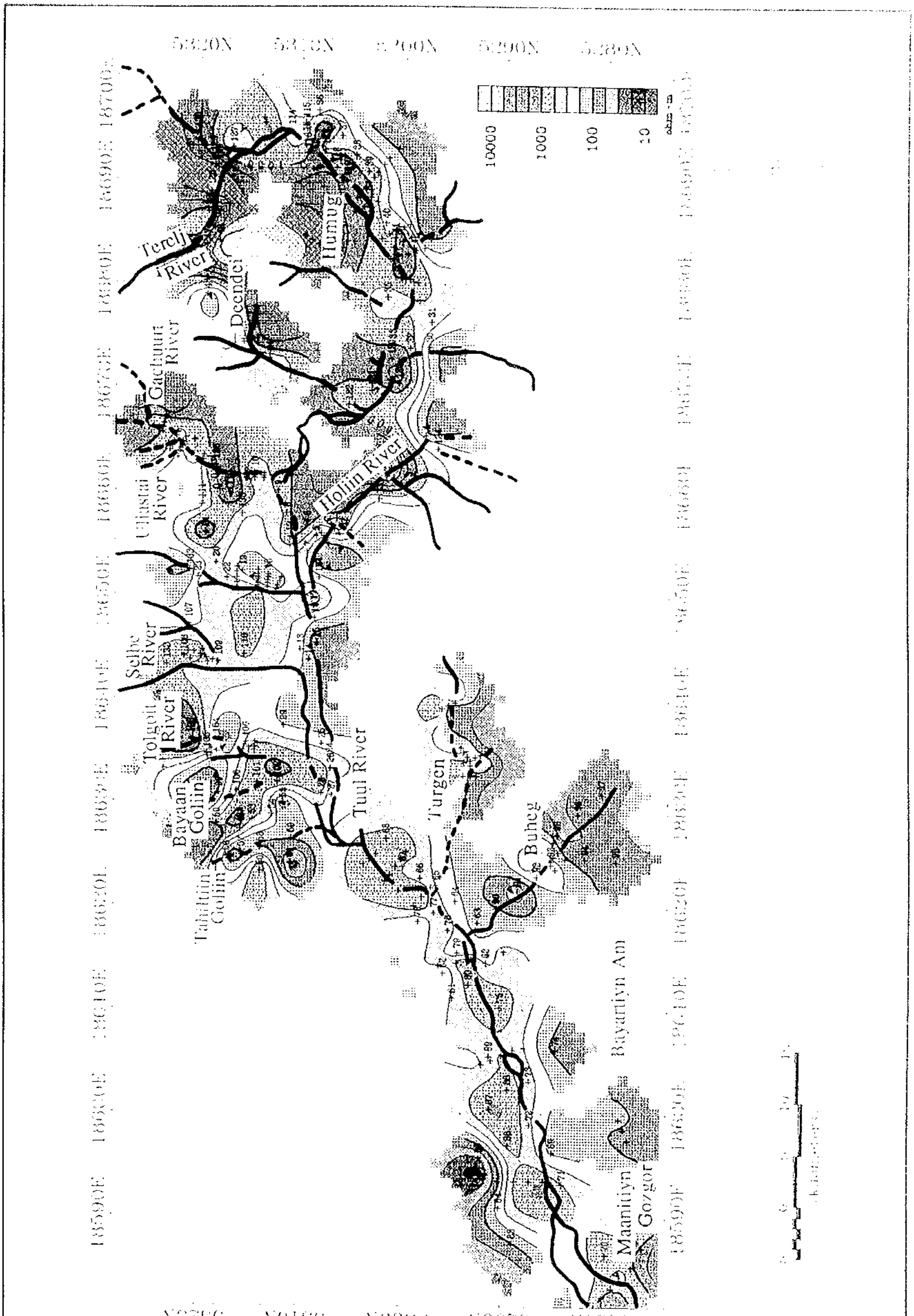
Appendix I.2.4

Compiled Resistivity Map

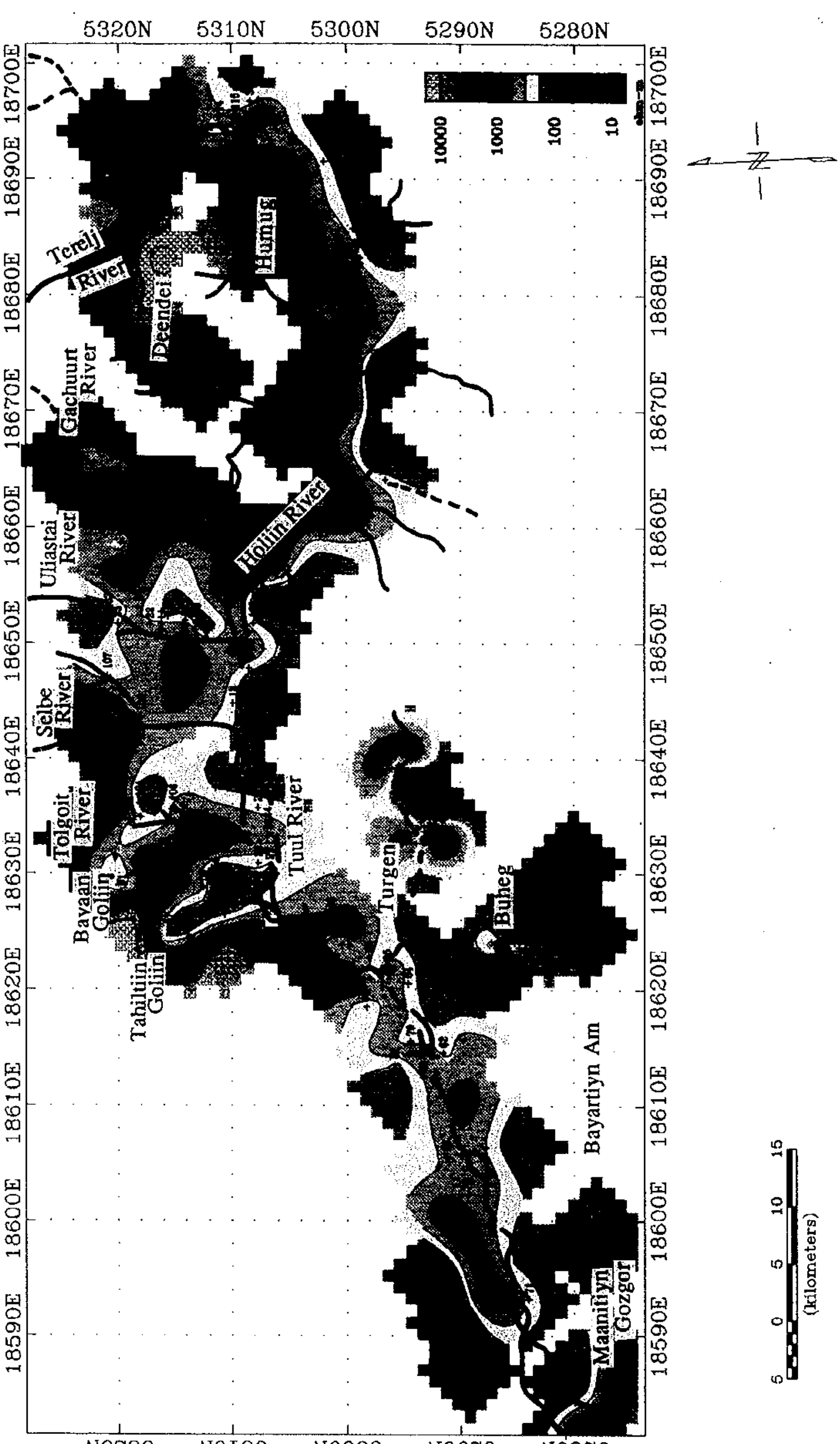


Compiled Resistivity map on -20m Level	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings



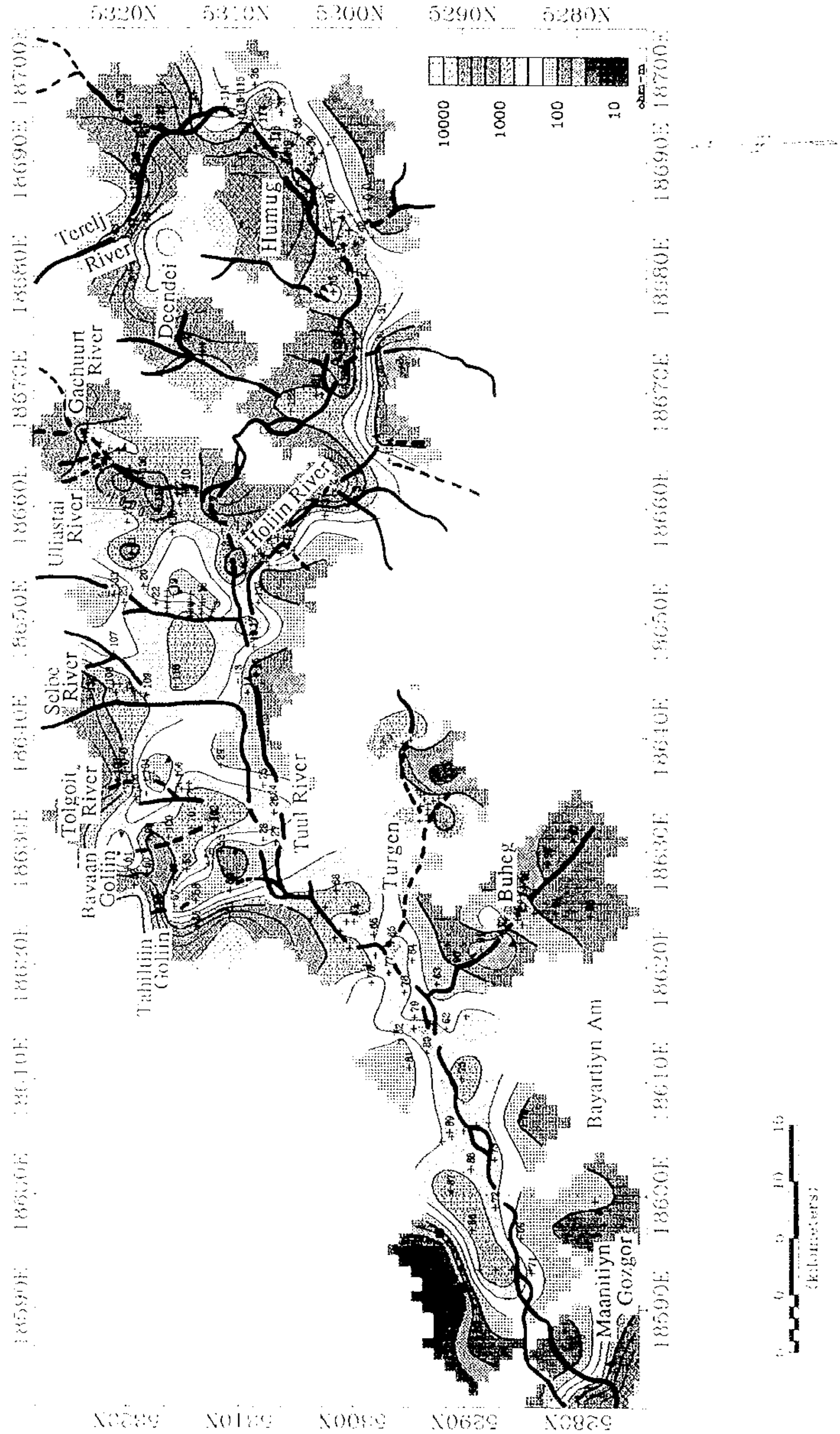
Compiled Resistivity map on -20m Level

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings



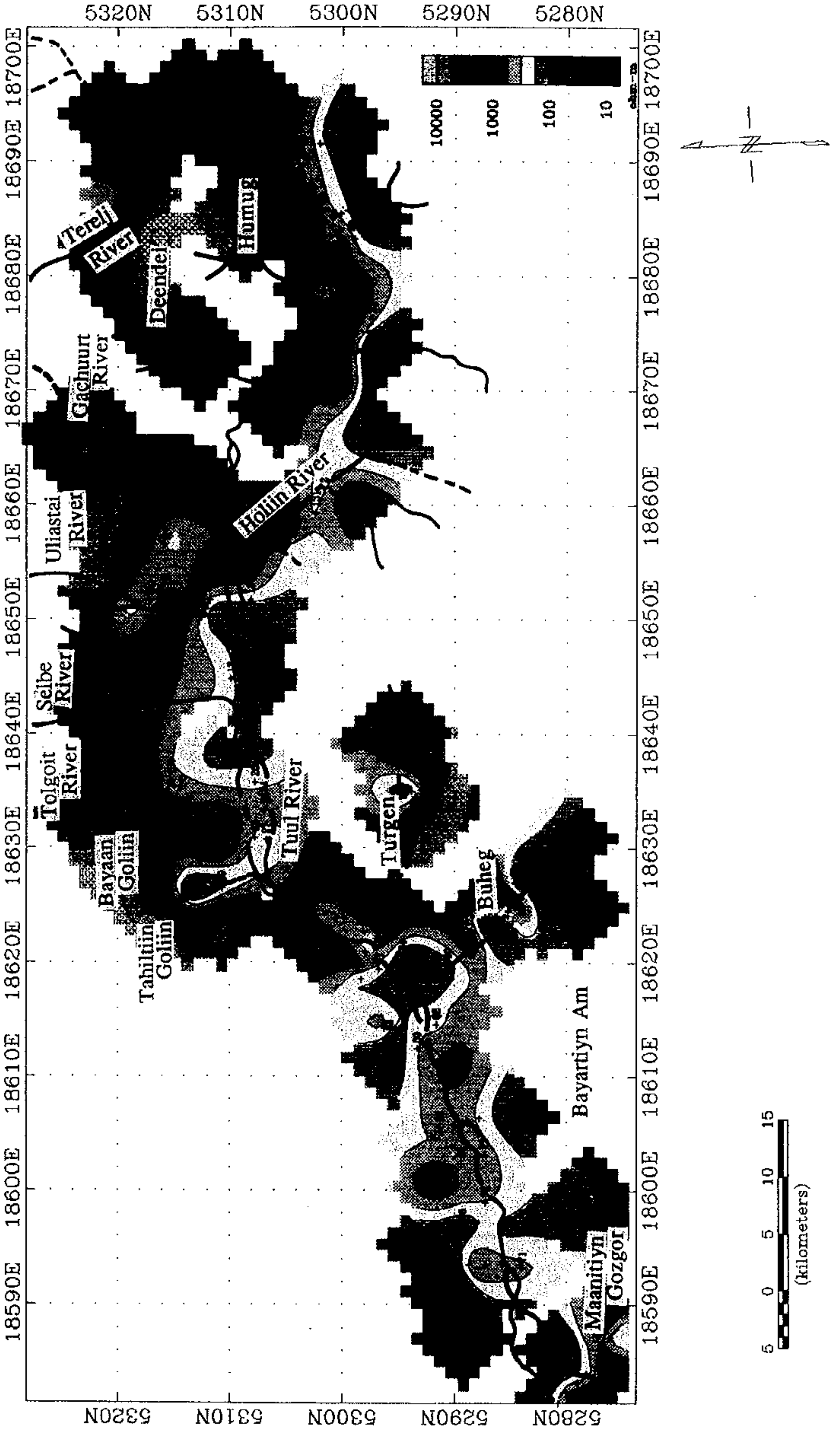
Compiled Resistivity Map on -30m Level

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

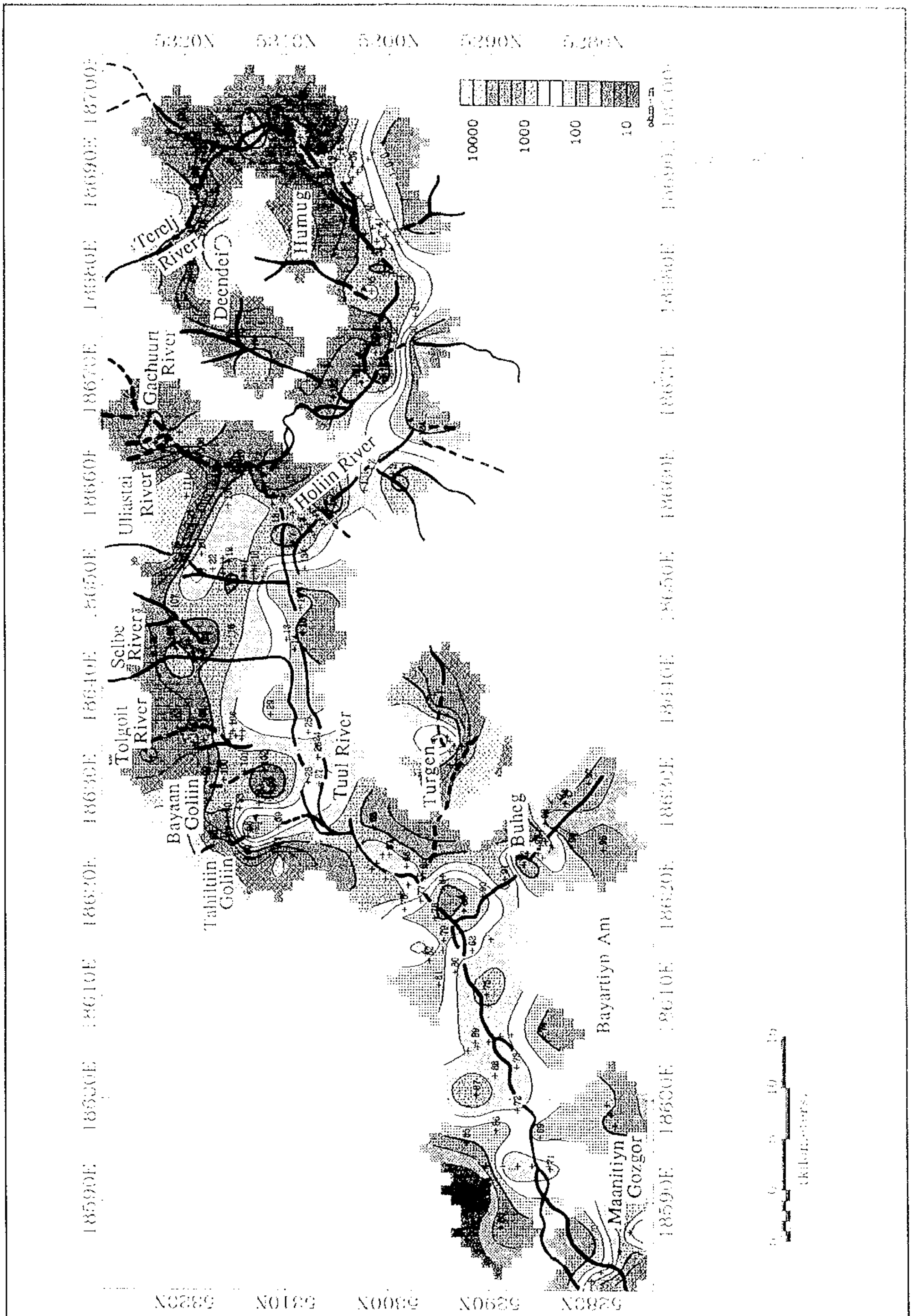


Compiled Resistivity Map on -30m Level

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

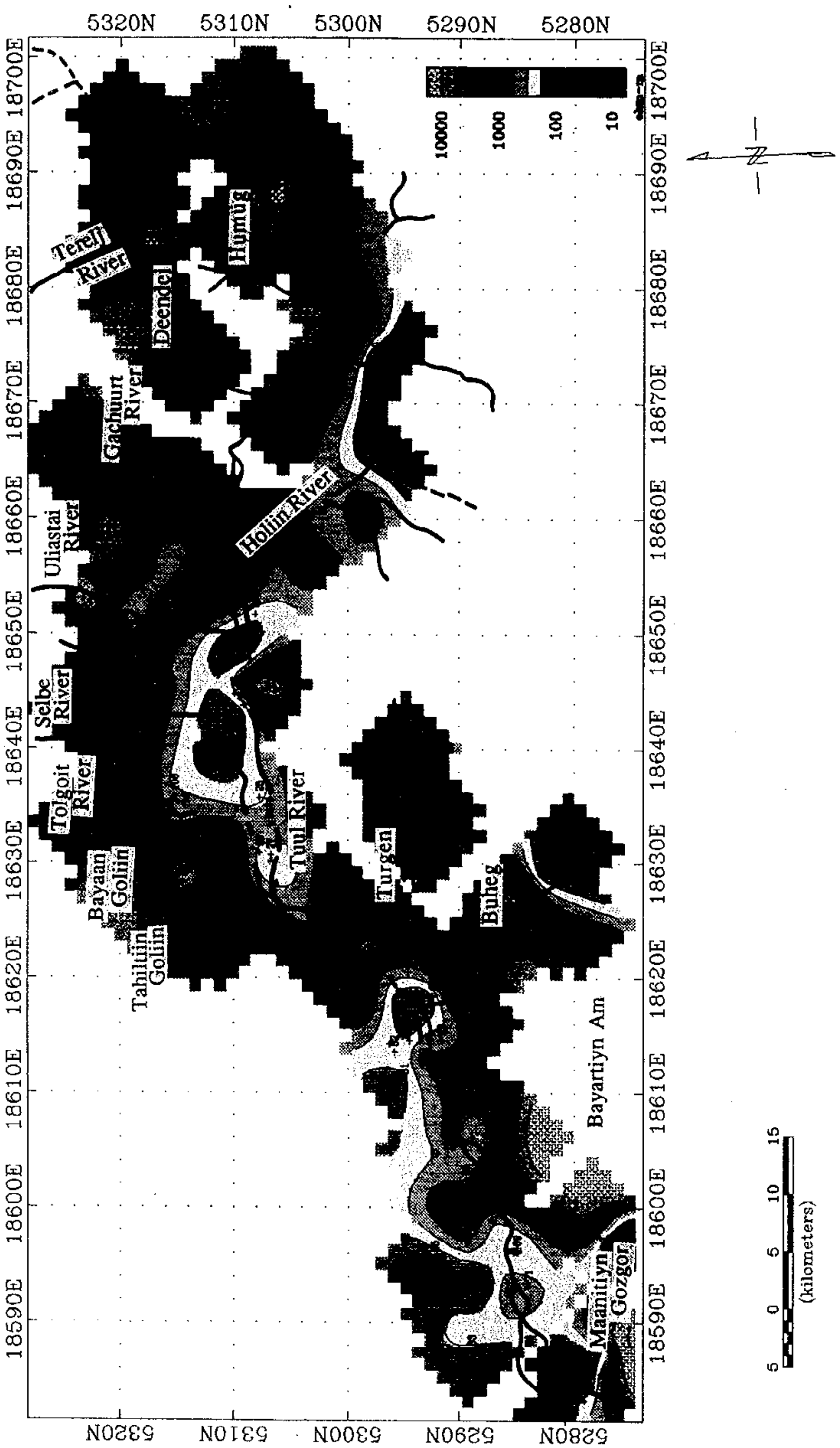


Compiled Resistivity Map on -50m Level	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

