

RECORD OF WATER PRESSURE TEST

PROJECT AGAS HYDROPOWER
BORE-HOLE No. A1-71-a (2)

LOCALITY AGAS DAMSITE LINE-B, LEFT BANK
GROUND WATER LEVEL -2.50 ~ -3.00 m

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN BOLT	PRESSURE HEAD		PRESSURE HEAD LOSS	TOTAL HEAD		WATER LEAKAGE		CALCULATING COEFF.	COEFFICIENT OF PERMEABILITY	LOGAR. UNIT
				Pressure	Flow		Head	Flow		Head	Flow	Head	Flow			
	25.00 ~ 30.00	500	301	1	1000	300	1000	1000	100	1000	5371	281	20000	250 x 10 ⁻⁵	1.12 x 10 ⁻⁹	Ln=8/11-2420'
				2	2000				200		1722	167	16700		2.21 x 10 ⁻⁹	
	30.00 ~ 35.00	500	301	1	1000	300	1000	1000	100	1000	970	187	18700	250 x 10 ⁻⁵	3.91 x 10 ⁻⁹	
				2	2000				200		3471	213	21300		1.52 x 10 ⁻⁹	
				7	7000				700		5766	286	28600		1.29 x 10 ⁻⁹	
				10	10000				1000		7837	351	35100		1.16 x 10 ⁻⁹	9.0
				6	6000				600		4760	264	26400		1.37 x 10 ⁻⁹	
				2	2000				200		1866	163	16300		2.25 x 10 ⁻⁹	
	35.00 ~ 40.00	500	301	1	1000	300	1000	1000	100	1000	1445	14	1400	2.50 x 10 ⁻⁵	2.50 x 10 ⁻⁹	
				2	2000				200		4415	35	3500		2.05 x 10 ⁻⁹	
				7	7000				700		7190	142	14200		3.66 x 10 ⁻⁹	
				10	10000				1000		9930	185	18500		3.77 x 10 ⁻⁹	2.9
				6	6000				600		6078	123	12300		5.22 x 10 ⁻⁹	
				2	2000				200		2272	84	8400		9.84 x 10 ⁻⁹	
	40.00 ~ 45.00	500	301	1	1000	300	1000	1000	100	1000	1213	46	4600	2.50 x 10 ⁻⁵	9.78 x 10 ⁻⁹	
				2	2000				200		4230	93	9300		5.95 x 10 ⁻⁹	
				7	7000				700		6220	147	14700		4.80 x 10 ⁻⁹	
				10	10000				1000		9472	167	16700		9.02 x 10 ⁻⁹	5.6
				6	6000				600		5269	104	10400		4.50 x 10 ⁻⁹	
				2	2000				200		2163	48	4800		9.19 x 10 ⁻⁹	
	45.00 ~ 50.00	500	301	1	1000	300	1000	1000	100	1000	1074	94	9400	2.50 x 10 ⁻⁵	2.26 x 10 ⁻⁹	
				2	2000				200		3726	181	18100		9.71 x 10 ⁻⁹	
				7	7000				700		6245	140	14000		5.26 x 10 ⁻⁹	
				10	10000				1000		8486	186	18600		7.51 x 10 ⁻⁹	5.8
				6	6000				600		5367	125	12500		8.38 x 10 ⁻⁹	
				2	2000				200		1991	107	10700		1.19 x 10 ⁻⁹	

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PROJECT: AGDS HYDROPOWER LOCALITY: AGDS DAMSITE LINE: B - LEFT BANK
 BORE-HOLE NO.: A1-29-S-11 GROUND WATER LEVEL: 1.58 B. (From flow. Accuracy = ±0.22 ft/m)

DATE	DEPTH m	SECTION LENGTH L m	MOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN WELL M _s m	PRESSURE HEAD CALC. M _h m		TOTAL HEAD M _h + M _s + H _g m	WATER LEAKAGE		CALCULATING CONST. C m ³ /cm ² -sec	COEFFICIENT OF PERMEABILITY K = Q/2L C cm/sec	LONDON UNIT Lp = Q/2L C
				P kg/cm ²	H _g m		Q (m ³ /min)	Q (cm ³ /min)						
	35.00 ~ 40.00	500	3.81	1	1000	-450	2	516	276	15.2	45200	2.57 x 10 ⁻⁵	137 x 10 ⁻⁵	106.3
				4	4000			625		560	50000			
				2	2000			1073		273	27200			
	40.00 ~ 45.00	500	3.81	1	1000	-450	2	27	285	2.1	3100	2.58 x 10 ⁻⁵	8.29 x 10 ⁻⁵	
				4	4000			237	365	8.2	9200		6.57 x 10 ⁻⁵	
				7	7000			435	637	22.8	13300		3.40 x 10 ⁻⁵	
				10	10000			809	904	32.4	17400		4.99 x 10 ⁻⁵	2.9
				6	6000			106	578	6.1	6100		2.76 x 10 ⁻⁵	
				2	2000			16	126	2.4	2940		3.37 x 10 ⁻⁵	
	45.00 ~ 50.00	500	3.81	1	1000	-450	2	18	334	2.4	3600	2.58 x 10 ⁻⁵	7.62 x 10 ⁻⁵	
				4	4000			270	352	8.6	9600		6.95 x 10 ⁻⁵	
				7	7000			416	543	21.2	31200		1.61 x 10 ⁻⁵	
				10	10000			300	1902	20.6	30600		1.16 x 10 ⁻⁵	8.9
				6	6000			207	505	16.4	16000		2.65 x 10 ⁻⁵	
				2	2000			85	1757	5.5	5200		3.02 x 10 ⁻⁵	
	50.00 ~ 55.00	500	3.81	1	1000	-450	2	32	220	3.0	3000	2.58 x 10 ⁻⁵	9.54 x 10 ⁻⁵	
				4	4000			437	3813	11.2	11200		8.27 x 10 ⁻⁵	
				7	7000			216	4226	23.7	33200		1.25 x 10 ⁻⁵	
				10	10000			307	6955	31.2	31200		1.25 x 10 ⁻⁵	9.7
				6	6000			122	4731	13.9	17900		2.76 x 10 ⁻⁵	
				2	2000			124	1726	6.0	6000		3.97 x 10 ⁻⁵	
	55.00 ~ 60.00	500	3.81	1	1000	-450	2	362	490	8.7	9700	2.58 x 10 ⁻⁵	5.11 x 10 ⁻⁵	
				4	4000			1287	2605	18.0	18000		1.79 x 10 ⁻⁵	
				7	7000			353	4269	25.9	25900		1.57 x 10 ⁻⁵	
				10	10000			525	4496	37.3	37300		2.14 x 10 ⁻⁵	16.6
				6	6000			732	3720	22.4	22400		1.67 x 10 ⁻⁵	
				2	2000			548	1287	12.1	12100		2.92 x 10 ⁻⁵	

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PROJECT: AGDS HYDROPOWER LOCALITY: AGDS DAMSITE LINE-B: LEFT BANK
 BORE-HOLE No.: A1-79-5 (2) GROUND WATER LEVEL: 7.17 m (Flow pipe, discharge = 2.22 gal/min)

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN BORE	PRESSURE HEAD		TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	DISCHARGE UNIT
				PRESSURE	HEAD		LOSS	HEAD	Q, l/min	Q, m ³ /min	$\frac{L}{r} \times \frac{L}{r} \times \frac{L}{r}$	$\frac{L}{r} \times \frac{L}{r} \times \frac{L}{r}$			
	10.00 ~ 15.00	570	3.81	1	1000	-570	276	711	2.58 x 10 ⁻⁵	8.10	8.10	2.96 x 10 ⁻⁴			
				4	4000		1877	2653		20.10	20.10	2.41 x 10 ⁻³			
				7	7000		2720	3200		26.1	26.60	1.77 x 10 ⁻⁴			13.7
				10	10000		3290			54.3	54.30	1.94 x 10 ⁻⁴			
				6	6000		2542	3070		20.7	20.70	2.22 x 10 ⁻⁴			
				2	2000		390	1316		11.3	11.30				
	15.00 ~ 20.00	570	3.81	1	1000	-570	123	929	2.58 x 10 ⁻⁵	5.2	5.20	1.24 x 10 ⁻⁴			
				4	4000		245	2537		17.0	17.00	1.73 x 10 ⁻⁴			
				7	7000		286	4018		25.0	25.00	1.61 x 10 ⁻⁴			11.0
				10	10000		437	5514		30.7	30.70	1.42 x 10 ⁻⁴			
				6	6000		295	3507		22.7	22.70	1.67 x 10 ⁻⁴			
				2	2000		473	1379		10.2	10.20	1.91 x 10 ⁻⁴			

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PROJECT: AGS HYDRO POWER LOCALITY: AGS DAMSITE LINE: B. RIGHT BANK
 BORE-HOLE No. A1-77-6 GROUND WATER LEVEL: -22.35 m

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE HEAD	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				PRESSURE	HEAD				Q	W			
	37.75 ~ 42.25	500	375	1	1000	22.35	-10	32.25	5.7	5700	2.59×10^{-5}	4.57×10^{-5}	
				4	4000			32.25	220	22000		9.16×10^{-5}	
				7	7000			32.25	416	41600		1.17×10^{-4}	
				10	10000			32.25	895	89500		1.90×10^{-4}	12.6
				6	6000			32.25	499	49900		6.51×10^{-5}	
				2	2000			32.25	251	25100		1.58×10^{-5}	
	37.75 ~ 42.25	500	375	1	1000	22.35	-10	32.25	2.2	2200	2.19×10^{-5}	1.72×10^{-5}	
				4	4000			32.25	46	4600		1.92×10^{-5}	
				7	7000			32.25	115	11500		3.23×10^{-5}	
				10	10000			32.25	243	24300		4.31×10^{-5}	3.3
				6	6000			32.25	743	74300		3.25×10^{-5}	
				2	2000			32.25	46	4600		2.82×10^{-5}	
	42.75 ~ 47.75	500	375	1	1000	22.35	-10	32.25	213	21300	2.59×10^{-5}	1.71×10^{-4}	
				4	4000			32.25	289	28900		1.25×10^{-4}	
				7	7000			32.25	551	55100		1.55×10^{-4}	
				10	10000			32.25	780	78000		1.59×10^{-4}	12.3
				6	6000			32.25	530	53000		1.67×10^{-4}	
				2	2000			32.25	211	21100		1.91×10^{-4}	
	47.75 ~ 52.75	225	375	1	1000	22.35	-10	32.25	487	48700	4.32×10^{-5}	2.20×10^{-4}	
				4	4000			32.25	215	21500		1.67×10^{-4}	
				7	7000			32.25	423	42300		2.21×10^{-4}	
				10	10000			32.25	426	42600		1.68×10^{-4}	1.5
				6	6000			32.25	412	41200		2.62×10^{-4}	
				2	2000			32.25	247	24700		2.70×10^{-4}	

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PROJECT: AGS HYDROPOWER LOCALITY: AGS DAMSITE LINE: A LEFT BANK
 BORE-HOLE No. A1-79-7 GROUND WATER LEVEL: -10.81 ~ -12.5

DATE	DEPTH	SECTION LENGTH	WOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGER UNIT
				P	Q				Q	Q			
	15.00 ~ 21.00	500	381	1	1000	1000	110	1110	133	1300	2.57×10^{-5}	1.26×10^{-4}	
				4	500		66	466	267	2600		1.43×10^{-4}	
				7	700		216	486	267	2700		1.41×10^{-4}	
				10	1000		216	486	499	4990		1.62×10^{-4}	11.7
				1	1000		171	579	224	3400		1.45×10^{-4}	
				2	2000		322	2722	175	1700		1.62×10^{-4}	
	24.00 ~ 25.00	500	381	1	1000	1150	130	2280	14	1900	2.57×10^{-5}	2.15×10^{-5}	
				4	4000		47	5283	67	5700		2.86×10^{-5}	
				7	7000		18	8262	26	3100		1.12×10^{-5}	
				10	10000		77	11201	75	2700		1.73×10^{-5}	1.3
				6	6000		34	7264	61	6700		1.82×10^{-5}	
				2	2000		0	2282	19	7900		1.47×10^{-5}	
	30.00 ~ 31.00	500	381	1	1000	1120	152	2281	10	1900	2.57×10^{-5}	1.13×10^{-5}	
				4	4000		42	5239	49	4900		2.41×10^{-5}	
				7	7000		4	8267	28	2800		2.76×10^{-6}	
				10	10000		73	11187	72	7300		1.63×10^{-5}	1.3
				6	6000		27	7252	41	4000		1.46×10^{-5}	
				2	2000		6	2281	17	1900		1.49×10^{-5}	
	34.00 ~ 35.00	500	381	1	1000	1120	120	2281	30	3000	2.57×10^{-5}	3.39×10^{-5}	
				4	4000		107	4793	12.1	12100		6.25×10^{-5}	
				7	7000		14	8794	21	7100		2.24×10^{-5}	
				10	10000		85	18495	18.7	19700		4.85×10^{-5}	28
				6	6000		19	7126	21	9100		3.27×10^{-5}	
				2	2000		32	2283	27	3900		3.08×10^{-5}	

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PROJECT: AGS HYDRO POWER LOCALITY: AGS DAM SITE LANE-A LEFT BANK
 BORE-HOLE No. A/1-77-7 GROUND WATER LEVEL: -12.05
 DATE: 12 CALCULATING CONST. C = 2.58 x 10⁻⁵

