

Chapter 3

Well Inventory Data

Table K3. 1 Data Sheet : Existing Deep Well (more than 25m in Depth)

No.	Owner's Name	Well Type	Latitude	Longitude	Elevation	Year Const.	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dri. W.												A	B
G-3-9	Deep Well - 1	*	13° 48.491	107° 41.912	395		150.00		-	Clear	6.08	54.1	26.3	G-3-1	*
G-3-22	Deep Well - 2	*	13° 48.134	107° 41.526	421		-		-	-	-	-	-		
G-4-91	Church	*	13° 49.565	107° 53.715	606		57.00	80.00	-	Clear	5.00	13.94	25.1	G-4-1	*
G-5-6	PA DT LK C11° No.1	*	14° 6.297	107° 55.434	670		191.00	-	3.78	Clear	10.39	216	27.0	G-5-4	*
G-5-7	PA DT LK C11° No.2	*	14° 6.297	107° 55.434	670		75.00	-	3.96	Slight Turbid	10.61	235	26.4		
G-5-8	PA DT LK C11° No.3	*	14° 6.297	107° 55.434	670		58.50	-	3.85	Slight Turbid	7.59	186.0	26.0		
G-5-13	Rubber Company	*	14° 5.634	107° 58.253	730		120.00	120.00	-	Clear	8.17	238	27.5	G-5-1	*
G-7-63	Deep Well	*	13° 51.053	108° 32.720	450		70.00		-	Clear	7.29	445	26.1	G-7-1	**
D-1-60	Health S. Center	*	12° 56.937	108° 20.306	704		85.00	75.00	40.00	Clear	6.98	183.6	25.4	D-1-1	*
D-2-11	Ms. Hang	*	13° 13.119	108° 12.260	620	-	70.00	50.00	34.77	Slight Turbid	6.91	112.1	25.7	D-2-3	*
D-2-32	Ms. Du	*	13° 12.025	108° 13.006	573	-	70.00	55.00	15.78	Clear	6.82	250	26.1	D-2-4	*
D-2-54	Ms. Hong	*	13° 12.294	108° 12.413	616	-	70.00	45.00	28.92	Clear	6.89	135.1	25.7	D-2-2	*
D-2-72	Rubber Co. No.1	*	13° 12.223	108° 12.048	622		30.00	-	19.42	Clear	5.61	30.1	25.8		*
D-2-73	Rubber Co. No.2	*	13° 12.179	108° 12.136	620		127.00	87.00	-	Clear	7.40	210	26.0	D-2-1	*
D-2-74	Rubber Co. No.3	*	13° 12.154	108° 12.088	617		105.00	-	-	Clear	7.21	215	26.0		
D-3-74	Army Coffee Farm No.1	*	12° 46.406	108° 24.330	480		43.00	35.00	-	Slight Turbid	7.41	356	26.3	D-3-1	*
D-3-75	Army Coffee Farm No.2	*	12° 46.445	108° 24.144	480		65.00	-	Not in use	-	-	-	-		
D-3-76	Army Coffee Farm No.3	*	12° 46.360	108° 24.204	480		43.00	35.00	-	Slight Turbid	6.18	166.0	25.9		
D-3-77	Army Coffee Farm No.4	*	12° 46.250	108° 24.137	480		70.00	-	Not in use	-	-	-	-		
D-3-78	Army Coffee Farm No.5	*	12° 46.351	108° 24.279	480		75.00	-	Not in use	-	-	-	-		
D-3-79	Mr. Son	*	12° 47.183	108° 23.894	488	-	47.00	no	-	-	-	-	-		
D-3-80	Mr. Tri	*	12° 47.193	108° 23.974	488	-	42.00	no	-	-	-	-	-		
D-3-82	Mr. Sang	*	12° 47.818	108° 23.064	505	-	37.00	no	6.79	Clear	6.42	421	25.5		
D-3-84	Army Coffee Farm No.6	*			480		70.00	-	Not in use	-	-	-	-		
D-5-2	Mr. Son	*	12° 51.537	107° 50.366	200		25.00	12.00	5.42	Clear	6.69	935	28.1		
D-5-4	Mr. Trieu	*	12° 51.542	107° 50.400	200	-	30.00	7.00	6.50	Clear	6.68	903	28.1		
D-5-5	Mr. Thuc	*	12° 51.530	107° 50.432	198	-	45.00	17.50	6.80	Clear	6.88	822	28.4	D-5-1	*
D-5-8	Mr. Chinh	*	12° 51.508	107° 50.471	201	-	40.00	9.50	8.31	Slight Turbid	7.00	807	29.8		
D-5-9	Mr. Bay	*	12° 51.499	107° 50.478	201	-	26.00	-	5.59	Slight Turbid	6.85	740	28.9		
D-5-10	Mr. Phuong	*	12° 51.494	107° 50.503	200	-	40.00	?	3.80	-	-	-	-		
D-5-11	Mr. Tien	*	12° 51.493	107° 50.521	200	-	?	?	3.94	-	-	-	-		
D-5-14	Mr. Vinh	*	12° 51.394	107° 50.667	201	-	60.00		7.25	Slight Turbid	7.01	640	28.2		

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Table K3. 2 Data Sheet : Existing Deep Well (more than 25m in Depth)

No.	Owner's Name	Well Type	Latitude	Longitude	Elevation	Year Const.	Well Depth	Pump Depth	G.W.L.	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dri. W.					GL-(m)	GL-(m)	GL-(m)					A	B
D-5-18	Mr. Toan	*	12° 51.279	107° 51.002	204	-	37.00		4.13	Clear	7.08	468	28.5		
D-5-20	Mr. Lan	*	12° 51.149	107° 51.140	209		38.00	29.30	8.52	Clear	6.80	775	28.9	D-5-2	*
D-5-38	Deep Well	*	12° 50.309	107° 51.790	211		70.00	50.00	-	Clear	6.93	652	28.5	D-5-3	*
D-5-50	Mr. Vien	*	12° 50.031	107° 52.411	211	-	39.00	39.00	2.80	Clear	6.97	779	28.4	D-5-4	*
D-6-1	BARD (Bank)	*	11° 59.591	107° 30.700	715	1999	195.00	120.00	> 40	-	-	-	-		
D-6-3	Mr. Gap (GD of BARD)	*	11° 59.628	107° 30.716	715	1998	154.00	70.00	-	Clear	7.04	228.0	27.0	D-6-3	*
D-6-4	Mr. LOC (VC of DPC)	*	11° 59.648	107° 30.720	715	1996	141.00	80.00	-	Clear	7.94	210.0	28.4	D-6-1	*
D-6-5	Mr. Nho	*	11° 59.727	107° 30.683	720	1997	124.00	80.00	-	Clear	7.00	225.0	27.1		+
D-6-6	Tax Office	*	11° 59.779	107° 30.701	728	2000	162.00	70.00	-	Clear	7.97	199.2	27.2	D-6-2	*
D-6-7	DPC Office	*	12° 0.421	107° 30.718	680	1998	110.00	80.00	-	Clear	6.99	188.7	24.9		
D-6-8	Police Station	*	12° 0.431	107° 30.786	683	1998	140.00	80.00	-	Clear	6.88	149.7	28.1		
D-6-9	Health S. Center	*	12° 0.245	107° 30.643	676	1998	90.00	50.00	-	Clear	6.70	163.2	25.7		
D-6-11	Mr. Kim	*	12° 0.271	107° 30.724	672	2000	85.00	40.00	-	Clear	7.97	220.0	26.7		
D-6-12	Education Office	*	12° 0.032	107° 30.758	691	2000	150.00		-	Clear	6.93	195.4	27.3		
D-6-13	WS -2	*	12° 0.015	107° 30.702	688		145.00	68.00	-	Clear	6.79	147.6	26.7	D-6-4	*
D-6-14	WS -1	*	12° 0.105	107° 30.861	685		150.00		-	Clear	7.45	195.0	26.5	D-6-5	*
D-6-15	SADACO Co.	*	11° 59.751	107° 30.928	716	1999	110.00	80.00	>80	-	-	-	-		
D-6-16	Post Office	*	11° 59.709	107° 30.703	722	1997	100.00	80.00	-	Clear	7.08	193.9	28.1		
D-6-17	Mr. Su	*	11° 59.626	107° 30.688	714	2000	127.00	60.00	-	Clear	5.34	58.1	24.7		
D-6-18	Mr. Hoa	*	11° 59.558	107° 30.609	714	2000	146.00	70.00	-	Clear	6.18	140.5	25.1		
D-7-1	Drilling Well - 1	*	12° 30.691	108° 20.553	435	2001	30.00	25.00	-	Clear	6.32	156.5	25.6	D-7-2	*
D-7-2	Drilling Well - 2	*	12° 30.601	108° 20.673	436	2001	26.50	25.00	-	Clear	6.14	222	26.2	D-7-1	*

Table K3. 3 Data Sheet : Hydrogeological Investigation Result of Bo Y Commune (K-1)