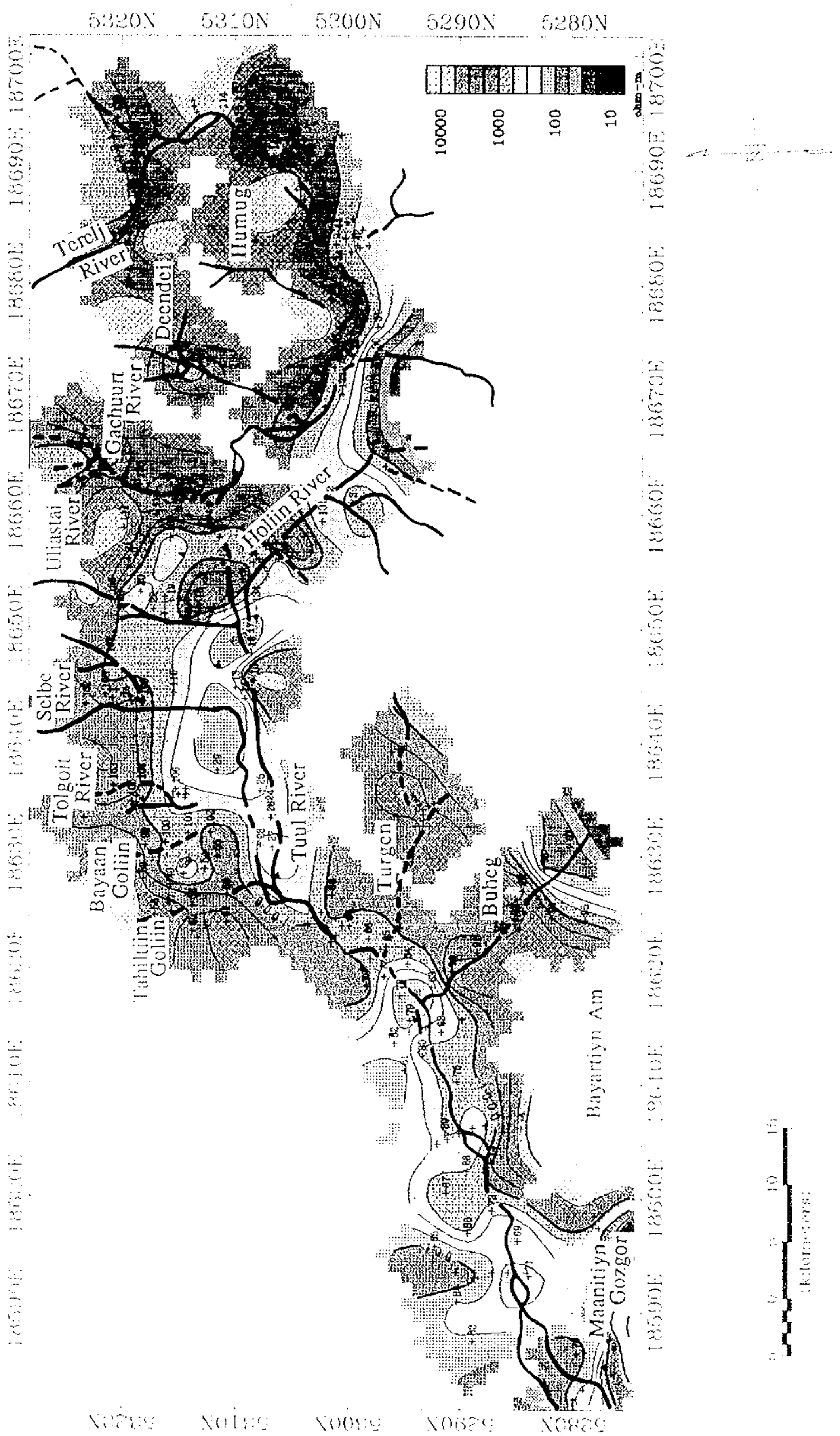


Compiled Resistivity Map on -50m Level

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings



Compiled Resistivity Map on -100m Level	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

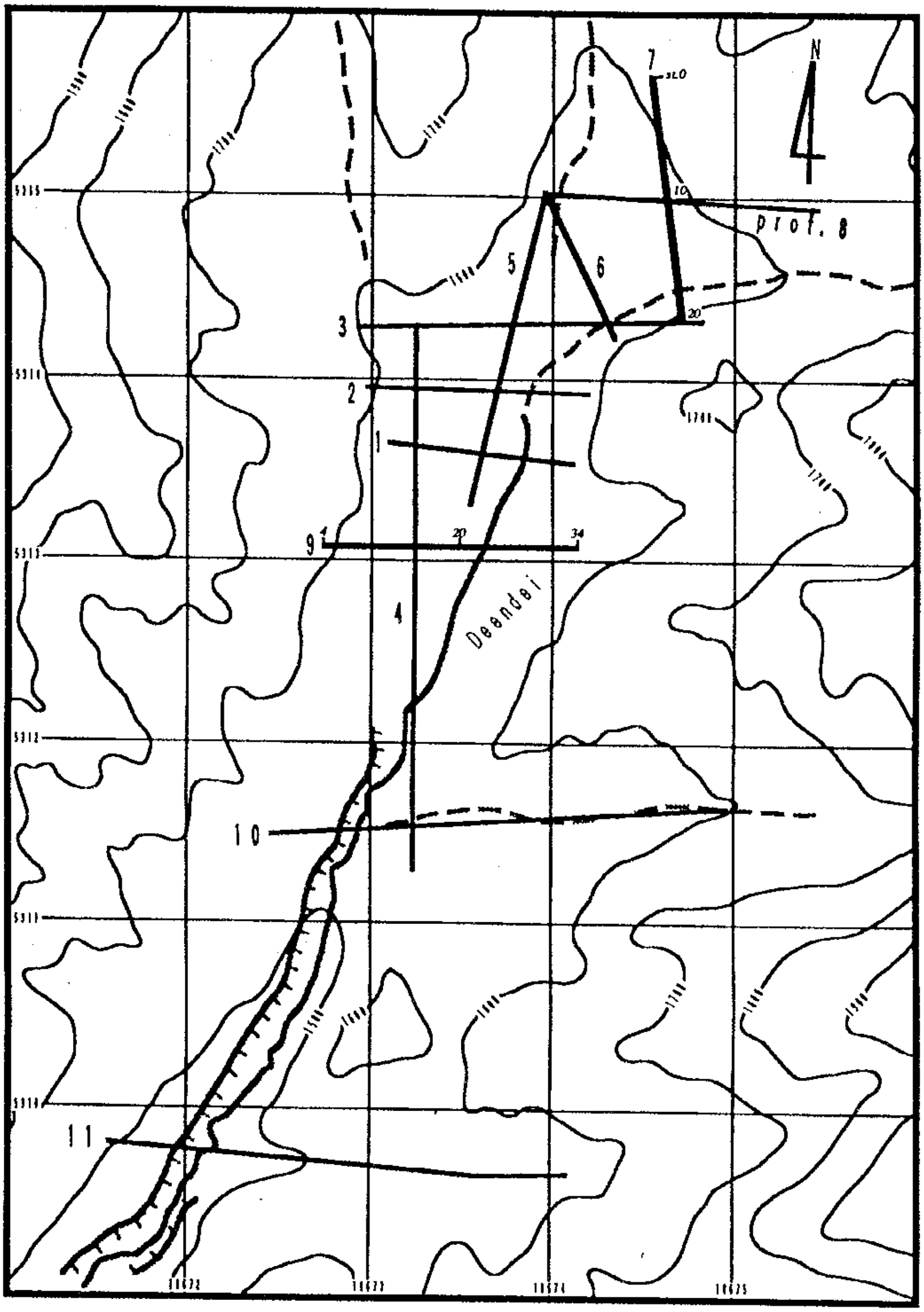


Compiled Resistivity Map on -100m Level

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

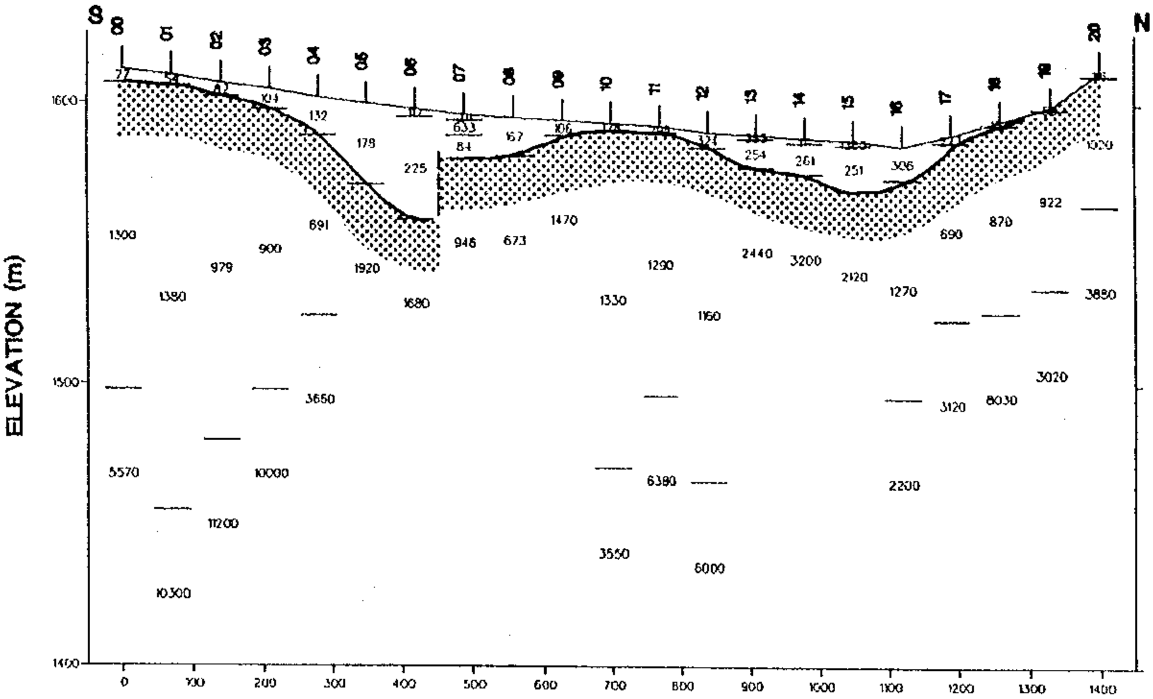
Appendix I.2.5

Existing Data of Electrical Survey in Deendei Area

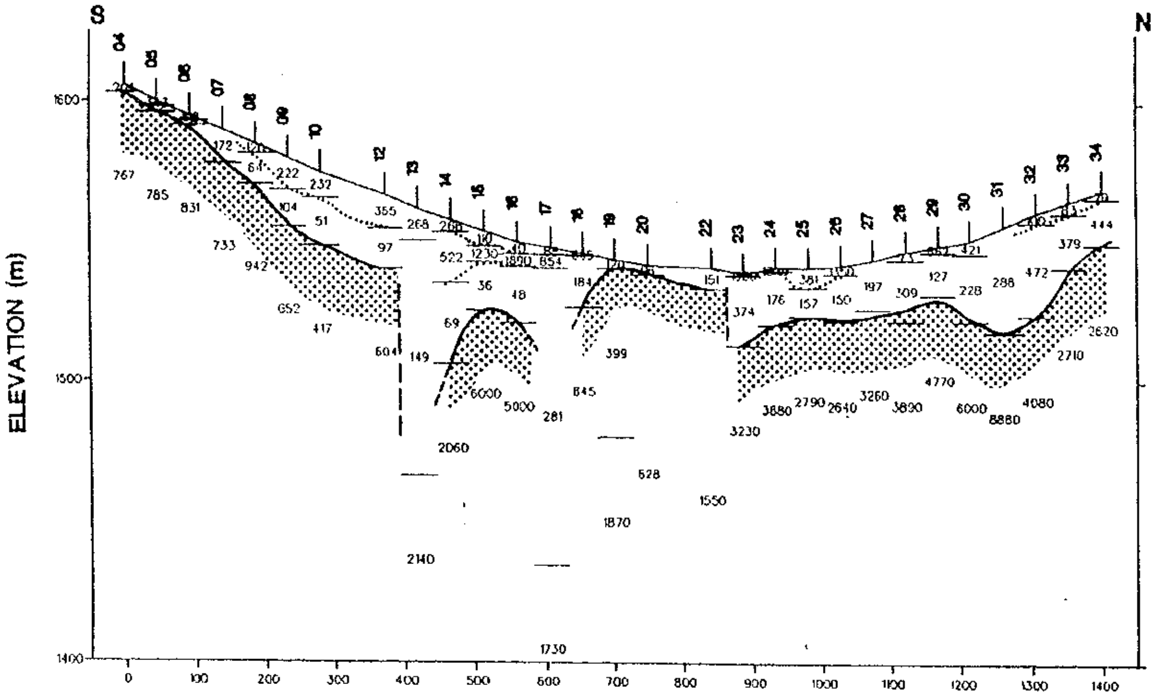


Location Map of Electrical Survey Profiles in Deendei Area

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings



RESISTIVITY STRUCTURE FOR PROFILE 07 IN DEENDEI AREA

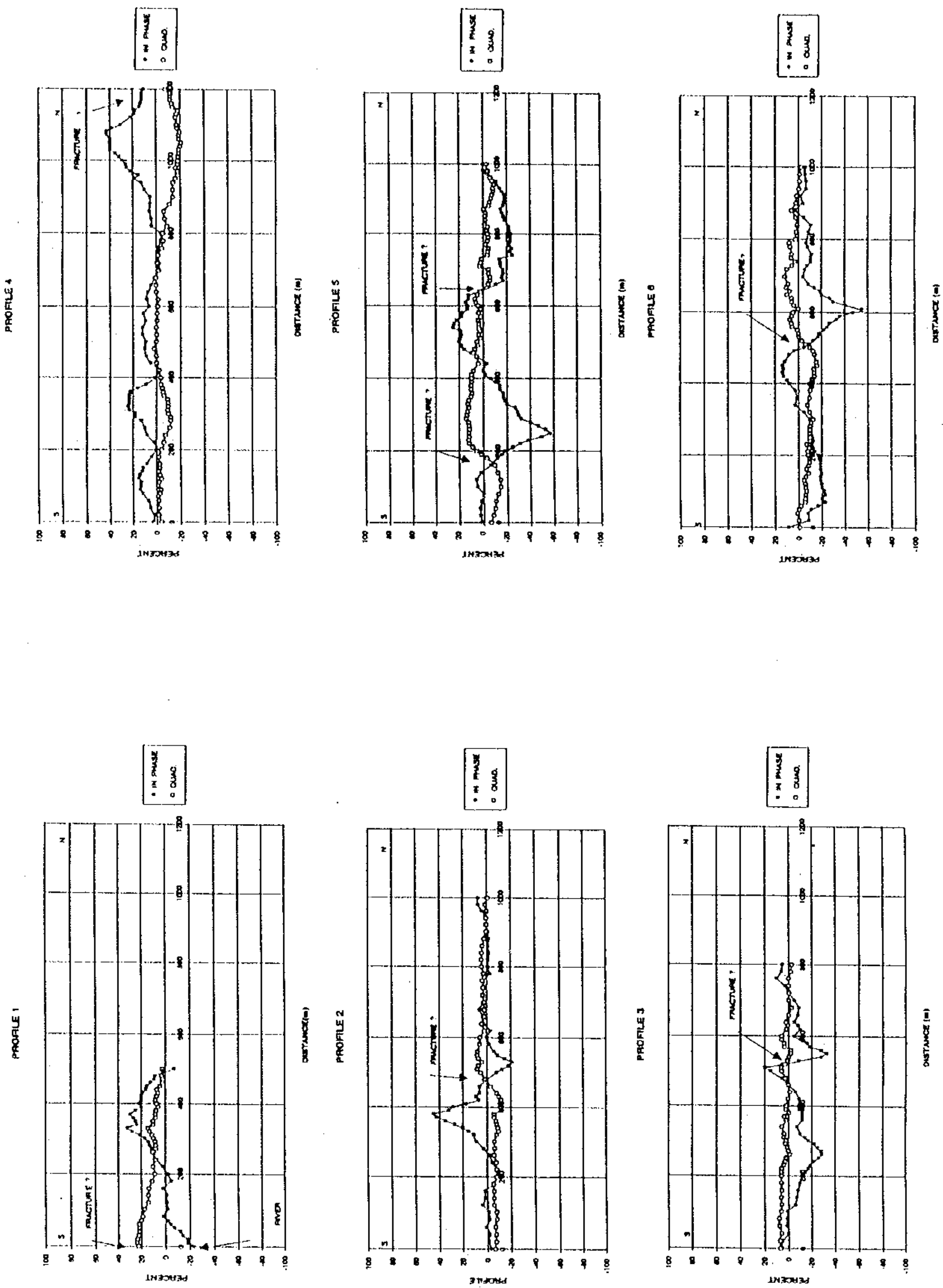


RESISTIVITY STRUCTURE FOR PROFILE 09 IN DEENDEI AREA

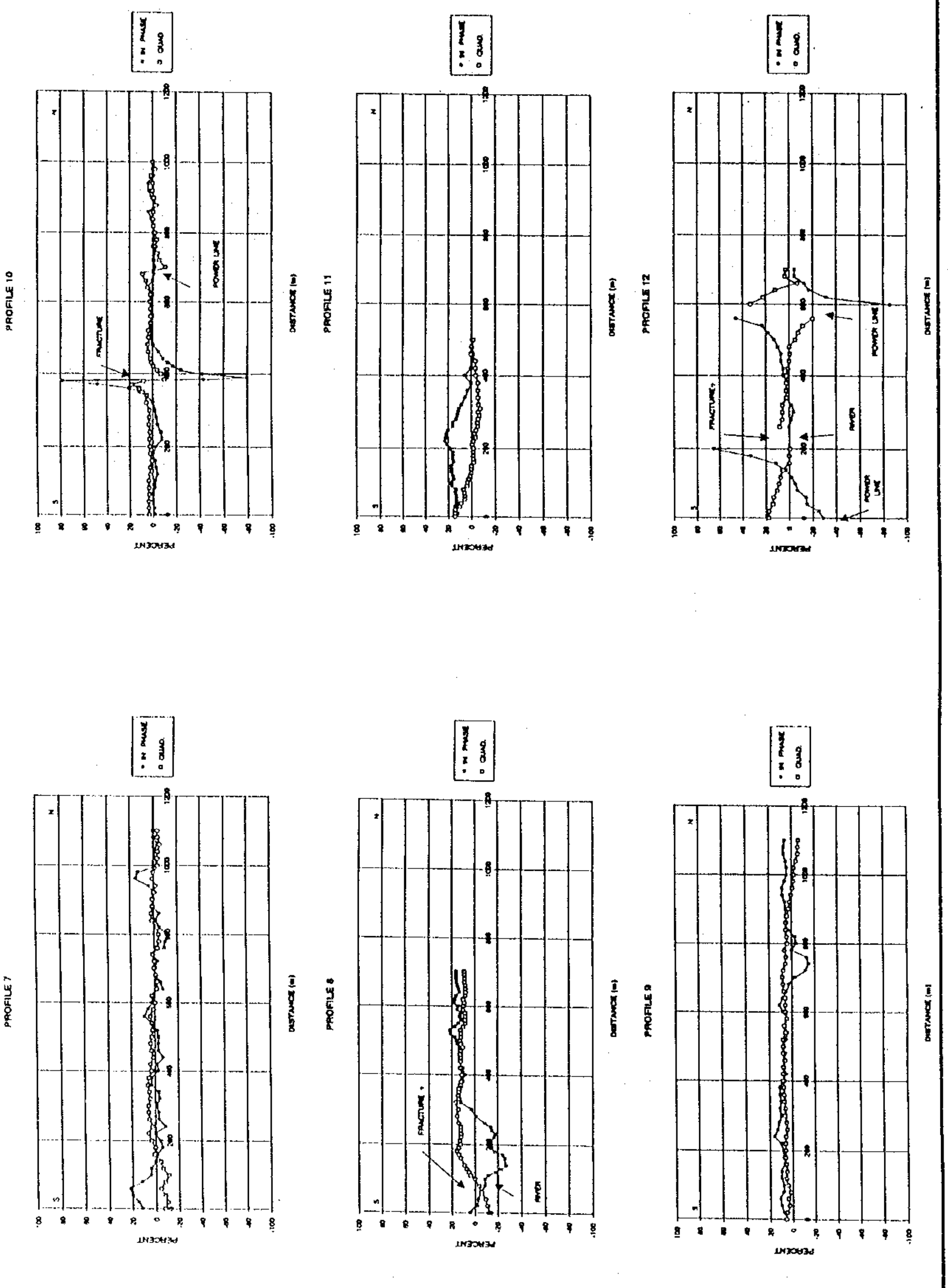
	Resistivity Sections on Profile 7 and 9 in Deendei Area
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

