APPENDIX A-2

Result of Permeability Study

DATA SHEET OF CONSTANT HEAD TEST

PROJECT : PROVINCIAL WATER SUPPLY HOLE NO : KK-1
DEPTH : 11.50-12.00 m. (L = 0.5 m.) WATER LEVEL : 1.40 m.
HEAD : 0.29 ksc, RADIUS (r):4.25 cm. DATE : 16/11/39

TIME		Q	Q1	Q2	PEAREABILITY COEFFICIENT	LUGEON VALUE
min.	sec.	(cm^3)	(cm^3/sec)	(l/min/m)	k (cm/sec)	(Lu)
18	30	215	0.194	0.023	5.26×10^{-6}	0.080
19	00	215	0.189	0.023	5.11×10^{-6}	0.080
22	30	215	0.159	0.019	4.31×10^{-6}	0.070
					Average	0.077

DATA SHEET OF CONSTANT HEAD TEST

PROJECT : PROVINCIAL WATER SUPPLY HOLE NO : KK-2
DEPTH : 10.50-15.00 m. (L = 4.50 m.) WATER LEVEL : 1.63 m.
HEAD : 0.177 ksc, RADIUS (r):4.25 cm. DATE : 17/11/39

TIME	Q	Q1	Q2	PEAMEABILITY COEFFICIENT	LUGEON VALUE
sec.	(cm^3)	(cm^3/sec)	(l/min/m)	k (cm/sec)	(Lu)
49	500	10.2	0.13	9.486×10^{-5}	0.730
27	250	9.3	0.13	8.649×10^{-5}	0.730
42	500	11.9	0.15	1.107×10^{-4}	0.850
19	250	13.2	0.17	1.228×10^{-4}	0.960
18	250	13.9	0.17	1.293×10^{-4}	0.960
				Average	0.846

FILE :PROJECT , DISK : FIELD TEST No.1/1

DATA SHEET OF FALLING HEAD TEST

HOLE NO.	DEPTH (m)	R (mm)	GWL (m)	T1 (min)	T2 (min)	ΔT (min)	H1 (m)	H2 (m)	H1 (m)	H2 (m)	COEFFICIENT OF PERMEABILITY, K (cm/sec)
CT-1	10.0-15.0	425	8.00	10	30	20	2.90	4.75	5.1	3.25	1.94×10^{-3}
	15.0-20.0	425	8.00	10	30	20	1.29	7.90	6.71	0.1	1.81×10^{-2}
	10.0-15.0	425	2.60	5	10	5	1.75	2.1	0.85	0.5	9.11×10^{-3}
CT-2	15.0-20.0	425	2.60	5	10	5	1.95	2.05	0.65	0.55	2.86×10^{-3}
	20.0-25.0	425	2.60	5	10	5	1.80	2.15	0.8	0.45	9.8×10^{-3}
BN-1	10.0-15.0	425	8.00	30	10	20	9.00	23	15.0	10	1.16×10^{-2}
	15.0-20.0	425	8.00	30	10	20	35.00	15.5	27	7.5	5.51×10^{-3}
BN-2	10.0-15.0	425	0.85	10	30	20	0.32	0.39	0.53	0.46	6.10×10^{-4}
	15.0-20.0	425	0.85	5	10	5	0.35	1.55	0.5	0.3	8.75×10^{-3}
BN-3	10.0-15.0	425	8.00	10	30	20	2.90	4.75	5.1	3.25	1.94×10^{-3}
	15.0-20.0	425	8.00	10	30	20	1.29	7.9	6.71	0.1	1.81×10^{-2}

FILE :DATE , DISK :FIELD TEST NO.1/1

Result of Lugion Test of BN-1

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HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
BN1-1-1	8.00	0.25	20.5-25.5	0.5	1.325	0.46	7.667	0.092	9.036E-06	0.694
BN1-1-2	8.00	0.25	20.5-25.5	2.0	2.825	1.30	21.667	0.260	1.198E-05	0.920
BN1-1-3	8.00	0.25	20.5-25.5	4.0	4.825	3.60	60.000	0.720	1.942E-05	1.492
BN1-1-4	8.00	0.25	20.5-25.5	6.0	6.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-5	8.00	0.25	20.5-25.5	8.0	8.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-6	8.00	0.25	20.5-25.5	10.0	10.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-7	8.00	0.25	20.5-25.5	8.0	8.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-8	8.00	0.25	20.5-25.5	6.0	6.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-9	8.00	0.25	20.5-25.5	4.0	4.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-10	8.00	0.25	20.5-25.5	2.0	2.825	0.00	0.000	0.000	0.000E+00	0.000
BN1-1-11	8.00	0.25	20.5-25.5	0.5	1.325	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	1.787	29.778	0.357	1.348E-05	1.036
BN1-2-1	8.00	0.25	25.0-30.0	0.5	1.325	0.15	2.500	0.030	2.947E-06	0.226
BN1-2-2	8.00	0.25	25.0-30.0	2.0	2.825	0.90	15.000	0.180	8.292E-06	0.637
BN1-2-3	8.00	0.25	25.0-30.0	4.0	4.825	1.35	22.500	0.270	7.283E-06	0.560
BN1-2-4	8.00	0.25	25.0-30.0	6.0	6.825	2.00	33.333	0.400	7.627E-06	0.586
BN1-2-5	8.00	0.25	25.0-30.0	8.0	8.825	2.45	40.833	0.490	7.226E-06	0.555
BN1-2-6	8.00	0.25	25.0-30.0	10.0	10.825	5.30	88.333	1.060	1.274E-05	0.979
BN1-2-7	8.00	0.25	25.0-30.0	8.0	8.825	5.60	93.333	1.120	1.652E-05	1.269
BN1-2-8	8.00	0.25	25.0-30.0	6.0	6.825	4.35	72.500	0.870	1.659E-05	1.275
BN1-2-9	8.00	0.25	25.0-30.0	4.0	4.825	2.50	41.667	0.500	1.349E-05	1.036
BN1-2-10	8.00	0.25	25.0-30.0	2.0	2.825	0.65	10.833	0.130	5.989E-06	0.460
BN1-2-11	8.00	0.25	25.0-30.0	0.5	1.325	0.20	3.333	0.040	3.929E-06	0.302
					AVERAGE	2.314	38.561	0.463	9.330E-06	0.717
BN1-3-1	11.30	0.25	30.0-35.0	0.5	1.655	0.70	11.667	0.140	1.101E-05	0.846
BN1-3-2	11.30	0.25	30.0-35.0	2.0	3.155	2.05	34.167	0.410	1.691E-05	1.300
BN1-3-3	11.30	0.25	30.0-35.0	4.0	5.155	3.30	55.000	0.660	1.666E-05	1.280
BN1-3-4	11.30	0.25	30.0-35.0	6.0	7.155	3.75	62.500	0.750	1.364E-05	1.048
BN1-3-5	11.30	0.25	30.0-35.0	8.0	9.155	4.45	74.167	0.890	1.265E-05	0.972
BN1-3-6	11.30	0.25	30.0-35.0	10.0	11.155	4.75	79.167	0.950	1.108E-05	0.852
BN1-3-7	11.30	0.25	30.0-35.0	8.0	9.155	4.40	73.333	0.880	1.251E-05	0.961
BN1-3-8	11.30	0.25	30.0-35.0	6.0	7.155	3.65	60.833	0.730	1.328E-05	1.020
BN1-3-9	11.30	0.25	30.0-35.0	4.0	5.155	3.15	52.500	0.630	1.590E-05	1.222
BN1-3-10	11.30	0.25	30.0-35.0	2.0	3.155	2.15	35.833	0.430	1.774E-05	1.363
BN1-3-11	11.30	0.25	30.0-35.0	0.5	1.655	0.65	10.833	0.130	1.022E-05	0.785
					AVERAGE	3.000	50.000	0.600	1.378E-05	1.059
BN1-4-1	11.00	0.40	35.0-40.0	0.5	1.640	0.65	10.833	0.130	1.032E-05	0.793
BN1-4-2	11.00	0.40	35.0-40.0	2.0	3.140	1.10	18.333	0.220	9.118E-06	0.701
BN1-4-3	11.00	0.40	35.0-40.0	4.0	5.140	1.25	20.833	0.250	6.330E-06	0.486
BN1-4-4	11.00	0.40	35.0-40.0	6.0	7.140	1.95	32.500	0.390	7.109E-06	0.546
BN1-4-5	11.00	0.40	35.0-40.0	8.0	9.140	2.65	44.167	0.530	7.547E-06	0.580
BN1-4-6	11.00	0.40	35.0-40.0	10.0	11.140	2.65	44.167	0.530	6.192E-06	0.476
BN1-4-7	11.00	0.40	35.0-40.0	8.0	9.140	2.15	35.833	0.430	6.123E-06	0.470
BN1-4-8	11.00	0.40	35.0-40.0	6.0	7.140	1.85	30.833	0.370	6.744E-06	0.518
BN1-4-9	11.00	0.40	35.0-40.0	4.0	5.140	1.50	25.000	0.300	7.596E-06	0.584
BN1-4-10	11.00	0.40	35.0-40.0	2.0	3.140	0.90	15.000	0.180	7.460E-06	0.573
BN1-4-11	11.00	0.40	35.0-40.0	0.5	1.640	0.60	10.000	0.120	9.523E-06	0.732
					AVERAGE	1.568	26.136	0.314	7.641E-06	0.587
BN1-5-1	11.00	0.10	40.0-45.0	0.5	1.610	0.11	1.833	0.022	1.778E-06	0.137
BN1-5-2	11.00	0.10	40.0-45.0	2.0	3.110	1.28	21.333	0.256	1.071E-05	0.823
BN1-5-3	11.00	0.10	40.0-45.0	4.0	5.110	2.22	37.000	0.444	1.131E-05	0.869
BN1-5-4	11.00	0.10	40.0-45.0	6.0	7.110	2.70	45.000	0.540	9.884E-06	0.759
BN1-5-5	11.00	0.10	40.0-45.0	8.0	9.110	2.70	45.000	0.540	7.714E-06	0.593
BN1-5-6	11.00	0.10	40.0-45.0	10.0	11.110	2.47	41.167	0.494	5.787E-06	0.445
BN1-5-7	11.00	0.10	40.0-45.0	8.0	9.110	2.25	37.500	0.450	6.429E-06	0.494
BN1-5-8	11.00	0.10	40.0-45.0	6.0	7.110	2.71	45.167	0.542	9.921E-06	0.762
BN1-5-9	11.00	0.10	40.0-45.0	4.0	5.110	2.47	41.167	0.494	1.258E-05	0.967
BN1-5-10	11.00	0.10	40.0-45.0	2.0	3.110	1.56	26.000	0.312	1.306E-05	1.003
BN1-5-11	11.00	0.10	40.0-45.0	0.5	1.610	1.50	25.000	0.300	2.425E-05	1.863
					AVERAGE	1.997	33.288	0.399	1.031E-05	0.792
BN1-6-1	11.80	0.15	45.0-50.0	0.5	1.695	0.00	0.000	0.000	0.000E+00	0.000
BN1-6-2	11.80	0.15	45.0-50.0	2.0	3.195	0.56	9.333	0.112	4.562E-06	0.351
BN1-6-3	11.80	0.15	45.0-50.0	4.0	5.195	0.84	14.000	0.168	4.209E-06	0.323
BN1-6-4	11.80	0.15	45.0-50.0	6.0	7.195	1.39	23.167	0.278	5.028E-06	0.386
BN1-6-5	11.80	0.15	45.0-50.0	8.0	9.195	2.00	33.333	0.400	5.661E-06	0.435
BN1-6-6	11.80	0.15	45.0-50.0	10.0	11.195	3.25	54.167	0.650	7.556E-06	0.581
BN1-6-7	11.80	0.15	45.0-50.0	8.0	9.195	1.58	26.333	0.316	4.473E-06	0.344
BN1-6-8	11.80	0.15	45.0-50.0	6.0	7.195	1.22	20.333	0.244	4.413E-06	0.339
BN1-6-9	11.80	0.15	45.0-50.0	4.0	5.195	0.58	9.667	0.116	2.906E-06	0.223
BN1-6-10	11.80	0.15	45.0-50.0	2.0	3.195	0.33	5.500	0.066	2.688E-06	0.207
BN1-6-11	11.80	0.15	45.0-50.0	0.5	1.695	0.02	0.333	0.004	3.071E-07	0.024
					AVERAGE	1.070	17.833	0.214	3.800E-06	0.292