DATE	DEPTH	SECTION LENGTH		MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN BORE		PRESSURE HEAD LOSS		TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUCCON USE
		L	l		P	q	H ₀	H ₁	H ₂	H ₃		Q	Q ₁			
	3500 ~ 4000	500	3.81	1	1100	1200	1200	1200	87	2293	2293	2.9	2900	2.58 x 10 ⁻⁵	4.39 x 10 ⁻⁵	Lane A/B-332P
				4	4000				58	4222	4222	1.4	1400		7.70 x 10 ⁻⁵	
				7	7000				47	3181	3181	2.8	2800		2.86 x 10 ⁻⁵	
				10	10000				117	1813	1813	22.1	22100		5.63 x 10 ⁻⁵	4.4
				6	6000				200	9099	9099	9.1	9900		3.10 x 10 ⁻⁵	
				2	2000				51	3271	3271	4.9	4900		3.86 x 10 ⁻⁵	
				1	1000				15	2265	2265	4.8	4800	2.58 x 10 ⁻⁵	5.49 x 10 ⁻⁵	
	4000 ~ 4500	500	3.81	4	4000				55	4725	4725	1.2	1200		9.90 x 10 ⁻⁵	
				7	7000				29	2968	2968	10.8	10800		3.21 x 10 ⁻⁵	
				10	10000				116	7566	7566	22.1	22100		6.77 x 10 ⁻⁵	5.2
				6	6000				39	6730	6730	11.7	11700		4.37 x 10 ⁻⁵	
				2	2000				112	2157	2157	7.6	7600		1.21 x 10 ⁻⁵	
	4500 ~ 5000	500	3.81	1	1000				0	2328	2328	0.1	100	2.58 x 10 ⁻⁵	1.11 x 10 ⁻⁵	
				4	4000				0	5328	5328	1.3	2300		6.30 x 10 ⁻⁵	
				7	7000				0	8328	8328	4.6	600		1.86 x 10 ⁻⁵	
				10	10000				26	11289	11289	2.3	3300		2.04 x 10 ⁻⁵	0.6
				6	6000				0	7328	7328	1.3	1300		4.58 x 10 ⁻⁵	
				2	2000				0	3328	3328	4.5	500		3.87 x 10 ⁻⁵	

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PROJECT: AGOS HYDROPOWER LOCALITY: AGOS DAMSITE LINE - A RIGHT BANK
 BORE-HOLE NO.: A1-77-2 GROUND WATER LEVEL: -440m

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE HEAD GAGE HEIGHT	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGERS UNIT
				P kg/cm ²	HEAD				Q l/min	Q cm ³ /min			
3/25 ~ 2/25	375	500	375	1	1000	460	45	1685	47	4800	259 x 10 ⁻⁵	8.38 x 10 ⁻⁵	
				4	4000			4485	116	11600		6.71 x 10 ⁻⁵	
				7	7000			7485	273	27300		9.96 x 10 ⁻⁵	
				9	9000			9485	373	37300		1.43 x 10 ⁻⁴	11.0
				6	6000			6485	281	28100		1.12 x 10 ⁻⁴	
				2	2000			2485	109	10900		1.12 x 10 ⁻⁴	
3/30 ~ 2/30	375	500	375	1	1000	460	45	1485	16	1600	259 x 10 ⁻⁵	2.79 x 10 ⁻⁵	
				4	4000			4485	23	2300		1.33 x 10 ⁻⁵	
				7	7000			7485	37	3700		1.32 x 10 ⁻⁵	
				10	10000			10485	54	5400		1.34 x 10 ⁻⁵	1.0
				6	6000			6485	35	3500		1.40 x 10 ⁻⁵	
				2	2000			2485	17	1700		6.77 x 10 ⁻⁵	
3/30 ~ 2/30	375	500	375	1	1000	460	45	1485	77	7700	259 x 10 ⁻⁵	1.36 x 10 ⁻⁴	
				4	4000			4485	125	12500		1.13 x 10 ⁻⁴	
				7	7000			7485	227	22700		1.80 x 10 ⁻⁴	
				10	10000			10485	310	31000		9.64 x 10 ⁻⁵	7.8
				6	6000			6485	242	24200		9.68 x 10 ⁻⁵	
				2	2000			2485	120	12000		1.25 x 10 ⁻⁴	
3/35 ~ 4/35	375	500	375	1	1000	460	45	1485	23	2300	259 x 10 ⁻⁵	5.21 x 10 ⁻⁵	
				4	4000			4485	28	2800		5.07 x 10 ⁻⁵	
				7	7000			7485	193	19300		6.69 x 10 ⁻⁵	
				10	10000			10485	424	42400		1.04 x 10 ⁻⁴	8.0
				6	6000			6485	217	21700		8.68 x 10 ⁻⁵	
				2	2000			2485	74	7400		2.72 x 10 ⁻⁵	

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PROJECT AGOS HYDROPOWER **LOCALITY** AGOS DAMSITE **LINE - A RIGHT BANK**
BORE-HOLE No. A1-79-9 **GROUND WATER LEVEL** -1758 ~ -2800

DATE	DEPTH	SECTION LENGTH	HOLE RADII	SUPPLIED WATER PRESSURE		STATE HEAD IN MOLS	PRESSURE HEAD IN MOLS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				P	Q				Q	Q			
	15.00 ~ 20.00	578	381	1	1000	1250	36	2231	32.0	2000	2.58×10^{-5}	2.66×10^{-4}	
				2	2000			3108	30.5	3750		4.79×10^{-4}	
				7	7000			2625	21.6	2100		7.53×10^{-4}	
				10	10000			1743	17.8	2200		1.85×10^{-3}	112.2
				1	1000			2433	17.4	2400		7.57×10^{-4}	
				2	2000			2305	22.2	3220		4.58×10^{-4}	
	20.00 ~ 25.00	570	321	1	1000	2250	36	2817	18.3	1830	2.58×10^{-5}	1.68×10^{-4}	
				4	4000			2867	45.4	4900		4.44×10^{-4}	
				7	7000			1050	26.7	2620		1.28×10^{-3}	146.1
				10	10000								
				6	6000				79.6	7900			
				2	2000			2232	32.3	3830		4.43×10^{-4}	
	25.00 ~ 30.00	570	381	1	1000	2400	36	1317	34.8	2400	2.58×10^{-5}	6.32×10^{-4}	
				4	4000				21.9	2100			
				7	7000				22.7	2270			
				10	10000								
				6	6000				26.2	2620			
				2	2000			1851	41.3	4130		7.54×10^{-4}	56.9
	30.00 ~ 35.00	570	381	1	1000	2400	36	3123	12.2	1220	2.58×10^{-5}	1.01×10^{-4}	
				4	4000				55.2	5520			
				7	7000				22.4	2240			
				10	10000								
				6	6000				22.5	2250			
				2	2000			1714	36.0	3600		5.42×10^{-4}	42.0

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PROJECT: AGOS HYDROPOWER LOCALITY: AGOS DAMSITE LINE-A R.G.HI BANK
 BORE-HOLE No. A1-11-9 (2) GROUND WATER LEVEL: 1750 ~ 2800

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLES	PRESSURE GAUGE HEIGHT	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				P	Q				Q	Q			
	35.00 ~ 40.00	500	381	1	1000	3500	27	3607	22	3300	2.52×10^{-5}	2.50×10^{-5}	
				4	4000		190	3266	28	8800		2.63×10^{-5}	
				7	7000		1194	8250	22.0	22000		6.08×10^{-5}	
				10	10000		796	10650	27.0	27000		6.58×10^{-5}	5.1
				6	6000		266	7770	18.7	18200		6.41×10^{-5}	
				2	2000		270	4161	10.6	10100		6.59×10^{-5}	
	45.00 ~ 50.00	500	381	1	1000	2500	31	2091	11.1	11100	2.52×10^{-5}	9.26×10^{-5}	
				4	4000		270	6066	16.5	16500		4.87×10^{-5}	
				7	7000		666	8770	12.9	12900		2.71×10^{-5}	
				10	10000		717	11719	16.0	16000		3.53×10^{-5}	2.7
				6	6000		403	8033	22.0	12000		3.85×10^{-5}	
				2	2000		357	4825	11.2	11200		7.07×10^{-5}	
	45.00 ~ 50.00	500	381	1	1000	2600	36	3067	10.3	10300	2.52×10^{-5}	9.02×10^{-5}	
				4	4000		477	6067	36.5	36500		1.55×10^{-4}	12.0
				7	7000		4389		71.2	71200			
				6	6000		2063		62.9	62900			
				2	2000		2113	2123	27.1	27100		3.29×10^{-5}	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER
 LOCALITY: AGOS DAM SITE
 BORE-HOLE No.: A1-71-17
 GROUND WATER LEVEL: -R.F. ~ -15.725
 LINE-B LEFT BANK

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				P	Q				Q' / mole	Q ml/min			
	1000 ~ 1500	500	3.81	1	1000	1250	25	1275	40.9	40900	2.57×10^{-5}	9.19×10^{-4}	
				4	4000		374	3625	22.1	23100		1.51×10^{-4}	
				7	7000		877	7403	36.8	37000		1.23×10^{-4}	2.6
				10	10000								
				6	6000		632	6097	30.2	30200		1.17×10^{-4}	
				2	2000		251	2194	14.7	14700		1.19×10^{-4}	
	1500 ~ 2000	500	3.81	6	6000	1550	25	1525	9.3	9300	2.57×10^{-5}	3.39×10^{-5}	2.6
				2	2000		10	3425	2.1	3100		2.21×10^{-5}	
	2000 ~ 2500	500	3.81	1	1000	1570	125	1625	0.0	0			
				4	4000		0	5625	0.1	100		4.51×10^{-7}	
				7	7000		0	7625	1.0	1000		2.79×10^{-6}	
				10	10000		17	11625	2.5	3700		7.77×10^{-6}	0.6
				6	6000		0	7625	0.9	900		3.65×10^{-6}	
				2	2000		0	3625	0.0	0			
	2500 ~ 3000	500	3.81	1	1000	1520	90	2615	0.0	0	2.58×10^{-5}		
				4	4000		0	5115	0.5	500		2.30×10^{-6}	
				7	7000		0	6115	1.2	1200		3.57×10^{-6}	
				10	10000		0	11615	2.0	2000		8.40×10^{-6}	0.3
				6	6000		0	7615	1.1	1100		3.73×10^{-6}	
				2	2000		0	3615	0.1	100		2.78×10^{-7}	
	3000 ~ 3500	500	3.81	1	1000	1510	120	2630	0.0	0			
				4	4000		0	5130	0.2	200		2.17×10^{-7}	
				7	7000		0	6130	0.0	1000		3.91×10^{-6}	
				10	10000		0	11630	1.2	1200		2.66×10^{-6}	0.2
				6	6000		0	7630	0.6	600		2.03×10^{-6}	
				2	2000		0	3630	0.0	0			

RECORD OF WATER PRESSURE TEST

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PROJECT AGOS HYDROPOWER
BORE-HOLE No. A1-77-11 (2)

LOCALITY AGOS DAMSITE LINE - B LEFT BANK
GROUND WATER LEVEL -22.77 ~ -25.702

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLES M ₀ m	PRESSURE HEAD M ₀ m	PRESSURE HEAD LOSS M ₀ m	TOTAL HEAD $H_0 + H_1 + H_2 + H_3$ M	WATER LEAKAGE		CALCULATING CONST. $\frac{2.25 \times 10^{-4} \times L}{C}$ m ³ /min	COEFFICIENT OF PERMEABILITY $K = Q/R \times C \times m$	LUGGON UNIT L _u = Q/L × 8.66
				PRESSURE P kg/cm ²	HEAD M ₀ m					Q l/min	Q m ³ /min			
35.08 ~ 44.00	570	3.81		1	1000	15.20	26	27.35		0	2.18			
				2	4000		37	57.25		300			1.47×10^{-5}	
				7	7000		200	87.25		10100			2.77×10^{-5}	
				10	10000		327	117.25		17800			3.25×10^{-5}	2.5
				6	6000		37	77.25		3900			1.30×10^{-5}	
				2	2000		0	37.25		300			2.07×10^{-6}	
40.08 ~ 45.08	570	3.81		1	1000	15.35	150	21.85		100		2.58×10^{-5}	9.61×10^{-7}	
				2	4000		25	51.25		3000			1.36×10^{-5}	
				7	7000		327	86.25		10200			3.21×10^{-5}	
				10	10000		717	116.25		16000			2.82×10^{-5}	2.7
				6	6000		70	76.25		5000			1.68×10^{-5}	
				2	2000		0	36.25		200			1.40×10^{-6}	
45.10 ~ 50.00	570	3.81		1	1000	15.70	152	27.22		1100		2.50×10^{-5}	1.04×10^{-5}	
				2	4000		43	57.22		3700			1.87×10^{-5}	
				7	7000		84	87.22		5800			1.60×10^{-5}	
				10	10000		181	117.22		7700			1.69×10^{-5}	1.3
				6	6000		79	77.22		5000			1.67×10^{-5}	
				2	2000		13	37.22		2000			1.37×10^{-5}	

RECORD OF WATER PRESSURE TEST

PROJECT: AGDS HYDROPOWER LOCALITY: AGDS DAMSITE LIME - B. RIGHT BANK
 BORE-HOLE NO.: A1-79-12 (1) GROUND WATER LEVEL: -2.02m

