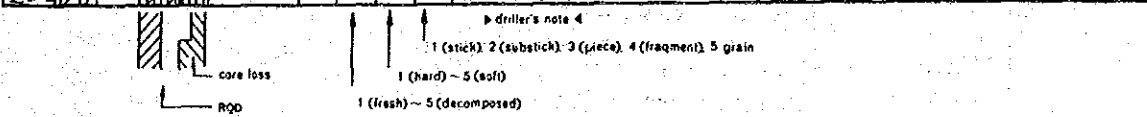


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RST-11 (SHEET 1 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 134.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $X = 470,334.78$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $Y = 4320,004.85$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N42°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF CASING	OBSERVATION OF CORE					WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0m			0 = 100%									0m	
1							4		Most cracks brown Cracky			1	
2						3	3	3				2	
3									z.95			3	
4									Brown cracks rare Some hair cracks			4	
5						1	2					5	
6						1	1					6	
7						2	3					7	
8									6.5			8	
9						1	2					9	
10						1	1					10	
11						2	3		8.0			11	
12												12	
13												13	
14												14	
15												15	
16												16	
17												17	
18												18	
19												19	
20												20	



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. RSI-11 (SHEET 2 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 534.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,284.98 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4520,404.85 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N42°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
0			0 → 100									0		
1	Db	+							Some hair cracks				1	
2		+							A few brown cracks				2	
3	Gd	+											3	
4	Db	+											4	
5	Gr	+											5	
6	Db	+											6	
7		+							26.7				7	
8	Gr	+							Hair cracks poor				8	
9		+											9	
10		+							30.0				10	
11		+							30.85				11	
12	Db	+											12	
13		+							33.15				13	
14		+							Some hair cracks				14	
15	Gr	+											15	
16		+							35.0				16	
17		+							36.5				17	
18		+							37.0				18	
19	Db	+							38.7				19	
20		+							39.7				20	

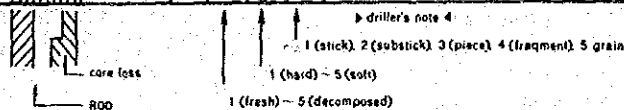
driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)  
 core loss  
 RQD

# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-11 (SHEET 3 of 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 534.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 420,284.98 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4550,204.85 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N42°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER			
4.0m			0-100									0	4.0m	
1		+			dk gy	1	1	2		40.9		P=10	LU=0	1
2	Db	+								41.6				2
3		+			gray	1	1	1		42.0		P=10	LU=0	3
4		+								44.25				4
5		+			dk gy	1-2	2	3-4		44.65	Cracky	P=10	LU=1.0	5
6	Gr	+			gray	1	1	2		45.7	Sheared with yel. green clay soft	P=10	LU=0	6
7		+			light gray	1	1	3		46.5		P=10	LU=0	7
8		+								47.8	Mostly altered to yel. green mineral	P=10	LU=0	8
9		+			gray	2	1	2		48.0				9
5.0		+								48.5	Some brown cracks	P=10	LU=0	5.0
1		+								49.1				1
2	Db	+								50.0	Weakly sheared with clay			2
3		+								50.4		P=10	LU=0	3
4		+			dark gray	1	1	2		50.7				4
5		+								52.8	Rather massive			5
6		+								56.3				6
7	Gr	+								56.7		P=10	LU=0	7
8		+			gray	2	1	3		58.4	Cracky			8
9	Db	+			dk gy	4	4	4-5		58.8	Sheared with clay			9
6.0	Gr	+			gray	2	1	3						6.0

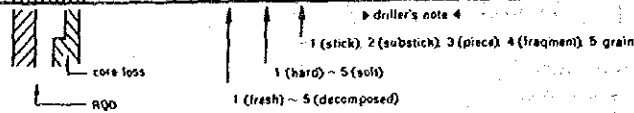


### GEOLOGIC LOG OF DRILL HOLE

PROJECT: \_\_\_\_\_ HOLE No. RSI-11 (SHEET 4 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 524.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,284.98 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4520,404.89 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° BEARING OF ANGLE HOLE N42°W CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BITTING CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER	LUGEON			
0m			0-100%										0	60m	
1	Gr	+			light gray	2	2-3	3-4	60.4	Hair cracks rather rich	P = 10	LU = 7.8		1	
2		+			light gray	2	2	2	Cracks coated by yel. green film						2
3	Db	-			light gray	3	4	4	62.9	Sheared with clay	P = 10	LU = 7.8		3	
4		+			light gray	3	4	4	63.3						4
5	Gr	+			light gray	2	3	3	64.7	Somewhat sheared cracky	P = 10	LU = 0		5	
6		+			light gray	3	3	4	66.0	Brecciated cracky in general					
7		-			dark gray	3	3	4	67.25	Hair cracks rich brittle	P = 10	LU = 0		7	
8	Db	-			dark gray	2	1	1	68.8	Sheared with some clay					
9		-			dark gray	3	3	3	69.7	Altered to yel. gr minerals	P = 10	LU = 0		9	
10		+			light gray-green	3	3	3	71.0	Soft. Fault					
11	Gr	+			light gray	4	4	4	72.7	Fault breccia	P = 10	LU = 0		11	
12		+			light gray	4	4	5	73.2	core recovery poor					
13	Db	-			dk gy	4	4	2	74.3	Fragment core	P = 10	LU = 0		13	
14		-			dk gy	3	3	3	75.0						
15		-			dk gy	4	4	4	76.4					15	
16	Gr	+			dk gy	4	4	4	77.8					16	
17		-			dk gy	4	4	5	78.0					17	
18	Db	-			dk gy	4	4	5						18	
19		+			dk gy	4	4	5						19	
20	Gr	+			dk gy	2	(3)	1						20	

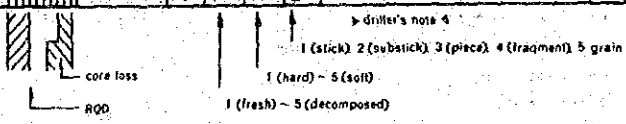


## GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-11 (SHEET 5 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 524.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,284.78 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4526,804.65 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 4.8° BEARING OF ANGLE HOLE N42°W CORE RECOVERY \_\_\_\_\_ %

DEPTH 0m	ROCK NAME	LOG	CORE RECOVERY	OBSERVATION OF CORE					WATER TABLE			DEPTH	ELEVATION		
				CEMENTATION KIND OF BIT CASING	COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER			LUGEON	
0			100%										0	524.09	
1	Gr	+			H gy	(3) 4-5	80.55							1	
2		+				(5) (5)	81.2	Fine Qz sand gained						2	
3		+				(3) 4-5	81.35							3	
4		+				3	82.7							4	
5		+				4	83.05							5	
6	Db	+				4	84.0							6	
7		+				3	85.6							7	
8		+				3	86.8							8	
9	Gr	+				4	87.0	Hair cracks rich						9	
10		+				3	88.0							10	
11	Db	+				2	89.0							11	
12		+				4	90.8	Sheared with calcite - Qz veinlets Fault						12	
13		+				4	91.4							13	
14	Gr	+				(3) 1	92.6	slime of Qz and hornblende						14	
15		+				(5) (5)								15	
16		+				(3) 2								16	
17		+				3								17	
18		+						River sand gained						18	
19	St	+												19	
20		+												20	
21		+												21	
22		+												22	
23		+												23	
24		+												24	
25		+												25	
26		+												26	
27		+												27	
28		+												28	
29		+												29	
30	Db	+				3	98.9	Cracky with Cal-Qz veinlets						30	



### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSJ-11 (SHEET 6 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_

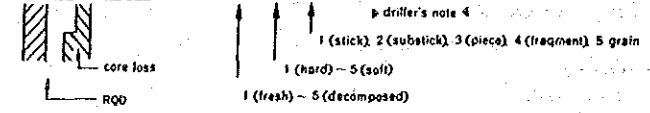
ELEVATION 534.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE X = 470,284.78 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 48° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE N42°W CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
100m			0-100								0	100m	
1							4	Do				1	
2	Db					3	3	7				2	
3							4	102.8 Sheared with clay				3	
4	Gr					2	2	103.7				4	
5						3	3-4	104.5				5	
6	Db					2	2	105.0 Somewhat sheared with clay				6	
7						3	3	105.5				7	
8						2	2	106.4 Sheared with clay				8	
9						2	2	Fragment core dominant				9	
10						2	2	Very cracky				10	
11						2	2	110.0				11	
12						2	2	110.5				12	
13						2	2	Some portions Very cracky (c=4)				13	
14	Gr					3	3	Hair crack rich				14	
15						3	3	114.0				15	
16						2	2	Cracky				16	
17						2	2	Fragment core				17	
18						2	2	116.1				18	
19						2	2	Some portions very cracky (c=4)				19	
20						3	3	Hair crack rich				20	

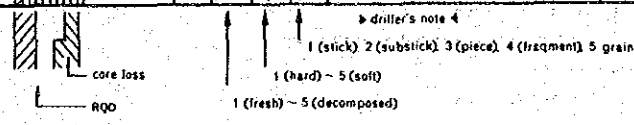


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-11 (SHEET 7 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 134.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $X = 470,284.88$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $Y = 4520,004.85$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N42°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION	
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION						
1/20m			0 → 100 %										0	1/20m	4B
1	Gr	+			white	Z (3)	4		Fragment core					1	
2	Gr	+			if gy ~ white	Z	4	122.0	sheared with clay					2	
3	Gr	+			if gy ~ white	Z (3)	4	122.2	clay					3	
4		+							Fragment core					4	
5		+							Many slickensides					5	
6	Db	+												6	
7	Db	+						126.75						7	
8		+			dark gray	Z	3		Somewhat fresh					8	
9		+			dark gray	Z	2	129.1						9	
10		+							Substick core					10	
11		+						130.0	Many slickensides					11	
12	Gr	+			if gy	Z	2	131.0	with clay					12	
13	Gr	+			if gy	Z	2	132.15	Hair cracks rich					13	
14	Db	+			dk gy	Z	3	132.95						14	
15		+							Hair cracks rich					15	
16		+							Brittle					16	
17	Gr	+			light gray	Z	3							17	
18		+												18	
19		+						138.3						19	
20		+						138.4						20	



