

DRILL LOG

HOLE NO. TG - 1 SHEET NO. 1 OF 1

PROJECT		SAPT GANDAKI PROJECT			DEPTH	30M	ELEVATION									
SITE		TEST GROUTING SITE	COORDINATE		INCLINATION	VERTICAL	DRILL RIG									
AVERAGE CORE RECOVERY		88.3%	DATE	FROM DEC. 7 TO DEC. 16 '81	DRILLED	by SAKAI	LOGGED									
							by KUMAZAWA									
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION	BIT DIAMETER & GROUNDWATER LEVEL	CORE RECOVERY	R. Q. D. & MAX. CORE LENGTH	WATER PRESSURE TEST					DEPTH	
										LUGEON VALUE						
DEC. 7	1		Overburden		Micaceous silty sand.					Applied pressure 10 kg/cm <sup>2</sup> D. Constant rate of flow 100 ml/min						
	3.50				Including decomposed rock fragments.											
	3.95		Med. Sandst.		White gray and massive.	CL	66 (M.B., Single)	50								
	4.70		Very Fine Sandstone and Siltstone		Dark gray and calcareous.	CH	66 (M.B., Double)	100								
	5				4.1 to 4.8 m; laminated.				100							
	6				4.8 to 6.5 m; patched struct.				100							
	7				6.5 to 7.8 m; laminated.			100								
	7.80				Above 7 m; Cracks are brownish and weathered.		7.50 (Dec. 16)	100								
	9.00		Mudstone		Greenish gray, massive and slaky.	CM		100								
	9.70		Fine Sandst.		Gray and massive.	CH		100								
	11.10		Fine Sandst.		Gray and well laminated.	CH		100								
	11.35		Very Fine Sandstone		Dark gray.			100								
	12.60				Lower half; silty and laminated.	CM		100								
	13.40		Fine Sandst.		Upper 40 cm; muddy & slaky.	CH		100								
	15.20				Gray and massive			100								
	15.60			Lower 40 cm; silty and laminated.	CL		100									
	16.10		Fine Sandst.		Bedding slip with clay seam.			100								
	17.10				Gray and massive. Patched and some laminated.			100								
	19.90		Fine Sandst.		White gray and micaceous.	CH		100								
	20.30				Laminated.			100								
	20.65		Siltstone		Well laminated and calcareous			100								
	23.10		Fine Sandst.		White gray and laminated.			100								
	23.10				Cracky and including patches.			100								
	26.70		Muddy Sandstone		21.05 m; including blackish lignite lamina; 0.5 cm. th.	CM to CL		100								
	26.70				Greenish gray and slaky. 23.9 m; bedding slip with clay; 3 cm. thick			100								
	27.90			Massive, weak and slaky.			100									
	27.90		Medium Sandstone		Below 26.6 m; patched.			100								
	30.00				Upper part; including some greenish patches.	CH to B		100								
	30.00			White gray and massive.	B		100									

LOG FORM-B

HOLE NO. TG - 1

\*R.Q.D is Rock Quality Designation. R.Q.D = (Total length of cylindrical cores longer than 30 cm) / (Total core length) x 100%  
 \*LUGEON VALUE is l/min/m under injection water pressure of 10 kg/cm<sup>2</sup>  
 \*DEPTH and ELEVATION are in meter  
 \*DIAMETER is in millimeter

DRILL LOG

HOLE NO. TG-2 SHEET NO. 1 OF 1

PROJECT		SAPT GANDAKI PROJECT			DEPTH	30 M	ELEVATION	TONE UD-5				
SITE		TEST GROUTING SITE		COORDINATE	INCLINATION		VERTICAL	DRILL RIG	LOGGED			
AVERAGE CORE RECOVERY		82.3 %		DATE	FROM DEC.6 TO DEC.21 '81		DRILLED	by A. SAKAI				
DATE		DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	R. Q. D & MAX CORE L	WATER PRESSURE TEST LUGEON VALUE	DEPTH
DEC. 6	1			Overburden		Drilled by means of single core-barrel and non-cored						1
	2											2
	3											3
	4	3.50					66 (M.B., Casing)					4
	5			Medium to Fine Sandst.		White gray and laminated.						5
	6											6
	7	7.00		Siltstone		Dark gray, calcareous and hard.	CM	(Apr. 7)				7
	8	7.50		Siltstone		Dark gray and hard; slaky.		7.60				8
	9			Siltstone		Dark gray and hard; slaky. Calcareous and patched.		8.00				9
	10	10.10										10
	11			Sandy Mudstone		Some greenish and massive.						11
	12	11.90				Slaky.						12
	13	12.20		Fine Sandst.		Muddy and patched.						13
	14	13.65		Fine Sandst. and Siltstone		Well laminated.						14
	15	14.20		Fine Sandst.		Dark gray.						15
	16	14.90				Silty and laminated.						16
	17			Fine Sandst.		Gray and massive.						17
	18	17.95		Fractured		Including patches and some laminations.	CH					18
	19	18.10				Fault clay.						19
	20	18.95		Fine Sandst.		Upper, muddy Lower, fine to medium.						20
	21	19.45		Fine Sandst.		Gray						21
	22			Fine to Medium Sandstone		White gray and some laminated.						22
	23											23
	24	23.40										24
	25	24.45		Fine Sandst.		White gray and laminated.	CM					25
	26	25.70		Breccia		Patched like breccia.						26
	27	26.10		Fine Sandst.		Gray to white gray; laminated and/or patched.						27
	28			Mudstone		Greenish gray and massive; slaky and weakness.						28
	29					26.1 to 26.65m; fractured.	CL					29
	30	30.00				27.4 to 27.7 m; 28.8 to 29.9 m; brownish patches Below 29.9 m; massive muddy sandstone.	CH					30

LOG FORM-B

HOLE NO. TG-2

\* R.Q.D is Rock Quality Designation. R.Q.D = (Total length of cylindrical cores longer than 10 cm / Total core length) x 100%  
 \* LUGEON VALUE is l/min/cm under injection water pressure of 10 kg/cm<sup>2</sup>  
 \* DEPTH and ELEVATION are in meter  
 \* DIAMETER is in millimeter

DRILL LOG

HOLE NO. TG - 3 SHEET NO. 1 OF 1

PROJECT		SAPT GANDAKI PROJECT			DEPTH	30 M	ELEVATION				
SITE		TEST GROUT SITE		COORDINATE			INCLINATION	VERTICAL	DRILL RIG	TOPE UD-5	
AVERAGE CORE RECOVERY		84.5%		DATE	FROM Dec.18	TO Dec.27	DRILLED	by A. SAKAI	LOGGED	by KUMAZAWA	
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION & BIT DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	R.Q.D. & MAX. CORE L. 50 cm	WATER PRESSURE TEST LUGEON VALUE	DEPTH
DEC 18	1		Overburden		Overburden						1
	2		Overburden								2
	3	3.40	Overburden								3
	4		Sandstone		White gray, medium to coarse. Cracks are brown.	Cm					4
	5	4.60	Sandstone		Gray, laminated including siltstone laminae.	5.40					5
	6	6.25	Fine Sandstone								6
	7	6.80	Mudstone		Greenish and silt patched.						7
	8		Siltstone		Gray, hard and calcareous. Includ. green mudstone and white gray silt patches. Brown cracks.						8
	9	8.90	Mudstone		(Bedding slip) Greenish gray, massive, not hard and latent cracks 9.1 to 9.3 m } White gray 10.0 to 10.3 m } silt patches Sandy (very fine sand)						9
	10		Mudstone								10
	11	11.10	Fine Sandstone		Gray and well laminated. 11.1 to 12.0 m. Some greenish. Laminae 34° dip.	CH					11
	12		Fine Sandstone		12.3 to 13.0 m; Silt stone dominant.						12
	13	13.70	Sandy Mudstone		(gradually) Greenish gray, massive. Apt to shale (latent crack nets) 15.1 to 15.6 m, Green patches. 15.8 to 16.2 m, White gray patches						13
	14		Sandy Mudstone								14
	15	16.30	Siltstone		Gray and laminated. (Fault clay; 1 cm th, 40° dip) 16.75 to 17.0 m and 17.4 to 17.7 m						15
	16	16.75	Siltstone		Some greenish fine sandstone. White gray patches.						16
	17		Fine to Medium Sandstone		White gray and laminated. Lamina; 45° dip. 18.8 m. Green patched layer.						17
	18	18.40	Medium Sandstone		Micaceous 19.8 to 20.2 m. Laminated fine sandstone; Slickensides common.						18
	19		Medium Sandstone								19
	20	21.35	Siltstone		Dark gray; Shaly						20
	21	21.50	Siltstone								21
	22		Fractured Zone		Fractured medium to coarse sandstone. at 21.9 m; Lamination 70° dip.	CL to D					22
	23	23.20	Fractured Zone								23
	24	24.00	Fine Sandstone and Siltstone		Gray and laminated. Crossing cracks with clay.						24
	25	24.60	Fractured		Dark gray siltstone and sandst. (Greenish fault clay; 1 cm) 24.6 to 25.4 m, Deep green Rather weak White gray silt patches.	CL to Cm					25
	26		Mudstone		Some yellowish color.						26
	27		Mudstone		Sandy.						27
	28		Mudstone		White gray sandstone patches.						28
	29	29.20	Sandstone		Fine to medium.						29
	30	30.00	Sandstone		Massive coarse sandstone.						30

LOC FORM-B

HOLE NO. TG-3

\*R.Q.D. is Rock Quality Designation, R.Q.D. = (Total length of cylindrical cores longer than 10 cm) / (Total core length) x 100%  
 \*LUGEON VALUE is l/min/m<sup>2</sup> under injection water pressure of 10kg/cm<sup>2</sup>  
 \*DEPTH and ELEVATION are in meter  
 \*DIAMETER is in millimeter

DRILL LOG

HOLE NO. TG-4 SHEET NO. 1 OF 1

PROJECT		SAPT GANDAKI PROJECT				DEPTH	20 M		ELEVATION			
SITE		TEST GROUT SITE		COORDINATE		INCLINATION	VERTICAL		DRILL RIG			
AVERAGE CORE RECOVERY		79%		DATE	FROM DEC.30 TO JAN.6	DRILLED	by A. SAKAI		LOGGED			
							by KUMAZAWA					
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	R. Q. D & MAX CORE L.	WATER PRESSURE TEST	DEPTH
									%	50 cm	LUGENON VALUE	
			Overburden		Overburden. 0 to 1.3 m; Brownish gray micaceous fine sand with roots 1.3 to 2.7 m; Yellowish gray very fine sand 2.7 to 3.4 m; Pale greenish gray very fine sand to silt		66 (Single) 86 (M.B.)					
	3.40					3.40						
	3.80		Sandstone		Weathered, fine and laminated Dark gray shaly. Inc. siltst. and sandst. patches 4.5 m; Crack with cement filling (2 mm thick)	CM		4.90				
			Laminated Sandstone and Siltstone		5.6 to 5.8 m; Dark gray mudstone with white spots. 5.8 to 7.5 m; Hard, fine to very fine. Inc. white gray patches and cracks with dark brown soil.			5.30				
					7.5 to 8.35 m; Laminated hard siltst. 35° dip laminae and fossil leaves.			7.70				
	8.35		Mudstone		Massive; Greenish gray Inc. brown spots Latent crack nets			Jan. 6 8:20 AM				
	10.20		Laminated Sandstone (Silty)		Gray fine to very fine sandst. 10.2 to 10.5 m; Patched sandst. 10.5 to 12.1 m; Well laminated. (cross lamination)			Jan. 4 9:00 AM				
	13.15		Fine Massive Sandstone		12.1 to 12.6 m; Dark gray shaly. Inc. some white patches. 12.6 to 13.15 m; Laminated.	CH						
	16.10		Micaceous Sandstone		13.15 to 15.85 m; Gray to white gray massive fine to medium sandstone. Inc. white patches. 15.85 to 16.1 m. Dark gray laminated and silty.							
	20.00				White gray micaceous and massive fine sandstone. Inc. white patches. 17.5 m; Some laminated. 17.6 to 18.6 m; Medium sandst. Inc. green patches. 18.6 to 20.0 m; Laminated. Bedding 45° dip. 19.55 to 19.75 m; Black lignite laminae.							
						20.00						

LOG FORM-B

HOLE NO. TG-4

\*R.Q.D is Rock Quality Designation. R.Q.D = (Total length of cylindrical cores longer than 10 cm) / Total core length x 100%  
 \*LUGENON VALUE is l/min/m under injection water pressure of 10kg/cm<sup>2</sup>  
 \*DEPTH and ELEVATION are in meter  
 \*DIAMETER is in millimeter

DRILL LOG

HOLE NO. TG-5 SHEET NO. 1 OF 1

PROJECT		SAPT GANDAKI PROJECT			DEPTH	20 M		ELEVATION				
SITE		TEST GROUTING SITE		COORDINATE	INCLINATION	VERTICAL		DRILL RIG				
AVERAGE CORE RECOVERY		100 %			DATE	FROM JAN. 6 TO JAN. 10 '82		DRILLED				
						by A. SAKAI		LOGGED				
						by KUMAZAWA						
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION	BIT & DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	R. Q. D & MAX. CORE L	WATER PRESSURE TEST LUGEON VALUE	DEPTH
Jan. 6 Jan. 7 Jan. 8 Jan. 10	1		Overburden		Upper 90 cm; top soil; dark brownish and micaceous sandy.	66 (Single)	66 (D.B. Double)	6.00 (Jan. 10 '800 AM)	100	3.84 LU		1
	2				Yellowish gray silty fine sand with decomposed rock fragments.				100			2
	3	3.40	Fine Sandst.		White gray with patches.				100			3
	4				Laminated.				100			4
	5	5.40	Very Fine Sandstone		Muddy Laminated.				100			5
	6				Gray, calcareous and laminated.				100			6
	7	6.20	Fine Sandst.		Gray, calcareous and laminated.				100			7
	8	7.45			Calcareous and patched and/or laminated.				100			8
	9	9.35	Very Fine Sandstone		Calcareous and patched and/or laminated.				100			9
	10				Greenish gray, massive, sandy and slaky.				100			10
	11	11.20	Mudstone		Brownish				100			11
	12	11.70			Brownish silt st. patched-like.				100			12
	13	12.75	Breccia		Some brownish and laminated.				100			13
	14	13.95			Upper 10 cm; muddy				100			14
	15	15.95	Very Fine Sandstone		Calcareous and laminated.				100			15
	16				Some greenish and muddy.				100			16
	17	16.80	Fine Sandst.		Gray and massive.				100			17
	18	17.05			Gray colored with brownish patches and lamination.				100			18
	19	17.78	Fractured		Upper 15 cm; muddy.				100			19
	20	20.00			Upper 15 cm; muddy.				100			20
			Fine Sandst.		Calcareous and patched and/or laminated.	100						

