

# BORE HOLE LOG KULEKHANI-3 HYDROELECTRIC POWER PROJECT

DRILL HOLE NO.: BPV-2B  
COORDINATES  
INCLINATION: VERTICAL  
DRILLING MACHINE: JOY  
DRILLING METHOD: ROTARY  
CLIENT: NIPPON KCEI

START DATE: 29/08/2002  
COMPLETION DATE: 21/08/2002  
COLLAR ELEVATION:  
ELEVATION HOLE END: 78.35 m.  
LOCATION: Sikharas Danda  
DIRECTION:

Depth, m	Casing Size	Core Log	Description	S P T Blows per 15 cm	Water Level m	Alteration	Orientation	Roughness	Jokal, m	REC%	RQD%	Core Recovery RQD%					Permeability	Laboratory
												20	40	60	80	100		
20.00				0-15/15-3030-45														
20.00	68		W2-W3, medium to strong hard, white, fine grain, moderately jointed silicious dolomite with mica parting. Core loss : 20.00 to 20.44m.		18.00		30°	ir	10	98	-							
21.00			W1, strong hard, white to light grey, fine grain, moderately jointed silicious dolomite. Core loss : 21.52 to 22.00m.		15.00		30°	ir	10	52	-							
22.00			W1, strong hard, light grey, fine grain, moderately jointed silicious dolomite. Light grey, fine grain sand as sludge. Core loss : 22.00 to 22.85m.		17.70		30°	ir	3	15	-							
23.00			Total core loss : Light grey to brownish, fine grain sand as sludge. Core loss : 23.00 to 24.00m.		18.00				0	0	-							
24.00			W1, strong hard, white to light grey, fine grain, moderately jointed silicious dolomite. Light grey to greenish, fine grain sand as sludge. CI : 24.00 to 24.83m.				30°	ir	5	17	-							
25.00			W1-W2, strong hard, white to greenish grey, fine grain, moderately jointed silicious dolomite. Core loss : 25.00 to 25.00m.		Dry		30°	ir	5	20	-							
26.00			W1-W3, medium to strong hard, light to dark grey, fine grain, highly jointed and fragmented silicious dolomite with mica parting. CI : 25.45 to 25.73m.		19.30		30°	ir	10	72	-							
27.00			W1, strong hard, white, fine grain, moderately jointed dolomite. Core loss : 27.16 to 27.72m.		Dry		30°	ir	7	43	-							
28.00			W1, strong hard, white to light grey, fine grain, moderately jointed dolomite with mica parting. Core loss : 28.16 to 28.26m.		23.72		30°	ir	12	80	10							
29.00			W1, strong hard, white to light grey, fine grain, moderately jointed dolomite with mica parting. FZ : 29.81 to 29.92m.		Dry		30°	ir	14	100	-							
30.00					30.30		30°	ir										

ABBREVIATION rougher, smoother, slickensided=sl, un=undulating, p=planar, clayed, sand=sa, mica=mi, crushed=cr, iron stain=FeO  
Core, MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed.  
FZ=Fractured, CL=Core loss

Compiled by: JOGN SHRESTHA & SANTA MAJHI

Logged by: R. SHRESTHA

# BORE HOLE LOG KULEKHANI-3 HYDROELECTRIC POWER PROJECT

DRILL HOLE NO.: BPV-23  
COORDINATES  
INCLINATION: VERTICAL  
DRILLING MACHINE: JOY  
DRILLING METHOD: ROTARY  
CLIENT: NIPPON KOEI

START DATE: 29/08/2002  
COMPLETION DATE: 21/08/2002  
COLLAR ELEVATION:  
ELEVATION HOLE END: 78.35 m.  
LOCATION: Sikharbas Canda  
DIRECTION:

CLIENT: NIPPOON RGE				S P T			Core Recovery										Results			
							RQD%										LU	kg/cm2		
Depth, m	Casing Size	Core Log	Description	Blows per 15 cm			Water Level m.	Alteration	Orientation	Roughness	Joint/ m	REC%	RQD%	20	40	60	80	100	Permeability	Laboratory
30.00				0-15	15-30	30-45														
	NX		W1, strong hard, light grey, fine grain dolomite.						10°	Ir	7	100	58							
31.00			W1-W2, strong hard, light to dark grey, fine grain dolomite with mica parting.						20°	Ir	8	100	61							
32.00			W1, strong hard, light grey, fine grain, moderately jointed dolomite.				31.37		30°	Ir	9	100	58							
33.00			W1-W2, strong hard, light grey, fine grain highly jointed silicious dolomite.				33.20		50°	Ir	14	100	-							
34.00			W1, strong hard, light grey, fine grain, moderately jointed silicious dolomite.						30°	Ir	8	88	41							
35.00	36		Core loss : 34.28 to 35.00m.				33.70		20°	Ir	4	21	-							
			W1, strong hard, white, fine grain, highly jointed and fragmented dolomite.				33.50		40°	Ir	3	9	-							
36.00			Core loss : 35.00 to 35.79m.						30°	Ir	4	17	-							
			W1, strong hard, white to dark grey, fine grain, highly jointed dolomite.																	
37.00	3X		Core loss : 36.00 to 36.91m.				32.00		30°	Ir	4	17	-							
			W1, strong hard, light grey, fine grain highly jointed dolomite. Fine grain, light grey sand as sudge.				33.10													
38.00	55		Core loss : 37.00 to 37.33m.				36.00					0	0	-						
			Total core loss : light grey, fine grain sand found as sudge.				35.10													
39.00			Core loss : 38.00 to 39.00m.						20°											
			W1, strong hard, light grey, fine grain, highly jointed and fragmented dolomite.						30°-40°	Ir	9	58	-							
40.00	7		Core loss : 39.00 to 39.42m.						60°	Ir										
ABBREVIATION rough=r, smooth=s, slickensided=sl, un=undulating, pl=planar, clay=cl, sand=sa, mica=mi, crushed=cr, iron stain=FeO Casing: MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed. FC= Fractured, CL= Core loss Drilled by: JOON SHRESTHA & SANTA MAJHI Logged by: R. STHAN																				

ABBREVIATION rough=r, smooth=s, slickensided=sl, un=undulating, pl=planar, clay=cl, sand=sa, mica=mi, crushed=cr, iron stain=FeO

Line MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed.

