

RECOVERY TEST

DATE 10 . 10 . 1995

Name of Client MANDABE Site No. 106
 Depth: 103 m Dia: 250 mm Screen Interval: 12 m~ 27 m, 33 m~ 39 m
 m~ m, m~ m
 Static Water Level:GL- 9.80 m Dynamic water Level:GL- 12.63 m Pump Setting: 40.25m
 Pumping Rate: _____ (l/min) Pump Type: OKAMOTO Inspector: Desiré

Time	Time (t') Since Recovery Started (min)	Time (t) Since Pumping Started(min)	Ratio t/t'	(s) Water Level (m)	(s') Residual Draedown(m)	Notes
	0	1440	244	12.63	2.83	
	1	1444	1444	11.58	1.78	
	2	1442	421	11.41	1.64	
	4	1444	361	11.40	1.60	
	6	1446	241	11.38	1.58	
	8	1448	181	11.36	1.56	
	10	1450	145	11.29	1.47	
	12	1452	121	11.28	1.48	
	14	1454	104	11.27	1.47	
	16	1456	91	11.26	1.46	
	18	1458	81	11.255	1.455	
	20	1460	73	11.24	1.44	
	25	1465	58.6	11.21	1.41	
	30	1470	49	11.205	1.405	
	35	1475	42.1	11.195	1.395	
	40	1480	37	11.16	1.360	
	50	1490	29.8	11.15	1.35	
	60	1500	25	11.14	1.34	
	70	1510	21.6	11.13	1.33	
	80	1520	19	11.12	1.32	
	90	1530	17	11.11	1.31	
	100	1540	15.4	11.10	1.30	
	120(2h)	1560	13	11.08	1.28	
	150	1590	10.6	11.00	1.20	
	180(3h)	1620	9	10.97	1.17	
	210	1650	7.86	10.92	1.12	
	240(4h)	1680	7	10.89	1.09	
	300(5h)	1740	5.8	10.88	1.08	
	360(6h)	1800	5.0	10.84	1.04	
	420(7h)	1860	4.43	10.80	1.00	
	480(8h)	1920	4.0	10.78	0.98	
	540(9h)	1980	3.67	10.76	0.96	
	600(10h)	2040	3.40	10.70	0.90	
	720(12h)	2160	3.0	10.68	0.88	
	840(14h)	2280	2.71	10.67	0.87	
	960(16h)	2400	2.50	10.66	0.86	
	1200(20h)	2640	2.20	10.60	0.80	
	1440(24h)	2880	2.0	10.59	0.79	

Tsiamnaka (1983)

$Q = 69 \text{ l/min}$

$SWL = 12.175 \text{ m}$

(Recovery method)

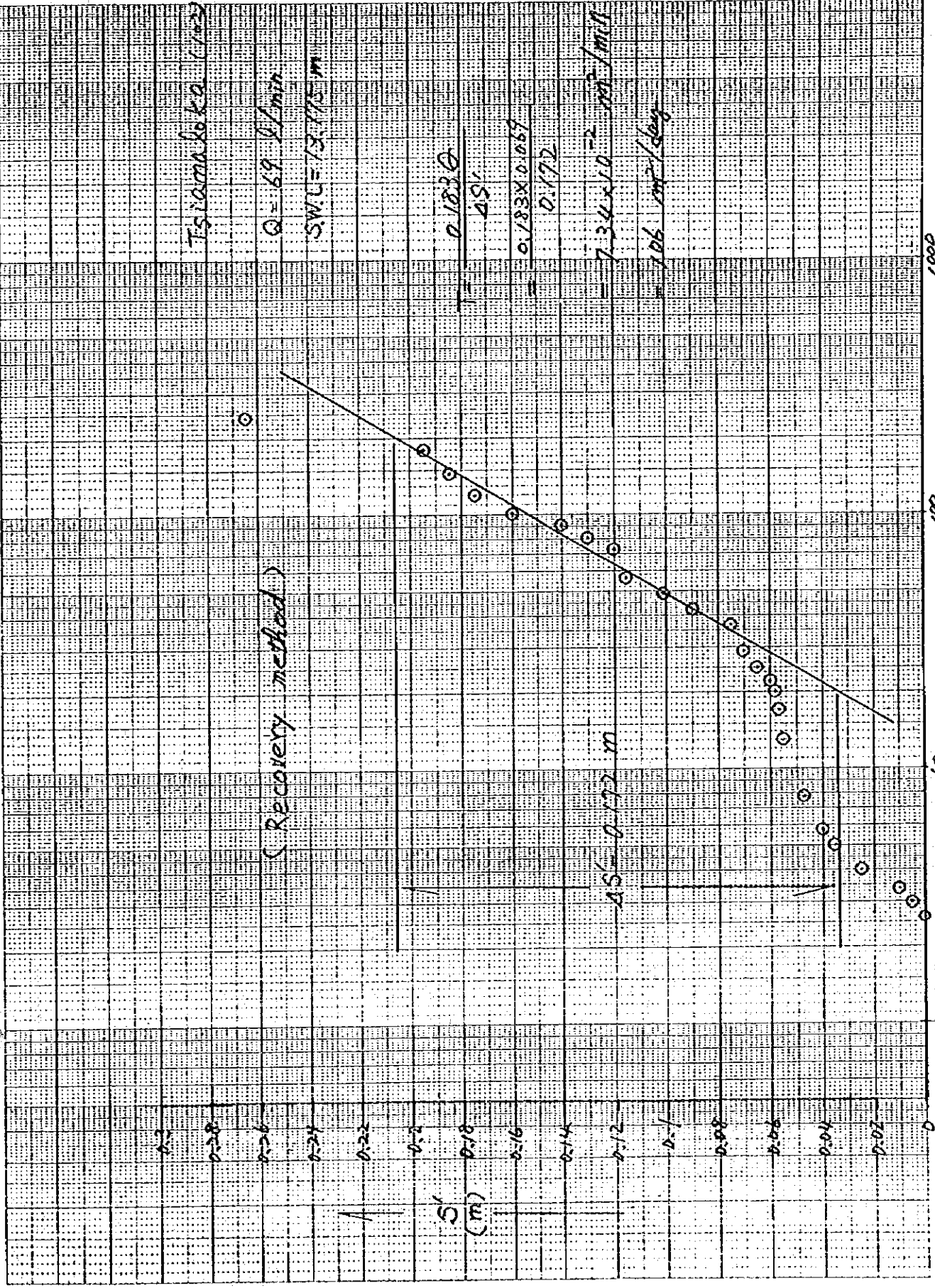
$AS = 0.183 \theta$

$= \frac{0.183 \times 0.1667}{0.172}$

$= 7.34 \times 10^{-2} \text{ m}^2/\text{min}$

$= 1.06 \text{ cm}^2/\text{day}$

$AS = 0.177 \text{ m}$



PUMPING (DISCHARGING) TEST (1)

DATE 21 . 09 . 1995

Name of Client TSIANALOKA (1) SITO No. 109
 Depth: 71.67 m Dia: 100 mm Screen Interval: 43.27 m ~ 51.27 m, 55.27 m ~ 59.27 m
63.27 m ~ 67.27 m, m ~ m
 Static Water Level: GL-17.18 m Dynamic water Level: GL- m Pump Setting: 37.80 m
 Pumping Rate: (l/min) Pump Type: Air lift Inspector:

Time	(t) Elapsed Time(min)	1/t	Water Level (m)	Drawdown (m)	Pumpig Rate (l/min)	EC (µs/cm)	PH	Notes
(Start)	0		<u>17.18</u>		<u>65 l / 1 min</u>	<u>5,230</u>	<u>7.0</u>	<u>65 l / 1 min</u>
	2	<u>0.50</u>	<u>37.565</u>		<u>130 l / 2 min</u>			<u>37.565</u>
	4	<u>0.25</u>						
	6	<u>0.1666</u>						
	8	<u>0.1250</u>						
	10	<u>0.1000</u>						
	15	<u>0.0666</u>						
	20	<u>0.0500</u>						
	25	<u>0.0400</u>						
	30	<u>0.0333</u>						
	40	<u>0.0250</u>						
	50	<u>0.0200</u>						
	60	<u>0.0166</u>						
	70	<u>0.0142</u>						
	80	<u>0.0125</u>						
	90	<u>0.0111</u>						
	120	<u>0.00833</u>						
	150	<u>0.00666</u>						
	180	<u>0.00555</u>						
	210	<u>0.00476</u>						
	240	<u>0.00416</u>						
	300	<u>0.00333</u>						
	360	<u>0.00277</u>						
	420	<u>0.00238</u>						
	480	<u>0.00208</u>						
	540	<u>0.00185</u>						
	600	<u>0.00166</u>						
	660	<u>0.00151</u>						
	720	<u>0.00138</u>						
	780	<u>0.00128</u>						
	840	<u>0.00119</u>						
	900	<u>0.00111</u>						
	960	<u>0.00104</u>						
	1020	<u>0.00098</u>						
	1080	<u>0.00092</u>						
	1140	<u>0.00083</u>						
	1200	<u>0.00083</u>						
	1260	<u>0.00079</u>						
	1320	<u>0.00075</u>						
	1380	<u>0.00072</u>						
	1440(24h)	<u>0.00069</u>						

