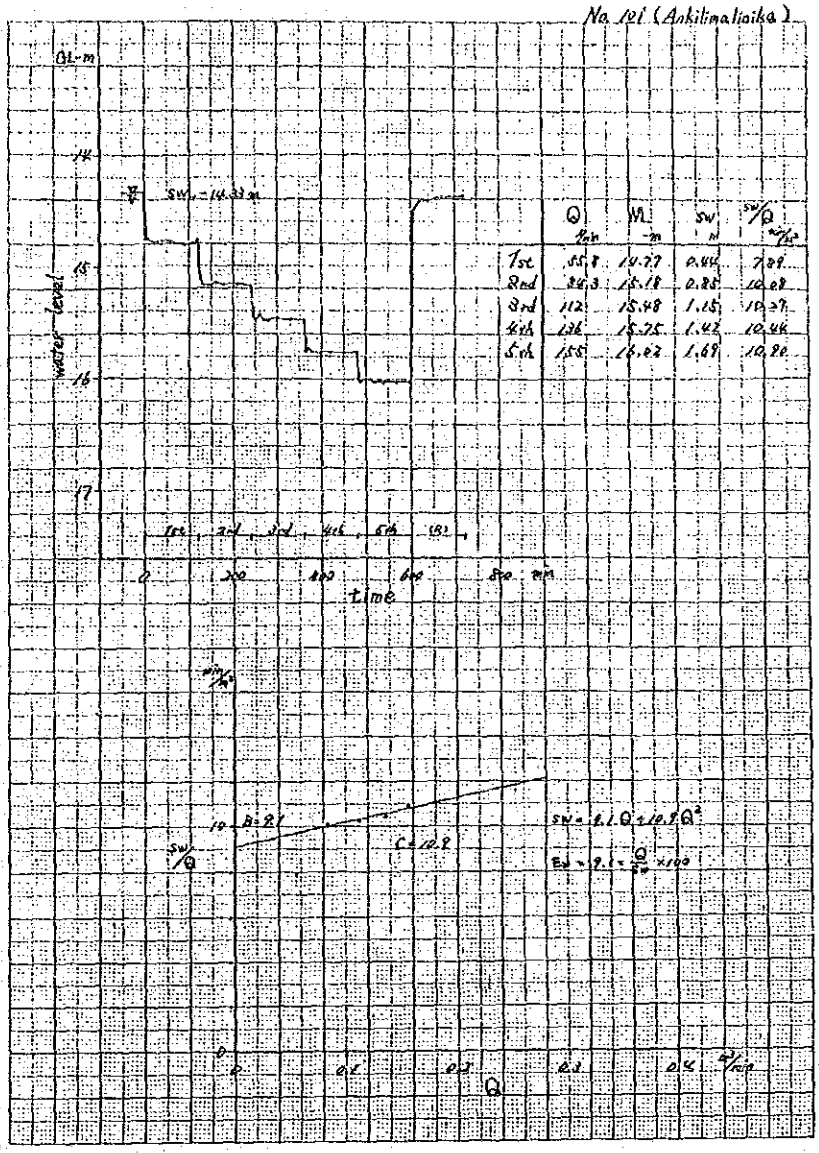
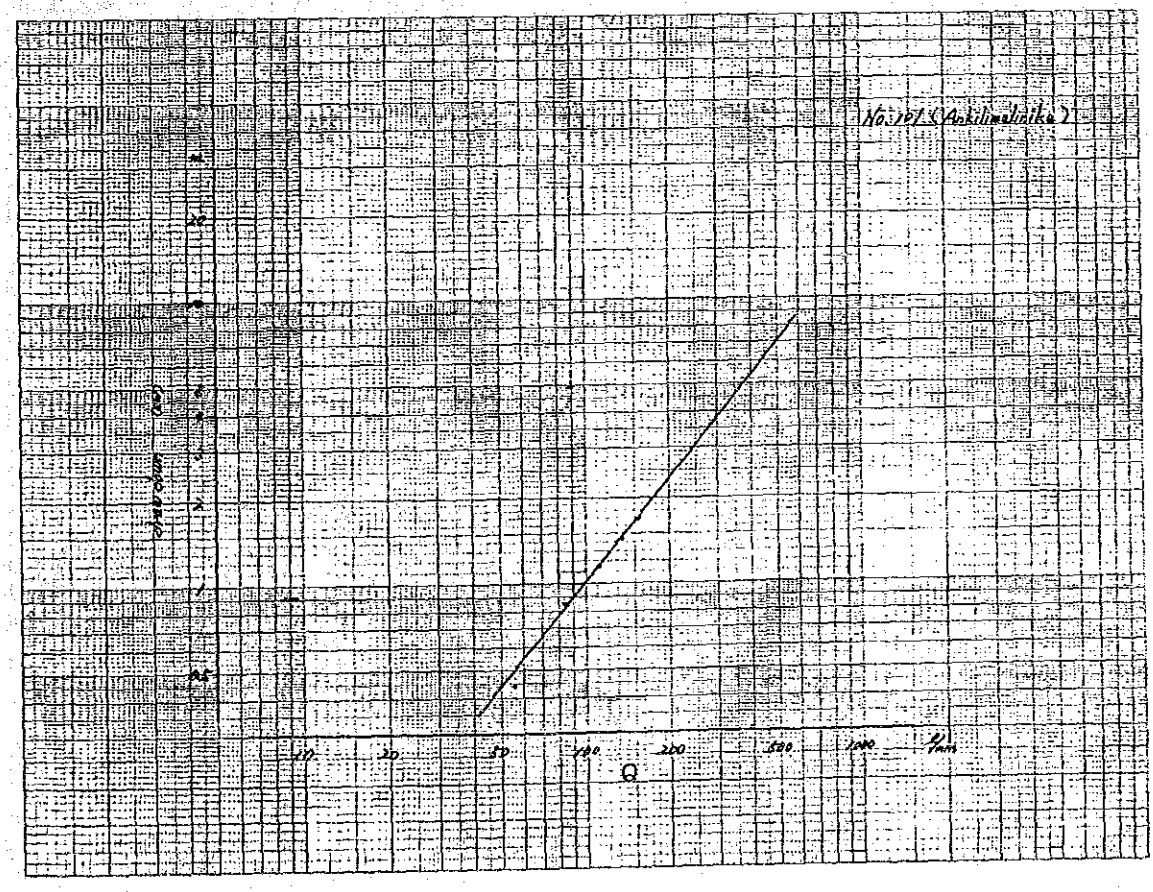
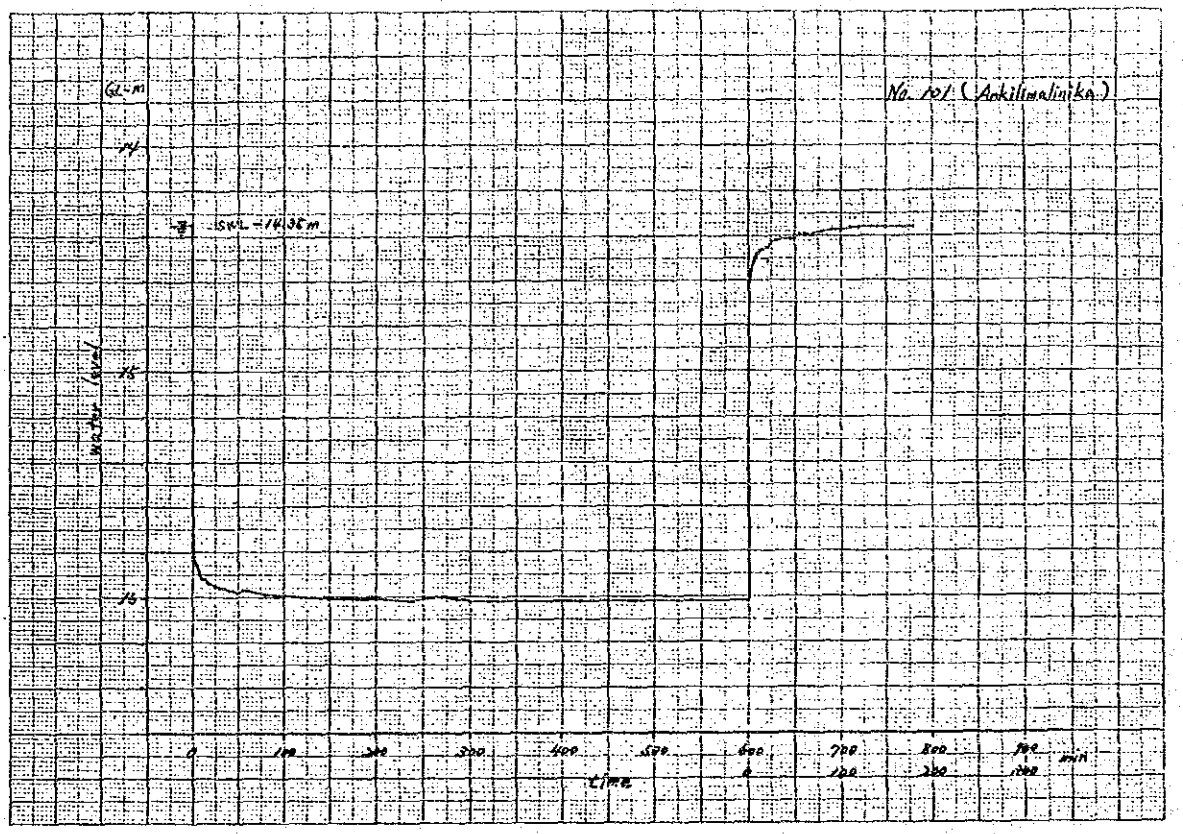
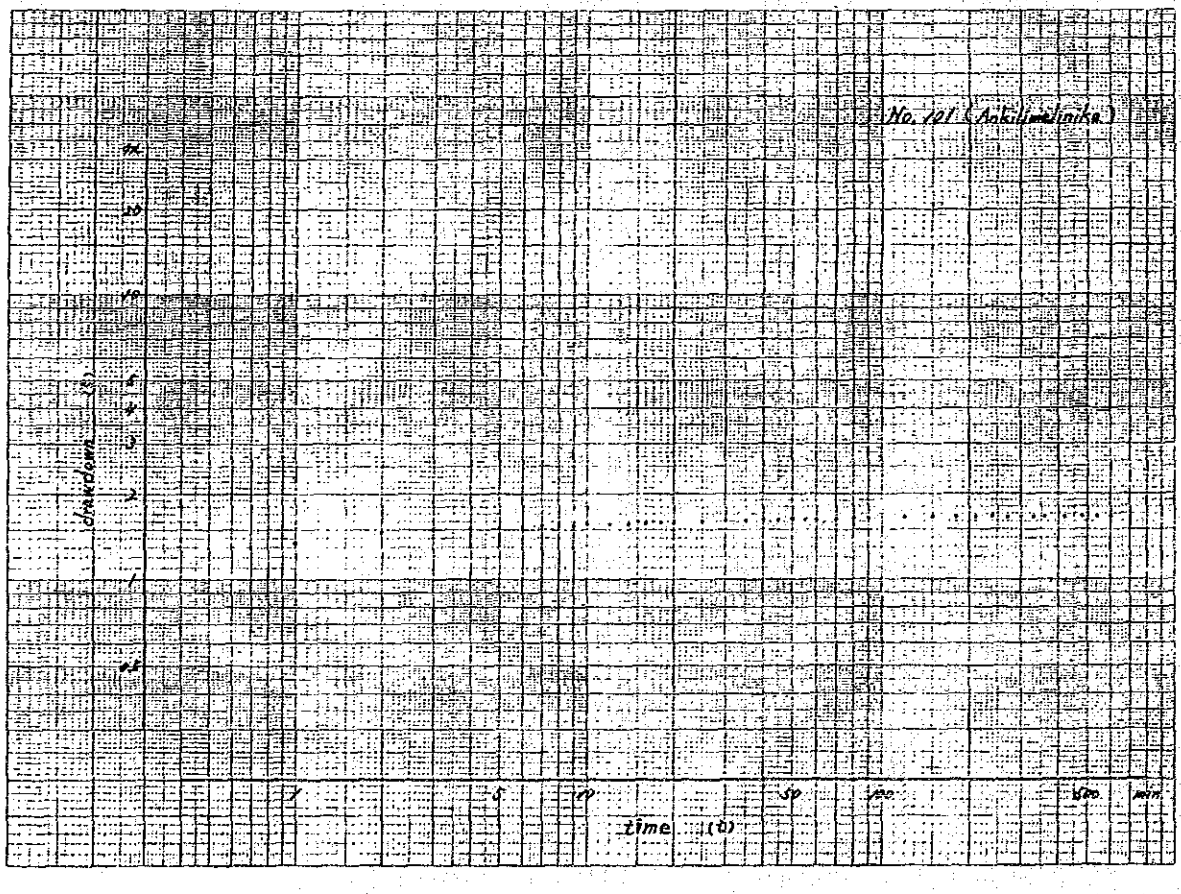
No. 101 Ankilimalinika

