Chapter 5

Pumping Test Data

Table G5. 1 Step-Drawdown Tests of JICA Test Wells

Well No.	Commune / town	Coordinates		Elevation	Drilling Depth	Reaming Depth	Screen Length	Static Water Level	Step-drawdown test						Aquifer loss coefficient [B]	Well loss coefficient [C]	Average well efficiency
		Latitude North UTM	Longitude East UTM	(m)	(m)	(m)	(m)	(m)	1st	2nd	3rd	4th	5th	6th	(hr/m^2)	(hr^2/m^5)	(%)
									Discharge(m3/h)								
									Drawdown (m)								
D1	Krong Nang	1432676	212271	714	140	100	40	11.80	1.8	7.2	12.6	18	14.4	10.8	5.13E-01	2.88E-02	64
									1.01	5.36	10.6	18.86	13.9	9.14			
D2	Ea Drang	1461593	196617	644	180	120	48	24.00	0.5	0.9	1.3	1.6	1.1	0.7	8.57E+00	2.69E+00	78
									5.67	9.29	14.92	21.42	11.05	7.41			
D3	Krong Buk	1412609	217070	484	140	70	30	9.00	4.3	8.6	13	17.3	10.8	7.2	5.58E-01	3.10E-02	58
									3.06	6.92	13.03	19.05	13.5	8.45			
D4	Ea Drong	1427255	209295	615	180	116	58	15.89	3.2	6.1	9	11.9	7.9	5.4	3.11E+00	3.82E-02	110
									10.05	16.89	23.97	32.87	22.03	15.76			
D5	Ea Wer	1418900	813607	255	150	35	22	2.00	3.6	7.2	10.8	13.3	10.1	6.5	3.22E-01	9.64E-02	30
									2.25	7.83	14.67	21.09	12.33	7.5			
D6	Kien Duc	1325577	772292	691	170	120	40	32.20	-	-	-	-	-	-	-	-	-
									-	-	-	-	-	-	-	-	
D7	Krong Kmar	1384752	210996	436	39	39	28	3.80	7.2	12.6	18	23	18	12.6	1.05E-01	5.70E-03	52
									1.07	2.13	3.94	5.37	4.33	2.95			
G1	Kong Tang	1554896	202592	736	150	112	40	34.00	3.6	6.6	9.6	13.2	9.6	6.6	1.57E+00	1.70E-03	101
									5.65	10.27	14.9	20.49	16.2	11.64			
G2	Nhon Hoa	1499742	185766	421	170	110	34	21.00	1.9	3.6	5.2	6.8	5.4	3.9	1.97E+00	5.37E-01	47
									5.84	12.96	24.77	39	26.75	15.89			
G3	Chu Ty	1528374	791729	417	150	85	22	22.40	4.2	7.2	10.8	13.2	10.8	7.2	8.27E-01	1.23E-01	52
									5.79	11.78	24.11	32.06	26.2	14.96			
G4	Thang Hung	1630373	813129	633	180	150	50	34.10	2.7	5.4	8.1	10.8	8.4	5.7	5.51E-01	9.60E-03	110
									1.45	2.62	3.78	4.93	4.4	3.25			
G5	Nghia Hoa	1562211	814529	682	160	135	52	32.50	1.5	3	4.2	6	5.1	3.6	3.42E+00	4.44E-02	93
									5.13	11.02	15	22	19.16	14.57			
G6	Ia Sion	1474169	238141	140	180	158	38	24.15	3.6	8.4	13.2	17	13.2	8.4	8.28E-01	3.50E-03	91
									3.07	6.97	11.73	15.08	13.25	8.96			
G7	Kong Yang	1531378	234391	472	160	110	34	10.80	4.5	9	13.8	18	14.4	10.2	1.07E+00	4.00E-04	104
									4.8	9.7	14.67	19.19	14.63	9.29			
K1	Bo Y	1623379	782270	683	170	50	24	0.88	0.8	1.8	2.7	3.6	2.8	2.0	7.78E+00	9.35E-02	101
									6.63	14.17	21.86	29.18	19.18	14.51			
K2A	Dak Su	1610205	783252	670	80	50	32	0.80	1.6	3.1	4.7	6.1	4.8	3.3	3.33E+00	9.60E-03	100
									5.21	10.53	15.83	20.72	15.8	10.59			
K3	Dak Ui	1613032	177275	685	160	38	28	1.35	3	6.6	9.6	12.6	9	6	9.89E-01	3.35E-02	84
									3.18	8.2	12.9	17.36	9.59	6.28			
K6	Chu Hreng	1584716	177337	590	98	40	14	12.50	0.12	0.24	-	-	-	-	3.5E+01	1.7E+01	92
									4.42	9.34	-	-	-	-			

Table G5. 2 Result of the Constant Continuous Test and Recovery Test Analyzed by Theis Analysis Method

Well No.	Commune / town	Coordinates		Elevation	Drilling depth	Reaming depth	Screen length	Static water level	Pumping discharge	Drawdown	Specific capacity	Theis method						
												Match point				Transmissivity	Storage coefficient	Hydraulic conductivity
		Latitude North UTM	Longitude East UTM	(m)	(m)	(m)	(m)	(m)	(l/s)	(m)	(l/s/m)	u	W(u)	r2/t (m2/s)	s (m)	(m2/day)		(m/day)
D1	Krong Nang	1432676	212271	714	140	100	40	11.80	4.00	15.89	0.25	1.0E-10	22.0	1.0E-04	13.0	4.7E+01	1.3E-07	1.2E+00
D2	Ea Drang	1461593	196617	644	180	120	48	24.00	0.45	20.56	0.02	1.0E-06	13.0	1.0E-04	17.5	2.3E+00	6.4E-05	4.8E-02
D3	Krong Buk	1412609	217070	484	140	70	30	9.00	4.80	21.26	0.23	1.0E-07	15.0	1.0E-05	16.0	2.6E+01	7.2E-04	8.6E-01
D4	Ea Drong	1427255	209295	615	180	116	58	15.89	3.10	30.20	0.10	1.0E-10	21.0	1.0E-04	23.5	1.9E+01	5.3E-08	3.3E-01
D5	Ea Wer	1418900	813607	255	150	35	22	2.00	3.70	21.42	0.17	1.0E-10	21.0	1.0E-04	17.0	3.1E+01	8.7E-08	1.4E+00
D6	Kien Duc	1325577	772292	691	170	120	40	32.20	0.25	22.23	0.01	-	-	-	-	-	-	-
D7	Krong Kmar	1384752	210996	436	39	39	28	3.80	6.40	6.50	0.98	1.0E-06	11.5	1.0E-04	4.0	1.3E+02	3.5E-03	4.5E+00
G1	Kong Tang	1554896	202592	736	150	112	40	34.00	3.73	21.73	0.17	1.0E-10	22.0	1.0E-04	19.0	3.0E+01	8.2E-08	7.4E-01
G2	Nhon Hoa	1499742	185766	421	170	110	34	21.00	2.00	40.34	0.05	1.0E-10	20.0	1.0E-04	37.0	7.4E+00	2.1E-08	2.2E-01
G3	Chu Ty	1528374	791729	417	150	85	22	22.40	3.67	32.22	0.11	4.0E-05	12.0	4.0E-03	13.5	2.2E+01	6.2E-04	1.0E+00
G4	Thang Hung	1630373	813129	633	180	150	50	34.10	3.00	9.66	0.31	1.0E-05	11.0	1.0E-03	3.5	6.5E+01	1.8E-03	1.3E+00
G5	Nghia Hoa	1562211	814529	682	160	135	52	32.50	2.00	26.13	0.08	1.0E-06	13.0	1.0E-04	20.0	8.9E+00	2.5E-04	1.7E-01
G6	Ia Sion	1474169	238141	140	180	158	38	24.15	4.70	15.83	0.30	1.0E-10	22.0	1.0E-04	12.6	5.6E+01	1.6E-07	1.5E+00
G7	Kong Yang	1531378	234391	472	160	110	34	10.80	5.00	22.96	0.22	1.0E-07	15.0	1.0E-05	20.0	2.6E+01	7.2E-04	7.6E-01
K1	Bo Y	1623379	782270	683	170	50	24	0.88	1.00	31.73	0.03	1.0E-02	4.2	1.0E-04	19.0	1.5E+00	4.2E-01	6.3E-02
K2A	Dak Su	1610205	783252	670	80	50	32	0.80	1.73	21.34	0.08	1.0E-05	12.0	4.0E-05	18.0	7.9E+00	5.5E-03	2.5E-01
K3	Dak Ui	1613032	177275	685	160	38	28	1.35	3.00	16.90	0.18	1.0E-06	13.0	1.0E-04	13.0	2.1E+01	5.7E-04	7.4E-01
K6	Chu Hreng	1584716	177337	590	98	40	14	12.50	0.07	22.50	0.003	-	-	-	-	-	-	-

Table G5. 3 Result of the Constant Continuous Test and Recovery Test Analyzed by Cooper-Jacob and Recovery Analysis Methods

Well No.	Commune / town	Coordinates		Elevation	Drilling depth	Reaming depth	Screen length	Static water level	Pumping discharge	Drawdown	Specific capacity	Cooper-Jacob analysis method			Recovery analysis	
		Latitude North UTM	Longitude East UTM	(m)	(m)	(m)	(m)	(m)	(l/s)	(m)	(l/s/m)	Transmissivity (m2/day)	Storage coefficient	Hydraulic conductivity (m/day)	Transmissivity (m2/day)	Hydraulic conductivity (m/day)
D1	Krong Nang	1432676	212271	714	140	100	40	11.80	4.00	15.89	0.25	4.2E+01	2.0E-06	1.1E+00	3.2E+01	7.9E-01
D2	Ea Drang	1461593	196617	644	180	120	48	24.00	0.45	20.56	0.02	2.4E+00	3.3E-04	4.9E-02	4.0E+00	8.2E-02
D3	Krong Buk	1412609	217070	484	140	70	30	9.00	4.80	21.26	0.23	1.4E+01	6.4E-01	4.6E-01	1.3E+01	4.2E-01
D4	Ea Drong	1427255	209295	615	180	116	58	15.89	3.10	30.20	0.10	1.6E+01	7.6E-06	2.8E-01	1.6E+01	2.8E-01
D5	Ea Wer	1418900	813607	255	150	35	22	2.00	3.70	21.42	0.17	2.3E+01	1.1E-05	1.1E+00	2.3E+01	1.1E+00
D6	Kien Duc	1325577	772292	691	170	120	40	32.20	0.25	22.23	0.01	2.9E-01	4.1E-01	7.3E-03	2.8E-01	7.0E-03
D7	Krong Kmar	1384752	210996	436	39	39	28	3.80	6.40	6.50	0.98	6.7E+01	3.1E-01	2.4E+00	8.4E+01	3.0E+00
G1	Kong Tang	1554896	202592	736	150	112	40	34.00	3.73	21.73	0.17	3.0E+01	1.4E-07	7.4E-01	2.1E+01	5.3E-01
G2	Nhon Hoa	1499742	185766	421	170	110	34	21.00	2.00	40.34	0.05	3.5E+00	3.3E-03	1.0E-01	6.3E+00	1.9E-01
G3	Chu Ty	1528374	791729	417	150	85	22	22.40	3.67	32.22	0.11	1.7E+01	7.7E-03	7.5E-01	7.0E+00	3.2E-01
G4	Thang Hung	1630373	813129	633	180	150	50	34.10	3.00	9.66	0.31	4.8E+01	2.2E-02	9.6E-01	6.8E+01	1.4E+00
G5	Nghia Hoa	1562211	814529	682	160	135	52	32.50	2.00	26.13	0.08	9.0E+00	4.2E-04	1.7E-01	1.1E+01	2.0E-01
G6	Ia Sion	1474169	238141	140	180	158	38	24.15	4.70	15.83	0.30	3.7E+01	1.7E-04	9.8E-01	6.2E+01	1.6E+00
G7	Kong Yang	1531378	234391	472	160	110	34	10.80	5.00	22.96	0.22	2.8E+01	1.3E-03	8.3E-01	5.3E+01	1.6E+00
K1	Bo Y	1623379	782270	683	170	50	24	0.88	1.00	31.73	0.03	1.9E+00	2.7E-01	8.0E-02	1.7E+00	7.2E-02
K2A	Dak Su	1610205	783252	670	80	50	32	0.80	1.73	21.34	0.08	3.9E+00	3.6E-02	1.2E-01	9.1E+00	2.9E-01
K3	Dak Ui	1613032	177275	685	160	38	28	1.35	3.00	16.90	0.18	1.7E+01	2.4E-03	6.1E-01	1.6E+01	5.6E-01
K6	Chu Hreng	1584716	177337	590	98	40	14	12.50	0.07	22.50	0.00	6.0E-02	2.9E-01	4.3E-03	1.3E-01	9.3E-03

