JADP Tubewell data

Department of Water Supply & Sanitation
Central Region Supervision Office, Kathmandu

Location : Syuchatar VDC-7, Kathmandu
Drilled by : Prajesh Construction & Tubewell Drilling Co. P. Ltd.

Drilling Started On: 2064/01/02
Logging Date : 2064/02/16

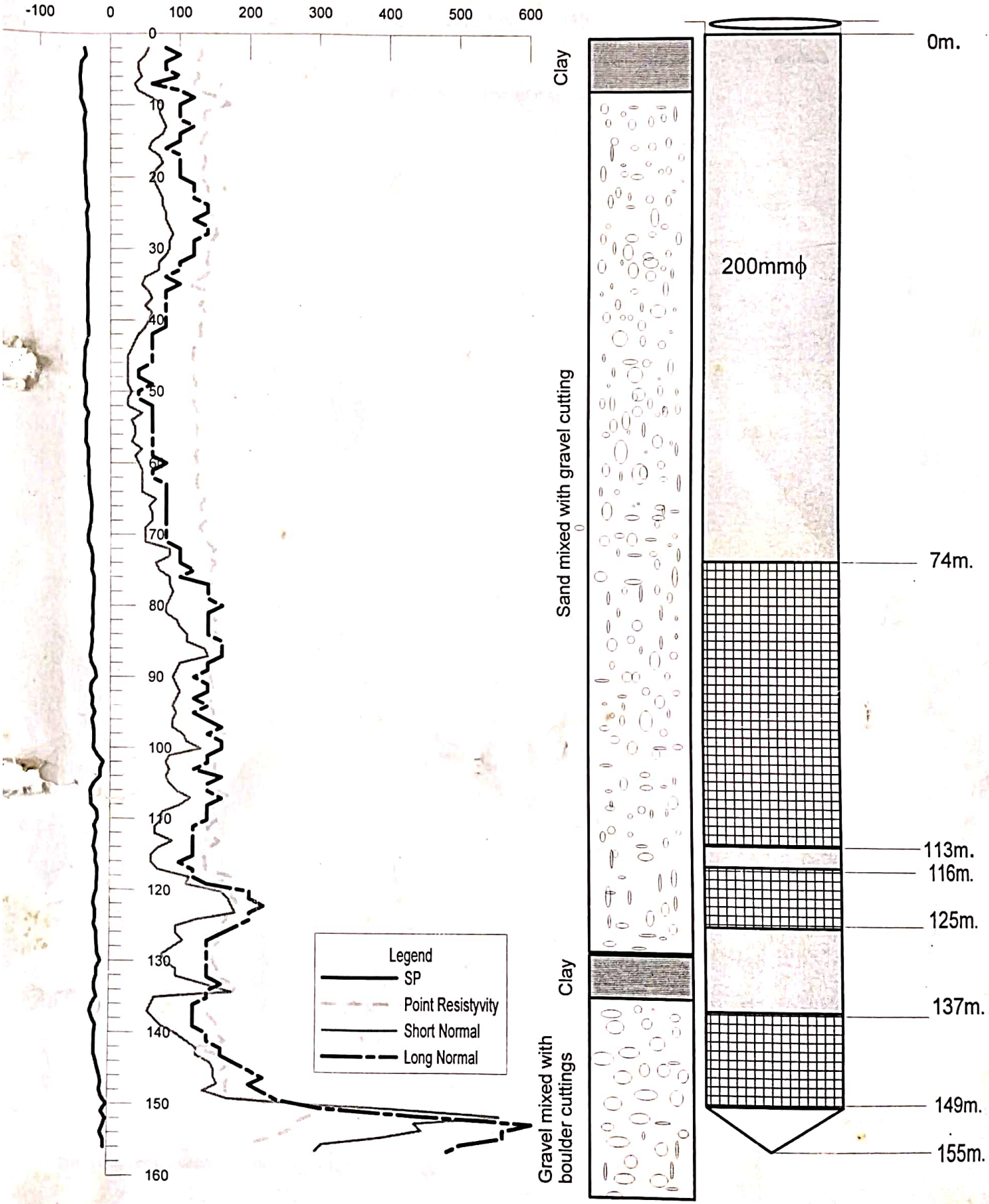


TABLE OF CONTENTS

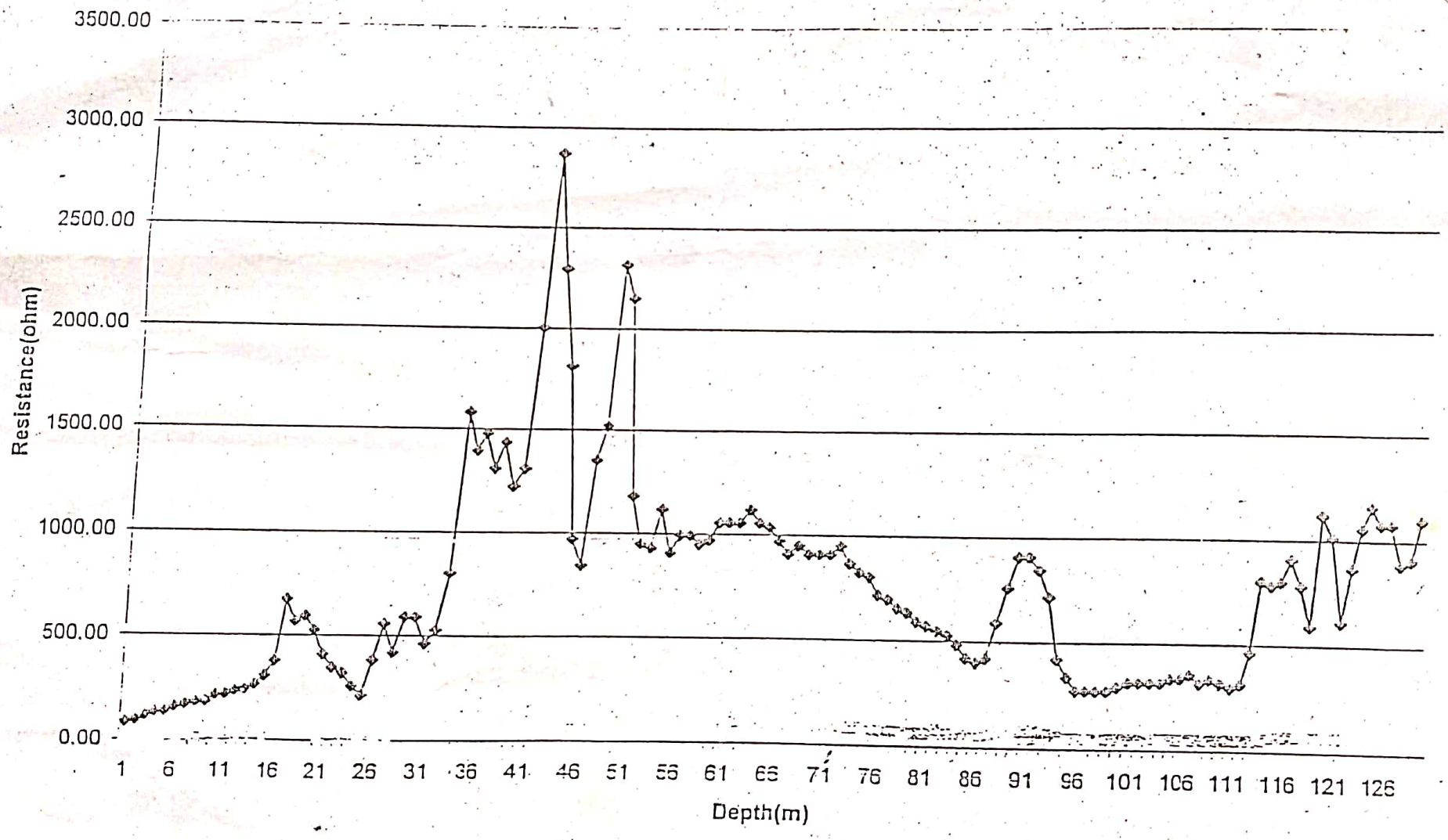
PARTICULAR TECHNICAL SPECIFICATION

Clause	Description
3.1	Drilling works of Deep tube well construction.

Logged by: Madan Pd.Lamichhane
Consultant Hydro-Geologist.

SAHID GANGALAL NATIONAL HEART CENTRE, Basabari,Kathmandu

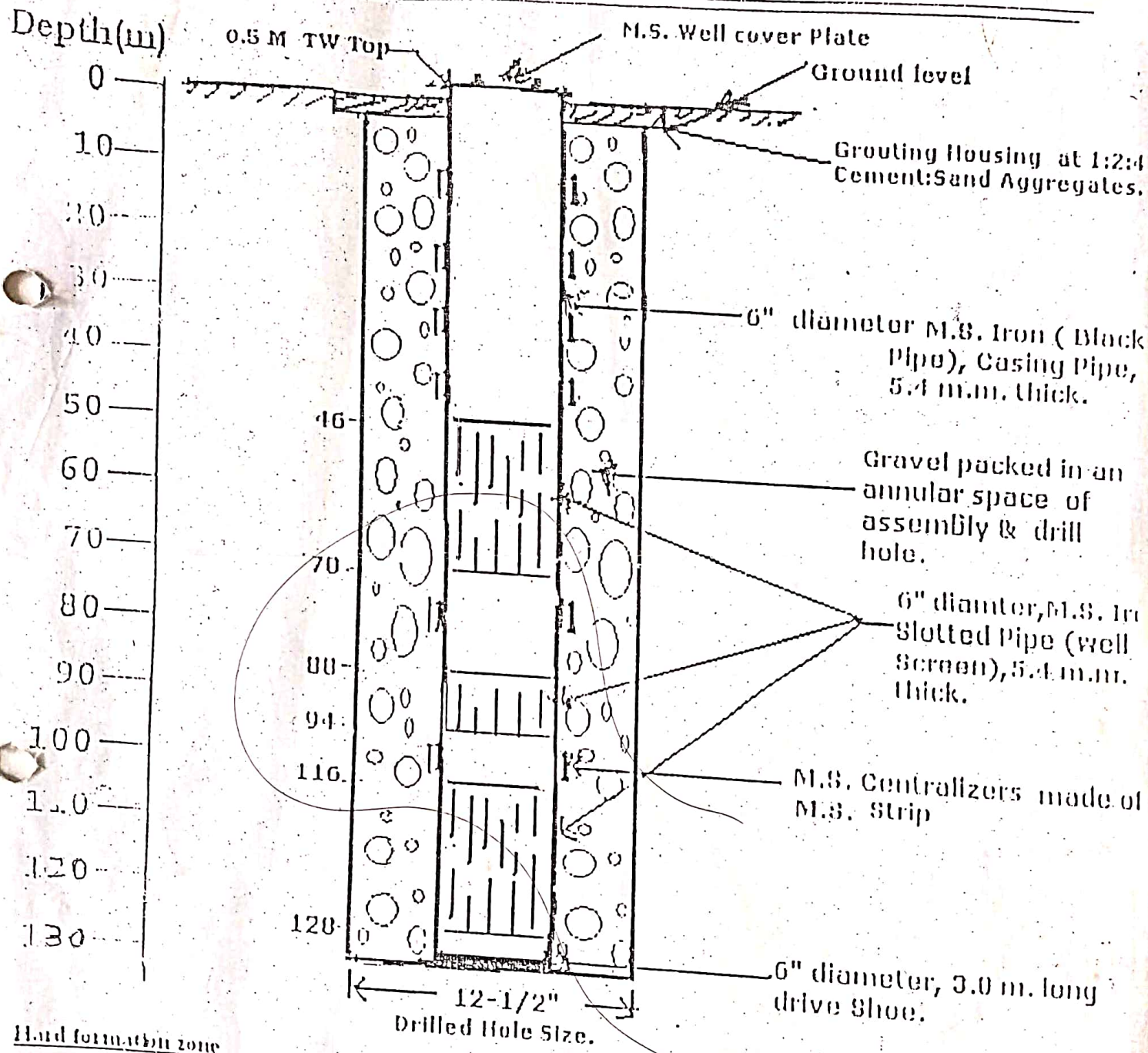
Date: 28/9/062



WELL-DESIGN

Client : SAHID GANGALAL NATIONAL

LOCATION : Basbari, Kathamndu, Nepal.



Hard formation zone

From	To	Total(m)
17	20	04
27	30	03
32	83	51
88	93	05
114	130	16
Grand Total		79 meter

Soft formation zone - 51 meter

DESIGNED BY

Madan Pd. Lamichhane,
Consultant Hydro-Geologist

On behalf of : ASCENDER ASSOCIATES & A.S.I. House.

Nepal Water Supply Coorporation, Jawalakhel, Lalitpur

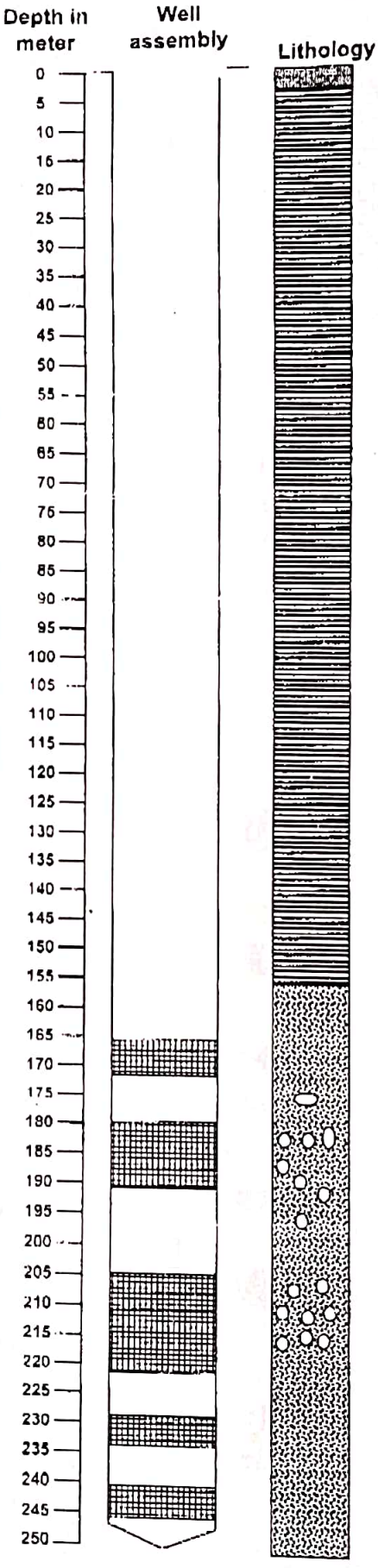
Location : Balkumari,

Drilled by Sagarmatha Drilling Company.

Drilling depth : 259m
Lowering Depth :250m

Drilling Started on : 062/2/13

Logging Date : 062/2/31



Casing positions

M. P. = 0.5m	= 0.5m
0.00 -166.20 m	= 166.2m
172.00 - 180.00 m	= 8.00m
191.60 - 205.00m	= 13.4m
221.94 - 229.00 m	= 7.06m
234.68 - 241.00 m	= 6.32m
Bail plug = 246.29 - 250.00	= 3.71m

Screen position

166.2 - 172.0 m	= 5.80m
180.0 - 191.6 m	= 11.6m
205 - 221.94 m	= 16.94
229.0 - 234.68 m	= 5.68m
241.0 - 246.29m	= 5.29m

Legends

Clay, Sandy

Clay, Black & greyish

Sand, Coarse

Design by

Recommended by

Approved by

Nepal Water Supply Coorporation, Jawalakhel, Lalitpur

Location : Balkumari, Lalitpur

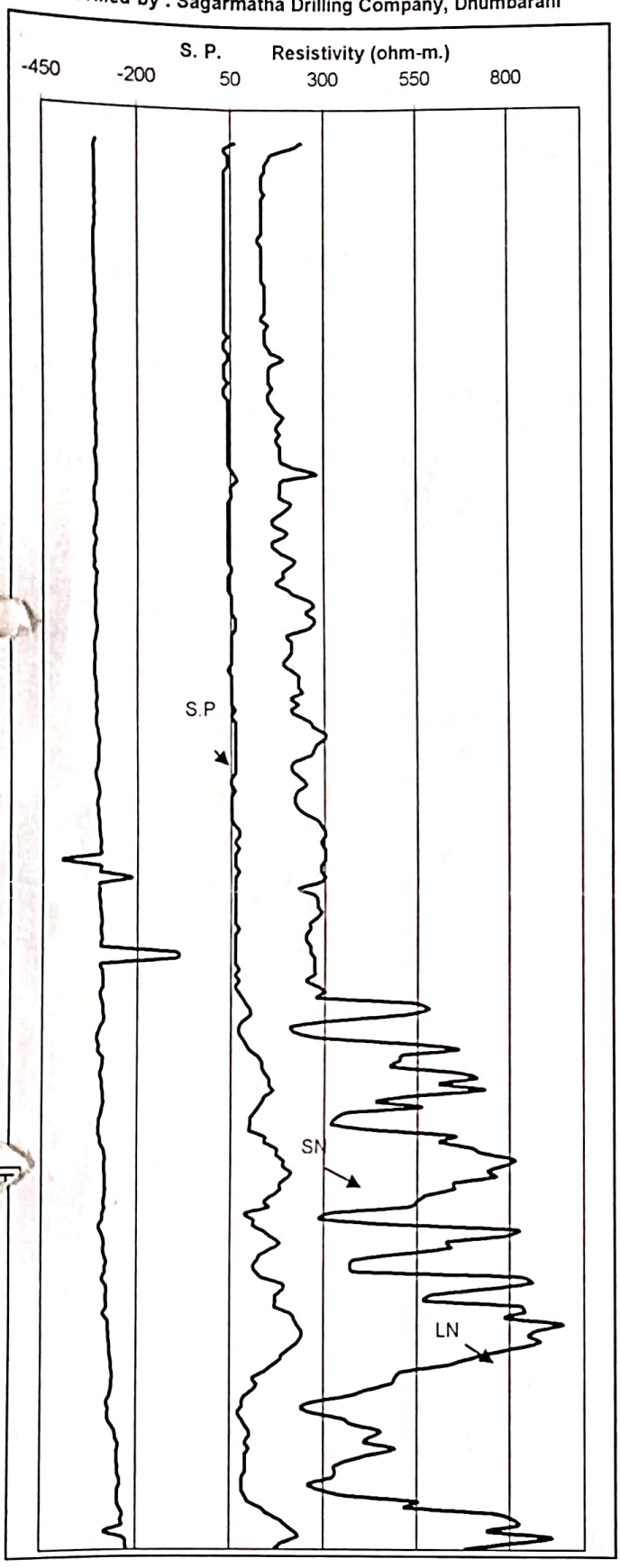
Drilled by : Sagarmatha Drilling Company, Dhumbarahi

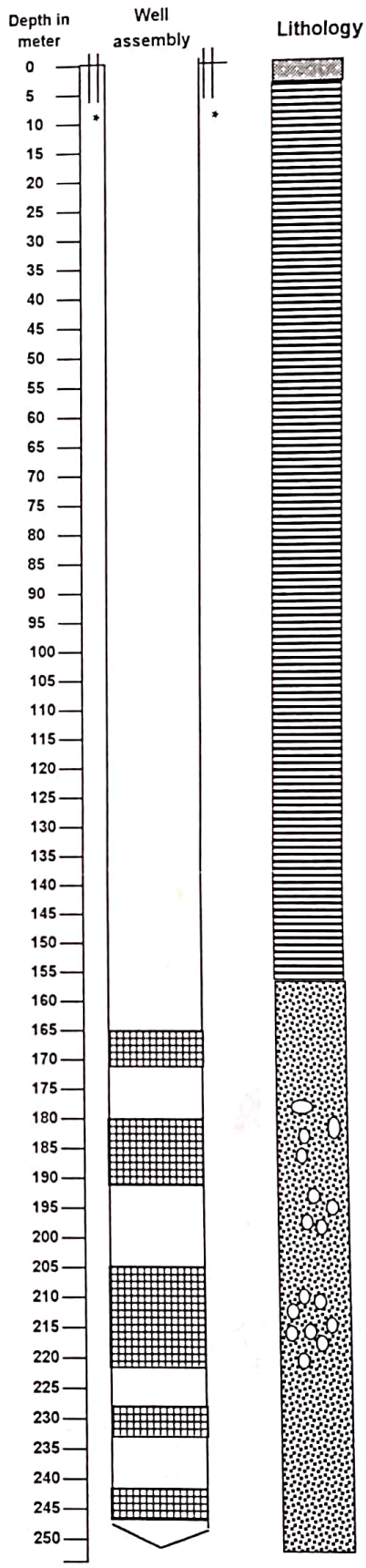
Drilling depth : 259m

Lowering Depth :250m

Drilling Started on : 062/2/13

Logging Date : 062/2/31





Casing positions

M. P. = 0.5m	=	0.5m
0.00 -166.20 m	=	166.2 m
172.00 - 180.00 m	=	8.00 m
191.60 - 205.00m	=	13.4 m
221.94 - 229.00 m	=	7.06 m
234.68 - 241.00 m	=	6.32 m
Bail plug = 246.29 - 250.00	=	3.71 m

Screen position

166.2 - 172.0 m	=	5.80 m
180.0 - 191.6 m	=	11.6 m
205 - 221.94 m	=	16.9
229.0 - 234.68 m	=	5.68 m
241.0 - 246.29m	=	5.29 m

Legends

- Clay, Sandy
- Clay, Black & greyish
- Sand, Coarse w/few gravel cuttings

Design by

Recommended by

Approved by

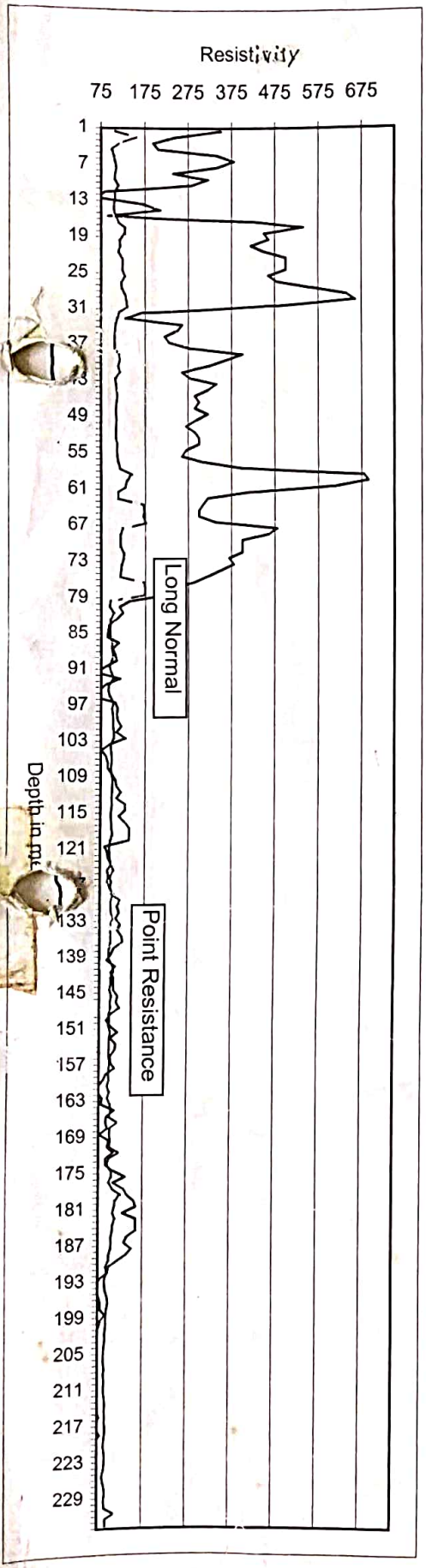
* Pipe for Gravel pack

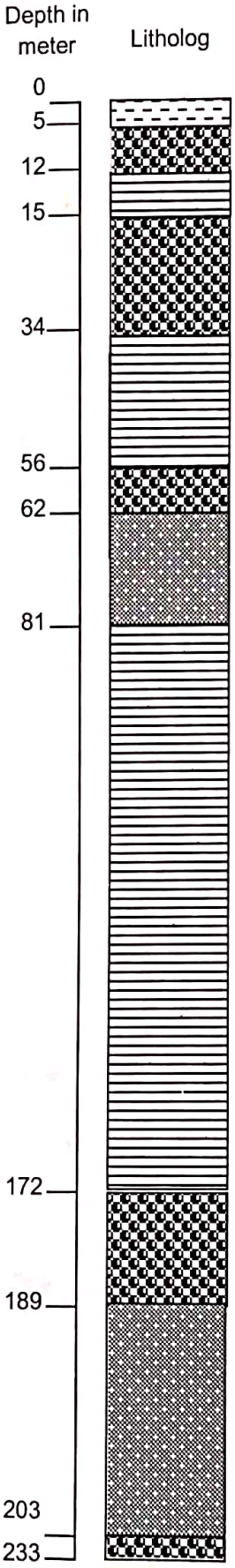
Location : Sunakothi

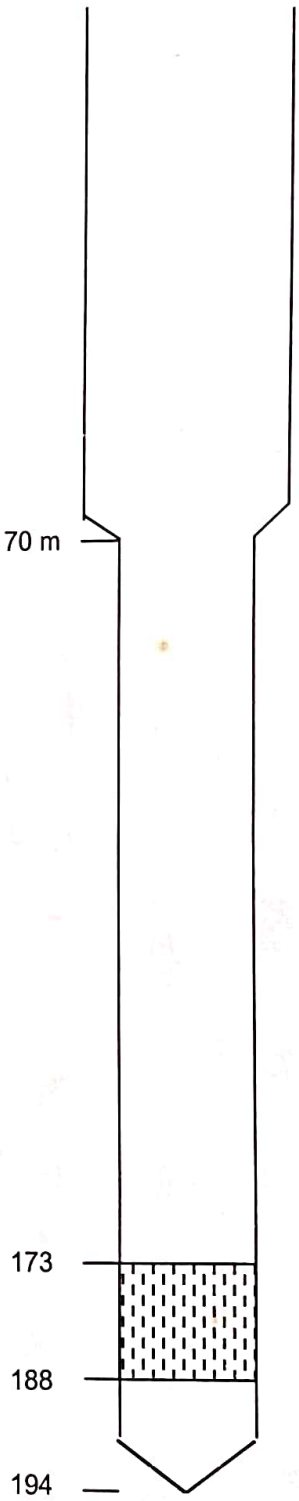
Logging date :2061/5/23

Drilling started on : 061/5/1

Rig Type : Vol Drill (Model-180)







Legends

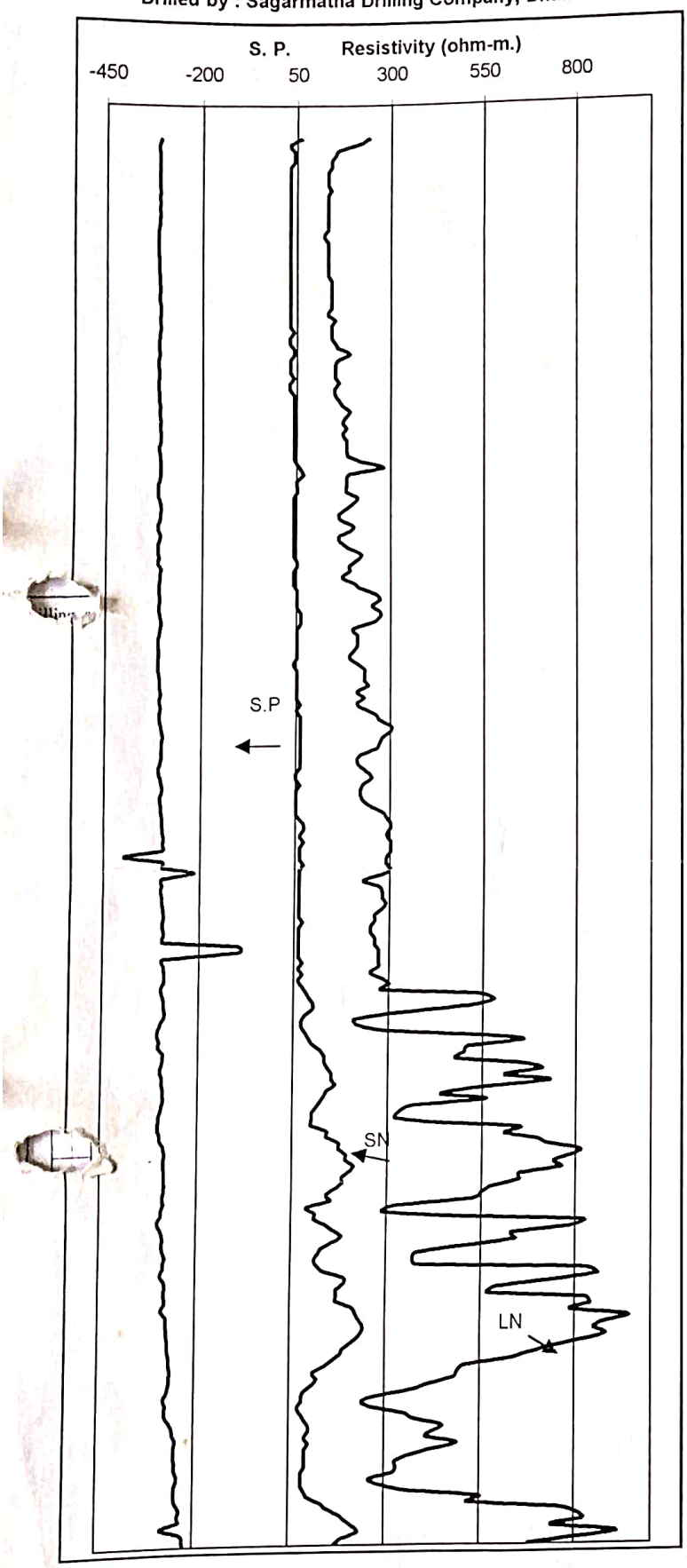
- Top soil
- Pebble cuttings
- Clay
- Pebble/gravel cuttings mixed with clay

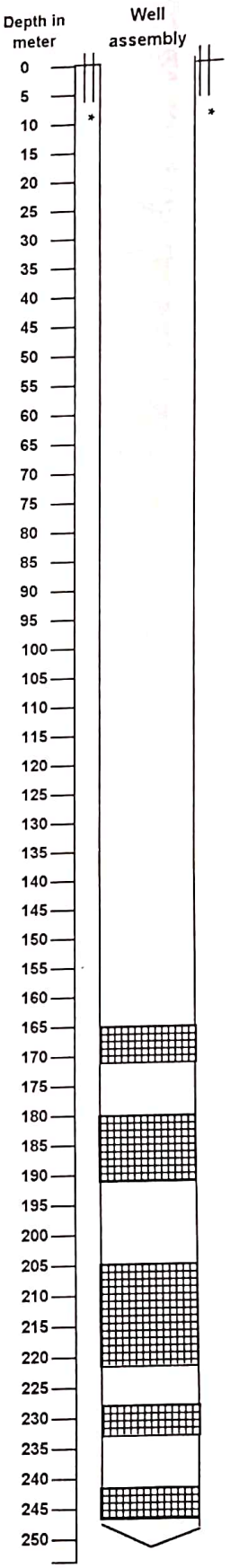
Nepal Water Supply Coorporation, Jawalakhel, Lalitpur

Location : Balkumari, Lalitpur
Drilled by : Sagarmatha Drilling Company, Dhumbarahi

Drilling depth : 259m
Lowering Depth :250m

Drilling Started on : 062/2/13
Logging Date : 062/2/31





Casing positions

M. P. = 0.5m	=	0.5m
0.00 -166.20 m	=	166.2 m
172.00 - 180.00 m	=	8.00 m
191.60 - 205.00m	=	13.4 m
221.94 - 229.00 m	=	7.06 m
234.68 - 241.00 m	=	6.32 m
Bail plug = 246.29 - 250.00	=	3.71 m

Screen position

166.2 - 172.0 m	=	5.80 m
180.0 - 191.6 m	=	11.6 m
205 - 221.94 m	=	16.9
229.0 - 234.68 m	=	5.68 m
241.0 - 246.29m	=	5.29 m

Legends

- Clay, Sandy
- Clay, Black & greyish
- Sand, Coarse w/few gravel cuttings

Design by

Recommended by

Approved by

* Pipe for Gravel pack

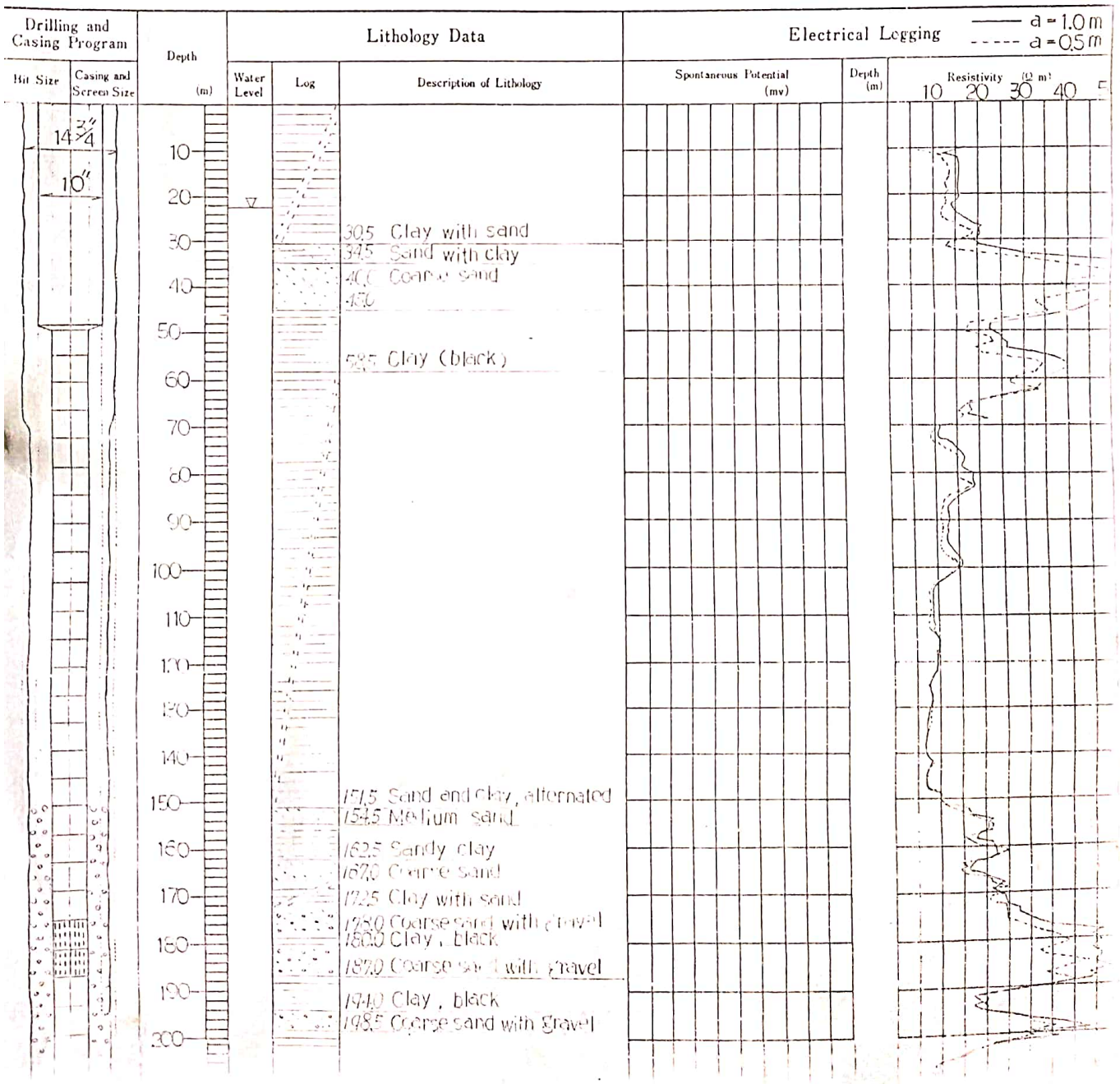
Data No.

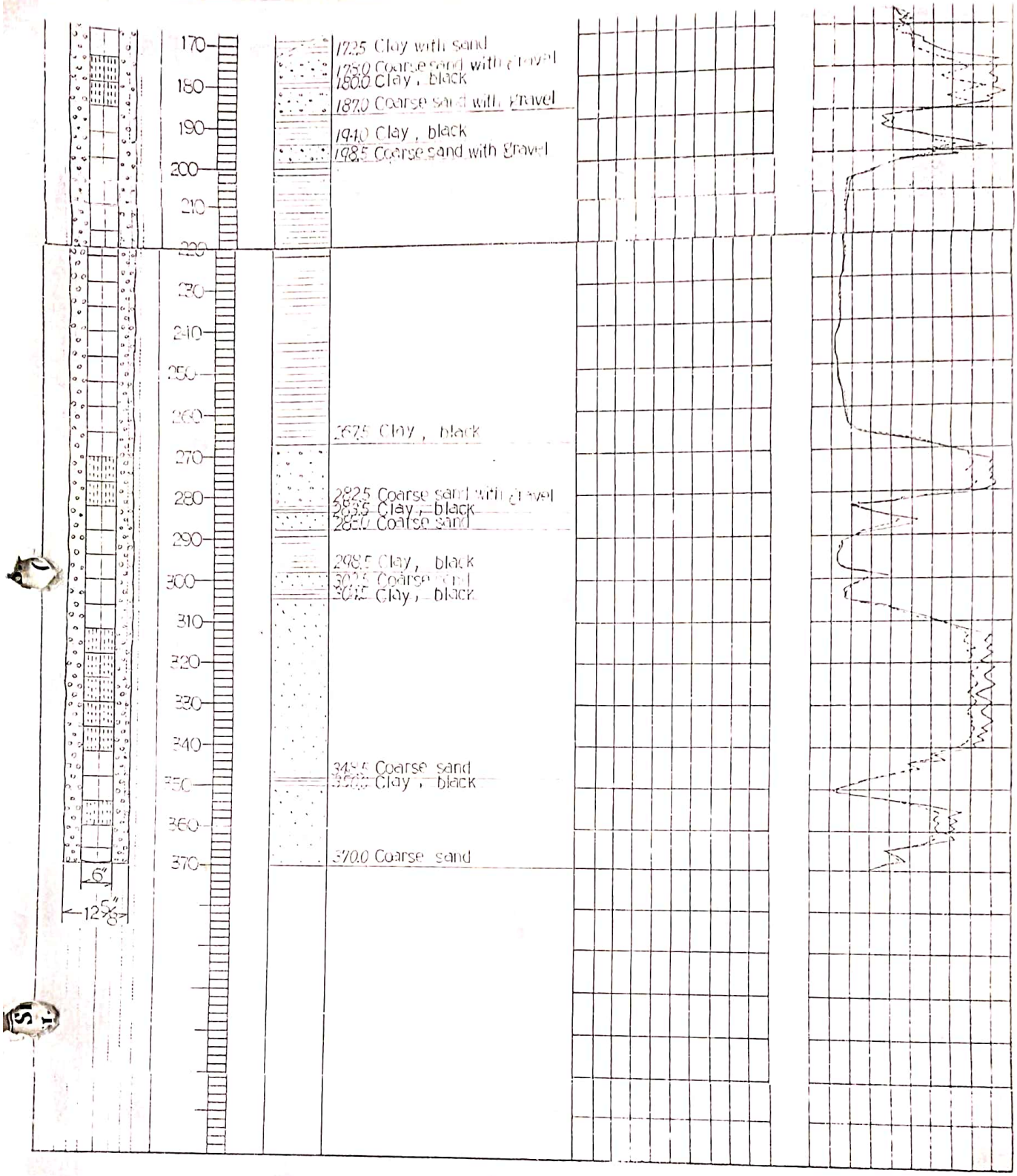
Fig-1

WELL LOG

PROJECT NAME	INTERKNIT INDUSTRIES (P). LTD.	WELL NO.	1
AREA AND LOCATION	HATHIBAN, HARISIDDHI, LALITPUR.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	G.L. 370 m	DRILLING RIG	TBM Rotary Type.
DRILLING STARTED	8th June 1987.	DRILLED BY	A. B. SHRESTHA.
WELL COMPLETED	27th July 1987	LOGGED BY	T. TANABE

STATIC WATER LEVEL	G.L. 22.50 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	G.L. 43.51 m	CONDUCTIVITY	μʊ/cm
PUMPING RATE	143 ℓ/min (206 m³/d)	pH	
SPECIFIC CAPACITY	4.8 m³/d/m	TOTAL HARDNESS	




170
180
190
200
210
220
230
240
250
260
270
280
290
300
310
320
330
340
350
360
370
172.5 Clay with sand
175.0 Coarse sand with gravel
180.0 Clay , black
187.0 Coarse sand with Gravel
194.0 Clay , black
198.5 Coarse sand with gravel
267.5 Clay , black
282.5 Coarse sand with gravel
283.5 Clay , black
285.0 Coarse sand
298.5 Clay , black
Clay , black
347.5 Coarse sand
Clay , black
370.0 Coarse sand
6"
12 5/8"

KATHMANDU DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
220.		Kamalpokhari	12"x8"	265.0	1987	44.0	−11.0	−55.0	10.0	50.0	
221.		Dasrath Rangashala	8"x6"	250.0	Oct. 1988	54.0	+0.5	−50	12.0	80.0	
222.		Gaushala	8"x6"	212	Dec. 1988	42.0	−13.0	−45.0	10.0	42.0	
223.		Police Training Center	8"x8"	222.0	Jan. 1989	44.0	−30.5	−55.0	10.0		
224.		Kanti Hospital	8"x8"	223.36	Mar.1989	63.0	−28.0	−55.0	10.0		
225.		Army camp Chhauni	8"x8"	160.0	Nov. 1994	42.0 60m	+0.2.0	−15.0	10.0	Army Hospital 20 l/m	
226.		Army camp Tundikhel	8"x8"		Oct. 1994	42.0	−8.0	−14.0	25.0		
227.		Sahakari Sanstha Baneswor	8"x8"	234.0	Feb. 1995	42.0	−11.0	−17.0	25.0		
228.		Army Camp	6"x6"	250.0	Dec. 1989	60.0	−13.0	−55	10.0		
229.		Khumaltar	8"x8"	221.0	July 1988	33.0	−8.0	−50.0	5.0		
230.		Khumaltar	8"x8"	222.0	April 1995	42.0	−10.0	−60.0	3.0		
231.		Baisodhara	8"x8"	118.0	August 1995	48.0	+0.20	−25.0	25.0		
232.		Agriculture Dev.	8"x8"	114.0	Sept. 1994	54.0	−23.0	−55.0	10.0		Submersible
233.		Agri. Ministry	8"x8"	248.0	Oct. 1989	48.0 204−252 m	−3.0	−13.0	15.0		Submersible
234.		Kalanki	6"x6"	128.0	April 1995	42.0	+0.25	−15.0	10.0		

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Table 4.2.3
INVENTORY OF SHALLOW TUBE WELL IN JHAPA DISTRICT

No.	Location	Depth (m)	SWL (mbgs)	Q (l/s)	D/d (m)	T (m2/d)	S.C. (l/s/m)	Location		EL(m)
								Lat. -N	Lon. -E	
STW- 1	Prithvinagar	35.1						26:29:07.0	88:03:44.6	81
STW- 2	Maheshpur	21.3	0.5	7.5	7.5	330	1.00	26:31:40.7	88:05:15.2	81
STW- 3	Gherabari	29.9						26:25:26.2	87:56:32.2	66
STW- 4	Phulbari	16.8	2.3	15.0	4.6	1,200	3.28	26:33:32.2	87:55:32.7	94
STW- 5	Lakhanpur	15.2	2.6	8.7	6.0	500	1.46	26:38:51.7	87:43:02.6	121
STW- 6	Sitapuri	27.4	0.6			1,068		26:34:35.7	87:42:54.5	101
STW- 7	Kanaki	43.9	6.7	8.3	1.5	1,070	5.57	26:39:19.9	87:51:41.7	120
STW- 8	Gwaldubba	36.6	0.8	6.0	0.7	400	8.33	26:30:55.2	87:43:08.8	86
STW- 9	Hukkagachhi	35.1						26:27:23.4	87:43:14.2	73
STW-10	Keradhap	36.6						26:37:48.8	87:45:41.8	113
STW-11	Buttabari	38.1	3.0	20.0	0.6	1,000	32.79	26:38:41.3	88:01:09.1	128
STW-12	Satashi	34.8	0.6	4.0	0.4	580	9.76			113
STW-13	Bareghare	25.9						26:42:22.3	88:01:07.1	183
STW-14	Sangambasti	36.6	0.4	5.4	8.4	180	0.64	26:26:53.1	88:03:51.7	69
STW-15	Panchgachhi	35.1	1.6	8.0	5.6	810	1.42	26:33:16.1	87:48:52.8	86
STW-16	Ghailadubba	38.1	0.1	10.3	8.6	280	1.20	26:36:56.0	87:56:22.8	112
STW-17	Satigatta	32.0	1.7	3.0	6.3	210	0.48	26:37:49.3	88:08:21.9	121
STW-18	Gauriganj	27.4						26:28:13.7	87:43:10.0	75
STW-19	Goldhap-4	29.0	1.2	12.0	4.9	445	2.44	26:32:47.5	87:58:08.7	95
STW-20	Kechana	22.9						26:23:05.3	87:59:56.1	63
STW-21	Jalthal	18.6						26:30:42.1	88:00:16.7	84
PRW- 1	Dasaharatpur					527				
PRW- 2	Pathariya					453				
PRW- 3	Topgacchi-3					380				
PRW- 4	Gaurigung					909				
PRW- 5	Dharampur					483				
Average		30.3	1.7	9.0	4.6	601	5.70			

Remark: Q=Yield D/d=Drawdown T=Transmissivity
S.C.=Specific Capacity SWL=Static Water Level
Location=Located by Satellite System

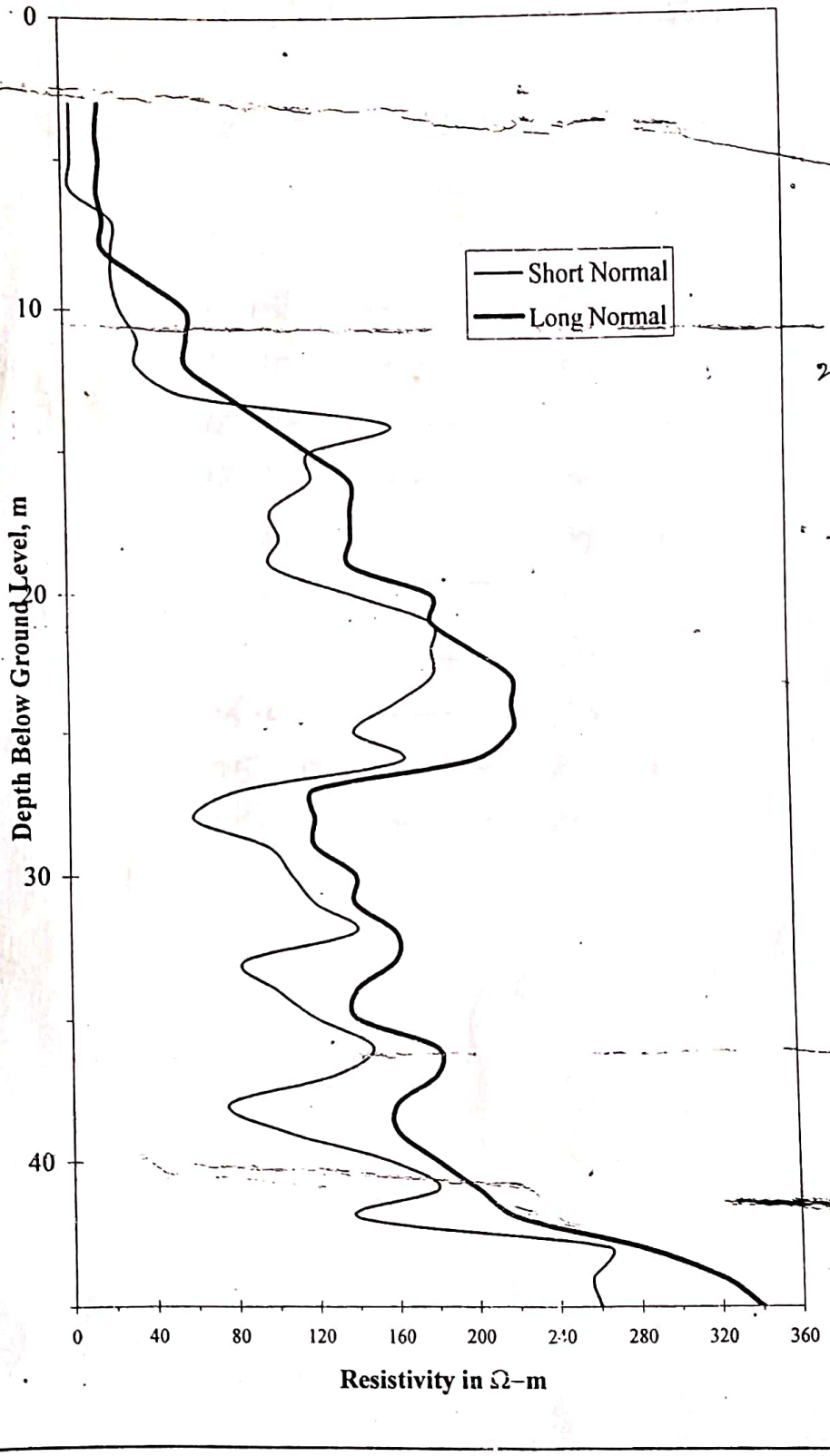
Bishnu Devi Mandir
Tin Thana

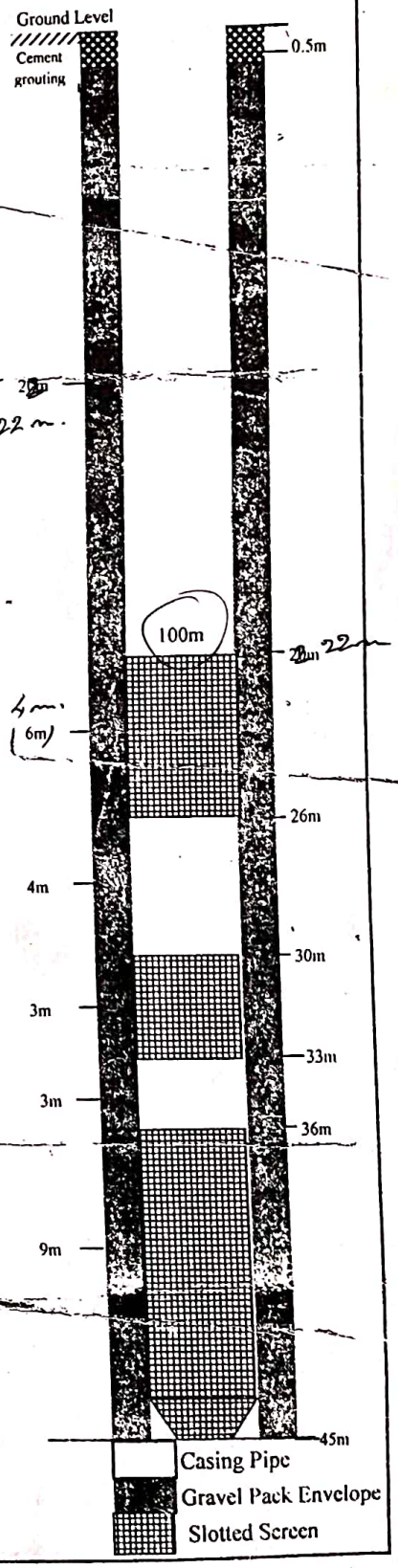
ELECTRICAL LOG DATA

BASANTA MAHARJAN

WATERWELL DRILLING AT NAIKAP

4" well





Pump test

Water Leavel 6 meter 21/01/062

11 টা	——	6 meter	Per/Hour
11.05	——	7 ,,	5000 leter
11.10	——	7 ,,	
11.15	——	8 ,,	
11.30	——	9 ,,	
12.00	——	11 ,,	
12.30	——	13 ,,	
01.00	——	15 ,,	
02.00	——	18 ,,	
03.00	——	20 ,,	
04.00	——	20 ,,	
05.00	——	21 ,,	
06.00	——	21 ,,	

22/01/062

Water Leavel 7 Meter

7 ~~9w~~	——	7 Meter
7.05	——	8 "
7.10	——	9 "
7.15	——	10 "
7.30	——	15 "
7.45	——	18 "
8.00	——	18 "
8.30	——	19 "
9.00	——	19 "
10.00	——	20 "
11.00	——	20 "
12.00	——	20 "
1.00	——	21 "
2.00	——	21 "
3.00	——	21 "
4.00	——	21 "

Lithology of Deep Well in UNDP office area, Pulchowk

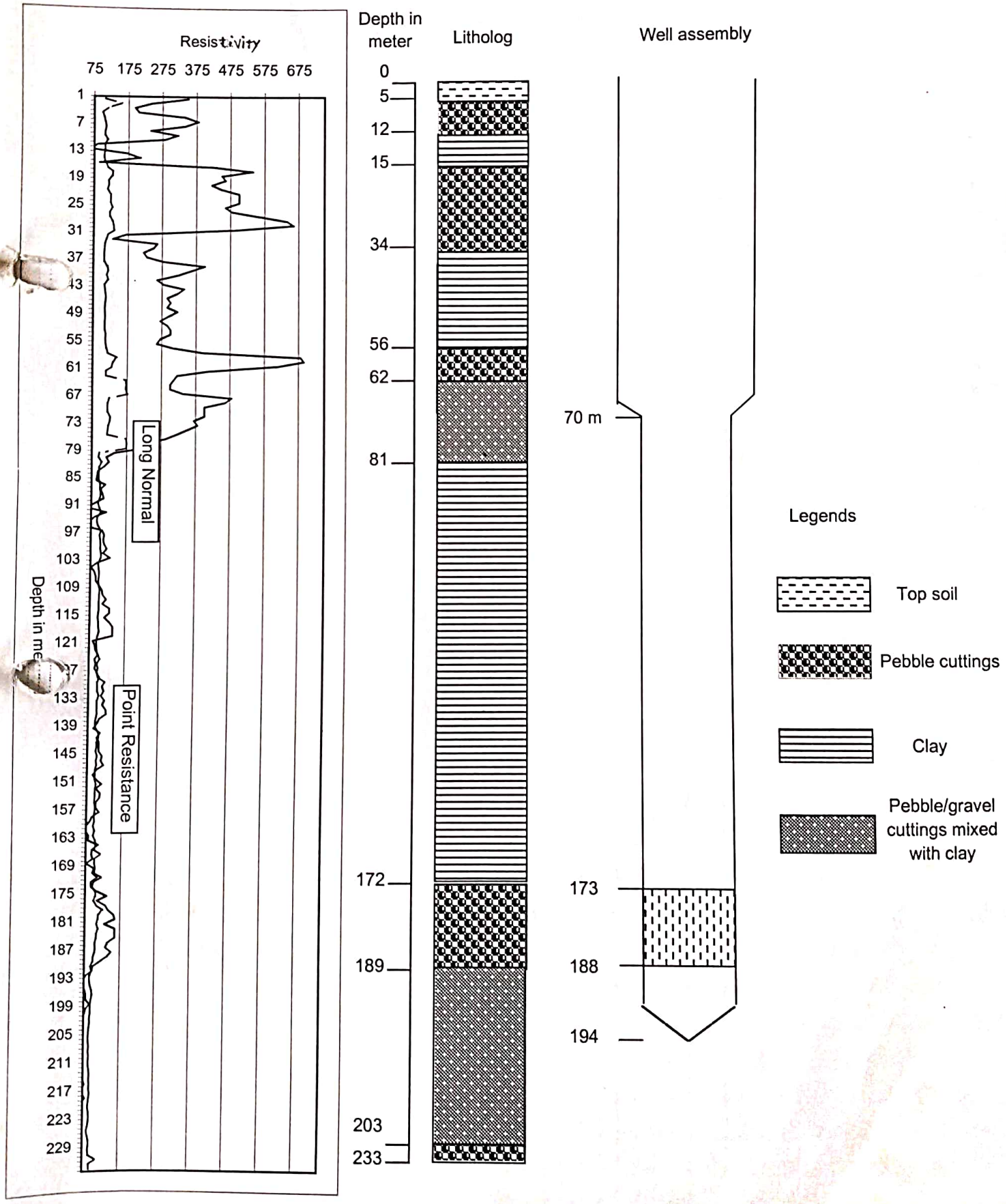
From	To	Lithology
0	90	Alternate layers of dominantly Black clay and little gravel
90	125	Sand with gravel
125	145	Gravels, Boulders of Limestone, Sandstone
145	215	Gravels, boulders of Limestone, Sandstone with black clay

Location : Sunakothi

Logging date :2061/5/23

Drilling started on : 061/5/1

Rig Type : Vol Drill (Model-180)



Log No. J-28

WELL LOG

PROJECT NAME	TEATSP	WELL NO.	
AREA AND LOCATION	Kumaltar, Lalitpur - District (Ktm)		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	221.0 feet	DRILLING RIG	TBM 72 A
DRILLING STARTED		DRILLED BY	G. D. Joshi
WELL COMPLETED	045-4-7	LOGGED BY	D. Mukhiya

STATIC WATER LEVEL	feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	feet	CONDUCTIVITY	µ℧/cm
PUMPING RATE	l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program: Bit Size	Casing and Screen Size	Depth (feet)	Water Level	Log	Description of Lithology	Electrical Logging: Spontaneous Potential (mv)	Depth (m)	Resistivity (Ωm)
+0.5		0			Top-Soil			
					Fine Sand			
		20–60			Blue Black clay			
		60			Gravel (fine)			
		80–160			Blue Black Clay			
		172			Fine Sand			
Slotted Pipe	27.5 Screen (5.5x5x5)	180–200			Coarse Sand very little clay			
	4.5 Pipe	201.5			Sandy clay			
Slotted	5.5 Screen	206			C. Sand w/ clay			
	9th Pipe	211.5			Blue Black clay			
		220, 240, 260						

KATHMANDU DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
220.		Kamalpokhari	12"x8"	265.0	1987	44.0	−11.0	−55.0	10.0	50.0	
221.		Dasrath Rangashala	8"x6"	250.0	Oct. 1988	54.0	+0.5	−50	12.0	80.0	
222.		Gaushala	8"x6"	212	Dec. 1988	42.0	−13.0	−45.0	10.0	42.0	
223.		Police Training Center	8"x8"	222.0	Jan. 1989	44.0	−30.5	−55.0	10.0		
224.		Kanti Hospital	8"x8"	223.36	Mar.1989	63.0	−28.0	−55.0	10.0		
225.		Army camp Chhauni	8"x8"	160.0	Nov. 1994	42.0 60m	+0.2.0	−15.0	10.0	Army Hospital 20 l/m	
226.		Army camp Tundikhel	8"x8"		Oct. 1994	42.0	−8.0	−14.0	25.0		
227.		Sahakari Sanstha Baneswor	8"x8"	234.0	Feb. 1995	42.0	−11.0	−17.0	25.0		
228.		Army Camp	6"x6"	250.0	Dec. 1989	60.0	−13.0	−55	10.0		
229.		Khumaltar	8"x8"	221.0	July 1988	33.0	−8.0	−50.0	5.0		
230.		Khumaltar	8"x8"	222.0	April 1995	42.0	−10.0	−60.0	3.0		
231.		Baisodhara	8"x8"	118.0	August 1995	48.0	+0.20	−25.0	25.0		
232.		Agriculture Dev.	8"x8"	114.0	Sept. 1994	54.0	−23.0	−55.0	10.0		Submersible
233.		Agri. Ministry	8"x8"	248.0	Oct. 1989	48.0 200−252 m	−3.0	−13.0	15.0		Submersible
234.		Kalanki	6"x6"	128.0	April 1995	42.0	+0.25	−15.0	10.0		

......***

WELL LOG

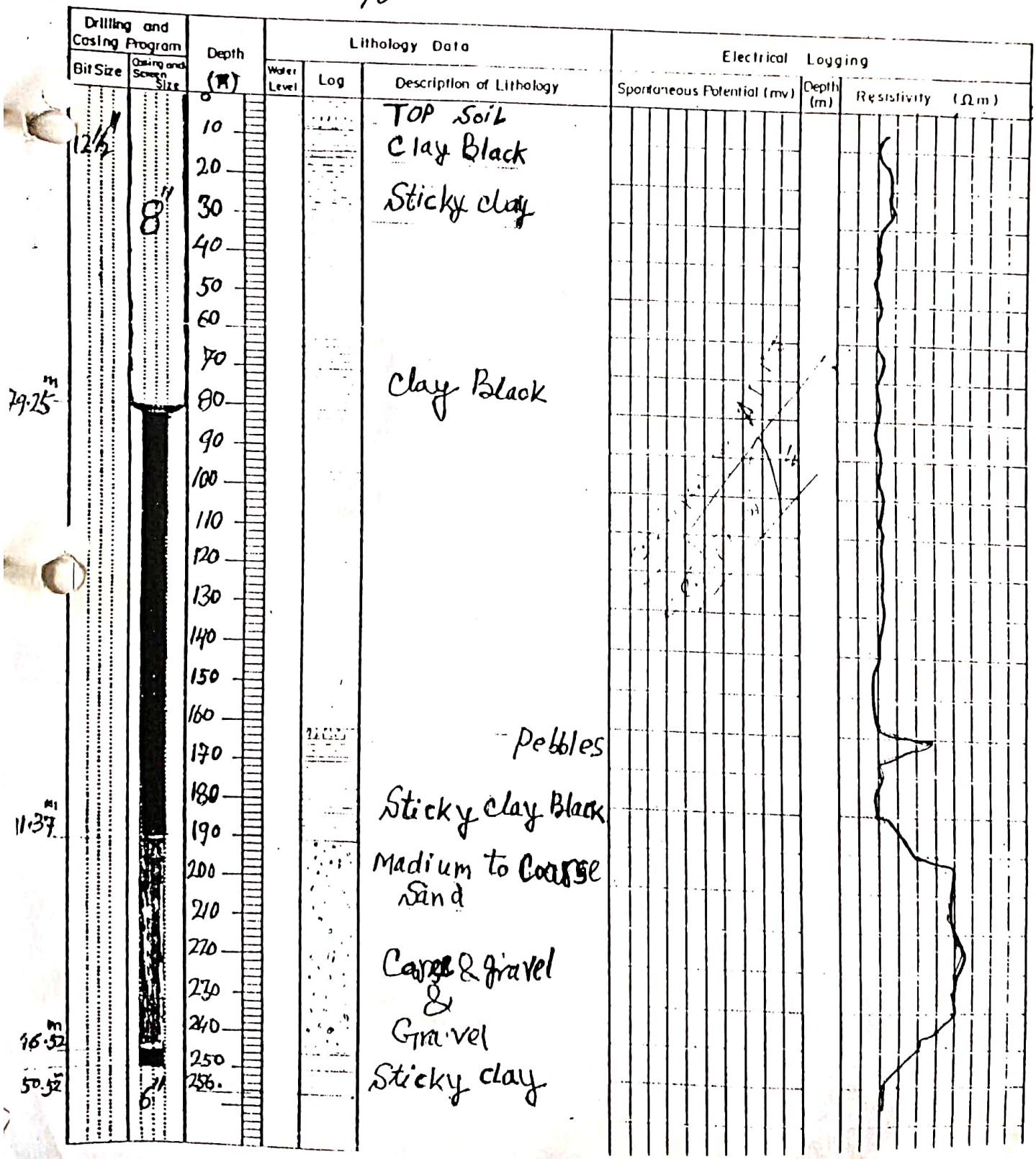
Data No J-30

PROJECT NAME	A. D. P. JANAKPUR	WELL NO.	3
AREA AND LOCATION	DASHRATH RANGSHALA TRIPURESHOR		
ELEVATION	M	LATITUDE / LONGITUDE	
TOTAL DEPTH	250-52 M	DRILLING RIG	TBM-72
DRILLING STARTED	10 Aug. 1988	DRILLED BY	D. N. SEN
WELL COMPLETED	16 Oct. 1988	LOGGED BY	P. MUKHIYA

STATIC WATER LEVEL	40.5 M	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	- 50 M	CONDUCTIVITY	μU/cm
PUMPING RATE	720 l/min (, m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

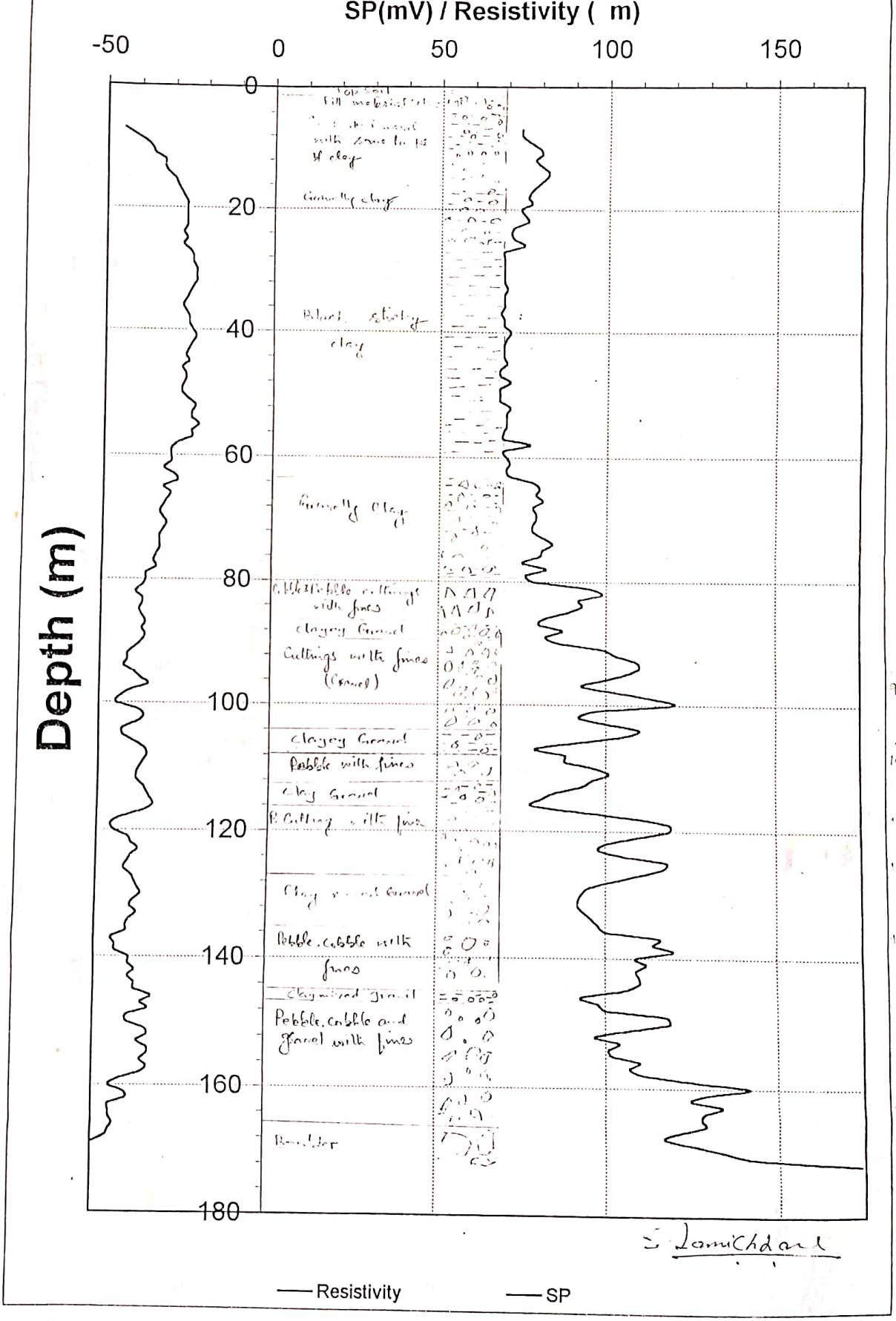
By Air Lift →

WELL SIZE:- 8"/6"



DOI/Jawalakhel

Depth Vs SP/Resistivity Plots



VISHAL PLASTOCAB INDUSTRIES PVT. LTD.

Satungal, Kathmandu, Nepal

Price List for "SUPREMO" Commercial Quality UPVC Pipes

Effective from 15 May, 2005

	OD in MM	2.5 kg f/cm^2 Rate/meter	4 kg f/cm^2 Rate/meter	6 kg f/cm^2 Rate/meter	10 kg f/cm^2 Rate/meter
1¼"	48 MM	-	63.00	-	-
1½"	50 MM	-	-	67.90	106.84
2"	60 MM	-	112.00	-	-
2½"	75 MM	-	108.67	152.60	241.96
3"	90 MM	97.02	151.10	220.49	344.97
4"	110 MM	143.94	218.33	319.67	511.05
6"	160 MM	295.88	470.27	676.29	1062.86

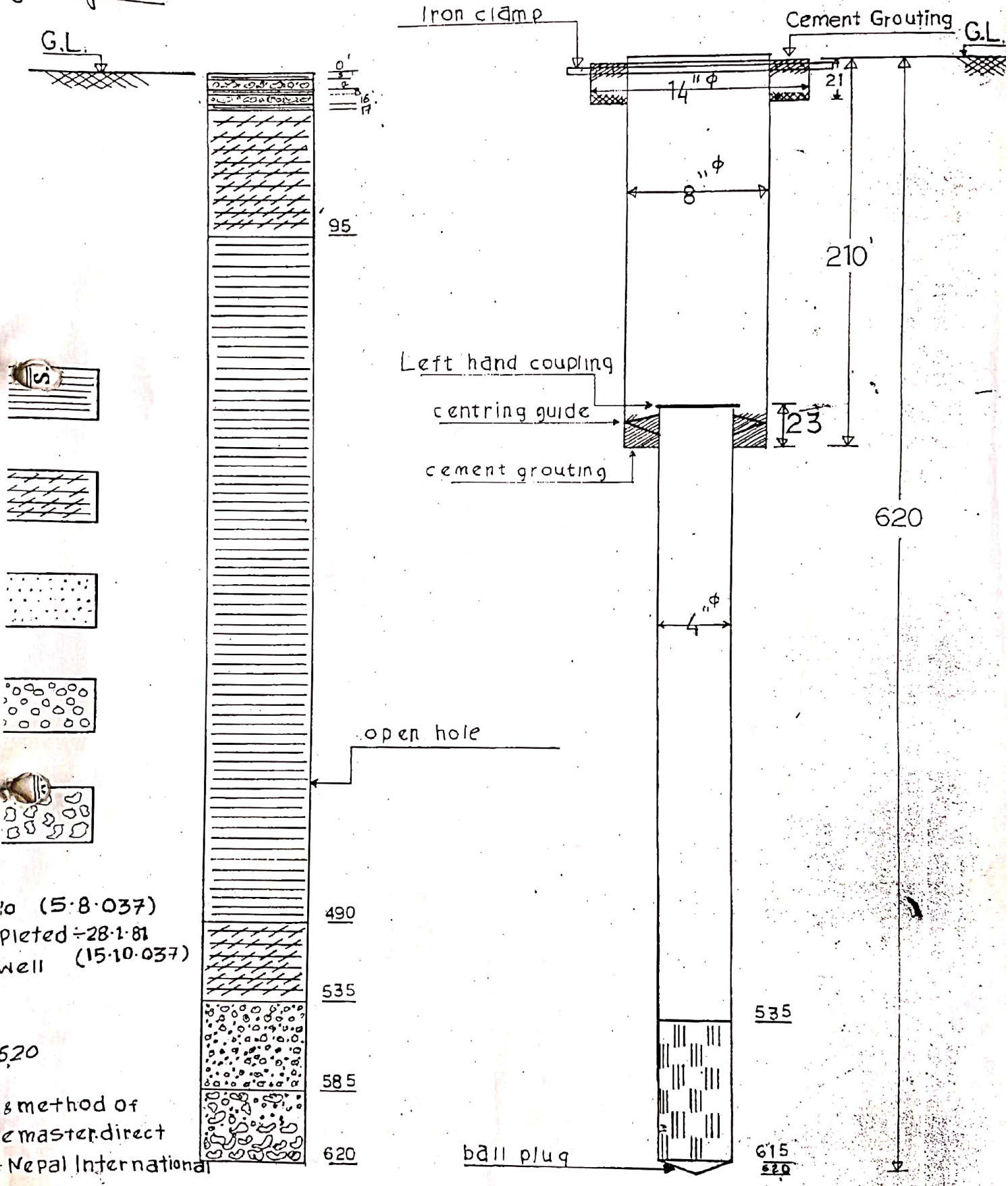
TERMS & CONDITION

1) The above price are Inclusive of 13% VAT
2) The price list supersedes all our previous Price List.
3) The prices are subject to change without any prior notice.

Refer Bahja Rai Tater.

Well No. G-17, Patan Hospital, Lalitpur

DIAGRAM OF BORE WELL CONSTRUCTED AT PATAN HOSPITAL, LALITPUR.



(5·8·037)
pleted :-28·1·81
well (15·10·037)

620

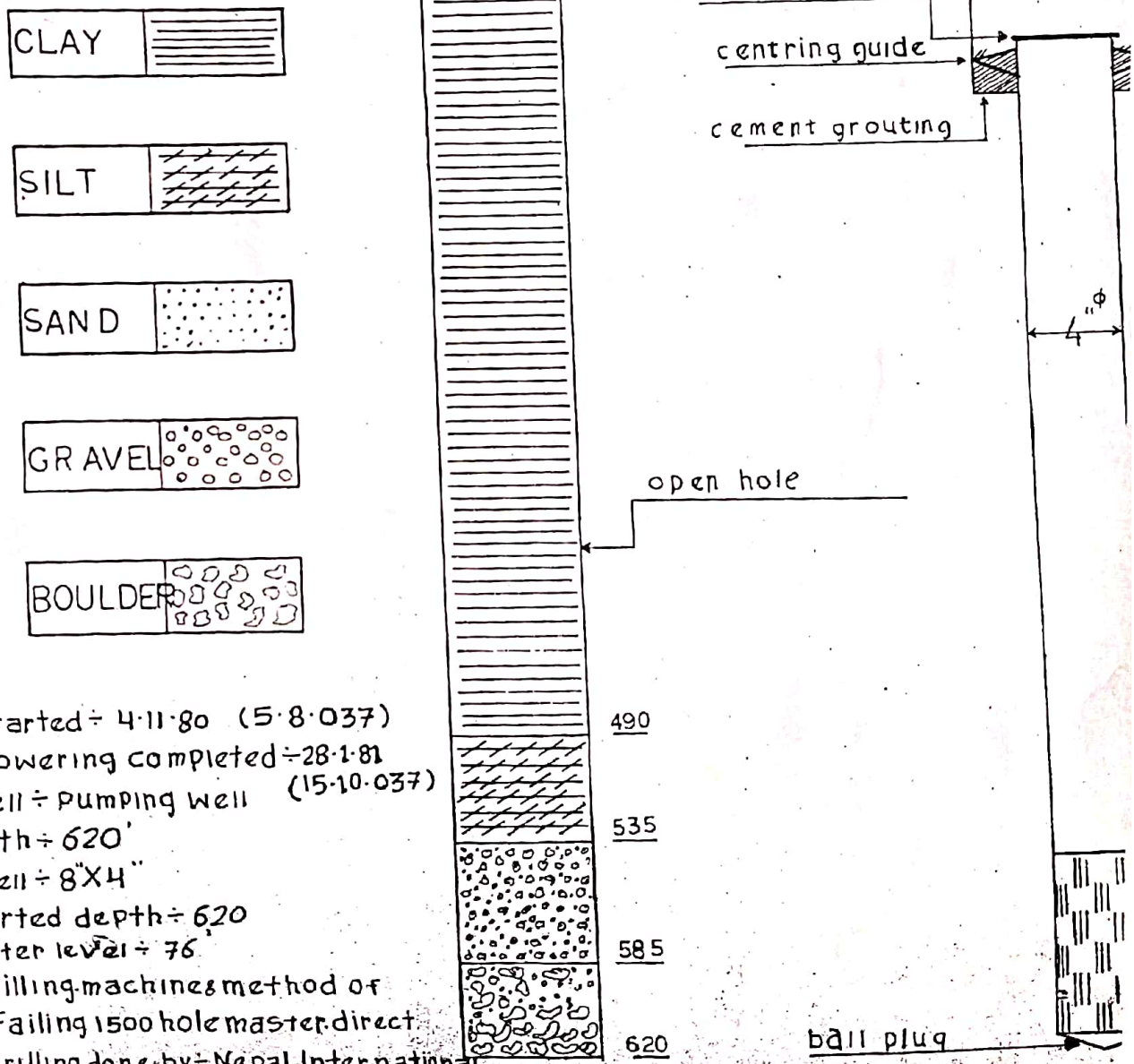
s method of
e master direct
- Nepal International

Note : All Dimensions in feet.