# GEOLOGIC LOG OF DRILL HOLE

PROJECT

HOLE No. RSI-11 (SHEET 8 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 534.07 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE 8 = 470, 284, 88 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE N42°W CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
140m			0-100%									0	140m	
1	Db	+			light gray	1	1	1	Fresh					
2	Gd	+			light gray	1	1	1	Brown cracks rare					
3	Db	+			light gray	2	2	2						
4	Gd	+			dk	3	3	3-4	143.5					
5	Db	+			gy	2	2	3	144.0 Some cracks yellowish brown					
6	Db	+			gy	2	2	3	145.0					
7	Gr	+			light gray	2	2	2	146.2					
8	Gr	+			light gray	2	2	2	147.0 Hair crack rich					
9	Db	+			dk	3	3	3	147.3					
10	Gr	+			light gray	2	2	2	148.8					
11	Db	+			dk	3	3	3	149.1 Many small slickensides					
12	Gr	+			lt gray	2	2	2	150.0 Somewhat massive					
13	Db	+			dk gray	2	2	3	151.7					
14	Gr	+			lt gray	2	2	3	152.5 Sheared with clay at 153.0~153.1m (W=3, H=4, C=4)					
15	Db	+			dk gray	2	2	3	153.9					
16	Gr	+			lt gray	2	2	3	154.5 Some slickensides					
17	Db	+			dk gray	2	2	3	156.6					
18	Gr	+			white	2	2	3	157.8					
19	Db	+			dk gray	2	2	3	159.3					
20	Gr	+			dk gray	4	4	4-5	159.7 Cracky with cal. Qz veinlets					
21	Db	+			dk gray	2	2	3	160.0 Sheared with clay					

core loss
   
 RQD
   
 driller's note 4
   
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain
   
 1 (hard) - 5 (soft)
   
 1 (fresh) - 5 (decomposed)



### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-11 (SHEET 9 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_

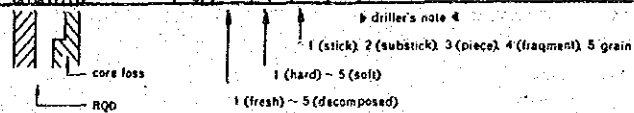
ELEVATION 524.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE 8 = 470, 234.98 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 48° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE N42°W CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION					
160m			0-100%										160m	43
1	Db	+			dark gray	Z	3	3	Cal-Qz veinlets rich Cracky					
2		+					3	1						
3		+					4	161.3						
4		+					Z	3						
5		+					3	162.7						
6		+					3	163.0						
7	Gr	+							Hair cracks rich in general					
8		+					Z	3	Cracks coated by Yel. green chlorite					
9		+					Z	3	Partially fragment core					
170		+												
1		+					Z	1	Substick core dominant, but rich in hair crack					
2		+					Z	1						
3		+						1						
4		+						1	Somewhat massive					
5		+												
6	Db	+					1	1						
7		+					Z	3						
8		+												
9		+					3	3-4	178.4					
180	Gr	+					1-2	1-2	179.5					



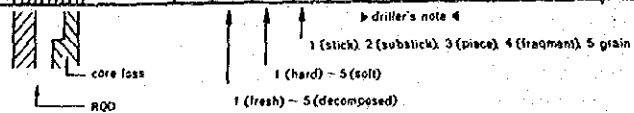
# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. RSI-11 (SHEET 10 OF 10)

LOCATION Right Bank DEPTH OF HOLE 200 m COMMENCED \_\_\_\_\_  
 ELEVATION 534.09 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,284.98 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4320,604.85 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N42°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
180m			0-100%									40.80m		
1		+					1 2	180.5						
		+					2 4	180.8						
2	Gr	+			gray		1 2	182.3	Most cracks					
		+					3 3	182.75	dark brown					
3		+					2 2							
4		+					1 2	184.3	Many small					
		+					1 3		slickensides					
5	Db	+					3 3							
		+					3 4	185.7						
6		+												
7	Gr	+			dark gray		1 1		Fresh					
		+					1 2							
8		+					2							
9		+						189.2						
10	Db	+					2 3	189.9	Cracky					
		+					3 3-4							
11	Gr	+					2 2		Hair cracks					
		+					1 1		rather rich					
12		+					1 3	191.8						
13	Db	+					3 3-4	192.15						
14		+												
15		+					1 1		Cracks coated					
		+					2 2		by yellowish					
16		+					1 1		green chlorite					
17	Gr	+			light gray		1 3							
18		+												
19		+												
20		+												



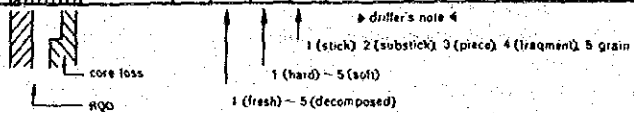
# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. LSI-12 (SHEET 1 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_  
 ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $X = 470,113.19$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $Y = 4520,536.07$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE S47°E

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER			
0m			0-100										0m	
1		+						3						
2		+						(2) 4	0.85					
3	Db	+						7	1	A few cracks brown				
4		+				dark gray		1	1					
5		+						2	2					
6		+						2	(2) 3					
7		+						(2) 4	6.8					
8		+								Some cracks brown				
9		+						3	4	Cracky. fragment core dominant				
10		+						3	3	Fragment is hard				
11		+							11.2					
12	Gf	+												
13		+				white		2	3					
14		+							14.2					
15		+						3	3					
16		+						3	3					
17		+						3	4					
18		+						3	4					
19		+						3	1					
20		+						2	3	18.85				
20								2	2	Hair cracks rich				



## GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-12 (SHEET 2 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_

ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

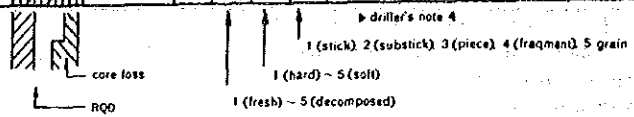
COORDINATE X = 476,173.73 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

Y = 4528,336.27 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %

BEARING OF ANGLE HOLE S37°E

DEPTH Z 0m	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER			
			0-100%											
1							3	3			P=0			
2							4	ZZZ						
3							Z				P=1			
4	Gf					white	Z	1						
5								Z	24.6		P=10			
6							3	3-4	25.1					
7							Z	Z-3	23.8					
8							3	3-4	26.25					
9							1	3			P=10			
10	Db						Z	1		Some cracks coated by chlorite film				
11							Z	Z						
12								Z	28.8		P=10			
13							1	3	29.0					
14							1	1						
15							2	Z	30.0					
16							1	1			P=10			
17	Gr					light gray	1	1						
18							1	1						
19							Z	Z	32.6		P=10			
20								Z						
21							Z	3	33.6					
22							1-2	1-2	34.0		P=10			
23							Z	3	34.4					
24										Some hair cracks				
25							1	1			P=10			
26							1	1						
27	Db					dark gray	Z	Z						
28											P=10			
29							3	3	38.0	Cracks brown				
30									38.2					
31							1	1		Massive hard				
32							Z	Z						
33											P=10			
34														
35														
36														
37														
38														
39														
40														

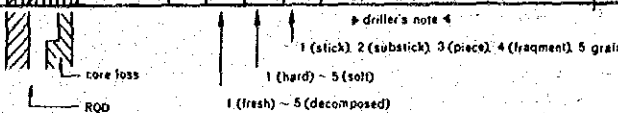


### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSJ-12 (SHEET 3 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_  
 ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $\delta = 470,173.13$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $\gamma = 4320,524.07$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE S37°E

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
0			0									0	404.0m	
1														
2							1							
3							2							
4								44.0						
5	Db				dark gray		1							
6							1							
7							3							
8								46.9						
9							1							
10								49.3						
11														
12							3							
13								51.0						
14	Gr						1		Some hair cracks					
15							1							
16							1							
17							1							
18							1							
19							1							
20							1							
21							1							
22							1							
23							1							
24							1							
25							1							
26							1							
27							1							
28							1							
29							1							
30							1							
31							1							
32							1							
33							1							
34							1							
35							1							
36							1							
37							1							
38							1							
39							1							
40							1							

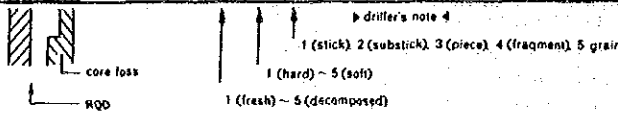


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-12 (SHEET 4 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_  
 ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,173.19 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4320,536.67 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE S37°E

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION					
6.0m			0-100%									0	6.0m	
1					gray	1	1	2	60.9					
2						1	1	1	61.3					
3	Db					1	3	3	Cracky with Cal-Qz veinlets					
4					dark gray			2						
5						1	1	1	Some hair cracks			P = 10		
6								3						
7						1	1	2	66.1					
8						1	1	2	Some cracks coated by yellowish green chlorite			P = 10		
9	Gr				light gray ~ wt ~ lt gray	1	1	3	67.5					
10						1	1	3	69.2					
11						1	1	3	70.0					
12						1	1	4	70.85					
13						1	1	3	72.2					
14						1	1	1				P = 0		
15						1	1	1						
16	Db				dark gray	1	1	1	74.8					
17						1	1	1	Sheared with Cal-Qz veinlets					
18						1	1	1	75.65					
19						1	1	1						
20	Gf					1	1	1						
21	Db					1	1	1						

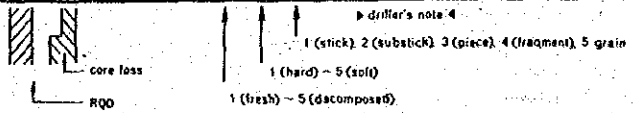


### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-12 (SHEET 5 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_  
 ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 479,173.13 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4328,536.07 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE S37°E

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE			DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS		WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0			0 → 100 %									0	508.0m
1		+			dark gray	1	1	Z				1	
2		+			dark gray	1	1	1				2	
3	Db	+						83.0				3	
4		+						slightly cracky				4	
5		+										5	
6		+			gray	1	Z	3				6	
7		+						86.0				7	
8		+						87.5				8	
9	Gd	+			light gray	1	1	1				9	
10		+										10	
11		+						91.35				11	
12	Db	+			gray	1	1	1	Some hair cracks dyke of granite and xenolith of granodiorite			12	
13		+						93.55				13	
14	Gd	+			light gray + gray	1	1	Z				14	
15	Gf	+							Some cracks coated by chlorite			15	
16	Gd	+			light gray	Z	Z	1				16	
17		+						96.3				17	
18	Gf	+			light gray	1	1	Z	Some cracks coated by chlorite			18	
19		+										19	
20		+										20	



## GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-12 (SHEET 6 OF 8)

LOCATION Left Bank DEPTH OF HOLE: 150 m COMMENCED \_\_\_\_\_

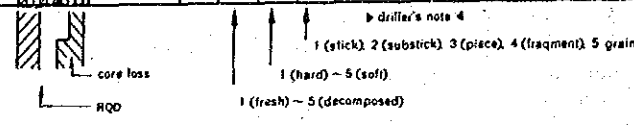
ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE  $X = 470,113.13$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