K6 : pumping for 5 hours

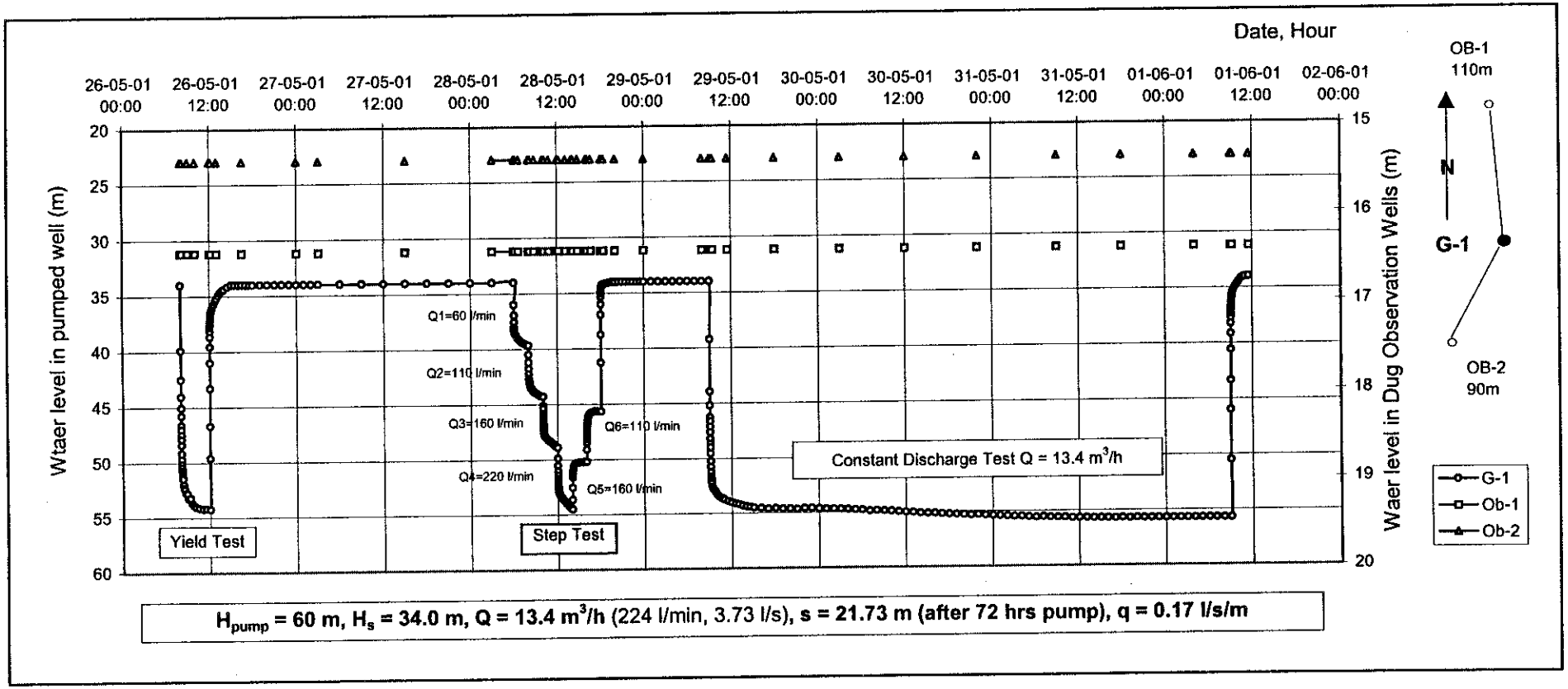


Figure G5. 1 Pumping Test of Borehole G-1 - Kong Tang Town - Mang Yang District

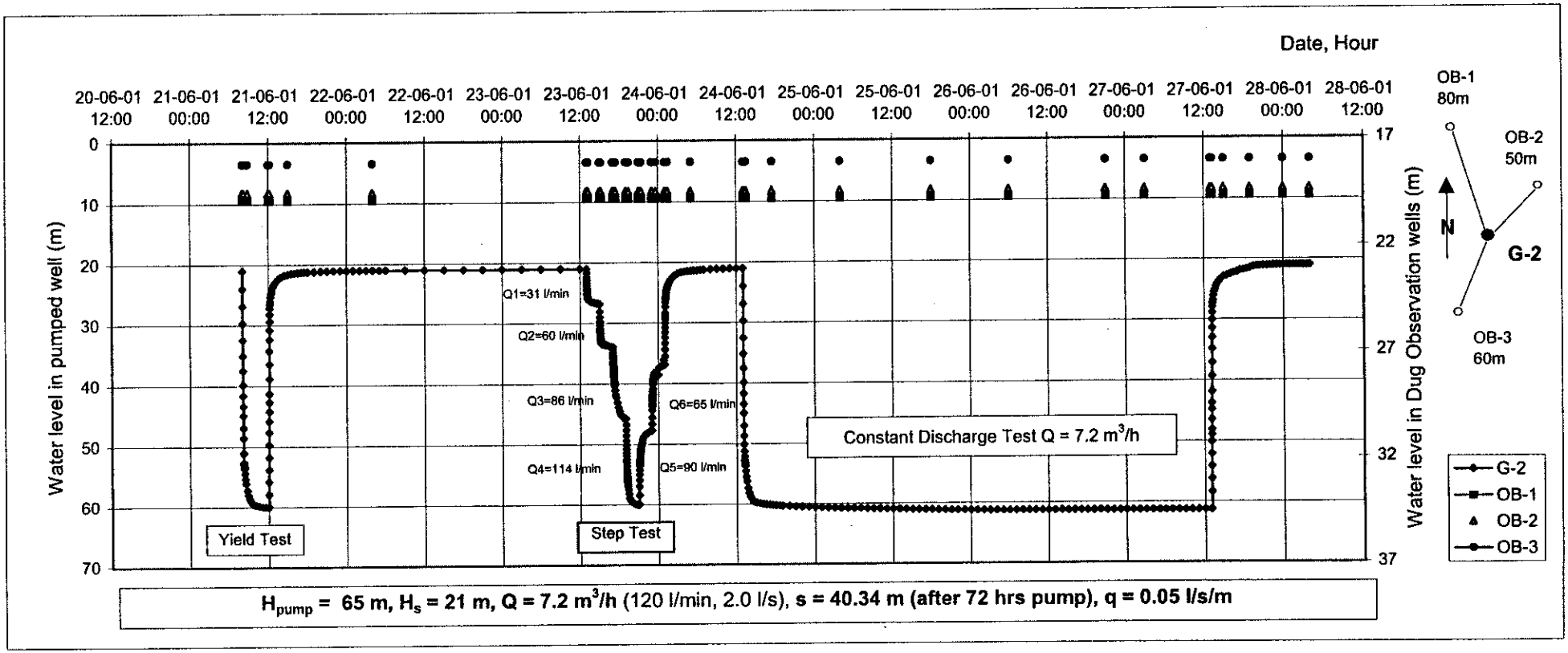


Figure G5. 2 Pumping Test of Borehole G-2 - Nhon Hoa Commune - Chu Se District

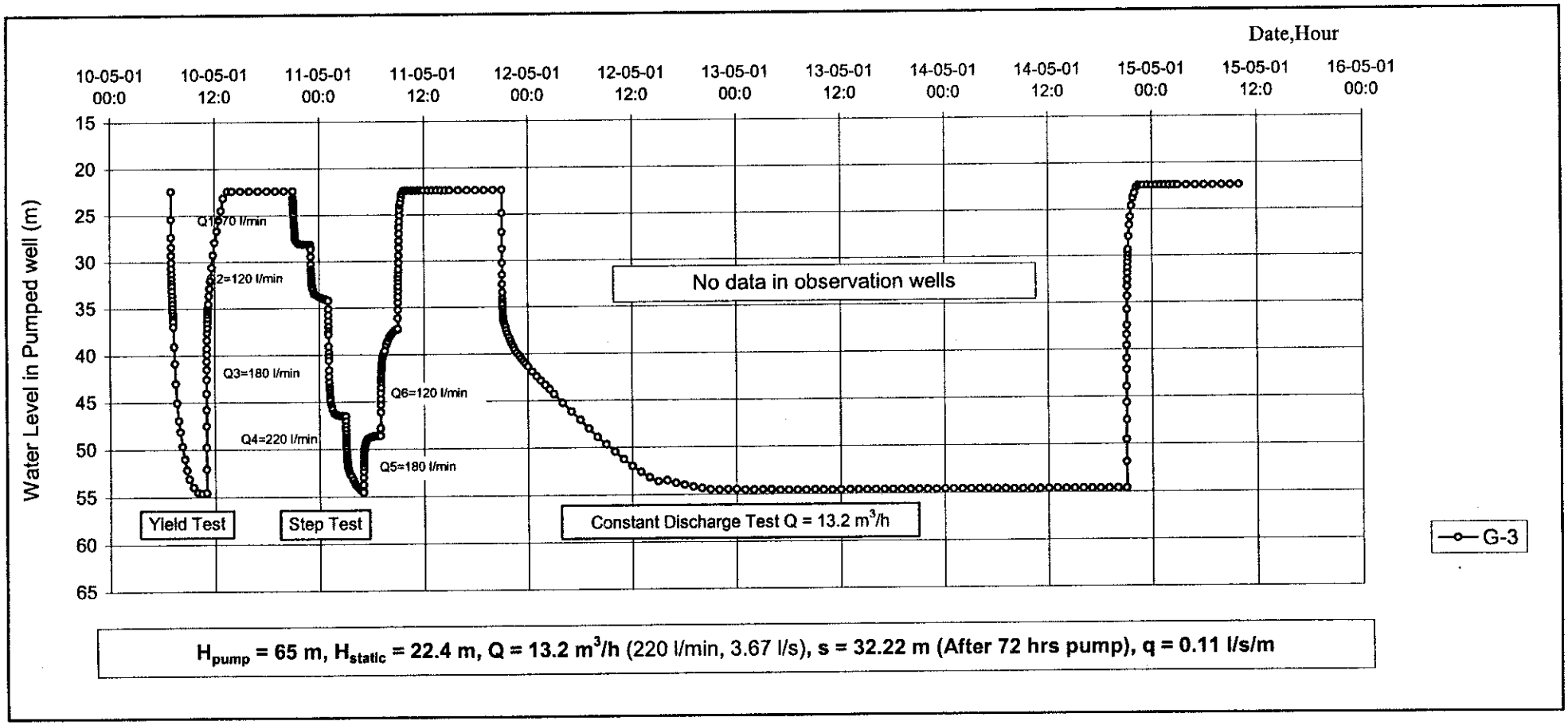


Figure G5. 3 Pumping Test of Borehole G-3 - Chu Ty Town - Duc Co District

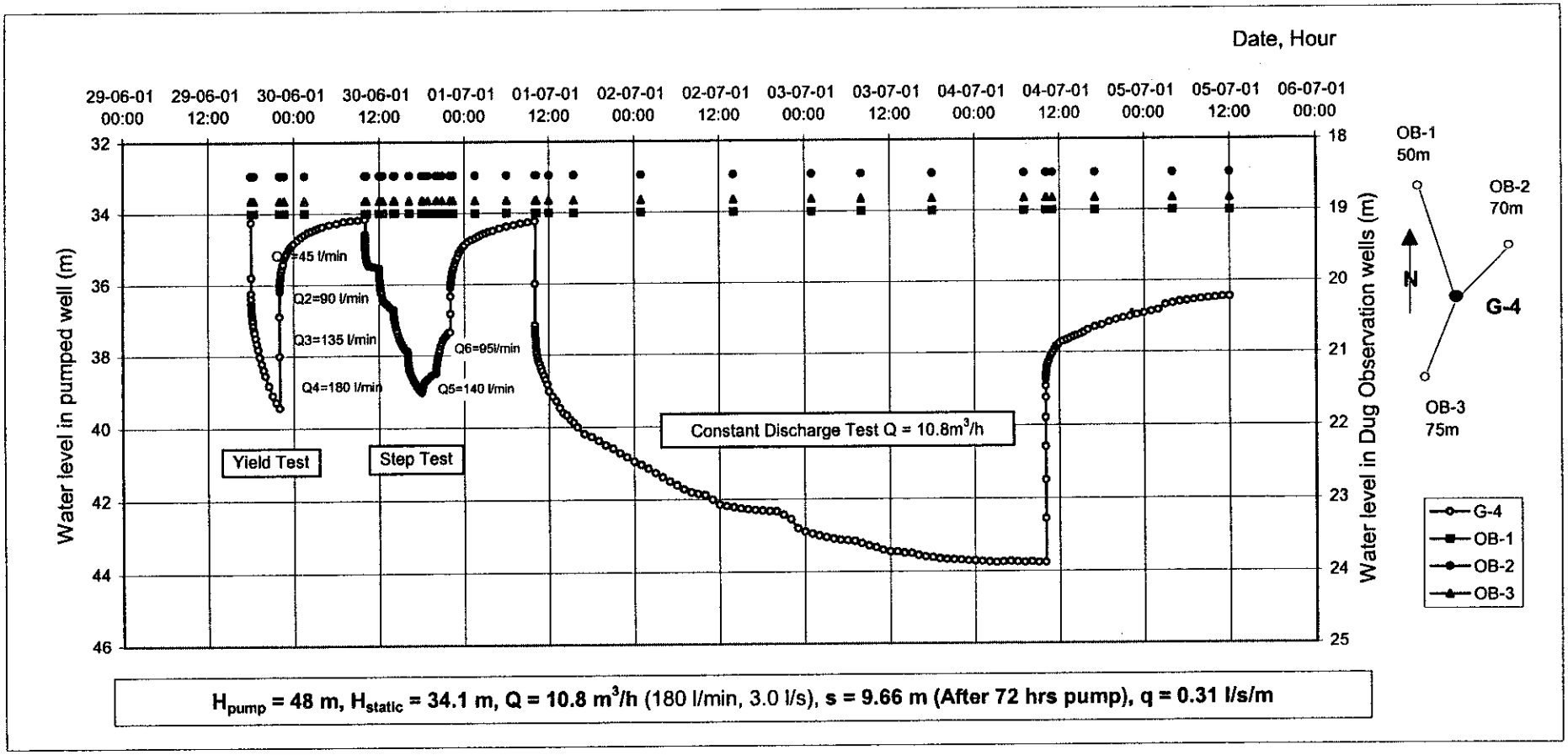


Figure G5. 4 Pumping Test of Borehole G-4 - Thang Hung Commune - Chu Prong District