LOG FORM-B

HOLE NO. TG-5

\*R.Q.D is Rock Quality Designation. R.Q.D = (Total length of cylindrical cores longer than 10 cm. / Total core length) x 100%  
 \*LUGEON VALUE is l/min/cm<sup>2</sup> under injection water pressure of 10kg/cm<sup>2</sup>  
 \*DEPTH and ELEVATION are in meter  
 \*DIAMETER is in millimeter

DRILL LOG

HOLE NO. TG-6 SHEET NO. 1 OF 1

PROJECT				SAPT GANDAKI PROJECT		DEPTH	20 M	ELEVATION												
SITE		TEST GROUTING SITE		COORDINATE			INCLINATION	VERTICAL	DRILL RIG	STONE UD-5										
AVERAGE CORE RECOVERY		75 %		DATE	FROM MAR. 4 TO MAR. 5 '82		DRILLED	by KUMAL	LOGGED	KIDO & by KUMAZAWA										
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION & BIT DIAMETER	GROUT/WATER LEVEL	CORE RECOVERY	R. Q. D	WATER PRESSURE TEST					DEPTH					
										LUGEON VALUE										
											1									
											2									
											3									
											4									
											5									
											6									
											7									
											8									
											9									
											10									
											11									
											12									
											13									
											14									
											15									
											16									
											17									
											18									
											19									
											20									
No core was recovered.																				
	5.00		Fine Sandst.			CM														
	5.20		Very Fine to Fine Sandst.		Dark gray and laminated.	CH														
	6.60				Upper 1 m; some greenish and muddy.															
	8.80		Fine Sandst.		Grayish and patched str. Reddish brown cracks.															
	9.30		Fine Sandst.		Silty and laminated.	CM														
	11.32		Sandy Mudstone		Greenish and massive, 9.3 to 10.5 m; staky. Includ. brownish silt patches.															
	14.00		Fine Sandstone		Gray and laminated.															
	16.50		Fine Sandstone		Gray and massive; including patches.	CH														
	17.10		Siltstone		Sheared															
	17.75		Fine Sandst.		Gray and massive.															
	18.35		Fine Sandst.		Dark gray and patched str.															
	20.00		Fine Sandst.		White gray with lamination. 19.7 to 19.9 m; including a gray siltstone patch layer.															

LOG FORM-B

HOLE NO. TG-6

\*R.Q.D is Rock Quality Designation, R.Q.D=(Total length of cylindrical cores longer than 10 cm)/(Total core length) x 100%  
 #LUGEON VALUE is 1/min/m under injection water pressure of 10kg/cm<sup>2</sup>  
 #DEPTH and ELEVATION are in meter  
 #DIAMETER is in millimeter

DRILL LOG

HOLE NO. TG-7 SHEET NO. 1 OF 1

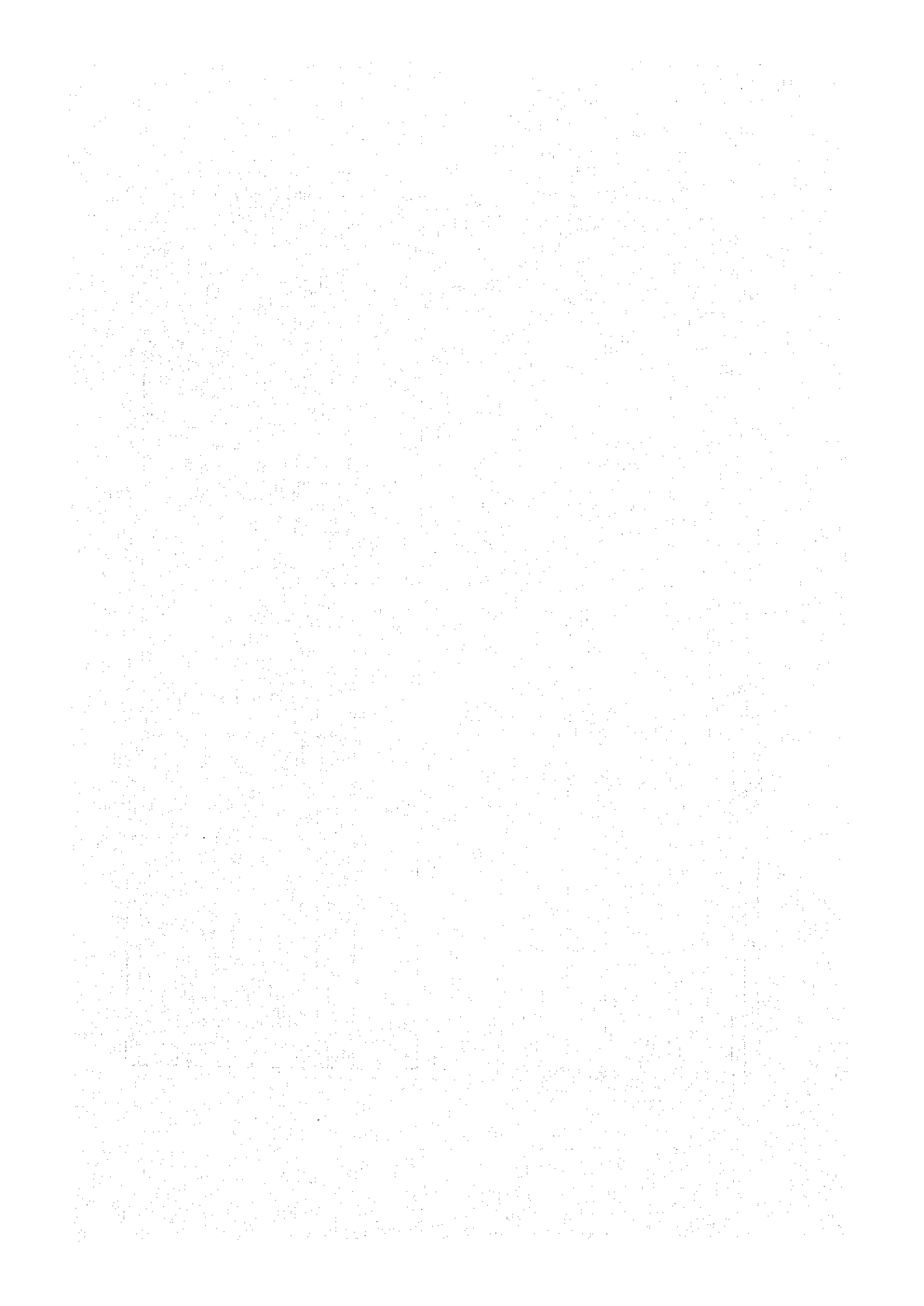
PROJECT		SAPT GANDAKI PROJECT				DEPTH	20 M	ELEVATION				
SITE		TEST GROUTING SITE	COORDINATE	:	:	INCLINATION	VERTICAL	DRILL RG	TDN UD-5			
AVERAGE CORE RECOVERY		75 %	DATE	FROM MAR. 5 TO MAR. 7 '82	DRILLED	by KUMAL	LOGGED	by KUMAZAWA				
DATE	DEPTH	ELEVATION	ROCK TYPE OR FORMATION	COLUMN SECTION	DESCRIPTION	ROCK CLASSIFICATION & BIT	DIAMETER	GROUNDWATER LEVEL	CORE RECOVERY	R. Q. D. & MAX. CORE L. 50 cm	WATER PRESSURE TEST LUGCON VALUE	DEPTH
									%	cm	kg/cm <sup>2</sup>	cm
	1				No core was recovered unnecessarily.							1
	2											2
	3											3
	4											4
	5	5.00										5
	5.50		Fine Sandst.		White gray and laminated. Upper 10 cm; dark gray and muddy.							5.50
	6											6
	7		Fine Sandst.		Grayish, patched and/or laminated. Includ. brownish cracks.	CM						7
	8											8
	8.70											8.70
	9		Sandy Mudstone		Greenish gray and massive. 9.0 to 10.2 m; slaky							9
	10	10.20										10
	10.65		Fine Sandst.		Gray and massive.							10.65
	11											11
	12	12.20										12
	12.20		Fine Sandst.		Below 12 m; silty.							12.20
	13											13
	13.40		Fine Sandst.		12.2 to 12.3 m; muddy. 12.7 to 13.4 m; laminated.							13.40
	14											14
	14.45		Fine Sandst.		Muddy and some slaky.							14.45
	15											15
	16		Fine Sandst.		Gray and massive; including patches.	CH						16
	16.30											16.30
	16.50		Mudstone		Bedding slip with clay seams. Upper 30 cm; muddy							16.50
	17											17
	17.95		Fine Sandst.		White gray, laminated and micaceous. Cores are long and good.							17.95
	18											18
	19		Fine to Med. Sandstone									19
	20	20.00										20

LOC FORM-B

HOLE NO. TG-7

\* R.Q.D. is Rock Quality Designation. R.Q.D. = (Total length of cylindrical cores longer than 10 cm / Total core length) x 100%  
 \* LUGCON VALUE is l/min/m under injection water pressure of 10kg/cm<sup>2</sup>  
 \* DEPTH and ELEVATION are in meter  
 \* DIAMETER is in millimeter







III

RECORD OF WATER PRESSURE TEST

(37 SHEETS)



**RECORD OF WATER PRESSURE TEST**

PROJECT: SAPT GANDAKI PROJECT  
BORE-HOLE No. B80-1

LOCALITY: DAMSITE: RIVERBED  
(drilled in the Saft Gandaki River)

GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE Hs cm	PRESSURE GAUGE HEIGHT Hg cm	TOTAL HEAD Ht = Hs + Hg cm	WATER LEAKAGE Q cm <sup>3</sup> /min	CALCULATING CONST. $\frac{2.3 \times 10^4 \times L}{H}$	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K = Q/H x C sec	LUGDON UNIT Lu = Q/L x H x 10 <sup>8</sup>
				P kg/cm <sup>2</sup>	HEAD Hp cm								
MAR.10	25.0 to 30.0	500	2.8	1	1,000	-170	250	1,080	4.44	$2.75 \times 10^{-5}$	4.11	$1.13 \times 10^{-4}$	
				3	3,000	-170	250	3,080	15.8	$2.75 \times 10^{-5}$	5.13	$1.41 \times 10^{-4}$	
				5	5,000	-170	250	5,080	16.6	$2.75 \times 10^{-5}$	3.27	$8.99 \times 10^{-5}$	6.6
				7	7,000	-170	250	7,080	-	-	-	-	
				4	4,000	-170	250	4,080	32.5	$2.75 \times 10^{-5}$	7.97	$2.19 \times 10^{-4}$	
				2	2,000	-170	250	2,080	4.0	$2.75 \times 10^{-5}$	1.92	$5.28 \times 10^{-5}$	
MAR.11	30.0 to 35.0	500	2.8	1	1,000	-170	250	1,080	3.6	$2.75 \times 10^{-5}$	3.33	$9.16 \times 10^{-4}$	
				3	3,000	-170	250	3,080	25.8	$2.75 \times 10^{-5}$	8.38	$2.30 \times 10^{-4}$	
				5	5,000	-170	250	5,080	15.5	$2.75 \times 10^{-5}$	3.05	$8.39 \times 10^{-5}$	
				7	7,000	-170	250	7,080	15.0	$2.75 \times 10^{-5}$	2.12	$5.83 \times 10^{-5}$	3.1
				10	10,000	-170	250	10,080	15.75	$2.75 \times 10^{-5}$	1.96	$4.29 \times 10^{-5}$	
				6	6,000	-170	250	6,080	15.2	$2.75 \times 10^{-5}$	2.5	$6.88 \times 10^{-5}$	
				4	4,000	-170	250	4,080	15.0	$2.75 \times 10^{-5}$	3.68	$1.01 \times 10^{-4}$	
				2	2,000	-170	250	2,080	17.3	$2.75 \times 10^{-5}$	8.32	$2.29 \times 10^{-4}$	
MAR.11	35.0 to 40.0	500	2.8	1	1,000	-170	250	1,080	2.75	$2.75 \times 10^{-5}$	2.55	$7.00 \times 10^{-5}$	
				3	3,000	-170	250	3,080	24.0	$2.75 \times 10^{-5}$	7.79	$2.14 \times 10^{-4}$	
				5	5,000	-170	250	5,080	23.75	$2.75 \times 10^{-5}$	4.68	$1.29 \times 10^{-4}$	
				7	7,000	-170	250	7,080	23.00	$2.75 \times 10^{-5}$	3.25	$8.94 \times 10^{-5}$	6.6
				10	10,000	-170	250	10,080	-	-	-	-	