Fr=Fractured, CL=Core loss

Drilled by: JCCN SHRESTHA & SANTA MAJHI

Logged by: R. SHAPIT

# BORE HOLE LOG KULEKHANI-3 HYDROELECTRIC POWER PROJECT

DRILL HOLE NO.: BPV-2B  
COORDINATES  
INCLINATION: VERTICAL  
DRILLING MACHINE: JOY  
DRILLING METHOD: ROTARY  
CLIENT: NIPPON KCE!

START DATE: 29/08/2002  
COMPLETION DATE: 21/08/2002  
COLLAR ELEVATION:  
ELEVATION HOLE END: 78.35 m.  
LOCATION: Sikharbes Danda  
DIRECTION:

DIRECTION:																		
				S P T		Core Recovery										Results		
						RQD%										LU		log/cm2
Depth, m	Casing Size	Core Log	Description	Blows per 15 cm	Water Level m	Alteration	Orientation	Roughness	Joint/ m	REC%	RQD%	20	40	60	80	100	Permeability	Laboratory
40.00				0-15 15-30 30-45														
56			W1, strong hard, light gray, fine grain,highly jointed and fragmented siliceous dolomite.				20°	ir	8	29	-							
			Core loss : 40.00 to 40.71 m.				30°	ir										
41.00			W1, strong hard, white to light grey, fine grain, highly jointed and fragmented dolomite with Quartz.		Dry 37.10		30°	ir	9	61	-							
			Core loss : 41.00 to 41.23 m & 41.73 to 41.39 m				30°	ir										
42.00			W1, strong hard, light to dark grey, fine grain, highly jointed and fragmented dolomite.				20°	ir	7	48	-							
			Core loss : 42.00 to 42.16 m & 42.38 to 42.74 m				30°	ir										
43.00			W1, strong hard, light grey, fine grain highly jointed and fragmented dolomite.				30°	ir	4	28	-							
			Core loss : 43.00 to 43.42 m & 43.50 to 43.91 m				30°	ir										
44.00			W1-W2, strong hard, light grey, fine grain, moderately jointed dolomite.				30°	ir	8	32	-							
			Core loss : 44.00 to 44.68 m				30°	ir										
45.00			W1, strong hard, dark to light grey, fine grain moderately jointed dolomite with mica parting.		44.54		30°	ir	10	71	-							
			Core loss : 45.19 to 45.48 m		Dry		30°	ir										
46.00			W1, strong hard, light grey, fine grain, highly jointed and fragmented dolomite.		43.50		20°	ir	11	100	-							
					22.50		30°	ir										
47.00			W1, strong hard, dark grey, fine grain, moderately jointed dolomite with mica parting.		46.60		30°	ir	6	40	-							
			Core loss : 47.00 to 47.50 m		28.70		30°	ir										
48.00	3X		W1, strong hard, light grey, fine grain, highly jointed dolomite. Sludge found as light grey, fine grain sand.				30°	ir	2	8	-							
			Core loss : 48.08 to 49.00 m				30°	ir										
49.00			W1, strong hard, light grey, fine grain moderately jointed dolomite with mica parting.		47.00		30°	ir	14	59	-							
			Core loss : 49.00 to 49.41 m		33.00		30°	ir										
50.00	7						30°	ir										

ABBREVIATION: rough=r, smooth=s, slickensided=sl, un=undulating, pl=planar, clay=cl, sand=sa, mica=mi, crushed=cr, iron stain=FeO  
Core, MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed.  
FZ=Fractured, CL=Core loss

Edited by: JCCN SHRESTHA & SANTA MAJHI

Logged by: R. STHAPIT

# BORE HOLE LOG

## KULEKHANI-3 HYDROELECTRIC POWER PROJECT

DRILL HOLE NO.: BPV-2B  
 COORDINATES  
 INCLINATION: VERTICAL  
 DRILLING MACHINE: JOY  
 DRILLING METHOD: ROTARY  
 CLIENT: NIPPON KOEI

START DATE: 29/08/2002  
 COMPLETION DATE: 21/08/2002  
 COLLAR ELEVATION:  
 ELEVATION HOLE END: 78.35 m.  
 LOCATION: Sikharbas Canda  
 DIRECTION:

Depth, m	Casing Size	Core Log	Description	Blows per 15 cm	Water Level m	Alteration	Orientation	Roughness	Joint/ m	Core Recovery					Results	
										RQD%					LU	kg/cm2
50.00				0-15 15-30 30-45						REC%	RQD%	20	40	60	80	100
50.00	8X		W1, strong hard, light grey, fine grain, moderately jointed dolomite. Core loss : 50.00 to 50.68 m			-	30° 45°	lr	8	32	-					
51.00			W1, strong hard, light grey, fine grain, moderately jointed and fragmented dolomite. Core loss : 51.32 to 51.84 m			-	30° 50°	lr	10	48	-					
52.00			W1, strong hard, light grey, fine grain, moderately jointed and fragmented dolomite. Core loss : 52.55 to 53.00 m		51.50 51.10	-	30° 50°	lr	12	58	-					
53.00			W1, strong hard, light grey, fine grain, moderately jointed and fragmented dolomite. Core loss : 53.00 to 53.18 m			-	20°-30° 50°	lr	9	82	-					
54.00	56		W1, strong hard, light grey, fine grain, moderately jointed dolomite. Core loss : 54.53 to 54.75 m		Dry 53.50	-	30°	lr	11	33	-					
55.00			W1, strong hard, light grey, fine grain dolomite. Core loss : 55.12 to 55.91 m			-	20° 50°	lr	5	11	-					
56.00	5X		W1, strong hard, light grey, fine grain dolomite. Core loss : 56.53 to 56.58 m		Dry 52.55	-	20° 50°	lr	9	85	31					
57.00			W1, strong hard, light grey, fine grain, highly jointed dolomite. Core loss : 57.00 to 57.73 m			-	30°	lr	4	12	-					
58.00			W1, strong hard, light grey, fine grain, highly jointed dolomite. Sludge cannot found due to water loss. Core loss : 58.16 to 59.00 m			-	30°	lr	5	16	-					
59.00			W1, strong hard, light to dark grey, fine grain, highly jointed and fragmented dolomite with mica parting. Core loss : 59.00 to 59.19 m & 59.39 to 59.50 m			-	20° 30°	s, lr	5	20	-					
60.00																