Investigation Date : from March 29 to March 31, 2011

No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
1	GFS-1					14° 40.430	107° 35.994	680	20-30	-	-	-	-	-	-	Clear	8.31	126.3	23.5		
2	Mr. Ngan	*				14° 40.431	107° 36.034	675		Full	13.09	11.72	11.0	NDU	Clear	6.73	77.3	23.9			
3	Mr. Soi	*				14° 40.417	107° 36.002	670		Full	9.36	8.05	5.4	NDU	Clear	6.41	54.4	23.9			
4	Mr. Thao Riu	*				14° 40.383	107° 36.041	664		-	7.88	4.94	0.0	DU	-	-	-	-			
5	Mr. Truong	*				14° 40.391	107° 36.071	665		0.3	5.77	5.25	2.0	NDU	Slight Turbid	5.85	25.8	22.9			
6	Frontier Guard- GFS					14° 40.437	107° 36.193	690		-	-	-	-	-	Clear	8.46	128.8	24.8	K-1-1	*	
7	Mr. Ac	*				14° 40.312	107° 36.107	665		0.3	3.64	2.33	-	-	-	-	-	-			
8	GFS-3					14° 40.298	107° 36.122	665		-	-	-	-	-	Clear	8.46	130.9	24.0			
9	Public Well	*				14° 40.263	107° 36.147	663		Full	1.67	0.79	0.0	NDU	Turbid	6.31	90.2	23.6			
10	Rivulet					14° 40.238	107° 36.183	657	70-80	-	-	-	-	-	Slight Turbid	7.43	81.1	24.4			
11	GFS-4 - Primary School					14° 40.218	107° 36.239	666		-	-	-	-	-	Clear	8.30	130.1	23.6			
12	Mr. Xai	*				14° 40.233	107° 36.239	666		1.0	9.35	8.13	7.8	DU	Slight Turbid	6.66	130.9	22.9			
13	Mr. Lao	*				14° 40.187	107° 36.265	666		0.5	7.52	7.52	7.3	DU	Slight Turbid	-	-	-			
14	Mr. Va	*				14° 40.089	107° 36.346	663		0.3	6.35	4.77	4.4	NDU	Slight Turbid	6.30	61.9	23.4			
15	Mr. En	*				14° 40.071	107° 36.309	662		Full	4.09	2.70	0.5	NDU	Clear	6.15	129.3	23.5			
16	Mr. Tu	*				14° 40.139	107° 36.348	661		0.0	2.00	0.86	0.0	NDU	Turbid	5.74	29.4	23.7			
17	Ms. Chau	*				14° 40.111	107° 36.392	660		1.0	8.70	6.08	3.0	NDU	Clear	6.09	54.7	22.8			
18	Mr. Anh	*		*		14° 39.937	107° 36.587	655		-	4.46	2.89	1.5	NDU	Clear	5.84	427	24.0			
19	GFS-5					14° 39.945	107° 36.613	658		-	-	-	-	-	Dried up	-	-	-			
20	Public Well	*				14° 39.970	107° 36.587	660		1.0	9.05	8.10	-	-	-	-	-	-			
21	Riverlet					14° 39.994	107° 36.565	659	50-60	-	-	-	-	NDU	Clear	7.31	44.8	22.3			
22	Public Well	*				14° 39.958	107° 36.605	660		1.0	7.56	7.56	7.0	DU	-	-	-	-			
23	GFS-6					14° 39.929	107° 36.647	659		-	-	-	-	-	-	-	-	-			
24	Public Well	*				14° 39.924	107° 36.655	658		-	5.60	5.60	-	DU	-	-	-	-			
25	Mr. Do	*				14° 39.907	107° 36.584	654		Full	3.14	1.87	0.0	NDU	Clear	6.40	73.6	24.9			
26	GFS-7(Health S. Center)					14° 39.885	107° 36.599	654		-	-	-	-	NDU	Clear	8.27	129.3	24.0	K-1-3	-	
27	Ms. Nga	*		*		14° 39.873	107° 36.650	654		0.3	4.15	3.15	2.2	NDU	Clear	6.02	75.2	23.3	K-1-4	-	
28	Mr. Nhat	*		*		14° 39.959	107° 36.893	655		-	5.00	2.93	-	-	Clear	6.30	93.9	23.2			
29	Mr. Buong	*		*		14° 39.961	107° 37.012	656		0.3	9.26	8.40	-	-	Slight Turbid	6.96	203	24.1			
30	Mr. Then	*				14° 39.972	107° 37.046	658		0.0	11.60	11.40	10.0	DU	Turbid	6.30	33.9	23.4			
31	Secondary School	*				14° 40.041	107° 37.082	660		Full	13.15	11.78	11.0	NDU	Slight Turbid	6.80	108.9	23.6			
32	Mr. Phuong	*		*		14° 39.992	107° 37.106	658		1.0	13.25	12.90	9.0	NDU	Clear	5.42	18.34	24.6			
33	Mr. Long	*		*		14° 39.920	107° 37.176	650		1.0	3.32	2.87	1.3	NDU	Clear	5.48	23.3	24.8			
34	Mr. Axen	*				14° 40.072	107° 37.235	654		0.3	4.85	4.34	1.5	NDU	Slight Turbid	5.75	28.7	24.0			
35	Mr. Hien	*		*		14° 40.107	107° 37.211	654		0.3	5.97	4.62	3.0	NDU	Turbid	6.05	68.7	24.1			
36	Mr. Thach	*		*		14° 40.128	107° 37.271	654		0.0	2.88	2.53	0.0	NDU	Turbid	5.72	19.51	23.7			
37	Mr. Chuong	*				14° 40.164	107° 37.278	654		0.0	4.04	3.65	0.0	NDU	Slight Turbid	5.63	41.4	23.7			
38	Mr. Thao Chet	*				14° 40.201	107° 37.294	654		0.0	4.81	4.36	3.8	NDU	Slight Turbid	5.89	25.5	23.3			

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Table K3. 4 Data Sheet : Hydrogeological Investigation Result of Bo Y Commune (K-1)

Investigation Date : from March 29 to March 31, 20

No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
39	Public Well	*				14° 40.202	107° 37.311	654		Full	4.54		4.32	3.0	NDU	-	-	-	-		
40	Public Well	*				14° 40.224	107° 37.332	654		Full	4.68		4.35	2.0	DU	Slight Turbid	5.57	18.17	23.8		
41	M. Hai	*			*	14° 40.247	107° 37.394	654		1.5	1.65		1.06	0.0	NDU	Slight Turbid	5.93	67.0	24.7		
42	Mr. Danh	*				14° 40.319	107° 37.415	654		0.2	3.65		1.90	0.0	NDU	Slight Turbid	6.99	415	23.9		
43	Mr. Pan	*				14° 40.308	107° 37.445	654		1.0	6.09		4.82	0.0	NDU	Slight Turbid	5.60	19.93	23.6		
44	Mr. Ton	*				14° 40.327	107° 37.461	654		1.0	7.80		6.21	4.8	NDU	Slight Turbid	5.80	19.43	23.8		
45	Mr. Thao Lang	*				14° 40.286	107° 37.467	653		-	6.70		5.00	3.2	NDU	Slight Turbid	5.34	15.06	23.5		
46	Mr. Nhan	*		*		14° 40.390	107° 37.466	655		0.5	1.00		7.89	5.2	DU	Slight Turbid	5.77	28.9	24.6		
47	Public Well	*		*		14° 40.403	107° 37.527	655		1.0	9.64		7.40	0.5	NDU	Slight Turbid	5.28	14.45	24.0		
48	Ms. Ninh	*		*		14° 40.449	107° 37.518	655		0.0	8.27		7.34	1.0	DU	Clear	5.45	26.6	25.6		
49	Unknown Name	*				14° 40.448	107° 37.483	655		1.0	8.66		7.58	2.0	NDU	Slight Turbid	6.21	64.2	24.0		
50	Rivulet					14° 40.549	107° 37.290	658	100~150	-	-		-	-	NDU	Slight Turbid	7.71	118.9	29.1		
51	Public Well	*				14° 40.478	107° 37.484	655		1.0	7.83		7.50	2.0	DU	Slight Turbid	6.31	70.3	23.9		
52	Unknown Name	*				14° 40.387	107° 37.558	654		1.0	9.37		7.37	-	-	-	-	-	-		
53	Public Well	*				14° 40.467	107° 37.590	654		1.0	8.64		8.14	-	NDU	Slight Turbid	5.34	14.98	24.0		
54	Mr. Cuong	*		*		14° 40.512	107° 37.578	654		-	7.36		5.88	1.5	NDU	Clear	5.51	19.23	24.6		
55	Public Well	*				14° 40.521	107° 37.641	654		1.0	6.30		3.54	-	NDU	Clear	4.79	18.07	24.1		
56	Mr. Hoa	*				14° 40.554	107° 37.661	654		0.0	3.66		3.06	-	-	Slight Turbid	5.29	13.39	24.3		
57	Rivulet					14° 40.617	107° 37.705	654		-	-		-	-	-	Turbid	7.37	82.3	32.6		
58	Unknown Name	*				14° 40.622	107° 37.714	654		0.3	2.72		2.29	-	-	Clear	5.48	31.2	23.7		
59	Mr. Luong	*				14° 40.675	107° 37.715	656		1.0	7.68		5.89	-	-	Clear	5.11	49.3	23.6		
60	Unknown Name	*				14° 40.648	107° 37.794	655		0.0	8.29		3.56	-	-	Slight Turbid	5.44	53.0	23.3		
61	Public Well	*				14° 40.730	107° 37.701	657		Full	8.25		7.42	6.7	NDU	Clear	5.88	27.6	23.6		
62	Mr. Hue	*				14° 40.775	107° 37.661	657		0.5	8.95		8.48	4.0	NDU	Slight Turbid	5.45	18.16	23.7		
63	Mr. Thuan	*		*		14° 40.697	107° 37.730	656		Full	8.56		6.95	-	NDU	Clear	6.43	21.6	27.2		
64	Ms. Trinh	*				14° 40.730	107° 37.776	662		1.0	8.06		6.47	3.5	NDU	Clear	5.69	25.9	22.9		
65	Unknown Name	*		*		14° 40.729	107° 37.828	660		0.2	5.92		5.15	-	-	Clear	5.39	35.6	24.1		
66	Unknown Name	*		*		14° 40.776	107° 37.795	660		0.7	7.63		6.75	-	-	Clear	5.20	29.3	23.6		
67	Unknown Name	*				14° 40.796	107° 37.726	661		0.0	8.73		8.00	-	-	Clear	5.29	20.1	23.9		
68	Mr. Khanh	*				14° 40.839	107° 37.709	662		0.0	8.30		7.43	-	-	Clear	5.01	19.76	27.6		
69	Mr. Thiem	*				14° 40.882	107° 37.667	664		0.0	7.47		7.11	6.0	NDU	-	-	-	-		
70	Mr. Huan	*		*		14° 40.743	107° 37.849	657		-	4.75		3.95	1.8	NDU	Clear	6.25	60.9	27.6		
71	Mr. Toan	*				14° 40.754	107° 37.865	656		0.0	2.04		1.41	0.5	NDU	Clear	5.50	39.7	23.3		
72	Rivulet					14° 40.770	107° 37.867	654	60~70	-	-		-	-	-	Turbid	6.94	81.0	30.8		
73	Mr. Dung	*		*		14° 40.794	107° 37.899	658		1.0	4.68		4.33	2.7	NDU	Clear	5.23	20.7	24.4		
74	Mr. Thu	*		*		14° 40.830	107° 37.895	664		0.2	9.26		9.01	4.0	NDU	Turbid	5.49	37.3	23.7		
75	Mr. Can	*		*		14° 40.855	107° 37.908	672		0.2	13.61		12.84	10.0	NDU	Slight Turbid	5.45	14.15	23.8		
76	Mr. Do	*		*		14° 40.851	107° 37.952	681		0.0	15.00		12.00	12.0	NDU	Clear	5.30	16.30	24.7		

Table K3. 5 Data Sheet : Hydrogeological Investigation Result of Bo Y Commune (K-1)

Investigation Date : from March 29 to March 31, 2011

No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
77	Mr. Khang	*		*		14° 40.831	107° 37.967	681		0.3	13.40		12.60	-	NDU	Clear	5.15	15.91	24.8		
78	Mr. Son	*		*		14° 40.832	107° 38.018	683		1.0	14.07		12.56	10.0	NDU	Clear	5.71	25.4	24.9		
79	Mr. Du	*				14° 40.779	107° 38.002	678		1.0	8.30		6.86	3.3	NDU	Clear	5.75	25.4	24.2		
80	Public Well	*				14° 40.854	107° 38.065	683		1.0	13.00		12.00	10.5	NDU	-	-	-	-		
81	Public Well	*				14° 40.073	107° 38.095	678		1.0	13.12		12.00	8.0	NDU	Clear	6.16	37.6	24.5		
82	Public Well	*				14° 40.892	107° 38.125	678		1.0	14.00		13.30	12.0	DU	Clear	5.98	28.9	24.3		
83	Public Well	*				14° 40.835	107° 38.170	665		1.0	8.64		4.85	1.8	NDU	Slight Turbid	6.70	76.1	24.7		
84	Mr. Luat	*				14° 40.818	107° 38.176	664		0.3	4.82		2.63	2.6	DU	Clear	5.42	34.4	23.1		
85	Mr. Bat	*				14° 40.785	107° 38.114	678		0.3	4.58		4.38	2.6	NDU	Slight Turbid	5.57	16.13	23.3		
86	Public Well	*				14° 40.918	107° 38.166	676		1.0	14.32		12.00	7.0	NDU	Clear	6.07	34.6	24.6		
87	Public Well	*				14° 40.945	107° 38.180	675		1.0	13.68		12.38	8.0	NDU	Clear	5.71	21.9	24.4		
88	Public Well	*				14° 40.962	107° 38.215	670		1.0	10.10		10.05	-	DU	-	-	-	-		
89	Ms. Yen	*				14° 40.900	107° 38.287	660		0.5	4.27		3.53	-	-	Clear	5.31	25.6	24.2		
90	DPC Public Well	*				14° 40.907	107° 38.252	668		1.0	7.88		5.59	1.9	NDU	Clear	5.80	20.3	24.3		
91	Public Well	*				14° 40.876	107° 38.204	666		1.0	9.15		6.15	6.1	NDU	Clear	4.97	21.0	24.4		
92	Mr. Yuen	*				14° 40.827	107° 38.234	657		0.5	3.26		2.32	-	-	Clear	5.48	17.50	23.2		
93	Mr. Dao	*				14° 40.027	107° 38.207	668		0.5	12.40		12.00	7.4	NDU	Clear	5.41	16.20	24.9		
94	Mr. Lanh	*				14° 41.066	107° 38.144	668		0.5	13.40		13.10	9.4	NDU	Clear	6.20	54.1	24.5		
95	Mr. Thuan	*				14° 41.071	107° 38.095	670		0.5	15.59		12.31	11.6	NDU	Slight Turbid	6.25	70.3	24.6		
96	Mr. Can	*				14° 41.074	107° 38.017	672		1.0	15.17		14.77	12.2	DU	Slight Turbid	6.01	47.1	24.0		
97	Pipe Flow System					14° 40.262	107° 36.220	670		-	-		-	-	-	Clear	7.20	45.3	24.5	K-1-2	*
98	B-B-C.No.1		*			14° 39.969	107° 37.239	656		-	50.00		-	-	-	-	-	-	-		
99	Reserver					14° 40.059	107° 36.401	660		-	-		-	-	-	Slight Turbid	7.89	62.2	26.7		
100	JICA K-1		*			14° 40.060	107° 37.319	654		-	170.00		-	-	-	Clear	7.23	188.3	26.5	K-1-0	*
101	Mr. Son	*		*		14° 40.090	107° 37.256	654		-	7.00		1.00	-	-	Clear	6.79	168.4	24.7	K-1-5	*
102	Rivulet					14° 40.318	107° 36.255	689	50-60	-	-		-	-	-	Clear	7.23	46.4	24.7		No.1
103	Unknown Name	*				14° 40.218	107° 36.201	670		-	6.60		4.64	-	-	Clear	5.96	21.6	24.2		No.2