**RECORD OF WATER PRESSURE TEST**

PROJECT: SAFT GANDAKI PROJECT  
BORE-HOLE No. B80-3

LOCALITY: DAMSITE: LEFT BANK

GROUND WATER LEVEL: Varied from 12.9 m to 30.2 m

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN ROLE H <sub>0</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>0</sub> +H <sub>g</sub> +H <sub>g</sub> cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{2\pi} \times \frac{1}{R} \times \frac{1}{\log \frac{r}{R}}$	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/H×C×sec	LUGOSON UNIT L=Q/L×HXH <sup>2</sup>
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q <sub>1</sub> /min	Q <sub>2</sub> cm <sup>3</sup> /min				
MAR.14	16.0 to 21.0	500	3.3	2	2,000	1,290	30	3,320	5.4	5,400	2.66 × 10 <sup>-5</sup>	1.63	4.34 × 10 <sup>-5</sup>	
				4	4,000	1,290	30	5,320	5.8	5,800	2.66 × 10 <sup>-5</sup>	1.09	2.90 × 10 <sup>-5</sup>	
				6	6,000	1,290	30	7,320	6.3	6,300	2.66 × 10 <sup>-5</sup>	0.86	2.29 × 10 <sup>-5</sup>	
				8	8,000	1,290	30	9,320	7.0	7,000	2.66 × 10 <sup>-5</sup>	0.75	2.00 × 10 <sup>-5</sup>	1.7
MAR.14	21.0 to 25.0	400	3.3	2	2,000	1,310	30	3,340	3.2	3,200	3.18 × 10 <sup>-5</sup>	0.96	3.05 × 10 <sup>-5</sup>	
				4	4,000	1,310	30	5,340	3.3	3,300	3.18 × 10 <sup>-5</sup>	0.62	1.97 × 10 <sup>-5</sup>	
				6	6,000	1,310	30	7,340	4.5	4,500	3.18 × 10 <sup>-5</sup>	0.51	1.94 × 10 <sup>-5</sup>	
				8	8,000	1,310	30	9,340	5.1	5,100	3.18 × 10 <sup>-5</sup>	0.55	1.75 × 10 <sup>-5</sup>	1.6
MAR.15	25.0 to 30.0	500	3.3	1	1,000	1,360	30	2,390	2.4	2,400	2.66 × 10 <sup>-5</sup>	1.00	2.66 × 10 <sup>-5</sup>	
				3	3,000	1,360	30	4,390	2.8	2,800	2.66 × 10 <sup>-5</sup>	0.64	1.70 × 10 <sup>-5</sup>	
				5	5,000	1,360	30	6,390	3.5	3,500	2.66 × 10 <sup>-5</sup>	0.55	1.46 × 10 <sup>-5</sup>	
				7	7,000	1,360	30	8,390	5.2	5,200	2.66 × 10 <sup>-5</sup>	0.62	1.65 × 10 <sup>-5</sup>	1.5
				6	6,000	1,360	30	7,390	3.1	3,100	2.66 × 10 <sup>-5</sup>	0.42	1.12 × 10 <sup>-5</sup>	
				2	2,000	1,360	30	3,390	1.7	1,700	2.66 × 10 <sup>-5</sup>	0.50	1.33 × 10 <sup>-5</sup>	
MAR.17	30.0 to 35.0	500	3.3	1	1,000	1,550	30	2,580	48.	48,000	2.66 × 10 <sup>-5</sup>	18.60	4.95 × 10 <sup>-4</sup>	
				1.4	1,400	1,550	30	2,960	58.	58,000	2.66 × 10 <sup>-5</sup>	19.46	5.18 × 10 <sup>-4</sup>	83
MAR.17	35.0 to 40.0	500	3.3	0	0	1,860	30	1,890	>64.	>64,000	2.66 × 10 <sup>-5</sup>	>33.86	>9.01 × 10 <sup>-4</sup>	
MAR.18	40.0 to 45.0	500	3.3	0	0	3,020	30	3,050	>64.	>64,000	2.66 × 10 <sup>-5</sup>	>20.98	>5.58 × 10 <sup>-4</sup>	
									more than					

**RECORD OF WATER PRESSURE TEST**

PROJECT SAPT GANDAKI PROJECT LOCALITY DAM: B-SIZE LEFT BANK  
 BORE-HOLE No. B81 - 2 (1) GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN BOLT H <sub>0</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>0</sub> + H <sub>g</sub> + H <sub>g</sub>		WATER LEAKAGE Q cm <sup>3</sup> /min	CALCULATING CONST. $\frac{2.3}{4.74} \times \frac{1}{60} \times \frac{1}{100} \times \frac{1}{L}$	Q H	COEFFICIENT OF PERMEABILITY K=Q/HK/Sec	LUGEON UNIT L <sub>u</sub> =Q/L-RXHP
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm			H <sub>0</sub> cm	H <sub>g</sub> cm					
FEB.4	15 to 20	500	3.3	1	1000	250	70	1320	0.9	900	2.66 x 10 <sup>-5</sup>	0.68	1.81 x 10 <sup>-5</sup>	
				2.5	2500			2820	4.9	4900		1.74	4.62 x 10 <sup>-5</sup>	
				4	4000			4320	18	18000		4.47	1.11 x 10 <sup>-4</sup>	9.0
				2.5	2500			2820	9.8	9800		3.48	9.24 x 10 <sup>-5</sup>	
				1	1000			1320	5.1	5100		3.86	1.03 x 10 <sup>-4</sup>	
FEB.5	20 to 25	500	3.3	1	1000	1340	70	2410	10.3	10300	2.66 x 10 <sup>-5</sup>	4.27	1.14 x 10 <sup>-4</sup>	
				3	3000			4410	20.3	20300		4.60	1.22 x 10 <sup>-4</sup>	
				5	5000			6410	22.7	22700		5.10	1.36 x 10 <sup>-4</sup>	13.08
				3	3000			4410	17	17000		3.85	1.03 x 10 <sup>-4</sup>	
				1	1000			2410	4.8	4800		1.99	5.30 x 10 <sup>-5</sup>	
FEB.6	25 to 30	500	3.3	1	1000	1400	70	2470	1.1	1100	2.66 x 10 <sup>-5</sup>	0.45	1.18 x 10 <sup>-5</sup>	
				3	3000			4470	1.4	1400		0.31	8.33 x 10 <sup>-6</sup>	
				5	5000			6470	2.1	2100		0.22	6.69 x 10 <sup>-6</sup>	
				7	7000			8470	2.4	2400		0.28	7.54 x 10 <sup>-6</sup>	0.69
				4	4000			5470	0.5	500		0.09	2.43 x 10 <sup>-6</sup>	
				2	2000			3470	0	0		0	0	
FEB.7	30 to 35	500	3.3	2	2000	1420	70	2490	1.7	1700	2.66 x 10 <sup>-5</sup>	0.49	1.30 x 10 <sup>-5</sup>	
				4	4000			5490	1.9	1900		0.35	9.21 x 10 <sup>-6</sup>	
				6	6000			7490	2.1	2100		0.28	7.46 x 10 <sup>-6</sup>	
				8	8000			9490	2.1	2100		0.22	5.89 x 10 <sup>-6</sup>	0.53
				5	5000			6490	1.5	1500		0.23	6.15 x 10 <sup>-6</sup>	
				3	3000			4490	1.1	1100		0.24	6.52 x 10 <sup>-6</sup>	
FEB.7	35 to 40	500	3.3	2	2000	870	70	2940	0.3	300	2.66 x 10 <sup>-5</sup>	0.10	2.71 x 10 <sup>-6</sup>	
				4	4000			4940	0.5	500		0.10	2.69 x 10 <sup>-6</sup>	
				7	7000			7940	1.1	1100		0.14	3.69 x 10 <sup>-6</sup>	0.31
				6	6000			6940	1.1	1100		0.16	4.22 x 10 <sup>-6</sup>	
				3	3000			3940	0.8	800		0.20	5.40 x 10 <sup>-6</sup>	





**RECORD OF WATER PRESSURE TEST**

PROJECT: SAFT GANDAKI PROJECT LOCALITY: DAMSITE B: RIGHT BANK  
 BORE-HOLE No. BSL - 3 (1) GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE PRESSURE P kg/cm <sup>2</sup>	SUPPLIED WATER PRESSURE HEAD		STATIC HEAD IN HOLE Hs cm	PRESSURE GAUGE HEIGHT Hg cm	TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub> cm	WATER LEAKAGE Q l/min	CALCULATING CONST $\frac{2.3 \times 10^{-4} \times L}{A \times r}$ C ml/cm <sup>2</sup> sec	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY $K = Q/H \times C \text{ m/sec}$	LUGEON UNIT $L_p = Q/L \times H \times 10^6$
					H <sub>p</sub> cm	H <sub>s</sub> cm								
MAR.11	7.5 to 11	350	3.3	1	1000	260	-10	250	0.2	200	$3.53 \times 10^{-5}$	0.16	$5.65 \times 10^{-6}$	0.71
				2	2000			2250	0.5	500		0.22	$7.84 \times 10^{-6}$	
				1	1000			1250	0.1	100		0.08	$2.22 \times 10^{-6}$	
MAR.12	10 to 15	500	3.3	1	1000	260	-10	250	0.7	700	$2.66 \times 10^{-5}$	0.56	$1.49 \times 10^{-5}$	
				2	2000			2250	1.3	1300		0.98	$1.54 \times 10^{-5}$	
				3	3000			2250	3.5	3500		1.08	$2.86 \times 10^{-5}$	2.33
				2	2000			2250	2.0	2000		0.89	$2.34 \times 10^{-5}$	
				1	1000			1250	0.4	400		0.32	$8.51 \times 10^{-6}$	
MAR.12	15 to 20	500	3.3	1	1000	260	-10	250	0.4	400	$2.66 \times 10^{-5}$	0.22	$2.51 \times 10^{-6}$	
				2.5	2500			2750	2.7	2700		0.98	$2.61 \times 10^{-5}$	
				4	4000			4250	4.9	4900		1.15	$3.07 \times 10^{-5}$	2.45
				2.5	2500			2750	2.5	2500		0.91	$2.42 \times 10^{-5}$	
				1	1000			1250	1.0	1000		0.8	$2.13 \times 10^{-5}$	
MAR.13	20 to 25	500	3.3	1	1000	440	-10	430	0	0	$2.66 \times 10^{-5}$	-	-	
				3	3000			3430	1.1	1100		0.32	$8.53 \times 10^{-6}$	
				5	5000			5430	3.2	3200		0.59	$1.57 \times 10^{-5}$	1.22
				3	3000			3430	1.5	1500		0.55	$1.47 \times 10^{-5}$	
				1	1000			1430	0.5	500		0.35	$9.50 \times 10^{-6}$	
MAR.14	25 to 30	500	3.3	1	1000	460	-10	450	2.1	2100	$2.66 \times 10^{-5}$	1.45	$3.85 \times 10^{-5}$	
				3	3000			3450	5.2	5200		1.51	$4.01 \times 10^{-5}$	
				5	5000			5450	6.4	6400		1.17	$3.12 \times 10^{-5}$	
				7	7000			7450	6.4	6400		0.86	$2.29 \times 10^{-5}$	1.83
				4	4000			4450	3.8	3800		0.85	$2.27 \times 10^{-5}$	
				2	2000			2450	2.5	2500		1.02	$2.71 \times 10^{-5}$	

**RECORD OF WATER PRESSURE TEST**

PROJECT: SAPT SANDAKI PROJECT  
 BORE-HOLE No. BH-1-3 (2)

LOCALITY  
 GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE Hs m	PRESSURE GAUGE HEIGHT Hg cm	TOTAL HEAD Hp+Hs+Hg H cm	WATER LEAKAGE Q' l/min Q cm <sup>3</sup> /min	CALCULATING CONST.		COEFFICIENT OF PERMEABILITY K=Q/RH/C cm/sec	LUGEON UNIT Lu=Q/L·RH·H*
				PRESSURE P kg/cm <sup>2</sup>	HEAD H <sub>p</sub> cm					$\frac{2.3}{\pi} \times \frac{1}{R} \times \frac{1}{L} \times \frac{1}{\log \frac{r}{R}}$	C mlt/cm <sup>2</sup> ·sec		
MAR.14	30 to 35	500	3.3	2	2000	460	-10	2450	5.0	5000	$2.66 \times 10^{-5}$	$5.43 \times 10^{-5}$	
				4	4000			4450	6.9	6900		$4.12 \times 10^{-5}$	
				6	6000			6450	7.6	7600		$3.13 \times 10^{-5}$	
				8	8000			8450	9.2	9200		$2.90 \times 10^{-5}$	2.3
				5	5000			5450	7.2	7200		$3.51 \times 10^{-5}$	
				3	3000			3450	6.7	6700		$5.17 \times 10^{-5}$	
MAR.15	35 to 40	500	3.3	2	2000	1166	-10	3150	5.1	3100	$2.66 \times 10^{-5}$	$2.62 \times 10^{-5}$	
				4	4000			5150	4.6	4600		$2.36 \times 10^{-5}$	
				7	7000			8150	7.2	7200		$2.35 \times 10^{-5}$	
				9	9000			10150	9.3	9300		$2.44 \times 10^{-5}$	2.07
				6	6000			7150	7.3	7300		$2.72 \times 10^{-5}$	
				3	3000			3150	4.7	4700		$3.97 \times 10^{-5}$	
MAR.16	40 to 45	500	3.3	2	2000	1400	-10	3390	6.9	6900	$2.66 \times 10^{-5}$	$3.41 \times 10^{-5}$	
				5	5000			6390	12.8	12800		$5.33 \times 10^{-5}$	
				8	8000			9390	19.2	19200		$5.44 \times 10^{-5}$	
				10	10000			11390	23.3	23300		$5.44 \times 10^{-5}$	4.66
				7	7000			8390	16.5	16500		$5.23 \times 10^{-5}$	
				3	3000			4390	8.6	8600		$5.21 \times 10^{-5}$	
MAR.17	45 to 50	500	3.3	2	2000	1435	-10	3425	4.4	4400	$2.66 \times 10^{-5}$	$3.42 \times 10^{-5}$	
				5	5000			6425	6.9	6900		$2.85 \times 10^{-5}$	
				8	8000			9425	8.4	8400		$2.37 \times 10^{-5}$	
				10	10000			11425	8.1	8100		$1.89 \times 10^{-5}$	1.62
				7	7000			8425	7.8	7800		$2.46 \times 10^{-5}$	
				3	3000			4425	6.8	6800		$4.09 \times 10^{-5}$	