$Y = 4520,536.07$  ANGLE FROM HORIZONTAL 45° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE S37E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT, CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
100m			0-100%								0	100m	
1	Gf	+			light gray	1	1	Z	Diabase dyke 99.9-100.1m				
2						1	1	1	Some hair cracks				
3		+				Z	Z	3					
4	Db	+			dk gray	1	1	Z					
5						Z	1-Z	3					
6	Gf	+							Some hair cracks				
7		+				1							
8	Db	+				Z		3					
9		+			light gray								
10	Gd	+						1	Massive				
11		+				1							
12		+						Z					
13		+											
14	Db	+			dk gray + H gy	1	1	1	Some hair cracks				
15						Z		Z					
16		+											
17	Gd	+				1	1	1					
18						1-Z		3					
19		+											
20	Db	+			dk gy + H gy	1		3					
21													
22		+											



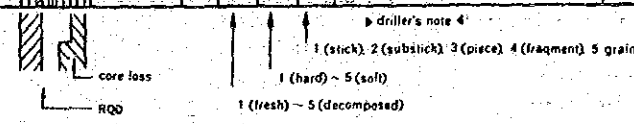


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-12 (SHEET 7 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_  
 ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $\delta = 470.113.13$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $\gamma = 4520.536.07$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 85° BEARING OF ANGLE HOLE S37E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
120m			0-100%								0	120m	
1	Db	+			Do	1	1	2					
2	Gd	+			1+gy	1	1	3					
3													
4	Db	+			1+dk gy	1	1	2	Some hair cracks				
5													
6	Gd	+			1+gy			3					
7													
8	Db	+			gray	1	1	1	Rather massive				
9													
10								3					
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													



### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-1Z (SHEET 8 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_

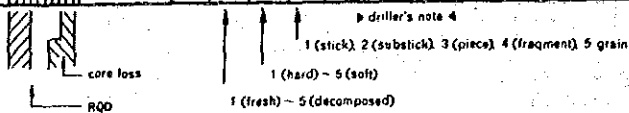
ELEVATION 506.75 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE  $\phi = 870, 113.13$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 45° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE S37°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION					
140m			0-100%										140m	42
1		+			white		3						1	
2							Z 1						2	
3	Gf	+			light gray	1	4 141.8		Some hair cracks				3	
4							Z 1		Some cracks coated				4	
5		+					Z 1		by yel. gr chlorite				5	
6							Z 3						6	
7	Db	+					dk gr 1-2 1-2-3	146.0	Do				7	
8	Gd	+					1 1 2		Some hair cracks				8	
9							2 2 3						9	
10	Db	+					dk gr 1-2 1-2-3						10	
150	Gf	+											150	

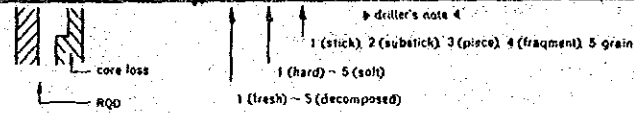


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LS-13 (SHEET 1 OF 5)

LOCATION Left Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 285.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $X = 479,041.01$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $Y = 4529,138.94$  ANGLE FROM HORIZONTAL 90° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH 0m	ROCK NAME	LOG	CORE RECOVERY 0-100%	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING	LEAKAGE OF DRILLING WATER		WATER PRESSURE TEST	LUGEON		
0	S1	Δ								0.5 Slope wash			0	
1		#			light gray			3		Not only cracks but also minerals weathered			1	
2	Gd	#						4	2.65				2	
3		#						1	2				3	
4		#						2	3.4				4	
5		#						3	3.95				5	
6		#						3	3.4	Some cracks brown in general			6	
7	Db	#			dark gray			1-2	2				7	
8		#						3	4.4				8	
9		#						3	4.75				9	
10		#						7-2	1				10	
11	Gd	#						2	5.1				11	
12		#						2	1				12	
13		#						2	3				13	
14		#						2	3				14	
15		#						2	3				15	
16		#						2	3				16	
17		#						2	3				17	
18		#						2	3				18	
19		#						2	3				19	
20		#						2	3				20	
21		#						2	3				21	
22		#						2	3				22	
23		#						2	3				23	
24		#						2	3				24	
25		#						2	3				25	
26		#						2	3				26	
27		#						2	3				27	
28		#						2	3				28	
29		#						2	3				29	
30		#						2	3				30	
31		#						2	3				31	
32		#						2	3				32	
33		#						2	3				33	
34		#						2	3				34	
35		#						2	3				35	
36		#						2	3				36	
37		#						2	3				37	
38		#						2	3				38	
39		#						2	3				39	
40		#						2	3				40	



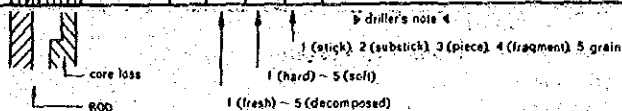


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LS-13 (SHEET 3 OF 5)

LOCATION Left Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 685.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $X = 470,054.01$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $Y = 4520,638.34$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE \_\_\_\_\_

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
4.0m			0 → 100									4.0m	4.3
1	Gd	+			light gray	Z	1	Z	Somewhat cracky	P=10		1	
2		+			light gray	Z	1	Z	Some cracks brown	P=10		2	
3		+							43.2	P=10		3	
4	Db	+			dark gray	Z	1	Z		P=10		4	
5		+								P=10		5	
6		+								P=10		6	
7		+								P=10		7	
8		+								P=10		8	
9	Gd	+			dark gray	Z	1	Z	48.75	P=10		9	
10		+			dark gray	Z	1	Z	49.2	P=10		10	
11		+							Some granitic veins	P=10		11	
12		+								P=10		12	
13	Gd	+			dark gray	Z	1	Z	52.8	P=10		13	
14		+			light gray	Z	1	Z	54.5	P=10		14	
15	Db	+			dark gray	Z	1	Z	Massive	P=10		15	
16		+								P=10		16	
17		+								P=10		17	
18		+								P=10		18	



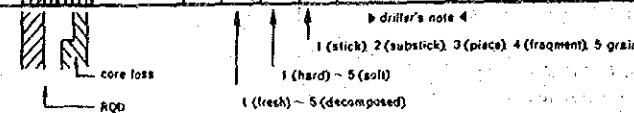
# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. LS-13 (SHEET 4 OF 5)

LOCATION Left Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 685.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE x = 470,041.01 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
y = 4520,638.34 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE \_\_\_\_\_

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE			DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH		
6.0m			0 → 100%									6.0m	
1	Db	+			1-2 1 2-3 60.5								
		+			1-2 7 3 60.9								
		+			4 3-4 3-4 61.3			Sheated with cal					
2		+			Z Z 3-4 62.0			-Qz veinlets, very brittle					
3		+											
4	Gd	+											
5		+											
6		+											
7		+											
8		+											
9		+											
10	Db	+											
11		+											
12		+											
13		+											
14		+											
15		+											
16		+											
17		+											
18		+											
19		+											
20		+											
21		+											
22		+											
23		+											
24		+											
25		+											
26		+											
27		+											
28		+											
29		+											
30		+											
31		+											
32		+											
33		+											
34		+											
35		+											
36		+											
37		+											
38		+											
39		+											
40		+											

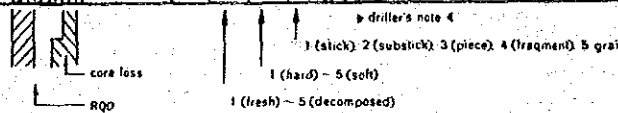


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LS-13 (SHEET 5 OF 5)

LOCATION Left Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 185.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE  $X = 470,041.01$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 $Y = 4520,638.34$  TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE \_\_\_\_\_

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTA- TION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
0m			0 → 100									0	80m	
1	Gd	+			lt	Z	1	81.3						
2		+					1	Brown cracks rare						
3		+					1	83.0						
4	Db	+					3	Cracky with col- Qz veinlets						
5		+					4	84.35						
6		+					1							
7		+					1	87.5						
8		+					Z							
9	Gd	+					1	89.8						
90		+			gray	Z	3-4	90.2						
1		+			dark			Open crack at 90.1m (op = 1cm max)						
2		+												
3		+												
4		+					1	Massive in gener- al						
5	Db	+					Z	Brown cracks rare						
6		+												
7		+												
8		+												
9		+												
100								100.0					100.0	



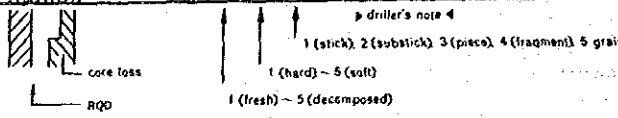
# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. LSF-14 (SHEET 1 OF 8)

LOCATION <u>Left Bank</u>	DEPTH OF HOLE <u>150</u> m	COMMENCED _____
ELEVATION <u>485.73</u> m	DEPTH OF OVERBURDEN _____ m	COMPLETED _____
COORDINATE $\phi = 470, 091, 01$ $\lambda = 4520, 638, 34$	LENGTH OF ROCK DRILLING _____ m	DRILLED BY _____
ANGLE FROM HORIZONTAL <u>48</u> °	TOTAL LENGTH OF CORE _____ m	LOGGED BY _____
BEARING OF ANGLE HOLE <u>N60°W</u>	CORE RECOVERY _____ %	

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0m			0 → 100%								0	0m	43
0.5	Sl	Δ							0.5 Slope wash				
1	Gd	+				Z	Z	3	Some cracks bro-				
								4	wn				
2	Db	+				gray	7	7	Some hair cracks				
							7	7					
							Z	Z	2.7				
3		+											
4	Gd	+				light gray	7		A few cracks brown				
5		+					7	7					
6		+					Z						
6									6.1				
7	Db	+				dk gy	7	7	Cracky				
							Z	Z	7.3				
8		+							Massive				
9		+							Some cracks brown				
10		+					Z	Z					
1	Gd	+				gray		7					
2		+						7					
3		+				light gray			12.8				
4		+						7					
5		+						Z					
6		+							15.6				
6	Gy	+							A few cracks brown				
7		+				white	7	7					
8	Gd	+					Z	Z					
9		+							19.25				
20	Db	+				dk gy	7	Z					





### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-14 (SHEET 2 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_

ELEVATION 185.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

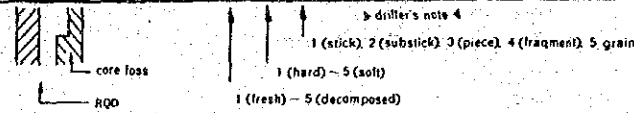
COORDINATE X = 470,041.01 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