Appendix I 2.6

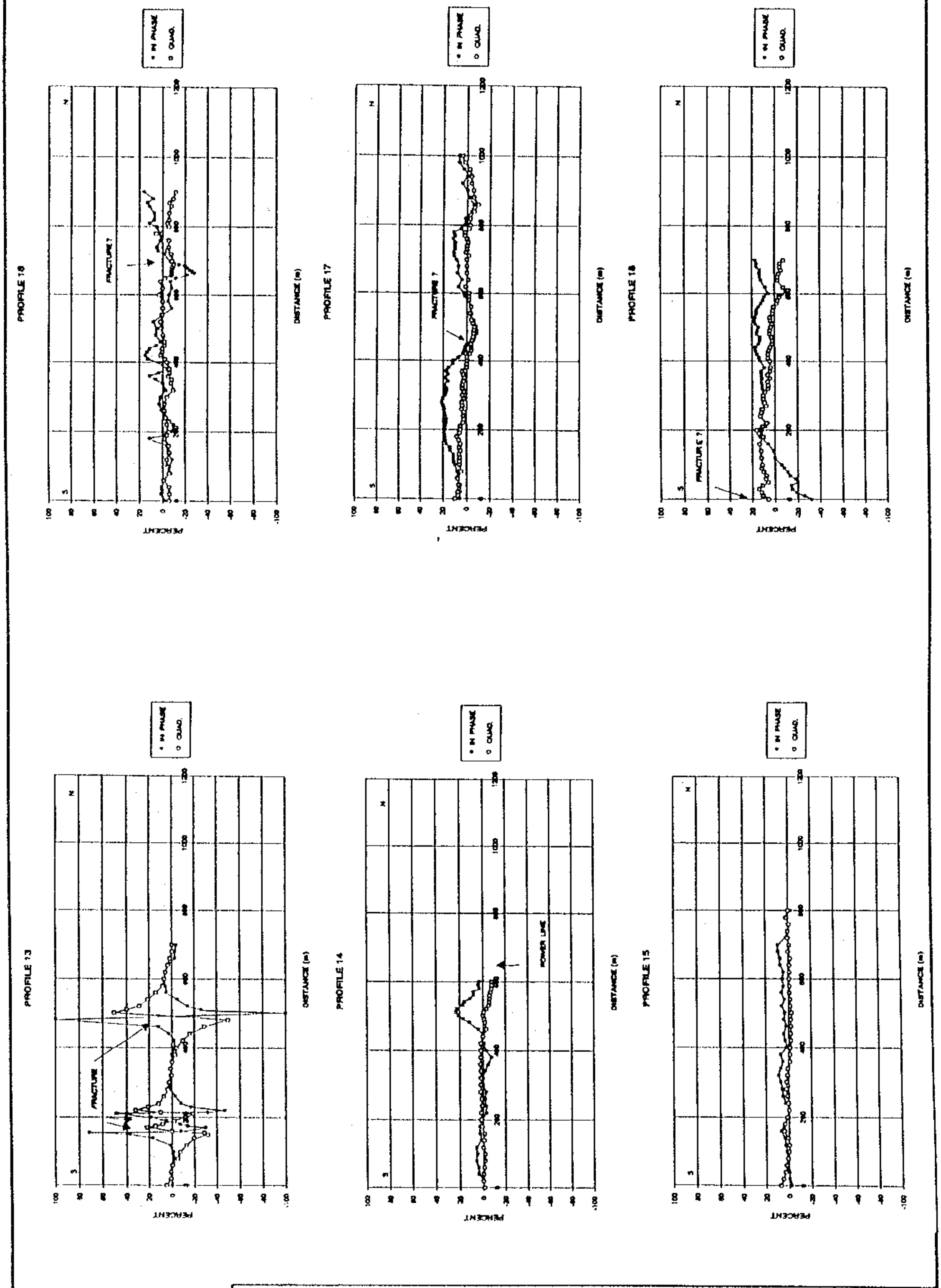
VLF-EM Inphase and Quadrature Profiles



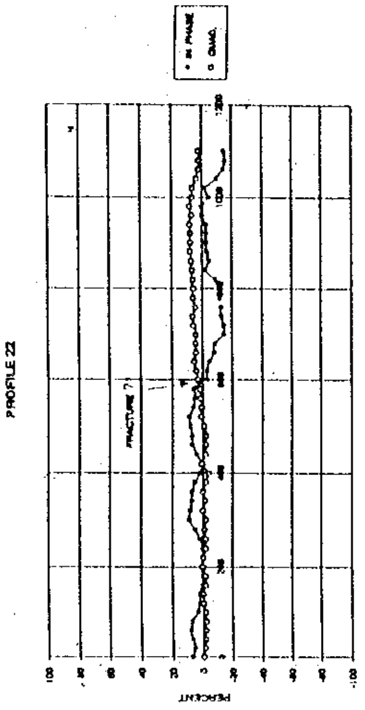
VLF-EM Inphase and Quadrature Profiles (No. 1, 2, 3, 4, 5, and 6)	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

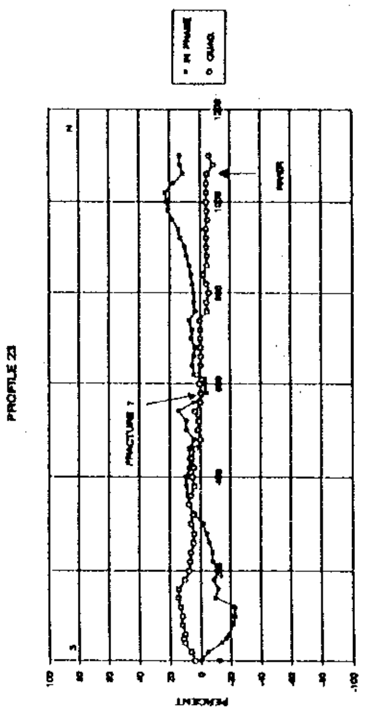


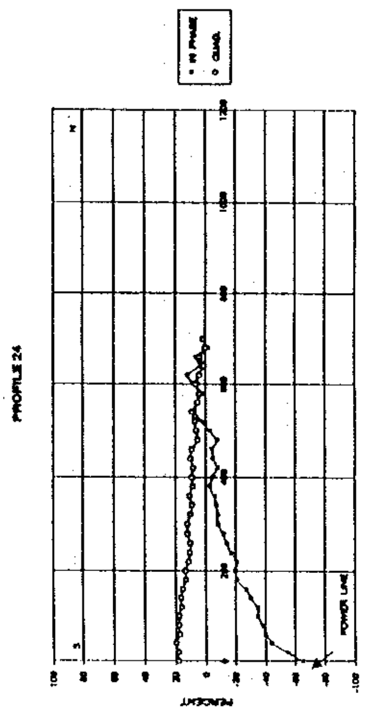
VLF-EM Inphase and Quadrature Profiles (No. 7, 8, 9, 10, 11 and 12)	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

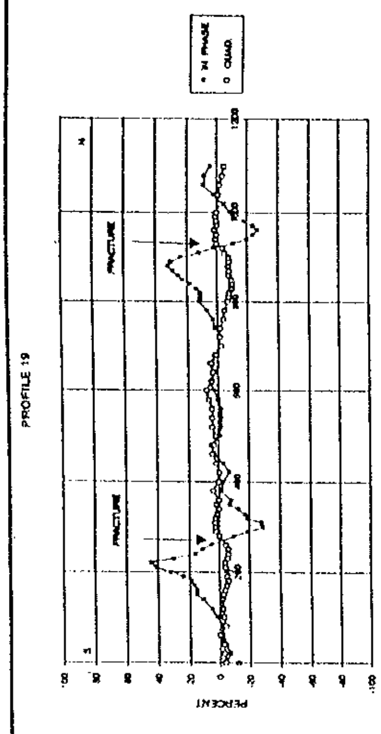


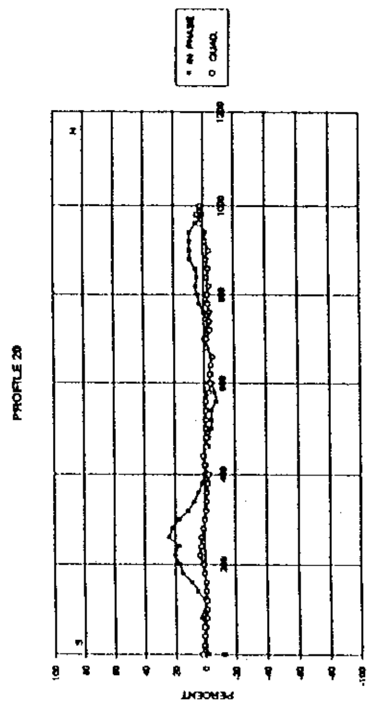
VLF-EM Inphase and Quadrature Profiles (No. 13, 14, 15, 16, 17 and 18)	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

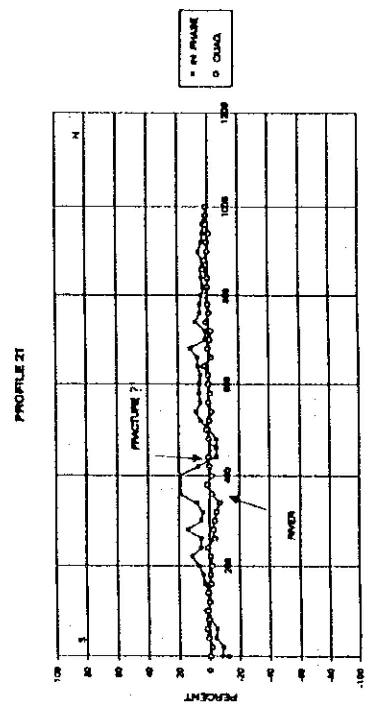




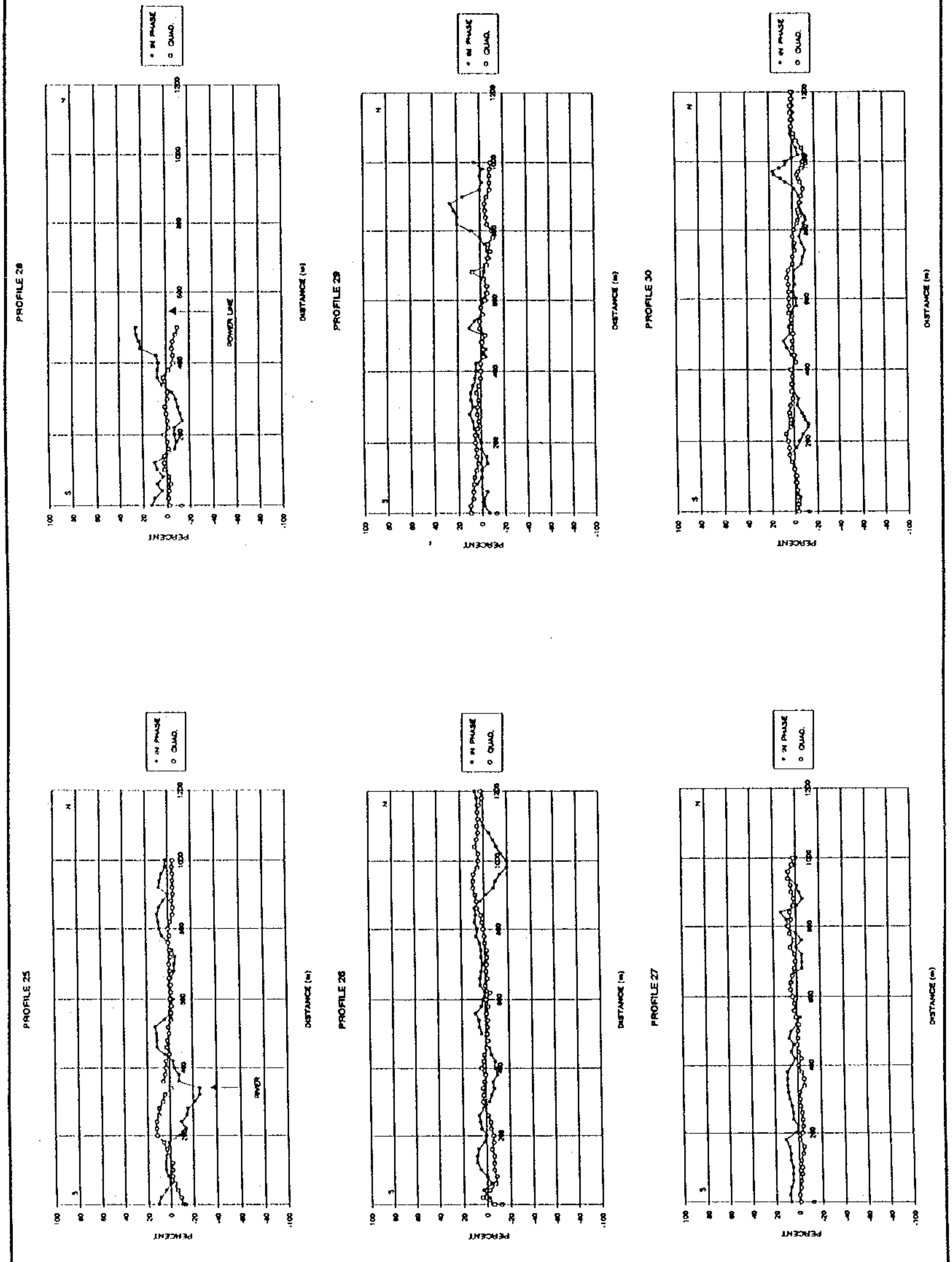






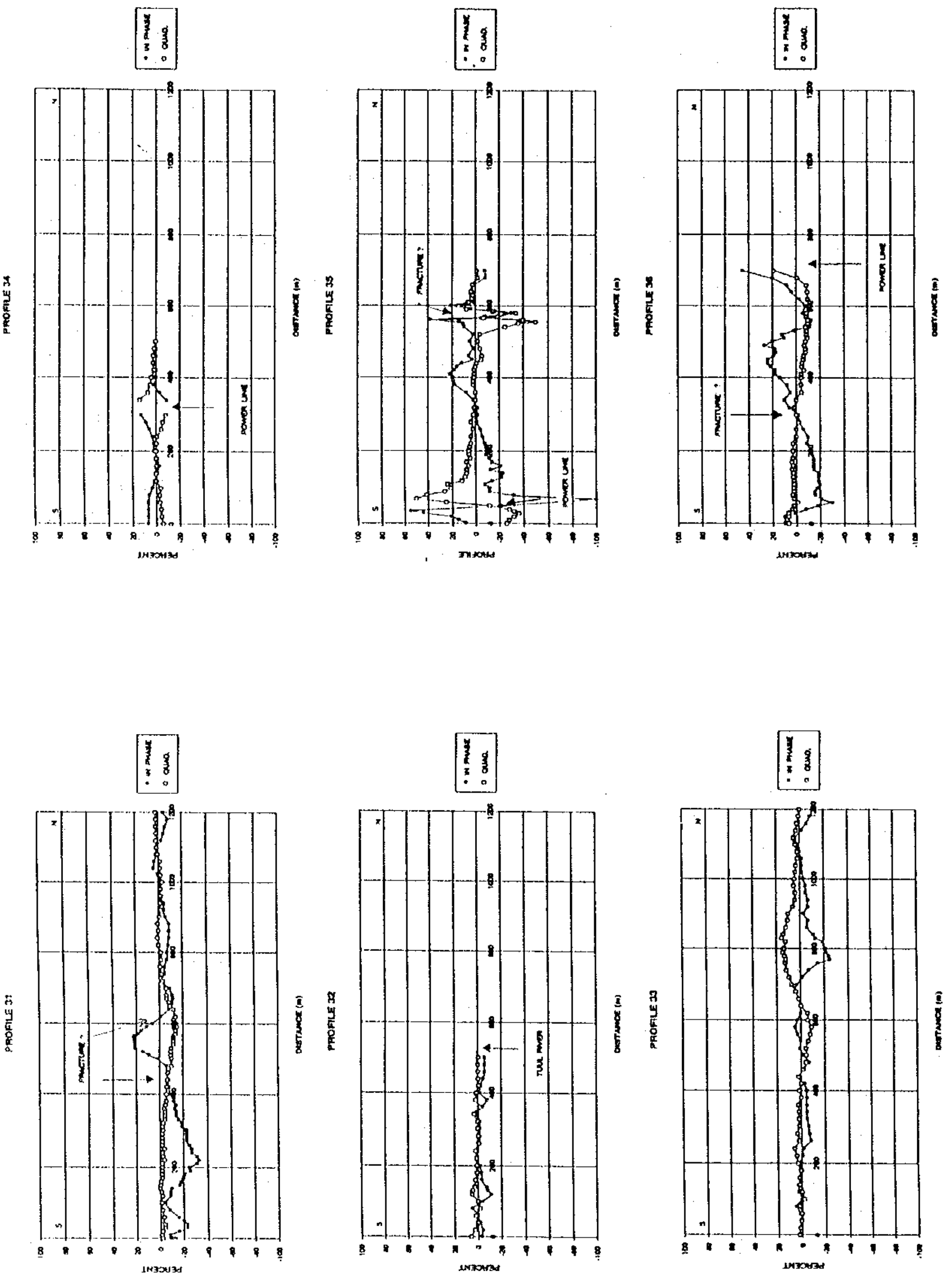


VLF-EM Inphase and Quadrature Profiles (No. 19, 20, 21, 22, 23 and 24)	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings



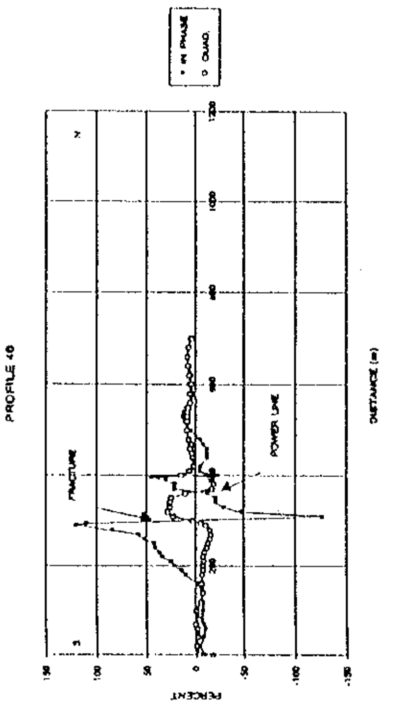
VLF-EM Inphase and Quadrature Profiles
(No. 25, 26, 27, 28, 29 and 30)

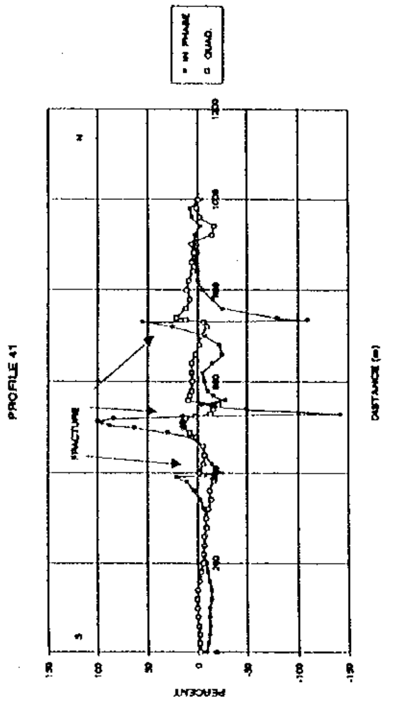
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

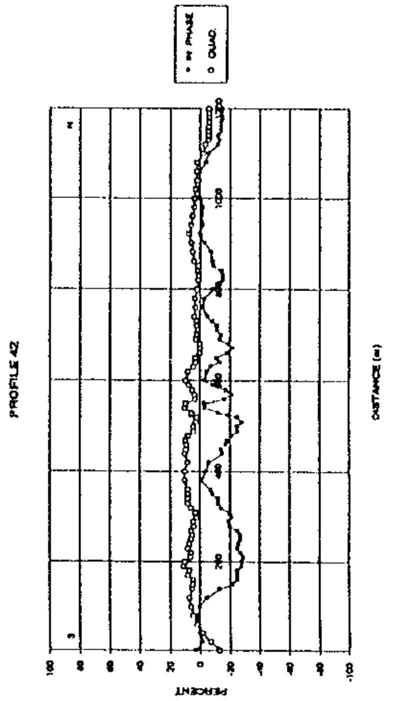


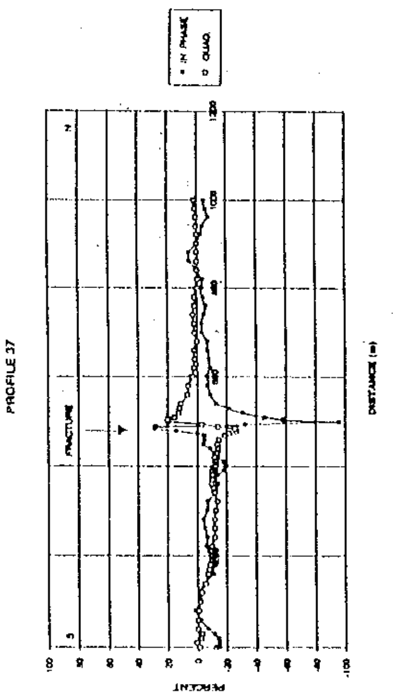
VLF-EM Inphase and Quadrature Profiles
(No. 31, 32, 33, 34, 35 and 36)