RECOVERY TEST

DATE 11 . 10 . 1995

Name of Client TSIANALOKA (2) Site No. 109

Depth: 21.5 m Dia: 100 mm Screen Interval: 16.87 m ~ 20.82 m
 m ~ m, m ~ m

Static Water Level: GL-13.175 m Dynamic water Level: GL-14.47 m Pump Setting: m

Pumping Rate: (l/min) Pump Type: Air lift Inspector:

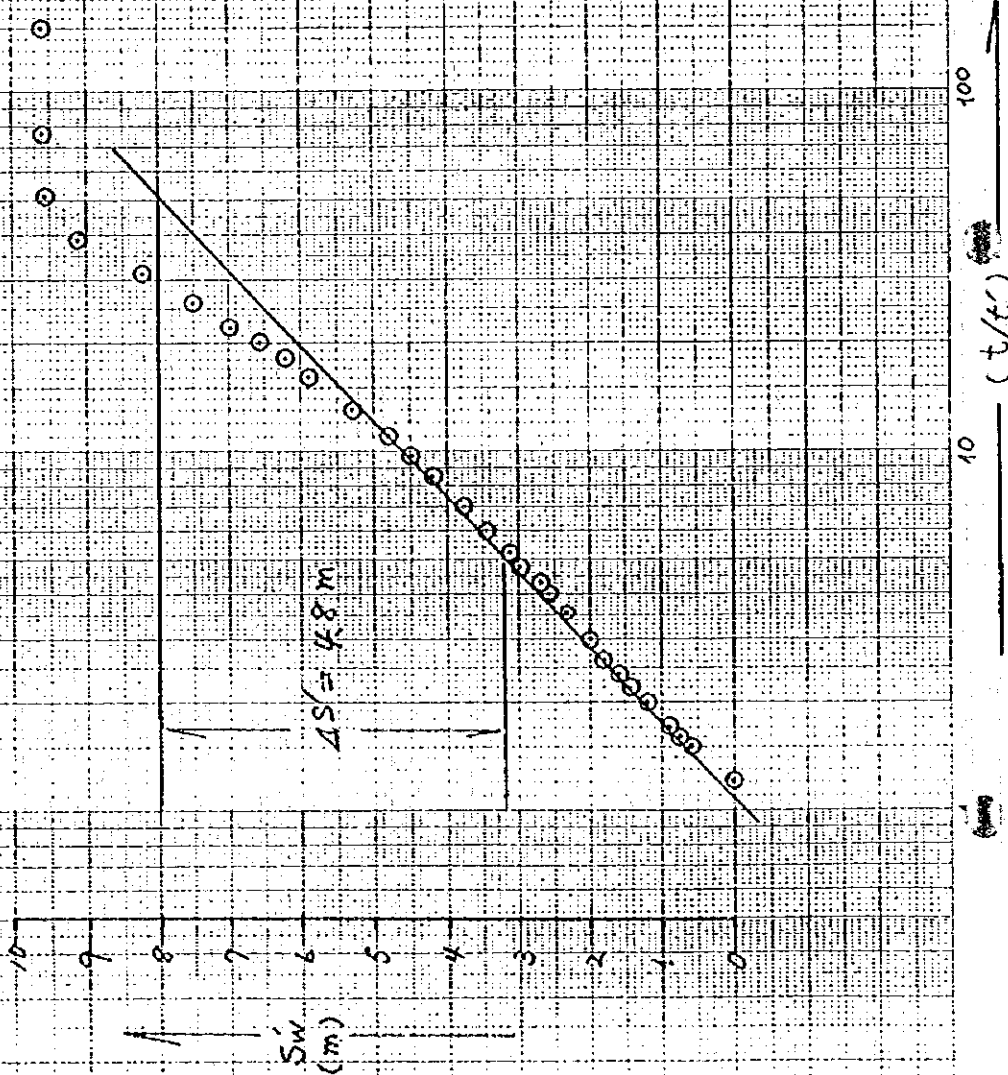
Time	Time (t') Since Recovery Started (min)	Time (t) Since Pumping Started (min)	Ratio t/t'	(s) Water Level (m)	(s') Residual Draedown (m)	Notes
	0	1440		14.48	1.315	
19:00	1	1441	1441	14.26	1.085	
	2	1442	721	13.685	0.51	
	4	1444	361	13.52	0.345	T ^s = 30°C
	6	1446	241	13.44	0.265	
	8	1448	181	13.38	0.225	E _c = 2335
	10	1450	145	13.36	0.185	
	12	1452	121	13.35	0.175	Q _s = 1.15
	14	1454	103.85	13.335	0.16	
	16	1456	91	13.315	0.14	
	18	1458	81	13.305	0.13	
	20	1460	73	13.295	0.12	
	25	1465	58.6	13.29	0.115	
19:30	30	1470	49	13.28	0.105	
	35	1475	42.14	13.265	0.09	
	40	1480	37	13.25	0.075	
	50	1490	29.8	13.245	0.07	
20:00	60	1500	25	13.24	0.065	
	70	1510	21.57	13.235	0.06	
	80	1520	19	13.233	0.058	
20:30	90	1530	17	13.232	0.059	
	100	1540	15.40	13.231	0.056	
21:00	120(2h)	1560	13	13.230	0.055	
21:30	150	1590	10.6	13.224	0.049	
22:00	180(3h)	1620	9	13.22	0.045	
22:30	210	1650	7.86	13.22		
23:00	240(4h)	1680	7			
0:00	300(5h)	1740	5.8	13.215	0.04	
	360(6h)	1800	5	13.21	0.035	
	420(7h)	1860	4.43			
3:00	480(8h)	1920	4	13.20	0.025	
4:00	540(9h)	1980	3.67	13.19	0.015	
5:00	600(10h)	2040	3.4	13.185	0.01	
6:00	720(12h)	2160	3	13.18	0.005	
7:00	840(14h)	2280	2.71	13.175	0	
	960(16h)	2400	2.5			
	1200(20h)	2640	2.2			
	1440(24h)	2880	2			

Ambulatory (1950)
(Recovery test)

(Recovery method)

$Q = 350 \text{ l/min}$
 $S.W.L = 13.4 \text{ m}$

$$T = \frac{0.183 \cdot Q}{4.81} = \frac{0.183 \times 350}{4.81} = 1.33 \times 10^{-2} \text{ m}^2/\text{min} = 1.92 \text{ m}^2/\text{day}$$



Ambatolohy (115)

$Q = 350 \text{ l/min}$

$S.W.L = 13.4 \text{ m}$

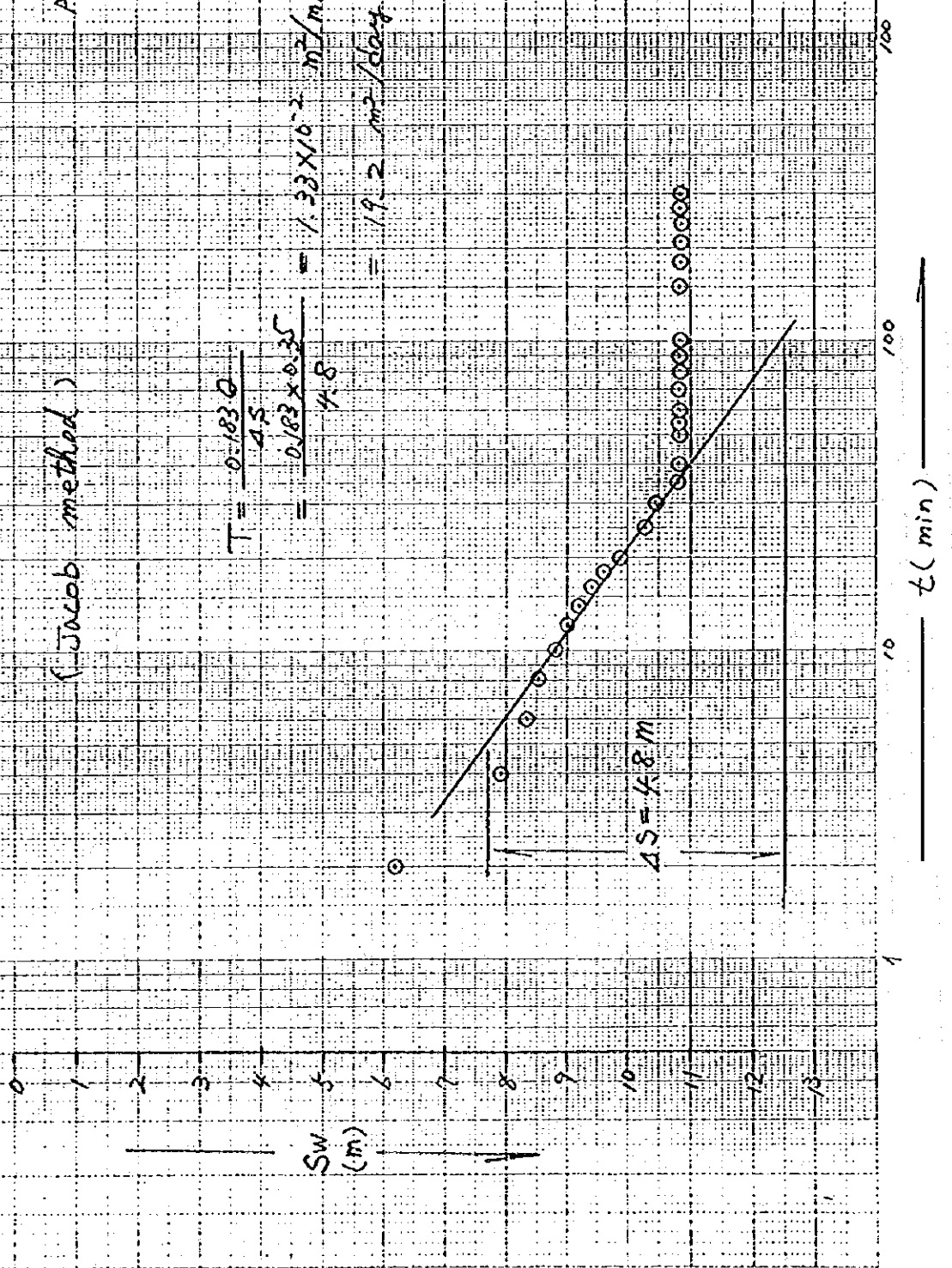
(Jacob method)