PATAN HOSPITAL PROJECT

PH 515

ge 3 of 3



Drilling started ÷ 4·11·80 (5·8·037)
Drilling & Lowering completed ÷ 28·1·81 (15·10·037)
kind of well ÷ pumping well
Total Depth ÷ 620'
size of well ÷ 8"X4"
pipe inserted depth ÷ 620
static water level ÷ 76'
Type of Drilling machines method of drilling ÷ Failing 1500 hole master direct rotary. Drilling done by ÷ Nepal International Drilling co (P) Ltd

Note All Dimensions in feet

KATHMANDU DISTRICT

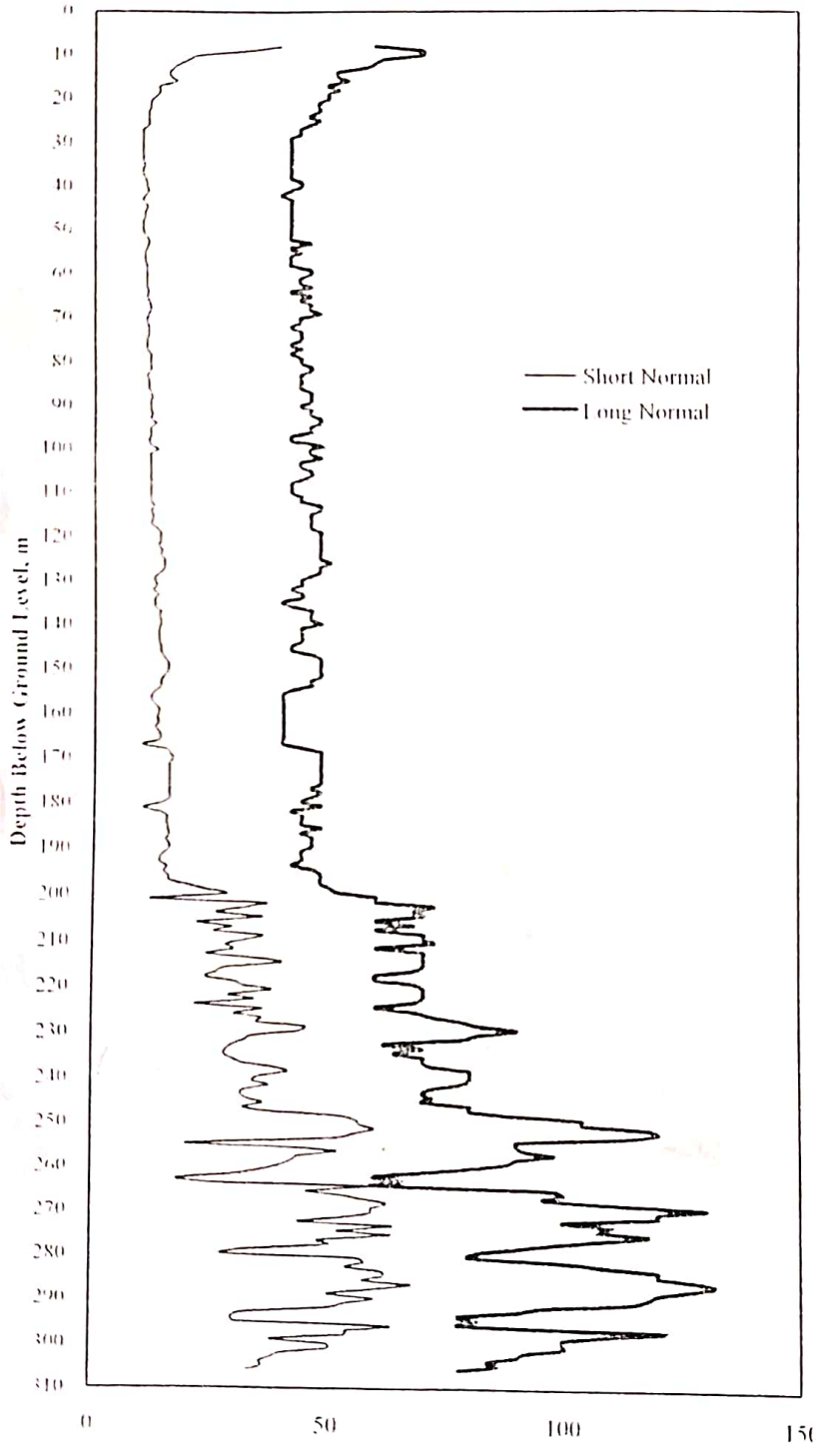
S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
220.		Kamalpokhari	12"x8"	265.0	1987	44.0	−11.0	−55.0	10.0	50.0	
221.		Dasrath Rangashala	8"x6"	250.0	Oct. 1988	54.0	+0.5	−50	12.0	80.0	
222.		Gaushala	8"x6"	212	Dec. 1988	42.0	−13.0	−45.0	10.0	42.0	
223.		Police Training Center	8"x8"	222.0	Jan. 1989	44.0	−30.5	−55.0	10.0		
224.		Kanti Hospital	8"x8"	223.36	Mar.1989	63.0	−28.0	−55.0	10.0		
225.		Army camp Chhauni	8"x8"	160.0	Nov. 1994	42.0 60m	+0.2.0	−15.0	10.0	Army Hospital 20 l/m	
226.		Army camp Tundikhel	8"x8"		Oct. 1994	42.0	−8.0	−14.0	25.0		
227.		Sahakari Sanstha Baneswor	8"x8"	234.0	Feb. 1995	42.0	−11.0	−17.0	25.0		
228.		Army Camp	6"x6"	250.0	Dec. 1989	60.0	−13.0	−55	10.0		
229.		Khumaltar	8"x8"	221.0	July 1988	33.0	−8.0	−50.0	5.0		
230.		Khumaltar	8"x8"	222.0	April 1995	42.0	−10.0	−60.0	3.0		
231.		Baisodhara	8"x8"	118.0	August 1995	48.0	+0.20	−25.0	25.0		
232.		Agriculture Dev.	8"x8"	114.0	Sept. 1994	54.0	−23.0	−55.0	10.0		Submersible
233.		Agri. Ministry	8"x8"	248.0	Oct. 1989	48.0 204−252 m	−3.0	−13.0	15.0		Submersible
234.		Kalanki	6"x6"	128.0	April 1995	42.0	+0.25	−15.0	10.0		

......***

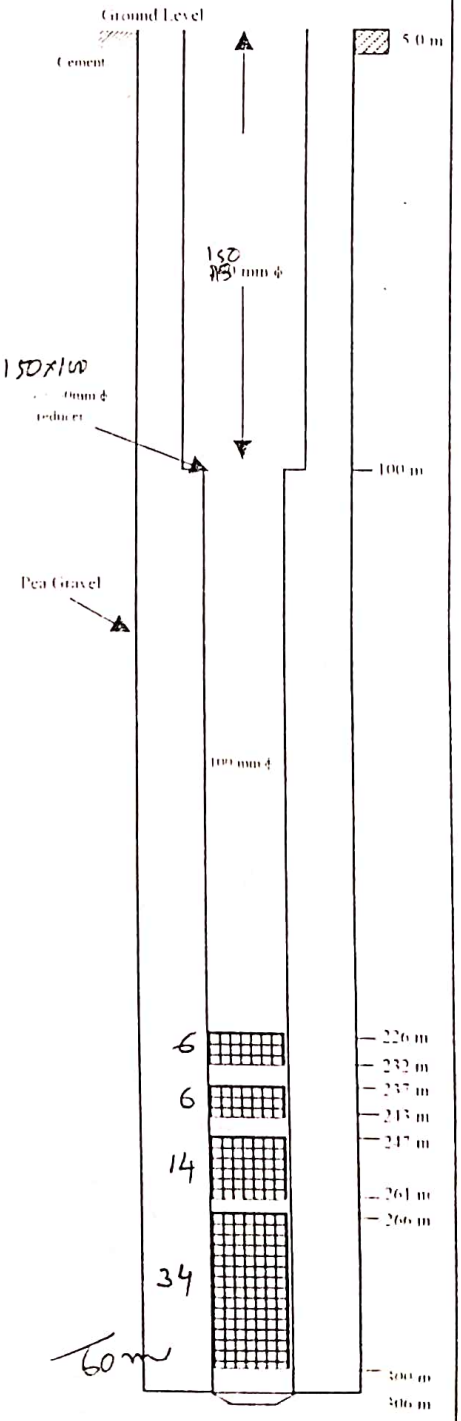
ELECTRICAL LOG DATA

Nepal Television

WATERWELL DRILLING AT SINGHDURBAP, KATHMANDU



FINAL TUBEWELL DIAGRAM



Main Identity

From: Naba Raj <nrbina@wlink.com.np>
To: <gwater@enet.com.np>
Sent: Monday, September 27, 2004 8:28 AM
Attach: undp well.xls
Subject: Un well lithology

Dear Mr. Nir Shakya

As discussed in the phone on last friday, the Lithology of deep well in the UNDP Office area is attached here for your kind attention. Hope it will serve the purpose.

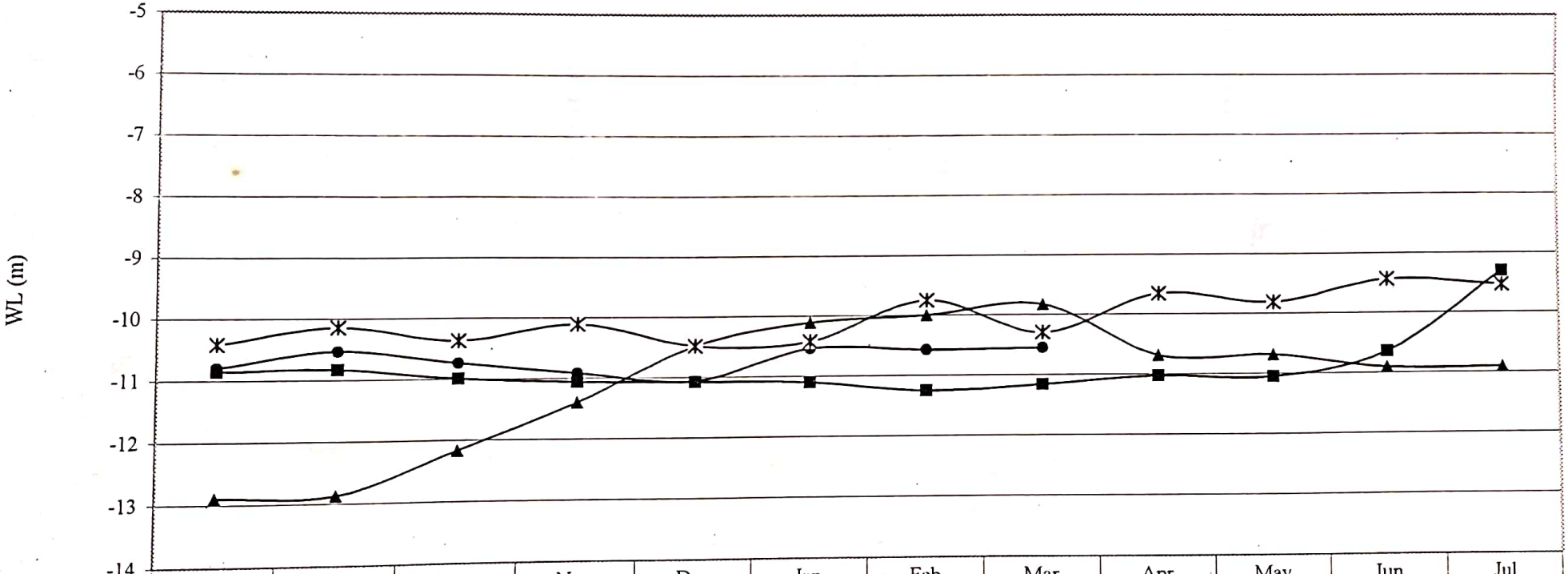
Regards

N R Shrestha

Hydrogrph-49

Comparison of SWL in Yr. 99/00 & 02/03

Well No. G-17, Patan Hospital, Lalitpur



	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
99\00	-12.9	-12.87	-12.17	-11.4	-10.48	-10.11	-10	-9.83	-10.68	-10.68	-10.9	-10.9
00\01	-10.85	-10.83	-10.99	-11.06	-11.07	-11.1	-11.25	-11.16	-11.02	-11.05	-10.64	-9.31
01\02	-10.79	-10.53	-10.73	-10.91	-11.06	-10.54	-10.57	-10.55				
02\03	-10.41	-10.14	-10.37	-10.11	-10.48	-10.42	-9.75	-10.29	-9.66	-9.81	-9.44	-9.54

Months

Page 1 of 3

Fax No: 4262979 ~~4262979~~

Att: Mr. Nir Shakya
Hydrogeologist
Groundwater Resources Development Project
Babar Mahal, Kathmandu, Nepal.

Dear Sir,

Hydro Consult (P) Ltd. would like to thank you for your help in providing the static ground water level data of Well No. G-17 at Patan Hospital, Lalitpur. In appreciation of your kind consideration we would like to provide you with the boring log of the well (G-17). I hope the boring log, which is attached along with this cover letter, will help you to better interpret the ground water level data at Well No. G-17.

Thank you once again and we look forward to establishing a good working relationship with you and the Groundwater Resources Development Project.

Sincerely,

Aashish Sharma
On behalf of Hydro Consult (P) Ltd.

WELL LOG

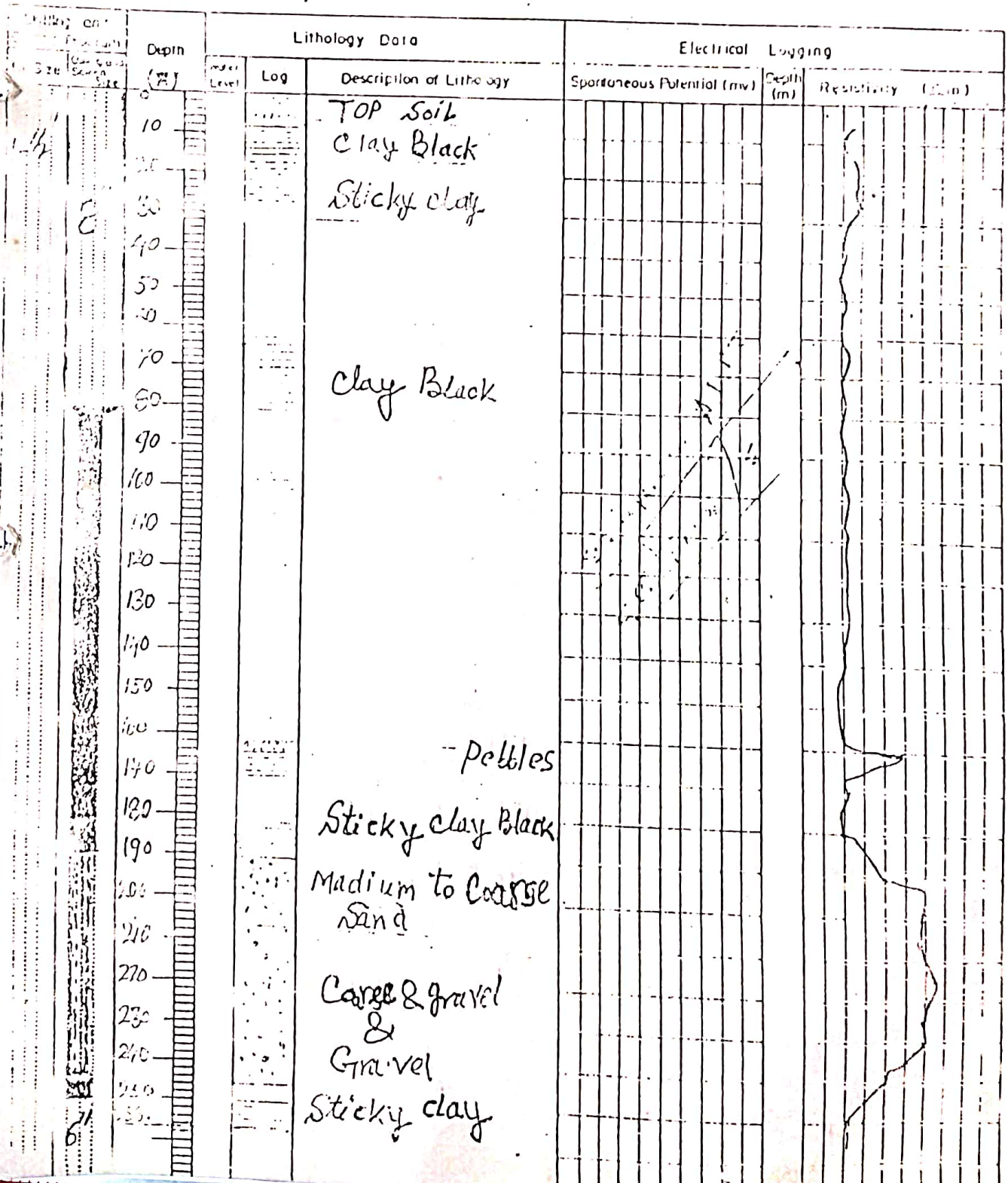
Data No 1···50

PROJECT NAME	A. D. P. JANAKPUR	WELL NO.	3
AREA AND LOCATION	DASIRATH RANGSHALA TRIPURESHOR		
ELEVATION	M	LATITUDE	LONGITUDE
TOTAL DEPTH	250-52 M	DRILLING RIG	TBM-42
DRILLING STARTED	10 Aug. 1988	DRILLED BY	D. N. SEN
WELL COMPLETED	16 Oct. 1988	LOGGED BY	P. MUKHIYA

STATIC WATER LEVEL	10·5 M	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	50 M	CONDUCTIVITY	μU /cm
PUMPING RATE	720 l/min m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Air Lift →

WELL SIZE:- 8"/6"



Data No

WELL LOG

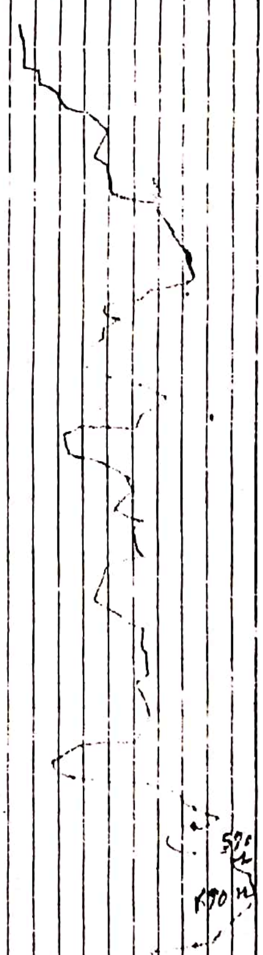
PROJECT NAME	A. D. P. Janakpur	WELL NO	
AREA AND LOCATION	Dept. of Agricultural Dev. HARIHAR BHAWAN		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	114.0 m	DRILLING RIG	TRD-500
DRILLING STARTED		DRILLED BY	D. N. SEN
WELL COMPLETED		LOGGED BY	M. LAMICHHANE

STATIC WATER LEVEL	23.00 m	WATER TEMPERATURE	
DYNAMIC WATER LEVEL	43.00 m	CONDUCTIVITY	μS/cm
PUMPING RATE	10.0 lps/sec. m³/d	pH	
SPECIFIC CAPACITY	m³/d.m	TOTAL HARDNESS	

Casing

Drilling and Casing Program: Bit Size	Casing and Screen	Depth (m)	Water Level	Log	Description of Lithology
	10.5 "	0			Surface soil
	8"	10			medium and coarse sand
		20			Black clay
		30			clay with gravel
		40			Consolidated rock (Lst)
					Black sticky clay
51		50			Boulder in clay
57					Silty clay
60		60			Gravel, sand Pebbles
		70			Consolidated Rock Feldspar, Limestone
		80			Sandstone intrusion of quartzite
90		90			Silty clay
96					Silty clay + gravel
		100			Consolidated rock
					Pebbles
		110			Sandstone, Lst,
114			114.0		
6" size		120			

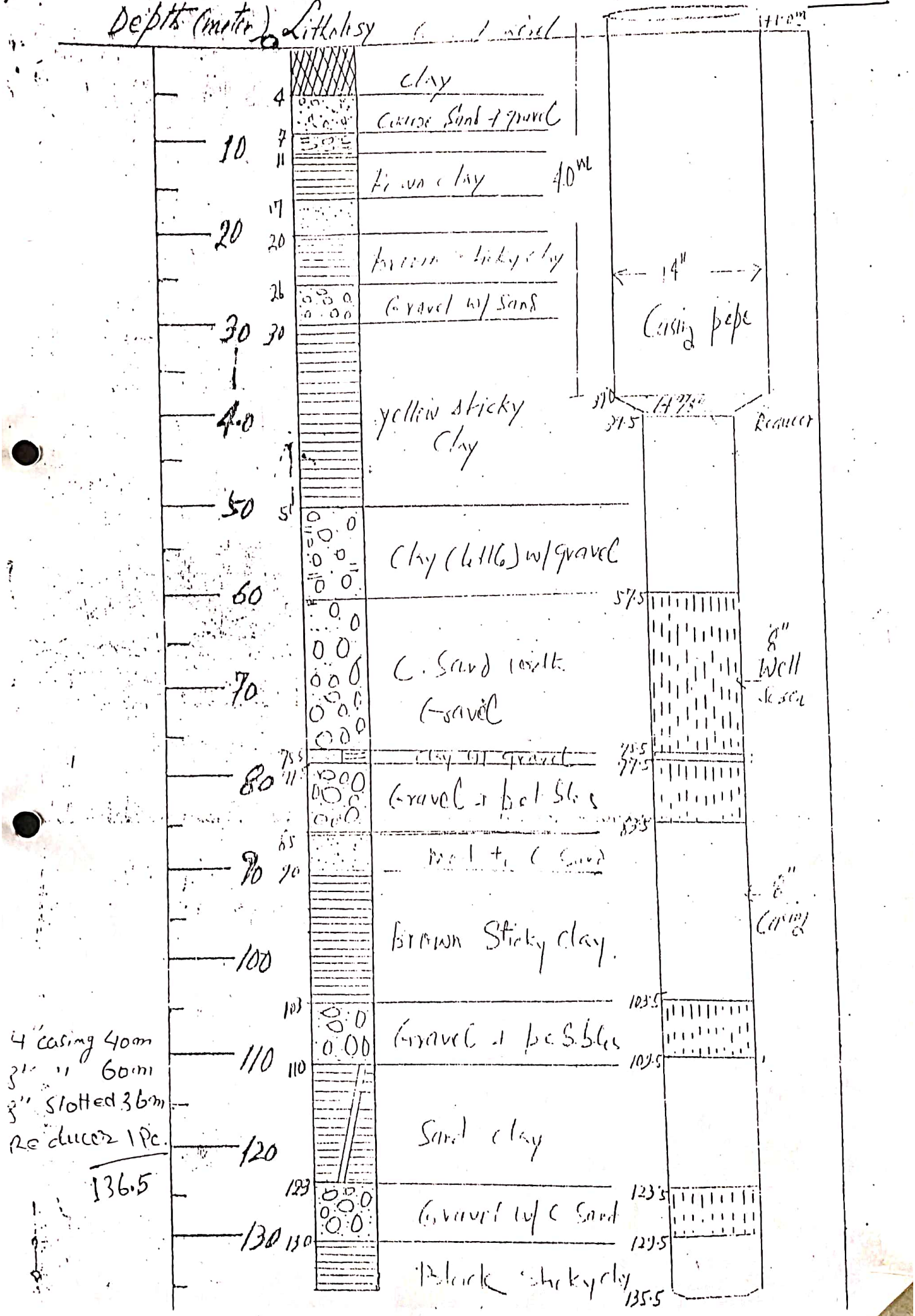
Electrical Logging: Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω·m) 0 – 250 – 500

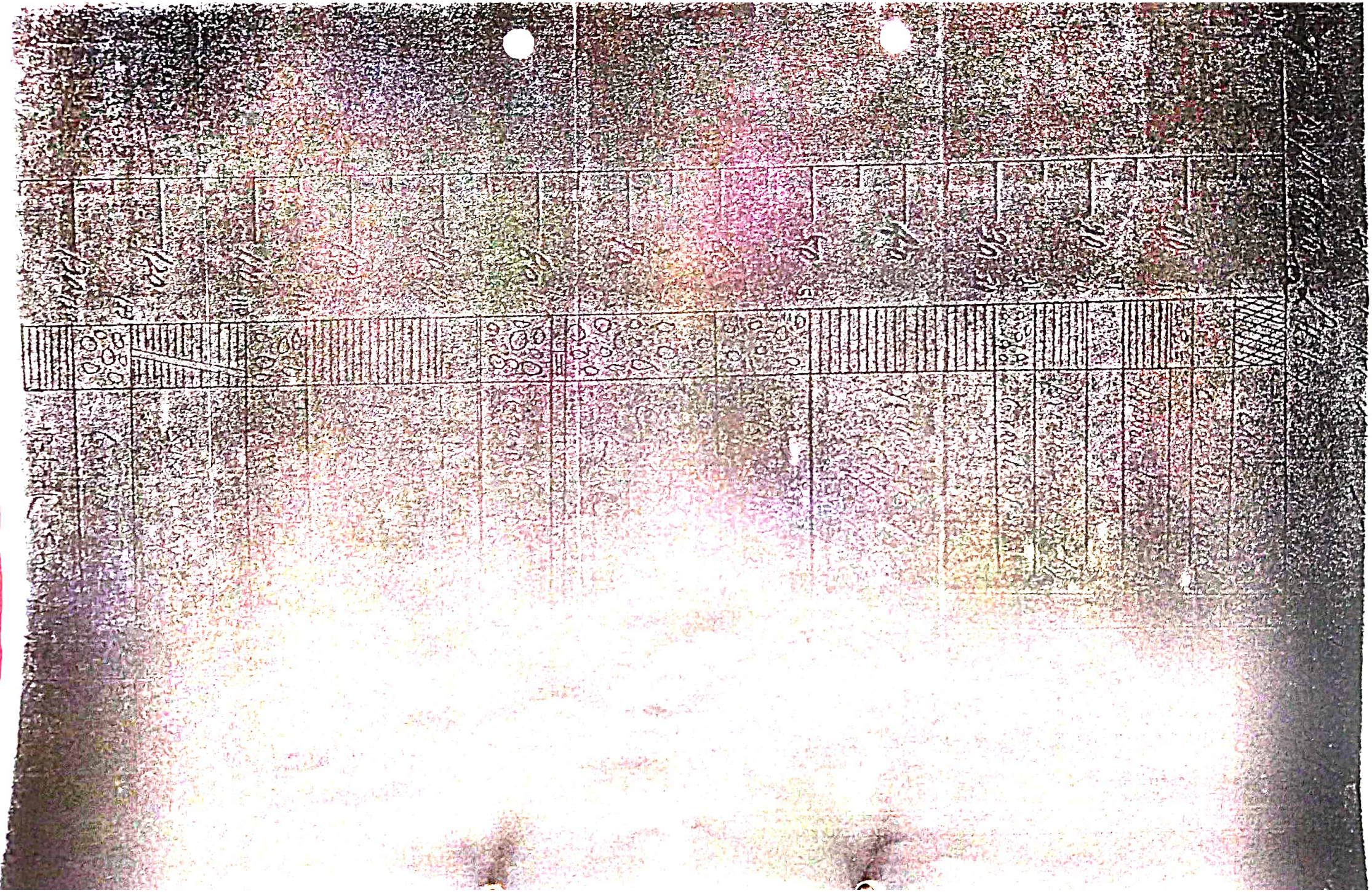


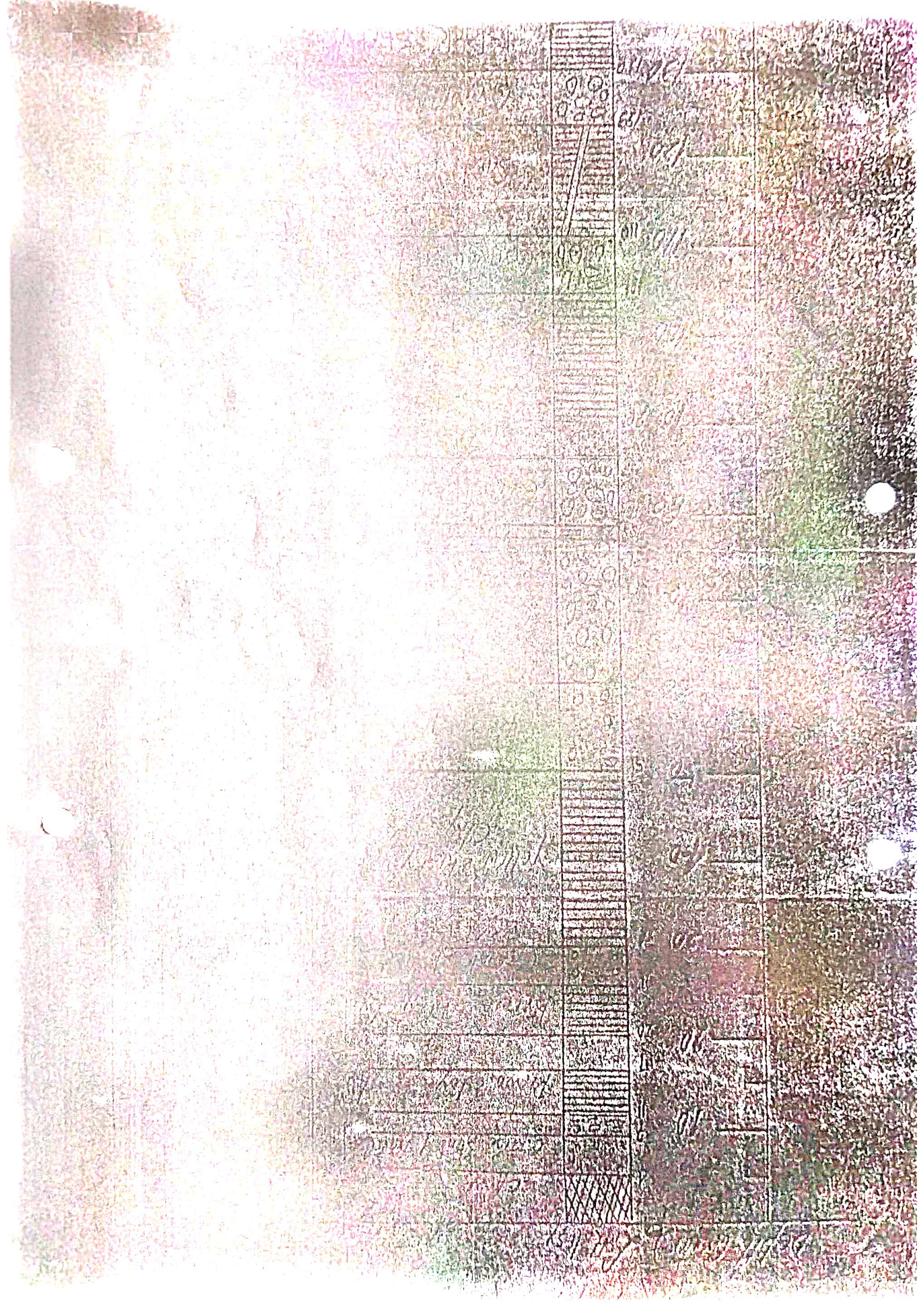
INDEX.

||| Well Screen
Sst = Sandstone
Lst = Limestone

Well Assembly well No J-3





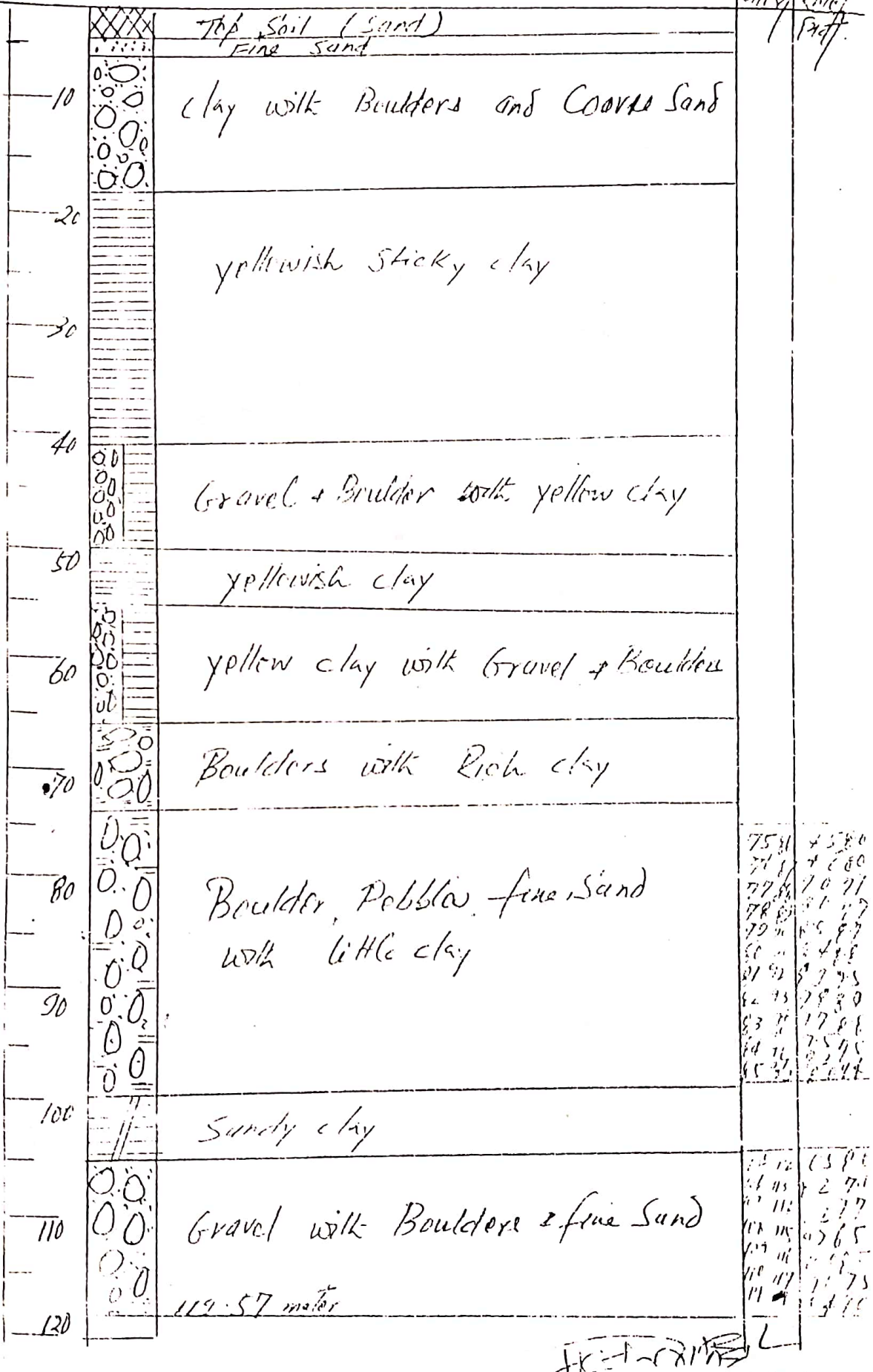


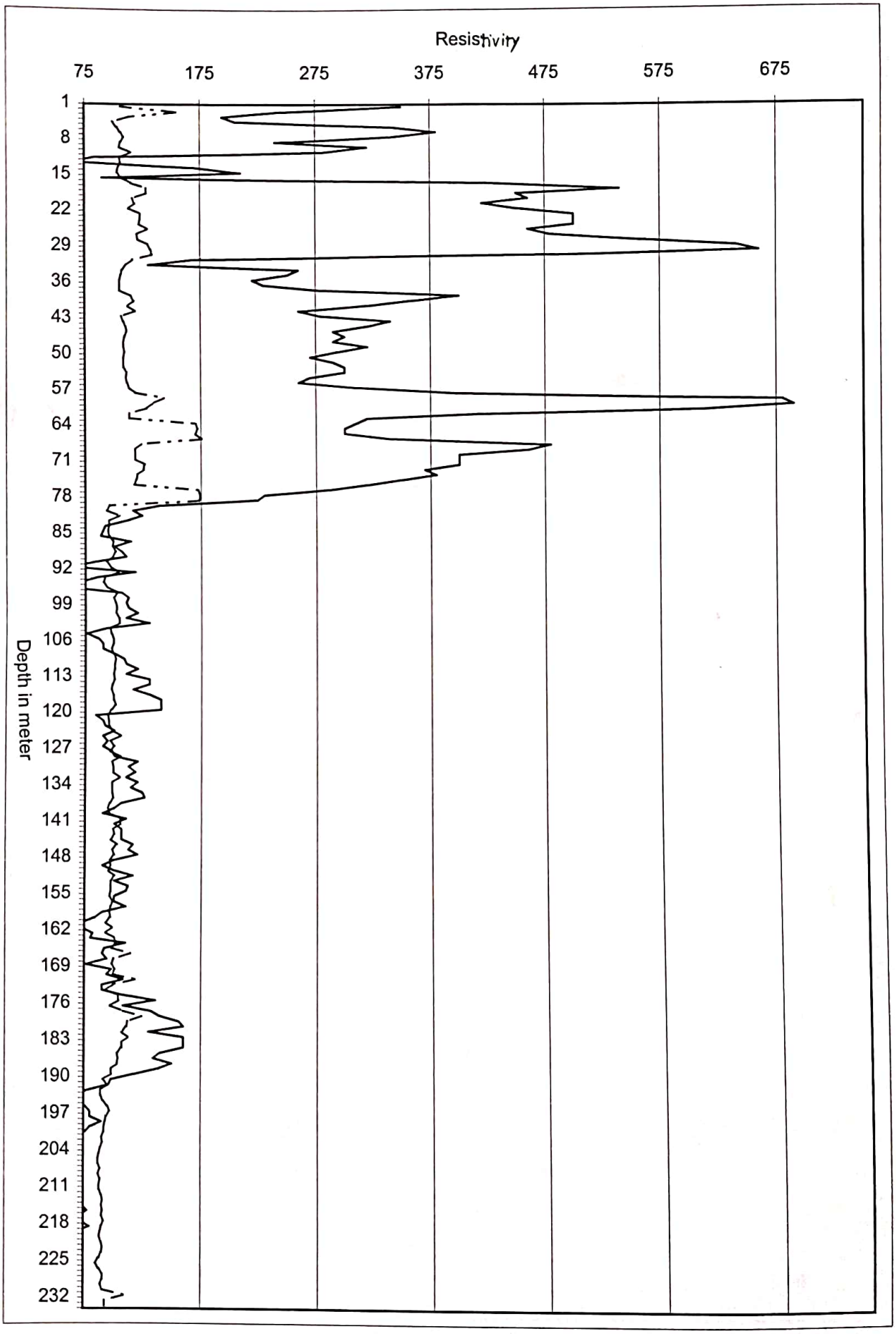
T-31

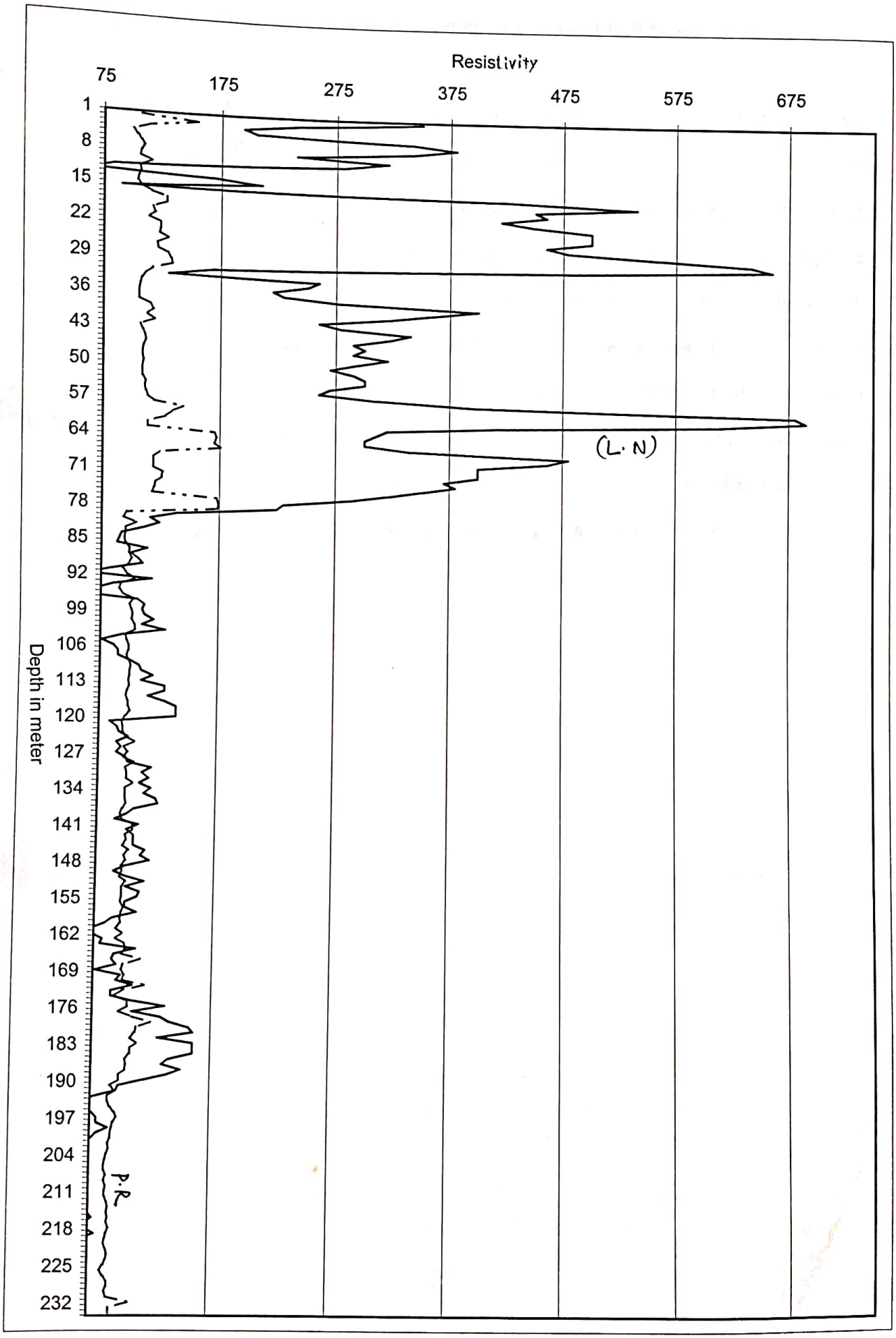
Depth

Geo. log.

T-31




Resistivity
75
175
275
375
475
575
675
Depth in meter
1
8
15
22
29
36
43
50
57
64
71
78
85
92
99
106
113
120
127
134
141
148
155
162
169
176
183
190
197
204
211
218
225
232
Long Normal
Point Resistance


Resistivity
75
175
275
375
475
575
675
1
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43
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64
71
78
85
92
99
106
113
120
127
134
141
148
155
162
169
176
183
190
197
204
211
218
225
232
Depth in meter
(L.N)
P.R.

Annex - XI

Proposal for YANMAR Pump set Spare Parts

JADP received pump sets TS-60, 1000 sets and TS-80-450 sets under KR-2 fund in 1981 along with sufficient spare parts to be distributed to the farmers. Now almost all the pump sets are distributed to farmer in subsidized price but the price of spare parts increased drastically so the farmers are not ready to buy the spare parts. This resulted the stock of spare parts in large quantity in JADP store. Now, it is an urgent task to distribute spare parts to the farmers before terminating the life of pump sets. So, the price of spare parts must be revised on the basis of current market prices of Indian product as given below:

Annex- IX

Proposal for Utilization of Micro Hydro Pump Set

JADP has received 1.5 kw. and 2.2 kw. micro hydro pumps each 65 sets in quantity under KR-2 assistance of Japan. As per the project agreement, those electric pump sets were to be supplied to the farmers of the mountain area of Janakpur zone for the purpose of irrigation, where the micro hydro plants were installed. But instead of lifting water for irrigation, the farmers used then for lighting their houses.

So, 56 units of pump sets are still in the storage of JADP in good condition. But, the storage for a long time in the ware house is not a solution. So, they should be distributed for the alternative use before they get mechanical deterioration in the store.

The micro hydro pump sets operate in 3 phase electricity line. In the villages, it is a problem to get 3 phase line. So, the 3 phase motors are now converted to single phase with special attachments (free of cost). Now, these pump sets can be operated in household for small scale irrigation purposes. The local market prices of such micro hydro pump sets were surveyed as below:

	CIF JKR	Made in China (NRS)	Made in India (NRS)	(NRS)
Ebara Motor Pump Centrifugal 2.5" diameter (1.5 kw 1800 rpm) Head 10m Cap 0.48/min	¥ 172,000.-	11,000.-	14000.-	
Ebara Motor Pump Centrifugal 3.0" diameter (2.2 kw 1800 rpm) Head 12m Cap 0.6 m^3/min	¥ 231,000.-	14,000.-	15,000.-	

Annex - V

List For Necessary Spare Parts :-

- Flat Engine
- Tone Rig Machine Trd 500
- Yanmar Diesel Tractor
- Komatsu Wheel Loader
- Toyota Pick-Up
- Nissan Pick-Up
- Toyota Station Wagon Jeep
- Hino dump Truck, Cargo Truck, Water Tank Lorry, Fuel Tank And Unique Crantruck, Etc

Model :FT 173 K

- Toyota Land Cruiser Jeep
- Kubota Diesel Engine

FY	Location		Schedule for Installation	Remarks
	Well No.	District VDC		
1997/98	T–5	Dhanusha Godar		EBARA + FIAT
"		Dhanusha Bateshwar		EBARA+FIAT 54/55
"		Dhanusha Sinurjora		OKAMOTO+ISUZU 054/55
"	T–13	Dhanusha Kajraramaul		OKAMOTO + ISUZU
"	T–12	Dhanusha Jankinagar		OKAMOTO + ISUZU
"	T–15	Dhanusha Hanspur Kathpulla		OKAMOTO + ISUZU
"	T–11	Dhanusha Gohiyahi		OKAMOTO + ISUZU

FY	Location		Schedule for Installation	Remarks
	Well No.	District VDC		
1996/97	T–7	Dhanusha Gauripur		EBARA + FIAT
"	T–8	Dhanusha Radhapur		EBARA + ISUZU
"		Chitwan Lankaline Jutpani	End of Fev	EBARA+FIAT 53/55
"		Mahottari Dhirapur		OKAMOTO+ISUZU 54/55
"		Mahottari Pipara		OKAMOTO+ISUZU ~~Artisan~~ farmers not interested
"		Mahottari Ramnagar–3		EBARA+FIAT 54/55
"		Mahottari Suga		OKAMOTO+ISUZU farmers not interested
"		Mahottari Ekrahiya–B		OKAMOTO+ISUZU Artisian
"		Sarlahi Bhaktapur–B 3		EBARA+FIAT
"		Sarlahi Ghukauli		EBARA+FIAT 054/55
"		Dhanusha Laxminibas–7		EBARA + FIAT 053/54
"		Dhanusha Tulsiyahi–2		OKAMOTO+ISUZU 054/55

– To be continued –

Annex – IV

Pump Set Installation Schedule

FY	Location		Schedule for Installation	Remarks
	Well No.	District VDC		
1996/97		Morang Majhare		EBARA+FIAT
"		Siraha Govindapur–6		EBARA+FIAT
"		Chitwan Pithuwa–7	Middle of March	EBARA+FIAT
"		Chitwan Pithuwa–3C	"	EBARA+FIAT
"		Mahottari Ekrahiya–A		OKAMOTO+ISUZU
"		Sarlahi Ranigunj	Early of March	EBARA+FIAT
"		Sarlahi Bhaktapur–7		OKAMOTO+ISUZU
"		Dhanusha Lagma–7		OKAMOTO+ISUZU Artesian Farmer not involved
"		Dhanusha Lagma–4		OKAMOTO + ISUZU "
"		Dhanusha Phulgama		OKAMOTO + ISUZU
"		Dhanusha Laxminibas–5	End of Fev	EBARA+FIAT
"		Dhanusha Lohana		OKAMOTO + ISUZU
"	T–3	Dhanusha Bharatpur		EBARA + ISUZU
"	T–5	Dhanusha Godar		EBARA + FIAT

– To be continued –

PER K.M. COST OF TUBELL ELECTRIFICATION WITHOUT PUMP AND MOTOR

S.N.	DESCRIPTION	Q'TY	UNIT	UNIT PRICE IN NRS.	AMOUNT IN NRS.
1	Concrete Pole	28	nos.	5,000.00	140,000.00
2	Transformer	1	nos.	250,000.00	250,000.00
3	3d Wires	5000	m	25.00	125,000.00
4	Insulator	120	nos.	100.00	12,000.00
5	MS. Angle	32	nos.	400.00	12,800.00
6	Stay Set wire	100	nos.	50.00	5,000.00
7	Panel Board set (with accessories)	1	set	25,000.00	25,000.00
8	Erection of pole, wire tensoning , fixing and fitting etc	1000	m	100	100,000.00
9	Contingency cost				50,000.00
				Total cost for 1 KM	719,800.00

Fuel consumption of Engine related to Dis. & heads

Well no.	District VDC	Combination of Engine and Pump	PWL	Discharge (l/sec)	Fuel consumption Engine RPM (l/Hr)
	Hattilet	FIAT Eng + EBAR (72Hp) (TDH 45m)	56m	20 l/sec	10 l/Hr 1700rpm
	Hariyon	FIAT Eng + EBAR	61m	32 l/sec	11 l/Hr 1700rpm
	Ramnagara (Danusa)	FIAT Eng + EBAR	11m	35 l/sec	6.5/Hr 1400rpm
	Ramnagar (Mohottari)	FIAT Eng + EBAR	31m	40 l/sec	7.5 l/Hr 1500rpm

Fiat engine is specified as 45m head for 60 l/s discharge. If it is lower than 45m head , it will not be economical. So Fiat engine should be used in high discharging well (35 ~ 45l/s) in 45m head for the economical rate of return.

Annex-III

RECOMMENDATION TABLE OF PUMP SET

(According to their Heads)

Total head	Types of Pump	Recommended Pump set
0 ~ 10m	Centrifugal Pump	18HP ~ 20 HP Engine TDH 10m Pump
0 ~ 30	Vertical turbine Pump	ISUZU Engine (42HP) OKAMOTO Pump (TDH40m)
30 ~ 45	Vertical turbine Pump	FIAT Engine (72 HP) EBARA Pump (TDH 45m)
45 ~ 60	Electric submersible Pump	(TDH 65m)

NOTE: Drilling Point should be fixed only to those areas where the pump is not deeper than 45m Head, otherwise any pump will be costly. Even Submersible Pump also requires much higher kilowatt motor.

Cost estimate of Tubewell Electrification

Per KM cost of Tubewell electrification without Pump & motor is Rs. 700,000/KM

Deep Tubewell, Hattilet (Mahottri)
February 1997

Crop	Rainfed Sector			DTW Sector			Remarks
	Land Available (ha.)			Land Available (ha.)			
		Cropped	Area%		Cropped	Area%	
Early Paddy		11.32	78		33.38	90	
Wheat		6.12	42		19.74	53	
Tobacco		3.5	24		4.22	11	
Maize	14.58	0.27	2	37.02	3.64	10	
Sugarcane		1.02	7		5.58	15	
Vegetables		0.64	4		0.61	2	
Oilseeds		0.27	2		0.28	1	
	14.58	23.14	159	37.02	67.45	182	

Production Per Unit Area (Ton Per Ha.)

Crop	Rainfed Sector	DTW Sector	Differences (%)
Early Paddy	1.38	3.20	232
Wheat	0.80	1.67	209
Tobacco	0.41	2.04	498
Maize	1.17	2.94	251
Sugarcane	6.54	16.99	260
Vegetables	0.81	4.27	527
Oilseeds	0.04	0.74	1850

Deep Tubewell Information
Hattilet, Mahottari
February, 1997

Depth of Well :	118.0 meter
Water Level :	41.0 meter; 61.0 meter in pumping time
Engine & Pump Installed :	1990
Engine :	FIAT; Horse power: – 72
:	Cylinder: – 6
:	RPM : – 1700
:	Fuel Consumption : – 10:00 L/Hr.
Pump :	EBARA
:	Capacity : 45 meter
:	Discharge : 20.00 L/Sec.
:	Utilized Hr: ~~145~~ :00 (January 1997)
Command Area :	80.00 hectares
Households :	70
Irrigation System :	Group Organized (9 member)

Surveyed Households :	27
Surveyed Sector :	DTW command area & rainfed area of same farms.

Survey findings is given in next page.

Deep Tubewell, Ramnagara
Dhanusha
February 1997

Crop	Rainfed Sector			DTW Sector			Remarks
	Land Available (ha.)			Land Available (ha.)			
		Cropped	Area%		Cropped	Area%	
Early Paddy		1.03	2		27.37	47	
Normal Paddy		59.41	94		24.39	41	
Wheat		7.68	12		24.12	41	
Potato	63.18	1.31	2	58.79	20.55	35	
Onion		0.55	1		3.61	6	
Lentil		1.41	2		3.26	6	
Mustard		0	0		1.21	2	
Vegetables		0	0		0.53	1	
	63.18	**71.39**	**113**	**58.79**	**105.04**	**179**	

Production Per Unit Area (Ton Per Ha.)

Crop	Rainfed Sector	DTW Sector	Differences (%)
Early Paddy	1.95	2.60	133
Normal Paddy	1.70	2.63	155
Wheat	0.72	1.39	193
Potato	8.94	14.03	157
Onion	8.87	8.88	100
Lentil	0.25	0.41	164
Mustard	0	0.49	–
Vegetables	0	11.93	–

Annex - II

Deep Tubewell Information
Ramnagara, Dhanusha
February, 1997

Depth of Well :	171.5 meter
Water Level :	8.0 meter; 11.0 meter in pumping time
Engine & Pump Installation :	1996
Engine :	FIAT: Horse power: – 72
:	Cylinder: – 6
:	RPM : – 1500
:	Fuel Consumption : – 7.5 L/Hr
Pump :	EBARA
:	Capacity : 45 meter
:	Discharge : 35.0 L/Sec.
:	Utilized Hr: 47:00 (January 1997)
Command Area :	40.00 hectares
Households :	80
Irrigation System :	Group Organized (9 members)

Surveyed Households :	51
Surveyed Sector :	DTW command area & rainfed area of same farms.

Survey findings is given in next page.

Institutional	**Present status and problens**	**Solutions**
1. Supervision for pump installation of DTWS	1. Pump instalation is delayed due to shortage of pump instalation assesories in JADP. so project have purchaged pump instalation assesories for 30 dtws through tendering process under KR 11 fund in this fiscal year. 2. The pump instalation maintenace and repair section is well equiped with manpower, vehicles machines tools, materials are not sufficient.	1. Neccessary spare part and accesories shall be procured utilising KR 11 fund. 2. An efficient team should be established comprising the technicians from driling, pump instalation and workshop sections of the project and periodical maintenace should be carried out in time, along with optimalvehicle, machinary, material and fund facilites. : One well experienced person in to be deputed in the pump installation and maintenance section by creating new post in the organization of the ADP.J

3. Others Problems and Countermeasures

Institutional	Present Status and Problems	Solutions
Organization and Extension	In this Project, well drilling is the major scope of work. Including the IAP, the guidance on water use to the farmers in the deep and shallow tubewell development regions, the extension services, and the instruction and coordination to the ADO, has not been carried our so far Additionally, the ADO who are responsible for direct extension services to the farmer have been more or less participating in activation plans for the extension workers. However, in actuility, scope of responsibility of the extension workers covers a wider field such as technical guidance, investigation statistics, ~~for~~ development of farmer's organization. Accordingly, the present reality shows that the extension workers have not been giving closer attention to their extension guidance, and their services.	Two persons dealing with Agronomy and Extension separately should be deputed in the ADPs. They shall be responsible to primarily extend guidance and coordination to the A.D.O., and water management extension training services directly to the farmers.

General Grant Aid Schem (NISSAKU)	Out of the totally drilled 8 wells water extraction is possible only at 4 locations. Pump fault was seen at 2 locations. For the rest of 2 location, water extraction was not possible on account of screen clogging	Pump repairing shall be executed once components have been procured (from India), around and of March cleaning chemicals shall be procured under 2 KR 1997.	* Condition of the well and counter measures (Annex XV)
Deep Tubewell Installations Construction of pump house and canal as new installation.	On account of budget shortages, the construction has not progressed well (current fiscal year target: pump house and canal at 5 locations). As of 31 Jan. 1997, the total wells drilled so far ws 234 numbers. Out of this agriculture wells was 173. The rest wells at 62 location is meant for school hospitals, temples etc. * Construction Condition of pump house. Out of 173 location, 127 locations have been completed. 46 locations is still to be executed. * Construction Condition of feeder (1 km) canal out of 170 locations, 90 locations had been completed 66 location still to be completed.	In order to continue the installation of the pumps, the pump foundation shall precede. Additionally, the pump house shall be made by the Water Utilization Committee (farmers organization), and this shall be bamboo built (temporary one), as shown in picture.	* The target objective of drilling 40 deep wells in the current fiscal year shall be reduced to 30 wells. The saved budget shall be utilized for Construction of pump foundations, pump house and canals. * Construction Schedule (Annex XVI)

2. Technical Assessment on State of Problematic Deep Wells, and their Reactivation Planning

Installation Name	Status Problems	Contents of Investigation	Solutions
Installation for Deep Tube Well IAP	Out of the total 9 installations, the water extraction at the following 3 installation was not possible. IAP No. 4 The Screen had been damaged. IAP No. 6 On account of very large sand quantity out flow, the pump house had caved in. IAP No. 7 Reduction in Pumped water Quantity. Year 1982 25 l/sec Presently 5 l/sec	In No. 6 the geological boring log casing design and construction content had been investigated. As a result, it was understood that the positioning of the screen, the breadth and quantity of gravel packing was the problem. * The foot valve had dropped downunder during construction works in well No. 7, and it was understood to be in the reducer portion position (-55 m). On account of above, cleaning was not possible.	* IAP No. 4 Drilling Initiation 2 Feb. No. 4, No. 6, No. 7. Drilling shall be done within 30~70 m of the old well, and the existing canals shall be reactivated. * Re-drilling Planning (Annex XII) * Repairing works budget and construction works planning of pump-house (newly built) and canal as per (Annex XIII) * Utilization of Existing Infrastructure (Pump House and canals) of Tube-wells (Annex XIV)
Deep Tubewell Installation KR-II Turnkey (TONE)	Of the totally drilled 16 wells, the extraction of water is possible only at Well No. 14 (Laliya, Dhanusha).	The geological bore log, casing design and the content of works had been investigated, showed that redrilling works at 11 location was possible. It was judged that there was no possibility of redrilling at the rest 4 locations.	Drilling for the 11 locations shall be carried out under 3 year plan, and the existing canals reactivated. Additionally, the pump house at the 11 location shall be used as a materials house. * Well No. 3 (KR-II Turnkey) Driling Works Commencement 18th Feb. * The pump house, administration house and the feeder canal (500 m) for the rest 4 locations shall have to be discarded.

Vehicles	The vehicle have been used for 13 years ~20 years in quite detrimental condition and the vehicle have aged significantly, thus the frequency of repair and maintainance is extremely high.	40 units of 36 types are in need of repair at present, and for the 9 types, necessary list up of the Parts shall be prepare (excluding those Parts that can be procured in India, or are available in the stores).	* The fault conditions is as per (Annex X) * Necessary Parts list (Annex V) * KR-II 1997 fund shall be utilized for procuring the necessary components.
Stocking Condition of Spare Parts and Selling Price	1. The Selling price of spare parts of the shallow tubewell pump-sets was almost 5~10 times compared to equivalent out of Indian manufactured pump-sets. Thus its selling was difficult on account of very high prices.	1-1 The selling prices of Indian manufactured Kirloskar pump-set spare parts of equivalent class had been investigated.	2-1-1 The selling price shall be set as identical to the prices of equivalent class Indian manufactured Parts Price list (Annex XI)
Machinary Types Targetted to be Auctioned off	The old ones which have been running for 12 years in worst condition, resulting in their aging which shall be time consuming and expensive to repairing, shall be auctioned off.	16 Types Selected	* Auction List (Annex VI)

Agriculture Machinary Kubota Tractor Attachment	1. Total procured quantity 11 types and out of the entire 190 sets, 98 sets comprised of 8 types are stored in unused condition.	1-1 The investigation showed no corrosion, no damages and no parts loss in the entire quantity, and they are almost new. 1-2 In consideration of the above, it is recommended that the machinaries be handed over to the Agriculture Research Center under the Ministry of Agriculture.	Proposal for the handing over of the machinary and their recipient (Annex VIII) 1-2-1 Recipient of the handing over 1. NARC (11 Agriculture Research Station) 6 types total 90 units * ADPJ shall use 6 types 6 units.
Motor-pump for Microhydro (Ebara make) 1.5 kw 50units 2.2 kw 15 units	1. out of the total 65 units Procured 56units are Stored in an unused condition. Since the motor of the pump is rated for 220 volt 3 phase, they cannot be used for 3 phase supply (British Standard is applicable in Nepal).	1-1 Trial test had been carried out to transform the 3 phase motor into Single phase motor. As a result, by making use of Capacitors, they could be transformed into Single phase motors.	1-1-1 These shall be sold out in shallow tubewell regions with well developed electric distrubution lines (farmlands under the Ministry of Agriculture, and also may be used in general house holds) * The selling price shall be identical to Indian or Chinese made motor pumps of equivalent capacity. The proposal for selling price set out is as per (Annex IX)
* Attachment for Bull dozer	Out of the total procured 5 units of disc harrow for the bull dozers, 2 units are not working on account of fault. Remaining 3 units are stored in unused condition.		The 2 units which have developed fault shall be repaired in March, and the entire 5 units is to be handed over to the Dept. of Roads within this fiscal year.

Screen Pipe for Deep Wells (SANKYO Manufactured)	1. Out of the total 5670 m (5m, 3m) procured, 4232 m had been stacked in the outdoors. However, the pipes had not undergone any corrosion and no problem may be encountered in the quality itself. On account of strength shortfall, these cannot be used for deep wells. Additionally, the strength of the screen was 4.6 kg/m2 resulting on usage up to 50 m only which indicated that the problem had been at the planning and requesting stage. Furthermore, when Nissaku had carried out drilling works project in 1992 (2KR turn key) for 8 wells, inner cylinder for reinforcement had been placed to increase the strength up to 16 kg/m2 (possible depth of use 100m 150m) and the screen pipe was utilized. As a result, no fault had been encountered in the 8 wells.	1-1 In order to ensure sufficient strength for their use in shallow tubewell, application tests shall be carried out (within the premises of ADPJ). As the result, the following advantage is present when comparing them 1 with slot screen made of polyethelene or steel. 1. As the diameter is 8", the water collection area is larger. 2. The opening area is larger. 3. As the screen gap is smaller, the sand protection effect is greater . Pumped water quantity increased (in above 1,2,3). The second turn application test shall be carried out in a farmer's field (Feb. 15 – Feb 28). The above test shall be executed by widening the screen gap. Trial production test of reducer pipe for interconnecting 4" Casing pipe and 8" Screen pipe.	1-1-1 The same 8" screen shall be used for Shallow Tubewell. Application Planning 5 year Shallow Tubewell Development Plan of ADPJ Annual shallow Tubewell drillings 150 number (average 8m used for 1 Tubewell, total 529 wells = 4232 m). Therefore, the total quantity shall be used within the 3 years period of FY 1996/97 to 1999/2000 & Prepesal for the Utilezation of 8"ø Johnson Screen in S.T.W.S (Annex VII)

Well Drilling Rig for Shallow Tubewell, Tone Manufacture ·TRD-100 6 units ·TOP-150 3units (Truck Mounted) · TOP-150 3units (Tractor Mounted) · Cleaning Van 4 units	1. Out of the total 12 units procured , 5 units cannot be used ※· TRD 100 2 units · TOP 150 2 units (Truck Mounted) · TOP 150 1 units (Tractor Mounted) · Cleaning Van 4 units ※ These have already been auctioned	1-1 The result of the investigation on the rig showed that 3 units of the hydraulic (TOP 150) drilling rig and 4 units of the cleaning van cannot be repaired for operating once again. These Vehicles can be Used only as a Cargo truk	1-2 The recommendation is to auction off these machinery. Auction List(Annex VI)
Casing Pipe 4269 m (8") 940 m (14")	1. The entire procurement quantity of 5209 m (8", 12") has been used.	1-2 Request has been made to Japan for a 2 year's quantity comprising 8",12" totaling 5555 m (for 31 wells) and these are slated for delivery in April 1997. As a measure for supply continuity, borrowing from Ministry for Water Resources until April. 8" 500 m 14" 600 m Besides the above procurement from India by utilizing 2KR C/P funding has been done in (Feb.97) 8" 700m	1-2-2 From next fiscal year onwards, procurement shall be done from India by utilizing 2 KR C/P funding.

	done. * No. of accident accountable to shaft distortion 5 number Time of use at the time of accident generation 30~80 hrs.	2-2 An endurance test is underway by using purely manufactured bus at Well No. J 105 (Bachaura) Current hours of endurance 133hrs (20th Jan. 1997) 2-3 A trial production of rubber bush shall be done (Kirloskar method, Indian Manufacture) Commencement of application test. Beginning of March 1997.	
Oil Drilling rigs meant for deep Tubewell Yoshida Man. 3 units Tone Man. 4 units	1. Of the totally procured 7 units of rig, 6 units have been running. For the remaining Tone 1 unit, the mast and body joint had undergone damage during the time of transportation and as a result, it is not possible to operate it presently.	1-1 As a result of the investigation, it was found out that the damaged portion had been repaired by a TONE Engineer in 1989 and no problem may be encountered.. The main reason of why it could not be operated was on account that this rig was used as a spare part source for other similar model rig (3 units). 1-2 In order to reoperate the rigs, a list up of necessary parts shall be prepared.	1-2-1 Necessary Parts list (Annex V) The KR-II 1997 grant-aid fund shall be utilized for the procurement of the parts.

EBARA Manufactured Deep Tubewell Pump (Pump Head 45 m) KR-II	1. Out of the totally procured 101units, 36 units are stored in un-utilized state. The reason was that the FIAT which was supposed to be used in pair was assessed as expensive and not installed. 2. Should be used as a pair with the Isuzu Engine which has better fuel consumption. Accordingly, coupling joint is under trial production and testing.	1-1 Consideration on installation plan 2-1 Test result at test well No. J125 Baniniya (Time of use at the testing 16 hours) On continuous running for 2 hrs, no abnormal sound at coupling joint, heating, vibration, loosenning of set bolt etc. was induced, and no problem may be encountered in durability.	1-1-1 Installation Plan(Annex IV) 2-1-1 Test result showed that no problem encountered in locally trail produced Coupling and can be used as a pair with the Isuzu engine. But basically, this Ebara pump shall be used as pair with the FIAT engine.
ISUZU Manufactured Diesel Engine (42 HP) KR-II	1. Of the total 79 units procured 66 units are stored in an unused condition. 2. Shall be used as a pair. Since a technical fault was present in Okamoto Pump, its installation could not progress.	1-1 Consideration on the Installation Plan.	1-1-1 A combination with Ebara Manufactured Pump is possible. * Installation plan(Annex IV)
OKAMOTO Manufactured Deep Tubewell Pump (Pump Head 45m)	1. Out of the total 79 units procured, 66 units are stored in unused condition. 2. The shaft is a metal alloy and prone to distortion by heating. As a result since the bushing (shaft) could be detached due to distortion and vibration, thus rendering it un-usable, the installation of the unit was not	2-1 An investigation on the distortion of the main shaft shall be undertaken. * Good Condition shaft number * Bad Condition shaft number	2-1-1 The procurement of shortage shaft amounting to units shall be done under KR-II 1997 * Installation Plan(Annex IV) 2-2-1 Shaft which have been assessed as good one, shall be used, and setting of the units shall be done extensively.

ADPJ : PROBLEM POINTS AND SOLUTIONS

Technical Evaluation Report on State of Un-utilized Machines & Equipment The Plan of Activation and Execution Content.

1.

Machine & Equipment	CONDITION PROBLEM POINTS	CONTENT OF DETAILED INVESTIGATION (TESTING & INVESTIGATION)	PROPOSED SOLUTIONS
FIAT DIESEL ENGINE (72 HP) KR-II	1. Total of 101 units procured but their utilization was slow and still 45 units remain unused, all on account of high fuel consumption because of large HP. 2. Stocking of important spare parts was absent. Only filters, packing materials had been sent as main spare parts, when the engine was imported into Nepal at that time.	1-1 Status of Fiat Engine Utilization, Well Condition, Execution of analysis on farmer's economy & finance. 1-2 Fuel Consumption Test (4 Sites) Poor Condition Well (Low PWL) 1. Hattilet – 64'(PWL) 10 L/Hr 2. Hariyon – 61'(PWL) 11 L/Hr Good Condition Well (High PWL) 1. Ramnagar – 11'(PWL) 6.5 L/Hr 2. Ramnagar – 31'(PWL) 7.5 L/Hr 1-3 Assessment of Installation Plans 2-1 Therefore, list up for necessary parts shall be made (excluding for those spares that could be procured in Nepal and India).	* List of installed DTW (Annex I) * Analysis of Results on the farm (Annex II) 1-2-1 Install Pump of Suitable Head (Refer Annex III for recommended setting) * Pump Installation Schedule (Annex IV). 2-1-1 As an emergency measure, the following spares from the existing 4 units of engines shall be used. Serial No. 037193.85 035295.85 035303.85 035051.85 2-1-2 Accordingly fund from the KR-II shall be apportioned to make procurement of the necessary spares (as recommended in 2-1) * List for Necessary Spare Parts as per Annex V

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ADPJ: PROBLEM POINTS AND SOLUTIONS

1. Technical Evaluation Report on State of Unutilized Machines & Equipment, The Plant of Activation and Execution.

2. Technical Assessment on State of Problematic Deep Wells and their Reactivation Planning.

3. Other Problems and Countermeasures.

ANNEX

I	List of Deep Tubewells Drilled with the Installation of Pump and Engine by ADPJ
II	Analysis of Results on the Farm
III	Recommendation Table of Pumpset
IV	Pumpset Installation Schedule
V	List for Necessary Spareparts
VI	Machinery and Vehicles Recommended for Auction
VII	Proposal for the Utilization of 8" Diameter Johanson Screen in STWs
VIII	Distribution Proposal for Attachments of Kubota Tractor
IX	Proposal for Utilization of Micro-Hydro Pumpset
X	Present Condition and Problems of Existing Machines and Vehicles
XI	Proposal for Yanmar Pumpset Spareparts
XII	Details of Re-Boring of IAP and Turnkey (KR-II)
XIII	Details for Pumphouse and Construction for IAP and Turnkey KR-II
XIV	Utilization of Existing Infrastructure (Pumphouse and Canals) of Tubewells
XV	Present Condition of Deep Tubewell under General Grant Aid.
XVI	Pumphouse and Canal Construction Schedule

A TERMINAL REPORT ON AGRICULTURAL MACHINERY AT THE AGRICULTURE DEVELOPMENT PROJECT JANAKPUR (ADPJ)

(6th January 1997 - 3rd March 1997)

27th February 1997

Presented By:
Kenro Esaki
Agricultural Machinery Expert (JICA)

JICA Japan International Cooperation Agency
Japan Overseas Cooperation Volunteers (JOCV)

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Date : Mar. 04, 1997

Ref. No : JICA 03-01

Mr. M. D. PANT
Secretary
Ministry of Agriculture
Singh Darbar
Kathmandu, Nepal.

Dear Mr. PANT,

It is our pleasure to mention here the joint meeting held at your office on February 27, 1997, about the Agriculture Development Project Janakpur.

Now we would like to submit one copy of the report prepared by Mr. Kenro Esaki, for the actual implementation of the proposed recommendations made by the expert which goes together with the action plan prepared by the Agriculture Development Project Janakpur.

Based on the series of discussion /meeting held so far at the different level from the both sides (MOA and EOJ /JICA Nepal office) on this topic, now we feel it is high time for the implementation for the reutilization of unopened engines, pumps and other items laying in the project and also for reviving the unused Deep Tube Wells .

So, please let me request you to expedite this matter further from your side.

Sincerely yours

A. UCHIDA
Assist. Resident Representative
JICA Nepal Office

JICA MAR - 4. NEPAL OFFICE

C. C.

Mr. M. P. GHIMIRE
Joint Secretary
MOF

Mr. J. N. THAPALIYA
Joint Secretary
MOA

Mr. T. B. SHRESTHA
D. G.
DOA

Mr. T. NAKAYA
Second Secretary
EOJ

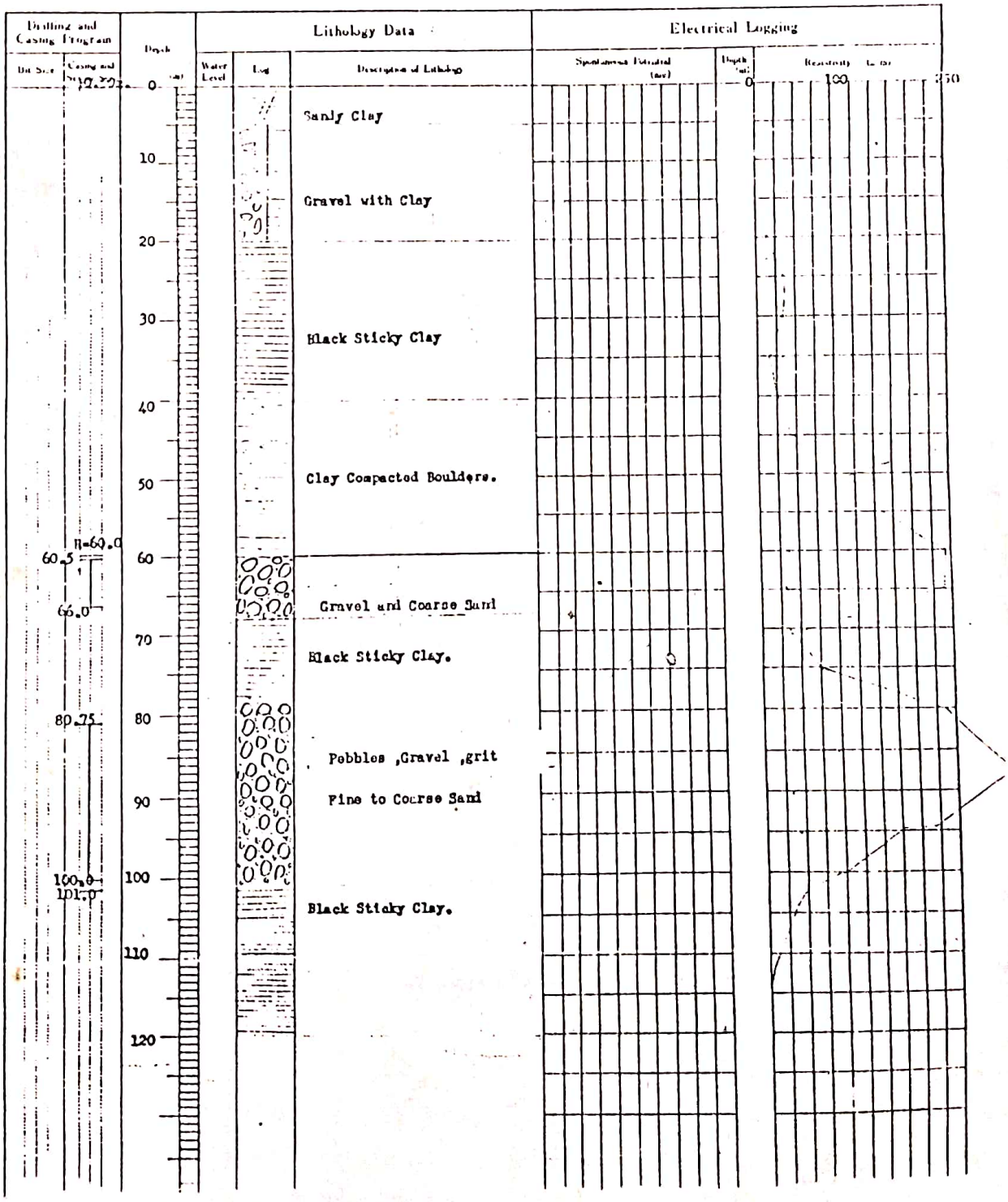
Mr. K. B. SHRESTHA
Project Chief
ADPJ, Janakpur

WELL LOG

Well Name: N-41

PROJECT NAME	T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	MIRCHAIYA-2,Sirsa-District,Sagarmath-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH 101.0	m	DRILLING RIG	TRD-500
DRILLING STARTED		DRILLED BY	Sudeep Ram
WELL COMPLETED Mar.,1997		LOGGED BY	P. Mukhiya

STATIC WATER LEVEL	-12.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-54.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	300.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

N-49.

PROJECT NAME T'JATSP	WELL NO.
AREA AND LOCATION Ram Nagar, Mahottari -Dist	
ELEVATION feet	LATITUDE LONGITUDE
TOTAL DEPTH 96·25 feet	DRILLING RIG TRD-500
DRILLING STARTED	DRILLED BY Sudesh Rana
WELL COMPLETED Nov. 1988	LOGGED BY M. Kamichhane

STATIC WATER LEVEL -28·00 feet	WATER TEMPERATURE
DYNAMIC WATER LEVEL -31·00 feet	CONDUCTIVITY
PUMPING RATE 42·0 l/min (gpm / m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

Drilling and Casing Program: Bit Size	Drilling and Casing Program: Casing and Screen Size	Depth (feet)	Lithology Data: Water Level	Lithology Data: Log	Lithology Data: Description of Lithology	Electrical Logging: Spontaneous Potential (mv)	Electrical Logging: Depth (m)	Electrical Logging: Resistivity (Ωm)
		0			Clay with Silt			
		10			Pebbles, C. Sand			
		20			Clay (yellowish Black) with Gravel			
		30			Yellowish Stickyclay			
		40			Clay with Gravel			
		50						
		60	60		Black sticky clay			
	Slits 5·5×2	70	71		Pebbles, gravel very little clay			
			74		Black Sticky clay			
	Sanky 3·25×5	80			Boulders, pebbles			
		90	90·25		Gravel & C. Sand			
91·25					Yellowish Stickyclay			
		100						

Data No. i-47

WELL LOG

PROJECT NAME	TIATSP	WELL NO.	
AREA AND LOCATION	Bhrmapuri, S-7 Block, Sarlahi-District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	261.0 m feet	DRILLING RIG	YBO-50IR
DRILLING STARTED		DRILLED BY	TTCA
WELL COMPLETED	26 Feb, 1988	LOGGED BY	H. Isikawa

STATIC WATER LEVEL	X	feet	WATER TEMPERATURE	
DYNAMIC WATER LEVEL	X	feet	CONDUCTIVITY	μΩ/cm
PUMPING RATE		m³/d	pH	
SPECIFIC CAPACITY		m³/d/m	TOTAL HARDNESS	

Drilling Hole is abandoned due to absence of Aquifer.

Depth (m)	Lithology Data: Description of Lithology
0–5.5	Top-Soil
5.5–15	Sandy clay
15–17	Sand
17–19	Sand & Gravel
19–28	Sandy silt, Silt
28–38	Gravel with clay
38–41	Gravel
41–?	Sandy clay
?–105	Blue Black yellowish clay
105–110	Sand with clay
110–146	Blue, yellow Sticky clay
146–151	Sand with clay
151–161	clay
161–162	clay with Gravel
162–213	Clay
213–217	Gravel with clay
217–233	Clay
233–?	Sand, Gravel & clay
?–235	Sandy clay
235–249	Gravel with clay
249–	Clay

Electrical Logging: Spontaneous Potential (mV) | Depth | Resistivity

WELL LOG

TRAING CENTRE

PROJECT NAME	JANAKPUR AQUACULTURE	WELL NO	
AREA AND LOCATION	JANAKPUR		
[illegible] feet		LATITUDE	LONGITUDE
[illegible] DEPTH 156.0 m feet		DRILLING RIG	XBM 501 (214 Rig)
DRILLING STARTED	09/6/3/10	DRILLED BY	S JHA
WELL COMPLETED	09/6/6/10	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL + 1.6 m feet	WATER TEMPERATURE °C
[illegible] WATER LEVEL feet	CONDUCTIVITY µS/cm
[illegible] RATE 60 l/s l/min	pH
[illegible] CAPACITY 60 l/s m³/d/m	TOTAL HARDNESS

Depth	Lithology Data: Log	Lithology Data: Description Lithology	Electrical Logging: Spontaneous Potential (mv)	Depth (m)	Resistivity (Ωm)
		Top soil			
		Black Sticky			
		Sticky clay			
		Sandy clay			
		Sticky Black clay			
57–63 (P)		Gravels Sand			
		clay mixed gravel			
		Rich clay gravels			
80		Sticky Black clay			
87 (P)		Gravels Pure			
100 / 96		Black clay			
116 / 120–125 (P)		Pebbles			
		Black clay			
131–140 (P)		Gravels Pure			
140 / 144 (P)		Black clay			

4" casing 10"

4" slotted 43 m [illegible]

5" casing = 81 m

Reducer 1 P.