DATE	DEPTH	SECTION LENGTH	SOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN BORE	PRESSURE HEAD CALC. (2)	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT BY PERMEABILITY	LOCATION UNIT
				P	HEAD				Q	C			
	3660 ~ 3965	305	381	1	1000	200	-62	1137	43	4200	381 x 10 ⁻⁵	161 x 10 ⁻⁴	
				4	4000			4133	110	1000		102 x 10 ⁻⁴	
				7	7000			7132	153	15300		219 x 10 ⁻⁴	
				10	10000			10132	143	14300		539 x 10 ⁻⁴	4.6
				6	6000			6132	90	9000		560 x 10 ⁻⁴	
				2	2000			2132	80	2000		715 x 10 ⁻⁴	
	3965 ~ 4270	305	381	1	1000	200	-62	1132	44	4000	381 x 10 ⁻⁵	148 x 10 ⁻⁴	
				4	4000			4132	73	2800		720 x 10 ⁻⁴	
				7	7000			7132	96	7600		407 x 10 ⁻⁴	
				10	10000			10132	26	3600		329 x 10 ⁻⁴	28
				6	6000			6132	96	7600		473 x 10 ⁻⁴	
				2	2000			2132	55	5500		983 x 10 ⁻⁴	
	4270 ~ 4575	305	381	1	1000	200	-62	1132	66	6000	381 x 10 ⁻⁵	222 x 10 ⁻⁴	
				4	4000			4132	106	14000		198 x 10 ⁻⁴	
				7	7000			7132	113	34000		162 x 10 ⁻⁴	
				10	10000			10132	227	22700		109 x 10 ⁻⁴	93
				1	1000			6132	114	24000		152 x 10 ⁻⁴	
				2	2000			2132	125	13000		241 x 10 ⁻⁴	
	4575 ~ 4880	305	381	1	1000	200	-62	1132	51	5100	381 x 10 ⁻⁵	171 x 10 ⁻⁴	
				4	4000			4132	101	15100		139 x 10 ⁻⁴	
				7	7000			7132	225	23500		126 x 10 ⁻⁴	
				10	10000			10132	422	42200		165 x 10 ⁻⁴	142
				6	6000			6132	250	25000		156 x 10 ⁻⁴	
				2	2000			2132	90	9000		211 x 10 ⁻⁴	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER LOCALITY: AGOS DAMSITE GROUND WATER LEVEL: -2.02 M
 BORE-HOLE NO.: AI-79-12 (2) LINE-B RIGHT BANK

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGERON UNIT
				HEAD	PRESSURE				Q / min	Q / m ² /min			
	5125 ~ 5126	305	381	1	1000	200	-62	1138	3.5	3300	381 x 10 ⁻³	1.18 x 10 ⁻⁶	
				4	900			4138	10.5	10500		9.70 x 10 ⁻⁵	
				7	700			7138	14.3	14300		7.66 x 10 ⁻⁵	
				10	1000			10138	18.1	18100		6.82 x 10 ⁻⁵	5.7
				6	600			6138	11.7	11700		7.41 x 10 ⁻⁵	
				2	200			2138	5.9	5900		1.65 x 10 ⁻⁶	
	5125 ~ 5126	305	381	1	1000	200	-62	1138	13.3	120300	381 x 10 ⁻³	4.38 x 10 ⁻⁵	
					pressure not allowed								
	5125 ~ 6100	305	381	1	1000	200	-62	1138	17.8	17800	381 x 10 ⁻³	5.98 x 10 ⁻⁶	
				4	500			4138	48.7	48700		4.50 x 10 ⁻⁶	
				7	700			7138	53.3	53300		2.85 x 10 ⁻⁶	
				10	1000			10138	37.7	39700		1.50 x 10 ⁻⁶	12.8
				6	600			6138	35.0	35000		2.18 x 10 ⁻⁶	
				2	200			2138	23.3	23300		4.16 x 10 ⁻⁶	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDRO POWER LOCALITY: AGOS DAM SITE LINE - B RIGHT BANK
 BORE-HOLE No. A1-79-13 GROUND WATER LEVEL: -1.50m

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN METER	PRESSURE GAUGE LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				PRESSURE	HEAD				Q / m ² /min	Q m ³ /min			
	15.62 ~ 18.53	2.25	2.75	1	1000	1050	-5	2045	6.45	6.4700	382 x 10 ⁻⁵	8.13 x 10 ⁻⁶	
				4	4000			5045	9.14	9.1400		5.92 x 10 ⁻⁶	
				6	6000			7045	13.02	13.0200		7.06 x 10 ⁻⁶	60.6
				2	2000			3045	70.1	70.100		8.80 x 10 ⁻⁶	
	18.53 ~ 21.58	2.25	2.75	1	1000	1050	-5	2045	19.4	19.400	382 x 10 ⁻⁵	3.62 x 10 ⁻⁶	
				4	4000			5045	64.3	64.300		3.36 x 10 ⁻⁶	
				7	7000			7045	128.4	128.400		6.10 x 10 ⁻⁶	52.3
				6	6000			7045	122.2	122.200		6.63 x 10 ⁻⁶	
				2	2000			3045	52.7	52.700		6.61 x 10 ⁻⁶	
	21.58 ~ 24.63	2.25	2.75	1	1000	1050	-5	2045	70.6	70.600	382 x 10 ⁻⁵	1.94 x 10 ⁻⁶	
				4	4000			5045	37.5	37.500		2.08 x 10 ⁻⁶	
				7	7000			7045	64.6	64.600		2.12 x 10 ⁻⁶	
				10	10000			11045	64.7	64.700		4.55 x 10 ⁻⁶	13.3
				6	6000			7045	47.5	47.500		2.18 x 10 ⁻⁶	
				2	2000			3045	22.1	22.100		2.53 x 10 ⁻⁶	
	24.63 ~ 27.68	2.25	2.75	1	1000	1050	-5	2045	12.6	12.600	382 x 10 ⁻⁵	2.35 x 10 ⁻⁶	
				4	4000			5045	39.2	39.200		2.97 x 10 ⁻⁶	
				7	7000			7045	46.4	46.400		2.20 x 10 ⁻⁶	
				10	10000			11045	82.4	82.400		2.85 x 10 ⁻⁶	28.5
				6	6000			7045	51.9	51.900		2.81 x 10 ⁻⁶	
				2	2000			3045	19.9	19.900		2.50 x 10 ⁻⁶	
	27.68 ~ 30.73	2.25	2.75	1	1000	1050	-5	2045	8.0	8.000	382 x 10 ⁻⁵	1.49 x 10 ⁻⁶	
				4	4000			5045	19.4	19.400		1.47 x 10 ⁻⁶	
				7	7000			7045	32.7	32.700		1.84 x 10 ⁻⁶	
				10	10000			11045	59.4	59.400		2.06 x 10 ⁻⁶	17.6
				6	6000			7045	35.7	35.700		1.94 x 10 ⁻⁶	
				2	2000			3045	12.1	12.100		2.27 x 10 ⁻⁶	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER
 LOCALITY: AGOS DAMSITE
 BORE-HOLE No.: A1-79-13 (2)
 GROUND WATER LEVEL: -12.50 m
 LINE-B RIGHT BANK

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGEON UNIT
				HEAD	P				Q	Q			
	3372 ~ 3377	305	375	1000	1	1050	-5	2065	18.8	10800	322×10^{-3}	2.02×10^{-6}	
				6000	4			5065	17.0	17000		1.27×10^{-6}	
				7000	7			7065	25.4	25400		1.21×10^{-6}	9.9
				10000	10			11065	33.4	33400		1.16×10^{-6}	
				6000	6			7065	20.2	20200		1.10×10^{-6}	
				2000	2			3065	8.1	9100		1.14×10^{-6}	
	3372 ~ 3375	305	375	1000	1	1050	-5	2065	28.5	29500	322×10^{-3}	3.51×10^{-6}	
				4000	4			5065	47.3	47300		3.58×10^{-6}	
				7000	7			7065	97.7	97700		4.64×10^{-6}	437
				10000	10			11065	157.3	157300		5.10×10^{-6}	
				6000	6			7065	93.3	93300		5.06×10^{-6}	
				2000	2			3065	41.7	41700		5.23×10^{-6}	475
	3372 ~ 3377	305	375	1000	1	1050	-5	2065	32.3	32300	322×10^{-3}	6.04×10^{-6}	
				4000	4			5065	46.1	46100		5.81×10^{-6}	
				7000	7			7065	110	110000		5.51×10^{-6}	475
				10000	10								
				6000	6			7065	108.8	108800		5.90×10^{-6}	
				2000	2			3065	45.8	45800		5.75×10^{-6}	
	3372 ~ 4293	305	375	1000	1	1050	-5	2065	53.6	53600	322×10^{-3}	1.09×10^{-6}	
				4000	4			5065	76.4	76400		7.30×10^{-6}	
				7000	7			7065	120.2	120200		5.71×10^{-6}	437
				10000	10			11065	147.5	147500		5.10×10^{-6}	
				6000	6			7065	100.4	100400		5.85×10^{-6}	
				2000	2			3065	49.3	49300		6.19×10^{-6}	

RECORD OF WATER PRESSURE TEST

PROJECT AGOS HYDROPOWER LOCALITY AGOS DAM SITE LINE-B. 2.977 BANK
 BORE-HOLE NO. A1-79-13 (3) GROUND WATER LEVEL -10.72

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN BORE	PRESSURE HEAD GAGE	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LONDON DIST
				P	Q				Q	Q			
	42.93 ~ 45.98	315	2.75	1	1400	1250	-5	2945	61.1	61100	322 x 10 ⁻⁵	1.14 x 10 ⁻³	1.4 x 10 ⁻³
				4	4000			5165	107.5	107500		3.14 x 10 ⁻⁴	
				7	7000			7985	121.2	121200		5.77 x 10 ⁻⁴	
				9	9000			10805	153.5	153500		5.84 x 10 ⁻⁴	56.1
				1	6000			7985	112.6	112600		6.11 x 10 ⁻⁴	
				2	2000			3645	56.6	56600		2.10 x 10 ⁻⁴	
	45.78 ~ 49.03	305	2.75	1	1000	1650	-5	2065	922	92200	322 x 10 ⁻⁵	1.83 x 10 ⁻³	
				4	4000			5165	142.4	142400		1.12 x 10 ⁻³	
				6	6000			7985	165.5	165500		3.22 x 10 ⁻⁴	77.0
				2	2000			3645	87.5	87500		1.10 x 10 ⁻³	

RECORD OF WATER PRESSURE TEST

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PROJECT: A605 HYDROPOWER LOCALITY: A605 DAMSITE LINE-D: RIGHT BANK
 BORE-HOLE No.: A1-79-14 (1) GROUND WATER LEVEL: -2980

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD	TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGEON UNIT
				PRESSURE	HEAD			LOSS	LOSS	Q, l/min	Q, m ³ /min			
	2865 ~ 2875	305	381	1	1000	2773	33	3746	312	31200	381 x 10 ⁻⁵	3.17 x 10 ⁻⁴		
				4	4000			6746	479	47900		2.70 x 10 ⁻⁴		
				7	7000			7746	650	65000		2.54 x 10 ⁻⁴		
				10	10000			12746	946	94600		2.83 x 10 ⁻⁴	26.3	
				6	6000			2746	322	32200		2.27 x 10 ⁻⁴		
				2	2000			4746	421	42100		3.38 x 10 ⁻⁴		
	2865 ~ 2870	305	381	1	1000	2920	33	4013	317	31700	381 x 10 ⁻⁵	2.81 x 10 ⁻⁴		
				4	4000			7013	424	42400		2.50 x 10 ⁻⁴		
				7	7000			10013	547	54700		2.88 x 10 ⁻⁴		
				10	10000			13013	721	72100		2.11 x 10 ⁻⁴	13.2	
				6	6000			9013	501	50100		2.12 x 10 ⁻⁴		
				2	2000			5013	394	39400		3.99 x 10 ⁻⁴		
	3170 ~ 3175	305	381	1	1000	2920	33	4013	330	33000	381 x 10 ⁻⁵	3.13 x 10 ⁻⁴		
				4	4000			7013	527	52700		2.92 x 10 ⁻⁴		
				7	7000			10013	926	92600		3.52 x 10 ⁻⁴		
				10	10000			13013	1186	118600		3.35 x 10 ⁻⁴	28.9	
				6	6000			9013	357	35700		3.62 x 10 ⁻⁴		
				2	2000			5013	476	47600		3.62 x 10 ⁻⁴		
	3170 ~ 3170	305	381	1	1000	2920	33	4013	378	37800	381 x 10 ⁻⁵	3.59 x 10 ⁻⁴		
				4	4000			7013	621	62100		3.37 x 10 ⁻⁴		
				7	7000			10013	1020	102000		4.11 x 10 ⁻⁴		
				10	10000			13013	1091	109100		3.19 x 10 ⁻⁴	27.5	
				6	6000			9013	349	34900		3.59 x 10 ⁻⁴		
				2	2000			5013	528	52800		4.01 x 10 ⁻⁴		

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER LOCALITY: AGOS DAMSITE CANE-B. R. SHT BANK
 BORE-HOLE No. A1-99-14 (2) GROUND WATER LEVEL: -29.8m