$T = \frac{0.183 Q}{4.5}$

$= \frac{0.183 \times 0.35}{4.8}$

$= 1.33 \times 10^{-2} \text{ m}^2/\text{min}$

$= 19.2 \text{ m}^2/\text{day}$



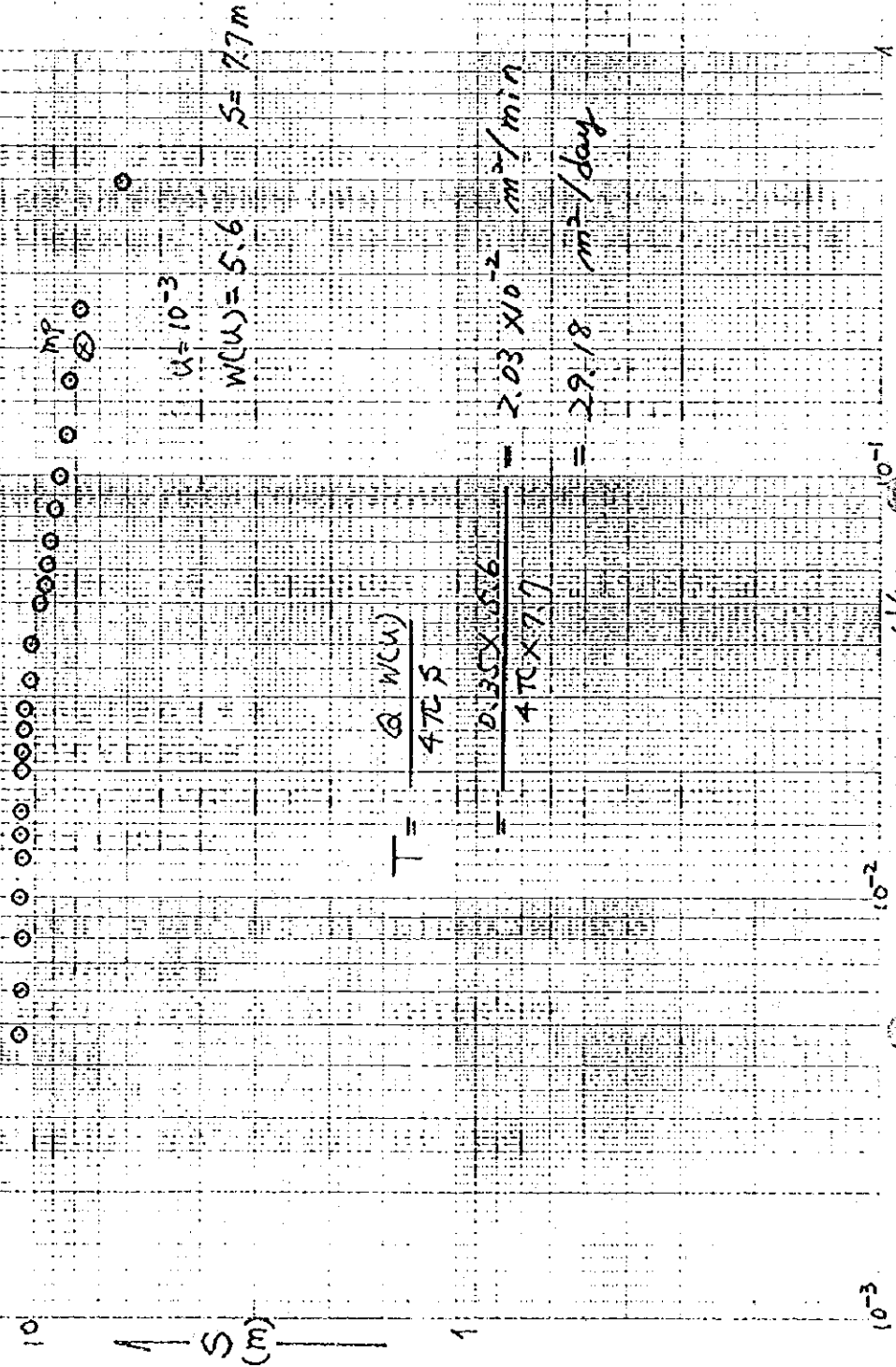
$\Delta S = 4.8 \text{ M}$

Ambatolohy (114)

$Q = 350.9 / \text{min}$

$S.W.L = 13.4 / \text{m}$

(This type curve method)



$$T = \frac{Q \cdot W(u)}{4 \pi S}$$

$$= \frac{0.35 \times 5.6}{4 \pi \times 7.7}$$

$$= 2.03 \times 10^{-2} \text{ m}^2 / \text{min}$$

$$= 29.18 \text{ days}$$

STEP DRAWDOWN TEST

DATE 25 . 11 . 15

Name of Client AMBATOLAHY

Sito No. 114

Depth: 93 m Dia: 260 mm Screen Interval: 18 m ~ 24 m, 30 m ~ 36 m
48 m ~ 54 m, 78 m ~ 81 m

Static Water Level: GL-13.41 m Dynamic water Level: GL-24.61 m Pump Setting: 78.97 m

Pumping Rate: _____ (l/min) Pump Type: Okamoto Pump Inspector: JACQUES

Time	Elapsed Time (min)	Water Level (m)	Drawdown (m)	Pumping Rate (l/min)	EC (µs/cm)	PH	T °C Notes
(13:00 Step)	0	13.41					Start
	2	17.02	3.61	179.37	341	7	32.1
	4	19.23	4.02				
	6	20.38	4.97				
	8	21.12	7.71				
	10	21.44	8.03				
	12	21.69	8.28				
	14	22.08	8.67				
	16	22.55	9.14				
	20	23.01	9.6		342		31.8
	25	23.77	10.36	180.04	341		31.7
13:30	30	24.16	10.75				
	35	24.22	10.81				
	40	24.24	10.83				
	50	24.25	10.84				
14:10	60	24.25	10.84				
	70	24.25	10.84				
	80	24.25	10.84				
14:30	90	"	"				
15:10	120	"	"				
15:30	150	"	"	180.1	340	7	31.9

(15:30 Step)	0						
	2	24.33	10.92	258.50	341	7	31.5
	4	24.35	10.94				
	6	24.365	10.955				
	8	"	"				
	10	24.37	10.96				
	12	"	"				
	14	"	"				
	16	24.375	10.965				
	20	24.377	10.967				
	25	"	"				
16:00	30	24.379	10.969		342	7	31.3
	35	24.379	"		341	7	30.6
	40	"	"				
	50	"	"				
16:30	60	24.38	10.97				
	70	"	"				
	80	"	"				
17:00	90	"	"				
17:30	120	"	"				
18:00	150	"	"		341		30.4

STEP DRAWDOWN TEST

DATE 25 . 11 . 95

Name of Client AMSATOLAHY

Sito No. 114

Depth: 93 m Dia: 260 mm Screen Interval: 18 m ~ 24 m, 30 m ~ 36 m
48 m ~ 54 m, 78 m ~ 81 m

Static Water Level: GL- 13.11 m Dynamic water Level: GL- 24.61 m Pump Setting: 72.97 m

Pumping Rate: _____ (l/min) Pump Type: Okarolo Pump Inspector: JACOJIS

Time	Elapsed Time (min)	Water Level (m)	Drawdown (m)	Pumping Rate (l/min)	EC (µs/cm)	PH	Notes
(18:00 Step)	0						Start
	2	24.53	11.12	322.10	343	7	30.4
	4	24.55	11.14				
	6	24.56	11.15				
	8	"	"				
	10	24.562	11.152				
	12	24.566	11.156				
	14	24.570	11.16				
	16	24.575	11.165				
	20	"	"				
	25	24.58	11.17				
18:30	30	24.593	11.183		340		30.1
	35	"	"				
	40	24.60	11.19				
	50	"	"		344		30.3
19:00	60	24.61	11.2				
	70	"	"				
	80	"	"		"		30.7
	90	"	"				
	120	"	"				
	150	"	"				30.1

