

Pumping Test Summary

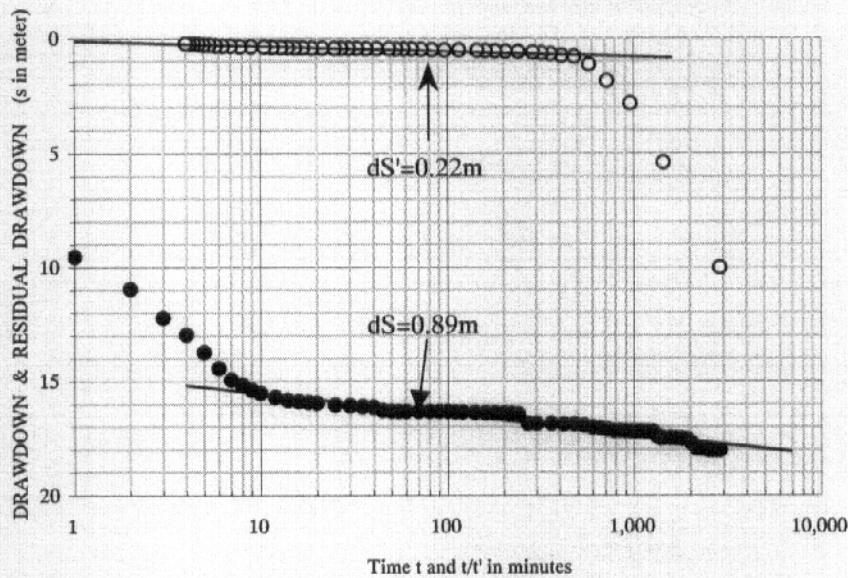
No.:

PT-3

Location :

Rango

TIME DRAWDOWN GRAPH & RESIDUAL DRAWDOWN GRAPH



○ Data of Residual Drawdown

$T=15.81Q/ds'=199(m^2/d)$

● Data of Time Drawdown

$T=15.81Q/ds'=50(m^2/d)$

SWL= -0.54(m)

Q= 2.81(l/sec)

$T=(2.3/4\pi) \times (q/ds') [m^2/d]$

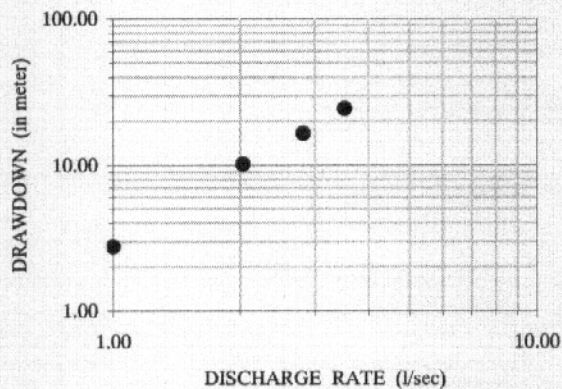
$=15.81 \times (Q/ds')$,

$q=60 \times 60 \times 24 \times Q$,

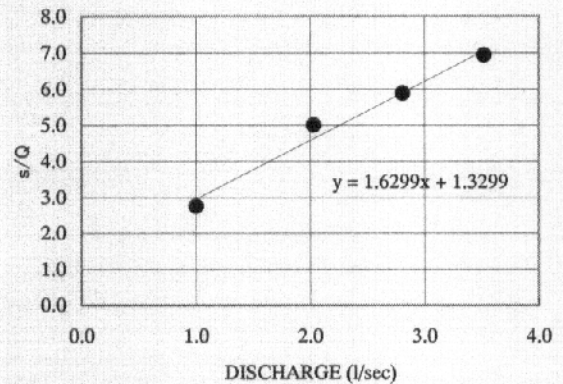
$q[m^3/d], Q[l/sec]$

(t) for Drawdown Test, (t/t') for Recovery Test
t : time since pumping started, t' : time since pumping stopped