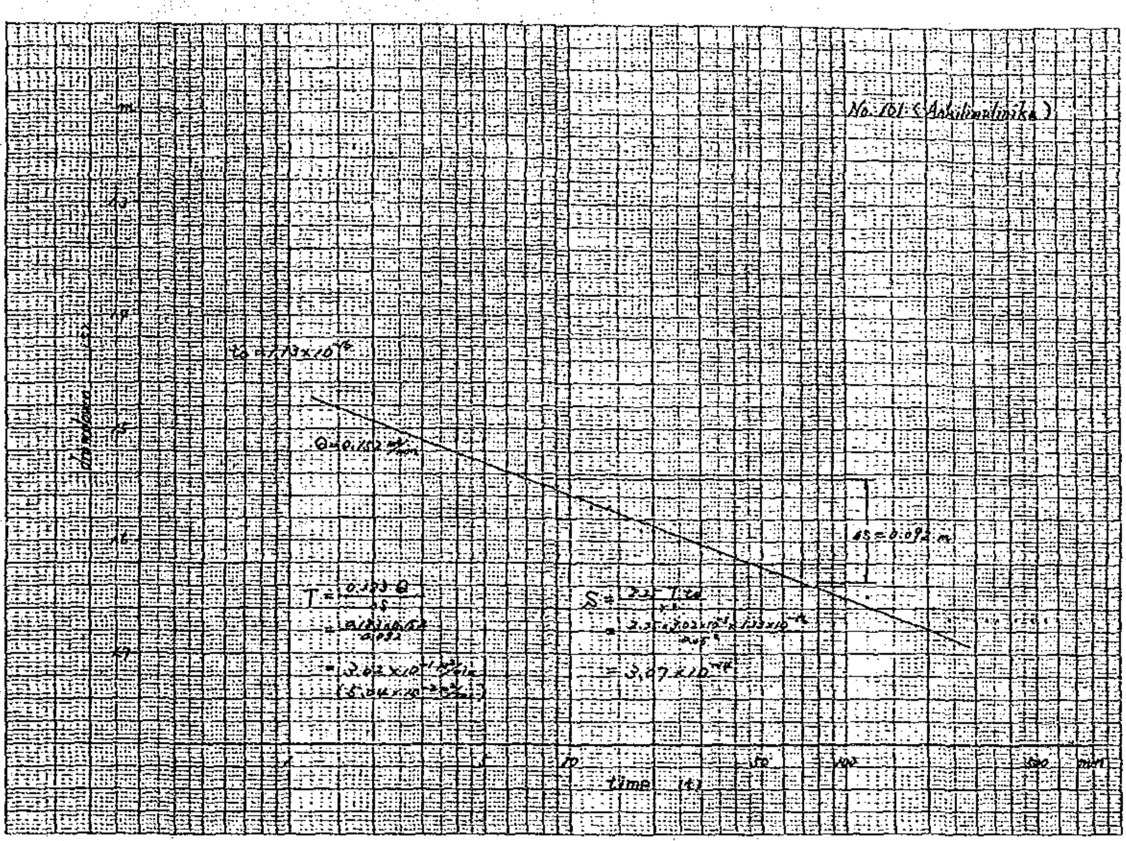


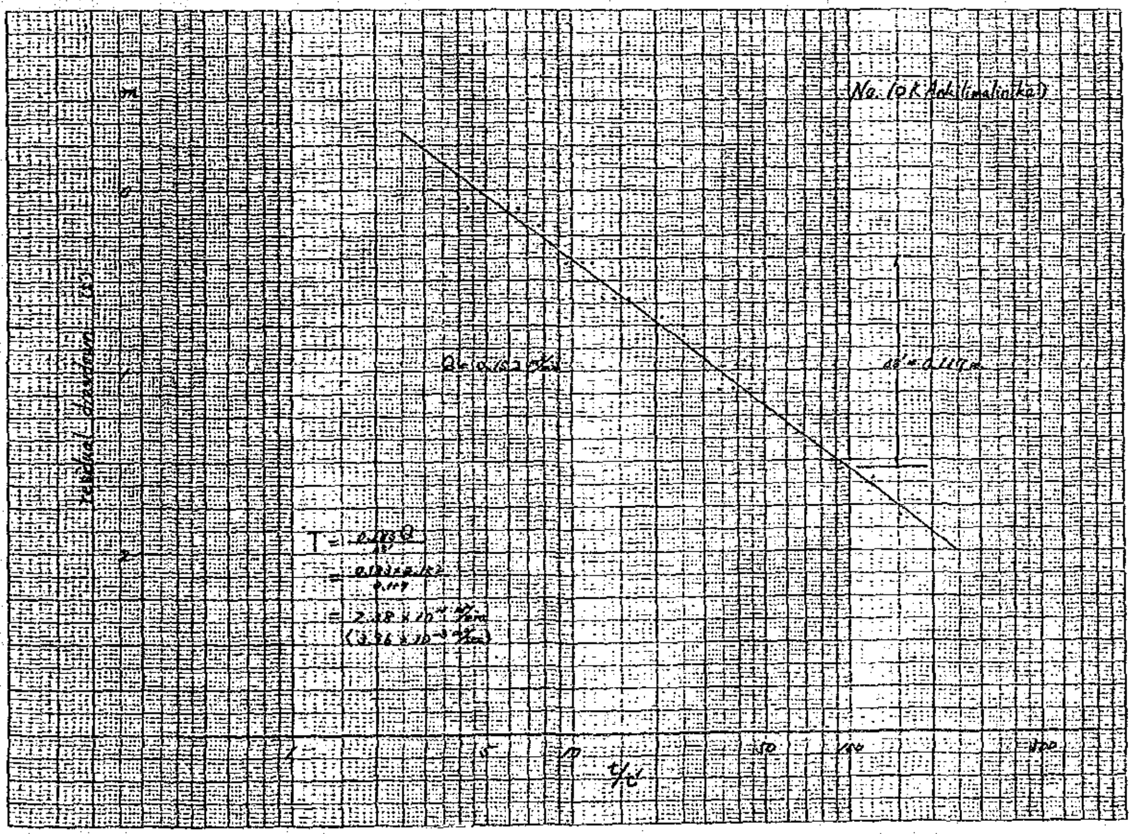
	Q l/min	WL m	SW m	SW/Q m/l/s
1st	55.8	14.77	0.44	7.89
2nd	84.3	15.18	0.85	10.08
3rd	112	15.48	1.15	10.27
4th	136	15.75	1.42	10.44
5th	155	16.02	1.69	10.90