Table K3. 6 Data Sheet : Hydrogeological Investigation Result of Dak Su Commune (K-2)

Investigation Date : from May 14 to May 15, 2001

No.		K-2				District Name		Province Name			Kon Tum										
Commune Name		Dak Su				Ngoc Hoi			Kon Tum												
No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
1	Mr. Chuyen	*		*		14° 42.141	107° 40.368	659		0.2	10.70		6.20	5.0	NDU	Slight Turbid	5.30	47.0	24.3	K-2-5	-
2	Mr. Khuong	*				14° 42.076	107° 40.240	656		0.0	2.74		1.60	0.0	NDU	Turbid	5.69	26.4	24.6		
3	Mrs. Me Chin	*				14° 42.069	107° 40.116	662		0.2	6.24		4.45	-	-	Clear	5.23	11.37	23.9		
4	Mrs. Y Nen	*				14° 41.943	107° 40.067	664		0.5	7.66		5.46	0.0	DU	Clear	4.93	18.94	24.2	K-2-4	-
5	Mr. Luyen	*				14° 41.819	107° 40.043	668		1.0	10.67		9.77	6.0	NDU	Clear	5.54	21.1	24.5		
6	Mr. Hoanh	*		*		14° 41.683	107° 39.988	661		0.2	4.10		1.25	0.8	NDU	Clear	5.56	30.7	31.9		
7	Mr. Son	*		*		14° 41.616	107° 39.979	670		0.2	13.54		12.55	6.0	NDU	Clear	6.24	125.5	25.7		
8	Mr. Bai	*		*		14° 41.510	107° 39.987	679		0.3	10.57		9.97	-	-	Slight Turbid	6.55	77.7	24.3		
9	Mr. Thap	*				14° 41.327	107° 39.876	669		0.2	7.96		6.89	0.0	NDU	Clear	5.27	23.5	23.7	K-2-3	*
10	Mr. Dong	*		*		14° 41.217	107° 39.811	664		0.2	6.18		4.30	0.5	NDU	Clear	5.16	22.5	24.3		
11	Rivulet					14° 41.060	107° 39.601	659	70-80	-	-		-	-	DU	Slight Turbid	6.27	24.8	25.7		
12	Mr. Hanh	*				14° 41.046	107° 39.618	660		Full	2.69		1.69	0.0	DU	Clear	5.86	30.2	25.4		
13	Mr. Quy	*				14° 41.031	107° 39.460	659		0.2	5.60		1.50	1.5	NDU	Turbid	5.76	14.63	25.3		
14	Ms. Nu	*				14° 41.122	107° 39.378	664		0.5	6.84		3.72	0.0	NDU	Clear	5.06	11.16	24.4		
15	Mr. Chien	*				14° 41.147	107° 39.307	671		Full	10.83		5.30	4.3	DU	Clear	5.97	68.9	24.6		
16	Ms. Su	*				14° 41.207	107° 39.207	682		Full	10.82		9.50	7.0	DU	Slight Turbid	6.07	61.1	24.8	K-2-2	-
17	Mr. Tong	*				14° 40.949	107° 39.136	660		0.2	3.12		2.44	2.0	NDU	Clear	5.35	13.14	25.4	K-2-1	*
18	Mr. Duc	*				14° 40.988	107° 39.238	665		Full	7.69		5.08	1.0	NDU	Clear	6.19	77.7	24.3		
19	Mr. Ly	*				14° 41.272	107° 39.121	689		Full	10.24		9.46	8.2	DU	Turbid	6.63	88.4	25.6		
20	Mr. Thiet	*				14° 41.409	107° 38.858	688		0.2	16.63		16.00	-	DU	Clear	5.86	67.0	24.3		
21	Mr. Ban	*				14° 41.346	107° 38.785	687		0.2	11.24		10.84	3.0	NDU	Clear	6.30	56.2	24.0		
22	Mr. Binh	*				14° 41.286	107° 38.528	683		0.2	10.34		10.25	3.0	DU	-	-	-	-		
23	Mr. Duoc	*				14° 42.236	107° 40.446	659		0.2	10.60		8.90	3.0	DU	Clear	5.22	18.71	24.6		
24	Mr. Xuan	*		*		14° 42.285	107° 40.561	664		0.2	12.62		10.85	4.0	NDU	Clear	6.00	67.5	24.3		
25	Mr. Hien	*				14° 42.337	107° 40.687	684		0.2	13.92		13.70	10.0	NDU	Slight Turbid	5.50	39.4	24.0		No.1
26	Mr. Dui	*				14° 42.205	107° 40.185	661		Full	4.86		3.80	0.0	NDU	Clear	5.89	162.5	24.9		
27	Mr. Vo	*				14° 42.315	107° 40.164	663		0.2	7.54		5.63	1.0	NDU	Clear	6.00	42.0	24.1		
28	Mr. Tuyen	*		*		14° 42.437	107° 40.138	666		0.2	9.85		9.55	1.0	NDU	Clear	5.25	25.5	24.7		
29	Mr. Lanh	*				14° 42.257	107° 40.225	661		0.2	6.02		4.77	-	NDU	Slight Turbid	4.58	73.5	23.9		
30	Rivulet					14° 42.734	107° 39.950	671		-	-		-	-	NDU	Slight Turbid	6.35	29.2	28.6		No.2
31	JICA K-2-1		*			14° 41.172	107° 39.212	683		-	60.00		-	-	-	-	-	-	-		
32	JICA K-2-2		*			14° 40.946	107° 39.142	660		-	70.00		-	-	-	Clear	7.26	175.7	24.5	K-2-0	*

Table K3. 7 Data Sheet : Hydrogeological Investigation Result of Dak Ui Commune (K-3)

Investigation Date : from March 26 to March 28, 200

No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
1	Rivulet					14° 34.594	108° 0.912	661	1,000	-	-	-	-	-	-	Clear	8.17	135.8	25.5		
2	Rivulet (Intake)					14° 34.516	108° 1.055	663	-	-	-	-	-	-	-	Clear	8.26	137.9	25.5	K-3-1	*
3	Mr. Y Toi	*				14° 34.640	108° 0.850	665		0.3	3.02	2.48	2.0	NDU	Slight Turbid	6.55	109.3	24.4			
4	Mr. Uxia	*				14° 34.668	108° 0.830	665		0.3	4.18	3.39	2.0	DU	Slight Turbid	6.80	105.7	24.0			
5	Mr. Hoang	*		*		14° 34.907	108° 0.798	667		0.3	3.25	2.57	-	NDU	Clear	6.01	59.5	23.4			
6	Mr. Ata	*				14° 34.874	108° 0.800	666		0.3	5.91	5.66	-	-	Slight Turbid	6.21	67.5	23.6			
7	Rivulet					14° 34.886	108° 0.836	663	500	-	-	-	-	-	Slight Turbid	7.62	164.7	30.0			
8	Ms. Yroi	*				14° 34.797	108° 0.817	667		0.3	7.58	6.99	5.6	DU	Clear	5.78	25.9	24.0			
9	Mr. Ato	*			*	14° 34.743	108° 0.813	666		0.1	7.20	6.55	3.5	NDU	Slight Turbid	6.02	44.1	25.1			
10	Mr. Axem	*		*		14° 34.705	108° 0.809	666		0.3	5.88	5.05	3.9	NDU	Clear	5.95	19.20	24.4			
11	Mr. Hai	*				14° 34.645	108° 0.788	664		0.3	3.33	2.63	1.4	NDU	Clear	6.14	68.1	24.5			
12	Mr. Abat	*				14° 34.620	108° 0.727	664		0.0	4.11	3.28	2.0	NDU	Clear	6.05	73.3	23.6			
13	Mr. Aklang	*				14° 34.629	108° 0.666	664		2.0	5.78	4.66	4.6	4.6	Clear	6.29	206.0	23.6			
14	Mr. Abaep	*		*		14° 34.643	108° 0.612	664		0.5	5.30	4.80	0.5	DU	Slight Turbid	5.54	345.0	23.3			
15	Mr. A Loan	*		*		14° 34.653	108° 0.593	664		0.5	5.12	3.83	2.5	DU	Slight Turbid	5.61	41.7	23.7			
16	Mr. Abra	*				14° 34.647	108° 0.570	664		0.5	7.31	6.03	5.0	NDU	Slight Turbid	5.78	27.8	23.6			
17	Mr. Ahiep	*				14° 34.663	108° 0.521	664		0.5	4.76	3.48	0.0	NDU	Slight Turbid	5.86	53.4	23.2			
18	Mr. Are	*				14° 34.660	108° 0.514	664		0.5	5.80	5.00	3.0	NDU	Clear	5.88	38.6	22.8			
19	Mr. Dinhtu	*				14° 34.667	108° 0.509	664		0.3	5.20	3.80	0.0	DU	Clear	5.60	50.0	23.1			
20	Mr. Akrut	*				14° 34.676	108° 0.465	664		0.3	4.75	3.82	1.8	NDU	Turbid	5.78	67.6	23.1			
21	Mr. Achro	*		*		14° 34.715	108° 0.483	665		0.3	8.22	6.84	5.7	NDU	Slight Turbid	5.73	31.5	23.4			
22	Mr. Aclen	*				14° 34.619	108° 0.454	664		0.3	3.03	1.26	-	NDU	Turbid	5.71	36.7	22.0			
23	Mr. Ale	*				14° 34.653	108° 0.439	664		Full	4.10	2.40	2.1	NDU	Clear	6.03	115.1	22.9			
24	Second. School	*		*		14° 34.632	108° 0.382	664		Full	3.90	2.38	0.5	DU	Clear	5.67	59.3	23.8	K-3-4	*	
25	Post Office	*				14° 34.593	108° 0.354	664		0.3	4.25	2.92	-	NDU	Turbid	5.63	40.4	23.0		Loc.4	
26	Mr. Uxnuoi	*				14° 34.560	108° 0.322	664		0.5	3.73	3.05	0.0	NDU	Turbid	6.66	134.0	22.0			
27	Mr. Vu	*				14° 34.527	108° 0.316	662		-	4.45	0.10	0.0	NDU	Turbid	6.56	345.0	23.6			
28	Mr. Tam	*		*		14° 34.524	108° 0.280	661		0.3	3.62	2.22	0.5	NDU	Turbid	5.57	33.3	23.3			
29	Ms. Ybai	*				14° 34.545	108° 0.238	662		0.3	2.62	1.90	0.6	DU	Turbid	5.97	76.6	22.9			
30	Public Well	*				14° 34.595	108° 0.209	665		Full	8.63	6.93	-	-	Clear	6.06	51.4	23.7			
31	Public Well	*				14° 34.627	108° 0.189	666		Full	9.19	7.07	7.0	NDU	Clear	6.22	54.7	23.6			
32	Mr. Abok	*		*		14° 34.501	108° 0.314	662		Full	3.00	1.65	-	NDU	Clear	6.03	82.1	24.0			
33	Mr. Adra	*				14° 34.433	108° 0.301	662		Full	2.73	0.83	0.0	NDU	Slight Turbid	6.65	110.2	23.9			
34	Mr. Angoi	*		*		14° 34.377	108° 0.291	662		Full	3.86	2.42	-	NDU	Clear	6.47	70.0	24.2			
35	Mr. Adro	*				14° 34.327	108° 0.284	662		0.3	2.60	1.05	1.0	DU	Turbid	5.98	40.6	23.3			
36	Mr. Ahuynh	*				14° 34.303	108° 0.260	661		0.3	2.75	0.92	0.0	NDU	Turbid	5.64	34.7	24.0			
37	Mr. Aab	*				14° 34.299	108° 0.260	661		0.0	1.85	0.58	0.0	NDU	Turbid	5.86	44.4	23.2			
38	Mr. Brau	*				14° 34.000	108° 34.293	661		Full	2.57	1.03	0.0	NDU	Turbid	6.17	79.1	24.0			