(Step)	0					
	2						
	4						
	6						
	8						
	10						
	12						
	14						
	16						
	20						
	25						
	30						
	35						
	40						
	50						
	60						
	70						
	80						
	90						
	120						
	150						

STEP DRAWDOWN TEST

DATE _____

Name of Client AMBATOLAHY

Sito No. 114

Depth: 93 m Dia: 260 mm Screen Interval: 18 m ~ 24 m, 30 m ~ 36 m
48 m ~ 54 m, 78 m ~ 81 m

Static Water Level: GL-13.41 m Dynamic water Level: GL-24.27 m Pump Setting: 2097 m

Pumping Rate: 350 (l/min) Pump Type: DAIMOTO PUMP Inspector: JACQUI'S

Time	Elapsed Time (min)	Water Level (m)	Drawdown (m)	Pumping Rate (l/min)	EC (µs/cm)	PH	Notes
(6:30 Step)	0	14.31					Start
	0.5	19.62		349.85	341	7	28.8
	0.25	21.33					
	0.166	21.77					
	0.125	21.90					
	0.1	22.20					
	0.063	22.41					
	0.171	22.604	7.194				
	0.0625	22.835	9.425				
	0.035	23.02	8.61				
	0.05	23.29	8.98				
	0.04	23.75	10.32				
7:00	0.033	23.874	10.464		340		29.3
	0.028	24.203	10.793				
	0.025	24.22	10.81				
	0.022	24.235	10.825				
	0.02	24.24	10.83				
7:30	0.018	24.246	10.836				
	0.016	24.25	10.84				
	0.014	"	"				
	0.0125	24.255	10.845				
7:50	0.011	"	"				
	0.01	24.267	10.857				
8:30	0.008	24.275	10.865	350.2	343	7	29.9
9:00	0.006	"	"				

(Step)	0					
9:30	0.005	24.280	"		343		30.2
10:00	0.004	24.280	"				
10:30	0.004	24.280	"				
11:00	0.003	24.280	"				
11:30	0.003	24.280	"		341	7	30.8
	12						
	14						
	16						
	20						
	25						
	30						
	35						
	40						
	50						
	60						
	70						
	80						
	90						
	120						
	150						

RECOVERY TEST

DATE 26 . 11 . 95

Name of Client AMBATOLPHY

Site No. 114

Depth: 33 m Dia: 260 mm Screen Interval: 18 m ~ 24 m, 30 m ~ 36 m
48 m ~ 54 m, 78 m ~ 81 m

Static Water Level: GL-13.41 m Dynamic water Level: GL-24.27 m Pump Setting: 72.77 m

Pumping Rate: 350 (l/min) Pump Type: OKAMOTO PUMP Inspector: SACDI'S

Time	Time (t') Since Recovery Started (min)	Time (t) Since Pumping Started (min)	Ratio t/t'	(s) Water Level (m)	(s') Residual Draedown (m)	Notes
11:30	0	300				
	1	301	301	23.13	9.72	
	2	302	151	23.15	9.64	
	4	304	76	23.515	9.605	
	6	306	51	23.507	9.597	
	8	308	36.5	22.523	9.113	
	10	310	31	21.622	8.215	
	12	312	26	20.95	7.54	
	14	314	22.43	20.38	6.97	
	16	316	19.75	19.955	6.555	
	18	318	17.66	19.623	6.213	
	20	320	16	19.298	5.888	
	25	325	13	18.682	5.272	
	30	330	11	18.243	4.833	
	35	335	9.57	17.89	4.48	
	40	340	8.5	17.629	4.219	
	50	350	7	17.193	3.783	
	60	360	6	16.864	3.454	
	70	370	5.28	16.558	3.148	
	80	380	4.75	16.365	2.955	
	90	390	4.33	16.110	2.78	
	100	400	4	16.00	2.59	
	120(2h)	420	3.5	15.746	2.336	
	150	450	3	15.46	2.05	
	180(3h)	480	2.66	15.203	1.793	
	210	510	2.43	15.011	1.601	
	240(4h)	540	2.25	14.881	1.471	
	300(5h)	600	2.0	14.636	1.226	
	360(6h)	660	1.83	14.46	1.05	
	420(7h)	720	1.71	14.305	0.895	
	480(8h)	780	1.62	14.195	0.785	
	540(9h)	840	1.55	14.098	0.688	
	600(10h)	900	1.5	14.01	0.6	
	720(12h)	1020	1.42	13.785	0.375	
	840(14h)	1140	1.36	13.723	0.313	
	960(16h)	1260	1.31	13.635	0.225	
	1200(20h)	1500	1.25	13.53	0.12	
	1440(24h)	1740	1.21	13.44	0.03	

7. Results of Water Quality Analysis

7. Results of Water Quality Analysis

DRINKING WATER QUALITY STANDARD

1. Physical Condition

Item	WHO		JAPAN
	Highest Desirable	Maximum Permissible	
Color	15	50	5
Taste	not offensive	not offensive	not offensive
Odor	not offensive	not offensive	not offensive
Turbidity	5	25	2
pH	6.5 to 8.5	6.5 to 9.2	5.8 to 8.6
Conductivity	0.5	1.5	-

2. Toxin

Item	WHO	JAPAN
Hg	0.001	None
Pb	0.1	0.1
As	0.05	0.05
Se	0.01	0.01
Cr ⁶⁺	0.05	0.05
Cn	0.1	None
Cd	0.005	0.01
Cl ₂	0.1	-
Phenol	0.0	-
Zn	5.0	-
No ₃	10	-

3. Bacteriological Condition

Item	WHO	JAPAN
Standard Plate Count (Colonies / cm ³)	-	100
MPN (Coliform Organism / 100 m ³)	-	None
E. Coli	-	-

4. Chemical Condition

Item	WHO		JAPAN (mg/l)
	Highest Desirable(mg/l)	Maximum Permissible(mg/l)	
Total dissolved Solids	500	1500	-
Fe	0.1	1.0	0.3
Mn	0.05	0.5	0.3
Fe + Mn	-	-	-
Cu	0.005	1.5	1.0
Ca	75	200	-
Mg	30	150	-
SO ₄ ²⁻	200	400	-
Cl ⁻	200	600	200
F ⁻	0.6	-	0.8
No ₃ ⁻	10	-	10
O ₂ dissolved	-	5	-
Na	Not Limited	Not Limited	Not Limited
K	Not Limited	Not Limited	Not Limited
CO ₂	Not Limited	Not Limited	Not Limited
S ²⁻	-	5	-
PO ₄ ³⁻	-	1	-
NH ₃	-	0.5	-
NO ₂ ⁻	-	0.1	-
T. Hardness	100	500	300
Alkybenzal Sulfonates, Abs	0.5	-	0.5
Phenolic Substance Asphenol	0.001	-	0.005

ITEMS AND METHODS USED
IN WATER QUALITY ANALYSIS

Item	Instrument	Method of Analysis
Acidity	Digital Titrator	Titration with NaOH Standard Solution
TDS	Conductivity Meter	Electrolytic Conductivity Method
Mg	Digital Titrator	Titration with EDTA Standard Solution
Fe	Automatic Photometer	O-phenantropine Method (total)
NO ₂ ^{-N}	Automatic Photometer	Diazotization Method
Mn	Automatic Photometer	Periodate Oxydation Method
Cr ⁶⁺	Automatic Photometer	1.5 Diphenylcarbohydrazide Method
S ²⁻	Automatic Photometer	Methyl Blue Method
Ni	Automatic Photometer	Photometric Method
ClO ₂	Automatic Photometer	Direct Reading Method
Alcalinity	Digital Titrator	Titration with H ₂ SO ₄ Standard Solution
CO ₂	Digital Titrator	Titration with Sodium Hydroxide NaOH Standard Solution
T. Hardness	Digital Titrator	Titration with EDTA Standard Solution (pH ₁₀)
PO ₄ ³⁻	Automatic Photometer	Nolybdenum Blue Method with Ascorbic Acid
NO ₃ ^{-N}	Automatic Photometer	Diazotization Method
Br ₂	Automatic Photometer	N,N-diethyl-p-phenylene-diamine Method
Cu	Automatic Photometer	Bicinchoninate Method
Cl ⁻	Digital Titrator	Titration with Hg(NO ₃) ₂ Standard Solution
Na ₂ CrO ₄	Automatic Photometer	Direct Colorimetric Method
E.Coli	Coliforms Detection Paper	Developing Method
Ca	Digital Titrator	Titration with EDTA Standard Solution (pH ₁₂)
SO ₄ ²⁻	Automatic Photometer	Barium Sulfate Turbidity Method
NH ₃ ^{-N}	Automatic Photometer	Nessler Method
F ⁻	Automatic Photometer	SPADNS Solution Method
Cl ₂	Automatic Photometer	N,N-diethyl-p-phenylene-diamine Method
I ₂	Automatic Photometer	N,N-diethyl-p-phenylene-diamine Method
SiO ₂	Automatic Photometer	Heteropoly Blue Method
Zn	Automatic Photometer	Zincon Method
pH	pH - Meter	Ion Electrode Method
T°	Conductivity Meter	Direct Reading Method
Conductivity	Conductivity Meter	Direct Reading Method
Turbidity and Color	-	View after Precipitation