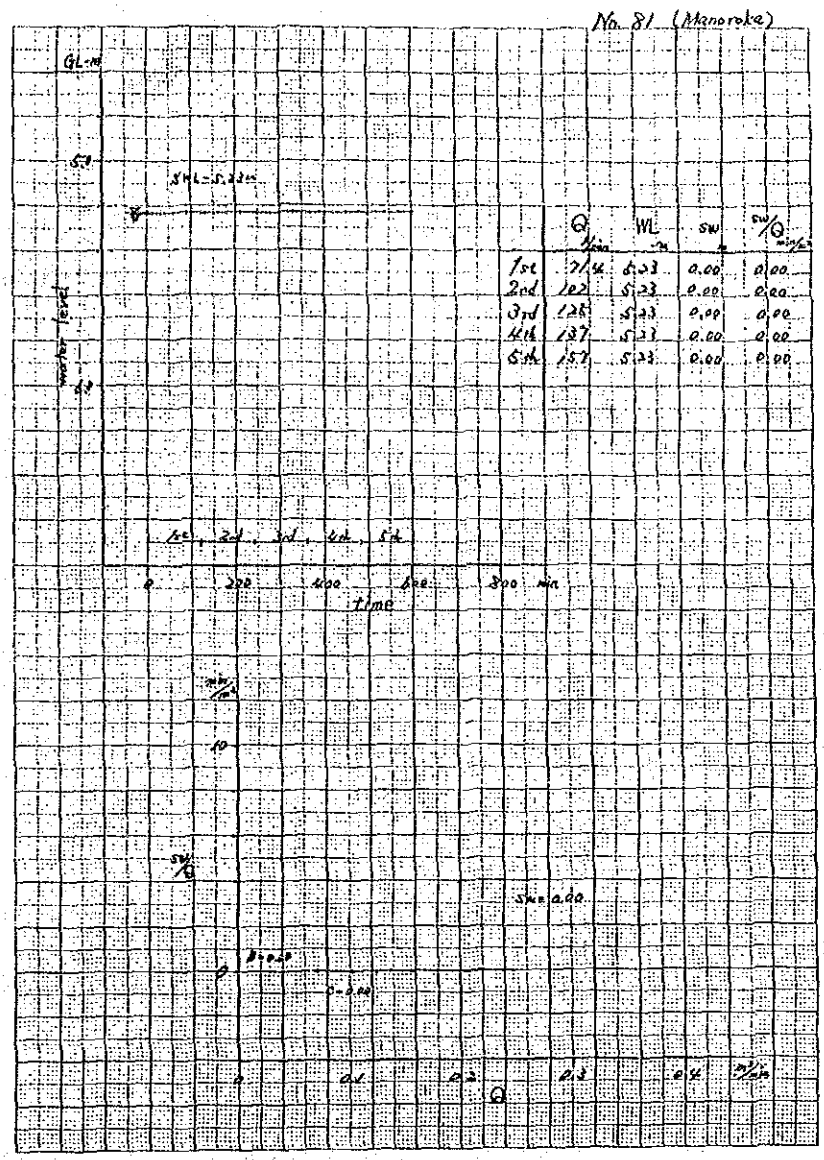

No. 101 (Ankilmalinka)
GL-m
SWL -14.38 m
water level
time
min

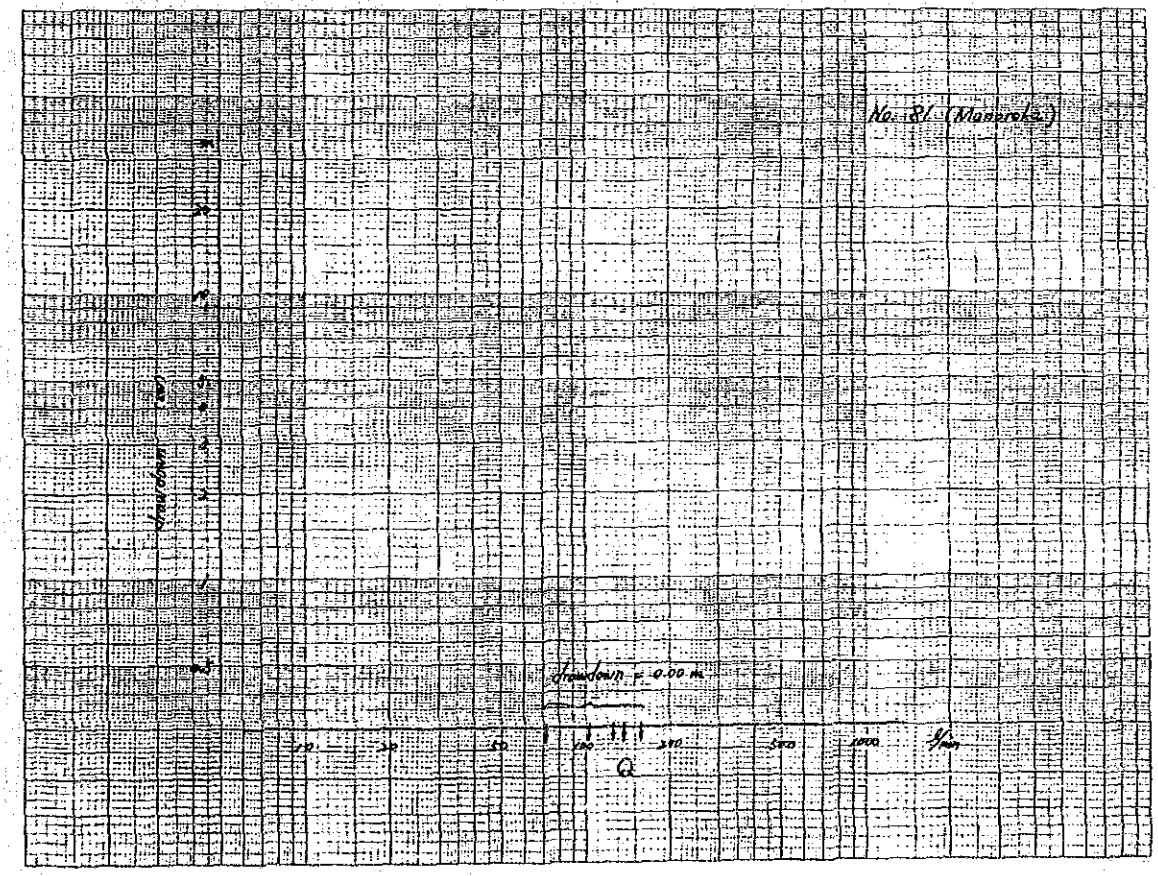

No. 101 (Ankilmalinka)
drawdown (s)
time (t)
min

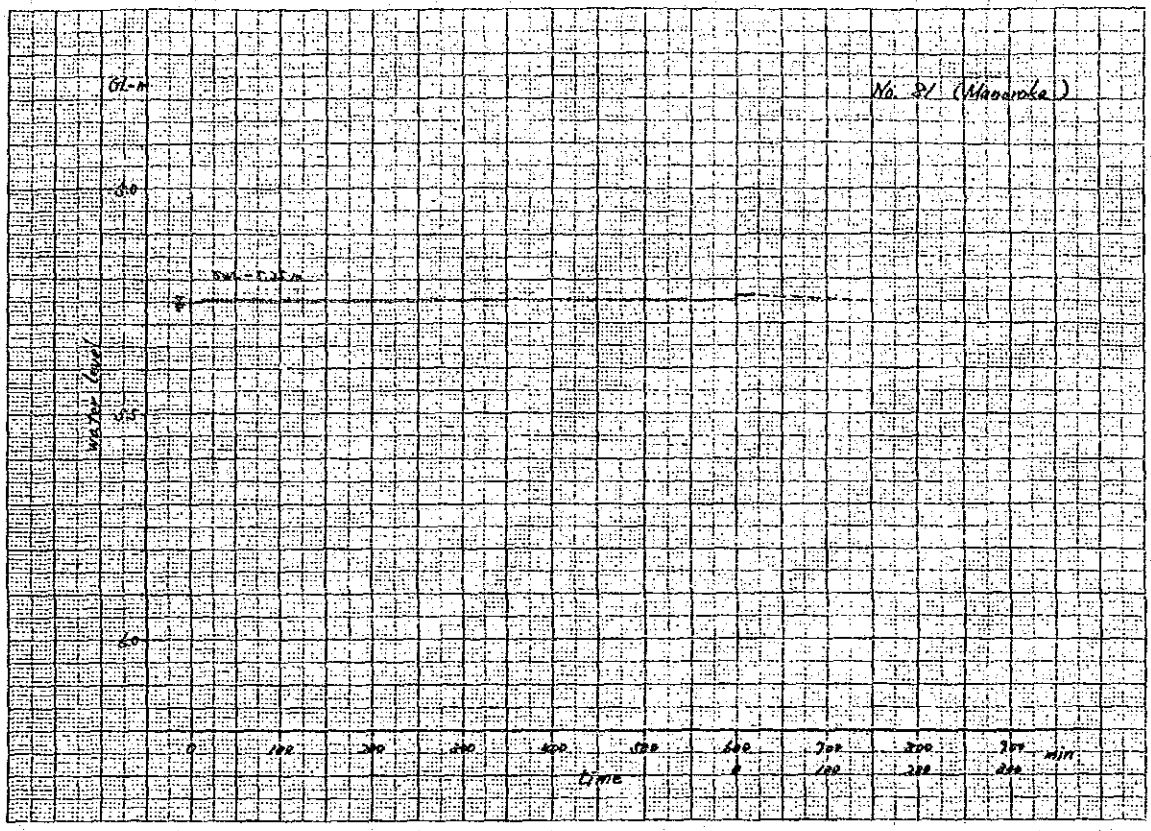

No. 101 (Aakilimalinika)
time (t)
min
1
5
10
50
100
500
Q=0.152 m³/min
T = 0.183 Q / Δs
S = 2.25 T t₀ / r²