DATE	DEPTH m	SECTION LENGTH m	MOLE RADIUS r	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE m	PRESSURE HEAD m	PRESSURE HEAD LOSS m	TOTAL HEAD m	WATER LEAKAGE		CALCULATING CONST. $\frac{L}{r} \times \frac{L}{r} \times \frac{L}{r}$ C	COEFFICIENT OF PERMEABILITY K=Q/RXC m/sec	LUCIGON UNIT L=Q/L.SXP
				PRESSURE P kg/cm ²	HEAD H ₀ m					Q l/min	Q cm ³ /min			
	3720 ~ 4020	305	381	1	1000	2920	33	4015	3920	381	3.91×10^{-5}	3.72×10^{-4}		
				4	4000			3013	6400	489		3.50×10^{-4}		
				7	7000			10013	10700	707		4.08×10^{-4}	35.2	
				6	6000			9013	9220	582		3.70×10^{-4}		
				2	2000			5013	5250	282		3.99×10^{-4}		
	4025 ~ 4320	305	381	1	1000	2920	33	4013	3420	381	3.91×10^{-5}	3.24×10^{-4}		
				4	4000			7013	4990	489		2.71×10^{-4}		
				7	7000			10013	8070	707		3.07×10^{-4}		
				10	10000			13013	10700	1010		3.13×10^{-4}	270	
				6	6000			9013	7840	782		3.31×10^{-4}		
				2	2000			5013	4200	480		3.34×10^{-4}		
	4325 ~ 4625	305	381	1	1000	2920	33	4013	3920	381	3.91×10^{-5}	2.77×10^{-4}		
				4	4000			7013	3490	348		1.89×10^{-4}		
				7	7000			10013	4200	420		1.60×10^{-4}		
				10	10000			13013	6170	617		1.85×10^{-4}	15.5	
				6	6000			9013	4370	427		2.57×10^{-4}		
				2	2000			5013	3390	339		2.57×10^{-4}		
	4625 ~ 4900	305	381	0	0	2920	23	3013	11020	1102	3.81×10^{-5}	1.39×10^{-3}	1200	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER LOCALITY: AGOS DAMSITE
 BORE-HOLE No. CDH-15 GROUND WATER LEVEL: 14.85 m

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE H ₀ cm	PRESSURE GAUGE HEIGHT H _g cm	TOTAL HEAD H ₀ + H _g + H _l cm	WATER LEAKAGE		CALCULATING CONST. $\frac{1.1}{2.7} \times \frac{1}{10} \times \frac{1}{100}$ C min/cm ³ sec	Q cm ³ /min	COEFFICIENT OF PERMEABILITY K = Q/RAC m/sec	LUGON UNIT L _u = Q/L RAC ²
				P kg/cm ²	H _p cm				Q' l/min	Q cm ³ /min				
	20.00 - 25.00	500	3.8	1	1,000	1,485	165	2,650	0.4	400	2.59 × 10 ⁻³	0.15	3.9 × 10 ⁻⁶	
				4	4,000			5,650	1.4	1,400		0.25	6.4 × 10 ⁻⁶	
				7	7,000			8,650	2.1	2,100		0.24	6.3 × 10 ⁻⁶	0.5
				10	10,000			11,650	4.4	4,400		0.38	9.8 × 10 ⁻⁶	
				6	6,000			7,650	2.4	2,400		0.31	8.1 × 10 ⁻⁶	
				2	2,000			3,650	0.5	500		0.14	3.5 × 10 ⁻⁶	
	25.00 - 30.00	500	3.8	1	1,000	1,485	165	2,650	0.5	500		0.19	4.9 × 10 ⁻⁶	
				4	4,000			5,650	1.6	1,600		0.38	7.3 × 10 ⁻⁶	
				7	7,000			8,650	3.2	2,200		0.25	6.6 × 10 ⁻⁶	0.5
				10	10,000			11,650	4.4	4,400		0.38	9.8 × 10 ⁻⁶	
				6	6,000			7,650	2.3	2,300		0.30	7.8 × 10 ⁻⁶	
				2	2,000			3,650	0.6	600		0.16	4.3 × 10 ⁻⁶	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS DAM SITE LOCALITY: AGOS DAM SITE
 BORE-HOLE No. 5CH-16 GROUND WATER LEVEL

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN M.O.L.	PRESSURE GAUGE HEIGHT	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				P	H ₁				Q	Q'			
15/1/80	23.00 - 28.00	500	3.8	1		25.00	40	5.70	1.000	2.59×10^{-5}	7.3×10^{-6}		
				4				6.40	1.000		3.9×10^{-6}		
				7				9.50	2.100		5.7×10^{-6}	0.4	
				10				12.50	5.400		1.1×10^{-5}		
				6				8.50	2.200		6.7×10^{-6}		
				2				4.50	1.000		5.7×10^{-6}		
16/1/80	28.00 - 33.00	500	3.8	1		1.165	40	2.205	1.000		1.2×10^{-5}		
				4				5.205	3.300		1.6×10^{-5}		
				7				8.205	7.400		2.4×10^{-5}		
				10				11.205	14.900		3.4×10^{-5}	2.7	
				6				7.205	7.800		2.8×10^{-5}		
				2				3.205	3.600		2.9×10^{-5}		
21/1/80	33.00 - 38.00	500	3.8	1		1.180	40	2.220	5.600		6.5×10^{-5}		
				4				5.220	1.700		8.5×10^{-6}		
				7				8.220	10.800		3.4×10^{-5}		
				10				11.220	20.200		4.7×10^{-5}	3.6	
				6				7.220	17.600		4.5×10^{-5}		
				2				3.220	6.300		5.1×10^{-5}		
26/1/80	38.00 - 43.00	500	3.8	1		9.4	40	1.955	1.500		2.0×10^{-5}		
				4				4.955	30.100		1.6×10^{-4}		
				7				7.955	52.000		1.7×10^{-4}		
				10				10.955	70.200		1.7×10^{-4}	12.8	
				6				6.955	48.800		1.8×10^{-4}		
				2				2.955	21.200		1.9×10^{-4}		
28/1/80	43.00 - 48.00	500	3.8	1		8.95	40	1.930	2.000		2.7×10^{-5}		
				4				4.930	2.600		1.4×10^{-5}		
				7				7.930	5.200		1.7×10^{-5}	1.4	
				10				10.930	7.500		1.8×10^{-5}		
				6				6.930	14.500		1.6×10^{-5}		
				2				2.930	2.400		2.1×10^{-5}		

RECORD OF WATER PRESSURE TEST

PROJECT: AGS - DRIFTER (2) LOCALITY: AGS - ZANCHE
 BORE-HOLE No. DDH-16 (2) GROUND WATER LEVEL

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN M.O.L.	PRESSURE GAUGE HEIGHT	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	Q/N	COEFFICIENT OF PERMEABILITY	LUGEON UNIT	
				PRESSURE	P W/m²				Q' /min	Q m³/min					C
29/10/80	48.00 - 50.10	200	3.8	1	1	9.5	40	1.955	10.200	10.200	5.25 × 10 ⁻⁷	3.22	2.7 × 10 ⁻⁴		
				4				4.955	30.600	30.600		6.19	3.2 × 10 ⁻⁴		
				7				7.955	46.400	46.400		5.08	2.7 × 10 ⁻⁴		
				10				10.955	52.100	52.100		4.76	2.5 × 10 ⁻⁴	23.8	
				6				6.955	36.600	36.600		5.26	2.8 × 10 ⁻⁴		
				3				2.955	15.100	15.100		5.11	2.7 × 10 ⁻⁴		

RECORD OF WATER PRESSURE TEST

PROJECT AGGS HYDROPOWER LOCALITY AGGS DAMSITE
 BORE-HOLE No. DDH-17 (1) GROUND WATER LEVEL 17.70 M

DATE	DEPTH m	SECTION LENGTH L m	MOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE H _s m	PRESSURE GAUGE HEIGHT H _g m	TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST.		COEFFICIENT OF PERMEABILITY K = Q/RSC m/sec	LUGON UNIT L _u = Q/L x R x P
				P kg/cm ²	H _p m			H _p + H _g + H _s m	Q m ³ /min	Q l/min	$\frac{1}{r} \times \frac{1}{L} \times \frac{1}{P} \times \frac{1}{H_p}$	C m ³ /m ² -sec	q m ³ /m ²		
5 Jul 70	20.95 - 25.95	500	3.8	1	1.000	1.770	70	2.840	7.2	7.200	2.59 x 10 ⁻⁵	2.54	6.6 x 10 ⁻⁵		
				4	4.000	"	"	5.840	16.8	16.800		2.88	7.5 x 10 ⁻⁵		
				7	7.000	"	"	8.840	28.9	28.900		3.27	8.5 x 10 ⁻⁵	6.5	
				10	10.000	"	"	11.840	41.7	41.700		3.52	9.1 x 10 ⁻⁵		
				6	6.000	"	"	7.840	20.3	20.300		2.58	6.7 x 10 ⁻⁵		
				2	2.000	"	"	3.840	11.9	11.900		3.10	8.0 x 10 ⁻⁵		
6 Jul	25.95 - 30.95	500	3.8	1	1.000	1.770	70	2.840	13.5	13.500	2.59 x 10 ⁻⁵	4.75	1.2 x 10 ⁻⁴		
				4	4.000	"	"	5.840	20.8	20.800		3.56	9.2 x 10 ⁻⁵		
				7	7.000	"	"	8.840	27.9	27.900		3.14	8.1 x 10 ⁻⁵	6.3	
				10	10.000	"	"	11.840	36.9	36.900		3.12	8.1 x 10 ⁻⁵		
				6	6.000	"	"	7.840	26.6	26.600		3.39	8.8 x 10 ⁻⁵		
				2	2.000	"	"	3.840	17.1	17.100		4.45	1.1 x 10 ⁻⁴		
7 Jul	30.95 - 35.95	500	3.8	1	1.000	1.770	70	2.840	17.6	17.600	2.59 x 10 ⁻⁵	6.20	1.6 x 10 ⁻⁴		
				4	4.000	"	"	5.840	39.1	39.100		6.70	1.7 x 10 ⁻⁴		
				7	7.000	"	"	8.840	65.7	65.700		7.43	1.9 x 10 ⁻⁴	14.9	
				10	10.000	"	"	11.840	91.7	91.700		7.74	2.0 x 10 ⁻⁴		
				6	6.000	"	"	7.840	56.0	56.000		7.14	1.8 x 10 ⁻⁴		
				2	2.000	"	"	3.840	18.9	18.900		4.92	1.3 x 10 ⁻⁴		
9 Jul	35.95 - 40.95	500	3.8	1	1.000	1.770	70	2.840	4.0	4.000	2.59 x 10 ⁻⁵	1.41	3.7 x 10 ⁻⁵		
				4	4.000	"	"	5.840	7.4	7.400		1.26	3.3 x 10 ⁻⁵		
				7	7.000	"	"	8.840	12.5	12.500		1.39	3.6 x 10 ⁻⁵	2.8	
				10	10.000	"	"	11.840	21.0	21.000		1.77	4.6 x 10 ⁻⁵		
				6	6.000	"	"	7.840	14.8	14.800		1.89	4.9 x 10 ⁻⁵		
				2	2.000	"	"	3.840	9.5	9.500		2.47	6.4 x 10 ⁻⁵		
11 Jul	40.95 - 45.95	500	3.8	1	1.000	1.770	70	2.840	1.1	1.100	2.59 x 10 ⁻⁵	0.39	1.0 x 10 ⁻⁵		
				4	4.000	"	"	5.840	3.3	3.300		0.57	1.5 x 10 ⁻⁵	1.9	
				7	7.000	"	"	8.840	8.5	8.500		0.96	2.5 x 10 ⁻⁵		
				10	10.000	"	"	11.840	13.9	13.900		2.03	5.3 x 10 ⁻⁵		
				6	6.000	"	"	7.840	13.9	13.900		1.77	4.6 x 10 ⁻⁵		
				2	2.000	"	"	3.840	6.6	6.600		1.72	4.5 x 10 ⁻⁵		

RECORD OF WATER PRESSURE TEST

PROJECT AGCS HYDROPOWER LOCALITY AGOS DAMSITE
 BORE-HOLE No. 2DH-18 GROUND WATER LEVEL 0

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE GAUGE HEIGHT	TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST.		COEFFICIENT OF PERMEABILITY	LOGBOOK UNIT
				PRESSURE	HEAD			H _p	H _s	H _p + H _s + H _g	Q l/min	Q m ³ /min	$\frac{L \times r^2}{r^2} \times \frac{L}{r}$		
7 Jul 36	31.05 - 36.05	500	3.8	1	1,000	0	150	1,150	3.0	3,000	2.59×10^{-5}	2.61	6.8×10^{-5}		
				4	4,000			4,150	7.4	7,400		1.78	4.6×10^{-5}		
				7	7,000			7,150	10.8	10,800		1.51	3.9×10^{-5}		
				10	10,000			10,150	12.4	12,400		1.19	3.1×10^{-5}	2.4	
				6	6,000			6,150	6.2	6,200		1.01	2.6×10^{-5}		
				2	2,000			2,150	2.9	2,900		1.35	3.5×10^{-5}		
9 Jul	36.05 - 41.05	500	3.8	1	1,000	0	150	1,150	1.0	1,000		0.87	2.3×10^{-5}		
				4	4,000			4,150	2.9	2,900		0.70	1.8×10^{-5}		
				7	7,000			7,150	4.1	4,100		0.57	1.5×10^{-5}		
				10	10,000			10,150	5.2	5,200		0.51	1.3×10^{-5}	1.0	
				6	6,000			6,150	3.4	3,400		0.55	1.4×10^{-5}		
				2	2,000			2,150	1.0	1,000		0.47	1.2×10^{-5}		
12 Jul	41.05 - 46.05	500	3.8	1	1,000	0	150	1,150	1.0	1,000		0.87	2.3×10^{-5}		
				4	4,000			4,150	2.6	2,600		0.63	1.6×10^{-5}		
				7	7,000			7,150	3.5	3,500		0.49	1.3×10^{-5}		
				10	10,000			10,150	4.9	4,900		0.48	1.2×10^{-5}	1.0	
				6	6,000			6,150	3.1	3,100		0.50	1.3×10^{-5}		
				2	2,000			2,150	1.4	1,400		0.65	1.7×10^{-5}		
14 Jul	46.05 - 51.05	500	3.8	1	1,000	0	150	1,150	1.0	1,000		0.87	2.3×10^{-5}		
				4	4,000			4,150	2.0	2,000		0.48	1.2×10^{-5}		
				7	7,000			7,150	2.6	2,600		0.36	9.3×10^{-6}		
				10	10,000			10,150	3.0	3,000		0.30	7.8×10^{-6}	0.6	
				6	6,000			6,150	2.2	2,200		0.36	9.3×10^{-6}		
				2	2,000			2,150	1.0	1,000		0.47	1.2×10^{-5}		
15 Jul	51.05 - 56.05	500	3.8	1	1,000	0	150	1,150	1.0	1,000		0.87	2.3×10^{-5}		
				4	4,000			4,150	2.0	2,000		0.48	1.2×10^{-5}		
				7	7,000			7,150	3.0	3,000		0.42	1.1×10^{-5}		
				10	10,000			10,150	3.0	3,000		0.30	7.8×10^{-6}	0.6	
				6	6,000			6,150	2.4	2,400		0.39	1.0×10^{-5}		
				2	2,000			2,150	1.2	1,200		0.56	1.5×10^{-5}		