Result of Lugion Test of BN－2

Bang Nie

HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
BN2-1-1	0.50	0.30	22.5-27.5	0.5	0.580	0.81	13.500	0.162	3.635E-05	2.793
BN2-1-2	0.50	0.30	22.5-27.5	2.0	2.080	2.55	42.500	0.510	3.191E-05	2.452
BN2-1-3	0.50	0.30	22.5-27.5	4.0	4.080	4.55	75.833	0.910	2.903E-05	2.230
BN2-1-4	0.50	0.30	22.5-27.5	6.0	6.080	6.00	100.000	1.200	2.569E-05	1.974
BN2-1-5	0.50	0.30	22.5-27.5	8.0	8.080	0.00	0.000	0.000	0.000E+00	0.000
BN2-1-6	0.50	0.30	22.5-27.5	10.0	10.080	0.00	0.000	0.000	0.000E+00	0.000
BN2-1-7	0.50	0.30	22.5-27.5	8.0	8.080	0.00	0.000	0.000	0.000E+00	0.000
BN2-1-8	0.50	0.30	22.5-27.5	6.0	6.080	21.12	352.000	4.224	9.041E-05	6.947
BN2-1-9	0.50	0.30	22.5-27.5	4.0	4.080	10.22	170.333	2.044	6.520E-05	5.010
BN2-1-10	0.50	0.30	22.5-27.5	2.0	2.080	3.81	63.500	0.762	4.768E-05	3.663
BN2-1-11	0.50	0.30	22.5-27.5	0.5	0.580	1.45	24.167	0.290	6.507E-05	5.000
					AVERAGE	6.314	105.229	1.263	1.304E-04	3.759
BN2-2-1	0.30	0.10	27.5-32.5	0.5	0.540	0.57	9.500	0.114	2.747E-05	2.111
BN2-2-2	0.30	0.10	27.5-32.5	2.0	2.040	1.42	23.667	0.284	1.812E-05	1.392
BN2-2-3	0.30	0.10	27.5-32.5	4.0	4.040	2.35	39.167	0.470	1.514E-05	1.163
BN2-2-4	0.30	0.10	27.5-32.5	6.0	6.040	3.72	62.000	0.744	1.603E-05	1.232
BN2-2-5	0.30	0.10	27.5-32.5	8.0	8.040	4.36	72.667	0.872	1.411E-05	1.085
BN2-2-6	0.30	0.10	27.5-32.5	10.0	10.040	4.24	70.667	0.848	1.099E-05	0.845
BN2-2-7	0.30	0.10	27.5-32.5	8.0	8.040	3.93	65.500	0.786	1.272E-05	0.978
BN2-2-8	0.30	0.10	27.5-32.5	6.0	6.040	3.40	56.667	0.680	1.465E-05	1.126
BN2-2-9	0.30	0.10	27.5-32.5	4.0	4.040	2.42	40.333	0.484	1.559E-05	1.198
BN2-2-10	0.30	0.10	27.5-32.5	2.0	2.040	1.49	24.833	0.298	1.901E-05	1.461
BN2-2-11	0.30	0.10	27.5-32.5	0.5	0.540	0.62	10.333	0.124	2.988E-05	2.296
					AVERAGE	2.593	43.212	0.519	1.761E-05	1.353
BN2-3-1	0.40	0.20	32.5-37.5	0.5	0.560	0.06	1.000	0.012	2.789E-06	0.214
BN2-3-2	0.40	0.20	32.5-37.5	2.0	2.060	0.03	0.500	0.006	3.791E-07	0.029
BN2-3-3	0.40	0.20	32.5-37.5	4.0	4.060	0.32	5.333	0.064	2.051E-06	0.158
BN2-3-4	0.40	0.20	32.5-37.5	6.0	6.060	0.59	9.833	0.118	2.534E-06	0.195
BN2-3-5	0.40	0.20	32.5-37.5	8.0	8.060	0.62	10.333	0.124	2.002E-06	0.154
BN2-3-6	0.40	0.20	32.5-37.5	10.0	10.060	0.24	4.000	0.048	6.210E-07	0.048
BN2-3-7	0.40	0.20	32.5-37.5	8.0	8.060	0.53	8.833	0.106	1.712E-06	0.132
BN2-3-8	0.40	0.20	32.5-37.5	6.0	6.060	0.41	6.833	0.082	1.761E-06	0.135
BN2-3-9	0.40	0.20	32.5-37.5	4.0	4.060	0.21	3.500	0.042	1.346E-06	0.103
BN2-3-10	0.40	0.20	32.5-37.5	2.0	2.060	0.02	0.333	0.004	2.527E-07	0.019
BN2-3-11	0.40	0.20	32.5-37.5	0.5	0.560	0.07	1.167	0.014	3.254E-06	0.250
					AVERAGE	0.282	4.697	0.056	1.700E-06	0.131
BN2-4-1	0.25	0.20	37.5-42.5	0.5	0.545	1.06	17.667	0.212	5.062E-05	3.890
BN2-4-2	0.25	0.20	37.5-42.5	2.0	2.045	2.40	40.000	0.480	3.055E-05	2.347
BN2-4-3	0.25	0.20	37.5-42.5	4.0	4.045	2.50	41.667	0.500	1.609E-05	1.236
BN2-4-4	0.25	0.20	37.5-42.5	6.0	6.045	3.24	54.000	0.648	1.395E-05	1.072
BN2-4-5	0.25	0.20	37.5-42.5	8.0	8.045	5.26	87.667	1.052	1.702E-05	1.308
BN2-4-6	0.25	0.20	37.5-42.5	10.0	10.045	4.97	82.833	0.994	1.288E-05	0.990
BN2-4-7	0.25	0.20	37.5-42.5	8.0	8.045	4.97	82.833	0.994	1.608E-05	1.236
BN2-4-8	0.25	0.20	37.5-42.5	6.0	6.045	4.83	80.500	0.966	2.080E-05	1.598
BN2-4-9	0.25	0.20	37.5-42.5	4.0	4.045	4.51	75.167	0.902	2.902E-05	2.230
BN2-4-10	0.25	0.20	37.5-42.5	2.0	2.045	2.71	45.167	0.542	3.449E-05	2.650
BN2-4-11	0.25	0.20	37.5-42.5	0.5	0.545	4.51	75.167	0.902	2.154E-04	16.550
					AVERAGE	3.724	62.061	0.745	4.153E-05	3.192
BN2-5-1	0.25	0.20	42.5-47.5	0.5	0.545	4.03	67.167	0.806	1.925E-04	14.789
BN2-5-2	0.25	0.20	42.5-47.5	2.0	2.045	10.10	168.333	2.020	1.286E-04	9.878
BN2-5-3	0.25	0.20	42.5-47.5	4.0	4.045	16.49	274.833	3.298	1.061E-04	8.153
BN2-5-4	0.25	0.20	42.5-47.5	6.0	6.045	20.89	348.167	4.178	8.995E-05	6.911
BN2-5-5	0.25	0.20	42.5-47.5	8.0	8.045	24.30	405.000	4.860	7.862E-05	6.041
BN2-5-6	0.25	0.20	42.5-47.5	10.0	10.045	28.31	471.833	5.662	7.336E-05	5.637
BN2-5-7	0.25	0.20	42.5-47.5	8.0	8.045	22.25	370.833	4.450	7.199E-05	5.531
BN2-5-8	0.25	0.20	42.5-47.5	6.0	6.045	18.28	304.667	3.656	7.871E-05	6.048
BN2-5-9	0.25	0.20	42.5-47.5	4.0	4.045	12.25	204.167	2.450	7.882E-05	6.057
BN2-5-10	0.25	0.20	42.5-47.5	2.0	2.045	8.22	137.000	1.644	1.046E-04	8.039
BN2-5-11	0.25	0.20	42.5-47.5	0.5	0.545	3.42	57.000	0.684	1.633E-04	12.550
					AVERAGE	15.322	255.364	3.064	1.060E-04	8.149
BN2-6-1	0.00	0.20	45.0-50.0	0.5	0.520	0.83	13.833	0.166	4.155E-05	3.192
BN2-6-2	0.00	0.20	45.0-50.0	2.0	2.020	4.25	70.833	0.850	5.476E-05	4.208
BN2-6-3	0.00	0.20	45.0-50.0	4.0	4.020	7.40	123.333	1.480	4.791E-05	3.682
BN2-6-4	0.00	0.20	45.0-50.0	6.0	6.020	8.44	140.667	1.688	3.649E-05	2.804
BN2-6-5	0.00	0.20	45.0-50.0	8.0	8.020	9.64	160.667	1.928	3.129E-05	2.404
BN2-6-6	0.00	0.20	45.0-50.0	10.0	10.020	10.35	172.500	2.070	2.689E-05	2.066
BN2-6-7	0.00	0.20	45.0-50.0	8.0	8.020	9.38	156.333	1.876	3.044E-05	2.339
BN2-6-8	0.00	0.20	45.0-50.0	6.0	6.020	8.41	140.167	1.682	3.636E-05	2.794
BN2-6-9	0.00	0.20	45.0-50.0	4.0	4.020	7.28	121.333	1.456	4.714E-05	3.622
BN2-6-10	0.00	0.20	45.0-50.0	2.0	2.020	4.75	79.167	0.950	6.121E-05	4.703
BN2-6-11	0.00	0.20	45.0-50.0	0.5	0.520	1.57	26.167	0.314	7.859E-05	6.038
					AVERAGE	6.573	109.545	1.315	4.478E-05	3.441

Result of Lugion Test of BN－3

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HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
BN3-1-1	8.00	0.00	23.0-25.0	0.5	1.300	0.77	12.833	0.154	3.134E-05	1.185
BN3-1-2	8.00	0.00	23.0-25.0	2.0	2.800	10.87	181.167	2.174	2.054E-04	7.764
BN3-1-3	8.00	0.00	23.0-25.0	4.0	4.800	20.04	334.000	4.008	2.209E-04	8.350
BN3-1-4	8.00	0.00	23.0-25.0	6.0	6.800	30.56	509.333	6.112	2.378E-04	8.988
BN3-1-5	8.00	0.00	23.0-25.0	8.0	8.800	39.58	659.667	7.916	2.380E-04	8.995
BN3-1-6	8.00	0.00	23.0-25.0	10.0	10.800	0.00	0.000	0.000	0.000E+00	0.000
BN3-1-7	8.00	0.00	23.0-25.0	8.0	8.800	40.02	667.000	8.004	2.407E-04	9.095
BN3-1-8	8.00	0.00	23.0-25.0	6.0	6.800	30.59	509.833	6.118	2.381E-04	8.997
BN3-1-9	8.00	0.00	23.0-25.0	4.0	4.800	22.27	371.167	4.454	2.455E-04	9.279
BN3-1-10	8.00	0.00	23.0-25.0	2.0	2.800	13.18	219.667	2.636	2.491E-04	9.414
BN3-1-11	8.00	0.00	23.0-25.0	0.5	1.300	8.65	144.167	1.730	3.521E-04	13.308
					AVERAGE	21.653	360.883	4.331	2.259E-04	8.538
BN3-2-1	8.00	0.80	25.0-28.0	0.5	1.380	1.25	20.833	0.250	3.520E-05	1.812
BN3-2-2	8.00	0.80	25.0-28.0	2.0	2.880	3.55	59.167	0.710	4.791E-05	2.465
BN3-2-3	8.00	0.80	25.0-28.0	4.0	4.880	0.92	15.333	0.184	7.327E-06	0.377
BN3-2-4	8.00	0.80	25.0-28.0	6.0	6.880	2.10	35.000	0.420	1.186E-05	0.610
BN3-2-5	8.00	0.80	25.0-28.0	8.0	8.880	1.46	24.333	0.292	6.390E-06	0.329
BN3-2-6	8.00	0.80	25.0-28.0	10.0	10.880	1.82	30.333	0.364	6.501E-06	0.335
BN3-2-7	8.00	0.80	25.0-28.0	8.0	8.880	1.69	28.167	0.338	7.356E-06	0.381
BN3-2-8	8.00	0.80	25.0-28.0	6.0	6.880	2.00	33.333	0.400	1.130E-05	0.581
BN3-2-9	8.00	0.80	25.0-28.0	4.0	4.880	0.90	15.000	0.180	7.168E-06	0.369
BN3-2-10	8.00	0.80	25.0-28.0	2.0	2.880	0.40	6.667	0.080	5.398E-06	0.278
BN3-2-11	8.00	0.80	25.0-28.0	0.5	1.380	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	1.463	24.379	0.293	1.331E-05	0.685
BN3-3-1	8.00	0.80	30.0-35.0	0.5	1.380	0.26	4.333	0.052	4.904E-06	0.377
BN3-3-2	8.00	0.80	30.0-35.0	2.0	2.880	0.12	2.000	0.024	1.085E-06	0.083
BN3-3-3	8.00	0.80	30.0-35.0	4.0	4.880	0.09	1.500	0.018	4.800E-07	0.037
BN3-3-4	8.00	0.80	30.0-35.0	6.0	6.880	0.23	3.833	0.046	8.701E-07	0.067
BN3-3-5	8.00	0.80	30.0-35.0	8.0	8.880	0.50	8.333	0.100	1.466E-06	0.113
BN3-3-6	8.00	0.80	30.0-35.0	10.0	10.880	2.74	45.667	0.548	6.555E-06	0.504
BN3-3-7	8.00	0.80	30.0-35.0	8.0	8.880	3.87	64.500	0.774	1.134E-05	0.872
BN3-3-8	8.00	0.80	30.0-35.0	6.0	6.880	2.89	48.167	0.578	1.093E-05	0.840
BN3-3-9	8.00	0.80	30.0-35.0	4.0	4.880	0.61	10.167	0.122	3.254E-06	0.250
BN3-3-10	8.00	0.80	30.0-35.0	2.0	2.880	0.42	7.000	0.084	3.796E-06	0.292
BN3-3-11	8.00	0.80	30.0-35.0	0.5	1.380	0.53	8.833	0.106	9.996E-06	0.768
					AVERAGE	1.115	18.576	0.223	4.971E-06	0.382
BN3-4-1	8.00	0.80	35.0-40.0	0.5	1.380	0.00	0.000	0.000	0.000E+00	0.000
BN3-4-2	8.00	0.80	35.0-40.0	2.0	2.880	1.09	18.167	0.218	9.851E-06	0.757
BN3-4-3	8.00	0.80	35.0-40.0	4.0	4.880	1.33	22.167	0.266	7.094E-06	0.545
BN3-4-4	8.00	0.80	35.0-40.0	6.0	6.880	3.96	66.000	0.792	1.498E-05	1.151
BN3-4-5	8.00	0.80	35.0-40.0	8.0	8.880	4.00	66.667	0.800	1.172E-05	0.901
BN3-4-6	8.00	0.80	35.0-40.0	10.0	10.880	3.90	65.000	0.780	9.330E-06	0.717
BN3-4-7	8.00	0.80	35.0-40.0	8.0	8.880	3.01	50.167	0.602	8.823E-06	0.678
BN3-4-8	8.00	0.80	35.0-40.0	6.0	6.880	2.16	36.000	0.432	8.172E-06	0.628
BN3-4-9	8.00	0.80	35.0-40.0	4.0	4.880	1.53	25.500	0.306	8.161E-06	0.627
BN3-4-10	8.00	0.80	35.0-40.0	2.0	2.880	0.82	13.667	0.164	7.411E-06	0.569
BN3-4-11	8.00	0.80	35.0-40.0	0.5	1.380	0.50	8.333	0.100	9.431E-06	0.725
					AVERAGE	2.027	33.788	0.405	8.634E-06	0.663
BN3-5-1	8.60	0.80	40.0-45.0	0.5	1.440	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-2	8.60	0.80	40.0-45.0	2.0	2.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-3	8.60	0.80	40.0-45.0	4.0	4.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-4	8.60	0.80	40.0-45.0	6.0	6.940	0.00	0.000	0.000	0.000E+00	0.000
BNT3-5-5	8.60	0.80	40.0-45.0	8.0	8.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-6	8.60	0.80	40.0-45.0	10.0	10.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-7	8.60	0.80	40.0-45.0	8.0	8.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-8	8.60	0.80	40.0-45.0	6.0	6.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-9	8.60	0.80	40.0-45.0	4.0	4.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-10	8.60	0.80	40.0-45.0	2.0	2.940	0.00	0.000	0.000	0.000E+00	0.000
BN3-5-11	8.60	0.80	40.0-45.0	0.5	1.440	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.000	0.000	0.000	0.000E+00	0.000
BN3-6-1	9.10	0.20	45.0-50.0	0.5	1.430	1.37	22.833	0.274	2.494E-05	1.916
BN3-6-2	9.10	0.20	45.0-50.0	2.0	2.930	1.95	32.500	0.390	1.732E-05	1.331
BN3-6-3	9.10	0.20	45.0-50.0	4.0	4.930	2.44	40.667	0.488	1.288E-05	0.990
BN3-6-4	9.10	0.20	45.0-50.0	6.0	6.930	2.88	48.000	0.576	1.082E-05	0.831
BN3-6-5	9.10	0.20	45.0-50.0	8.0	8.930	3.41	56.833	0.682	9.939E-06	0.764
BN3-6-6	9.10	0.20	45.0-50.0	10.0	10.930	3.23	53.833	0.646	7.692E-06	0.591
BN3-6-7	9.10	0.20	45.0-50.0	8.0	8.930	2.08	34.667	0.416	6.063E-06	0.466
BN3-6-8	9.10	0.20	45.0-50.0	6.0	6.930	2.16	36.000	0.432	8.113E-06	0.623
BN3-6-9	9.10	0.20	45.0-50.0	4.0	4.093	1.89	31.500	0.378	1.202E-05	0.924
BN3-6-10	9.10	0.20	45.0-50.0	2.0	2.093	1.24	20.667	0.248	1.542E-05	1.185
BN3-6-11	9.10	0.20	45.0-50.0	0.5	0.593	0.73	12.167	0.146	3.204E-05	2.462