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Table K3. 9 Data Sheet : Hydrogeological Investigation Result of Dak Ui Commune (K-3)

Investigation Date : from March 26 to March 28, 2008

No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity µ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
77	Mr. Nghiep	*		*		14° 32.987	107° 58.946	658		0.0	7.45		6.20	3.5	NDU	Clear	5.12	22.2	32.7		
78	Mr. Kin	*				14° 32.905	107° 58.930	659		0.0	10.43		8.78	2.4	NDU	Slight Turbid	5.14	20.6	25.2		
79	Mr. Lai	*				14° 32.875	107° 58.867	659		Full	14.47		13.37	7.5	NDU	Clear	6.36	46.9	25.2		
80	Mr. Tuoi	*				14° 32.797	107° 58.805	658		0.3	14.80		12.30	7.8	NDU	Slight Turbid	6.07	36.7	24.3		
81	Mr. Danh	*				14° 32.788	107° 58.741	657		0.3	13.29		12.25	8.0	NDU	Turbid	6.60	47.0	25.0		
82	Mr. Trai	*				14° 32.832	107° 58.661	666		0.3	13.09		11.18	11.0	NDU	Slight Turbid	5.28	16.64	24.5		
83	Mr. Trong	*				14° 32.591	107° 58.257	680		0.3	9.00		7.77	6.8	NDU	Slight Turbid	4.93	40.6	25.3		
84	Mr. Lan	*		*		14° 32.574	107° 58.168	678		0.2	10.06		9.80	7.0	NDU	-	-	-	-		
85	Unknown Name	*				14° 32.561	107° 58.131	664		0.3	10.93		9.45	-	-	Clear	5.10	18.89	24.8		
86	Mr. Toan	*				14° 32.535	107° 58.093	656		0.3	7.53		6.30	2.5	NDU	Clear	5.19	22.0	25.1		
87	Mr. Thu	*				14° 32.510	107° 57.963	655		1.0	7.72		6.59	6.5	6.5	Clear	5.04	72.6	24.4		
88	Mr. Dinh	*		*		14° 32.429	107° 57.901	656		0.0	8.72		8.21	-	-	Turbid	5.29	18.35	25.6		
89	Mr. The	*		*		14° 32.391	107° 57.858	656		0.3	13.75		12.03	7.8	NDU	Slight Turbid	5.12	13.43	25.6		
90	Mr. Xinh	*		*		14° 32.326	107° 57.808	656		-	6.62		6.12	4.1	NDU	Clear	4.98	66.8	24.9		
91	Mr. Thin	*		*		14° 32.274	107° 57.775	655		0.0	8.02		6.91	5.0	NDU	Clear	5.30	29.6	24.6		
92	Unknown Name	*				14° 32.206	107° 57.731	656		0.0	12.90		12.11	-	-	Turbid	5.63	56.6	24.5		
93	Mr. Bong	*				14° 32.178	107° 57.654	656		0.0	12.52		11.54	9.5	NDU	Slight Turbid	5.62	22.6	25.1		
94	Mr. Nhap	*				14° 32.168	107° 57.615	656		-	12.65		12.65	-	DU	-	-	-	-		
95	Mr. Thu	*		*		14° 32.153	107° 57.597	656		-	12.20		11.70	10.2	DU	-	-	-	-		
96	Mr. Bo	*				14° 32.139	107° 57.534	656		0.0	7.38		7.28	3.4	DU	Slight Turbid	5.62	40.8	24.7		
97	Ms. Binh	*		*		14° 32.120	107° 57.487	656		0.0	9.40		8.68	4.4	NDU	Clear	5.56	26.9	25.5		
98	Mr. Thao	*				14° 32.076	107° 57.446	656		-	11.18		10.21	-	-	-	-	-	-		
99	Mr. Vinh	*				14° 32.083	107° 57.305	656		0.3	10.14		9.38	8.0	NDU	Slight Turbid	6.26	57.3	24.8		
100	Unknown Name	*				14° 32.084	107° 57.238	656		-	9.18		8.44	6.2	NDU	-	-	-	-		
101	Mr. Xay	*		*		14° 32.153	107° 57.079	655		0.0	10.83		9.60	-	-	Clear	5.78	47.7	25.2		
102	Mr. Thuc	*		*		14° 32.151	107° 57.060	655		-	6.98		5.69	5.5	NDU	Clear	6.47	75.6	24.9		
103	Bamboo System					14° 34.592	108° 0.915	659	30	-	-		-	-	DU	Clear	7.53	220.0	23.9		
104	Health S. Center	*				14° 34.267	108° 0.325	662		-	3.46		2.38	-	NDU	Clear	5.57	45.3	25.4	K-3-2	*
105	Bamboo System Outlet					14° 34.008	108° 0.180	674	30-40	-	-		-	-	NDU	Clear	7.59	142.3	24.1	K-3-3	No.2,*
106	Bamboo System Intake					14° 34.033	108° 0.053	684	30-40	-	-		-	-	NDU	Clear	7.59	139.3	24.0		No.1
107	Rivulet					14° 32.501	107° 58.058	653		-	-		-	-	NDU	Slight Turbid	7.30	82.4	23.6		No.3
108	JICA K-3		*			14° 34.275	108° 0.313	660		-	160.00		-	-	-	Clear	7.19	864	24.1	K-3-0	*

Table K3. 11 Data Sheet : Hydrogeological Investigation Result of Dak Hring Commune (K-4)

Investigation Date : from May 11 to May 12, 2001

No.		K-4				District Name		Province Name			Investigation Date		Water Quality Test								
Commune Name		Dak Hring				Dak Ha			Kon Tum		from May 11 to May 12, 2001		Water Quality Test								
No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
40	Rivulet					14° 35.128	107° 55.944	610		-	-	-	-	NDU	Slight Turbid	6.39	18.80	32.5		No.2	
41	Spring					14° 35.218	107° 54.949	652		-	-	-	-	NDU	Slight Turbid	6.81	11.88	30.6		No.4	
42	JICA K-4-1		*			14° 34.963	107° 54.847	660		100.00		-	-	-	-	-	-	-			
43	JICA K-4-2		*			14° 35.884	107° 55.421	604		45.00		-	-	-	-	-	-	-			
44	Dak Hring River					14° 35.870	107° 55.392	603		-	-	-	-	-	-	7.13	66.6	26.7	K-4-0	*	

Table K3. 13 Data Sheet : Hydrogeological Investigation Result of Sa Nghia Commune (K-5)

Investigation Date : on May 16, 2001

No. <u>K-5</u>		Commune Name <u>Sa Nghia</u>				District Name <u>Sa Thay</u>				Province Name <u>Kon Tum</u>											
No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant. l/min	Lining GL-(m)	Well Depth GL-(m)	Pump Depth GL-(m)	G.W.L. GL-(m)	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity μ S/cm	Temperature (°C)	Water Quality Test	
		Dug W.	Dri. W.	P.U.	H. P.															A	B
39	Un Known	*				14° 24.148	107° 48.081	550		-	8.80		8.70	-	DU	Slight Turbid	6.48	228	24.8		No.4

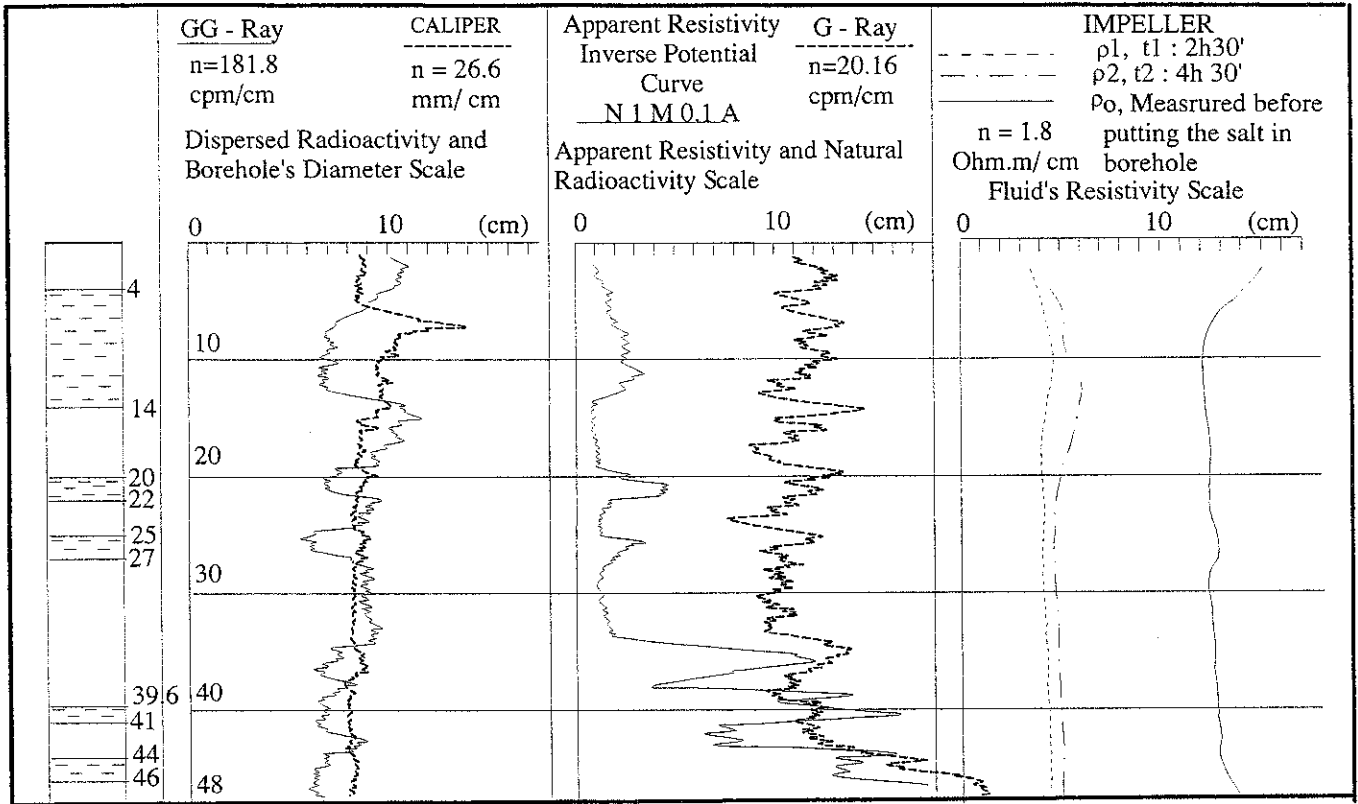
Table K3. 14 Data Sheet : Hydrogeological Investigation Result of Chu Hreng Commune (K-6)