STEP DRAWDOWN TEST



WELL LOSS EVALUATION



| Q (l/sec) | s (m) | Q/s(l/sec/m) | s/Q |
|-----------|-------|--------------|------|
| 1.00 | 2.75 | 0.36 | 2.75 |
| 2.03 | 10.16 | 0.20 | 5.00 |
| 2.81 | 16.54 | 0.17 | 5.89 |
| 3.52 | 24.41 | 0.14 | 6.93 |

| | |
|----|------|
| B: | 1.33 |
| C: | 1.63 |

B: Aquifer Loss Coefficient
C: Well Loss Coefficient

Q: Discharge, s: Drawdown, Q/s: Specific capacity, $s/Q=B+CQ$

$T=(2.3/4\pi) \times (q/ds') [m^2/d]=15.81 \times (Q/ds')$, $q=60 \times 60 \times 24 \times Q$, $q[m^3/d], Q[l/sec]$

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Figure A7-11
Pumping Test Summary (PT-3 for JICA TW-3)

Pumping Test Summary

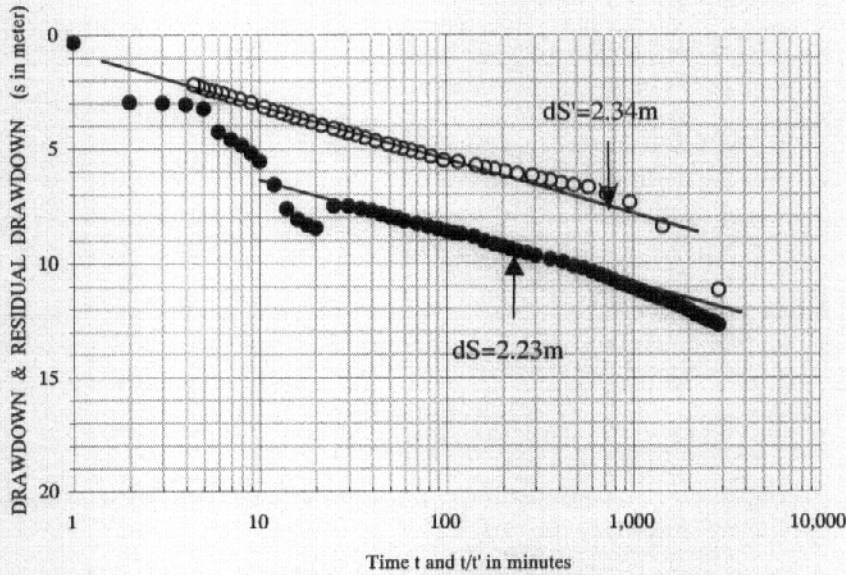
No.:

PT-4

Location :

Jambu

TIME DRAWDOWN GRAPH & RESIDUAL DRAWDOWN GRAPH



○ Data of Residual Drawdown

$$T=15.81Q/ds' = 10.1(m^2/d)$$

● Data of Time Drawdown

$$T=15.81Q/ds = 10.6(m^2/d)$$

SWL= 2.66(m)

Q= 1.50(l/sec)