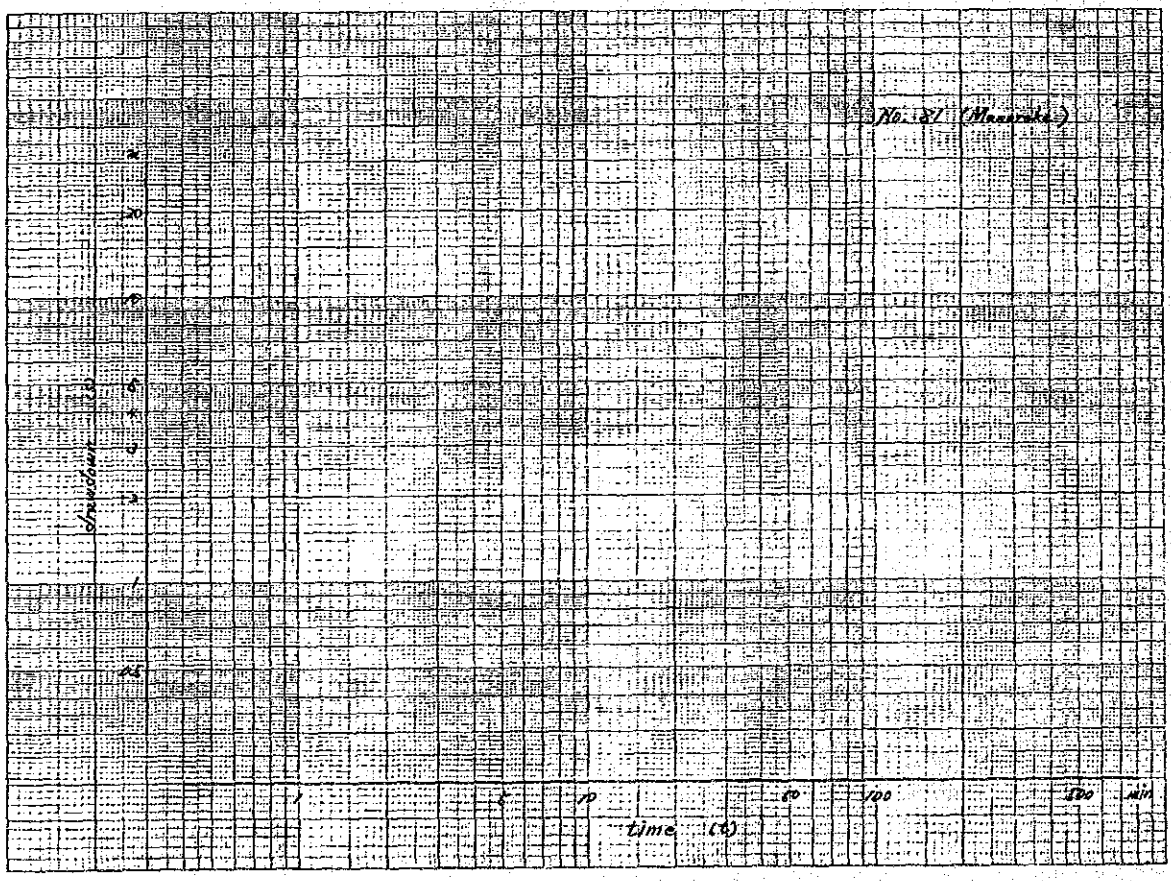

No. 101 (Aakilimalinika)
residual drawdown (s')
t/t'
1
5
10
50
100
500
Q=0.152 m³/min
T = 0.183 Q / Δs'

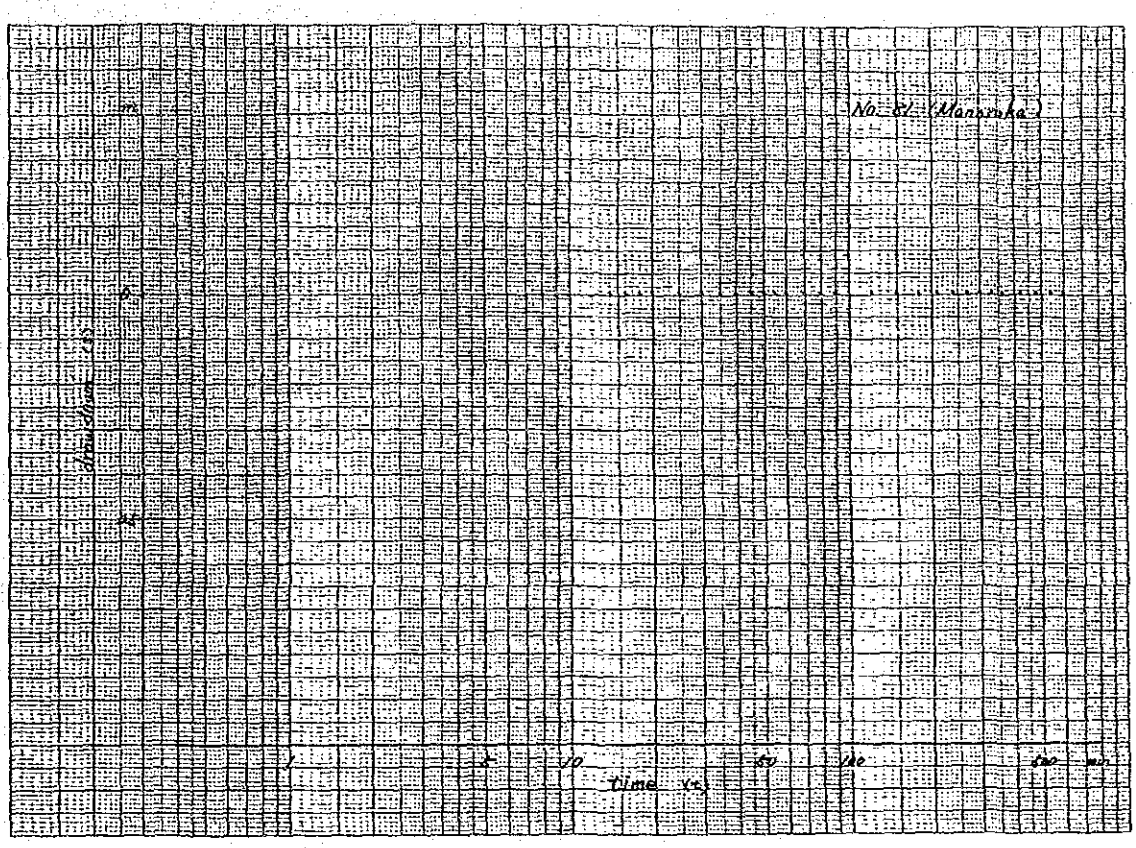
No. 81 Manoroka

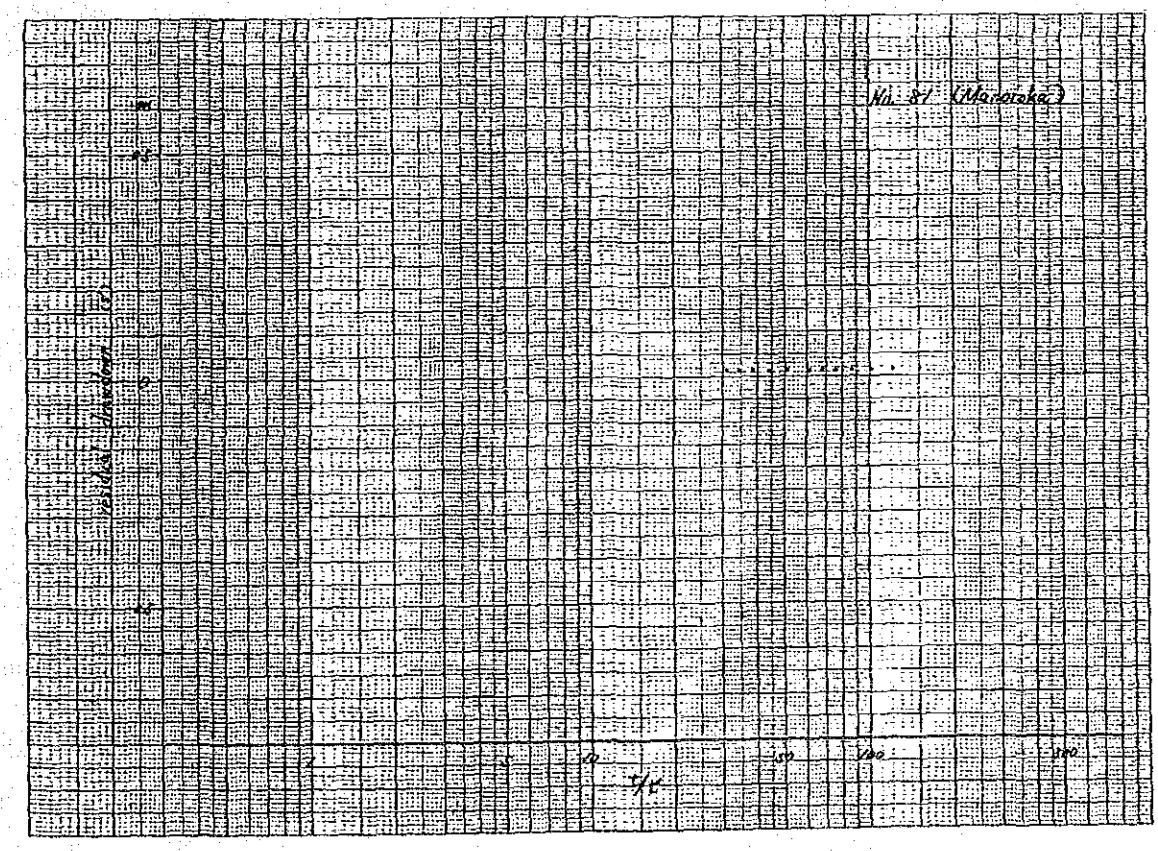

No. 81 (Manoroka)
GL-m
SWL=5.23m
water level
1st 2nd 3rd 4th 5th
0 200 400 600 800 min
time
SW/Q
Sw=0.00
Q
Q WL SW SW/Q
1st 2/4 5.23 0.00 0.00
2nd 1e2 5.23 0.00 0.00
3rd 126 5.23 0.00 0.00
4th 137 5.23 0.00 0.00
5th 157 5.23 0.00 0.00