Results of Analysis of Water Quality (1/10)

No.	Village	Prelevement	Analyse	Acidite	IDS	Mg	Fe	NO ₂ -N	Mn	Cr ₆ ⁺	S ²⁻	ClO ₂	Alcalimite	CO ₂	Durete totale	PO ₄ ³⁻	NO ₃ -N	Br ₂	Cu	
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1	Andranopasy I (DW)	95/06/15	95/06/16	78	397.00	70	0.17	0.040	0.10	0.12	0.008	16	332	18	290	1.11	1.3	0.00	1.94	
2	Andranopasy II (DW)	95/06/16	95/06/16	46	1051.00	146	0.28	0.059	0.30	0.05	0.049	103	122	17	336	0.54	1.5	0.06	0.72	
3	Antely (R)	95/06/16	95/06/16	44	658.00	4	0.29	0.069	0.00	0.10	0.000	47	196	19	130	0.77	4.2	0.01	0.11	
4	Darika (DW)	95/06/15	95/06/16	82	739.00	36	0.86	0.000	0.40	0.02	0.146	211	256	20	114	0.48	0.0	0.11	0.00	
5	Belamonty (DW)	95/06/16	95/06/16	62	180.00	40	1.56	0.009	0.80	0.04	0.000	31	142	8	138	0.37	4.1	0.09	0.22	
6	Ambatobe (R)	95/06/16	95/06/16	74	257.00	44	0.59	0.036	3.50	0.07	0.000	6	226	13	204	0.31	4.3	0.02	0.27	
7	Nositonga (DW)	95/06/15	95/06/16	58	162.00	48	0.13	0.002	0.30	0.06	0.008	15	136	26	130	0.55	0.7	0.10	0.49	
8	Nositobe (R)	95/06/15	95/06/16	110	746.00	140	0.05	0.002	0.20	0.07	0.014	28	260	24	286	0.25	0.7	0.07	0.40	
9	Ankoba (S)	95/06/15	95/06/16	174	880.00	34	0.06	0.009	0.40	0.05	0.011	19	466	38	264	0.36	1.8	0.09	1.31	
10	Antsiranandaka Nord (DW)	95/06/15	95/06/16	162	367.00	60	0.27	0.010	0.10	0.08	0.038	35	382	42	212	0.37	23.7	0.14	0.20	
11	Tsaramandroso (DW)	95/06/15	95/06/16	144	623.00	26	0.90	0.000	1.90	0.00	0.023	24	290	32	356	0.24	0.0	0.49	0.87	
12	Songary (R)	95/06/18	95/06/19	48	212.00	0	0.04	0.042	0.10	0.06	0.064	0	262	11	204	0.15	4.3	0.02	1.71	
14	Tanambahiny (S)	95/06/17	95/06/17	50	325.00	82	0.02	0.036	0.00	0.06	0.040	3	308	24	270	0.40	3.9	0.02	0.74	
15	Miary (S/C)	95/06/13	95/06/14	25	15.20	4	0.15	0.010	0.00	0.05	0.009	6	8.5	6	6	0.40	0.4	0.04	0.23	
15	Miary (Spring)	95/06/13	95/06/14	30	19.00	3	0.08	0.005	0.00	0.06	0.002	0	3	12	8	0.43	6.6	0.00	0.30	
16	Ambivy I (R)	95/06/16	95/06/16	32	64.00	14	2.28	0.000	0.00	0.02	0.205	305	92	7	46	0.31	0.0	0.06	0.25	
17	Ambivy II (R)M	95/06/14	95/06/15	68	364.00	86	0.08	0.003	0.00	0.80	0.010	20	290	12	226	0.33	0.8	0.02	0.56	
18	Ambahio (DW)	95/06/14	95/06/15	84	433.00	102	0.05	0.019	0.00	0.50	0.005	11	270	17	276	1.12	15.3	0.04	0.48	
19	Besatrohoka (S)	95/06/14	95/06/15	54	121.00	22	0.59	0.010	0.00	0.04	0.069	87	120	5	90	0.54	5.0	0.01	0.25	
20	Marolafika Atsimo (S)	95/06/14	95/06/15	108	630.00	102	1.68	0.003	0.00	0.01	0.005	81	328	14	270	0.29	0.0	0.35	1.13	

Results of Analysis of Water Quality (2/10)

No.	Village	Prelevement	Analyse	Acidité	IDS	Mg	Fe	NO ₂ -N	Mn	Cr ₆ ⁺	S ²⁻	ClO ₂	Alcalinite	CO ₂	Dureté totale	PO ₄ ³⁻	NO ₃ -N	Br ₂	Cu	
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
23	Marerano (DW)	95/06/17	95/06/17	68	238.00	4	0.70	0.059	0.10	0.04	0.042	48	32	14	6	0.41	3.0	0.10	0.32	
25	Befasy (DW)	95/05/31	95/06/01	200	861.00	20	0.06	0.049	0.20	0.08	0.000	1	241.8	124	545	0.16	405.0	0.09	4.34	
26	Antevomano (R)	95/06/21	95/06/22	50	166.60	36	0.64	0.037	0.00	0.08	0.029	68	164	4	124	0.21	2.8	0.12	0.10	
27	Mitsitky (DW)	95/06/21	95/06/22	78	153.10	64	0.87	0.028	0.40	0.07	0.011	41	128	9	154	0.26	4.5	0.06	0.22	
28	Andranovorisoira (DW)	95/06/21	95/06/22	60	588.00	86	1.99	0.034	0.40	0.09	0.015	45	96	14	168	0.26	4.0	0.12	0.16	
29	Ankicatamahavelo (B)	95/06/02	95/06/02	30	134.40	14	1.64	0.032	2.00	0.14	0.005	81	118	16	52	0.23	3.0	2.92	0.57	
30	Bekiny Soarano (S)	95/06/01	95/06/02	95	377.00	28	0.18	0.011	0.10	0.05	0.000	6	274	25	272	0.16	3.0	0.12	1.33	
31	Beleo (R/C)	95/05/31	95/06/01	50	169.00	10	0.07	0.006	0.10	0.07	0.001	11	122.8	64	145	0.12	4.8	0.12	0.60	
32	Anadabo (DW)	95/06/28	95/06/28	38	374.00	12	0.21	0.006	0.20	0.26	0.004	30	168	11	182	1.12	4.0	0.06	0.72	
33	Misokotso (DW)	95/06/28	95/06/28	50	458.00	84	0.07	0.018	0.10	0.13	0.000	1	58	15	138	0.35	28.8	0.06	0.31	
34	Croisement Beselroka (DW)	95/05/31	95/05/01	85	370.00	15	0.09	0.038	0.10	0.07	0.030	9	82	80	155	0.24	34.8	0.07	0.58	
35	Amanga (DW)	95/05/30	95/05/31	32	51.00	5	1.73	0.069	3.00	0.19	0.144	179	12.2	13	45	2.03	5.0	1.49	1.61	
36	Namokia (DW)	95/06/08	95/06/09	38	294.00	34	0.21	0.019	0.10	0.14	0.000	9	250	34	196	0.46	8.5	0.12	0.46	
37	Voloe (DW)	95/06/08	95/06/09	50	231.00	36	0.14	0.007	0.10	0.13	0.008	15	188	34	160	0.16	4.8	0.11	0.23	
38	Benasy (DW)	95/06/08	95/06/09	54	289.00	52	0.05	0.010	0.00	0.14	0.000	7	170	28	188	0.09	4.6	0.10	0.49	
39	Antsamako (P)	95/06/08	95/06/09	20	80.10	12	1.33	0.000	0.00	0.11	0.112	201	46	2	22	0.28	4.0	0.10	0.61	
40	Manomentimay (DW)	95/06/08	95/06/09	58	298.00	72	0.01	0.007	0.10	0.11	0.000	7	222	46	194	0.15	5.5	0.01	0.26	
41	Farateny (DW)	95/06/08	95/06/09	150	1.85	104	0.00	0.953	0.00	0.08	0.000	9	672	62	310	0.31	81.5	0.15	0.29	
43	Andranonja (DW)	95/06/21	95/06/22	95	296.00	4	0.11	0.035	0.10	0.10	0.031	40	344	16	150	0.17	4.8	0.02	0.36	
44	Belo sur mer (DW)	95/05/18	95/05/19	345	325.00	16	0.04	0.034	0.10	0.05	0.015	0	125	48	194	0.10	107.0	0.07	1.71	

Results of Analysis of Water Quality (3/10)