$$T=(2.3/4\pi) \times (q/ds') [m^2/d]$$

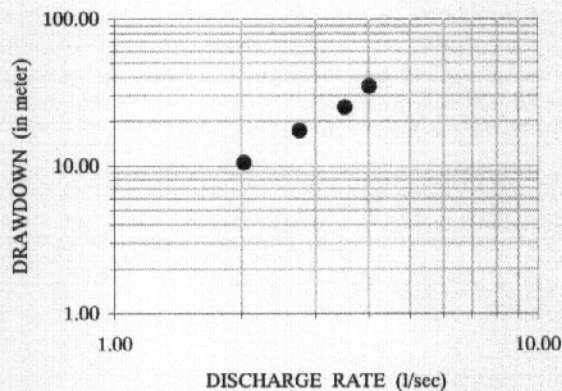
$$=15.81 \times (Q/ds')$$

$$q=60 \times 60 \times 24 \times Q,$$

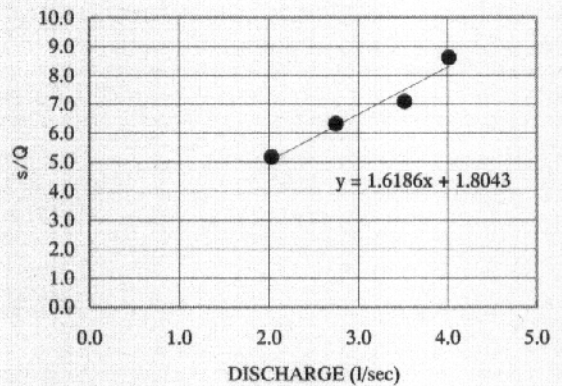
$$q[m^3/d], Q[l/sec]$$

(t) for Drawdown Test, (t/t') for Recovery Test
t : time since pumping started, t' : time since pumping stopped

STEP DRAWDOWN TEST



WELL LOSS EVALUATION



| Q (l/sec) | s (m) | Q/s(l/sec/m) | s/Q |
|-----------|-------|--------------|------|
| 2.03 | 10.48 | 0.19 | 5.16 |
| 2.75 | 17.34 | 0.16 | 6.31 |
| 3.52 | 24.94 | 0.14 | 7.09 |
| 4.02 | 34.59 | 0.12 | 8.60 |

| | |
|----|------|
| B: | 1.80 |
| C: | 1.62 |

B:Aquifer Loss Coefficient
C:Well Loss Coefficient

Q: Discharge, s: Drawdown, Q/s: Specific capacity, $s/Q=B+CQ$

$$T=(2.3/4\pi) \times (q/ds') [m^2/d]=15.81 \times (Q/ds'), q=60 \times 60 \times 24 \times Q, q[m^3/d], Q[l/sec]$$

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Figure A7-12
Pumping Test Summary (PT-4 for JICA TW-4)

Pumping Test Summary

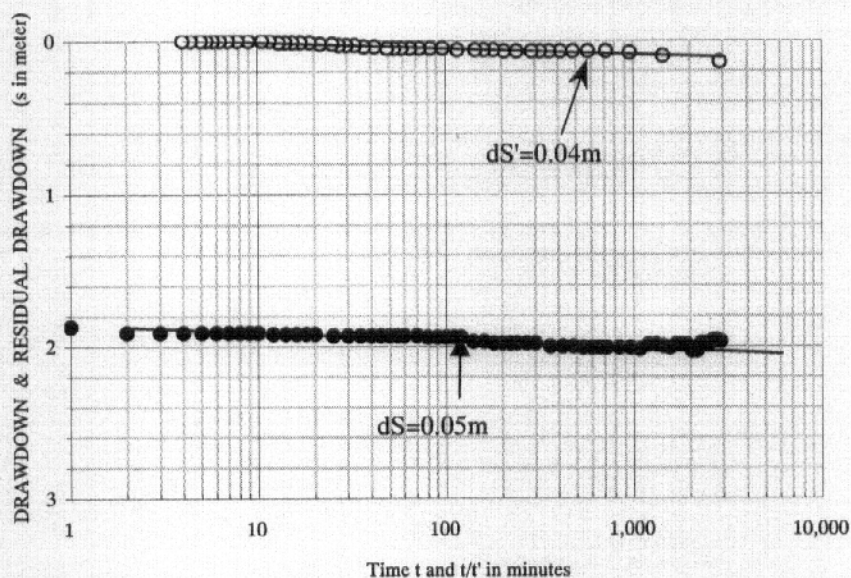
No.:

PT-7

Location :