No. 81 (Manoroka)
drawdown
drawdown = 0.00 m
Q

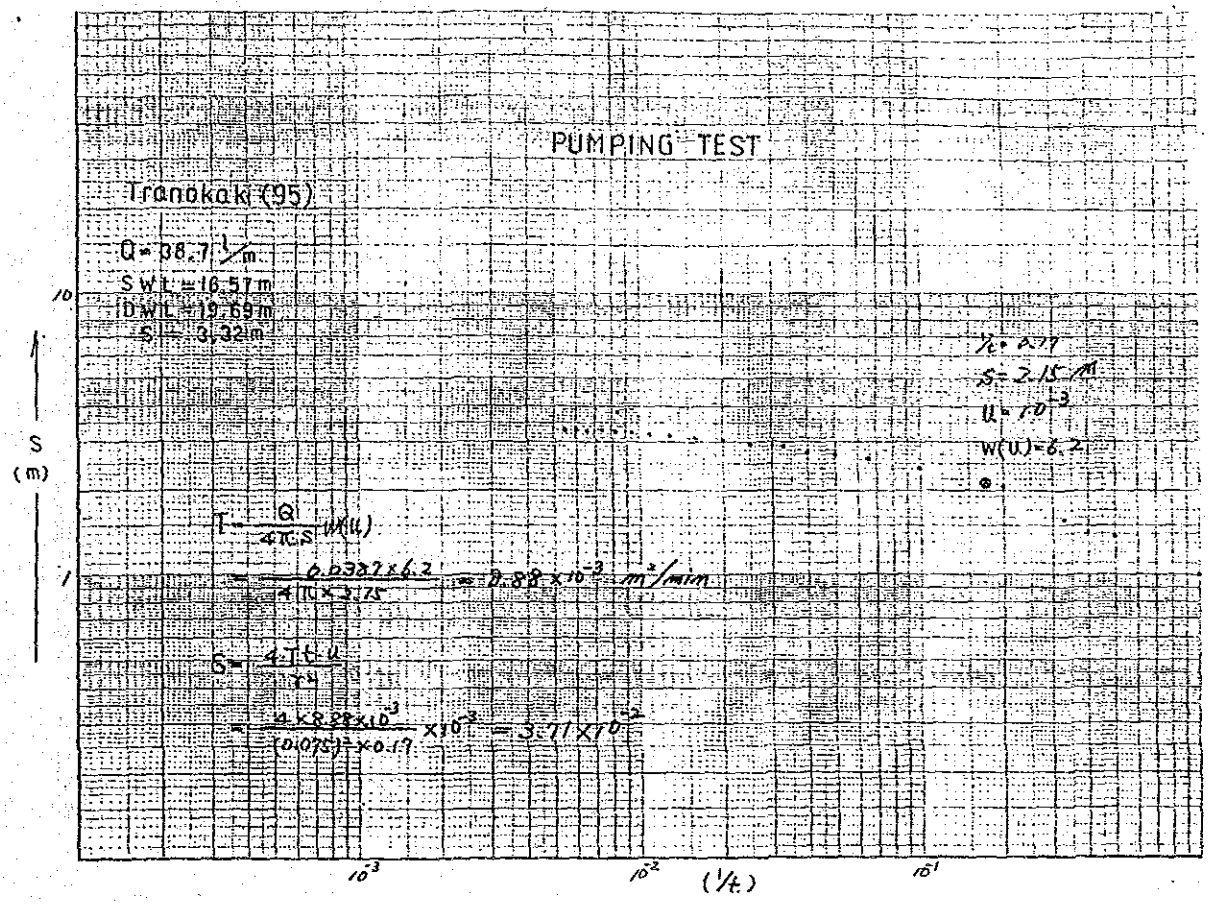

No. 21 (Masuoka)
GL-m
Water Level
Time
min

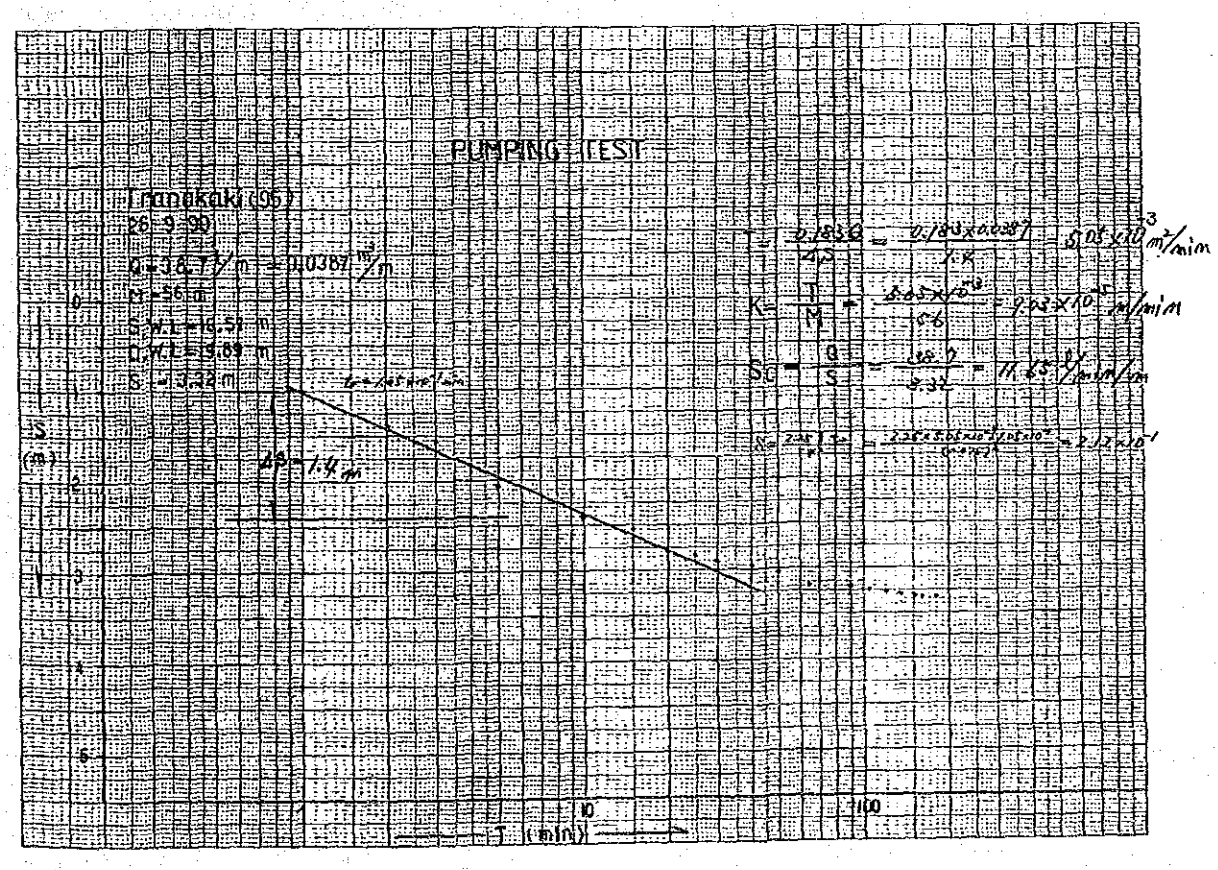

No. 21 (Masuoka)
Drawdown
time (t)
min

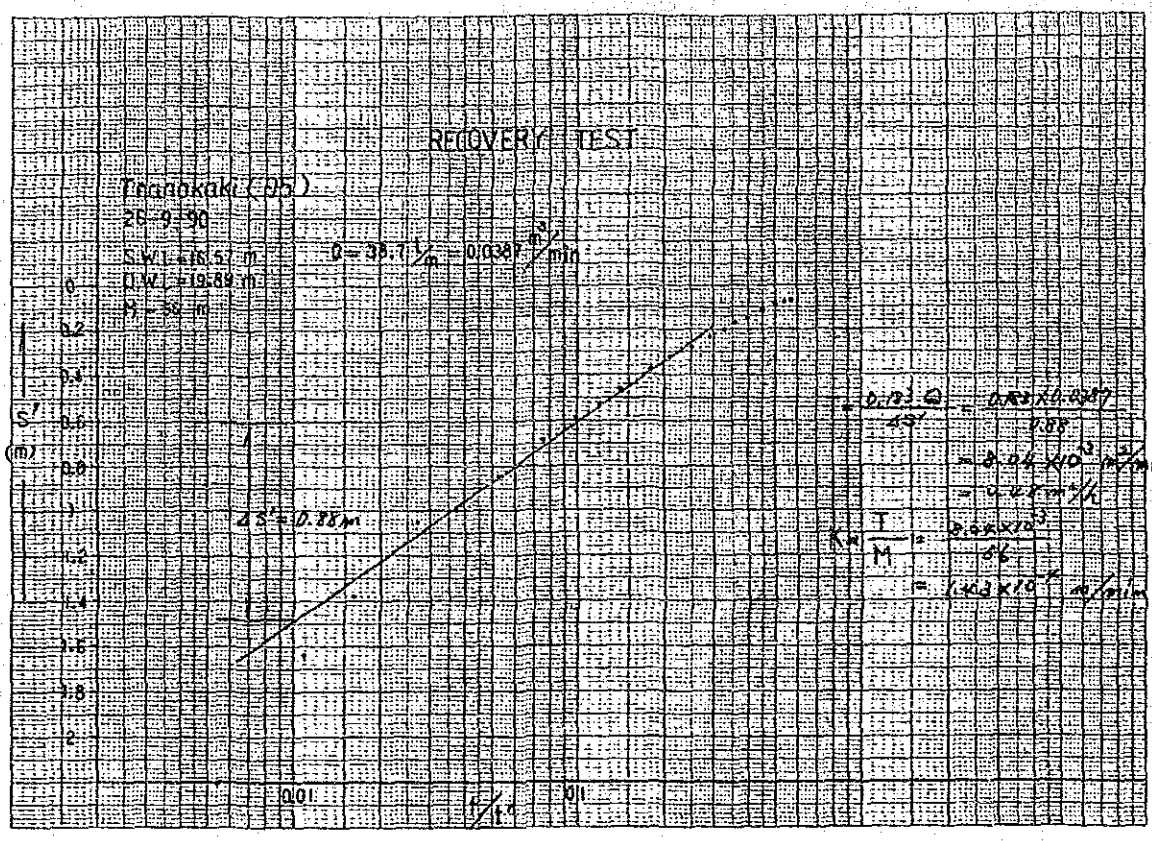

No. 82 (Manroka)
Time (s)


No. 81 (Manroka)

No. 95 Tranokaky


PUMPING TEST
Tranokaki (95)
Q = 38.7 l/m
SWL = 16.57m
DWL = 19.69m
S = 3.32m
S (m)
1/t = 0.17
S = 2.15 /M
u = 1.0^-3
W(u) = 6.2
T = Q/4πS W(u)
= 0.0387×6.2 / 4×π×3.75 = 2.88×10^-3 m²/min
S = 4Tt/r² u
= 4×2.88×10^-3 / (0.075)²×0.17 ×10^-3 = 3.71×10^-2
10^-3
10^-2
(1/t)
10^-1