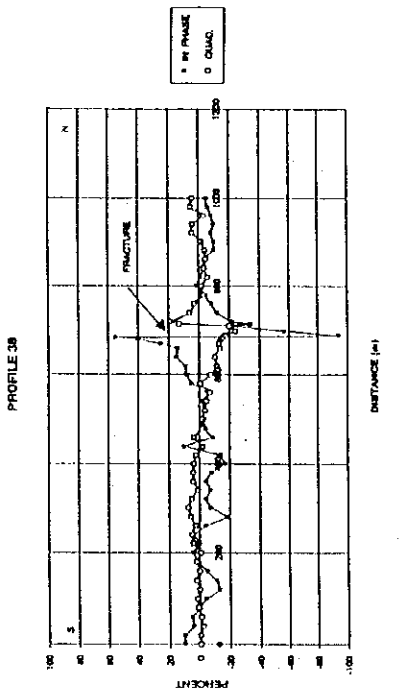
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

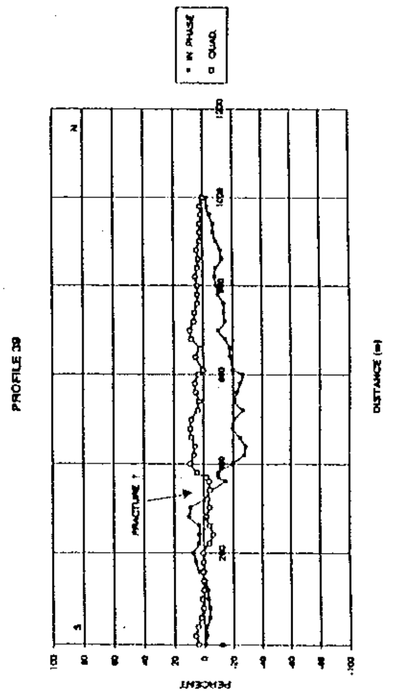




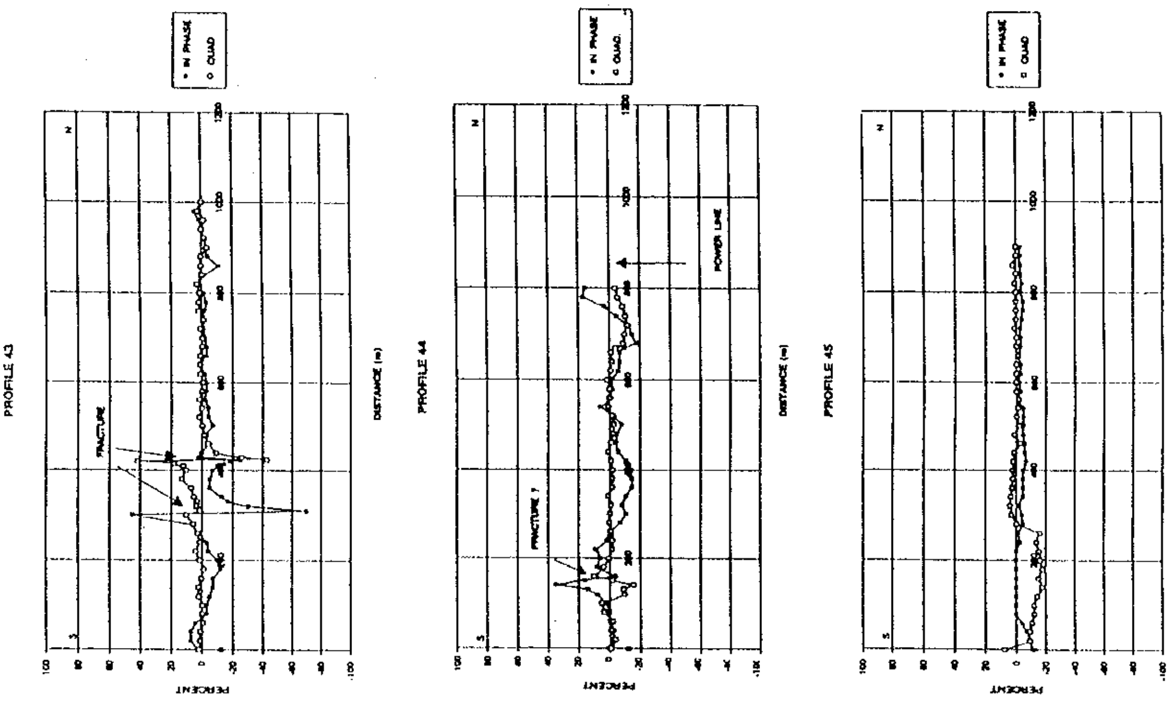








VLF-EM Inphase and Quadrature Profiles (No. 37, 38, 39, 40, 41 and 42)	
JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings



VLF-EM Inphase and Quadrature Profiles
(No. 43, 44 and 45)

JICA	The Study on Water Supply System in Ulaanbaatar and Surroundings

Appendix I.2.7

Data of VLF-EM Survey

App. 4.3 Data of VLF-EM survey

	PRO-41			PRO-42			PRO-43			PRO-44			PRO-45	
DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)
0	-8	-2	0	3	-13	0	3	2	0	1	-1	0	-11	8
20	-10	-2	20	-2	-7	20	7	1	20	-3	-4	20	-10	-9
40	-12	-2	40	0	-2	40	7	1	40	-3	-1	40	-7	-10
60	-12	-1	60	1	2	60	4	-1	60	0	-2	60	-4	-11
80	-12	-1	80	1	5	80	-3	-0	80	0	4	80	0	-12
100	-12	1	100	0	6	100	-3	-0	100	2	5	100	0	-12
120	-14	0	120	-5	7	120	-5	2	120	8	-10	120	0	-14
140	-14	-0	140	-13	5	140	-7	2	130	14	-9	140	0	-18
160	-12	-2	150	-22	5	160	-7	0	140	35	-16	160	0	-16
180	-10	-4	160	-25	5	180	-12	-1	150	16	-2	180	0	-18
200	-9	-6	170	-25	8	200	-10	1	160	-4	10	200	0	-17
220	-6	-6	180	-25	7	220	-4	4	180	8	4	220	0	-16
240	-7	-7	190	-28	11	240	-3	1	200	6	1	240	-3	-14
260	-8	-7	200	-28	10	260	2	3	220	9	-2	260	-1	-16
280	-8	-10	210	-29	6	280	6	5	240	2	-2	280	-5	-0
300	-8	-9	220	-27	6	300	45	10	260	0	-1	300	-4	3
320	-6	-11	230	-25	8	310	-70	1	280	-7	0	320	-2	4
340	-3	-14	240	-26	7	320	-30	4	300	-11	-0	340	-5	4
360	4	-12	250	-27	6	330	-17	3	320	-8	-1	360	-5	3
380	11	-17	260	-27	5	340	-13	5	340	-11	1	380	-5	2
390	22	-17	270	-25	6	360	-5	7	360	-15	-2	400	-5	2
395	-17	-5	280	-20	4	380	-5	13	380	-15	-2	420	-7	2
400	-25	-2	290	-19	4	400	-7	10	400	-15	-2	440	-6	1
420	-14	-6	300	-21	2	410	-10	12	420	-11	-1	460	-6	-3
440	-8	-7	310	-20	3	415	-15	18	440	-6	1	480	-5	1
460	-5	-6	320	-14	6	420	-18	42	460	-4	-1	500	-5	-2
480	8	2	330	-12	8	425	-25	-43	480	-5	-2	520	-5	-0
490	30	8	340	-12	8	430	2	-26	500	-8	-3	540	-5	-1
500	63	14	350	-8	8	440	0	-9	520	-3	-2	560	-2	-2
505	88	16	360	-7	8	460	-5	-4	540	6	1	580	-3	0
510	96	16	380	-1	10	480	-3	-2	560	-1	0	600	-2	0
515	100	14	400	-4	10	500	-7	-0	580	-2	0	620	-3	0
520	84	12	420	-6	8	520	-4	2	600	-1	2	640	-3	0
525	15	2	440	-15	10	540	-4	0	620	-6	-1	660	-2	-1
530	-142	-13	450	-14	9	560	-2	2	640	-7	-2	680	-3	0
540	-50	-16	460	-17	9	580	-3	0	660	-7	-1	700	-3	-0
550	-4	-22	470	-18	10	600	-3	-1	670	-10	-4	720	-3	1
560	-28	10	480	-21	8	620	-2	1	680	-18	-9	740	-4	0
570	-16	8	490	-25	4	640	1	1	700	-15	-10	760	-5	-0
580	-10	6	500	-25	4	660	-3	1	720	-13	-12	780	-5	0
600	-7	5	510	-28	3	680	-3	-0	740	-5	-11	800	-3	0
620	-5	6	520	-25	2	700	-2	-0	760	3	-9	820	-4	1
640	-15	6	525	-18	6	720	-1	1	780	17	-6	840	-3	0
660	-25	2	530	-12	6	740	-2	-1	800	15	-4	860	-3	2
680	-22	-2	540	-3	10	760	-2	2				880	-3	-0
700	-7	-3	550	-3	10	780	-3	2				900	-3	0
720	25	-10	560	-16	3	800	-1	1						
730	55	-6	570	-21	4	820	2	3						
735	-110	12	580	-17	5	840	-2	-0						
740	-80	22	590	-9	8	860	-11	0						
760	-25	12	600	-3	10	880	-4	-0						
780	-15	8	620	-5	8	900	-3	-4						
800	-5	11	630	-7	4	920	-2	-2						
820	0	9	640	-13	3	940	-1	0						
840	0	5	650	-11	3	960	1	-2						
860	4	7	660	-18	0	980	4	2						
880	0	4	670	-22	-0	1000	-1	-0						
900	4	7	680	-19	0									
920	3	-14	690	-13	3									
940	-3	-17	700	-14	2									
960	6	-2	710	-11	1									
980	8	1	720	-11	2									
1000	-4	0	730	-8	2									
			740	-5	4									
			760	-2	3									
			780	-3	4									
			800	-9	2									
			820	-15	1									
			830	-15	1									
			840	-14	2									
			850	-9	1									
			860	-8	4									
			880	-7	5									
			900	-3	6									
			920	0	8									
			940	-2	6									
			960	-1	5									
			980	-2	4									
			1000	0	4									
			1020	2	3									
			1040	0	2									
			1060	0	2									
			1080	-4	2									
			1100	-6	-2									
			1120	-12	-4									
			1130	-13	-6									
			1140	-12	-6									
			1150	-14	-6									
			1160	-14	-6									
			1170	-14	-6									
			1180	-15	-6									
			1190	-14	-6									
			1200	-15	-6									

	PRO-1			PRO-2			PRO-3			PRO-4			PRO-5	
DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)
0	-23	23	0	-3	-7	0	6	7	0	3	-4	0	2	-6
10	-18	24	20	-1	-8	20	5	7	20	2	-2	20	3	-8
20	-18	23	40	-2	-7	40	0	6	40	5	-2	40	3	-10
30	-14	22	60	1	-7	60	2	8	60	7	-2	60	2	-10
40	-12	22	80	-2	-8	80	1	8	80	12	-3	80	0	-12
50	-7	22	100	-1	-8	100	1	6	90	14	-4	100	5	-15
60	-4	22	120	4	-6	120	-6	6	100	13	-1	120	6	-14
70	-2	20	140	2	-6	140	-7	6	110	13	-2	140	2	-12
80	2	19	160	2	-6	160	-8	6	120	15	-4	160	-6	-10
100	-2	17	180	-6	-5	180	-10	6	130	14	-3	180	-12	-3
120	-1	14	200	-10	-8	200	-13	6	140	12	-2	190	-16	2
140	-1	14	220	-9	-8	210	-15	6	150	11	-3	200	-18	6
160	2	14	240	-4	-8	220	-17	6	160	8	-3	210	-25	9
180	-5	11	260	-2	-6	230	-19	4	180	4	-2	220	-31	12
200	-2	8	280	3	-7	240	-22	3	200	0	-4	230	-38	12
220	2	10	300	9	-6	250	-26	2	220	2	-6	240	-50	12
240	7	8	320	11	-8	260	-29	-1	240	8	-8	250	-57	12
260	11	10	330	15	-10	270	-28	0	260	10	-11	260	-53	12
270	11	8	340	20	-9	280	-25	1	280	13	-12	270	-47	12
280	13	8	350	27	-8	290	-22	3	290	18	-12	280	-40	12
290	14	8	360	35	-8	300	-17	2	300	18	-10	290	-32	14
300	17	10	370	43	-6	310	-14	4	310	23	-9	300	-30	14
310	21	11	380	45	-6	320	-10	4	320	24	-10	310	-29	13
320	28	13	390	32	-12	340	-7	6	330	23	-10	320	-27	12
330	32	14	400	28	-11	360	-12	2	340	23	-9	330	-20	13
340	24	10	410	17	-11	370	-12	4	350	23	-6	340	-18	12
350	25	10	420	7	-12	380	-12	-0	360	22	-6	350	-17	10
360	27	8	430	9	-10	390	-9	3	370	16	-5	360	-17	9
370	30	8	440	6	-8	400	-9	2	380	9	-4	370	-14	10
380	25	8	460	6	-3	420	-9	1	400	1	-4	380	-14	10
390	20	6	480	0	2	440	-6	-1	420	-3	-2	390	-10	10
400	22	7	500	-8	5	460	0	0	440	5	0	400	-6	10
410	20	8	510	-13	8	480	6	3	460	9	0	410	-2	10
420	20	7	520	-18	7	500	15	6	480	10	2	420	0	8
430	19	6	530	-21	4	510	20	6	500	9	0	440	-3	4
440	16	7	540	-15	7	520	5	3	520	12	-0	460	5	6
450	15	4	550	-9	8	530	-9	1	540	12	0	470	10	8
460	12	2	560	-6	8	540	-28	-0	560	9	-1	480	16	7
470	9	2	580	-2	6	550	-33	-2	580	11	-1	490	18	5
480	8	3	600	0	6	560	-28	-2	600	6	-1	500	20	5
500	-7	2	620	-3	2	570	-18	4	620	8	-2	510	19	3
			640	3	4	580	-16	4	640	7	-0	520	18	4
			660	3	2	590	-10	6	660	4	0	530	19	3
			680	6	2	600	-5	6	680	1	0	540	25	4
			700	3	2	620	-10	2	700	-3	-2	550	24	4
			720	3	3	630	-8	1	720	-3	-1	560	22	4
			740	2	3	640	-5	2	740	-1	-2	570	18	2
			760	3	4	660	-8	0	760	-2	-5	580	17	4
			780	-3	3	680	-9	-3	780	-4	-6	590	13	2
			800	-1	4	700	-5	-0	800	-4	-6	600	13	4
			820	-1	4	720	0	-0	820	4	-9	610	14	6
			840	-2	4	740	3	-0	840	4	-7	620	12	7
			860	-1	4	760	10	0	860	6	-7	630	12	5
			880	-2	2	780	6	-2	880	5	-11	640	3	2
			900	-1	0	800	5	-3	900	5	-14	660	-11	-4
			920	1	0				920	10	-14	670	-17	-6
			940	1	0				940	13	-14	680	-16	-6
			960	4	0				950	18	-16	690	-17	-5
			980	7	1				960	15	-18	700	-17	-5
			1000	7	-1				970	22	-18	710	-15	3
									980	25	-16	720	-15	2
									990	26	-18	730	-14	1
									1000	29	-18	740	-25	-4
									1010	32	-18	750	-23	-4
									1020	35	-19	760	-24	-5
									1030	40	-19	770	-22	-2
									1040	40	-20	780	-23	-4
									1050	40	-21	790	-23	-5
									1060	40	-19	800	-23	-4
									1070	43	-19	810	-22	-3
									1080	43	-20	820	-22	-4
									1090	38	-18	840	-18	-2
									1100	30	-17	850	-17	-2
									1120	22	-16	860	-16	-2
									1130	18	-17	870	-15	-1
									1140	18	-18	880	-17	-5
									1150	14	-14	890	-18	-6
									1160	13	-13	900	-18	-7
									1170	12	-12	910	-18	-8
									1180	12	-12	920	-16	-9
									1190	12	-12	930	-14	-8
									1200	10	-8	940	-12	-9
												950	-11	-8
												960	-7	-6
												980	0	-4
												1000	0	-3

	PRO-6			PRO-7			PRO-8			PRO-9			PRO-10	
DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE
(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)
0	9	-1	0	12	-8	0	4	-14	0	5	6	0	-2	4
20	-9	0	20	15	-10	20	-2	-11	20	8	5	20	-1	4
40	-8	1	40	20	-8	40	-3	-10	40	10	3	40	0	4
50	-11	-0	60	22	-4	60	-5	-6	60	11	4	60	0	4
60	-17	-2	80	12	-8	80	-9	-4	80	8	2	80	-2	4
70	-23	-6	100	4	-11	100	-9	0	100	8	4	100	-2	4
80	-20	-6	120	4	-6	110	-12	4	120	10	6	120	-4	2
90	-23	-6	140	0	-4	120	-18	5	140	10	5	140	-3	3
100	-22	-7	160	-1	1	130	-23	7	160	7	6	160	-2	1
110	-20	-6	180	-6	0	140	-27	9	180	8	6	180	0	2
120	-20	-6	200	-4	4	160	-26	12	200	8	6	200	-3	3
130	-19	-5	220	0	6	170	-24	14	220	10	6	220	-8	3
140	-19	-7	240	-9	3	180	-17	16	240	16	6	240	-7	2
150	-20	-9	260	-3	5	190	-15	14	260	13	5	260	-4	4
160	-19	-7	280	-3	6	200	-14	13	280	12	5	280	-3	3
170	-19	-9	300	-1	6	210	-14	13	300	10	6	300	-2	3
180	-19	-10	320	-4	4	220	-17	12	320	11	6	320	0	6
190	-18	-10	340	-3	5	230	-18	12	340	10	7	340	5	5
200	-17	-8	360	3	7	240	-15	12	360	11	7	350	12	9
210	-14	-8	380	3	6	250	-14	12	380	11	8	360	20	12
220	-13	-9	400	-3	3	260	-9	14	400	7	8	370	48	18
230	-12	-7	420	-2	4	280	-1	15	420	5	8	380	78	8
240	-13	-10	440	-7	1	300	3	14	440	7	8	385	-43	-10
250	-12	-10	460	-3	3	320	12	17	460	7	6	390	-80	-12
260	-11	-10	480	-3	4	330	13	14	480	6	8	400	-42	-7
270	-11	-10	500	-3	3	340	14	14	500	7	8	410	-24	-4
280	-11	-10	520	-2	2	350	13	14	520	5	8	420	-17	-1
290	-11	-11	540	3	3	360	12	14	540	4	6	430	-13	1
300	-10	-13	560	9	4	370	13	12	560	6	7	440	-9	2
320	-5	-10	580	6	1	380	10	12	580	4	5	460	-5	4
340	3	-8	600	2	-0	400	8	11	600	8	6	480	0	4
360	1	-10	620	3	2	420	10	12	620	11	6	500	2	4
380	3	-10	640	-7	-2	440	13	12	640	8	6	520	1	4
400	8	-10	660	-5	-2	450	13	12	660	5	8	540	1	2
410	10	-12	680	-1	-1	460	13	13	680	3	8	560	0	2
420	13	-14	700	-1	1	470	13	12	700	-3	9	580	2	2
430	14	-14	720	-3	0	480	13	10	720	-12	8	600	1	3
440	13	-14	740	2	1	490	15	12	740	-15	6	620	0	2
450	14	-16	760	-9	-3	500	16	12	760	-13	5	640	5	4
460	12	-16	780	-10	-4	510	17	12	780	0	7	660	0	6
480	8	-14	800	-11	-4	520	21	12	800	-4	4	680	-1	9
490	4	-13	820	-5	-3	530	22	12	820	-3	4	700	-2	-11
500	-5	-10	840	-2	2	540	17	10	840	3	5	720	-1	-6
510	-10	-6	860	-5	2	550	14	8	860	4	5	740	-2	-4
520	-13	-3	880	0	1	560	12	8	880	5	4	760	0	-2
530	-17	-0	900	0	1	570	13	8	900	5	2	780	-1	-4
540	-18	0	920	-2	-0	580	12	8	920	6	2	800	-1	-2
550	-22	1	940	4	-2	590	15	10	940	8	0	820	0	-1
560	-25	6	960	15	1	600	14	10	960	8	-1	840	1	-0
570	-27	6	980	13	0	610	18	9	980	6	-2	860	4	-1
580	-33	8	1000	-4	-4	620	17	10	1000	4	-2	880	-4	-2
590	-36	6	1020	-2	-4	630	16	8	1020	4	-2	900	1	-1
600	-47	5	1040	-1	-4	640	13	8	1040	5	-4	920	4	0
605	-55	1	1060	-4	-6	650	14	8	1060	7	-6	940	4	0
610	-55	0	1080	0	-4	660	15	8	1080	7	-6	960	-1	2
620	-41	4	1100	0	-4	670	16	9	1100	6	-6	980	0	-2
630	-30	6				680	16	9				1000	0	0
640	-27	6				690	16	9						
650	-20	10				700	16	9						
660	-19	8												
670	-14	11												
680	-9	9												
700	-4	12												
720	-6	10												
730	-8	6												
740	-11	3												
750	-11	6												
760	-12	6												
780	-8	7												
790	-7	8												
800	-12	3												
820	-9	2												
840	-11	1												
860	-5	2												
880	3	6												
900	-4	2												
920	-2	2												
940	-7	-1												
960	-7	-1												
980	-6	-1												
1000	-6	-3												