Result of Lugion Test of CT-1

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HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
CT1-1-1	8.95	0.25	22.5-27.5	0.5	1.420	0.22	3.667	0.044	4.033E-06	0.310
CT1-1-2	8.95	0.25	22.5-27.5	2.0	2.920	1.05	17.500	0.210	9.360E-06	0.719
CT1-1-3	8.95	0.25	22.5-27.5	4.0	4.920	2.15	35.833	0.430	1.137E-05	0.874
CT1-1-4	8.95	0.25	22.5-27.5	6.0	6.920	2.20	36.667	0.440	8.275E-06	0.636
CT1-1-5	8.95	0.25	22.5-27.5	8.0	8.920	2.65	44.167	0.530	7.733E-06	0.594
CT1-1-6	8.95	0.25	22.5-27.5	10.0	10.920	4.90	81.667	0.980	1.168E-05	0.897
CT1-1-7	8.95	0.25	22.5-27.5	8.0	8.920	3.40	56.667	0.680	9.921E-06	0.762
CT1-1-8	8.95	0.25	22.5-27.5	6.0	6.920	2.20	36.667	0.440	8.275E-06	0.636
CT1-1-9	8.95	0.25	22.5-27.5	4.0	4.920	2.00	33.333	0.400	1.058E-05	0.813
CT1-1-10	8.95	0.25	22.5-27.5	2.0	2.920	1.60	26.667	0.320	1.426E-05	1.096
CT1-1-11	8.95	0.25	22.5-27.5	0.5	1.420	0.95	15.833	0.190	1.741E-05	1.338
					AVERAGE	2.120	35.333	0.424	1.026E-05	0.789
CT1-2-1	12.70	0.25	27.5-32.5	0.5	1.795	0.38	6.333	0.076	5.510E-06	0.423
CT1-2-2	12.70	0.25	27.5-32.5	2.0	3.295	1.31	21.833	0.262	1.035E-05	0.795
CT1-2-3	12.70	0.25	27.5-32.5	4.0	5.295	1.74	29.000	0.348	8.553E-06	0.657
CT1-2-4	12.70	0.25	27.5-32.5	6.0	7.295	2.39	39.833	0.478	8.527E-06	0.655
CT1-2-5	12.70	0.25	27.5-32.5	8.0	9.295	2.90	48.333	0.580	8.121E-06	0.624
CT1-2-6	12.70	0.25	27.5-32.5	10.0	11.295	2.98	49.667	0.596	6.867E-06	0.528
CT1-2-7	12.70	0.25	27.5-32.5	8.0	9.295	2.93	48.833	0.586	8.205E-06	0.630
CT1-2-8	12.70	0.25	27.5-32.5	6.0	7.295	2.45	40.833	0.490	8.742E-06	0.672
CT1-2-9	12.70	0.25	27.5-32.5	4.0	5.295	1.70	28.333	0.340	8.357E-06	0.642
CT1-2-10	12.70	0.25	27.5-32.5	2.0	3.295	1.06	17.667	0.212	8.373E-06	0.643
CT1-2-11	12.70	0.25	27.5-32.5	0.5	1.795	0.37	6.167	0.074	5.365E-06	0.412
					AVERAGE	1.837	30.621	0.367	7.906E-06	0.608
CT1-3-1	12.70	0.25	32.5-37.5	0.5	1.795	1.80	30.000	0.360	2.610E-05	2.006
CT1-3-2	12.70	0.25	32.5-37.5	2.0	3.295	3.02	50.333	0.604	2.386E-05	1.833
CT1-3-3	12.70	0.25	32.5-37.5	4.0	5.295	4.59	76.500	0.918	2.256E-05	1.734
CT1-3-4	12.70	0.25	32.5-37.5	6.0	7.295	4.60	76.667	0.920	1.641E-05	1.261
CT1-3-5	12.70	0.25	32.5-37.5	8.0	9.295	6.44	107.333	1.288	1.803E-05	1.386
CT1-3-6	12.70	0.25	32.5-37.5	10.0	11.295	12.25	204.167	2.450	2.823E-05	2.169
CT1-3-7	12.70	0.25	32.5-37.5	8.0	9.295	11.41	190.167	2.282	3.195E-05	2.455
CT1-3-8	12.70	0.25	32.5-37.5	6.0	7.295	8.80	146.667	1.760	3.140E-05	2.413
CT1-3-9	12.70	0.25	32.5-37.5	4.0	5.295	4.78	79.667	0.956	2.350E-05	1.805
CT1-3-10	12.70	0.25	32.5-37.5	2.0	3.295	3.97	66.167	0.794	3.136E-05	2.410
CT1-3-11	12.70	0.25	32.5-37.5	0.5	1.795	1.91	31.833	0.382	2.770E-05	2.128
					AVERAGE	5.779	96.318	1.156	2.555E-05	1.964
CT1-4-1	8.95	0.25	37.5-42.5	0.5	1.420	2.37	39.500	0.474	4.344E-05	3.338
CT1-4-2	8.95	0.25	37.5-42.5	2.0	2.920	5.40	90.000	1.080	4.813E-05	3.699
CT1-4-3	8.95	0.25	37.5-42.5	4.0	4.920	12.10	201.667	2.420	6.401E-05	4.919
CT1-4-4	8.95	0.25	37.5-42.5	6.0	6.920	18.40	306.667	3.680	6.921E-05	5.318
CT1-4-5	8.95	0.25	37.5-42.5	8.0	8.920	19.20	320.000	3.840	5.603E-05	4.305
CT1-4-6	8.95	0.25	37.5-42.5	10.0	10.920	21.17	352.833	4.234	5.046E-05	3.877
CT1-4-7	8.95	0.25	37.5-42.5	8.0	8.920	19.85	330.833	3.970	5.792E-05	4.451
CT1-4-8	8.95	0.25	37.5-42.5	6.0	6.920	18.65	310.833	3.730	7.015E-05	5.390
CT1-4-9	8.95	0.25	37.5-42.5	4.0	4.920	12.40	206.667	2.480	6.560E-05	5.041
CT1-4-10	8.95	0.25	37.5-42.5	2.0	2.920	7.43	123.833	1.486	6.623E-05	5.089
CT1-4-11	8.95	0.25	37.5-42.5	0.5	1.420	4.44	74.000	0.888	8.138E-05	6.254
					AVERAGE	12.855	214.258	2.571	6.114E-05	4.698
CT1-5-1	18.20	0.25	42.5-47.5	0.5	2.345	0.11	1.833	0.022	1.221E-06	0.094
CT1-5-2	18.20	0.25	42.5-47.5	2.0	3.845	1.28	21.333	0.256	8.665E-06	0.666
CT1-5-3	18.20	0.25	42.5-47.5	4.0	5.845	2.22	37.000	0.444	9.886E-06	0.760
CT1-5-4	18.20	0.25	42.5-47.5	6.0	7.845	2.70	45.000	0.540	8.958E-06	0.688
CT1-5-5	18.20	0.25	42.5-47.5	8.0	9.845	2.70	45.000	0.540	7.138E-06	0.549
CT1-5-6	18.20	0.25	42.5-47.5	10.0	11.845	2.47	41.167	0.494	5.428E-06	0.417
CT1-5-7	18.20	0.25	42.5-47.5	8.0	9.845	2.25	37.500	0.450	5.949E-06	0.457
CT1-5-8	18.20	0.25	42.5-47.5	6.0	7.845	2.71	45.167	0.542	8.991E-06	0.691
CT1-5-9	18.20	0.25	42.5-47.5	4.0	5.845	2.47	41.167	0.494	1.100E-05	0.845
CT1-5-10	18.20	0.25	42.5-47.5	2.0	3.845	1.56	26.000	0.312	1.056E-05	0.811
CT1-5-11	18.20	0.25	42.5-47.5	0.5	2.345	1.50	25.000	0.300	1.665E-05	1.279
					AVERAGE	1.997	33.288	0.399	8.586E-06	0.660

Result of Lugion Test of CT－2

Khao Che Tra

HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
CT2-1-1	2.20	0.25	35.0-40.0	0.5	0.745	3.52	58.667	0.704	1.230E-04	9.450
CT2-1-2	2.20	0.25	35.0-40.0	2.0	2.245	5.26	87.667	1.052	6.098E-05	4.686
CT2-1-3	2.20	0.25	35.0-40.0	4.0	4.245	7.98	133.000	1.596	4.893E-05	3.760
CT2-1-4	2.20	0.25	35.0-40.0	6.0	6.245	10.20	170.000	2.040	4.251E-05	3.267
CT2-1-5	2.20	0.25	35.0-40.0	8.0	8.245	0.00	0.000	0.000	0.000E+00	0.000
CT2-1-6	2.20	0.25	35.0-40.0	10.0	10.245	0.00	0.000	0.000	0.000E+00	0.000
CT2-1-7	2.20	0.25	35.0-40.0	8.0	8.245	0.00	0.000	0.000	0.000E+00	0.000
CT2-1-8	2.20	0.25	35.0-40.0	6.0	6.245	10.32	172.000	2.064	4.301E-05	3.305
CT2-1-9	2.20	0.25	35.0-40.0	4.0	4.245	8.38	139.667	1.676	5.138E-05	3.948
CT2-1-10	2.20	0.25	35.0-40.0	2.0	2.245	5.80	96.667	1.160	6.724E-05	5.167
CT2-1-11	2.20	0.25	35.0-40.0	0.5	0.745	3.52	58.667	0.704	1.230E-04	9.450
					AVERAGE	4.998	83.303	1.000	5.091E-05	3.912
CT2-2-1	2.80	0.40	40.0-45.0	0.5	0.820	3.32	55.333	0.664	1.054E-04	8.098
CT2-2-2	2.80	0.40	40.0-45.0	2.0	2.320	6.85	114.167	1.370	7.685E-05	5.905
CT2-2-3	2.80	0.40	40.0-45.0	4.0	4.320	9.34	155.667	1.868	5.627E-05	4.324
CT2-2-4	2.80	0.40	40.0-45.0	6.0	6.320	11.78	196.333	2.356	4.851E-05	3.728
CT2-2-5	2.80	0.40	40.0-45.0	8.0	8.320	4.29	71.500	0.858	1.342E-05	1.031
CT2-2-6	2.80	0.40	40.0-45.0	10.0	10.320	17.02	283.667	3.404	4.293E-05	3.298
CT2-2-7	2.80	0.40	40.0-45.0	8.0	8.320	13.77	229.500	2.754	4.308E-05	3.310
CT2-2-8	2.80	0.40	40.0-45.0	6.0	6.320	11.69	194.833	2.338	4.814E-05	3.699
CT2-2-9	2.80	0.40	40.0-45.0	4.0	4.320	8.69	144.833	1.738	5.236E-05	4.023
CT2-2-10	2.80	0.40	40.0-45.0	2.0	2.320	6.41	106.833	1.282	7.191E-05	5.526
CT2-2-11	2.80	0.40	40.0-45.0	0.5	0.820	3.81	63.500	0.762	1.209E-04	9.293
					AVERAGE	8.815	146.924	1.763	6.180E-05	4.749
CT2-3-1	2.60	0.40	45.0-50.0	0.5	0.800	2.46	41.000	0.492	8.004E-05	6.150
CT2-3-2	2.60	0.40	45.0-50.0	2.0	2.300	4.81	80.167	0.962	5.443E-05	4.183
CT2-3-3	2.60	0.40	45.0-50.0	4.0	4.300	7.52	125.333	1.504	4.552E-05	3.498
CT2-3-4	2.60	0.40	45.0-50.0	6.0	6.300	3.82	63.667	0.764	1.578E-05	1.213
CT2-3-5	2.60	0.40	45.0-50.0	8.0	8.300	6.53	108.833	1.306	2.048E-05	1.573
CT2-3-6	2.60	0.40	45.0-50.0	10.0	10.300	19.97	332.833	3.994	5.046E-05	3.878
CT2-3-7	2.60	0.40	45.0-50.0	8.0	8.300	16.77	279.500	3.354	5.259E-05	4.041
CT2-3-8	2.60	0.40	45.0-50.0	6.0	6.300	13.50	225.000	2.700	5.578E-05	4.286
CT2-3-9	2.60	0.40	45.0-50.0	4.0	4.300	10.26	171.000	2.052	6.210E-05	4.772
CT2-3-10	2.60	0.40	45.0-50.0	2.0	2.300	7.65	127.500	1.530	8.657E-05	6.652
CT2-3-11	2.60	0.40	45.0-50.0	0.5	0.800	4.09	68.167	0.818	1.331E-04	10.225
					AVERAGE	8.853	147.545	1.771	5.971E-05	4.588