141 m

WELL LOG

Well No: J-33

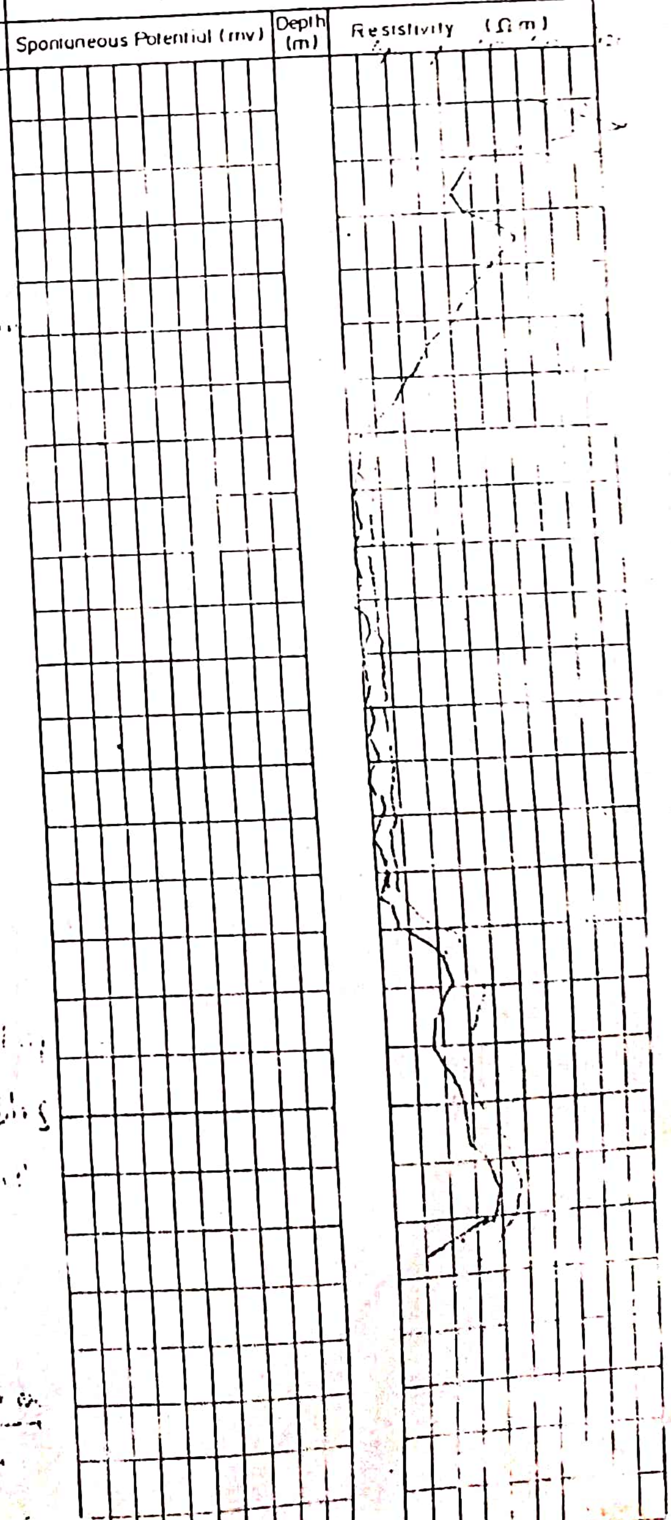
PROJECT NAME	[illegible]	WELL NO.	[illegible]
AREA AND LOCATION	Pasubali [illegible]		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	212 Meter feet	DRILLING RIG	
DRILLING STARTED		DRILLED BY	[illegible]
WELL COMPLETED		LOGGED BY	[illegible]

STATIC WATER LEVEL	feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	feet	CONDUCTIVITY	µ℧ /cm
PUMPING RATE	600 l/min ~~m³/d~~ (Estimated)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Well [illegible] [illegible] logging [illegible]

Drilling and Casing Program: Size	Casing and Screen Size	Meter Depth (feet)	Water Level	Log	Description of Lithology
		10			Medium Coarse Sand [illegible]
		20			Sand fine to [illegible] Fine Sand
		110			clay Black
		120			Stick clay
		130			
		140			Silty clay
		150			Coarse Sand
		160			Rich [illegible]
		170			Sand and [illegible]
		200			[illegible] and Sand
		210			Sticky clay
		220			

Electrical Logging: Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω m)



Screen Position

165 m to 210 m

WELL LOG

Data No. N-51

PROJECT NAME	TIATSP	WELL NO.	
AREA AND LOCATION	Laxmi Niwas, Dhanusha - District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	122.50 feet	DRILLING RIG	YRD-501R"
DRILLING STARTED		DRILLED BY	S. Jha
WELL COMPLETED	Apr. 1998	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	-37.25 feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-44.50 feet	CONDUCTIVITY	μU /cm
PUMPING RATE	30.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d /m	TOTAL HARDNESS	

Bit Size	Casing and Screen Size	Depth (feet)	Water Level	Log	Description of Lithology	Spontaneous Potential (mv)	Depth (m)	Resistivity (Ω m)
		0			Sandy clay			
		10			Boulders, pebbles coarse-to-fine Sand			
		20						
		30						
		40			clay with gravel			
		50			Silt with clay			
		60			clay with gravel			
		70			Silty clay			
		80	83.5 S		Gravel & C. Sand			
			89.0 S		Silt to Sand			
			93.5 R.F		Gravel & med to C. Sand			
		90	97.5					
		100	103.5		Gravel, pebbles with Sticky clay			
		110	R.F.		Pebbles, C. Sand & gravel			
		120	120.5		Sticky brown clay			

WELL LOG

N-53

PROJECT NAME TIATSP	WELL NO. N-53
AREA AND LOCATION Idhorpur, Sarlahi-District	
ELEVATION feet	LATITUDE LONGITUDE
TOTAL DEPTH 95.0 feet m	DRILLING RIG YRD-50 R"
DRILLING STARTED	DRILLED BY D.N.Sen
WELL COMPLETED Apr. 1988	LOGGED BY M. Lamichhane

STATIC WATER LEVEL -30.70 feet	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -40.65 feet	CONDUCTIVITY µU /cm
PUMPING RATE 43.0 l/min (l/sec m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

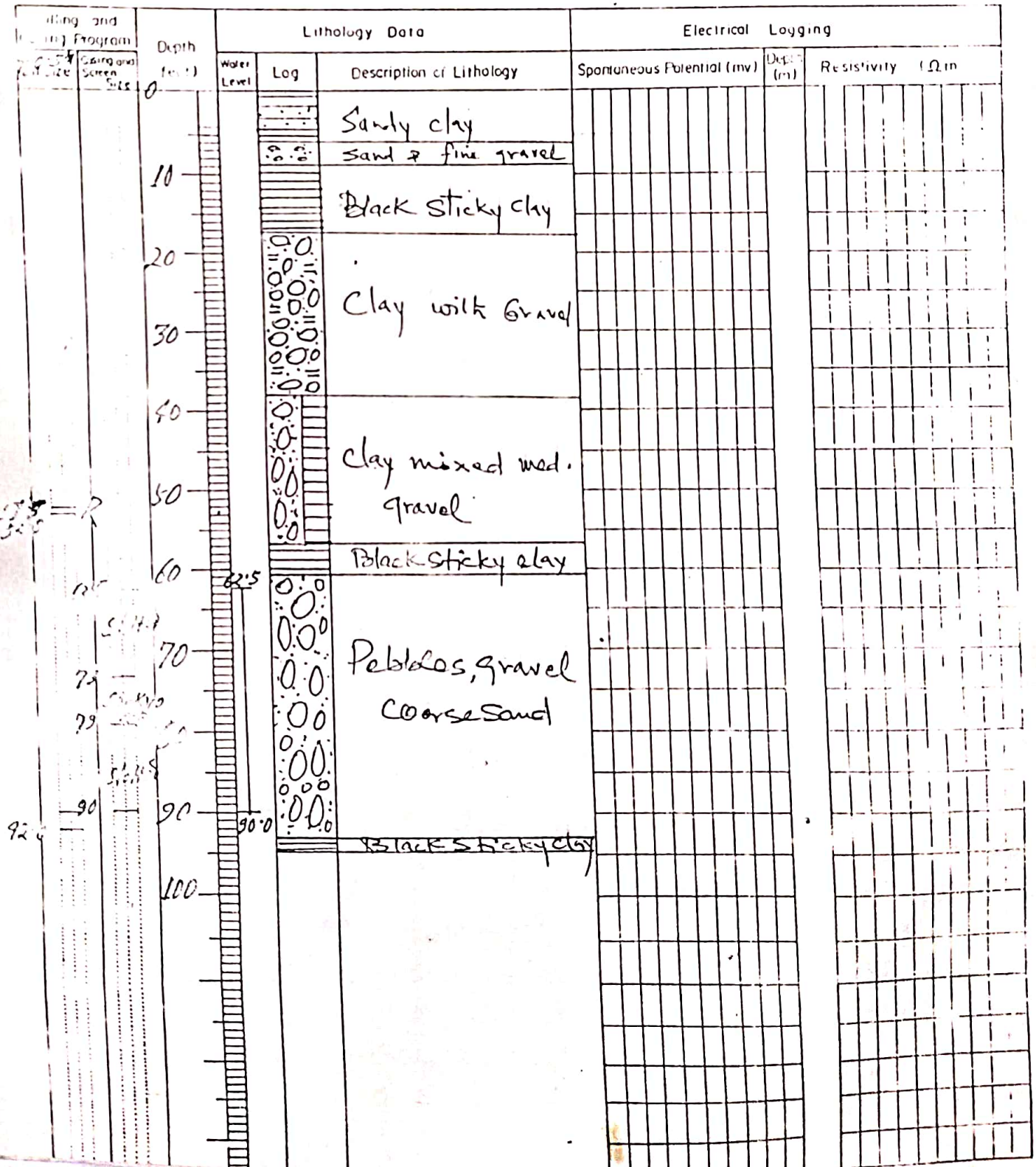
Depth (feet)	Water Level	Log	Description of Lithology	Spontaneous Potential (mv)	Resistivity (Ω-m)
0			Silty clay		
10			Yellowish Sticky Clay		
20			Boulders with clay		
30			Silt		
40			Clay with gravel		
50					
60					
65	65'				
70			Med. gravel with C.S.		
80			Silt with Clay		
90			Pebbles, Gravel fine to med Sand		
93	93'		Yellowish Sticky clay		
95.0					
120					

WELL LOG

Data No. N-54

PROJECT NAME: TIATSP	WELL NO.
AREA AND LOCATION: Balgaon, Ghurkauli, Sarlahi District	
ELEVATION feet	LATITUDE LONGITUDE
TOTAL DEPTH 92.5 feet	DRILLING RIG TRD-500
DRILLING STARTED	DRILLED BY Sudesh Kumar
WELL COMPLETED May, 1988	LOGGED BY M. Lamichhane

STATIC WATER LEVEL -17.00 feet	WATER TEMPERATURE
DYNAMIC WATER LEVEL -23.49 feet	CONDUCTIVITY
PUMPING RATE 48.0 l/min (l/sec, m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



Well No : N-1

Kisan Nagar, Mahottari - District

by JICA Team

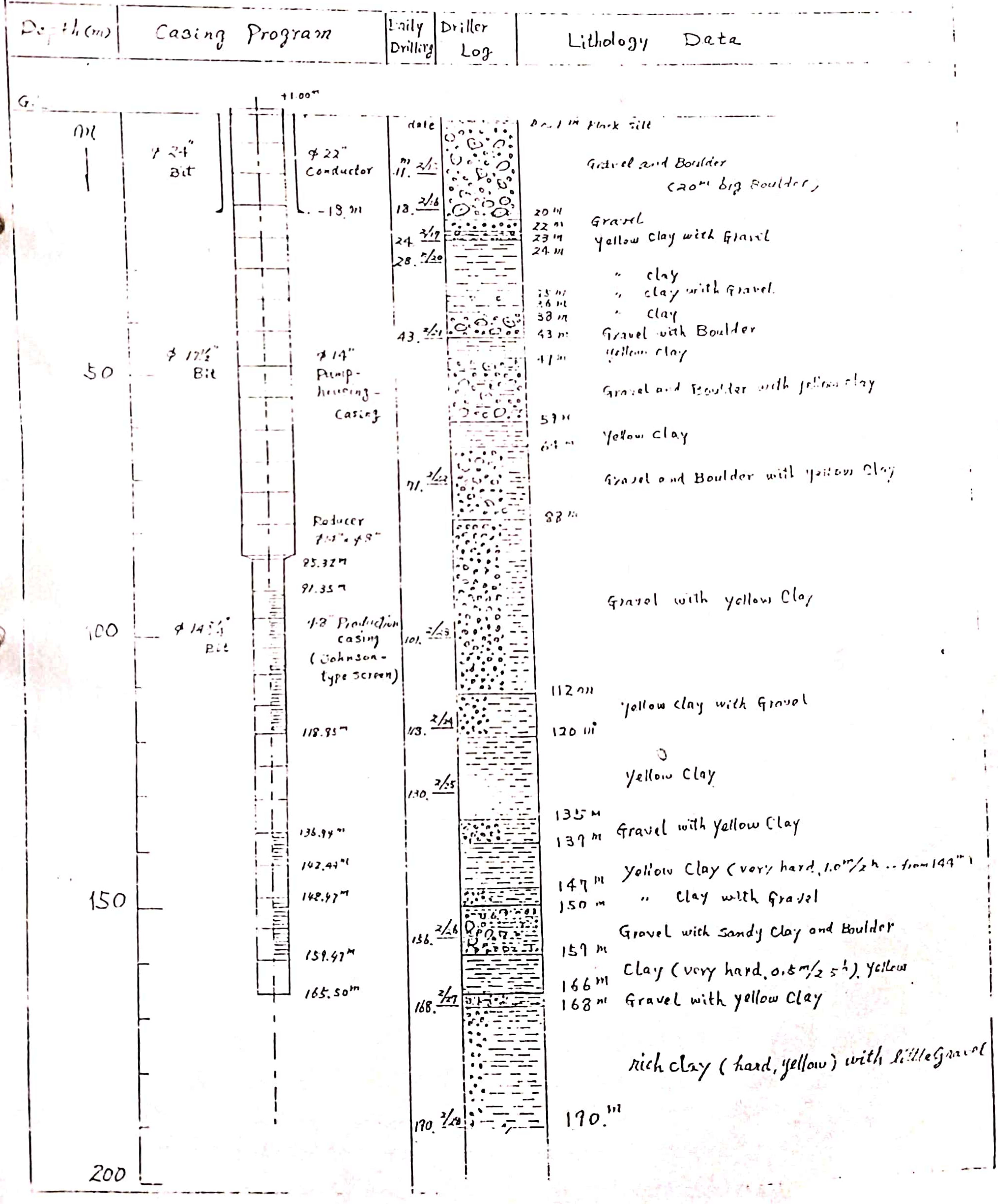
Loc. M-4 Site - Well Log

Installed:

Driller: Mr.

Rig: Rotary YRD-5

Mud pump NAS-7



Depth (m)
Casing Program
Daily Drilling
Driller Log
Lithology Data
G.L
+1.00m
m
ϕ 24" Bit
ϕ 22" Conductor
-18 m
ϕ 17½" Bit
ϕ 14" Pump-housing-Casing
Reducer
95.32m
91.35m
ϕ 14¾" Bit
ϕ 8" Production casing (Johnson-type screen)
118.85m
136.94m
142.44m
148.47m
159.47m
165.50m
50
100
150
200
date
11.
18.
24.
28.
43.
71.
101.
113.
130.
156.
168.
170.
Gravel and Boulder
(20cm big Boulder)
20 m
22 m
23 m
24 m
Gravel
yellow clay with Gravel
" clay
" clay with Gravel
" clay
38 m
43 m
Gravel with Boulder
yellow clay
Gravel and Boulder with yellow clay
59 m
Yellow clay
Gravel and Boulder with yellow clay
88 m
Gravel with yellow Clay
112 m
yellow clay with Gravel
120 m
Yellow Clay
135 m
137 m
Gravel with Yellow Clay
147 m
150 m
Yellow Clay (very hard, 1.0m/2h .. from 144m)
" clay with Gravel
Gravel with Sandy Clay and Boulder
157 m
166 m
168 m
Clay (very hard, 0.5m/2.5h). Yellow
Gravel with yellow Clay
rich clay (hard, yellow) with little Gravel
170.m

WELL LOG

PROJECT [illegible] Dev. Project Jamakhu	WELL NO.
AREA AND LOCATION Police Training Centre, Maharajgunj, Kathmandu	
ELEVATION M	LATITUDE LONGITUDE
TOTAL DEPTH 222.0 M	DRILLING [illegible] - 72 A
DRILLING STARTED Nov. 16, 1968	DRILLED [illegible]
WELL COMPLETED 10 Jan. 1969	LOGGED [illegible]

STATIC WATER LEVEL 31.5 M	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL 55.0 M	CONDUCTIVITY µ℧/cm
PUMPING RATE (Q) 4/min m³/d	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

Through Out = 6"

Depth (ft)	Water Level	Log	Description of Lithology
10			Top soil
			Clay Black
20			Fine to madium Sand
30			Silty Clay
40			Madium to Fine Sand
50			
60			
70			Clay Black
80			
90			
100			
110			
120			Sand and Gravel
130			
140			Clay Black
150			Sticky Clay
160			Course Sand & Gravel
170			
178.0			Fine Sand
182.0			Sand and Gravels
190			
200			
207.0			Silty Clay
215.0			Sticky Clay
220			

Electrical Logging

Spontaneous Potential (mV) | Caliper (in) | Resistivity (Ω m)

Casing pipe - 171.7 m
Strainer pipe - 43.5 m
Screen position
175.5 to 178.0
182.0 to 207.0

WELL LOG

Data No. N-5

PROJECT NAME	TIATSP	WELL NO.	
AREA AND LOCATION	Shree Nagar, Gauri-Shanker, Sarlahi – District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	106.0 meet	DRILLING RIG	YRD-50 "R"
DRILLING STARTED		DRILLED BY	Mr. G. D. Joshi
WELL COMPLETED	Mar, 1988	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	–17.20 feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	–21.0 feet	CONDUCTIVITY	µ℧/cm
PUMPING RATE	42.0 l/min (l/sec) (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

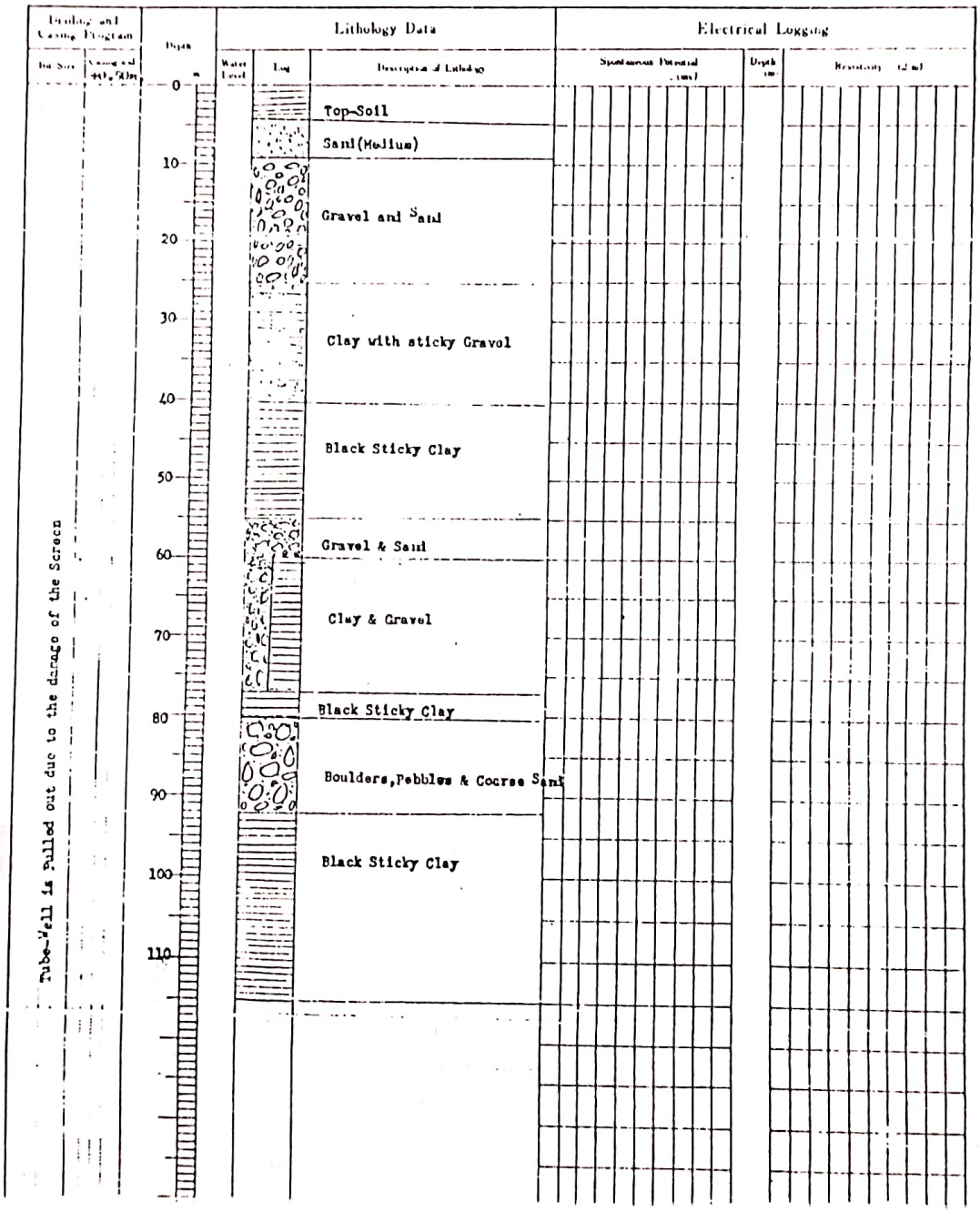
Drilling and Casing Program: Bit Size	Drilling and Casing Program: Casing program	Depth (feet)	Water Level	Log	Description of Lithology	Electrical Logging: Spontaneous Potential (mv)	Electrical Logging: Depth (m)	Electrical Logging: Resistivity (Ω m)
					Sandy clay			
		10, 20, 30, 40			Boulders, pebbles gravel & clay (little)			
					Gravel & clay			
		50			Clay with gravel			
59.5 / 60.0	R	60	60.5		Sticky clay			
		70			Sand med to coarse, gravel			
		80	74.5		Sticky clay with gravel			
		90, 100	83.5		Gravel, coarse sand & med. sand			
			100.0		Clay with gravel			
					clay			
		110, 120						

WELL LOG

Well Name: TW-3

PROJECT NAME	T.I.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	BHAKTIPUR, Sarlahi-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	112.0 m	DRILLING RIG	TRD-500
DRILLING STARTED		DRILLED BY	Sudeep Ram
WELL COMPLETED	Feb, 1987	LOGGED BY	P. Thithiya.

STATIC WATER LEVEL	-1.5 m	WATER TEMPERATURE	C
DYNAMIC WATER LEVEL	-54.0 m	CONDUCTIVITY	μmho/cm
PUMPING RATE	Pulled Out l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

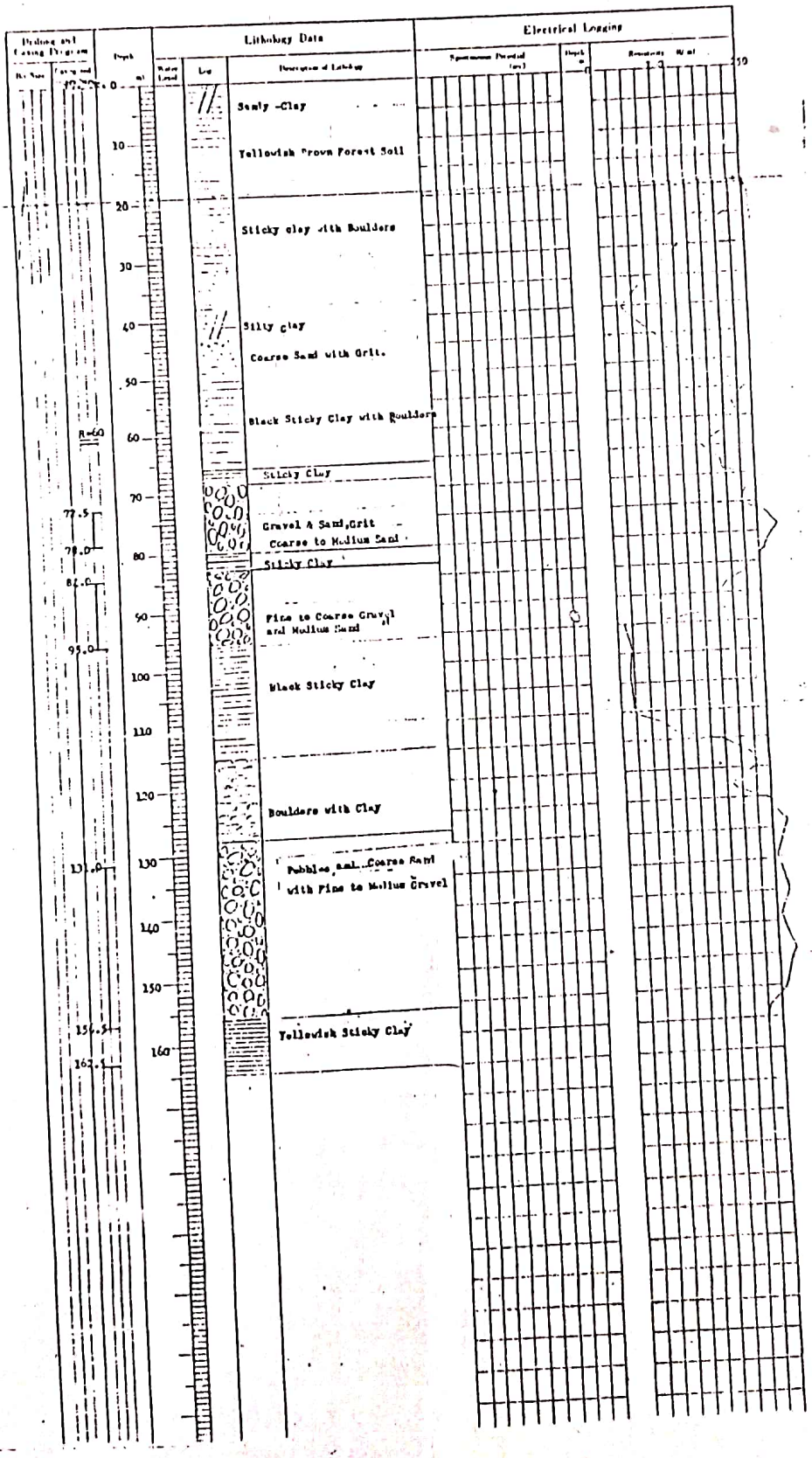


Well Panel M-42

WELL LOG

PROJECT NAME	P.I.A.S.P.s		Size: 14"/8"
AREA AND LOCATION	MIRUMBA-E., Simba-District, Tanzania.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	162.5 m	DRILLING RIG	TPD 500
DRILLING STARTED		DRILLED BY	Swiss Aqua
WELL COMPLETED	Apr.1977	LOGGED BY	P. Kubbly

STATIC WATER LEVEL	-15.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-35.0 m	CONDUCTIVITY	µS/cm
PUMPING RATE	1909.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

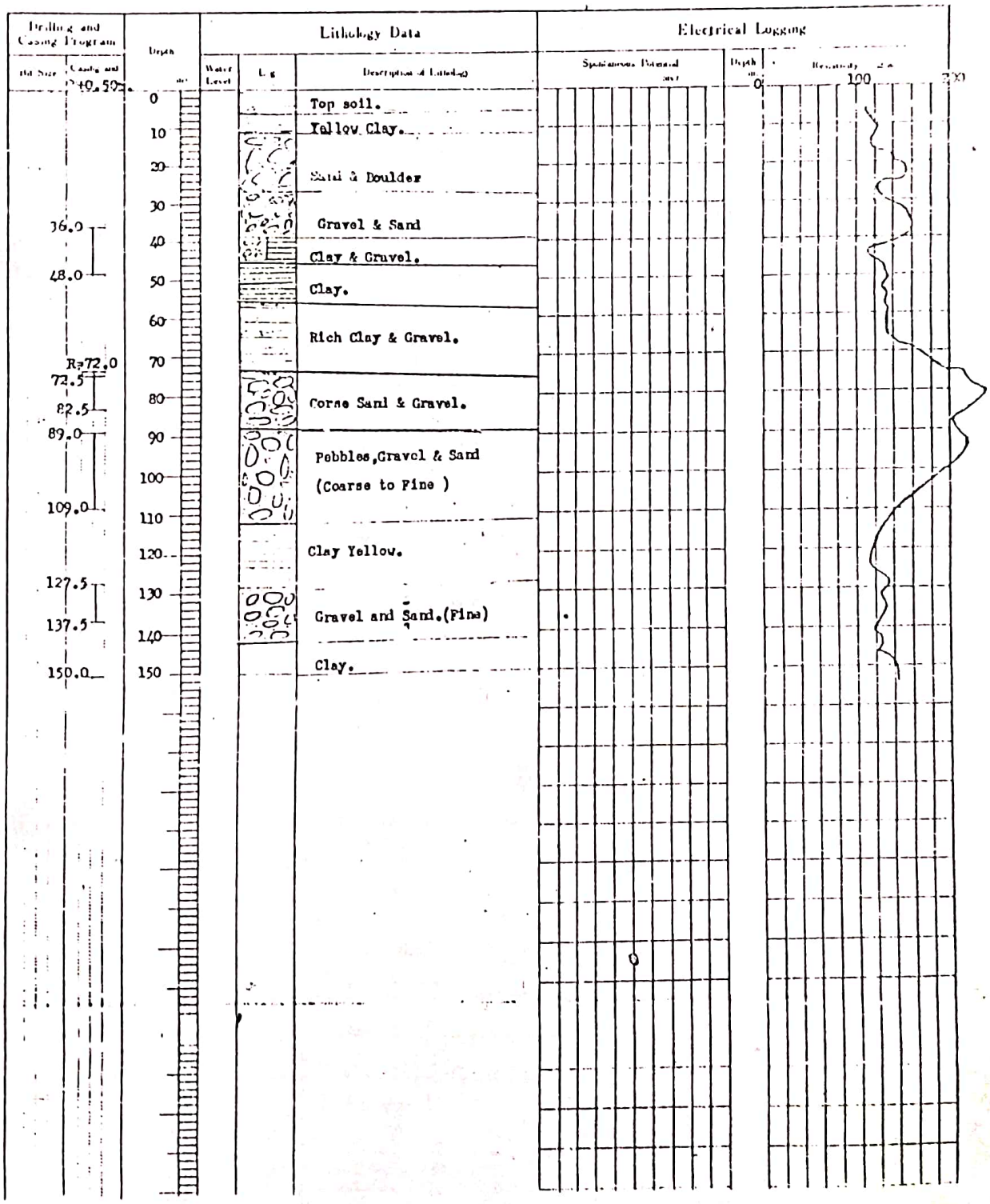


WELL LOG

Well Number K-27

PROJECT NAME Terai Ground Water Project(JICA) TIATSP	Size: 14"/8"
AREA AND LOCATION JANAKPUR, Dhanusha-District, Janakpur-Zone.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 150 m	DRILLING RIG YRD-501
DRILLING STARTED 2 Feb,1967.	DRILLED BY D.N. Sen.
WELL COMPLETED 4 March,1967.	LOGGED BY O. Nagata.

STATIC WATER LEVEL -37.0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -66.0 m	CONDUCTIVITY μmho/cm
PUMPING RATE 60 l/min for ( ) m³/d/m	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

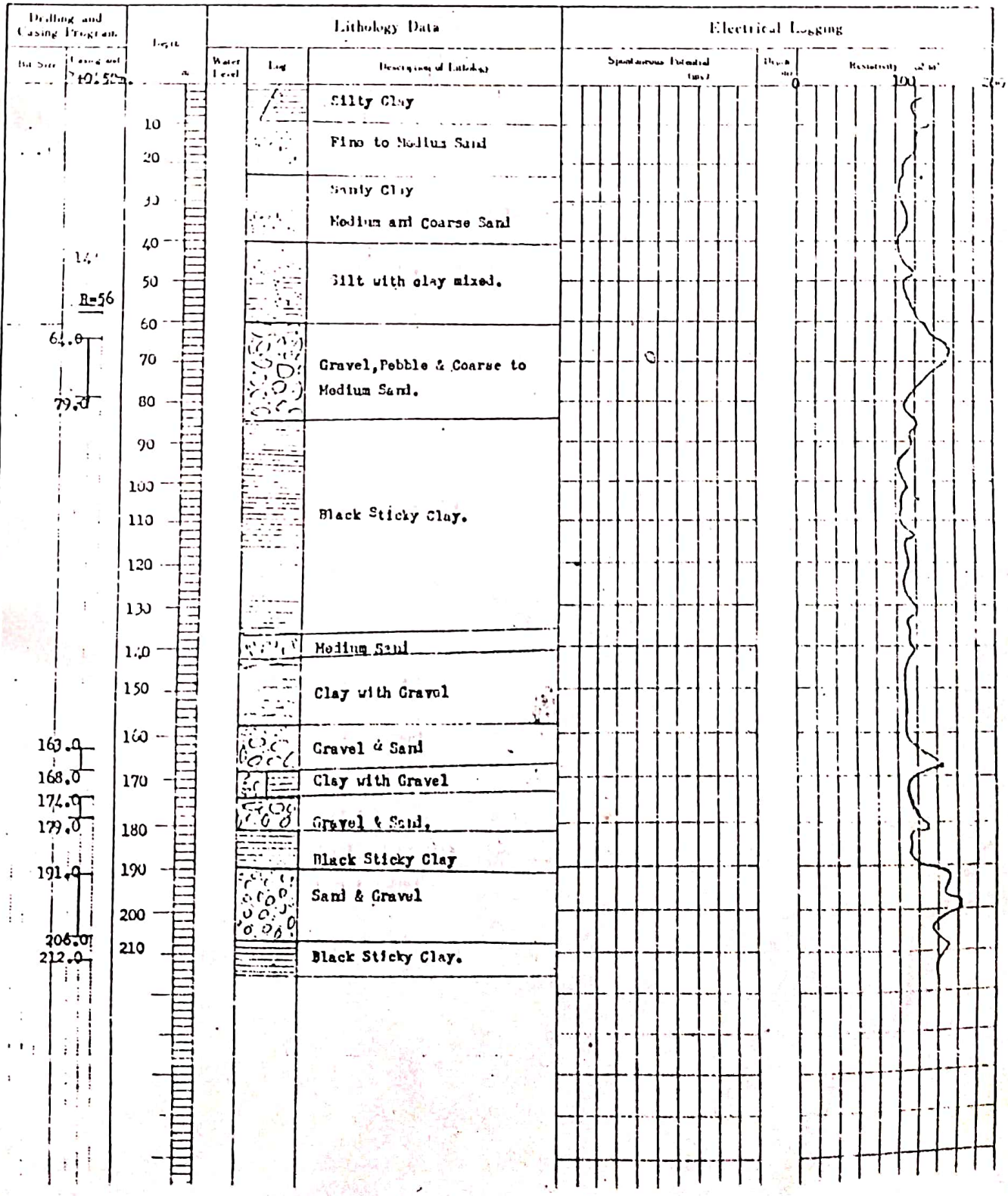


WELL LOG

Well Name: R-29

PROJECT NAME J I C A Rural Ground Water Project(PHASE)	Size: 14"/8"
AREA AND LOCATION RANI BAZZER,Dhanusha-District,Janakpur-Zone.	
ELEVATION m	LATITUDE , LONGITUDE
TOTAL DEPTH 212.00 m	DRILLING RIG YBO-501
DRILLING STARTED 16 Feb, 1987	DRILLED BY S. Jha.
WELL COMPLETED 10 March,1987.	LOGGED BY Nagata.

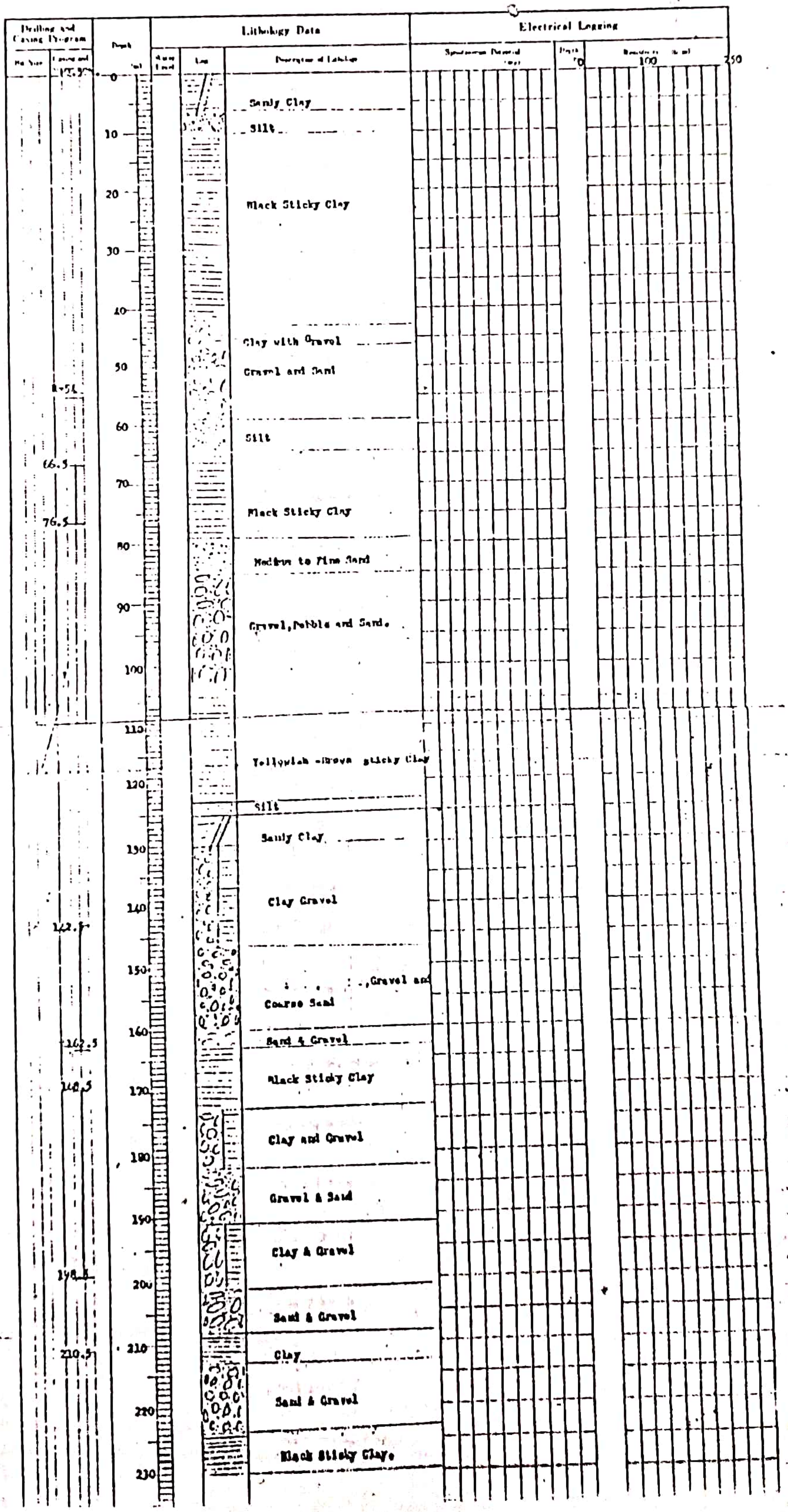
STATIC WATER LEVEL -0.2 m	WATER TEMPERATURE
DYNAMIC WATER LEVEL m	CONDUCTIVITY
PUMPING RATE 180.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



WELL LOG

PROJECT NAME	T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	MUZELIA, Dhanusha-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	210.[illegible] m	DRILLING RIG	TRD 501 R
DRILLING STARTED		DRILLED BY	S. Dm
WELL COMPLETED	Feb., 1977	LOGGED BY	O. Pegala.

STATIC WATER LEVEL	0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	- m	CONDUCTIVITY	μS/cm
PUMPING RATE	12.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

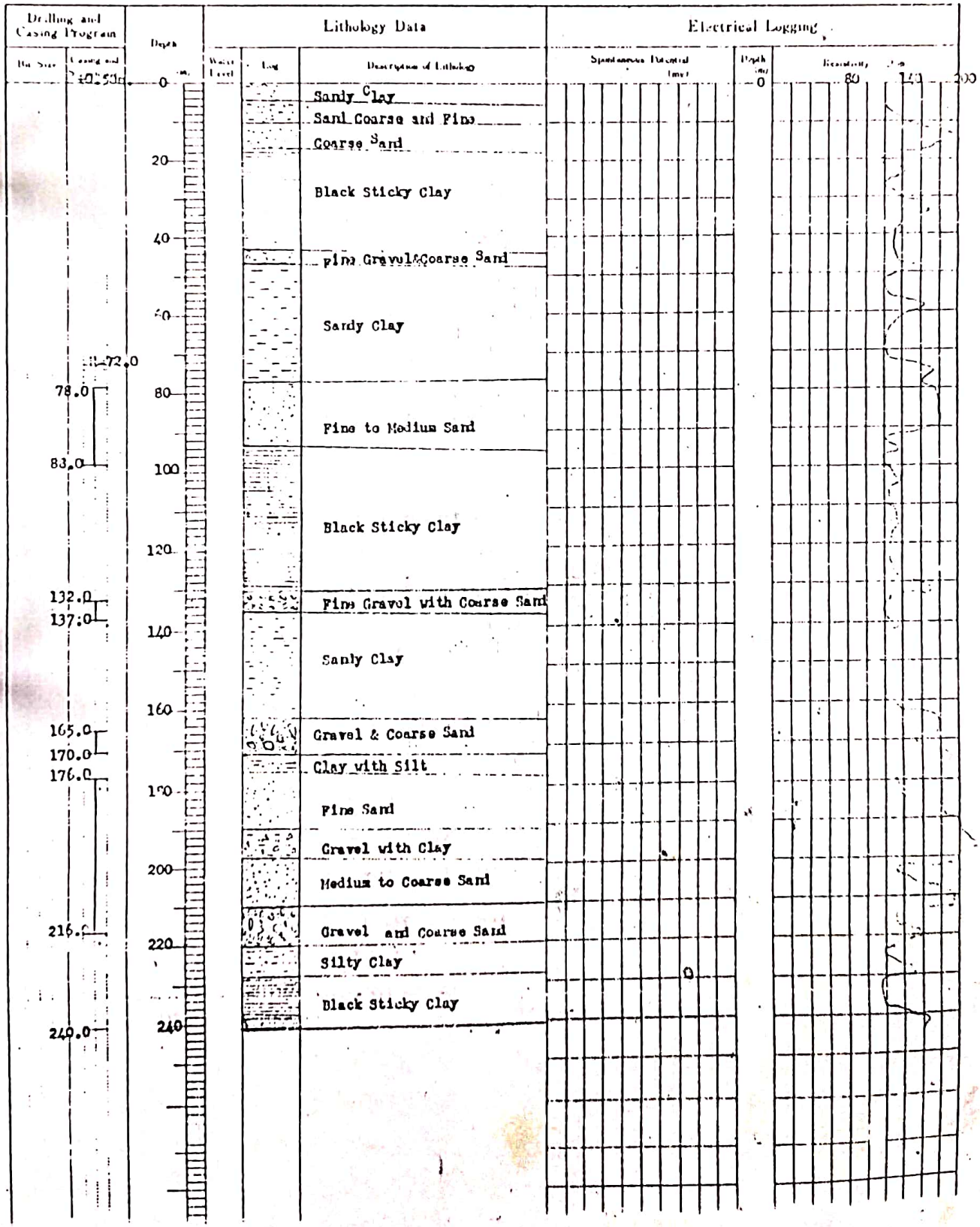


WELL LOG

Well Name: N-30

PROJECT NAME	JICA Team& T.I.A.T.S.P.	Size: 1/4"/8"	
AREA AND LOCATION	PARKAULI, Mahottari-District, Janakpur-Zone		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	240.0 m	DRILLING RIG	YMD 501 R
DRILLING STARTED		DRILLED BY	G.Gould
WELL COMPLETED	Jan., 1987	LOGGED BY	O.Nagata.

STATIC WATER LEVEL	-0.3 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	-60.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	300.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

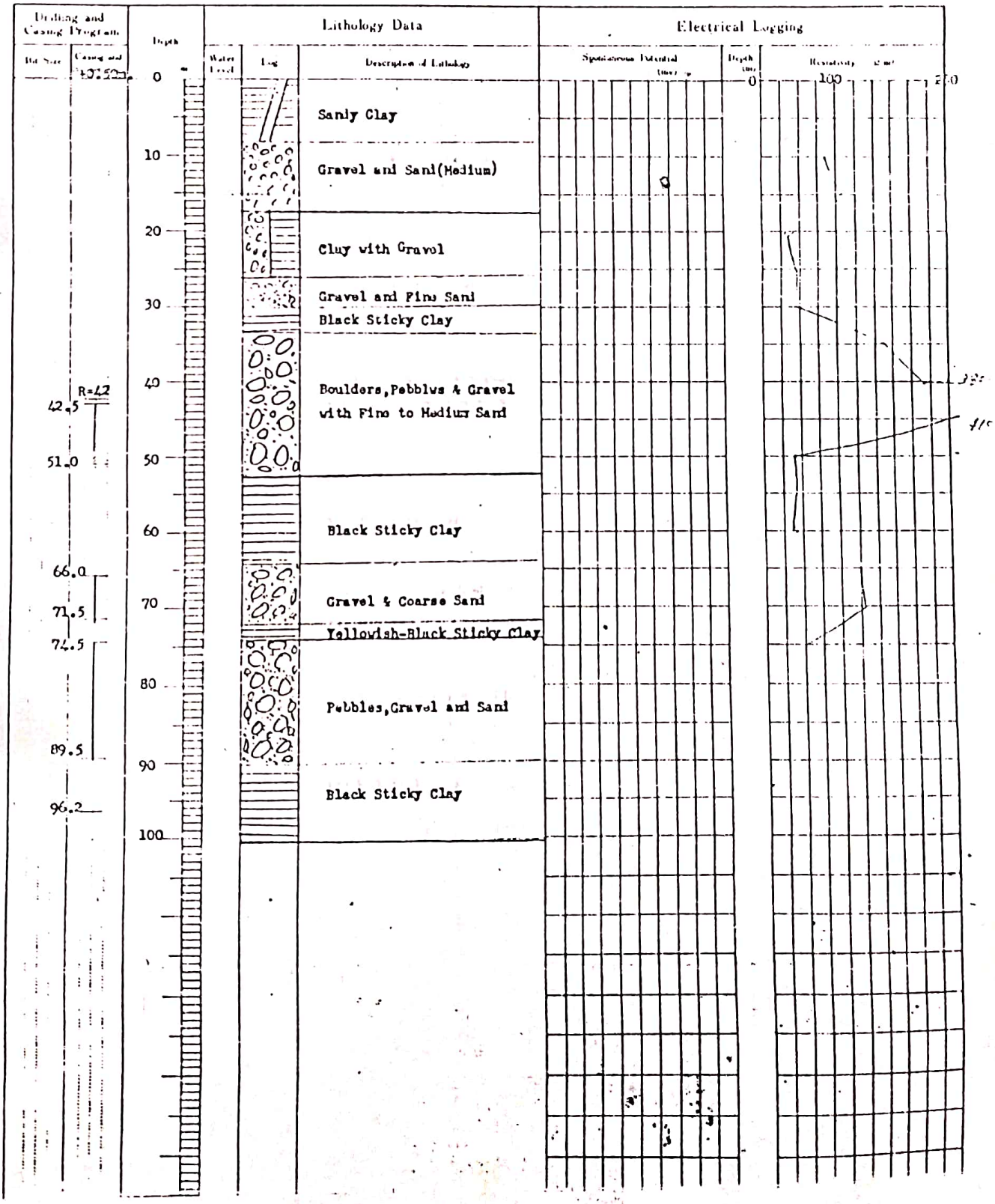


WELL LOG

Well Name: B-31

PROJECT NAME	T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	SASAPUR, Sarlahi-District, Janakpur.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH 96.2	m	DRILLING RIG	YHD 501 R
DRILLING STARTED		DRILLED BY	D.N. Sen
WELL COMPLETED	Mar., 1987	LOGGED BY	P.Mukhiya

STATIC WATER LEVEL	-30.0 m	WATER TEMPERATURE	C
DYNAMIC WATER LEVEL	-57.0 m	CONDUCTIVITY	μ℧.cm
PUMPING RATE	1200.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

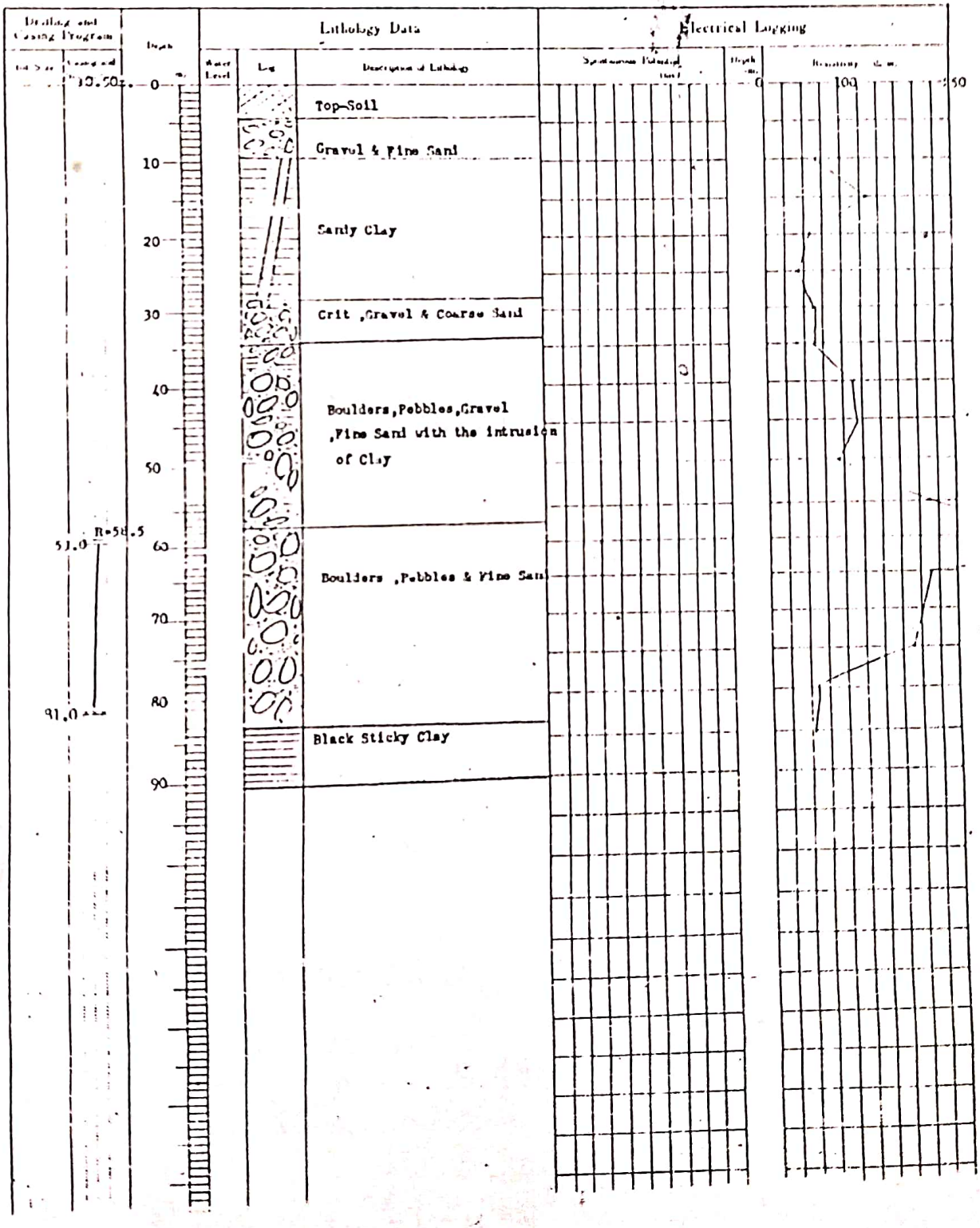


WELL LOG

Well Name: B-32

PROJECT NAME	T.I.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	PATAR, Sarlahi-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE / LONGITUDE	
TOTAL DEPTH 81.0	m	DRILLING RIG	YHD 501 R
DRILLING STARTED		DRILLED BY	D.N.Sen.
WELL COMPLETED	Apr., 1987	LOGGED BY	P.Mukhiya

STATIC WATER LEVEL	-33.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-53.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	(l/min) m³/d	pH	
SPECIFIC CAPACITY	1900.0 m³/d/m	TOTAL HARDNESS	



WELL LOG

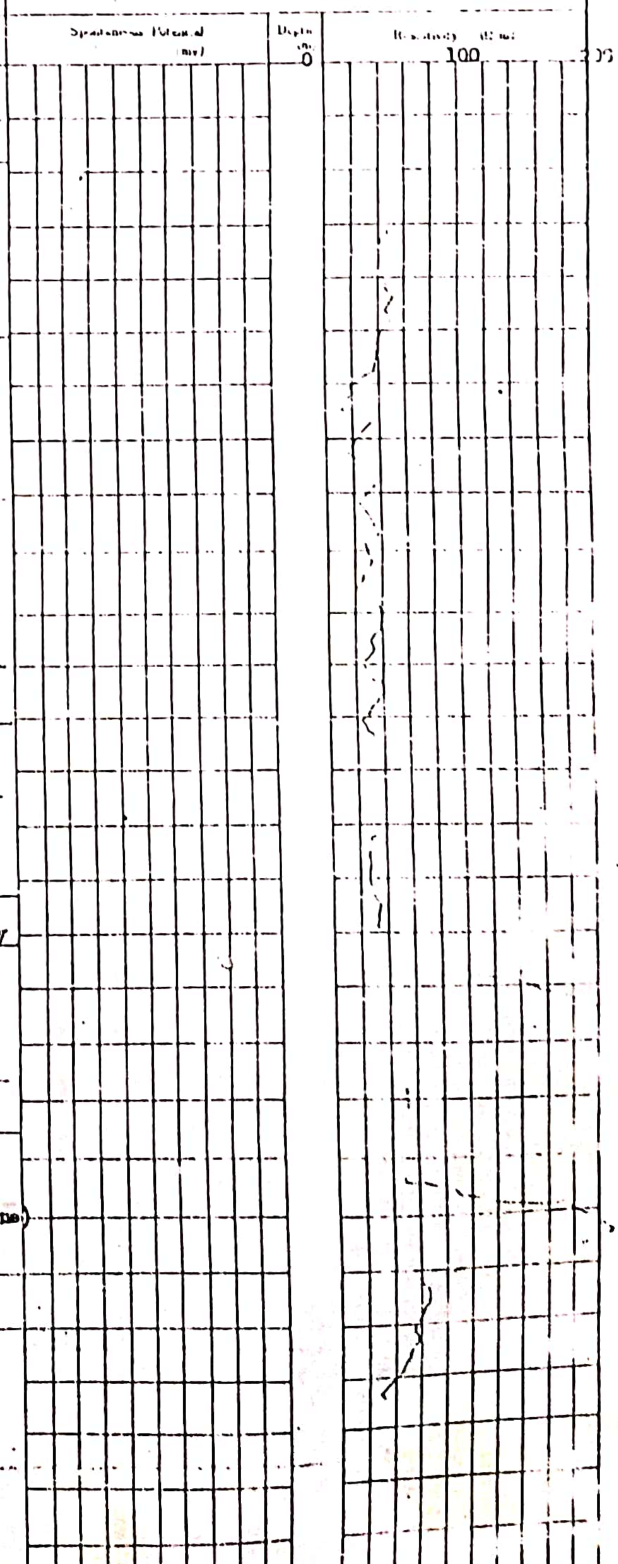
Well Name: N-37

PROJECT NAME T.I.A.T.S.P.	Size: 14"/8"
AREA AND LOCATION BHAKTIPUR, Sarlahi-District, Janakpur-Zone	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 112.5 m	DRILLING RIG TRD 500
DRILLING STARTED	DRILLED BY N.Maldya
WELL COMPLETED Apr., 1977	LOGGED BY P.Maldya

STATIC WATER LEVEL -1.5 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL 29.0 m	CONDUCTIVITY μʊ/cm
PUMPING RATE 2600.0 ℓ/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

Drilling and Casing Program		Depth (m)	Lithology Data		
Bit Size	Casing and Screen		Water Level	Log	Description of Lithology
	S+0.50	0			Top-Soil
					Fine Sand
		10			Grit & Coarse Sand
		20			Gravel & Sand
		30			Clay with Gravel
		40			
		50			Black Sticky Clay
54.5	R-54.0				
60.0		60			Gravel with Coarse Sand
					Clay with Boulders
68.0		70			Gravel & Sand
76.75					
82.75		80			Yellowish-Black Sticky Clay
					Pebbles, Gravel, Coarse Sand
91.5		90			
97.5					Black Sticky Clay
		100			Pebbles, Gravel and Sand (Fine)
106.5					
		110			Black Stick Clay
112.5					
		120			

Electrical Logging



WELL LOG

PROJECT NAME	T.T.A.T.S.P. Size: 14"/8"
AREA AND LOCATION	HUZULIA, Dharmsha-District, Jamalpur-Zone.
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 210.5 m	DRILLING RIG YPP 501 R
DRILLING STARTED	DRILLED BY S.Jha
WELL COMPLETED Feb.,1997	LOGGED BY O. Mgata.

STATIC WATER LEVEL 0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL – m	CONDUCTIVITY µS/cm
PUMPING RATE 12.0 ℓ/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

Drilling and Casing Diagram — Depth — Lithology Data — Electrical Logging

Casing depths marked: 17.50, 53, 66.5, 76.5, 142.5, 162.5, 168.5, 198.5, 210.5

Depth (m)	Description of Lithology
0	Sandy Clay
10	Silt
20	Black Sticky Clay
40	Clay with Gravel
50	Gravel and Sand
60	Silt
70	Black Sticky Clay
80	Medium to Fine Sand
90	Gravel, Pebble and Sand.
110	Yellowish -Brown sticky Clay
120	Silt
130	Sandy Clay
140	Clay Gravel
150	,Gravel and Coarse Sand
160	Sand & Gravel
170	Black Sticky Clay
180	Clay and Gravel
190	Gravel & Sand
195	Clay & Gravel
205	Sand & Gravel
210	Clay
220	Sand & Gravel
230	Black Sticky Clay.

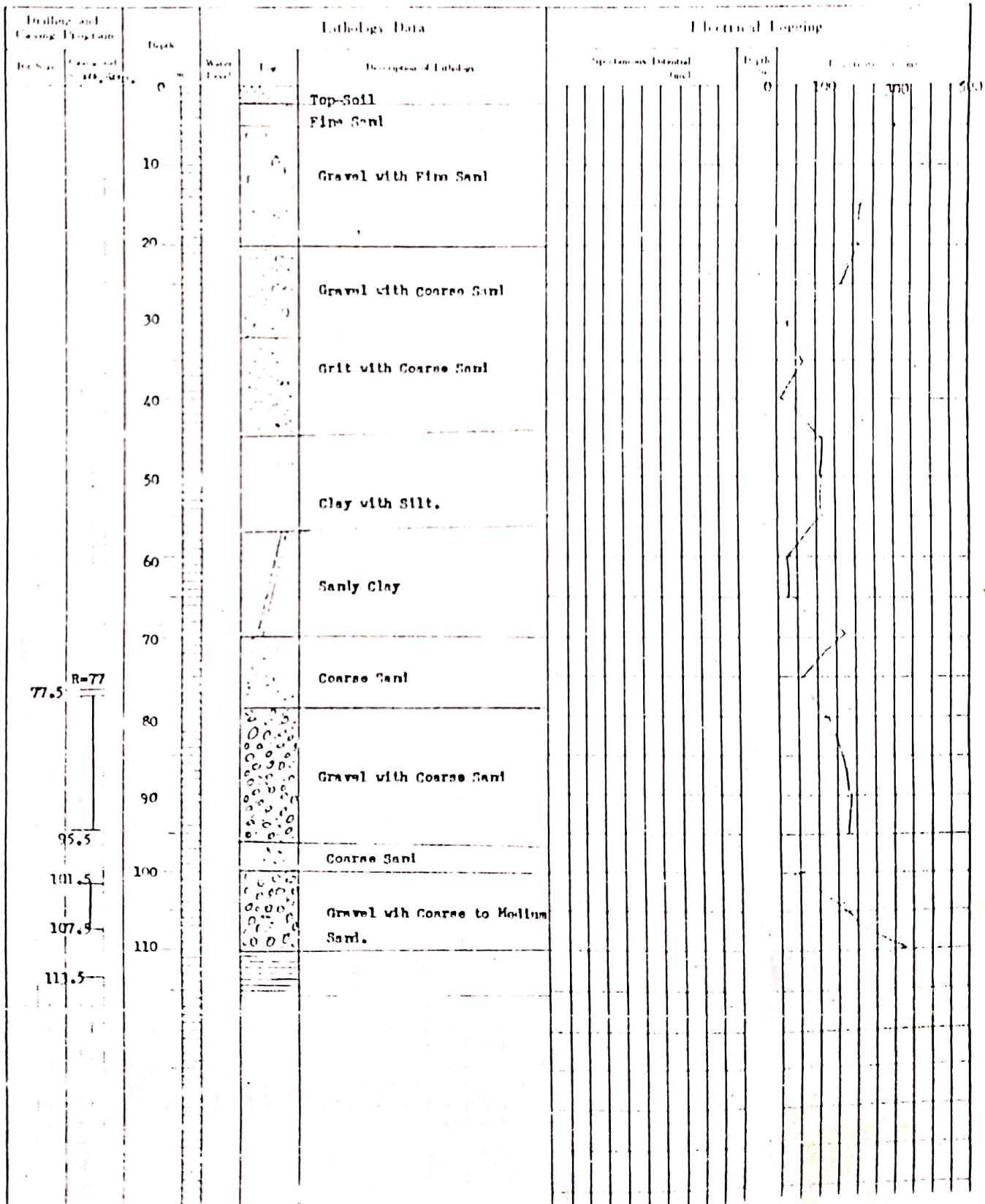
Electrical Logging: Spontaneous Potential (mV); Depth; Resistivity (Ω·m) 0 – 100 – 250

WELL LOG

Well No: N-33

PROJECT NAME	T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	NAKTAJHIJ,Dhanusha-District,Janakpur-Zone		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH 113.5	m	DRILLING RIG	YRD 501R
DRILLING STARTED		DRILLED BY	G.Joshi
WELL COMPLETED Mar.,1987		LOGGED BY	P. Mukhiya

STATIC WATER LEVEL	-40.0 m	WATER TEMPERATURE	C
DYNAMIC WATER LEVEL	-61.0 m	CONDUCTIVITY	
PUMPING RATE	1800.0 m³/hr	pH	
SPECIFIC CAPACITY	m³/hr/m	TOTAL HARDNESS	

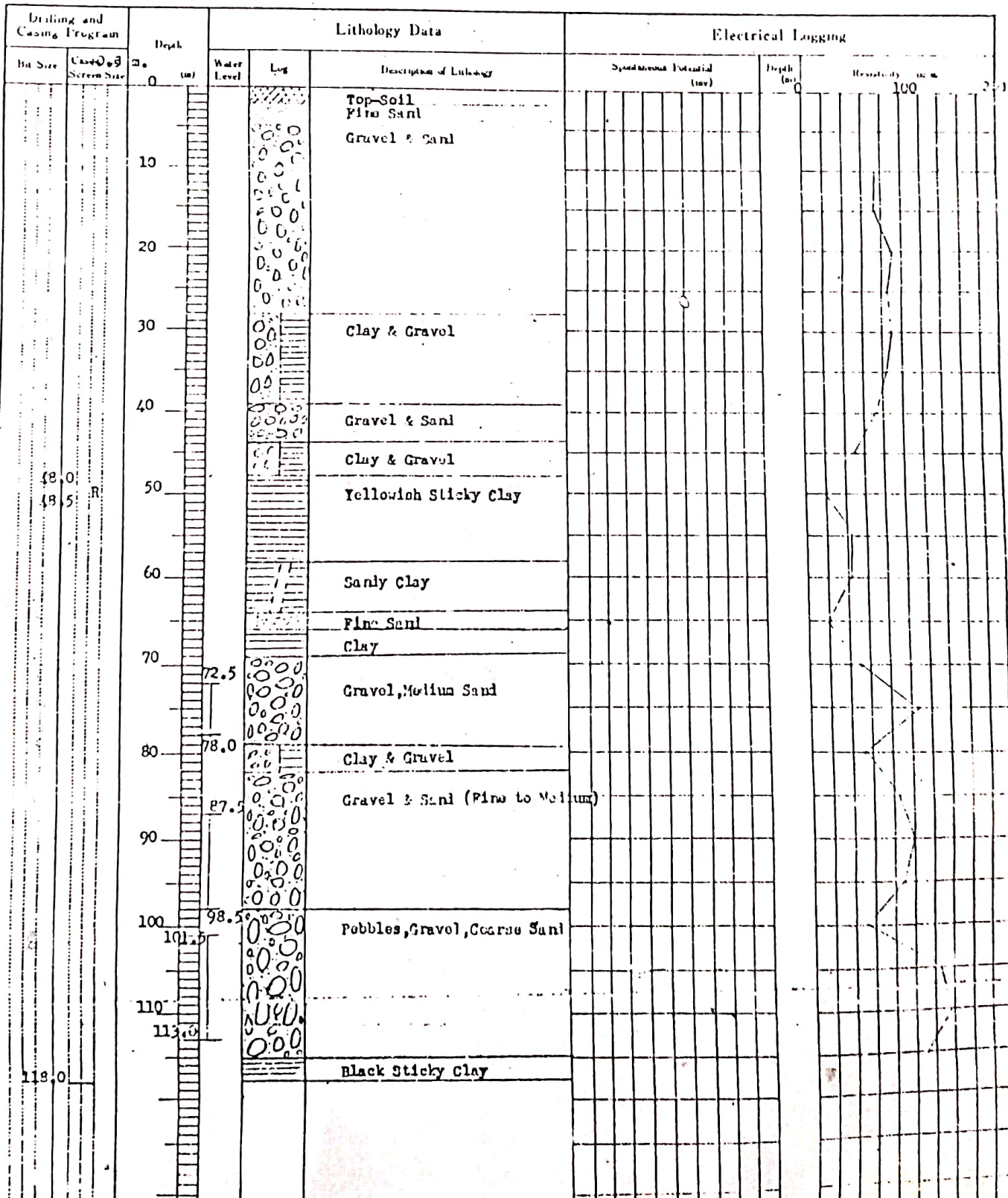


WELL LOG

Well No: N-35

PROJECT NAME	T.I.A.T.S.P.		Size: 14"/8"
AREA AND LOCATION	MAHENDRANAGAR, Shaldhuwa-Mahendranagar Village Panchayat.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	118.0 m	DRILLING RIG	YND 501"R"
DRILLING STARTED		DRILLED BY	Mr. S.Jha
WELL COMPLETED	Apr., 1987	LOGGED BY	Mr. P. Lakhiya

STATIC WATER LEVEL	-15.000 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-30.000 m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	3000.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

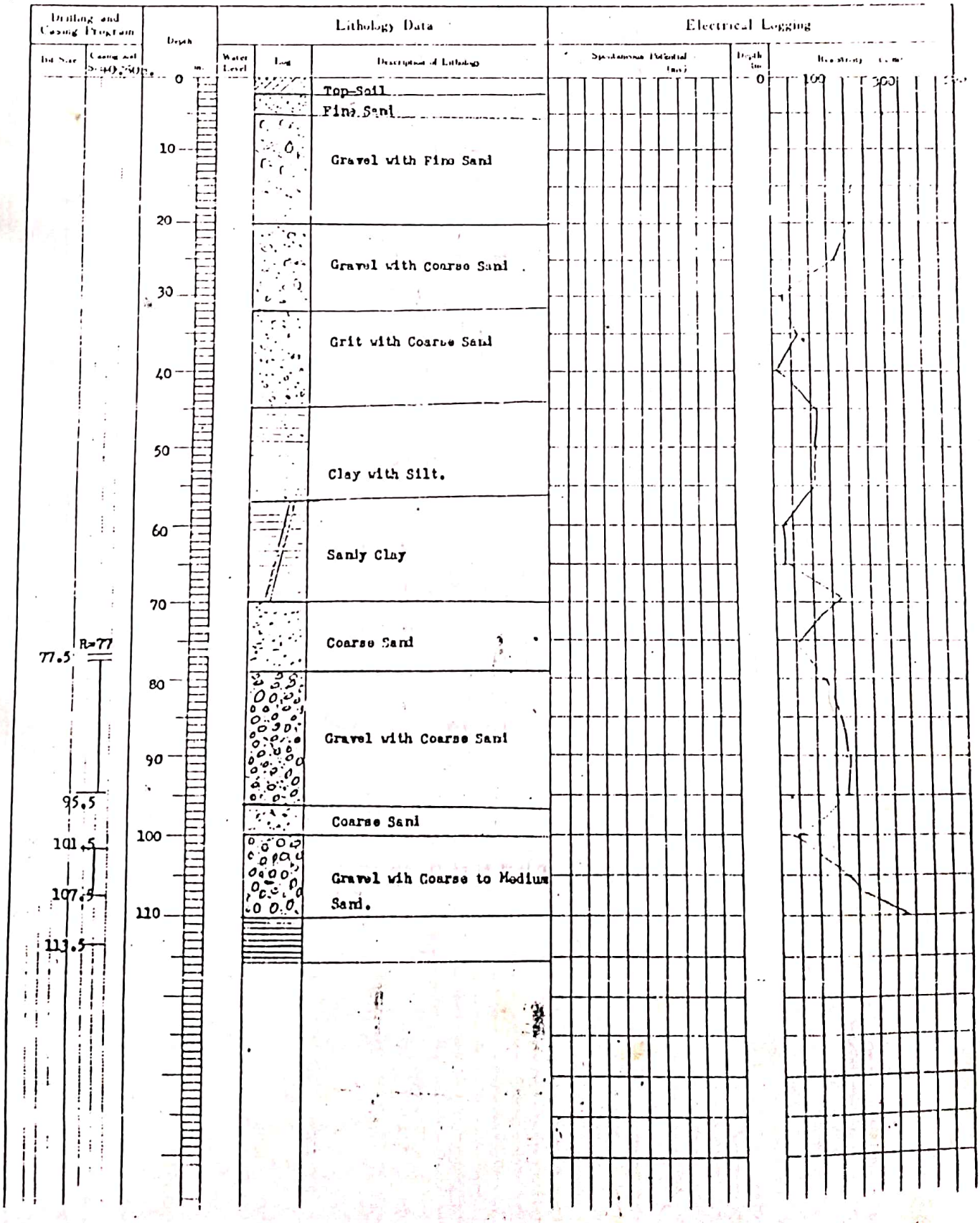


WELL LOG

Well No. [illegible]

PROJECT NAME	T.I.A.T.S.P.		Size: 14"/8"
AREA AND LOCATION	NAKTAJHIJ, Dhanusha-District, Janakpur-Zone		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	113.5 m	DRILLING RIG	YBD 501R
DRILLING STARTED		DRILLED BY	G.Joshi
WELL COMPLETED	Mar.,1987	LOGGED BY	P. Mukhiya

STATIC WATER LEVEL	-40.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-61.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1800.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Development ... Janakpur ...

Data No.

	Agri Dev. Project		
	Majhare Morang		
Total depth	113·5 m	Equipment	
	2050-2-2	Drilled by	R·B·K·C
	2050-3-10	Logged by	R·B·K·C
			TKD 'B00'

Static water level	6·5 m	Water temperature	°C
Pumping water level	22·0 m	Conductivity	
Pumping rate	3600	pH	
Capacity		Total hardness	

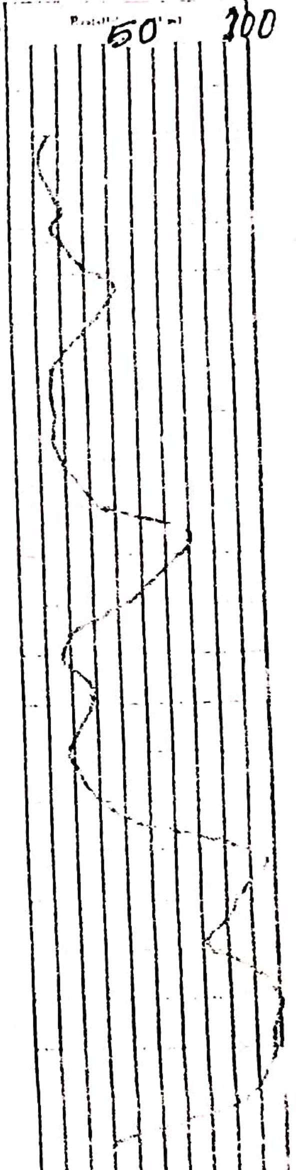
Lithology Data

Depth (m)	Lithologic description
	Top soil
	Fine sand
10	Clay
20–30	Coarse sand and Gravel
40	Clay
50	Gravel w/ sand
60	Clay
	Coarse sand
70	Clay
80–100	Gravel & Sand
110	Clay

Annotated depths: 35, 47·5, 60·5, 78·5, 110·5, 113·5

Depth scale: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150

Electrical Logging



Agriculture Development Project, Janakpur, [illegible]

Data No.

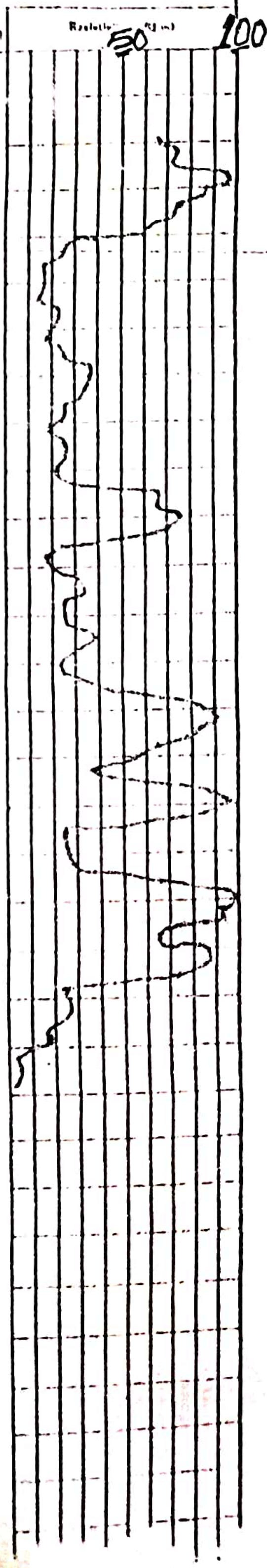
WELL LOG

PROJECT NAME	Agri-dev. Project.	WELL NO.	
AREA AND LOCATION	Lalbandi-3 Sarlahi		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	105.5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2050-12-23	DRILLED BY	R.B. K.C
WELL COMPLETED	2051-2-28	LOGGED BY	R.B. K.C

STATIC WATER LEVEL	46.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	56.0 m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	25 l/sec m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Diagram	Depth (m)	Lithology Data: Water Level	Log	Description of Drilling
				Top soil
	10			Dry Gravel
	20			Gravel W/ sand
	30, 40			Clay
	50			Gravel
	60			Clay
	70, 80			Gravel
				Clay
	90			Gravel
1055	100			Clay
	110, 120, 130, 140, 150			

Electrical Logging: Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω m)



Agriculture Development Project Janakpur [illegible]

L 1

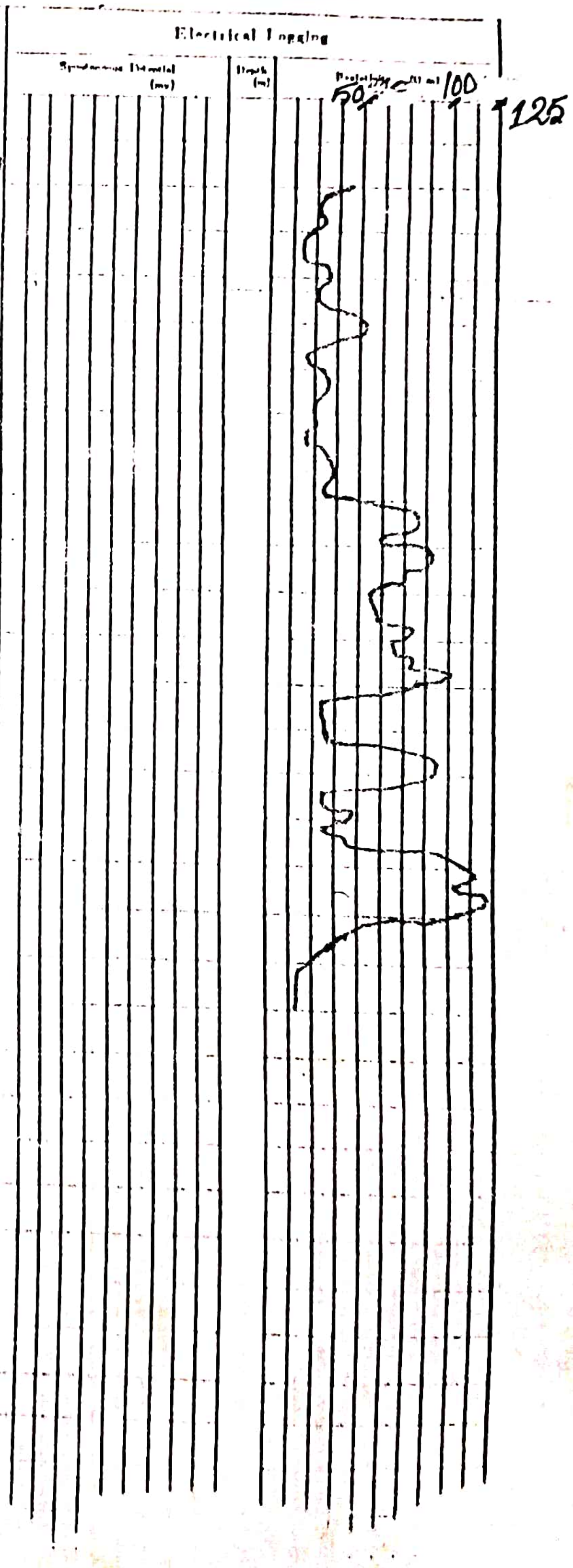
Data No.