ABBREVIATION rough=r, smooth=s, slickensided=sl, un=undulating, p=planar, clay=cl, sand=sa, mica=mi, crushed=cr, iron stain=FeO  
 Core, MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed.  
 FZ= Fractured, CL= Core loss

Drilled by: JCCN SHRESTHA & SANTA MAJHI

Logged by: R. SHAPIT

# BORE HOLE LOG KULEKHANI-3 HYDROELECTRIC POWER PROJECT

DRILL HOLE NO.: BPV-2B  
COORDINATES  
INCLINATION: VERTICAL  
DRILLING MACHINE: JCY  
DRILLING METHOD: ROTARY  
CLIENT: NIPPON KOEI

START DATE: 29/06/2002  
COMPLETION DATE: 21/08/2002  
COLLAR ELEVATION:  
ELEVATION HOLE END: 78.35 m.  
LOCATION: Sikharbes Danda  
DIRECTION:

				S P T			Core Recovery											Results		
							RQD%											LU	kg/cm2	
Depth, m	Casing Size	Core Log	Description	Blows per 15 cm			Water Level m	Alteration	Orientation	Roughness	Joint# / m	REC%	RQD%	20	40	60	80	100	Permeability	Laboratory
60.00				0-15	15-30	30-45														
	8X		W1, strong hard, light grey, fine grain, highly jointed and fragmented silicious dolomite.  Core loss : 60.32 to 61.00m																	
61.00			W1-W2, strong hard, light grey, fine grain, jointed dolomite, sludge of light grey, fine grain sand particle.  Core loss : 61.00 to 61.81m				63.00 64.70	-	20° 30°	s, fr fr	4 4	32 19	-							
62.00			W1, strong hard, light to dark grey, fine grain, moderately jointed silicious dolomite with mica parting.  Core loss : 62.14 to 63.00m					-	20° 30°	s, fr fr	5 8	14 18	-							
63.00			W1, strong hard, light to dark grey, fine grain, moderately jointed silicious dolomite with Quartz vein.  Core loss : 63.00 to 63.20m & 63.38 to 64.00m					-	20° 30°	fr fr	4 4	18 18	-							
64.00			W1, strong hard, light grey, fine grain, highly jointed dolomite.  Core loss : 64.00 to 64.48m & 64.66 to 65.00m					-	20° 30°	fr fr	4 15	38 38	-							
65.00	56		W1, strong hard, light grey, fine grain, moderately jointed dolomite.  Core loss : 65.00 to 65.11m				64.90 63.10	-	30° 40°	fr fr	16 16	100 100	10							
66.00			W1, strong hard, light grey, fine grain, highly jointed and fragmented dolomite.  Core loss : 66.00 to 66.32m					-	30° 40°	fr fr	13 10	58 76	-							
67.00			W1-W2, strong hard, light to dark grey, fine grain, moderately jointed dolomite with mica parting.  Core loss : 67.00 to 67.32m				67.65 68.50	-	30° 50°	s, fr s, fr	16 10	100 76	12							
68.00			W1, strong hard, light grey, fine grain, moderately jointed silicious dolomite.  Core loss : 68.59 to 69.73m					-	30° 50°	s, fr s, fr	10 10	76 76	-							
69.00																				
70.00																				

ABBREVIATION rough=rr, smooth=ss, slickensided=sl, un=undulating, pr=planar, clay=cl, sand=ss, mica=mi, crushed=cr, iron stain=FeO  
Zone, MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed.  
FC=Fractured, CL=Core loss

Drilled by: JCCN SHRESTHA & SANTI MAJHI

Logged by: R. SHARMA

# **BORE HOLE LOG** **KULEKHANI-3 HYDROELECTRIC POWER PROJECT**

DRILL HOLE NO.: BPV-23  
COORDINATES  
INCLINATION: VERTICAL  
DRILLING MACHINE: JOY  
DRILLING METHOD: ROTARY  
CLIENT: NIPPON KOEI

START DATE: 29/08/2002  
COMPLETION DATE: 21/08/2002  
COLLAR ELEVATION:  
ELEVATION HOLE END: 78.35 m.  
LOCATION: Sikharbas Danda  
DIRECTION:

SECTION													Core Recovery					Results		
Depth, m	Casing Size	Core Log	Description	S P T			Water Level m.	Alteration	Orientation	Roughness	Joint/m	REC%	RQD%	20	40	60	80	100	Permeability	Laboratory
				0-15	15-30	30-45														
70.00																				
56			W1, strong hard, light grey, fine grain, dolomite with mica parting.																	
			Core loss : 70.32 to 70.51m																	
71.00			W1, strong hard, light grey, fine grain, moderately jointed silicious dolomite.				70.80													
							81.00													
			Core loss : 71.00 to 71.32m																	
72.00			W1-W2, strong hard, light to dark grey, fine grain, highly jointed silicious dolomite.																	
73.00			W1, strong hard, light grey, fine grain, highly jointed silicious dolomite.																	
74.00			Core loss : 73.00 to 73.32m																	
			W1, strong hard, light to dark grey, fine grain, moderately jointed silicious dolomite.				76.00													
			Core loss : 74.19 to 74.56m																	
75.00			W1, strong hard, light to dark grey, fine grain, moderately jointed silicious dolomite.																	
			Core loss : 75.16 to 75.70m																	
76.00			W1, strong hard, light to dark grey, fine grain, moderately jointed silicious dolomite.																	
			Core loss : 76.16 to 76.50m																	
77.50			W1, strong hard, light grey, fine grain silicious dolomite.																	
			Core loss : 77.20 to 78.00m																	
78.00			W1, strong hard, light dark grey dolomite.																	
78.25																				
79.00																				
80.00																				
ABBREVIATION rough=r, smooth=s, slickensided=sl, un=undulating, pl=planar, clay=cl, sand=sa, mica=mi, crushed=cr, iron stain=FeO Zone, MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed, FZ= Fractured, CL= Core loss Compiled by: JOON SHRESTHA & SANITA MAJHI																				
Logged by: R. STHAP																				