Result of Lugion Test of CT-3

Khao Che Tra

HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
CT3-1-1	9.00	0.10	18.5-23.5	0.5	1.410	2.27	37.833	0.454	4.190E-05	3.220
CT3-1-2	9.00	0.10	18.5-23.5	2.0	2.910	5.75	95.833	1.150	5.143E-05	3.952
CT3-1-3	9.00	0.10	18.5-23.5	4.0	4.910	0.62	10.333	0.124	3.287E-06	0.253
CT3-1-4	9.00	0.10	18.5-23.5	6.0	6.910	15.67	261.167	3.134	5.903E-05	4.535
CT3-1-5	9.00	0.10	18.5-23.5	8.0	8.910	28.45	474.167	5.690	8.311E-05	6.386
CT3-1-6	9.00	0.10	18.5-23.5	10.0	10.910	0.00	0.000	0.000	0.000E+00	0.000
CT3-1-7	9.00	0.10	18.5-23.5	8.0	8.910	31.10	518.333	6.220	9.085E-05	6.981
CT3-1-8	9.00	0.10	18.5-23.5	6.0	6.910	26.71	445.167	5.342	1.006E-04	7.731
CT3-1-9	9.00	0.10	18.5-23.5	4.0	4.910	20.65	344.167	4.130	1.095E-04	8.411
CT3-1-10	9.00	0.10	18.5-23.5	2.0	2.910	13.38	223.000	2.676	1.197E-04	9.196
CT3-1-11	9.00	0.10	18.5-23.5	0.5	1.410	7.45	124.167	1.490	1.375E-04	10.567
					AVERAGE	13.823	230.379	2.765	7.244E-05	5.567
CT3-2-1	9.00	0.00	23.5-28.5	0.5	1.400	1.31	21.833	0.262	2.436E-05	1.871
CT3-2-2	9.00	0.00	23.5-28.5	2.0	2.900	1.13	18.833	0.226	1.014E-05	0.779
CT3-2-3	9.00	0.00	23.5-28.5	4.0	4.900	1.96	32.667	0.392	1.041E-05	0.800
CT3-2-4	9.00	0.00	23.5-28.5	6.0	6.900	2.65	44.167	0.530	9.996E-06	0.768
CT3-2-5	9.00	0.00	23.5-28.5	8.0	8.900	4.05	67.500	0.810	1.184E-05	0.910
CT3-2-6	9.00	0.00	23.5-28.5	10.0	10.900	4.43	73.833	0.886	1.058E-05	0.813
CT3-2-7	9.00	0.00	23.5-28.5	8.0	8.900	3.54	59.000	0.708	1.035E-05	0.796
CT3-2-8	9.00	0.00	23.5-28.5	6.0	6.900	2.87	47.833	0.574	1.083E-05	0.832
CT3-2-9	9.00	0.00	23.5-28.5	4.0	4.900	2.22	37.000	0.444	1.179E-05	0.906
CT3-2-10	9.00	0.00	23.5-28.5	2.0	2.900	1.42	23.667	0.284	1.274E-05	0.979
CT3-2-11	9.00	0.00	23.5-28.5	0.5	1.400	0.58	9.667	0.116	1.078E-05	0.829
					AVERAGE	2.378	39.636	0.476	1.217E-05	0.935
CT3-3-1	9.20	0.00	28.5-33.5	0.5	1.420	4.81	80.167	0.962	8.817E-05	6.775
CT3-3-2	9.20	0.00	28.5-33.5	2.0	2.920	3.23	53.833	0.646	2.879E-05	2.212
CT3-3-3	9.20	0.00	28.5-33.5	4.0	4.920	9.42	157.000	1.884	4.983E-05	3.829
CT3-3-4	9.20	0.00	28.5-33.5	6.0	6.920	24.75	412.500	4.950	9.309E-05	7.153
CT3-3-5	9.20	0.00	28.5-33.5	8.0	8.920	29.18	486.333	5.836	8.515E-05	6.543
CT3-3-6	9.20	0.00	28.5-33.5	10.0	10.920	6.76	112.667	1.352	1.611E-05	1.238
CT3-3-7	9.20	0.00	28.5-33.5	8.0	8.920	27.94	465.667	5.588	8.153E-05	6.265
CT3-3-8	9.20	0.00	28.5-33.5	6.0	6.920	22.46	374.333	4.492	8.448E-05	6.491
CT3-3-9	9.20	0.00	28.5-33.5	4.0	4.920	16.09	268.167	3.218	8.512E-05	6.541
CT3-3-10	9.20	0.00	28.5-33.5	2.0	2.920	10.94	182.333	2.188	9.752E-05	7.493
CT3-3-11	9.20	0.00	28.5-33.5	0.5	1.420	6.47	107.833	1.294	1.186E-04	9.113
					AVERAGE	14.732	245.530	2.946	7.531E-05	5.787
CT3-4-1	8.10	0.00	33.5-38.5	0.5	1.310	0.12	2.000	0.024	2.384E-06	0.183
CT3-4-2	8.10	0.00	33.5-38.5	2.0	2.810	0.93	15.500	0.186	8.614E-06	0.662
CT3-4-3	8.10	0.00	33.5-38.5	4.0	4.810	1.95	32.500	0.390	1.055E-05	0.811
CT3-4-4	8.10	0.00	33.5-38.5	6.0	6.810	2.90	48.333	0.580	1.108E-05	0.852
CT3-4-5	8.10	0.00	33.5-38.5	8.0	8.810	3.95	65.833	0.790	1.167E-05	0.897
CT3-4-6	8.10	0.00	33.5-38.5	10.0	10.810	5.68	94.667	1.136	1.368E-05	1.051
CT3-4-7	8.10	0.00	33.5-38.5	8.0	8.810	5.43	90.500	1.086	1.604E-05	1.233
CT3-4-8	8.10	0.00	33.5-38.5	6.0	6.810	3.32	55.333	0.664	1.269E-05	0.975
CT3-4-9	8.10	0.00	33.5-38.5	4.0	4.810	3.23	53.833	0.646	1.748E-05	1.343
CT3-4-10	8.10	0.00	33.5-38.5	2.0	2.810	2.30	38.333	0.460	2.130E-05	1.637
CT3-4-11	8.10	0.00	33.5-38.5	0.5	1.310	0.99	16.500	0.198	1.967E-05	1.511
					AVERAGE	2.800	46.667	0.560	1.320E-05	1.014
CT3-5-1	7.60	0.00	43.5-48.5	0.5	1.260	0.20	3.333	0.040	4.131E-06	0.317
CT3-5-2	7.60	0.00	43.5-48.5	2.0	2.760	1.19	19.833	0.238	1.122E-05	0.862
CT3-5-3	7.60	0.00	43.5-48.5	4.0	4.760	1.83	30.500	0.366	1.001E-05	0.769
CT3-5-4	7.60	0.00	43.5-48.5	6.0	6.760	2.82	47.000	0.564	1.086E-05	0.834
CT3-5-5	7.60	0.00	43.5-48.5	8.0	8.760	3.14	52.333	0.628	9.930E-06	0.717
CT3-5-6	7.60	0.00	43.5-48.5	10.0	10.760	6.51	108.500	1.302	1.575E-05	1.210
CT3-5-7	7.60	0.00	43.5-48.5	8.0	8.760	3.94	65.667	0.788	1.171E-05	0.900
CT3-5-8	7.60	0.00	43.5-48.5	6.0	6.760	3.35	55.833	0.670	1.290E-05	0.991
CT3-5-9	7.60	0.00	43.5-48.5	4.0	4.760	2.03	33.833	0.406	1.110E-05	0.853
CT3-5-10	7.60	0.00	43.5-48.5	2.0	2.760	1.26	21.000	0.252	1.188E-05	0.913
CT3-5-11	7.60	0.00	43.5-48.5	0.5	1.260	0.45	7.500	0.090	9.296E-06	0.714
					AVERAGE	2.429	40.485	0.486	1.074E-05	0.826

Result of Lugion Test of CT-4

Khao Che Tra

HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
CT4-1-1	1.40	0.50	23.0-28.0	0.5	0.690	8.24	137.333	1.648	3.108E-04	23.884
CT4-1-2	1.40	0.50	23.0-28.0	2.0	2.190	17.85	297.500	3.570	2.121E-04	16.301
CT4-1-3	1.40	0.50	23.0-28.0	4.0	4.190	25.70	428.333	5.140	1.596E-04	12.267
CT4-1-4	1.40	0.50	23.0-28.0	6.0	6.190	32.50	541.667	6.500	1.367E-04	10.501
CT4-1-5	1.40	0.50	23.0-28.0	8.0	8.190	39.10	651.667	7.820	1.243E-04	9.548
CT4-1-6	1.40	0.50	23.0-28.0	10.0	10.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-1-7	1.40	0.50	23.0-28.0	8.0	8.190	38.95	649.167	7.790	1.238E-04	9.512
CT4-1-8	1.40	0.50	23.0-28.0	6.0	6.190	29.63	493.833	5.926	1.246E-04	9.574
CT4-1-9	1.40	0.50	23.0-28.0	4.0	4.190	20.75	345.833	4.150	1.289E-04	9.905
CT4-1-10	1.40	0.50	23.0-28.0	2.0	2.190	13.70	228.333	2.740	1.628E-04	12.511
CT4-1-11	1.40	0.50	23.0-28.0	0.5	0.690	7.23	120.500	1.446	2.727E-04	20.957
					AVERAGE	21.241	354.015	4.248	1.597E-04	12.269
CT4-2-1	1.40	0.50	28.0-33.0	0.5	0.690	12.20	203.333	2.440	4.602E-04	35.362
CT4-2-2	1.40	0.50	28.0-33.0	2.0	2.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-3	1.40	0.50	28.0-33.0	4.0	4.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-4	1.40	0.50	28.0-33.0	6.0	6.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-5	1.40	0.50	28.0-33.0	8.0	8.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-6	1.40	0.50	28.0-33.0	10.0	10.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-7	1.40	0.50	28.0-33.0	8.0	8.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-8	1.40	0.50	28.0-33.0	6.0	6.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-9	1.40	0.50	28.0-33.0	4.0	4.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-10	1.40	0.50	28.0-33.0	2.0	2.190	0.00	0.000	0.000	0.000E+00	0.000
CT4-2-11	1.40	0.50	28.0-33.0	0.5	0.690	12.00	200.000	2.400	4.527E-04	34.783
					AVERAGE	2.200	36.667	0.440	8.299E-05	6.377
CT4-3-1	1.10	0.25	33.0-38.0	0.5	0.635	2.90	48.333	0.580	1.189E-04	9.134
CT4-3-2	1.10	0.25	33.0-38.0	2.0	2.135	8.90	148.333	1.780	1.085E-04	8.337
CT4-3-3	1.10	0.25	33.0-38.0	4.0	4.135	14.98	249.667	2.996	9.429E-05	7.245
CT4-3-4	1.10	0.25	33.0-38.0	6.0	6.135	23.94	399.000	4.788	1.016E-04	7.804
CT4-3-5	1.10	0.25	33.0-38.0	8.0	8.135	29.18	486.333	5.836	9.336E-05	7.174
CT4-3-6	1.10	0.25	33.0-38.0	10.0	10.135	38.10	635.000	7.620	9.785E-05	7.519
CT4-3-7	1.10	0.25	33.0-38.0	8.0	8.135	33.63	560.500	6.726	1.076E-04	8.268
CT4-3-8	1.10	0.25	33.0-38.0	6.0	6.135	26.85	447.500	5.370	1.139E-04	8.753
CT4-3-9	1.10	0.25	33.0-38.0	4.0	4.135	20.43	340.500	4.086	1.286E-04	9.881
CT4-3-10	1.10	0.25	33.0-38.0	2.0	2.135	12.84	214.000	2.568	1.565E-04	12.028
CT4-3-11	1.10	0.25	33.0-38.0	0.5	0.635	7.10	118.333	1.420	2.910E-04	22.362
					AVERAGE	19.895	331.591	3.979	1.284E-04	9.864
CT4-4-1	1.10	0.25	38.0-43.0	0.5	0.635	0.07	1.167	0.014	2.869E-06	0.220
CT4-4-2	1.10	0.25	38.0-43.0	2.0	2.135	3.15	52.500	0.630	3.840E-05	2.951
CT4-4-3	1.10	0.25	38.0-43.0	4.0	4.135	4.75	79.167	0.950	2.990E-05	2.297
CT4-4-4	1.10	0.25	38.0-43.0	6.0	6.135	8.15	135.833	1.630	3.458E-05	2.657
CT4-4-5	1.10	0.25	38.0-43.0	8.0	8.135	12.85	214.167	2.570	4.111E-05	3.159
CT4-4-6	1.10	0.25	38.0-43.0	10.0	10.135	18.25	304.167	3.650	4.687E-05	3.601
CT4-4-7	1.10	0.25	38.0-43.0	8.0	8.135	10.80	180.000	2.160	3.456E-05	2.655
CT4-4-8	1.10	0.25	38.0-43.0	6.0	6.135	7.80	130.000	1.560	3.309E-05	2.543
CT4-4-9	1.10	0.25	38.0-43.0	4.0	4.135	4.75	79.167	0.950	2.990E-05	2.297
CT4-4-10	1.10	0.25	38.0-43.0	2.0	2.135	3.45	57.500	0.690	4.206E-05	3.232
CT4-4-11	1.10	0.25	38.0-43.0	0.5	0.635	1.60	26.667	0.320	6.558E-05	5.039
					AVERAGE	6.875	114.576	1.375	3.627E-05	2.787
CT4-5-1	0.10	0.10	43.0-48.0	0.5	0.520	1.37	22.833	0.274	6.857E-05	5.269
CT4-5-2	0.10	0.10	43.0-48.0	2.0	2.020	2.72	45.333	0.544	3.505E-05	2.693
CT4-5-3	0.10	0.10	43.0-48.0	4.0	4.020	3.99	66.500	0.798	2.583E-05	1.985
CT4-5-4	0.10	0.10	43.0-48.0	6.0	6.020	5.13	85.500	1.026	2.218E-05	1.704
CT4-5-5	0.10	0.10	43.0-48.0	8.0	8.020	6.00	100.000	1.200	1.947E-05	1.496
CT4-5-6	0.10	0.10	43.0-48.0	10.0	10.020	6.20	103.333	1.240	1.611E-05	1.238
CT4-5-7	0.10	0.10	43.0-48.0	8.0	8.020	5.01	83.500	1.002	1.626E-05	1.249
CT4-5-8	0.10	0.10	43.0-48.0	6.0	6.020	4.18	69.667	0.836	1.807E-05	1.389
CT4-5-9	0.10	0.10	43.0-48.0	4.0	4.020	3.21	53.500	0.642	2.078E-05	1.597
CT4-5-10	0.10	0.10	43.0-48.0	2.0	2.020	2.17	36.167	0.434	2.796E-05	2.149
CT4-5-11	0.10	0.10	43.0-48.0	0.5	0.520	1.09	18.167	0.218	5.456E-05	4.192
					AVERAGE	3.734	62.227	0.747	2.953E-05	2.269