Y = 4320,638.34 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %

BEARING OF ANGLE HOLE N60°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
20m			0-100%									40	43
1		+						Z		P=8		1	
2		+						22.0		P=10		2	
3	Db	+						Brown cracks very rare		P=10		3	
4		+						Fresh and massive in general		P=10		4	
5		+						Slickensides at 22.85m, 23.45m		P=10		5	
6		+								P=10		6	
7		+								P=10		7	
8		+						27.6		P=10		8	
9	Gd	+						light gray		P=10		9	
10		+								P=10		10	
30	Db	+						29.7		P=10		30	
1		+						30.3		P=10		1	
2		+						30.9	A few cracks brown	P=10		2	
3	Gd	+						31.8	cracky with chlorite veinlets	P=10		3	
4		+						32.0		P=10		4	
5		+						32.5		P=10		5	
6		+						33.5	A few cracks brown	P=10		6	
7		+						35.1		P=10		7	
8	Gr	+						36.0		P=10		8	
9		+								P=10		9	
10		+								P=10		10	
7	Db	+								P=10		7	
8		+								P=10		8	
9	Gr	+								P=10		9	
10		+								P=10		10	



### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSF-14 (SHEET 3 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_


ELEVATION 685.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE  $X = \frac{470.021.0}{4520.638.34}$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 48° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE N60°W CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
40m			0-100%									40m	
1	Gr	+			H	1	1	1	40.85		P=10		
2	Db	+			dark gray	3	1	1	Massive but most cracks blawn		P=10	Lu=32.0	
3	Gd	+			dark gray	3	1	1			P=10	Lu=5.5	
4	Db	+							43.85		P=10	Lu=37.0	
5	Gd	+							46.15		P=10	Lu=17.5	
6	Gd	+			light gray	2	1	1	Brecciated by granitic intrusion. xenolith of diabase		P=10	Lu=4.0	
7	Db	+			light gray	1	1	1	But massive in general		P=10	Lu=1.4	
8	Db	+							48.95		P=10	Lu=1.4	
9	Gd	+							Fragment core dominant. cracky with cal-Qz veinlets and small slickensides		P=10	Lu=1.4	
50	Db	+			dark gray	1 (z)	4	4	51.25		P=10	Lu=1.4	
1	Db	+			dark gray	1	1	4	53.05		P=10	Lu=1.4	
2	Db	+			dark gray	1	1	4	Partially somewhat massive		P=10	Lu=1.4	
3	Db	+			dark gray	1	1	4	54.5		P=10	Lu=1.4	
4	Db	+			dark gray	1	1	4	55.2		P=10	Lu=1.4	
5	Gr	+			wt	1	1	1	Consolidated but brecciated by granitic intrusion		P=10	Lu=1.4	
6	Db	+			dark gray	1	1	1	A few cracks brown		P=10	Lu=1.4	
7	Db	+			dark gray	1	1	1			P=10	Lu=1.4	
8	Db	+			dark gray	1	1	1			P=10	Lu=1.4	
9	Db	+			dark gray	1	1	1			P=10	Lu=1.4	
60	Gr	+			wt	1	1	1	59.3		P=10	Lu=1.4	
					wt	1	1	1	59.35	sheared	P=10	Lu=1.4	


  
 core loss  
 RQD  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)

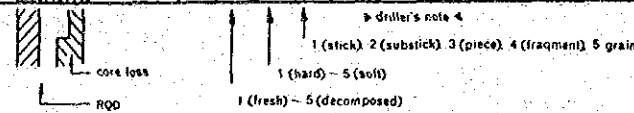
# GEOLOGIC LOG OF DRILL HOLE

PROJECT

HOLE No. LSI-14 (SHEET 4 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED -  
 ELEVATION 885.73 m DEPTH OF OVERBURDEN - m COMPLETED -  
 COORDINATE X = 470,041.01 LENGTH OF ROCK DRILLING - m DRILLED BY -  
Y = 2520,638.34 TOTAL LENGTH OF CORE - m LOGGED BY -  
 ANGLE FROM HORIZONTAL 48 ° CORE RECOVERY - %  
 BEARING OF ANGLE HOLE N60°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
60m			0 = 100 %									40.6m	43	
1	Gr	+			w	1	1		61.1					
2		-			gray	1			A few cracks brown					
3	Db	-			dark	1	1		Massive					
4		-							64.4					
5		+				1	1							
6	Gd	+				1	1							
7		+			gray				66.5					
8	Db	-					Z		Somewhat cracky cracks brown in general					
9		+			light	Z	1							
10	Gd	+					3		But hair cracks poor					
11		+							71.5					
12	Db	-			dk gray	Z	1							
13		-							73.7					
14	Gr	+												
15		+				Z	Z		Some cracks brown					
16	Gd	+					1							
17		+			light	1	1							
18		+												
19	Gr	+												
20		+												



## GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSJ-14 (SHEET 5 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_

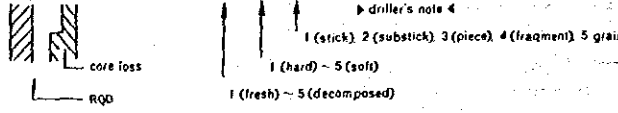
ELEVATION 185.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE X = 470,041.01  
Y = 4520,638.34 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 48° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE N60°W CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0.0m			0-100%									0.0m	185.73
1		+							Somewhat hair cracks rich			1	
2		+					Z	Z	Some cracks brown			2	
3	Gr	+					Z	1				3	
4		+						1				4	
5		+										5	
6		+										6	
7	Db	+					dk	1				7	
8	Gr	+					dy	1				8	
9	Db	+					z	1				9	
9.0		+										9.0	
10		+							Very fresh Massive			10	
11		+							89.0~89.3m: diabase dyke			11	
12		+										12	
13	Gr	+										13	
14		+										14	
15		+										15	
16		+										16	
17		+										17	
18		+										18	
19		+										19	
20		+										20	

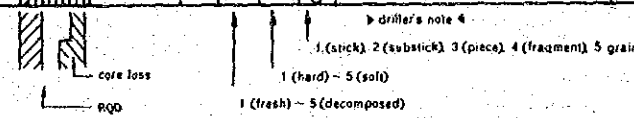


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-14 (SHEET 6 OF 8)

LOCATION Left Bank DEPTH OF HOLE 150 m COMMENCED \_\_\_\_\_  
 ELEVATION 685.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470.041.01 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4320.638.34 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N60°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING						
100m			0 = 100%									0	100m	
1	Gd	+			1	1	1						1	
2		+			Z	1	Z						2	
3		+			Z	Z	4	102.8	cracky				3	
4		+			1	1	Z	103.5	cracks brownish				4	
5		+			Z	1	Z						5	
6	Db	+						105.5					6	
7		+							Brown cracks rare				7	
8		+			1	1	1						8	
9		+					Z						9	
10		+											10	
11		+						111.3					11	
12		+					1						12	
13		+			1	1	1						13	
14		+					Z	114.0					14	
15	Gd	+			1		Z		A few cracks brown				15	
16		+			1	1	1						16	
17		+			Z		3	116.7					17	
18		+			3	3	4		Cracky and cracks brown				18	
19		+					5		Sheared with some clay				19	
20	Db	+			dk gy	Z	4	118.8					20	

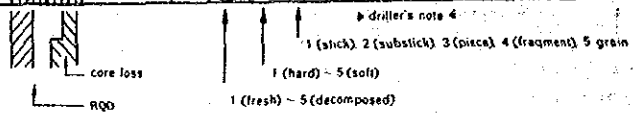


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LST-14 (SHEET 7 OF 8)

LOCATION Left Bank DEPTH OF HOLE 130 m COMMENCED \_\_\_\_\_  
 ELEVATION 685.73 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470.041.01 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4720.618.34 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 48° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N60°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HANDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
120m			0-100%									0	40/20m	
1						3	3	4	120.5 - 120.8 m: Fault with clay but consolidated					
2						4	4	4	121.5					
3								2						
4								1						
5								3	123.0					
6									A few cracks brown					
7									Massive					
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
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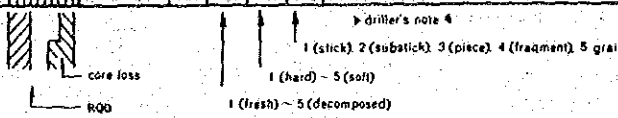


## GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LST-14 (SHEET 8 OF 8)

LOCATION <u>Left Bank</u>	DEPTH OF HOLE <u>150</u> m	COMMENCED _____
ELEVATION <u>185.73</u> m	DEPTH OF OVERBURDEN _____ m	COMPLETED _____
COORDINATE $X = 470,041.01$ $Y = 4370,438.34$	LENGTH OF ROCK DRILLING _____ m	DRILLED BY _____
ANGLE FROM HORIZONTAL <u>48°</u>	TOTAL LENGTH OF CORE _____ m	LOGGED BY _____
BEARING OF ANGLE HOLE <u>N60°W</u>	CORE RECOVERY _____ %	

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
140m			100									40/40m	43	
1	Db	+			gray	1	1		A few cracks brown				1	
2		+							Massive in general				2	
3	Gd	#			dark	1	1		Intruded by optitic veins				3	
4		+				Z	Z						4	
5	Db	+											5	
6		+											6	
7		+											7	
8	Gy	+			gray	1	1						8	
9		+			light	1	Z						9	
10	Gd	#				Z	3						10	
150													150	



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-15 (SHEET 1 OF 5)

LOCATION Right Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_

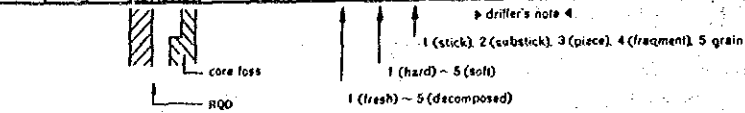
ELEVATION 600.06 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE  $X = 470,387.61$   
 $Y = 4520,452.53$  LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 45° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

BEARING OF ANGLE HOLE S55°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0			0-100%								0	43	
0.65	S1	Δ						0.65					
1		+					1	A few cracks brown					
2		+					2	2.35 Rather massive					
3		+					3	3.0					
4	Db	+			gray		1	5.0-5.7m: Cracky with chlorite veinlets					
5		+			dark		1						
6		+					2						
7		+					2	7.0					
8		+					1	Some cracks dark brown, some slickensides					
8.25		+					2	8.25					
9	Gf	+					2	Some crack brown some cracks coated by chlorite veinlets					
10		+			white		1						
11		+					3						
11.7		+					2	11.7					
12.0		+					1	Altered to secondary minerals					
12.45		+					2	12.0					
13		+					3	Soft					
14		+					1	Hair cracks rich					
14.0	Db	+			gray		1	14.0					
15		+			light		3	Brown cracks rare					
17		+					4						
17.7		+					1	17.7					
18.0		+					2	A few cracks brown					
18.4		+					3	18.0					
18.4		+					1	18.4					
20	Gf	+			gray		2						
		+					1						
		+					7						





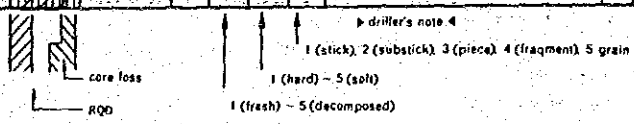
### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. RST-15 (SHEET 3 OF 5)