ABBREVIATION rough=r, smooth=s, slickensided=sl, un=undulating, pl=planar, clay=cl, sand=sa, mica=mi, crushed=cr, iron stain=FeO  
Zone, MB=Mechanical Breakage, W1=Fresh, W2=slightly Weathered, W3=Moderately Weathered, W4=Highly Weathered, W5=Decomposed.  
F3=Fractured, CL=Core loss

Checked by: JOON SHRESTHA & SANTI MAJHI

Logged by: R. STHAPIT

**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,802570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE : ACKER  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth,m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES						CORE RECOVERY RQD %					LU	PERMEABILITY	LAB TEST	SCREEN PIPE			
				Blows per 15 cm			WATER LEVEL,m	ALTERATION	ORIENTATION	ROUGHNESS	JOINT,/m	REC %	ROD%											
				0-15	15-30	30-45																		
0.00				0-15	15-30	30-45										20	40	60	80	100				
1.00			0.000 TO 95cm DEPTH,WATER LOSS,AND CORE LOSS. BELOW THIS W2, STRONG,WHITE GRAY COLOR,THINLY FOLIATED,FINE GRAINED SILICIOUS DOLOMITE, <10cm CORES.				NO	CL COATING	70°	r	3	42	-											
2.00			1.80-2.00m WATER LOSS,CORE LOSS. BELOW IT W2 STRONG,WHITE GRAY FINE GRAINED SILICIOUS DOLOMITE				NO	-	-	-	-	39	35											
3.00			W2,STRONG FRACTURED SILICIOUS DOLOMITE				NO	-	-	-	-	71	60											
4.00			2.85-3.55m WATER LOSS AND CORE LOSS BELOW IT W2,STRONG,WHITE GRAY FINE GRAINED SILICIOUS DOLOMITE				NO	-	-	-	-	33	32											
5.00			W2 ,STRONG,SILICIOUS DOLOMITE.				NO	-	-	-	-	75	75											
			W2 ,STRONG,SILICIOUS DOLOMITE.				NO	-	-	-	-	100	40											
			W2, STRONG,SILICIOUS DOLOMITE.				NO	CL COATING	70° 45°	r	4	100	20											
			W3 ,MEDIUM STRONG,GRAY COLOR FINE GRAINED THINLY FOLIATEDSILICIOUS DOLOMITE, <10cm CORE.				NO	-	-	-	-	90												
6.00			5.65-6.45m CORE LOSS & WATER LOSS. BELOW IT W3 ,MEDIUM STRONG,WHITE GRAY COLOR THINLY FOLIATED SILICIOUS DOLOMITE.				NO	-	-	-	-	33	23											
7.00			6.85-7.10m CORE LOSS & WATER LOSS. 7.10-7.30 W3 SILICIOUS DOLOMITE, <10cm CORE				NO	-	-	-	-	33	-											
8.00			7.30-8.25m CORE LOSS. BELOW IT 8.25-8.60m W3,WHITE GRAY COLOR,FINE GRAINED FOLIATED FRACTURED SILICIOUS DOLOMITE, <10cm CORE.				NO	-	-	-	-	18	-											
9.00			8.60-9.20m WATER LOSS & CORE LOSS, BELOW THIS 9.20-9.25m W2,SILICIOUSDOLOMITE.				NO	-	-	-	-	8	-											
10.00			9.25-9.75m WATER LOSS & CORE LOSS. BELOW THIS 9.75-10.05m W2 SILICIOUS DOLOMITE <10cm CORE.				NO	-	-	-	-	38												

ABBREVIATION Rough = r, Irregular = ir, Stepped = st, Smooth = s, Slickensided = sl, Undulating = un, Planner = pl, Clay = cl, Sand = sa, Mica = mi, Crumbed = cr, Iron stain = Feo, Fractured zone = f2, Mechanical Breakage = MB, Fresh = W1, Slightly Weathered = W2, Mod. Weathered = W3, Highly Weathered = w4, Decomposed = w5.