PROJECT NAME	Agri dev Project	WELL NO.	
AREA AND LOCATION	Netragand-1 Sarlahi		
ELEVATION	m	LATITUDE	LONGITUDE
DEPTH	95.5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2050-3-2	DRILLED BY	R.B.K.C
COMPLETED	2050-3-31	LOGGED BY	R.B.K.C

[illegible]	22.0 m	WATER TEMPERATURE	°C
[illegible] WATER [illegible]	20.0 m	CONDUCTIVITY	µS/cm
YIELDING AIR	10.5 [illegible] m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Casing depth (m)	Depth (m)	Lithology Data: Description of Lithology
		Clay
	10	Coarse sand w/Gravel
	20	Clay
		Gravel
	30	Clay
		Gravel
42.0 / 45.5 / 48.5	40	Clay
	50	Gravel w/sand
	60	
68.5	70	Clay
74.5		Gravel
80.5	80	Clay
86.5	90	Gravel
92.5 / 95.5		Clay
	110	
	120	
	130	
	140	
	150	

Electrical Logging

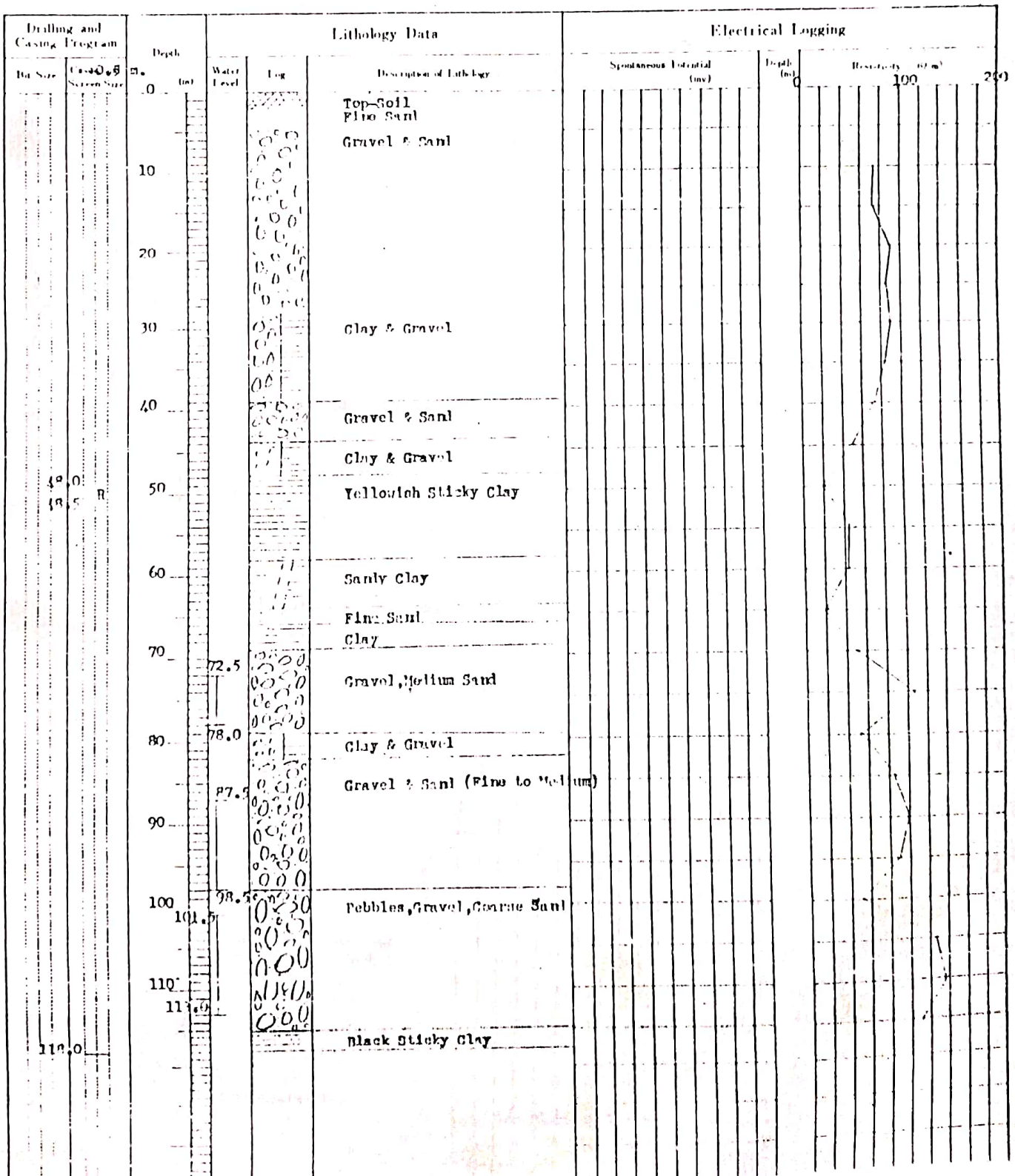


Well Name: N-35

WELL LOG

PROJECT NAME T.I.A.T.S.P.	Size: 14" /8"
AREA AND LOCATION MAHENDRANAGAR, Shaktikhum-Mahendranagar Village Panchayat.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 118.0 m	DRILLING RIG YDP 501"R"
DRILLING STARTED	DRILLED BY Mr. S.Jha
WELL COMPLETED Apr., 1987	LOGGED BY Mr. P. Mukhiya

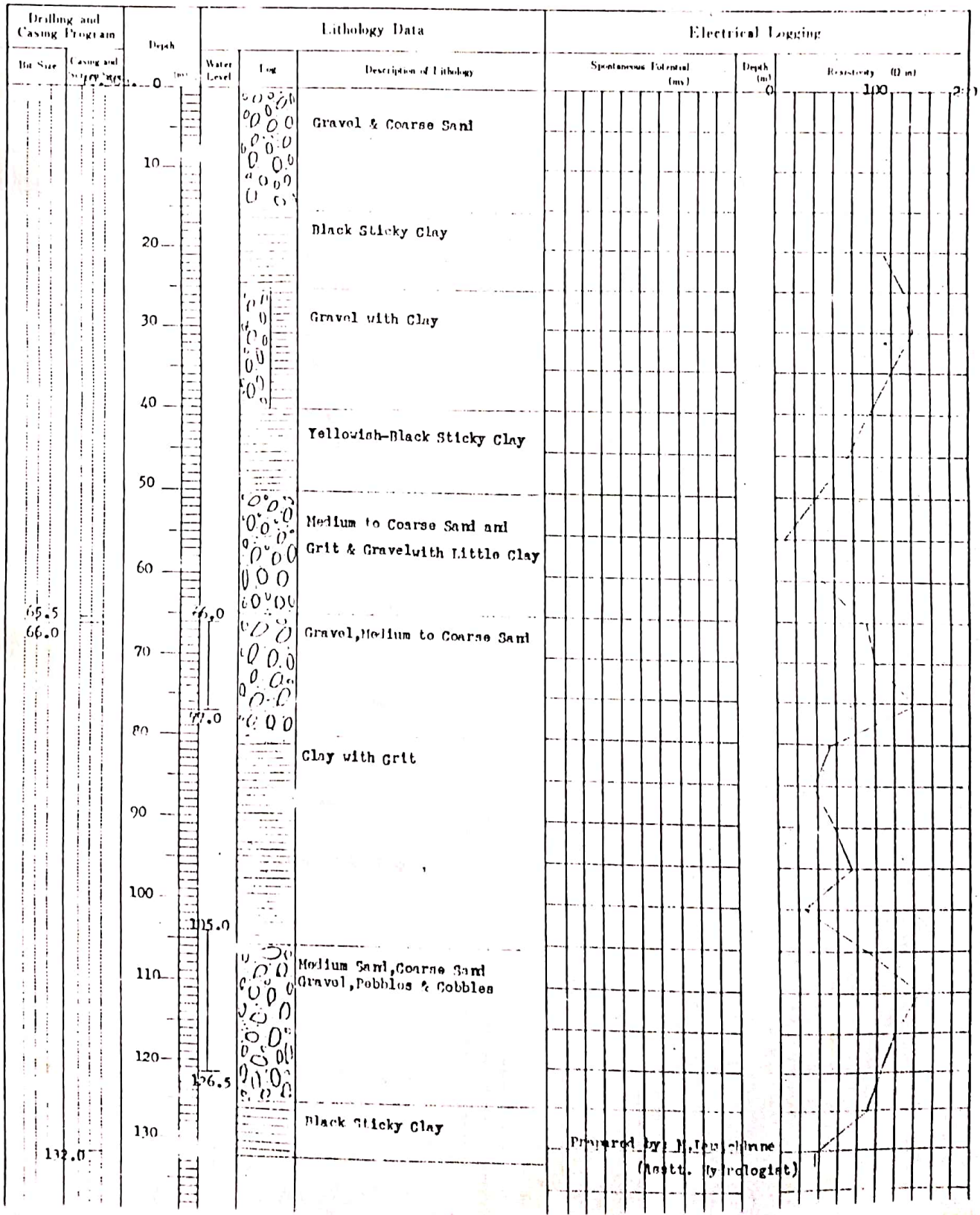
STATIC WATER LEVEL -15.000 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -30.000 m	CONDUCTIVITY µS/cm
PUMPING RATE 3000.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



WELL LOG

PROJECT NAME	J.I.D.P.	Size: 14"/8"	
AREA AND LOCATION	MALTOLE, Umprumpur Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	132.0 m	DRILLING RIG	YRD 501"R"
DRILLING STARTED		DRILLED BY	Mr. S.Jha
WELL COMPLETED	Mar., 1996	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-45.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μS/cm
PUMPING RATE	600.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

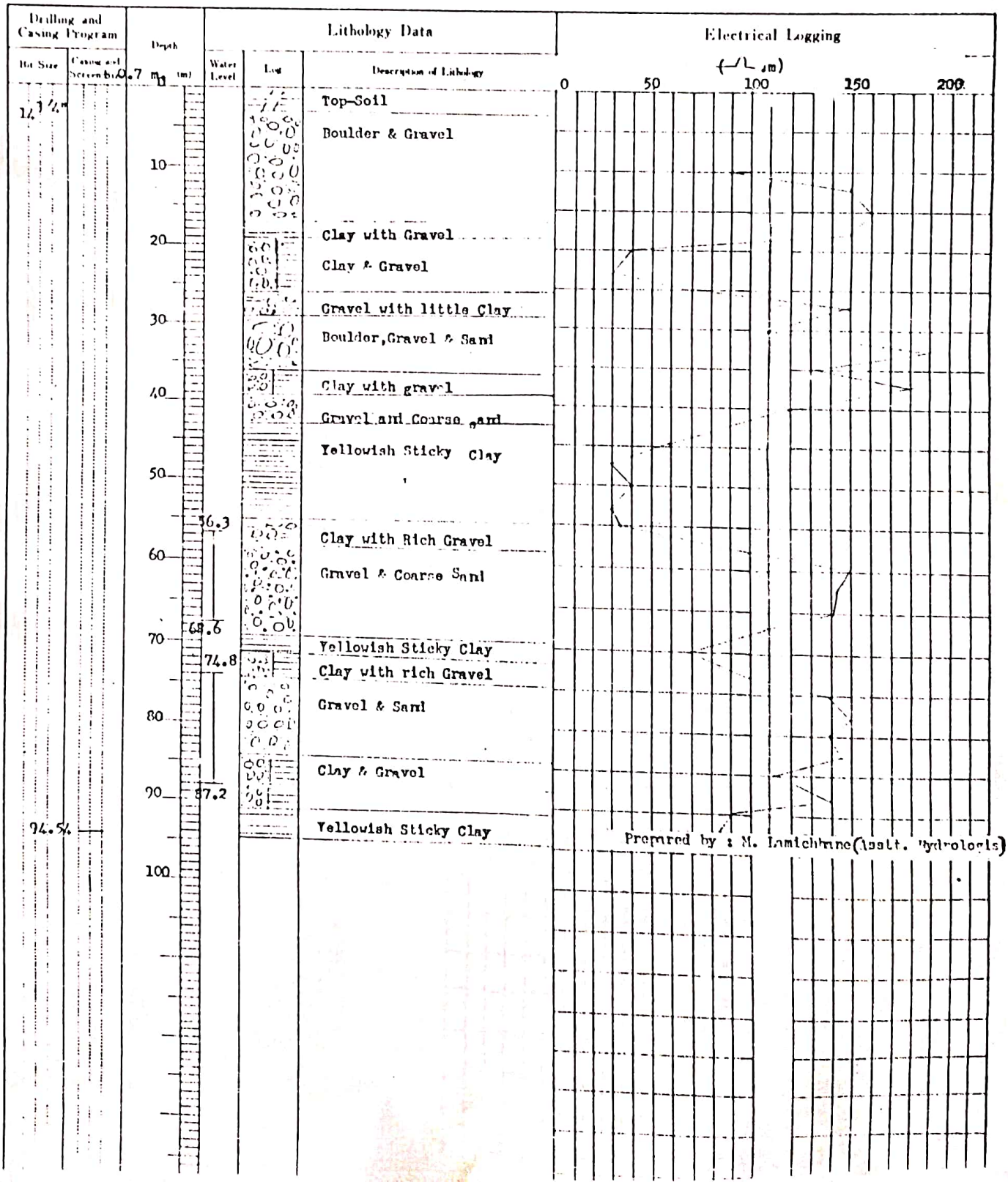


Well Name : J-20

WELL LOG

PROJECT NAME	J.A.D.P.	Size: 8"/8"	
AREA AND LOCATION	SAGARNATH FOREST DEVELOPMENT PROJECT, JATILET, Mahottari district.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	94.54 m	DRILLING RIG	TBM 72"A"
DRILLING STARTED		DRILLED BY	Mr. P. Mukhiya & D.M. Sen
WELL COMPLETED	Aug., 1985	LOGGED BY	Mr. P. Mukhiya

STATIC WATER LEVEL	-42.30 m	WATER TEMPERATURE	C
DYNAMIC WATER LEVEL	-60.00 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1500.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

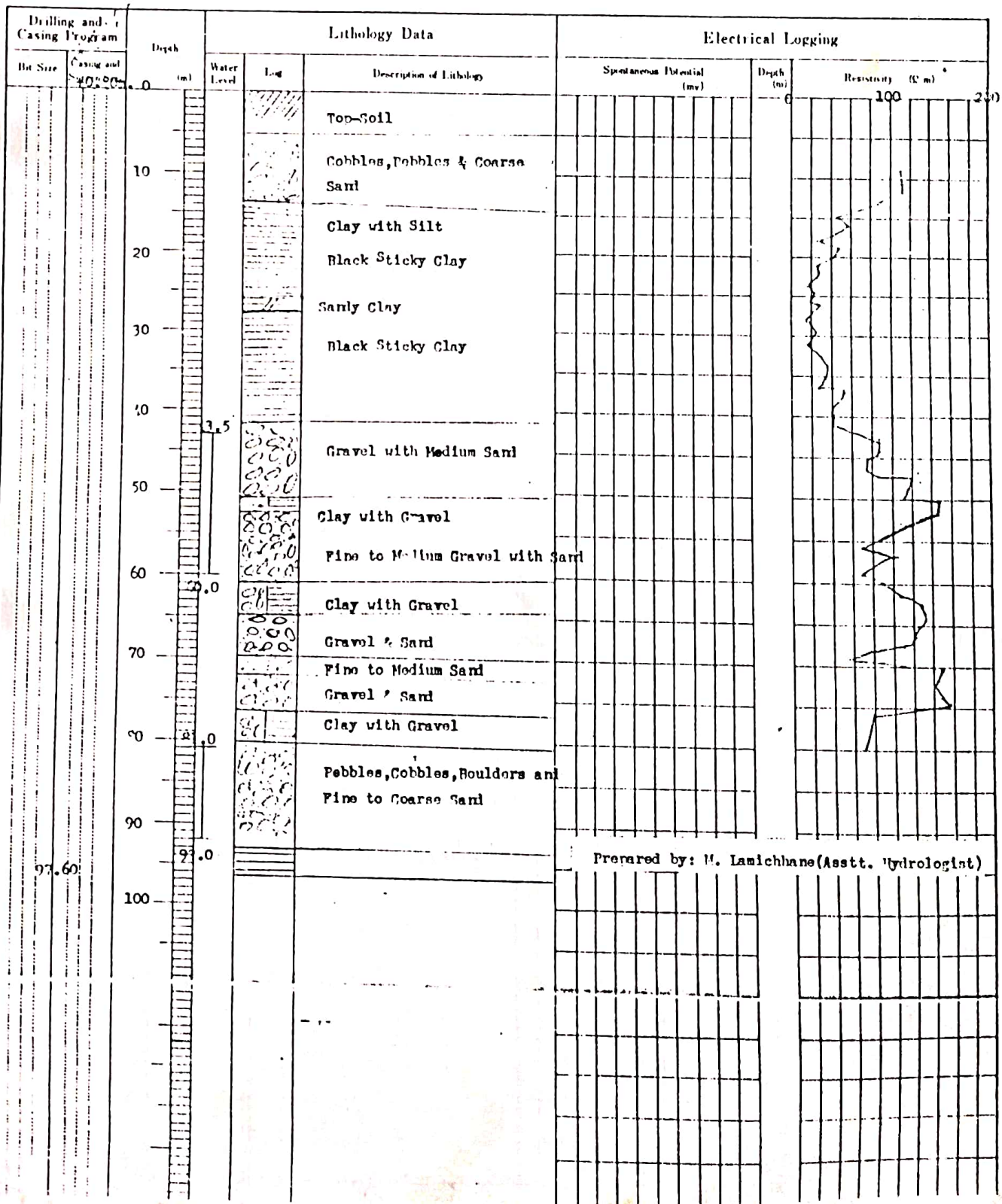


Well Name: J-23

WELL LOG

PROJECT NAME	J.A.D.P.	Size: 12"/8"	
AREA AND LOCATION	SAGARNATH FOREST DEV'LOPMENT PROJECT, Sagarmath, Sarlahi		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	97.60 m	DRILLING RIG	TDM 72"A"
DRILLING STARTED		DRILLED BY	Mr. S. Lamichhane & P. Mukhiya
WELL COMPLETED	15 Feb,1992	LOGGED BY	Mr. S. Lamichhane

STATIC WATER LEVEL	-11.000 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-35.000 m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	1500.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

Well No. N-49

PROJECT NAME TIATSP	WELL NO.
AREA AND LOCATION Ram Nagar, Mahohari - District	
ELEVATION feet	LATITUDE LONGITUDE
TOTAL DEPTH 96.25 feet	DRILLING RIG TRD-500
DRILLING STARTED	DRILLED BY Sudish Rana
WELL COMPLETED Mar 1988	LOGGED BY M. Lamichhane

STATIC WATER LEVEL -28.00 feet m	WATER TEMPERATURE
DYNAMIC WATER LEVEL -31.00 feet m	CONDUCTIVITY
PUMPING RATE 42.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

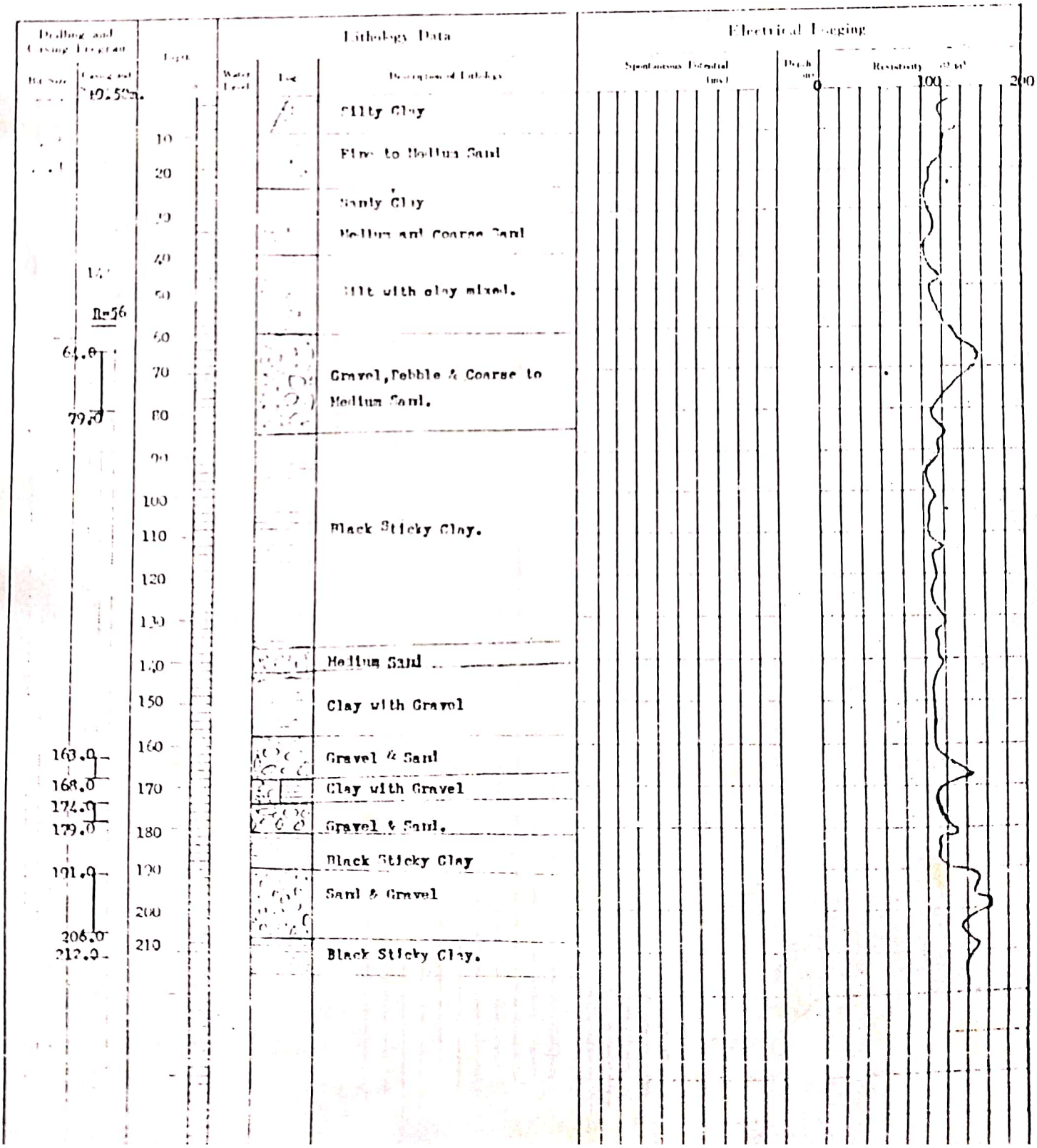
Drilling and Casing Program		Depth (feet)	Lithology Data			Electrical Logging		
Bit Size	Casing and Screen Size		Water Level	Log	Description of Lithology	Spontaneous Potential (mv)	Depth (m)	Resistivity (Ωm)
17.5		0			Clay with Silt			
					Pebbles, C. Sand			
		10						
					Clay (yellowish Black) with Gravel			
		20						
		30			yellowish Stickyclay			
		40			clay with Gravel			
		50			Black Sticky clay			
	R	60	60					
	Slotted 5.5×2				Pebbles, gravel very little clay			
		70	71		Black Sticky clay			
			74					
	Sankyu 3.25×5	80			Boulders, pebbles			
		90			Gravel + C. Sand			
			90.25		Yellowish Stickyclay			
96.25		100						

Well Name: B-29

WELL LOG

PROJECT NAME: J I C A Rural Groundwater Project (PIATSP)	Size: 14"/8"
AREA AND LOCATION: RANI BAZZER, Dhanusha-District, Janakpur-Zone.	
ELEVATION: m	LATITUDE: LONGITUDE:
TOTAL DEPTH: 212.0 m	DRILLING RIG: YBO-501
DRILLING STARTED: 16 Feb, 1977	DRILLED BY: S. Jha.
WELL COMPLETED: 10 March, 1977.	LOGGED BY: Bagula.

RATE WATER LEVEL: -0.2 m	WATER TEMPERATURE:
DYNAMIC WATER LEVEL: m	CONDUCTIVITY:
PUMPING RATE: 180.0 l/min m³/d	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS



Agriculture Development Project, Janakpur Habitat Data No.

WELL LOG

PROJECT NAME: Agri. Dev. Project	WELL NO.
AREA AND LOCATION: Ramnagar-1 Mahotari	
ELEVATION: m	LATITUDE / LONGITUDE
TOTAL DEPTH: 114.5 m	DRILLING RIG: TRD 500
DRILLING STARTED: 2052-8-6	DRILLED BY: R.B.K.C
WELL COMPLETED: 2052-9-6	LOGGED BY: Ran Bdr K.C

STATIC WATER LEVEL: 19.0 m	WATER TEMPERATURE: °C
DYNAMIC WATER LEVEL: 24.0 m	CONDUCTIVITY: µS/cm
PUMPING RATE: 2400 l/min (m³/d)	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS

Drilling and Casing Diagram

Depth (m)

Lithology Data

Water Level | Log | Description of Lithology

- Clay
- Gravel
- Clay
- Clay & Gravel
- Gravel
- Gravel & Clay
- Gravel & Sand
- Clay

Electrical Logging

Resistance Potential (ms) | Depth (m) | Resistivity (Ω m)

75 150

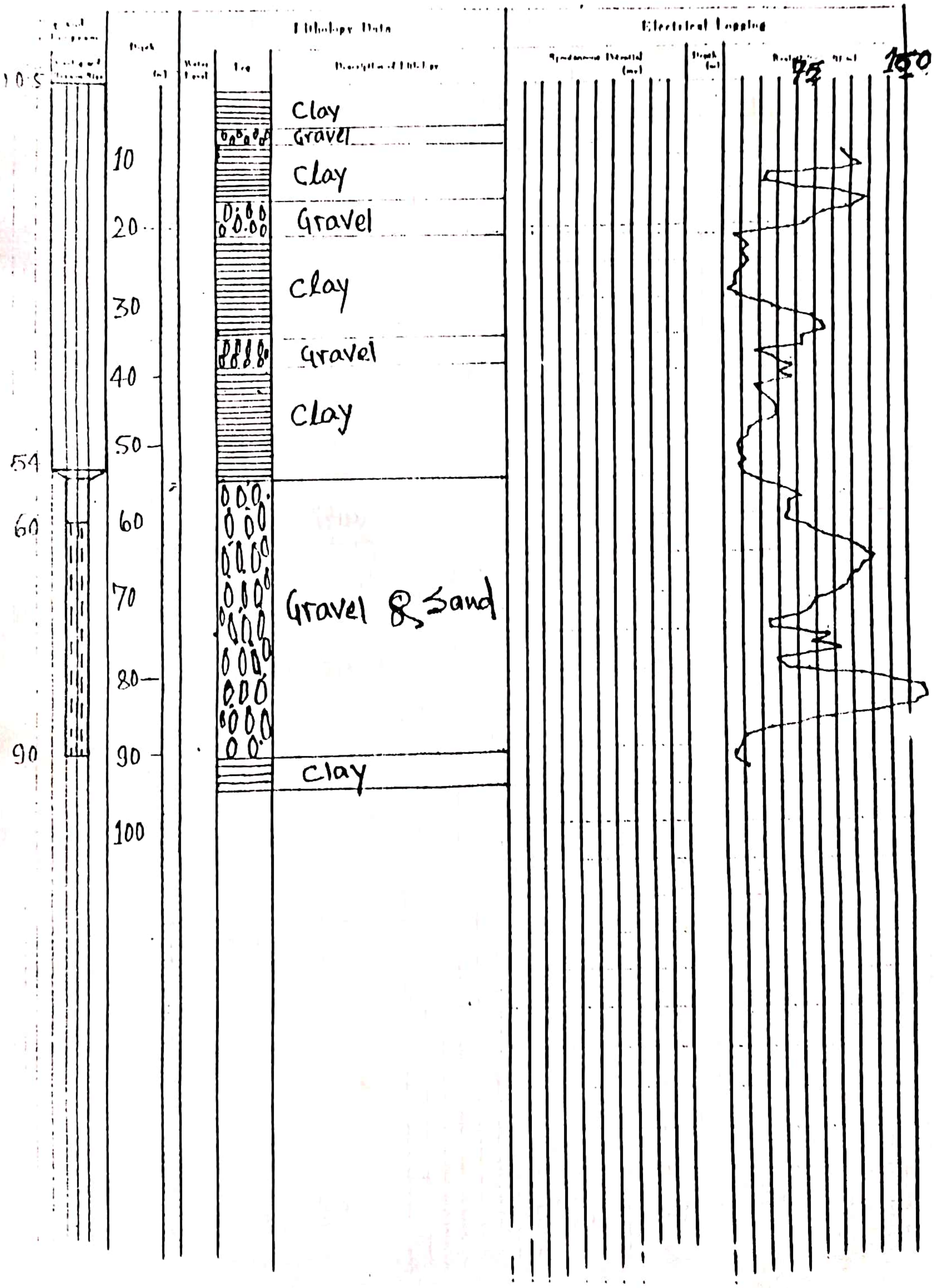
Agriculture Development Project, Janakpur

Data No.

WELL LOG

PROJECT NAME	Agri. Dev. Project	WELL NO.	
AREA AND LOCATION	Ramnagar – 6 Mahotari		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	90·5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2052-9-7	DRILLED BY	R.B.K.C
WELL COMPLETED	2052-10-4	LOGGED BY	Ran. Bdr. K.C.

STATIC WATER LEVEL	23·0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	30·0 m	CONDUCTIVITY	µS/cm
PUMPING RATE	1800 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



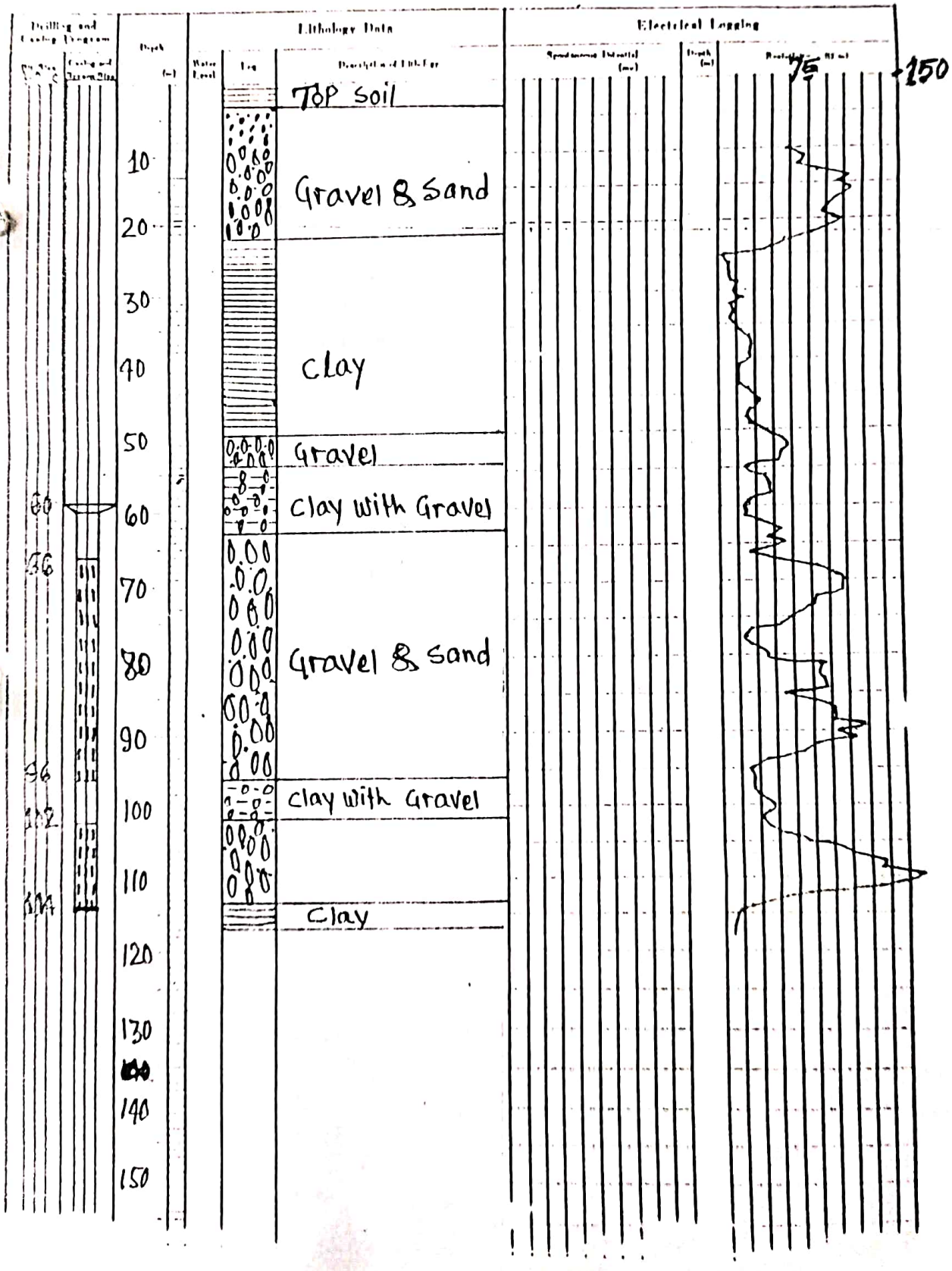
Draw By

Agriculture Development Project, Janakpur Hydrology
Data No.

WELL LOG

PROJECT NAME	Agri. dev. Project	WELL NO.	
AREA AND LOCATION	Kamnagar -7 Mahotari		
ELEVATION	m	LATITUDE / LONGITUDE	
TOTAL DEPTH	114.5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2052-7-1	DRILLED BY	R.B.K.C
WELL COMPLETED	2052-8-5	LOGGED BY	Ram Bdr K.C

STATIC WATER LEVEL	41.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	41.5 m	CONDUCTIVITY	μmho/cm
PUMPING RATE	1800 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Drawn By

J-32.

Data No.

WELL LOG

PROJECT NAME [illegible] Project [illegible]		WELL NO	
AREA AND LOCATION Police Training [illegible] Kathmandu.			
ELEVATION	M	LATITUDE [illegible]	LONGITUDE
TOTAL DEPTH 222	M	[illegible]	[illegible] 72
DRILLING STARTED [illegible], 16, 1988		DRILLER	[illegible]
WELL COMPLETED [illegible], 1989		LOGGED	[illegible] Pukhiya.

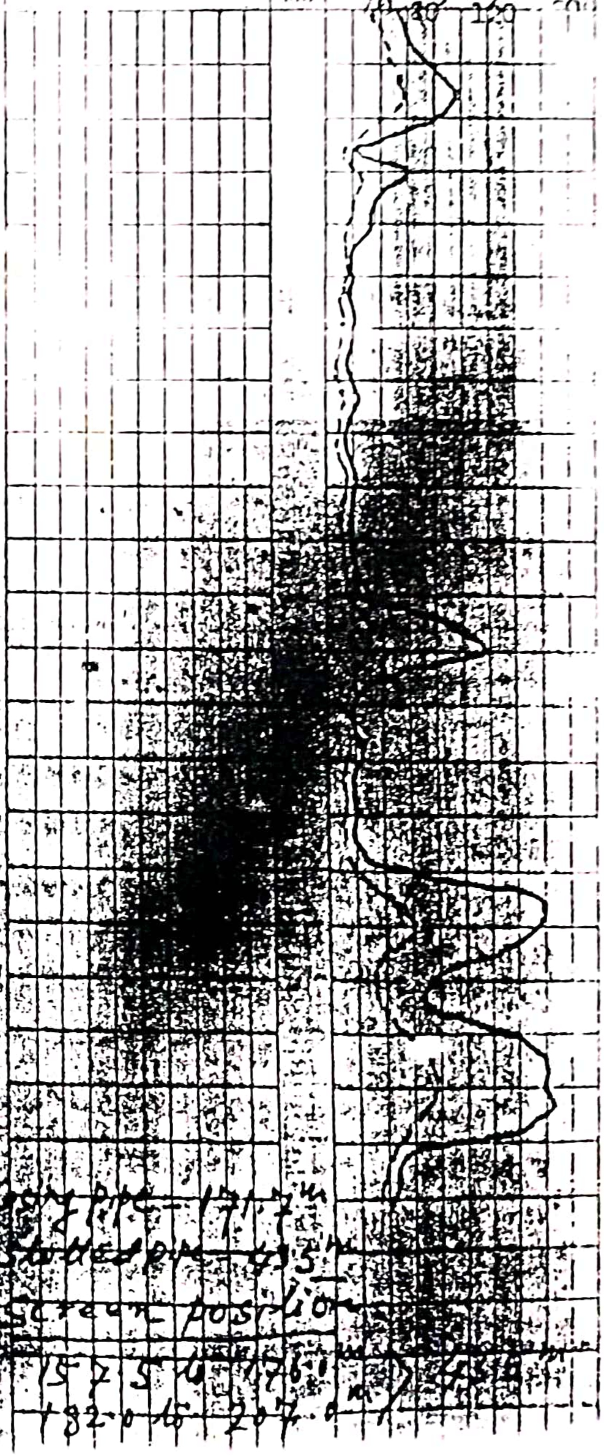
STATIC WATER LEVEL [illegible]	M	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL [illegible].0	M	CONDUCTIVITY	µS/cm
PUMPING RATE [illegible] /min(	m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL [illegible]	

By air lift--- (Pumping rate)

Throughout = 6"

Drilling and Casing Program: Bit Size	Casing and Screen Size	Depth (M)	Water Level	Log	Description of Lithology
12¼"					Top soil
		10			Clay Black
		20			Fine to medium Sand
		30			Silty Clay
		40			Medium to Fine Sand
		70–80			Clay Black
		120			Sand and Gravel.
		140			Clay Black
157.5		150			Sticky Clay
		160			Coarse Sand, Gravel
176.0 / 182.0		180			Fine Sand
		190			Sand and Gravel.
207.0		210			Silty clay
216.0		220			Sticky clay

Electrical Logging: Spontaneous Potential (mV) | Depth (m) | Resistivity (Ω·m) 10 20 100 200



Casing pipe – 171 [illegible]

6" Screen – 45 m

Screen position

157.5 – 176.0 m

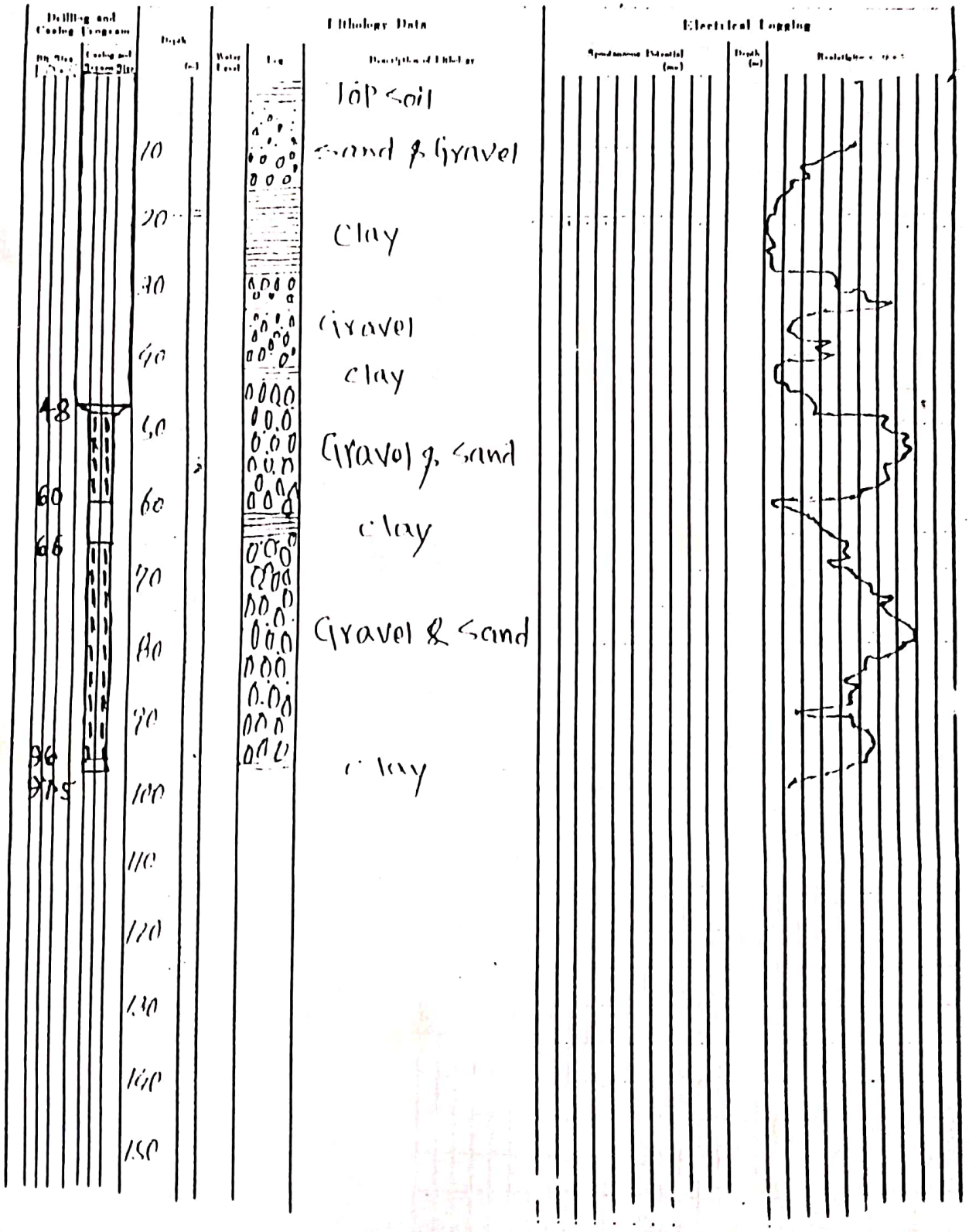
182.0 – 207.0 m

Agriculture Development Project, Jaleshwor Data No.

WELL LOG

PROJECT NAME	Agri. Dev. Project	WELL NO.	
AREA AND LOCATION	Ranigung, Sarlahi		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	98.0 m	DRILLING RIG	JRD 500'
DRILLING STARTED	2052-2-28	DRILLED BY	Ram Bdr K.C
WELL COMPLETED	2052-4-10	LOGGED BY	R.B.K.C

STATIC WATER LEVEL	43.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	47.0 (Air Compr)	CONDUCTIVITY	µS/cm
PUMPING RATE	25.0 l/sec m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Drawn By
RBK.C

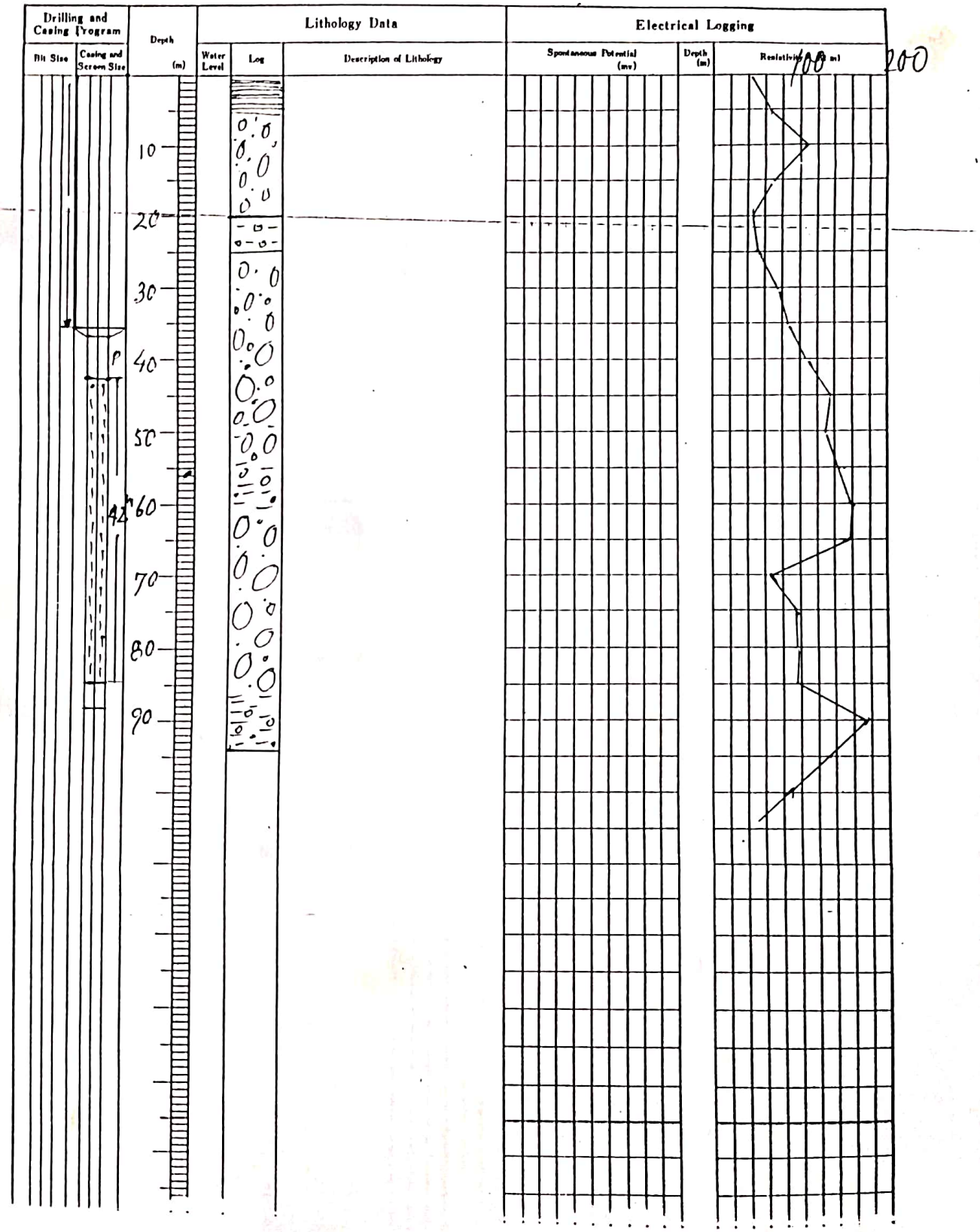
Agriculture Development Project, Janakpur, Nakhighis

Data No.

WELL LOG

PROJECT NAME	Agri. Dev. Project	WELL NO.	1
AREA AND LOCATION	P.E.V. ward- 4	Madhavpur	
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	90 M m	DRILLING RIG	YRD 500
DRILLING STARTED	2050/8/07	DRILLED BY	S. JHA
WELL COMPLETED	2050/9/18	LOGGED BY	S. JHA

STATIC WATER LEVEL	10 M m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	32 m m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	2400 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



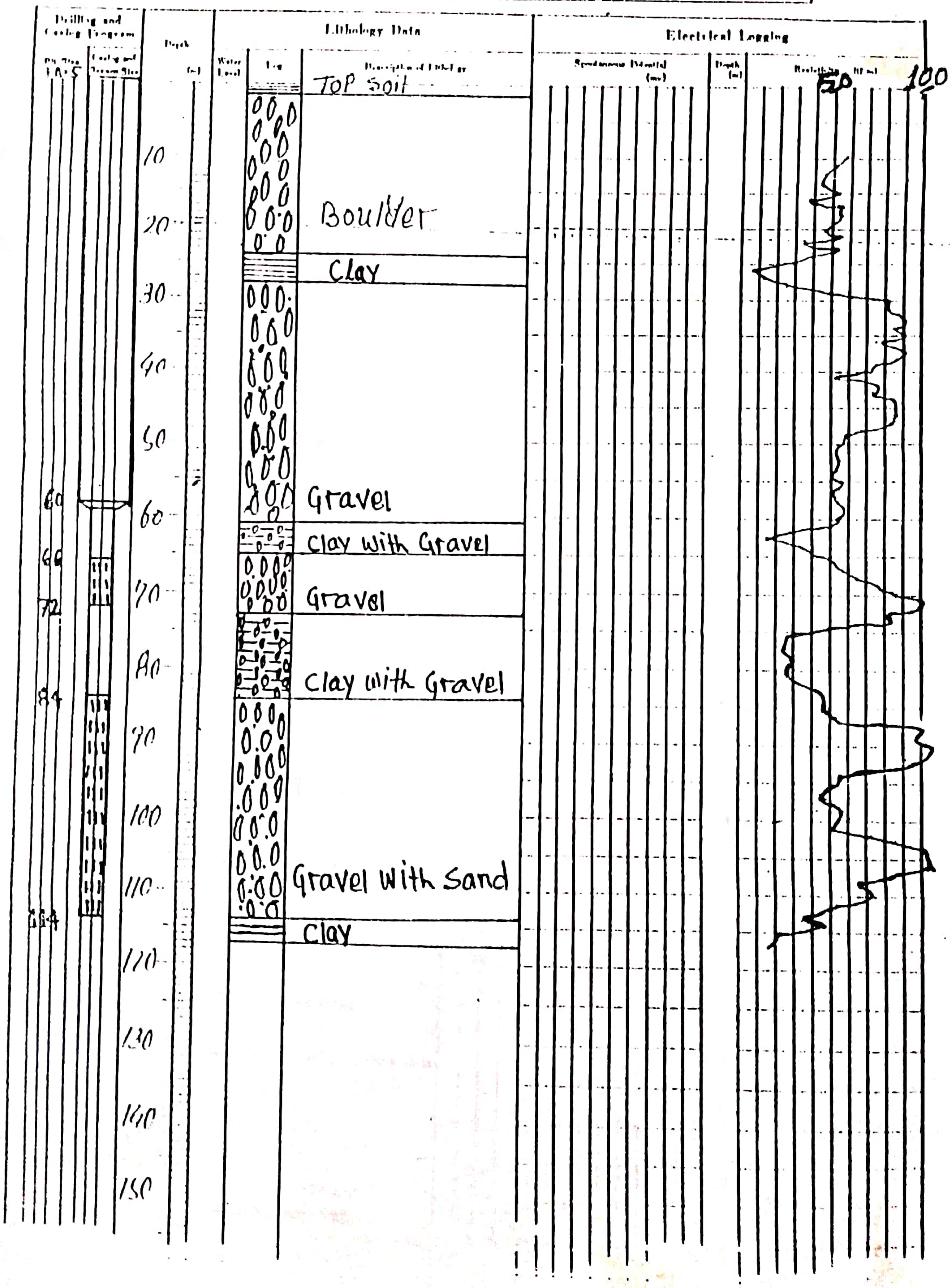
Agriculture Development Project, Janakpur, Mahottary

WELL LOG

Data No.

PROJECT NAME	Agri. dev. Project	WELL NO.	
AREA AND LOCATION	Pasupatinagar-4 Mahotari		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	114·5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2052-5-20	DRILLED BY	R·B·K·C
WELL COMPLETED	2052-6-25	LOGGED BY	Ran Bdr. K.C

STATIC WATER LEVEL	34·0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	39·0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1800 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

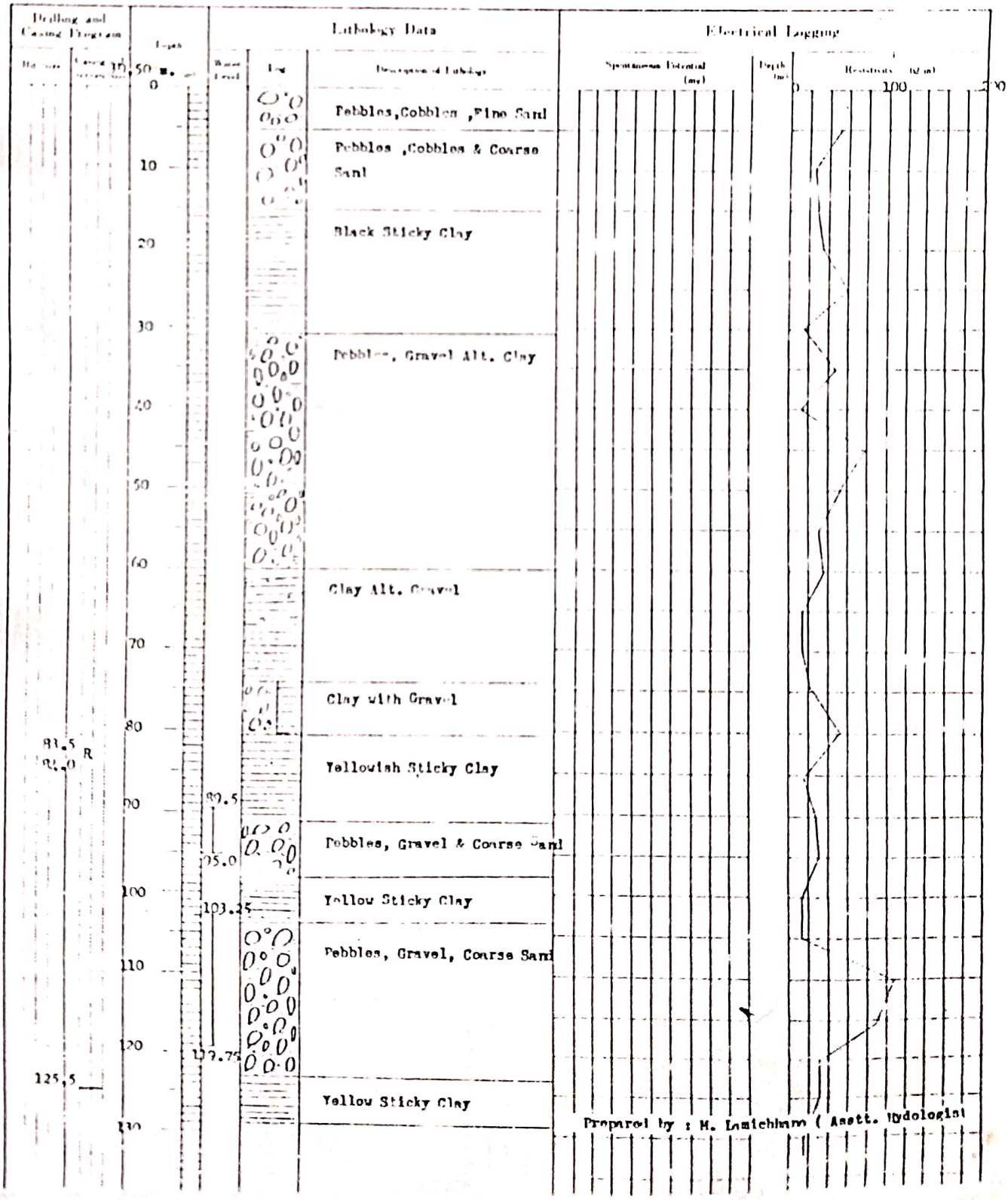


WELL LOG

Well Name: P-19

PROJECT NAME J.I.C.A.	Size: 14"/8"
AREA AND LOCATION PUSPALPUR, Puspalpur Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 125.50 m	DRILLING RIG TRD-500
DRILLING STARTED	DRILLED BY Mr. Sulesh Ram
WELL COMPLETED Apr., 1976	LOGGED BY Mr. M. Lamichhane

STATIC WATER LEVEL -45.0 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL -60.0 m	CONDUCTIVITY μmho/cm
PUMPING RATE 600.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d m	TOTAL HARDNESS

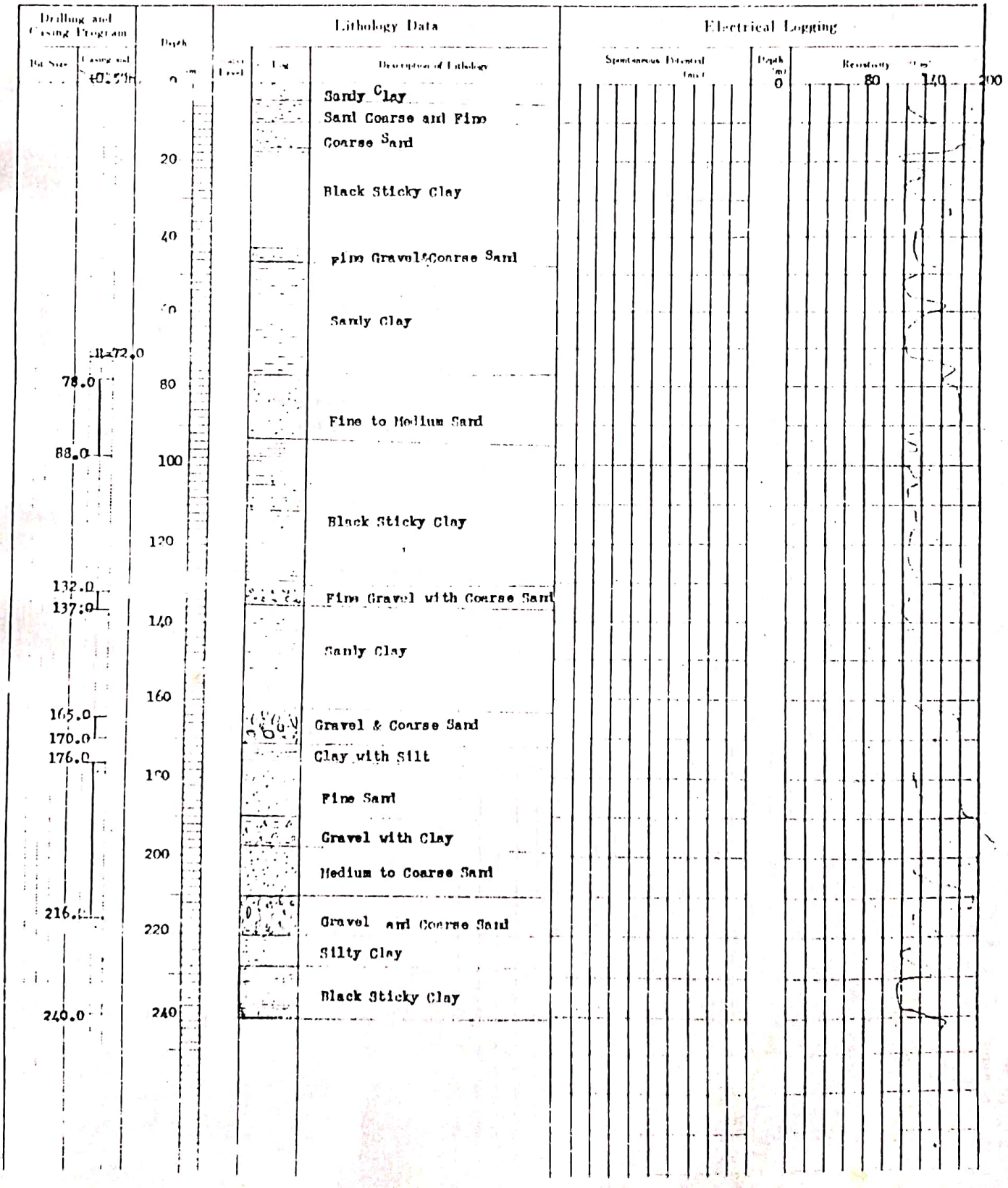


WELL LOG

Well No: B-30

PROJECT NAME	JICA Team: T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	PARKAULI, Mahottari-District, Janakpur-Zone		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	240.0 m	DRILLING RIG	YHD 501 R
DRILLING STARTED		DRILLED BY	G.Joshi
WELL COMPLETED	Jan., 1987	LOGGED BY	O.Nagata.

STATIC WATER LEVEL	-0.3 m	WATER TEMPERATURE	C
DYNAMIC WATER LEVEL	-60.0 m	CONDUCTIVITY	μU/cm
PUMPING RATE	300.0 / min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

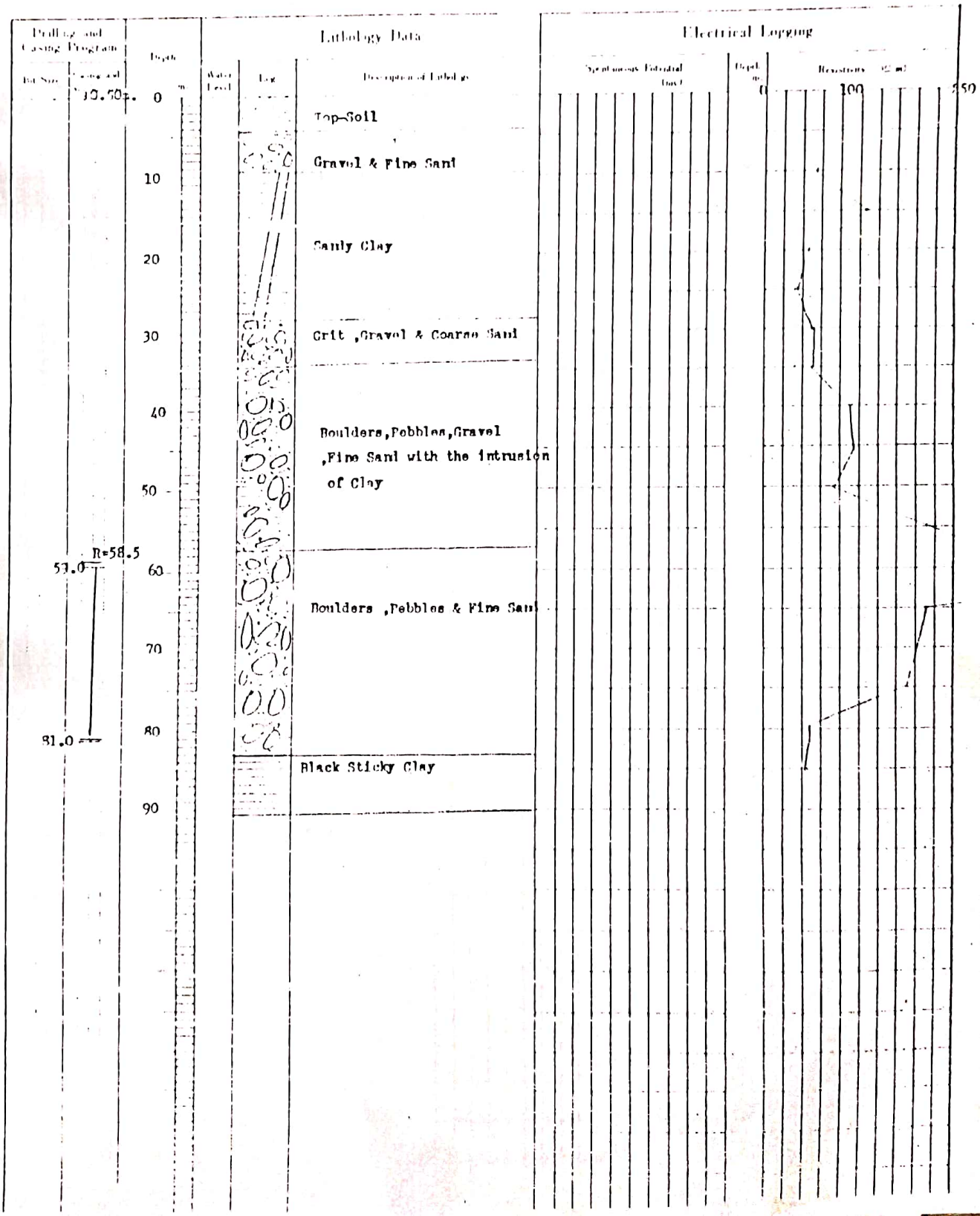


WELL LOG

Well Paper P-32

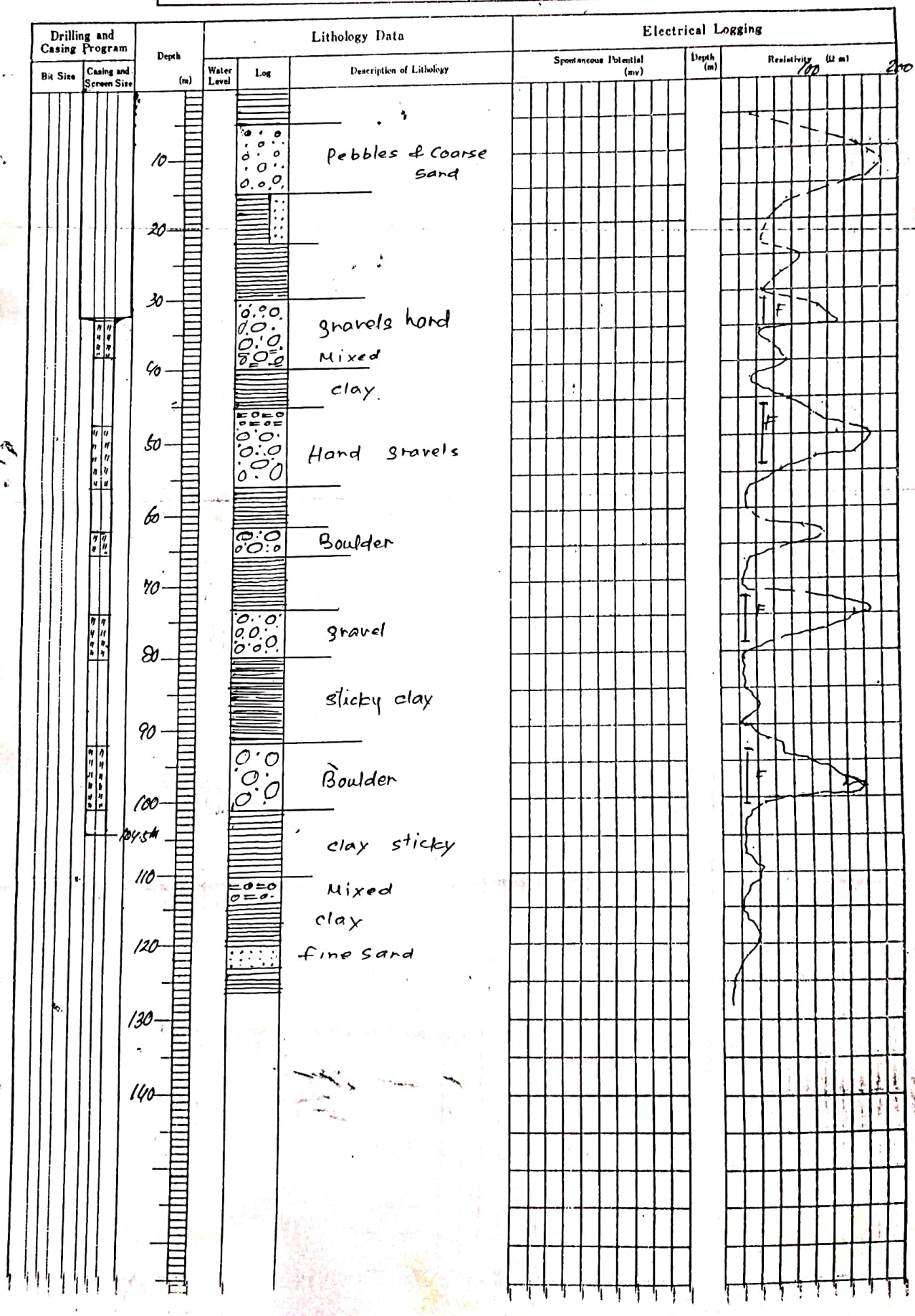
PROJECT NAME T.I.A.F.S.P.	Size: 14"/8"
AREA AND LOCATION PAIAR, Sarlahi-District, Janakpur-Zone.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 81.0 m	DRILLING RIG YRD 501 R
DRILLING STARTED	DRILLED BY D.N.Sen.
WELL COMPLETED Apr.,1977	LOGGED BY P.Mukhiya

STATIC WATER LEVEL -33.0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -53.0 m	CONDUCTIVITY $\mu mho/cm$
PUMPING RATE / min / m³/d	pH
SPECIFIC CAPACITY 1200.0 m³/d/m	TOTAL HARDNESS



PROJECT NAME	Agri Dev Project JNK	WELL NO.	4
AREA AND LOCATION	PARARIYA - 4		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH - 130 M	(104.50) m	DRILLING RIG	YRD 500 JA 214
DRILLING STARTED		DRILLED BY	S. JHA, RAJIA
WELL COMPLETED		LOGGED BY	S. JHA,

STATIC WATER LEVEL	- 6 M m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	- 21 M m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	2400 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

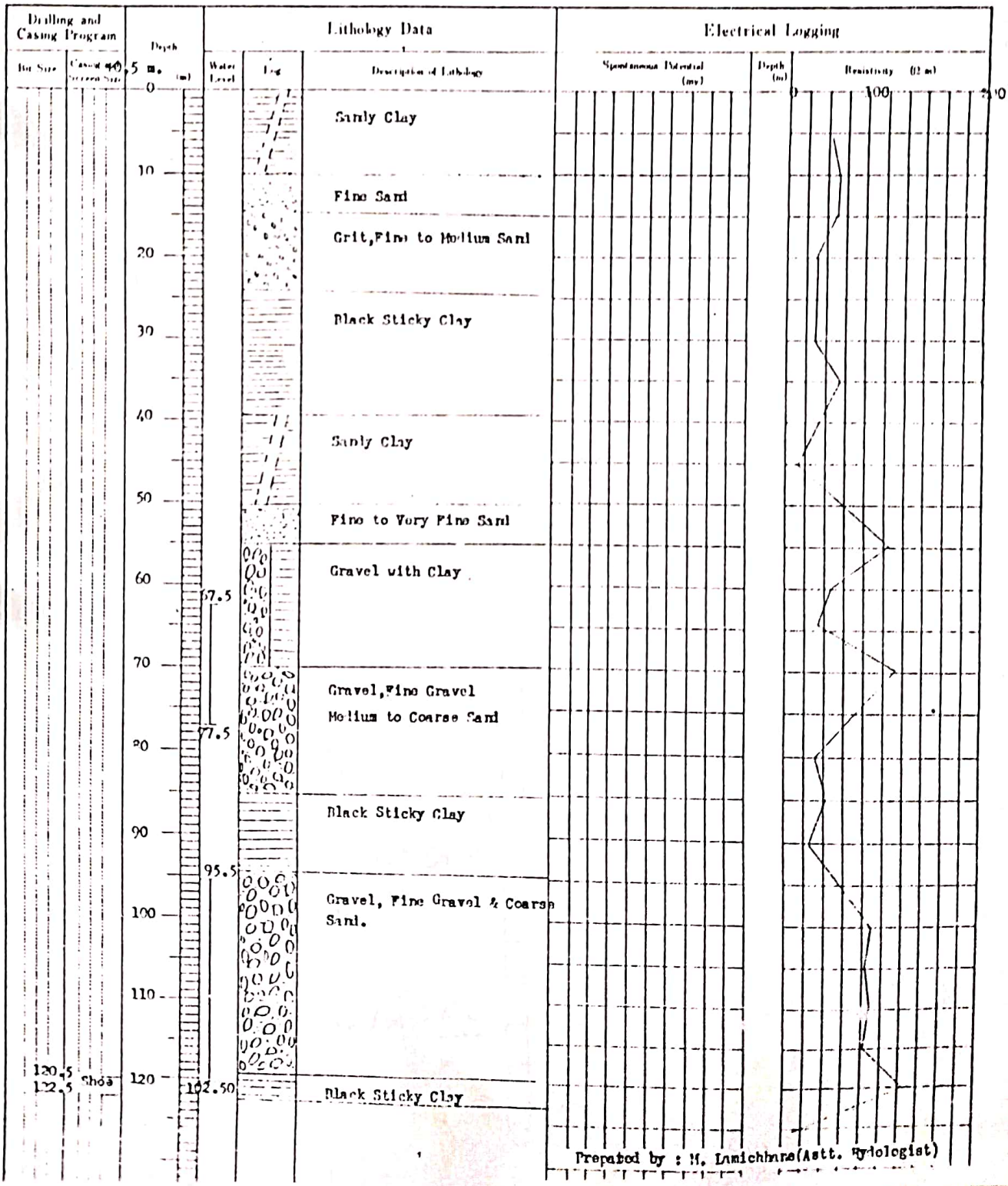


WELL LOG

Well Number J- 25

PROJECT NAME	J.A.D.P.	Size: 8"/6"	
AREA AND LOCATION	PARTANIPUR AGRICULTURE CENTRE, Bara-District, Bhrayani-Zone		
ELEVATION	m	LATITUDE / LONGITUDE	
TOTAL DEPTH	122.50 m	DRILLING RIG	TOP-150 (Tractor Mounted)
DRILLING STARTED		DRILLED BY	Mr. Ram Bdr. K.C.
WELL COMPLETED	July,1976	LOGGED BY	Mr. P. Bhkhiya

STATIC WATER LEVEL	-7.000 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	1800,0 //min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d.m	TOTAL HARDNESS	



Prepared by : M. Lamichhane (Astt. Hydrologist)

WELL LOG

Well No: J-33

PROJECT NAME	D.D.P... [illegible]	WELL NO.	
AREA AND LOCATION	Pasulati [illegible]		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH 212	Meter ~~feet~~	DRILLING RIG	
DRILLING STARTED		DRILLED BY	[illegible]
WELL COMPLETED		LOGGED BY	P. MUEHM[illegible]

STATIC WATER LEVEL	feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	feet	CONDUCTIVITY	µ℧/cm
Estimated PUMPING RATE 600	l/min (~~m³/d~~)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Well Assembly 095-12-15 Logging test.

Drilling and Casing Program: Bit Size	Casing and Screen Size	Meter Depth (feet)	Water Level	Log	Description of Lithology
	8	10			Medium to Coarse Sand and gravel
17½		20			
		30			
		40			
		50			Sand fine to medium
		60			Fine Sand
		70			
		80			Clay Block
		90			
		100			
		110			
		120			Sticky clay
		130			
		140			
		150			
		160			Silty clay
165		170			Coarse Sand
		180			Rich gravel and clay
		190			Sand and pebbles
	Screen Size	200			Gravel and Sand
		210			Sticky clay
210		220			

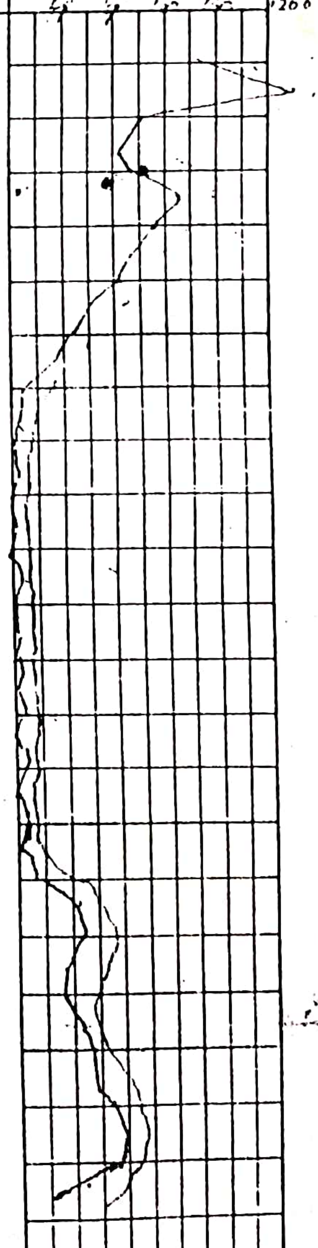
Screen Position

165 m to 210 m

= 45 m

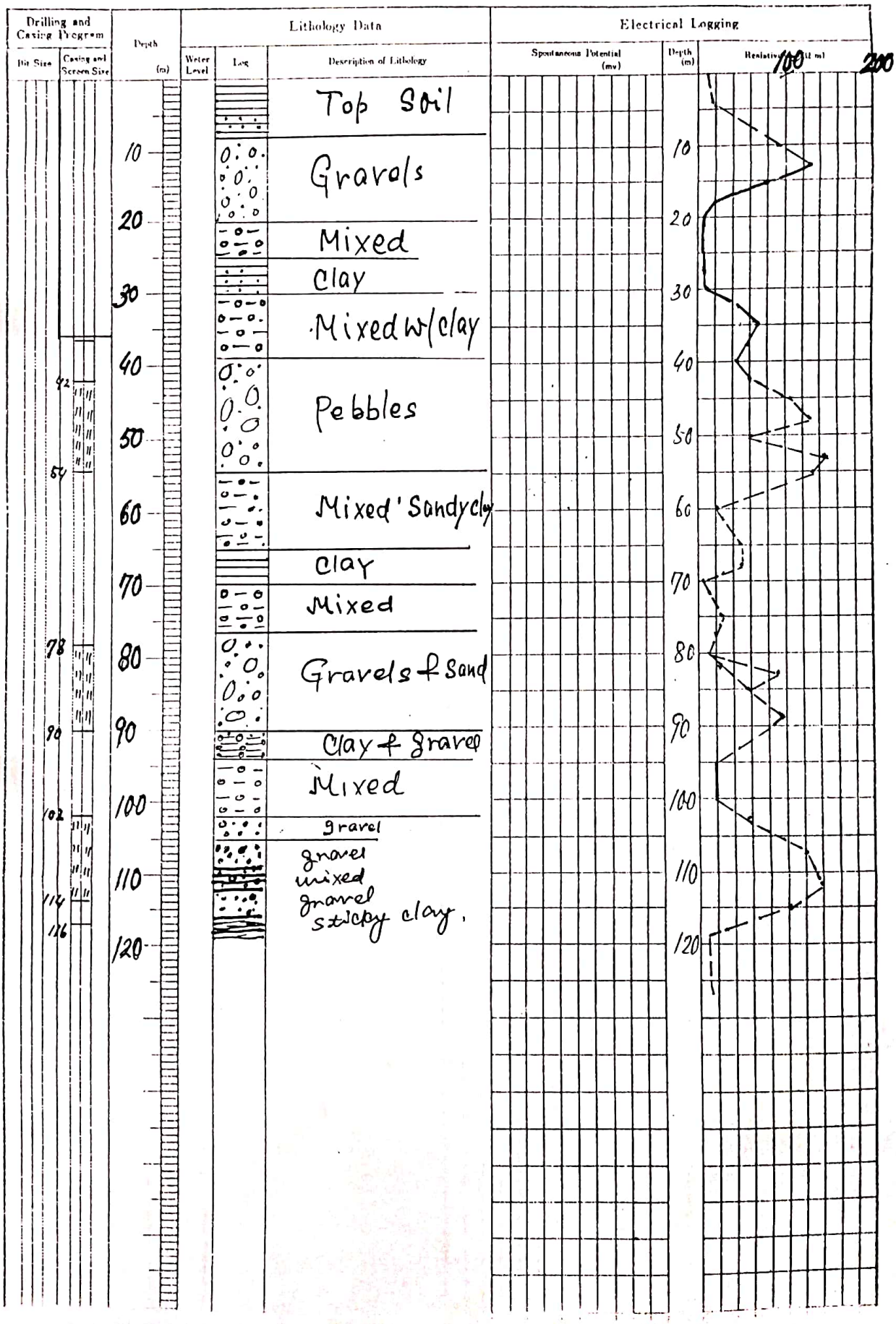
Electrical Logging

Spontaneous Potential (mv) | Depth (m) | Resistivity (Ωm)



PROJECT NAME	Agri. Dev. Project	WELL NO.	3 (054/55)
AREA AND LOCATION	Pirorboni . VDC Pakaria		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	116.50M m	DRILLING RIG	YRD500 . J-A214
DRILLING STARTED	2052/8/10	DRILLED BY	Rajlal & Jitendra
WELL COMPLETED	2052/9/10	LOGGED BY	S. JHA.