**RECORD OF WATER PRESSURE TEST**

PROJECT SAPT GANDARI PROJECT  
 BSL - 4 (1)

LOCALITY DAK A-SITE RIGHT BANK  
 GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L, cm	HOLE RADIUS r, cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE		PRESSURE GAUGE HEIGHT		TOTAL HEAD		WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{2r} \times \frac{Q}{C} \times \frac{1}{\log \frac{L}{r}}$	Q H cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY $K = Q/H \times C \text{ cm/sec}$	LUGEON UNIT $L = Q/L \times H \times 10^8$
				P, kg/cm <sup>2</sup>	H <sub>p</sub> , cm	H <sub>s</sub> , cm	H <sub>g</sub> , cm	H <sub>p</sub> + H <sub>s</sub> + H <sub>g</sub> , cm	H, cm	Q, l/min	Q, cm <sup>3</sup> /min						
NOV.26	7 to 10	300	3.3	1	1000	250	30	1290				47.6	47800	$3.98 \times 10^{-5}$	37.05	$1.47 \times 10^{-3}$	159.3
NOV.27	10 to 15	500	3.3	1	1000	185	20	1215				5.2	5200	$2.66 \times 10^{-5}$	4.22	$1.14 \times 10^{-4}$	10.4
NOV.27	12 to 15	300	3.3	2	2000	185	30	2215				6.8	6800	$3.98 \times 10^{-5}$	3.07	$1.22 \times 10^{-4}$	
				3	3000			3215				13.4	13400		4.17	$1.65 \times 10^{-4}$	14.9
				2	2000			2215				6.4	6400		2.89	$1.15 \times 10^{-4}$	
				1	1000			1215				4.4	4400		1.15	$4.59 \times 10^{-5}$	
NOV.29	15 to 20	500	3.3	1	1000	230	30	1260				2.8	2800	$2.66 \times 10^{-5}$	2.22	$5.91 \times 10^{-5}$	
				2	2000			2260				5.9	5900		2.61	$6.94 \times 10^{-5}$	
				5	5000			5260				7.0	7000		1.33	$3.54 \times 10^{-5}$	2.8
				4	4000			4260				6.4	6400		1.50	$4.0 \times 10^{-5}$	
				2	2000			2260				5.8	5800		2.97	$6.83 \times 10^{-5}$	
				1	1000			1260				4.8	4800		3.81	$1.01 \times 10^{-4}$	
NOV.30	20 to 25	500	3.3	1	1000	300	30	1330				5.2	5200	$2.66 \times 10^{-5}$	4.66	$1.24 \times 10^{-4}$	
				3	3000			3330				24.7	24700		7.42	$1.97 \times 10^{-4}$	
				5	5000			5330				40.2	40200		7.54	$2.01 \times 10^{-4}$	16.1
				3	3000			3330				26.5	26500		7.96	$2.12 \times 10^{-4}$	
				1	1000			1330				16.5	16500		12.41	$3.30 \times 10^{-4}$	
DEC.1	25 to 30	500	3.3	1	1000	465	50	1495				3.2	3200	$2.66 \times 10^{-5}$	2.14	$5.69 \times 10^{-5}$	
				3	3000			3495				6.4	6400		1.83	$4.87 \times 10^{-5}$	
				5	5000			5495				7.4	7400		1.35	$3.58 \times 10^{-5}$	
				7	7000			7495				7.9	7900		1.05	$2.80 \times 10^{-5}$	2.3
				4	4000			4495				6.8	6800		1.51	$4.02 \times 10^{-5}$	
				2	2000			2495				5.5	5500		2.20	$5.86 \times 10^{-5}$	



**RECORD OF WATER PRESSURE TEST**

PROJECT: SAFT BANDAKI PROJECT LOCALITY: DAMSITE B: LEFT BANK  
 BORE-HOLE No. B81 - 5 (1) GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L - m	HOLE RADIUS r - cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>0</sub> - cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> - cm	TOTAL HEAD H <sub>0</sub> + H <sub>g</sub> + H <sub>g</sub> - cm	WATER LEAKAGE		CALCULATING CONST. $C = \frac{2.3 \times 10^{-5} \times L \log L}{r^2}$ C - min/cm <sup>2</sup> sec	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY $K = Q/H \times C$ cm/sec	LUCSON UNIT $L_u = Q/L \times R \times P$
				P - kg/cm <sup>2</sup>	H <sub>p</sub> - cm				Q' - l/min	Q - cm <sup>3</sup> /min				
FEB.14	10 to 15	500	3.3	1	1000	710	75	1785	0	0	$2.66 \times 10^{-5}$	0		
				2	2000			2785	0	0		0		
				3	3000			3785	0.6	600		0.16	$4.22 \times 10^{-6}$	0.4
				2	2000			2785	0	0		0		
				1	1000			1785	0	0		0		
FEB.15	15 to 20	500	3.3	1	1000	980	75	2055	0	0	$2.66 \times 10^{-5}$	0		
				2.5	2500			3555	0	0		0		
				4	4000			4055	0	0		0		
				2.5	2500			3555	1.3	1300		0.52	$1.38 \times 10^{-5}$	1.04
				1	1000			1055	0	0		0		
FEB.15	20 to 25	500	3.3	1	1000	980	75	2055	0	0	$2.66 \times 10^{-5}$	0		
				3	3000			4055	0.9	900		0.22	$5.90 \times 10^{-6}$	
				5	5000			6055	1.6	1600		0.26	$7.03 \times 10^{-6}$	0.64
				3	3000			4055	1.0	1000		0.25	$6.56 \times 10^{-6}$	
				1	1000			2055	0	0		0		
FEB.16	25 to 30	500	3.3	1	1000	1390	75	2465	1.3	1300	$2.66 \times 10^{-5}$	0.53	$1.40 \times 10^{-5}$	
				3	3000			4465	2.9	2900		0.65	$1.73 \times 10^{-5}$	
				5	5000			6465	4.2	4200		0.65	$2.72 \times 10^{-5}$	
				7	7000			8465	5.9	5900		0.70	$1.85 \times 10^{-5}$	1.69
				4	4000			5465	3.7	3700		0.68	$1.80 \times 10^{-5}$	
				2	2000			3465	2.1	2100		0.61	$1.61 \times 10^{-5}$	
FEB.17	30 to 35	500	3.3	2	2000	1340	75	3115	18.6	18600	$2.66 \times 10^{-5}$	5.45	$1.45 \times 10^{-4}$	
				4	4000			5115	28.1	28100		5.19	$1.28 \times 10^{-4}$	
				6	6000			7115	36.9	36900		4.98	$1.22 \times 10^{-4}$	10.78
				8	8000			9115	43.1	43100		4.58	$1.22 \times 10^{-4}$	
				5	5000			6115	31.2	31200		4.86	$1.29 \times 10^{-4}$	
				3	3000			4115	16.7	16700		3.78	$1.01 \times 10^{-4}$	

**RECORD OF WATER PRESSURE TEST**

PROJECT

LOCALITY

BORE-HOLE No. BB-5 (2)

GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L m	WOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub> H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{Q} \times \frac{1}{r} \times \frac{1}{1-\log \frac{1}{r}}$ C min/cm <sup>2</sup> sec	Q m <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/RxC mbret	LUGEON UNIT L=Q <sup>2</sup> /L <sup>2</sup> HXP
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q' l/min	Q cm <sup>3</sup> /min				
FEB.19	35 to 40	500	3.3	2	2000	1000	75	3075	0.9	900	$2.66 \times 10^{-5}$	0.29	$7.79 \times 10^{-6}$	
				4	4000			5075	2.0	2000		0.39	$1.05 \times 10^{-5}$	
				7	7000			8075	3.1	3100		0.38	$1.02 \times 10^{-5}$	
				9	9000			10075	4.0	4000		0.40	$1.06 \times 10^{-5}$	0.89
				6	6000			7075	3.1	3100		0.44	$1.17 \times 10^{-5}$	
				3	3000			4075	2.5	2500		0.61	$1.63 \times 10^{-5}$	
FEB.20	40 to 45	500	3.3	2	2000	1000	75	3075	1.4	1400	$2.66 \times 10^{-5}$	0.46	$1.21 \times 10^{-5}$	
				5	5000			6075	3.0	3000		0.49	$1.31 \times 10^{-5}$	
				8	8000			9075	4.6	4600		0.51	$1.35 \times 10^{-5}$	
				10	10000			11075	5.7	5700		0.51	$1.37 \times 10^{-5}$	1.14
				7	7000			8075	4.9	4900		0.61	$1.61 \times 10^{-5}$	
				3	3000			4075	3.3	3300		0.81	$2.15 \times 10^{-5}$	
FEB.21	45 to 50	500	3.3	2	2000	1310	75	3385	0	0	$2.66 \times 10^{-5}$	0		
				5	5000			6385	2.4	2400		0.38	$1.00 \times 10^{-5}$	
				8	8000			9385	5.0	5000		0.53	$1.42 \times 10^{-5}$	
				10	10000			11385	5.9	5900		0.52	$1.38 \times 10^{-5}$	1.18
				7	7000			8385	4.6	4600		0.55	$1.46 \times 10^{-5}$	
				3	3000			4385	1.0	1000		0.29	$6.07 \times 10^{-6}$	

**RECORD OF WATER PRESSURE TEST**

PROJECT SAPT GANDAKI PROJECT  
BORE-HOLE No. B81 - 7 (-)

LOCALITY DAMSITE C; LEFT BANK  
GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH m	HOLE RADIUS cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE cm	PRESSURE GAUGE HEIGHT	TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub>		WATER LEAKAGE Q cm <sup>3</sup> /min	CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L}{2.7}$	Q H	COEFFICIENT OF PERMEABILITY $K = \frac{Q}{H \times C \times \text{area}}$	LUGEON UNIT $L_u = \frac{Q}{L \times H \times \Delta P}$	
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm			H <sub>s</sub> cm	H <sub>g</sub> cm						C min/cm <sup>2</sup> sec
FEB. 27	20 to 25	500	3.3	1	1000	2040	25	3065	0.6	600	$2.66 \times 10^{-5}$	0.20	$5.20 \times 10^{-6}$		
				3	3000			5065	21.4	21400	4.23			$1.12 \times 10^{-4}$	
				5	5000			7065	33.7	23700	4.77			$1.27 \times 10^{-4}$	13.48
				3	3000			5065	21.5	21500	4.24			$1.13 \times 10^{-4}$	
				1	1000			3065	1.1	1100	0.36			$9.55 \times 10^{-5}$	
FEB. 28	25 to 30	500	3.3	1	1000	2040	25	3065	0.6	600	$2.66 \times 10^{-5}$	0.20	$5.21 \times 10^{-6}$		
				3	3000			5065	1.2	1200	0.24			$6.30 \times 10^{-5}$	
				5	5000			7065	1.4	1400	0.20			$5.27 \times 10^{-5}$	
				7	7000			9065	2.2	2200	0.24			$6.46 \times 10^{-5}$	0.63
				4	4000			6065	1.1	1100	0.18			$4.82 \times 10^{-6}$	
MAR. 1	30 to 35	500	3.3	2	2000			4065	1.2	1200		0.30	$7.85 \times 10^{-6}$		
				2	2000	2040	25	4065	1.4	1400		$2.66 \times 10^{-5}$	0.24	$9.16 \times 10^{-6}$	
				4	4000			6065	4.5	4500	0.74			$1.97 \times 10^{-5}$	
				6	6000			8065	8.6	8600	1.07			$2.84 \times 10^{-5}$	
				8	8000			10065	27.2	27200	2.70			$7.19 \times 10^{-5}$	6.8
MAR. 2	35 to 40	500	3.3	5	5000			7065	19.2	19200		2.82	$7.49 \times 10^{-5}$		
				3	3000			5065	10.9	10900				$5.72 \times 10^{-5}$	
				2	2000	2040	25	4065	2.1	2100		$2.66 \times 10^{-5}$	0.52	$1.37 \times 10^{-5}$	
				4	4000			6065	5.2	5100				$2.24 \times 10^{-5}$	
				7	7000			9065	6.7	6700				$1.97 \times 10^{-5}$	
				9	9000			11065	8.0	8000			$1.92 \times 10^{-5}$	1.78	
				6	6000			8065	6.4	6400				$2.11 \times 10^{-5}$	
				3	3000			5065	4.7	4700				$2.47 \times 10^{-5}$	





**RECORD OF WATER PRESSURE TEST**

PROJECT: SAPT GANDAKI PROJECT

LOCALITY: DAMSITE A; RIGHT BANK

BORE-HOLE No. B81 - 8 (1)

GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>i</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>g</sub> + H <sub>i</sub> + H <sub>e</sub> H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L^2 \times H_e}{2.7 \times H_e}$ C ml/min	Q H cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/H×C m/sec	LUGEON UNIT L <sub>u</sub> =Q'/L×H×D <sup>2</sup>
				HEAD P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q' l/min	Q cm <sup>3</sup> /min				
NOV.16	5 - 10	500	3.3	1	1000	310	25	1335	0.2	200	2.66 × 10 <sup>-5</sup>	0.15	3.99 × 10 <sup>-6</sup>	
				2	2000			2335	1.0	1000		0.43	1.14 × 10 <sup>-5</sup>	1.0
				1	1000			1335	0.5	500		0.37	9.96 × 10 <sup>-6</sup>	
NOV.16	10 - 15	500	3.3	1	1000	310	25	1335	1.1	1100	2.66 × 10 <sup>-5</sup>	0.82	2.19 × 10 <sup>-5</sup>	
				2	2000			2335	1.6	1500		0.69	1.82 × 10 <sup>-5</sup>	
				3	3000			3335	1.7	1700		0.51	1.36 × 10 <sup>-5</sup>	1.1
				2	2000			2335	1.2	1200		0.51	1.37 × 10 <sup>-5</sup>	
				1	1000			1335	0.8	800		0.67	1.79 × 10 <sup>-5</sup>	
NOV.17	15 - 20	500	3.3	1	1000	310	25	1335	1.2	1200	2.66 × 10 <sup>-5</sup>	0.80	2.39 × 10 <sup>-5</sup>	
				2.5	2500			2835	3.4	3400		1.20	3.19 × 10 <sup>-5</sup>	
				4	4000			4335	6.5	6500		1.50	3.99 × 10 <sup>-5</sup>	3.3
				2.5	2500			2835	3.2	3200		1.16	3.10 × 10 <sup>-5</sup>	
				1	1000			1335	1.1	1100		0.82	2.19 × 10 <sup>-5</sup>	
NOV.18	20 - 25	500	3.3	1	1000	350	25	1375	1.1	1100	2.66 × 10 <sup>-5</sup>	0.80	2.13 × 10 <sup>-5</sup>	
				3	3000			3375	4.4	4400		1.30	3.47 × 10 <sup>-5</sup>	
				5	5000			5375	18.0	18000		2.35	8.91 × 10 <sup>-5</sup>	7.2
				3	3000			3375	8.8	8800		2.61	6.94 × 10 <sup>-5</sup>	
				1	1000			1375	3.0	3000		2.18	5.80 × 10 <sup>-5</sup>	
NOV.19	25 - 30	500	3.3	1	1000	500	25	1525	2.9	2900	2.66 × 10 <sup>-5</sup>	1.90	5.06 × 10 <sup>-5</sup>	
				3	3000			3525	9.8	9800		2.78	7.10 × 10 <sup>-5</sup>	
				5	5000			5525	13.5	13500		2.44	6.50 × 10 <sup>-5</sup>	
				7	7000			7525	26.5	26500		3.52	9.37 × 10 <sup>-5</sup>	7.6
				4	4000			4525	12.0	12000		2.65	7.05 × 10 <sup>-5</sup>	
				2	2000			2525	5.6	5600		2.22	5.90 × 10 <sup>-5</sup>	
NOV.21	30 - 35	500	3.3	2	2000	450	25	1575	24.6	24600	2.66 × 10 <sup>-5</sup>	15.62	4.15 × 10 <sup>-4</sup>	
				4	4000			3575	10.8	10800		11.41	3.04 × 10 <sup>-4</sup>	20.4



# RECORD OF WATER PRESSURE TEST

PROJECT: SAKT GANDAKI PROJECT  
BORE-HOLE No. BBI - 9 (L)

LOCALITY: DAMSITE A: TEST BANK  
GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE CHANGE HEIGHT H <sub>p</sub> cm	TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub> H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.30 \times 10^{-5} \times L \times \log \frac{H_0}{H_1}}{r}$ C min/m <sup>2</sup> sec	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/HK/C m/sec	LUCEON UNIT L=Q/(LHKW)
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q l/min	Q cm <sup>3</sup> /min				
OCT.26	9.5 - 15	550	3.3	1	1000	650	40	1670	6.6	6600	$2.66 \times 10^{-5}$	3.95	$9.72 \times 10^{-5}$	
				2	2000			2670	2.8	9800		3.67	$9.03 \times 10^{-5}$	
				3	3000			3670	12.2	12200		3.32	$8.18 \times 10^{-5}$	7.4
				4	4000			4670	9.4	9400		3.52	$8.66 \times 10^{-5}$	
				5	5000			5670	6.5	6500		3.89	$9.57 \times 10^{-5}$	
				6	6000			6670	2.9	2900		1.74	$4.62 \times 10^{-5}$	
				7	7000			7670	4.9	4900		1.84	$4.88 \times 10^{-5}$	
OCT.31	15 - 20	500	3.3	1	1000	650	40	1670	3.2	3200	$2.66 \times 10^{-5}$	1.92	$5.20 \times 10^{-5}$	
				2	2000			2670	7.9	7900		1.80	$4.78 \times 10^{-5}$	
				3	3000			3670	9.4	9400		2.01	$5.35 \times 10^{-5}$	4.7
				4	4000			4670	7.8	7800		2.13	$5.65 \times 10^{-5}$	
				5	5000			5670	4.9	4900		1.84	$4.88 \times 10^{-5}$	
				6	6000			6670	3.2	3200		1.92	$5.20 \times 10^{-5}$	
				7	7000			7670	3	3000		1.80	$4.78 \times 10^{-5}$	
OCT.31	20 - 25	500	3.3	1	1000	650	40	1670	5.2	5200		2.51	$6.67 \times 10^{-5}$	
				2	2000			2670	14.8	14800		2.61	$6.94 \times 10^{-5}$	5.9
				3	3000			3670	13.9	13900		2.76	$7.35 \times 10^{-5}$	
				4	4000			4670	7.3	7300		2.73	$7.27 \times 10^{-5}$	
				5	5000			5670	4.2	4200		2.46	$6.53 \times 10^{-5}$	
				6	6000			6670	5.3	5300		3.17	$8.89 \times 10^{-5}$	
				7	7000			7670	10.5	10500		2.86	$8.01 \times 10^{-5}$	
NOV.1	25 - 29.7	470	3.3	1	1000	650	40	1670	15.9	15900		2.80	$7.25 \times 10^{-5}$	
				2	2000			2670	19.1	19100		2.49	$6.97 \times 10^{-5}$	5.8
				3	3000			3670	13	13000		2.78	$7.79 \times 10^{-5}$	
				4	4000			4670	8.2	8200		3.07	$8.60 \times 10^{-5}$	
				5	5000			5670	5.4	5400		3.23	$9.05 \times 10^{-5}$	
				6	6000			6670	12.4	12400		4.64	$1.24 \times 10^{-4}$	
				7	7000			7670	16.2	16200		3.47	$9.23 \times 10^{-5}$	
NOV.2	30 - 35	500	3.3	1	1000	650	40	1670	25.8	25800		3.42	$9.09 \times 10^{-5}$	
				2	2000			2670	28.8	28800		3.75	$9.99 \times 10^{-5}$	8.2
				3	3000			3670	20.8	20800		3.67	$9.76 \times 10^{-5}$	
				4	4000			4670	15.8	15800		4.31	$1.15 \times 10^{-4}$	
				5	5000			5670	13.4	13400		5.02	$1.33 \times 10^{-4}$	
				6	6000			6670						
				7	7000			7670						



### RECORD OF WATER PRESSURE TEST

PROJECT SAPT GANDAKI PROJECT  
 BORE-HOLE No. B81 - 12 (1)

LOCALITY DAMSITE B - LEFT BANK  
 GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>p</sub> +H <sub>g</sub> +H <sub>s</sub> H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L \times r^2}{T}$ C min/cm <sup>2</sup> sec	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/HxC cm/sec	LOGEON UNIT Ls=Q/L-HXK
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q' l/min	Q cm <sup>3</sup> /min				
JAN.18	15 to 20	500	3.3	1	1000	250	50	1400	2.7	2700	2.66 x 10 <sup>-5</sup>	1.93	5.13 x 10 <sup>-5</sup>	
				2.5	2000			2900	4.4	4400		1.92	4.04 x 10 <sup>-5</sup>	
				4	4000			4400	6.8	6800		1.95	4.12 x 10 <sup>-5</sup>	3.4
				2.5	2500			2900	4.7	4700		1.62	4.31 x 10 <sup>-5</sup>	
				1	1000			1400	2.7	2700		1.93	5.13 x 10 <sup>-5</sup>	
JAN.19	20 to 25	500	3.3	1	1000	380	50	1330	2.7	2700	2.66 x 10 <sup>-5</sup>	2.03	5.40 x 10 <sup>-5</sup>	
				3	3000			3330	5.0	5000		1.50	3.99 x 10 <sup>-5</sup>	
				5	5000			5330	5.5	5500		1.03	2.74 x 10 <sup>-5</sup>	2.2
				3	3000			3330	4.3	4300		1.29	3.43 x 10 <sup>-5</sup>	
				1	1000			1330	1.9	1900		1.43	3.80 x 10 <sup>-5</sup>	
JAN.20	25 to 30	500	3.3	1	1000	310	50	1360	0	0	2.66 x 10 <sup>-5</sup>	-		
				3	3000			3360	4.8	4800		1.43	3.80 x 10 <sup>-5</sup>	
				5	5000			5360	5.8	5800		1.02	2.87 x 10 <sup>-5</sup>	
				7	7000			7360	34.8	34800		4.73	1.26 x 10 <sup>-4</sup>	9.9
				4	4000			4360	7.6	7600		1.74	4.63 x 10 <sup>-5</sup>	
				2	2000			2360	0	0		-		
JAN.21	30 to 35	500	3.3	2	2000	380	50	2430	5.4	5400	2.66 x 10 <sup>-5</sup>	2.22	5.91 x 10 <sup>-5</sup>	
				4	4000			4430	8.7	8700		1.96	5.21 x 10 <sup>-5</sup>	
				6	6000			6430	22.6	22600		3.51	9.34 x 10 <sup>-5</sup>	
				8	8000			8430	44.0	44000		5.22	1.39 x 10 <sup>-4</sup>	11.0
				5	5000			5430	17.8	17800		3.22	8.72 x 10 <sup>-5</sup>	
				3	3000			3430	0.9	900		0.26	6.92 x 10 <sup>-6</sup>	
JAN.22	34.9 to 39.9	500	3.3	2	2000	480	50	2530	3.9	3900	2.66 x 10 <sup>-5</sup>	1.54	4.10 x 10 <sup>-5</sup>	
				4	4000			4530	5.3	5300		1.17	3.21 x 10 <sup>-5</sup>	
				7	7000			7530	13.7	13700		1.82	4.84 x 10 <sup>-5</sup>	
				9	9000			9530	55.0	55000		5.77	1.53 x 10 <sup>-4</sup>	12.2
				6	6000			6530	27.2	27200		4.17	1.11 x 10 <sup>-4</sup>	
				3	3000			3530	2.5	2500		0.71	1.89 x 10 <sup>-5</sup>	

**RECORD OF WATER PRESSURE TEST**

PROJECT: SAPU CANDAKI PROJECT LOCALITY: DAMSITE B; LEFT BANK  
 BORE-HOLE No. BSL - 12 (2) GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>t</sub> = H <sub>s</sub> + H <sub>g</sub> cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{2.3} \times \frac{1}{g} \times \frac{1}{\log r}$ C. ml/(cm <sup>2</sup> ·sec)	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K = Q/(H × C) ml/sec	LUGEON UNIT L <sub>u</sub> = Q/L × 8.33 × 10 <sup>4</sup>
				HEAD H <sub>p</sub> cm	PRESSURE P kg/cm <sup>2</sup>				Q' l/min	Q cm <sup>3</sup> /min				
JAN. 23	40 to 45	500	3.3	2000	2	440	50	2490	4.4	4400	2.66 × 10 <sup>-5</sup>	1.77	4.71 × 10 <sup>-5</sup>	
				5000	5			5490	6.0	6000		1.09	2.90 × 10 <sup>-5</sup>	
				8000	8			8490	6.9	6900		0.81	2.15 × 10 <sup>-5</sup>	
				10000	10			10490	10.6	10600		1.01	2.69 × 10 <sup>-5</sup>	2.1
				7000	7			7490	8.0	8000		1.07	2.85 × 10 <sup>-5</sup>	
				3000	3			3490	5.4	5400		1.55	4.22 × 10 <sup>-5</sup>	
JAN. 24	45 to 50	500	3.3	2000	2	410	50	2460	4.5	4500	2.66 × 10 <sup>-5</sup>	1.83	4.95 × 10 <sup>-5</sup>	
				5000	5			5460	6.2	6200		1.14	3.03 × 10 <sup>-5</sup>	
				8000	8			8460	6.0	6000		0.71	1.89 × 10 <sup>-5</sup>	
				10000	10			10460	5.6	5600		0.54	1.44 × 10 <sup>-5</sup>	1.1
				7000	7			7460	6.4	6400		0.86	2.29 × 10 <sup>-5</sup>	
				3000	3			3460	5.2	5200		1.79	4.76 × 10 <sup>-5</sup>	
JAN. 25	50 to 55	500	3.3	2000	2	680	50	2730	4.5	4500	2.66 × 10 <sup>-5</sup>	1.65	4.39 × 10 <sup>-5</sup>	
				5000	5			5730	6.2	6200		1.08	2.87 × 10 <sup>-5</sup>	
				8000	8			8730	6.1	6100		0.70	1.86 × 10 <sup>-5</sup>	
				10000	10			10730	6.6	6600		0.62	1.65 × 10 <sup>-5</sup>	1.3
				7000	7			7730	6.1	6100		0.79	2.10 × 10 <sup>-5</sup>	
				3000	3			3730	5.3	5300		1.42	3.78 × 10 <sup>-5</sup>	
JAN. 28	55 to 60	500	3.3	2000	2	610	50	2660	4.4	4400	2.66 × 10 <sup>-5</sup>	1.65	4.39 × 10 <sup>-5</sup>	
				5000	5			5660	6.2	6200		1.10	2.83 × 10 <sup>-5</sup>	
				8000	8			8660	6.6	6600		0.76	2.02 × 10 <sup>-5</sup>	
				10000	10			10660	6.6	6600		0.62	1.65 × 10 <sup>-5</sup>	1.3
				7000	7			7660	6.0	6000		0.78	2.07 × 10 <sup>-5</sup>	
				3000	3			3660	4.8	4800		1.31	3.48 × 10 <sup>-5</sup>	