DRILLED BY: U.B. SHRESTHA/S.R. TIMALSINA (DRILLING SUPERVISOR), SRCL

**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE : ACKER  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY					LU				
				Blows per 15 cm			WATER LEVEL	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%								
				0-15	15-30	30-45															
10.00														20	40	60	80	100			
			10.05-10.25m CORE LOSS. BELOW IT W2, SILICIOUS DOLOMITE.				NO	-	-	-	-	38	-								
			10.30-11.35m WATER LOSS & CORE LOSS. BELOW IT 11.35-11.70m W2,WHITE GRAY COLOR THINLY FOLIATED SILICIOUS DOLOMITE, <10cm CORE.				NO	-	-	-	-	25	-								
11.00																					
			11.70-11.95m WATER LOSS & CORE LOSS 11.95-12.35m W2 SILICIOUS DOLOMITE, <10cm CORE.				NO	-	-	-	-	62	-								
12.00																					
			12.35-12.50 m WATER LOSS & CORE LOSS 12.50-13.30m W2,WHITE GRAY COLOR FINE GRAINED,SILICIOUS DOLOMITE.				NO	-	-	-	-	84	-								
13.00																					
			13.30-14.50m WATER LOSS, & CORE LOSS 14.50-14.75 W3,WHITE GRAY FINE GRAINED, FRACTURED SILICIOUS DOLOMITE, <10cm CORE.				NO	-	-	-	-	17	-								
14.00																					
			14.75-16.05m WATER LOSS, & CORE LOSS 16.05-16.25 m W2,STRONG,WHITE GRAY THINLY FOLIATED,FINE GRAINED,FRACTURED SILICIOUS DOLOMITE,<10cm CORE.				NO	-	-	-	-	13	-								
15.00																					
			16.25-16.65m CORE LOSS. 16.65-16.85m W2, STRONG,SILICIOUS DOLOMITE,<10cm CORE.				NO	-	-	-	-	33	-								
16.00																					
			16.85-17.25m CORE LOSS. 17.25-17.75m W2,STRONG,WHITE GRAY FINE GRAINED SILICIOUS DOLOMITE.				NO	-	-	-	-	55	23								
17.00																					
			17.75-18.10m W2 ,STRONG,SILICIOUS DOLOMITE, <10cm CORES,18.10-18.20m CORE LOSS.				NO	-	-	-	-	78	-								
18.00																					
			18.20-18.30m THINLY FOLIATED W2 ,STRONG,WHITE GRAY FINE GRAINED SILICIOUS DOLOMITE,<10cm CORE 18.30-19.35m WATER LOSS & CORE LOSS.				NO	-	-	-	-	9	-								
19.00																					
			19.35-19.50m WELL CEMENTED CONGOMERATE. 19.50-19.85m CORE LOSS				NO	-	-	-	-	10	-								
20.00																					

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DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPARVISOR),SRCL



**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE : ACKER  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK/SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY RQD %				CORE RECOVERY RQD %					LU	PERMEABILITY	LAB TEST	SCREEN PIPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				Blows per 15 cm			WATER LEVEL	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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DRILLED BY: U.B. SHRESTHA/S.R. TIMALSINA (DRILLING SUPERVISOR), SRCL

**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
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DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY RQD %					LU	PERMEABILITY	LAB TEST	SCREEN PIPE				
				Blows per 15 cm			WATER LEVEL	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%											
				0-15	15-30	30-45																		
30.00				0-15	15-30	30-45										20	40	60	80	100				
			29.75-30.40m CORE LOSS					-	-	-	-	3												
			30.40-30.65m W3 MEDIUM STRONG COMPLEATELY FRACTURED SILICIOUS DOLOMITE																					
			30.65-31.45mCORE LOSS					-	-	-	-	38	-											
31.00			31.45 -31.70 W3,FRACTURED SILICIOUS DOLOMITE.																					
			31.30-31.40m CORE LOSS & WATER LOSS.																					
			31.40-31.70m W1,COMPLETELY FRACTURED SILICIOUS DOLOMITE				NO	-	-	-	-	63	-											
32.00			31.70-32.60m CORE LOSS.& WATER LOSS																					
			32.60-32.80m W1,VERY STRONG, GRAY COLOR FINE GRAINED HORIZONTAL FOLIATION SILICIOUS DOLOMITE,<10cm CORE				NO	-	-	-	-	18	-											
33.00			32.80-33.70m CORE LOSS &WATER LOSS																					
			33.70-34.00m INSITU WELL CEMENTED GRAVELS OF SILICIOUS DOLOMITE,<10cm CORE				NO	-	-	-	-	20	-											
34.00			34.00-34.13m CORE LOSS 34.13-34.25m INSITU WELL CEMENTED GRAVELS .				NO	-	-	-	-	48	48											
			34.25-35.00m CORE LOSS & WATER LOSS																					
			35.00-35.36m INSITU WELL CEMENTED GRAVEL,<10CM CORE				NO	-	-	-	-	50	30											
			35.36-35.75m W1,VERY STRONG,GRAY COLOR, LAMINATED SILICIOUS DOLOMITE 65deg.INCLINED FOLIATION																					
36.00			35.75-37.00m CORE LOSS & WATER LOSS																					
			37.00-37.30m W2-W3 ,STRONG- MED.STRONG, GRAY COLOR,LAMINATED SILICIOUS DOLOMITE , <10cm CORE.				NO	-	-	-	-	26	-											
37.00																								
			37.30-38.65m CORE LOSS & WATER LOSS																					
			38.65-38.80m W2, STRONG FRACTURED SILICIOUS DOLOMITE, <10cm CORE.				NO	-	-	-	-	10	-											
39.00																								
			38.65-40.00 CORE LOSS & WATER LOSS.				NO	-	-	-	-	20	-											
40.00																								

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DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPARVISOR),SRCL

**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE :YAKAR  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY RQD %					LU						
				Blows per 15 cm			WATER LEVEL	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	RQD%						PERMEABILITY	LAB TEST	SCREEN PIPE		
				0-15	15-30	30-45																20	40
40.00			40.00-40.30m W3 MEDIUM STRONG FRACTURED SILICIOUS DOLOMITE.				NO	-	-	-	-	20	-			20	40	60	80	100			
41.00			40.30-40.75m CORE LOSS & WATER LOSS OPEN/COMPLETELY FRACTURED AREA 40.75-41.30 FRACTURED CLAY FILLING W3 SILICIOUS DOLOMITE.				NO	-	-	-	-	55	20										
42.00			41.30-41.48m CORE LOSS & WATER LOSS. BELOW IT W1-W2 SILICIOUS DOLOMITE.				NO	-	-	-	-	64	36										
43.00			41.80-41.93m CORE LOSS. THEN W2-W3 FRACTURED SILICIOUS DOLOMITE.				NO	-	-	-	-	71	-										
44.00			42.25-42.83m CORE LOSS THEN W1,FRESH VERY STORNG,SILICIOUS DOLOMITE.				NO	-	-	-	-	47	14										
45.00			CORE LOSS.(WEAK ZONE/OPEN)				NO	-	-	-	-	-	-										
46.00			W2,STRONG FRACTURED SILICIOUS DOLOMITE 45-45.40m CORE LOSS, THEN W2 STRONG FRACTURED SILICIOUS DOLOMITE.				NO	-	-	-	-	100	-										
47.00			45-45.80m CORE LOSS THEN W2,STRONG SILICIOUS DOLOMITE.				SL	48' 35'	r	3	63	25											
48.00			W2,STRONG GRAY COLOR,THINLY FOLIATED FRACTURED SILICIOUS DOLOMITE.				SL	48' 35'	r	4	100	25											
49.00			47.80-48.65m CORE LOSS BELOW IT W2 STRONG,GRAY COLOR FINE THINLY FOLIATED SILICIOUS DOLOMITE.				SL	65' 45' 35'	r	4	53	12											
50.00			49.30-50.30m CORE LOSS THEN 50.30-50.45m SAND.				-	-	-	-	-	-	-										