Result of Lugion Test of KK-1

Khlong Katha

HOLE NO.	STATIC W.L (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm2)	HEAD (H) (Kg/cm2)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
kk1-1-1	1.40	0.20	12.0-17.0	0.5	0.660	2.48	41.333	0.496	9.780E-05	7.515
kk1-1-2	1.40	0.20	12.0-17.0	2.0	2.160	6.50	108.333	1.300	7.833E-05	6.019
kk1-1-3	1.40	0.20	12.0-17.0	4.0	4.160	9.75	162.500	1.950	6.100E-05	4.688
kk1-1-4	1.40	0.20	12.0-17.0	6.0	6.160	14.20	236.667	2.840	6.000E-05	4.610
kk1-1-5	1.40	0.20	12.0-17.0	8.0	8.160	15.83	263.833	3.166	5.049E-05	3.880
kk1-1-6	1.40	0.20	12.0-17.0	10.0	10.160	30.70	511.667	6.140	7.865E-05	6.043
kk1-1-7	1.40	0.20	12.0-17.0	8.0	8.160	22.10	368.333	4.420	7.049E-05	5.417
kk1-1-8	1.40	0.20	12.0-17.0	6.0	6.160	14.03	233.833	2.806	5.928E-05	4.555
kk1-1-9	1.40	0.20	12.0-17.0	4.0	4.160	7.67	127.833	1.534	4.799E-05	3.688
kk1-1-10	1.40	0.20	12.0-17.0	2.0	2.160	4.11	68.500	0.822	4.953E-05	3.806
kk1-1-11	1.40	0.20	12.0-17.0	0.5	0.660	2.35	39.167	0.470	9.268E-05	7.121
					AVERAGE	11.793	196.545	2.359	6.784E-05	5.213
kk1-2-1	1.30	0.15	17.0-22.0	0.5	0.645	0.10	1.667	0.020	4.035E-06	0.310
kk1-2-2	1.30	0.15	17.0-22.0	2.0	2.145	1.99	33.167	0.398	2.415E-05	1.855
kk1-2-3	1.30	0.15	17.0-22.0	4.0	4.145	3.14	52.333	0.628	1.972E-05	1.515
kk1-2-4	1.30	0.15	17.0-22.0	6.0	6.145	3.78	63.000	0.756	1.601E-05	1.230
kk1-2-5	1.30	0.15	17.0-22.0	8.0	8.145	4.59	76.500	0.918	1.467E-05	1.127
kk1-2-6	1.30	0.15	17.0-22.0	10.0	10.145	6.55	109.167	1.310	1.680E-05	1.291
kk1-2-7	1.30	0.15	17.0-22.0	8.0	8.145	5.15	85.833	1.030	1.646E-05	1.265
kk1-2-8	1.30	0.15	17.0-22.0	6.0	6.145	4.10	68.333	0.820	1.737E-05	1.334
kk1-2-9	1.30	0.15	17.0-22.0	4.0	4.145	3.31	55.167	0.662	2.078E-05	1.597
kk1-2-10	1.30	0.15	17.0-22.0	2.0	2.145	1.69	28.167	0.338	2.051E-05	1.576
kk1-2-11	1.30	0.15	17.0-22.0	0.5	0.645	0.20	3.333	0.040	8.071E-06	0.620
					AVERAGE	3.145	52.424	0.629	1.623E-05	1.247
kk1-3-1	1.30	0.10	22.0-27.0	0.5	0.640	0.00	0.000	0.000	0.000E+00	0.000
kk1-3-2	1.30	0.10	22.0-27.0	2.0	2.140	1.95	32.500	0.390	2.372E-05	1.822
kk1-3-3	1.30	0.10	22.0-27.0	4.0	4.140	3.72	62.000	0.744	2.339E-05	1.797
kk1-3-4	1.30	0.10	22.0-27.0	6.0	6.140	6.04	100.667	1.208	2.550E-05	1.967
kk1-3-5	1.30	0.10	22.0-27.0	8.0	8.140	11.50	191.667	2.300	3.677E-05	2.826
kk1-3-6	1.30	0.10	22.0-27.0	10.0	10.140	14.27	237.833	2.854	3.663E-05	2.815
kk1-3-7	1.30	0.10	22.0-27.0	8.0	8.140	9.88	164.667	1.976	3.159E-05	2.428
kk1-3-8	1.30	0.10	22.0-27.0	6.0	6.140	6.29	104.833	1.258	2.666E-05	2.049
kk1-3-9	1.30	0.10	22.0-27.0	4.0	4.140	4.11	68.500	0.822	2.564E-05	1.986
kk1-3-10	1.30	0.10	22.0-27.0	2.0	2.140	2.70	45.000	0.540	3.284E-05	2.523
kk1-3-11	1.30	0.10	22.0-27.0	0.5	0.640	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	5.496	91.606	1.099	2.391E-05	1.837
kk1-4-1	1.20	0.10	27.0-32.0	0.5	0.630	0.00	0.000	0.000	0.000E+00	0.000
kk1-4-2	1.20	0.10	27.0-32.0	2.0	2.130	0.68	11.333	0.136	8.310E-06	0.638
kk1-4-3	1.20	0.10	27.0-32.0	4.0	4.130	1.33	22.167	0.266	8.382E-06	0.644
kk1-4-4	1.20	0.10	27.0-32.0	6.0	6.130	0.87	14.500	0.174	3.694E-06	0.284
kk1-4-5	1.20	0.10	27.0-32.0	8.0	8.130	1.46	24.333	0.292	4.674E-06	0.359
kk1-4-6	1.20	0.10	27.0-32.0	10.0	10.130	0.11	1.833	0.022	2.826E-07	0.022
kk1-4-7	1.20	0.10	27.0-32.0	8.0	8.130	0.00	0.000	0.000	0.000E+00	0.000
kk1-4-8	1.20	0.10	27.0-32.0	6.0	6.130	0.59	9.833	0.118	2.505E-06	0.192
kk1-4-9	1.20	0.10	27.0-32.0	4.0	4.130	0.88	14.667	0.176	5.546E-06	0.426
kk1-4-10	1.20	0.10	27.0-32.0	2.0	2.130	0.35	5.833	0.070	4.277E-06	0.329
kk1-4-11	1.20	0.10	27.0-32.0	0.5	0.630	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.570	9.500	0.114	3.425E-06	0.263
kk1-5-1	0.95	0.15	32.0-37.0	0.5	0.610	0.06	1.000	0.012	2.560E-06	0.197
kk1-5-2	0.95	0.15	32.0-37.0	2.0	2.110	0.58	9.667	0.116	7.155E-06	0.550
kk1-5-3	0.95	0.15	32.0-37.0	4.0	4.110	0.88	14.667	0.176	5.573E-06	0.428
kk1-5-4	0.95	0.15	32.0-37.0	6.0	6.110	1.07	17.833	0.214	4.558E-06	0.350
kk1-5-5	0.95	0.15	32.0-37.0	8.0	8.110	1.13	18.833	0.226	3.627E-06	0.279
kk1-5-6	0.95	0.15	32.0-37.0	10.0	10.110	1.21	20.167	0.242	3.115E-06	0.239
kk1-5-7	0.95	0.15	32.0-37.0	8.0	8.110	0.95	15.833	0.190	3.049E-06	0.234
kk1-5-8	0.95	0.15	32.0-37.0	6.0	6.110	0.12	2.000	0.024	5.112E-07	0.039
kk1-5-9	0.95	0.15	32.0-37.0	4.0	4.110	0.19	3.167	0.038	1.203E-06	0.092
kk1-5-10	0.95	0.15	32.0-37.0	2.0	2.110	0.15	2.500	0.030	1.850E-06	0.142
kk1-5-11	0.95	0.15	32.0-37.0	0.5	0.610	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.576	9.606	0.115	3.018E-06	0.232
kk1-6-1	0.90	0.00	37.0-42.0	0.5	0.590	0.08	1.333	0.016	3.529E-06	0.271
kk1-6-2	0.90	0.00	37.0-42.0	2.0	2.090	0.09	1.500	0.018	1.121E-06	0.086
kk1-6-3	0.90	0.00	37.0-42.0	4.0	4.090	0.80	13.333	0.160	5.091E-06	0.391
kk1-6-4	0.90	0.00	37.0-42.0	6.0	6.090	1.01	16.833	0.202	4.317E-06	0.332
kk1-6-5	0.90	0.00	37.0-42.0	8.0	8.090	0.00	0.000	0.000	0.000E+00	0.000
kk1-6-6	0.90	0.00	37.0-42.0	10.0	10.090	2.00	33.333	0.400	5.159E-06	0.396
kk1-6-7	0.90	0.00	37.0-42.0	8.0	8.090	0.26	4.333	0.052	8.365E-07	0.064
kk1-6-8	0.90	0.00	37.0-42.0	6.0	6.090	0.43	7.167	0.086	1.838E-06	0.141
kk1-6-9	0.90	0.00	37.0-42.0	4.0	4.090	1.34	22.333	0.268	8.528E-06	0.655
kk1-6-10	0.90	0.00	37.0-42.0	2.0	2.090	0.54	9.000	0.108	6.725E-06	0.517
kk1-6-11	0.90	0.00	37.0-42.0	0.5	0.590	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.595	9.924	0.119	3.377E-06	0.259
kk1-7-1	1.03	0.15	42.0-47.0	0.5	0.618	0.48	8.000	0.096	2.022E-05	1.553
kk1-7-2	1.03	0.15	42.0-47.0	2.0	2.118	0.63	10.500	0.126	7.742E-06	0.595
kk1-7-3	1.03	0.15	42.0-47.0	4.0	4.118	1.04	17.333	0.208	6.573E-06	0.505
kk1-7-4	1.03	0.15	42.0-47.0	6.0	6.118	1.04	17.333	0.208	4.425E-06	0.340
kk1-7-5	1.03	0.15	42.0-47.0	8.0	8.118	0.88	14.667	0.176	2.821E-06	0.217
kk1-7-6	1.03	0.15	42.0-47.0	10.0	10.118	0.00	0.000	0.000	0.000E+00	0.000
kk1-7-7	1.03	0.15	42.0-47.0	8.0	8.118	0.00	0.000	0.000	0.000E+00	0.000
kk1-7-8	1.03	0.15	42.0-47.0	6.0	6.118	0.48	8.000	0.096	2.042E-06	0.157
kk1-7-9	1.03	0.15	42.0-47.0	4.0	4.118	0.47	7.833	0.094	2.971E-06	0.228
kk1-7-10	1.03	0.15	42.0-47.0	2.0	2.118	0.28	4.667	0.056	3.441E-06	0.264
kk1-7-11	1.03	0.15	42.0-47.0	0.5	0.618	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.482	8.030	0.096	4.567E-06	0.351

Result of Lugion Test of KK－2

Khlong Katha

HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
kk2-1-1	1.28	0.15	20.5-25.5	0.5	0.643	0.00	0.000	0.000	0.000E+00	0.000
kk2-1-2	1.28	0.15	20.5-25.5	2.0	2.143	1.75	29.167	0.350	2.126E-05	1.633
kk2-1-3	1.28	0.15	20.5-25.5	4.0	4.143	4.52	75.333	0.904	2.840E-05	2.182
kk2-1-4	1.28	0.15	20.5-25.5	6.0	6.143	4.54	75.667	0.908	1.924E-05	1.478
kk2-1-5	1.28	0.15	20.5-25.5	8.0	8.143	7.76	129.333	1.552	2.480E-05	1.906
kk2-1-6	1.28	0.15	20.5-25.5	10.0	10.143	12.77	212.833	2.554	3.277E-05	2.518
kk2-1-7	1.28	0.15	20.5-25.5	8.0	8.143	8.15	135.833	1.630	2.605E-05	2.002
kk2-1-8	1.28	0.15	20.5-25.5	6.0	6.143	5.27	87.833	1.054	2.233E-05	1.716
kk2-1-9	1.28	0.15	20.5-25.5	4.0	4.143	4.61	76.833	0.922	2.896E-05	2.225
kk2-1-10	1.28	0.15	20.5-25.5	2.0	2.143	2.91	48.500	0.582	3.534E-05	2.716
kk2-1-11	1.28	0.15	20.5-25.5	0.5	0.643	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	6.535	108.917	1.307	7.972E-05	2.297
kk2-2-1	1.20	0.00	25.05-30.5	0.5	0.620	1.15	19.167	0.230	4.828E-05	3.710
kk2-2-2	1.20	0.00	25.05-30.5	2.0	2.120	0.18	3.000	0.036	2.210E-06	0.170
kk2-2-3	1.20	0.00	25.05-30.5	4.0	4.120	0.36	6.000	0.072	2.274E-06	0.175
kk2-2-4	1.20	0.00	25.05-30.5	6.0	6.120	2.99	49.833	0.598	1.272E-05	0.977
kk2-2-5	1.20	0.00	25.05-30.5	8.0	8.120	0.91	15.167	0.182	2.917E-06	0.224
kk2-2-6	1.20	0.00	25.05-30.5	10.0	10.120	0.60	10.000	0.120	1.543E-06	0.119
kk2-2-7	1.20	0.00	25.05-30.5	8.0	8.120	0.31	5.167	0.062	9.937E-07	0.076
kk2-2-8	1.20	0.00	25.05-30.5	6.0	6.120	0.24	4.000	0.048	1.021E-06	0.078
kk2-2-9	1.20	0.00	25.05-30.5	4.0	4.120	0.03	0.500	0.006	1.895E-07	0.015
kk2-2-10	1.20	0.00	25.05-30.5	2.0	2.120	2.02	33.667	0.404	2.480E-05	1.906
kk2-2-11	1.20	0.00	25.05-30.5	0.5	0.620	1.54	25.667	0.308	6.465E-05	4.968
					AVERAGE	0.939	15.652	0.188	1.469E-05	1.129
kk2-3-1	1.42	0.05	30.5-35.5	0.5	0.647	0.30	5.000	0.060	1.207E-05	0.927
kk2-3-2	1.42	0.05	30.5-35.5	2.0	2.147	1.03	17.167	0.206	1.249E-05	0.959
kk2-3-3	1.42	0.05	30.5-35.5	4.0	4.147	1.12	18.667	0.224	7.030E-06	0.540
kk2-3-4	1.42	0.05	30.5-35.5	6.0	6.147	0.00	0.000	0.000	0.000E+00	0.000
kk2-3-5	1.42	0.05	30.5-35.5	8.0	8.147	2.51	41.833	0.502	8.019E-06	0.616
kk2-3-6	1.42	0.05	30.5-35.5	10.0	10.147	4.49	74.833	0.898	1.152E-05	0.885
kk2-3-7	1.42	0.05	30.5-35.5	8.0	8.147	2.89	48.167	0.578	9.233E-06	0.709
kk2-3-8	1.42	0.05	30.5-35.5	6.0	6.147	0.27	4.500	0.054	1.143E-06	0.088
kk2-3-9	1.42	0.05	30.5-35.5	4.0	4.147	0.19	3.167	0.038	1.193E-06	0.092
kk2-3-10	1.42	0.05	30.5-35.5	2.0	2.147	1.08	18.000	0.216	1.309E-05	1.006
kk2-3-11	1.42	0.05	30.5-35.5	0.5	0.647	0.21	3.500	0.042	8.448E-06	0.649
					AVERAGE	1.281	21.348	0.256	7.657E-06	0.588
kk2-4-1	0.50	0.00	35.5-40.5	0.5	0.550	0.28	4.667	0.056	1.325E-05	1.018
kk2-4-2	0.50	0.00	35.5-40.5	2.0	2.050	0.34	5.667	0.068	4.317E-06	0.332
kk2-4-3	0.50	0.00	35.5-40.5	4.0	4.050	0.19	3.167	0.038	1.221E-06	0.094
kk2-4-4	0.50	0.00	35.5-40.5	6.0	6.050	0.00	0.000	0.000	0.000E+00	0.000
kk2-4-5	0.50	0.00	35.5-40.5	8.0	8.050	0.35	5.833	0.070	1.132E-06	0.087
kk2-4-6	0.50	0.00	35.5-40.5	10.0	10.050	1.00	16.667	0.200	2.590E-06	0.199
kk2-4-7	0.50	0.00	35.5-40.5	8.0	8.050	0.70	11.667	0.140	2.263E-06	0.174
kk2-4-8	0.50	0.00	35.5-40.5	6.0	6.050	0.00	0.000	0.000	0.000E+00	0.000
kk2-4-9	0.50	0.00	35.5-40.5	4.0	4.050	0.00	0.000	0.000	0.000E+00	0.000
kk2-4-10	0.50	0.00	35.5-40.5	2.0	2.050	0.71	11.833	0.142	9.015E-06	0.693
kk2-4-11	0.50	0.00	35.5-40.5	0.5	0.550	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.325	5.409	0.065	3.072E-06	0.236
kk2-5-1	0.25	0.20	42.5-47.5	0.5	0.545	4.03	67.167	0.806	1.925E-04	14.789
kk2-5-2	0.25	0.20	42.5-47.5	2.0	2.045	10.10	168.333	2.020	1.286E-04	9.878
kk2-5-3	0.25	0.20	42.5-47.5	4.0	4.045	16.49	274.833	3.298	1.061E-04	8.153
kk2-5-4	0.25	0.20	42.5-47.5	6.0	6.045	20.89	348.167	4.178	8.995E-05	6.911
kk2-5-5	0.25	0.20	42.5-47.5	8.0	8.045	24.30	405.000	4.860	7.862E-05	6.041
kk2-5-6	0.25	0.20	42.5-47.5	10.0	10.045	28.31	471.833	5.662	7.336E-05	5.637
kk2-5-7	0.25	0.20	42.5-47.5	8.0	8.045	22.25	370.833	4.450	7.199E-05	5.531
kk2-5-8	0.25	0.20	42.5-47.5	6.0	6.045	18.28	304.667	3.656	7.871E-05	6.048
kk2-5-9	0.25	0.20	42.5-47.5	4.0	4.045	12.25	204.167	2.450	7.882E-05	6.057
kk2-5-10	0.25	0.20	42.5-47.5	2.0	2.045	8.22	137.000	1.644	1.046E-04	8.039
kk2-5-11	0.25	0.20	42.5-47.5	0.5	0.545	3.42	57.000	0.684	1.633E-04	12.550
					AVERAGE	15.322	255.364	3.064	1.060E-04	8.149