Investigation Date : on May 16, 2001

No.		K-6				District Name		Sa Thay		Province Name			Kon Tum									
Commune Name		Chu Hreng																				
No.	Owner's Name	Well Type				Latitude	Longitude	Elevation	Flow Quant.	Lining	Well Depth	Pump Depth	G.W.L.	Rainy Season	Dry Season	Water Color	pH	Electrical Conductivity	Temperature (°C)	Water Quality Test		
		Dug W.	Dri. W.	P.U.	H. P.															l/min	GL-(m)	GL-(m)
1	CPC	*		*		14° 18.908	108° 0.504	560		Full		11.49		11.03	9.5	NDU	Clear	5.82	80.8	25.8	K-6-1	No.3, *
2	Mr. Hung	*		*		14° 18.840	108° 0.484	560		0.2		9.33		8.72	5.0	NDU	Clear	5.09	74.3	26.4		
3	Mrs. Huyen	*		*		14° 18.743	108° 0.616	560		0.2		11.44		11.22	10.0	DU	Clear	5.75	94.7	26.1		
4	Mr. Do	*		*		14° 18.689	108° 0.687	560		0.2		11.05		9.90	7.0	NDU	Clear	5.98	105.0	25.3	K-6-2	-
5	Mr. Chien	*		*		14° 18.610	108° 0.769	563		0.2		12.50		12.20	10.0	NDU	Clear	5.30	84.7	25.4		
6	Mr. Huu	*		*		14° 18.511	108° 0.798	564		0.2		14.67		13.95	13.1	DU	Clear	5.48	74.4	25.8		
7	Mr. Uyen	*		*		14° 18.340	108° 0.865	564		Full		13.51		13.33	10.5	NDU	Clear	-	-	-		
8	Mr. Hoa	*				14° 18.321	108° 0.982	565		Full		12.50		11.20	11.0	NDU	Slight Turbid	6.04	121.1	25.4		
9	Mr. Hoan	*				14° 18.187	108° 1.007	567		0.2		12.25		9.63	-	NDU	Clear	5.27	117.7	25.4		
10	Mr. Loc	*		*		14° 18.048	108° 0.990	568		0.3		13.05		12.35	8.5	NDU	Clear	5.57	29.9	26.2		
11	Mr. Tam	*				14° 18.943	108° 0.569	560		0.2		10.33		10.06	-	DU	Clear	6.01	80.6	25.5		
12	Mr. A Ni	*				14° 18.963	108° 0.693	555		Full		10.35		10.20	8.2	NDU	Slight Turbid	6.03	134.3	25.9		
13	Spring -1					14° 18.975	108° 0.632	545	20-30	-	-	-		-	-	NDU	Slight Turbid	5.76	53.3	26.4		No.2
14	Mrs. Nga	*		*		14° 19.032	108° 0.827	551		0.3		10.86		10.36	4.9	NDU	Clear	5.39	92.6	24.0		
15	Public Well	*				14° 19.321	108° 0.950	540		0.2		10.05		7.80	3.0	NDU	Clear	5.99	254	25.2	K-6-3	No.5, *
16	Spring -2					14° 19.334	108° 0.855	531	30-40	-	-	-		-	-	NDU	Slight Turbid	6.12	56.7	25.0	K-6-4	No.1, *
17	JICA K-6		*			14° 19.460	108° 1.075	533		-	100.00	-		-	-	-	Clear	7.19	194.4	26.1	DO=3.03	
18	Dak Lai River					14° 19.471	108° 1.151	527	500-600	-	-	-		-	-	NDU	Turbid	7.04	68.8	25.9	K-6-0	*
19	Rivulet					14° 19.415	108° 0.828	526	50-60	-	-	-		-	-	NDU	Slight Turbid	6.55	86.3	27.1		
20	Mr. Lan	*				14° 19.006	108° 0.917	549		Full		7.93		5.17	3.0	DU	Slight Turbid	5.93	259	25.2		
21	Mr. Nhat	*				14° 19.024	108° 0.997	547		0.2		11.05		8.67	-	NDU	Clear	6.28	259	25.2		
22	Mr. Ky	*		*		14° 19.065	108° 1.079	545		0.5		14.70		8.10	7.7	NDU	Turbid	6.36	200	25.3		
23	Rivulet					14° 19.011	108° 1.135	542	70-80	0.5		14.70		8.10	7.7	NDU	Slight Turbid	7.15	73.8	29.3		
24	Mr. Chuong	*				14° 18.993	108° 1.135	542		0.0		1.10		0.00	-	NDU	Turbid	5.95	66.2	26.7		
25	Public Well	*				14° 19.803	108° 0.092	546		Full		7.10		5.65	4.6	NDU	Clear	5.76	96.1	25.1		
26	Public Well	*				14° 19.752	108° 0.100	549		0.0		11.60		7.58	5.0	NDU	Clear	5.23	65.5	25.3		
27	Rivulet					14° 19.430	108° 0.315	536	30-40	-	-	-		-	-	NDU	Clear	6.84	103.5	31.5		
28	Mr. Kien	*		*		14° 19.427	108° 0.340	545		Full		4.28		3.35	0.3	DU	Slight Turbid	6.41	205	25.4		
29	Mr. Hanh	*				14° 19.428	108° 0.403	553		Full		10.62		9.81	5.6	NDU	Clear	6.03	132.1	25.1		
30	Mr. Thanh	*		*		14° 19.417	108° 0.551	549		Full		8.49		6.44	4.0	NDU	Clear	6.27	209	25.5	K-6-5	*
31	Rivulet					14° 19.434	108° 0.599	542	80-100	-	-	-		-	-	NDU	Slight Turbid	7.19	91.8	30.2		
32	Mr. Thang	*				14° 19.445	108° 0.668	556		Full		9.66		8.40	4.8	NDU	Slight Turbid	7.01	424	25.2		
33	Public Well	*				14° 19.069	108° 0.311	562		Full		12.22		11.94	-	-	Slight Turbid	6.54	175.4	25.8		
34	Mr. Ha	*		*		14° 18.976	108° 0.419	560		0.2		22.83		8.80	-	NDU	Slight Turbid	8.03	164.6	26.2		
35	Mr. Roi	*		*		14° 18.689	108° 0.748	559		0.2		9.90		8.02	7.4	NDU	Clear	5.61	148.9	26.0		
36	Mr. Huan	*		*		14° 18.770	108° 0.789	554		Full		7.61		6.51	4.6	NDU	Clear	4.88	129.8	26.4		

K3-14

Chapter 4
Logging Graph



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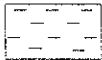
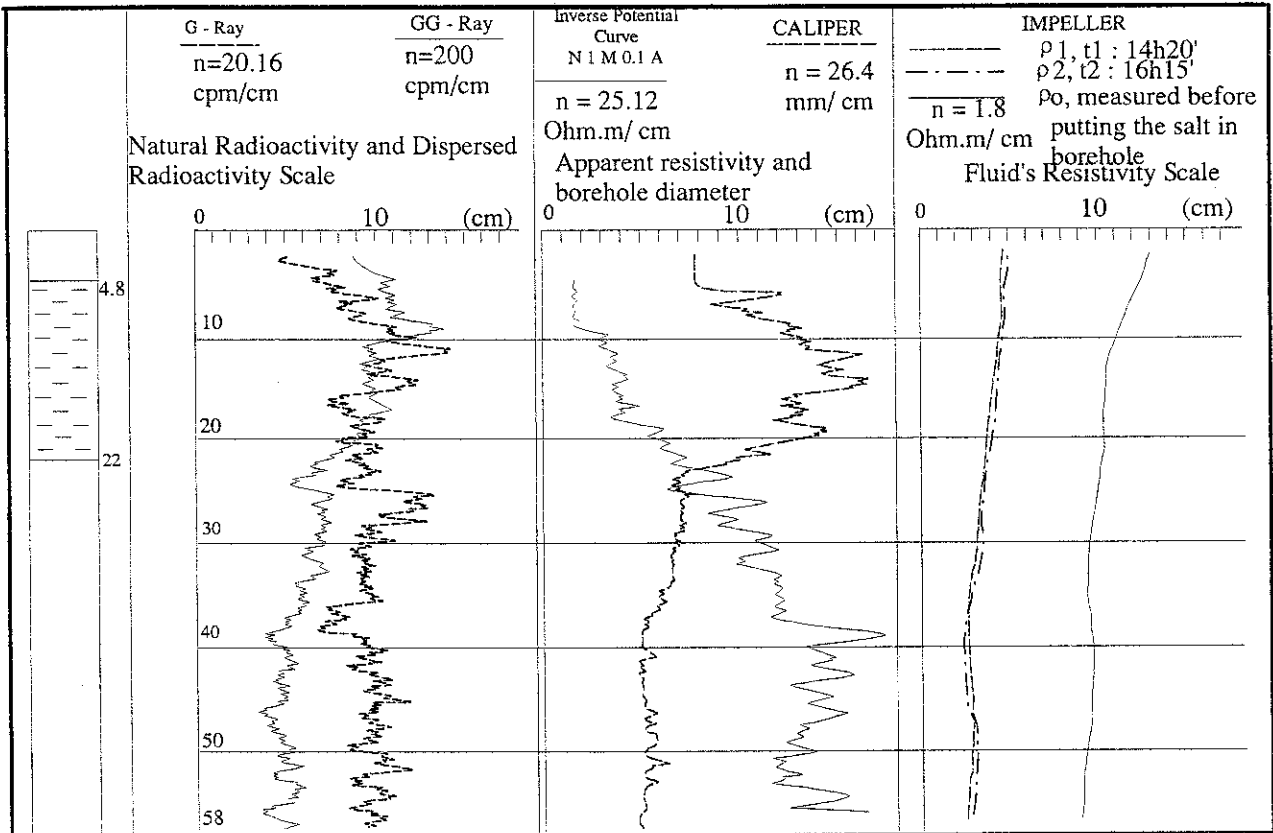
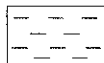
 Supposed water bearing zones