RECORD OF WATER PRESSURE TEST

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PROJECT AGOS HYDROPOWER
BORE-HOLE No. DDH-18 (2)

LOCALITY AGOS DAMSITE
GROUND WATER LEVEL 0

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN M.O.L.		PRESSURE GAUGE HEIGHT		TOTAL HEAD H _p +H _s +H _g		WATER LEAKAGE		CALCULATING CONST. $\frac{1.1 \times 10^{-5} \times \frac{1}{r} \times \frac{1}{L}}{4 \pi}$ C ml/m-sec	S	COEFFICIENT OF PERMEABILITY K=Q/HX C m/sec	LUGGON UNIT L _u =Q/L-RXRP
				P kg/cm ²	H _p m	H _s m	H _g m	H _s m	H _g m	Q l/min	Q m ³ /min						
16 Jul	56.05 - 61.05	500	3.8	1		0	150		1.150		1.000		2.57×10^{-5}	0.87	2.3×10^{-5}		
				4					4.150		2.000			0.48	1.2×10^{-5}		
				7					7.150		2.900			0.41	1.1×10^{-5}		
				10					10.150		3.300			0.33	8.5×10^{-6}	0.7	
				6					6.150		2.300			0.36	9.3×10^{-6}		
				2					2.150		1.000			0.47	1.2×10^{-5}		
18 Jul	61.05 - 66.05	500	3.8	1		0	150		1.150		1.000			0.87	2.3×10^{-5}		
				4					4.150		2.800			0.67	1.7×10^{-5}		
				7					7.150		3.300			0.46	1.2×10^{-5}		
				10					10.150		4.900			0.48	1.2×10^{-5}	1.0	
				6					6.150		2.900			0.47	1.2×10^{-5}		
				2					2.150		1.000			0.47	1.2×10^{-5}		
20 Jul	66.00 - 71.00	500	3.8	1		0	150		1.150		0			C	0		
				4					4.150		1.000			0.24	6.2×10^{-6}		
				7					7.150		1.900			0.27	7.0×10^{-6}		
				10					10.150		3.300			0.33	8.5×10^{-6}	0.7	
				6					6.150		1.500			0.24	6.2×10^{-6}		
				2					2.150		2.00			0.09	2.3×10^{-6}		
22 Jul	71.00 - 76.00	500	3.8	1		0	150		1.150		0			C	0		
				4					4.150		1.250			0.20	7.8×10^{-6}		
				7					7.150		1.850			0.26	6.7×10^{-6}		
				10					10.150		2.650			0.26	6.7×10^{-6}	0.5	
				6					6.150		1.700			0.28	7.3×10^{-6}		
				2					2.150		0			C	0		
23 Jul	76.00 - 81.00	500	3.8	1					1.150		0			0	0		
				4					4.150		650			0.14	4.1×10^{-6}		
				7					7.150		750			0.10	2.6×10^{-6}		
				10					10.150		1.500			0.15	3.9×10^{-6}	0.3	
				5					6.150		750			0.12	3.1×10^{-6}		
				2					2.150		C			C	0		

RECORD OF WATER PRESSURE TEST

PROJECT: AGCS HYDRO-PUMPER LOCALITY: AGCS DAMSITE
 BORE-HOLE No. DDH 18 (2) GROUND WATER LEVEL: 0

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H ₀ m	PRESSURE GAUGE HEIGHT H _g m	TOTAL HEAD H ₀ + H _g + H _q m	WATER LEAKAGE		CALCULATING CONST. $\frac{1}{L} \times \frac{1}{r} \times \frac{1}{\rho} \times \frac{1}{g}$ C min/cm sec	Q cm ³ /min	Q l/min	Q cm ³ /min	COEFFICIENT OF PERMEABILITY K = Q/HKC m/sec	LUGON UNIT L _u = Q/L BX ² g ²
				P kg/cm ²	H _p m				Q l/min	Q cm ³ /min						
28 Jul 96.00 - 96.00	500	500	3.8	1		0	150	1.150	0.7	700	2.57×10^{-5}	0.61		1.6×10^{-5}		
				4				1.150	1.0	1000		0.24		6.2×10^{-6}		
				7				1.150	2.0	2000		0.28		7.3×10^{-6}		
				10				10.150	2.6	2600		0.26		6.7×10^{-6}	0.5	
				6				6.150	1.9	1900		0.31		8.0×10^{-6}		
				2				2.150	1.3	1300		0.60		1.6×10^{-5}		
28 Jul 96.00 - 96.00	500	500	3.8	1		0	150	1.150	0	0		0		0		
				4				1.150		2200		0.53		1.4×10^{-5}		
				7				1.150		2800		0.39		1.0×10^{-5}		
				10				10.150		6400		0.63		1.6×10^{-5}	1.3	
				6				6.150		3200		0.54		1.4×10^{-5}		
				2				2.150		700		0.33		2.5×10^{-6}		
28 Jul 96.00 - 96.00	500	500	3.8	1		0	150	1.150		1100		0.96		2.5×10^{-5}		
				4				1.150		3200		0.77		2.0×10^{-5}		
				7				7.150		3400		0.48		1.2×10^{-5}	0.8	
				10				10.150		4000		0.39		1.0×10^{-5}		
				6				6.150		3200		0.52		1.3×10^{-5}		
				2				2.150		1700		0.79		2.0×10^{-5}		
29 Jul 96.00 - 96.00	500	500	3.8	1		0	150	1.150		1000		0.87		2.3×10^{-5}		
				4				1.150		2800		0.67		1.7×10^{-5}		
				7				7.150		4200		0.59		1.5×10^{-5}	0.9	
				10				10.150		4400		0.43		1.1×10^{-5}		
				6				6.150		3100		0.50		1.3×10^{-5}		
				2				2.150		1200		0.56		1.5×10^{-5}		
29 Jul 96.00 - 96.00	500	500	3.8	1		0	150	1.150		1100		0.96		2.5×10^{-5}		
				4				1.150		2600		0.63		1.6×10^{-5}		
				7				7.150		4100		0.57		1.5×10^{-5}		
				10				10.150		4200		0.42		1.1×10^{-5}	0.8	
				6				6.150		3500		0.49		1.3×10^{-5}		
				2				2.150		1200		0.56		1.5×10^{-5}		

RECORD OF WATER PRESSURE TEST

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PROJECT

AGOS WYSEBURNER

LOCALITY

AGOS DAM

BORE-HOLE No.

DDH-8 (A)

GROUND WATER LEVEL

C

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE GAUGE HEIGHT	TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST.	Q	COEFFICIENT OF PERMEABILITY	LUGEON UNIT
				P	H _p			H _s	H _t	Q	r				
30 Jul 80	106.00 - 111.00	500	3.8	1			150	1150		1.000		$2.3 \times 10^{-3} \times \frac{1}{60} \times \frac{1}{100} \times \frac{1}{100}$	0.97	2.3×10^{-3}	
				4				2150		2.500			0.55	1.4×10^{-3}	
				7				2150		3.300			0.46	1.2×10^{-3}	
				10				2150		4.400			0.42	1.1×10^{-3}	0.9
				6				2150		3.000			0.49	1.3×10^{-3}	
				3				2150		1.100			0.51	1.3×10^{-3}	
				1				2150		1.260			0.69	2.8×10^{-3}	
				4				2150		3.500			0.54	2.2×10^{-3}	
				7				2150		2.100			0.71	1.8×10^{-3}	
				10				2150		2.780			0.67	1.7×10^{-3}	1.3
				6				2150		2.780			0.61	6×10^{-3}	
				3				2150		1.100			0.77	2.0×10^{-3}	
				1				2150		1.600			1.23	4.3×10^{-3}	
				4				2150		4.500		2.69×10^{-3}	1.02	3.2×10^{-3}	
				7				2150		5.600			0.50	2.4×10^{-3}	
				10				2150		7.400			0.75	2.3×10^{-3}	
				6				2150		4.500			0.72	2.2×10^{-3}	
				3				2150		3.100			1.44	4.4×10^{-3}	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS DAM SITE LOCALITY: AGOS DAM SITE BORE-HOLE No.: 22
 SECTION LENGTH: 22 GROUND WATER LEVEL: 22

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H _s cm	PRESSURE GAUGE HEIGHT H _g cm	TOTAL HEAD H _p + H _s + H _g		WATER LEAKAGE Q l/min	Q m ³ /min	CALCULATING CONST. C m ³ /m ³ -sec	f	COEFFICIENT OF PERMEABILITY K=Q/RX C cm/sec	LUGEON UNIT L _u =Q/L _u RX 9P
				P kg/cm ²	H _p cm			H	H _p + H _s + H _g						
4 Jul 50	45.00	170	3.8	1	1.000	2200	60	3260	2.90	960	2.59 x 10 ⁻⁵	0.28	7.3 x 10 ⁻⁵		
				4	4.000			6260	2.00	3.000		0.46	1.2 x 10 ⁻⁵		
				7	7.000			9260	8.10	8.100		0.87	2.3 x 10 ⁻⁵	1.7	
				6	6.000			12260	23.40	23.400		1.91	4.9 x 10 ⁻⁵		
				2	2.000			8260	7.30	7.300		0.88	2.3 x 10 ⁻⁵		
4 Jul	40.00 - 45.00	500	3.8	1	1.000	2200	45	3245	2.10	2.100		0.65	1.7 x 10 ⁻⁵		
				4	4.000			6245	5.20	5.200		0.85	2.2 x 10 ⁻⁵		
				7	7.000			9245	9.50	9.500		1.03	2.7 x 10 ⁻⁵	2.1	
				6	6.000			12245	13.00	13.000		1.06	2.7 x 10 ⁻⁵		
				2	2.000			8245	7.30	7.300		0.89	2.3 x 10 ⁻⁵		
				3	3.000			4245	2.60	2.600		0.61	1.6 x 10 ⁻⁵		

RECORD OF WATER PRESSURE TEST

PROJECT AGOS HYDROPOWER LOCALITY AFERBAT NEAR SITE RIGHT BANK
 BORE-HOLE No. 42-29-1 (1) GROUND WATER LEVEL -7.70 ~ -2420 m

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD LOSS		TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LOGSON UNIT
				HEAD	PRESSURE		H ₁	H ₂		Q	Q			
	m	L	r	Mp	P	Mp	H ₁	H ₂	H ₁ - H ₂	H ₁ + H ₂ - H ₃ - H ₄	cm ³ /min	cm ³ /min	cm ² /min	cm ² /min
	150 ~ 200	500	321	1000	1	1250	50	494	2368	217	21700	2.58 x 10 ⁻⁵	2.03 x 10 ⁻⁹	
				2000	4			1016	4784	311	31100		1.68 x 10 ⁻⁹	
				7000	7			1731	7057	406	40600		1.43 x 10 ⁻⁹	11.5
				10000	10									
				6000	6			783	7308	273	27300		9.64 x 10 ⁻⁵	
				2000	2			575	3225	239	23900		1.87 x 10 ⁻⁹	
	2000 ~ 2500	500	321	1000	1	1750	50	500	2200	107	2800	2.58 x 10 ⁻⁵	3.14 x 10 ⁻⁵	
				4000	4			908	4232	263	5200		3.10 x 10 ⁻⁵	
				7000	7			1745	7015	349	8800		3.20 x 10 ⁻⁵	
				10000	10			2321	9978	449	11800		3.39 x 10 ⁻⁵	100
				6000	6			1354	6446	311	7800		3.12 x 10 ⁻⁵	
				2000	2			459	3141	217	3200		3.12 x 10 ⁻⁵	
	2500 ~ 3000	500	321	1000	1	2400	50	389	2870	169	3970	2.58 x 10 ⁻⁵	3.62 x 10 ⁻⁵	
				4000	4			986	5424	235	6470		3.63 x 10 ⁻⁵	
				7000	7			2248	7182	310	9170		3.39 x 10 ⁻⁵	
				10000	10			4159	8100	407	12070		3.87 x 10 ⁻⁵	11.7
				6000	6			1845	6587	321	8970		3.22 x 10 ⁻⁵	
				2000	2			658	3872	191	4670		3.01 x 10 ⁻⁵	
	3000 ~ 3500	500	321	1000	1	2600	50	770	2660	179	3670	2.58 x 10 ⁻⁵	3.37 x 10 ⁻⁵	
				4000	4			1422	4768	223	6670		3.60 x 10 ⁻⁵	
				7000	7			2722	6178	342	9470		3.15 x 10 ⁻⁵	
				10000	10			4049	8403	439	12070		3.82 x 10 ⁻⁵	104
				6000	6			2471	4379	314	8670		4.99 x 10 ⁻⁵	
				2000	2			789	3470	216	8470		6.50 x 10 ⁻⁵	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER LOCALITY: AFTERBAY WEIR SITE RIGHT BANK
 BORE-HOLE No. 42-77-1 GROUND WATER LEVEL: -17.50 ~ -14.20