Result of Lugion Test of KK－3

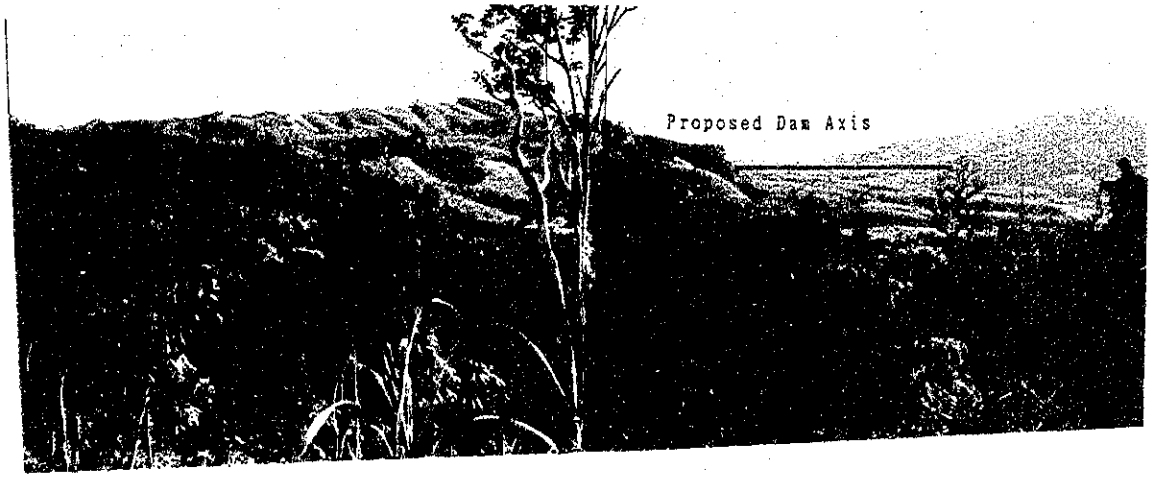
Khlong Katha

HOLE NO.	STATIC W.L. (m)	GAGE HIGHT (m)	TEST DEPTH (m)	PRESSURE (H1) (Kg/cm3)	HEAD (H) (Kg/cm3)	INJECTION QUANTITY (l/min)	INJECTION QUANTITY (cm3/sec)	UNIT QUANTITY (l/min*m)	PEAMEABILITY COEFFICIENT k(cm/sec)	LUGEON VALUE Lu
kk3-1-1	2.00	0.20	8.0-13.0	0.5	0.720	0.00	0.000	0.000	0.000E+00	0.000
kk3-1-2	2.00	0.20	8.0-13.0	2.0	2.220	3.45	57.500	0.690	4.045E-05	3.108
kk3-1-3	2.00	0.20	8.0-13.0	4.0	4.220	7.80	130.000	1.560	4.811E-05	3.697
kk3-1-4	2.00	0.20	8.0-13.0	6.0	6.220	14.70	245.000	2.940	6.151E-05	4.727
kk3-1-5	2.00	0.20	8.0-13.0	8.0	8.220	25.80	430.000	5.160	8.169E-05	6.277
kk3-1-6	2.00	0.20	8.0-13.0	10.0	10.220	47.30	788.333	9.460	1.205E-04	9.256
kk3-1-7	2.00	0.20	8.0-13.0	8.0	8.220	24.50	408.333	4.900	7.758E-05	5.961
kk3-1-8	2.00	0.20	8.0-13.0	6.0	6.220	14.60	243.333	2.920	6.110E-05	4.695
kk3-1-9	2.00	0.20	8.0-13.0	4.0	4.220	7.40	123.333	1.480	4.564E-05	3.507
kk3-1-10	2.00	0.20	8.0-13.0	2.0	2.220	2.90	48.333	0.580	3.400E-05	2.613
kk3-1-11	2.00	0.20	8.0-13.0	0.5	0.720	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	14.845	247.417	2.969	5.187E-05	4.384
kk3-2-1	2.00	0.20	18.0-23.0	0.5	0.720	1.35	22.500	0.270	4.880E-05	3.750
kk3-2-2	2.00	0.20	18.0-23.0	2.0	2.220	3.50	58.333	0.700	4.104E-05	3.153
kk3-2-3	2.00	0.20	18.0-23.0	4.0	4.220	6.70	111.667	1.340	4.132E-05	3.175
kk3-2-4	2.00	0.20	18.0-23.0	6.0	6.220	9.20	153.333	1.840	3.850E-05	2.958
kk3-2-5	2.00	0.20	18.0-23.0	8.0	8.220	12.80	213.333	2.560	4.053E-05	3.114
kk3-2-6	2.00	0.20	18.0-23.0	10.0	10.220	25.10	418.333	5.020	6.392E-05	4.912
kk3-2-7	2.00	0.20	18.0-23.0	8.0	8.220	11.35	189.167	2.270	3.594E-05	2.762
kk3-2-8	2.00	0.20	18.0-23.0	6.0	6.220	9.95	165.833	1.990	4.164E-05	3.199
kk3-2-9	2.00	0.20	18.0-23.0	4.0	4.220	6.75	112.500	1.350	4.163E-05	3.199
kk3-2-10	2.00	0.20	18.0-23.0	2.0	2.220	2.85	47.500	0.570	3.341E-05	2.568
kk3-2-11	2.00	0.20	18.0-23.0	0.5	0.720	1.90	31.667	0.380	6.869E-05	5.278
					AVERAGE	8.314	138.561	1.663	4.504E-05	3.461
kk3-3-1	2.00	0.20	28.0-33.0	0.5	0.720	0.00	0.000	0.000	0.000E+00	0.000
kk3-3-2	2.00	0.20	28.0-33.0	2.0	2.220	0.85	14.167	0.170	9.966E-06	0.766
kk3-3-3	2.00	0.20	28.0-33.0	4.0	4.220	0.85	14.167	0.170	5.243E-06	0.403
kk3-3-4	2.00	0.20	28.0-33.0	6.0	6.220	1.15	19.167	0.230	4.812E-06	0.370
kk3-3-5	2.00	0.20	28.0-33.0	8.0	8.220	2.00	33.333	0.400	6.333E-06	0.487
kk3-3-6	2.00	0.20	28.0-33.0	10.0	10.220	3.20	53.333	0.640	8.150E-06	0.626
kk3-3-7	2.00	0.20	28.0-33.0	8.0	8.220	1.80	30.000	0.360	5.700E-06	0.438
kk3-3-8	2.00	0.20	28.0-33.0	6.0	6.220	1.20	20.000	0.240	5.022E-06	0.386
kk3-3-9	2.00	0.20	28.0-33.0	4.0	4.220	0.90	15.000	0.180	5.551E-06	0.427
kk3-3-10	2.00	0.20	28.0-33.0	2.0	2.220	0.42	7.000	0.084	4.924E-06	0.378
kk3-3-11	2.00	0.20	28.0-33.0	0.5	0.720	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	1.125	18.742	0.225	5.064E-06	0.389
kk3-4-1	2.00	0.20	33.0-38.0	0.5	0.720	0.00	0.000	0.000	0.000E+00	0.000
kk3-4-2	1.00	0.20	33.0-38.0	2.0	2.120	0.70	11.667	0.140	8.594E-06	0.660
kk3-4-3	2.00	0.20	33.0-38.0	4.0	4.220	0.45	7.500	0.090	2.776E-06	0.213
kk3-4-4	2.00	0.20	33.0-38.0	6.0	6.220	0.75	12.500	0.150	3.138E-06	0.241
kk3-4-5	2.00	0.20	33.0-38.0	8.0	8.220	0.95	15.833	0.190	3.008E-06	0.231
kk3-4-6	2.00	0.20	33.0-38.0	10.0	10.220	0.95	15.833	0.190	2.419E-06	0.186
kk3-4-7	2.00	0.20	33.0-38.0	8.0	8.220	0.80	13.333	0.160	2.533E-06	0.195
kk3-4-8	2.00	0.20	33.0-38.0	6.0	6.220	0.60	10.000	0.120	2.511E-06	0.193
kk3-4-9	2.00	0.20	33.0-38.0	4.0	4.220	0.37	6.167	0.074	2.282E-06	0.175
kk3-4-10	2.00	0.20	33.0-38.0	2.0	2.220	0.51	8.500	0.102	5.979E-06	0.459
kk3-4-11	2.00	0.20	33.0-38.0	0.5	0.720	0.00	0.000	0.000	0.000E+00	0.000
					AVERAGE	0.353	9.212	0.111	3.022E-06	0.232

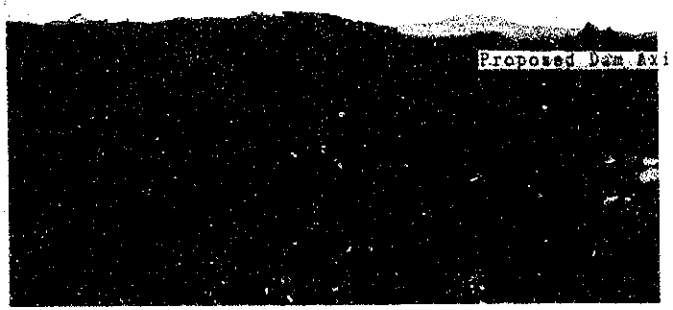
APPENDIX A-3

Photographs of Proposed Dam Sites

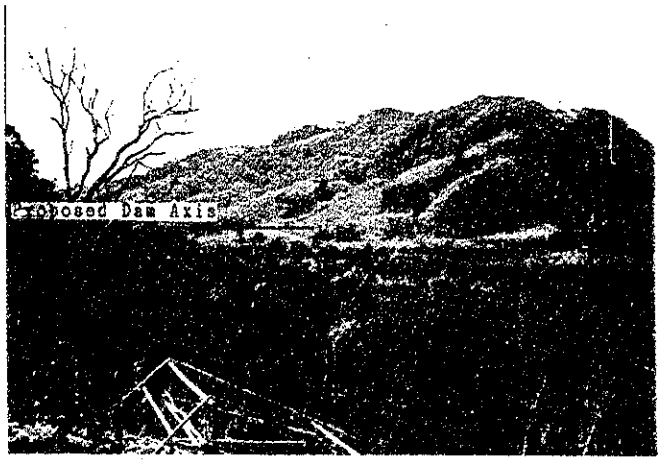
klong Lo Young Dam Site,
Veiv of Dam Site and
Revoir from downstream



klong Lo Young Dam Site,
Veiw of Dam Site and
Revoir from upstream



klong Lo Young Dam Site,
Veiw of Left Abutment



klong Lo Young Dam Site,
Veiv of Right Abutment

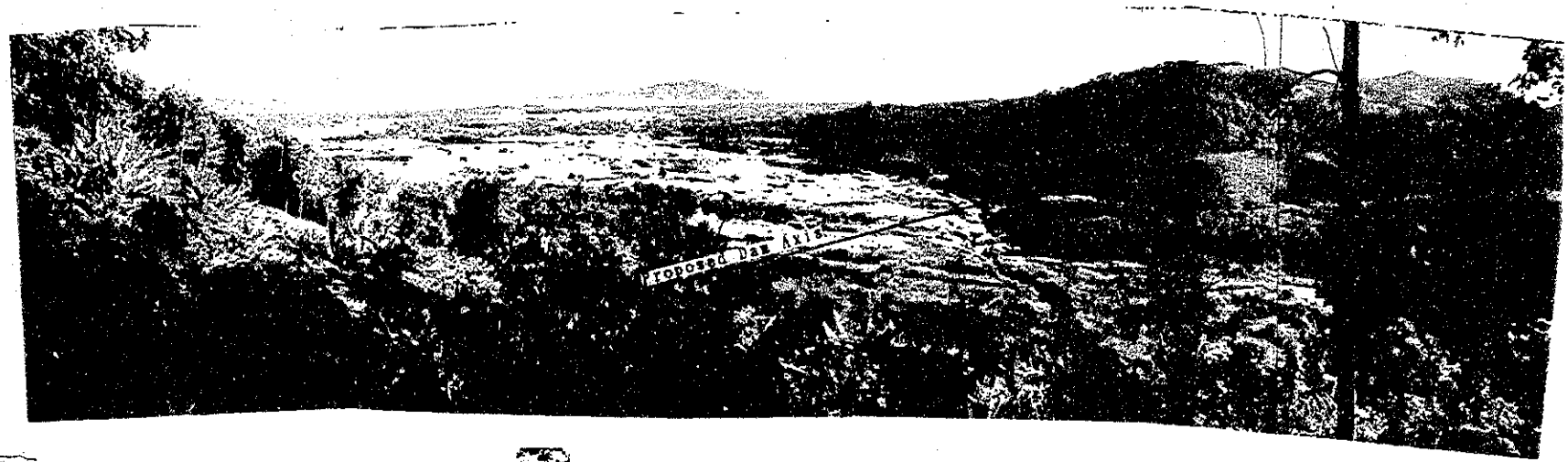
BANG NIE SITE

Bang Nie Dam Site, Veiv of Dam Site and Revoir from upstream

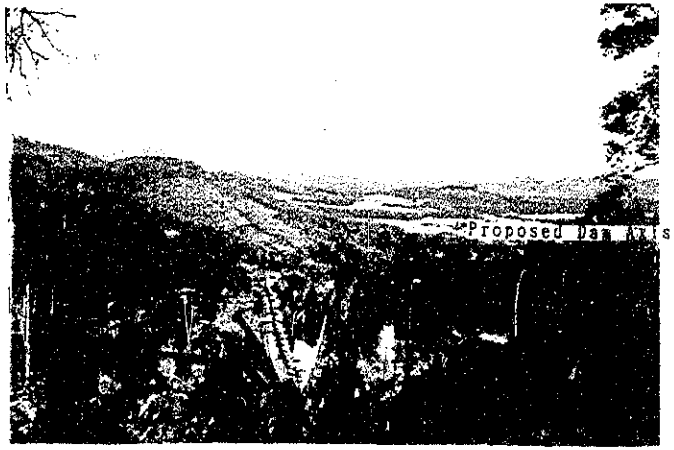
Khao Che Tra Dam Site. Veiv of Dam Site and Revoir from upstream