Figure K4. 1 Geophysical Logging Test of K1, Bo Y Commune

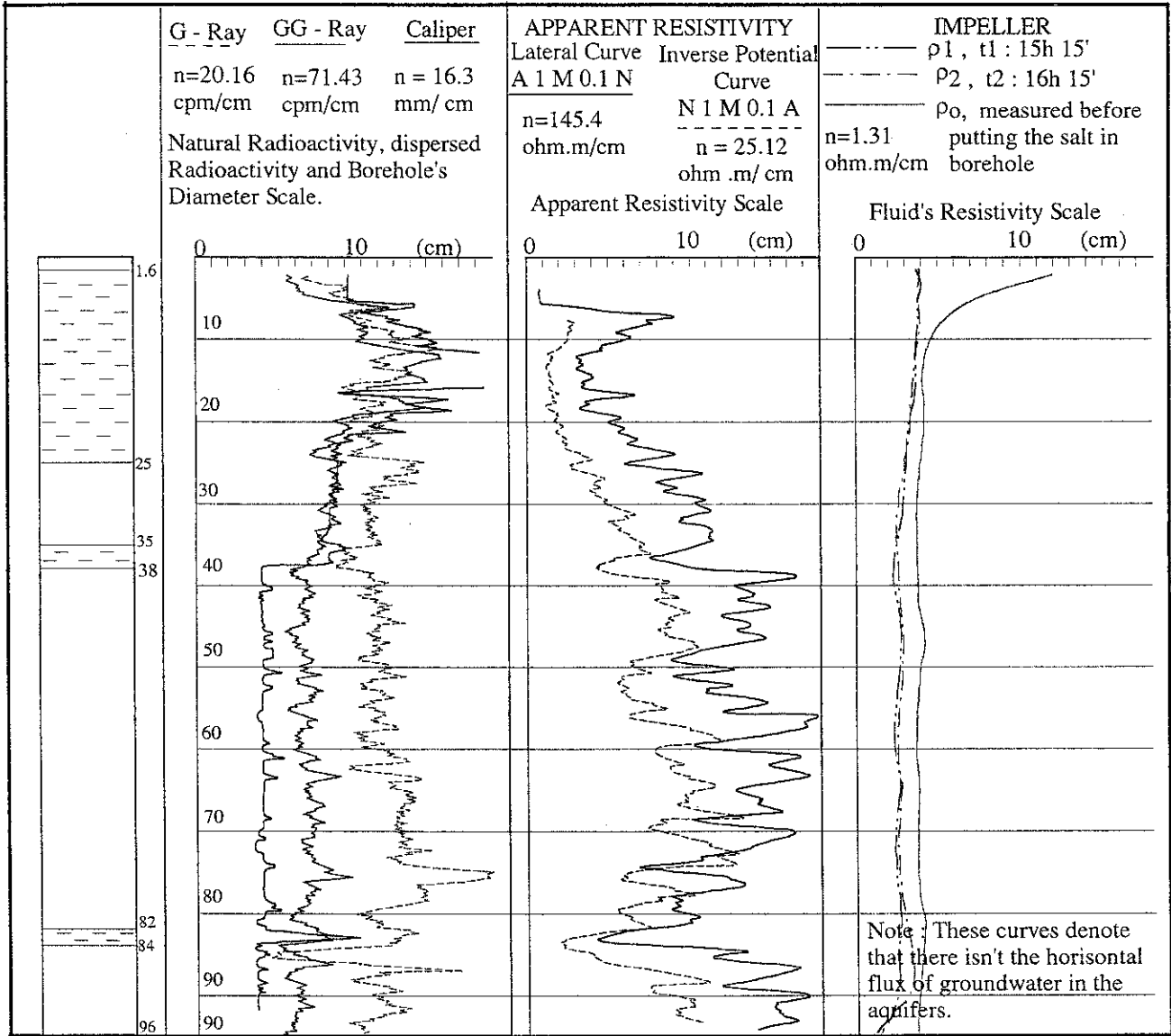


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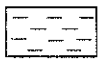


Supposed water bearing zone.

Figure K4. 2 Geophysical Logging Test of K2, Dak Su Commune



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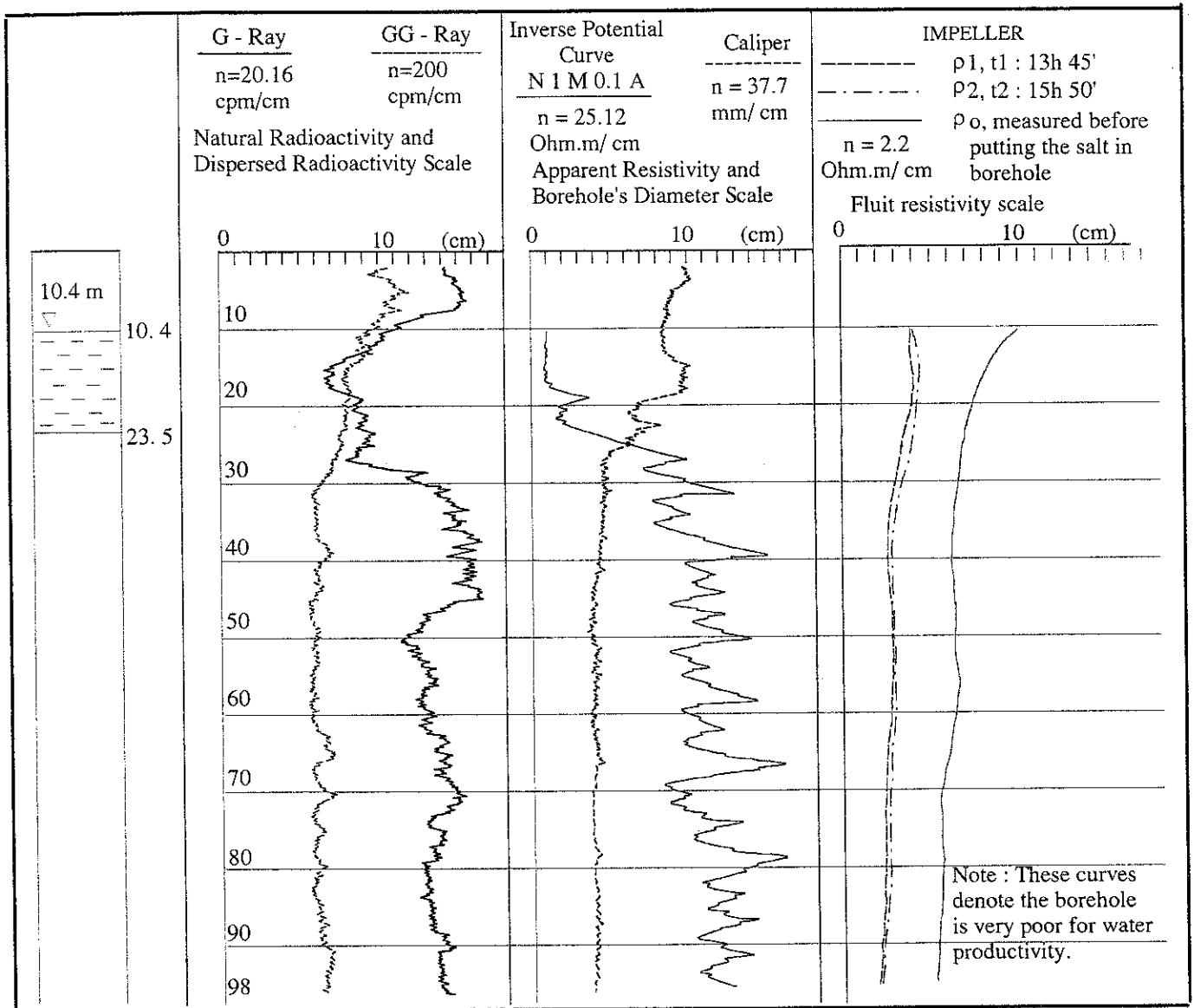


Supposed water bearing zones.

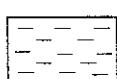


Depth to static water level in borehole, determined at the moment of logging by means of log parameters.

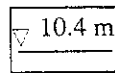
Figure K4. 3 Geophysical Logging Test of K3, Dak Ui Commune



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Supposed water bearing zone



Depth to static water level in borehole

Figure K4. 4 Geophysical Logging Test of K6, Chu Hreng Commune

Chapter 5

Pumping Test Data

Table K5. 1 Step-Drawdown Tests of JICA Test Wells

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

Table K5. 2 Result of the Constant Continuous Test and Recovery Test Analyzed by Cooper-Jacob and Recovery Analysis Methods

Well No.	Commune / town	Coordinates		Elevation (m)	Drilling depth (m)	Reaming depth (m)	Screen length (m)	Static water level (m)	Pumping discharge (l/s)	Drawdown (m)	Specific capacity (l/s/m)	Theis method						
		Latitude North UTM	Longitude East UTM									Match point				Transmissivity (m ² /day)	Storage coefficient	Hydraulic conductivity (m/day)
												u	W(u)	r ² /t (m ² /s)	s (m)			
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	-	-	-	-	-	-	-

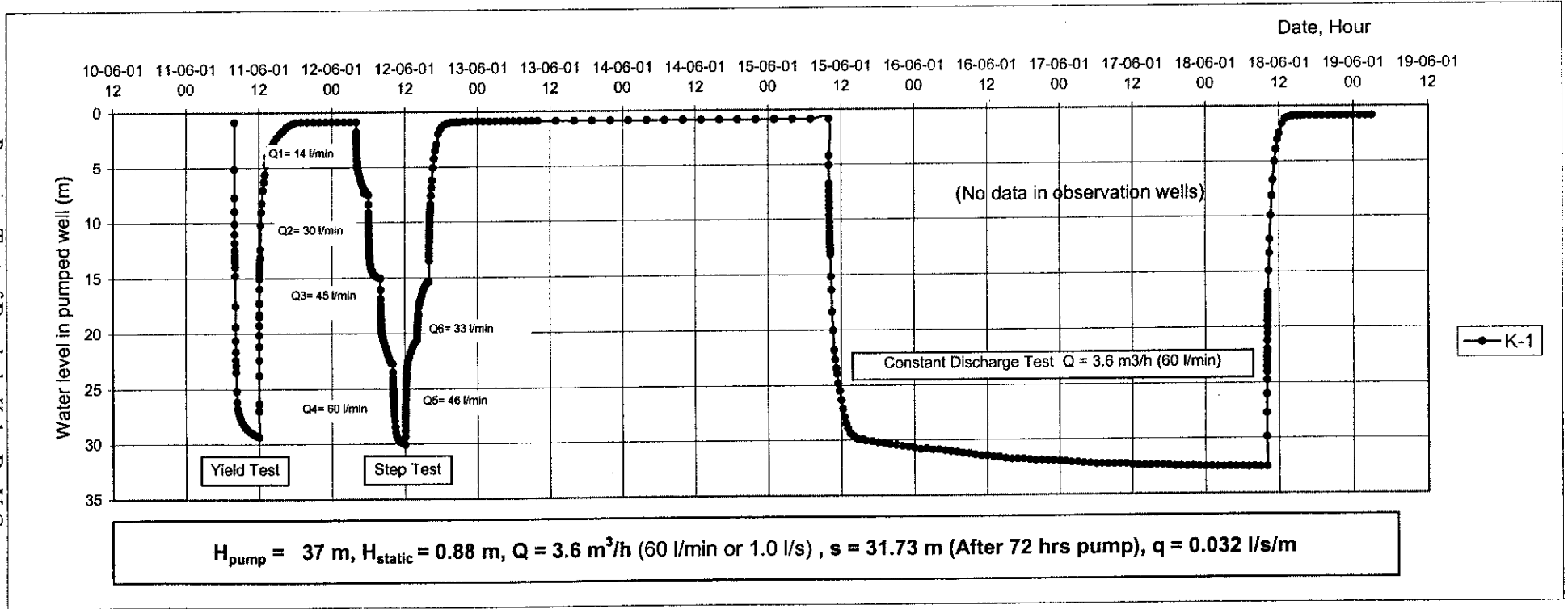
K5- 2

Table K5. 3 Result of the Constant Continuous Test and Recovery Test Analyzed by Cooper-Jacob and Recovery Analysis Methods