	PRO-11			PRO-12			PRO-13			PRO-14			PRO-15	
DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)
0	14	14	0	-29	18	0	0	5	0	0	-1	0	-2	7
10	12	14	20	-25	18	20	1	1	20	0	0	20	0	5
20	14	14	40	-15	14	40	1	1	40	4	-0	40	0	3
30	14	10	60	-14	14	60	-1	-0	60	4	-1	60	3	2
40	13	9	80	-7	11	80	-2	-5	80	6	-2	80	1	1
50	13	6	100	-5	9	100	-1	-7	100	5	-2	100	2	0
60	13	6	120	-2	8	120	2	-13	120	6	0	120	3	-0
70	14	6	140	3	6	140	17	-20	140	2	-1	140	4	1
80	13	7	160	12	0	150	37	-32	160	3	-1	160	7	4
90	17	4	180	33	-0	155	72	-29	180	3	1	180	4	4
100	17	4	200	65	-1	160	-8	0	200	2	2	200	0	2
110	15	2	220			170	-30	22	220	-3	2	220	0	-0
120	16	1	240			175	-14	15	240	-3	1	240	3	0
130	17	0	260	0	9	180	-7	9	260	-2	1	260	5	1
140	17	-0	280	-2	6	190	5	-2	280	-3	2	280	6	2
150	17	0	300	-4	6	200	18	-12	300	0	2	300	7	2
160	15	-2	320	-2	6	210	48	-19	320	0	2	320	9	1
170	16	-2	340	2	2	215	-32	10	340	-2	2	340	7	1
180	16	-2	360	2	3	220	-47	32	360	-5	3	360	5	-1
190	16	-2	380	2	3	230	-17	21	380	-8	2	380	7	-1
200	19	-2	400	5	2	240	-8	12	400	-3	2	400	2	-1
210	21	-1	420	5	1	260	-3	7	420	-1	2	420	3	-2
220	23	-2	440	7	-0	280	1	4	440	0	0	440	4	-2
230	22	-4	460	7	-1	300	3	3	460	4	-3	460	2	-2
240	21	-3	480	10	-0	320	1	0	480	12	-2	480	4	-2
250	20	-4	500	13	-6	340	2	1	490	17	-1	500	3	-3
260	16	-6	520	18	-8	360	0	-0	500	21	0	520	6	-2
270	16	-6	540	23	-12	380	0	-3	510	23	-1	540	3	-2
280	13	-6	560	46	-20	400	-3	-4	520	22	-3	560	6	-1
290	12	-7	580			420	-2	-10	530	17	-6	580	4	-1
300	11	-6	600	-86	33	440	3	-16	540	16	-6	600	5	-1
310	10	-8	620	-32	22	460	12	-29	550	11	-6	620	4	-1
320	8	-6	640	-17	12	480	100	-50	560	8	-6	640	7	-1
340	5	-6	660	-13	-8	500	-100	50	570	8	-7	660	7	-2
360	3	-6	680	-5	4	510	-26	40	580	3	-8	680	9	0
380	0	-6	700	-5	3	520	-14	29	590	4	-8	700	9	-1
400	5	-4				540	-5	21	600	3	-8	720	2	0
420	0	-4				560	5	14				740	0	0
440	-1	-4				580	6	8				760	0	-1
460	-2	0				600	7	7				780	2	1
480	0	-0				620	6	6				800	-3	-0
500	0	-2				640	3	4						
						660	-3	2						
						680	-3	0						
						700	-4	0						

DIST. (m)	PRO-16 IN PHASE (%)	QUAD. PHASE (%)
0	-2	-6
20	2	-6
40	1	-6
60	-2	-1
80	-7	-6
100	-6	-4
120	-9	-4
140	-5	-6
160	-4	-6
180	11	-2
190	-3	-4
200	-9	-6
220	-10	-4
230	-5	-6
240	-2	-3
260	1	-2
280	3	-2
300	2	-4
320	-3	-10
340	0	-8
350	6	-8
360	11	-5
370	3	-6
380	-5	-6
400	4	-4
410	13	-2
420	15	2
430	13	0
440	11	0
450	5	-2
460	2	-2
480	6	-0
500	5	2
520	8	2
540	1	0
560	-8	0
580	-5	0
600	-6	3
620	-8	0
640	-7	2
650	-12	-2
660	-22	-8
665	-28	-8
670	-26	-8
675	-24	-8
680	-22	-9
685	-20	-10
690	-15	-10
700	-7	-9
720	-2	-8
730	4	-4
740	5	-6
760	2	-6
780	3	6
800	5	-6
810	11	-4
820	7	-6
840	7	-6
860	11	-8
870	13	-6
880	8	-10
900	16	-12

DIST. (m)	PRO-17 IN PHASE (%)	QUAD. PHASE (%)
0	6	10
20	5	8
40	5	7
60	8	8
80	8	5
100	10	6
110	11	6
120	11	6
130	11	6
140	14	5
150	14	6
160	17	5
170	18	7
180	18	8
190	19	6
200	18	5
210	18	5
220	17	3
230	17	2
240	18	3
250	19	2
260	19	4
270	20	4
280	21	4
290	20	2
300	18	4
310	17	2
320	17	4
330	19	4
340	16	3
350	18	2
360	16	3
370	17	4
380	15	0
390	12	0
400	11	-0
410	7	-0
420	3	-3
430	2	-4
440	1	-4
445	0	-4
450	-3	-4
460	-6	-5
470	-7	-6
480	-9	-6
490	-9	-6
500	-8	-7
510	-5	-6
520	-6	-4
540	-4	-3
560	-4	-4
580	-1	-2
590	2	-2
600	2	-2
620	7	1
640	4	-1
660	8	0
680	7	0
700	9	0
710	11	-2
720	11	1
730	10	0
740	10	-0
750	10	-1
760	12	0
770	10	2
780	11	2
790	5	-2
800	2	-3
820	1	-3
840	-4	-6
860	-6	-10
880	-2	-6
900	0	-6
920	4	-4
940	0	-4
960	3	-2
980	7	2
1000	7	4

DIST. (m)	PRO-18 IN PHASE (%)	QUAD. PHASE (%)
0	-32	6
10	-26	11
20	-19	12
30	-15	14
40	-14	11
50	-20	6
60	-18	8
70	-13	8
80	-11	10
90	-8	12
100	-6	11
120	0	12
140	1	12
160	6	14
180	13	10
190	12	14
200	11	16
210	8	11
220	6	7
240	12	13
250	11	12
260	12	11
270	9	8
280	10	9
290	11	10
300	11	10
310	9	9
320	11	6
330	11	6
340	12	6
350	11	4
360	12	6
370	12	4
380	9	4
400	13	4
410	14	6
420	16	6
430	17	5
440	17	4
450	14	2
460	13	2
470	13	3
480	16	4
490	15	4
500	14	3
510	17	2
520	18	4
530	17	4
540	16	2
550	16	1
560	14	1
570	12	-2
580	10	-3
590	9	-4
600	5	-10
620	8	-8
640	12	-3
650	13	-3
660	13	-4
670	13	-6
680	16	-5
690	16	-5
700	17	-8

DIST. (m)	PRO-19 IN PHASE (%)	QUAD. PHASE (%)
0	-4	-4
20	-7	-3
40	-4	-3
60	-2	0
80	-2	-4
100	2	-3
120	5	-2
140	11	-2
150	15	-3
160	15	-4
170	17	-5
180	19	-6
190	24	-5
200	32	-8
210	41	-4
220	44	-4
230	30	-6
240	16	-6
250	11	-6
260	5	-4
280	-10	-0
290	-19	2
300	-29	2
310	-28	3
320	-19	2
330	-17	1
340	-13	0
350	-7	2
360	-8	0
380	-2	4
400	-3	0
420	-7	-0
440	-3	2
460	3	4
480	5	3
500	-1	2
520	-2	4
540	-2	4
560	-2	4
580	0	6
600	3	8
620	4	4
640	2	4
660	6	4
680	0	2
700	-3	-2
720	-2	-2
740	2	-2
760	3	-4
780	7	-5
800	12	-7
810	11	-8
820	11	-8
830	14	-10
840	18	-10
850	23	-10
860	26	-8
870	29	-8
880	32	-8
890	30	-8
900	24	-8
910	12	-5
920	2	-4
930	-11	0
940	-20	1
950	-24	0
960	-27	2
970	-24	-0
980	-18	0
990	-11	1
1000	-9	-0
1020	-5	-2
1040	2	-1
1060	9	-2
1080	8	-4
1100	4	-5

DIST. (m)	PRO-20 IN PHASE (%)	QUAD. PHASE (%)
0	-2	2
20	0	1
40	0	1
60	-1	1
80	3	-1
100	0	-1
120	0	-1
140	5	-1
160	9	-1
180	15	0
200	17	1
220	20	3
240	17	2
260	24	2
280	22	1
300	17	0
320	11	-1
340	7	-1
360	4	-1
380	2	-2
400	0	-3
420	-1	0
440	0	1
460	-3	-1
480	-3	-1
500	-5	-1
520	-5	-1
540	-5	-1
560	-8	-1
580	-7	-3
600	-5	-4
620	-5	-4
640	-5	-4
660	-5	-6
680	-1	-2
700	0	-2
720	-2	-4
740	-3	-4
760	0	-4
780	3	-3
800	4	-3
820	5	-4
840	4	-2
860	5	-3
880	9	-2
900	9	-4
920	9	-1
940	9	-1
960	5	2
980	0	4
1000	2	2

	PRO-21			PRO-22			PRO-23			PRO-24			PRO-25	
DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE
(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)
0	-8	-0	0	7	-0	0	0	4	0	-65	18	0	11	-11
20	-9	-2	20	5	-1	20	-5	6	20	-55	18	20	9	-9
40	-4	1	40	7	-2	40	-14	10	40	-44	20	40	4	-6
60	-5	2	60	8	-2	50	-17	11	60	-40	17	60	0	-4
80	0	1	80	7	-2	60	-19	10	80	-38	18	80	2	-2
100	3	1	100	3	-2	80	-22	12	100	-35	18	100	4	-2
120	-1	0	120	2	-0	100	-23	12	120	-35	16	120	4	-2
140	0	1	140	2	-0	120	-23	13	140	-30	16	140	3	2
160	3	-1	160	0	-2	140	-10	14	160	-27	15	160	3	3
180	4	-1	180	0	-2	160	-12	14	180	-21	13	180	1	6
200	7	-2	200	1	0	180	-9	10	200	-20	13	200	-8	12
220	11	-1	220	0	-0	200	-11	7	220	-21	11	220	-14	12
240	5	1	240	0	-2	220	-8	7	240	-17	10	240	-10	12
260	5	-4	260	2	-2	240	-8	6	260	-14	10	260	-15	10
280	14	-3	280	5	-1	260	-6	5	280	-12	12	280	-16	10
300	5	-4	300	9	-2	280	-4	4	300	-8	12	300	-22	6
320	4	-5	320	8	0	300	-2	6	320	-8	10	320	-26	4
340	8	-7	340	7	-2	320	4	5	340	-7	9	340	-26	-1
360	19	-2	360	7	-0	340	7	7	360	-6	11	360	-8	6
380	19	1	380	5	-2	360	8	6	380	-3	9	380	-8	4
400	19	-2	400	2	-4	380	9	4	400	-5	9	400	-4	3
420	7	-0	420	0	1	400	9	5	420	-8	8	420	-3	3
440	-5	0	440	4	-2	420	7	4	440	-5	10	440	4	0
460	-5	-2	460	7	-2	440	7	6	460	-4	9	460	11	2
480	-5	0	480	7	-2	460	7	3	480	-8	5	480	11	2
500	0	2	500	8	-1	480	4	0	500	-3	6	500	11	0
520	5	-1	520	9	1	500	9	2	520	3	7	520	13	1
540	8	-2	540	6	1	520	9	1	540	7	9	540	4	-2
560	5	0	560	5	1	540	14	4	560	5	5	560	-1	-2
580	6	-1	580	6	2	560	4	0	580	2	4	580	-3	-2
600	6	0	600	-3	3	580	-4	-0	600	8	6	600	-4	-1
620	5	0	620	-3	4	600	-3	1	620	12	4	620	-1	-2
640	7	3	640	-5	5	610	-3	-1	640	2	1	640	0	-2
660	7	-2	660	-8	4	620	4	2	660	6	4	660	-2	-0
680	12	0	680	-9	4	640	5	-0	680	-2	0	680	-5	-1
700	2	-1	700	-15	4	660	4	-0	700	2	1	700	-5	-0
720	2	-2	720	-15	6	680	3	-0				720	-6	-2
740	8	1	740	-13	6	700	6	0				740	-3	-1
760	5	-1	760	-13	4	720	5	0				760	0	-0
780	5	0	780	-12	6	740	7	0				780	6	-1
800	4	2	800	-12	6	760	3	-5				800	8	0
820	3	0	820	-9	6	780	4	-4				820	9	-2
840	4	0	840	-2	7	800	4	-6				840	10	-4
860	4	3	860	-5	7	820	5	-4				860	8	-4
880	3	2	880	-3	8	840	6	-2				880	4	-3
900	6	0	900	-3	8	860	7	-4				900	0	-5
920	4	1	920	-3	8	880	9	-4				920	8	-4
940	3	-1	940	-3	8	900	10	-4				940	7	-4
960	3	1	960	0	7	920	13	-4				960	5	-4
980	1	1	980	0	8	940	14	-4				980	2	-4
1000	1	1	1000	-5	7	960	18	-5				1000	2	-5
			1020	-2	6	980	21	-4						
			1040	-10	4	1000	22	-4						
			1060	-15	2	1020	23	-4						
			1080	-16	2	1040	17	-4						
			1100	-15	2	1060	11	-5						
						1080	13	-9						
						1100	13	-6						

	PRO-26			PRO-27			PRO-28			PRO-29			PRO-30	
DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)
0	-4	-6	0	7	-1	0	13	-2	0	-6	10	0	-3	-3
20	-2	4	20	8	-0	20	10	-1	20	-2	10	20	-4	-3
40	3	-2	40	7	-2	40	4	-2	40	-2	7	40	-5	-2
60	-4	-7	60	5	-2	60	8	-3	60	-5	7	60	-3	-2
80	0	-9	80	5	-3	80	3	-2	80	4	7	80	0	-2
100	5	-6	100	5	-3	100	8	2	100	0	6	100	0	-2
120	8	-6	120	7	-2	120	10	2	120	0	4	120	1	0
140	8	-6	140	7	-4	140	0	2	140	-5	3	140	2	2
160	7	-4	160	8	-5	160	-7	-2	160	-4	4	160	4	4
180	2	-6	180	11	-1	180	-9	-1	180	0	4	180	-2	4
200	0	-6	200	2	-4	200	-7	2	200	0	5	200	-5	5
220	4	-4	220	0	-4	220	-7	-2	220	3	5	220	-8	7
240	5	-4	240	4	-4	240	-14	-1	240	6	3	240	-13	3
260	6	-2	260	4	-4	260	-12	0	260	7	2	250	-13	3
280	2	2	280	5	-2	280	-10	1	280	10	3	260	-10	3
300	-3	2	300	7	-2	300	-8	-1	300	7	3	270	-9	3
320	-5	2	320	8	-2	320	-5	-1	320	9	2	280	-7	4
340	-7	2	340	9	-6	340	3	2	340	9	4	300	-3	3
360	-6	1	360	9	-6	360	7	2	360	7	2	320	-4	1
380	-10	0	380	9	-4	380	7	-2	380	5	0	340	0	2
400	-8	4	400	5	-1	400	6	-6	400	4	0	360	0	2
420	-8	2	420	2	-4	420	8	-6	420	4	0	380	1	1
440	-5	1	440	5	-1	440	22	-5	440	-4	-2	400	3	2
460	-3	-1	460	3	-0	460	23	-6	460	-4	-2	420	-1	-2
480	-3	-2	480	7	-1	480	25	-8	480	0	-1	440	2	-1
500	3	-2	500	5	-1	500	25	-10	500	-4	-4	460	6	1
520	5	-2	520	0	-2				520	10	1	480	9	1
540	5	-2	540	-3	1				540	5	1	500	3	0
560	8	-1	560	3	2				560	-1	-2	520	4	2
580	3	-3	580	2	2				580	0	-0	540	1	2
600	2	-1	600	3	4				600	-2	-4	560	2	4
620	0	-4	620	5	6				620	-5	-6	580	-3	4
640	4	-0	640	4	5				640	-5	-6	600	-3	4
660	4	-2	660	3	4				660	-3	-3	620	0	4
680	3	-1	680	-5	2				680	-3	7	640	-2	4
700	2	-2	700	-5	1				700	-4	-6	660	-1	5
720	3	-2	720	-5	1				720	-8	-6	680	-1	4
740	3	-2	740	0	5				740	-6	-9	700	-8	0
760	4	-0	760	-5	2				760	-4	-7	720	-9	0
780	7	0	780	0	6				780	0	-11	740	-11	-2
800	6	1	800	8	6				800	8	-10	760	-8	-2
820	8	2	820	8	4				820	20	-6	780	-6	-0
840	7	3	840	13	5				840	20	-5	800	-8	-1
860	8	6	860	-1	2				860	23	-4	820	-10	-4
880	3	6	880	-6	2				880	26	-4	830	-12	-5
900	-2	7	900	-3	4				900	15	-6	840	-11	-7
920	-8	9	920	-1	4				920	0	-8	850	-9	-6
940	-10	9	940	7	6				940	-2	-8	860	-7	-5
960	-14	9	960	7	6				960	0	-8	880	-8	-6
980	-20	5	980	0	3				980	-3	-9	900	-6	-8
1000	-20	4	1000	-1	2				1000	5	-10	920	-2	-10
1020	-15	4										940	6	-7
1040	-11	7										950	10	-6
1060	-8	6										960	16	-4
1080	-5	4										970	17	-6
1100	0	5										980	11	-9
1120	3	4										990	6	-10
1140	5	5										1000	5	-10
1160	5	3										1010	0	-11
1180	5	1										1020	-6	-11
1200	7	2										1040	-4	-9
												1060	-1	-4
												1080	1	-2
												1100	1	0
												1120	-2	1
												1140	-2	1
												1160	-2	1
												1180	-2	0
												1200	-2	0

	PRO-31			PRO-32			PRO-33			PRO-34			PRO-35	
DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE	DIST.	IN PHASE	QUAD. PHASE
(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)	(m)	(%)	(%)
0	-9	-2	0	-3	6	0	2	3	0	7	-6	0	9	-26
10	-8	-1	20	-4	3	20	2	2	20	7	-4	10	15	-28
20	-16	-2	40	-2	0	40	1	1	40	7	-4	20	21	-32
30	-23	-4	60	0	2	60	2	0	60	7	-3	30	44	-36
40	-23	-4	80	5	-2	80	5	2	80	6	-3	35	55	-32
50	-20	-2	100	-4	0	100	0	-2	100	3	-4	40	-28	-28
60	-16	-3	120	-11	5	120	3	0	120	1	0	50	-21	-12
80	-8	-2	130	-8	5	140	3	2	140	-1	0	60	25	25
100	-4	-1	140	-7	3	160	2	2	160	-3	-0	70	-100	50
120	-9	-2	160	-3	2	180	0	1	180	-1	0	80	-32	41
130	-9	-1	180	-3	1	200	1	3	200	2	-0	90	-12	26
140	-10	-0	200	-2	1	220	-1	4	220	2	-0	100	-12	21
150	-17	-0	220	1	1	240	-2	6	240	3	-1	110	-8	24
160	-18	-1	240	0	2	260	-8	2	260	6	-4	120	-14	12
170	-20	-2	260	-2	-1	280	-7	4	280	9	-6	130	-22	9
180	-21	-2	280	-2	-1	300	-6	2	300	13	-8	140	-23	8
190	-26	-2	300	-2	0	320	-5	2	320	100	-50	150	-13	8
200	-25	-2	320	-2	0	340	-5	2	340	-9	14	160	-21	6
210	-31	-2	340	0	3	360	-5	3	360	-3	7	170	-14	8
220	-33	-4	360	-4	-2	380	-5	0	380	2	5	180	-12	5
230	-31	-2	380	-8	2	400	-5	2	400	0	4	190	-9	6
240	-27	-2	400	-2	1	420	-3	0	420	0	2	200	-10	6
250	-27	-4	420	-3	-1	440	3	2	440	1	2	210	-9	5
260	-25	-2	440	-5	-1	460	-3	-2	460	0	2	220	-8	4
270	-23	-2	460	-6	-1	480	-7	-4	480	0	2	240	-6	4
280	-23	-2	480	-6	-1	500	-2	-5	500	1	0	260	-4	2
290	-23	-2	500	-6	-1	520	1	-4				280	-1	4
300	-23	-3				540	0	-6				300	-2	2
310	-19	-2				560	3	-8				320	-2	1
320	-19	-3				580	5	-9				340	2	0
330	-16	-4				600	3	-6				360	8	0
340	-14	-4				620	0	-6				380	18	2
350	-14	-4				640	0	-0				390	19	2
360	-13	-4				660	1	2				400	20	1
370	-14	-5				680	5	4				410	22	1
380	-12	-6				700	3	8				420	18	1
400	-9	-6				720	-2	10				430	16	0
420	-8	-6				740	-7	12				440	12	-1
440	-8	-7				760	-15	13				450	3	-5
460	-7	-7				770	-25	12				460	6	-6
480	-6	-10				780	-24	13				480	2	-4
500	1	-10				790	-22	15				500	5	-2
510	9	-10				800	-21	14				520	2	-4
520	14	-10				820	-19	12				540	10	-25
530	21	-10				830	-13	15				550	11	-36
540	21	-12				840	-11	14				555	14	-50
550	22	-12				860	-6	12				560	38	-40
560	22	-12				880	-7	10				565	-5	-7
565	22	-12				900	-3	10				570	-8	-19
570	18	-14				920	-7	6				580	-30	-34
580	16	-14				940	-7	4				585	-17	-15
590	11	-15				960	-5	4				590	4	8
600	6	-14				980	-5	5				600	21	14
620	-1	-14				1000	-3	5				610	1	6
640	-8	-12				1020	-2	4				620	1	3
650	-10	-9				1040	-2	3				630	4	2
660	-11	-8				1060	-2	2				640	3	4
670	-12	-6				1080	0	2				660	2	3
680	-11	-6				1100	2	4				680	-9	-2
700	-9	-6				1120	4	5				700	-8	-1
720	-2	-3				1140	-2	3						
740	-5	-2				1160	-6	2						
760	-5	-1				1180	-9	1						
780	-7	-2				1200	-12	0						
800	-7	-2												
820	-8	-0												
840	-9	1												
860	-9	0												
880	-9	1												
900	-6	-1												
920	-5	-2												
940	-5	-2												
960	-3	-2												
980	-2	-2												
1000	-2	-3												
1020	0	-2												
1040	4	-2												
1060	3	-2												
1080	2	0												
1100	1	1												
1120	-3	2												
1140	-5	1												
1160	-6	2												
1180	-8	2												
1200	-4	2												