# RECORD OF WATER PRESSURE TEST

PROJECT: SAPT GANDAKI PROJECT LOCALITY: DAMSITE B; REVERSED

BORE-HOLE No. B81-13 GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>s</sub> +H <sub>g</sub> +H <sub>g</sub> H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{3.0} \times \frac{1}{2.5} \times \frac{1}{10^5}$ C min/cm <sup>2</sup> sec	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/HX C m/sec	LUCEON UNIT L <sub>u</sub> =Q/L <sub>u</sub> HX10 <sup>10</sup>
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q <sub>z</sub> l/min	Q <sub>cm</sub> m <sup>3</sup> /min				
APR.6	19.5 to 25	550	2.8	1	1000	-590	650	1060	65.7	65700	2.54 x 10 <sup>-5</sup>	61.97	1.58 x 10 <sup>-3</sup>	119.5
APR.7	25 to 30	500			(A packet soaked.)									
APR.8	30 to 35	500	2.8	2	2000	-590	650	2060	0	0	2.75 x 10 <sup>-5</sup>	0		
				4	4000			4060	0	0		0		
				6	6000			6060	0.6	600		0.10	2.75 x 10 <sup>-6</sup>	
				8	8000			8060	0.2	200		0.025	6.87 x 10 <sup>-7</sup>	0.05
				5	5000			5060	0.2	200		0.04	1.10 x 10 <sup>-6</sup>	
				3	3000			3060	0	0		0		
APR.9	35 to 40.35	535	2.8	2	2000	-590	650	2060	0	0	2.60 x 10 <sup>-5</sup>	0		
				4	4000			4060	0	0		0		
				7	7000			7060	0	0		0		
				9	9000			9060	0	0		0	0	0
				6	6000			6060	0	0		0		
				3	3000			3060	0	0		0		
APR.9	40 to 44.55	455	2.8	2	2000	-590	650	2060	0	0	2.96 x 10 <sup>-5</sup>	0		
				5	5000			5060	0	0		0		
				8	8000			8060	0	0		0		
				10	10000			10060	0.25	250		0.025	7.41 x 10 <sup>-7</sup>	0.05
				7	7000			7060	0	0		0		
				3	3000			3060	0	0		0		
APR.10	44.5 to 50	550	2.8	2	2000	-590	650	2060	0	0	2.54 x 10 <sup>-5</sup>	0		
				5	5000			5060	0.35	350		0.069	1.76 x 10 <sup>-6</sup>	
				8	8000			8060	0.7	700		0.087	2.21 x 10 <sup>-6</sup>	0.15
				10	10000			10060	0.85	850		0.084	2.14 x 10 <sup>-6</sup>	
				7	7000			7060	0.35	350		0.050	1.27 x 10 <sup>-6</sup>	
				3	3000			3060	0	0		0		

**RECORD OF WATER PRESSURE TEST**

PROJECT: SAPT. GANDAKI PROJECT LOCALITY: DAMSITE C. WEST BANK  
 BORE-HOLE No. BSL - 14 (1) GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L, cm	HOLE RADIUS r, cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE Hs, cm	PRESSURE GAUGE HEIGHT		TOTAL HEAD H <sub>0</sub> = H <sub>1</sub> + H <sub>2</sub> , cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{L} \times \frac{1}{60} \times \frac{1}{100} \times \frac{1}{r^2}$	COEFFICIENT OF PERMEABILITY K = Q/RXC cm/sec	LUGEON UNIT L <sub>u</sub> = Q/L · RX10 <sup>6</sup>
				P, kg/cm <sup>2</sup>	H <sub>1</sub> , cm		H <sub>2</sub> , cm	Q, l/min		Q, cm <sup>3</sup> /min	C, ml/(cm <sup>2</sup> ·sec)			
DEC. 28	2.5 - 7.5	500	3.3	1	1000	150	20	1170	0.4	400	2.66 × 10 <sup>-5</sup>	0.34	9.09 × 10 <sup>-6</sup>	0.6
				2	2000			2170	0.6	600		0.28	7.35 × 10 <sup>-6</sup>	
				1	1000			1170	0.4	400		0.34	9.09 × 10 <sup>-6</sup>	
DEC. 29	5.00 - 10.00	500	3.3	1	1000	180	20	1200	0.1	100	2.66 × 10 <sup>-5</sup>	0.083	2.22 × 10 <sup>-6</sup>	
				2	2000			2200	0.1	100		0.045	1.21 × 10 <sup>-6</sup>	0.1
				1	1000			1200	0	0		0	0	
DEC. 29	10.00 - 15.00	500	3.3	1	1000	180	20	1200	1.7	1700	2.66 × 10 <sup>-5</sup>	1.42	3.77 × 10 <sup>-5</sup>	
				2	2000			2200	2.8	2800		1.27	3.39 × 10 <sup>-5</sup>	
				3	3000			3200	4.2	4200		1.31	3.65 × 10 <sup>-5</sup>	2.8
				2	2000			2200	2.5	2500		1.14	3.02 × 10 <sup>-5</sup>	
				1	1000			1200	0.8	800		0.67	1.77 × 10 <sup>-5</sup>	
DEC. 30	15.00 - 20.00	500	3.3	1	1000	770	20	1790	3.4	3400	2.66 × 10 <sup>-5</sup>	1.90	5.05 × 10 <sup>-5</sup>	
				2.5	2500			3290	5.2	5200		1.58	4.20 × 10 <sup>-5</sup>	
				4	4000			4790	7.2	7200		1.90	4.00 × 10 <sup>-5</sup>	3.6
				2.5	2500			3290	5.0	5000		1.52	4.04 × 10 <sup>-5</sup>	
				1	1000			1790	2.4	2400		1.34	3.57 × 10 <sup>-5</sup>	
DEC. 30	20.00 - 25.00	500	3.3	1	1000	520	20	1540	20.8	20800	2.66 × 10 <sup>-5</sup>	13.51	3.59 × 10 <sup>-4</sup>	
				3	3000			3540	40.2	40200		11.26	3.02 × 10 <sup>-4</sup>	
				5	5000			5540	55.4	55400		10.0	2.66 × 10 <sup>-4</sup>	22.2
				3	3000			3540	38.	38000		10.73	2.86 × 10 <sup>-4</sup>	
				1	1000			1540	15	15000		9.74	2.59 × 10 <sup>-4</sup>	
DEC. 31	25.00 - 30.00	500	3.3	1	1000	1050	20	2080	6	6000	2.66 × 10 <sup>-5</sup>	2.88	7.67 × 10 <sup>-5</sup>	
				3	3000			4080	12.1	12100		2.97	7.89 × 10 <sup>-5</sup>	
				5	5000			6080	16.8	16800		2.76	7.35 × 10 <sup>-5</sup>	6.5
				2	2000			3080	22.8	22800		2.82	7.51 × 10 <sup>-5</sup>	
				4	4000			5080	14.5	14500		2.85	7.59 × 10 <sup>-5</sup>	
				2	2000			3080	10.2	10200		3.31	8.81 × 10 <sup>-5</sup>	

**RECORD OF WATER PRESSURE TEST**

PROJECT \_\_\_\_\_ LOCALITY \_\_\_\_\_  
 BORE-HOLE No. BS1 - 14 (2) \_\_\_\_\_ GROUND WATER LEVEL \_\_\_\_\_

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>p</sub> + H <sub>s</sub> + H <sub>g</sub> H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L \times \log \frac{L}{r}}{K \times H}$ C min/cm <sup>2</sup> sec	Q H cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/HxC/ctec Le=Q/L.HxH <sub>p</sub>	LUCSON UNIT
				P kg/cm <sup>2</sup>	H <sub>p</sub> cm				Q' / min	Q cm <sup>3</sup> /min				
JAN.1	30.00 - 35.00	500	3.3	2	2000	900	20	2920	0.2	200	2.66 x 10 <sup>-5</sup>	0.068	1.82 x 10 <sup>-6</sup>	
				4	4000			4920	0.4	400		0.081	2.16 x 10 <sup>-6</sup>	
				6	6000			6920	0.4	400		0.098	1.54 x 10 <sup>-6</sup>	
				8	8000			8920	0.7	700		0.078	2.09 x 10 <sup>-6</sup>	0.2
				5	5000			5920	0.6	600		0.101	2.70 x 10 <sup>-6</sup>	
				3	3000			3920	0.4	400		0.102	2.72 x 10 <sup>-6</sup>	
JAN.2	35.00 - 40.00	500	3.3	2	2000	1100	20	3120	0.3	300	2.66 x 10 <sup>-5</sup>	0.096	2.56 x 10 <sup>-6</sup>	
				4	4000			5120	0.9	900		0.18	4.88 x 10 <sup>-6</sup>	
				7	7000			8120	1.3	1300		0.16	4.26 x 10 <sup>-6</sup>	
				9	9000			10120	2.5	2500		0.25	6.57 x 10 <sup>-6</sup>	0.6
				6	6000			7120	2.1	2100		0.29	7.85 x 10 <sup>-6</sup>	
				3	3000			4120	1.4	1400		0.34	9.04 x 10 <sup>-6</sup>	
JAN.3	40.00 - 45.00	500	3.3	2	2000	950	20	2970	0.1	100	2.66 x 10 <sup>-5</sup>	0.034		
				5	5000			5970	0.1	100		0.017		
				8	8000			8970	0.1	100		0.011	Less than	
				10	10000			10970	0.1	100		0.009	1 x 10 <sup>-6</sup>	0.02
				5	5000			5970	0.1	100		0.017	(impermeable)	
				3	3000			3970	0.1	100		0.025		
JAN.4	45.00 - 50.00	500	3.3	2	2000	850	20	2880	0.1	100	2.66 x 10 <sup>-5</sup>			
				5	5000			5880	0.1	100				
				8	8000			8880	0	0			Less than	
				10	10000			10880	0	0			1 x 10 <sup>-6</sup>	0.0
				5	5000			5880	0	0			(impermeable)	
				3	3000			3880	0	0				

**RECORD OF WATER PRESSURE TEST**

PROJECT: SAFT GANDAKI PROJECT  
BORE-HOLE No. B81-15 (1)

LOCALITY: DANSIITE B; REVERED

GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE Hs cm	PRESSURE HEIGHT FROM WATER LEVEL		TOTAL HEAD Hs+Hw+Hg cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{2.3} \times \frac{1}{2.3} \times \frac{1}{2.3}$	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K=Q/RxS cm/sec	LUGBON UNIT Ls=Q/LxHxT
				HEAD Hp cm	PRESSURE P kg/cm <sup>2</sup>		HEAD Hw cm	HEIGHT Hg cm		Q' l/min	Q cm <sup>3</sup> /min				
APR.6	15 to 20	500	3.3	1	1000	110	110	110	110	14.2	14200	2.66 x 10 <sup>-5</sup>	10.50	3.40 x 10 <sup>-4</sup>	
				2.5	2500			2610	2610	27.4	27400		8.61	2.79 x 10 <sup>-4</sup>	
				4	4000			4110	4110	35.4	35400		9.23	2.29 x 10 <sup>-4</sup>	17.7
				2.5	2500			2610	2610	24.1	24100		11.44	3.04 x 10 <sup>-4</sup>	
				1	1000			1110	1110	12.7	12700				
APR.7	20 to 25	500	3.3	(A packet leaked.)											
APR.7	25 to 30	500	3.3	(A packet leaked.)											
APR.8	30 to 35	500	3.3	2	2000	110	110	2110	2110	0	0	2.66 x 10 <sup>-5</sup>	0		
				4	4000			4110	4110	0.1	100		0.024	6.39 x 10 <sup>-7</sup>	
				6	6000			6110	6110	0.6	600		0.098	2.61 x 10 <sup>-6</sup>	
				8	8000			8110	8110	1.35	1350		0.166	4.42 x 10 <sup>-6</sup>	0.34
				5	5000			5110	5110	0.5	500		0.098	2.61 x 10 <sup>-6</sup>	
				3	3000			3110	3110	0	0		0		
APR.8	35.65 to 40.65	500	3.3	2	2000	110	110	2110	2110	0.05	50	2.66 x 10 <sup>-5</sup>	0.024	6.39 x 10 <sup>-7</sup>	
				4	4000			4110	4110	0.2	200		0.049	1.30 x 10 <sup>-6</sup>	
				7	7000			7110	7110	1.1	1100		0.155	4.12 x 10 <sup>-6</sup>	
				9	9000			9110	9110	1.75	1750		0.192	5.11 x 10 <sup>-6</sup>	0.39
				6	6000			6110	6110	0.75	750		0.123	3.27 x 10 <sup>-6</sup>	
				3	3000			3110	3110	0	0		0		
APR.9	40.3 to 45.3	500	3.3	2	2000	110	110	2110	2110	0.15	150	2.66 x 10 <sup>-5</sup>	0.071	1.89 x 10 <sup>-6</sup>	
				5	5000			5110	5110	0.65	650		0.127	3.38 x 10 <sup>-6</sup>	
				8	8000			8110	8110	1.15	1150		0.142	3.78 x 10 <sup>-6</sup>	
				10	10000			10110	10110	1.6	1600		0.158	4.20 x 10 <sup>-6</sup>	0.32
				7	7000			7110	7110	0.85	850		0.120	3.19 x 10 <sup>-6</sup>	
				3	3000			3110	3110	0.1	100		0.032	8.51 x 10 <sup>-7</sup>	



**RECORD OF WATER PRESSURE TEST**

PROJECT SAFI GANDAKI PROJECT  
 BORE-HOLE No. BB1-16 (1)