LOCATION Right Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 600.06 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 270,387.61  
Y = 4520,432.83 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE S55°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION				
0			0-100								0	40	40
1	Db	+			1	2				P=10			
2		+			2	3	42.4	Cracky with Co-Qz veinlets	P=5	Lu=0			
3		+			2	3	42.8		P=10	Lu=76.0			
4		+			2	3	44.0	sheared with greenish clay and slickensides	P=10	Lu=0			
5	Gd	+			1	2			P=10	Lu=0			
6		+			1	1			P=10	Lu=0			
7		+			2	3	47.0	Somewhat porous cracks coated by yel. green clay yey film	P=10	Lu=0			
8		+			1	2	48.0		P=10	Lu=0			
9	Db	+			1	2	49.0		P=10	Lu=0			
10		+			2	3	50.0						
11		+			1	1	50.4						
12		+			2	3	50.4						
13	Db	+			1	1		Rather massive	P=10	Lu=0			
14		+			1	1							
15		+			2	2							
16		+					55.2						
17	Gd	+			1	1			P=5	Lu=35.2			
18		+			1	2	57.45	Cracky with clay films					
19		+			3	4	57.85						
20		+			2	1							
21	Db	+			1	1							
22		+			2	1							
23	Gf	+			1	1							
24		+			2	2							

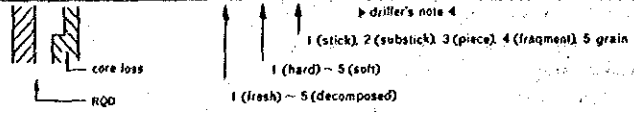


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RST-15 (SHEET 2 OF 5)

LOCATION Right Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 100.06 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,377.61 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 2320,252.53 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE S35°E

DEPTH Z 0m	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER			
0			0 → 100										0	
1	Gf	+			gray	1		Z			P=10			1
2		+			gray	1	1	1						2
3	Db	+			gray	2	2	1	22.7	Altered	P=3			3
4		+			gray	2	2	3	22.8	Cracky				4
5		+						4	23.8					5
6		+								Brown cracks rare	P=8			6
7	Gd	+			white	1	1	Z		somewhat sheared with slickensides at 28.6~28.7m	P=Z			7
8		+												8
9		+							29.2					9
30	Db	+			dk gray	1	1	Z		Some cracky portions (C=4) at 29.2~29.4m 30.5~30.6m	P=Z			30
1		+							31.1		P=0			1
2		+								Some hair cracks Almost cracks coated by yellowish green film (veinlets)	P=8			2
3		+			white	1	1	Z						3
4	Gd	+												4
5		+			pinkish	2	2	3						5
6		+												6
7		+							37.15					7
8		+			dark gray	1	1	Z						8
9	Db	+							38.3					9
10		+							39.25					10

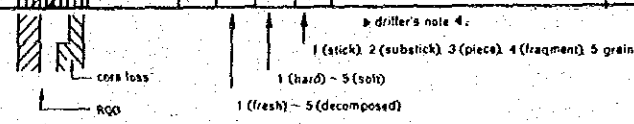


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RS1-15 (SHEET 4 OF 5)

LOCATION Right Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 600.06 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,347.61 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4820,432.53 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE S35°E

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION		
6.0m			0-100%										6.0m		
1	Gf	+			dk gr > pink wt > yel gr	1	1	1	1	61.2				1	
2	Db	-				3	3-4	1	1	61.8				2	
3	Gf	+				2	1	1	1					3	
4		+			dk gr > pink wt > yel gr			2	2	64.0				4	
5		+						1	1					5	
6	Db	+			dark gray	1	1	1	1					6	
7		+				2	1	1	1					7	
8		+				2		2	2					8	
9		+						2	2	68.7				9	
10		+						2	2	69.5				10	
70		+						1	1					70	
1		+						3	3	70.9				1	
2	Gf	+			light gray	1	1	3	3	Hair cracks somewhat rich				2	
3		+				1	1	1	1	Cracks coated by yel. gn chlorite				3	
4		+				2	2	2	2					4	
5		+												5	
6		+						1	2-3	75.55				6	
7	Db	-			dk gray	2	1	3	3	76.0 some cracks btown				7	
8		+				2	1	1	1					8	
9		+				2	2	2	2	77.3				9	
80	Gd	+			white	2	1	1	1	Somewhat porous Most cracks coated by yel. gr. veinlets				80	

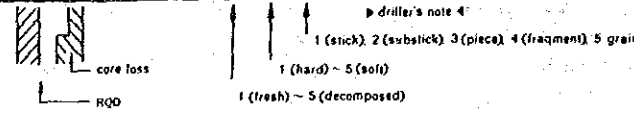


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RST-15 (SHEET 5 OF 5)

LOCATION Right Bank DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION 600.06 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 420.387.11 Y = 4520.252.53 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 45° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE S55°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	OBSERVATION OF CORE					WATER TABLE		DEPTH	ELEVATION
				CEMENTATION KIND OF BIT CASING	COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST		
0.0m			0-100%								0	0.0m
1	Gd	+			wt	Z	1	Z	81.7			1
2	Db	+			dk gy	3	4	Z	81.9 weathered brown			2
3		+					1	3	Some cracks brown	P = 1.0 LU = 1.6		3
4	Gf					Z	1	1	Somewhat cracky			4
5		+				Z	Z					5
6									85.25			6
7									Brown cracks rare	P = 0 LU = 0		7
8									Some cracks coated			8
9									by yel. green chlorite			9
10					gray							10
11										P = 1.0 LU = 6.0		11
12	Gd	+										12
13		+			light							13
14		+										14
15		+								P = 1.0 LU = 8.8		15
16		+										16
17		+										17
18		+									18	
19	Db	+			dk gy	1	1	Z	98.4			19
20		+										20



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-16 (SHEET 1 of 5)

LOCATION Power House DEPTH OF HOLE 100 m COMMENCED 11-10-1985  
 ELEVATION 520 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED 11-1-1986  
 COORDINATE 470335, 4520546 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 10 ° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE N80°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER			
0.5			0 → 100 %									0	40	0m
1	Gd	+			grey	1	1	3	1.25					
2	Gd	+			grey	2	2	4	1.4					
3	Gd	+			grey	2	2	2						
4	Gd	+			grey									
5	Gd	+			grey			3	4.9					
6	Db	+			dk grey	1	1	4	5.25	Some cracks coated by quartz and calcite				
7	Db	+			dk grey	1	1	2	6.5					
8	Gr	+			lt grey	2	2	3	7.40					
9	Gr	+			lt grey	2	2	2	7.75					
10	Db	+			dark grey	1	1	3	7.9	Massive Some hair cracks Some cracks coated by calcite				
11	Db	+			dark grey	1	1	2	8.50					
12	Gr	+			dk grey	2	2	2	12.52					
13	Gr	+			dk grey	1	1	2	12.0					
14	Gr	+			dk grey	1	1	2	12.8					
15	Gd	+			dk grey	1	1	1						
16	Gd	+			dk grey	1	1	1						
17	Gd	+			dk grey	2	2	2						
18	Gd	+			dk grey	2	2	2	18.15					
19	Dr	+			dk grey	1	1	1	19.55					
20	Gd	+			dk grey	2	2	2						

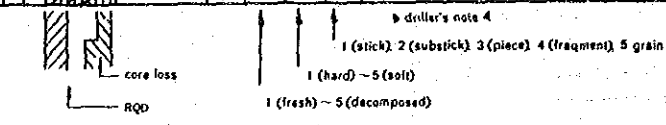
driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)  
 core loss  
 RQD

# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. PSI-16 (SHEET 2 OF 5)

LOCATION Power House DEPTH OF HOLE 100 m COMMENCED 11-10-1985  
 ELEVATION 520 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED 11-1-1986  
 COORDINATE 470.385, 4520.546 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 10 ° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE N80°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT Casing	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION				
0			0-100								0	520	
1		+										1	
2		+										2	
3		+										3	
4	Gd	+			grey	1	1	1				4	
5		+										5	
6		+										6	
7		+							26.8			7	
8	Db	-			dk grey	1	1	1	Some fair cracks 28.0 Massive			8	
9		+										9	
10	Gd	+			grey	1	1	1	Some cracks coated by calcite and quartz			10	
11		+							29.95			11	
12		+										12	
13	Db	-			dk grey	1	2	2	Some brown cracks			13	
14		+							31.4			14	
15		+										15	
16		+										16	
17	Gd	+			grey	1	1	2				17	
18		+							33.65			18	
19		+										19	
20		+							34.10	No brown cracks		20	
21		+										21	
22		+										22	
23	Db	-			dk grey	1	1	3	35.55			23	
24		+							35.82			24	
25		+										25	
26	Gd	+			grey	1	1	1				26	
27		+							37.45			27	
28	Db	-			dk grey	1	1	2	39.52			28	
29		+										29	
30	Gd	+			dk grey	1	1	2	Some cracks coated by chlorite			30	
31		+										31	
32		+										32	
33		+										33	
34		+										34	
35		+										35	
36		+										36	
37		+										37	
38		+										38	
39		+										39	
40		+										40	

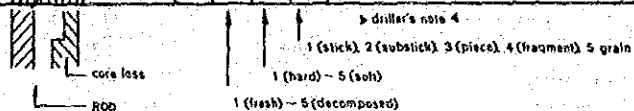


### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. R51-16 (SHEET 3 OF 5)

LOCATION Power House DEPTH OF HOLE 100 m COMMENCED 11-10-1986  
 ELEVATION 520 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED 11-1-1986  
 COORDINATE 470,835, 4520,546 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 10° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE N80°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0m			0-100%									0m	
0.5	Gd	+			dk grey	1-2	1-2	40.45	hair crack poor				
1	Db	-				1	2	41.55					
2	Gd	+				1	2	42.80					
3		-				1	2	43.0					
3.5		-				2	3	43.7					
4		-				1	2	44.0					
5		-				2	3	45.5	Some cracks coated by calcite Somewhat brown				
6		-							No brown cracks Massive				
7		-											
8		-											
9	Db	-				1	2						
10		-				1	1						
11		-											
12		-						52.9					
13		-											
14		-											
15		-											
16		-											
17		-											
18		-						55.22					
19		-							Chloritization				
20		-											
21		-						56.55					
22		-											
23		-						57.0					
24	Gd	+				2	1						
25		-											
26		-											
27		-											
28		-											
29		-											
30		-											
31		-											
32		-											
33		-											
34		-											
35		-											
36		-											
37		-											
38		-											
39		-											
40		-											
41		-											
42		-											
43		-											
44		-											
45		-											
46		-											
47		-											
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49		-											
50		-											
51		-											
52		-											
53		-											
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60		-											