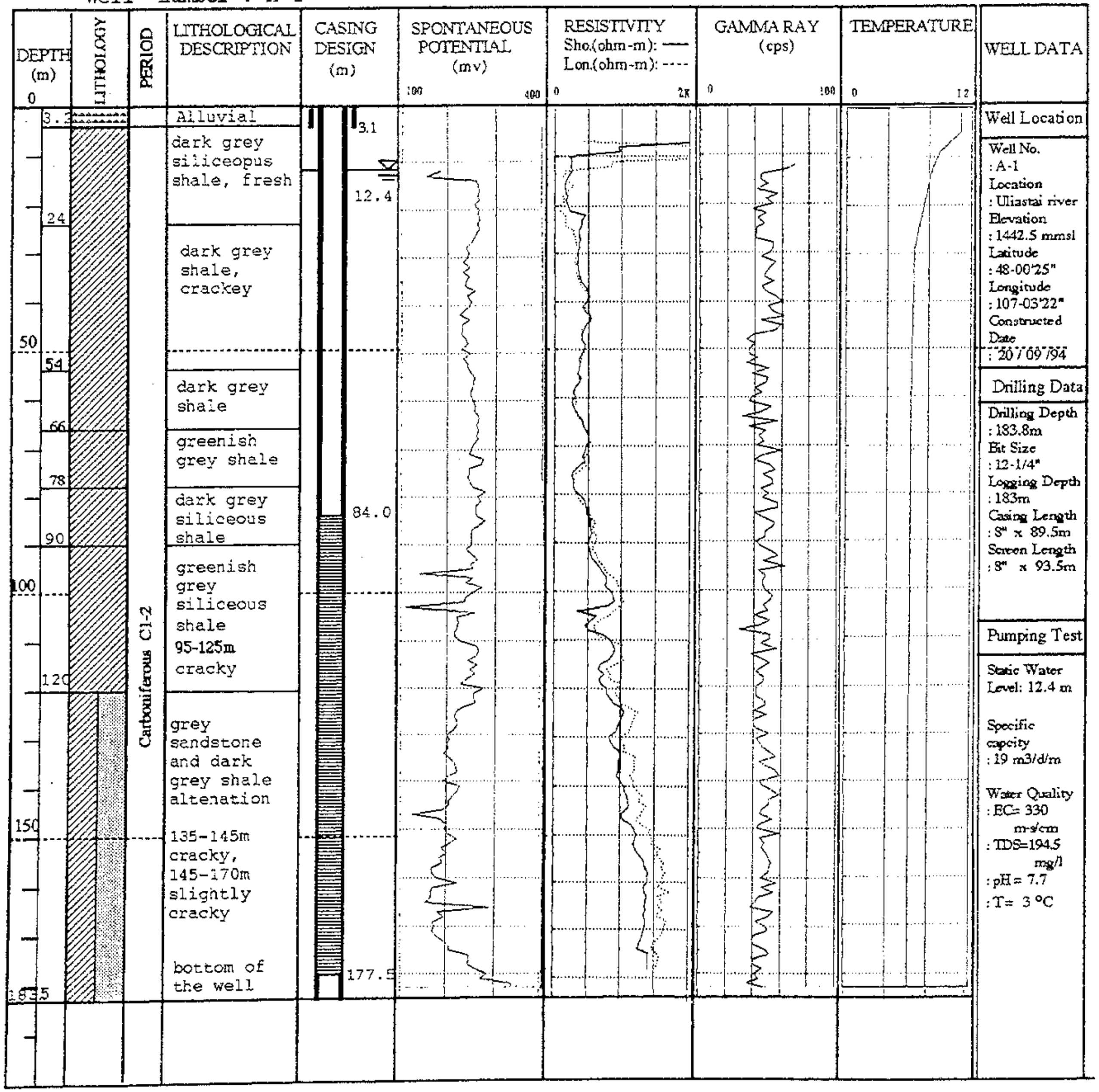
	PRO-36			PRO-37			PRO-38			PRO-39			PRO-40	
DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)	DIST. (m)	IN PHASE (%)	QUAD. PHASE (%)
0	10	7	0	-15	-1	0	10	-0	0	-1	4	0	-10	-4
20	10	7	10	-15	1	20	10	-0	20	-2	6	20	-4	-1
30	1	7	20	-14	-2	40	4	-2	40	-2	4	40	-9	-3
40	-8	4	30	-11	-3	60	5	-1	60	-4	2	60	-11	-2
50	-18	2	40	-7	0	80	0	1	80	-4	0	70	-9	-0
60	-30	-1	60	-2	0	100	-4	2	100	-3	1	80	-7	-4
70	-21	2	80	2	-1	120	-13	0	120	-3	0	100	-8	-1
80	-16	3	100	-2	-2	140	-11	2	140	-1	0	120	-8	-6
90	-16	2	120	-1	-3	160	-5	0	160	3	0	140	-7	-8
100	-18	2	140	-5	-6	180	2	2	180	5	0	160	-2	-7
110	-20	2	160	-11	-7	200	4	-1	200	7	0	180	10	-8
120	-19	2	170	-10	-8	220	0	4	220	3	-4	190	14	-8
130	-19	3	180	-13	-9	240	5	5	240	3	-6	200	21	-8
140	-19	2	190	-11	-10	260	-4	3	260	3	-4	210	25	-9
150	-15	4	200	-11	-10	280	-18	6	280	10	-2	220	34	-8
160	-15	3	210	-8	-10	300	-7	7	300	9	-4	230	37	-10
170	-15	4	220	-6	-10	320	-4	5	320	-2	-3	240	41	-12
180	-15	3	240	-7	-12	340	-7	1	340	-5	-4	250	42	-14
200	-13	3	260	-5	-12	360	-4	4	360	-15	-4	260	52	-16
220	-9	3	280	-4	-12	380	-8	4	370	-10	-2	270	58	-16
240	-10	0	300	-7	-13	400	-17	4	380	-10	5	280	84	-16
260	-6	0	320	-7	-14	420	-14	2	400	-20	9	290	120	-11
280	-3	-2	340	-12	-12	440	10	-2	420	-28	7	295	110	-6
300	-2	0	350	-13	-11	460	-9	4	440	-29	6	300	2	3
320	6	2	360	-14	-10	480	-4	-2	460	-25	8	310	-126	23
340	10	0	370	-12	-10	500	-3	-2	480	-20	9	320	-48	28
360	5	-5	380	-14	-10	520	-4	-4	500	-21	8	330	-30	26
380	8	-4	390	-18	-10	540	-2	-5	520	-27	4	340	-22	26
400	14	-4	400	-20	-12	560	-6	-7	540	-21	3	350	-22	25
410	18	-4	410	-18	-13	580	5	-1	560	-23	5	360	-13	10
420	18	-7	420	-14	-12	600	8	-8	580	-25	6	370	21	-18
430	22	-5	430	-12	-14	620	9	-12	600	-27	3	380	21	-20
440	24	-5	440	-9	-14	640	15	-10	610	-20	0	390	30	-17
450	24	-6	450	-4	-14	660	14	-14	640	-18	5	395	45	-16
460	19	-7	460	-5	-15	670	25	-13	660	-18	2	400	-24	14
470	17	-8	470	-5	-19	680	40	-14	680	-15	8	410	-5	6
480	18	-8	475	0	-22	685	55	-16	700	-10	9	420	-5	2
490	27	-7	480	14	-27	690	-94	-18	720	-15	6	440	-13	3
500	20	-8	485	29	-26	700	-57	-24	740	-14	6	450	-12	4
510	10	-10	490	28	-14	710	-22	-20	760	-14	4	460	-12	5
520	12	-9	495	-33	-3	715	-34	13	780	-10	4	470	-8	4
530	2	-9	500	-96	20	720	-22	19	800	-9	4	480	-5	7
540	-12	-8	505	-58	20	740	-12	6	820	-8	5	500	5	9
550	-12	-10	510	-46	15	760	-8	3	840	-9	4	520	11	8
560	-13	-10	520	-31	12	780	-4	-3	860	-13	3	530	13	8
570	-8	-9	530	-22	12	800	1	-2	880	-12	4	540	11	8
580	-6	-9	540	-13	11	820	-1	-6	900	-9	2	550	9	7
600	-8	-11	560	-9	7	840	-4	-4	920	-7	2	560	6	5
620	-3	-10	580	-7	6	860	-5	-5	940	-7	2	580	2	6
640	4	-10	600	-7	3	880	-10	-4	960	-5	1	600	7	4
660	8	-9	620	-9	2	900	-10	-2	980	-3	2	620	4	6
680	20	-1	640	-8	2	920	-8	4	1000	-3	0	640	6	8
700	45	19	660	-7	2	940	-10	4				660	8	8
			680	-7	0	960	-8	-4				680	6	7
			700	-3	2	980	-6	5				700	5	4
			720	-3	2	1000	-5	4						
			740	-5	3									
			760	-6	2									
			780	-4	2									
			800	-3	0									
			820	-4	-0									
			840	0	0									
			860	5	0									
			880	5	0									
			900	0	0									
			920	-3	0									
			940	-4	0									
			960	-8	1									
			980	-6	1									
			1000	-5	2									

Appendix I.2.8

Drillhole Logs of JICA Test Wells

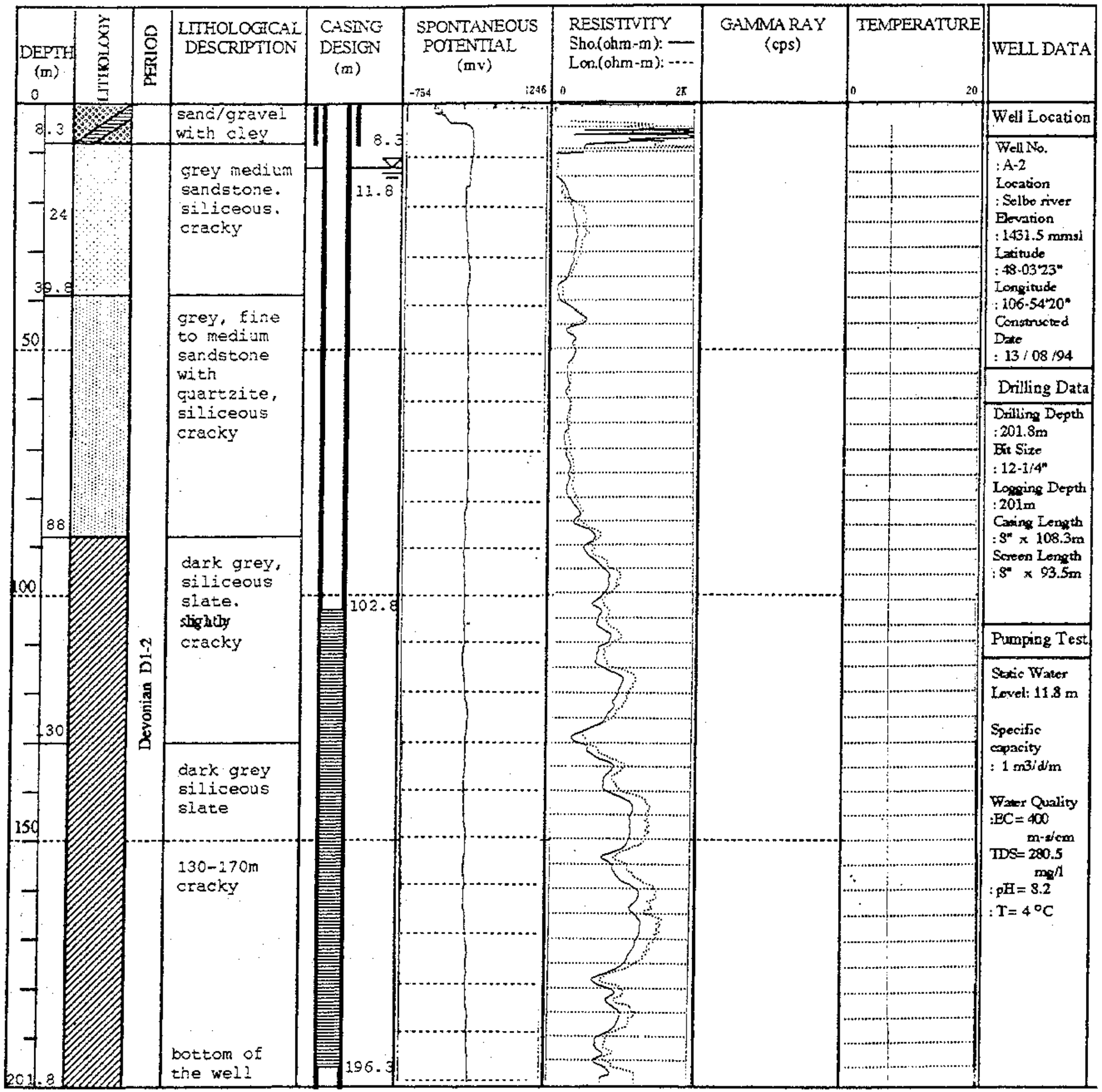
Drillhole log of A-1

Well number : A-1



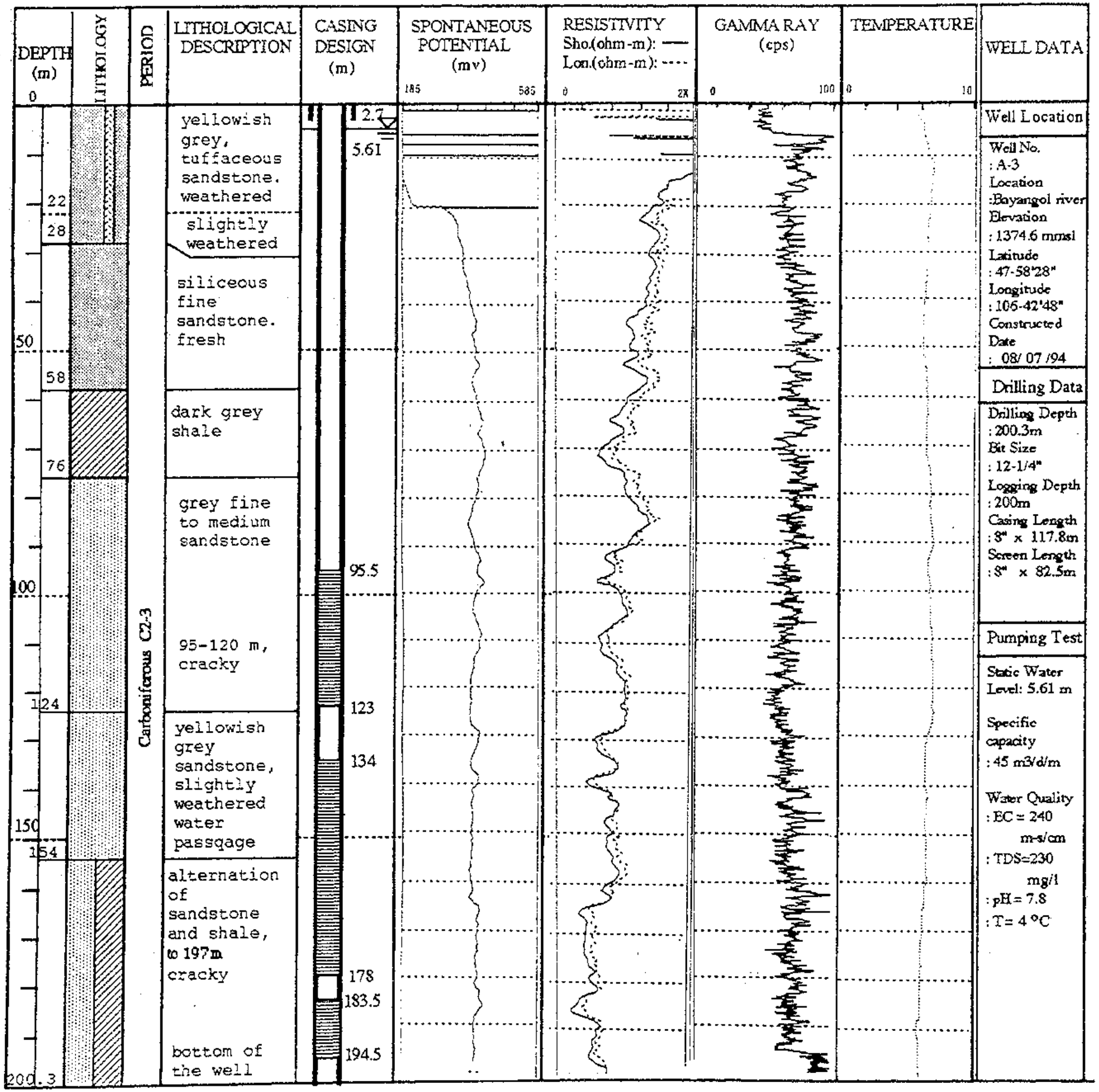
Drillhole log of A-2

Well number : A-2



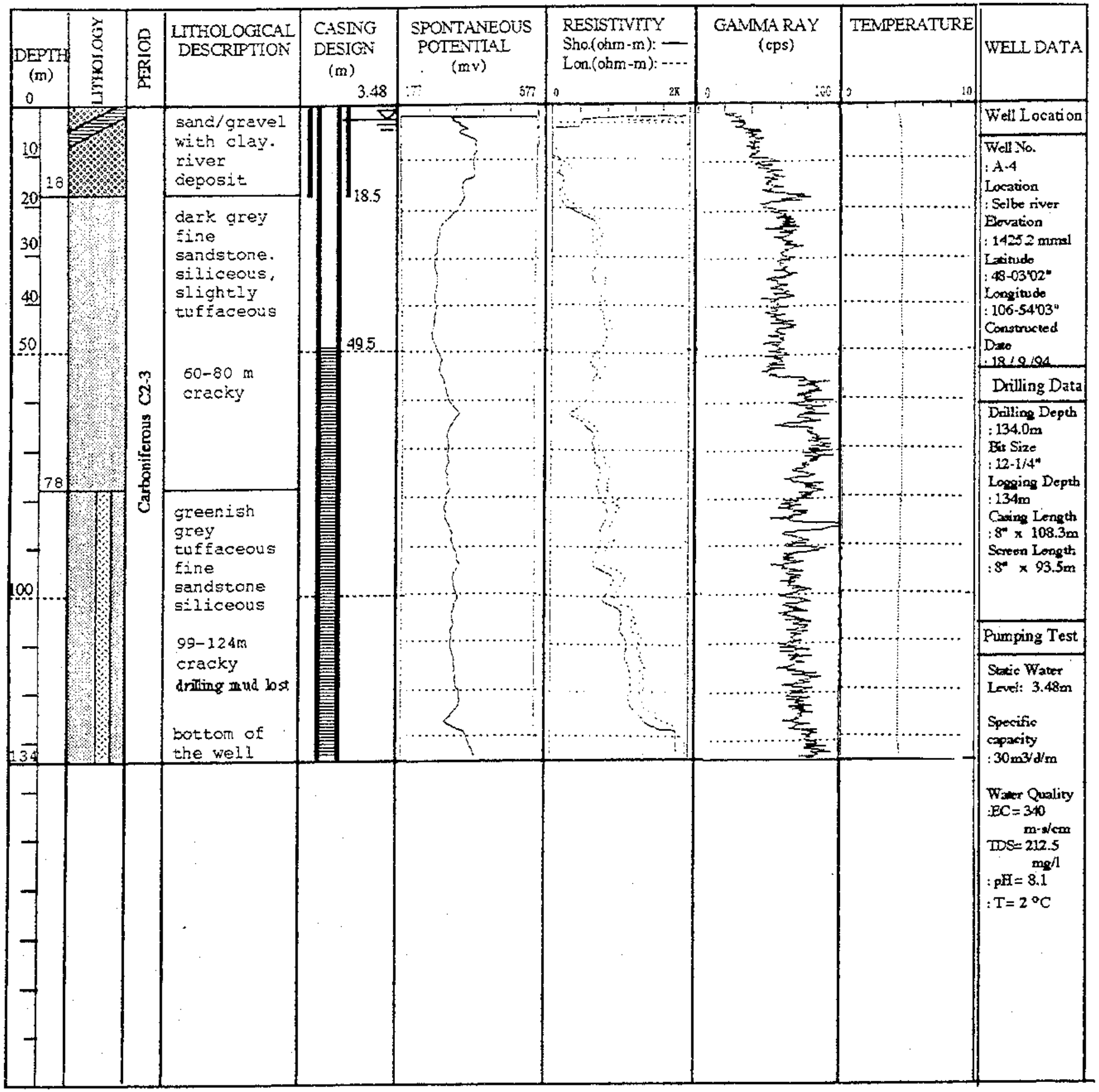
Drillhole log of A-3

Well number : A-3



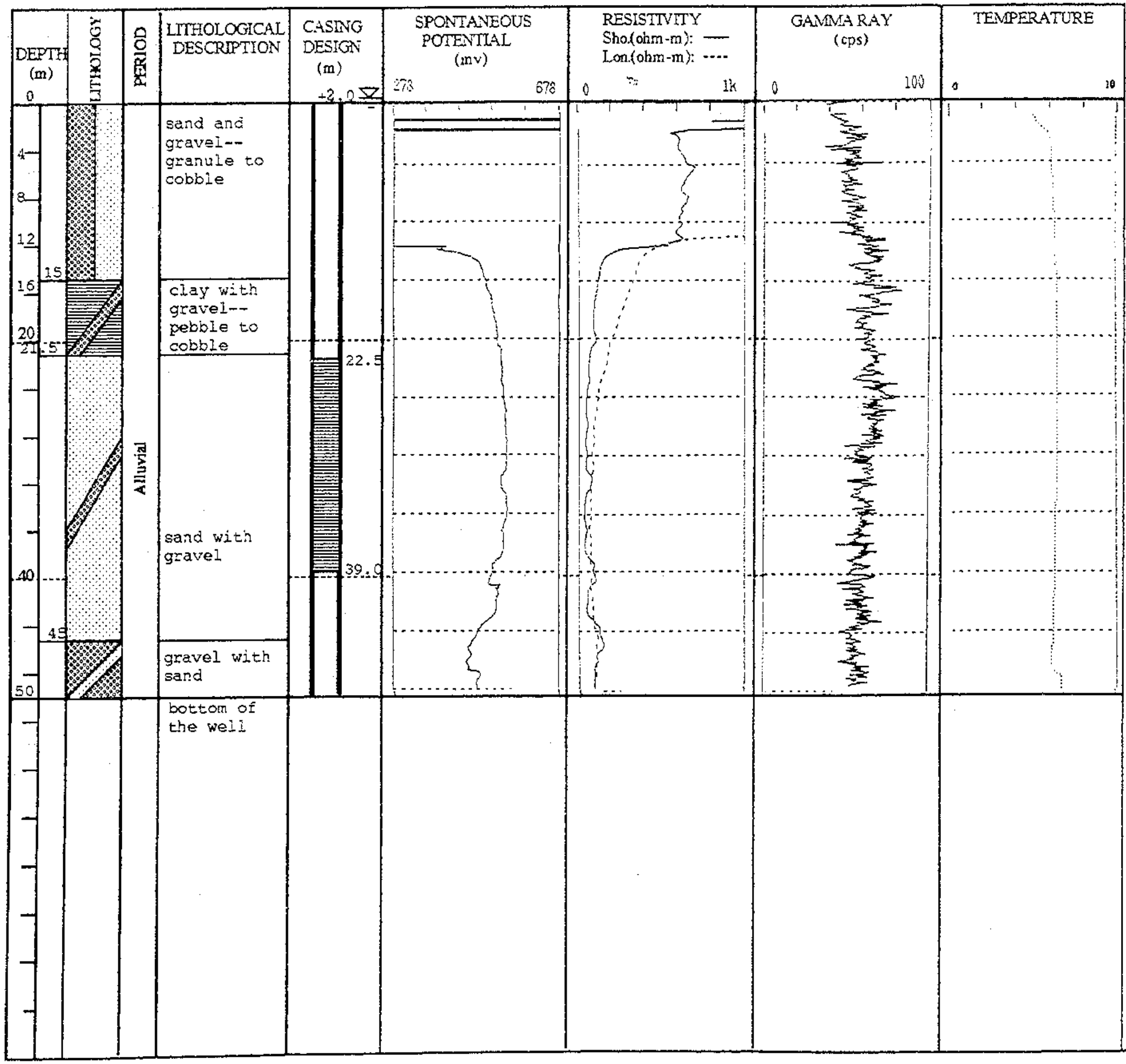
Drillhole log of A-4

Well number : A-4



Drillhole log of B-1

Well number : B-1



WELL DATA

Well Location

Well No.
: B-1
Location
: Buheg river
Elevation
: 1305.5 mmsl
Latitude
: 47-38'18"
Longitude
: 106-45'00"
Constructed Date
: 19/ 08/94