Well No.	Commune / town	Coordinates		Elevation (m)	Drilling depth (m)	Reaming depth (m)	Screen length (m)	Static water level (m)	Pumping discharge (l/s)	Drawdown (m)	Specific capacity (l/s/m)	Cooper-Jacob analysis method			Recovery analysis	
		Latitude North UTM	Longitude East UTM									Transmissivity (m ² /day)	Storage coefficient	Hydraulic conductivity (m/day)	Transmissivity (m ² /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 K5. 1 Pumping Test of Borehole K-1 - Bo Y Commune - Ngoc Hoi District - Kon Tum Province K5- 4



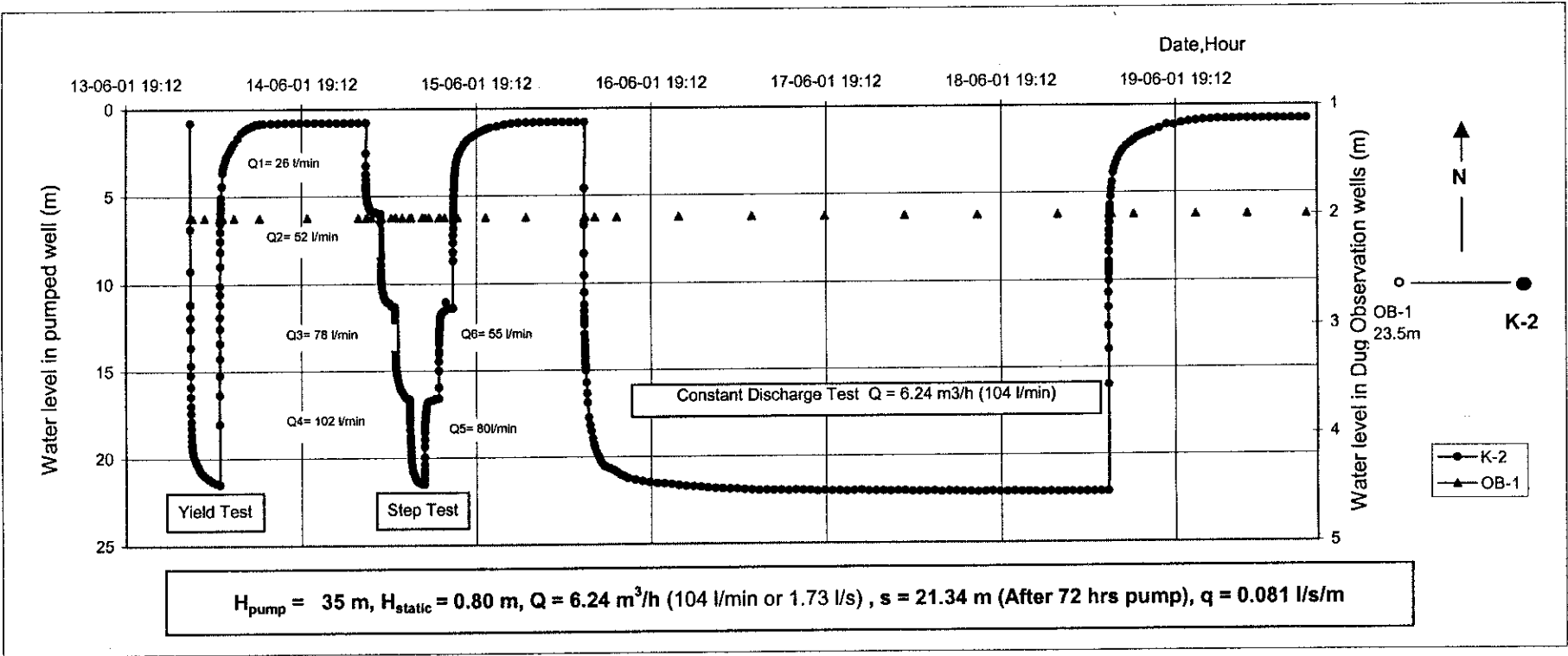


Figure K5. 2

Pumping Test of Borehole K-2 - Dak Su Commune - Ngoc Hoi District - Kon Tum Province

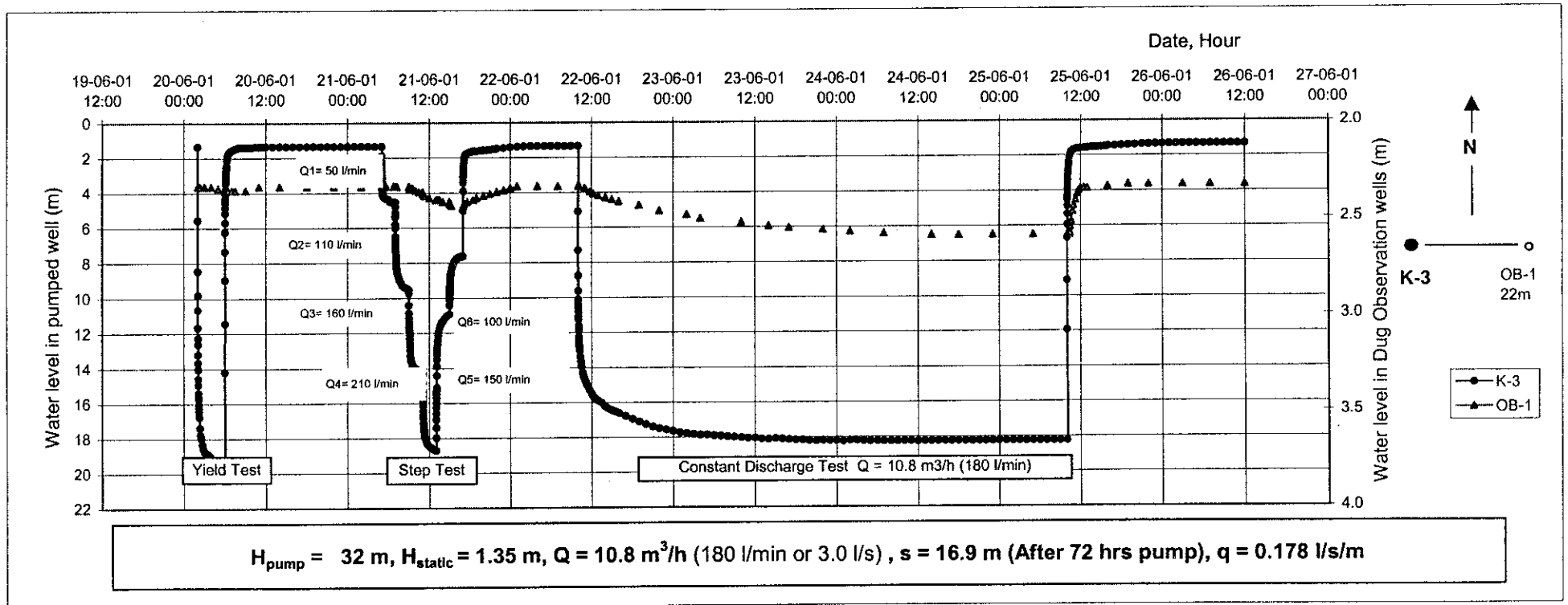


Figure K5. 3 Pumping Test of Borehole K-3 - Dak Ui Commune - Dak Ha District - Kon Tum Province

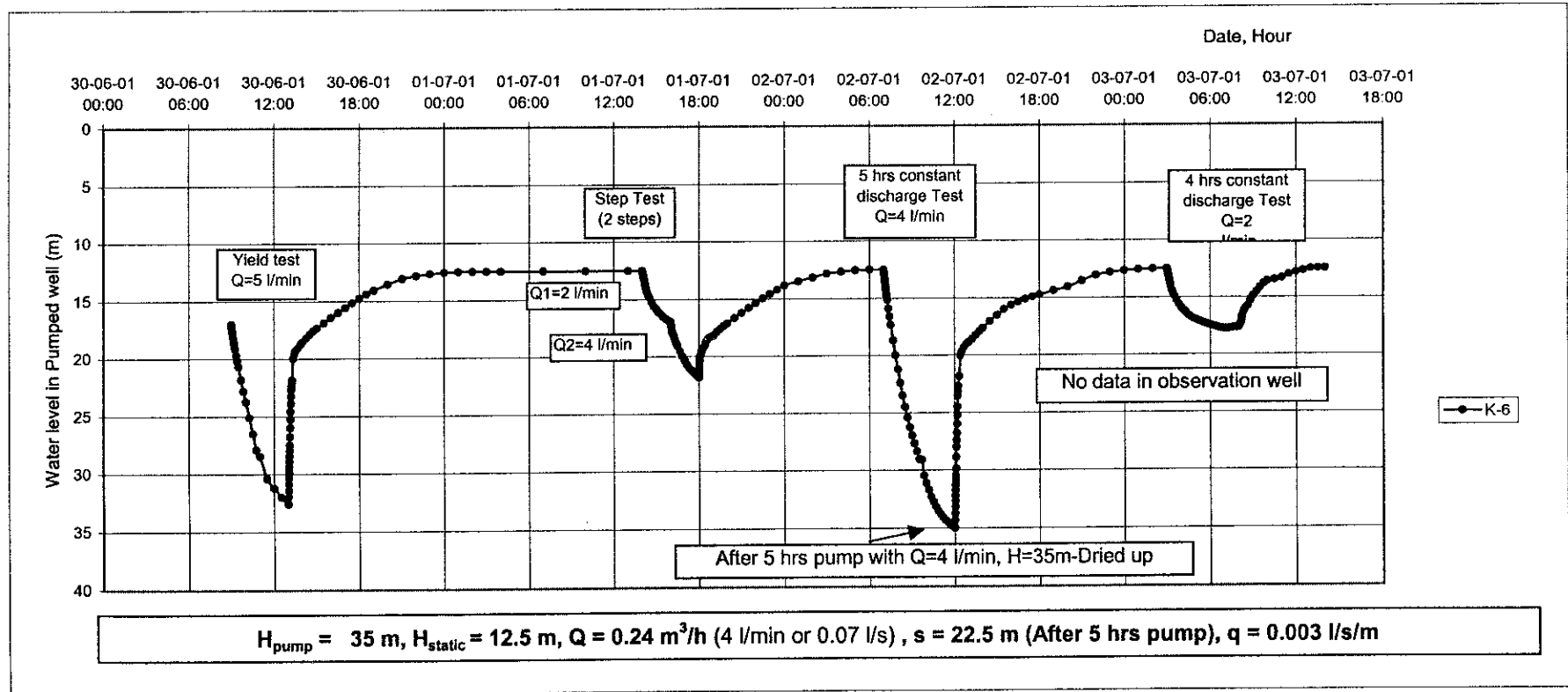


Figure K5. 4 Pumping Test of Borehole K-6 - Chu Hreng Commune - Kon Tum City - Kon Tum Province