STATIC WATER LEVEL	13.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	27.0"A" m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	1800 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

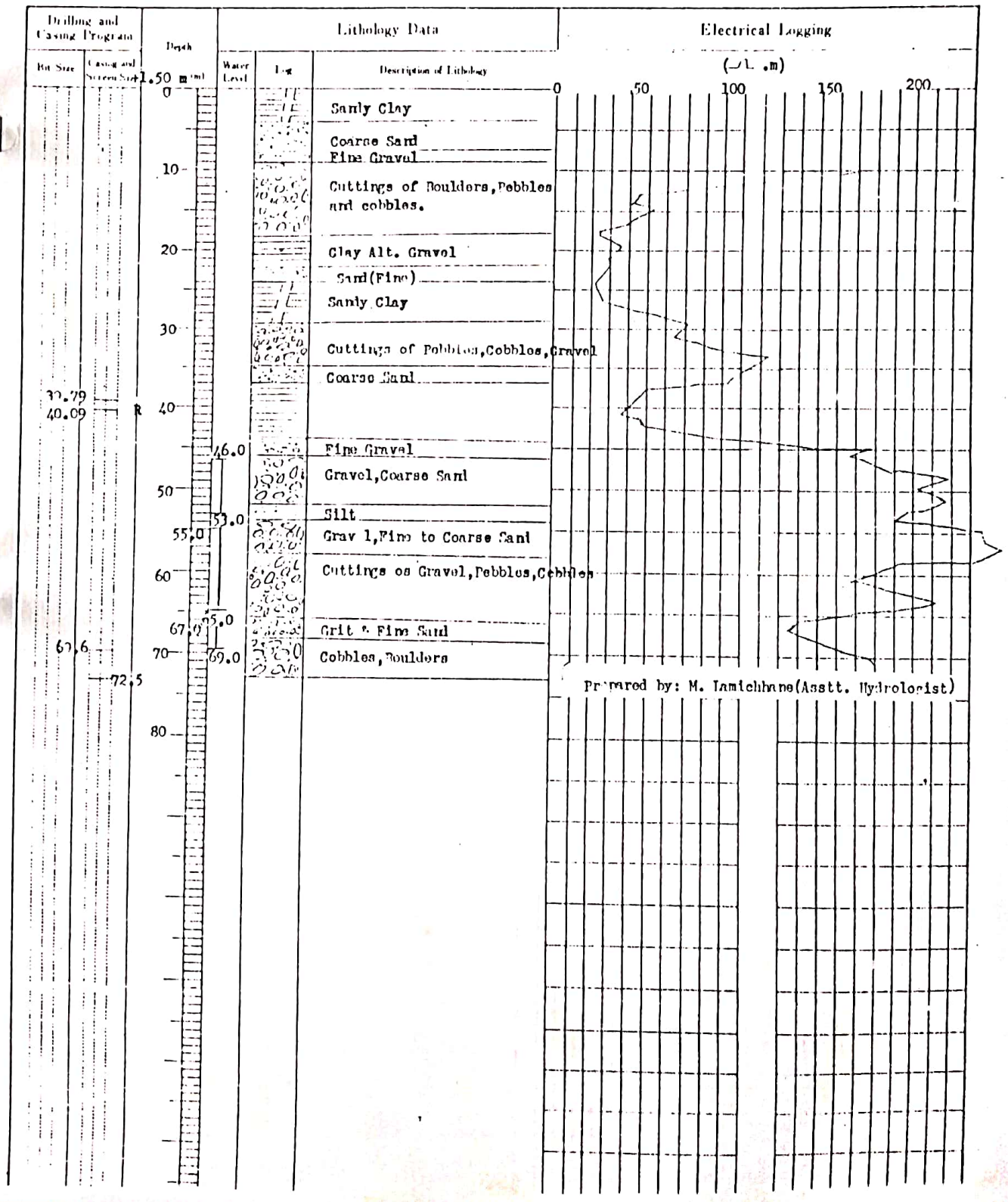


Well No. J-22

WELL LOG

PROJECT NAME	J.A.D.P.		Size: 12"/8"
AREA AND LOCATION	NATIONAL OIL SEED PROGRAMME, KAMALPUR, Sabarkantha-District.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	72.50 m	DRILLING RIG	TM4.72"AH
DRILLING STARTED	27 Aug.,1979	DRILLED BY	Mr. S. Lamichhane & Mr. P. Mukhiya
WELL COMPLETED	22 Sept.,1979	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-21.300 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-37.500 m	CONDUCTIVITY	µmho/cm
PUMPING RATE	2700.0 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

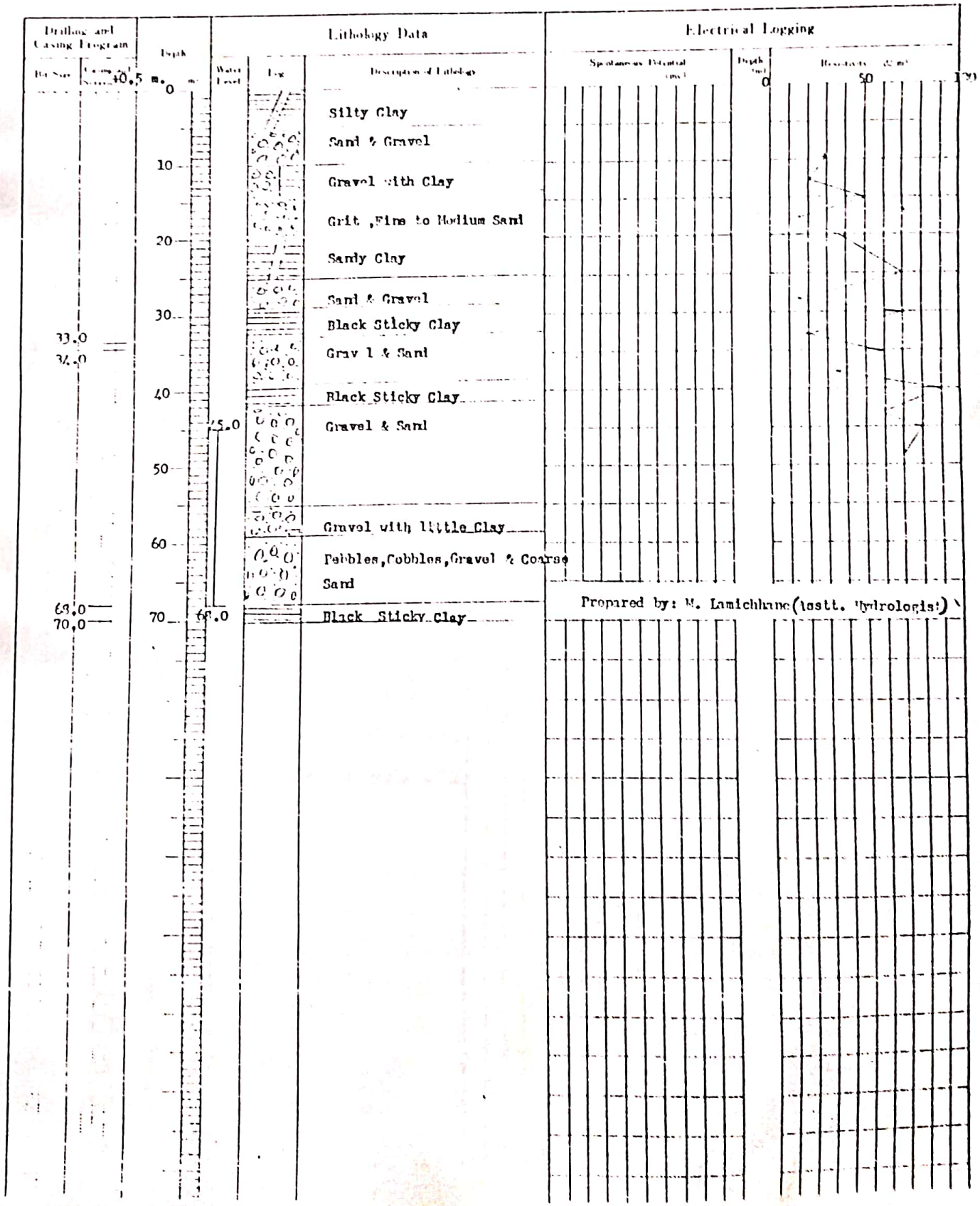


Well Name: J-21

WELL LOG

PROJECT NAME J.I.D.P	Size: 12"/8"
AREA AND LOCATION KAWALPUR HORTICULTURE FARM, Sarlahi-District.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 70.0 m	DRILLING RIG TFM 72"A"
DRILLING STARTED	DRILLED BY Mr. S. Lamichhane & Mr. D.N. Sah
WELL COMPLETED Dec., 1991	LOGGED BY Mr. S. Lamichhane

STATIC WATER LEVEL -22.0 m	WATER TEMPERATURE t
DYNAMIC WATER LEVEL -33.0 m	CONDUCTIVITY μS/cm
PUMPING RATE 900.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



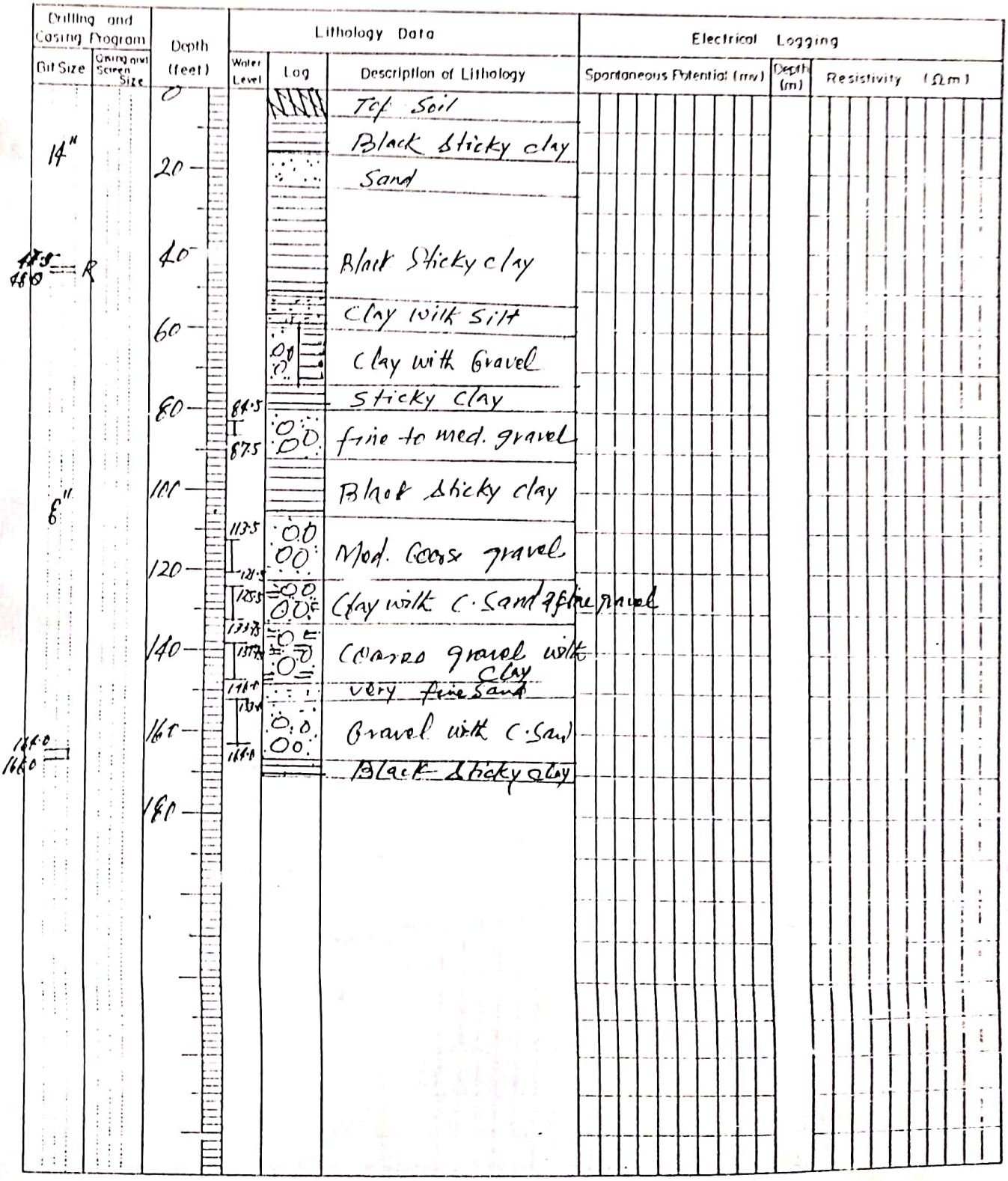
WELL LOG

N-48

PROJECT NAME	TIATSP	WELL NO	
AREA AND LOCATION	Nagarayan, Dhanusha - District.		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	166 C feet	DRILLING RIG	TRD-500
DRILLING STARTED		DRILLED BY	N. Mukhiya
WELL COMPLETED	Mar, 1988	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	+1.5 feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	−20.0 feet	CONDUCTIVITY	µS/cm
PUMPING RATE	55.0 l/min (gpm, m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Artesian Dis = 15 C/Sec

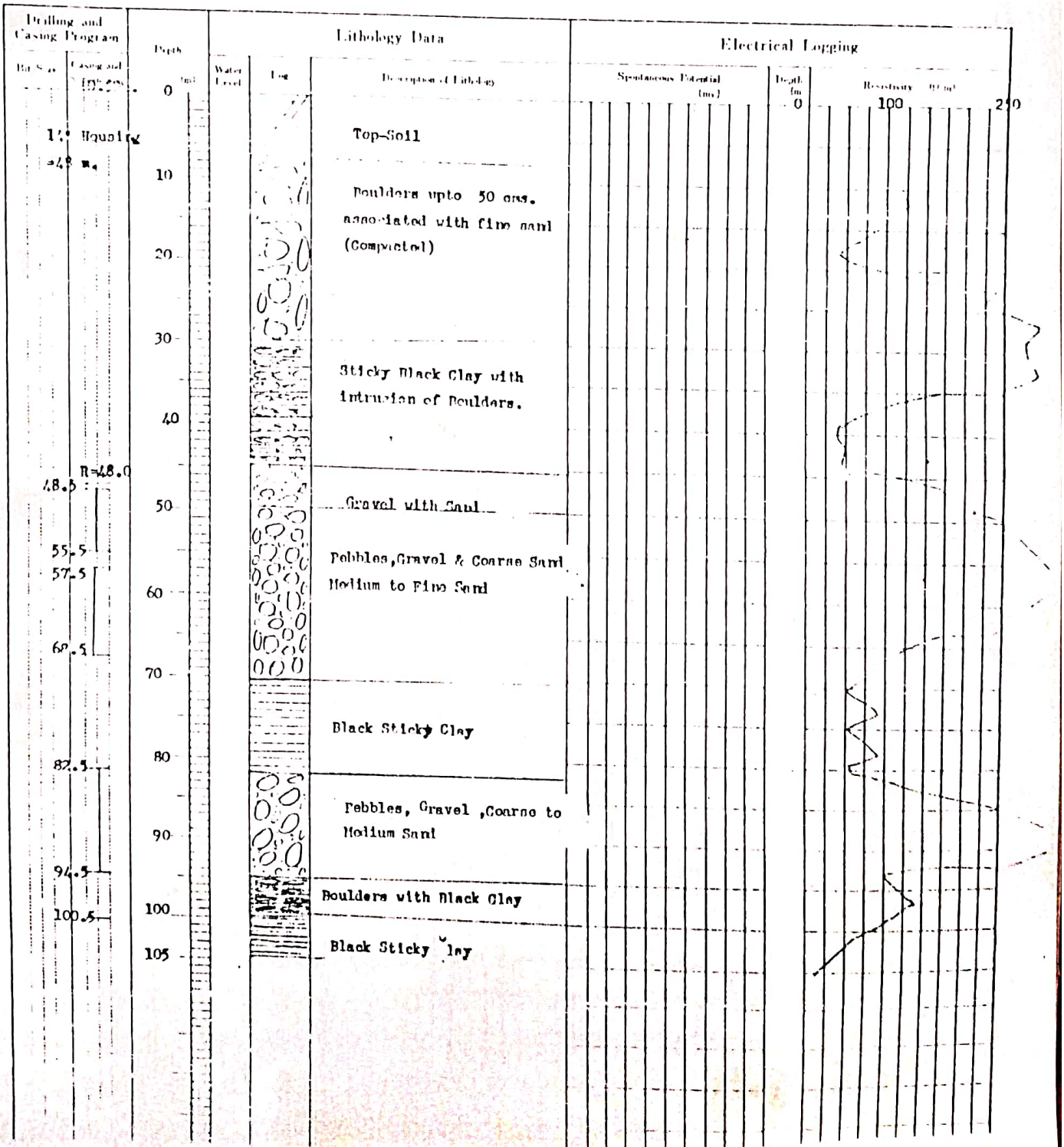


WELL LOG

Well Name: N-44

PROJECT NAME: TIATSP	Size: 14"/8"
AREA AND LOCATION: BAWALPUR, Horticulture Centre	
ELEVATION: m	LATITUDE / LONGITUDE
TOTAL DEPTH: 100.5 m	DRILLING RIG: TRD-500
DRILLING STARTED	DRILLED BY: N. Mukhiya
WELL COMPLETED: Mar.,1987	LOGGED BY: N. Mukhiya

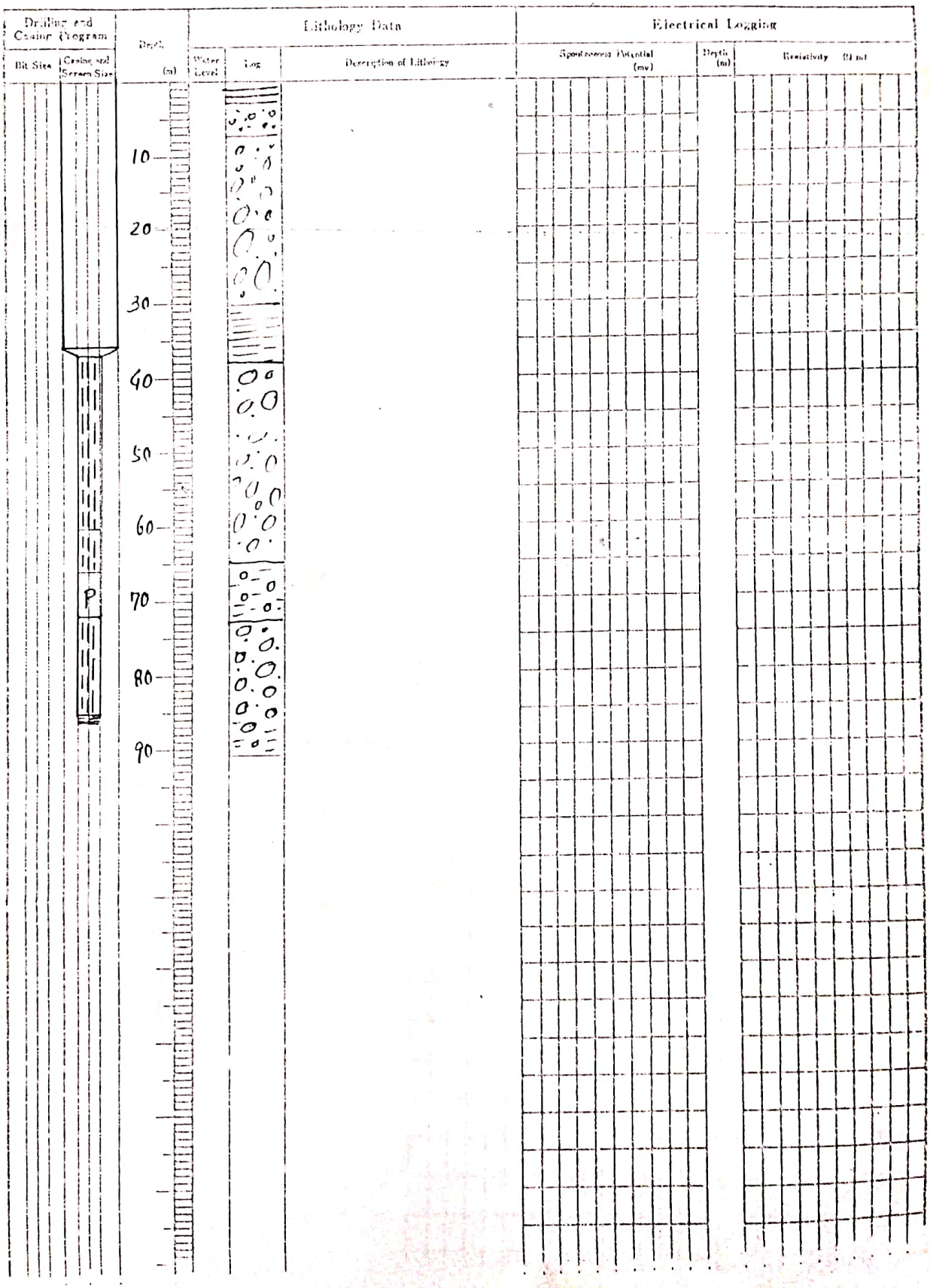
STATIC WATER LEVEL: - 21.0 m	WATER TEMPERATURE: (
DYNAMIC WATER LEVEL: -31.0 m	CONDUCTIVITY: µS/cm
PUMPING RATE: 2400.0 l/min (m³/d)	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS



WELL LOG

PROJECT NAME	Agri. Dev. Project, Janakpur	WELL NO.	3
AREA AND LOCATION	Jaymangla, P.V.D.S- 9 CHITWAN		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	84.15 m	DRILLING RIG	YRD 500
DRILLING STARTED	2051-8-15	DRILLED BY	S. JHA
WELL COMPLETED	2051-9-20	LOGGED BY	S. JHA

STATIC WATER LEVEL	13 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	28 m	CONDUCTIVITY	μS/cm
PUMPING RATE	2400 l/min (m³/Hr)	pH	
SPECIFIC CAPACITY	m³/Hr/m	TOTAL HARDNESS	

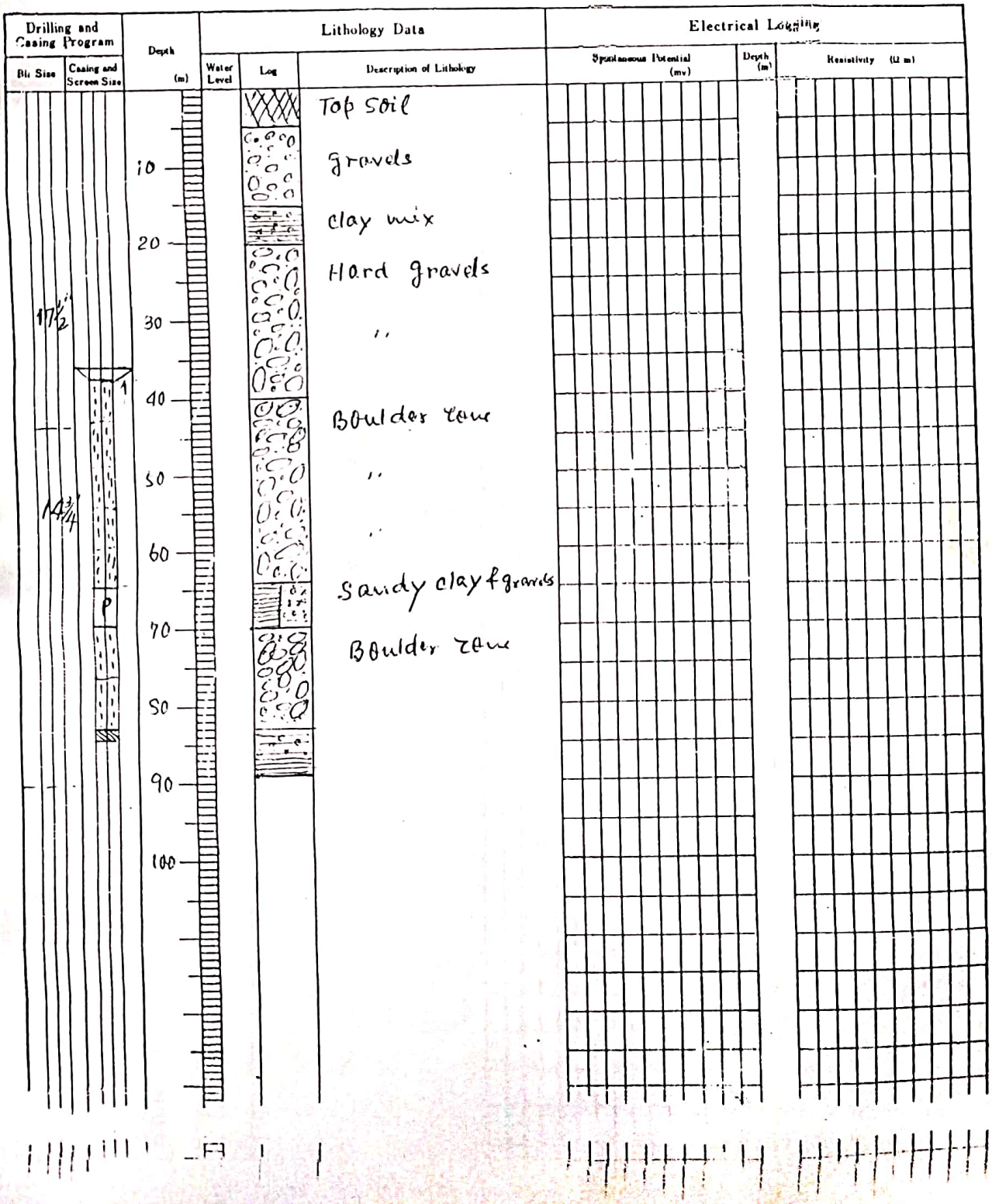


Data No. _____

WELL LOG

PROJECT NAME	Agri. Dev. Project, Jawak	WELL NO.	- 2
AREA AND LOCATION	Jaymangla- 9, Panch Kanya V.K. Chitwan		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	85.90 M m	DRILLING RIG	XRD 500
DRILLING STARTED	2050/9/23	DRILLED BY	S. JHA
WELL COMPLETED	2050/10/30	LOGGED BY	S. JHA

STATIC WATER LEVEL	10 m m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	33 m m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	2400 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



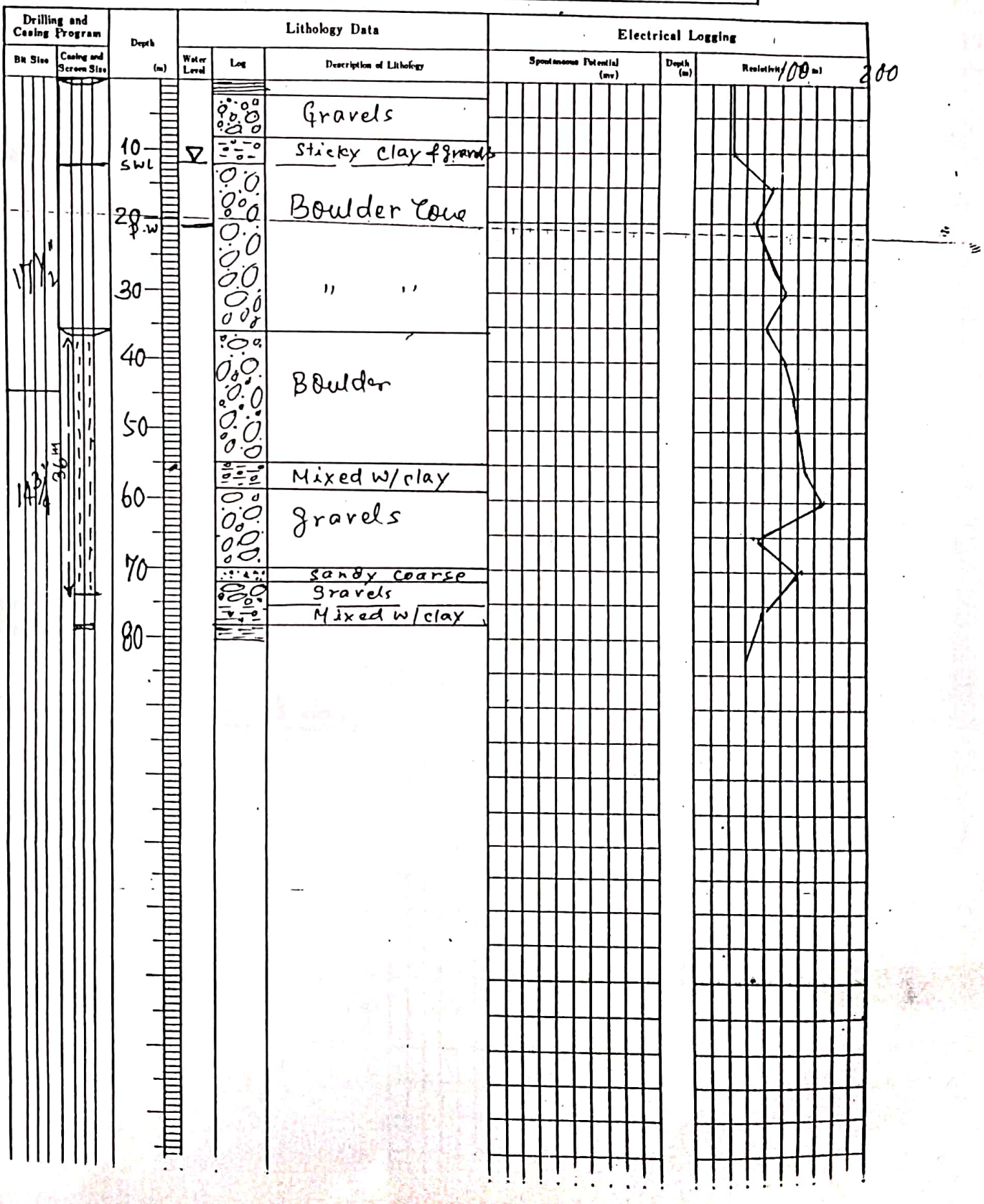
Agriculture Development Project, Janakpur Nakalahij

WELL LOG

Data No.

PROJECT NAME	Agri. Dev. Project, Janakpur	WELL NO.	5
AREA AND LOCATION	Panch Kanya V.D.S - 7 Jirauha		
ELEVATION	m	LATITUDE / LONGITUDE	
TOTAL DEPTH	98 m	DRILLING RIG	
DRILLING STARTED	2051-2-01	DRILLED BY	S. JHA
WELL COMPLETED	2051-3-05	LOGGED BY	S. JHA

STATIC WATER LEVEL	12.00 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	21.00 m	CONDUCTIVITY	µʊ/cm
PUMPING RATE	2400 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



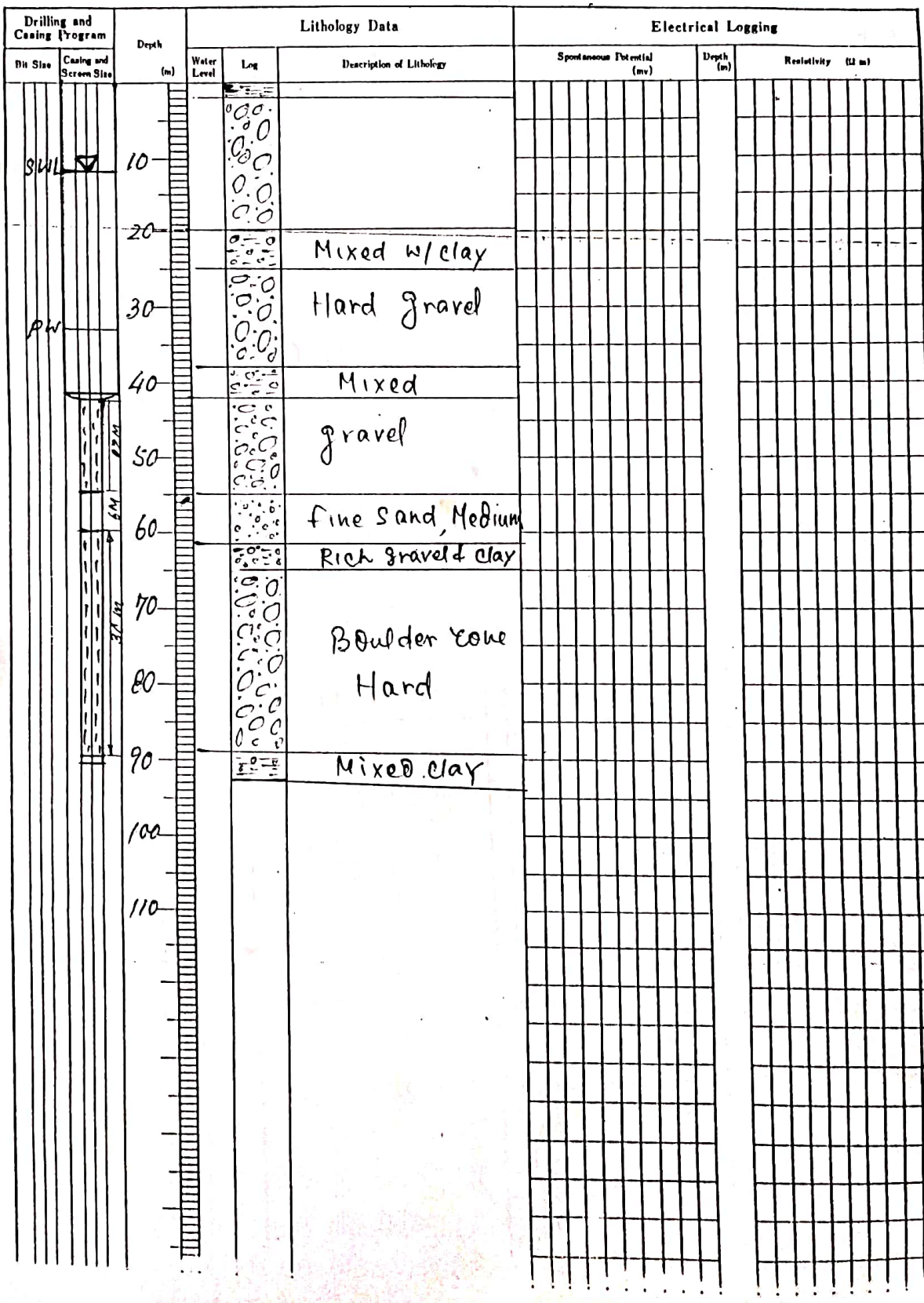
Agriculture Development Project, Janakpur Nakhasij

Data No.

WELL LOG

PROJECT NAME	Agri. Dev. Proj.	WELL NO.	3
AREA AND LOCATION	Chitwan, Madhavpur (RB)		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	92.00 M m	DRILLING RIG	YRD 500
DRILLING STARTED	2050/11/05	DRILLED BY	S. JHA
WELL COMPLETED	2050/12/25	LOGGED BY	S. JHA

STATIC WATER LEVEL	12 M m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	33 M m	CONDUCTIVITY	μʊ/cm
PUMPING RATE	2100 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



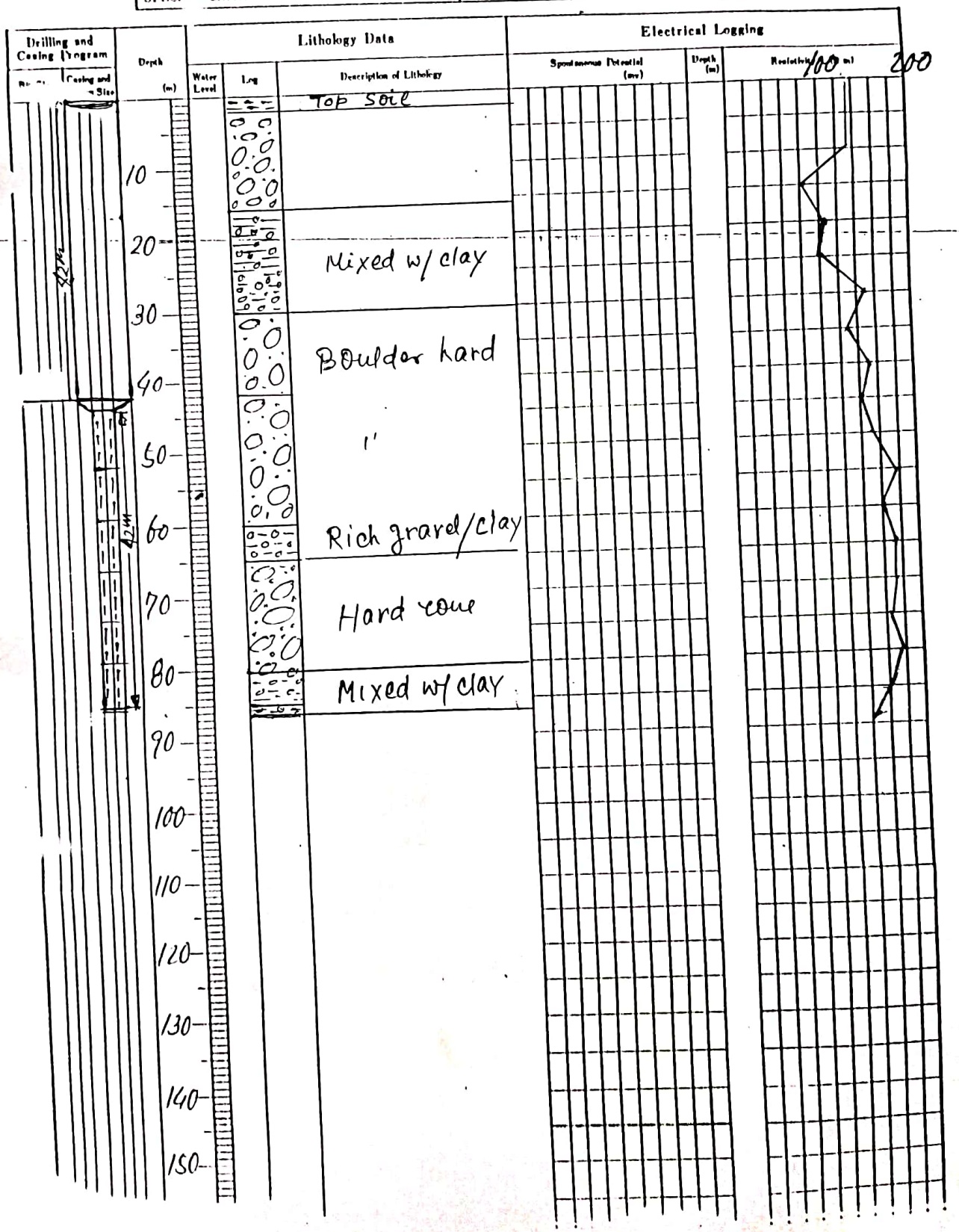
Agriculture ...velopment Project, Janakpur, Nepal

Data No.

WELL LOG

PROJECT NAME	Agri. dev. Project.	WELL NO.	6
AREA AND LOCATION	Champur - 8 Chitwan		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	86 m, m	DRILLING RIG	YRD 500
DRILLING STARTED	2051- 3-	DRILLED BY	S. JHA
WELL COMPLETED	2051- 4-	LOGGED BY	S. JHA.

STATIC WATER LEVEL	m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	90 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Well No J-31

[illegible Devanagari heading] J-31

Depth	Geo-log	Lithology
		Top Soil (Sand)
		Fine Sand
10		Clay with Boulders and Coarse Sand
20, 30		yellowish Sticky clay
40		Gravel + Boulder with yellow clay
50		yellowish clay
60		yellow clay with Gravel + Boulders
70		Boulders with Rich clay
80, 90		Boulder, Pebbles, fine Sand with little clay
100		Sandy clay
		Gravel with Boulders & fine Sand
		113.57 meter

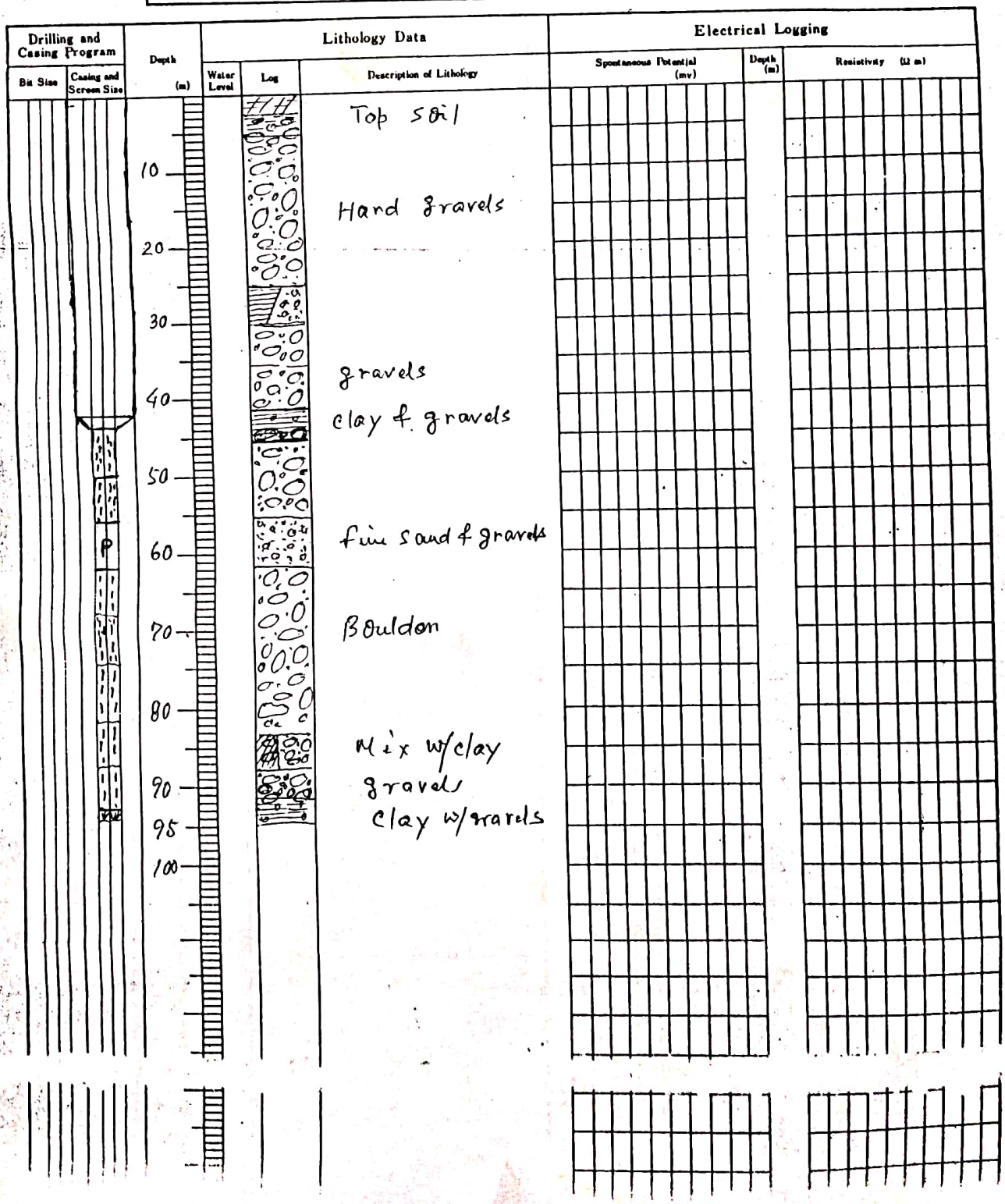
[illegible signature]

Data No. _____

WELL LOG

PROJECT NAME	Agriculture dev. Project, Jay	WELL NO.	3
AREA AND LOCATION	Chitwan (P. Kanya, V.D-4)		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	92 m	DRILLING RIG	YRD 500, J.A 214
DRILLING STARTED	2050/11/4	DRILLED BY	Satyendra Jha
WELL COMPLETED	2050/12/18	LOGGED BY	Satyendra Jha

STATIC WATER LEVEL	12 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μʊ/cm
PUMPING RATE	2100 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Agriculture Development Project, Janakpur, Mahottari

WELL LOG

Data No. ______

PROJECT NAME	Agri development Project	WELL NO.	
AREA AND LOCATION	Shamsingpur, Banke		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	192 m	DRILLING RIG	D '501'
DRILLING	2050-3-27	DRILLED BY	R.L. K.C.
WELL COMPLETED	2050-[illegible]-28	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μʊ/cm
PUMPING RATE	l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program (Bit Size, Casing and Screen Size)	Depth (m)	Water Level	Log	Description of Lithology
				Clay
	20			
				Coarse sand
	40			
	60			Stickey Black Clay
	80			Coarse sand w/ clay
	100			
	120			Black stickey clay
	140			
	160			
	180			
	200			

Electrical Logging

Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω m) 50 10

WELL LOG

Data No
N-55

PROJECT NAME TIATSP	WELL NO
AREA AND LOCATION Sakarawa, Makothari - District	
ELEVATION feet	LATITUDE LONGITUDE
TOTAL DEPTH 210.0 m feet	DRILLING RIG N. Mukhiya
DRILLING STARTED	DRILLED BY TRD-500
WELL COMPLETED May, 1988	LOGGED BY M. Lamichhane

STATIC WATER LEVEL +0.5 feet	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL −14.0 feet	CONDUCTIVITY μU/cm
PUMPING RATE 45.0 l/min gpm m³/d	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

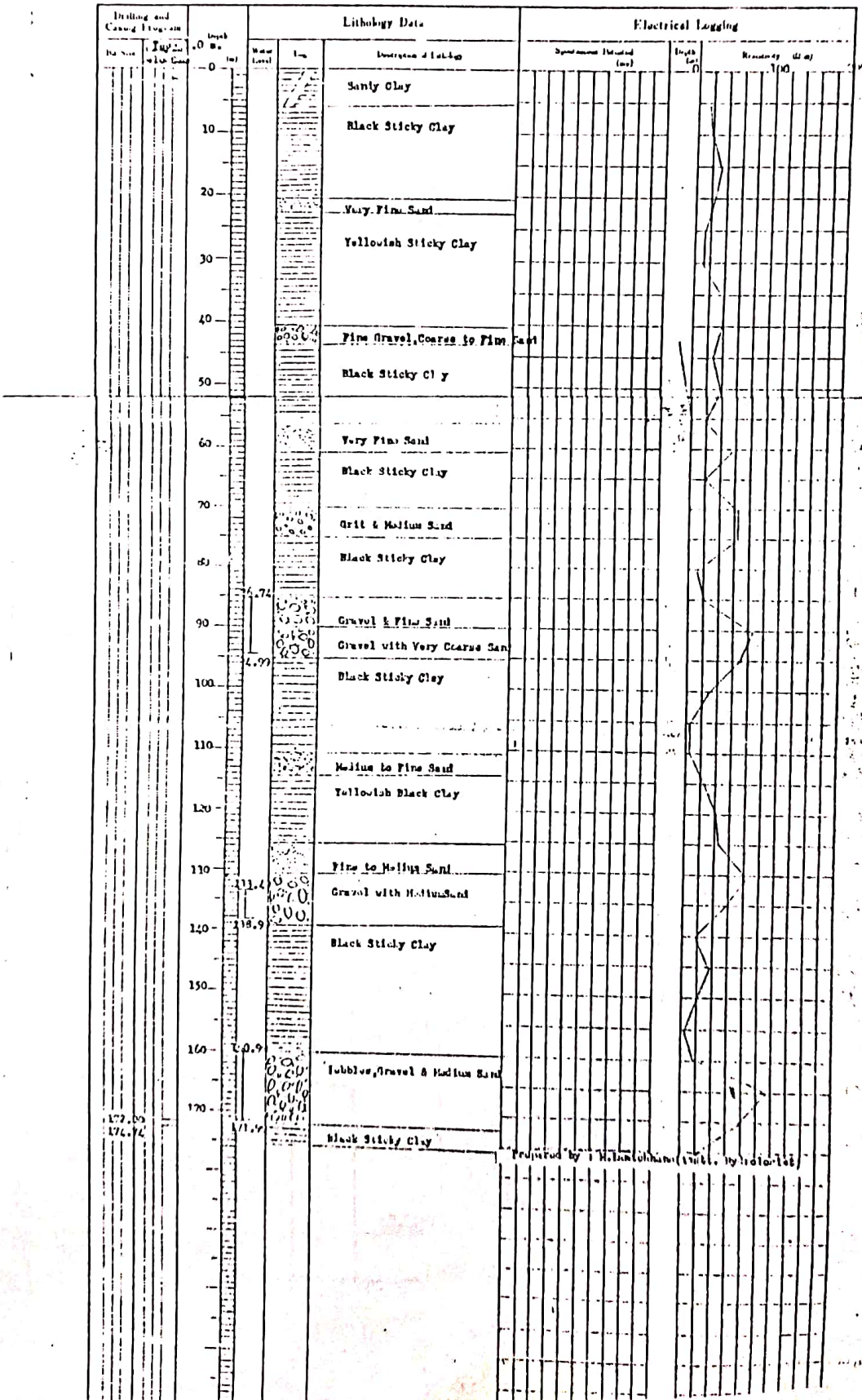
Drilling and Casing Program		Depth (feet)	Lithology Data			Electrical Logging		
Bit Size	Casing and Screen Size		Water Level	Log	Description of Lithology	Spontaneous Potential (mv)	Depth (m)	Resistivity (Ω.m)
		0			Top-soil			
		20			Bl. Sticky Clay			
		40						
57.5 = R					Clay with gravel			
52.0		60	62.5					
			65.5		Gravel C. to med. + C. sand			
		80	85.0		Black sticky clay			
					Sand + gravel			
			90.5					
		100			Clay with Sand + gravel			
		120	124.5		Sand, med. + fine gravel			
			132.5					
		140			Yellowish Black Sticky clay			
			156.5					
		160			Sand + gravel			
			162.0		Black Sticky clay			
		180	180.0					
					Fine to med. gravel C. Sand			
			196.5		Black Sticky Clay			
		200	202.5		C. Sand, f. gravel			
210 m			208.0		Clay			
		220						

Well Name: J-24

WELL LOG

PROJECT NAME J.S.D.P.	Size: 4"/4"
AREA AND LOCATION JARIKI TAMPLE, Jamkpur-Dhan	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 174.74 m	DRILLING RIG TOP-150(Tractor Mounted)
DRILLING STARTED	DRILLED BY Mr. Ram Bih, K.G.
WELL COMPLETED May.1976	LOGGED BY Mr. P. Mukhiya

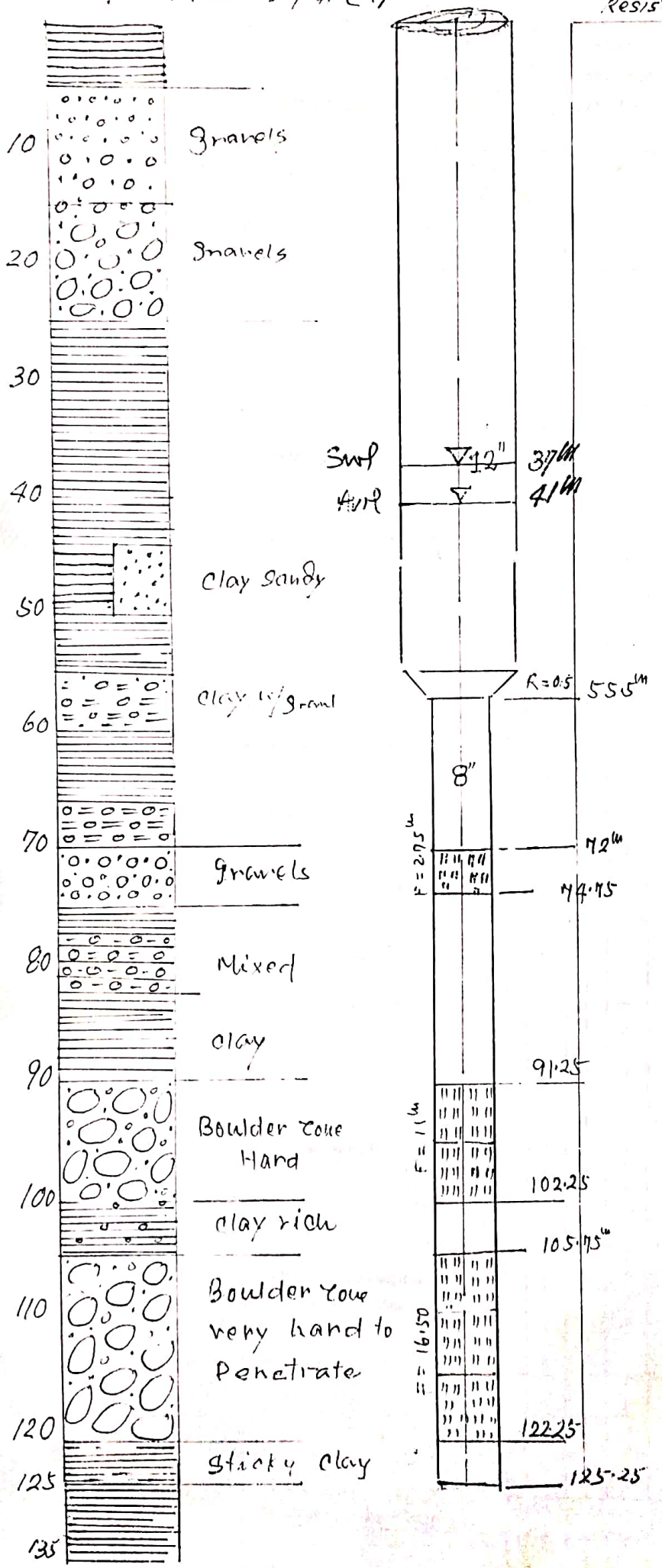
STATIC WATER LEVEL +1.000 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL-5.600 m	CONDUCTIVITY μmho/cm
PUMPING RATE 1500.0 l/min (m³/d)	pH
SPECIFIC CAPACITY Artesian- 5.0 l/Sec. m³/d/m	TOTAL HARDNESS



Total Depth - : 125.25m (135m)
Start & End - : 05/3/15 - 4/15
SWL / AWL : — - 37/41 (A)

Location — HARIHARPUR
Well - 10 , F.Y 053/54
"Resistivity" 90" 180 210

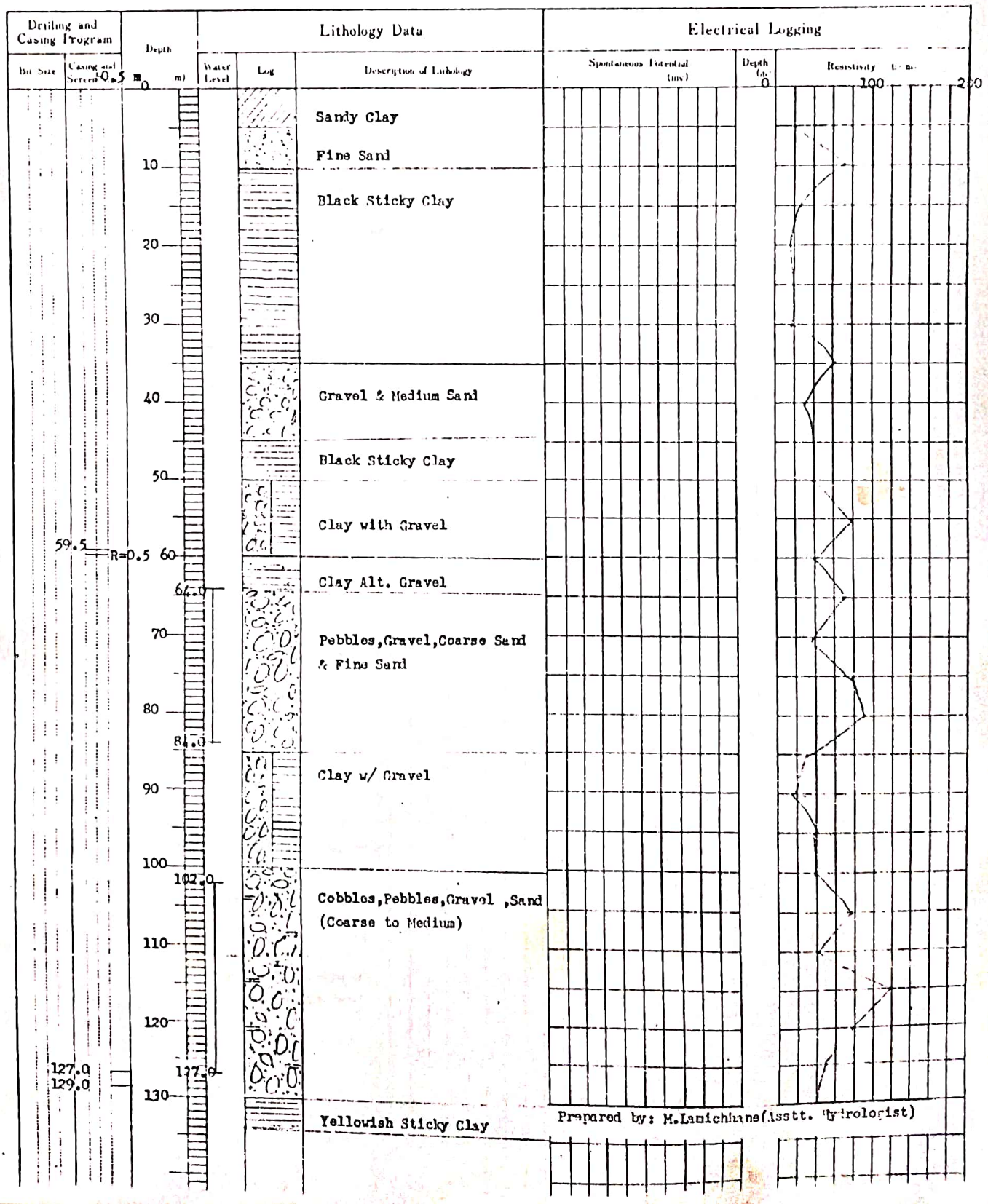
D/s — 30 c/s



Size:14"/8"

PROJECT NAME J.A.D.P.	
AREA AND LOCATION UMAPREMPUR-3, Umaprempur Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 129.0 m	DRILLING RIG TRD-500
DRILLING STARTED	DRILLED BY Mr. Sudesh Rana
WELL COMPLETED Apr.,1986	LOGGED BY Mr. M. Lamichhane

STATIC WATER LEVEL -33.0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µʊ/cm
PUMPING RATE 2400.0 ℓ/min (m^3/d)	pH
SPECIFIC CAPACITY $m^3/d/m$	TOTAL HARDNESS



PROJECT NAME J.A.D.P.	Size: 14"/8"
AREA AND LOCATION UMARKHUR-2, Umarpemour Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 124.75 m	DRILLING RIG YRD 501"R"
DRILLING STARTED	DRILLED BY Mr. Sudesh Ram
WELL COMPLETED Apr., 1986	LOGGED BY Mr. M. Ramchhane

STATIC WATER LEVEL -40.0 m	WATER TEMPERATURE
DYNAMIC WATER LEVEL m	CONDUCTIVITY
PUMPING RATE 600.0 (mm (m³ /d)	pH
SPECIFIC CAPACITY m³ /d /m	TOTAL HARDNESS

Drilling and Casing Program

Depth 0.5 m

Lithology Data

Water Level

Log

Description of Lithology

Sandy Clay

Fine Sand

Yellowish -Black Clay

Gravel, Medium to Fine Sand

Black Sticky Clay

Gravel & Medium Sand

Black Sticky Clay

Gravel Fine to Medium Sand

Yellow Clay

Clay & Gravel

Fine Gravel & Coarse Sand

Pebbles, Gravel & Medium Sand

Clay with gravel

Gravel, Fine to Medium Sand

Clay with Gravel

Boulder, Cobbles, Pebbles
Gravel with Medium Sand

59.5 m
60.0

62.75
82.75
93.75
98.75
109.75
124.75

Electrical Logging

Spontaneous Potential (mV)

Depth

Resistivity (Ω-m)

0

100

200

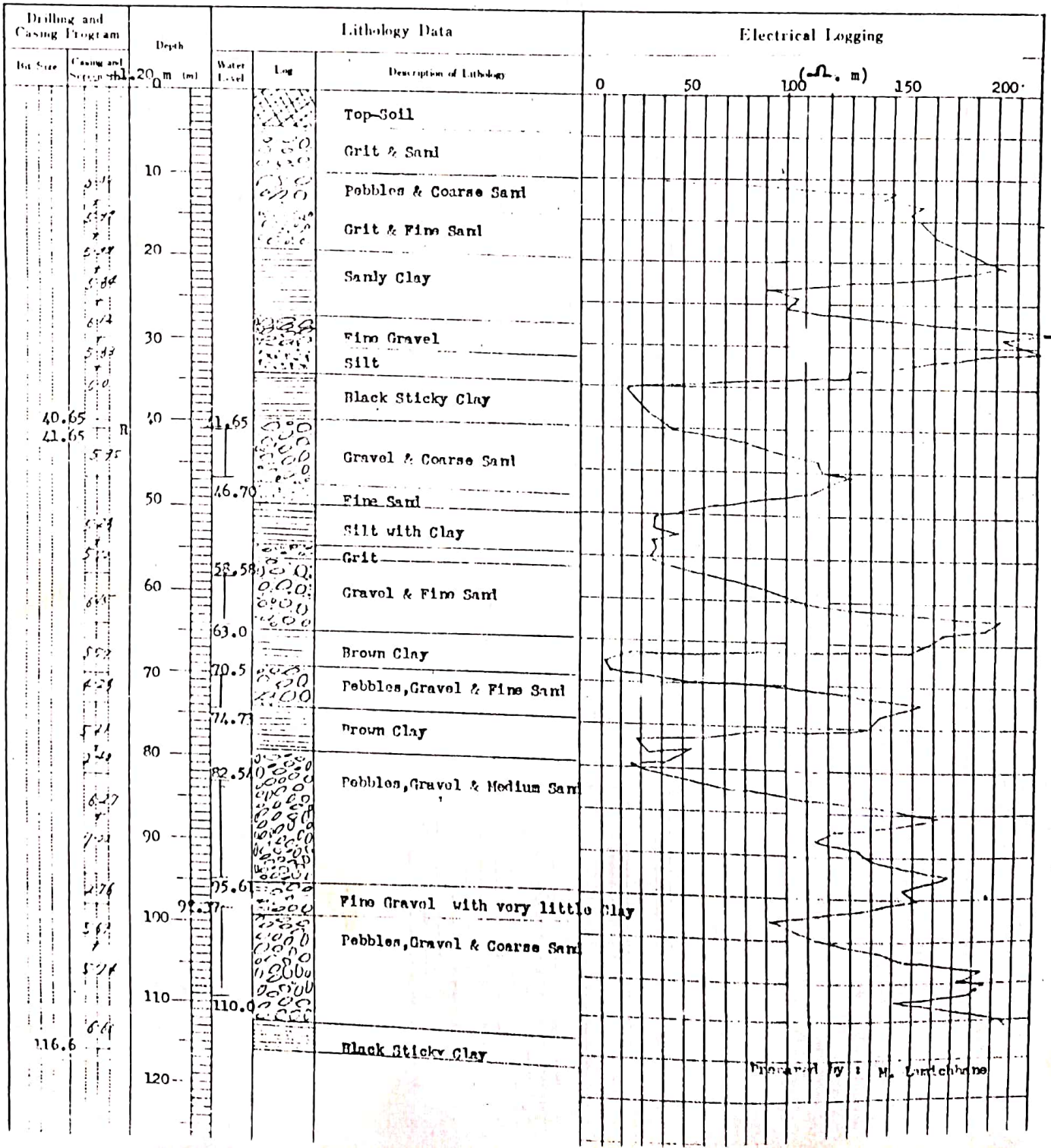
Prepared by : M. Ramchhane(

Well Name:J-3

WELL LOG

PROJECT NAME	J.A.D.P		Size: 12"/8"
AREA AND LOCATION	TOBACCO PROCESSING FACTORY, MAHENDRA-NAGAR, Dahamusha.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	116.0	DRILLING RIG	TEM 72"A"
DRILLING STARTED	21 Mar., 1990	DRILLED BY	Mr. S.Lamichhane & P. mukhiya
WELL COMPLETED	19 Apr., 1990	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-6.000 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-21.000 m	CONDUCTIVITY	µS/cm
PUMPING RATE	1200.0 m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



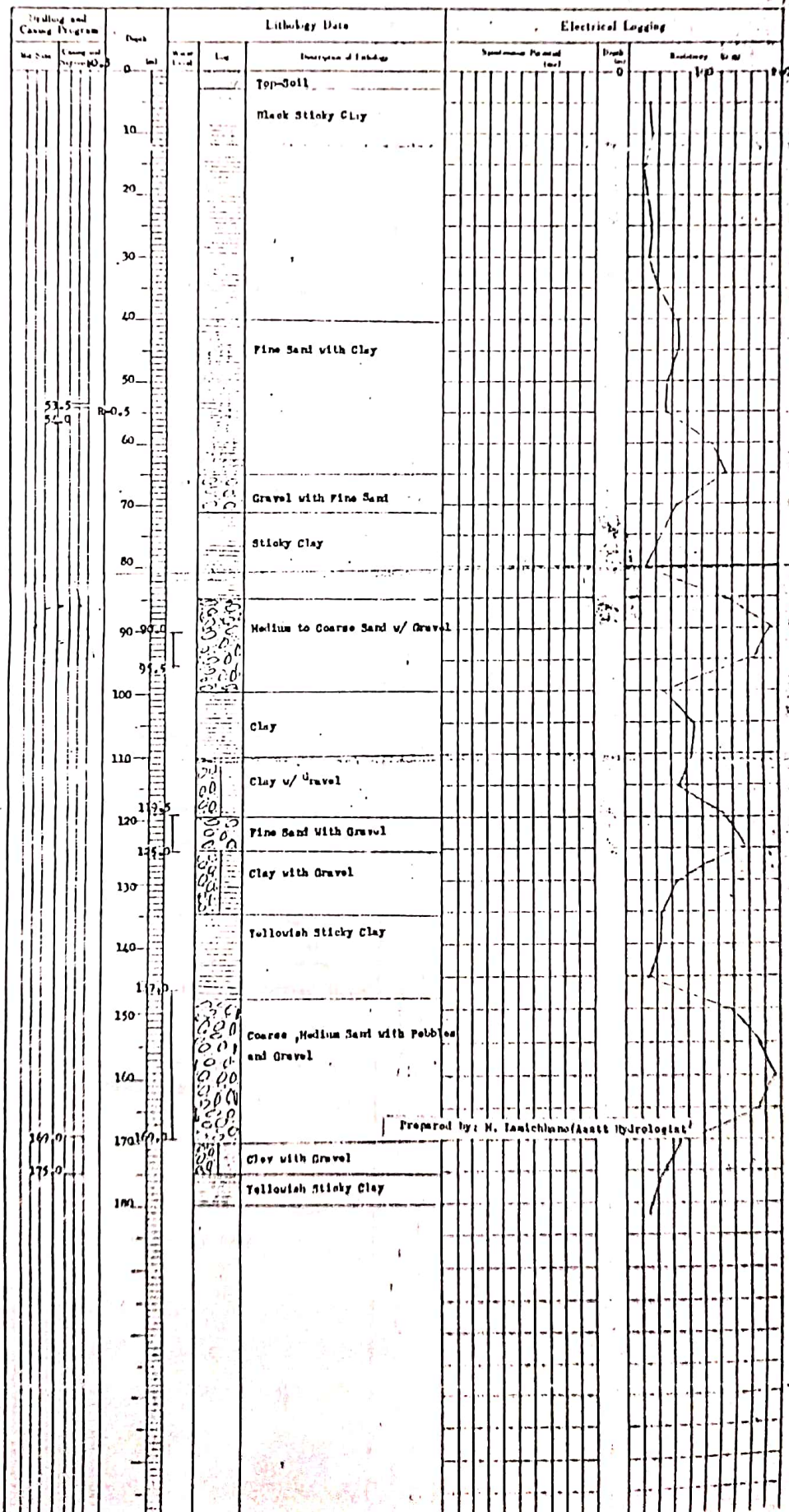
V-A)

PROJECT NAME	J.A.D.P	Size: 14"/8"	
AREA AND LOCATION	SONAPADA, Dessiya Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	175.0 m	DRILLING RIG	TWD-500
DRILLING STARTED		DRILLED BY	Mr. M. Jakhiya
WELL COMPLETED	Mar.,1996	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	+0.5 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µmho/cm
PUMPING RATE	3000.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d.m	TOTAL HARDNESS	

5045

Artesian Discharge= 6.0 Litre/Second.

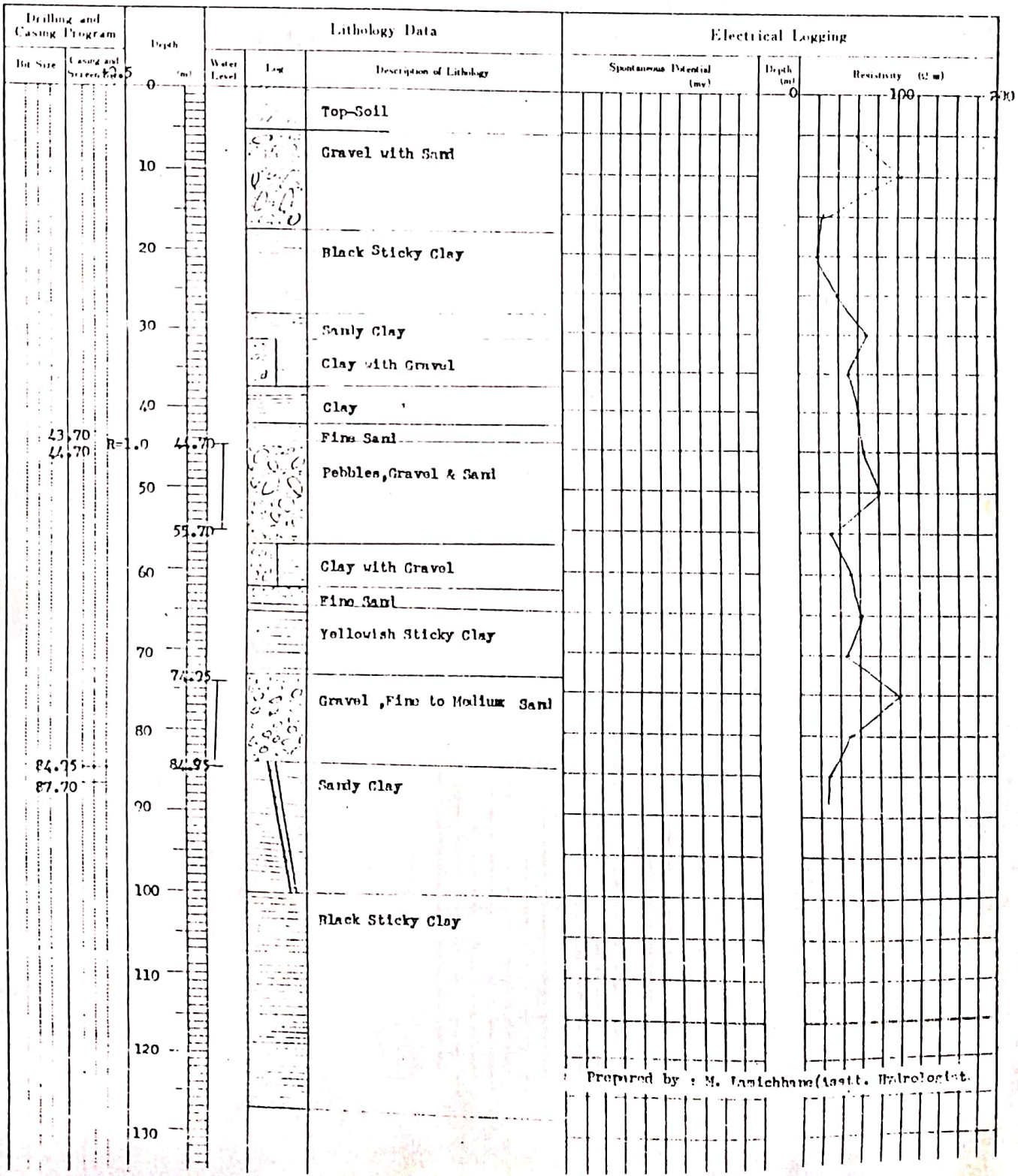


WELL LOG

Well Name : J-27

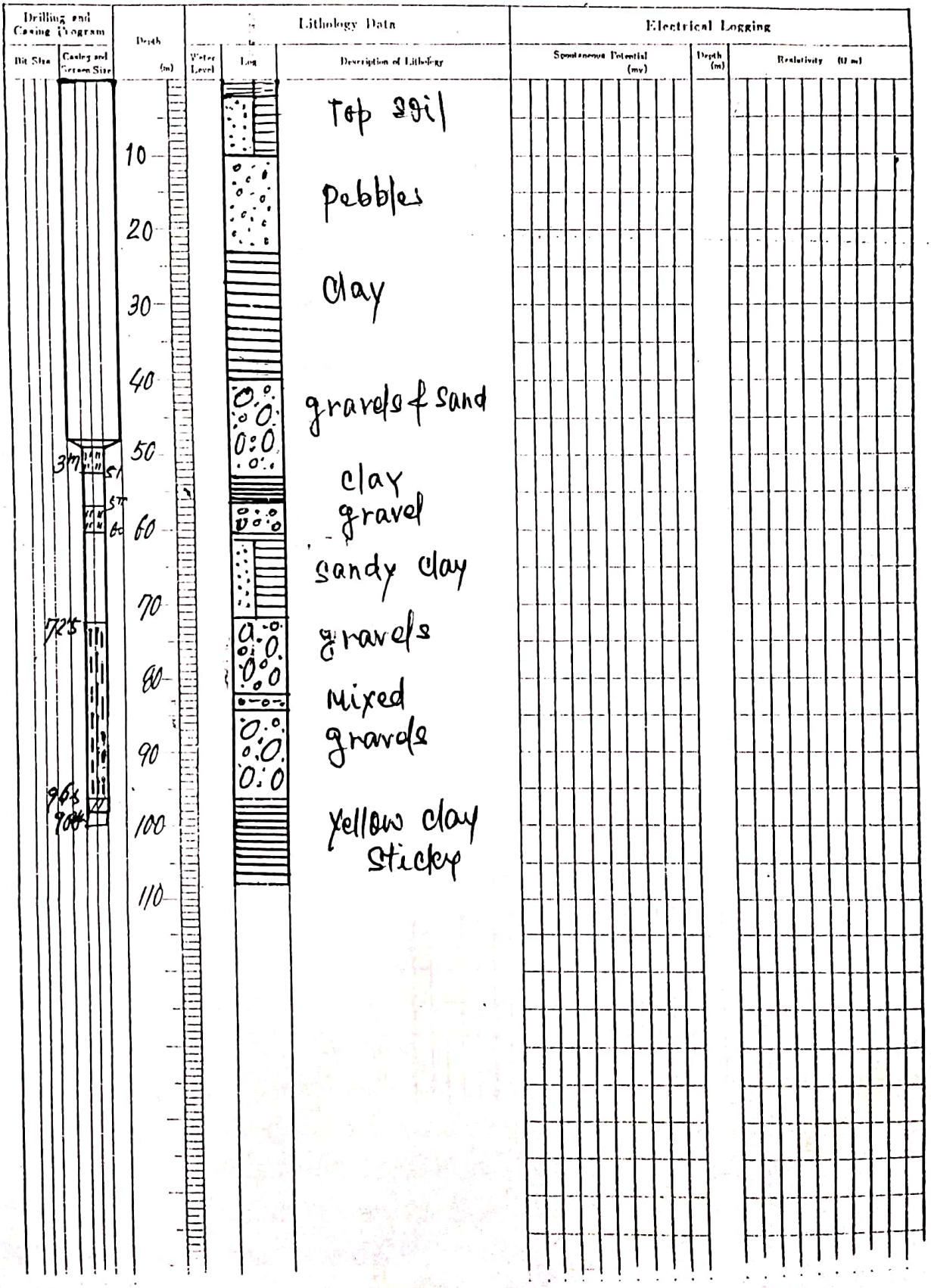
PROJECT NAME	J.I.D.P.	Size: 12"/8"	
AREA AND LOCATION	SIKYAHIHADAN, Sirsahi Bardan Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	87.70 m	DRILLING RIG	TOP 150 (Tractor Mounted)
DRILLING STARTED		DRILLED BY	Mr. G. Gautam
WELL COMPLETED	Apr., 1996	LOGGED BY	Mr. P.Mukhiya

STATIC WATER LEVEL	-1.00 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μS/cm
PUMPING RATE	2400.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



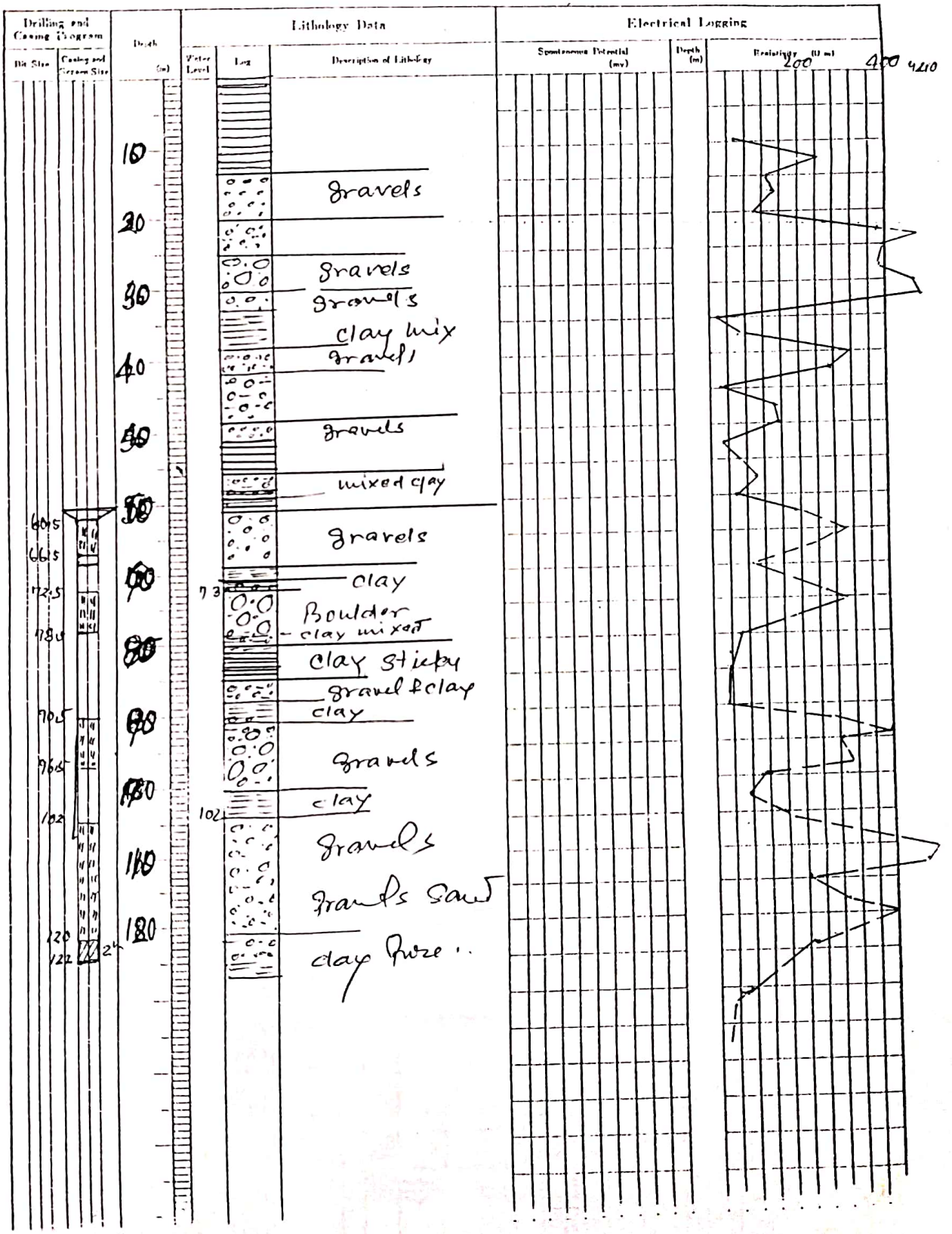
PROJECT NAME	Agri Dev. Project	WELL NO.	5 (051/52
AREA AND LOCATION	SANGRAMPUR, DAILPUR VDC		
ELEVATION	m	LATITUDE / LONGITUDE	
TOTAL DEPTH	100 m	DRILLING RIG	YRD 500 (214)
DRILLING STARTED		DRILLED BY	Jitendra & Rajlal
WELL COMPLETED		LOGGED BY	S. JHA

STATIC WATER LEVEL	26.0M m	WATER TEMPERATURE	
DYNAMIC WATER LEVEL	48.00M m	CONDUCTIVITY	μS/cm
PUMPING RATE	1200 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



PROJECT NAME	Agri Dev. Project, Nakta	WELL NO.	2 (059/54)
AREA AND LOCATION	Bateshwar -		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	122 m	DRILLING RIG	YRD500
DRILLING STARTED	2052/8/5	DRILLED BY	Rajlaxmi Jitendra
WELL COMPLETED	2052/8/1	LOGGED BY	S. JHA.