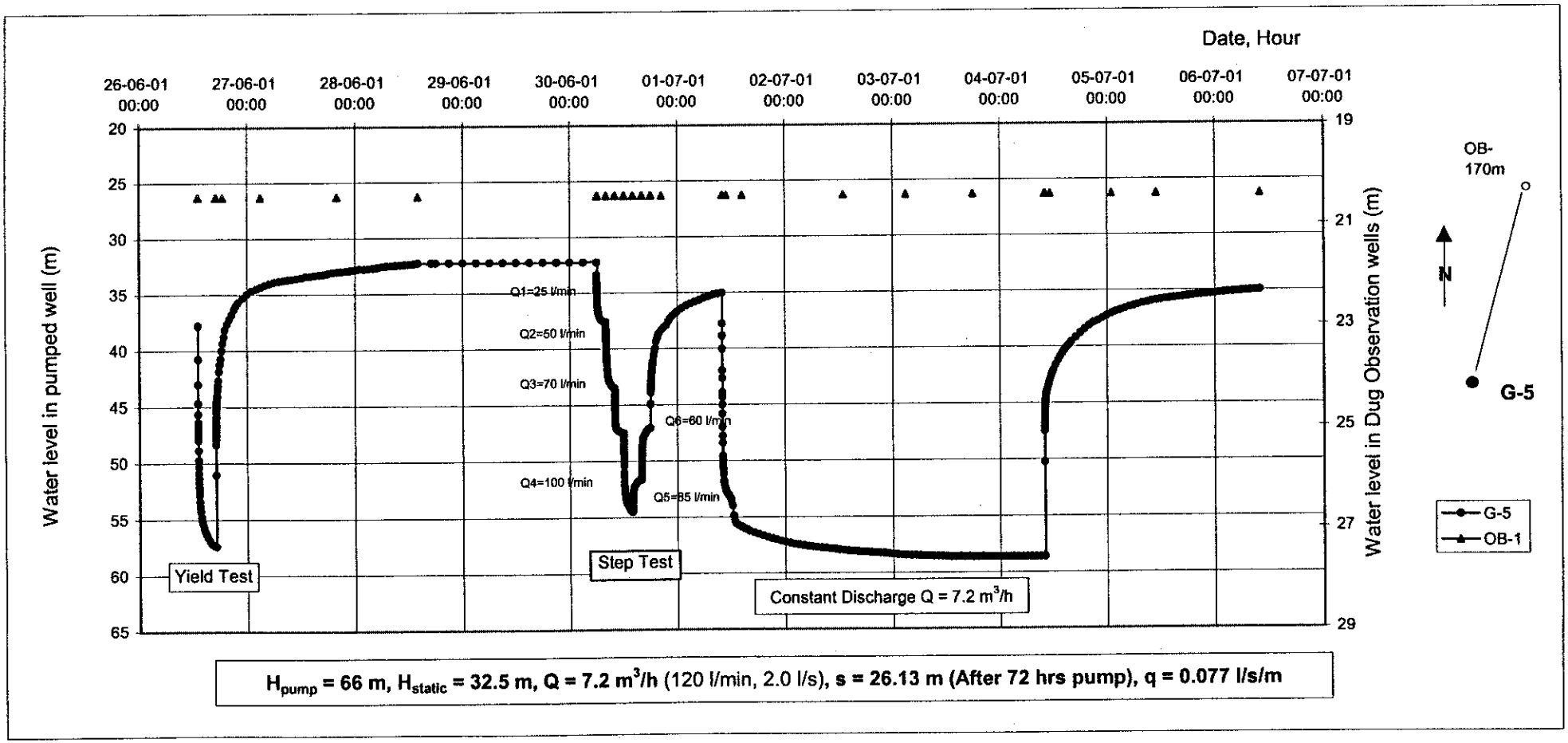


Figure G5. 5 Pumping Test of Borehole G-5 - Nghia Hoa Commune- Chu Pah District

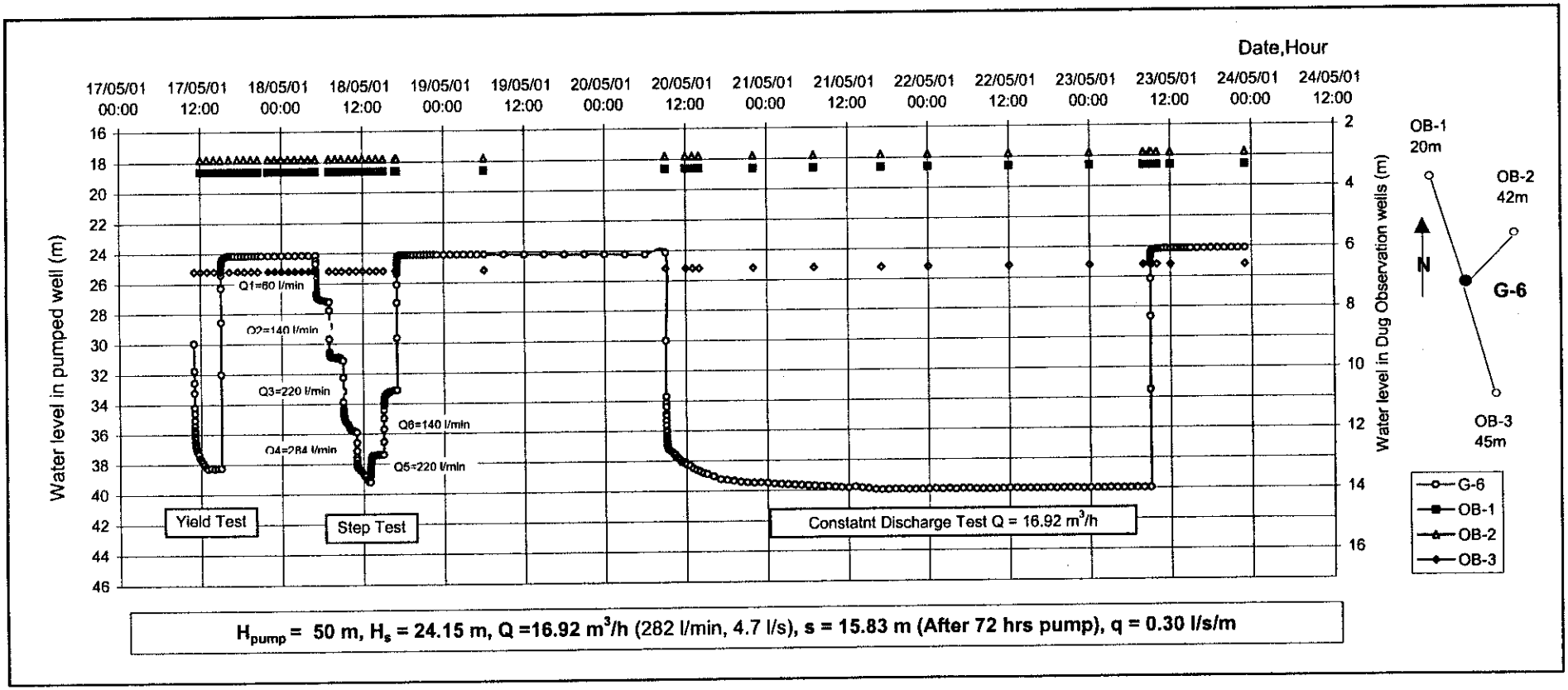


Figure G5. 6 Pumping Test of Borehole G-6 - Ia Rsiom Commune- Prong Pa District

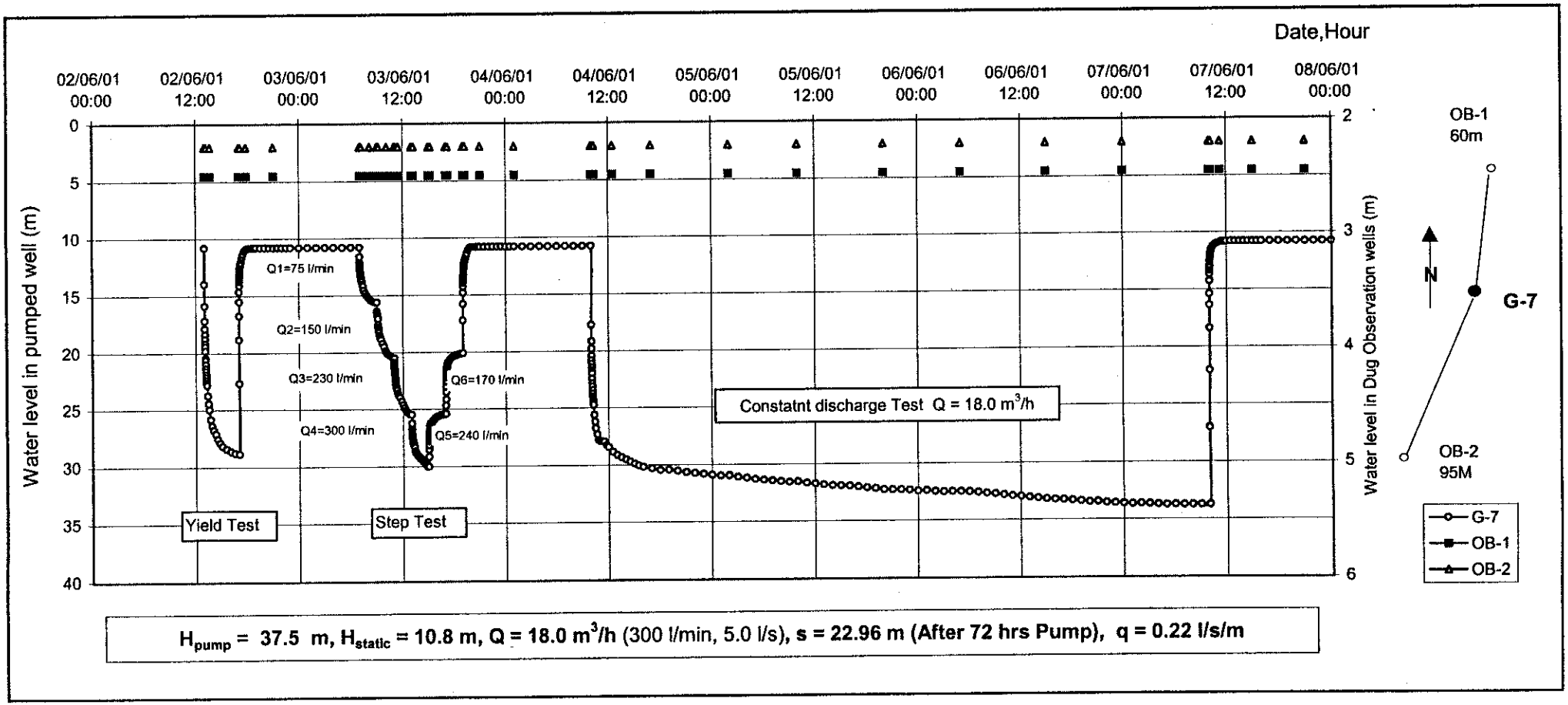
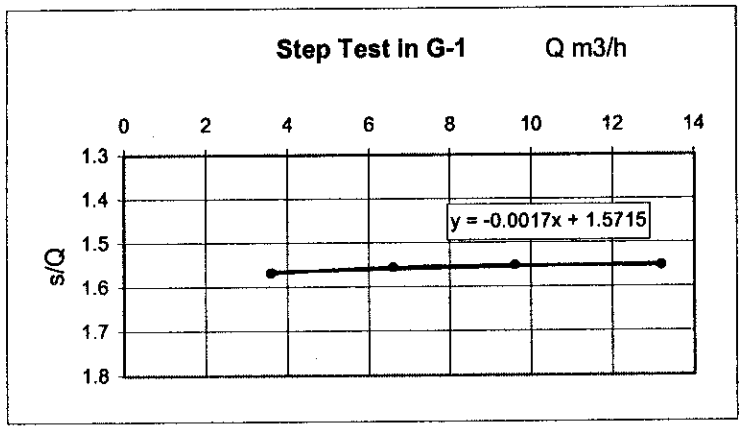
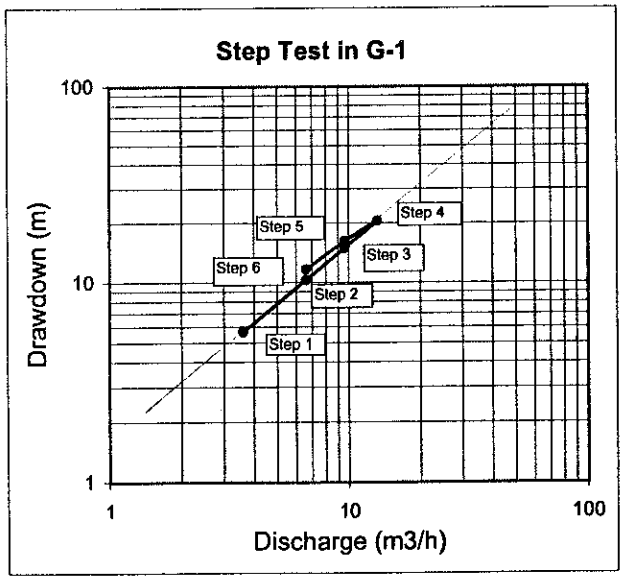


Figure G5. 7 Pumping Test of Borehole G-7 - Kong Yang Commune- Krong Chro District





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
60	3.6	5.65	1.57	100.13
110	6.6	10.27	1.56	100.99
160	9.6	14.90	1.55	101.25
220	13.2	20.49	1.55	101.24
160	9.6	16.2	1.69	93.13
110	6.6	11.64	1.76	89.11
			Average:	97.64

Calculated drawdown by Hantush-Bierschenk method:

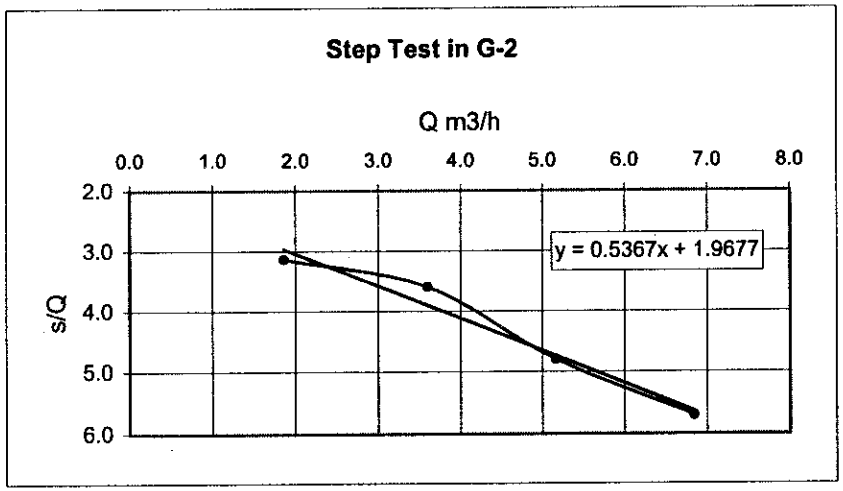
s= B*Q + C*Q*Q

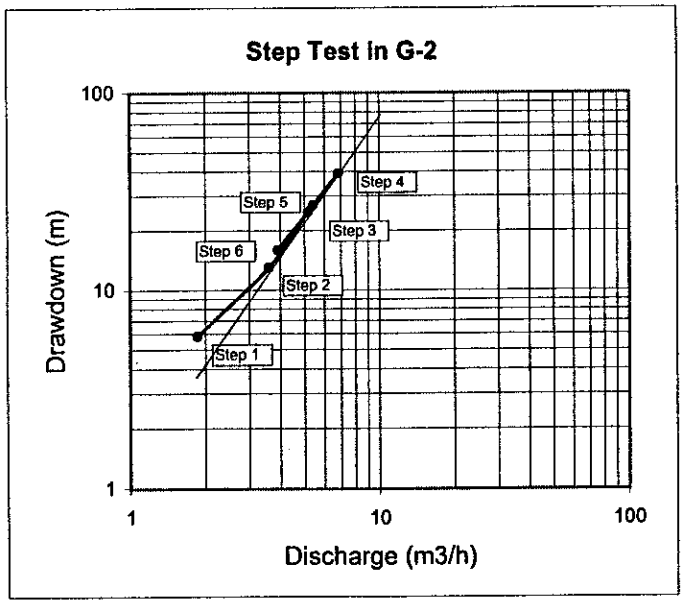
B = 1.5715

C = 0.0017

Q (l/min)	Q (m3/h)	s (m)	
166.7	10	15.89	Calculated drawdown
200.0	12	19.10	after 2 hours
216.7	**13**	20.72	