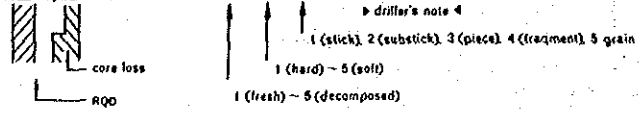


### GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RST-16 (SHEET 4 of 5)

LOCATION Power House DEPTH OF HOLE 100 m COMMENCED 11-10-1985  
 ELEVATION 520 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED 11-1-1986  
 COORDINATE 470335, 4520546 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 10 ° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE N80°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE			DEPTH	ELEVATION	
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER				
6.0m			0-100%										0	6.0m	43
1	Db	+			dk 98	2	1	3	60.15	Hair cracks poor					
						2	1	2	61.32						
2	Gr	+			gt 98	2	1	2		Some cracks coated by chlorite					
3	Gr	+			gt 98			3							
									63.25						
4	Db	+			dk 98	1-2	1	3	63.95						
	Gr	+			gt 98	1-2	1-2	3	64.4						
5	Db	+			dk 98	1		3	65.3						
6	Db	+			gt 98	2		1	66.5						
7	Gr	+			gt 98	1	1	2	67.55						
8	Db	+			dk 98	1	1	1	68.2						
						2		3-4	68.4						
9	Gr	+			gt 98	1	1	2							
									69.85						
10	Db	+			dk 98	1		2							
						2	1	1	71.8						
2	Gr	+			gt 98	1	1	2							
3	Gr	+			gt 98	1	1	2							
									73.6						
									73.8						
									74.25						
5	Gd	±			gt 98	1	1	2							
						2		1							
6		±							76.43						
7		+						1	77.0						
								3	77.6						
8	Db	+			dk 98	1	1	1							
						2		2	78.55						
								2-4	78.8						
9		+						1							
								1							
80															



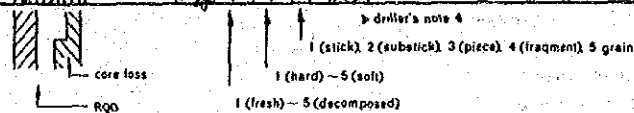


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. RSI-16 (SHEET 5 of 5)

LOCATION Power House DEPTH OF HOLE 100 m COMMENCED 11-10-1985  
 ELEVATION 520 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED 11-1-1986  
 COORDINATE 470335, 4520546 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 10° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE N80°E CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER			
80m			0-100%									0	80m	
1	Db	+			dk	1	1	2	80.42					
						2	2	3-4	80.85					
2		+			94	1	1	1	81.82					
								2	82.45 Chloritization					
3	Gr	+			Greenish gr	2	1	3						
								2	83.85					
4		+						4						
5	Db	+			dk	1	1	3						
						2	2	2	85.25					
6		+			lt	2	1	4						
								2	87.02					
7	Gr	+			94	2	1	3						
								2	87.65 Core fragments					
8	Db	+			dk	1	2	4-3	88.0 dominant					
						2	1	2						
9	Gr	+			lt	2	1	3						
								2	89.2					
90	Db	+			dk	2	1-2	3-4	89.7					
								2	90.5					
1	Gr	+			lt	2	2	4	91.15 Fragmental core					
								1	91.5					
2	Db	+			dk	1	2	4	Surface of the cracks are polished					
								2	92.8					
3		+						3	93.85					
								2	94.8					
4		+			lt	1	1	2						
								2	96.5					
5	Gr	+			94	2								
								2	97.35					
6		+						4	Somewhat sheared Core fragments dominant					
7		+			dk	2	2	3	98.6					
								2	99.7					
8	Db	+			94	2	2	3						
								1	100.0					
9		+						1						
100	Gr	+			94	1	1	1					100	

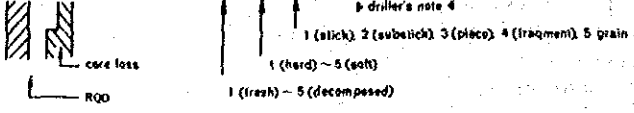


## GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-17 (SHEET 1 of 7)

LOCATION	<u>LEFT BANK</u>	DEPTH OF HOLE	<u>130</u> m	COMMENCED	_____
ELEVATION	<u>613.25</u> m	DEPTH OF OVERBURDEN	_____ m	COMPLETED	_____
COORDINATE	<u>X=470.111.31</u> <u>Y=4520.712.68</u>	LENGTH OF ROCK DRILLING	_____ m	DRILLED BY	_____
ANGLE FROM HORIZONTAL	<u>65°</u>	TOTAL LENGTH OF CORE	_____ m	LOGGED BY	_____
BEARING OF ANGLE HOLE	<u>N35°W</u>	CORE RECOVERY	_____ %		

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING					
0			0-100								0	43	
1	Gd	[Hatched]	[Hatched]		grey	1	1	3	Gd: Granodiorite Some brown cracks	P=4	Lu=38.5	No Test	[Scale]
2								2.0					
3								2					
4								1					
5								3					
6								6.2					
7	Db	[Hatched]	[Hatched]		dark grey	1	1	2	Db: Diabase Somewhat cracky	P=10	Lu=2.1	[Scale]	
8								7.35					
9								3					
10								8.2					
11													
12													
13	[Hatched]	[Hatched]	[Hatched]		dark grey	1	1	1	A few brown cracks Some cracks are coated by quartz and calcite	P=10	Lu=30.6	[Scale]	
14								2					
15								1					
16								1					
17								2					
18													
19	[Hatched]	[Hatched]	[Hatched]		dark grey	1	1	1	Some fair cracks	P=10	Lu=0.7	[Scale]	
20								2					
21													
22													



# GEOLOGIC LOG OF DRILL HOLE

PROJECT

HOLE No. LSI-17 (SHEET 2 of 7)

LOCATION LEFT BANK DEPTH OF HOLE 130 m COMMENCED \_\_\_\_\_  
 ELEVATION 613.25 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,111.31 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4620,712.08 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 65° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N35W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER			
2.0m			0-100									0	2.0m	43
1		+					1				P=10		1	
								21.42						
2		+					1				P=10		2	
								22.71						
3		+			1		1				P=10		3	
								23.0						
4	Db	+			1	1	1				P=10		4	
5		+			2		1				P=10		5	
6		+					2				P=10		6	
								26.0						
7		+					2				P=10		7	
								27.2						
8	Gd	+			1	1	1				P=10		8	
								27.7						
9	Db	+			1-2	1	2				P=10		9	
								28.0						
10	Gd	+			1	1	2				P=10		10	
								28.3						
11		+			1	1	2				P=10		11	
								28.6						
12		+			1	1	1				P=10		12	
13	Db	+			1	1	1				P=10		13	
14		+			1	1	1				P=10		14	
								29.6						
15		+			1	1	2				P=10		15	
								31.5						
16	Gd	+			1	1	1				P=10		16	
								31.8						
17		+			1	1	1				P=10		17	
18	Db	+			1	1	1				P=10		18	
19		+			1	1	2				P=10		19	
								34.15						
20	Gd	+			1	1	2				P=10		20	
								34.85						
21	Gr	+			1	1	2			Microgranite	P=10		21	
								35.85						
22		+			1	1	2				P=10		22	
								36.0						
23		+			1	1	1				P=10		23	
24	Db	+			1	1	1				P=10		24	
25		+			1	1	2				P=10		25	
								39.2						
26		+			2	2	4				P=10		26	
								39.7						
27		+			1	1	2				P=10		27	

driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)

# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-17 (SHEET 3 OF 7)

LOCATION LEFT BANK DEPTH OF HOLE 130 m COMMENCED \_\_\_\_\_

ELEVATION 613.25 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_

COORDINATE X=490,111.27 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_

Y=4520,712.08 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_

ANGLE FROM HORIZONTAL 65° CORE RECOVERY \_\_\_\_\_ %

BEARING OF ANGLE HOLE N35°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
4.0m			0-100%									4.0m	43
1									Some brown cracks	P=10		1	
2									Some cracks are coated by quartz and calcite	P=10		2	
3	Db				1	1	1			P=10		3	
4					2					P=10		4	
5								41.72		P=10		5	
6								44.35		P=10		6	
7	Gr				1	1	1	46.68		P=10		7	
8					2	3	3	47.0	No brown cracks	P=10		8	
9									Some cracks are coated by quartz and calcite	P=10		9	
10					1	1	1			P=10		10	
11										P=10		11	
12								52.0		P=10		12	
13	Db								Some brown cracks	P=10		13	
14					1	1	1			P=10		14	
15					2					P=10		15	
16								55.7		P=10		16	
17								56.0		P=10		17	
18					1	2				P=10		18	
19					2			57.2		P=10		19	
20								57.3		P=10		20	
21					1	1	2			P=10		21	
22					2					P=10		22	
23								59.6	All cracks brown	P=10		23	
24					3	1	3			P=10		24	

driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) ~ 5 (soft)  
 1 (fresh) ~ 5 (decomposed)

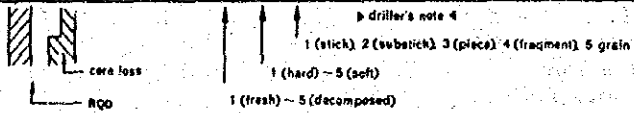
# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. LSI-17 (SHEET 4 OF 7)

LOCATION LEFT BANK DEPTH OF HOLE 130 m COMMENCED \_\_\_\_\_  
 ELEVATION 613.25 m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE X = 470,111.31 LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
Y = 4550,212.08 TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 65° CORE RECOVERY \_\_\_\_\_ %  
 BEARING OF ANGLE HOLE N35W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE			DESCRIPTION	WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS		CORE CUTTING	WATER PRESSURE TEST		
0			0-100								0	
1					1		2	Some brown cracks	P=10		1	
2					1	1	1	Some cracks are coated by quartz and calcite				
3					2		3					
4								62.6				
5					1	1	1	No brown cracks	P=10		3	
6								64.0				
7								Some brown cracks	P=10		5	
8					1		1	Some cracks are coated by quartz and calcite				
9					1	1	1					
10					2		2	Massive	P=10		6	
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												



# GEOLOGIC LOG OF DRILL HOLE

PROJECT

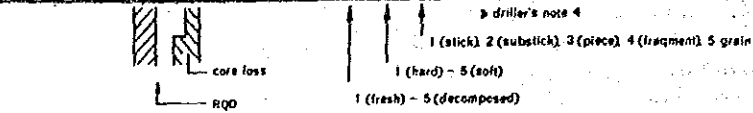
HOLE No. LST-17 (SHEET 5 OF 7)

LOCATION LEFT BANK DEPTH OF HOLE 100 m COMMENCED - - -  
 ELEVATION 613.25 m DEPTH OF OVERBURDEN - - - m COMPLETED - - -  
 COORDINATE X=470.111.31 LENGTH OF ROCK DRILLING - - - m DRILLED BY - - -  
Y=4520.712.08 TOTAL LENGTH OF CORE - - - m LOGGED BY - - -  
 ANGLE FROM HORIZONTAL 65° CORE RECOVERY - - %  
 BEARING OF ANGLE HOLE N25°W