LOCALITY DASITE G. RIGHT BANK  
 GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub> cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L \times \log \frac{H}{H_0}}{C}$	Q H	COEFFICIENT OF PERMEABILITY K=Q/HK C cm/sec	LUGEON UNIT L <sub>u</sub> =Q/L-HR <sup>1/2</sup>
				HEAD H <sub>p</sub> cm	PRESSURE P kg/cm <sup>2</sup>				Q' / (m <sup>3</sup> /min)	Q cm <sup>3</sup> /min				
MAR.26	12 to 20	800	3.3	1000	1	630	0	1630	3.55	3550	1.82 x 10 <sup>-5</sup>	2.18	3.96 x 10 <sup>-5</sup>	
				2500	2.5			3130	8.7	8700		2.78	5.06 x 10 <sup>-5</sup>	
				4000	4			4630	15.7	15700		3.39	6.16 x 10 <sup>-5</sup>	4.91
				2500	2.5			3130	11.95	11950		3.82	6.95 x 10 <sup>-5</sup>	
				1000	1			1630	3.1	3100		1.90	3.46 x 10 <sup>-5</sup>	
MAR.27	20 to 25	500	3.3	1000	1	890	0	1890	4.0	4000	2.66 x 10 <sup>-5</sup>	2.12	5.64 x 10 <sup>-5</sup>	
				3000	3			3890	16.15	16150		4.15	1.10 x 10 <sup>-5</sup>	
				5000	5			5890	25.45	25450		4.32	1.15 x 10 <sup>-4</sup>	10.2
				3000	3			3890	14.15	14150		3.64	9.68 x 10 <sup>-5</sup>	
				1000	1			1890	0.5	500		0.265	7.05 x 10 <sup>-6</sup>	
MAR.28	25 to 30	500	3.3	1000	1	890	0	1890	3.65	3650	2.66 x 10 <sup>-5</sup>	1.93	5.13 x 10 <sup>-5</sup>	
				3000	3			3890	4.7	4700		1.21	3.22 x 10 <sup>-5</sup>	
				5000	5			5890	17.2	17200		2.92	7.77 x 10 <sup>-5</sup>	6.88
				7000	7	(The pressure could not be applied.)								
				4000	4			4890	14.1	14100		2.88	7.66 x 10 <sup>-5</sup>	
				2000	2			2890	7.6	7600		2.53	7.00 x 10 <sup>-5</sup>	
MAR.29	30 to 35	500	3.3	2000	2	1065	0	3065	7.1	7100	2.66 x 10 <sup>-5</sup>	2.32	6.17 x 10 <sup>-5</sup>	
				4000	4			5065	10.05	10050		1.98	5.27 x 10 <sup>-5</sup>	
				6000	6			7065	29.9	29900		4.23	1.13 x 10 <sup>-4</sup>	
				7000	7			8065	43.8	43800		5.43	1.44 x 10 <sup>-4</sup>	12.5
				5000	5			6065	28.4	28400		4.68	1.25 x 10 <sup>-4</sup>	
				3000	3			4065	13.85	13850		3.41	9.07 x 10 <sup>-5</sup>	
MAR.30	35 to 40	500	3.3	2000	2	1065	0	3065	4.45	4450	2.66 x 10 <sup>-5</sup>	1.45	3.86 x 10 <sup>-5</sup>	
				4000	4			5065	5.0	5000		0.987	2.63 x 10 <sup>-5</sup>	
				7000	7			8065	10.4	10400		1.29	3.43 x 10 <sup>-5</sup>	
				9000	9			10065	11.05	11050		1.10	2.93 x 10 <sup>-5</sup>	2.46
				6000	6			7065	8.6	8600		1.22	3.25 x 10 <sup>-5</sup>	
				3000	3			4065	5.6	5600		1.38	3.67 x 10 <sup>-5</sup>	





**RECORD OF WATER PRESSURE TEST**

PROJECT SAFT GANDAKI PROJECT  
BORE-HOLE No. 381-17 (1)

LOCALITY DAMSTE B; RIGHT BANK  
GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L, m	HOLE RADIUS r, cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> , cm	PRESSURE GAUGE HEIGHT		TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub>		WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{L} \times \frac{r^2}{20} \times \frac{1}{\log \frac{L}{r}}$	COEFFICIENT OF PERMEABILITY K=Q/HK C/sec	LUCEON UNIT Lu=Q/L.HxH <sub>p</sub>
				P, kg/cm <sup>2</sup>	H <sub>p</sub> , cm		H <sub>g</sub> , cm	H, cm	Q', l/min	Q, cm <sup>3</sup> /min	Q H cm <sup>3</sup> /min				
MAR.19	10 to 15	500	3.3	1	1000	600	-40	1560	0.6	600	2.66 x 10 <sup>-5</sup>	0.38	1.02 x 10 <sup>-5</sup>		
				2	2000			2560	2.0	2000		0.78	2.08 x 10 <sup>-5</sup>		
				3	3000			3560	3.6	3600		1.01	2.69 x 10 <sup>-5</sup>	2.4	
				2	2000			2560	1.8	1800		0.70	1.87 x 10 <sup>-5</sup>		
				1	1000			1560	0.5	500		0.32	8.53 x 10 <sup>-6</sup>		
MAR.20	15 to 20	500	3.3	1	1000	620	-40	1580	0.9	900	2.66 x 10 <sup>-5</sup>	0.57	1.52 x 10 <sup>-5</sup>		
				2.5	2500			3080	0.6	600		0.19	5.18 x 10 <sup>-6</sup>		
				4	4000			4580	2.4	2400		0.52	1.34 x 10 <sup>-5</sup>	1.2	
				2.5	2500			3080	1.7	1700		0.55	1.47 x 10 <sup>-5</sup>		
				1	1000			1580	0.9	900		0.57	1.52 x 10 <sup>-5</sup>		
MAR.20	20 to 25	500	3.3	1	1000	620	-40	1580	0.6	600	2.66 x 10 <sup>-5</sup>	0.38	1.01 x 10 <sup>-5</sup>		
				3	3000			3580	1.1	1100		0.31	8.17 x 10 <sup>-6</sup>		
				5	5000			5580	2.0	2000		0.36	9.54 x 10 <sup>-6</sup>	0.8	
				3	3000			3580	1.1	1100		0.31	8.17 x 10 <sup>-6</sup>		
				1	1000			1580	0.5	500		0.32	8.42 x 10 <sup>-6</sup>		
MAR.20	25 to 30	500	3.3	1	1000	620	-40	1580	0.5	500	2.66 x 10 <sup>-5</sup>	0.32	8.42 x 10 <sup>-6</sup>		
				3	3000			3580	1.6	1600		0.45	1.19 x 10 <sup>-5</sup>		
				5	5000			5580	2.9	2900		0.52	1.38 x 10 <sup>-5</sup>		
				7	7000			7580	4.0	4000		0.53	1.40 x 10 <sup>-5</sup>	1.14	
				4	4000			4580	2.3	2300		0.50	1.34 x 10 <sup>-5</sup>		
				2	2000			2580	0.6	600		0.23	6.19 x 10 <sup>-6</sup>		
MAR.21	30 to 35	500	3.3	2	2000	765	-40	2725	1.4	1400	2.66 x 10 <sup>-5</sup>	0.51	1.37 x 10 <sup>-5</sup>		
				4	4000			4725	1.5	1500		0.32	8.45 x 10 <sup>-6</sup>		
				6	6000			6725	3.3	3300		0.49	1.31 x 10 <sup>-5</sup>		
				8	8000			8725	4.3	4300		0.49	1.31 x 10 <sup>-5</sup>	1.08	
				5	5000			5725	1.5	1500		0.26	6.97 x 10 <sup>-6</sup>		
				3	3000			3725	2.0	2000		0.54	1.43 x 10 <sup>-5</sup>		

**RECORD OF WATER PRESSURE TEST**

PROJECT: SPT GANDAKI PROJECT  
BORE-HOLE No. B81-17 (2)

LOCALITY: DAMSITE B; RIGHT BANK

GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L m	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> cm	TOTAL HEAD H <sub>0</sub> = H <sub>s</sub> + H <sub>g</sub> cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{2.7} \times \frac{L}{50} \times \frac{1}{r^2} \times \frac{1}{\log \frac{1}{r}}$ C min/cm-sec	Q cm <sup>3</sup> /min	COEFFICIENT OF PERMEABILITY K = Q/HXC cm/sec	LUCEON UNIT L <sub>u</sub> = Q/L-HXJP
				PRESSURE P kg/cm <sup>2</sup>	HEAD H <sub>p</sub> cm				Q <sub>1</sub> l/min	Q <sub>2</sub> l/min				
MAR. 21	35 to 40	500	3.3	2	2000	850	-40	2810	1.5	1500	2.66 x 10 <sup>-5</sup>	0.53	1.42 x 10 <sup>-5</sup>	
				4	4000			4810	1.9	1900		0.40	1.05 x 10 <sup>-5</sup>	
				7	7000			7810	2.0	2000		0.26	6.81 x 10 <sup>-6</sup>	
				9	9000			9810	2.8	2800		0.29	7.59 x 10 <sup>-6</sup>	0.62
				6	6000			6810	2.2	2200		0.32	8.60 x 10 <sup>-6</sup>	
				3	3000			3810	1.8	1800		0.47	1.26 x 10 <sup>-5</sup>	
MAR. 22	40 to 45	500	3.3	2	2000	2650	-40	4610	3.7	3700	2.66 x 10 <sup>-5</sup>	0.80	2.14 x 10 <sup>-5</sup>	
				5	5000			7610	6.0	6000		0.79	2.10 x 10 <sup>-5</sup>	
				8	8000			10610	8.4	8400		0.79	2.11 x 10 <sup>-5</sup>	
				10	10000			13610	9.4	9400		0.75	1.98 x 10 <sup>-5</sup>	1.88
				7	7000			9610	7.2	7200		0.75	1.99 x 10 <sup>-5</sup>	
				3	3000			5610	4.2	4200		0.75	1.99 x 10 <sup>-5</sup>	
MAR. 22	45 to 50	500	3.3	2	2000	2650	-40	4610	3.7	3700	2.66 x 10 <sup>-5</sup>	0.80	2.14 x 10 <sup>-5</sup>	
				5	5000			7610	6.6	6600		0.87	2.31 x 10 <sup>-5</sup>	
				8	8000			10610	9.0	9000		0.85	2.26 x 10 <sup>-5</sup>	
				10	10000			13610	10.2	10200		0.81	2.15 x 10 <sup>-5</sup>	2.04
				7	7000			9610	7.8	7800		0.81	2.16 x 10 <sup>-5</sup>	
				3	3000			5610	4.9	4900		0.87	2.32 x 10 <sup>-5</sup>	

## RECORD OF WATER PRESSURE TEST

PROJECT: SAPT GANDAKI PROJECT LOCALITY: DAMSTE G. LEFT BANK  
 BORE-HOLE No. B81-18 (1) GROUND WATER LEVEL:

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	HEAD				Q'	Q				
	m	L	R	kg/cm <sup>2</sup>	cm	cm	cm	cm	cm <sup>3</sup> /min	cm <sup>3</sup> /min	min/cm <sup>2</sup> sec	cm <sup>3</sup> /min	cm/sec	
APR.5	10 to 15	500	3.3	1	1000	310	0	1310	0	0	$2.66 \times 10^{-5}$	0		
				2	2000			2310	2.5	2500		1.08	$2.87 \times 10^{-5}$	
				3	3000			3310	4.8	4800		1.45	$3.86 \times 10^{-5}$	3.2
				2	2000			2310	3.5	3500		1.52	$4.04 \times 10^{-5}$	
				1	1000			1310	1.05	1050		0.802	$2.13 \times 10^{-5}$	
APR.6	15 to 20	500	3.3	1	1000	650	0	1650	1.15	1150	$2.66 \times 10^{-5}$	0.697	$1.85 \times 10^{-5}$	
				2.5	2500			3150	4.7	4700		1.49	$3.96 \times 10^{-5}$	
				4	4000			4650	7.35	7350		1.58	$4.20 \times 10^{-5}$	3.68
				2.5	2500			3150	4.9	4900		1.55	$4.15 \times 10^{-5}$	
				1	1000			1650	2.35	2350		1.42	$3.78 \times 10^{-5}$	
APR.7	20 to 25	500	3.3	1	1000	650	0	1650	0.9	900	$2.66 \times 10^{-5}$	0.545	$1.45 \times 10^{-5}$	
				3	3000			3650	3.45	3650		0.945	$2.51 \times 10^{-5}$	
				5	5000			5650	6.35	6350		1.12	$2.98 \times 10^{-5}$	2.54
				3	3000			3650	3.9	3900		1.07	$2.85 \times 10^{-5}$	
				1	1000			1650	1.4	1400		0.848	$2.26 \times 10^{-5}$	
APR.8	30 to 35	500	3.3	2	2000	500	0	2500	5.55	5550	$2.66 \times 10^{-5}$	2.22	$5.91 \times 10^{-5}$	
				4	4000			4500	8.45	8450		1.88	$5.00 \times 10^{-5}$	
				6	6000			6500	11.85	11850		1.82	$4.84 \times 10^{-5}$	
				8	8000			8500	14.4	14400		1.69	$4.50 \times 10^{-5}$	3.6
				5	5000			5500	8.8	8800		1.60	$4.26 \times 10^{-5}$	
				3	3000			3500	3.85	3850		1.10	$2.93 \times 10^{-5}$	
APR.8	35 to 40	500	3.3	2	2000	590	0	2590	0.15	150	$2.66 \times 10^{-5}$	0.058	$1.54 \times 10^{-6}$	
				4	4000			4590	0.8	800		0.174	$4.63 \times 10^{-6}$	
				7	7000			7590	3.45	3450		0.455	$1.21 \times 10^{-5}$	
				9	9000			9590	4.4	4400		0.459	$1.22 \times 10^{-5}$	0.98
				6	6000			6590	2.85	2850		0.432	$1.15 \times 10^{-5}$	
				3	3000			3590	0.4	400		0.111	$2.95 \times 10^{-6}$	