PUMPING TEST
Tranokaki (96)
26-9-96
Q = 38.7 l/m = 0.0387 m³/m
r = 56 m
S.W.L = 16.57 m
D.W.L = 19.89 m
S = 3.32 m
S (m)
Δs = 1.4 m
T (min)
10
100
T = 0.183Q/Δs = 0.183×0.0387 / 1.4 = 5.05×10^-3 m²/min
K = T/M = 5.05×10^-3 / 0.6 = 9.42×10^-5 m/min
Sc = Q/S = 38.7 / 3.32 = 11.65 l/m/m/m
N = 2.25Tt/r² = 2.25×5.05×10^-3×1.0×10^-3 / (0.056)² = 3.62×10^-4



$$T = \frac{0.183\,Q}{\Delta s'} = \frac{0.183 \times 0.0387}{0.88} = 8.04 \times 10^{-3}\ m^2/min = 0.134\ m^2/h$$

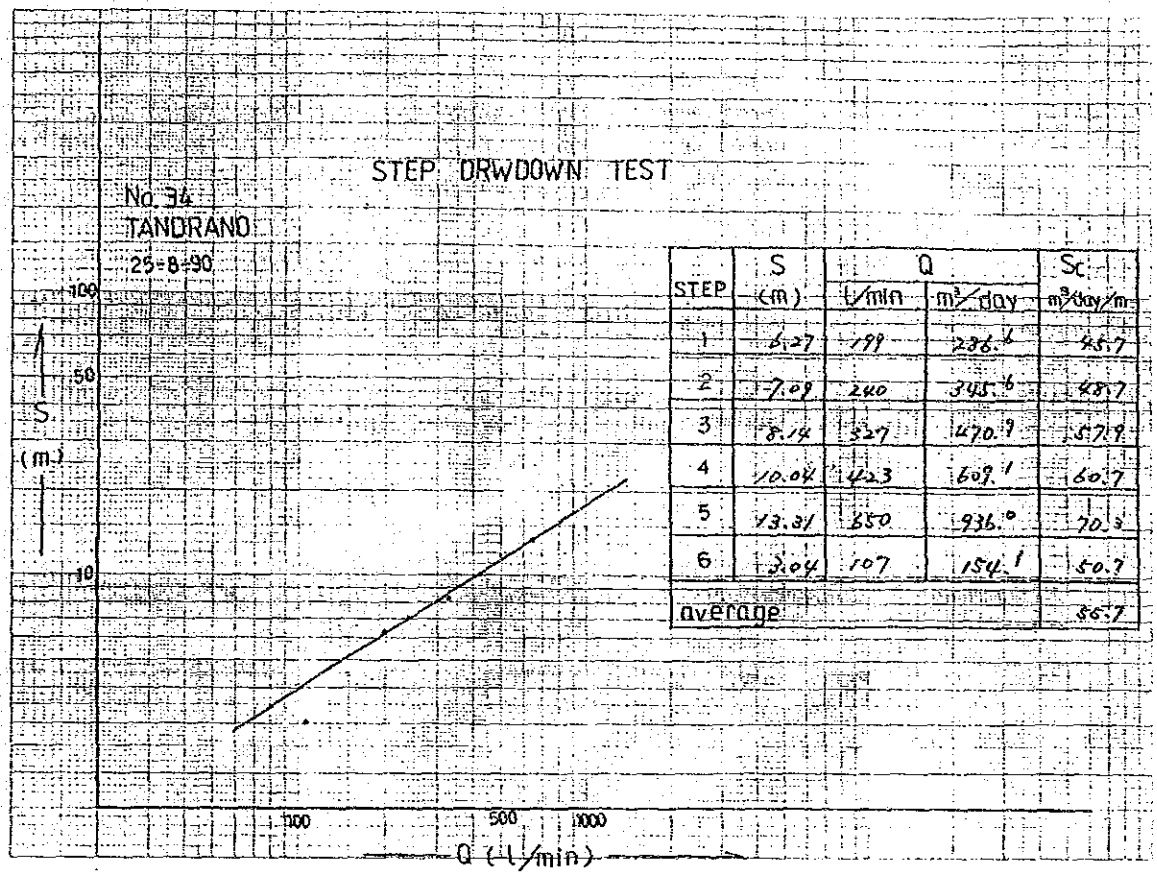
$$K_H = \frac{T}{M} = \frac{8.04 \times 10^{-3}}{5} = 1.61 \times 10^{-3}\ m/min$$

No. 34 Tandrano

STEP DRWDOWN TEST

No. 34
TANDRANO
25÷8÷90

STEP	S (m)	Q l/min	Q m³/day	Sc m³/day/m
1	6.27	199	286.6	45.7
2	7.09	240	345.6	48.7
3	8.14	327	470.9	57.9
4	10.04	423	609.1	60.7
5	13.31	650	936.0	70.3
6	3.04	107	154.1	50.7
average				56.7



PUMPING TEST

Tandrano (34)
Q = 300 l/m
SWL = 32.72 m
DWL = 39.92 m
S = 7.2 m

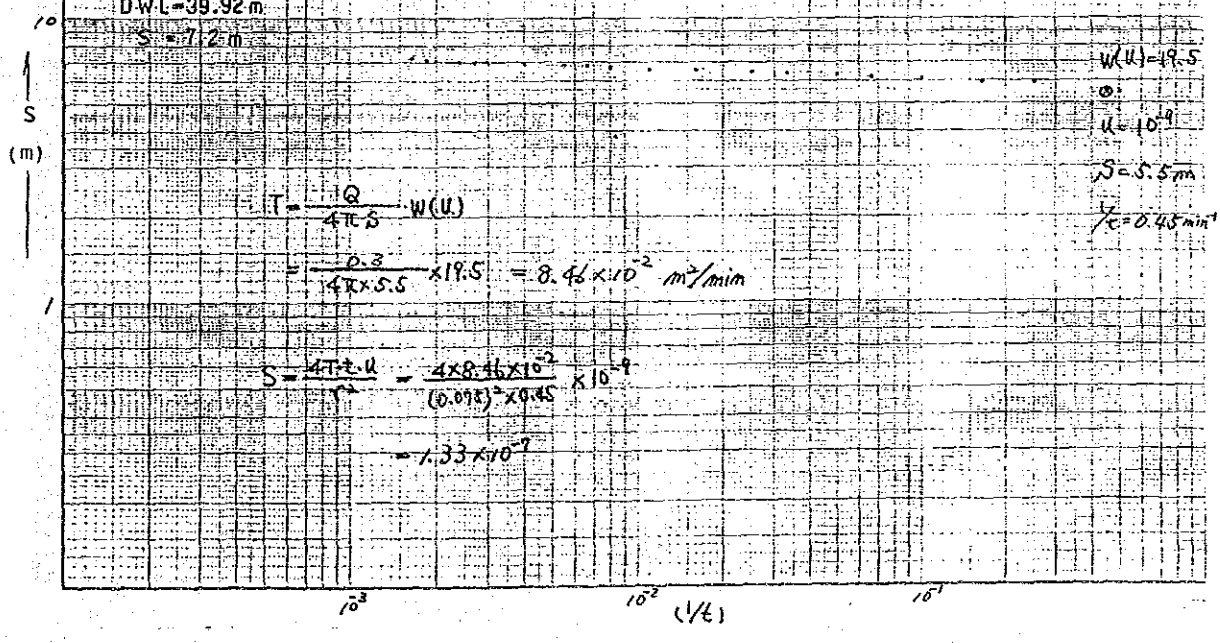
$$T = \frac{Q}{4\pi S} W(u)$$

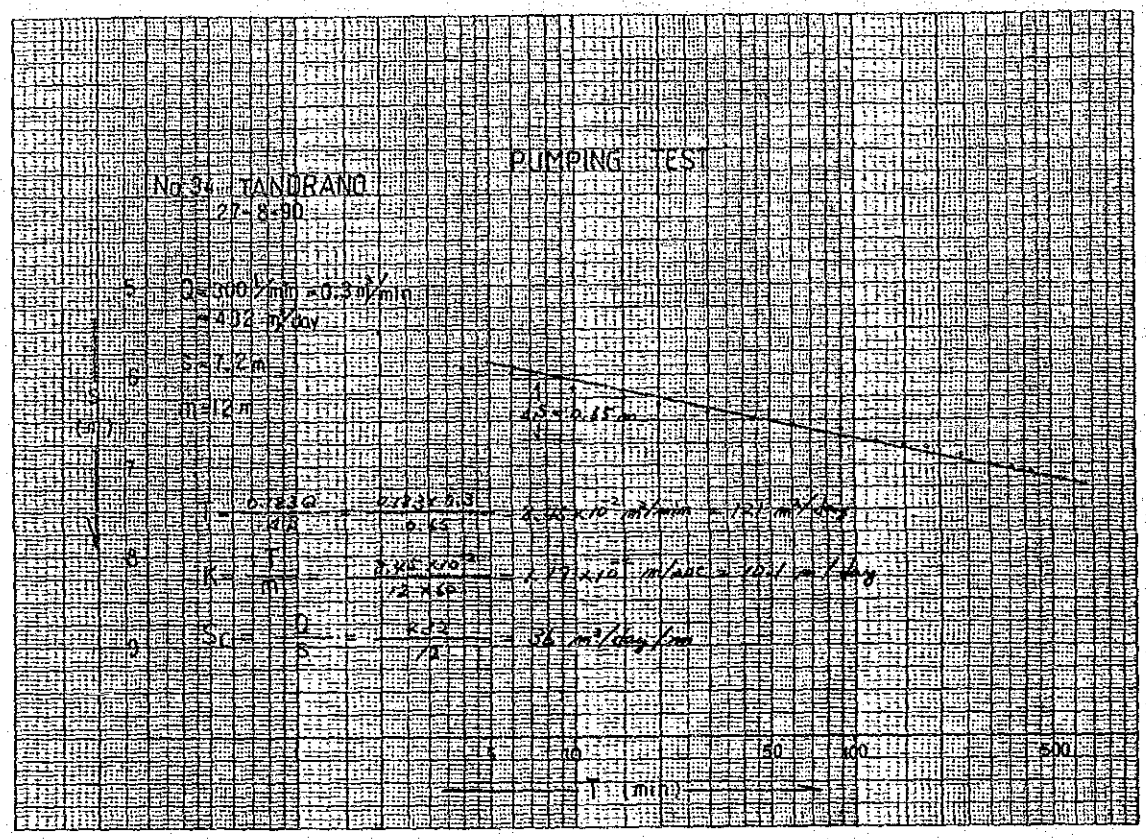
$$= \frac{0.3}{4\pi \times 5.5} \times 19.5 = 8.46 \times 10^{-2}\ m^2/min$$