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION				
0			0 + 100									40.8	4.2
1							1	2	80.3		P=10		
2							1	2	81.5		P=10		
3							2	3	83.2		P=10		
4							2	3	83.5		P=10		
5							3	1			P=10		
6							2	2	85.35		P=10		
7							1	2			P=10		
8											P=10		
9									88.6		P=10		
10											P=10		
11											P=10		
12											P=10		
13											P=10		
14											P=10		
15											P=10		
16											P=10		
17											P=10		
18											P=10		
19											P=10		
20											P=10		
21											P=10		
22											P=10		
23											P=10		
24											P=10		
25											P=10		
26											P=10		
27											P=10		
28											P=10		
29											P=10		
30											P=10		

Some cracks are coated by quartz and calcite

Some brown cracks



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. LSI-17 (SHEET 6 OF 7)

LOCATION	<u>LEFT BANK</u>	DEPTH OF HOLE	<u>120</u> m	COMMENCED	_____
ELEVATION	<u>613.25</u> m	DEPTH OF OVERBURDEN	_____ m	COMPLETED	_____
COORDINATE	<u>X = 450 111.31</u> <u>Y = 4520 712.08</u>	LENGTH OF ROCK DRILLING	_____ m	DRILLED BY	_____
ANGLE FROM HORIZONTAL	<u>85°</u>	TOTAL LENGTH OF CORE	_____ m	LOGGED BY	_____
BEARING OF ANGLE HOLE	<u>N35W</u>	CORE RECOVERY	_____ %		

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				WATER TABLE		DEPTH	ELEVATION		
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST			LEAKAGE OF DRILLING WATER	
10.0m			0-100%								0	40 100m	4.5	
1	Gd	+			gy	1	1	1	101.15		P=10			1
2	Db	+			dk	1	1	1	No brown cracks		P=10			2
3		+			gy				103.2		P=10			3
4	Gd	+			gy	1	1	1			P=10			4
5		+							105.1		P=10			5
6	Db	+			dk	1	1	1			P=10			6
7		+			gy				107.1		P=10			7
8	Gd	+			gy	1	1	1			P=10			8
9		+							106.8		P=10			9
10		+			dk						P=10			10
11	Db	+			gy	1	1	1			P=10			11
12		+							112.95		P=10			12
13	Gd	+			gy	1	1	1-2	113.1		P=10			13
14	Gr	+			gy	1-2	1	1-2	113.4		P=10			14
15		+							113.6		P=10			15
16		+						2	Some cracks are coated by quartz and calcite		P=10			16
17	Db	+			dk				115.2		P=10			17
18		+			gy	1	1	1			P=10			18
19		+							117.1		P=10			19
20		+						2			P=10			20
21		+						3			P=10			21
22		+						1			P=10			22
23		+						2			P=10			23
24		+						1			P=10			24
25		+						2			P=10			25
26		+						1			P=10			26
27		+						2			P=10			27
28		+						1			P=10			28
29		+						2			P=10			29
30		+						1			P=10			30
31		+						2			P=10			31
32		+						1			P=10			32
33		+						2			P=10			33
34		+						1			P=10			34
35		+						2			P=10			35
36		+						1			P=10			36
37		+						2			P=10			37
38		+						1			P=10			38
39		+						2			P=10			39
40		+						1			P=10			40
41		+						2			P=10			41
42		+						1			P=10			42
43		+						2			P=10			43
44		+						1			P=10			44
45		+						2			P=10			45
46		+						1			P=10			46
47		+						2			P=10			47
48		+						1			P=10			48
49		+						2			P=10			49
50		+						1			P=10			50
51		+						2			P=10			51
52		+						1			P=10			52
53		+						2			P=10			53
54		+						1			P=10			54
55		+						2			P=10			55
56		+						1			P=10			56
57		+						2			P=10			57
58		+						1			P=10			58
59		+						2			P=10			59
60		+						1			P=10			60
61		+						2			P=10			61
62		+						1			P=10			62
63		+						2			P=10			63
64		+						1			P=10			64
65		+						2			P=10			65
66		+						1			P=10			66
67		+						2			P=10			67
68		+						1			P=10			68
69		+						2			P=10			69
70		+						1			P=10			70
71		+						2			P=10			71
72		+						1			P=10			72
73		+						2			P=10			73
74		+						1			P=10			74
75		+						2			P=10			75
76		+						1			P=10			76
77		+						2			P=10			77
78		+						1			P=10			78
79		+						2			P=10			79
80		+						1			P=10			80
81		+						2			P=10			81
82		+						1			P=10			82
83		+						2			P=10			83
84		+						1			P=10			84
85		+						2			P=10			85
86		+						1			P=10			86
87		+						2			P=10			87
88		+						1			P=10			88
89		+						2			P=10			89
90		+						1			P=10			90
91		+						2			P=10			91
92		+						1			P=10			92
93		+						2			P=10			93
94		+						1			P=10			94
95		+						2			P=10			95
96		+						1			P=10			96
97		+						2			P=10			97
98		+						1			P=10			98
99		+						2			P=10			99
100		+						1			P=10			100

Driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 3 (decomposed)

# GEOLOGIC LOG OF DRILL HOLE

**PROJECT** \_\_\_\_\_ **HOLE No.** LSI-17 (SHEET 7 OF 7)  
**LOCATION** LEFT BANK **DEPTH OF HOLE** 130 m **COMMENCED** \_\_\_\_\_  
**ELEVATION** 613.25 m **DEPTH OF OVERBURDEN** \_\_\_\_\_ m **COMPLETED** \_\_\_\_\_  
**COORDINATE** X = 4520.711.21  
Y = 4520.712.08 **LENGTH OF ROCK DRILLING** \_\_\_\_\_ m **DRILLED BY** \_\_\_\_\_  
**ANGLE FROM HORIZONTAL** 65° **TOTAL LENGTH OF CORE** \_\_\_\_\_ m **LOGGED BY** \_\_\_\_\_  
**BEARING OF ANGLE HOLE** N35°W **CORE RECOVERY** \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION					
120m			0 = 100									0	120m	
1	Db	+			dk	1	1	1	No brown cracks	P=10			1	
2		+			gy	1	1	2					2	
3	Gd	+			gy	1	1	1	123.15 123.3	P=10			3	
4	Db	+			dk	1	1	1	124.3				4	
5	Gd	+			gy	1	1	1		P=10			5	
6	Db	+			dk	1	1	1					6	
7		+			gy	1	1	1	125.09				7	
8	Db	+			dk	1	1	1		P=10			8	
9		+			gy	1	1	2	128.6				9	
10	Gd	+			gy	1	1	1		P=10			10	
130									130.0				130	

> driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) ~ 8 (soft)  
 1 (fresh) ~ 5 (decomposed)

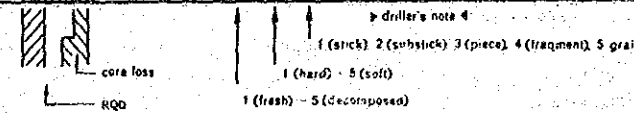


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. ST-1 (SHEET 1 OF 6)

LOCATION \_\_\_\_\_ DEPTH OF HOLE 10.2 m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION				
0m			0-100%									0	0m
1		△							Alluvium and Slope wash				1
2	Al + SI	△							Composed of fine, coarse pebbles.				2
3		△							Pebbles are diabase, meta sandstone being angular.				3
4		△											4
5									4.5				5
6	Ss				black			1 3 5.15	Meta sandstone				6
7								2 2 5.67	Some hair cracks				7
8								3-4 5.95	Surface of cracks are polished				8
9								1-2 6.25					9
10	Ss				black			2 2 7.10					10
11								3-4 7.5					11
12	Db				grey			3 8.0	Diabase				12
13								1 1 8.65					13
14								2 2-3 9.32					14
15	Ss				dk gy			2 2 10.2					15
16								3 10.3					16
17								1 12.0					17
18	Db				grey			2 1 2					18
19								1 1 3					19
20								2 15.85					20
21								1 17.45					21
22	Ss				black			1 3 3	Meta sandstone is fine-grained and medium grained				22
23								2 4 4	Property of meta sandstone is greasy feel.				23
24								1-2 2-3 2-3					24



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. ST-1 (SHEET 2 OF 6)

LOCATION \_\_\_\_\_ DEPTH OF HOLE 102 m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90 ° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH Z 0m	ROCK NAME	LOG	CORE RECOVERY %	CEMENTA- TION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE WATER PRESSURE TEST LEAKAGE OF DRILLING WATER	DEPTH Z 0m	ELEVATION 4.3
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING	LU				
0			0 → 100								0	4.3	
1							2					1	
2							1 2 3 21.95 2-4 22.24				Lu=1	2	
3							2 1 3 23.5				Lu=1	3	
4							2 1 3 25.2 2-4 25.24				Lu<1	4	
5							2 1 3 26.95 2-4 27.05 2 27.31				Lu=1	5	
6							3-4 27.80				Lu=1	6	
7							2 1 3 30.45 3 4 4-5 30.80				Lu=1	7	
8							1 1 2 33.35				Lu<1	8	
9							2 1 3 34.4	Some hair cracks			Lu<1	9	
10							2 1 3 35.3				Lu<1	10	
11							1 1 1 36.99 1-2 2 3 37.3				Lu<1	11	
12							1 1 2 38.2 1-2 1-2 3 38.65				Lu<1	12	
13							1 1-2 1 39.0				Lu<1	13	
14							1 1 3 2 2 4 39.8				Lu<1	14	

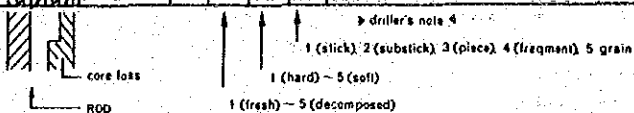
driller's note  
 1 (stick) 2 (substick) 3 (piece) 4 (fragment) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)

# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. ST-1 (SHEET 3 of 6)

LOCATION \_\_\_\_\_ DEPTH OF HOLE 102 m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING		WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUCEON		
4.0m			0 → 100%									0	4.0m	
1					black	1-2	2	40.4						
						2	3	40.75						
						2	2	41.0						
						2	3							
						2	2	41.8						
2									Meta sandstone					
3														
4									Hair cracks rich					
5						1	1		Some cracks coated by quartz					
6						1	1							
7						2	2							
8														
9														
50					dark grey			49.4						
						3-4		50.0						
						2		50.2						
1						2	1							
						2	2							
2								52.0						
3														
						1	1							
						1	2							
						1	1							
						2	3							
								53.2						
								53.4						
4						1	1							
						2	1							
5														
6														
7						1	1							
						2	2							
8														
								55.53						
9						1	1							
						1	2							
						2	1-2							
								57.25						
60								57.35						