Kokowahor

TIME DRAWDOWN GRAPH & RESIDUAL DRAWDOWN GRAPH

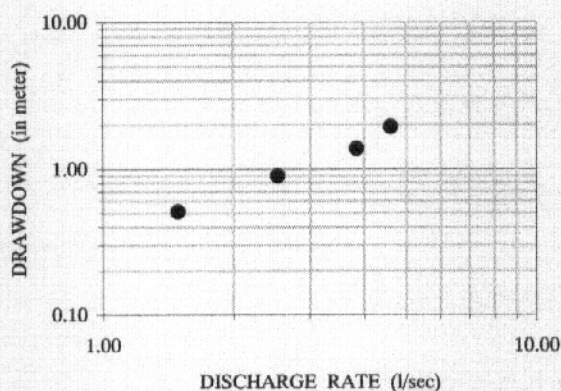


○ Data of Residual Drawdown
 $T=15.81Q/ds'= 1823(m^2/d)$
 ● Data of Time Drawdown
 $T=15.81Q/ds= 1448(m^2/d)$
 SWL= 50.28(m)
 $Q= 4.62(l/sec)$

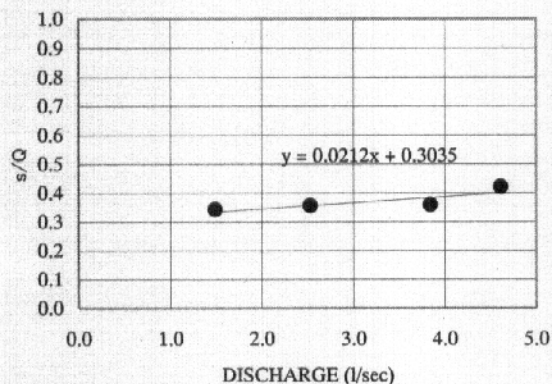
$T=(2.3/4\pi) \times (q/ds') [m^2/d]$
 $=15.81 \times (Q/ds')$
 $q=60 \times 60 \times 24 \times Q,$
 $q[m^3/d], Q[l/sec]$

(t) for Drawdown Test, (t/t') for Recovery Test
 t : time since pumping started, t' : time since pumping stopped

STEP DRAWDOWN TEST



WELL LOSS EVALUATION



| Q (l/sec) | s (m) | Q/s(l/sec/m) | s/Q |
|-----------|-------|--------------|------|
| 1.49 | 0.51 | 2.92 | 0.34 |
| 2.53 | 0.90 | 2.81 | 0.36 |
| 3.84 | 1.38 | 2.78 | 0.36 |
| 4.61 | 1.94 | 2.38 | 0.42 |

| | |
|----|-------|
| B: | 0.30 |
| C: | 0.021 |

B: Aquifer Loss Coefficient
 C: Well Loss Coefficient

Q: Discharge, s: Drawdown, Q/s: Specific capacity, $s/Q=B+CQ$

$T=(2.3/4\pi) \times (q/ds') [m^2/d]=15.81 \times (Q/ds'), q=60 \times 60 \times 24 \times Q, q[m^3/d], Q[l/sec]$

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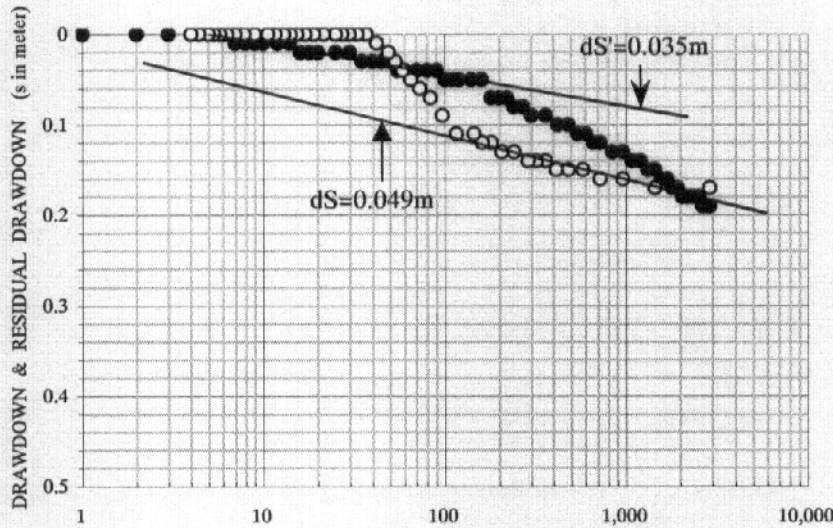
Figure A7-13
 Pumping Test Summary (PT-7 for P2AT IKI-5)