Figure G5. 8 Step Drawdown Test at Borehole G-1



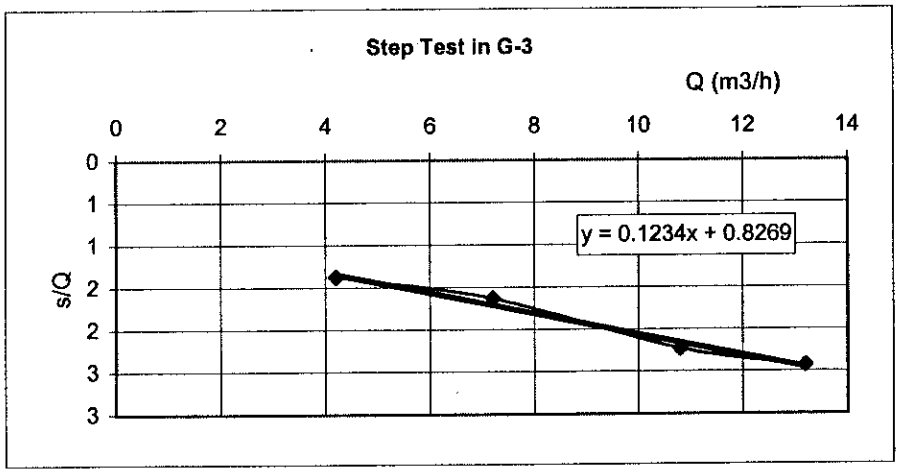


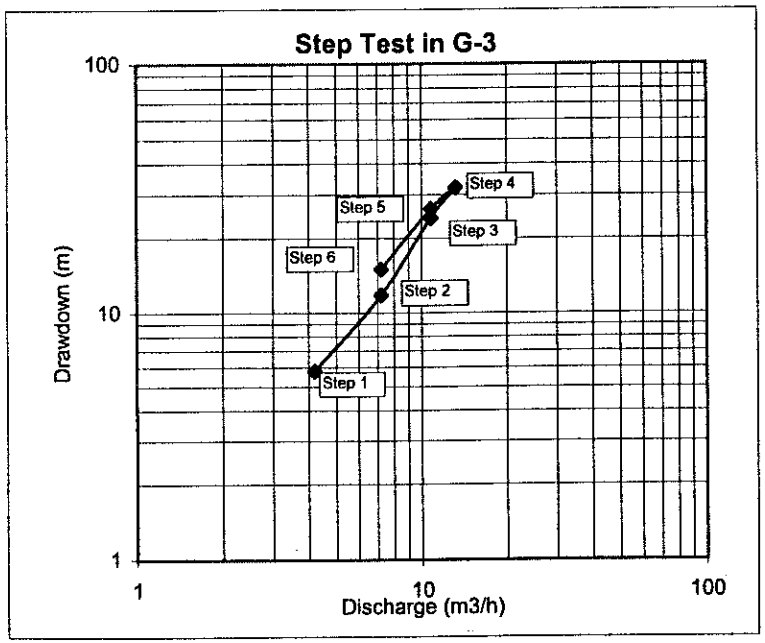
Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
31	1.9	5.84	3.14	62.67
60	3.6	12.96	3.60	54.66
86	5.2	24.77	4.80	40.99
114	6.8	39	5.70	34.51
90	5.4	26.75	4.95	39.72
65	3.9	15.89	4.07	48.29
			Average:	46.81

Calculated drawdown by
Hantush-Bierschenk method:
s= B*Q + C*Q*Q
B = 1.9677
C = 0.5367

Q (l/min)	Q (m3/h)	s (m)	
50.0	3	10.73	Calculated drawdown
66.7	4	16.46	after 2 hours
83.3	**5**	23.26	

Figure G5. 9 Step Drawdown Test at Borehole G-2





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
70	4.2	5.79	1.38	72.54
120	7.2	11.78	1.64	61.12
180	10.8	24.11	2.23	44.79
220	13.2	32.06	2.43	41.17
180	10.8	26.2	2.43	41.22
120	7.2	14.96	2.08	48.13
			Average:	51.50

Calculated drawdown by Hantush-Bierschenk method:

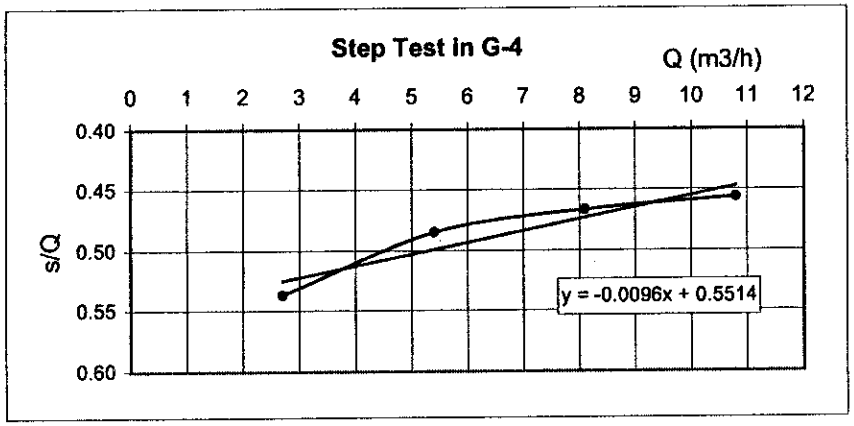
$s = B*Q + C*Q*Q$

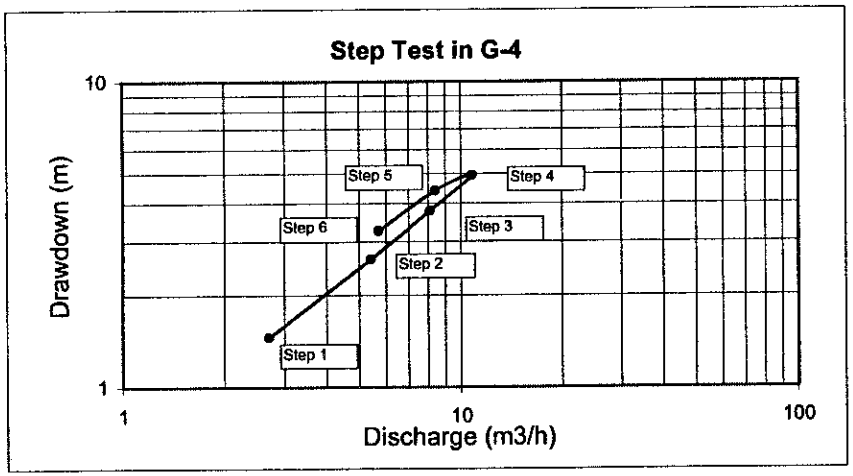
B = 0.8269 h/m²

C = 0.1234 h/m²

Q (l/min)	Q (m3/h)	S (m)	
133	8	14.51	Drawdown after 2 hrs
150	9	17.44	
167	**10**	20.61	

Figure G5. 10 Step Drawdown Test at Borehole G-3





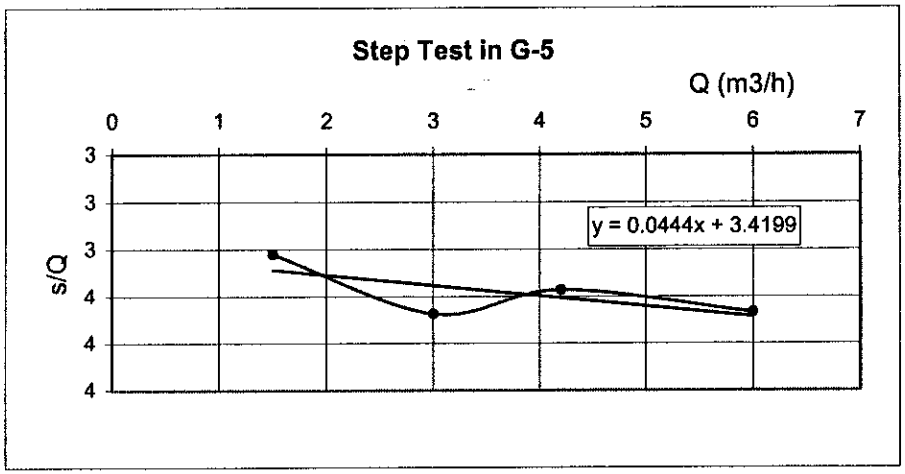
Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
45	2.7	1.45	0.54	102.67
90	5.4	2.62	0.49	113.65
135	8.1	3.78	0.47	118.16
180	10.8	4.93	0.46	120.79
140	8.4	4.4	0.52	105.27
95	5.7	3.25	0.57	96.71
			Average:	109.54

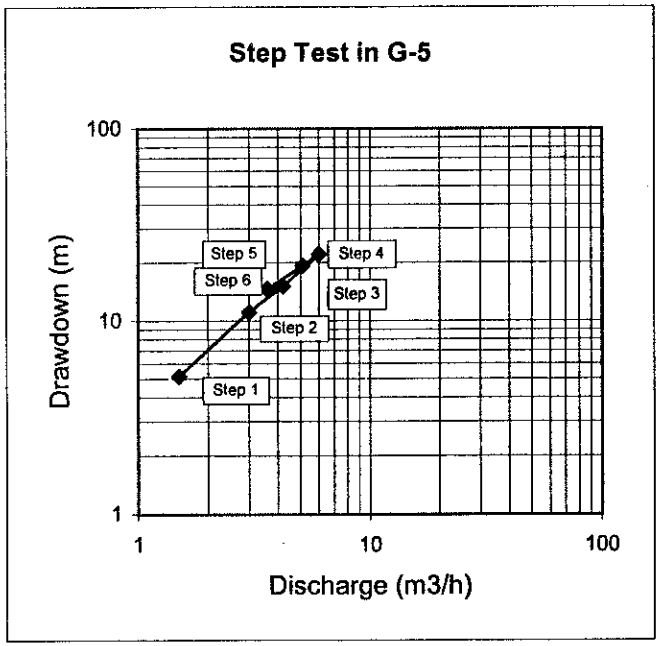
Calculated drawdown by
Hantush-Bierschenk method:
$s = B*Q + C*Q*Q$

B = 0.5514 h/m^2
C = 0.0096 h/m^3

Q (l/min)	Q (m3/h)	S (m)	
167	10	6.47	Calculated drawdown
250	15	10.43	after 2 hours
333	**20**	14.87	

Figure G5. 11 Step Drawdown Test at Borehole G-4





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
25	1.5	5.13	3.42	100.00
50	3.0	11.02	3.67	93.10
70	4.2	15.00	3.57	95.76
100	6.0	22.00	3.67	93.27
85	5.1	19.16	3.76	91.03
60	3.6	14.57	4.05	84.50
			Average:	92.94

Calculated drawdown by Hantush-Bierschenk method:

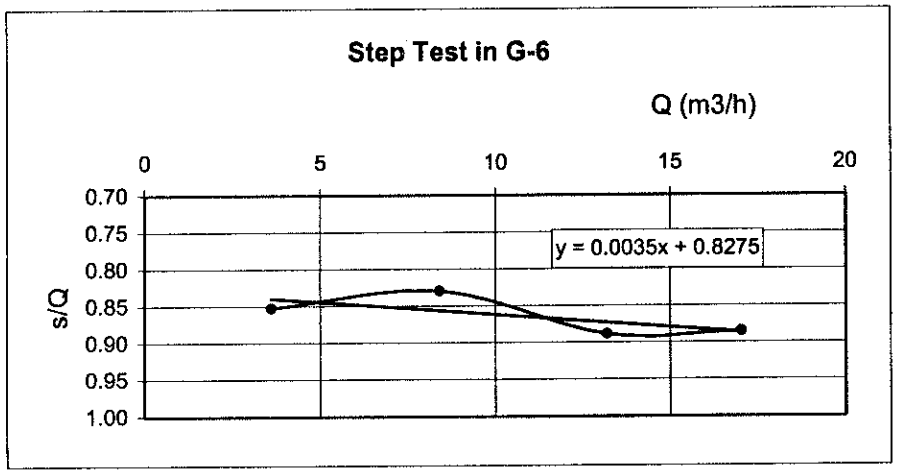
s= B*Q + C*Q*Q

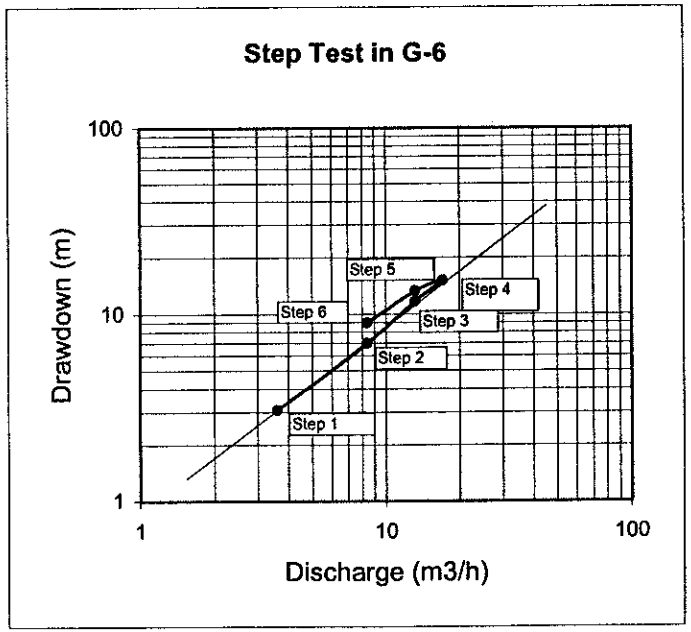
B = 3.4199

C = 0.0444

Q (l/min)	Q (m3/h)	s (m)	
66.7	4	14.39	Calculated drawdown
83.3	5	18.21	after 2 hours
100.0	**6**	**22.12**	

Figure G5. 12 Step Drawdown Test at Borehole G-5





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
60	3.6	3.07	0.85	97.04
140	8.4	6.97	0.83	99.73
220	13.2	11.73	0.89	93.12
284	17.0	15.08	0.88	93.51
220	13.2	13.25	1.00	82.44
140	8.4	8.96	1.07	77.58
			Average:	90.57

Calculated drawdown by Hantush-Bierschenk method:

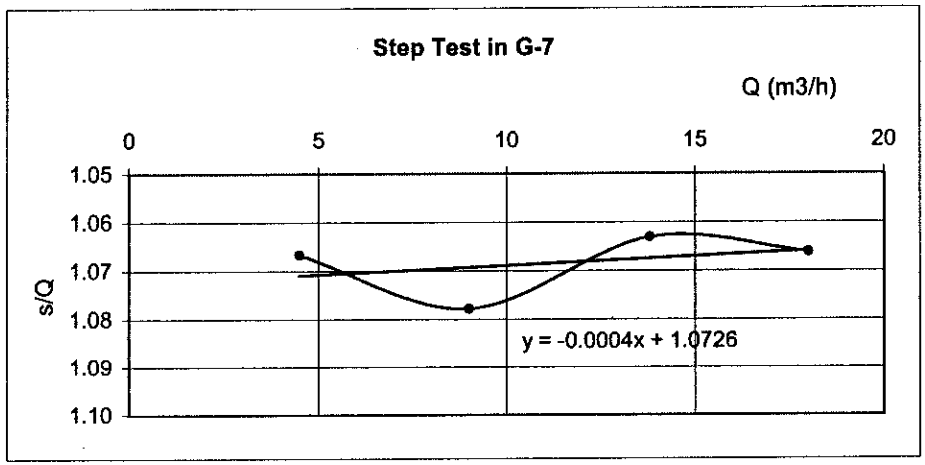
$s = B^*Q + C^*Q^*Q$

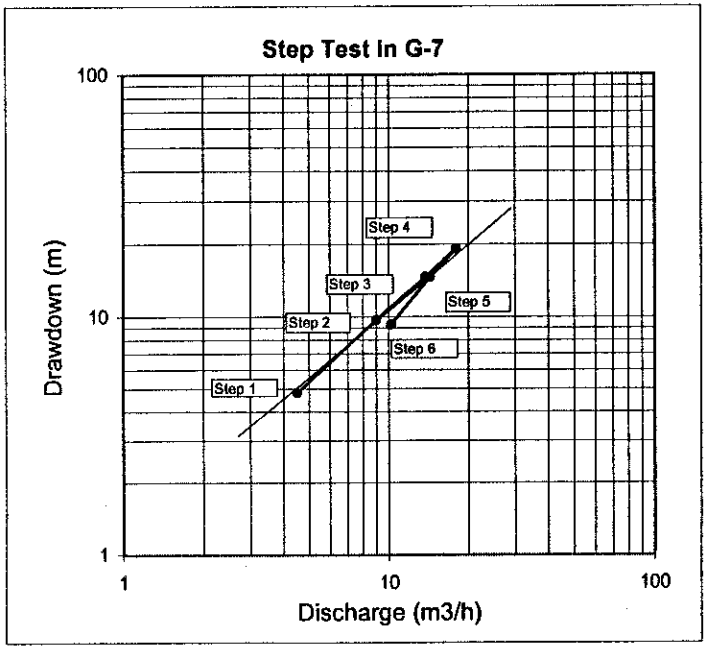
B = 0.8275 h/m^4

C = 0.0035 h/m^7

Q (l/min)	Q (m3/h)	s (m)	
333	20	17.95	Calculated drawdown
350	21	18.92	after 2 hours
367	**22**	19.90	

Figure G5. 13 Step Drawdown Test at Borehole G-6





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
75	4.5	4.8	1.07	100.56
150	9.0	9.7	1.08	99.52
230	13.8	14.67	1.06	100.90
300	18.0	19.19	1.07	100.61
240	14.4	14.63	1.02	105.57
170	10.2	9.29	0.91	117.77
			Average:	104.15

Calculated drawdown by Hantush-Bierschenk method:

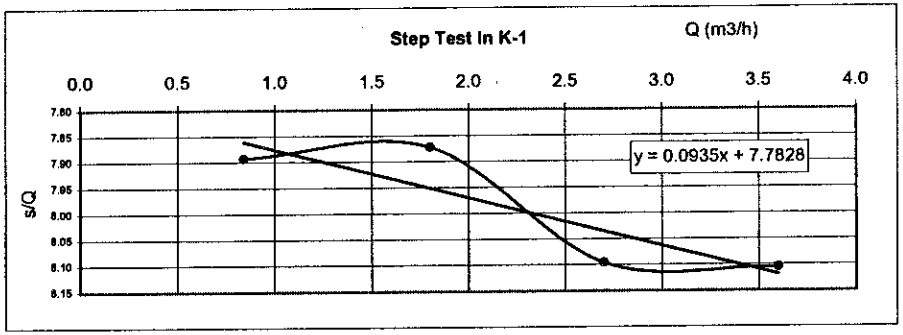
$s = B*Q + C*Q*Q$

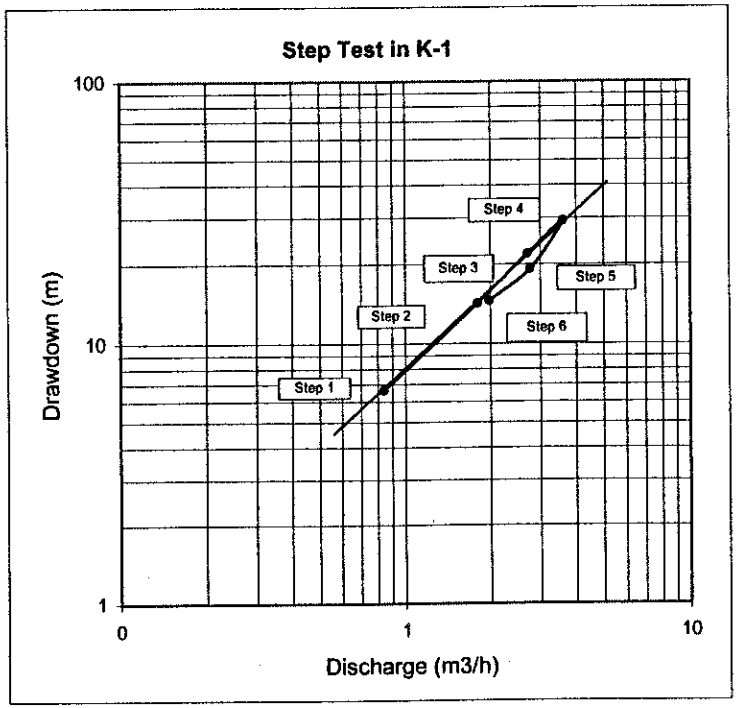
B = 1.0726

C = 0.0004

Q (l/min)	Q (m3/h)	S (m)	
250.0	15	16.18	Calculated drawdown
300.0	18	19.44	after 2 hours
316.7	**19**	20.52	

Figure G5. 14 Step Drawdown Test at Borehole G-7





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
14	0.8	6.63	7.89	98.61
30	1.8	14.17	7.87	98.86
45	2.7	21.86	8.10	96.13
60	3.6	29.18	8.11	96.02
46	2.8	19.18	6.95	111.99
33	2.0	14.51	7.33	106.20
			Average:	101.30

Calculated drawdown by
Hantush-Bierschenk method:

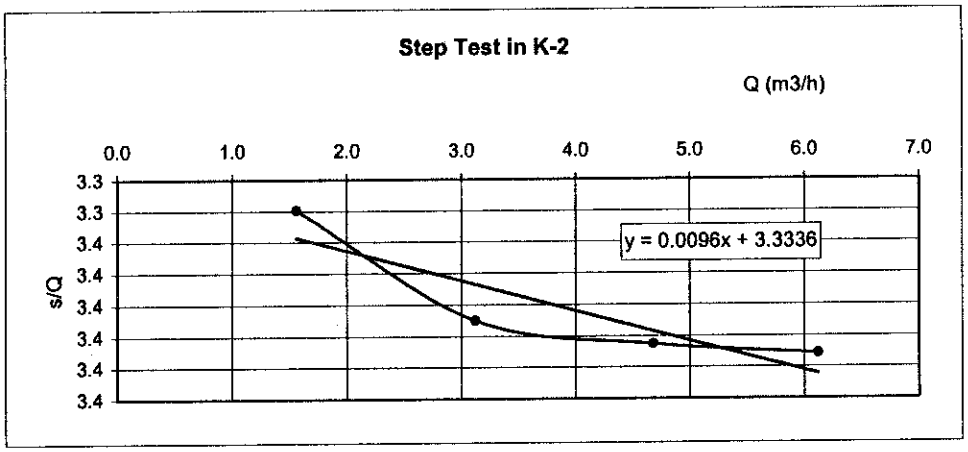
s= B*Q + C*Q*Q

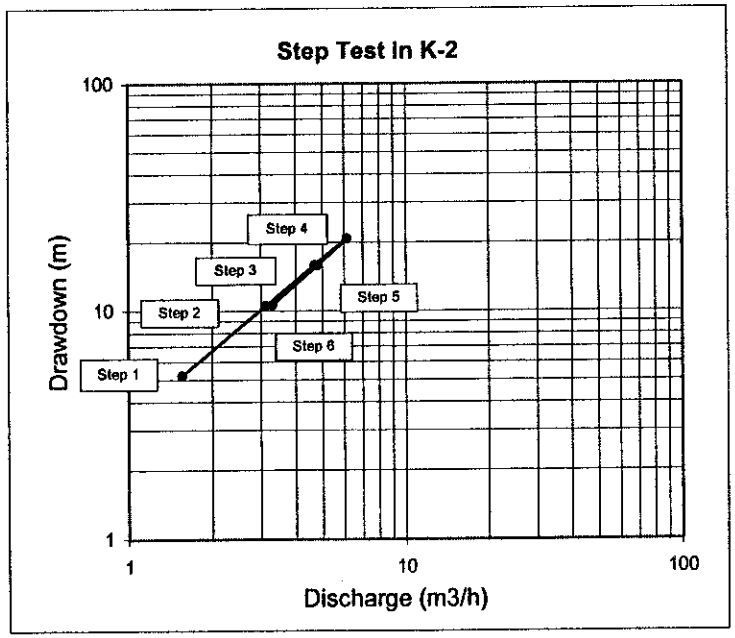
B = 7.7828 h/m2

C = 0.0935 h2/m5

Q (l/min)	Q (m3/h)	s (m)	
50.0	3	24.19	Calculated drawdown
58.3	3.5	28.39	after 2 hours
63.3	**3.8**	**30.92**	

Figure G5. 15 Step Drawdown Test at Borehole K-1





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
26	1.6	5.21	3.34	99.82
52	3.1	10.53	3.38	98.77
78	4.7	15.83	3.38	98.55
102	6.1	20.72	3.39	98.46
80	4.8	15.8	3.29	101.27
55	3.3	10.59	3.21	103.88
			Average:	100.13

Calculated drawdown by

Hantush-Bierschenk method:

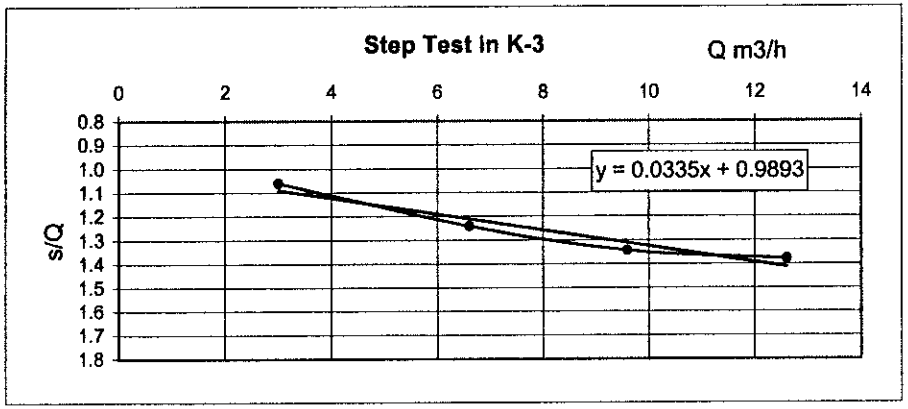
s= B*Q + C*Q*Q

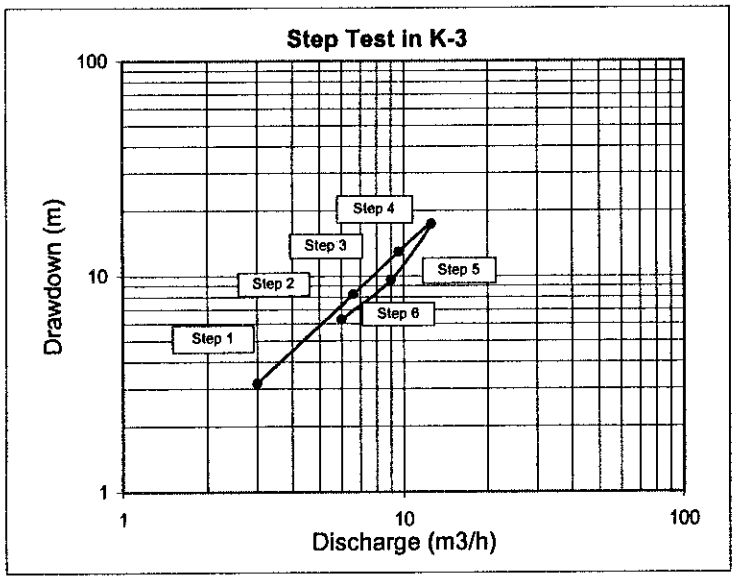
B = 3.3336

C = 0.0096

Q (l/min)	Q (m3/h)	s (m)	
66.7	4	13.49	Calculated drawdown
100.0	6	20.35	after 2 hours
141.7	**8.5**	**29.03**	

Figure G5. 16 Step Drawdown Test at Borehole K-2





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
50	3.0	3.18	1.06	0.93
110	6.6	8.2	1.24	0.80
160	9.6	12.9	1.34	0.74
210	12.6	17.36	1.38	0.72
150	9.0	9.59	1.07	0.93
100	6.0	6.28	1.05	0.95
			Average:	0.84

Calculated drawdown by

Hantush-Bierschenk method:

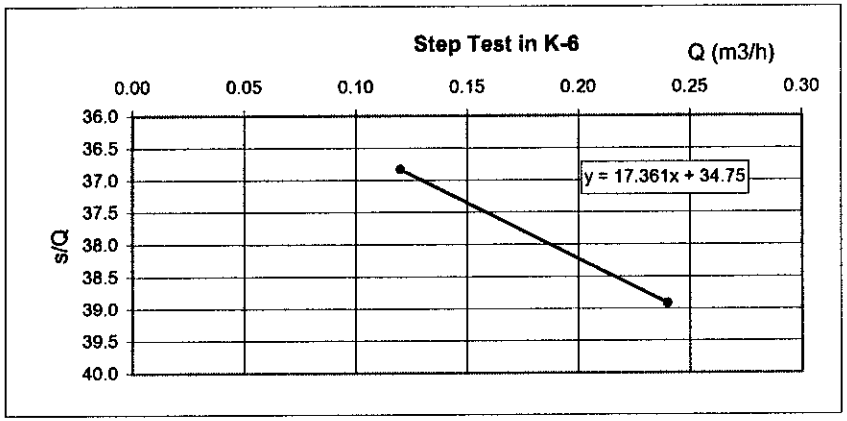
s= B*Q + C*Q*Q

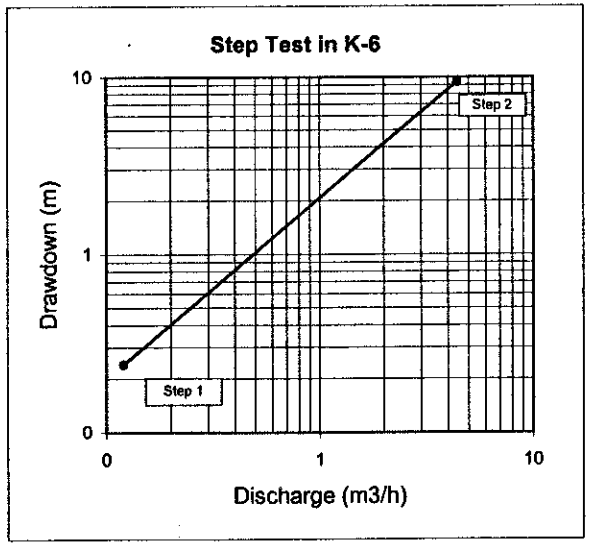
B = 0.9893

C = 0.0335

Q (l/min)	Q (m3/h)	s (m)	
200.0	12	16.70	Calculated drawdown
216.7	13	18.52	after 2 hours
233.3	**14**	**20.42**	

Figure G5. 17 Step Drawdown Test at Borehole K-3





Yield (Q)		Drawdown	s/Q	BQ/s
l/min	m3/h	s (m)	(h/m2)	(%)
2	0.12	4.42	36.83	0.94
4	0.24	9.34	38.92	0.89
			Average:	0.92

Calculated drawdown by
Hantush-Bierschenk method:
s= B*Q + C*Q*Q
B = 34.75
C = 17.361

Q (l/min)	Q (m3/h)	s (m)	
3.3	0.2	7.64	Calculated drawdown
5.0	0.3	11.99	after 2 hours
7.5	**0.45**	**19.15**	

Figure G5. 18 Step Drawdown Test at Borehole K-6

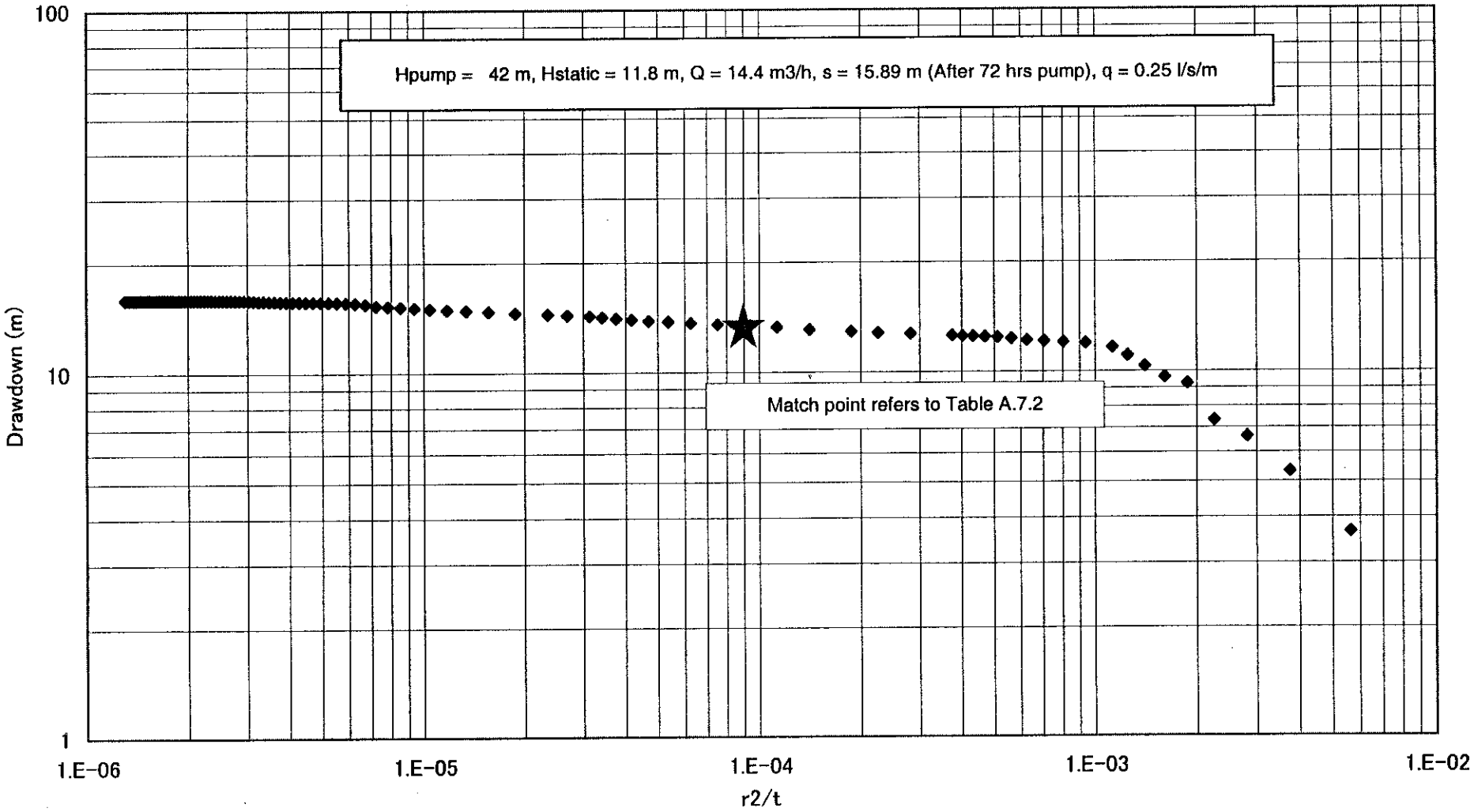


Figure G5. 19 Constant Continuous Pumping Test Analyzed by Theis Analysis Method at D1 (Krong Nang Town)

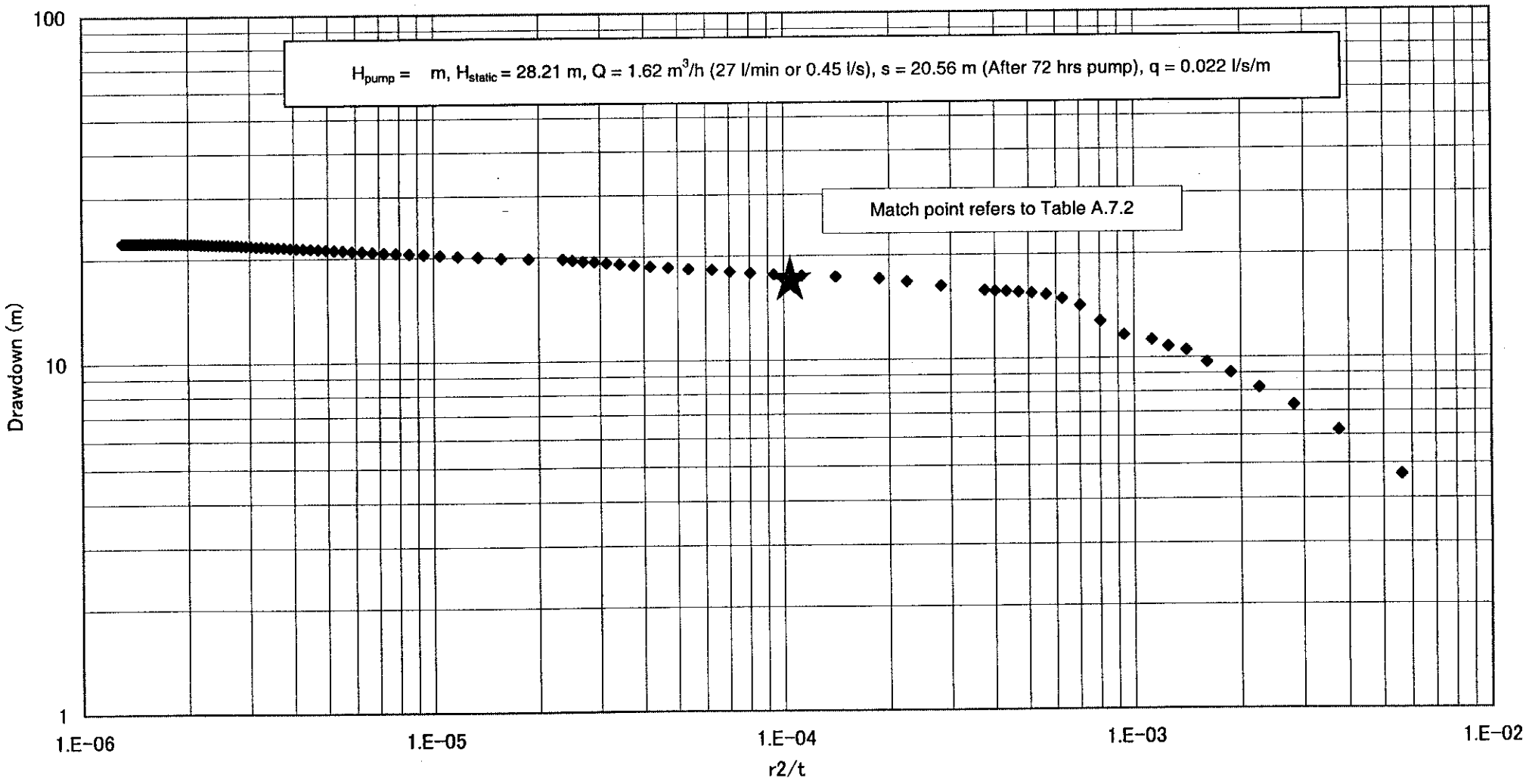


Figure G5. 20 Constant Continuous Pumping Test Analyzed by Theis Analysis Method at D2 (Ea Drang Town)

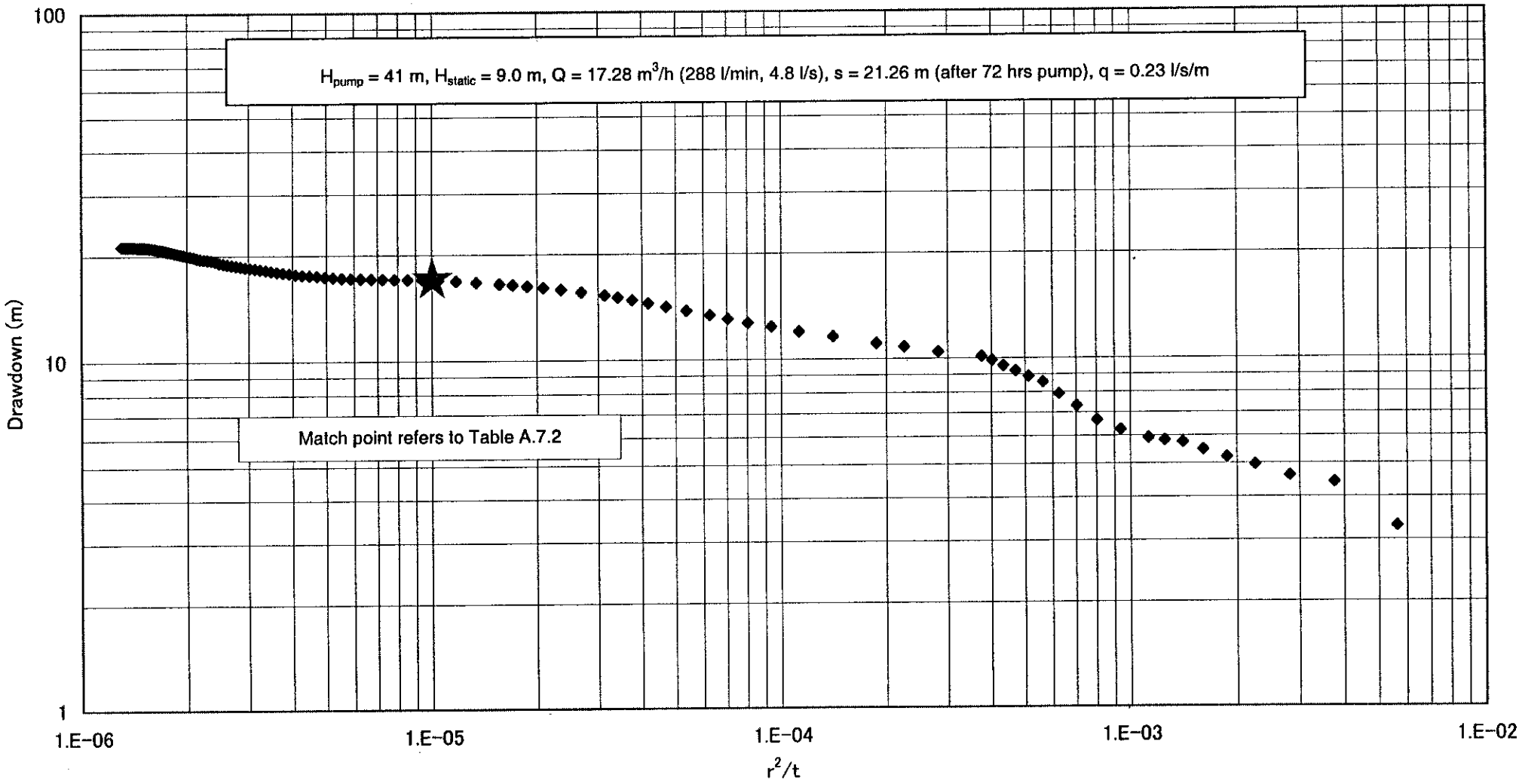
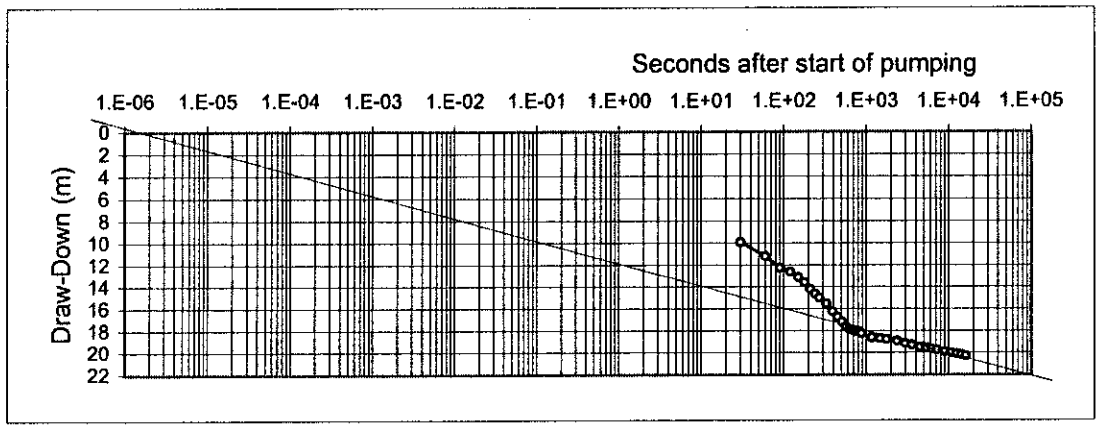
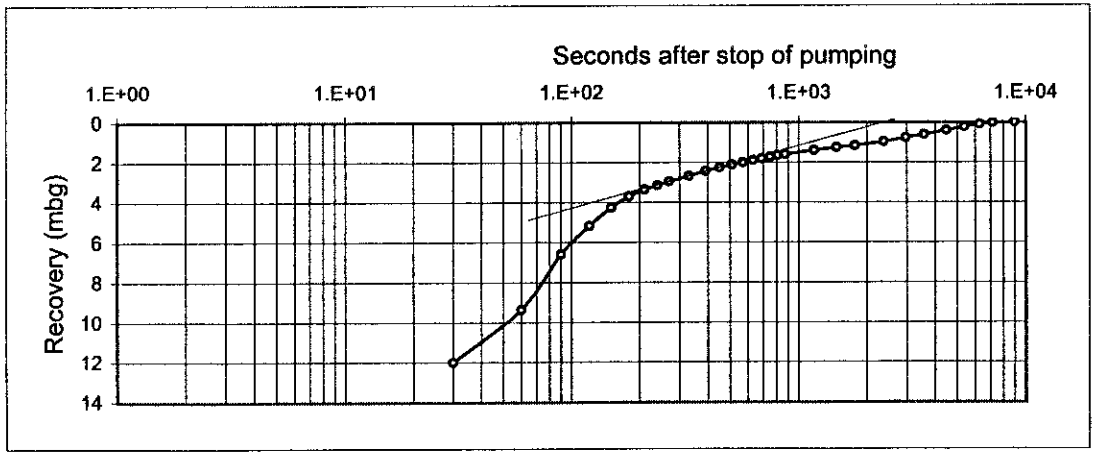