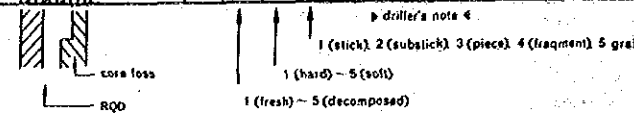


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. ST-1 (SHEET 4 OF 6)

LOCATION \_\_\_\_\_ DEPTH OF HOLE 102 m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER	LUGEON			
0			0 → 100 %										0	40.60m	
0.5															
1										Meta-sandstone					
1.5					dk grey	1	1-2	1-2	60.65						
2						1	1	3	61.7						
2.5						1	1	1-2	62.4						
3						1-2	1-2	3	62.8						
3.5						1	1	1	63.3						
4						2	2	3-4	63.55						
4.5						2	1	3	63.95						
5						2	1	3							
5.5						1	1-2	2	65.1						
6						1-2	2	3-4	65.52						
6.5						1-2	2	3-4	66.0						
7					Black	1	1-2	1	66.65						
8						1	1	3							
8.5						1	2	1							
9						2	1	4							
9.5									69.7						
10						1	1	1	70.0						
10.5						1	1	3							
11						1	2	1							
11.5						2	1	4	71.4						
12						1	2	2							
12.5						1	1	3							
13						2	3	3	73.05						
13.5						1	1	2							
14						1	1	1							
14.5						2	2	3	74.85						
15						1	1	1							
15.5					grey	1	1	1							
16						2	2	3-4	76.7						
16.5						2	2	3-4	76.9						
17						1	1	1	77.4						
17.5						1	1	2							
18					dark grey	1	2	3	78.4						
18.5						1	1	1							
19						1	1	1							
19.5						1	1	2							
20						1	1	2							

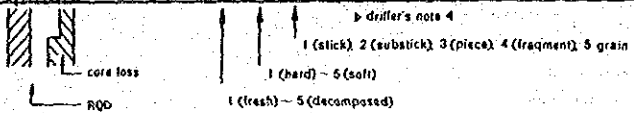


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. ST-7 (SHEET 5 OF 6)

LOCATION \_\_\_\_\_ DEPTH OF HOLE 102 m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER	LUGEON		
0			0 → 100 %										0	80m
1					1	1	1	2	Hair cracks rich					
2					2	1	3	4	81.0					
3					1	2	1	2	82.30					
4					2	3	3	4	82.63					
5					1	2	2	2	83.8					
6									Hair cracks rich					
7					1	1	1	1	Some cracks coated by quartz					
8									88.3					
9					1	2	2	2						
10					2	3	3	3	89.6					
11	SS				dark grey									
12														
13					1	2	2	2						
14					1	2	1	3						
15					2	3	3	3						
16														
17														
18														
19														
20					1	1	1	1	98.95					
					3	3	4	5	99.3					

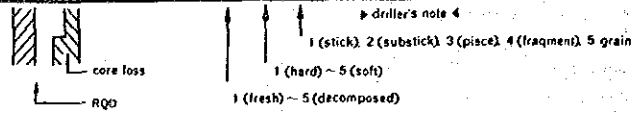


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. ST-1 (SHEET 6 OF 6)

LOCATION _____	DEPTH OF HOLE <u>102</u> m	COMMENCED _____
ELEVATION _____ m	DEPTH OF OVERBURDEN _____ m	COMPLETED _____
COORDINATE _____	LENGTH OF ROCK DRILLING _____ m	DRILLED BY _____
ANGLE FROM HORIZONTAL <u>90</u> °	TOTAL LENGTH OF CORE _____ m	LOGGED BY _____
BEARING OF ANGLE HOLE _____	CORE RECOVERY _____ %	

DEPTH 100m	ROCK NAME	LOG	CORE RECOVERY 0 → 100 %	CEMENTA- TION KIND OF BIT CASING	OBSERVATION OF CORE				DESCRIPTION	WATER TABLE WATER PRESSURE TEST LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING				
1	SS				dk grey	3	3-4	4-5	100.95			
1						1	1-2	2	100.95			
2						1	2	3	120.0	Bottom		
2								4				
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												



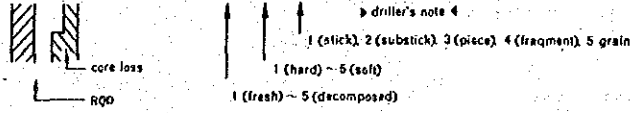
# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. *STD-1* (SHEET 1 OF 5)

LOCATION _____	DEPTH OF HOLE <i>100</i> m	COMMENCED _____
ELEVATION _____ m	DEPTH OF OVERBURDEN _____ m	COMPLETED _____
COORDINATE _____	LENGTH OF ROCK DRILLING _____ m	DRILLED BY _____
ANGLE FROM HORIZONTAL <i>90</i> °	TOTAL LENGTH OF CORE _____ m	LOGGED BY _____
BEARING OF ANGLE HOLE _____	CORE RECOVERY _____ %	

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	COLOR	WEATHERING	HARDNESS	CORE CUTTING	OBSERVATION OF CORE		WATER TABLE	WATER PRESSURE TEST	DEPTH	ELEVATION
									DESCRIPTION	LEAKAGE OF DRILLING WATER				
0m			0-100%										0	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10		<i>Al</i>												
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

*0 ~ 33.7m*  
*River bed deposit*  
*consisting of sand*  
*and gravel.*  
*Normal diameter of*  
*gravel is 5 ~ 10 cm*  
*Max. diameter of*  
*gravel 80 cm*

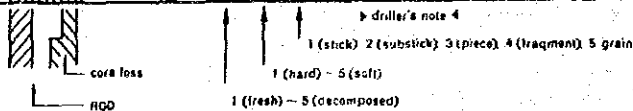


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. *SID-1* (SHEET 2 OF 5)

LOCATION \_\_\_\_\_ DEPTH OF HOLE *100* m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL *90°* TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					DESCRIPTION	WATER TABLE			DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	WATER PRESSURE TEST		LEAKAGE OF DRILLING WATER	DEPTH	ELEVATION		
2.0m			0 → 100 %										0	40.20m	4.5
1														1	
2														2	
3														3	
4														4	
5														5	
6														6	
7	<i>AI</i>													7	
8														8	
9														9	
30														30	
1														1	
2														2	
3														3	
4														4	
5														5	
6														6	
7	<i>Db</i>													7	
8														8	
9														9	
40														40	



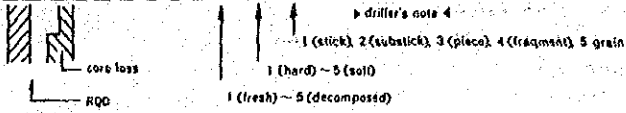


# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. *SID-1* (SHEET 3 OF 5)

LOCATION \_\_\_\_\_ DEPTH OF HOLE *120* m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL *90* ° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF CLASING	OBSERVATION OF CORE					WATER TABLE WATER PRESSURE TEST LEAKAGE OF DRILLING WATER LUGEON	DEPTH	ELEVATION
					COLOR	WEATHER- ING	HARD- NESS	CORE CUTTING	DESCRIPTION			
4.0m			0-100%								4.0m	4.3
1											1	
2											2	
3											3	
4											4	
5											5	
6											6	
7					1	1	1	2			7	
8											8	
9											9	
50	<i>Db</i>										50	
1											1	
2											2	
3											3	
4											4	
5											5	
6											6	
7											7	
8					1	1	3		<i>57.0</i> No brown cracks but calcite vein chloritization near <i>59.5</i> <i>59.5m.</i>		8	
9					2	2					9	
60											60	



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_ HOLE No. *SD-1* (SHEET 4 OF 5)

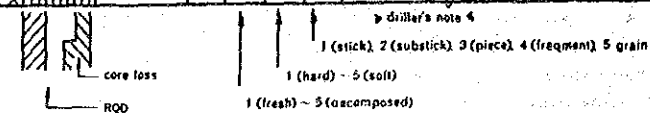
LOCATION \_\_\_\_\_ DEPTH OF HOLE \_\_\_\_\_ m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL *90°* TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE		DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION	WATER PRESSURE TEST	LEAKAGE OF DRILLING WATER		
0			0 → 100									0	60m
1									<i>Brecciated cores, but no brown cracks. Gravelly core (1-3cm). Many calcite film. Shear zone?</i>				1
2							4		<i>Generally somewhat sheared</i>				2
3						1			<i>Calcite vein and chlorite film</i>				3
4						2							4
5													5
6									<i>Mainly gravelly core Shear zone but clay zone not remarkable</i>				6
7													7
8													8
9									<i>Flaky core from 60.0 to 71.5m</i>				9
10													10
11													11
12													12
13													13
14													14
15													15
16													16
17													17
18													18
19													19
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49													49
50													50
51													51
52													52
53													53
54													54
55													55
56													56
57													57
58													58
59													59
60													60

70 Db

19.45

Flaky core



# GEOLOGIC LOG OF DRILL HOLE

PROJECT \_\_\_\_\_

HOLE No. S2D-1 (SHEET 5 OF 5)

LOCATION \_\_\_\_\_ DEPTH OF HOLE 100 m COMMENCED \_\_\_\_\_  
 ELEVATION \_\_\_\_\_ m DEPTH OF OVERBURDEN \_\_\_\_\_ m COMPLETED \_\_\_\_\_  
 COORDINATE \_\_\_\_\_ LENGTH OF ROCK DRILLING \_\_\_\_\_ m DRILLED BY \_\_\_\_\_  
 ANGLE FROM HORIZONTAL 90° TOTAL LENGTH OF CORE \_\_\_\_\_ m LOGGED BY \_\_\_\_\_  
 BEARING OF ANGLE HOLE \_\_\_\_\_ CORE RECOVERY \_\_\_\_\_ %

DEPTH	ROCK NAME	LOG	CORE RECOVERY	CEMENTATION KIND OF BIT CASING	OBSERVATION OF CORE					WATER TABLE	WATER PRESSURE TEST	DEPTH	ELEVATION
					COLOR	WEATHERING	HARDNESS	CORE CUTTING	DESCRIPTION				
0m			0-100%									0	43
1									80-81.4m core: less than 5cm				
2						1	4		81.4 Many chlorite films				
3						2	3		83.0				
4									No brown cracks				
5													
6							3						
7						1	1						
8							2						
9													
90 Db													
1						1	1	3	90.5 Cracky with some shear zone (91.87-92.9m)				
2						2	2	4	92.0				
3						1	1	3					
4						2	2	4					
5									95.0				
6									Good core				
7								1					
8								2					
9													
100									100.0				100

driller's note 4  
 1 (stick) 2 (substick) 3 (piece) 4 (fragmen) 5 grain  
 1 (hard) - 5 (soft)  
 1 (fresh) - 5 (decomposed)