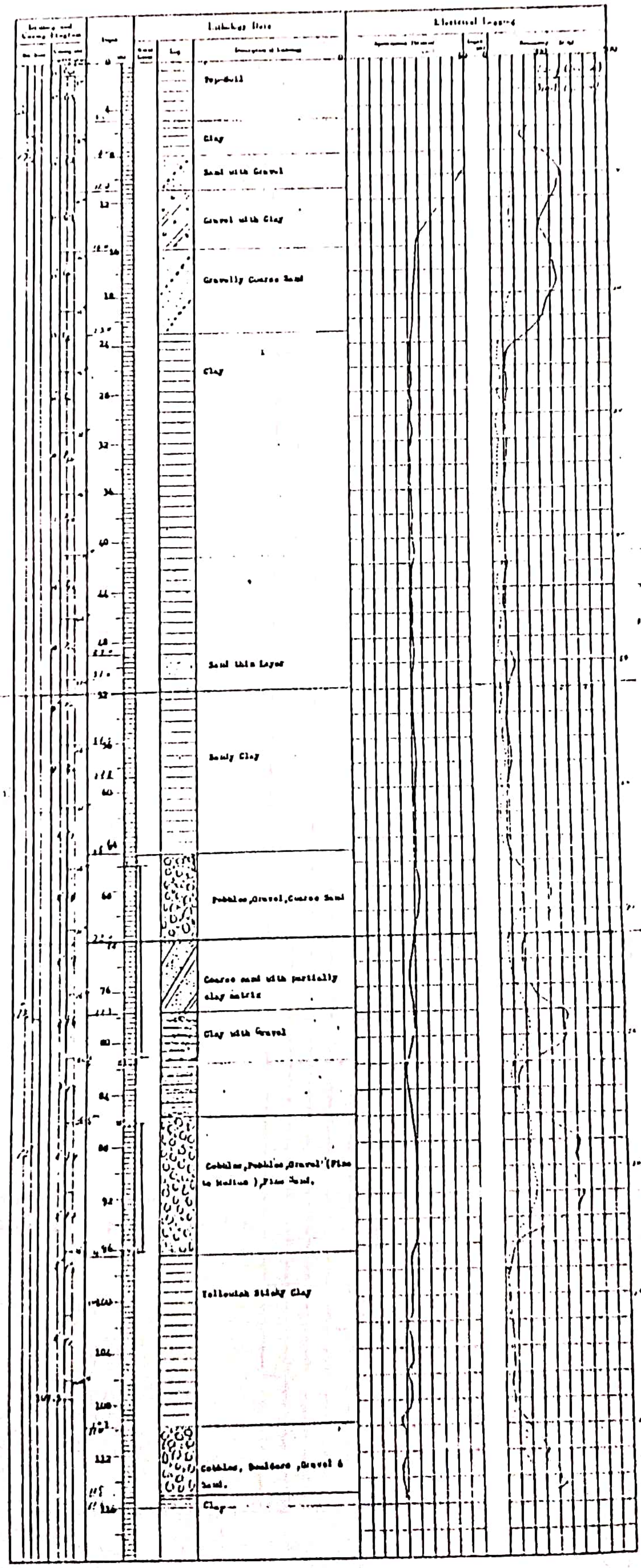
STATIC WATER LEVEL	- 36.4 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	42 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1500 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



AREA AND LOCATION [illegible]	LATITUDE — LONGITUDE
ELEVATION	
TOTAL DEPTH 107.5 m	DRILLING RIG TMD-[illegible]
DRILLING STARTED	DRILLED BY [illegible]
WELL COMPLETED Feb.,[illegible]	LOGGED BY [illegible]

STATIC WATER LEVEL -35.0 m	WATER TEMPERATURE
DYNAMIC WATER LEVEL -38.0 m	CONDUCTIVITY
PUMPING RATE 1500.0 m³/d	pH
SPECIFIC CAPACITY	TOTAL HARDNESS

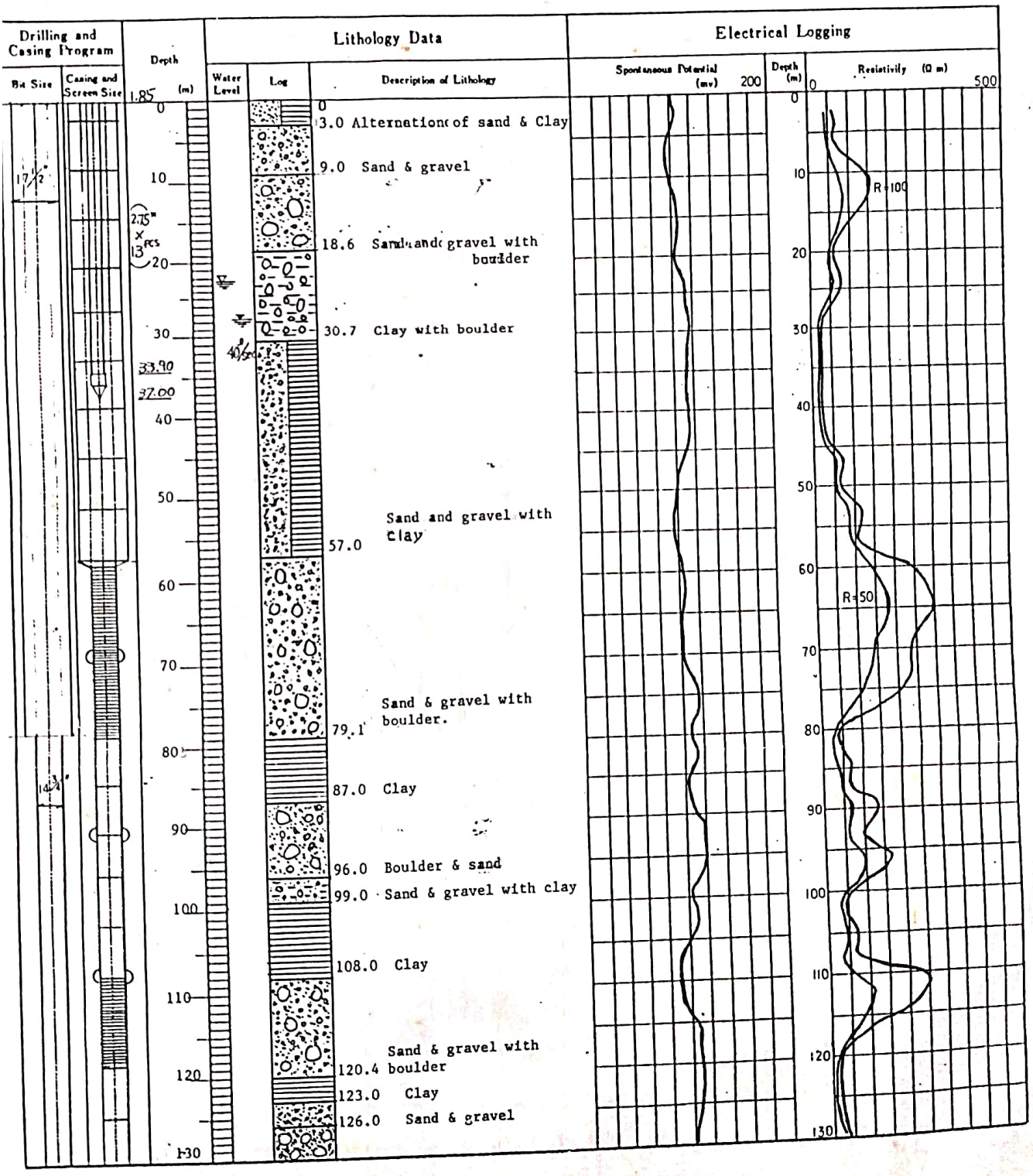
Dis:- 20 l/s

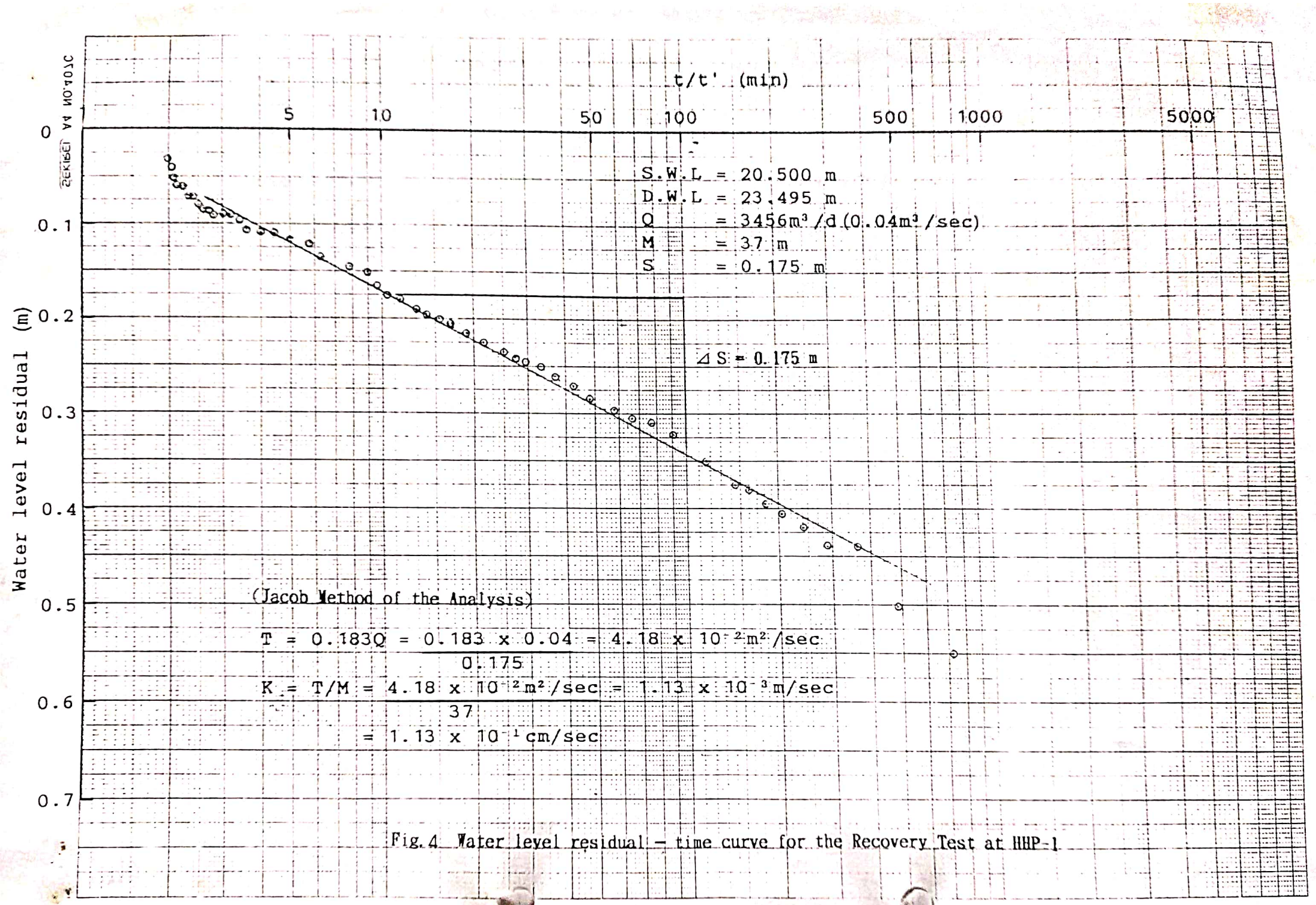


WELL LOG

PROJECT NAME	The Terai Groundwater Development Project	WELL NO.	HHP-2
AREA AND LOCATION	D-15 Block Hariharpur		
ELEVATION	102.45 m	DRILLING RIG	YRD-501R
TOTAL DEPTH	150 m	DRILLED BY	Makoto Hashimoto
DRILLING STARTED	23rd January, 1991	LOGGED BY	Mitsuro Uemura
WELL COMPLETED	3rd March, 1991		

STATIC WATER LEVEL	22.390 m	W.T.	25.5 ℃
DYNAMIC WATER LEVEL	27.825 m	E.C.	169.8 μS/cm
PUMPING RATE	40ℓ/sec (3,456 ㎥/d)	pH	7.44
SPECIFIC CAPACITY	1,154 ㎥/d/m		





(Jacob Method of the Analysis)

$$T = \frac{0.183Q}{0.175} = \frac{0.183 \times 0.04}{0.175} = 4.18 \times 10^{-2}\,m^2/sec$$

$$K = T/M = \frac{4.18 \times 10^{-2}\,m^2/sec}{37} = 1.13 \times 10^{-3}\,m/sec$$

$$= 1.13 \times 10^{-1}\,cm/sec$$

Fig. 4 Water level residual – time curve for the Recovery Test at HHP-1

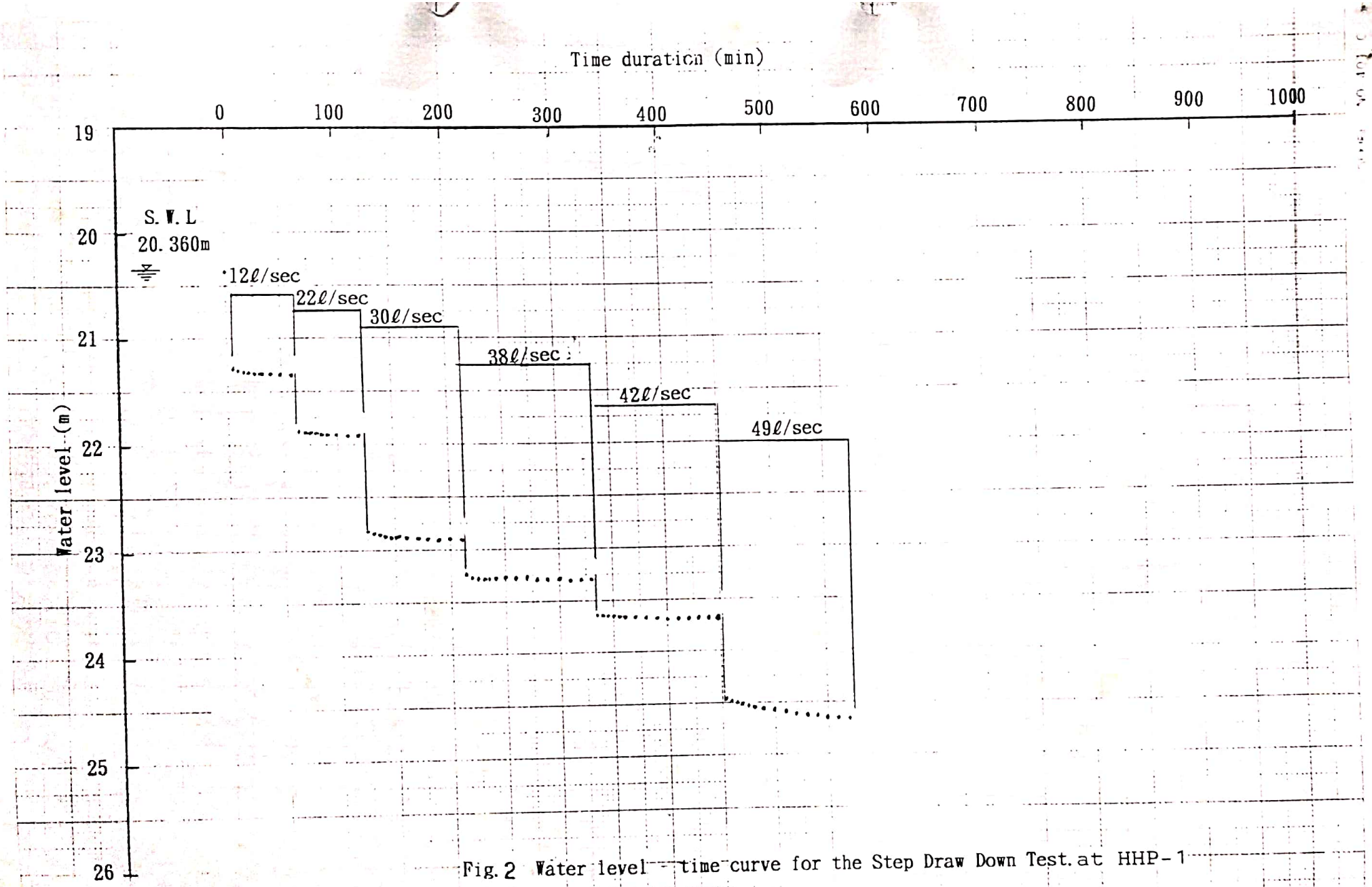


Fig. 2 Water level - time curve for the Step Draw Down Test at HHP-1

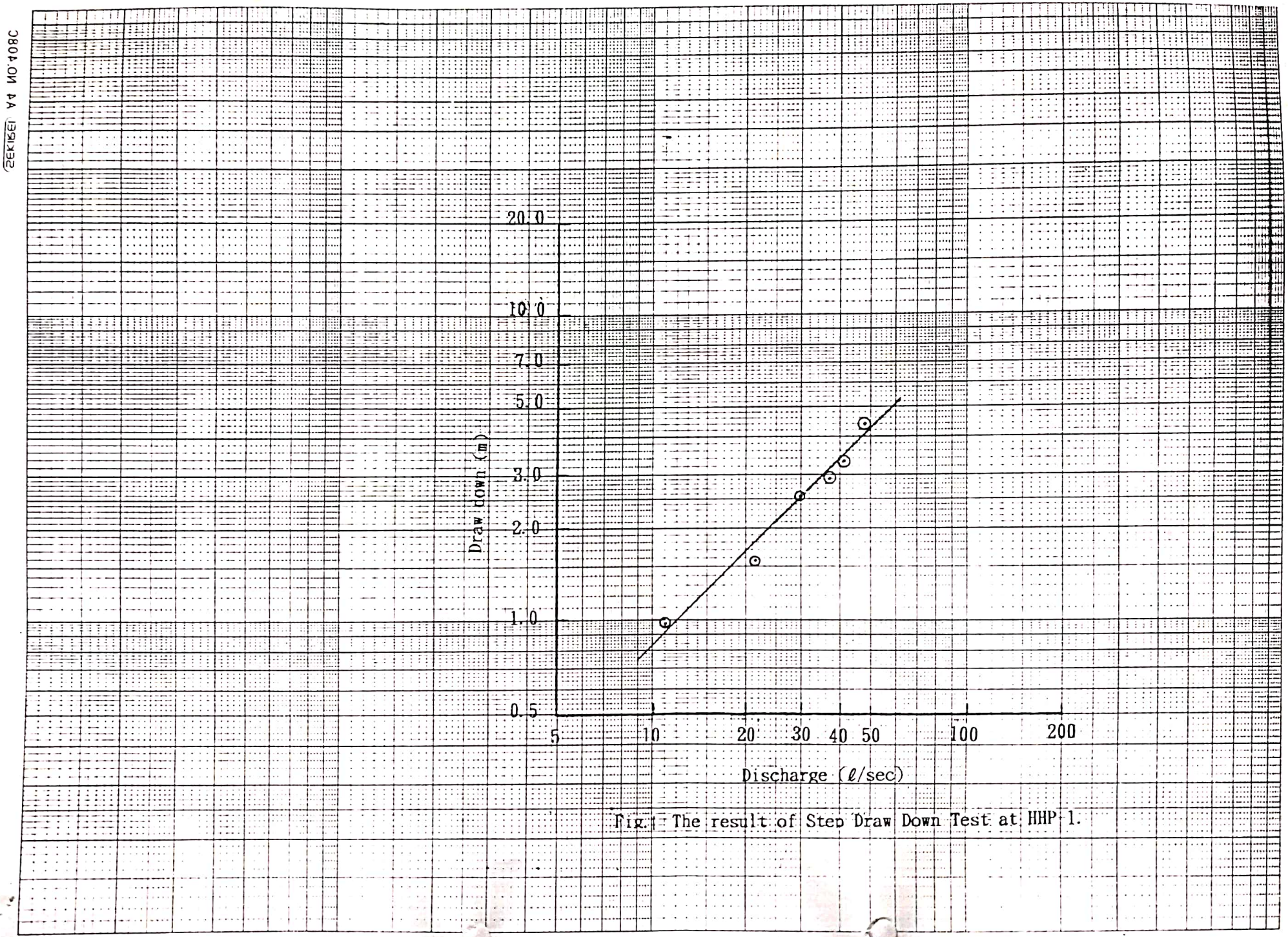
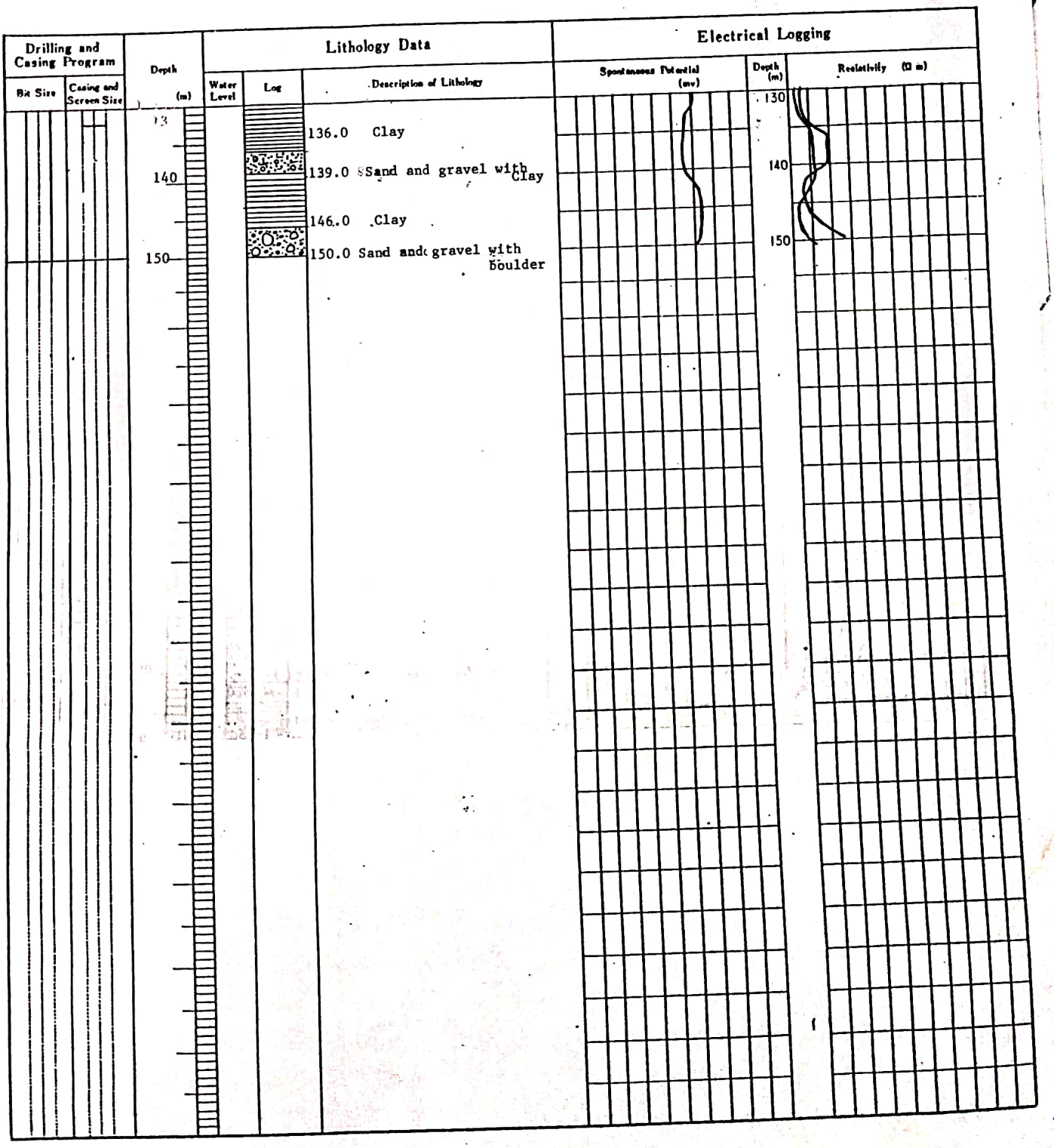


Fig. 1 The result of Step Draw Down Test at HHP-1.

WELL LOG

PROJECT NAME		WELL NO.	
AREA AND LOCATION			
ELEVATION	m	DRILLING RIG	
TOTAL DEPTH	m	DRILLED BY	
DRILLING STARTED		LOGGED BY	
WELL COMPLETED			

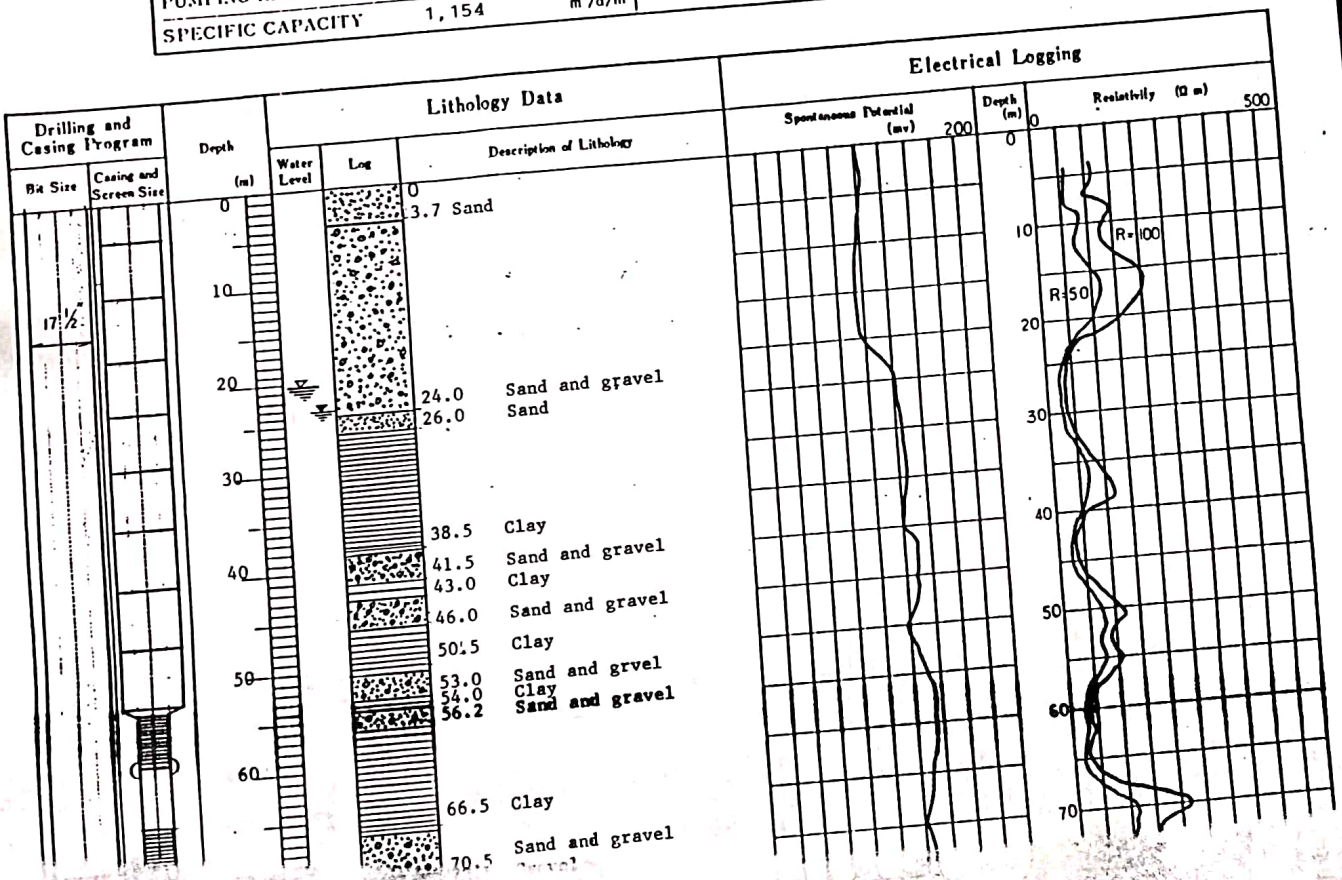
STATIC WATER LEVEL	m	W.T.	℃
DYNAMIC WATER LEVEL	m	E.C.	μS/cm
PUMPING RATE	ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m		



WELL LOG

PROJECT NAME	The Terai Groundwater Development Project	WELL NO.	HHP-1
AREA AND LOCATION	D-15 Block Hariharpur		
ELEVATION	102.13 m	DRILLING RIG	YRD-501R
TOTAL DEPTH	150 m	DRILLED BY	Teruo Owada
DRILLING STARTED	23rd January, 1991	LOGGED BY	Mitsuro Uemura
WELL COMPLETED	8th March, 1991		

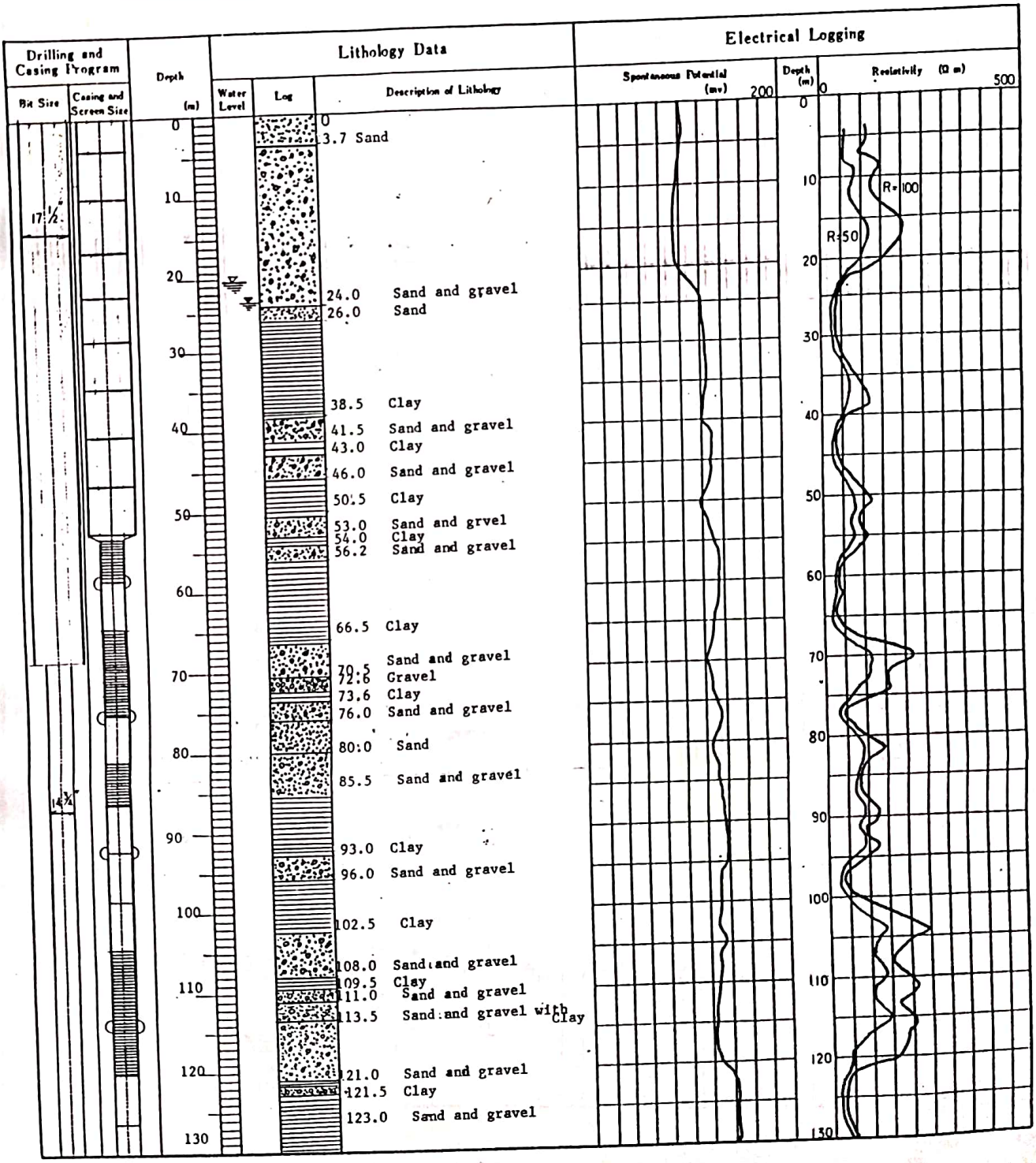
STATIC WATER LEVEL	20.500 m	W.T.	25.0	℃
DYNAMIC WATER LEVEL	23.495 m	E.C.	136.7	μS/cm
PUMPING RATE	40ℓ/sec (3,456 ㎥/d)	pH	7.51	
SPECIFIC CAPACITY	1,154 ㎥/d/m			



WELL LOG

PROJECT NAME The Terai Groundwater Development Project		WELL NO.	HHP-1
AREA AND LOCATION	D-15 Block Hariharpur		
ELEVATION	102.13 m	DRILLING RIG	YRD-501R
TOTAL DEPTH	150 m	DRILLED BY	Teruo Owada
DRILLING STARTED	23rd January, 1991	LOGGED BY	Mitsuro Uemura
WELL COMPLETED	8th March, 1991		

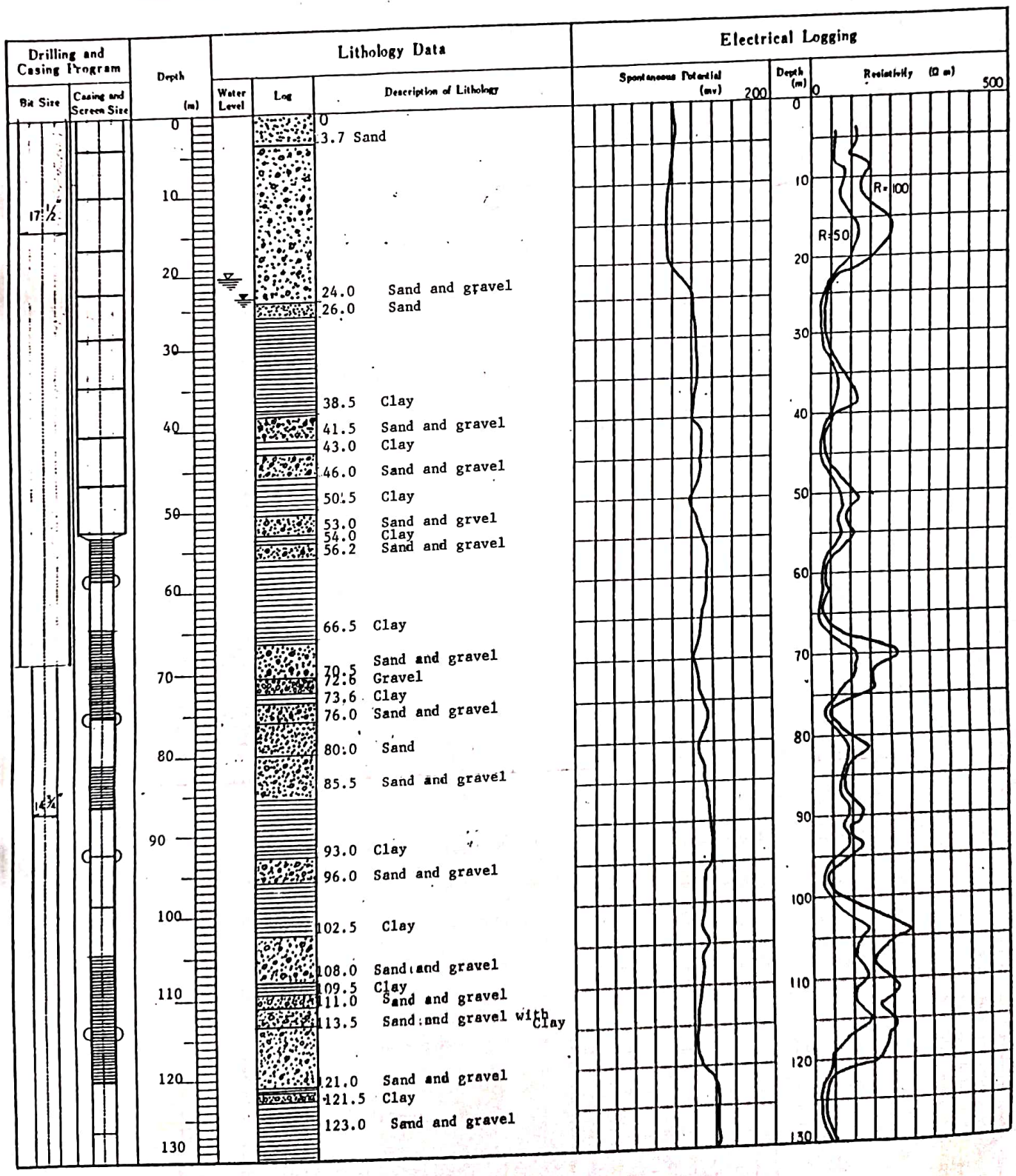
STATIC WATER LEVEL	20.500 m	W.T.	25.0 ℃
DYNAMIC WATER LEVEL	23.495 m	E.C.	136.7 μS/cm
PUMPING RATE	40ℓ/sec (3,456㎥/d)	pH	7.51
SPECIFIC CAPACITY	1,154 ㎥/d/m		



WELL LOG

PROJECT NAME	The Terai Groundwater Development Project	WELL NO.	HHP-1
AREA AND LOCATION	D-15 Block Hariharpur		
ELEVATION	102.13 m	DRILLING RIG	YRD-50,1R
TOTAL DEPTH	150 m	DRILLED BY	Teruo Owada
DRILLING STARTED	23rd January, 1991	LOGGED BY	Mitsuro Uemura
WELL COMPLETED	8th March, 1991		

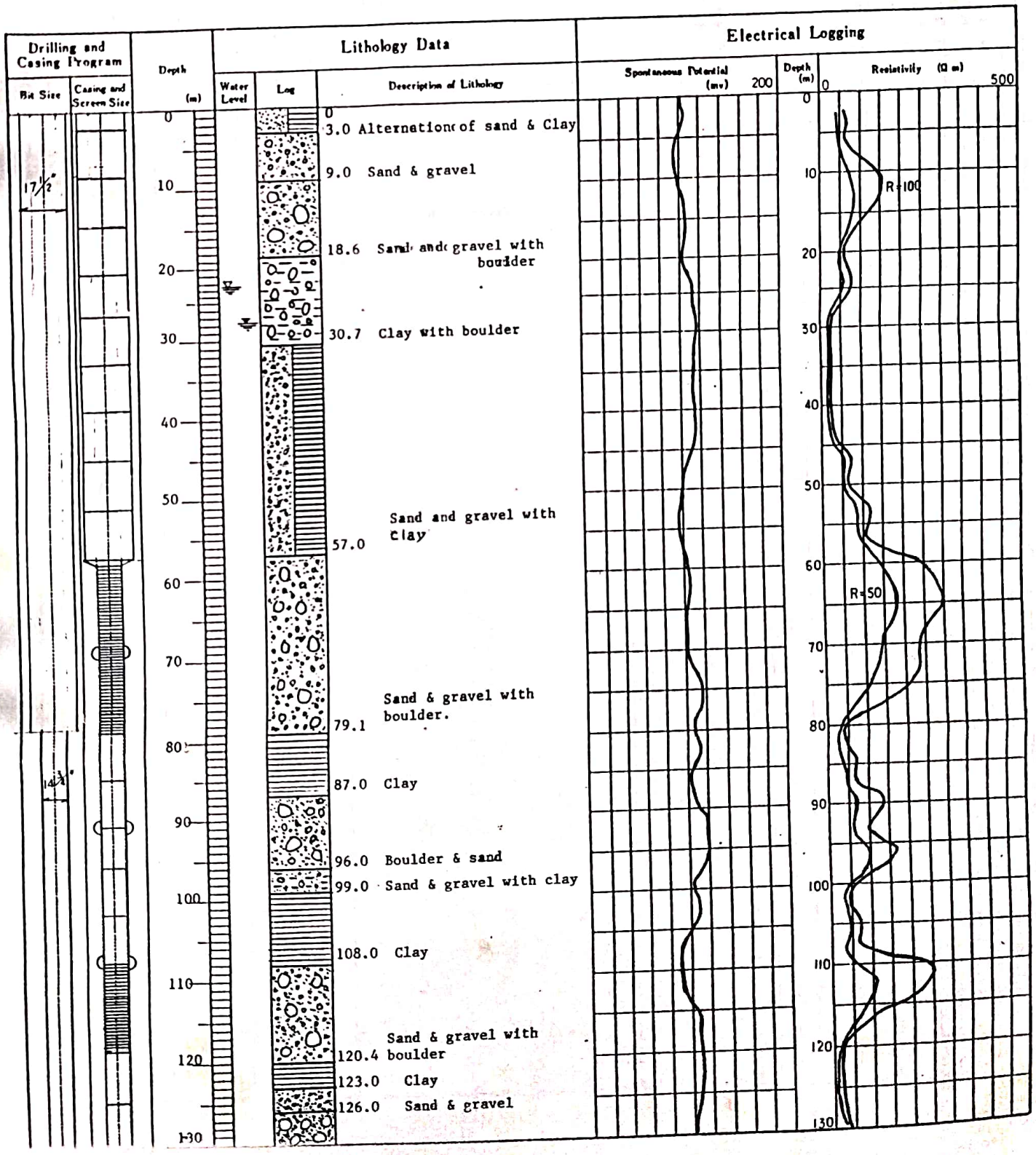
STATIC WATER LEVEL	20.500 m	W.T.	25.0 ℃
DYNAMIC WATER LEVEL	23.495 m	E.C.	136.7 μS/cm
PUMPING RATE	40ℓ/sec (3,456 m³/d)	pH	7.51
SPECIFIC CAPACITY	1,154 m³/d/m		



WELL LOG

PROJECT NAME	The Terai Groundwater Development Project	WELL NO.	HHP-2
AREA AND LOCATION	D-15 Block Hariharpur		
ELEVATION	102.45 m	DRILLING RIG	YRD-501R
TOTAL DEPTH	150 m	DRILLED BY	Makoto Hashimoto
DRILLING STARTED	23rd January, 1991	LOGGED BY	Mitsuro Uemura
WELL COMPLETED	3rd March, 1991		

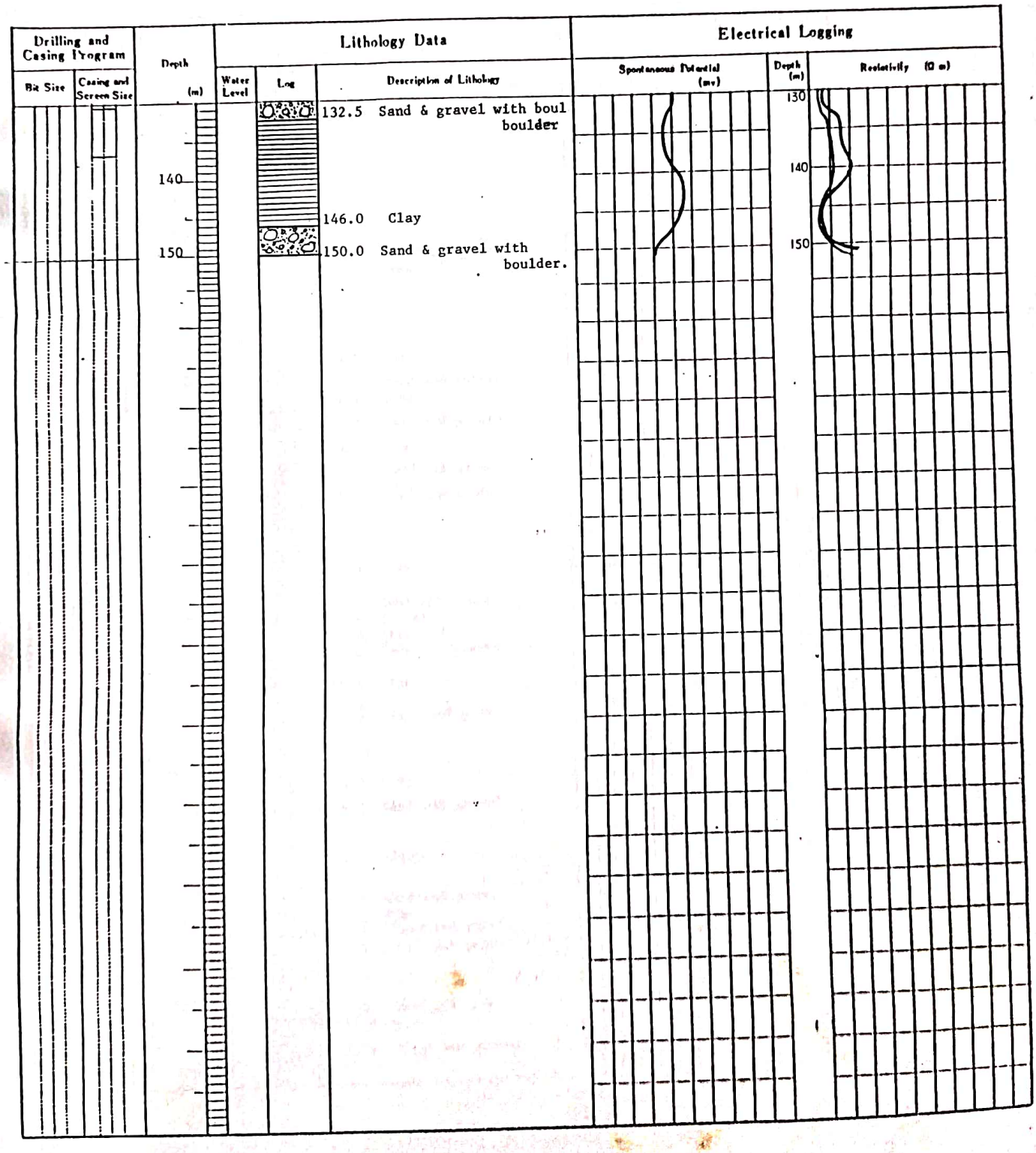
STATIC WATER LEVEL	22.390 m	W.T.	25.5 ℃
DYNAMIC WATER LEVEL	27.825 m	E.C.	169.8 μS/cm
PUMPING RATE	40ℓ/sec (3,456 m³/d)	pH	7.44
SPECIFIC CAPACITY	1,154 m³/d/m		



WELL LOG

PROJECT NAME		WELL NO.	HHP-2
AREA AND LOCATION			
ELEVATION	m	DRILLING RIG	
TOTAL DEPTH	m	DRILLED BY	
DRILLING STARTED		LOGGED BY	
WELL COMPLETED			

STATIC WATER LEVEL	m	W.T.	℃
DYNAMIC WATER LEVEL	m	E.C.	μS/cm
PUMPING RATE	ℓ/min (nf /d)	pH	
SPECIFIC CAPACITY	nf /d/m		

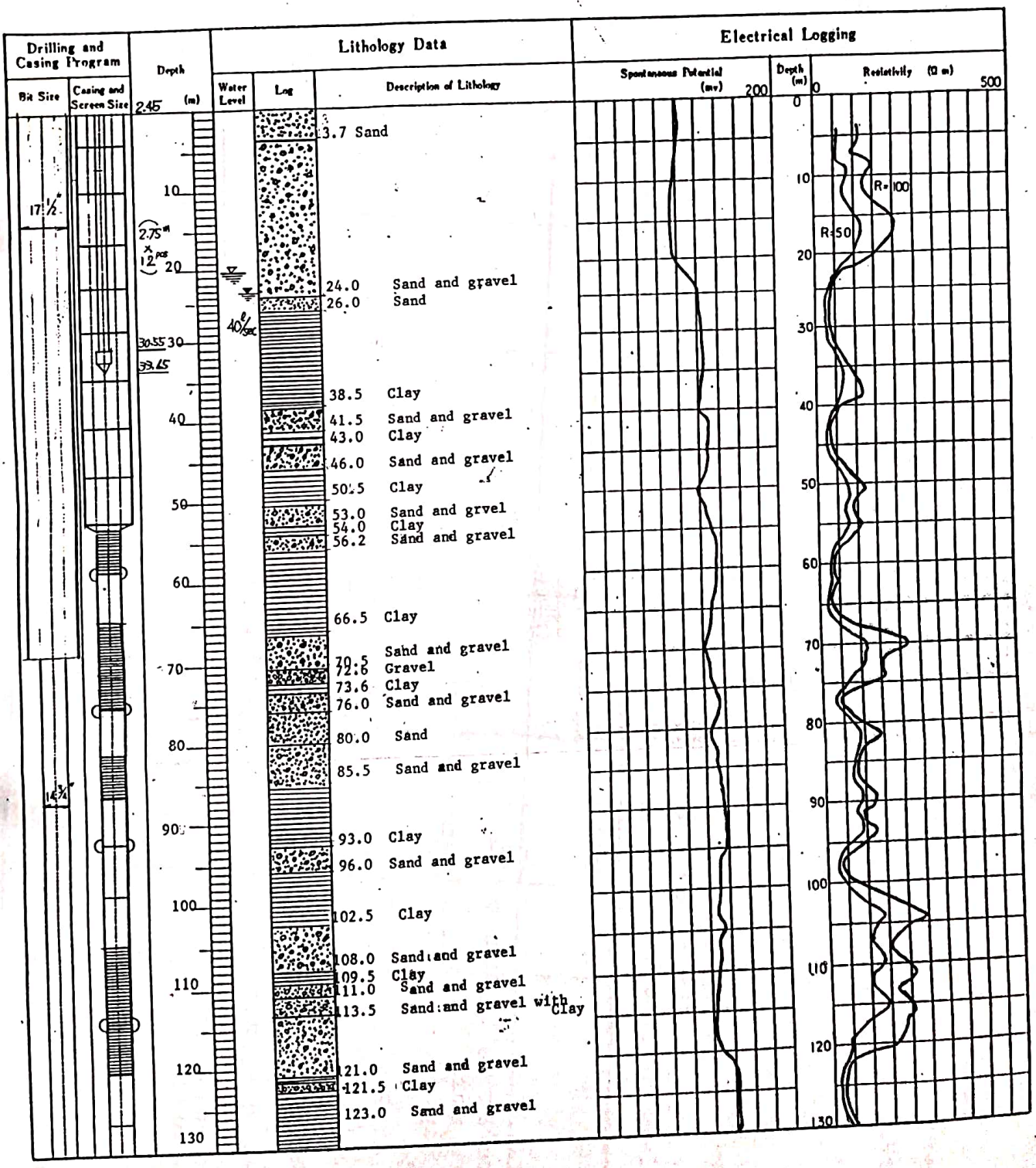


Dhanusha

WELL LOG

PROJECT NAME The Terai Groundwater Development Project			WELL NO. HHP-1
AREA AND LOCATION	D-15 Block Hariharpur		
ELEVATION	102.13 m	DRILLING RIG	YRD-501R
TOTAL DEPTH	150 m	DRILLED BY	Teruo Owada
DRILLING STARTED	23rd January, 1991	LOGGED BY	Mitsuro Uemura
WELL COMPLETED	8th March, 1991		

STATIC WATER LEVEL	20.500	m	W.T.	25.0	℃
DYNAMIC WATER LEVEL	23.495	m	E.C.	136.7	μS/cm
PUMPING RATE	40ℓ/sec	(3,456 ㎥/d)	pH	7.51	
SPECIFIC CAPACITY	1,154	㎥/d/m			



Installation of Okamoto Pump

Site Name	S.W.L (m)	Pump Depth (m)	Discharge		Draw Down (m)	D.W.L (m)
			m^3/min	ℓ/sec		
HHP-1	20.50	30.55	3.5	58	4.9	25.40
			3.8	63	5.2	25.70
HHP-2	22.39	33.90	3.3	55		
NTJ-2	40.86	50.83	1.9	32.0	2.1	42.96
			2.6	43.3	3.0	43.86
			2.45	40.8	2.85	43.71
			2.55	42.5	2.95	43.81

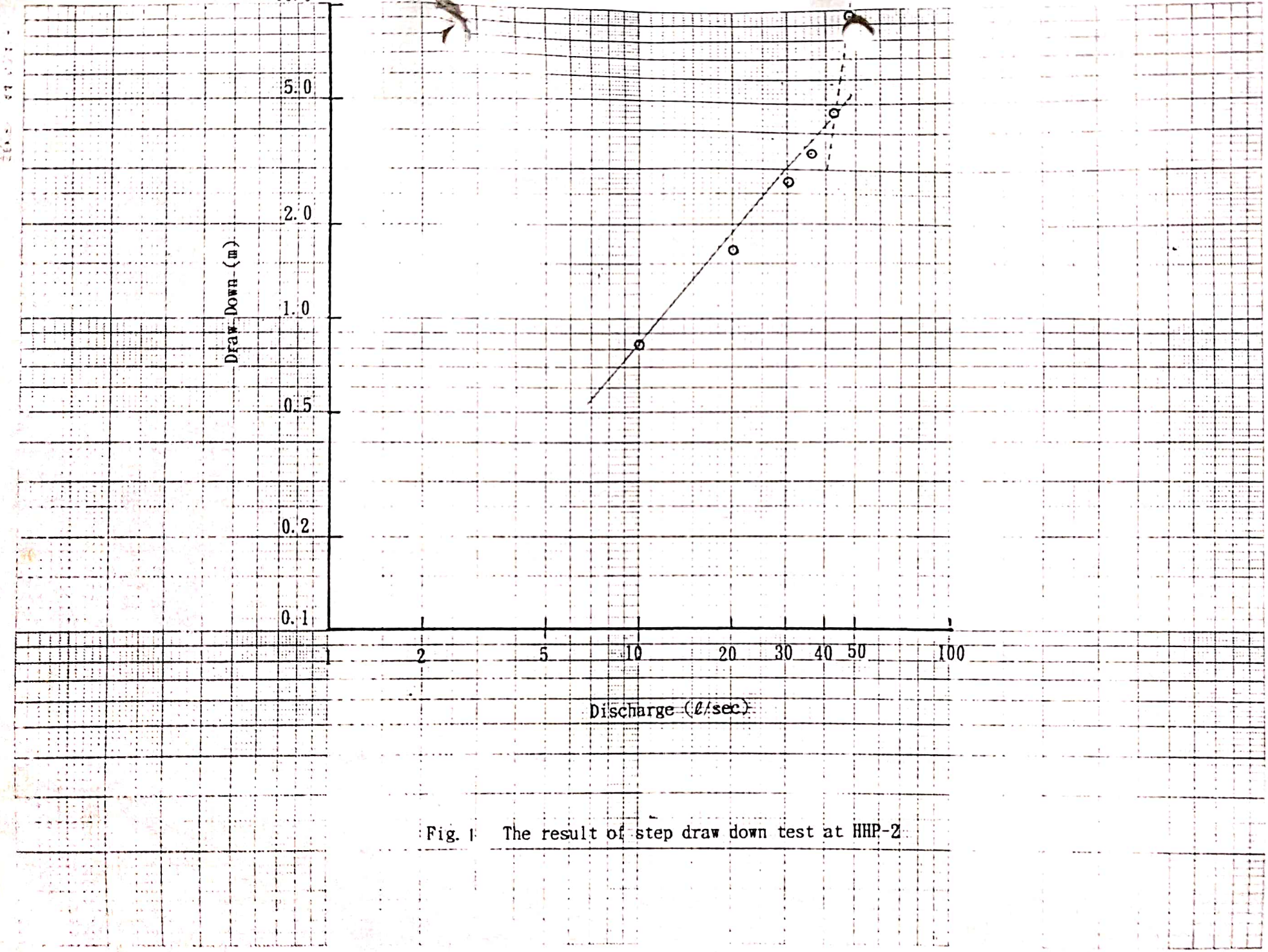


Fig. 1 The result of step draw down test at HHP-2

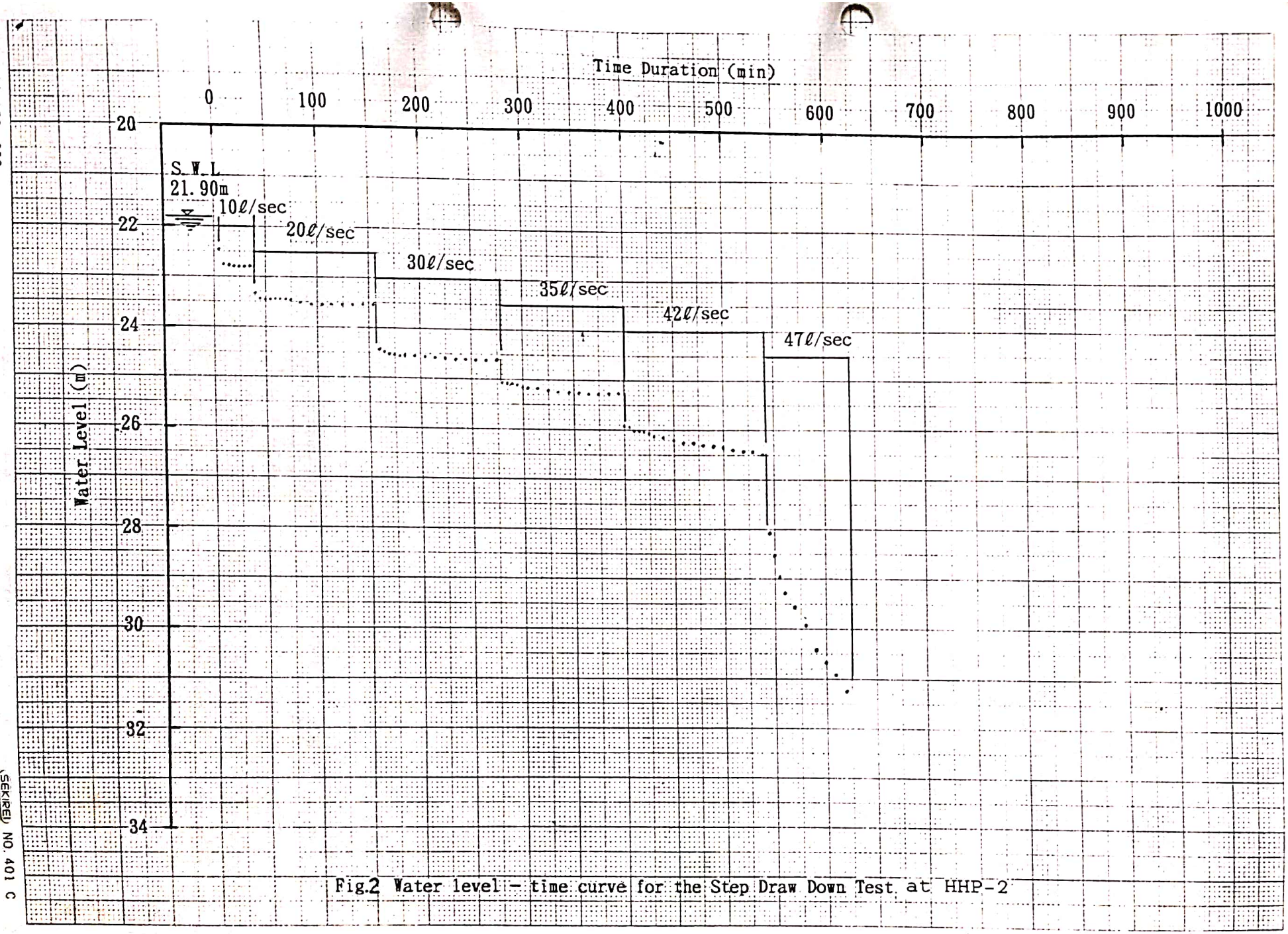
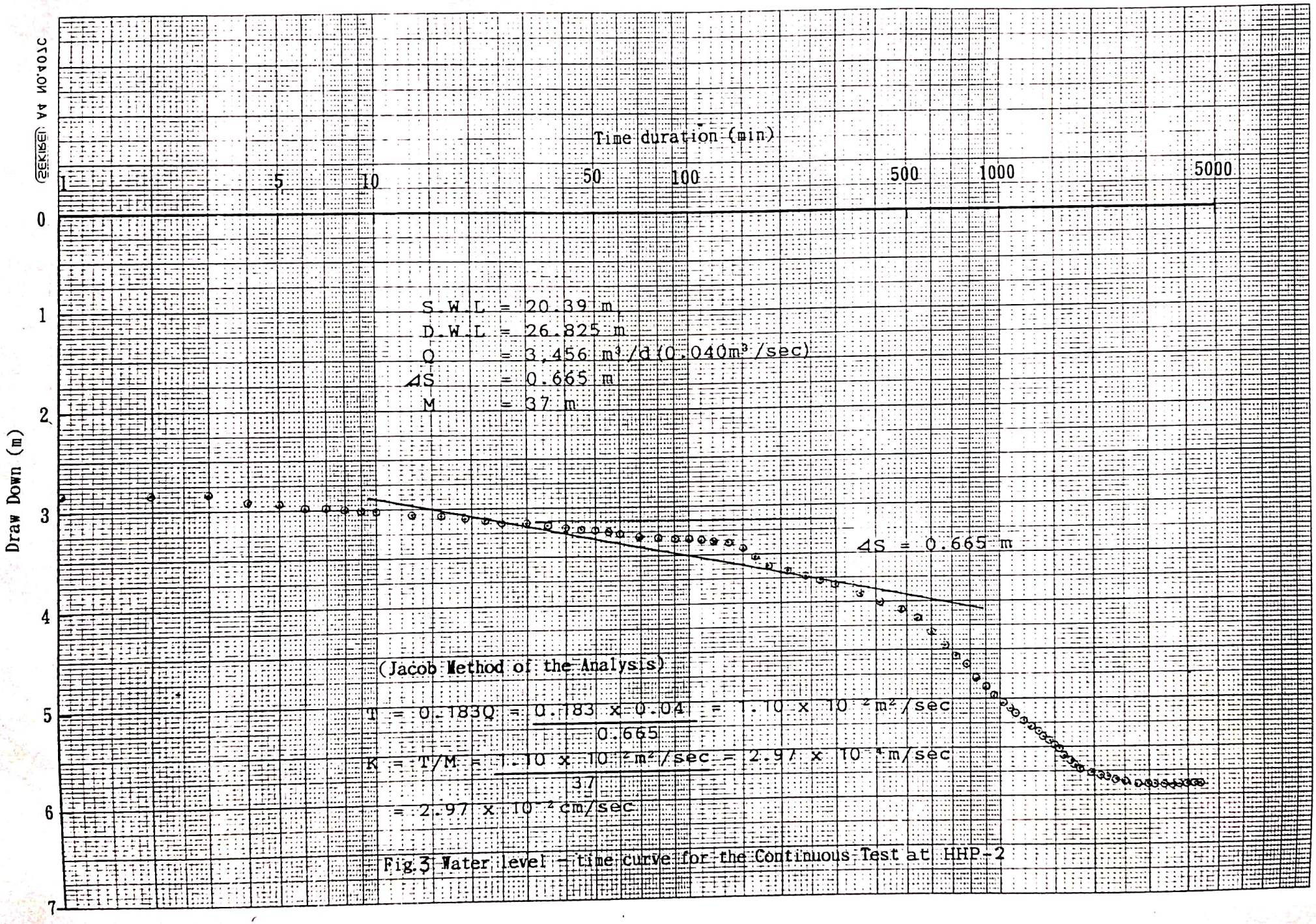


Fig.2 Water level – time curve for the Step Draw Down Test at HHP-2



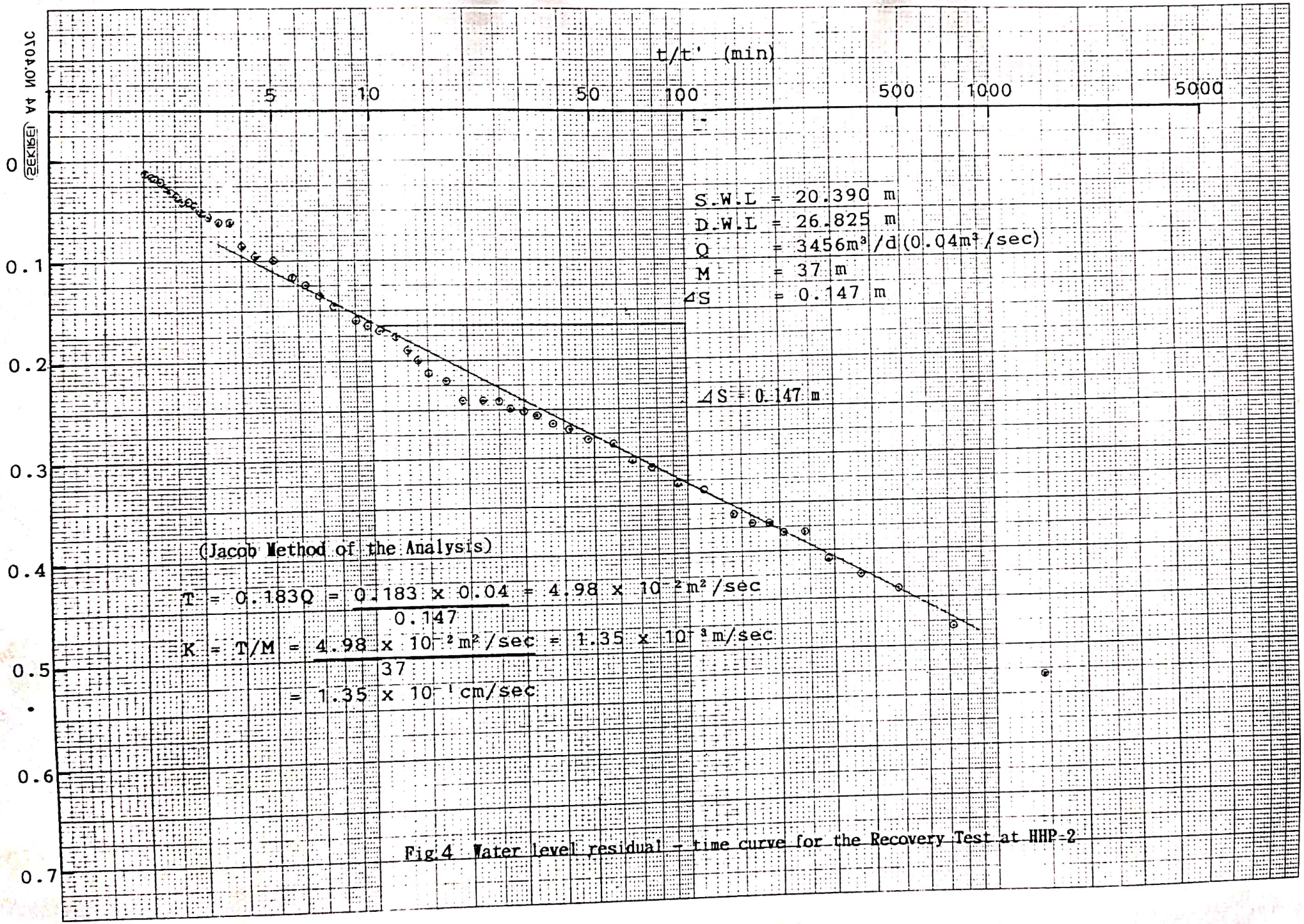
(Jacob Method of the Analysis)

$$T = 0.183Q = \frac{0.183 \times 0.04}{0.665} = 1.10 \times 10^{-2} m^2/sec$$

$$K = T/M = \frac{1.10 \times 10^{-2} m^2/sec}{37} = 2.97 \times 10^{-4} m/sec$$

$$= 2.97 \times 10^{-2} cm/sec$$

Fig.3 Water level – time curve for the Continuous Test at HHP-2



(Jacob Method of the Analysis)

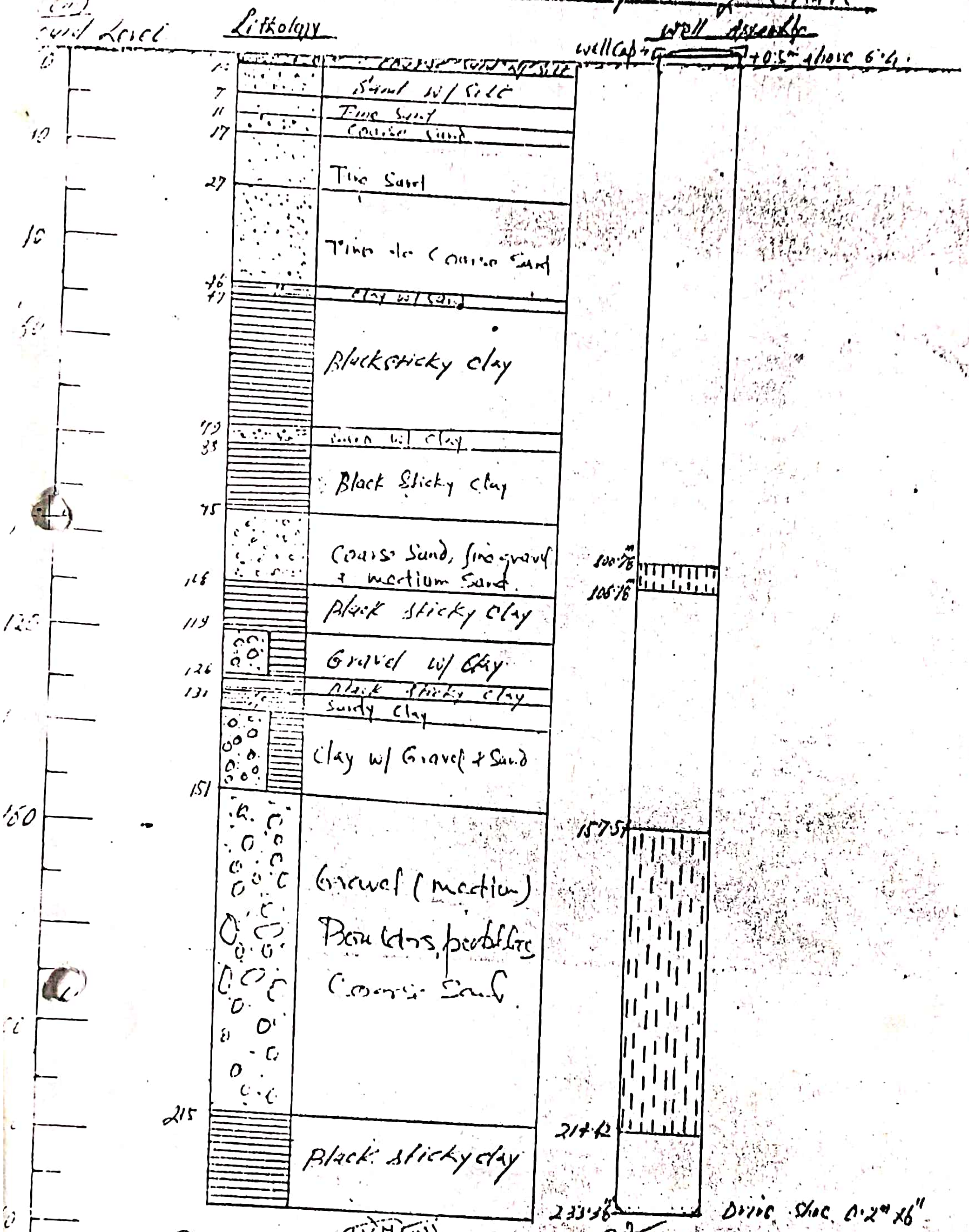
$$T = 0.183Q = \frac{0.183 \times 0.04}{0.147} = 4.98 \times 10^{-2} m^2/sec$$

$$K = T/M = \frac{4.98 \times 10^{-2} m^2/sec}{37} = 1.35 \times 10^{-3} m/sec$$

$$= 1.35 \times 10^{-1} cm/sec$$

Fig.4 Water level residual – time curve for the Recovery Test at HHP-2

Lithology And Well Assembly Chart


Ground Level
Lithology
Well Assembly
Well Cap
+0.5m above G.L.
Sand w/ Silt
Fine Sand
Coarse Sand
Fine Sand
Fine to Coarse Sand
Clay w/ Sand
Black sticky clay
Sand w/ Clay
Black Sticky Clay
Coarse Sand, fine gravel & medium Sand
Black sticky clay
Gravel w/ Clay
Black sticky clay
Sandy Clay
Clay w/ Gravel & Sand
Gravel (medium) Boulders, pebbles Coarse Sand
Black sticky clay
Drive Shoe 0.2" x6"
7
11
17
27
75
151
215

WELL LOG

Data No. N-52

PROJECT NAME	TIATSP	WELL NO.	
AREA AND LOCATION	Shree Nagar, Gauri-Shankar, Sarlahi-District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	106.0 feet	DRILLING RIG	YRD-50"R"
DRILLING STARTED		DRILLED BY	Mr. G. D. Joshi
WELL COMPLETED	Mar, 1988	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-17.20 feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-21.0 feet	CONDUCTIVITY	µ℧ /cm
PUMPING RATE	42.0 l/min (g/m, m³/d)	pH	
SPECIFIC CAPACITY	m³/d /m	TOTAL HARDNESS	

Drilling and Casing Program (Bit Size)	Depth (feet)	Water Level	Description of Lithology
	0–		sandy clay
	10–40		Boulders, pebbles gravel & clay (little)
	~42		Gravel & clay
	50		clay with gravel
59.5 / 60.0 R	60	60.5	Sticky clay
	70		Sand med to coarse, gravel
	80	77.5	Sticky clay with gravel
	90–100	83.5	Gravel, coarse sand & med. sand
	100	100.0	clay with gravel
106			clay
	110		
	120		

Electrical Logging: Spontaneous Potential (mv) | Depth (m) | Resistivity (Ωm)

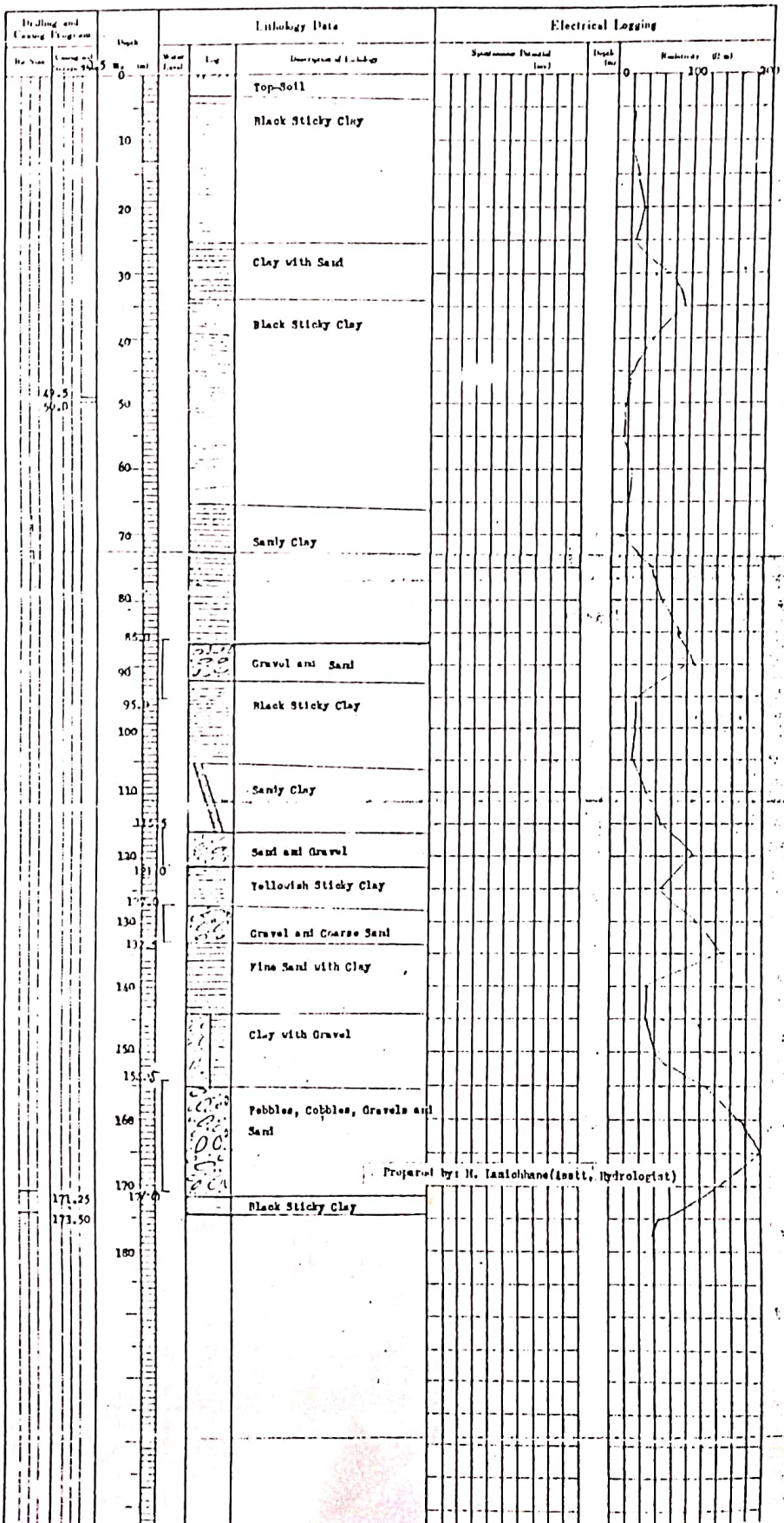
Well No: B-14

WELL LOG

PROJECT NAME J.I.D.P.	Size: 14"/ 8"
AREA AND LOCATION MAHOTARI BAZAR, Jamkpur-Town Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 173.75 m	DRILLING RIG TND.500
DRILLING STARTED	DRILLED BY Mr. M. Mikhlya
WELL COMPLETED Feb., 1996	LOGGED BY Mr. M.Lamichhane

STATIC WATER LEVEL + 0.50 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µS/cm
PUMPING RATE 3000.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

50 lps

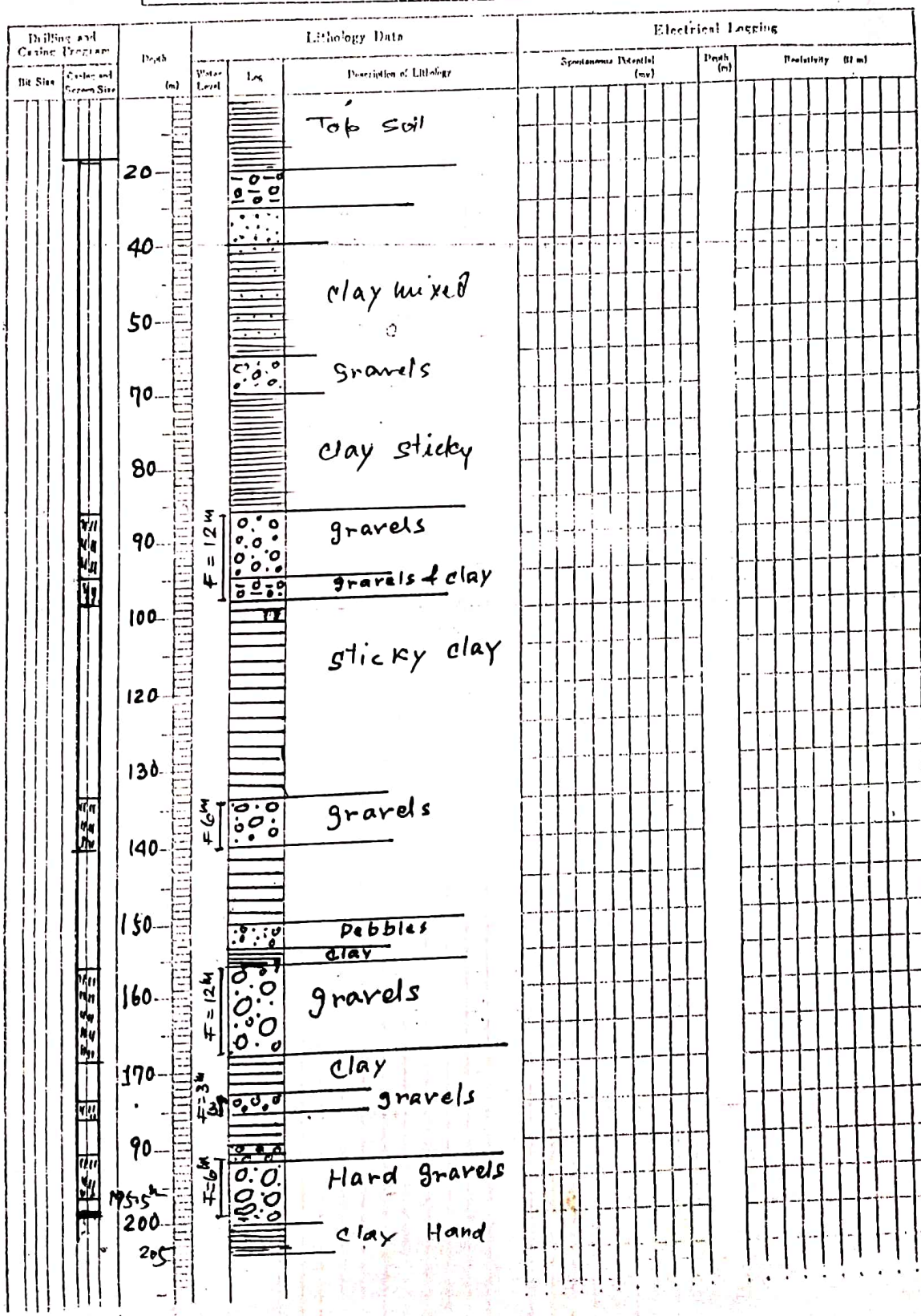


WELL LOG

Data No. 053/54

PROJECT NAME	A D P J , Nawlajhij	WELL NO.	1
AREA AND LOCATION	Ganga- Sagar , JNK		
ELEVATION m		LATITUDE	LONGITUDE
TOTAL DEPTH	205m (1955)	DRILLING RIG	J·A 214 YRD
DRILLING STARTED	20531411	DRILLED BY	
WELL COMPLETED	516	LOGGED BY	

STATIC WATER LEVEL	+.5m m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	12M m	CONDUCTIVITY	μS/cm
PUMPING RATE	2400 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Agriculture Development Project, Janakpur (Hattaphy)

WELL LOG

Data No. ______

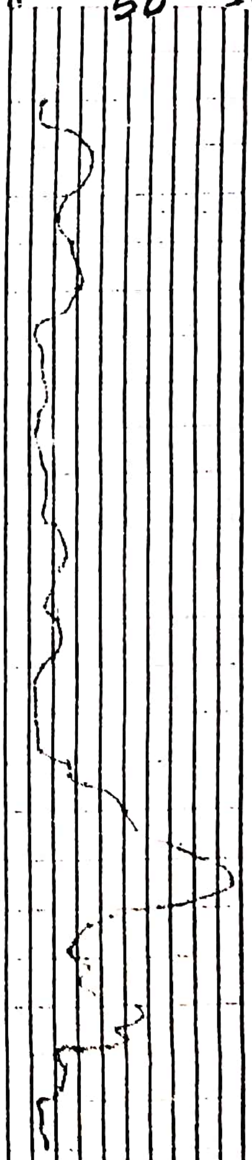
PROJECT NAME	Agri dev. project	WELL NO.	
AREA AND LOCATION	HARIWAN-3 SARLAHI		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	116·5 m	DRILLING RIG	"YRD 301"
DRILLING STARTED	048-5-28	DRILLED BY	R.B.K.C
WELL COMPLETED	048-6-17	LOGGED BY	M. LAMICHHANE

STATIC WATER LEVEL	30·22 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	54·0 m	CONDUCTIVITY	µS/cm
DISCHARGE RATE	1500 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program — Lithology Data — Electrical Logging

Casing / screen	Depth (m)	Description of Strata
	0	TOP SOIL
		COARSE SAND
	10	CLAY
		GRAVEL
10"	20	CLAY
		GRAVEL W/ CLAY
	30	GRAVEL
	40	GRAVEL W/ CLAY
	50–60	CLAY
72·0	70	CLAY W/ GRAVEL
72·5, 8"		CLAY
80·5	80–100	GRAVEL & SAND
110·5	110	CLAY
116·5	120	
	130	
	140	
	150	

Resistivity (Ω-m): 0, 50, 100



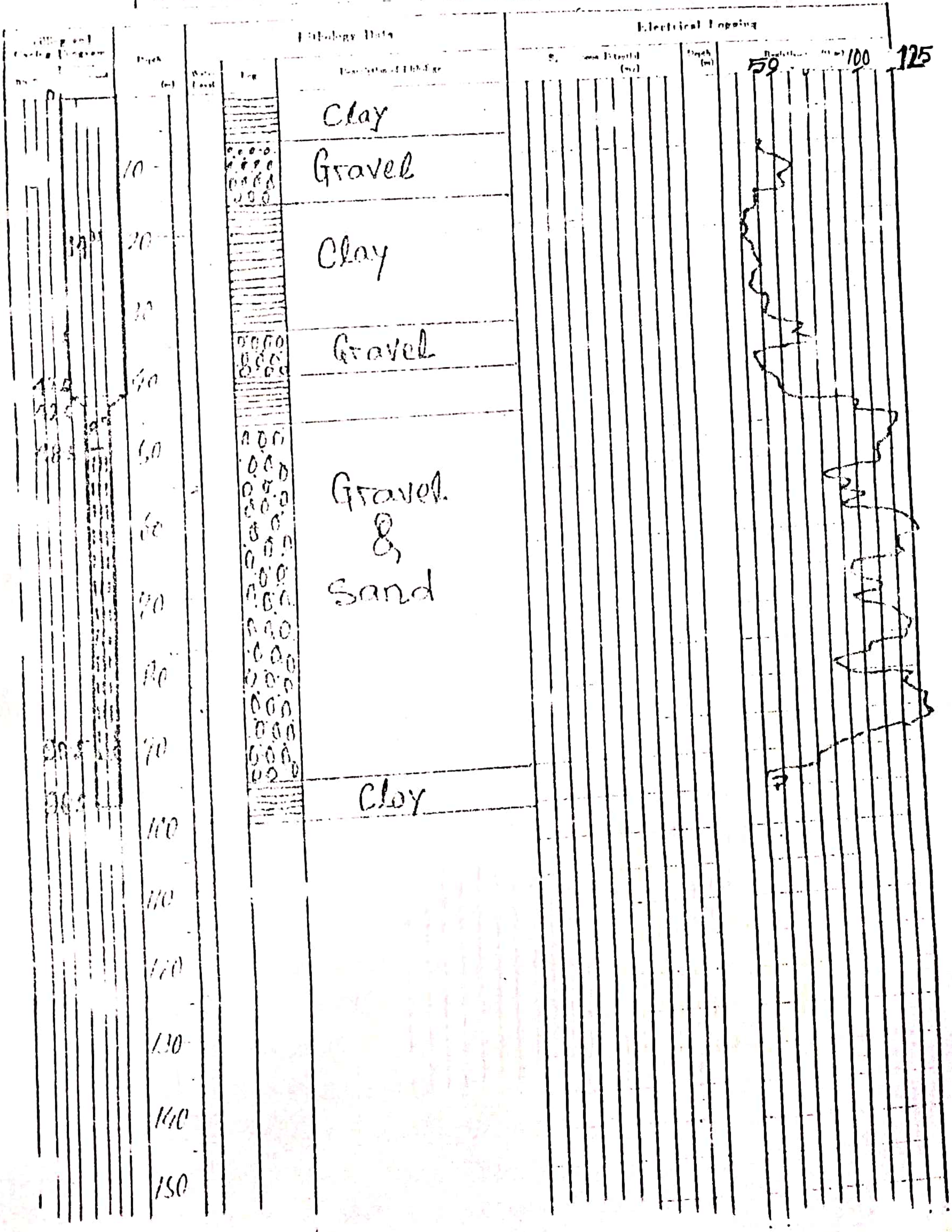
Agriculture Development Project, Janakpur, Hydrology

Data No.