Drilling Data

Drilling Depth
: 50.0m
Bit Size
: 14"
Logging Depth
: 50m
Casing Length
: 10" x 33.5m
Screen Length
: 10" x 16.5m

Pumping Test

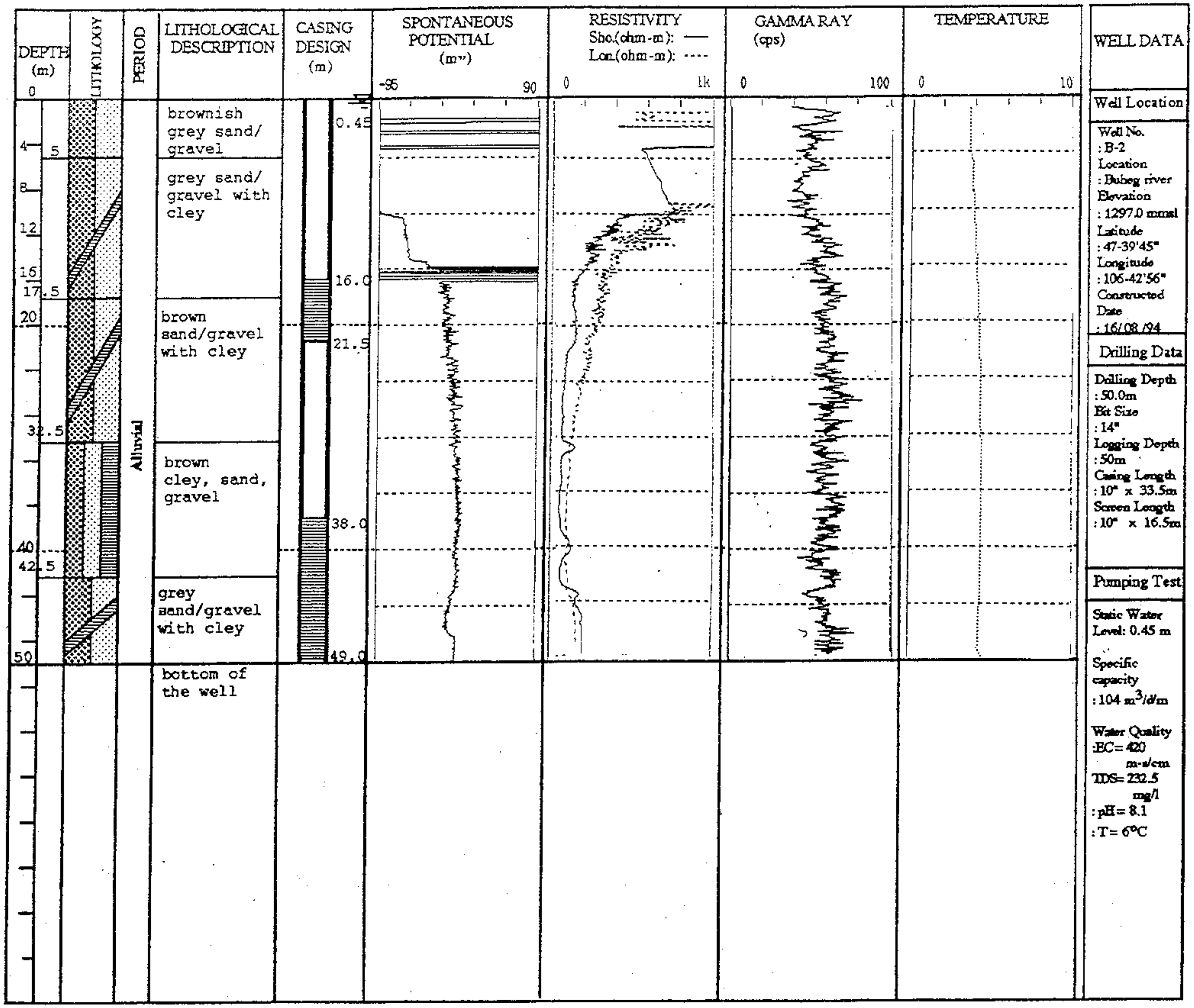
Static Water Level: +2.0 m (spring)

Specific capacity
: 25 m^3/d/m

Water Quality
:EC= 370 m-s/cm
TDS= 221.5 mg/l
: pH= 8.0
: T= 4 °C

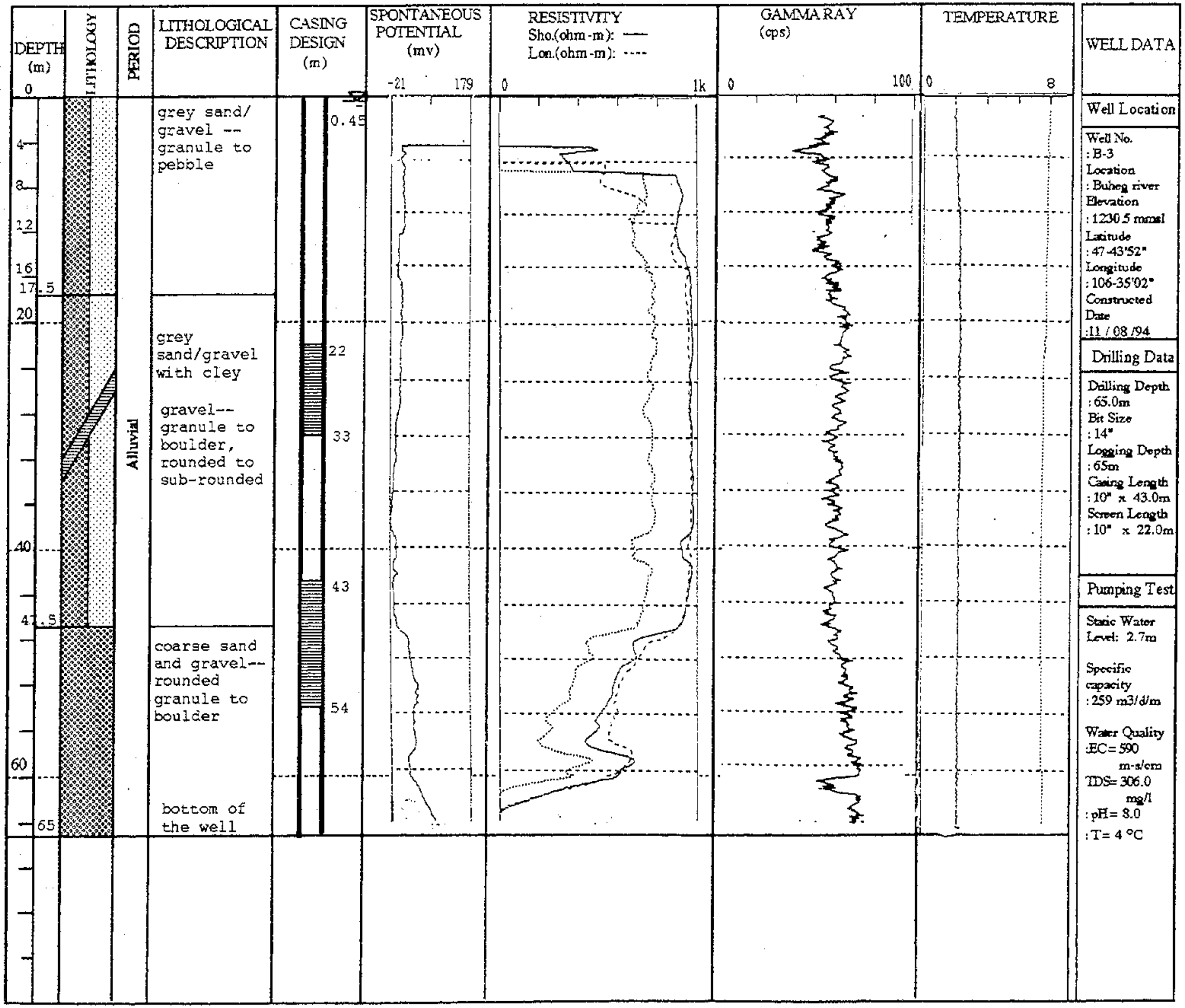
Drillhole log of B-2

Well number : B-2



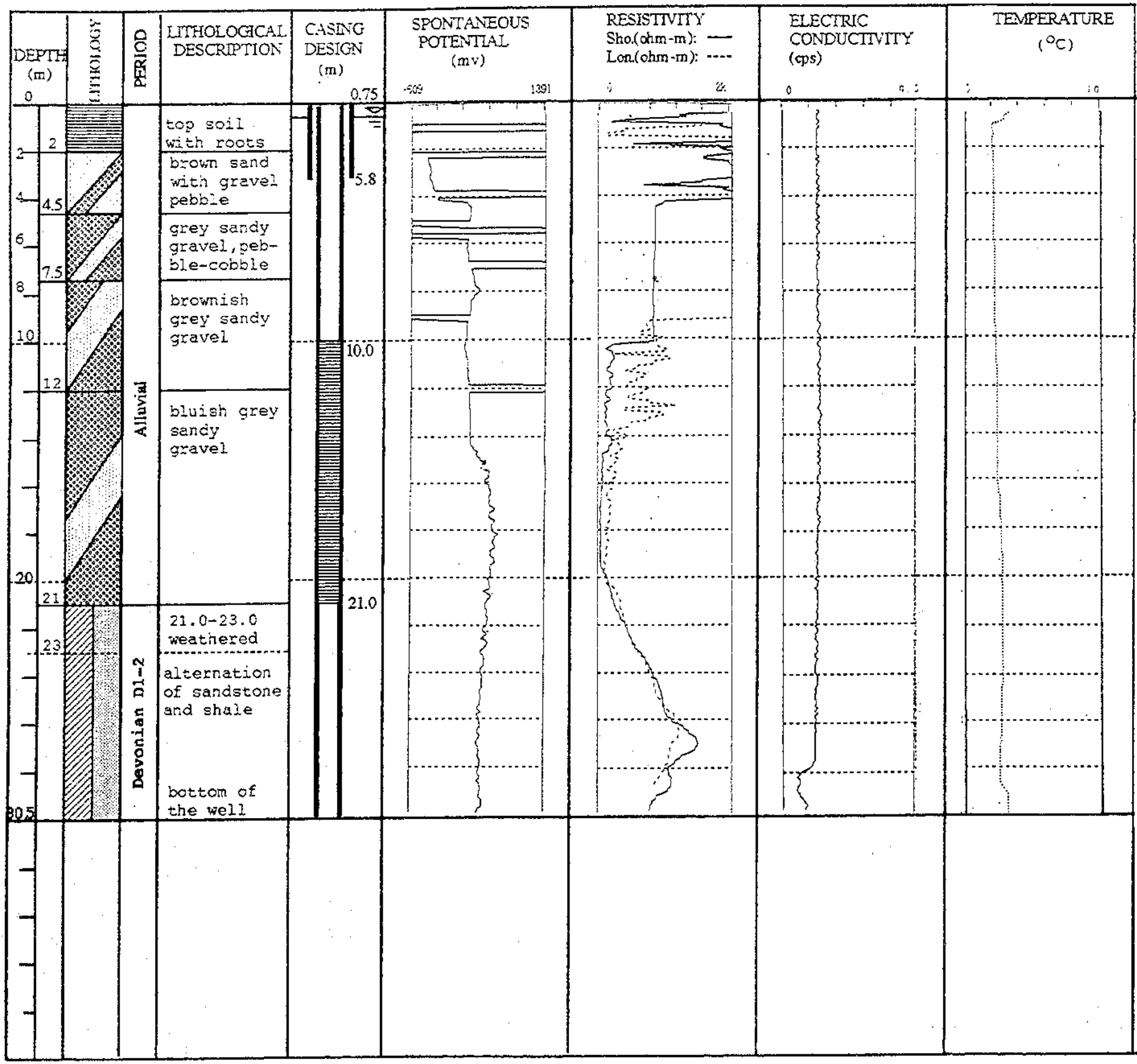
Drillhole log of B-3

Well number : B-3



Drillhole log of C-1

Well number : C-1



WELL DATA

Well Location

Well No.
: C-1
Location
: Tuul river Nalaih
Elevation
: 1392.3 mmsl
Latitude
: 47-48'52"
Longitude
: 107-21'59"
Constructed date
: 02 /07/94

Drilling Data

Drilling Depth
: 30.5m
Bit Size
: 14"
Logging Depth
: 30m
Casing Length
: 10" x 19.5m
Screen Length
: 10" x 11.0m