**RECORD OF WATER PRESSURE TEST**

PROJECT: SAFT GANDAKI PROJECT LOCALITY: TEST GROUPT SITE: GROUND WATER LEVEL:

BORE-HOLE No. TG - 1

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE Hs cm	PRESSURE GAUGE HEIGHT Hg cm	TOTAL HEAD Hs + Hg + Hk H cm	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L \times \log r}{4 \pi^2 \times 20 \times 10^{-5}}$	Q H	COEFFICIENT OF PERMEABILITY $K = Q/H \times C \text{ cm/sec}$	LUGEON UNIT $L = Q/L \times H \times 10^4$
				P kg/cm <sup>2</sup>	Hp cm				Q l/min	Q cm <sup>3</sup> /min				
DEC.9	5 - 10	500	3.3	1	1000	500	25	1625	73	73000	$2.66 \times 10^{-5}$	44.9	$1.19 \times 10^{-3}$	137.9
				1.25	1250			1875	86.2	86200			$1.22 \times 10^{-3}$	
				1	1000			1625	72.2	72200			$1.30 \times 10^{-3}$	
					2500									
DEC.10	10 - 15	500	3.3	1	1000	380	25	1405	3.5	3500	$2.66 \times 10^{-5}$	2.49	$6.63 \times 10^{-5}$	
				2.5	2500			2905	4.0	4000			$3.66 \times 10^{-5}$	3.2
				1	1000			1405	3.5	3500			$6.63 \times 10^{-5}$	
DEC.11	15 - 20	500	3.3	1	1000	500	25	1525	39.8	29800	$2.66 \times 10^{-5}$	19.54	$5.20 \times 10^{-4}$	
				2.5	2500			3025	38.0	38000			$3.34 \times 10^{-4}$	
				3.75	3750			4275	50.4	50400			$3.14 \times 10^{-4}$	26.9
				2.5	2500			3025	34.4	34400			$3.02 \times 10^{-4}$	
				1	1000			1525	20	20000			$3.45 \times 10^{-4}$	
DEC.14	20 - 25	500	3.3	1	1000	330	25	1355	4.4	4400	$2.66 \times 10^{-5}$	3.25	$8.64 \times 10^{-5}$	
				3	3000			3355	5.6	4600			$3.65 \times 10^{-5}$	
				5	5000			5355	6.2	6200			$3.08 \times 10^{-5}$	2.5
				3	3000			3355	4.2	4200			$3.33 \times 10^{-5}$	
				1	1000			1355	4.6	4600			$9.03 \times 10^{-5}$	
DEC.16	25 - 30	500	3.3	1	1000	250	25	1275	4.8	4800	$2.66 \times 10^{-5}$	3.76	$1.00 \times 10^{-4}$	
				3.5	3500			3775	4.0	4000			$2.82 \times 10^{-5}$	
				6.5	6500			6775	4.6	4600			$1.81 \times 10^{-5}$	1.4
				3.5	3500			3775	4.4	4400			$3.10 \times 10^{-5}$	
				1	1000			1275	4.8	4800			$1.00 \times 10^{-4}$	

## RECORD OF WATER PRESSURE TEST

PROJECT: SAPT GANDAKI PROJECT LOCALITY: TEST-GROUT SITE  
 BORE-HOLE NO.: TC - 2 GROUND WATER LEVEL: \_\_\_\_\_

DATE	DEPTH m	SECTION LENGTH L cm	HOLE RADIUS r cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE Hs cm	PRESSURE GAUGE HEIGHT		TOTAL HEAD Hp+Hs+Hg	WATER LEAKAGE		CALCULATING CONST. $\frac{2.3}{2.7} \times \frac{1}{60} \times \frac{100}{L} \times \frac{1}{H}$	Q H	COEFFICIENT OF PERMEABILITY K=Q/HxC ml/sec	LUGEON UNIT Lw=Q/LHX10 <sup>10</sup>
				P kg/cm <sup>2</sup>	Hp cm		Hg cm	Hg cm		Q /min	Q cm <sup>3</sup> /min				
DEC. 8	5 - 10	500	3.3	0.25	250	750	25	5025	90	90000	2.66 x 10 <sup>-5</sup>	87.8	2.34 x 10 <sup>-5</sup>	720	
DEC. 13	10 - 15	500	3.3	1	1000	285	25	1310	3.0	3000	2.66 x 10 <sup>-5</sup>	2.29	6.09 x 10 <sup>-5</sup>		
				2.5	2500	280		2810	4.6	4600		1.64	4.35 x 10 <sup>-5</sup>	3.7	
				1	1000			1310	3.8	3800		2.90	7.72 x 10 <sup>-5</sup>		
DEC. 15	15 - 20	500	3.3	1	1000	310	25	1335	3.0	3000	2.66 x 10 <sup>-5</sup>	2.25	5.98 x 10 <sup>-5</sup>		
				2.5	2500			2835	4.0	4000		1.84	3.75 x 10 <sup>-5</sup>		
				3.75	3750			4085	2.8	2800		0.69	1.82 x 10 <sup>-5</sup>	1.5	
				2.5	2500			2835	4.2	4200		1.48	3.94 x 10 <sup>-5</sup>		
				1	1000			1335	3.6	3600		2.70	7.17 x 10 <sup>-5</sup>		
DEC. 18	20 - 25	500	3.3	1	1000	800	25	1825	2.4	2400	2.66 x 10 <sup>-5</sup>	1.32	3.50 x 10 <sup>-5</sup>		
				3	3000			3825	3.2	3200		0.84	2.23 x 10 <sup>-5</sup>		
				5	5000			5825	4.4	4400		0.76	2.01 x 10 <sup>-5</sup>	1.8	
				3	3000			3825	3.4	3400		0.89	2.38 x 10 <sup>-5</sup>		
				1	1000			1825	3.0	3000		1.64	4.37 x 10 <sup>-5</sup>		
DEC. 21	25 - 30	500	3.3	1	1000	400	25	1425	4.0	4000	2.66 x 10 <sup>-5</sup>	2.81	7.47 x 10 <sup>-5</sup>		
				3.5	3500			3925	5.6	5600		1.43	3.80 x 10 <sup>-5</sup>		
				6.5	6500			6925	5.2	5200		0.75	2.00 x 10 <sup>-5</sup>	1.6	
				3.5	3500			3925	4.2	4200		1.07	2.85 x 10 <sup>-5</sup>		
				1	1000			1425	3.8	3800		2.67	7.09 x 10 <sup>-5</sup>		

**RECORD OF WATER PRESSURE TEST**

PROJECT SAPT. BANDAKI PROJECT  
 BORE-HOLE No. TC - 3

LOCALITY TEST CROFT SITE  
 GROUND WATER LEVEL

DATE	DEPTH m	SECTION LENGTH L, cm	HOLE RADIUS r, cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN HOLE H <sub>s</sub> , cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> , cm	TOTAL HEAD H <sub>p</sub> +H <sub>s</sub> +H <sub>g</sub>		WATER LEAKAGE Q, cm <sup>3</sup> /min	CALCULATING CONST. $\frac{2.3 \times 10^{-5} \times L \log \frac{L}{r}}{2.3 \times 10^{-5} \times L \log \frac{L}{r}}$ C, min/cm <sup>2</sup> sec	Q R	COEFFICIENT OF PERMEABILITY K = Q/HX C cm/sec	LUGEON UNIT L <sub>e</sub> = Q/LHX10 <sup>4</sup>
				P, kg/cm <sup>2</sup>	H <sub>p</sub> , cm			H <sub>p</sub> , cm	H <sub>g</sub> , cm					
DEC.21	5 - 10	500	3.3	1	1000	600	25	1625	3.0	3000	2.66 x 10 <sup>-5</sup>	1.85	4.91 x 10 <sup>-5</sup>	5.1
				1	1250			1875	3.2	3200		1.71	4.91 x 10 <sup>-5</sup>	
				1	1000			1625	3.0	3000		1.85	4.91 x 10 <sup>-5</sup>	
DEC.23	10 - 15	500	3.3	1	1000	165	25	1190	3.2	3200	2.66 x 10 <sup>-5</sup>	2.69	7.15 x 10 <sup>-5</sup>	
				1	2500			2690	3.2	3200		1.19	3.16 x 10 <sup>-5</sup>	2.6
				1	1000			1190	3.0	3000		2.52	6.71 x 10 <sup>-5</sup>	
DEC.24	15 - 20	500	3.3	1	1000	125	25	1150	0	0	2.66 x 10 <sup>-5</sup>	0	0	
				2.5	2500			2650	1.5	1500		0.57	1.51 x 10 <sup>-5</sup>	
				3.75	3750			3900	2.0	2000		0.51	1.36 x 10 <sup>-5</sup>	1.1
				2.5	2500			2650	1.5	1500		0.57	1.31 x 10 <sup>-5</sup>	
				1	1000			1150	0	0		0	0	
DEC.25	20 - 25	500	3.3	1	1000	315	25	1315	1.8	1800	2.66 x 10 <sup>-5</sup>	1.37	3.64 x 10 <sup>-5</sup>	
				3	3000			3315	2.4	2400		0.72	1.93 x 10 <sup>-5</sup>	
				5	5000			5315	3.0	3000		0.56	1.50 x 10 <sup>-5</sup>	1.2
				3	3000			3315	4.2	2200		0.66	1.77 x 10 <sup>-5</sup>	
				1	1000			1315	1.8	1800		1.37	3.64 x 10 <sup>-5</sup>	
DEC.26	25 - 30	500	3.3	1	1000	340	25	1365	2.4	2400	2.66 x 10 <sup>-5</sup>	1.76	4.68 x 10 <sup>-5</sup>	
				3.5	3500			3865	2.4	2400		0.44	1.16 x 10 <sup>-5</sup>	
				6.5	6500			6865	3.0	3000		0.44	1.16 x 10 <sup>-5</sup>	0.9
				3.5	3500			3865	2.6	2600		0.67	1.79 x 10 <sup>-5</sup>	
				1	1000			1365	2.2	2200		1.61	4.29 x 10 <sup>-5</sup>	







**RECORD OF WATER PRESSURE TEST**

PROJECT: SAFT GANDAKI PROJECT  
BORE-HOLE No. TC - 6

LOCALITY: TEST GROUPING SITE  
GROUND WATER LEVEL:

DATE	DEPTH m	SECTION LENGTH L, m	HOLE RADIUS r, cm	SUPPLIED WATER PRESSURE		STATIC HEAD IN BOLE H <sub>s</sub> , cm	PRESSURE GAUGE HEIGHT H <sub>g</sub> , cm	TOTAL HEAD H <sub>p</sub> + H <sub>s</sub> + H <sub>g</sub>		WATER LEAKAGE Q, cm <sup>3</sup> /min	CALCULATING CONST. $\frac{2.3}{4r} \times \frac{1}{C} \times \frac{1}{\log \frac{r}{r_0}}$	D h	COEFFICIENT OF PERMEABILITY K = Q/(H x C) cm/sec	LUCEON UNIT L <sub>u</sub> = Q/(L x H x T)
				P, wt/cm <sup>2</sup>	HEAD H <sub>p</sub> , cm			H, cm	Q', l/min					
MAR. 5	5 to 10	500	3.3	1	1000	710	30	1740	0.1	100	2.66 x 10 <sup>-5</sup>	0.027	1.53 x 10 <sup>-6</sup>	1.2
				2	2000			2740	1.2	1200		0.44	1.16 x 10 <sup>-5</sup>	1.2
				1	1000			1740	0.1	100		0.027	1.53 x 10 <sup>-6</sup>	
MAR. 5	10 to 15	500	3.3	1	1000	710	30	1740	0	0	2.66 x 10 <sup>-5</sup>	0	-	
				2	2000			2740	0.1	100		0.036	9.71 x 10 <sup>-7</sup>	
				3	3000			3740	0.1	100		0.027	7.11 x 10 <sup>-7</sup>	0.07
				2	2000			2740	0.1	100		0.036	9.71 x 10 <sup>-7</sup>	
				1	1000			1740	0	0		0	-	
MAR. 5	15 to 20	500	3.3	1	1000	710	30	1740	0	0	2.66 x 10 <sup>-5</sup>	0	-	
				2.5	2500			3240	0.1	100		0.031	8.21 x 10 <sup>-7</sup>	
				4	4000			4740	0.4	400		0.084	2.24 x 10 <sup>-6</sup>	0.2
				2.5	2500			3240	0.1	100		0.031	8.21 x 10 <sup>-7</sup>	
				1	1000			1740	0	0		0	-	



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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in financial reporting and compliance with regulatory requirements. The text highlights that without reliable records, organizations may face significant risks, including legal penalties and reputational damage.

2. The second section focuses on the role of internal controls in ensuring the integrity of financial data. It outlines various control mechanisms, such as segregation of duties, authorization procedures, and regular reconciliations, which are designed to prevent and detect errors or fraud. The document stresses that a robust internal control system is a cornerstone of sound financial management and is critical for building trust among stakeholders.

3. The third part of the document addresses the challenges associated with data security and privacy in the digital age. It notes that as organizations increasingly rely on technology and cloud services, the risk of data breaches and unauthorized access has grown significantly. The text provides guidance on implementing strong security protocols, including encryption, access controls, and regular security audits, to protect sensitive information and maintain compliance with data protection regulations.

4. The final section discusses the importance of continuous monitoring and reporting. It argues that organizations should not only implement controls but also actively monitor their effectiveness and report any issues promptly. This proactive approach allows for the identification of weaknesses and the implementation of corrective actions, ensuring that the organization remains resilient and compliant in a constantly evolving regulatory environment.

[The page contains extremely faint and illegible text, likely due to low contrast or scanning quality. No specific content can be transcribed.]

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