DATE	DEPTH m	SECTION LENGTH L m	BORE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE M ₀ m	PRESSURE HEAD H _g m	PRESSURE LOSS H _l m	TOTAL HEAD H _g + H _l + H ₀ + H _g H m	WATER LEAKAGE		CALCULATING CONST. $\frac{L}{r^2} \times \frac{1}{2} \times \frac{1}{\log \frac{L}{r}}$ C. min/m ² -sec	COEFFICIENT OF PERMEABILITY K = Q/BC ² cm/sec	LUGEON UNIT L _u = 87L/BC ² P
				P kg/cm ²	H _g m					Q l/min	Q cm ³ /min			
	35.41 ~ 40.00	540	2.21	1	1900	2420	50	286	2586	15.1	15100	252 x 10 ⁻⁵	1.51 x 10 ⁻⁴	
				4	4200			1991	4271	27.1	27100		1.50 x 10 ⁻⁴	
				7	7000			3173	6277	36.1	36100		1.42 x 10 ⁻⁴	
				10	10000			4027	8023	47.6	47600		1.99 x 10 ⁻⁴	1.54
				6	6000			2717	5753	33.3	33300		1.69 x 10 ⁻⁴	
				2	2000			2044	3586	17.0	17000		1.37 x 10 ⁻⁴	

RECORD OF WATER PRESSURE TEST

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PROJECT: AGOS HYDROPOWER
BORE-HOLE No. A2-79-2

LOCALITY: AFTER 671 WEIR SITE, RIVERBED
GROUND WATER LEVEL: -4.57 ~ -4.65 m

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD GAUGE HEIGHT	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGEON UNIT
				P kg/cm ²	Q m ³ /min				Q l/min	Q cm ³ /min			
	25.00 ~ 25.10	500	381	1	1000	450	55	1362	10.1	10100	2.58 x 10 ⁻⁵	1.91 x 10 ⁻⁶	
				4	4000			409	17.1	17100		1.08 x 10 ⁻⁶	
				7	7000			98	25.1	25100		1.00 x 10 ⁻⁶	9.2
				10	10000			207	32.7	32700		1.19 x 10 ⁻⁶	
				1	6000			204	22.9	22900		1.02 x 10 ⁻⁶	
				2	2000			177	11.6	11600		1.27 x 10 ⁻⁶	
	25.00 ~ 30.00	500	381	1	1000	450	55	1417	7.1	7100	2.58 x 10 ⁻⁵	1.24 x 10 ⁻⁶	
				4	4000			204	11.2	11200		7.14 x 10 ⁻⁵	
				7	7000			77	21.2	21200		8.14 x 10 ⁻⁵	
				10	10000			174	31.3	31300		9.9 x 10 ⁻⁵	7.1
				1	6000			84	18.6	18600		8.13 x 10 ⁻⁵	
				2	2000			145	9.1	9100		9.95 x 10 ⁻⁵	
	30.00 ~ 35.00	500	381	1	1000	465	55	1334	8.4	8400	2.58 x 10 ⁻⁵	1.82 x 10 ⁻⁶	
				4	4000			321	16.7	16700		1.18 x 10 ⁻⁶	
				7	7000			453	26.3	26300		1.12 x 10 ⁻⁶	
				10	10000			372	38.7	38700		1.37 x 10 ⁻⁶	10.6
				1	6000			492	24.8	24800		1.22 x 10 ⁻⁶	
				2	2000			29	3.7	3700		3.83 x 10 ⁻⁵	
	35.00 ~ 40.00	500	381	1	1000	465	55	1382	7.5	7500	2.58 x 10 ⁻⁵	1.40 x 10 ⁻⁶	
				4	4000			381	15.4	15400		1.01 x 10 ⁻⁶	
				7	7000			495	24.7	24700		1.06 x 10 ⁻⁶	
				10	10000			220	32.7	32700		1.07 x 10 ⁻⁶	8.3
				1	6000			177	22.1	22100		1.07 x 10 ⁻⁶	
				2	2000			423	13.3	13300		1.64 x 10 ⁻⁶	

RECORD OF WATER PRESSURE TEST

PROJECT: AGCS HYDROPIPER LOCALITY: AFTERBAY WEIR SITE LEFT BANK
 BORE-HOLE No. 12-79-4 GROUND WATER LEVEL: -180 ~ -188 cm

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE GAUGE HEIGHT	HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUNGEON UNIT
				P	h _p					Q	Q ₁			
	6.50 ~ 11.50	500	381	1	1000	90	22	15	1097	5.7	5700	2.58×10^{-5}	1.36×10^{-6}	
				4	4000			147	3965	18.0	13700		1.23×10^{-6}	
				7	7000			457	6655	31.7	31700		1.23×10^{-6}	
				10	10000			785	9207	44.6	44600		1.25×10^{-6}	9.7
				6	6000			337	5775	27.2	27200		1.23×10^{-6}	
				2	2000			38	2874	8.1	9100		1.13×10^{-6}	
	11.50 ~ 16.50	500	381	1	1000	90	22	-	1112	0	0	2.57×10^{-5}	-	
				4	4000			-	4112	0.5	300		1.88×10^{-6}	
				7	7000			-	7112	0.5	500		1.81×10^{-6}	
				10	10000			-	10112	1.2	1200		3.06×10^{-6}	0.2
				6	6000			-	6112	0.3	300		1.27×10^{-6}	
				2	2000			-	2112	0	0		-	
	16.50 ~ 21.50	500	381	1	1000	90	22	-	1112	0	0	2.58×10^{-5}	-	
				4	4000			-	4112	0	0		-	
				7	7000			-	7112	0.2	200		7.26×10^{-7}	
				10	10000			-	10112	1.0	1000		2.55×10^{-6}	0.2
				6	6000			-	6112	0	0		-	
				2	2000			-	2112	0	0		-	
	21.50 ~ 26.50	500	381	1	1000	100	22	-	1112	0	0	2.58×10^{-5}	-	
				4	4000			-	4112	0	0		-	
				7	7000			-	7112	1.1	1100		3.99×10^{-6}	
				10	10000			-	10112	1.9	1900		4.85×10^{-6}	0.2
				6	6000			-	6112	0.2	200		2.44×10^{-7}	
				2	2000			-	2112	0	0		-	

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RECORD OF WATER PRESSURE TEST

PROJECT ASIS HYDROPOWER LOCALITY AFTERBAT WEIR SITE LEFT BANK
 BORE-HOLE No. A2-79-9 (2) GROUND WATER LEVEL -1.80 ~ -1.00m

DATE	DEPTH m	SECTION LENGTH L, m	MOLE RADIUS r, m	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE H ₀ , m	PRESSURE GAUGE HEIGHT H _g , cm	PRESSURE HEAD LOSS H _h , cm	TOTAL HEAD H ₀ + H _h + H _g , m	WATER LEAKAGE		CALCULATING CONST. $\frac{1}{3} \times \frac{1}{4} \times \frac{1}{10^4}$ C, ml/cm-sec	COEFFICIENT OF PERMEABILITY K = Q/H/C cm/sec	LOGEON UNIT Lp = Q/L · R · S
				P, kg/cm ²	H ₀ , m					Q, l/min	Q, m ³ /min			
	26.50 ~ 31.50	570	3.81	1	1000	100	22	50	1672	5.2	5200	2.58 × 10 ⁻⁵	1.25 × 10 ⁻⁶	
				4	4000			332	3789	13.4	13000		9.12 × 10 ⁻⁵	
				7	7000			220	5902	19.7	19200		7.98 × 10 ⁻⁵	
				10	10000			143	8179	27.7	27200		8.22 × 10 ⁻⁵	6.4
				6	6000			355	5567	17.3	17200		8.02 × 10 ⁻⁵	
				2	2000			-	-	0.6	600		-	
				1	1000			67	1635	5.5	5500	2.58 × 10 ⁻⁵	1.37 × 10 ⁻⁶	
	31.50 ~ 36.50	570	3.81	4	4000	80	22	67	3645	14.9	14000		1.42 × 10 ⁻⁶	
				7	7000			84	6147	20.3	20800		2.73 × 10 ⁻⁵	6.1
				10	10000			104	8588	26.2	26200		3.87 × 10 ⁻⁵	
				1	6000			407	5645	14.6	14000		6.59 × 10 ⁻⁵	
				2	2000			52	2447	5.0	500		6.30 × 10 ⁻⁶	
	36.50 ~ 41.00	570	3.81	1	1000	80	22	1	1101	2.6	2600	2.58 × 10 ⁻⁵	5.12 × 10 ⁻⁵	
				4	4000			271	3731	14.3	12300		8.51 × 10 ⁻⁵	
				7	7000			82	6270	18.2	18200		2.47 × 10 ⁻⁵	5.6
				10	10000			149	8183	24.6	24000		7.28 × 10 ⁻⁵	
				6	6000			591	5521	14.4	14000		7.20 × 10 ⁻⁵	
				2	2000			11	2081	5.0	500		6.33 × 10 ⁻⁶	

RECORD OF WATER PRESSURE TEST

PROJECT: AGS HYDROPOWER LOCALITY: AFIERMY WEIR SITE LEFT BANK
 BORE-HOLE No. 12-79-5 GROUND WATER LEVEL: -14.20 ~ -15.00 m

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGGON UNIT
				P	Q				Q'	Q			
	21.25 ~ 25.00	425	381	1	1000	14.20	30	23.11	11.7	11700	2.94×10^{-5}	1.47×10^{-5}	
				4	4000		85	4.64	24.9	24900		1.54×10^{-5}	
				7	7000		253	1.35	30.5	30500		1.78×10^{-5}	
				10	10000		415	7.35	53.5	53500		2.14×10^{-5}	17.1
				6	6000		203	5.97	37.3	37300		2.01×10^{-5}	
				2	2000		116	2.79	24.6	24600		2.09×10^{-5}	
	25.00 ~ 28.00	540	381	1	1000	14.20	76	2.26	6.6	6600	3.58×10^{-5}	7.00×10^{-5}	
				4	4000		334	5.16	13.6	13600		6.77×10^{-5}	
				7	7000		457	7.53	21.2	21200		9.53×10^{-5}	
				10	10000		573	7.87	45.0	45000		1.52×10^{-4}	11.8
				6	6000		248	5.62	37.6	37600		1.91×10^{-4}	
				2	2000		793	2.67	20.6	20600		1.92×10^{-4}	
	30.00 ~ 35.00	500	381	1	1000	15.00	30	2.67	5.3	5300	2.58×10^{-5}	5.53×10^{-5}	
				4	4000		58	1.92	16.0	16000		2.07×10^{-5}	
				7	7000		176	6.74	27.0	27000		1.11×10^{-4}	
				10	10000		225	10.77	41.4	41400		1.11×10^{-4}	8.6
				6	6000		463	6.07	26.3	26300		1.12×10^{-4}	
				2	2000		102	3.34	7.3	7300		7.17×10^{-4}	
	35.00 ~ 40.00	500	381	1	1000	15.00	30	2.39	7.3	7300	2.58×10^{-5}	7.85×10^{-5}	
				4	4000		93	4.67	19.2	19200		1.07×10^{-4}	8.3
				7	7000		174	2.35	50.2	50200		5.50×10^{-4}	42.6
				10	10000								
				6	6000								
				2	2000								

pressure was not allowed

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER LOCALITY: AFTERBAY WEIR SITE LEFT BANK
22-79-5 (2) -1430 ~ -1510 m
 BORE-HOLE No. GROUND WATER LEVEL

DATE	DEPTH	SECTION LENGTH	MOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE	PRESSURE HEAD GAUGE HEIGHT	PRESSURE HEAD LOSS	TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGEON UNIT
				HEAD	P					Q	Q			
	4500 ~ 5100	500	381	1000	1	1500	30	485	2025	13.3	13300	2.57×10^{-5}	1.19×10^{-4}	267
				5000	4			2077	2942	30.6	30600		2.67×10^{-4}	267
				7000	7			1221		647	64700			
				10000	10	pressure not allowed								
				8000	6			718	361	52.6	52600		3.62×10^{-5}	2823
				2000	2			1221	2287	21.6	21600		2.46×10^{-6}	
	4500 ~ 5000	500	381	1000	1	1500	30	222	2302	8.5	8500	2.59×10^{-5}	9.53×10^{-5}	310
				5000	4			340	2120	32.9	32900		4.00×10^{-6}	
				7000	7			1386		647	64700			
				10000	10	pressure not allowed								
				6000	6			872		53.6	53600			
				2000	2			1100	1716	23.6	23600		3.83×10^{-6}	

RECORD OF WATER PRESSURE TEST

PROJECT: AGCS HYDROPOWER LOCALITY: AFTERBAY WEIR SITE RIGHT BANK
 BORE-HOLE No. A2-79.6 GROUND WATER LEVEL: -13.60m - 13.27m