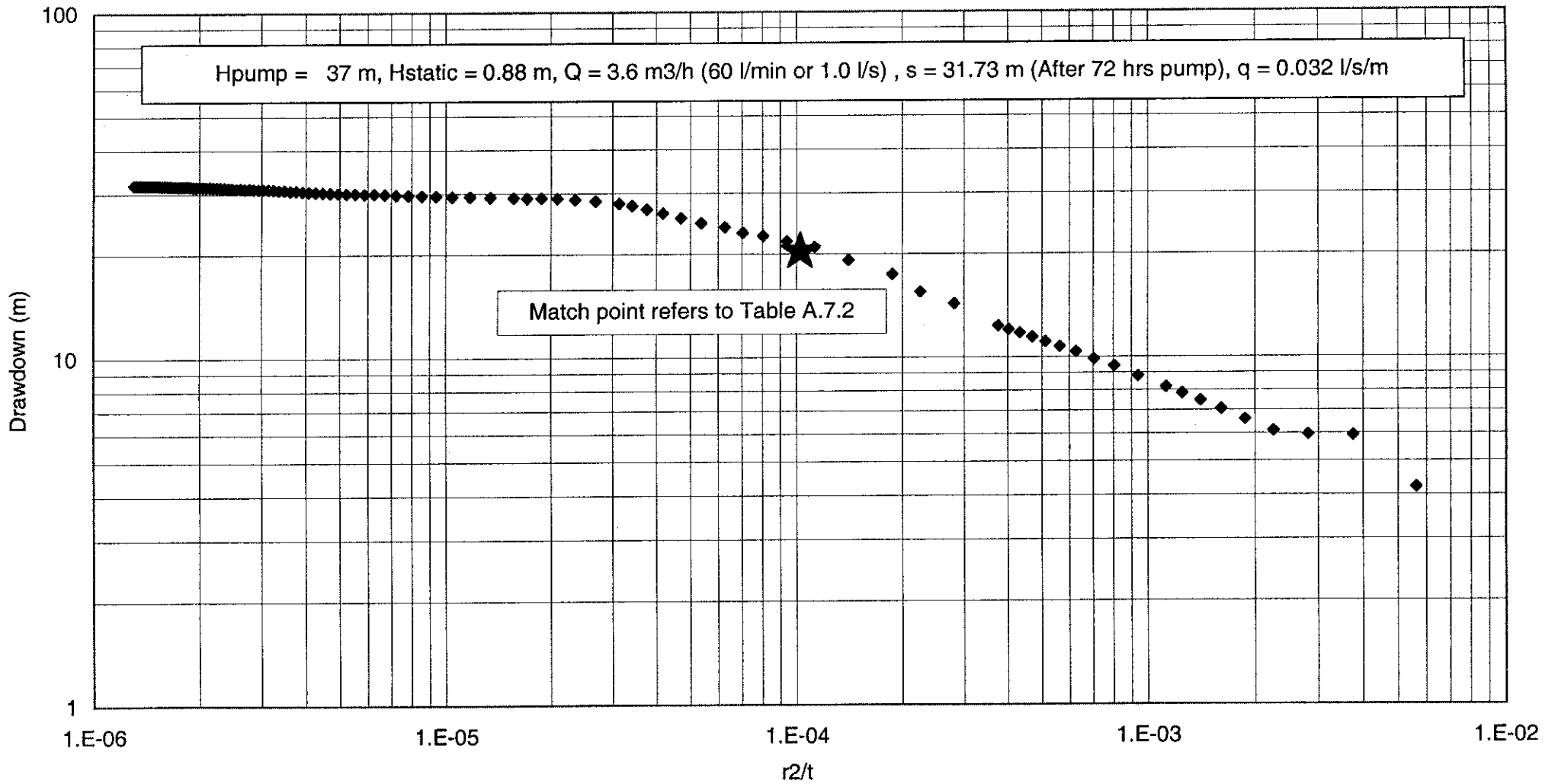


Figure K5. 5 Constant Continuous Pumping Test Analyzed by Theis Analysis Method at K1, Bo Y Commune

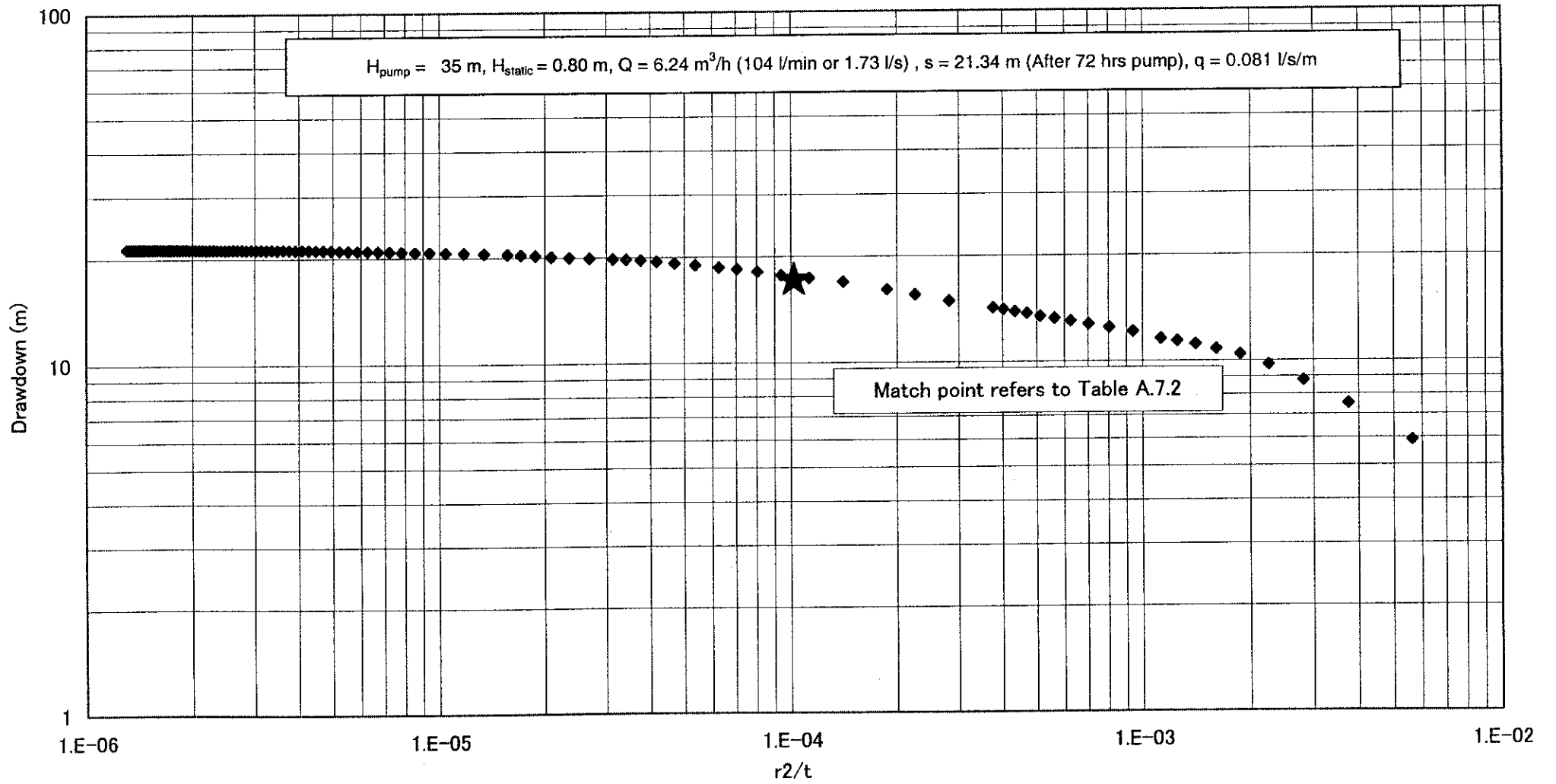


Figure K5. 6 Constant Continuous Pumping Test Analyzed by Theis Analysis Method at K2, Dak Su Commune

K5-10

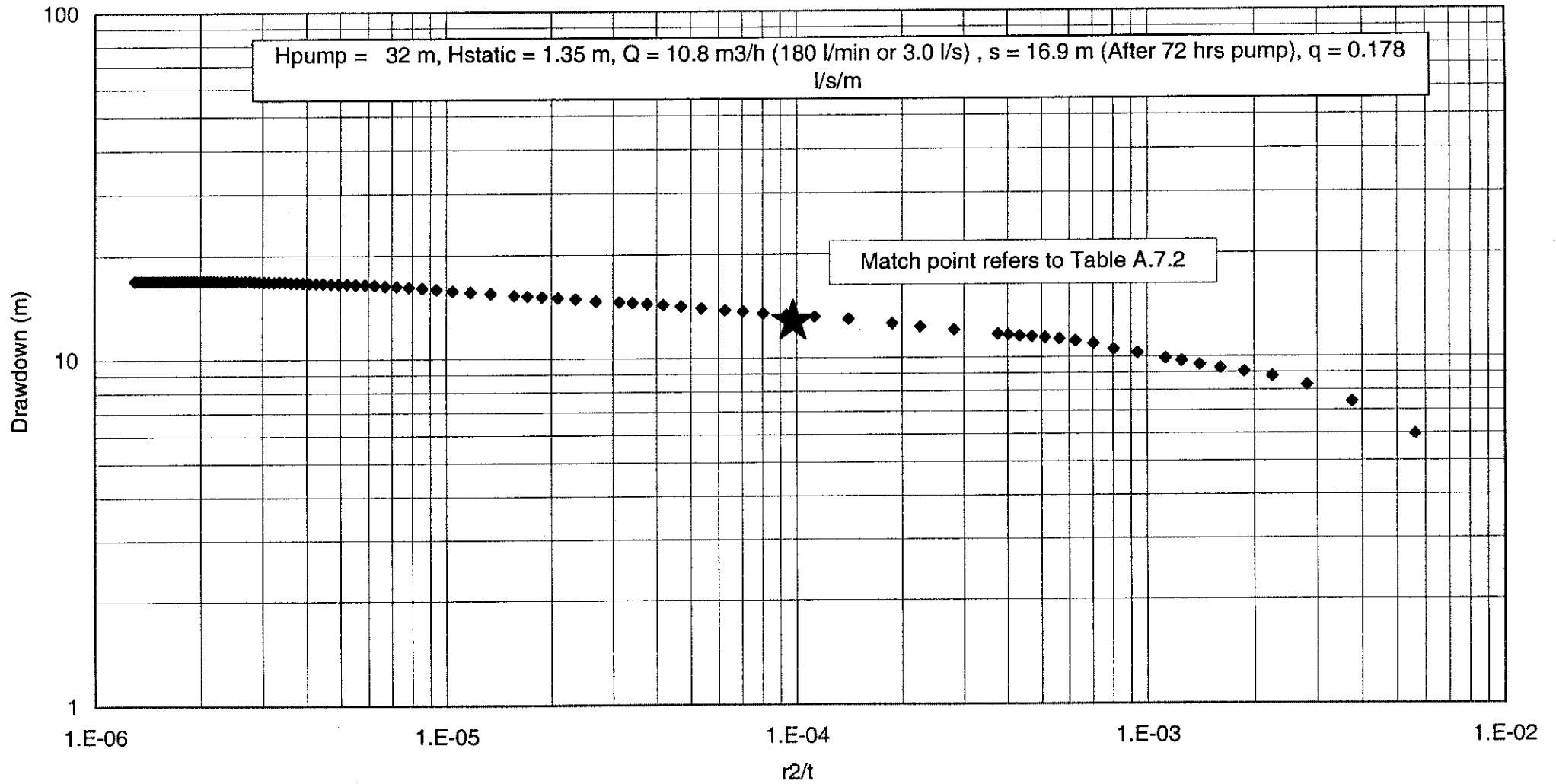


Figure K5. 7 Constant Continuous Pumping Test Analyzed by Theis Analysis Method at K3, Dak Ui Commune