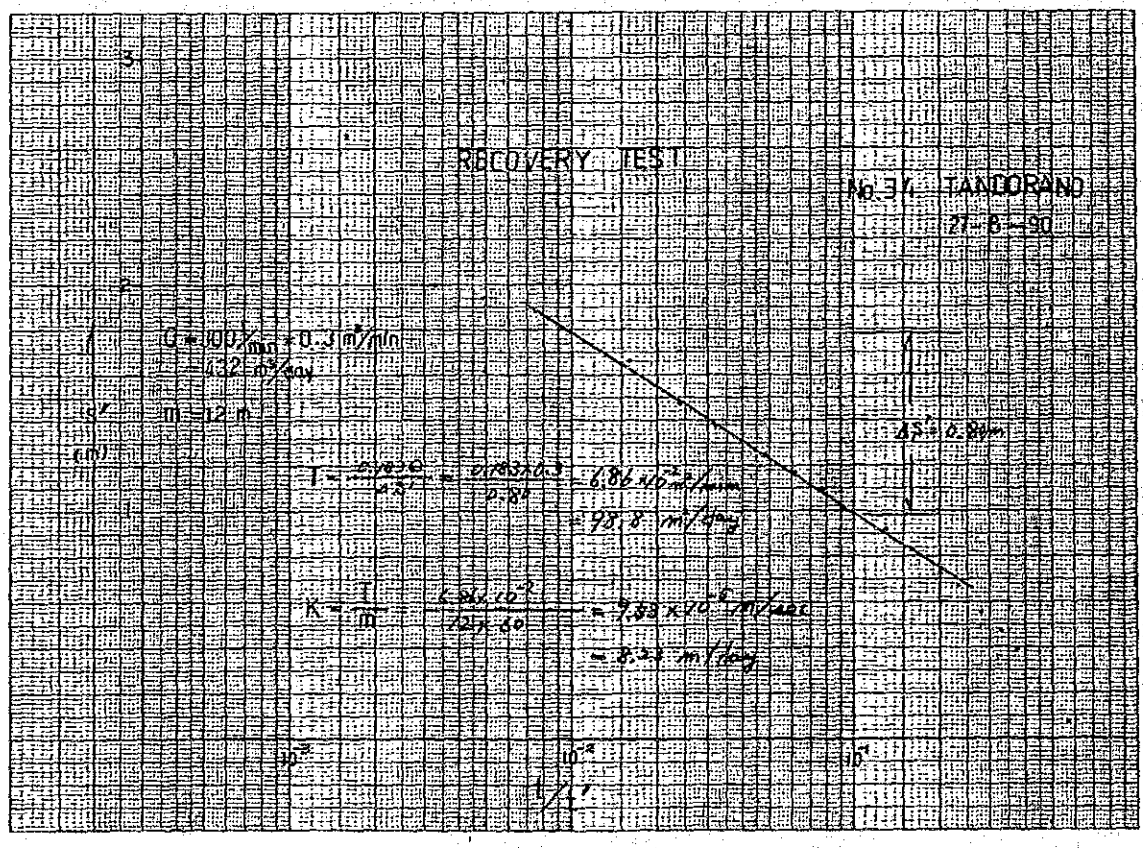
$$S = \frac{4Tt \cdot u}{r^2} = \frac{4 \times 8.46 \times 10^{-2}}{(0.098)^2 \times 0.45} \times 10^{-9}$$

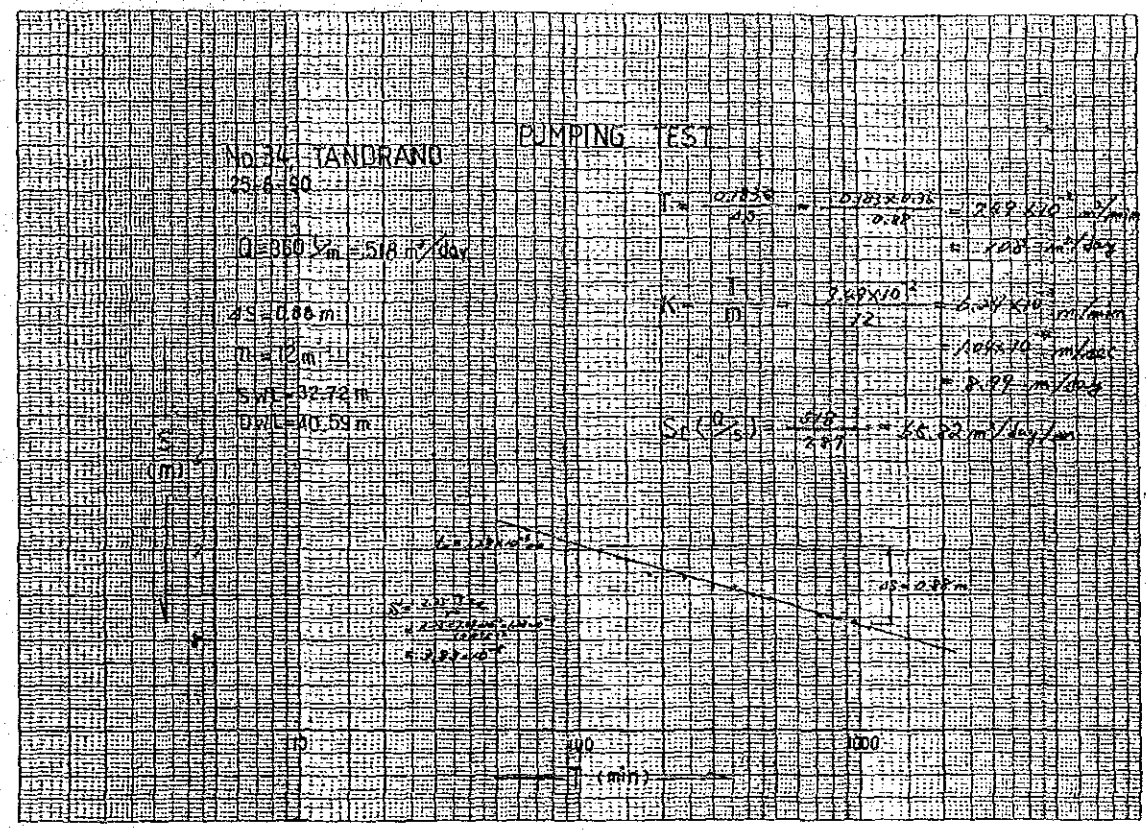
$$= 1.33 \times 10^{-7}$$

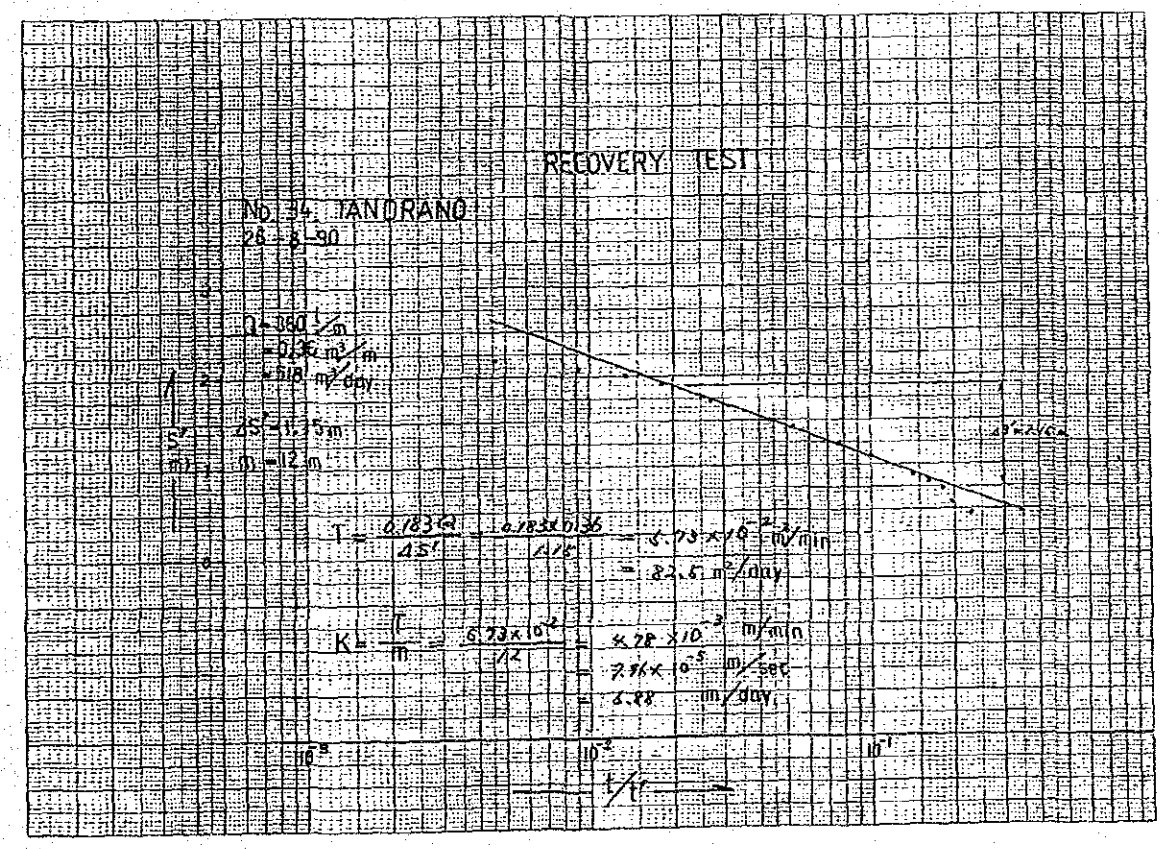
W(u) = 19.5
u = 10^{-9}
S = 5.5 m
t/r² = 0.45 min⁻¹