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Crusbed= cr, Iron stain=Feo, Fractured zone = f2, Mechanical Breakage= MB, Fresh = W1, Slightly Weathered = W2,Mod. Weathered =W3,  
Highly Weathered= w4, Decomposed = w5.

DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPARVISOR),SRCL

**KULEKHANI III HYDROPOWER PROJECT  
BORE HOLE LOG**

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COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE :YAKAR  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY RQD %					LU	PERMEABILITY	LAB TEST	SCREEN PIPE				
				Blows per 15 cm			WATER LEVELm	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%											
				0-15	15-30	30-45																		
50.00				0-15	15-30	30-45										20	40	60	80	100				
			THIS W2,STRONG, GRAY COLOR SILICIOUS DOLOMITE.							65° 40'	r	3	23	13										
51.00			W2,STRONG, GRAY COLOR SILICIOUS DOLOMITE.							65° 40'	r	3	100	50										
			W2,STRONG, GRAY COLOR SILICIOUS DOLOMITE.							65° 40'	r	3	100	60										
52.00			51.55-51.85m CORE LOSS. BELOW IT,W2-W3 STRONG MEDIUM STRONG SILICIOUS DOLOMITE.						-	-	-	-	60	-										
			52.30-53.70 CORE LOSS. BELOW THIS W2-W3 STORNG MEDIUM STRONG SILICIOUS DOLOMITE. <10cm CORES.							-	-	-	64	-										
53.00																								
			W1,STRONG, FRESH SILICIOUS DOLOMITE.						-	-	-	-	100	61										
54.00			W2,STRONG, SILICIOUS DOLOMITE.				St			65° 40'	r	4	100	55										
			54.25-54.50m CORE LOSS BELOW IT W2-W3 SILICIOUS DOLOMITE,							65° 40'	r	4	67	26										
55.00			W2-W3 SILICIOUS DOLOMITE<10cm CORE.					CL		65° 40'	r	4	100	-										
			55.30-56.40mCORE LOSS,BELOW IT W2-W3 MEDIUM STRONG SILICIOUS DOLOMITE. <10cm CORE.						-	-	-	-	33	-										
57.00			56.80-57.1m CORE LOSS BELOW THIS, W3,MEDIUM STRONG SILICIOUS DOLOMITE <10cm CORE.										80	47										
58.00																								
			58.30-58.70m CORE LOSS THEN W2-W3 STRONG MEDIUM STRONG DARK GRAY SILICIOUS DOLOMITE <10cm CORE										55	-										
59.00																								
			CONTACT ZONE BETWEEN AND PHYLLITE DOLOMITE (CORE LOSS/OPEN/WEAK ZONE)																					
60.00																								

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**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE :YAKAR  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
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ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES						CORE RECOVERY		CORROSION					LU		LAB TEST	SCREEN PIPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
				Blows per 15 cm			WATER LEVEL/m	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%	20	40	60	80	100	PERMEABILITY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
				0-15	15-30	30-45														ROD %	ROD %			ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %	ROD %

ABBREVIATION Rough =r, Irregular=ir, Stepped= st, Smooth= s, Slickensided= sl, Undulating= un, Planner= pl, Clay= cl, Sand= sa, Mica= mi, Crumbed= cr, Iron stain=Feo, Fractured zone = f2, Mechanical Breakage= MB, Fresh = W1, Slightly Weathered = W2,Mod. Weathered =W3, Highly Weathered= w4, Decomposed = w5.

DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPARVISOR),SRCL

**KULEKHANI III HYDROPOWER PROJECT  
BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE :YAKAR  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth,m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES						CORE RECOVERY		LU								
				Blows per 15 cm			WATER LEVEL,m	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%					PERMEABILITY	LAB TEST	SCREEN PIPE			
				0-15	15-30	30-45																	
70.00				0-15	15-30	30-45										20	40	60	80	100			
			70-00-71.45m CORE LOSS. BELOW IT W1 FRESH,STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE <10cm CORE.									19	-										
71.00																							
			W1 FRESH STRONG DARK GRAY COLOR PHYLLITE					-	-	-	-	100	33										
72.00																							
			72.40-72.70m CORE LOSS. BELOW IT W1, FRESH STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE,<10cm CORE.					-	-	-	-	77	-										
73.00																							
			W1,FRESH STRONG DARK GRAY COLOR PHYLLITE					-	-	-	-	100	-										
			73.60-74.30m CORELOSS. BELOW IT,W1 FRESH STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE																				
74.00												42	13										
75.00			74.80-75.80m CORE LOSS. BELOW IT W1 FRESH STRONG THINLY FOLIATED DARK GRAY COLOR PHYLLITE									34	7										
76.00																							
			W1,FRESH, STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE									100	50										
77.00																							
			76.90-77.20mCORE LOSS. BELOW IT W1 FRESH STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE.									67	22										
78.00																							
			77.80-78.65mCORE LOSS. BELOW IT,W1 FRESH STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE.									44	23										
79.00																							
			W1,STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE									100	47										
80.00																							

Lu=9.00 Lit/min/m/mpa, K=1.350E-04cm/sec.