No.	Village	Prelevement	Analyse	Acidite	TDS	Mg	Fe	NO ₂ -N	Mn	Cr ₆ ⁺	S ²⁻	ClO ₂	Alcalinite	CO ₂	Durete totale	PO ₄ ³⁻	NO ₃ -N	Br ₂	Cu	
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
45	Ankiliolo (DW)	95/06/07	95/06/08	218	0.69	88	5.68	0.018	0.00	0.12	0.028	43	440	112	296	0.37	44.0	0.97	0.04	
46	Marofihitsa (DW)	95/06/07	95/06/08	168	2.01	80	1.05	0.026	0.10	0.14	0.002	5	330	88	264	0.25	98.0	0.05	1.39	
47	Ambarorata (DW)	95/06/07	95/06/08	196	895.00	176	0.02	0.023	0.10	0.09	0.003	7	170	68	418	0.28	99.5	0.12	2.18	
48	Ankevo (DW)	95/06/07	95/06/08	228	325.00	26	0.07	0.015	0.10	0.11	0.000	9	118	216	122	0.11	35.0	1.22	0.24	
50	Bevantaza (DW)	95/06/01	95/06/02	150	424.00	5	0.07	0.021	0.10	0.09	0.001	6	344	21	300	1.35	70.0	0.12	2.19	
52	Antsamirahaka (DW)	95/05/17	95/05/17	166	864.00	116	0.05	0.093	0.30	0.09	0.000	17	382.8	146	376	2.32	34.3	0.14	2.23	
53	Androvokely (DW)	95/05/17	95/05/17	160	390.00	58	0.04	0.056	0.40	0.07	0.003	9	283	112	248	1.56	1.6	0.14	1.03	
55	Amponaniho (DW)	95/06/28	95/06/28	56	340.00	6	2.68	5.000	0.40	0.12	0.009	36	144	11	66	0.27	6.3	0.00	0.25	
56	Antseranambondro (P)	95/06/28	95/06/28	30	184.00	36	0.16	4.500	0.20	0.09	0.010	31	162	10	164	0.10	4.4	0.10	0.26	
58	Bemanonga (DW)	95/05/12	95/05/13	72	300.00	60	0.05	0.035	0.20	0.15	0.002	5	89.25	88	170	1.00	6.7	0.12	2.24	
59	Marovoay (DW)	95/05/15	95/05/16	110	429.00	24	0.10	0.031	1.20	0.05	0.000	56	231.4	104	258	0.36	6.1	0.08	2.91	
60	Tandrokasy (R/C)	95/05/15	95/05/16	22	69.10	24	1.14	0.086	3.10	0.09	0.043	143	41.8	30	52	0.74	6.7	0.99	2.69	
61	Bekonazy (DW)	95/05/05	95/05/05	436	856.00	46	0.08	0.021	0.30	0.16	0.000	2	187.4	48	288	0.24	3.9	0.35	1.68	
62	Bevolengo (P)	95/05/05	95/05/05	88	65.00	20	0.07	0.032	0.70	0.22	0.018	38	18.4	24	46	0.30	6.2	0.45	0.20	
64	Andranomena At imo(R)	5/05/05	95/05/05	106	131.00	98	0.30	0.036	0.40	0.11	0.000	15	44.7	24	146	0.25	5.0	0.23	0.08	
65	Tanandava (S)	95/05/15	95/05/16	72	195.40	10	0.21	0.030	0.60	0.09	0.013	34	31.2	44	30	0.17	9.7	0.15	2.31	
66	Croisment Belo Sur Tsiribihino (DW)	95/05/12	95/05/13	154	691.00	134	0.20	0.023	0.80	0.07	0.020	17	26.7	160	152	0.31	5.7	0.12	2.45	
67	Andava (DW)	95/05/11	95/05/12	72	187.80	0	0.13	0.023	0.40	0.11	0.060	4	139.4	60	110	0.51	4.4	0.08	0.68	
68	Betsipolika (DW)	95/05/12	95/05/13	80	463.00	44	0.09	0.053	0.03	0.07	0.080	4	150.8	90	218	0.37	47.0	0.09	1.26	
69	Amboloandao (S)	95/05/11	95/05/12	48	550.00	116	0.58	0.102	0.30	0.13	0.000	11	109	58	316	0.33	7.2	0.20	2.77	

Results of Analysis of Water Quality (4/10)

No.	Village	Prelevement	Analyse	Acidite	TDS	Mg	Fe	NO ₂ -N	Mn	Cr ₆ ⁺	S ²⁻	ClO ₂	Alcalinite	CO ₂	Durete totale	PO ₄ ⁻	NO ₃ -N	Br ₂	Cu	
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
70	Ampendra (DW)	95/05/12	95/05/13	72	548.00	108	0.04	0.023	0.20	0.06	0.002	4	203	92	792	0.29	4.7	0.09	2.39	
72	Anlevomano II (DW)	95/05/11	95/05/12	64	163.00	32	0.17	0.025	0.10	0.12	0.001	10	87.4	54	80	0.31	47.0	0.07	0.68	
73	Belobaka (DW)	95/05/15	95/05/16	144	445.00	18	0.09	0.021	0.20	0.04	0.005	8	13.5	86	142	0.29	8.2	0.08	2.13	
74	Tsimjorano (DW)	95/05/11	95/05/12	92	835.00	84	0.11	0.081	0.30	0.06	0.000	6	169.4	104	276	0.38	88.5	0.10	1.10	
76	Laloby (DW)	95/05/30	95/05/31	88	311.00	71	0.04	0.008	0.10	0.07	0.000	19	143.2	23	301	0.64	5.8	0.16	2.08	
79	Ambonio (DW)	95/05/17	95/05/17	132	470.00	98	0.12	0.074	0.80	0.17	0.010	30	274	116	310	0.94	17.8	0.31	1.25	
80	Anolotava (DW)	95/05/30	95/05/31	72	195.00	5	7.56	0.297	6.70	0.35	1.435	563	74.3	28	145	2.63	13.8	7.58	5.09	
81	Malandirano (DW)	95/05/31	95/06/01	85	201.00	45	0.25	0.004	0.10	0.07	0.000	14	99	80	150	0.24	5.2	0.12	0.62	
82	Marofandilo (DW)	95/05/04	95/05/04	182	220.00	46	0.62	0.009	0.30	0.06	0.000	11	68.2	46	110	0.23	3.2	0.16	0.17	
83	Ampelaka (P)	95/05/04	95/05/04	48	30.00	70	1.14	0.023	0.40	0.16	0.001	34	21.8	10	80	0.20	7.5	0.32	0.26	
89	Ankarabato (DW)	95/05/04	95/05/04	342	520.00	68	0.06	0.038	0.10	0.07	0.000	2	78.6	58	194	0.53	4.0	0.14	0.16	
92	Betsirny (S)	95/05/04	95/05/04	134	173.00	38	0.02	0.024	0.00	0.10	0.000	2	21.3	22	86	0.22	15.5	0.09	0.14	
93	Beroboka Nsimo (r1)	95/05/04	95/05/04	225	192.00	62	0.06	0.017	0.10	0.08	0.000	6	147.8	52	152	0.46	4.5	0.10	0.15	
94	Ankilivato (DW)	95/05/10	95/05/11	20	177.80	159	0.08	0.022	0.20	0.12	0.000	1.2	87.2	60	254	0.18	7.5	0.10	0.64	
95	Ambohibary (S)	95/05/10	95/05/11	26	86.60	16	0.29	0.033	0.80	0.08	0.011	13	54.8	32	88	0.31	5.2	0.45	0.77	
96	Bevoay (DW)	95/05/04	95/05/04	331	652.00	96	0.02	0.018	0.10	0.06	0.000	0	162.1	62	256	0.21	4.6	0.10	1.24	
97	Bezizika (Dug well)	95/05/03	95/05/04	57	260.00	22	0.04	0.028	0.10	0.09	0.000	1	74.3	38	86	0.68	14.2	0.10	0.12	
97	Bezizika (Spring)	95/05/03	95/05/04	51	105.20	26	0.05	0.021	0.10	0.09	0.000	1	45	10	52	0.64	4.1	0.07	0.14	
98	Anjomahitsy (R)	95/05/11	95/05/12	26	63.40	20	1.62	0.031	1.20	0.09	0.000	60	39	26	48	0.27	8.7	0.51	1.22	
99	Ankilimido (DW)	95/05/10	95/05/11	2	117.00	164	0.23	0.021	0.10	0.06	0.000	4	46.8	44	202	0.33	0.5	0.12	0.63	

Results of Analysis of Water Quality (S/10)