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLT	PRESSURE HEAD LOSS	TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUCICON UNIT
				P	W			H ₁	H ₂	Q	h			
	2000 ~ 2500	500	3.81	1	1000	1370	35	1676	2170	2170	2.58 x 10 ⁻⁵	3.34 x 10 ⁻⁴		
				4	4000		1725	3610	351	3510		2.51 x 10 ⁻⁴		
				7	7000		2529	5206	425	4250		1.89 x 10 ⁻⁴	1.46	
				10	10000		was not obtained							
				6	6000		2198	5140	39.6	3960		1.99 x 10 ⁻⁴		
				2	2000		783	2332	21.5	2150		2.91 x 10 ⁻⁴		
	2500 ~ 3100	500	3.81	1	1000	1320	35	1916	189	1490	2.58 x 10 ⁻⁵	1.96 x 10 ⁻⁴		
				4	4000		74	4641	202	2020		1.12 x 10 ⁻⁴		
				7	7000		126	7007	267	2670		9.99 x 10 ⁻⁵		
				10	10000		2000	8555	400	4000		1.21 x 10 ⁻⁴	8.4	
				6	6000		1013	6322	243	2430		9.92 x 10 ⁻⁵		
				2	2000									
	3050 ~ 3500	500	3.81	1	1000	1320	35	1984	133	1330	2.58 x 10 ⁻⁵	1.73 x 10 ⁻⁴		
				4	4000		600	5757	169	1690		9.17 x 10 ⁻⁵		
				7	7000		1999	6326	307	3070		1.24 x 10 ⁻⁴		
				10	10000		3717	8588	362	3620		1.09 x 10 ⁻⁴	8.5	
				6	6000		1823	5552	293	2930		1.36 x 10 ⁻⁴		
				2	2000		423	2932	142	1420		1.25 x 10 ⁻⁴		
	3500 ~ 4000	500	3.81	1	1000	1320	35	2000	10.6	1060	2.58 x 10 ⁻⁵	1.31 x 10 ⁻⁴		
				4	4000		54	4841	142	1420		7.94 x 10 ⁻⁵		
				7	7000		70	7325	201	2010		7.04 x 10 ⁻⁵		
				10	10000		2047	9208	296	2960		8.29 x 10 ⁻⁵	6.4	
				6	6000		716	6579	173	1730		6.99 x 10 ⁻⁵		
				2	2000		353	2002	120	1200		1.03 x 10 ⁻⁴		

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDRO POWER LOCALITY: AFTER BAY WEIR SITE RIGHT BANK
 BORE-HOLE No.: A2-79-7 (1) GROUND WATER LEVEL: -22.50 ~ -25.00 M

DATE	DEPTH m	SECTION LENGTH L m	MOLE RADIUS r m	SUPPLIED WATER PRESSURE		STATIC HEAD IN MOLE M _s m	PRESSURE GAUGE HEIGHT M _g m	HEAD LOSS M _h + M _h + M _h M	TOTAL HEAD M	WATER LEAKAGE		CALCULATING CONST. C m ³ /m ² sec	Q m ³ /min	COEFFICIENT OF PERMEABILITY K=Q/RxC m/sec	LUGEON UNIT L=Q/L·B·W
				P kg/cm ²	M _p m					Q' l/min	Q m ³ /min				
	20.00 ~ 25.00	500	381	1	1000	22.50	250	321	30.54	16.6	16600	2.58 × 10 ⁻⁵		1.02 × 10 ⁻⁹	
				4	4000			932	5460	20.8	20800			1.22 × 10 ⁻⁶	
				7	7000			1716	7636	30.5	30500			1.20 × 10 ⁻⁶	
				10	10000			3325	9025	47.1	47100			1.40 × 10 ⁻⁶	10.9
				6	6000			1225	7115	20.3	20300			1.10 × 10 ⁻⁶	
				2	2000			549	3851	19.8	19800			1.33 × 10 ⁻⁶	
	25.00 ~ 30.00	500	381	1	1000	27.50	200	1220	2630	26.0	26000	2.58 × 10 ⁻⁵		2.59 × 10 ⁻⁶	
				4	4000		pressure was not changed	851		69.9	69900				
				7	7000										
				10	10000										
				1	1000										
				2	2000					36.3	36300			374 × 10 ⁻⁶	270
	30.00 ~ 35.00	500	381	1	1000	32.50	150	322	4072	12.5	12500	2.58 × 10 ⁻⁵		7.92 × 10 ⁻⁵	
				4	4000			1466	5736	24.0	24000			1.15 × 10 ⁻⁶	
				7	7000			2767	7633	36.3	36300			1.23 × 10 ⁻⁶	
				10	10000			4600	8956	46.0	46000			1.33 × 10 ⁻⁶	10.3
				1	1000			2018	7322	21.0	21000			1.02 × 10 ⁻⁶	
				2	2000			538	4812	18.0	18000			3.49 × 10 ⁻⁵	
	35.00 ~ 40.00	500	381	1	1000	35.50	120	312	4212	11.1	11100	2.58 × 10 ⁻⁵		8.63 × 10 ⁻⁵	
				4	4000			981	6679	19.6	19600			7.57 × 10 ⁻⁵	
				7	7000			1477	8421	41.4	41400			1.66 × 10 ⁻⁶	12.9
				10	10000										
				6	6000			270	8870	33.5	33500			1.26 × 10 ⁻⁶	
				2	2000			657	4771	16.4	16400			3.48 × 10 ⁻⁵	

RECORD OF WATER PRESSURE TEST

PROJECT: AGOS HYDROPOWER LOCALITY: AFTERBAY WEIR SITE RIGHT BANK
 BORE-HOLE No. A2-77-7 GROUND WATER LEVEL: -22.50 ~ -35.00m

DATE	DEPTH	SECTION LENGTH	HOLE RADIUS	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE	PRESSURE HEAD		TOTAL HEAD	WATER LEAKAGE		CALCULATING CONST.	COEFFICIENT OF PERMEABILITY	LUGEON UNIT
				P	Q		LOSS	GAUGE HEIGHT		Q	Q			
	m	m	m	kg/cm ²	m ³ /min	m	cm	m	m	l/min	m ³ /min	min/m ²	cm/sec	1/L-sec
	40.00 ~ 45.00	500	371	1	1000	3500	150	277	4153	103	18300	2.58 x 10 ⁻⁵	6.0 x 10 ⁻⁵	
				4	4010			1100	6450	207	20700		327 x 10 ⁻⁵	
				7	7000			2500	8096	302	30200		962 x 10 ⁻⁵	
				10	10000			4000	9781	417	41700		123 x 10 ⁻⁴	9.5
				6	6000			1922	7722	262	26200		375 x 10 ⁻⁴	
				2	2000			445	5205	126	12600		625 x 10 ⁻⁵	
	45.00 ~ 50.00	500	371	1	1000	3500	150	477	4173	123	12300	2.58 x 10 ⁻⁵	7.60 x 10 ⁻⁵	
				4	4010			2001	5579	207	20700		1.19 x 10 ⁻⁴	
				7	7000			4220	6520	311	31100		1.97 x 10 ⁻⁴	
				10	10000			5866	7384	446	44600		1.56 x 10 ⁻⁴	14.1
				1	6000			3027	6623	310	31000		1.21 x 10 ⁻⁴	
				2	2000			776	4854	159	15900		3.45 x 10 ⁻⁵	

CHAPTER 4

DIAGRAM OF WATER PRESSURE TEST

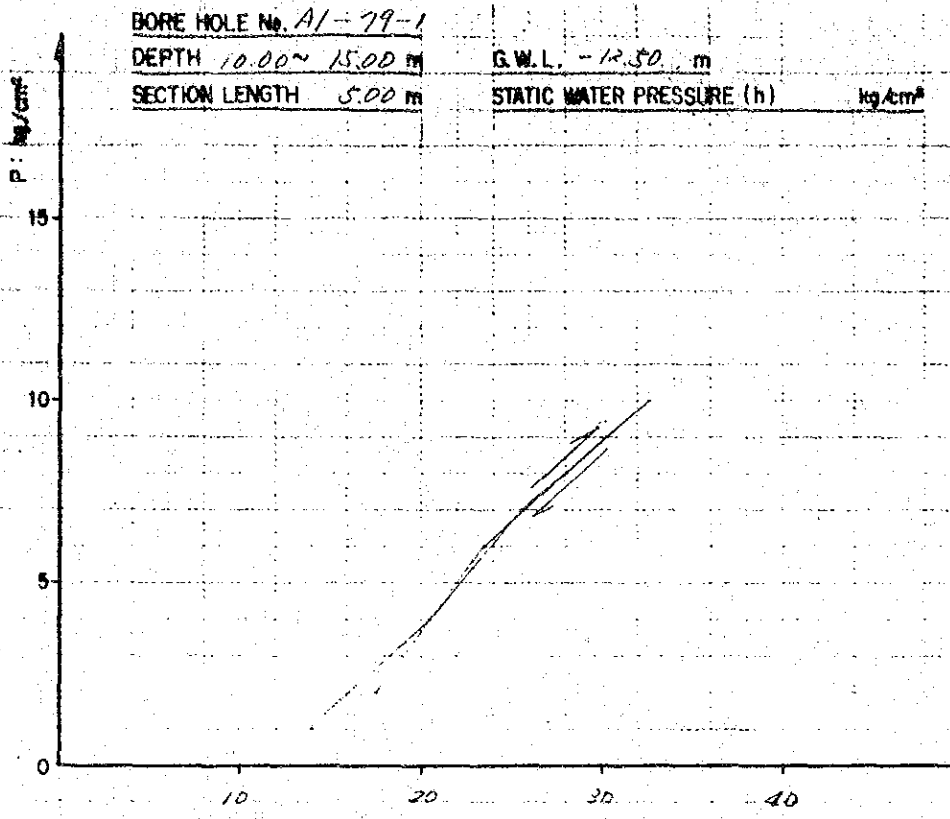
161
162
E



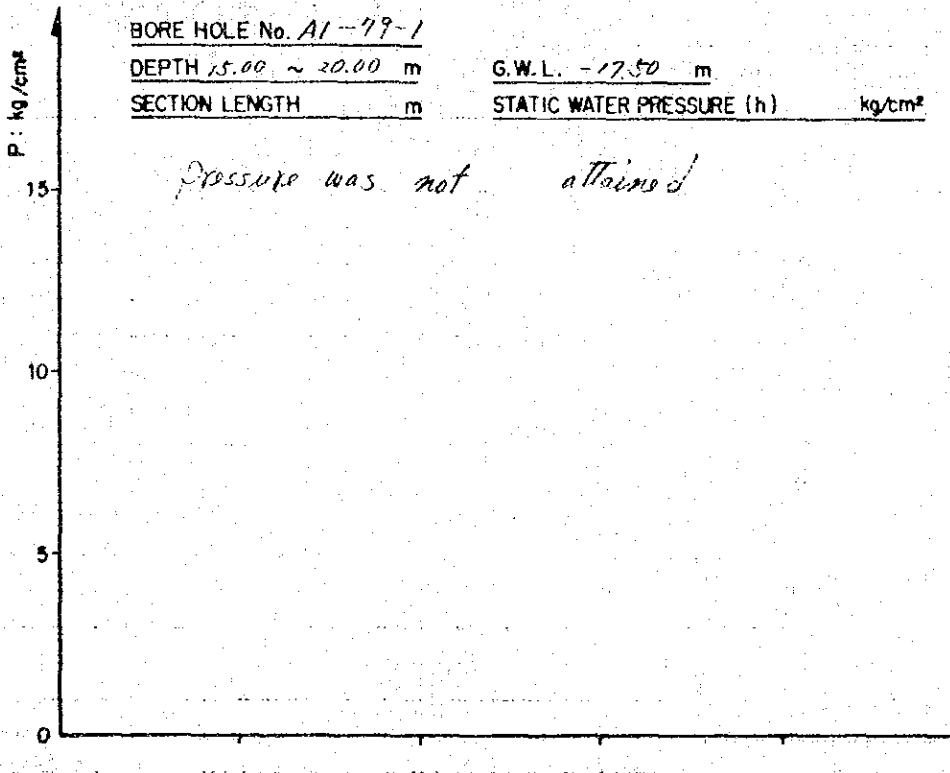
WATER PRESSURE TEST DIAGRAM

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No 1



$K = 2.96 \times 10^{-5}$
 $Lu = 6.2$



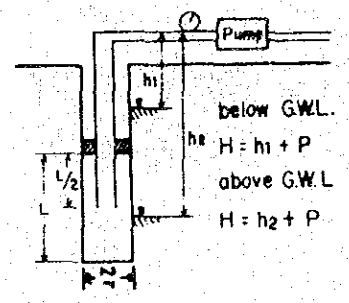
LUGEON UNIT (Lu)

$$Lu = \frac{Q_1}{L \cdot H} \times 10^8$$

PERMEABILITY COEFFICIENT (K)

$$K = \frac{2.3 Q_2 / 60}{2\pi \cdot L \cdot H} \times \log_{10} \frac{L}{r}$$

$$Q_2 = Q \times 1000$$



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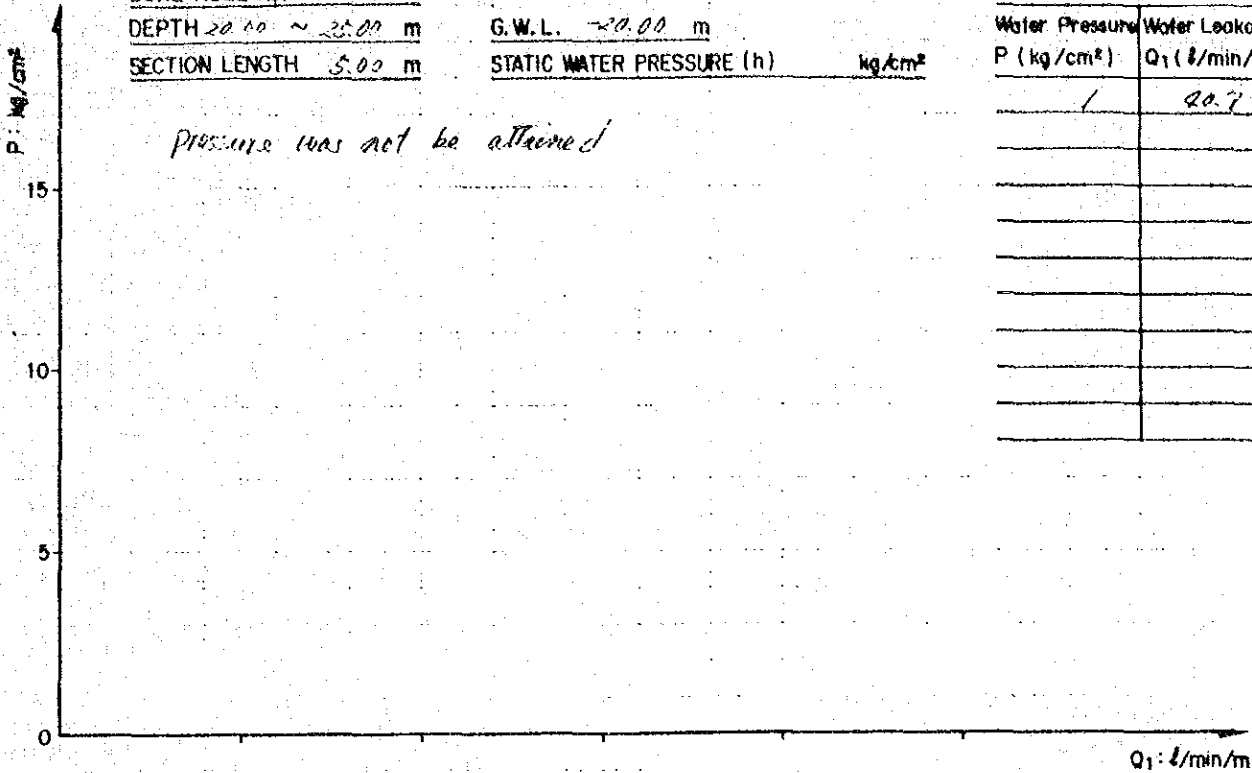
WATER PRESSURE TEST DIAGRAM