Figure G5. 21 Constant Continuous Pumping Test Analyzed by Theis Analysis Method at D3 (Krong Buk Commune)



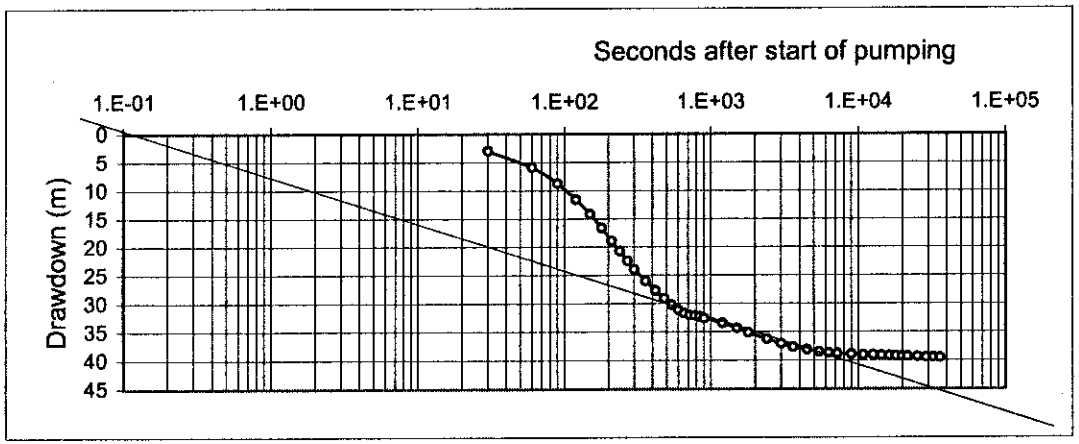
Transmissivity:		
Q =	**13.4**	**m3/h**
ds =	2.0	m/decade
T =	0.183*Q*24/ds	
T =	**29.51**	**m2/day**
T =	3.42E-04	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-06	sec
S =	2.25*T*t_0/r*r	
S =	**1.4E-07**	



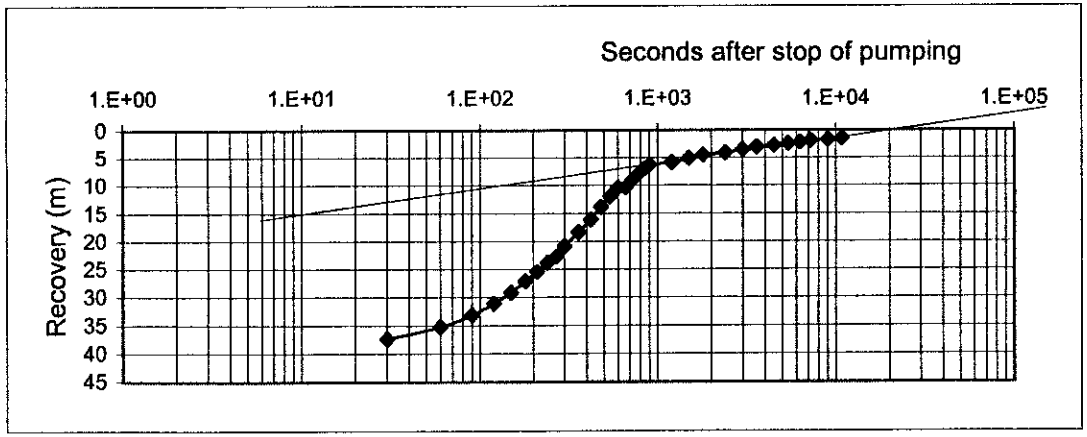
Transmissivity, recovery		
Q =	13.44	m3/h
ds =	3	m/decade
T =	0.183*Q*24/ds	
T =	**19.68**	**m2/day**
T =	2.28E-04	m2/sec

Figure G5. 22 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-1



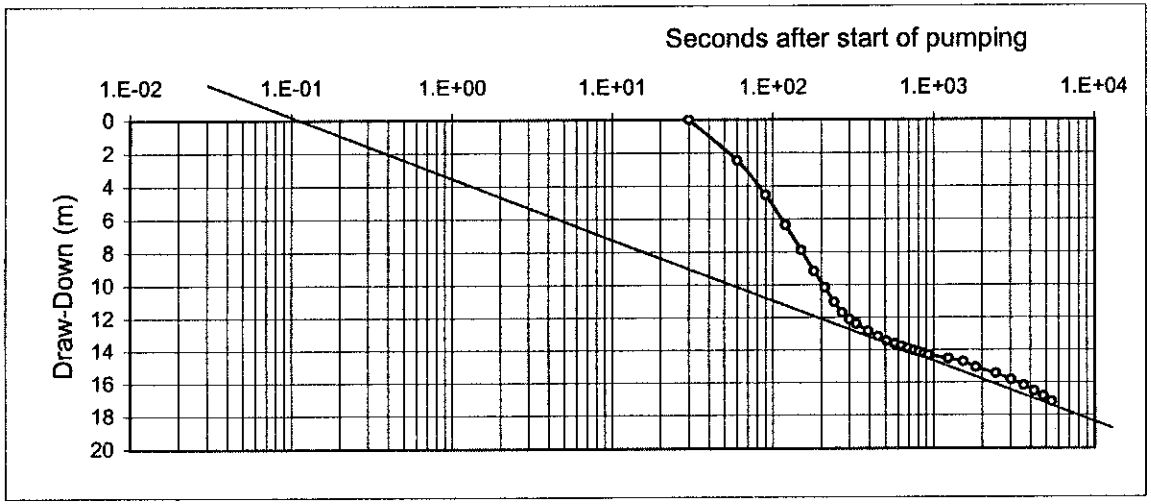
Transmissivity:		
Q =	**7.2**	**m3/h**
ds =	7.5	m/decade
T =	0.183*Q*24/ds	
T =	**4.22**	**m2/day**
T =	4.88E-05	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-01	sec
S =	2.25*T*t_0/r*r	
S =	**2.0E-03**	



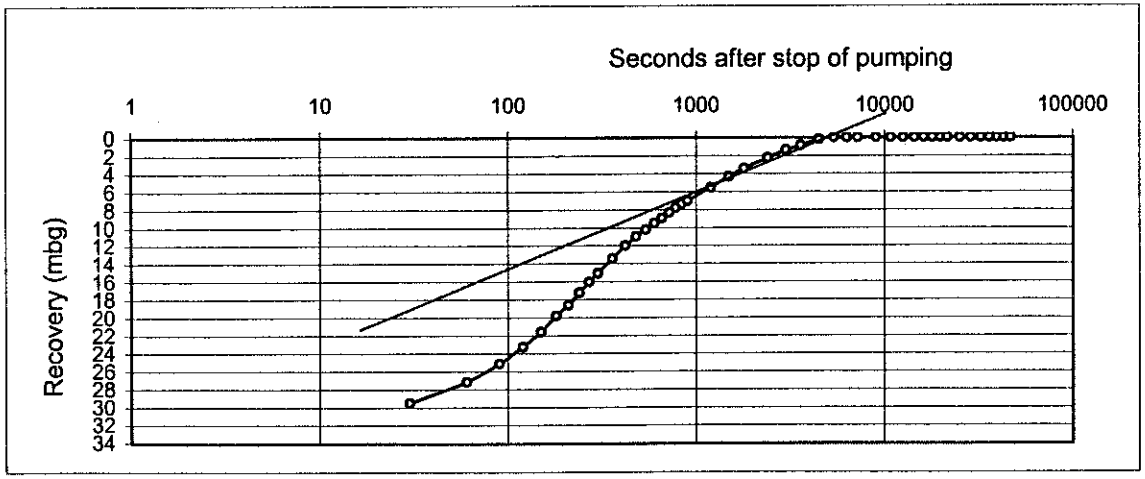
Transmissivity, recovery		
Q =	7.2	m3/h
ds =	5	m/decade
T =	0.183*Q*24/ds	
T =	**6.32**	**m2/day**
T =	7.32E-05	m2/sec

Figure G5. 23 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-2



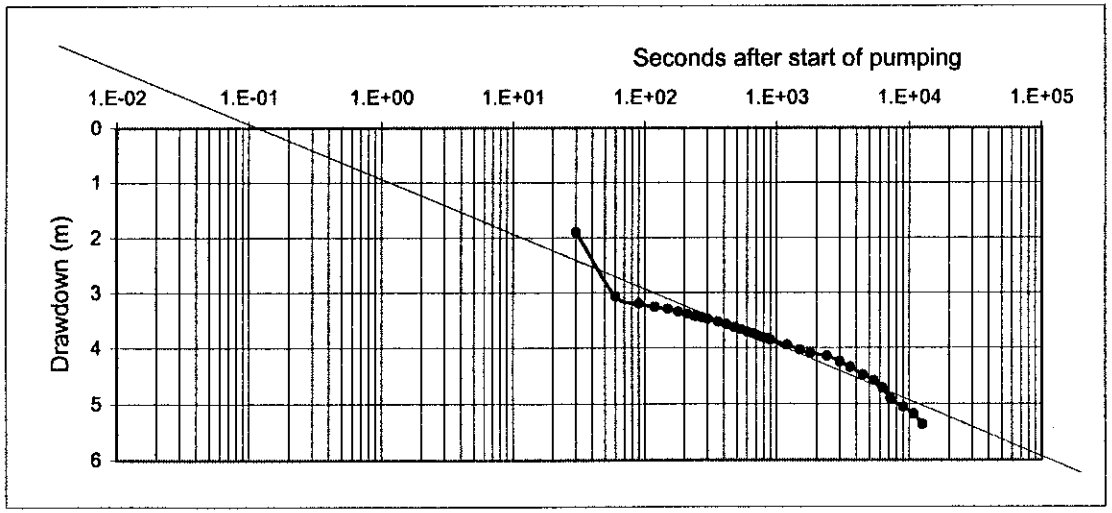
Transmissivity:		
Q =	**13.2**	**m3/h**
ds =	3.5	m/decade
T =	0.183*Q*24/ds	
T =	**16.56**	**m2/day**
T =	1.92E-04	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-01	sec
S =	2.25*T*t_0/r*r	
S =	**7.7E-03**	



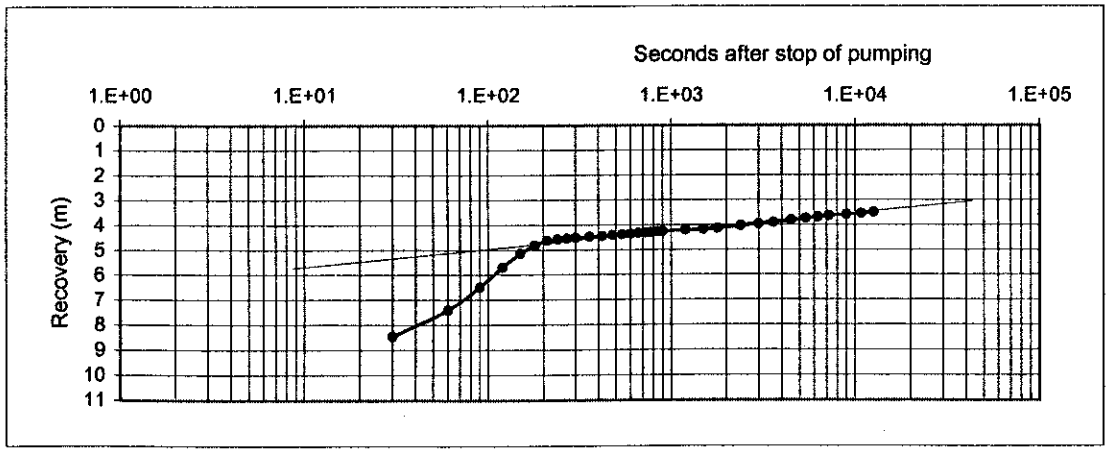
Transmissivity, recovery		
Q =	13.2	m3/h
ds =	8.3	m/decade
T =	**0.183*Q*24/ds**	
T =	**6.98**	**m2/day**
T =	8.08E-05	m2/sec