Pumping Test Summary

No.:
Location :

PT-8
Weerame

TIME DRAWDOWN GRAPH & RESIDUAL DRAWDOWN GRAPH

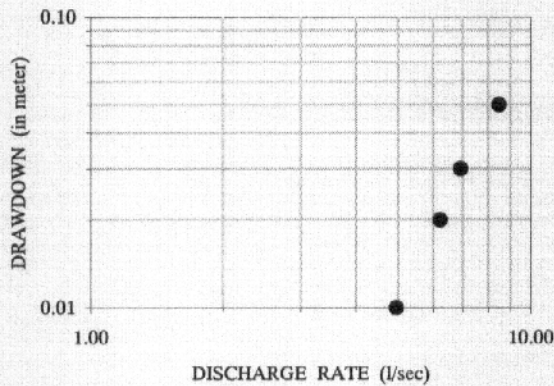


○ Data of Residual Drawdown
 $T=15.81Q/ds'= 2500(m^2/d)$
 ● Data of Time Drawdown
 $T=15.81Q/ds= 3494(m^2/d)$
 $SWL= 6.30(m)$
 $Q= 7.68(l/sec)$

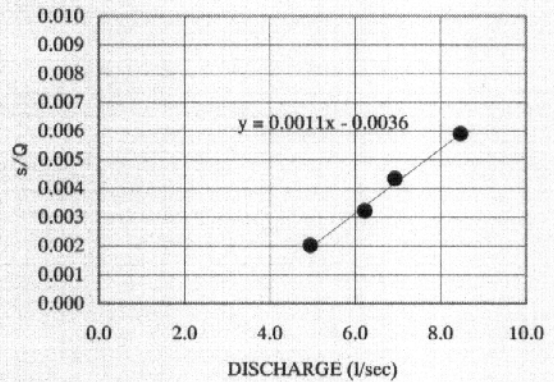
$T=(2.3/4\pi) \times (q/ds') [m^2/d]$
 $=15.81 \times (Q/ds')$
 $q=60 \times 60 \times 24 \times Q,$
 $q[m^3/d], Q[l/sec]$

Time t and t/t' in minutes
 (t) for Drawdown Test, (t/t') for Recovery Test
 t : time since pumping started, t' : time since pumping stopped

STEP DRAWDOWN TEST



WELL LOSS EVALUATION



| Q (l/sec) | s (m) | Q/s (l/sec/m) | s/Q |
|-----------|-------|---------------|--------|
| 4.95 | 0.01 | 495.00 | 0.0020 |
| 6.23 | 0.02 | 311.50 | 0.0032 |
| 6.93 | 0.03 | 231.00 | 0.0043 |
| 8.47 | 0.05 | 169.40 | 0.0059 |

| | |
|----|---------|
| B: | -0.0036 |
| C: | 0.0011 |

B: Aquifer Loss Coefficient
 C: Well Loss Coefficient

Q: Discharge, s: Drawdown, Q/s: Specific capacity, $s/Q=B+CQ$

$T=(2.3/4\pi) \times (q/ds') [m^2/d]=15.81 \times (Q/ds'), q=60 \times 60 \times 24 \times Q, q[m^3/d], Q[l/sec]$

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Figure A7-14
 Pumping Test Summary (PT-8 for Weerame)