Lu=9.50 Lit/min/m/mpa, K=1.425E-04cm/sec.

Lu=9.00 Lit/min/m/npa, K=1.350E-04cm/sec.

Lu=9.50 Lit/min/m/npa, K=1.425E-04cm/sec.

ABBREVIATION Rough =r, Irregular=ir, Stepped= st, Smooth= s, Slickensided= sl, Undulating= un, Planner= pl, Clay= cl, Sand= sa, Mica= mi, Crumbed= cr, Iron stain=Feo, Fractured zone = f2, Mechanical Breakage= MB, Fresh = W1, Slightly Weathered = W2,Mod. Weathered =W3, Highly Weathered= w4, Decomposed = w5.

DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPARVISOR),SRCL

**KULEKHANI III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE :YAKAR  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY RQD %							LU	PERMEABILITY	LAB TEST	SCREEN PIPE			
				Blows per 15 cm			WATER LEVEL.m	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%												
				0-15	15-30	30-45																			
80.00																20	40	60	80	100					
			80.00-80.50m CORE LOSS. BELOW IT W1 FRESH STRONG PHYLLITE.									29	14												
81.00			W1, FRESH STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE.									100	53												
82.00			W1 FRESH STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE.									100	55												
			82.20-82.55m CORELOSS. BELOW IT W1 FRESH STRONG DARK GRAY COLOR PHYLLITE																						
83.00												63	42												
			83.15-83.55m CORE LOSS. BELOW IT W1 FRESH STRONG PHYLLITE									39	23												
84.00			83.80-84.00m CORE LOSS. BELOW IT W1 FRESH STRONG PHYLLITE									70	31												
			84.45-84.84.55m CORE LOSS. BELOW IT W1 FRESH STRONG PHYLLITE									88	41												
85.00																									
			85.30-86.50m CORE LOSS. BELOW IT W1 FRESH STRONG THINLY FOLIATED DARK GRAY COLOR PHYLLITE									20	7												
86.00																									
			86.80-86.95m CORE LOSS. BELOW IT W1 STRONG PHYLLITE <10cm CORE.									58	-												
87.00			STRONG DARK GRAY COLOR THINLY FOLIATED PHYLLITE.									58	-												
			87.15-87.40m CORE LOSS. BELOW IT W1 STRONG DARK GRAY COLOR PHYLLITE.									67	-												
88.00			88.20-88.65 CORE LOSS BELOW IT W1 STRONG PHYLLITE.									50	22												
89.00			89.10-89.55m FRESH STRONG DARK GRAY COLOR PHYLLITE BELOW IT 89.55-89.80m CORE LOSS									65	65												
90.00			W1 STRONG PHYLLITE. <10cm CORE.									100	-												

Lu=7.370 Lit/mln/m/mpa, K=1.106E-04cm/sec.

Lu=14.30 Lit/mln/m/mpa, K=2.145E-04cm/sec.

Lu=7.370 Lit/min/m/MPa, K=1.106E-04cm/sec.

Lu=14.30 Lit/min/m/MPa, K=2.145E-04cm/sec.

ABBREVIATION Rough =r, Irregular=ir, Stepped= st, Smooth= s, Slickensided= sl, Undulating= un, Planner= pl, Clay= cl, Sand= sa, Mica= mi, Crumbed= cr, Iron stain=Feo, Fractured zone = f2, Mechanical Breakage= MB, Fresh = W1, Slightly Weathered = W2, Mod. Weathered = W3, Highly Weathered= w4, Decomposed = w5.

DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPARVISOR),SRCL

**KULEKHANI III HYDROPOWER PROJECT  
BORE HOLE LOG**

DRILL HOLE NO. BPV-3  
COORDINATES 3040490.502,602570.869,834.262  
INCLINATION : VERTICAL  
DRILLING MACHINE :YAKAR  
DRILLING METHOD : ROTARY

START DATE :  
COMPLETION DATE :  
COLLAR ELEVATION :834.262  
ELEVATION OF HOLE END :734.262  
LOCATION : POWERHOUSE

Depth,m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY RQD %					PERMEABILITY	LAB TEST	SCREEN PIPE			
				Blows per 15 cm			WATER LEVEL	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%									
				0-15	15-30	30-45																
90.00			W1 STRONG PHYLLITE <10cm CORE									100	-		20	40	60	80	100			
			90.30-91.00m CORE LOSS. BELOW IT W1-W2 STRONG PHYLLITE <10cm CORE.									30	-									
91.00			W1 FRESH STRONG PHYLLITE, <10cm CORE									100	-									
			91.80-92.15m CORE LOSS BELOW IT W1 FRESH STRONG DARK GRAY COLOR PHYLLITE.									65	15									
92.00			W1 STRONG PHYLLITE DARK GRAY COLOR PHYLLITE									100	25									
			93.60-93.80m CORE LOSS BELOW IT W1 STRONG PHYLLITE									72	26									
93.00			94.30-94.50m CORE LOSS BELOW IT W1 DARK GRAY COLOR ,STRONG PHYLLITE									80	58									
			W1-W2 STRONG DARK GRAY COLOR PHYLLITE MICRO DRAGGED FOLDS WITH IN THEM.									100	17									
94.00			W1-W2 STRONG DARK GRAY COLOR PHYLLITE MICRO DRAGGED FOLDS WITH IN THEM.									100	35									
			W1-W2 STRONG DARK GRAY COLOR PHYLLITE MICRO DRAGGED FOLDS WITH IN THEM.									100	85									
95.00			W1-W2 STRONG DARK GRAY COLOR PHYLLITE MICRO DRAGGED FOLDS WITH IN THEM.									100	81									
			W1-W2 STRONG DARK GRAY COLOR PHYLLITE MICRO DRAGGED FOLDS WITH IN THEM.									100	71									
96.00			W1-W2 STRONG DARK GRAY COLOR PHYLLITE MICRO DRAGGED FOLDS WITH IN THEM.									100	80									
97.00																						
98.00																						
99.00																						
100.00																						

Lu=7.60 Lit/min/mpa, K=1.140E-04cm/sec.