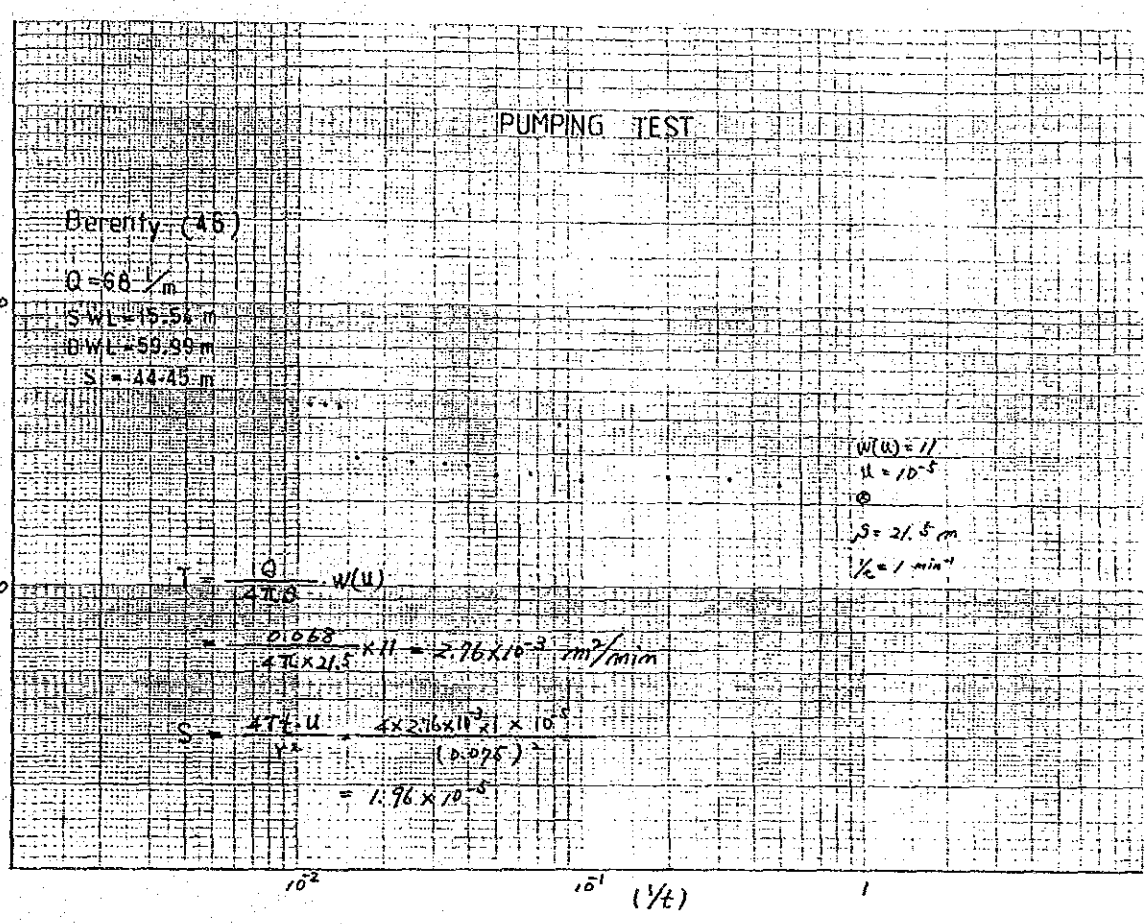

PUMPING TEST
No 34 TANDRANO
27-8-90
Q=300 l/mn =0.3 m³/mn
=432 m³/day
Sc=1.2m
m=12m
Δs=0.15m
T=0.183Q/Δs = 0.183×0.3/0.15 = 3.66×10⁻² m²/mn = 52.7 m²/day
K=T/m = 3.66×10⁻²/12 = 3.05×10⁻³ m/sec = 263 m/day
Sc=Q/s = 432/12 = 36 m³/day/m
T (mn)

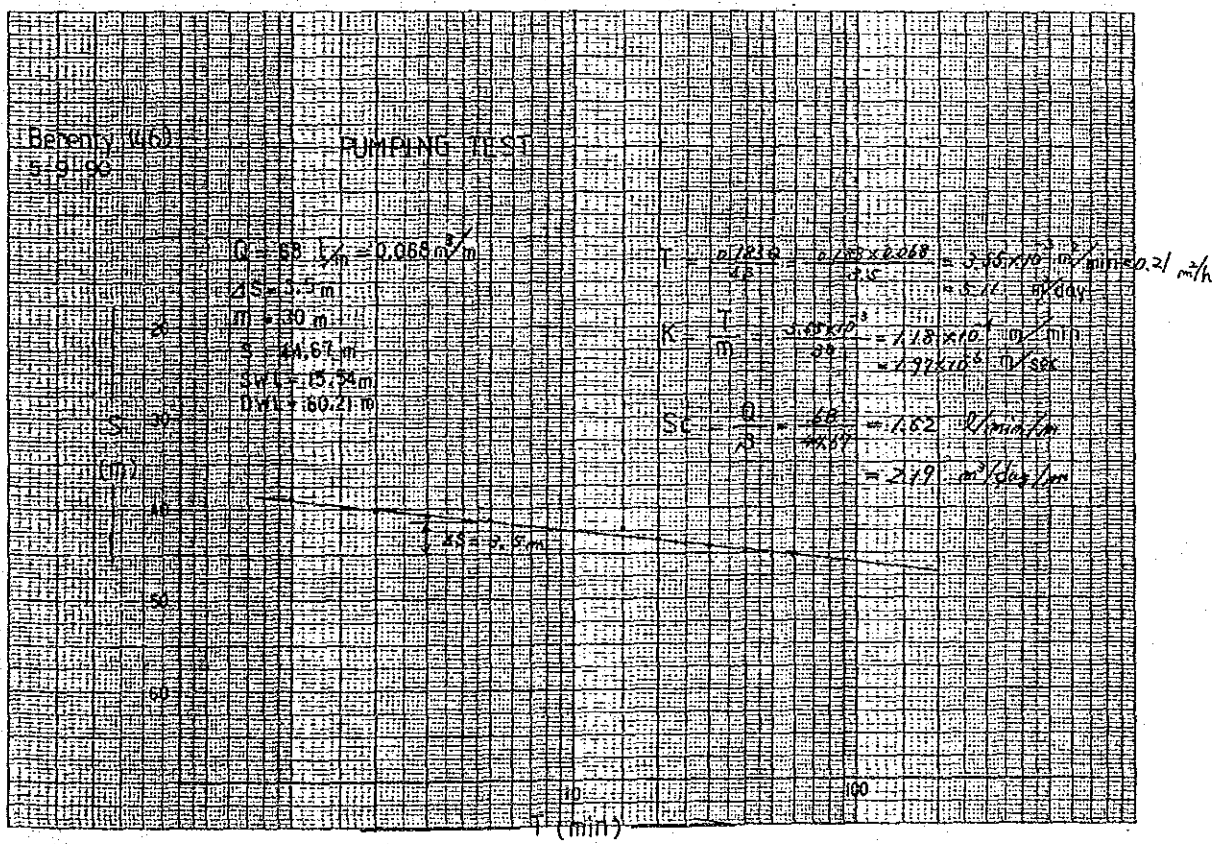

RECOVERY TEST
No 34 TANDRANO
27-8-90
Q=300 l/mn =0.3 m³/mn
=432 m³/day
m=12 m
Δs=0.8m
T=0.183Q/Δs = 0.183×0.3/0.8 = 6.86×10⁻² m²/mn
=98.8 m²/day
K=T/m = 6.86×10⁻²/12×60 = 9.53×10⁻⁵ m/sec
=8.23 m/day
t/t'


PUMPING TEST
No.34. TANDRANO
25-6-90
Q=860 l/m = 518 m³/day
ΔS=0.86 m
m=12 m
S.W.L=32.72 m
D.W.L=40.59 m
S (m)
t (min)
10
100
1000


RECOVERY TEST
No. 34. TANDRANO
28-6-90
Q=860 l/m
=0.86 m³/m
=518 m³/day
ΔS=11.5 m
m=12 m
S (m)
t/t'
10⁻²
10⁻¹

No. 46 Berenty-Betsileo


PUMPING TEST
Berenty (46)
Q = 68 l/m
S.W.L = 15.54 m
D.W.L = 59.99 m
S = 44.45 m
100
10
S (m)
$T = \frac{Q}{4\pi s} \cdot W(u)$
$= \frac{0.068}{4\pi \times 21.5} \times 11 = 2.76 \times 10^{-3}$ m²/min
$S = \frac{4Tt.u}{r^2} = \frac{4 \times 2.76 \times 10^{-3} \times 21 \times 10^{-5}}{(0.075)^2}$
$= 1.96 \times 10^{-5}$
W(u) = 11
u = 10^{-5}
@
s = 21.5 cm
1/t = 1 min⁻¹
10^{-2}
10^{-1}
(1/t)
1


Berenty (46)
PUMPING TEST
Q = 68 l/m = 0.068 m³/m
Δs = 3.5 m
m = 30 m
S = 44.67 m
S.W.L = 15.54 m
D.W.L = 60.21 m
s = 21.5 cm
S (m)
30
40
50
60
t (min)
10
100
$T = \frac{0.183Q}{\Delta s} = \frac{0.183 \times 0.068}{3.5} = 3.56 \times 10^{-3}$ m²/min = 0.21 m²/h = 5.12 m²/day
$K = \frac{T}{m} = \frac{3.56 \times 10^{-3}}{30} = 1.18 \times 10^{-4}$ m/min
$= 1.97 \times 10^{-6}$ m/sec
$Sc = \frac{Q}{s} = \frac{68}{44} = 1.52$ l/min/m
$= 2.19$ m³/day/m