LOG

PROJECT NAME	Agri. dev Project	WELL NO.	
AREA AND LOCATION	Horticulture farm Nawalpur, Sarlahi		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	96.5 m	DRILLING RIG	YRD 501
DRILLING STARTED	2050-10-8	DRILLED BY	R.B.K.C
WELL COMPLETED	2050-11-15	LOGGED BY	R.B.K.C

STATIC WATER LEVEL	24.5 m	WATER TEMPERATURE	°C
PUMPING WATER LEVEL	27.5 m	CONDUCTIVITY	μS/cm
PUMPING RATE	2400 l/min	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



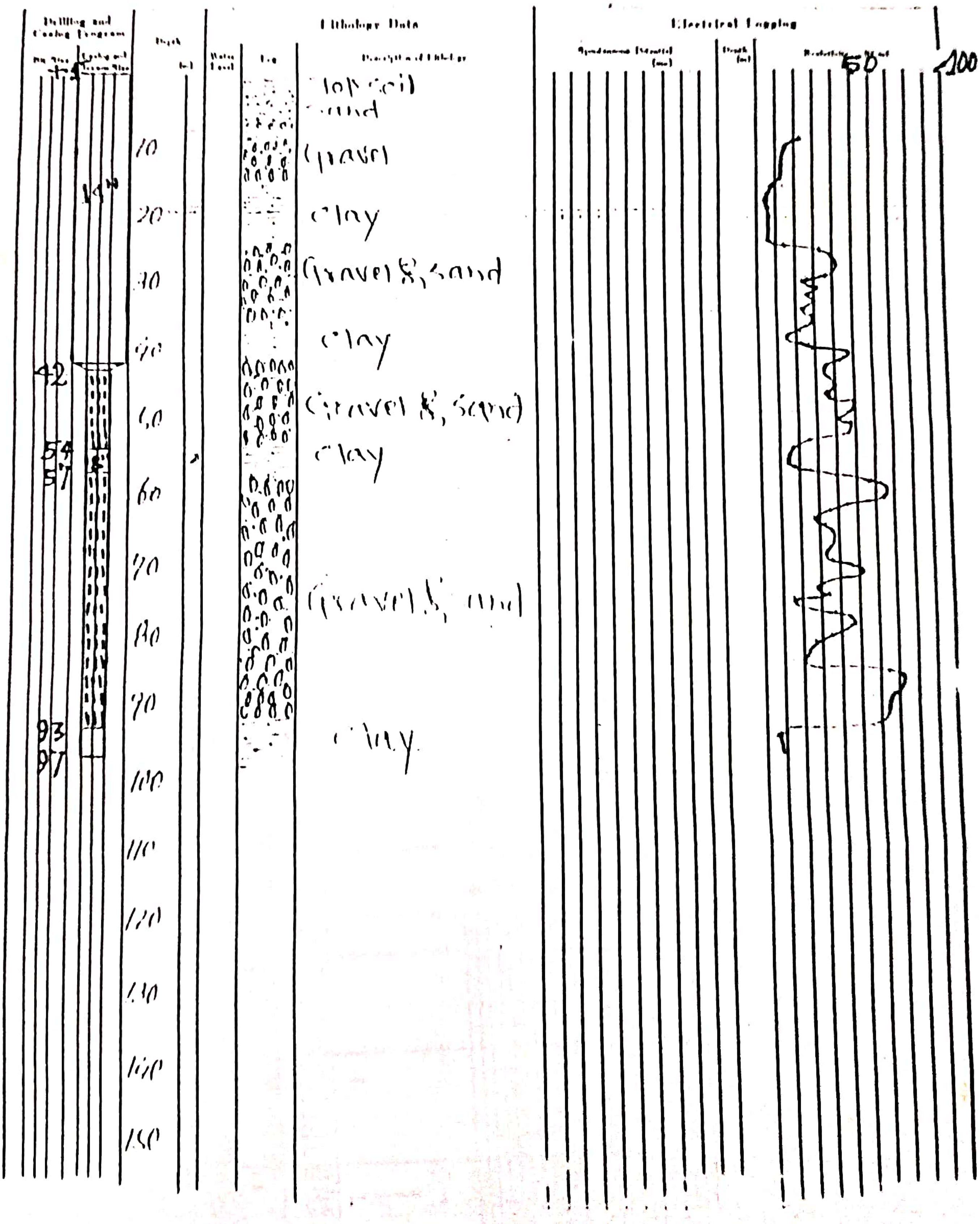
Agriculture Development Project, Janakpur [illegible]

Data No

WELL LOG

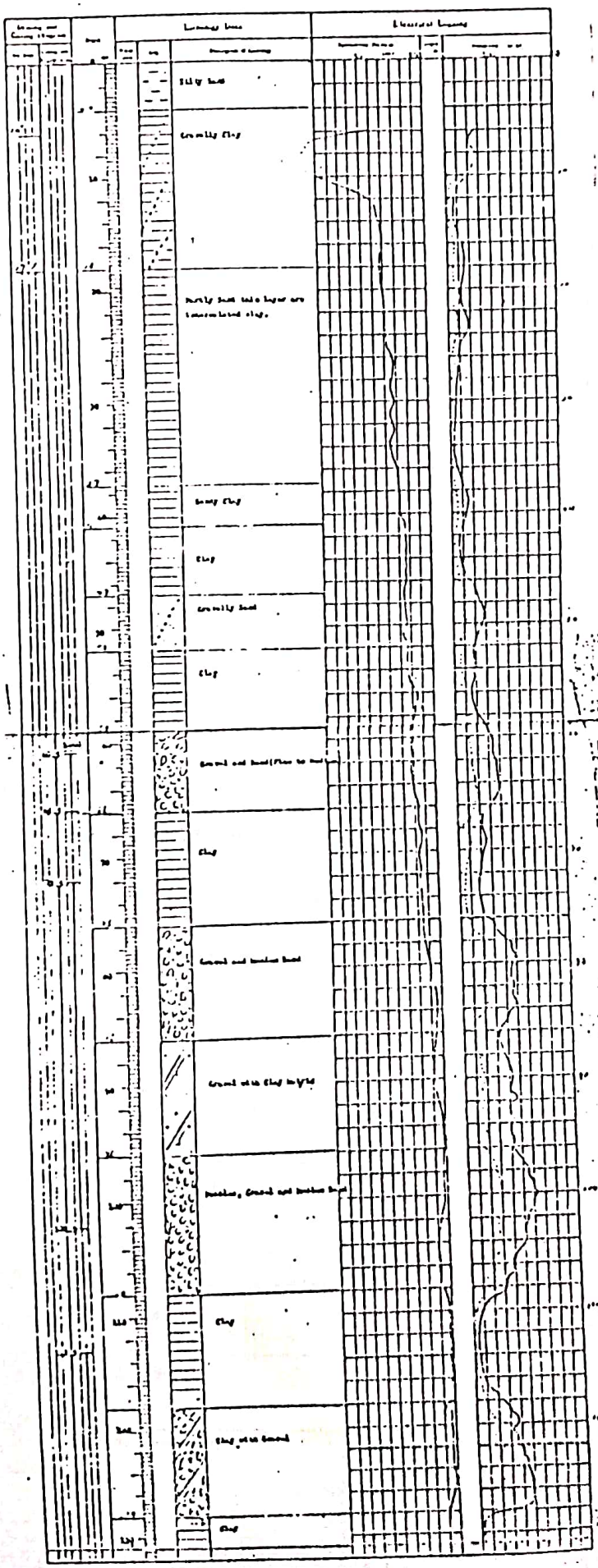
PROJECT NAME	Agri. Dev. Project.	WELL NO.	'2nd'
AREA AND LOCATION	Netraganj – Sarlahi		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	97·5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2051-4-6	DRILLED BY	Ran Bdr K C
WELL COMPLETED	2051·5-5	LOGGED BY	R. B. K C

STATIC WATER LEVEL	20·0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	30 0 m	CONDUCTIVITY	µS/cm
PUMPING RATE	550 l/sec m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



N-31

Godar, 1136

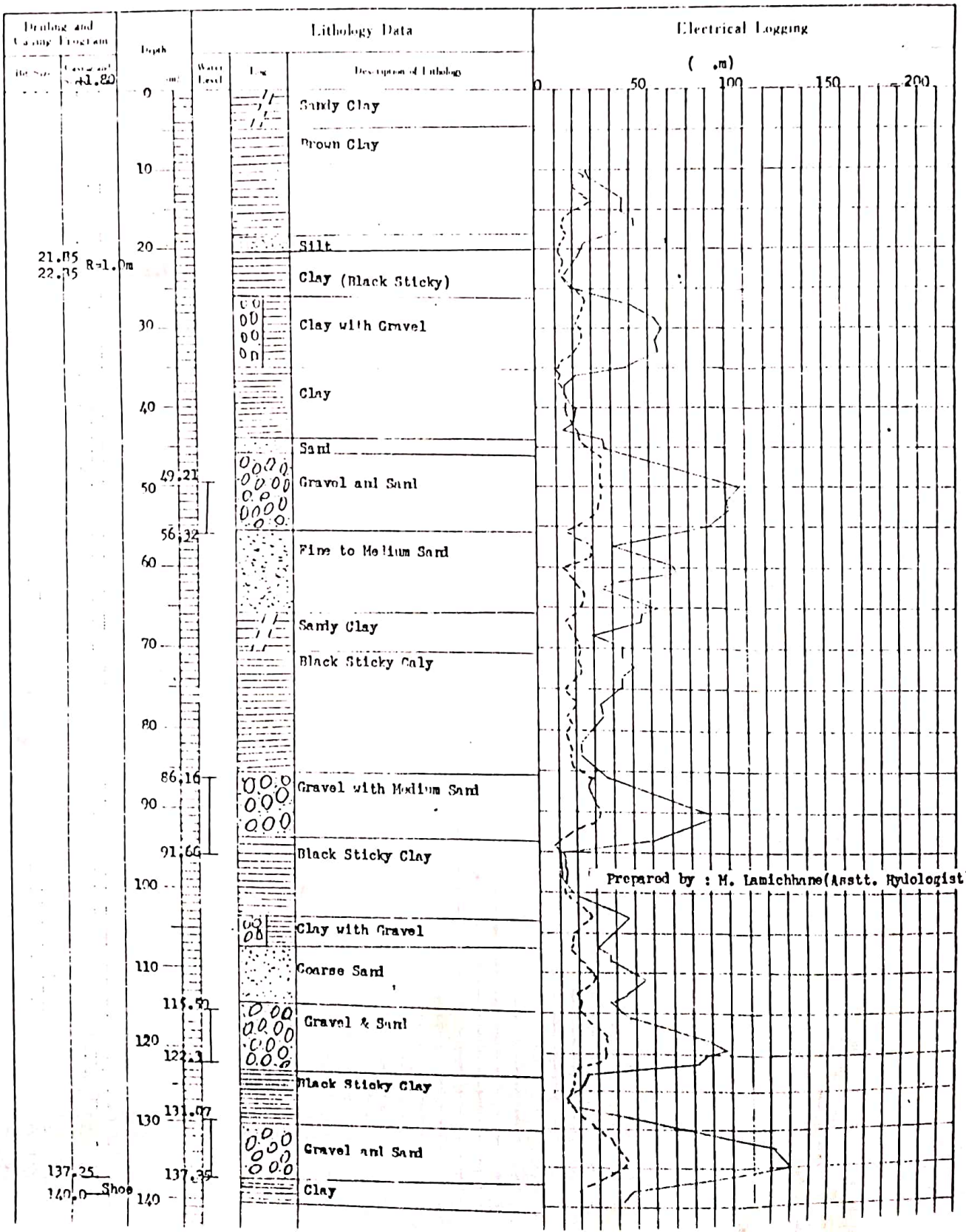


Well Name: J-16

WELL LOG

PROJECT NAME J.A.I.P	Size: 12"/8"
AREA AND LOCATION FISHERIES DEVELOPMENT CENTRE, Jamkpur-dhan	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 140.0 m	DRILLING RIG TBH 72 "A"
DRILLING STARTED 16 Jan., 1979	DRILLED BY Mr. S. Lamichhane & Mr. P. Mukhiya
WELL COMPLETED 16 Feb., 1979	LOGGED BY Mr. M. Lamichhane

STATIC WATER LEVEL +1.500 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -25.500 m	CONDUCTIVITY $\mu S/cm$
PUMPING RATE 2700.0 (2mm) m^3/d	pH
SPECIFIC CAPACITY $m^3/d/m$	TOTAL HARDNESS

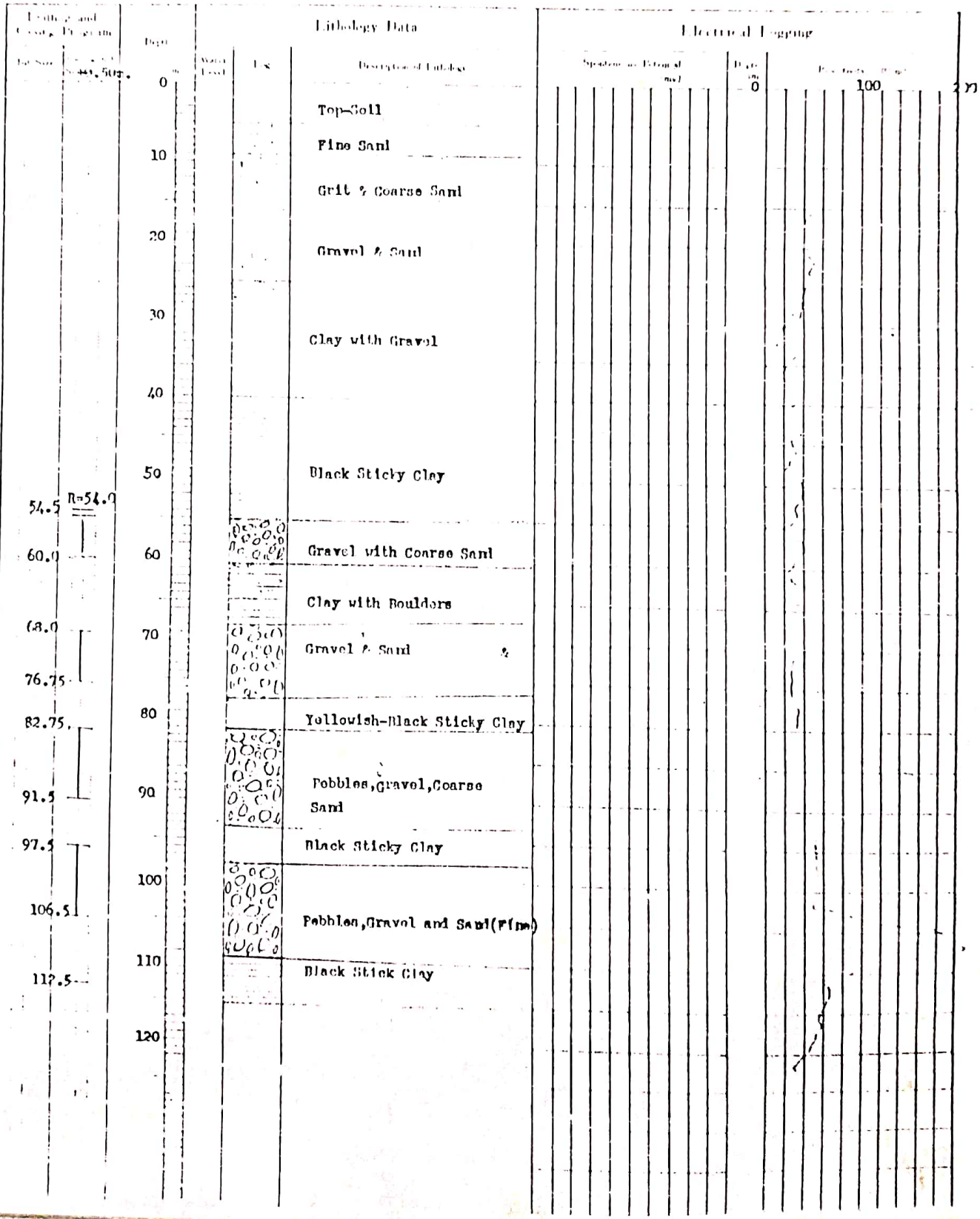


WELL LOG

Well Number: N-37

PROJECT NAME	T.I.A.P.3.P.	Size: 14"/8"	
AREA AND LOCATION	BHAKTIPUR, Sarlahi-District, Janakpur-Zone		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	112.5 m	DRILLING RIG	TRD 500
DRILLING STARTED		DRILLED BY	M.Mukhiya
WELL COMPLETED	Apr., 1997	LOGGED BY	P.Mukhiya

STATIC WATER LEVEL	-1.5 m	WATER TEMPERATURE	°
DYNAMIC WATER LEVEL	-22.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	3600.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

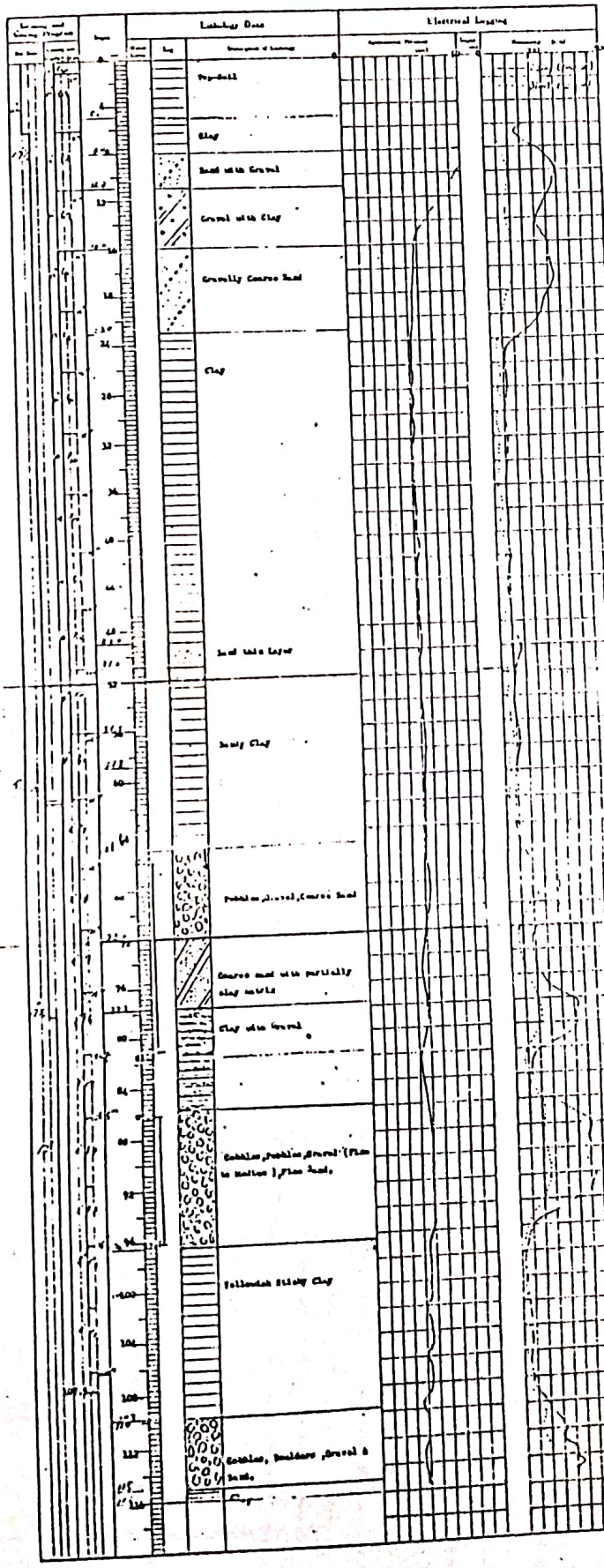


WELL LOG

Well Name: N-38

PROJECT NAME			Site:
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH 109.5	m	EASTING	
DRILLING STARTED		EASTING	
WELL COMPLETED		EASTING	

STATIC WATER LEVEL -34.0	m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL -0.0	m	CONDUCTIVITY	µS/cm
PUMPING RATE 1700.0	l/min	pH	
SPECIFIC CAPACITY	m³/hr	TOTAL HARDNESS	

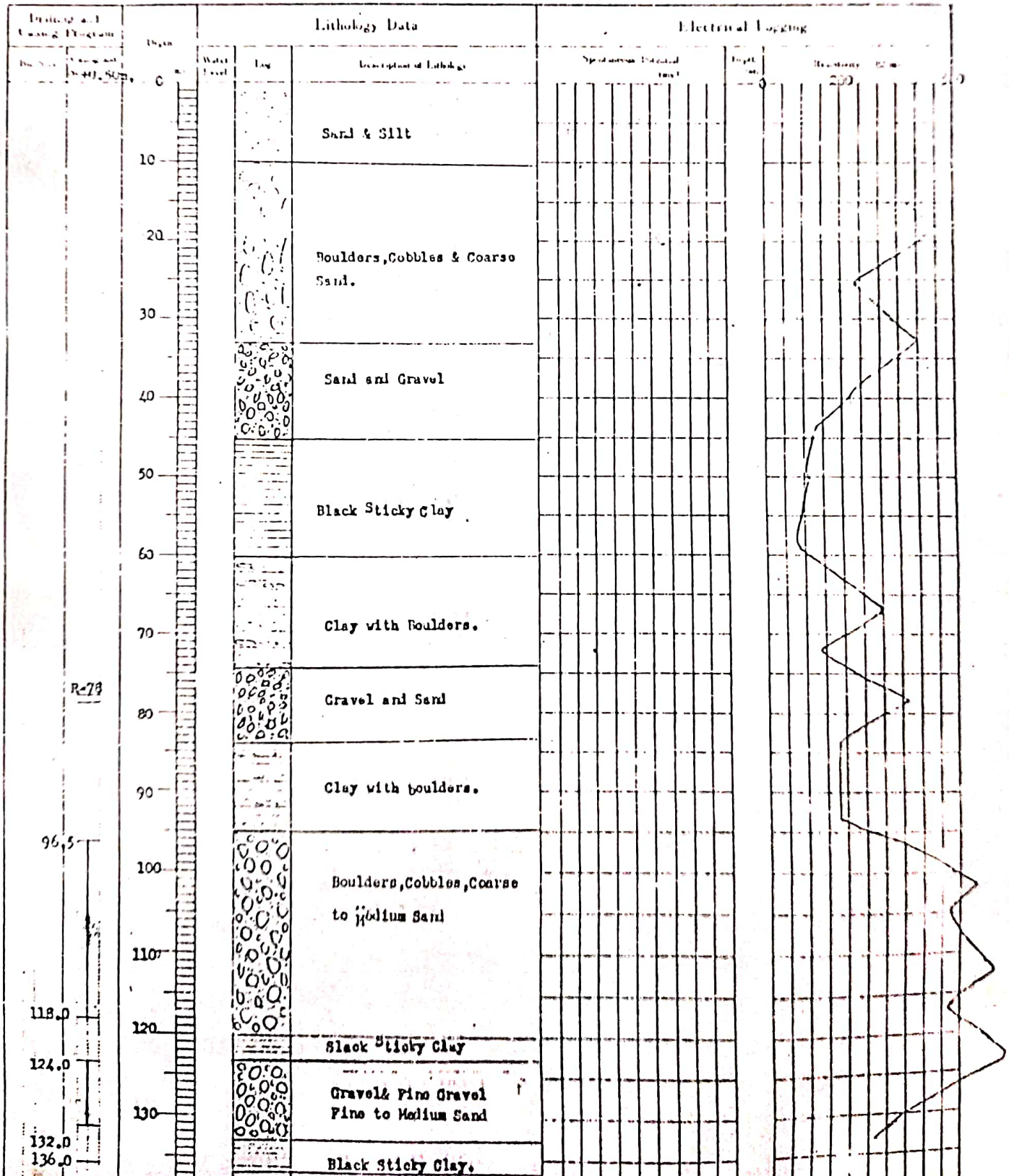


WELL LOG

Well Dimo: N-39

PROJECT NAME	T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	HARIYON, ,Sarlahi-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	136.0 m	DRILLING RIG	TUD 500
DRILLING STARTED		DRILLED BY	Sudesh Rani
WELL COMPLETED	Mar.1997	LOGGED BY	P.Mukhiya

STATIC WATER LEVEL	-51.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-59.0 m	CONDUCTIVITY	
PUMPING RATE	1500.0	pH	
SPECIFIC CAPACITY		TOTAL HARDNESS	

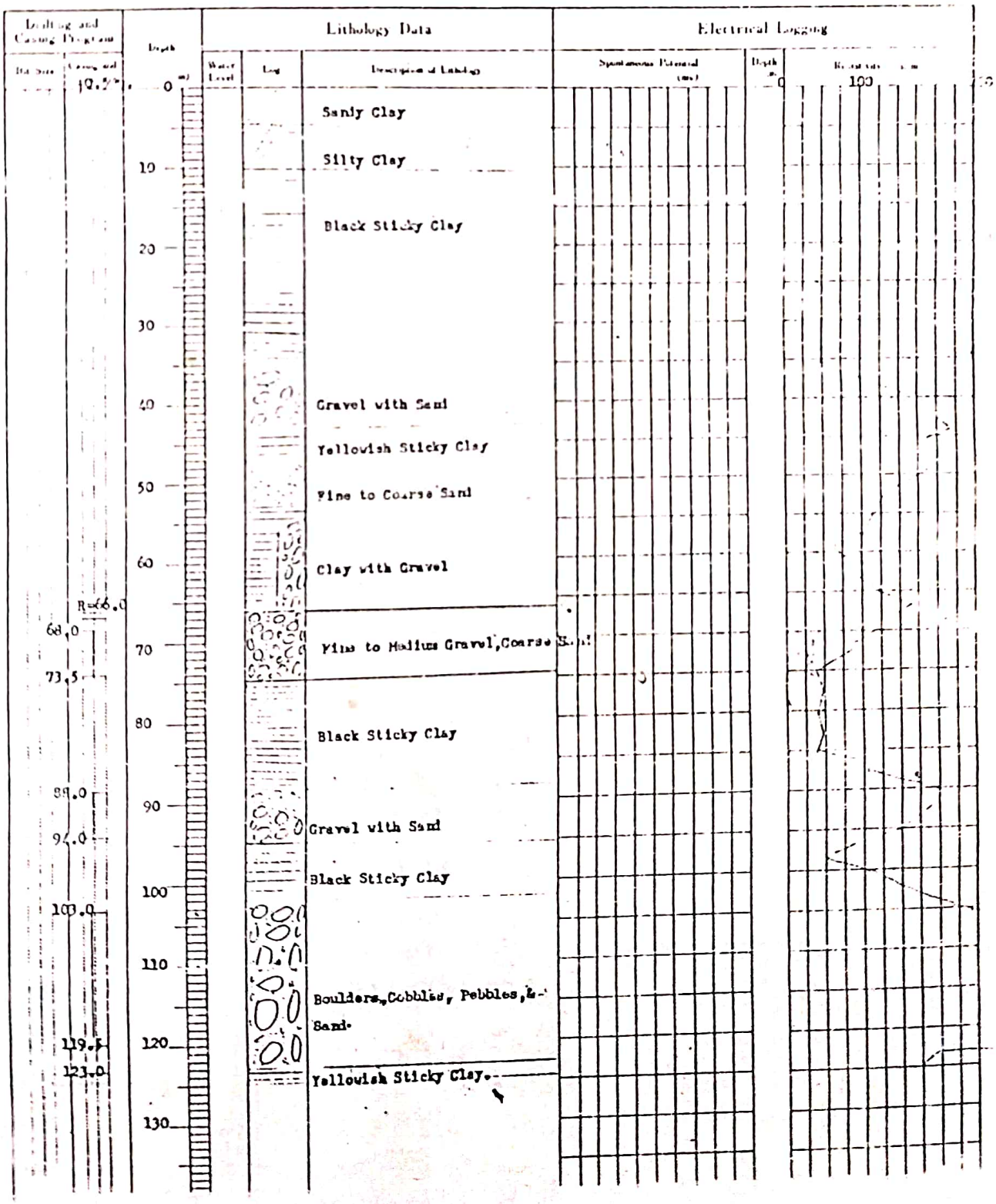


WELL LOG

Well No.: N-40

PROJECT NAME	T.I.A.S.P.		Size: 14"/8"
AREA AND LOCATION	BaTECHORE, Dhanusha-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	123.0 m	DRILLING RIG	TRD-500
DRILLING STARTED		DRILLED BY	Sudesh Rimi
WELL COMPLETED	May., 1997	LOGGED BY	P.Maldiya

STATIC WATER LEVEL	-42.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	- 54.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1500.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



JADP STWs : Number of Pumps Sold in the year

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

Development Region	District	87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur						
	Kailali						
	Sub-total						
Mid West	Bardia						
	Banke						
	Surkhet*						
	Dangdeukhuri*						
	Sub-total						
West	Kapilvastu						
	Rupandehi						
	Nawalparasi						
	Sub-total						
Cantral	Chitwan*						
	Parsa						
	Bara						
	Rautahat						
	Sarlahi	16	8	4	4	—	—
	Mahottari	3	—	1	—	—	—
	Dhanusha	10	14	4	4	—	—
	Sub-total						
East	Siraha	1	1	1	—	—	—
	Saptari						
	Sunsari						
	Morang						
	Jhapa						
	Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

Failed STWs: JADP. in the year.

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

Development Region	District	87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur						
	Kailali						
	Sub-total						
Mid West	Bardia				—		
	Banke				17	—	
	Surkhet*						
	Dangdeukhuri*						
	Sub-total						
West	Kapilvastu						
	Rupandehi						
	Nawalparasi						
	Sub-total						
Central	Chitwan*						
	Parsa						
	Bara						
	Rautahat						
	Sarlahi	30	1	2	3	8	6
	Mahottari	12	—	4	1	1	8
	Dhanusha	7	6	8	2	3	22
	Sub-total						
East	Siraha	22	18	5	—	1	5
	Saptari						
	Sunsari						
	Morang	—	—	—	—	4	8
	Jhapa						
	Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

Number of ~~fee~~ Successful STWs, JADP. Drilled in that years.

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

Development Region	District	Financial Years.					
		87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur						
	Kailali						
	Sub-total						
Mid West	Bardia				18	—	
	Banke				21		
	Surkhet*						
	Dangdeukhuri*						
	Sub-total						
West	Kapilvastu						
	Rupandehi						
	Nawalparasi						
	Sub-total						
Cantral	Chitwan*						
	Parsa						
	Bara						
	Rautahat						
	Sarlahi	178	14	38	44	44	36
	Mahottari	62	10	13	16	22	37
	Dhanusha	42	9	37	19	43	148
	Sub-total						
East	Siraha	86	76	2	—	11	24
	Saptari						
	Sunsari						
	Morang	—	—	—	—	13	18
	Jhapa						
	Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

ADP DTWs : Installed in the year

Reassessment of the groundwater development strategy for irrigation in the Terai:
Standard District Data Sheet

Development Region	District	Financial Year					
		87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur Kailali Sub-total						
Mid West	Bardia Banke Surkhet* Dangdeukhuri* Sub-total						
West	Kapilvastu Rupandehi Nawalparasi Sub-total						
Cantral	Chitwan* Parsa Bara Rautahat Sarlahi Mahottari Dhanusha Sub-total						
East	Siraha Saptari Sunsari Morang Jhapa Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

JADP DTWs : Total DTWs in operation for irrigation in the year.

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

Development Region	District						
		87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur						
	Kailali						
	Sub-total						
Mid West	Bardia						
	Banke						
	Surkhet*						
	Dangdeukhuri*						
	Sub-total						
West	Kapilvastu						
	Rupandehi						
	Nawalparasi						
	Sub-total						
Cantral	Chitwan*						
	Parsa						
	Bara						
	Rautahat						
	Sarlahi						
	Mahottari						
	Dhanusha						
	Sub-total						
East	Siraha						
	Saptari						
	Sunsari						
	Morang						
	Jhapa						
	Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

GWRDB Exploration DTWs* Drilled in the year.

173

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

Development Region	District	~~044/045~~ 044 87/88	045 88/89	046 89/90	047 90/91	91/92	92/93
~~Far West~~	~~Kanchanpur~~						
	~~Kailali~~						
	~~Sub-total~~						
~~Mid West~~	~~Bardia~~						
	~~Banke~~						
	~~Surkhet*~~						
	~~Dangdeukhuri*~~						
	~~Sub-total~~						
~~West~~	~~Kapilvastu~~						
	~~Rupandehi~~						
	~~Nawalparasi~~						
	~~Sub-total~~						
~~Cantral~~	~~Chitwan*~~						
	~~Parsa~~						
	~~Bara~~						
(Birt)	Rautahat						
	Sarlahi						
Total 45	Mahottari 26 (Gefar)	10	2	4	3		
	Dhanusha						
	Sub-total						
East	Siraha 12 (upto 045)	16 — 12 failure					
	Saptari 3	11 — operati[illegible]					
	Sunsari						
	Morang						
	Jhapa**						
	Udayapur**						
Total Terai							

(19) →

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

* includes production DTWs installed by Mahottari GWIP. Show separately for GWRDB and JICA programmes.

93
50
43

50/51
49/50
48/49
47/48
46/47
45/46
44/45
43/44

93/94
92/93
91/92
89/90 90/91
88/89 89/90
87/88 88/89
86/87 87/88
85/86 86/87

Mahattan

040 — 5
041 — 10
042 — 5
043 — 6

25
14
49

Total Number of GWDB Exploration / Test 273
STWs Selected for Irrigation.

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

Development Region	District	87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur Kailali Sub-total						
Mid West	Bardia Banke Surkhet* Dangdeukhuri* Sub-total						
West	Kapilvastu Rupandehi Nawalparasi Sub-total						
Cantral	Chitwan* Parsa Bara						
	Rautahat Sarlahi Mahottari Dhanusha Sub-total	4	5	5			
East	Siraha 12 Saptari 3 Sunsari Morang Jhapa Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

Total Number of GWRDB Exploration / Test DTWs being operated for Irrigation in the year.

Reassessment of the groundwater development strategy for irrigation in the Terai:

Standard District Data Sheet

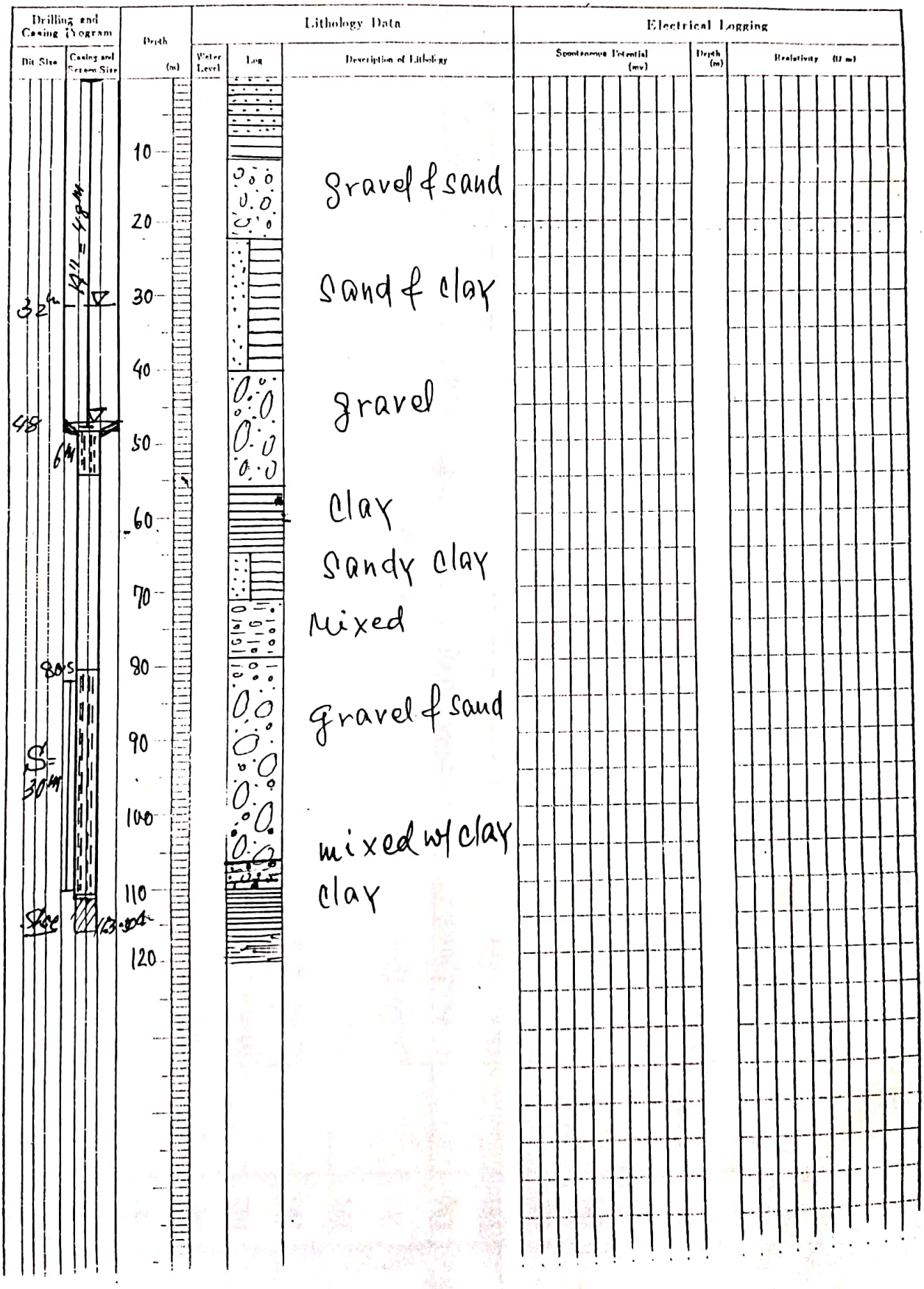
Development Region	District	87/88	88/89	89/90	90/91	91/92	92/93
Far West	Kanchanpur						
	Kailali						
	Sub-total						
Mid West	Bardia						
	Banke						
	Surkhet*						
	Dangdeukhuri*						
	Sub-total						
West	Kapilvastu						
	Rupandehi						
	Nawalparasi						
	Sub-total						
Cantral	Chitwan*						
	Parsa						
	Bara						
	Rautahat						
	Sarlahi						
	Mahottari	5	5	5			
	Dhanusha						
	Sub-total						
East	Siraha 12						
	Saptari 3						
	Sunsari						
	Morang						
	Jhapa						
	Udayapur**						
Total Terai							

* Inner Terai Valley

** Small area of Terai land outside Study Area; included for completeness

PROJECT NAME	Agri. Dev. Project	WELL NO.	4 (051/52)
AREA AND LOCATION	GURUDHAM, LALPUR VDC		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	118.50M m	DRILLING RIG	YRD500 (214)
DRILLING STARTED	2051- -	DRILLED BY	Jitendra & Rajlal
WELL COMPLETED	2051- -	LOGGED BY	Satyendra Jha

STATIC WATER LEVEL	32M m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	48M m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	1200L/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



SIRAHA DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
186.	N–23 No. 1	Mirchaiya		140.0	April 1986	Drilling hole abandoned due to absence of acquifer					
187.	N–41 No. 2	Mirchaiya	14"x8"	101.0	March 1987	24.75	–12.0	–54.0	5.0	60.0	
188.	N–42 No. 3	Mirchaiya	14"x8"	167.5	April 1987	42.0	–15.0	–25.0	30.0	60.0	
189.		Khirauna	14"x8"	174.50	F.Y. 052/53	36.0	+0.5	–20.0	40.0	36.0	
190.		Parariya (Pirorban)	14"x8"	114.5		35 l/s	–12.0	–30.0	38.0	42.0	
191.		Parariya (Laxminiya)	14"x8"	132.5		36.0	–6.0	25.0	45.0	36.0	
192.		Madad 1	14"x8"	163.5		36.0	+.5	20.0	45.0	36.0	
193.		Gobindpur 3	14"x8"	96.5	Oct. 1995	30.0	–21.0	–35.0	25.0	48.0	
194.		Gobindpur 5	14"x8"	120.5		24.0	22.0	42.0	20.0	42.0	
195.		Gobindpur 6	14"x8"	112.5	Jan. 1996	36.0	–23.0	–35.0	30.0	48.0	
196.		Gobindpur 7	14"x8"	99.50		36.0	–20.0	–35.0	35.0	48.0	
197.		Gobindpur 1	14"x8"	117.50	March 1996		–17.0	34.0	30.0	48.0	
198.		Belha	14"x8"	210.0	June 1996	36.0	–1.50	–15.0	40.0	36.0	
199.		Chainpur	8"x8"	110.0		24.0	–22.0	35.0	20.0		
200.		Gurudham	14"x8"	110.0		36.0	–32.0	–48.0	20.0	48.0	
201.		Sukhchaina	14"x8"	163.0		36.0	+.5	–25.0	40.0(Ar.)	36.0	
202.		Sangrampur	14"x8"	99.5	F.Y.051/52	30.0	–26.0	–46.0	20.0	48.0	
203.		Turkiya Bastipur		200.0 113.5	F.Y.051/52 Jan. 97	"Hole abondoned due to lack of Acquifer" 27.0	–14.5	29.0	30.0l/s	48.0	Abondoned

Data No.

N-51

WELL LOG

PROJECT NAME	TIHTSP	WELL NO.	
AREA AND LOCATION	Laxmi Niwas, Dhanusha - District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	122.50 feet	DRILLING RIG	YRD-501E"
DRILLING STARTED		DRILLED BY	S. Jha
WELL COMPLETED	Apl. 1988	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	-37.25 feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-44.50 feet	CONDUCTIVITY	µU /cm
PUMPING RATE	30.0 l/min (l/sec, m³/d)	pH	
SPECIFIC CAPACITY	m³/d /m	TOTAL HARDNESS	

Drilling and Casing Program		Depth (feet)	Lithology Data			Electrical Logging		
Bit Size	Casing and Screen Size		Water Level	Log	Description of Lithology	Spontaneous Potential (mv)	Depth (m)	Resistivity (Ωm)
		0			Sandy clay			
		10			Boulders, pebbles coarse to fine Sand			
		20						
		30						
		40			clay with gravel			
		50			Silt with clay			
61.5		60			clay with gravel			
		70			Silty clay			
		80	82.5		Gravel & C. Sand			
	Slotted	90	89.0		Silt to Sand			
	Slotted R.F. & Sand		93.5 R.F.		Gravel & med to C. Sand			
		100	97.5		Gravel, pebbles with Sticky clay			
		110	109.5					
	Sanky R.F.	120	R.F.		Pebbles, C. Sand & gravel			
122.5			120.0		Sticky brown clay			
		130						

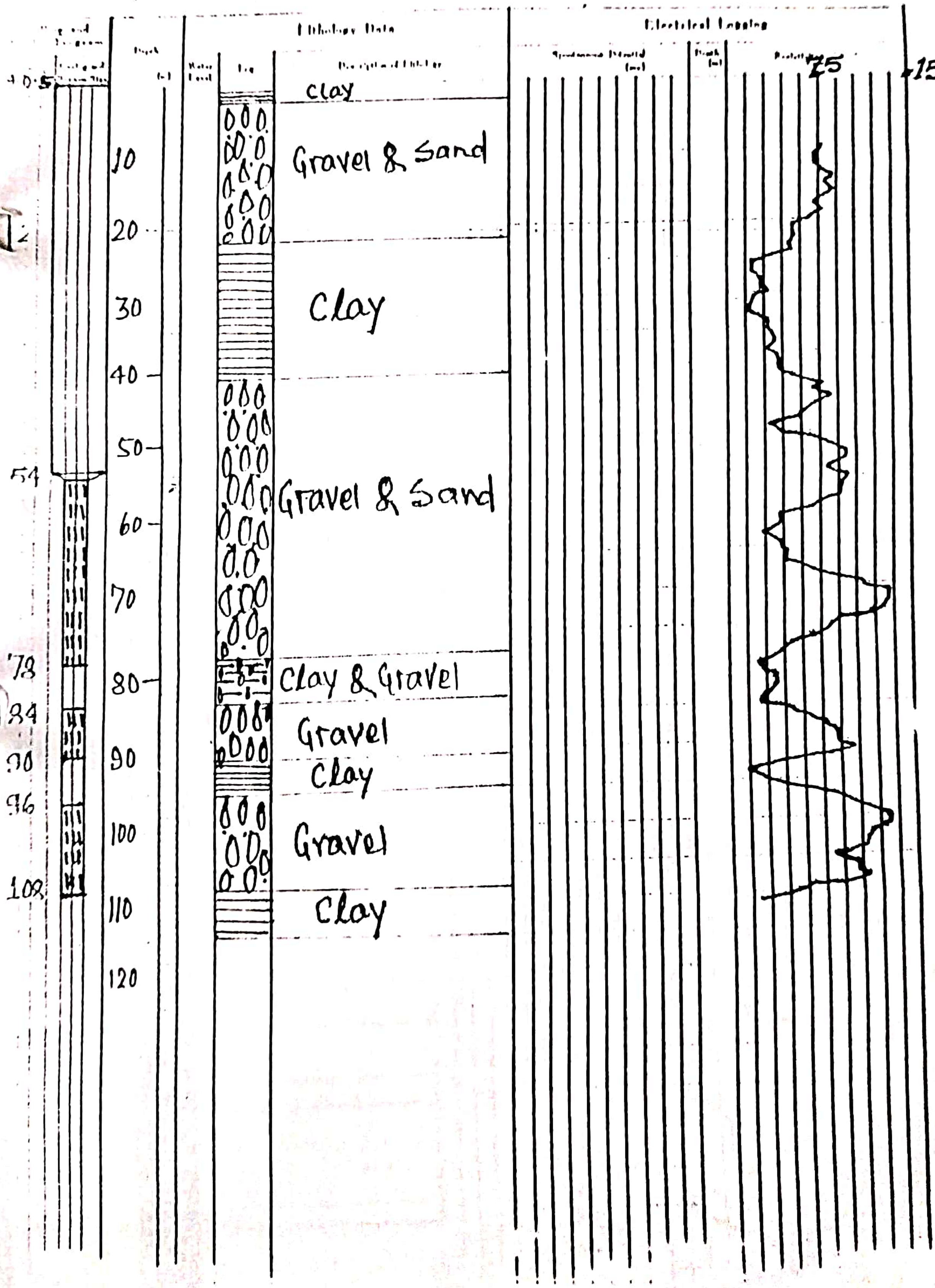
Agriculture Development Project, Janakpur, Dhanusha

Data No.

WELL LOG

PROJECT NAME	Agri. dev. Project	WELL NO.	
AREA AND LOCATION	Laxminiwas-7 Dhanusha		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	108·5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2052-10-5	DRILLED BY	R. B. K. C
WELL COMPLETED	2052-11-7	LOGGED BY	Ran Bdr K.C

STATIC WATER LEVEL	35·0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	36·0 m	CONDUCTIVITY	µS/cm
PUMPING RATE	2100 l/min m³/H	pH	
SPECIFIC CAPACITY	m³/H/m	TOTAL HARDNESS	



Drawn By
R3lar

WELL LOG

PROJECT NAME: Agri. Dev. Project	WELL NO.
AREA AND LOCATION: Lohana - Dhanusha	
ELEVATION: m	LATITUDE LONGITUDE
TOTAL DEPTH: 166.5 m	DRILLING RIG: IRD 500
DRILLING STARTED: 2052-11-8	DRILLED BY: R.B.K.C
WELL COMPLETED: 2052-12-15	LOGGED BY: Ron Bdr. K.C

STATIC WATER LEVEL: Artisen m	WATER TEMPERATURE: °C
DYNAMIC WATER LEVEL: m	CONDUCTIVITY: µS/cm
PUMPING RATE: 1800 l/min (m³/d)	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS

Lithologic Data

Electrical Logging

70.5
24
116
122
128
134
138
157
162
169
170

10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160

Clay
sand
Clay
Clay with Gravel
Clay
Clay with Gravel
Black clay

50
100

Drawn by

Annex - XIII

Details of Pump house and Canal construction for IAP and Turnkey KR–II

Location		Construction cost in NRs.	Canal cost in NRs.	Total cost in NRs.	Plan of repai construction schedule by Fiscal year
No. of Pump station	District V.D.C.				
IAP No. 4	Dhanusha Ramdaiya	200,000.–	Approach canal 26 m 253,704.–	453,704.–	F/Y 1996/97 March
IAP No. 6	Dhanusha Ramdaiya	"	Approach canal 46 m 279,632.–	479,632.–	F/Y 1997/98
IAP No. 7	Dhanusha Ramdaiya	"	Approach canal 76 m 237,347.–	437,347.–	F/Y 1997/98
KR II Turnkey T 3	Dhanusha Bharatpur	"	Approach canal 20 m 20,000.–	220,000.–	F/Y 1996/97 April
KR II Turnkey T 5	Dhanusha Godar	"	"	"	F/Y 1997/98
KR II Turnkey T 7	Dhanusha Gauripur	"	"	"	F/Y 1996/97 May
KR II Turnkey T 8	Dhanusha Radhapur	"	"	"	F/Y 1996/97 June
KR II Turnkey T 9	Dhanusha Mangalpur	"	"	"	F/Y 1997/98
KR II Turnkey T 10	Dhanusha Sarasa	"	"	"	"
KR II Turnkey T 11	Dhanusha Gohiyahi	"	"	"	"
KR II Turnkey T 12	Dhanusha Janakinagar	"	"	"	"
KR II Turnkey T 13	Dhanusha Kajra Ramaul	"	"	"	"
KR II Turnkey T 15	Dhanusha Hanspurkathpulla	"	"	"	"
KR II Turnkey T 16	Dhanusha Jhatiyahi	"	"	"	"

10% cost of construction will be produced by concern farmer and rest 90% cost will be beared by JADP Budget.

Utilization of Existing Infrastucture (Pump House and Canals) of Tube–Wells

T6	Dhanusha Dhalkebar	It was installed in Jan. 1986. At that time pumping discharge was 5 l/sec. At present, the well has been handed over for drinking water purpose.
T7	Dhanusha Gauripur	It was installed in Feb. 1986. At that time pumping discharge was 20 l/sec. The well damage occured because of screen collapse since 1990. So reboring is feasible with 40 l/sec. discharge keeping a distance of 30 meter from the existing hole.
T8	Dhanusha Radhapur	It was installed in Jan. 1986. During that time pumping discharge was 42 l/sec. The well was damaged occured because of screen collapse since 1994. So reboring is feasible keeping a distance of 30 meter from the existing hole for same discharge.
T9	Dhanusha Mangalpur	It was installed in Jan. 1986. At that time pumping discharge was 20 l/sec. The well was damaged occured because of screen collapse since 1995. So reboring is feasible with 40 ~ 45 l/sec. discharge keeping a distance of 30 meter from the existing hole.
T10	Dhanusha Sarsa	It was installed in Jan. 1986. At that time pumping discharge was 20 l/sec. The well was damaged because of screen collapse since 1989. So, reboring is feasible with 35 ~ 40 l/sec. discharge keeping a distance of 30 meter from the existing hole.
T11	Dhanusha Gohiyahi	This well was installed in Feb. 1986. At that time pumping discharge was 40 l/sec. The well was damaged because of screen collapse since 1991. So, reboring is feasible with good discharge keeping a distance of 30 meter from the existing hole.
T12	Dhanusha Janakinagar	It was installed in Feb. 1986. At that time pumping discharge was 10 l/sec. The well was damaged because of screen collapse since 1988. Reboring is feasible there because this place is located between Mangalpur and Laliya. So we can hope 25 ~ 30 l/sec. discharge. The reboring should be done keeping a distance of 30 meter from the existing hole.

Utilization of Existing Infrastucture (Pump House and Canals) of Tube–Wells

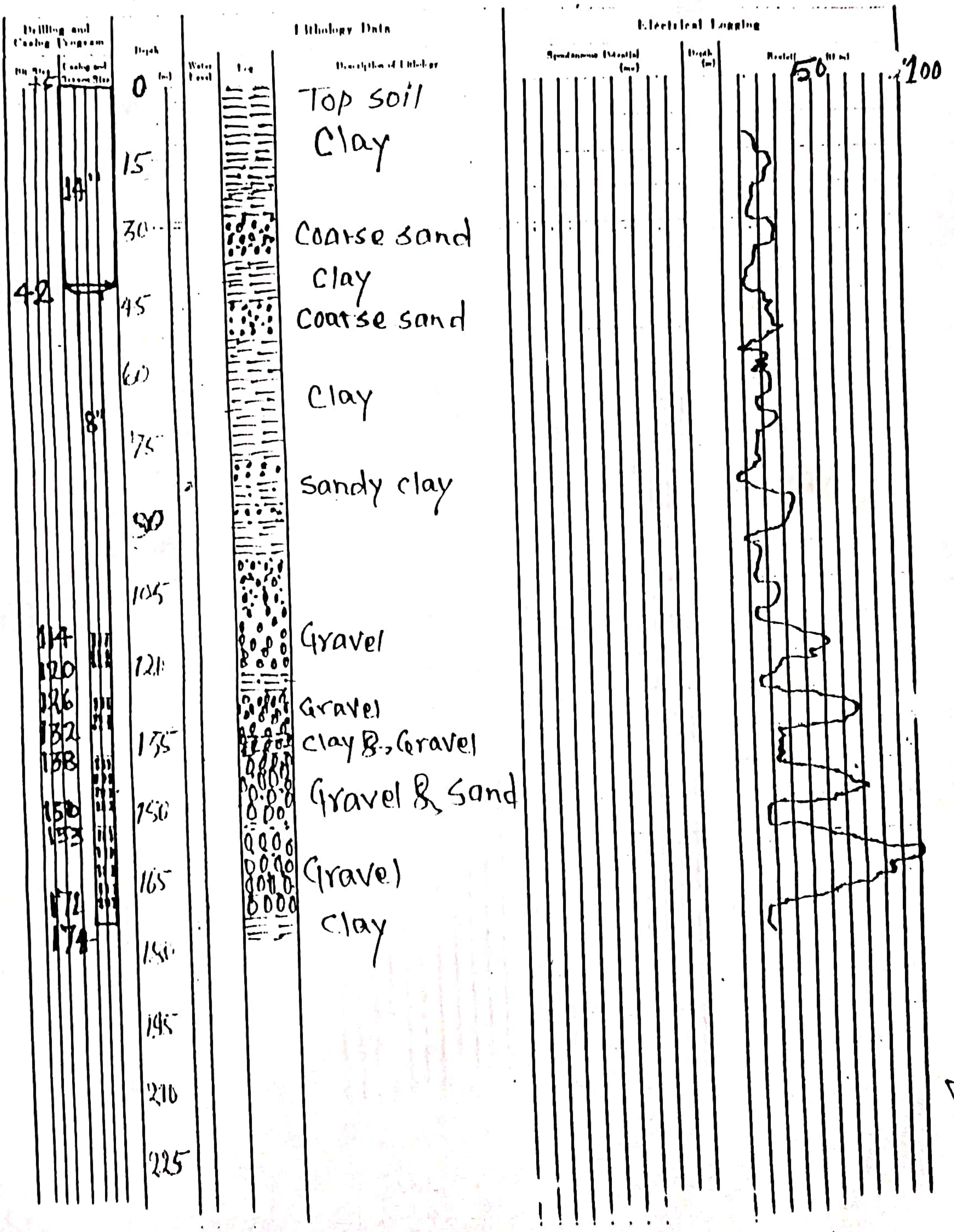
T13	Dhanusha Kajra Ramaul	It was installed in Jan. 1986. At that time pumping discharge was 10 l/sec. The well was damaged because of screen collapse since 1988. Reboring is feasible there because this place is situated between Mangalpur and Laliya. So we hope 25 ~ 30 l/sec. discharge keeping a distance of 30 meter from the existing hole.
T14	Dhanusha Laliya	It was installed in March 1986. At that time pumping discharge was 30 l/sec. uptill now this well is operating with same discharge rate.
T15	Dhanusha Hanspur Kathpulla	It was installed in Feb. 1986. At that time pumping water discharge was 7 l/sec. The well was damaged because of screen collapse since 1988. Reboring is feasible there because this place is situated in the success area. So we hope 25 ~ 30 l/sec. discharge keeping a distance of 30 meter with existing hole.
T16	Dhanusha Jhatiyahi	It was installed in March 1986. At that time pumping discharge was 25 l/sec. The well is damaged because of screen collapse since 1995. So reboring is feasible with same discharge rate keeping distance of 30 meter from the existing hole.

Agriculture Development Project, Janakpur Dhanusha
Data No.

WELL LOG

PROJECT NAME	Agri. Dev. Project	WELL NO.	'1st'
AREA AND LOCATION	Logma - Dhanusha		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	174.5 m	DRILLING RIG	TRD 600
DRILLING STARTED	2051-5-11	DRILLED BY	R.B.K.C
WELL COMPLETED	2051-6-15	LOGGED BY	R.B.K.C

STATIC WATER LEVEL	Artisen m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µS/cm
PUMPING RATE	20l/sec Artisen	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Drawn By
R.B.K.C

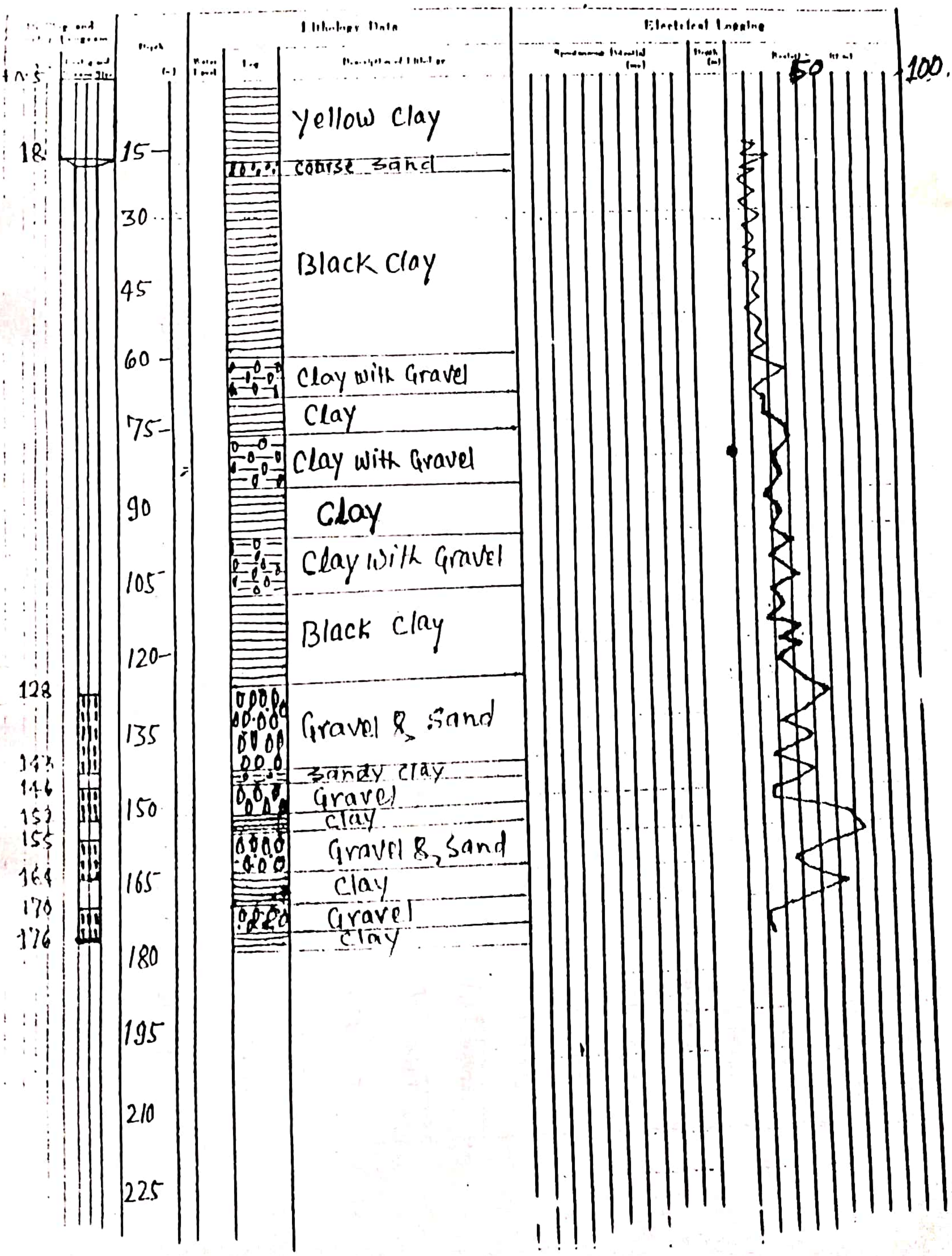
Agriculture Development Project, Janakpur Dhanusha

WELL LOG

Data No.

PROJECT NAME	Agri. dev. Project	WELL NO.	
AREA AND LOCATION	Lohana-3 Dhanusha		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	176.5 m	DRILLING RIG	TRD 500
DRILLING STARTED	2052-12-16	DRILLED BY	R. B. K. C
WELL COMPLETED	2053-1-14	LOGGED BY	Ram Bdr. K. C

STATIC WATER LEVEL	Artizen m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µS/cm
PUMPING RATE	1500 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Drawn by
[signature]

S.N.	Name of place	Di[illegible]ict	Date of Installation	Pump + Engine Machine	[illegible]scharge lit. / sec.	Fuel Consumption lit. / hour	Remarks
1.	Madhavpur (A) Panchkanya –4	Chitwan	1994	Ebara + Fiat	40 l/sec.	9 l/hour	
2.	Panchkanya –9 (Jayma) (Ngala A)	"	"	"	"	10 l/ hour	
3.	Madhavpur (A) Panchkanya –4	"	"	"	"	9 l/hour	
4.	Panchkanya –5 (Amilia)	"	"	"	30 l/sec.	9 l/hour	
5.	Panchkanya –7 (Jirauna)	"	"	"	40 l/sec.	10 l/ hour	
6.	Chainpur –8 (A)	"	"	"	30 l/sec.	8 l/ hour	
7.	Bharatapur Nagarpalika–14	"	"	"	30 l/sec.	8 l/ hour	
8.	Bharatapur Nagarpalika–14 Kalyanpur	"	"	"	50 l/sec.	9 l/hour	
9.	Bharatapur Nagarpalika–8 Parasnagar	"	"	"	40 l/sec.	10 l/ hour	
10.	Bharatapur Nagarpalika–13 Rambag	"	"	"	35 l/sec.	10 l/ hour	
11.	Bharatapur Nagarpalika–6 Lanku	"	"	"	40 l/sec.	8 l/ hour	
12.	Pithuwa –3 (A)	"	1995	Ebara + Fiat	40 l/sec.	10 l/ hour	
13.	Pithuwa –3 (B)	"	"	"	40 l/sec.	10 l/ hour	
14.	Chainpur –8 (B)	"	"	"	30 l/sec.	8 l/ hour	
1.	Mirchaiya – 3	Siraha	1987	"	30 l/sec.	10 l/ hour	
1.	Department of Agriculture	Kathmandu	1994	Submersible Pump (4" diameter)	10 l/sec.		
2.	Ministry of Agriculture	Kathmandu	1992	Submersible Pump	15 l/sec.		

– To be continued –

S.N.	Name of place	District	Date of Installation	Pump + Engine Machine	Discharge lit. / sec	Fuel Consumption lit. / hour	Remarks
1.	Kisan Nagar (JICA)	Mahottari	1988	Okamoto + Isuzu	35 l/sec.	5 l/hour	
2.	Ram Nagar (JADP) (A)	"	1988	Ebara + Fiat	40l/sec.	8 l/hour	
3.	Ram Nagar (JADP) (B)	"	1996	"	45 l/sec.	7.5 l/hour	
4.	Hathilet	"	1990	"	25 l/sec.	12 l/hour	
5.	Laxminiya–8– JADP	"	1996	"	35 l/sec.	8 l/hour	
6.	Bijalpura 6 JADP	"	1997	Ebara + Isuzu	55 l/sec.	9 l/hour	
7.	Pashupatinagar	"	1996	Ebara + Fiat	30 l/sec.	8 l/hour	
1.	Pallan Netraganja	Sarlahi	1987	Ebara + Fiat	30 l/sec.	10 l/hour	
2.	Bhaktipur –9	"	1987	Ebara + Fiat	60 l/sec	7 l/hour	
3.	Shreenagar – 8	"	1988	Okamoto + Isuzu	45 l/sec.	5 l/hour	
4.	Shreenagar – 9	"	1992	Ebara + Fiat	40l/sec.	8 l/hour	
5.	Hariyon	"	1990	Ebara + Fiat	32 l/sec.	11 l/hour	
6.	Karmaiya	"	1993	Ebara + Fiat	40 l/sec.	10 l/hour	
7.	Shreenagar	"	1993	Ebara + Fiat	32 l/sec.	10 l/hour	
8.	Lalbandi	"	1996	Ebara + Fiat	30 l/sec.	10 l/hour	
9.	Ishwarpur	"	1995	Ebara + Fiat	40l/sec.	8 l/hour	
10.	Balganga Ghurgauli	"	1997	Ebara + Fiat	35 l/sec.	9 l/ hour	
1.	Bhoraha – 3	Morang	1992	Ebara + Fiat	60 l/sec		
2.	Bhoraha – 4	"	1992	Ebara + Fiat	50 l/sec.		
3.	Sorabhag	"	1993	Ebara + Fiat	50 l/sec.		
1.	Topgachhi – 3	Jhapa	1995	Ebara + Fiat	60 l/sec	8 l/hour	
2.	Topgachhi – 2	"	1995	Ebara + Fiat	60 l/sec	8 l/hour	
3.	Topgachhi – 5	"	1995	Ebara + Fiat	40 l/sec.	8 l/hour	
4.	Satasidhan – 7	"	1995	Ebara + Fiat	30 l/sec.	9 l/ hour	

– To be continued –

List of Pump Installation

S.N.	Name of place	District	Date of Installation	Pump + Engine Machine	Discharge lit. / sec.	Fuel Consumption lit. / hour	Remarks
1.	IAP No. –1	Dhanusha	1976	Centrifugal pump	30 l/sec	2 l/hour	
2.	IAP No. –2	"	1976	Centrifugal pump	35 l/sec	2 l/hour	
3.	IAP No. –3	"	1977	Centrifugal pump	35 l/sec	2 l/hour	
4.	IAP No. –5	"	1976	Centrifugal pump	35 l/sec	2 l/hour	
5.	IAP No. –8	"	1975	Centrifugal pump	40 l/sec	2 l/hour	
6.	IAP No. –9	"	1977	Centrifugal pump	36 l/sec	2 l/hour	
7.	Singyahi Madau	"	1986	Okamoto + Isuzu	40 l/sec	5 l/hour	
8.	Birendra Bazar	"	1985	Ebara + Fiat	25 l/sec	10 l/hour	
9.	Chhiyattar bigaha	"	1986	Ebara + Fiat	35 l/sec	10 l/hour	
10.	Umaprenpur	"	1986	Ebara + Fiat	25 l/sec	10 l/hour	
11.	Nakatajhi	"	1986	Ebara + Fiat	40 l/sec	10 l/hour	
12.	Sakhuwa Mahendranagar	"	1987	Okamoto + Isuzu	50 l/sec	5 l/hour	
13.	Gedar	"	1987	Ebara + Fiat	25 l/sec	8 l/hour	
14.	Bateswor	"	1987	Ebara + Fiat	25 l/sec	10 l/hour	
15.	Bashaiya	"	1988	Ebara + Fiat	50l/sec	9 l/ hour	
16.	Rani bazar	"	1988	Centrifugal pump	35 l/sec	1.5 l /hour	
17.	Mahuwa	"	1992	Ebara + Fiat	30 l/sec	8 l/hour	
18.	Laxmibas Dhalkabar	"	1988	Ebara + Fiat	30 l/sec	10 l/hour	
19.	Kanakpati	"	1993	Ebara + Fiat	40 l/sec	8 l/hour	
20.	Shantipur	"	1996	Okamoto + Isuzu	35 l/sec	5 l/hour	
21.	Ramnagara	"	1996	Ebara + Fiat	30 l/sec	8 l/hour	
22.	Baniniya	"	1997	Ebara + Isuzu	60 l/sec.	6 l/hour	
23.	Backchora	"	1991	Ebara + Fiat	40 l/sec	6 l/hour	
24.	Naktajhij	"	1994	Ebara + Fiat	38 l/sec.	10l/hour	
25.	Naktajhij	"	1991	Ebara + Fiat	35 l/sec.	10 l/hour	
26.	Basahiya –1	"	1994	Ebara + Isuzu	45 l/sec	6 l/ hour	
27.	Basahiya –2	"	1994	Ebara + Isuzu	45 l/sec	6 l/ hour	
28.	Basahiya –3	"	1994	Ebara + Isuzu	45 l/sec	6 l/ hour	
29.	Basahiya –4	"	1994	Ebara + Isuzu	45 l/sec	6 l/ hour	
30.	Hariharpur – 1	"	1986	Ebara + Fiat	30 l/sec	8 l/hour	
31.	Hariharpur – 2	"	1990	Ebara + Fiat	35 l/sec.	8 l/hour	
32.	Hariharpur – 3	"	1986	Okamoto + Isuzu	30 l/sec	5 l/hour	
33.	Dharapani	"	1986	Ebara + Isuzu	5 l/sec	10 l/hour	Screen damage
34.	Bhartapur	"	1985	Ebara + Isuzu	25l/ sec.	6 l./ hour	Screen damage
35.	Godar	"	1986	Ebara + Isuzu	25l/ sec.	6 l./ hour	Screen damage

– To be continued –

List of Deep Tubewell Drilled with the Installation of Pumps & Engines by ADPJ

S.N.	District	Budget Source	Operational Status (# of DTW)			Total	
			Working	Not Working	Abandoned		
5.	Morang	"	4	0	0	4	
6.	Sunsari	"	1	0	0	1	
7.	Siraha	"	16	0	2	18	
8.	Bara	"	1	0	0	1	
9.	Parsa	"	1	0	0	1	
10.	Chitwan	"	19	0	0	19	
11.	Kathmandu	"	15	0	0	15	
12.	Rupandehi	"	2	0	0	2	
13.	Banke	"	0	0	2	2	
			174	**15**	**46**	**235**	

Annex – I

List of Deep Tubewell Drilled with the Installation of Pumps & Engines by ADPJ

S.N.	District	Budget Source	Operational Status (# of DTW)			Total	
			Working	Not Working	Abandoned		
1.	Dhanusha	KR II Turn key	1	0	15	16	
		JGGAS	4	5	0	9	
		KR II–ADPJ	39	7	18	64	
		JICA–ADPJ	20	3	2	25	
		Total	64	15	35	114	
2.	Mahottary	KR II Turn key	0	0	0	0	
		JGGAS	0	0	0	0	
		KR II–ADPJ	16	0	2	18	
		JICA–ADPJ	3	0	0	3	
		Total	19	0	2	21	
3.	Sarlahi	KR II Turn key	0	0	0	0	
		JGGAS	0	0	0	0	
		KR II–ADPJ	24	0	4	28	
		JICA–ADPJ	3	0	1	4	
		Total	27	0	5	32	
4.	Jhapa	ADPJ	5	0	0	5	

Annex XI

Utilization of Existing Infrastucture (Pump House and Canals) of Tube–Wells

Well No.	District V.D.C.	Present Condition & Possibility of reboring
I.A.P. No. 4	Dhanusha Saphi	It was installed on 25 March 1975. At that time artesian discharge was 14.4 l/sec. and pumping water discharge was 39.9 l/sec. The well damaged was occured becasue of screen collapse since 1995. So reboring is feasible keeping a distance of 30 meter from the existing hole.
I.A.P. No. 6	Dhanusha Saphi	It was installed on 25 March 1975. At that time artesian discharge was 14.4 l/sec. and pumping water discharge was 39.9 l/sec. The well damaged was occured becasue of screen collapse since 1995. So reboring is feasible keeping a distance of 30 meter from the existing hole. ?
I.A.P. No. 7	Dhanusha Saphi	It was installed on 25 March 1975. At that time artesian discharge was 14.4 l/sec. and pumping water discharge was 39.9 l/sec. The well damaged was occured becasue of screen collapse since 1995. So reboring is feasible keeping a distance of 30 meter from the existing hole.
T1	Dhanusha Dharapani	It was installed in June 1985. Pumping discharge was 5 l/sec. that time.due to poor acquifer reboring is not possible in this area.
T2	Dhanusha Pushapalpur	It was installed in June 1985. From the begining it was a dry well. So reboring is not possible.
T3	Dhanusha Bharatpur	It was installed in May 1985. At that time pumping discharge was 10 l/sec. The well damage occured because of screen collapse since 1995 so reboring is feasible keeping a distance of 30 meter from the existing hole.
T4	Dhanusha Kumrah	It was installed in July 1985. During that time pumping discharge was 10 l/sec. Due to poor acquifer reboring is not possible there.
T5	Dhanusha Godar	It was installed in December 1985. At that time pumping discharge was 45 l/sec. The well was damaged because of screen collapse since 1990. So, reboring is feasible keeping a distance of 30 meter from the existing hole.