Figure G5. 24 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-3



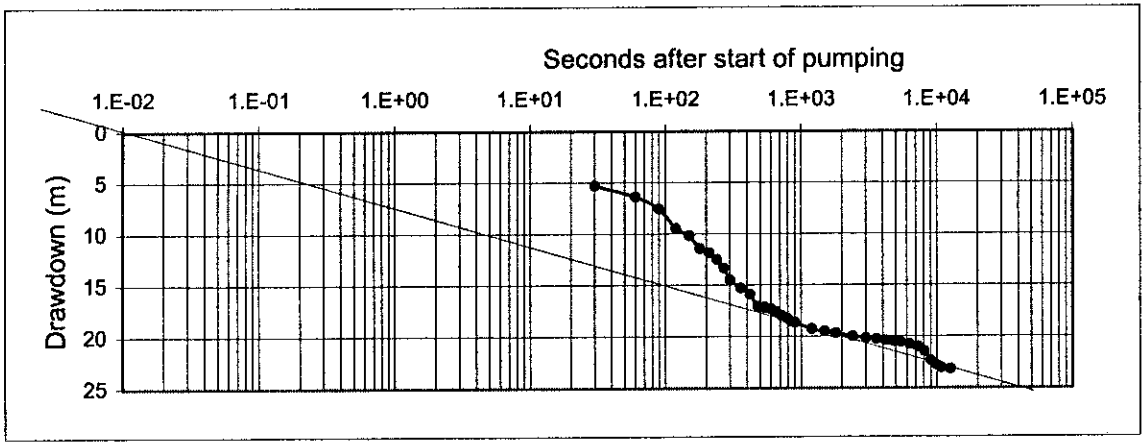
Transmissivity:		
Q =	**10.8**	**m3/h**
ds =	1.0	m/decade
T =	0.183*Q*24/ds	
T =	**47.43**	**m2/day**
T =	5.49E-04	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-01	sec
S =	2.25*T*t_0/r*r	
S =	**2.2E-02**	



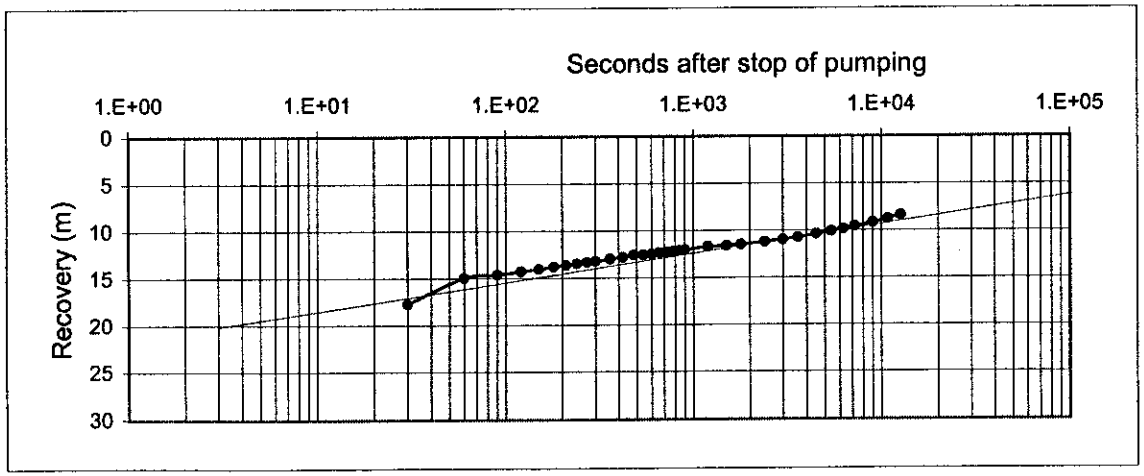
Transmissivity, recovery		
Q =	10.8	m3/h
ds =	0.7	m/decade
T =	**0.183*Q*24/ds**	
T =	**67.76**	**m2/day**
T =	7.84E-04	m2/sec

Figure G5. 25 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-4



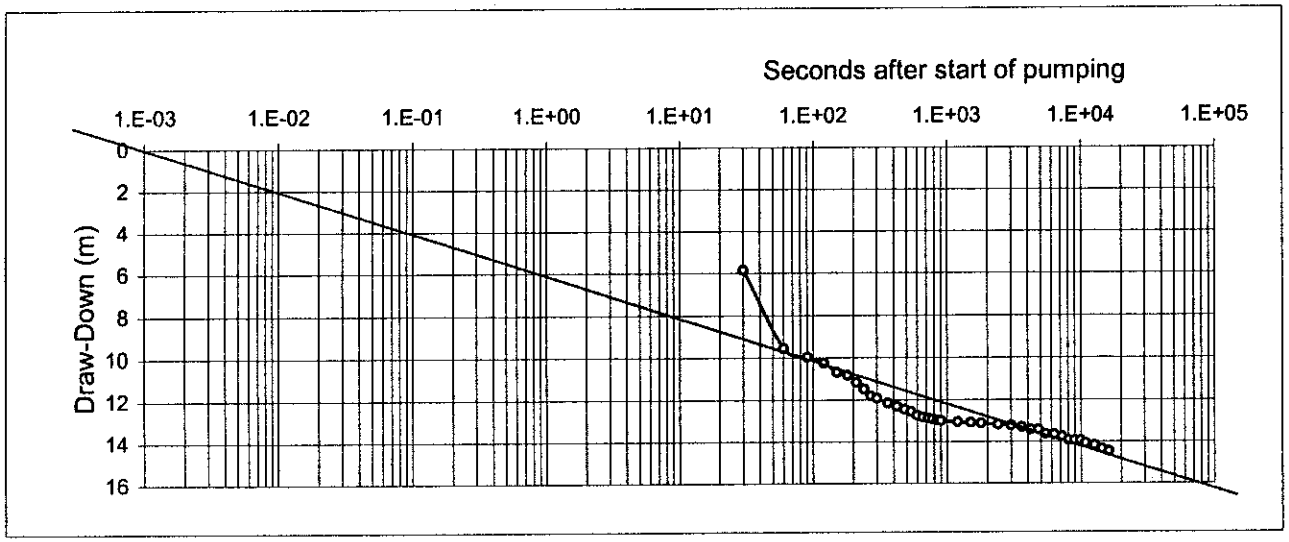
Transmissivity:		
Q =	**7.2**	**m3/h**
ds =	3.5	m/decade
T =	0.183*Q*24/ds	
T =	**9.03**	**m2/day**
T =	1.05E-04	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-02	sec
S =	2.25*T*t_0/r*r	
S =	**4.2E-04**	



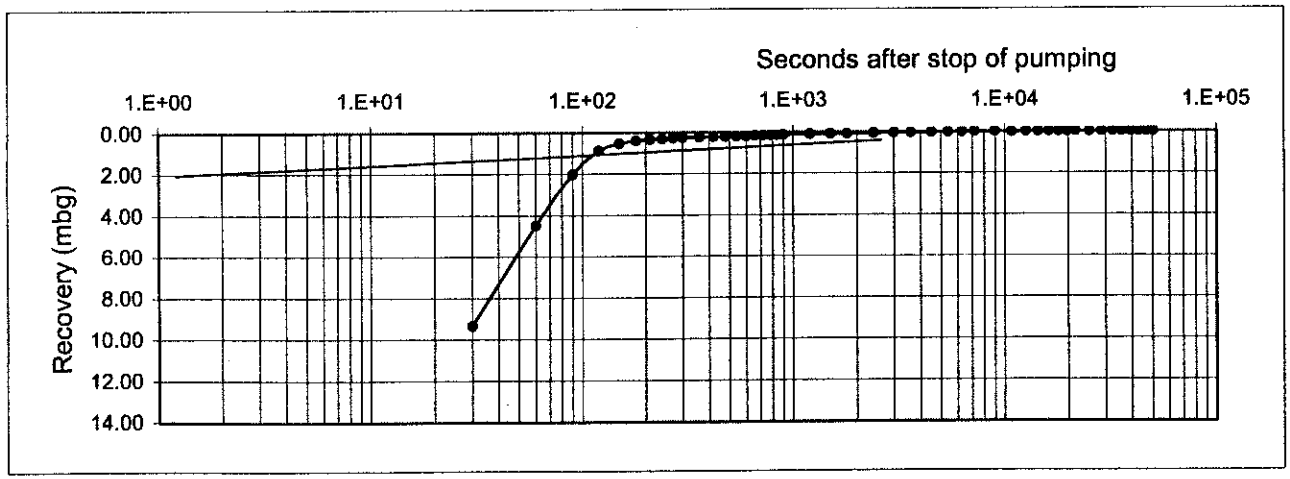
Transmissivity, recovery		
Q =	7.2	m3/h
ds =	3	m/decade
T =	).183*Q*24/ds	
T =	**10.54**	**m2/day**
T =	1.22E-04	m2/sec

Figure G5. 26 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-5



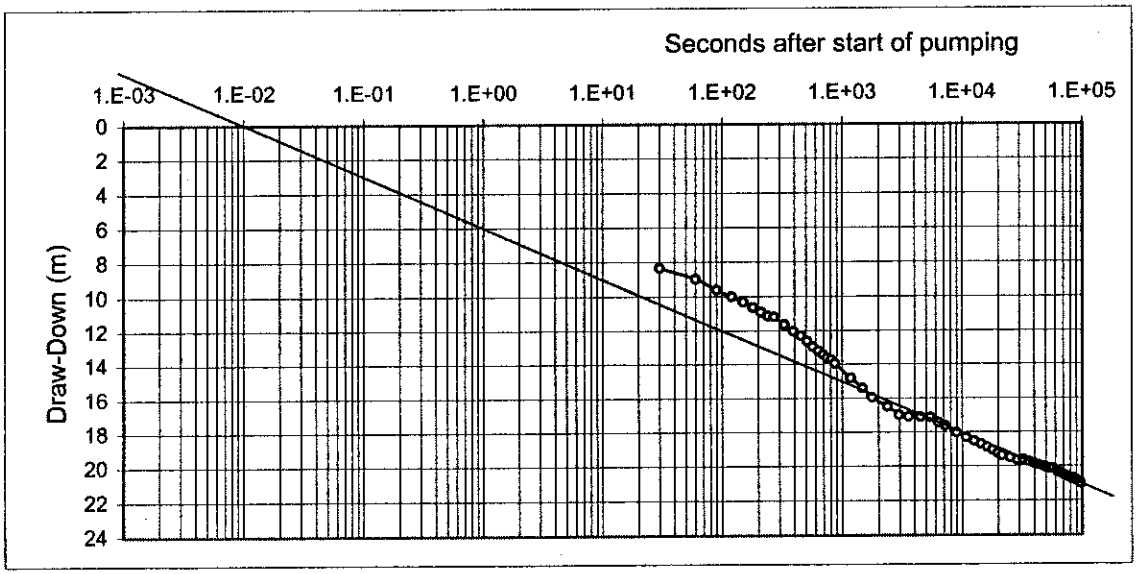
Transmissivity:		
Q =	16.9	m3/h
ds =	2.0	m/decade
	T = 0.183*Q*24/ds	
T =	37.16	m2/day
T =	4.30E-04	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-03	sec
	S = 2.25*T*t_0/r*r	
S =	1.7E-04	



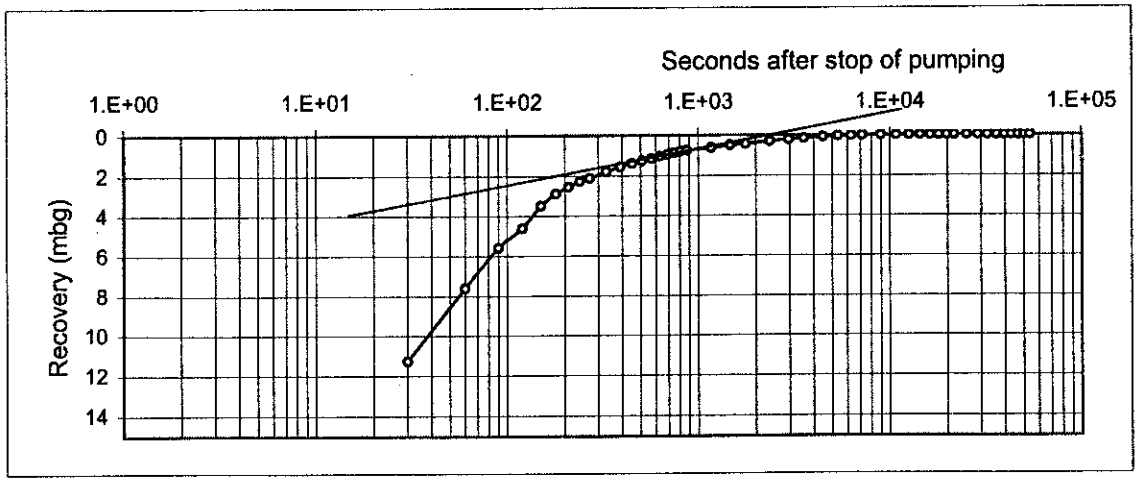
Transmissivity, recovery		
Q =	16.92	m3/h
ds =	1.2	m/decade
	T = 0.183*Q*24/ds	
T =	61.93	m2/day
T =	7.17E-04	m2/sec

Figure G5. 27 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-6



Transmissivity:		
Q =	**18.0**	**m3/h**
ds =	2.8	m/decade
T = 0.183*Q*24/ds		
T =	**28.23**	**m2/day**
T =	3.27E-04	m2/sec

Storage Coefficient:		
r =	0.075	
t_0 =	1.00E-02	sec
S =	$2.25*T*t_0/r*r$	
S =	**1.3E-03**	



Transmissivity, recovery		
Q =	18	m3/h
ds =	1.5	m/decade
T = 0.183*Q*24/ds		
T =	**52.70**	**m2/day**
T =	6.10E-04	m2/sec

Figure G5. 28 Calculation of Transmissivity and Storage Coefficient by Cooper-Jacob and Recovery methods at Borehole G-7