No. 2

BORE HOLE No. A1-77-1
 DEPTH 20.00 ~ 25.00 m
 SECTION LENGTH 5.00 m

G.W.L. -20.00 m
 STATIC WATER PRESSURE (h) kg/cm²

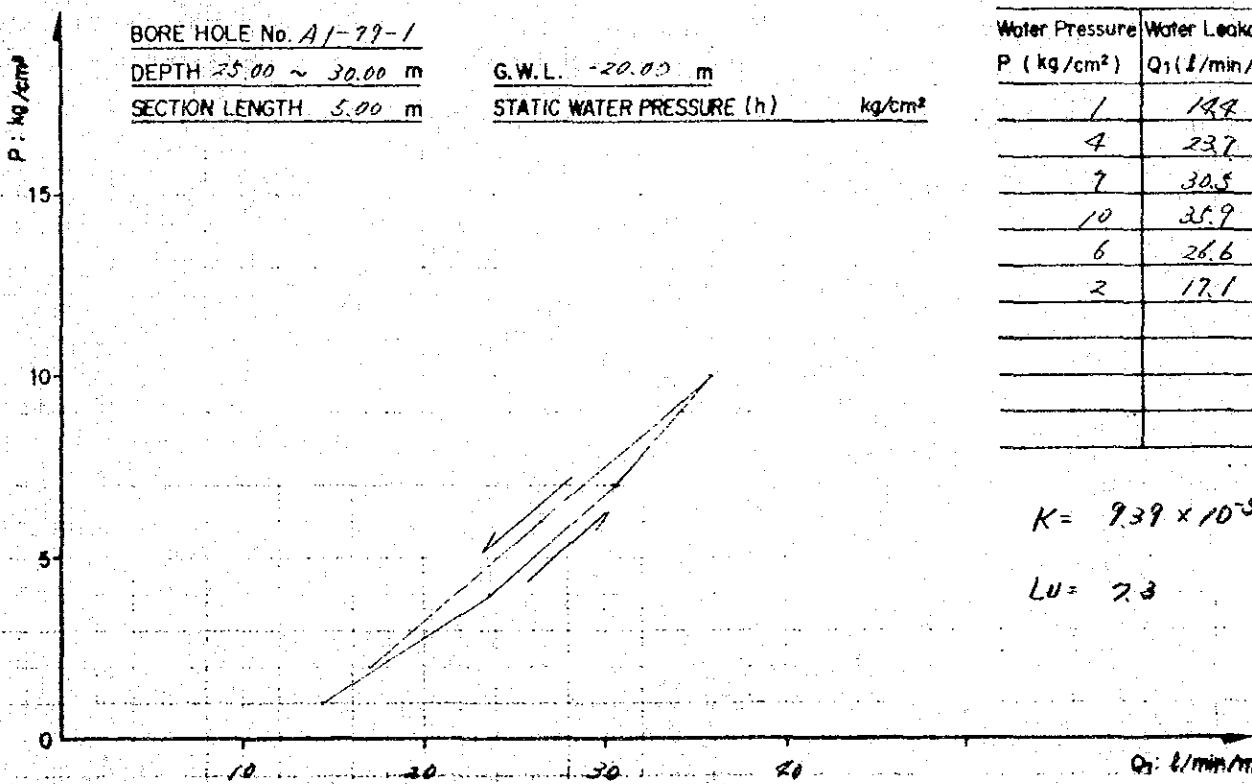
Water Pressure P (kg/cm ²)	Water Leakage Q ₁ (l/min/m)
1	20.7



BORE HOLE No. A1-77-1
 DEPTH 25.00 ~ 30.00 m
 SECTION LENGTH 5.00 m

G.W.L. -20.00 m
 STATIC WATER PRESSURE (h) kg/cm²

Water Pressure P (kg/cm ²)	Water Leakage Q ₁ (l/min/m)
1	14.4
4	23.7
7	30.5
10	35.9
6	26.6
2	17.1



$K = 9.39 \times 10^{-5}$
 $Lu = 7.3$

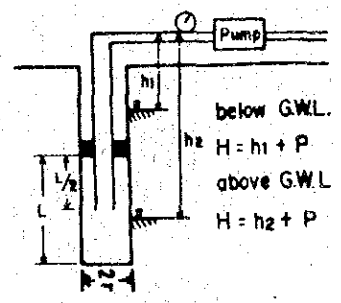
LUGEON UNIT (Lu)

$$Lu = \frac{Q_1}{L \cdot H} \times 10^8$$

PERMEABILITY COEFFICIENT (K)

$$K = \frac{2.3 Q_2 / 60}{2\pi \cdot L \cdot H} \times \log_{10} \frac{L}{r}$$

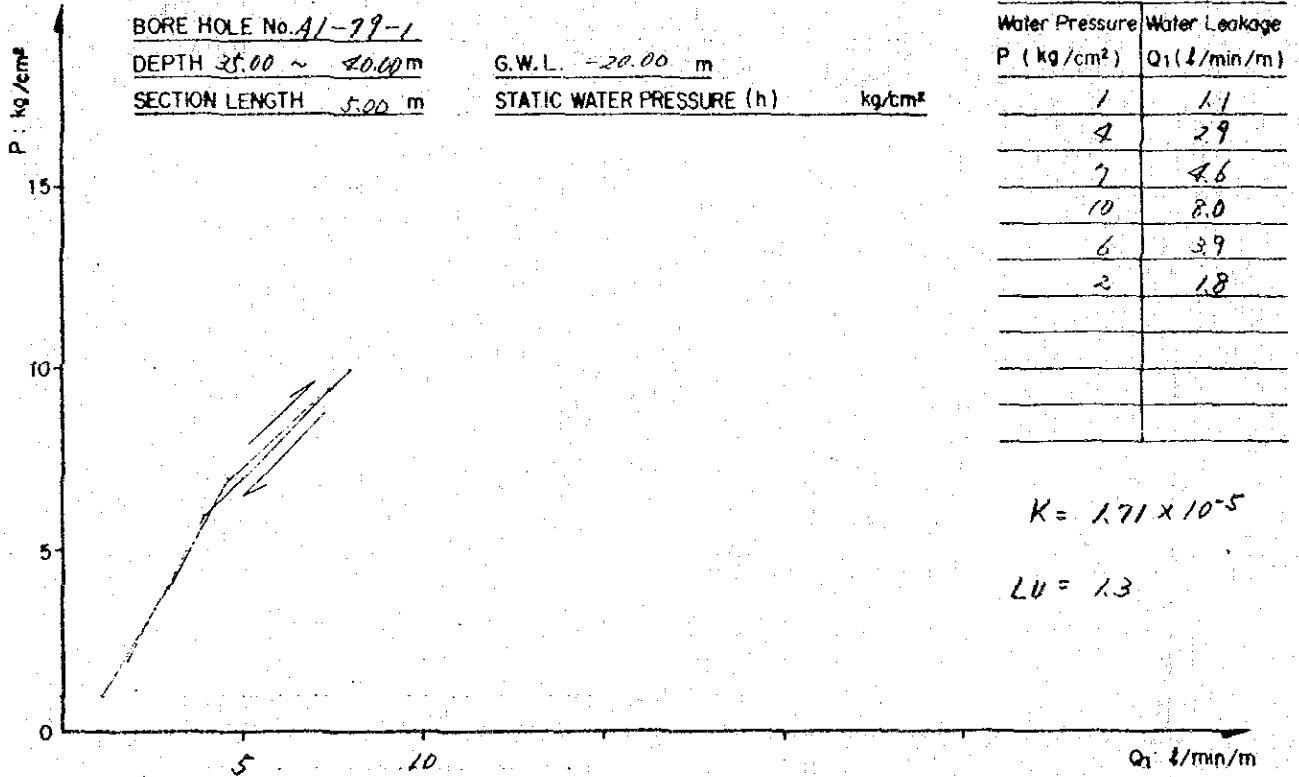
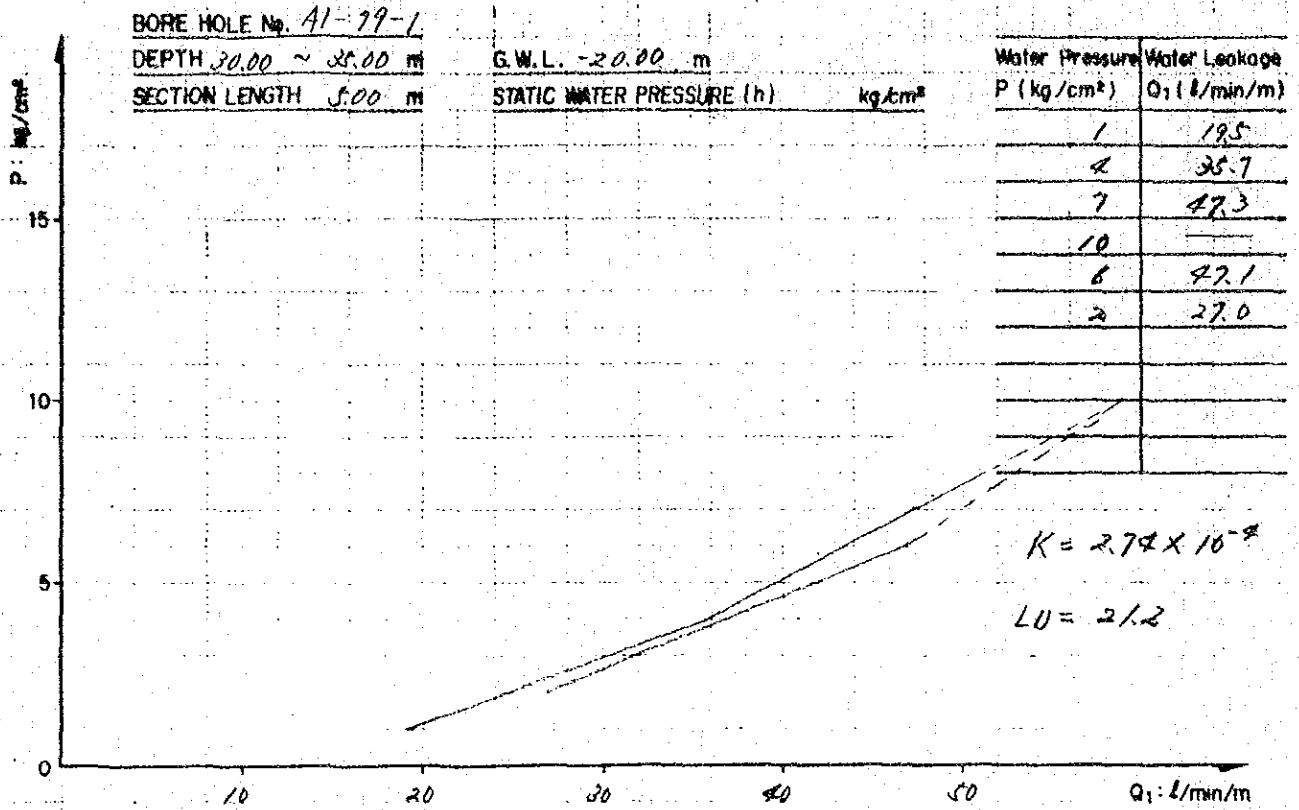
$$Q_2 = Q \times 1000$$



WATER PRESSURE TEST DIAGRAM

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No 3



LUGEON UNIT (Lu)

$$Lu = \frac{Q_1}{L \cdot H} \times 10^8$$

PERMEABILITY COEFFICIENT (K)

$$K = \frac{2.3 Q_2 / 60}{2\pi \cdot L \cdot H} \times \log_{10} \frac{L}{r}$$

$$Q_2 = Q_1 \times 1000$$