khao Che Tra Dam Site. Veiv of Right Abutment

klong Katha Dam Site,
Veiv of Dam Site and
Revoir from downstream



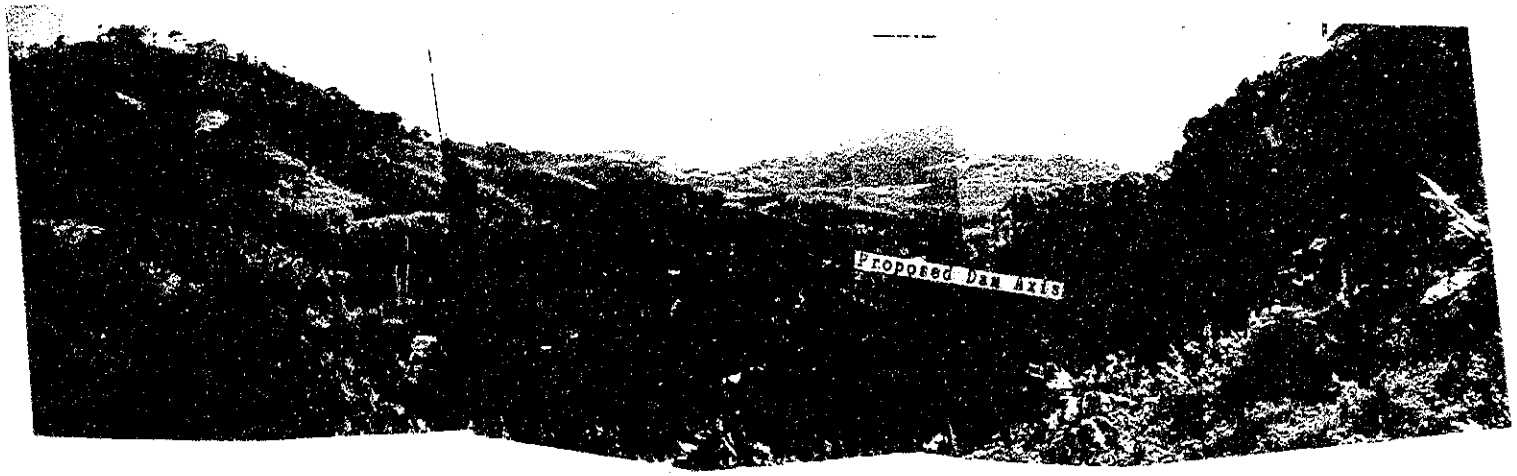
klong Katha Dam Site,
Veiv of Dam Site and
Revoir from upstream



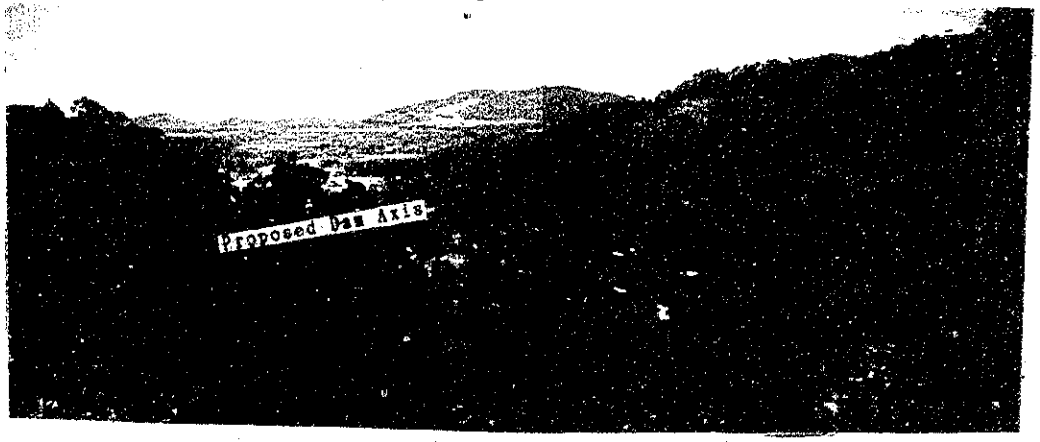
klong Katha Dam Site,
Veiw of Left Abutment

klong Katha Dam Site,
Veiv of Right Abutment

Bang The Sunga Dam Site,
Veiv of Dam Site and
Revoir from downstream



Bang The Sung Dam Site,
Veiw of Dam Site and
Revoir from upstream



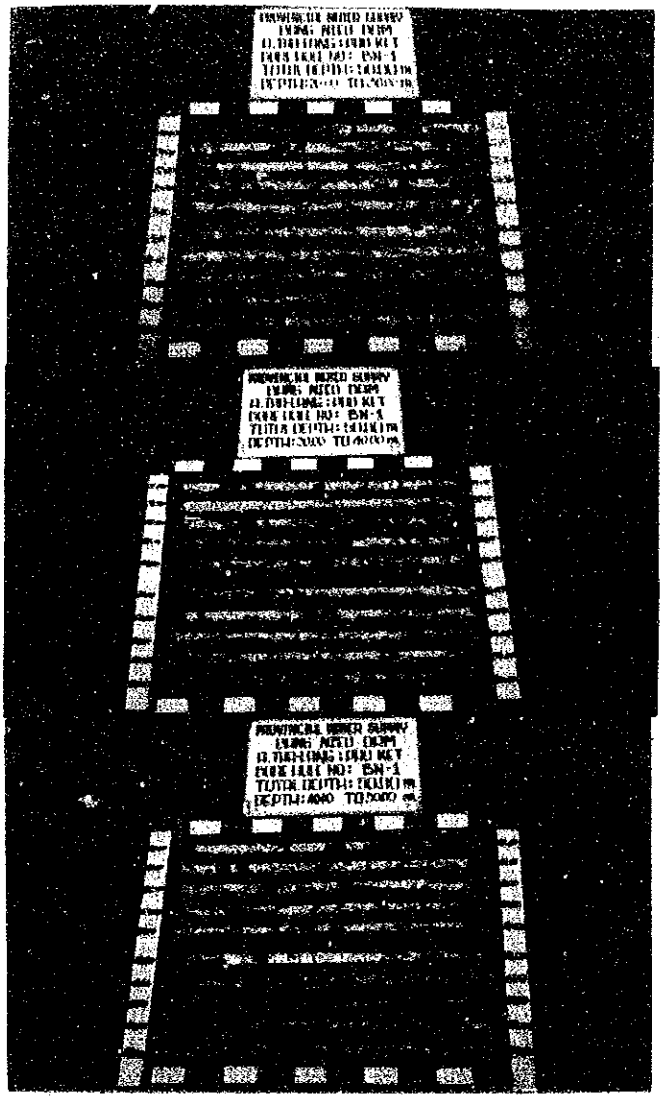
Bang The Sung Dam Site,
Veiv of Right Abutment