Lu=4.40 Lit/min/mpa, K=6.600E-05cm/sec.

Lu=7.60 Lit/min/m/MPa, K=1.140E-04cm/sec.

Lu=4.40 Lit/min/m/MPa, K=6.600E-05cm/sec.

ABBREVIATION Rough =r, Irregular=ir, Stepped= st, Smooth= s, Slickensided= sl, Undulating= un, Planar= pl, Clay= cl, Sand= sa, Mica= mi, Crumbed= cr, Iron stain=Feo, Fractured zone = f2, Mechanical Breakeage= MB, Fresh = W1, Slightly Weathered = W2, Mod. Weathered =W3, Highly Weathered= w4, Decomposed = w5.

DRILLED BY:U.B. SHRESTHA/S.R. TIMALSINA(DRILLING SUPERVISOR),SRCL



**KULEKHANI-III HYDROPOWER PROJECT  
BORE HOLE LOG**

DRILL HOLE NO. BPH-1  
COORDINATES : 3040705.228,602589.264,578.717  
INCLINATION : HORIZONTAL  
DRILLING MACHINE : TONE-UD5  
DRILLING METHOD : ROTARY

START DATE : 18-05-2002  
COMPLETION DATE : 03-07-2002  
COLLAR ELEVATION : 578.717  
ELEVATION OF HOLE END : 578.717  
LOCATION : POWERHOUSE

Depth,m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITES					CORE RECOVERY					LU	PERMEABILITY	LAB TEST	SCREEN PIPE
				Blows per 15 cm			WATER LEVEL,m	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%							
				0-15	15-30	30-45								20	40	60	80	100		
0.00																				
			W1,FRESH,HARD,DARK GRAY COLOR THINLY FOLIATED LAMINATED SILICIOUS DOLOMITE.				FLOW	STAINING	40°	r	1	100	50							
1.00			W1,FRESH,VERY STRONG,DARK GRAY COLOR THINLY FOLIATED LAMINATED SILICIOUS DOLOMITE.					STAINING	65°	S,UN	2	100	86							
2.00			1.70-2.15m SHEAR PLANE HAVING BROWN GRAY COLOR CLAY MIXED SAND 2.15-2.70 W2,STRONG,FRACTURED SILICIOUS DOLOMITE.									55								
3.00			W1,VERY STRONG,WHITE GRAY COLOR,THINLY FOLIATED LAMINATED SILICIOUS DOLOMITE.					ST.	70° 65°	S,UN	2	100	60							
4.00			W1,VERY STRONG,WHITE GRAY COLOR,THINLY FOLIATED LAMINATED SILICIOUS DOLOMITE.					STAINING	70° 65°	S,UN	2	100	56							
5.00			W1,VERY STRONG,WHITE GRAY COLOR THINLY FOLIATED LAMINATED FINE GRAINED SILICIOUS DOLOMITE.					STAINING	68° 40°	r S,UN	3	100	35							
6.00			W1,VERY STRONG,WHITE GRAY COLOR THINLY FOLIATED LAMINATED FINE GRAINED SILICIOUS DOLOMITE.					STAINING	68° 40°	r S,UN	3	100	42							
7.00			W1,VERY STRONG,WHITE GRAY COLOR THINLY FOLIATED LAMINATED FINE GRAINED SILICIOUS DOLOMITE.					STAINING	68° 40°	r S,UN	3	100	75							
8.00			W1,VERY STRONG,WHITE GRAY COLOR THINLY FOLIATED LAMINATED FINE GRAINED SILICIOUS DOLOMITE.					STAINING	68° 40°	r S,UN	3	100	41							
9.00																				
10.00			9.20-10.70m W1,VERY STRONG,WHITE GRAY COLOR,THINLY FOLIATED LAMINATED-					STAINING	60° 65°	S,UN	10	73	56							

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DRILLED BY :M. SHRESTHA/B.B KARKI/R. ADHIKARI(DRILLING SUPERVISOR/FOREMAN),SRCL

**KULEKHANI-III HYDROPOWER PROJECT**  
**BORE HOLE LOG**

DRILL HOLE NO. BPH-1

COORDINATES: 3040705.228, 602589.264, 578.717

INCLINATION : HORIZONTAL

DRILLING MACHINE : TONE-UD5

DRILLING METHOD : ROTARY

START DATE : 18-05-2002

COMPLETION DATE : 03-07-2002

COLLAR ELEVATION : 578.717

ELEVATION OF HOLE END : 578.717

LOCATION : POWERHOUSE

Depth.m	Casing size	Core Log	DESCRIPTION OF ROCK /SOIL	S P T			DESCRIPTION OF DISCONTINUITIES					CORE RECOVERY ROD %					LU																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
				Blows per 15 cm			WATER LEVELm	ALTERATION	ORIENTATION	ROUGHNESS	JOINT/m	REC %	ROD%						PERMEABILITY	LAB TEST	SCREEN PIPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
				0-15	15-30	30-45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
10.00			FINE GRAINED SILICIOUS DOLOMITE.					STARTING	68° 40'	r S,UN	3	100	56			20	40	60	80	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		</

Lu=13.880 Lit/min/m/ mpa, K=1.804E-04 cm/sec.

Lu=9.60 Lit/min/m/ mpa, K=1.248E-04 cm/sec.

ABBREVIATION Rough = r, Irregular = ir, Stepped = st, Smooth = s, Slickensided = sl, Undulating = un, Planar = pl, Clay = cl, Sand = sa, Mica = mi, Crumbed = cr, Iron stain = Feo, Fractured zone = f2, Mechanical Breakage = MB, Fresh = W1, Slightly Weathered = W2, Mod. Weathered = W3, Highly Weathered = W4, Decomposed = W5.

DRILLED BY : M. SHRESTHA/B.B KARKI/R. ADHIKARI (DRILLING SUPERVISOR/FOREMAN), SRCL