Pumping Test

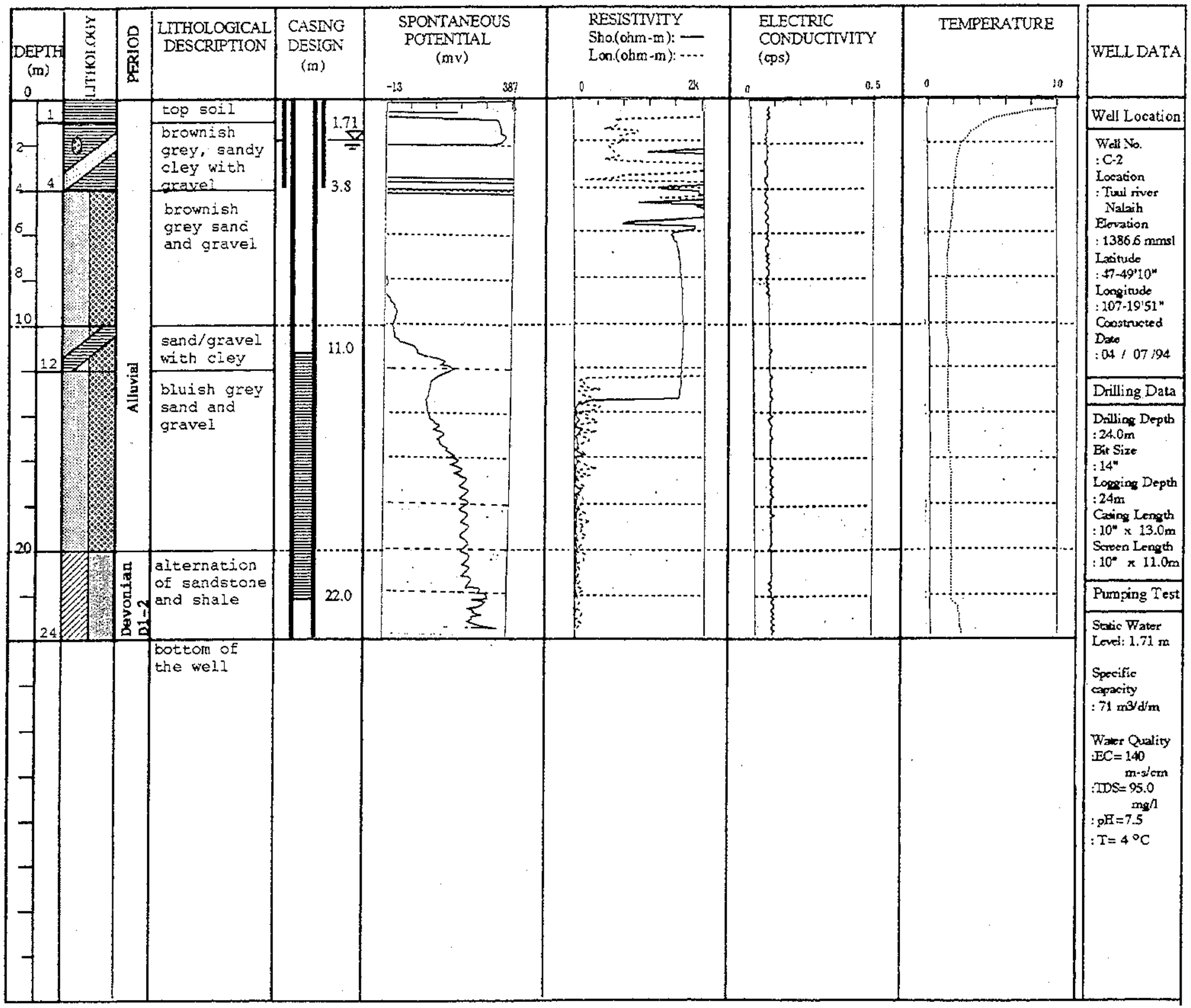
Static Water Level: 0.75m

Specific capacity
: 118 m3/d/m

Water Quality
:EC= 160 m-s/cm
:TDS= 115.0 mg/l
: pH= 7.8
: T= 3 °C

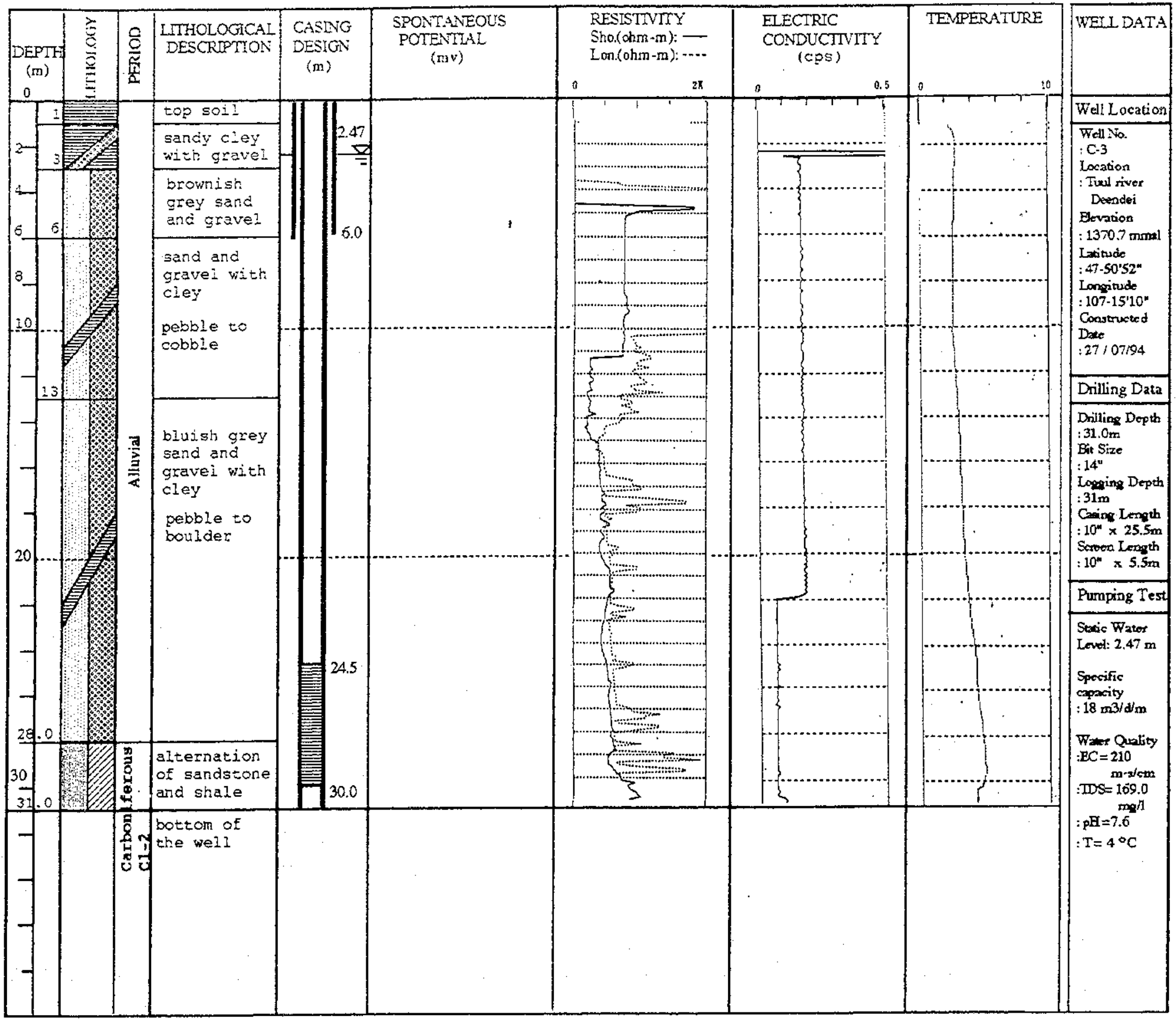
Well number : C-2

Drillhole log of C-2



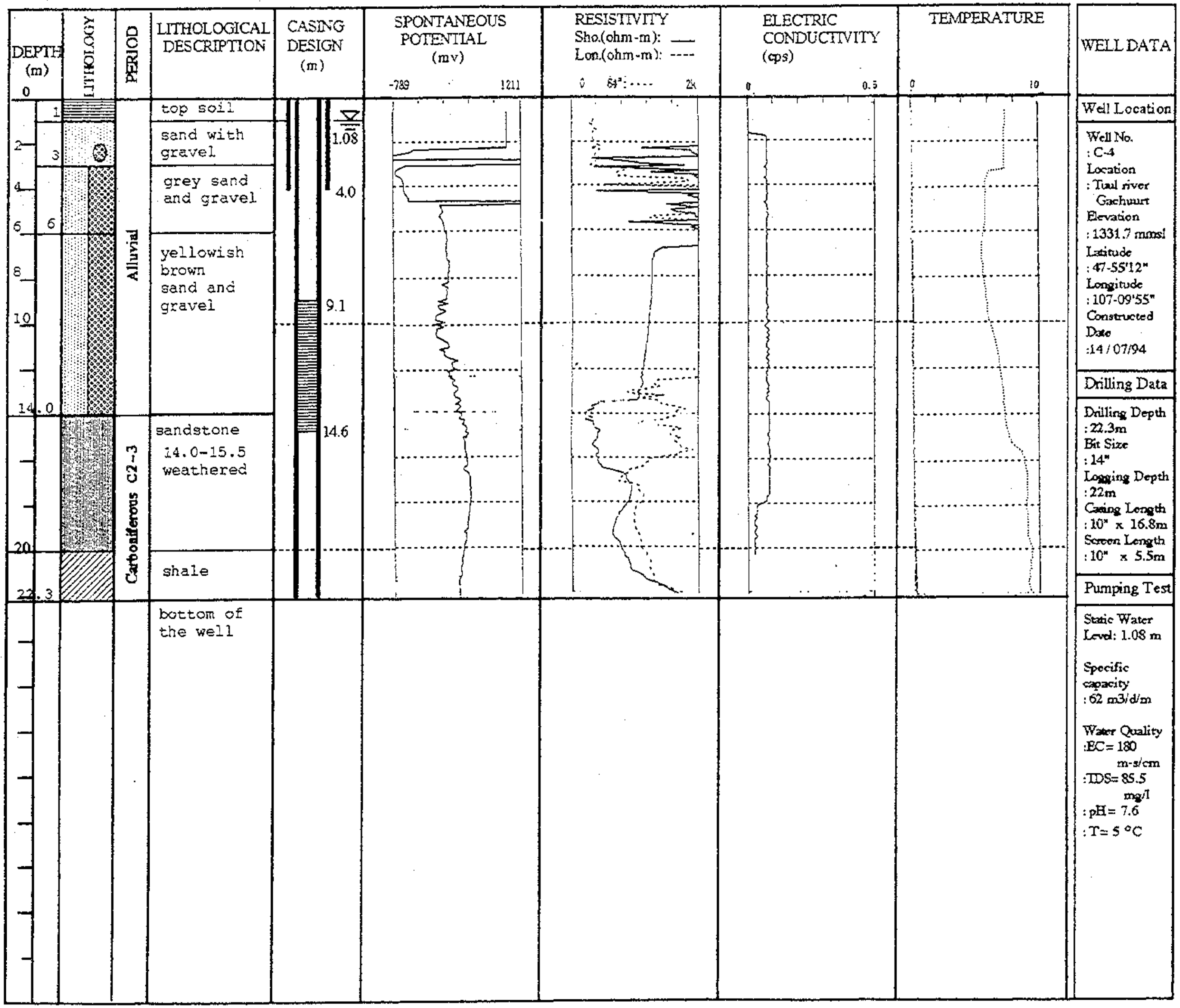
Drillhole log of C-3

Well number : C-3



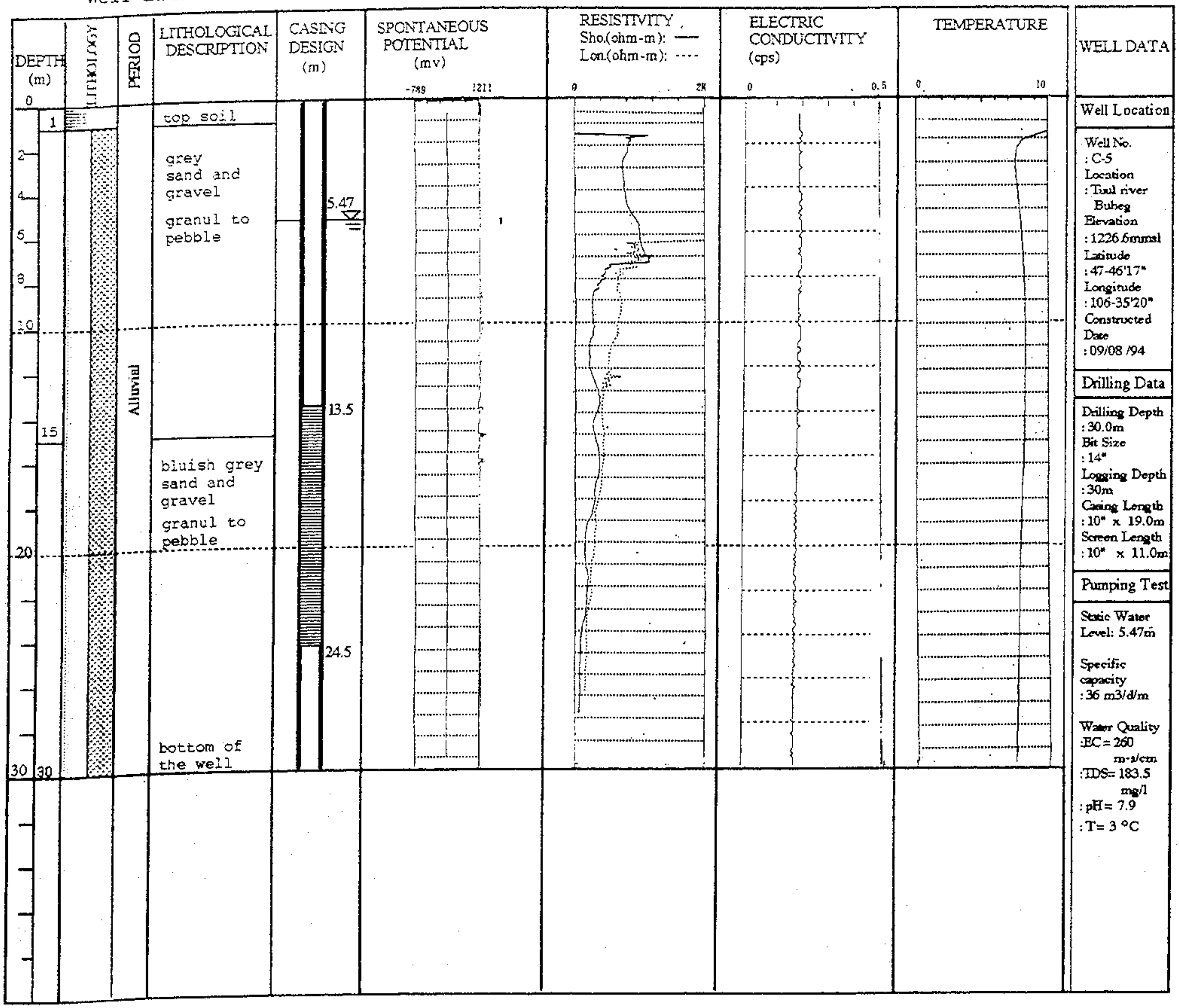
Drillhole log of C-4

Well number : C-4



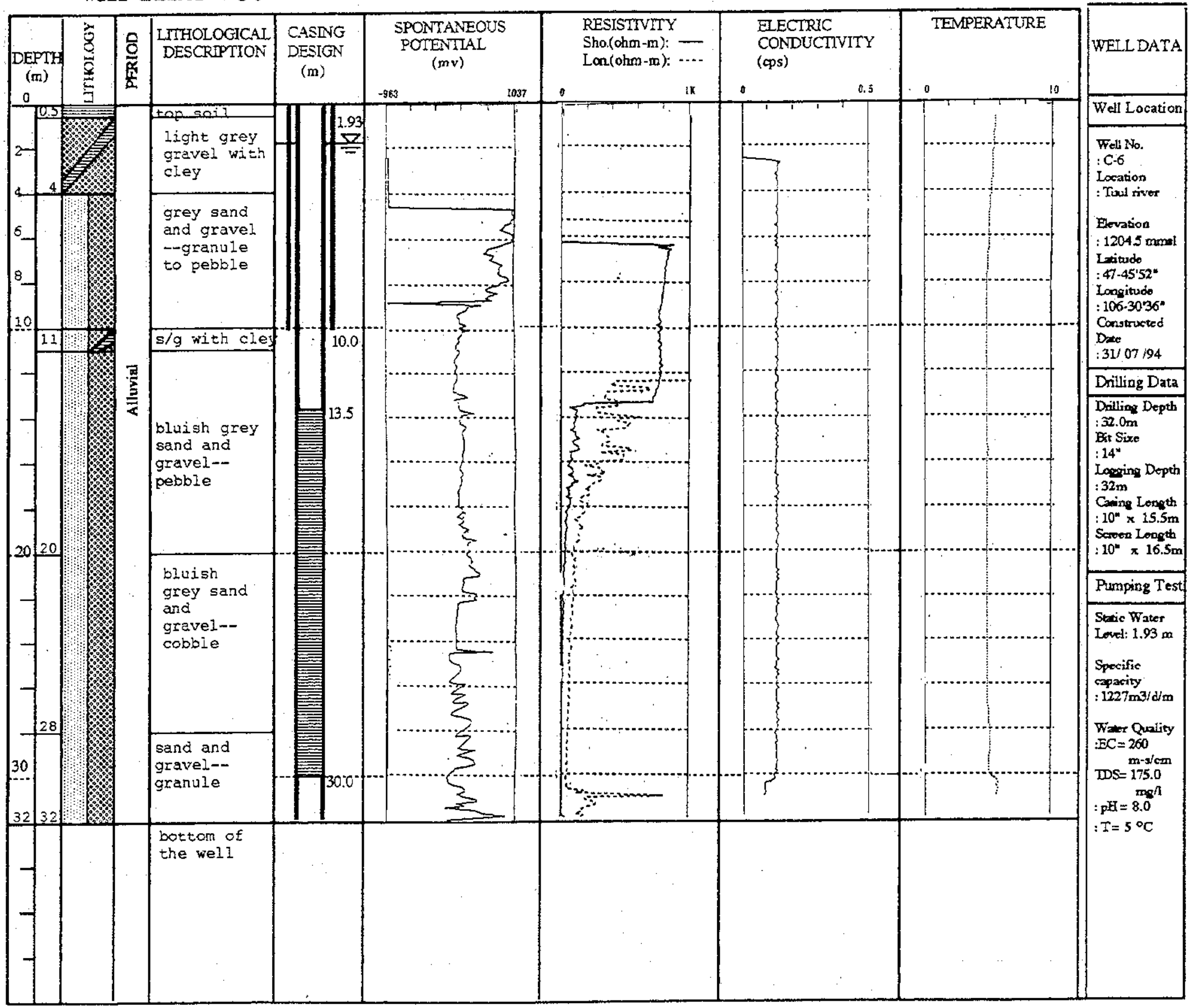
Drillhole log of C-5

Well number : C-5



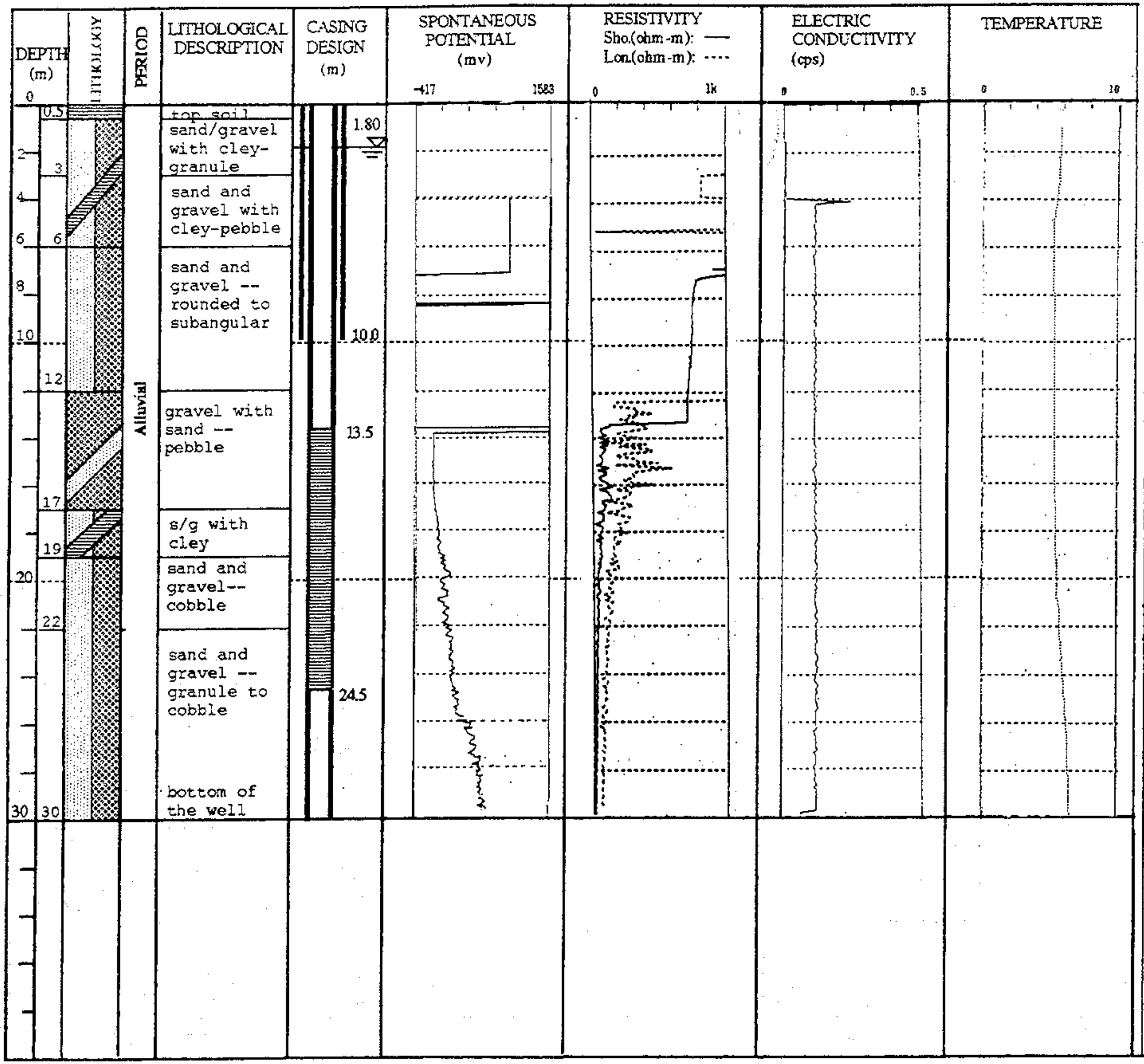
Drillhole log of C-6

Well number : C-6



Drillhole log of C-7

Well number : C-7



WELL DATA

Well Location

Well No.
: C-7
Location
: Tuul river

Elevation
: 1174.2 mmsl
Latitude
: 47-43'35"
Longitude
: 106-17'20"
Constructed Date
: 20/ 07/94

Drilling Data

Drilling Depth
: 30.0m
Bit Size
: 14"
Logging Depth
: 30m
Casing Length
: 10" x 19.0m
Screen Length
: 10" x 11.0m

Pumping Test

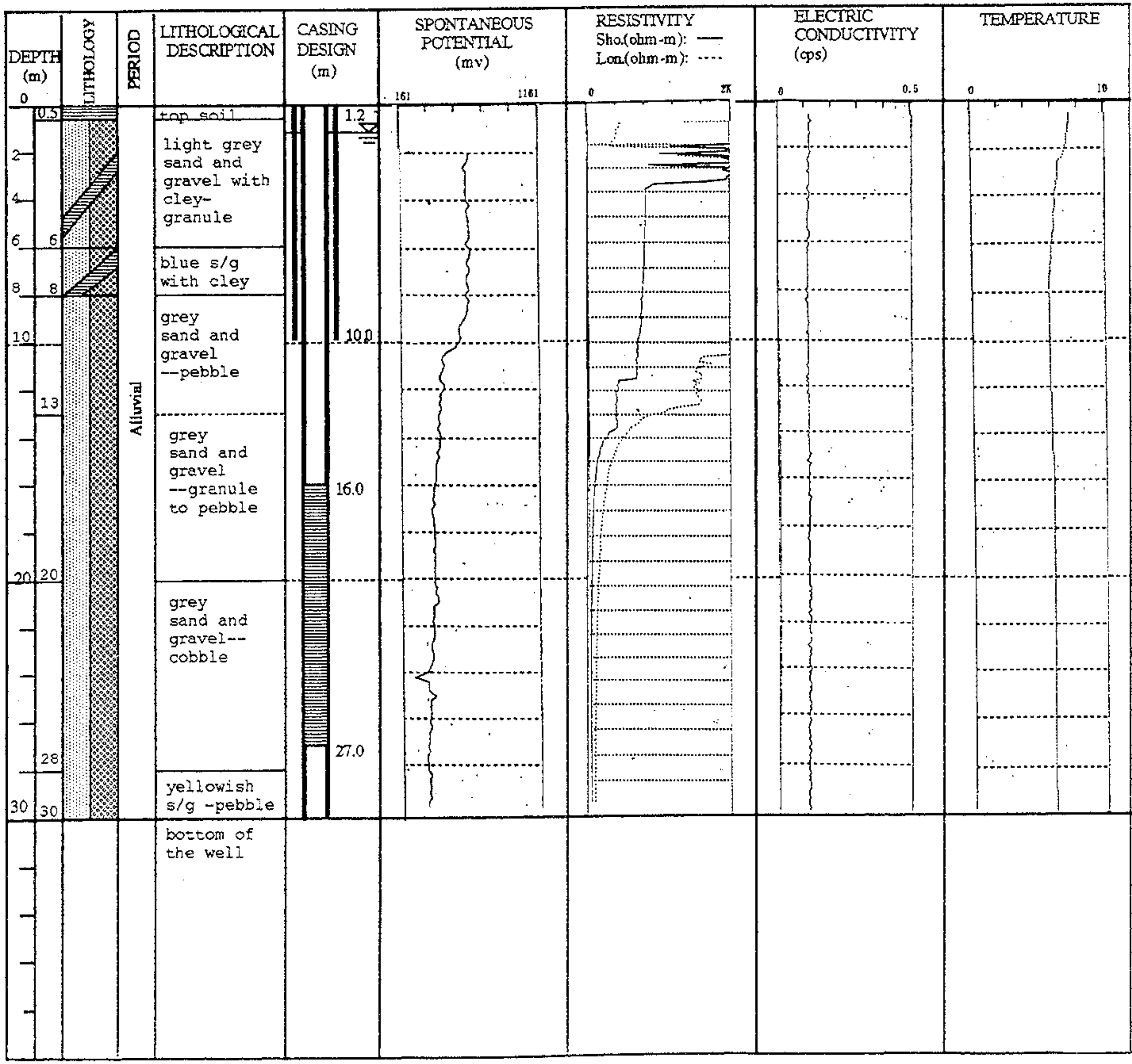
Static Water Level: 1.80 m

Specific capacity
: 2018m3/d/m

Water Quality
:EC= 250 m-s/cm
:TDS= 159.0 mg/l
: pH = 8.1
: T= 4 °C

Drillhole log of C-8

Well number : C-8



WELL DATA

Well Location

Well No.
: C-8
Location
: Tuul river

Elevation
: 1173.0 mmsl
Latitude
: 47-42'50"
Longitude
: 106-18'10"
Constructed Date
: 27/07 /94

Drilling Data

Drilling Depth
: 30.0m
Bit Size
: 14"
Logging Depth
: 30m
Casing Length
: 10" x 19.0m
Screen Length
: 10" x 11.0m

Pumping Test

Static Water Level: 1.20m

Specific capacity
: 56 m3/d/m

Water Quality
:EC= 240 m-s/cm
:TDS= 146.5 mg/l
: pH= 7.9
: T= 4 °C