No.	Village	Prelevement	Analyse	Acidite	IDS	Mg	Fe	NO ₂ -N	Mn	C ₆ ⁺	S ²⁻	ClO ₂	Alcalinite	CO ₂	Durete totale	PO ₄ ³⁻	NO ₃ -N	B ₂	Cu	
				mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
100	Amponihy (S)	95/05/10	95/05/11	38	150.30	35	0.15	0.034	0.30	0.13	0.004	14	108.2	70	172	2.31	5.3	0.18	0.75	
101	Benato (S)	95/05/23	95/05/23	50	241.00	44	0.32	0.005	0.60	0.08	0.003	18	101.7	78	156	0.15	0.9	0.24	0.78	
102	Anoltsy (DW)	95/05/23	95/05/23	82	540.00	70	0.82	0.025	2.10	0.08	0.096	67	122	88	236	0.42	1.0	0.68	1.13	
103	Ankizirato (R)	95/05/10	95/05/11	8	52.80	47	0.35	0.026	0.40	0.09	0.004	23	39	30	100	0.19	5.3	0.23	0.78	
104	Mandabe (R)	95/05/13	95/06/14	60	201.00	91	0.39	0.003	0.00	0.04	0.015	21	167.5	18	174	0.27	0.5	0.03	0.36	
106	Molaimbandy (R)	95/05/09	95/05/10	6	38.20	4	0.49	0.026	0.30	0.06	0.000	16	78	30	26	0.26	4.6	0.21	0.77	
107	Ampanotoka (S)	95/05/08	95/05/09	32	12.70	0	1.27	0.100	4.90	0.31	0.161	212	10	16	0	0.82	4.2	1.95	1.06	
109	Tsiandoloka (S)	95/05/03	95/05/04	30	154.00	22	0.08	0.105	0.60	0.17	0.000	8	89.8	36	84	0.52	4.8	2.08	0.17	
110	Kiboy (S)	95/05/03	95/05/04	32	115.70	24	0.73	0.064	0.20	0.16	0.005	12	78	32	62	0.41	4.9	0.14	0.20	
112	Tsimafona (DW)	95/05/03	95/05/04	37	425.00	66	0.02	0.027	0.20	0.15	0.000	4	16	18	128	0.95	199.0	0.11	0.14	
113	Manonjaky (DW)	95/05/03	95/05/04	36	484.00	68	0.00	0.028	0.10	0.11	0.000	0	88.4	32	196	0.87	235.0	0.07	0.15	
114	Ambatolahy (R)	95/05/08	95/05/09	16	26.50	11	0.68	0.028	0.50	0.11	0.021	32	46	9	16	0.25	6.3	0.32	0.32	
115	Ankotrotsy (R)	95/05/08	95/05/08	26	31.50	9	1.00	0.030	0.80	0.08	0.012	49	14	16	22	0.34	6.4	0.41	0.47	

Results of Analysis of Water Quality (6/10)

No.	Village	Cl ⁻	No ₂ CrO ₄	E.Coli	Co	SO ₄ ⁻	NH ₃ N	F ⁻	Cl ₂	I ₂	SiO ₂	Zn	pH	pH	Temp.	Temp.	Conduct.	Conduct.
		mg/l	mg/l	(+/-)	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	terrain	labo.	°C	°C	ms/cm
1	Andronopasy I	50	19.00	(-)	220	27	0.46	0.000	0.03	0.00	0.543	0.820	7.00	7.06	22.9	20.3	0.7840	0.7940
2	Andronopasy II	566	154.00	(+)	190	52	0.89	1.000	0.03	0.12	0.689	0.000	6.80	7.04	25.7	25.6	2.1500	2.1100
3	Antaly	304	79.00	(+)	126	50	0.35	0.000	0.00	0.03	0.559	0.000	7.50	7.79	27.7	25.9	1.3050	1.3170
4	Darika	256	342.00	(-)	78	25	1.33	0.025	0.03	0.15	0.691	0.000	7.00	6.74	25.5	20.0	1.4630	1.4740
5	Befamony	52	54.00	(+)	98	7	0.83	0.875	0.00	0.14	0.488	0.000	6.80	6.84	25.4	25.5	0.3720	0.3610
6	Ambatobe	44	8.00	(-)	160	23	0.42	0.700	0.01	0.06	0.668	0.000	6.80	7.34	26.1	26.0	0.5040	0.5140
7	Nositonga	16	28.00	(-)	82	22	0.16	0.000	0.05	0.16	0.483	0.000	7.00	6.48	26.9	20.5	0.3240	0.3240
8	Nosibe	264	49.00	(-)	146	80	0.25	0.025	0.03	0.11	0.668	0.000	6.80	7.16	24.1	20.3	1.4730	1.4950
9	Ankoba	206	34.00	(+)	230	200	0.18	0.025	0.05	0.15	0.509	0.000	7.00	5.79	27.9	20.5	1.7740	1.7560
10	Antseranandaka Nord	18	64.00	(-)	152	290	0.22	0.900	0.01	0.23	0.650	0.000	7.20	6.45	26.6	20.2	0.7260	0.7340
11	Tsaramandroso	112	38.00	(-)	330	290	1.09	0.600	0.05	0.63	0.838	0.000	7.20	6.39	21.0	20.2	1.2180	1.2450
12	Songary	0	0.00	(-)	204	1	0.00	0.075	0.04	0.03	0.780	0.000	6.80	7.54	25.9	24.7	0.4230	0.4240
14	Tanambohiny	34	0.00	(+)	188	42	0.10	0.725	0.02	0.09	0.849	0.020	7.00	4.67	18.1	22.3	0.6380	0.6500
15	Miary	6	10.00	(-)	2	0	0.05	0.000	0.02	0.05	0.494	0.040	6.80	5.95	19.5	19.5	0.0301	0.0300
15	Miary (Spring)	10	0.00	(-)	5	0	0.00	0.250	0.00	0.07	0.478	0.940		4.80		19.7		0.0380
15	Ambivy I	14	493.00	(-)	32	0	1.34	0.000	0.00	0.09	0.630	0.420	7.20	6.76	26.4	24.6	0.1300	0.1290
17	Ambivy II	36	28.00	(-)	140	62	0.08	0.000	0.05	0.03	0.623	0.000	7.20	8.11	18.5	19.4	0.7170	0.7290
18	Ambahia	76	18.00	(-)	174	115	0.05	0.000	0.04	0.07	0.633	0.140	7.20	7.32	28.6	19.4	0.8630	0.8670
19	Besatrahoko	10	141.00	(-)	68	16	0.30	0.000	0.05	0.01	0.230	0.000	7.50	7.36	26.9	19.7	0.2500	0.2430
20	Marolafika Nisimo	154	135.00	(-)	168	150	0.91	0.000	0.15	0.42	0.666	0.000	7.00	7.22	25.0	19.7	1.2690	1.2570

Results of Analysis of Water Quality (7/10)

No.	Village	Cl mg/l	No ₃ CrO ₄ mg/l	E.Coli (+/-)	Co mg/l	SO ₄ ⁻ mg/l	NH ₃ N mg/l	F mg/l	Cl ₂ mg/l	I ₂ mg/l	SiO ₂ mg/l	Zn mg/l	pH terrain	pH labo.	Temp. terrain °C	Temp. labo. °C	Conduct. terrain mS/cm	Conduct. labo. mS/cm
25	Marerano	4	83.00	(-)	2	2	0.23	0.2/5	0.02	0.17	0.826	0.000	6.00	5.98	24.0	22.0	0.0525	0.0470
25	Befasy	118	3.00	(-)	525	285	0.69	0.100	0.01	0.03	0.587	0.000	7.00	7.79	27.0	28.0	1.8330	1.7200
26	Antevomano	12	99.00	(-)	88	39	0.34	0.425	0.02	0.15	0.494	0.000	7.00	8.65	25.9	22.0	0.3360	0.3320
27	Mililitiky	38	68.00	(-)	102	27	0.28	0.175	0.03	0.09	0.552	0.000	7.00	7.31	25.7	22.1	0.3200	0.3050
28	Andranovorisoatra	222	74.00	(-)	82	112	0.59	0.150	0.08	0.14	0.614	0.000	7.20	6.71	22.9	21.9	1.1500	1.1760
29	Ankitalamahavelo	8	135.00	(+)	38	1	0.51	0.000	0.03	0.10	0.539	0.000	6.70	7.51	29.6	29.7	0.3150	0.2680
30	Be'kiminy Soarano	46	12.00	(-)	244	135	0.15	0.000	0.15	0.12	0.707	0.000	7.40	7.71	28.7	23.3	0.8150	0.7530
31	Beleo	12	18.00	(+)	135	40	0.06	1.800	0.03	0.10	0.884	0.260	6.50	8.70	26.9	27.3	0.3440	0.3400
32	Anadabo	96	53.00	(-)	170	92.5	0.66	0.225	0.02	0.10	0.632	0.000	7.00	7.32	27.4	26.6	0.7400	0.7500
33	Misokotso	120	3.00	(-)	54	135	0.32	0.300	0.01	0.08	0.588	0.000	7.00	6.51	27.9	26.3	0.9050	0.9170
34	Croisement Besetroka	22	13.00	(-)	140	36	0.16	0.020	0.02	0.05	0.792	0.000	6.80	7.34	29.1	27.7	0.7940	0.7410
35	Amanaga	11	289.00	(-)	40	24	0.74	0.000	0.50	0.00	0.671	0.000	6.00	7.08	28.4	24.3	0.1061	0.1020
36	Namakia	6	18.00	(-)	162	80	0.24	0.675	0.03	0.21	0.543	0.000	7.50	7.74	26.9	22.3	0.6010	0.5880
37	Voloc	20	27.00	(-)	124	64	0.09	1.425	0.03	0.17	0.609	0.000	7.20	7.76	24.6	21.9	0.4660	0.4630
38	Benasy	34	11.00	(-)	136	100	0.17	0.650	0.01	0.17	0.673	0.000	7.50	7.77	23.1	21.8	0.5820	0.4630
39	Antsamaka	12	322.00	(-)	10	1	1.50	0.025	0.01	0.14	0.513	0.000	7.00	7.26	27.0	24.8	0.2390	0.1603
40	Mananentimay	32	12.00	(-)	122	49	0.20	1.000	0.02	0.17	0.656	0.000	7.00	7.43	26.6	21.9	0.6000	0.5960
41	Faraleny	384	17.00	(-)	206	500	0.21	1.100	0.02	0.26	0.777	1.075	7.20	7.78	25.5	21.7	3.6600	3.7100
43	Andranonjo	38	69.00	(-)	146	0	0.41	0.300	0.02	0.08	0.567	0.000	7.00	8.06	21.7	21.9	0.5880	0.5930