APPENDIX A-4

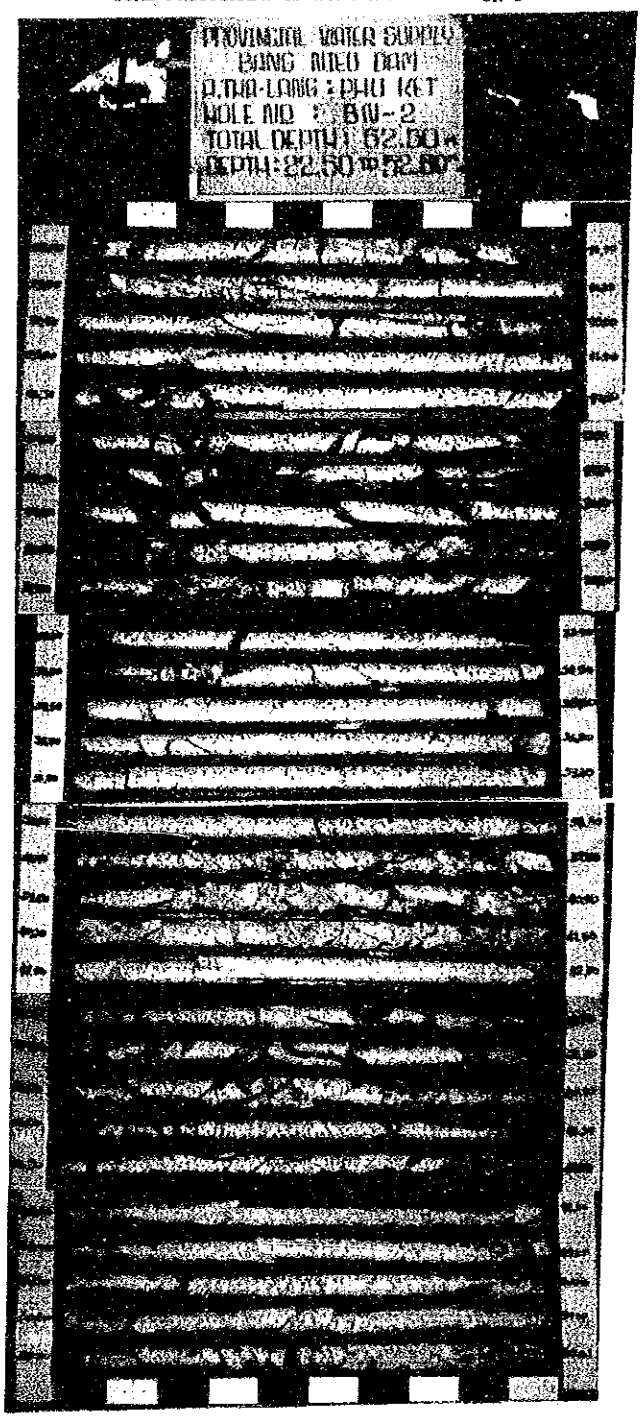
Photographs of Core Samples

BANG NIE SITE

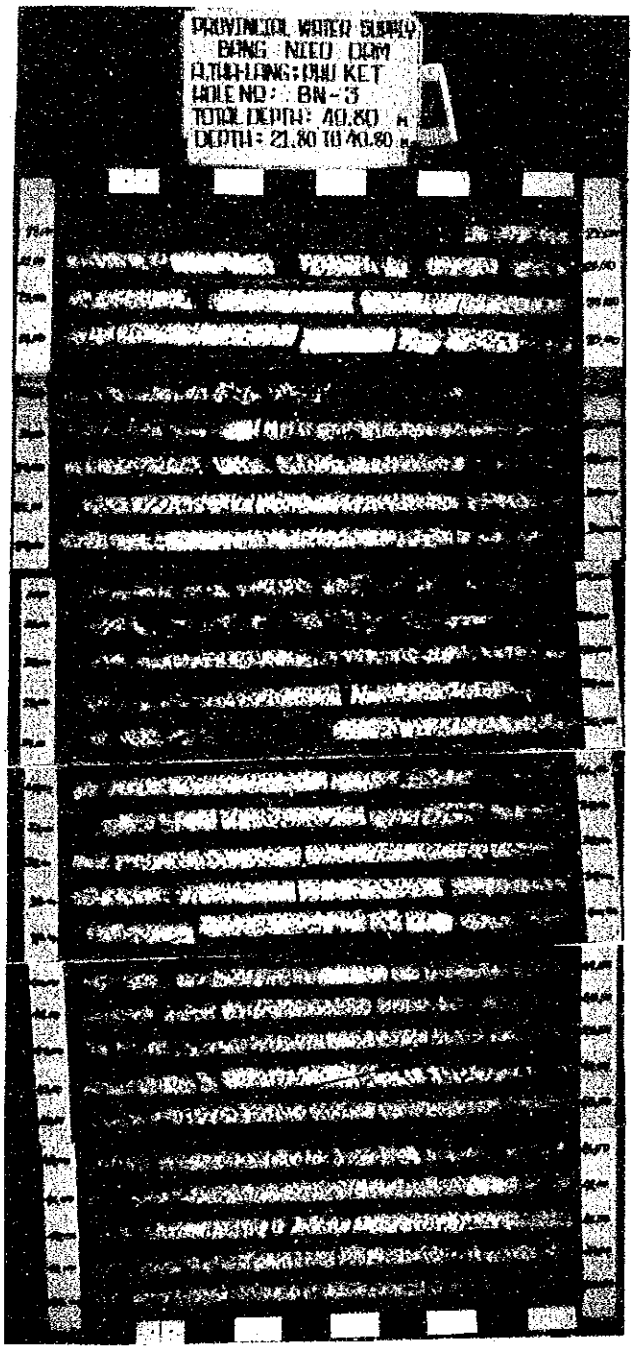
CORE PHOTOGRAPH OF BORE HOLE NO. BN-1



CORE PHOTOGRAPH OF BORE HOLE NO. BN-2

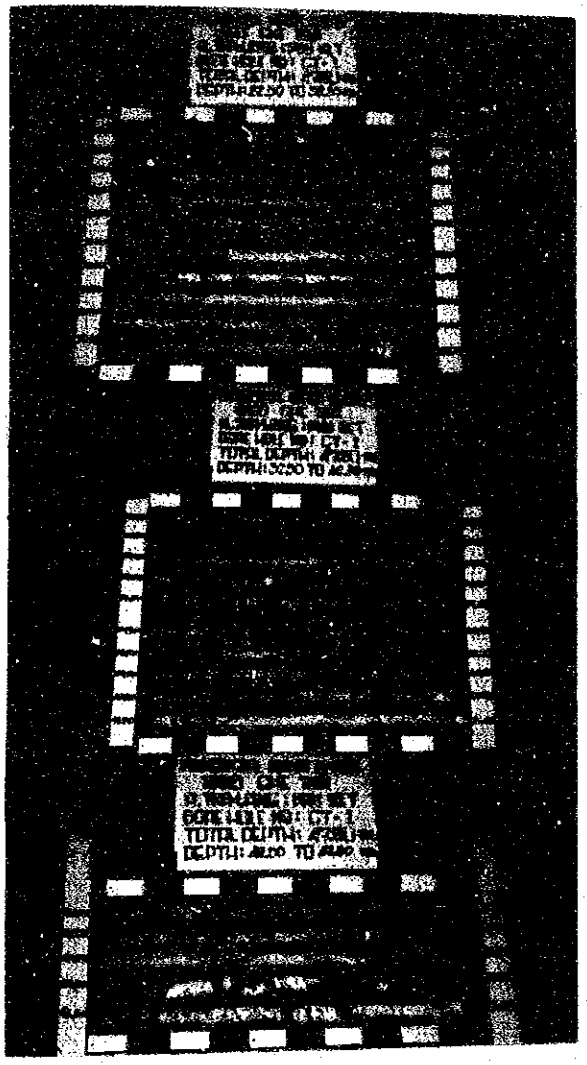


CORE PHOTOGRAPH OF BORE HOLE NO. BN-3

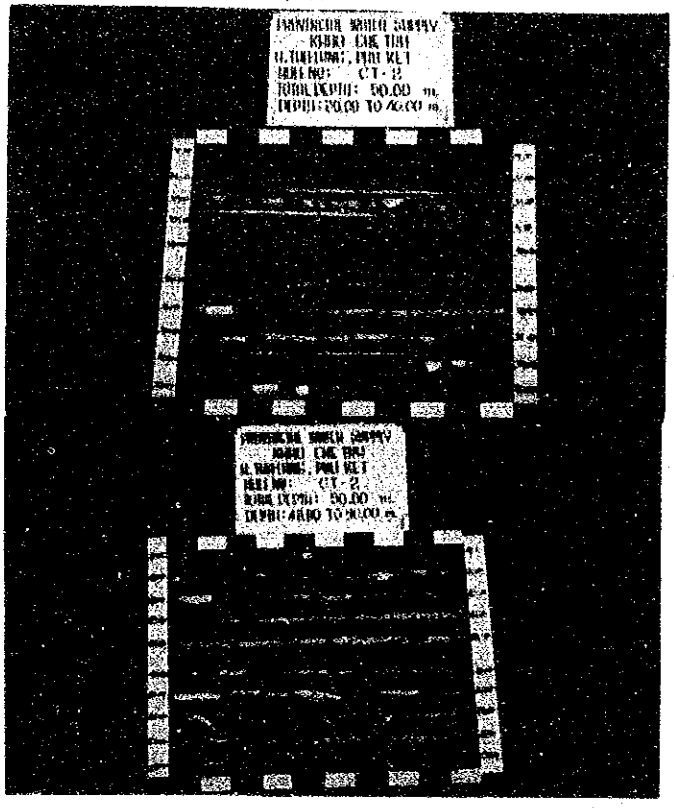


KHAO CHE TRA SITE

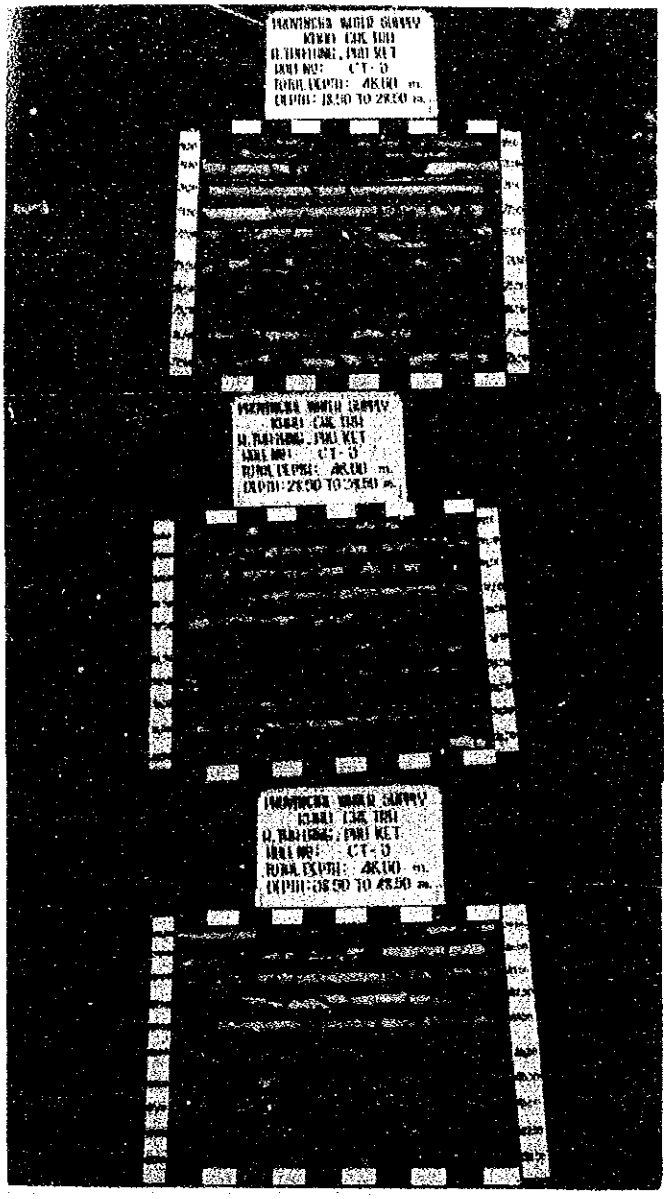
CORE PHOTOGRAPH OF BORE HOLE NO. CT-1



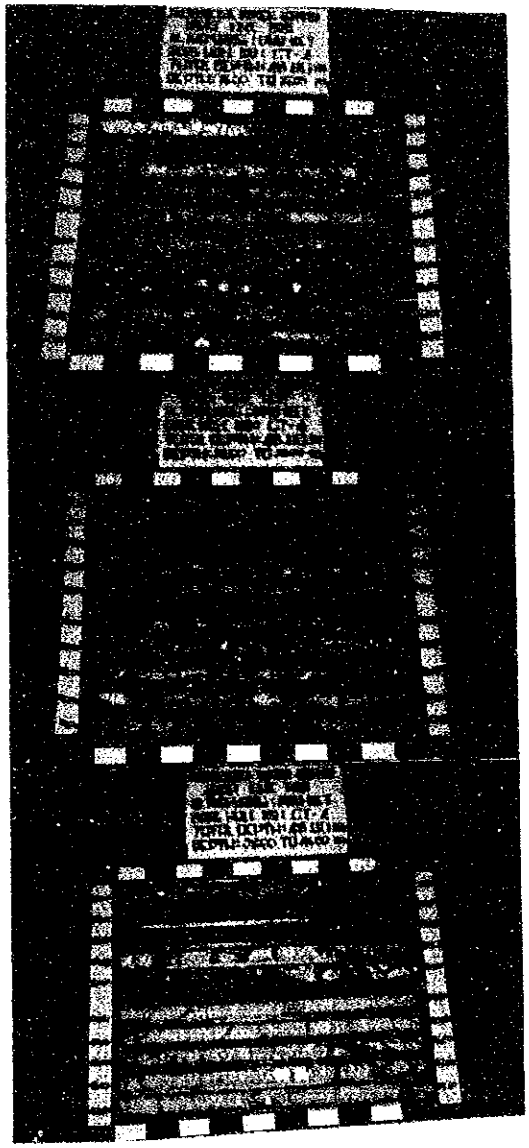
CORE PHOTOGRAPH OF BORE HOLE NO. CT-2



CORE PHOTOGRAPH OF BORE HOLE NO. CT-3

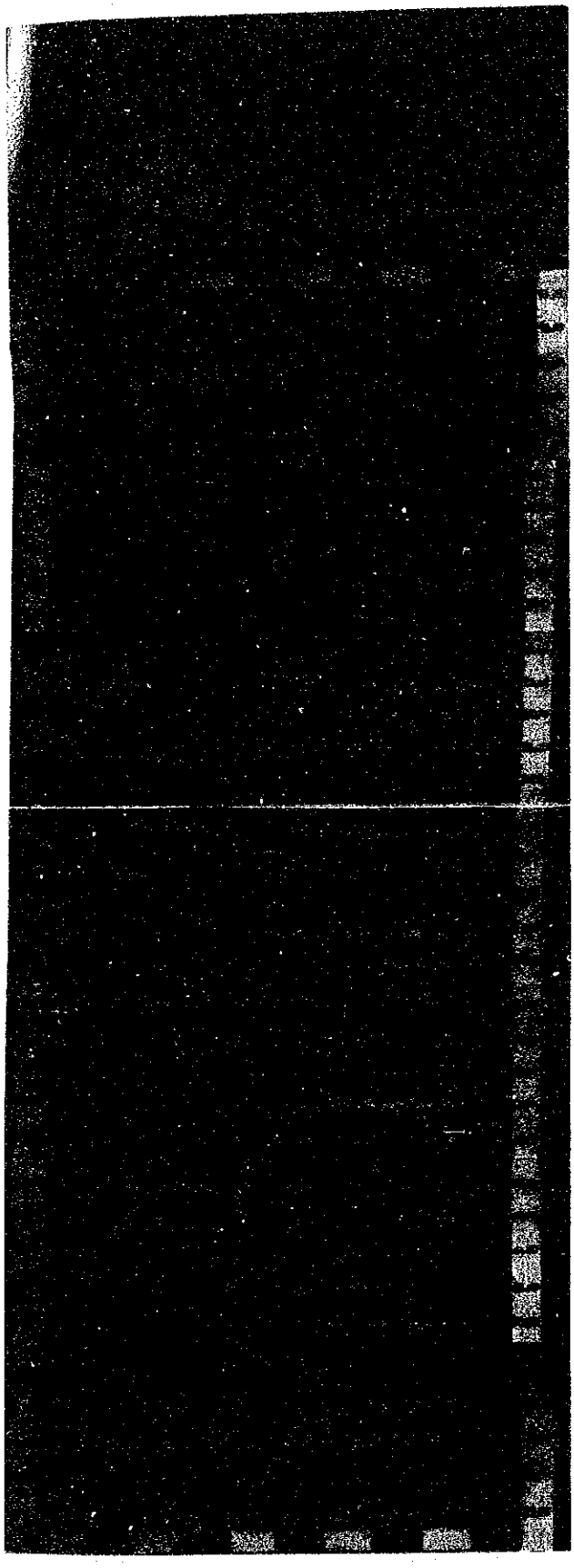


CORE PHOTOGRAPH OF BORE HOLE NO CT-4

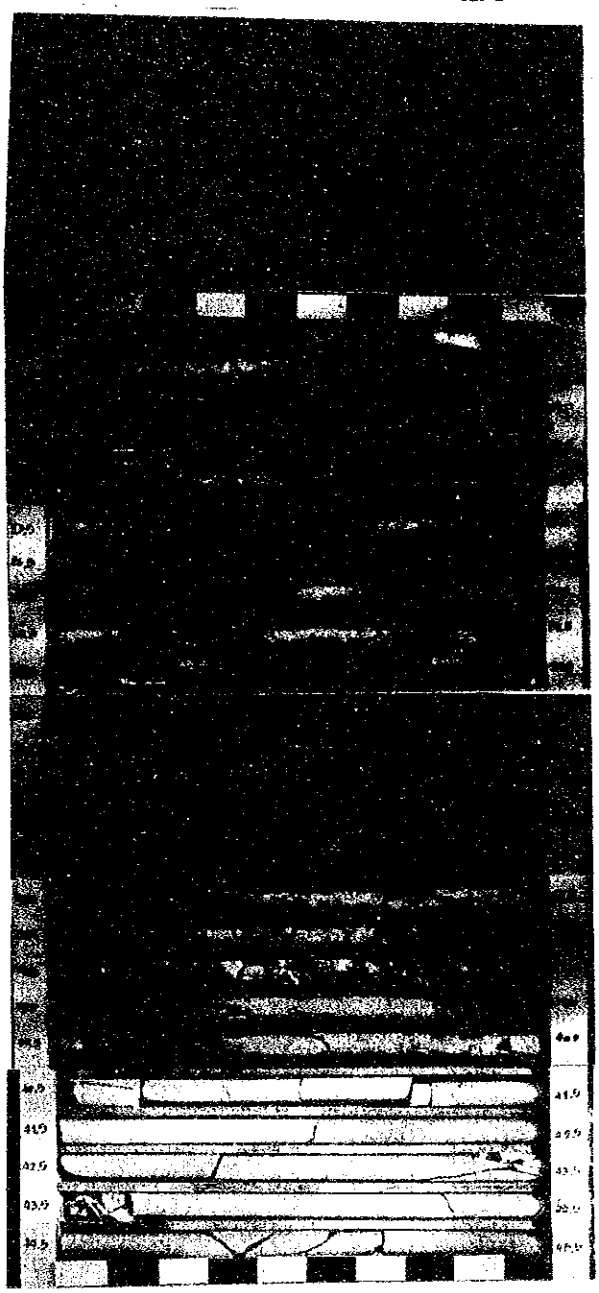


K H L O N G K A T H A S I T E

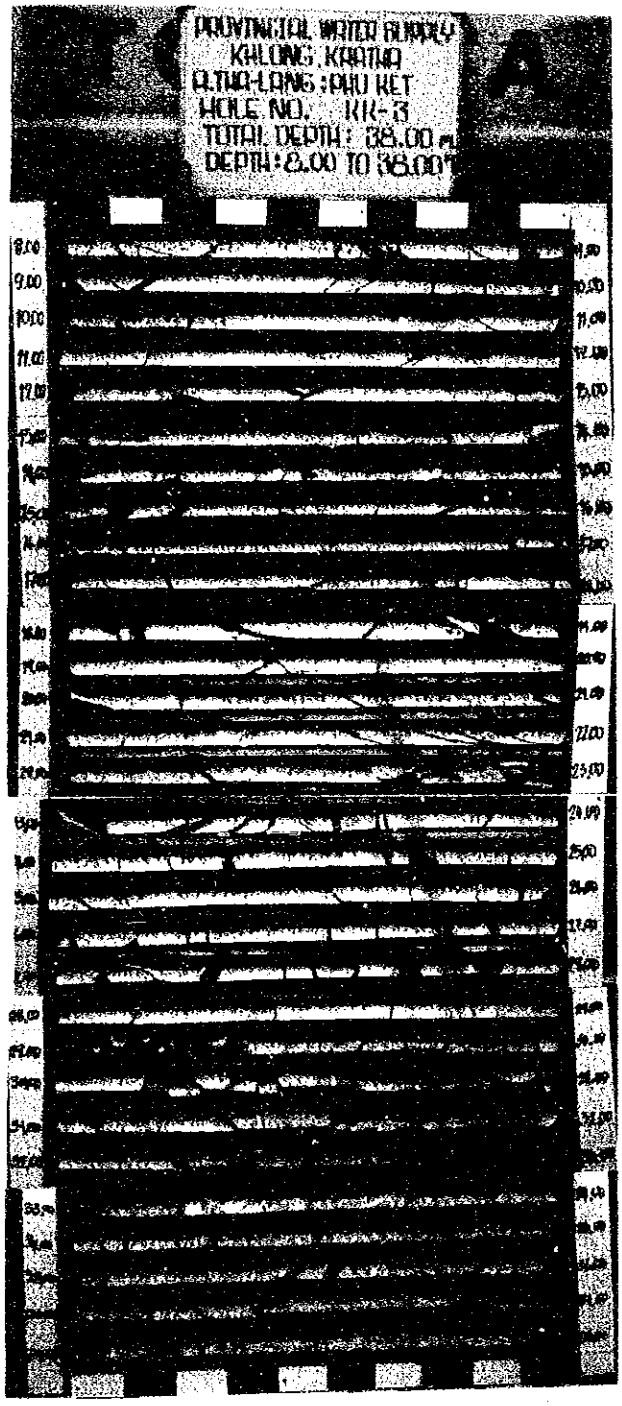
CORE PHOTOGRAPH OF BORE HOLE NO. KK-1



CORE PHOTOGRAPH OF BORE HOLE NO. KK-2



CORE PHOTOGRAPH OF BORE HOLE NO. KK-3



JICA