Results of Analysis of Water Quality (8/10)

No.	Village	Cl ⁻ mg/l	NO ₃ -CrO ₄ mg/l	E.Coli (+/-)	Co mg/l	SO ₄ ²⁻ mg/l	NH ₃ -N mg/l	F ⁻ mg/l	Cl ₂ mg/l	b ₅ mg/l	SiO ₂ mg/l	Zn mg/l	pH terrain	pH labo.	Temp. terrain °C	Temp. labo. °C	Conduct. terrain mS/cm	Conduct. labo. mS/cm
1-5	Ankifitolo	72	69.00 (-)		208	124	1.93	1.325	0.14	4.66	0.526	0.000	7.50	7.40	22.4	23.6	1.3600	1.3670
1-6	Marofititsa	770	9.00 (-)		184	248	1.45	0.425	0.03	0.09	0.646	0.010	7.00	7.69	28.6	23.4	4.0500	4.0200
1-7	Ambararalo	70	12.00 (-)		442	164	0.22	1.700	0.03	0.22	0.735	0.075	7.00	7.17	28.9	23.1	1.7400	1.7900
48	Ankevo	210	17.00 (-)		96	40	0.04	0.728	0.01	2.08	0.722	0.225	7.20	7.30	27.7	22.9	0.7980	0.6500
50	Bevantaza	28	22.00 (+)		295	35	0.17	0.000	0.01	0.00	0.543	0.020	7.00	7.92	26.3	23.4	0.8790	0.8480
52	Antsamirohako	176	18.00 (+)		260	120	0.43	0.000	0.00	0.34	0.693	0.000	8.00	7.85	28.6	29.5	1.7300	1.6780
53	Androvakely	36	13.00 (+)		190	28	0.50	0.000	0.01	0.37	0.900	0.000	7.00	7.83	29.1	28.8	0.8140	0.8040
55	Ampananiha	70	62.00 (-)		60	75	0.56	0.350	0.04	0.00	0.527	0.000	7.00	7.00	28.1	25.4	0.6840	0.6810
56	Antseranambondro	36	60.00 (-)		128	18	0.48	0.225	0.04	0.17	0.412	0.310	7.50	8.37	25.1	26.0	0.3880	0.3880
58	Bemananga	48	0.00 (+)		110	25	0.43	0.860	0.03	0.21	0.798	0.000	7.00	8.03	28.6	25.5	0.5910	0.6130
59	Marovoay	66	0.00 (+)		234	75	0.61	0.000	0.02	0.11	0.645	0.000	7.50	7.63	28.0	25.0	0.8750	0.8560
60	Tandrokasy	4	74.00 (-)		28	15	0.87	0.000	0.00	1.77	0.734	0.000	7.00	8.78	25.4	25.7	0.1287	0.1350
61	Bekonary	307	10.00 (+)		242	145	0.60	1.660	2.35	0.20	0.268	0.000	8.00	8.07	26.3	30.7	1.7580	1.7110
62	Bevolengo	9	60.00 (-)		26	7	1.28	0.200	0.20	0.63	0.315	0.000	6.50	7.28	32.5	30.5	0.1245	0.1290
64	Andranomena Atsimo	15	15.00 (-)		48	13	0.37	1.340	0.43	0.25	0.261	0.000	7.00	7.90	23.3	30.9	0.2640	0.2600
65	Tanandava	54	15.00 (-)		20	85	0.47	0.000	0.00	0.36	0.698	0.000	7.50	6.07	26.6	25.0	0.3750	0.3990
66	Croi. Belo Sur Tsiribihina	100	0.00 (+)		118	280	0.58	0.000	0.01	0.20	1.073	0.000	7.20	7.87	27.1	27.4	1.3770	1.3820
67	Analaiva	12	0.00 (+)		110	26	0.38	0.840	0.01	0.18	0.840	0.000	7.00	7.50	29.2	25.2	0.3950	0.3700
68	Betsipitika	70	0.00 (+)		174	58	0.43	0.700	0.02	0.18	0.905	0.000	7.00	8.10	26.9	25.6	0.3070	0.8870
69	Amboboondo	130	6.00 (-)		220	210	0.74	0.480	0.18	0.28	0.654	0.000	7.00	7.69	26.8	25.6	1.2090	1.2000

Results of Analysis of Water Quality (9/10)

No.	Village	Cl mg/l	Na ₂ CrO ₄ mg/l	E.Coli (+/-)	Ca mg/l	SO ₄ ²⁻ mg/l	NH ₃ -N mg/l	F mg/l	Cl ₂ mg/l	b ₅ mg/l	SiO ₂ mg/l	Zn mg/l	pH		Temp.		Conduct.	
													terrain	labo.	terrain	labo.	terrain	labo.
70	Ampondra	122	0.00 (+)	1/4	174	0.53	0.820	0.02	0.17	0.777	0.000	7.20	8.10	26.5	25.4	1.0920	1.0960	
72	Antevamena II	16	0.00 (+)	52	20	0.41	0.380	0.19	0.10	0.748	0.000	7.00	7.62	29.9	25.3	0.3400	0.3270	
73	Beoboka	102	5.00 (-)	124	100	0.36	0.000	0.02	0.14	0.653	0.000	6.50	7.53	26.7	25.0	0.3300	0.8780	
74	Tsinjorano	52	0.00 (+)	19.2	60	0.47	0.360	0.01	0.18	0.875	0.000	7.00	8.35	28.4	25.9	0.7880	0.7760	
76	Lajoby	4	28.00 (-)	230	4	0.84	0.220	0.44	0.10	0.612	0.000	7.00	7.42	27.6	24.2	0.6690	0.6200	
79	Ambonia	62	45.00 (+)	212	57	0.57	0.000	0.00	0.45	0.949	0.000	7.30	7.64	27.3	29.3	0.9790	0.9450	
80	Analoava	16	944.00 (-)	140	230	10.00	0.000	1.13	0.00	0.234	0.000	6.40	7.70	28.1	24.1	0.3910	0.3900	
81	Malandirano	22	25.00 (+)	105	85	0.18	0.320	0.00	0.04	0.805	0.000	7.00	7.54	28.0	27.8	0.4280	0.4040	
82	Marofandilia	72	0.60 (-)	64	17	0.30	0.700	0.03	0.26	0.712	0.000	7.00	6.50	28.0	24.9	0.5200	0.4400	
83	Ampetaka	11	27.00 (-)	10	7	0.79	1.640	0.10	0.39	0.375	0.000	5.80	6.39	26.4	24.4	0.0786	0.0700	
89	Ankaraobato	237	0.00 (+)	126	26	0.51	0.640	0.03	0.11	0.876	0.000	6.50	6.20	28.0	28.0	1.0760	1.0380	
92	Betsirry	55	1.00 (-)	48	0	0.33	1.320	0.07	0.08	0.555	0.290	6.00	6.89	24.1	24.4	0.3570	0.3460	
93	Beroboka Atsimo	16	36.00 (+)	90	7	0.30	0.000	0.06	0.14	0.876	0.720	7.00	7.26	24.5	24.2	0.3880	0.3830	
94	Ankilivato	24	0.00 (-)	95	44	0.42	0.420	0.06	0.13	0.785	4.480	7.00	7.49	27.0	26.3	0.4210	0.3550	
95	Ambositary	18	25.00 (+)	72	20	0.48	0.560	0.58	0.39	0.770	1.880	7.00	7.00	25.8	26.3	0.1782	0.1720	
95	Bevoay	112	12.00 (+)	160	320	0.36	0.780	0.03	0.18	0.727	0.000	7.00	6.14	24.1	23.9	1.3060	1.2960	
97	Bezizika (Dug well)	50	0.30 (-)	64	33	0.38	0.540	0.07	0.10	0.770	0.480	6.50	5.97	29.5	27.4	0.5690	0.5100	
97	Bezizika (Spring)	10	0.10 (-)	26	16	0.43	0.500	0.10	0.06	0.755	0.000	6.50	5.84	28.2	27.2	0.2190	0.2100	
98	Anjamahitsy	8	68.00 (+)	28	18	0.61	0.480	0.01	0.83	0.669	0.000	6.50	8.10	24.1	25.1	0.1256	0.1200	
99	Ankilimida	10	0.00 (+)	38	40	0.35	0.800	0.02	0.23	0.732	0.240	6.00	7.40	26.5	26.4	0.0775	0.0233	