Annex-XII

Details of Reboring of IAP & Turnkey (KRII)

FY	Location		Schedule for Boring	Remarks
	Name of Pump Station	District VDC		
1996/97	IAP No. 4	Dhanusha Ramdaiya	Early of February ~ End of February	Deposit money is already collected for DTW
"	T3	" Bharatpur	Middle of February ~ End of March	"
"	T7	" Gauripur	Early of April ~ End of May	Deposit money should be collected
"	T8	" Radhapur	Early of June ~ End of June	"
1997/98	IAP No. 6	" "	October 1997	Deposit money is already collected for DTW
"	IAP No. 7	" "	November 1997	"
"	T5	" Godar		"
"	T9	" Mangalpur		"
"	T10	" Sarasa		"
"	T11	" Gohiyahi		"
"	T12	" Janakinagar		"
"	T13	" Kajra Ramaul		"
"	T15	" Hanspur Kathpulla		"
"	T16	" Jhatiyahi		"

PROJECT NAME	Agri Dev. Project, Janakpur	WELL NO.	2 (052/53)
AREA AND LOCATION	Laxminiya, Parariya - 3, Lahan "Sirah"		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	132.50 m	DRILLING RIG	YRD 300 Rig - 214
DRILLING STARTED	0521 /	DRILLED BY	Rajlal & Jitendra
DRILLING COMPLETED	0521 /	LOGGED BY	S. JHA

STATIC WATER LEVEL	6 m	WATER TEMPERATURE	°C
PUMPING WATER LEVEL	25.0 m	CONDUCTIVITY	
PUMPING RATE	2100 l/min	pH	
SPECIFIC CAPACITY		TOTAL HARDNESS	

Drilling and Casing Diagram (Bit Size; Casing and Screen Size) — Depth (m) — Lithologic Data (Water Level; Log; Description of Lithology) — Electrical Logging (Spontaneous Potential (mv); Depth (m); Resistivity (Ω-m))

Depth marks: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140

Casing/screen marks: 64, 82, 12¼, 124, 130, 132.5

Description of Lithology:

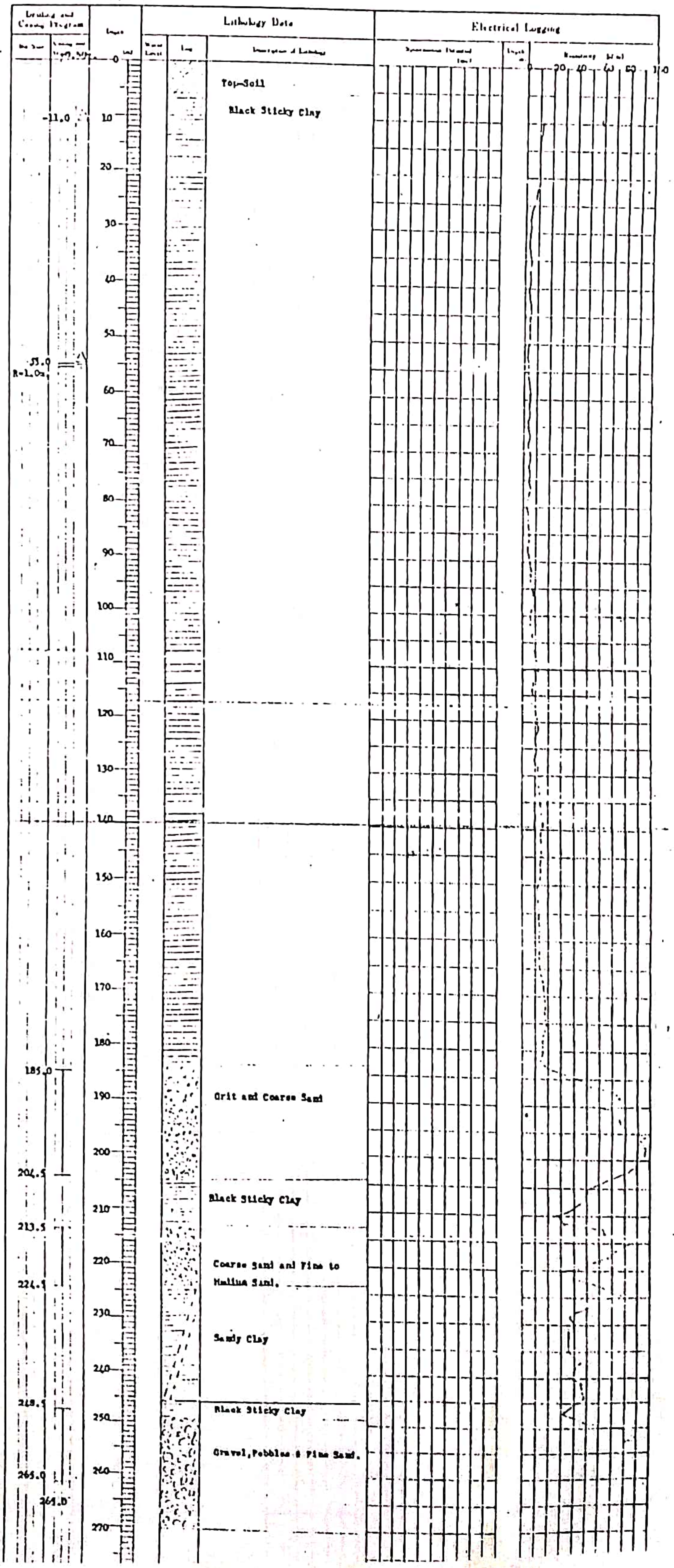
- Black sticky clay
- Hard gravel
- clay
- gravel & sand
- Sticky clay
- Boulder Zone (Hard)
- Black sticky clay
- gravel w/ clay
- clay Black
- gravel & clay
- gravel
- sticky clay

WELL LOG

JTR 26

PROJECT NAME: Tube-Well Irrigation, Agriculture Training & Service Project.	Size: 14"/8"
AREA AND LOCATION: KHULPOKHRI, Kathmandu, Nepal.	
ELEVATION: m	LATITUDE / LONGITUDE
TOTAL DEPTH: 265.0 m	DRILLING RIG: TBK-72*A*
DRILLING STARTED: 2022-2-18	DRILLED BY: Mr. D.N. Sen
WELL COMPLETED: 2022-5-1	LOGGED BY: Mr. P.Mukhiya

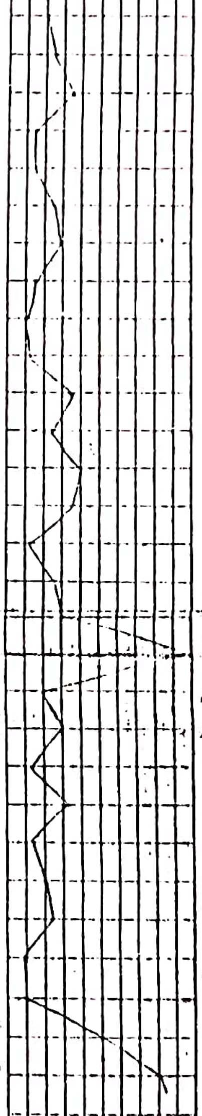
STATIC WATER LEVEL: -11.000 m	WATER TEMPERATURE
DYNAMIC WATER LEVEL: -55.000 m	CONDUCTIVITY
PUMPING RATE: 600.0 m³/d	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS



PROJECT NAME	J.A.D.P.	Size: 14"/8"	
AREA AND LOCATION	KE BARKUTTI, Tegrabhari Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	165.0 m	DRILLING RIG	TMQ 500
DRILLING STARTED		DRILLED BY	Mr. Sudeep Rana
WELL COMPLETED	Mar., 1996	LOGGED BY	Mr. M. Lalchhana

STATIC WATER LEVEL	+10.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μS/cm
PUMPING RATE	1902.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program		Depth (m)	Lithology Data		Electrical Logging
69.0 / 69.5	R=0.5	0		Top-Soil	
				Fine to Medium Gravel	
		10		Black Sticky Clay	
		20		Clay with Gravel	
		30		Clay	
				Clay with Gravel	
		40		Fine to Medium Sand with Gravel	
		50		Yellow Sticky Clay	
				Coarse Sand	
		60		Yellow Sticky Clay	
		70		Clay with Gravel	
		80		Gravel, Fine to Medium Sand	
				Black Sticky Clay	
		90			
		100			
		102.5		Pebbles, Gravel, Coarse to Medium Sand	
		110			
		117.5 / 120		Clay with Gravel	
		128.5 / 130		Gravel, Medium Sand	
		133.5		Black Sticky Clay	
		140			
		144.5		Gravel Fine to Medium Sand	
		150	149.5	Black Sticky Clay	
		155.0		Gravel & Fine to Medium Sand Pebbles.	
165.0		160 / 165.0			
		175			



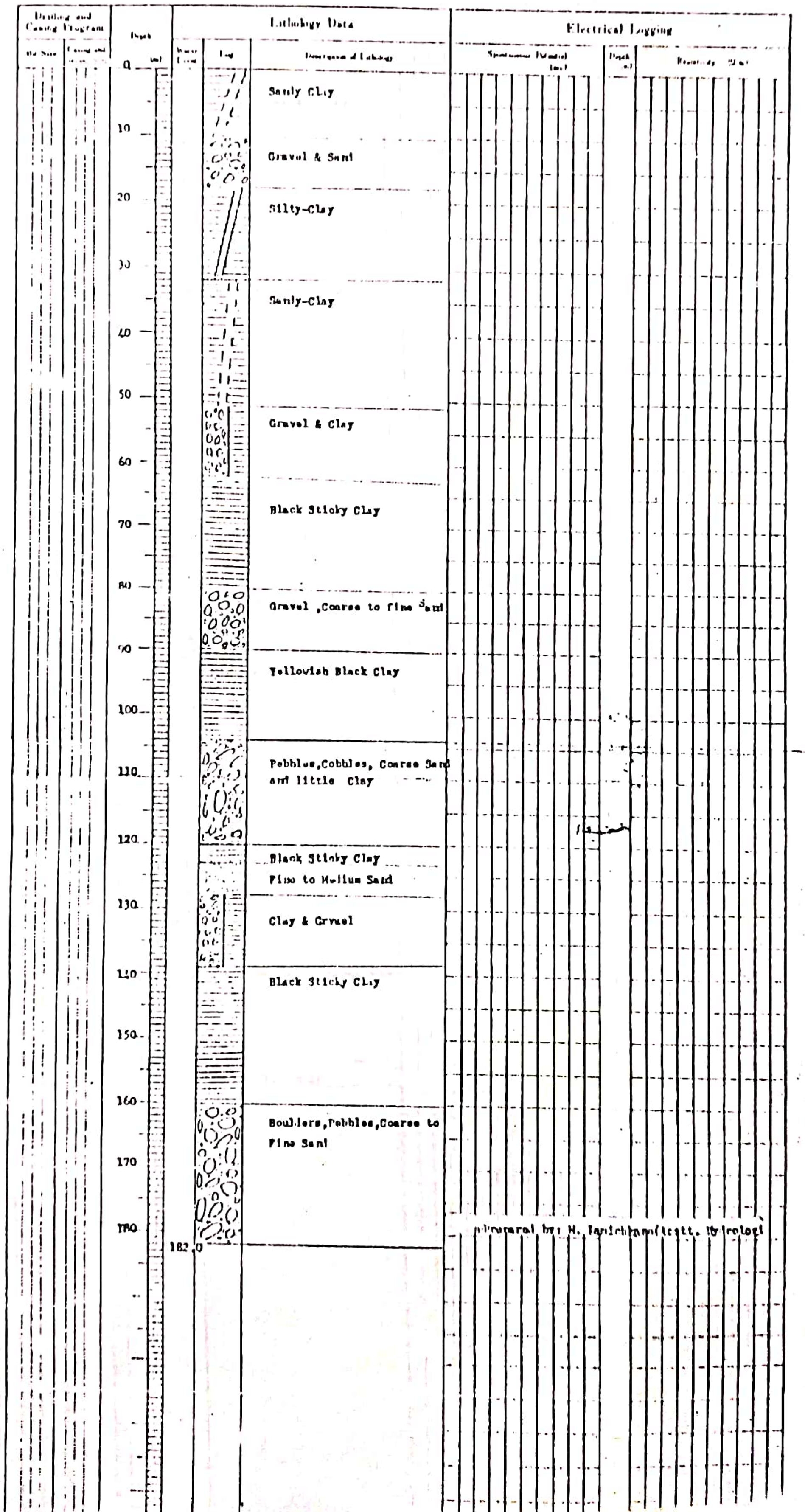
Prepared by: M. Lalchhana

WELL LOG

Well Name: N-21

PROJECT NAME	I.A.D.P	Size: Abandoned	
AREA AND LOCATION	KESHARKOTTI, Yagyabhumi Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	182.0 m	DRILLING RIG	YWD 501"R"
DRILLING STARTED		DRILLED BY	Mr. S. Jha
WELL COMPLETED	Feb. 1976	LOGGED BY	Mr. M. Lanichhane

STATIC WATER LEVEL	m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µS/cm
PUMPING RATE	(m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

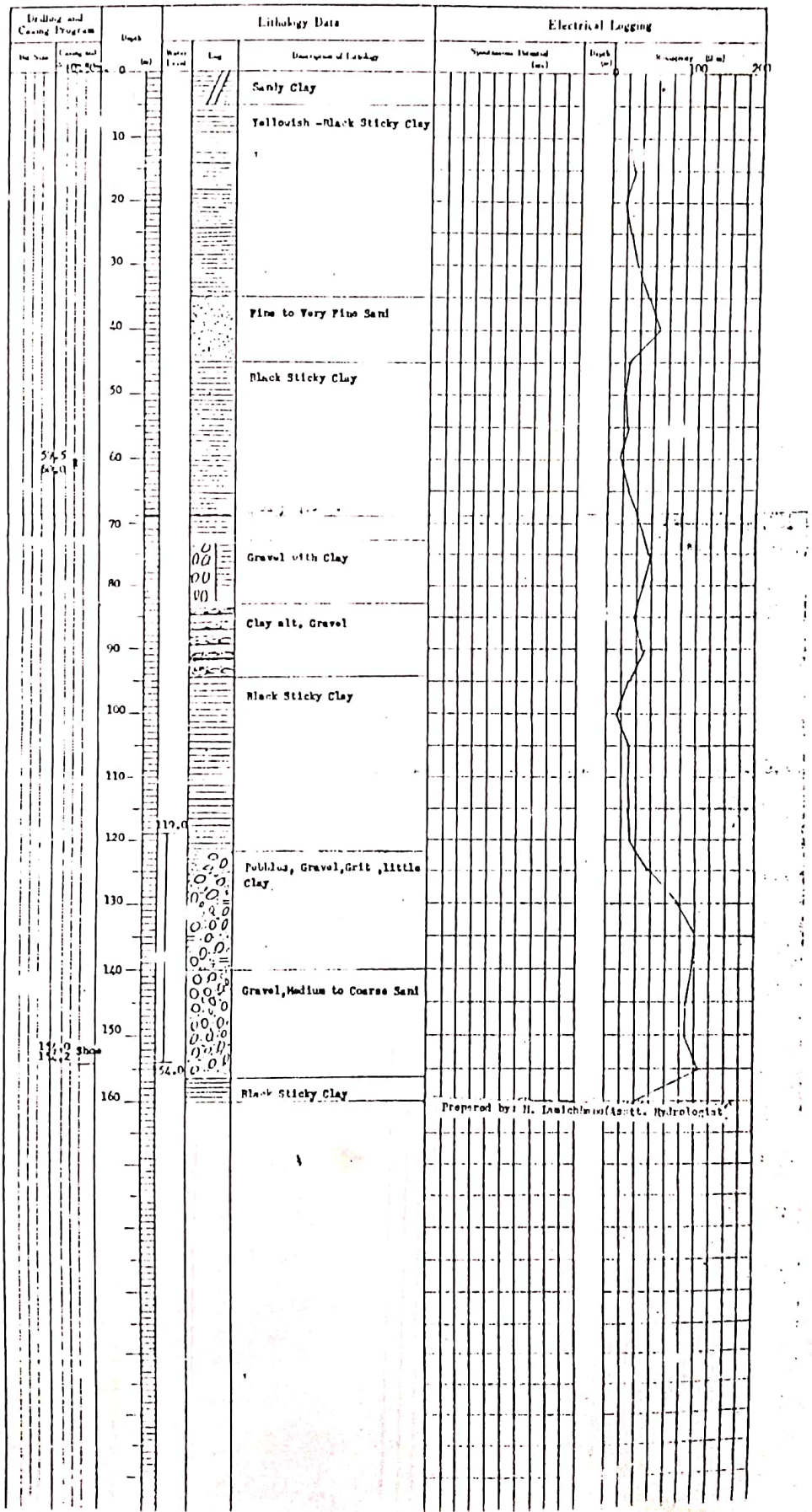


WELL LOG

PROJECT NAME J.I.D.P.	Size: 14"/8"
AREA AND LOCATION KUSHUMA-TOLE, Hanspur-Kathmandu Village Panchayat.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 154.20 m	DRILLING RIG YDD 501 "D"
DRILLING STARTED	DRILLED BY Mr. D.K. Sen
WELL COMPLETED Feb. 1986	LOGGED BY Mr. P.Lakhiya

STATIC WATER LEVEL ± 0.0 m	WATER TEMPERATURE C°
DYNAMIC WATER LEVEL m	CONDUCTIVITY µmho/cm
PUMPING RATE 600.0 l/min (m³/d)	pH
SPECIFIC CAPACITY l/min/allowing Artesian m³/d.m	TOTAL HARDNESS

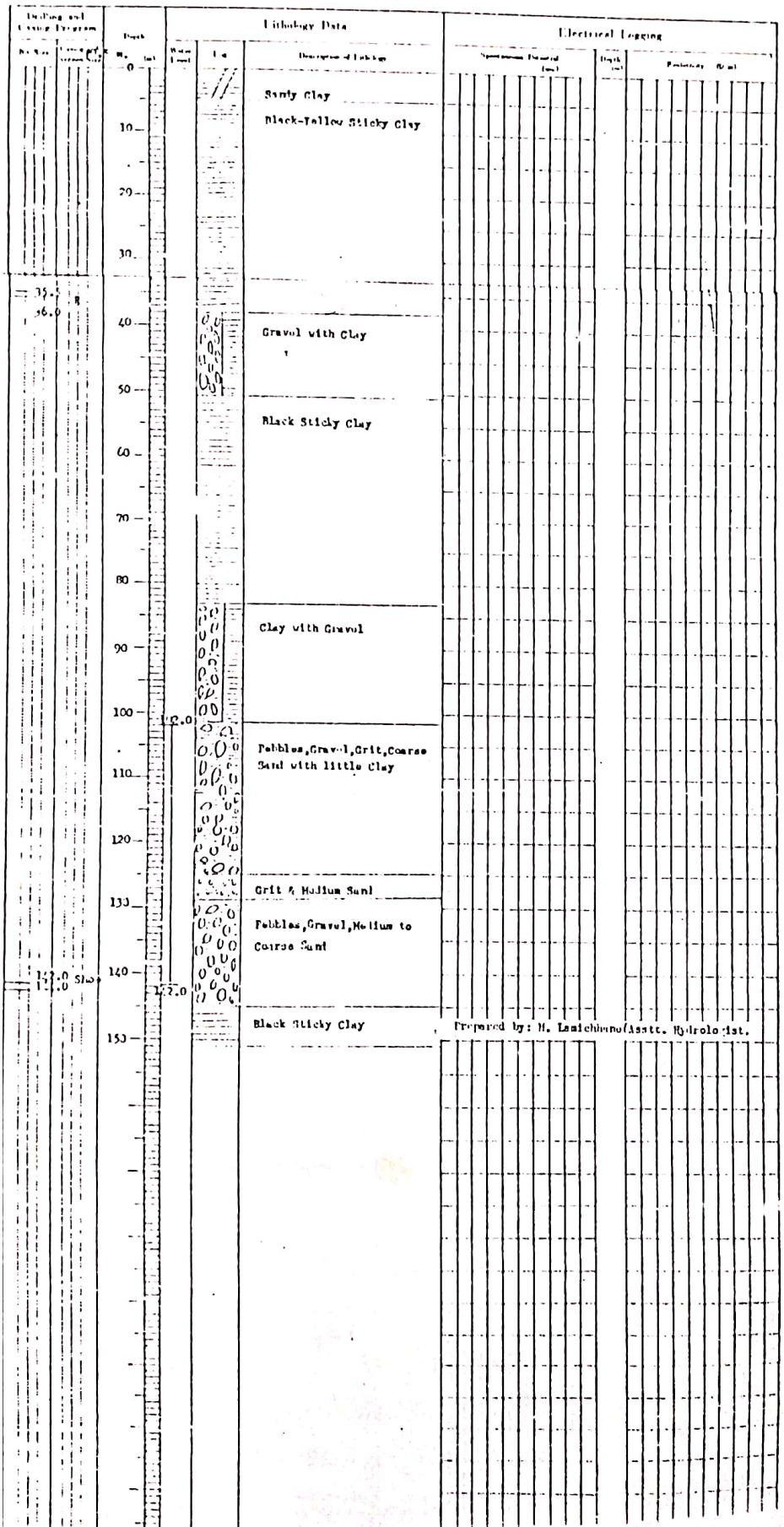
10 l/s



PROJECT NAME J.V.D.P.	Size: 14"/8"
AREA AND LOCATION KATHMULLA , Hampur-Kathmulla Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 144.0 m	DRILLING RIG TWD 501*8"
DRILLING STARTED	DRILLED BY Mr. D.F. Gon
WELL COMPLETED Jan.1996	LOGGED BY Mr. H. Lamichhane

STATIC WATER LEVEL ± 0.0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µS/cm
PUMPING RATE 600.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

10 l/s

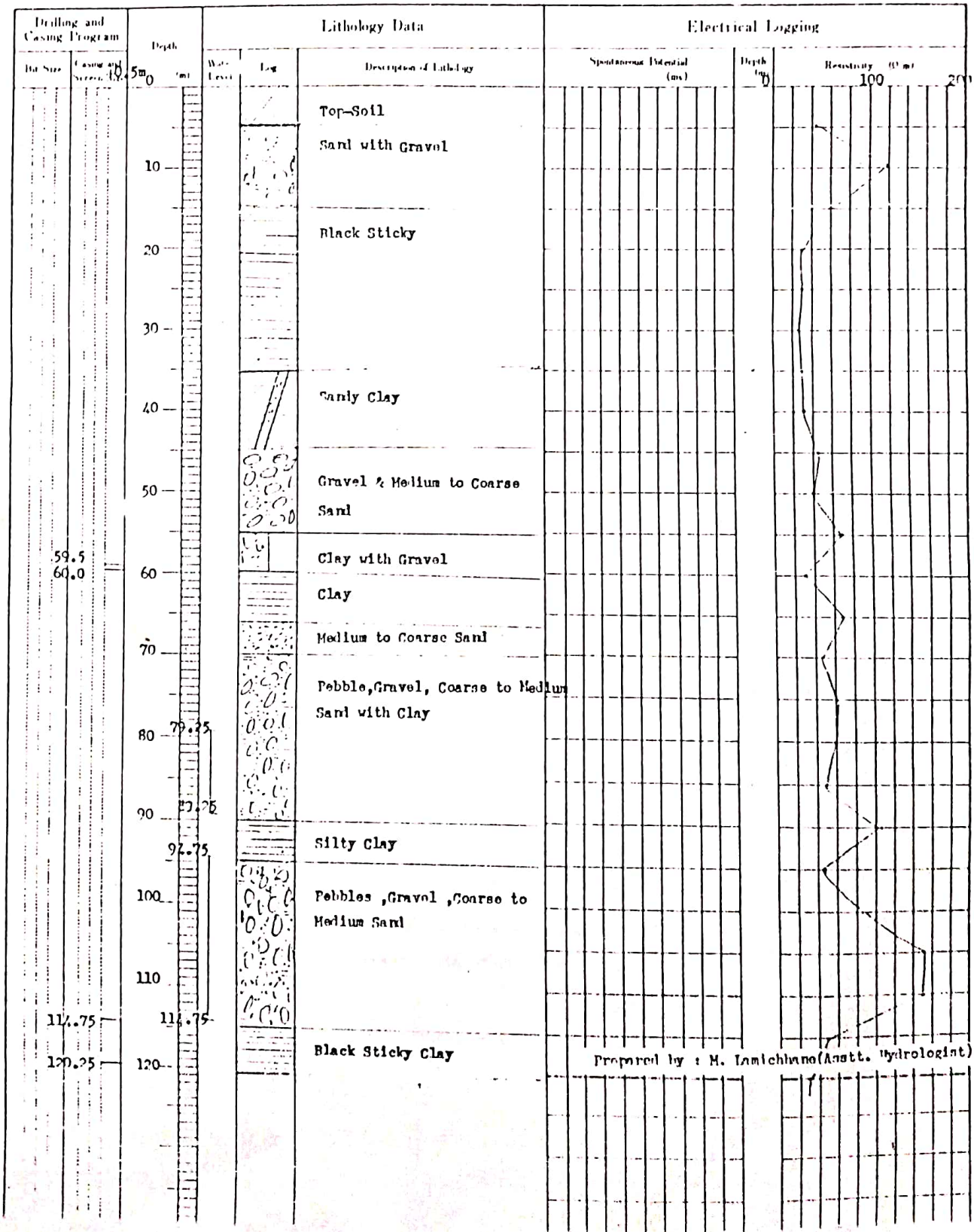


WELL LOG

Size: 14"/8"

PROJECT NAME J.A.D.P.	
AREA AND LOCATION KIGAMTHR, Yagyabhumi Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 120.25 m	DRILLING RIG YMD 501"R"
DRILLING STARTED	DRILLED BY Mr. G. Joshi
WELL COMPLETED Apr., 1986	LOGGED BY Mr. M. Lamichane

STATIC WATER LEVEL -31.00 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µ℧/cm
PUMPING RATE 1200.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



Prepared by : M. Lamichhane(Asstt. Hydrologist)

Well No. N-46

Kisan Nagar, Mahottari - District

by JICA Team

Installed: Mar 1988

Loc. M-4 Site - Well log.

Driller: Mr. SEN

Rig: Rotary YPD-501
Mud pump UAS-7

Depth (m)	Casing Program	Daily Drilling	Driller Log	Lithology Data

G.L. +1.00 m

Casing Program:
- φ 24" Bit — φ 22" Conductor — 18 m
- φ 17½" Bit — φ 14" Pump housing Casing
- Reducer φ 14" × φ 8"
- φ 14¾" Bit — φ 8" Production Casing (Johnson-type screen)
- 95.32 m, 97.35 m, 118.87 m, 136.94 m, 142.44 m, 148.47 m, 159.47 m, 165.50 m

Daily Drilling (depth in m): 11, 18, 24, 28, 43, 71, 101, 118, 130, 146, 168, 170

Lithology Data:

Depth	Lithology
0 - 1 m	black silt
	Gravel and Boulder (20" big Boulder)
20 m	Gravel
22 m - 23 m	yellow clay with Gravel
24 m	" clay
35 m	" clay with Gravel
36 m	" clay
38 m	Gravel with Boulder
43 m	yellow clay
47 m	Gravel and Boulder with yellow clay
59 m	Yellow clay
64 m	Gravel and Boulder with yellow clay
98 m	Gravel with yellow Clay
112 m	yellow clay with Gravel
120 m	Yellow Clay
135 m	Gravel with yellow Clay
139 m	yellow Clay (very hard, 1.0 m/2 h - from 144 m)
147 m	" clay with Gravel
150 m	Gravel with sandy Clay and Boulder
159 m	Clay (very hard, 0.8 m/2.5 h), yellow
166 m	Gravel with yellow Clay
168 m	rich clay (hard, yellow) with little Gravel
170 m	

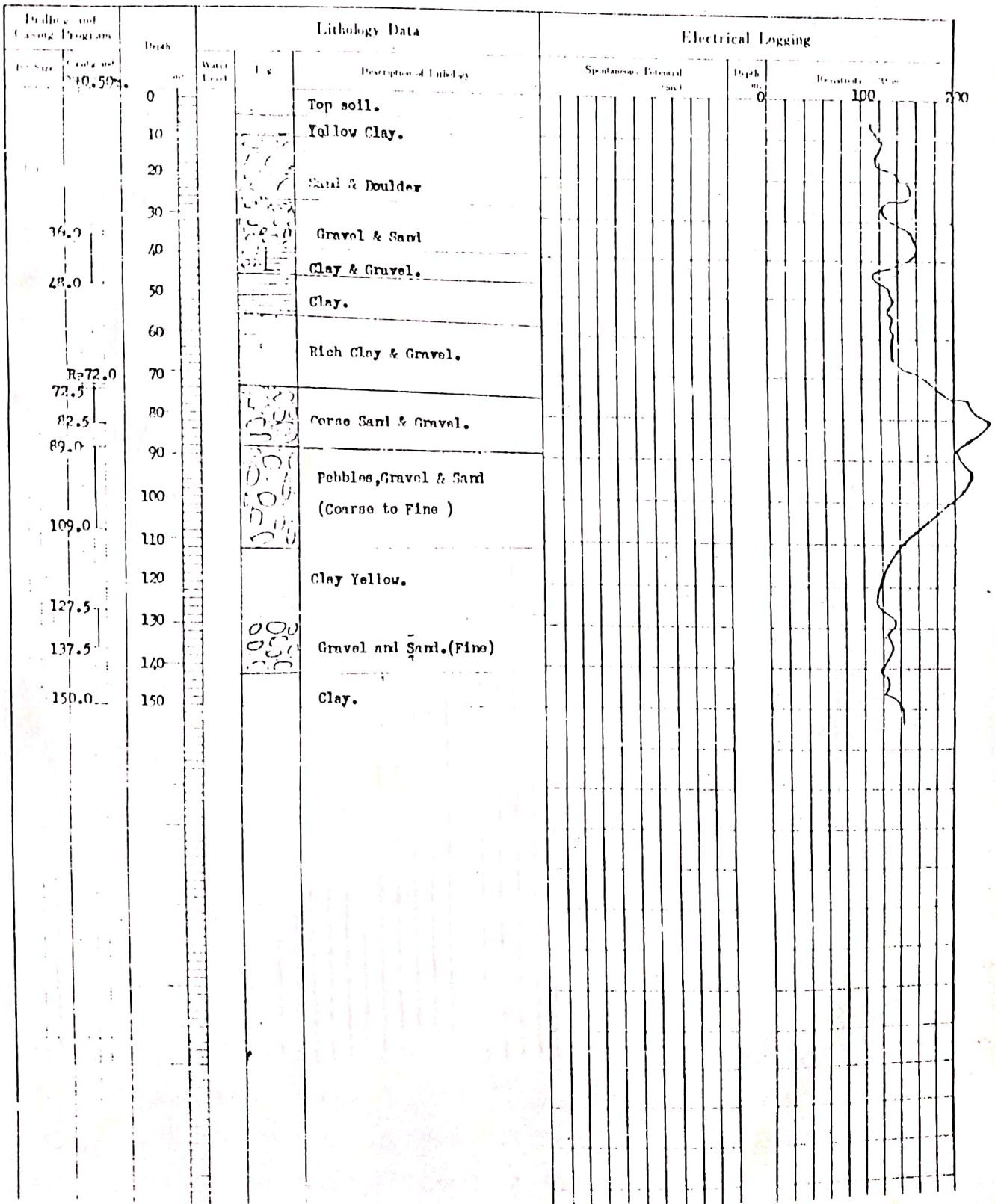
Depth scale: 0 m, 50, 100, 150, 200

WELL LOG

Well Number E-27

PROJECT NAME Terai Ground Water Project(JICA) TIATSP	Size: 14"/8"
AREA AND LOCATION JANAKNIBAS,Dhanusha-District,Janakpur-Zone.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 150 m	DRILLING RIG YRD-501
DRILLING STARTED 2 Feb,1987.	DRILLED BY D.N. Sen.
WELL COMPLETED 4 March,1987.	LOGGED BY O. Nagata.

STATIC WATER LEVEL - 37.0 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL -66.0 m	CONDUCTIVITY
[illegible] 60 l/min [illegible]	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



WELL LOG

PROJECT NAME: Agro Low Project	WELL NO.
AREA AND LOCATION: Thatiyahe Ramnagara Dhanusha	
ELEVATION: m	LATITUDE: LONGITUDE:
TOTAL DEPTH: 171.5 m	DRILLING RIG: TRD 500'
DRILLING STARTED: 2052-1-27	DRILLED BY: Ran Bdr K.C
WELL COMPLETED: 2052-2-26	LOGGED BY: R.B.K.C

STATIC WATER LEVEL: 8.0 m	WATER TEMPERATURE: °C
DYNAMIC WATER LEVEL: 11.0 (Air Comp)	CONDUCTIVITY: μS/cm
PUMPING RATE: 50.0 l/sec m³/d	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS

Drilling and Casing Diagram

Depth (m)

Lithology Data

Water Level | Log | Description of Lithology

Top Soil
clay
sand
clay
Gravel
clay
Gravel & Sand
clay
Gravel
clay
Gravel
clay
Gravel & Sand
clay

Electrical Logging

Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω m)

75 150

Drawn By

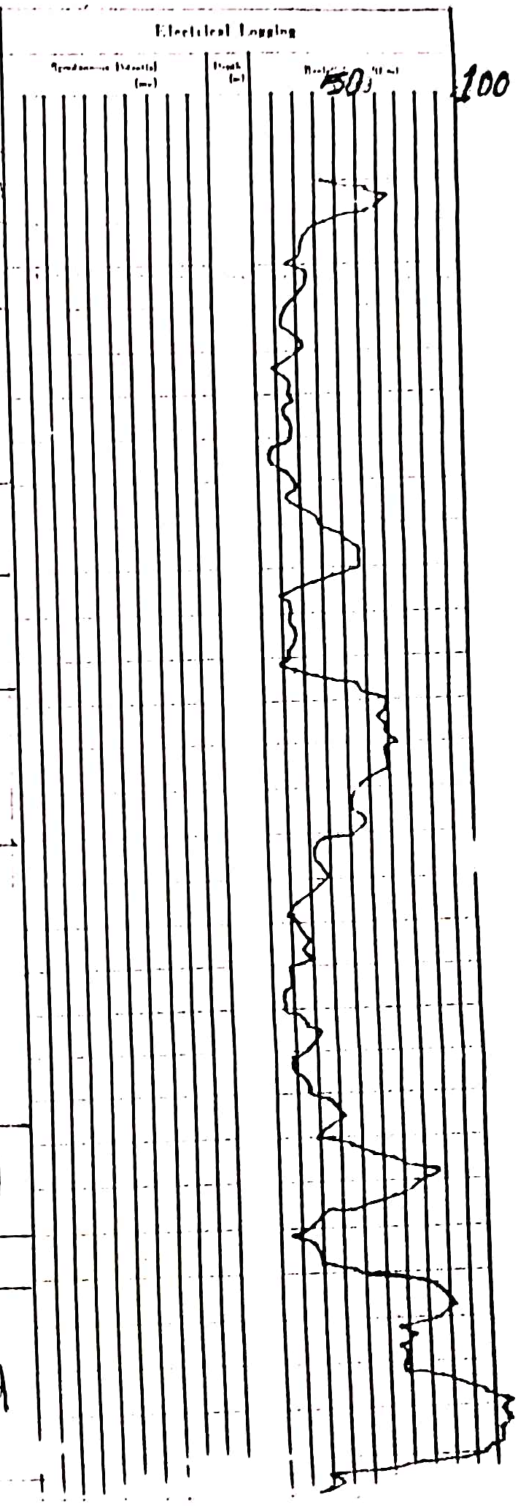
WELL LOG

PROJECT NAME	Agri. dev. Project	WELL NO.	
AREA AND LOCATION	Bogtachura-7 Dhanusha		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	159·5 m	DRILLING RIG	JRD 500
DRILLING STARTED	2053-1-15	DRILLED BY	R.B.K.C
WELL COMPLETED		LOGGED BY	Ram Bdr K.C

STATIC WATER LEVEL	3·0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	12·5 (Air com) m	CONDUCTIVITY	µS/cm
PUMPING RATE	40 l/sec m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program | Depth (m) | Water Level | Lithology Data: Log, Description of Lithology | Electrical Logging

Depth (m)	Description of Lithology
	Black clay
10	sand, coarse sand & gravel
	clay
20	clay with gravel
30	clay
40	
50	Sand & coarse sand
60	yellow clay
70–80	Gravel & sand
90–110	yellow clay
120	Gravel & sand
130	clay
140–150	Gravel & sand
160	yellow clay



WELL LOG

N-53

PROJECT NAME	T IATSP	WELL NO	N-53
AREA AND LOCATION	Ishorpur, Sarlahi-District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	95.0 feet	DRILLING RIG	YRD-501 "R"
DRILLING STARTED		DRILLED BY	D.N. Sen
WELL COMPLETED	Apr. 1988	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	-30.70 feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-40.65 feet	CONDUCTIVITY	µS/cm
PUMPING RATE	430 l/min (gpm) (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Depth (feet)	Description of Lithology
0 – ~3	Silty clay
~3 – ~15	yellowish sticky clay
~15 – ~32	Boulders with clay
~32 – ~33	Silt
~33 – 65.4	Clay with gravel
65.4 – ~76	Mod. gravel with C.S.
~76 – ~79	Silt with clay
~79 – 93.4	Pebbles, Gravel fine to med Sand
93.4 – 95	yellowish sticky clay

Drilling and Casing Program: 54.4 – R; 58.9; 3/6 Hn (screens) [illegible]; Reinforced Sonkyo; 95.0

Water Level: 65.4; 93.4

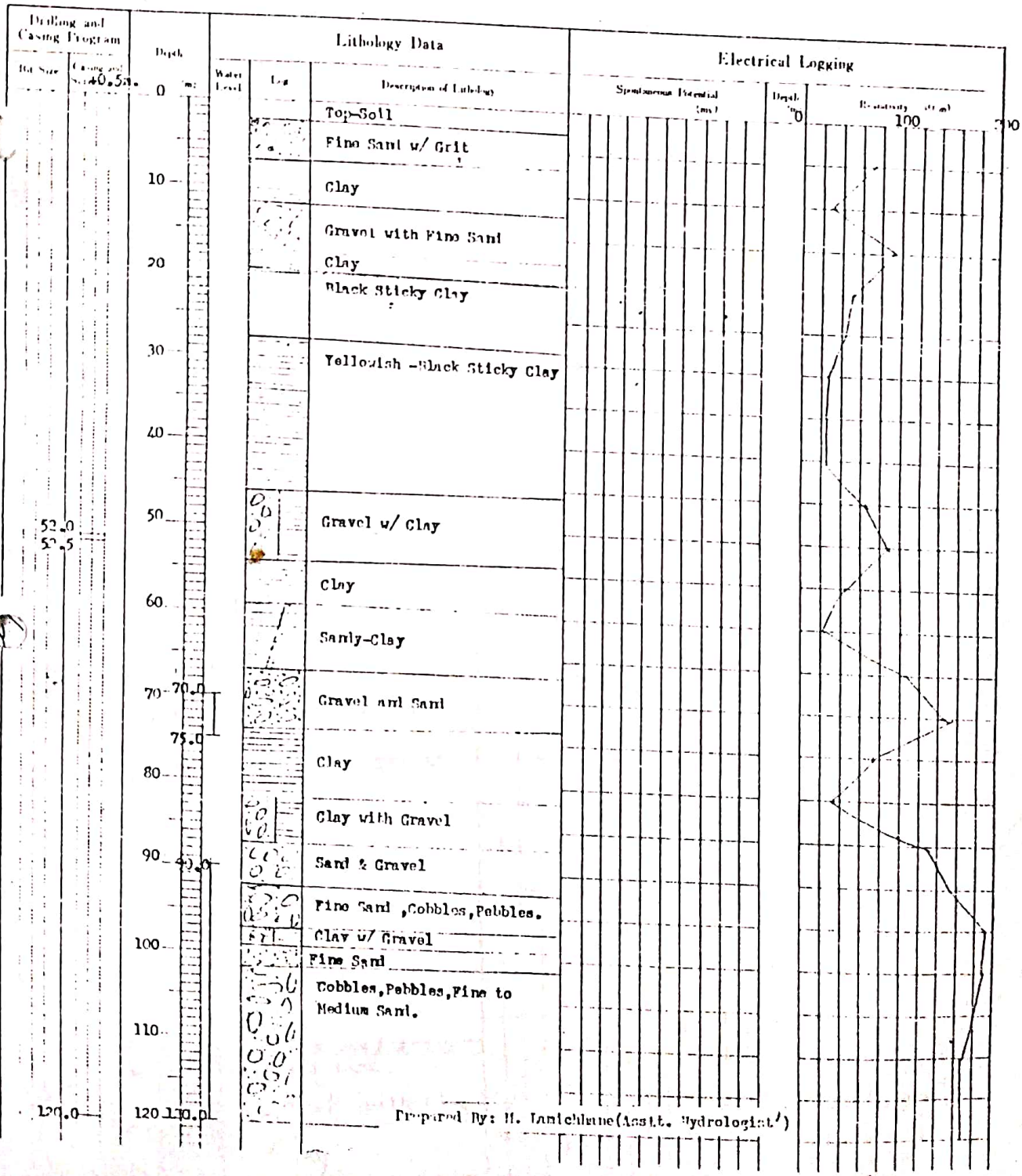
Electrical Logging: Spontaneous Potential (mv) | Depth (m) | Resistivity (Ωm) — not recorded

WELL LOG

Well No.: E-19

PROJECT NAME J.I.D.P.	Size: 14"/8"
AREA AND LOCATION BARTHARPUR, Barharpur Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 120.0 m	DRILLING RIG YDH 501"B"
DRILLING STARTED	DRILLED BY Mr. S. Jha
WELL COMPLETED Dec., 1995	LOGGED BY Mr. M. Lamichhane

STATIC WATER LEVEL -30.5 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µS/cm
PUMPING RATE 3000.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



Prepared By: M. Lamichhane (Asst. Hydrologist)

WELL LOG

Data No N-41

PROJECT NAME	TIATSP	WELL NO.	
AREA AND LOCATION	Bhramapuri, S-7 Block, Sarlahi-District.		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	261.0 m	DRILLING RIG	YRD-5CIR
DRILLING STARTED		DRILLED BY	JICA Team & Toshi
WELL COMPLETED	26 Feb, 1988	LOGGED BY	H. ISIKAWA

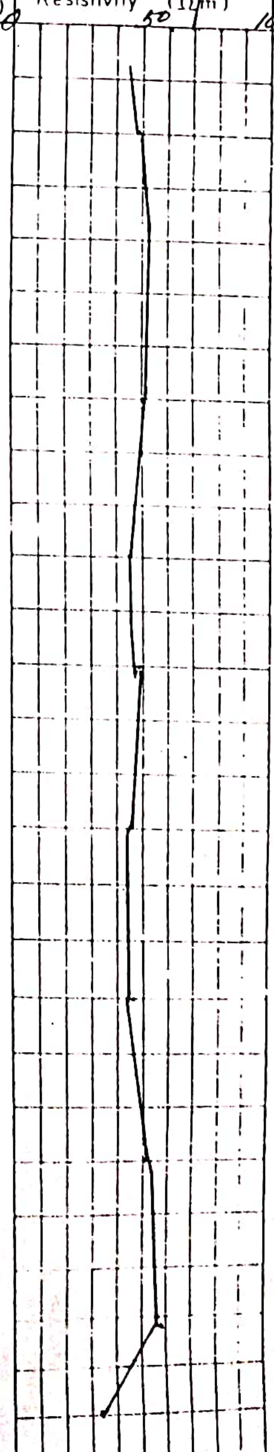
Abandoned:

STATIC WATER LEVEL	X feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	X feet	CONDUCTIVITY	µ℧ /cm
PUMPING RATE	X ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d /m	TOTAL HARDNESS	

Depth (m)	Description of Lithology
0 – 5.5	Top-Soil
5.5 – 15	Sandy clay
15 – 18	Sand
18 – 23	Sand & Gravel
23 – 25	Sandy clay
25 – 28	Silt
28 – 38	Gravel with clay
38 – 41	Gravel
41 –	Sandy clay
– 105	Blue Black yellowish clay
105 – 110	Sand with clay
110 – 146	Blue, yellow Sticky clay
146 – 151	Sand with clay
151 – 161	Clay
161 – 162	Clay with Gravel
162 – 213	Clay
213 – 217	Gravel with clay
217 – 228	Clay
228 – 230	Sand Gravel & clay
230 – 235	Sandy clay
235 – 249	Gravel with clay
249 – 261	Clay.

Drilling Hole is abandoned due to absence of Aquifer.

Electrical Logging — Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω·m) 0, 50, 100

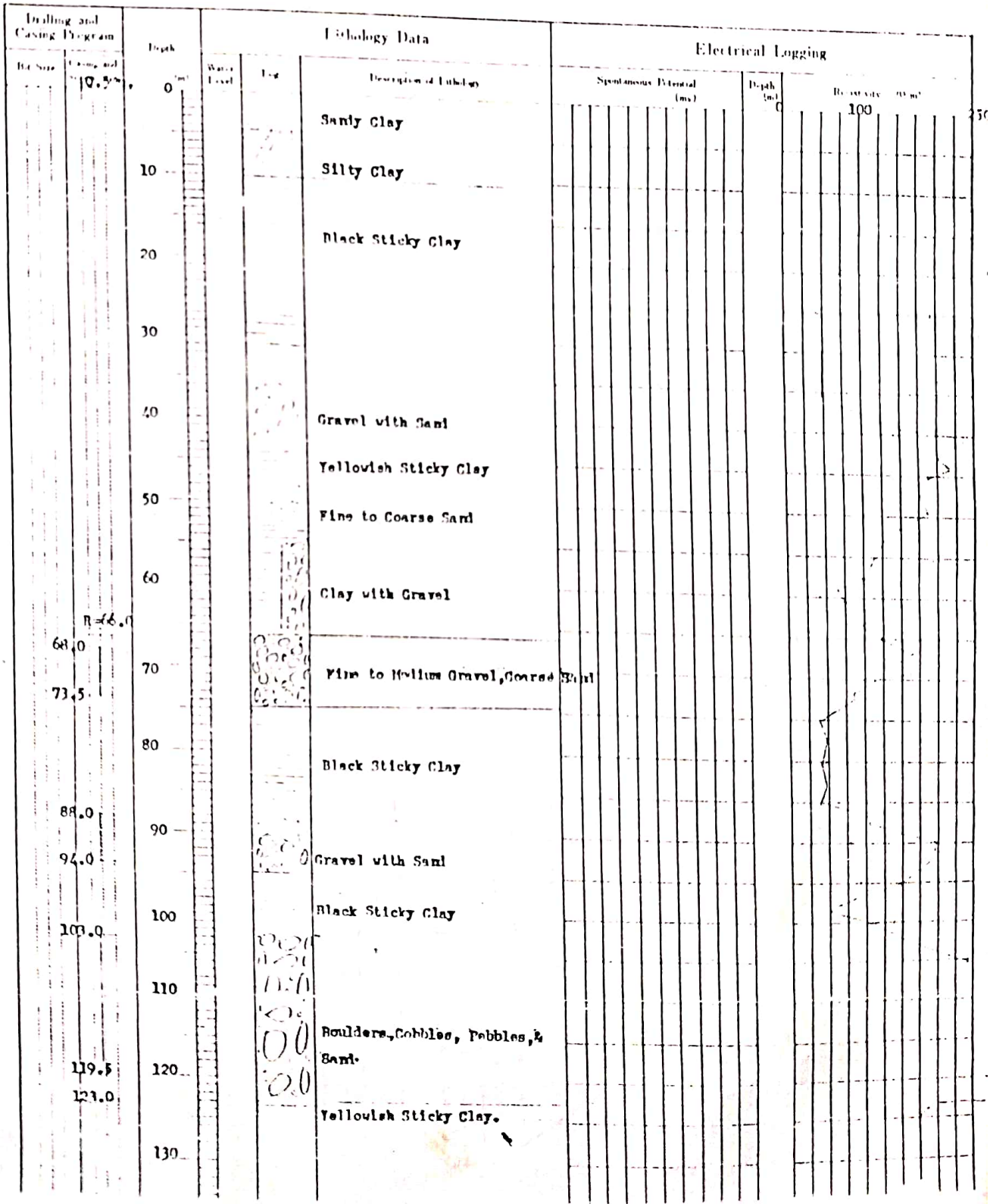


WELL LOG

Well No.: B-10

PROJECT NAME: T.I.A.S.P.	Size: 14"/8"
AREA AND LOCATION: DATHORE, Dhanusha-District, Janakpur-Zone.	
ELEVATION: m	LATITUDE / LONGITUDE
TOTAL DEPTH: 123.0 m	DRILLING RIG: TRD-500
DRILLING STARTED	DRILLED BY: Sulesh Ram
WELL COMPLETED: May., 1997	LOGGED BY: P.Mukhiya

STATIC WATER LEVEL: -42.0 m	WATER TEMPERATURE: °C
DYNAMIC WATER LEVEL: - 54.0 m	CONDUCTIVITY: µS/cm
PUMPING RATE: 1500.0 l/min (m³/d)	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS

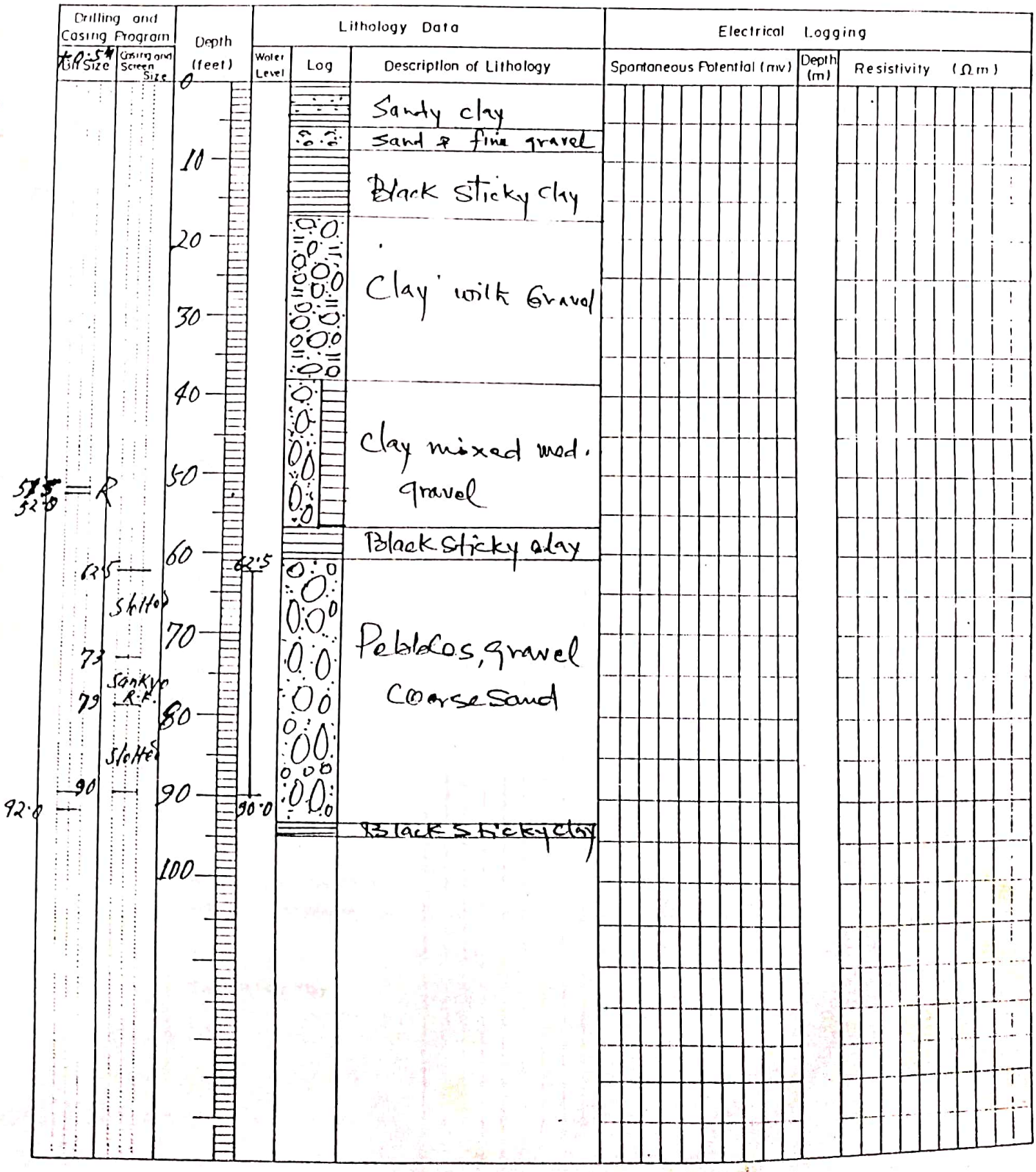


WELL LOG

Data No
N-54

PROJECT NAME	TIATSP	WELL NO	
AREA AND LOCATION	Balgonga, Ghumkauli, Sarlahi District		
ELEVATION	feet	LATITUDE	LONGITUDE
TOTAL DEPTH	92.5 feet	DRILLING RIG	TRD-500
DRILLING STARTED		DRILLED BY	Sudesh Rana
WELL COMPLETED	May. 1986	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	−17.00 feet	WATER TEMPERATURE	
DYNAMIC WATER LEVEL	−23.49 feet	CONDUCTIVITY	
PUMPING RATE	48.0 l/min (g/sec m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

Well Number: H-34

PROJECT NAME	T.I.A.T.S.P.		Size: 14"/8"
AREA AND LOCATION	HATILET, Mahottari-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH 118.0	m	DRILLING RIG	YRD 501R
DRILLING STARTED		DRILLED BY	G.Joshi
WELL COMPLETED	May, 1987.	LOGGED BY	P.Mukhiya

STATIC WATER LEVEL	- 41.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-61.0 m	CONDUCTIVITY	µS/cm
PUMPING RATE	1500.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

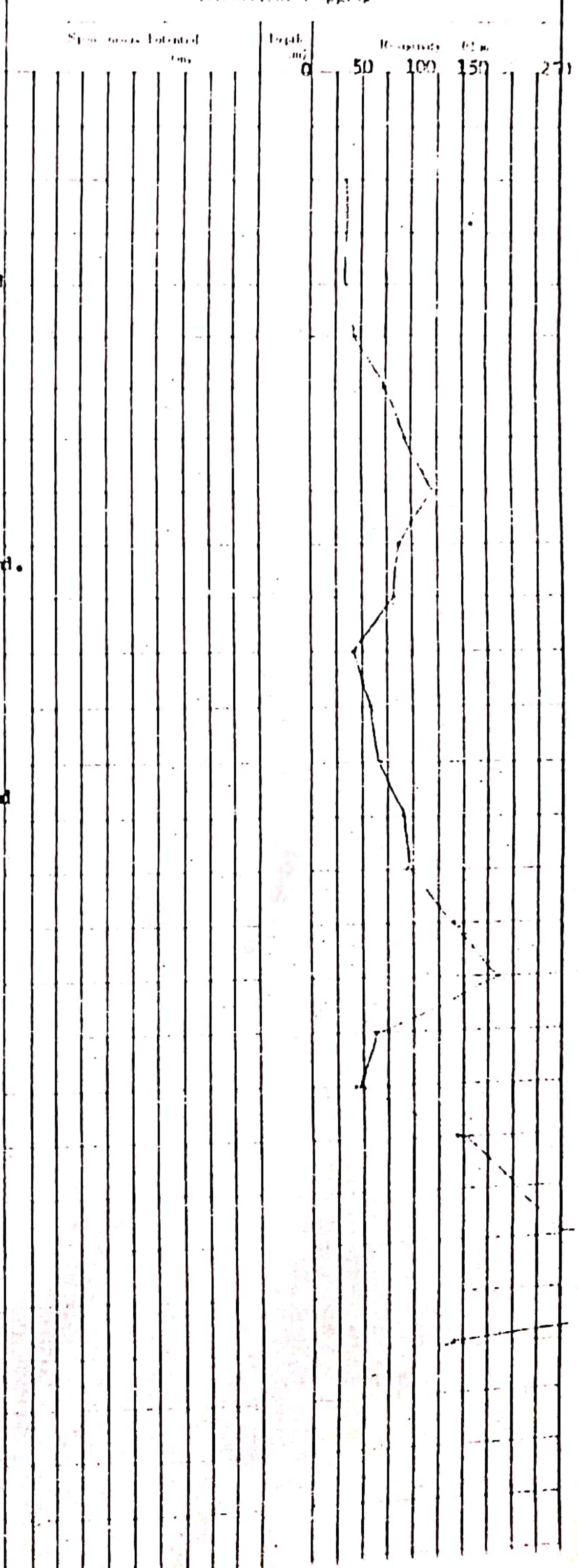
Drilling and Casing Program — Bit Size / Casing and ... 10.20m.

Casing program depths (m): R=66; 66.5; 77.5; 80.5; 86.0; 95.0; 112.0; 118.0

Lithology Data (Depth 0–120 m; Water Level; Log; Description of Lithology)

- Sandy Clay
- Fine Sand
- Gravel, Pebbles & coarse Sand
- Grit with Fine to Medium Sand.
- Clay with Gravel
- Gravel, Pebble and Coarse Sand
- Black Sticky Clay
- Gravel and coarse sand
- Clay with Gravel
- Boulders, Pebbles & Cobbles with Grit and Coarse Sand
- Black Sticky Clay

Electrical Logging

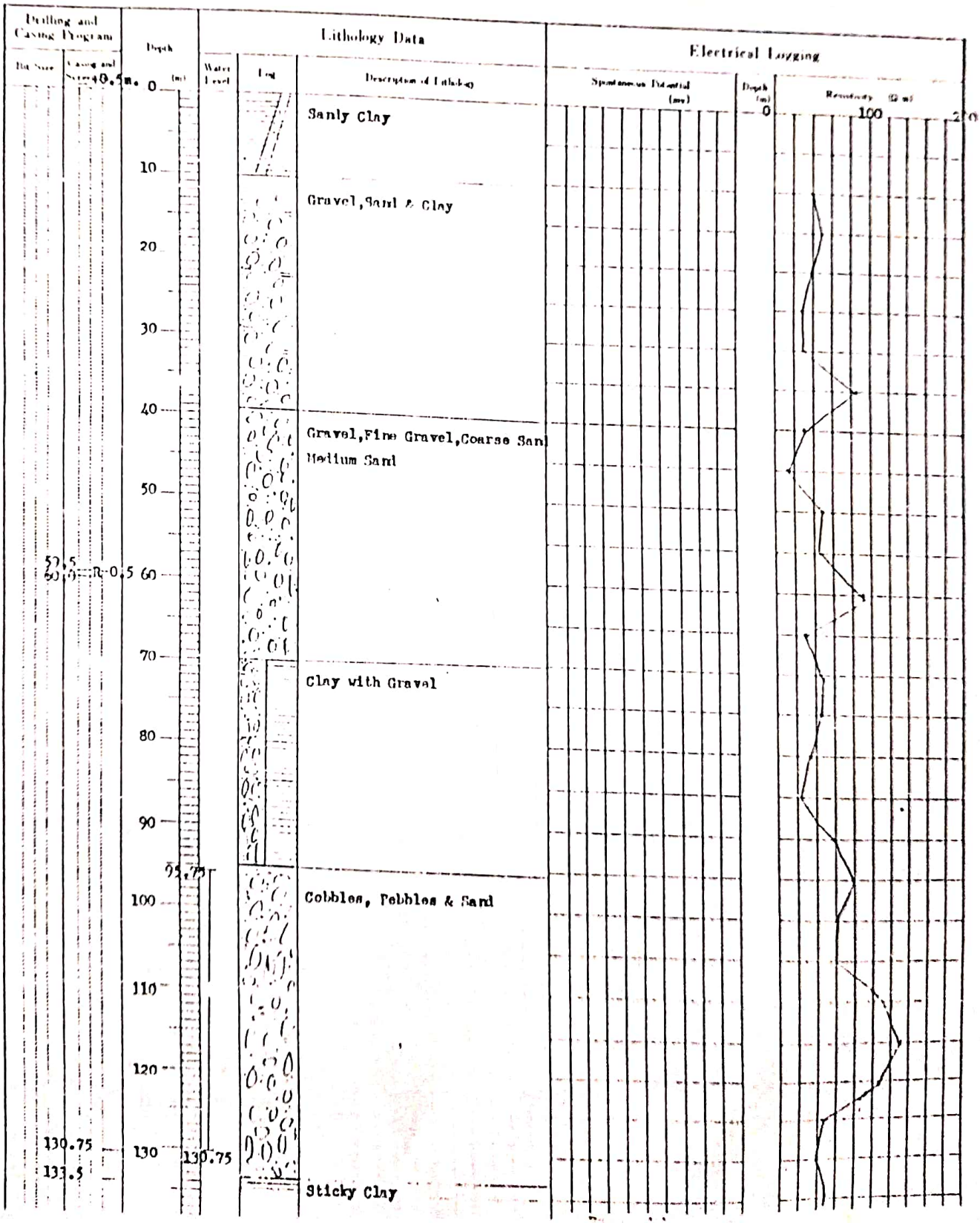


WELL LOG

Well Index B-9

PROJECT NAME J.A.D.P.	Size: 14"/8"
AREA AND LOCATION DIGAMBARPUR, Digambarpur Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 133.5 m	DRILLING RIG YBM 501"B"
DRILLING STARTED	DRILLED BY Mr. G. Joshi
WELL COMPLETED May., 1986	LOGGED BY Mr. P. Mishra

STATIC WATER LEVEL -28.50 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µS/cm
PUMPING RATE 1200.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

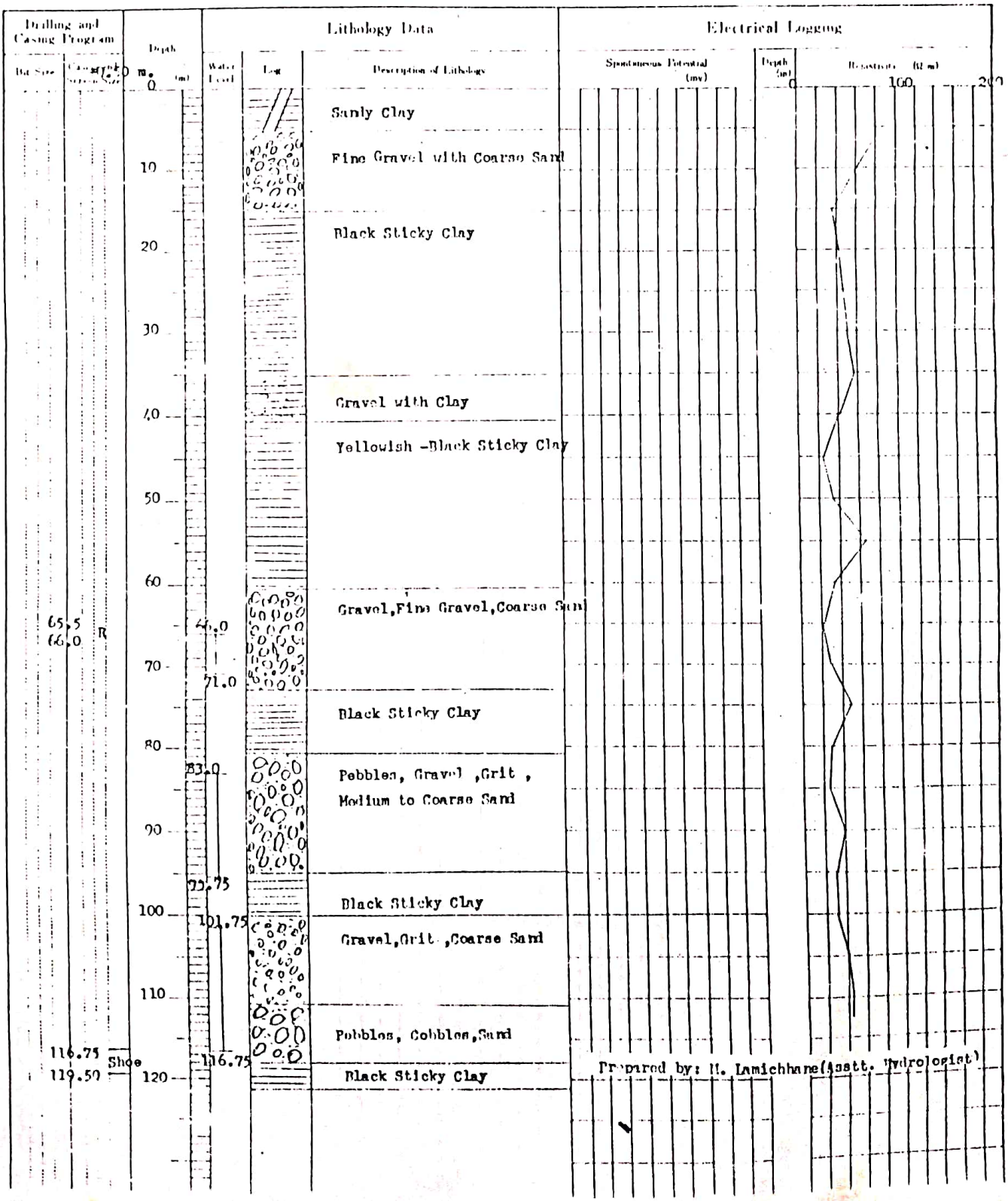


Well Name: B-20

WELL LOG

PROJECT NAME	J.A.D.P.	Size: 14"/8"	
AREA AND LOCATION	BIRWACHOWCK, Vagvabhumi Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	119.50 m	DRILLING RIG	YRD 501"B"
DRILLING STARTED		DRILLED BY	Mr. G.D. Joshi
WELL COMPLETED	Feb., 1986	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-42.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µmho/cm
PUMPING RATE	900.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d.m	TOTAL HARDNESS	

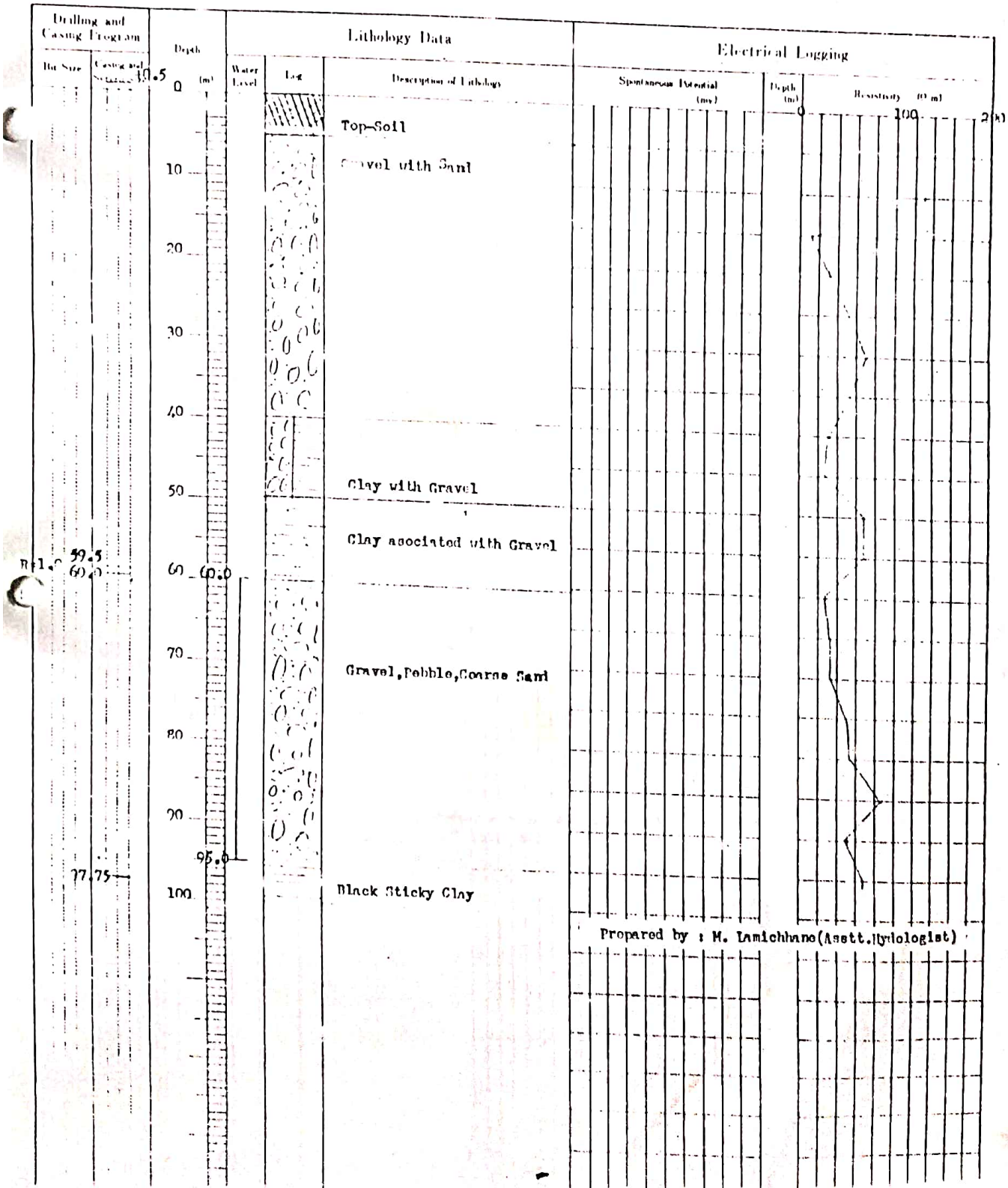


WELL LOG

9811 Tamo: B-21

PROJECT NAME J.A.D.P.	Size: 14"/8"
AREA AND LOCATION DADATOLE, Yaryabhanai village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 97.75 m	DRILLING RIG YRD-501"R"
DRILLING STARTED	DRILLED BY S.Jha
WELL COMPLETED Feb., 1996	LOGGED BY M.Lamichhane

STATIC WATER LEVEL -39.0 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL m	CONDUCTIVITY μΩ cm
PUMPING RATE 900.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



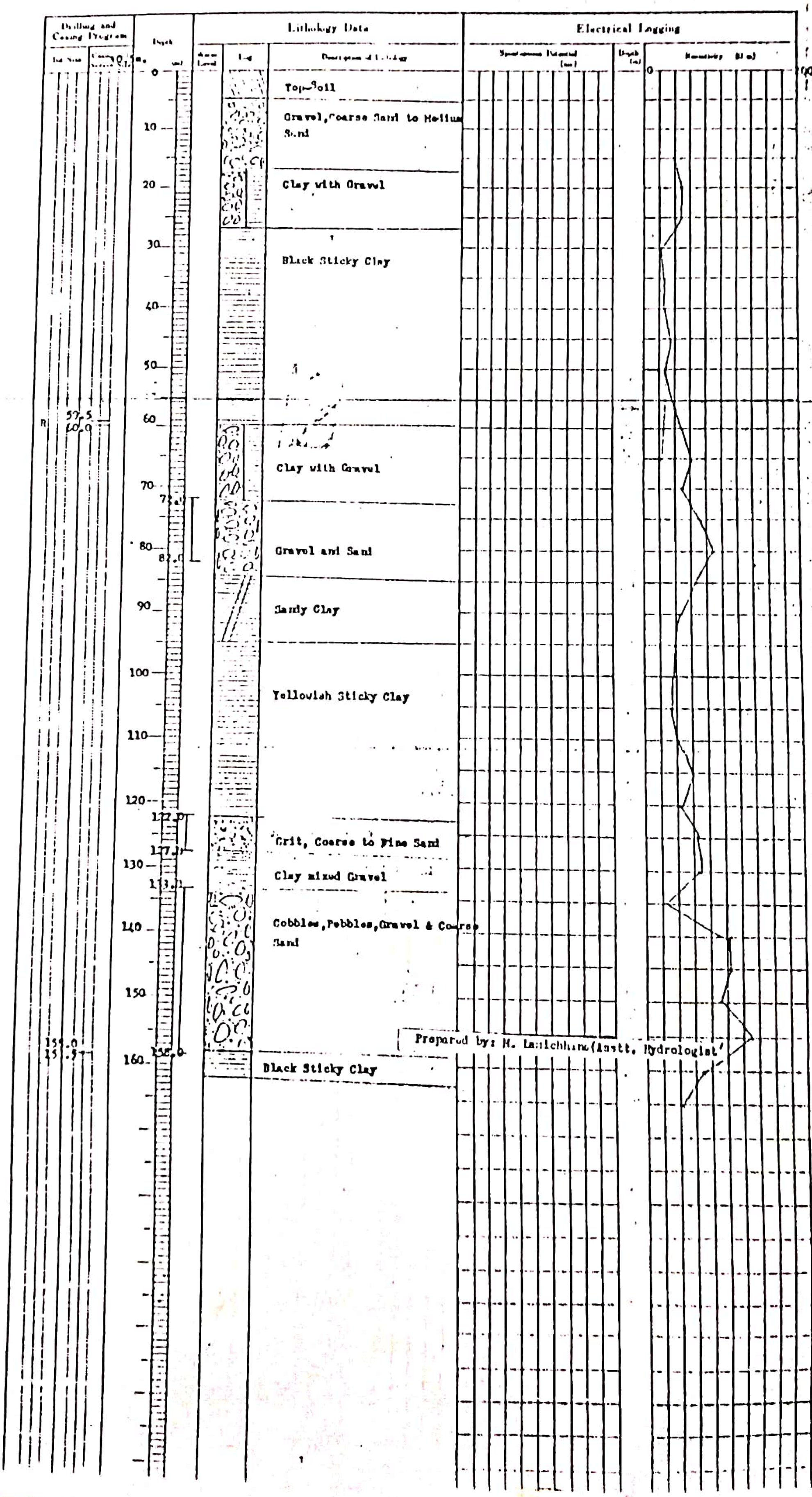
WELL LOG

Well No.: B-13

Size: 14"/8"

PROJECT NAME	J.A.D.P.		
AREA AND LOCATION	BACKCHAURA, Jagdhaura Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	158.5 m	DRILLING RIG	YIQ-501"R"
DRILLING STARTED		DRILLED BY	Mr. D.N.Sen & Sudep Rana
WELL COMPLETED	Apr., 1986	LOGGED BY	Mr. D.N. Sen

STATIC WATER LEVEL	10.20 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µS/cm
PUMPING RATE	2400.0 ℓ/min	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

PROJECT NAME J.A.D.P. — Sites 14"/8"

AREA AND LOCATION CHHATTARIGA, Bharatpur Village Panchayat

ELEVATION m | LATITUDE | LONGITUDE

TOTAL DEPTH 162.0 m | DRILLING RIG YRD 501"R"

DRILLING STARTED | DRILLED BY Mr. G. Joshi

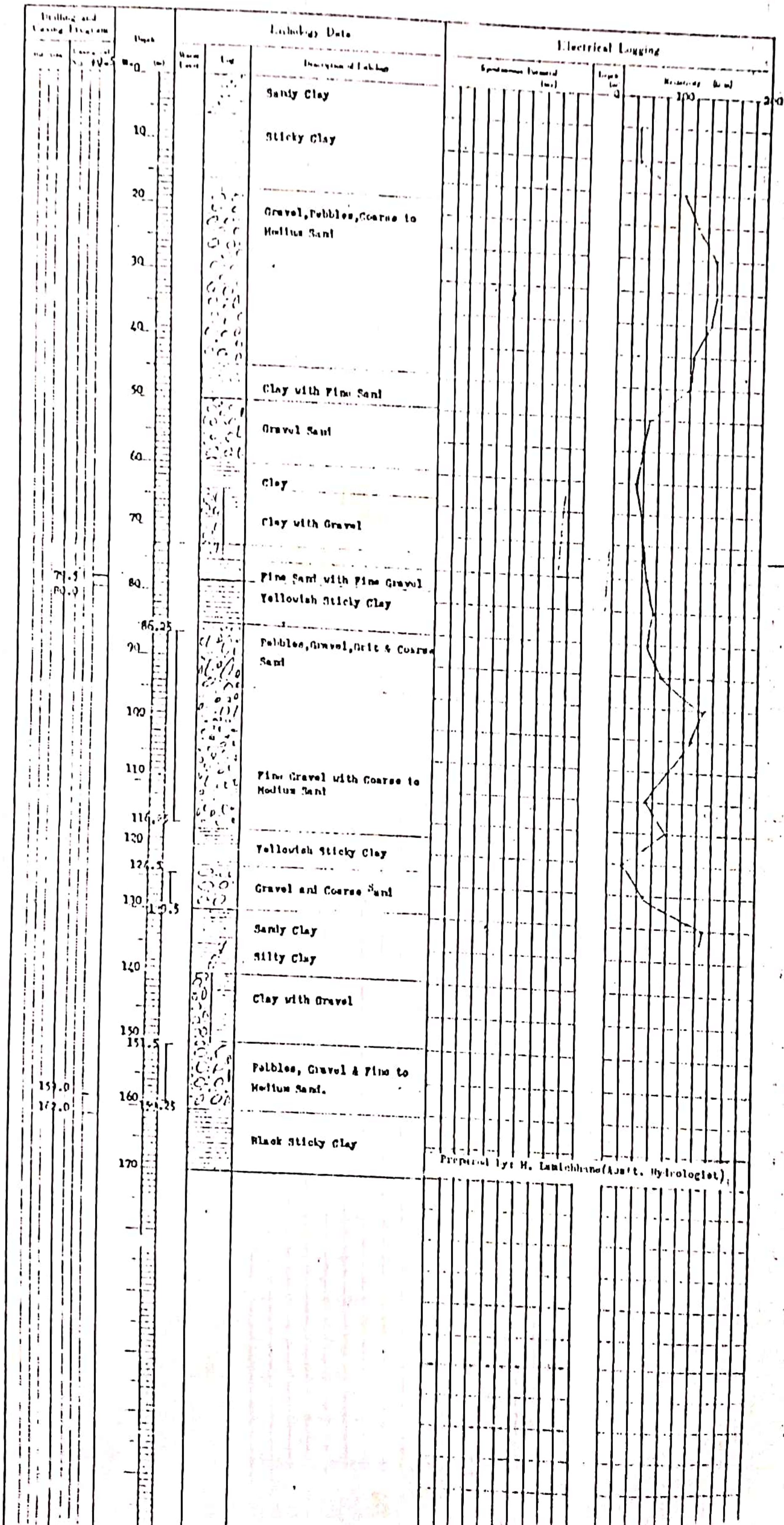
WELL COMPLETED Jan., 1996 | LOGGED BY Mr. H. Lamichhane

STATIC WATER LEVEL -47.00 m | WATER TEMPERATURE °C

DYNAMIC WATER LEVEL m | CONDUCTIVITY µS/cm

PUMPING RATE 1800.0 l/min (m³/d) | pH

SPECIFIC CAPACITY m³/d/m | EC



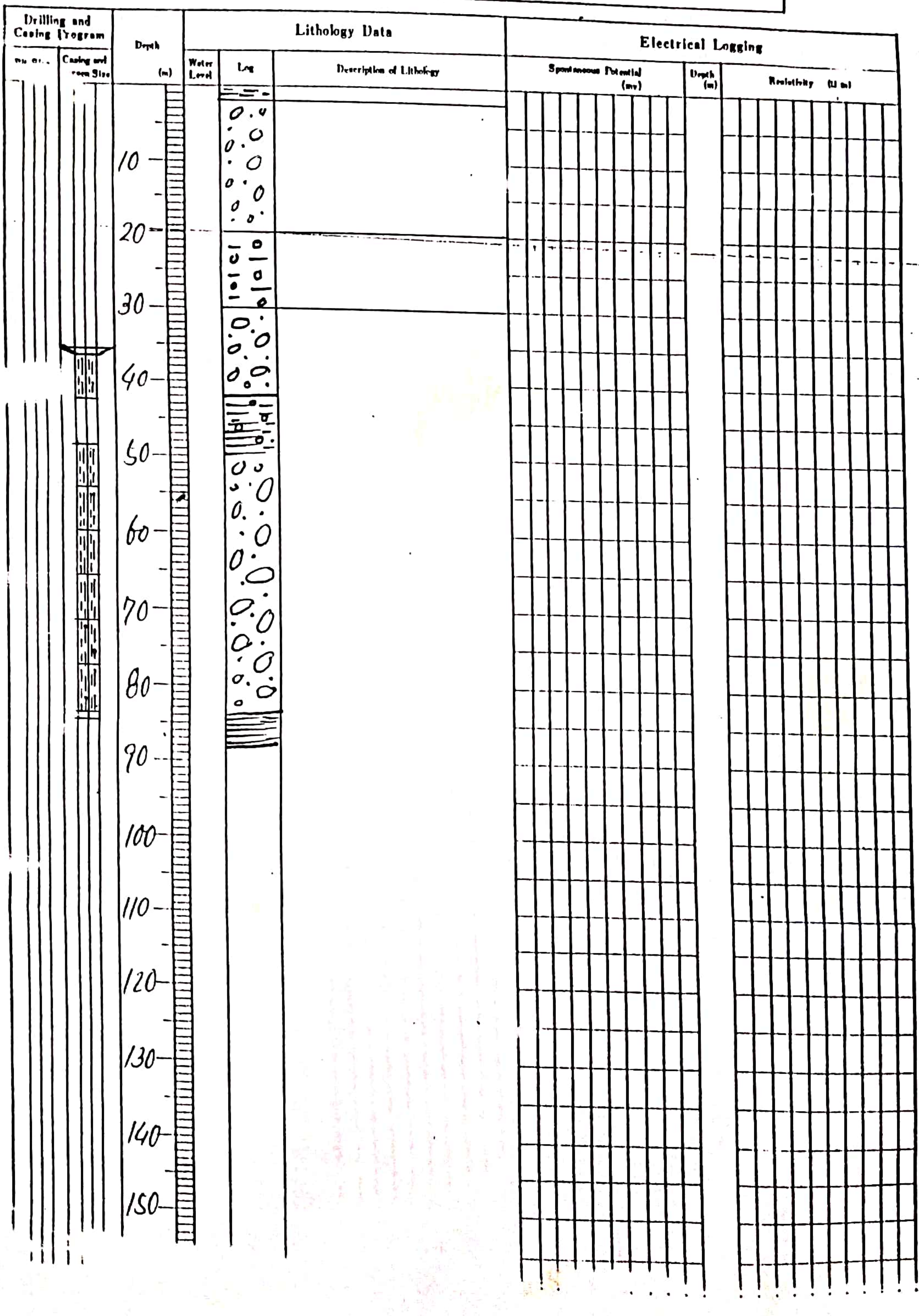
Agricul' Development Project, Janakpur, Mahottari

WELL LOG

Data No.

PROJECT NAME	Agri. dev. Project.	WELL NO.	4
AREA AND LOCATION	Amiliya P.K.V.D.5		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	84. m	DRILLING RIG	YRD 500
DRILLING STARTED		DRILLED BY	S. JHA
WELL COMPLETED		LOGGED BY	S. JHA.

STATIC WATER LEVEL	m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μʊ/cm
PUMPING RATE	l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Agriculture Development Project, janakpur [illegible]

Data No.

WELL LOG

PROJECT NAME	Agriculture Project.	WELL NO.	
AREA AND LOCATION	Agriculture Tools Factory, Birganj		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	115.5 m	DRILLING RIG	TRD 600
DRILLING STARTED	051-8-15	DRILLED BY	R.B. K.C.
WELL COMPLETED	051-10-15	LOGGED BY	R.B. K.C

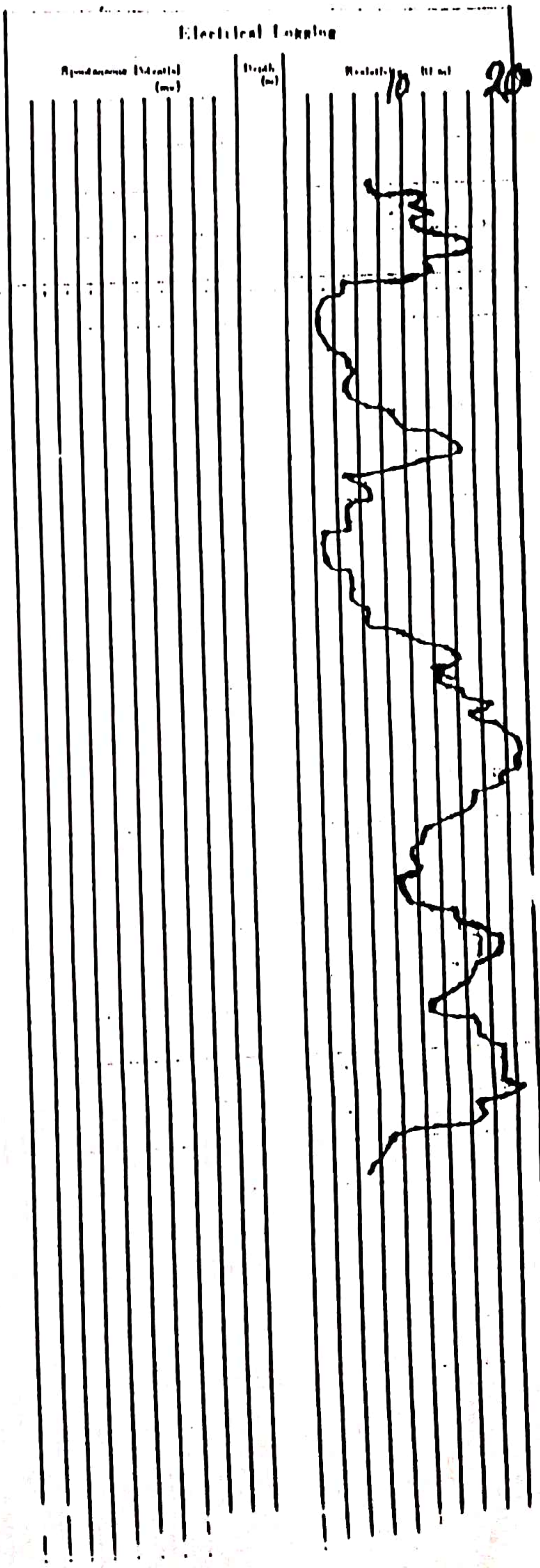
STATIC WATER LEVEL	9.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µS/cm
PUMPING RATE	30.0 [illegible] m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program / Lithology Data

Depth (m)	Description of Lithology
0	Top soil sand
10	Clay
	Gravel
20	clay
30	Gravel
	clay
40	clay/Gravel
50	clay
60	Gravel/Sandy clay
70	Gravel & Sand
80	Sandy clay
90	Gravel/Sand
100	
110	
115.5	clay
120	
130	
140	
150	

Casing and screen: 8"; 66; 78; 90; 11?; 115.5

Electrical Logging



Drawn By
R.B.K.C.
052-2-26

WELL LOG

PROJECT NAME J.I.C.P	Size: [illegible]
AREA AND LOCATION HOT IEATI No.2, Palnlya	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 160.0 m	DRILLING RIG [illegible]
DRILLING STARTED 21 Mar.,1977	DRILLED BY Mr. D.?. Parki
WELL COMPLETED 1 Apr.,1977	LOGGED BY Mr. M. Loutchhum

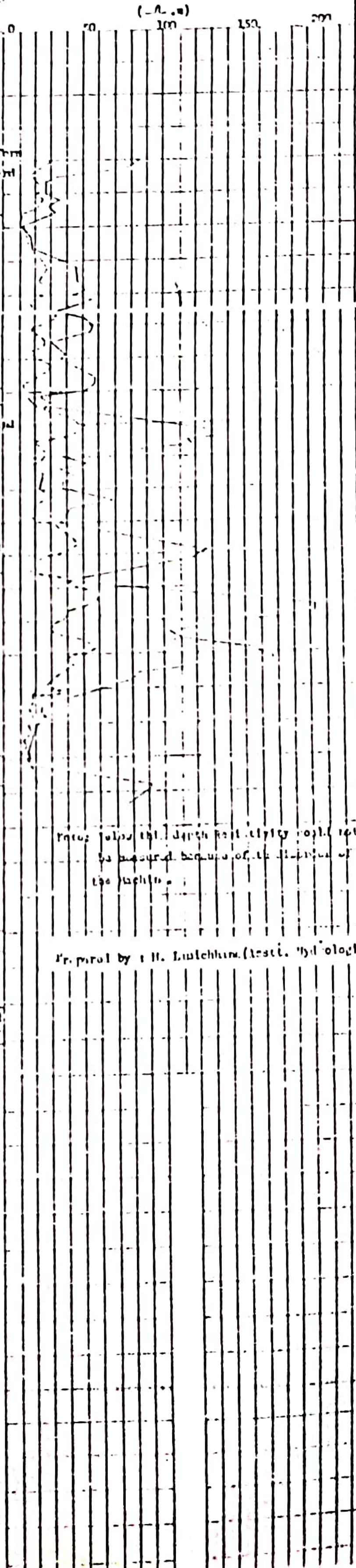
STATIC WATER LEVEL 13.330 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL 27.605 m	CONDUCTIVITY μS/cm
PUMPING RATE 1000.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

Drilling and Casing Program: 11.0 (top); 29.25; 30.75; 160.0 (bottom)

Screen intervals (Depth, m): 63.75 – 69.25; 83.0 – 105.0; 143.5 – 150.0

Depth (m)	Lithology Data – Description of Lithology
0	Sandy Clay
	Brown Clay
10	Sandy Clay
	Clay with Gravel
	Clay mixed with compacked Form
20	Medium Gravel with Coarse Sand
	Clay with Gravel
30	Yellowish Sticky Clay
	Gravel with little Clay
40	
50	Gravel with Medium Sand
	Yellowish Sticky Clay
	Clay with Gravel
60	Brownish Yellow Clay
63.75	Medium Gravel with Coarse Sand
70 (69.25)	Black Sticky Clay
	Clay with Medium Gravel
80	
83.0	Gravel, Pebbles & Coarse Sand
	Clay with Gravel
90	Gravel with Coarse Sand
	Clay with Fine Sand
100	Clay with Gravel
	Silty Clay
105.0	
110	Black Sticky Clay
	Clay with Clay
120	Yellowish Brown Clay
	Gravel Coarse to Medium
130	
	Yellowish Sticky Clay
	Clay with gravel
140	Silty Clay
143.5	Gravel with Medium Sand
150 (150.0)	Fine Gravel with Coarse Sand
	Fine Sand
	Black Brown Sticky Clay
160	

Electrical Logging



Note: Below this depth Resistivity could not be measured because of the disorder of the machine.

Prepared by M. Loutchhum (Asst. Hydrologist)

Data No

WELL LOG

TRAING CENTRE

PROJECT NAME	JANAKPUR AQUACULTURE	WELL NO	
AREA AND LOCATION	JANAKPUR		
	feet	LATITUDE	LONGITUDE
DEPTH 150.0m	feet	DRILLING RIG	YBM 501 L.214 Rig
DRILLING STARTED	09613110	DRILLED BY	S. JHA
WELL COMPLETED	09616110	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	1.10m feet	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	feet	CONDUCTIVITY	µS/cm
RATE	60.15 l/min		pH
SPECIFIC CAPACITY	60 l/s m³/d/m	TOTAL HARDNESS	

Casing Program Bit Size	Screen Size	Depth (m)	Log	Description of Lithology
				Top soil
				Black Sticky
		20		
				Sticky clay
		40		Sandy clay
				Sticky Black clay
		60 57		Gravels Sand
		63		clay mixed gravel
				Rich clay gravels
		80		Sticky Black clay
		87		Gravels Pure
		100 96		
				Black clay
		120 116		Pebbles
		125		Black clay
		131		Gravels Pure
		140 140		Black clay
144		144		

Electrical Logging			
Spontaneous Potential (mv)	Depth (m)	Resistivity	

14" Casing 30m

8" Slotted 33m + 3 strainer

8" casing 81m

Plunger 1 Pc

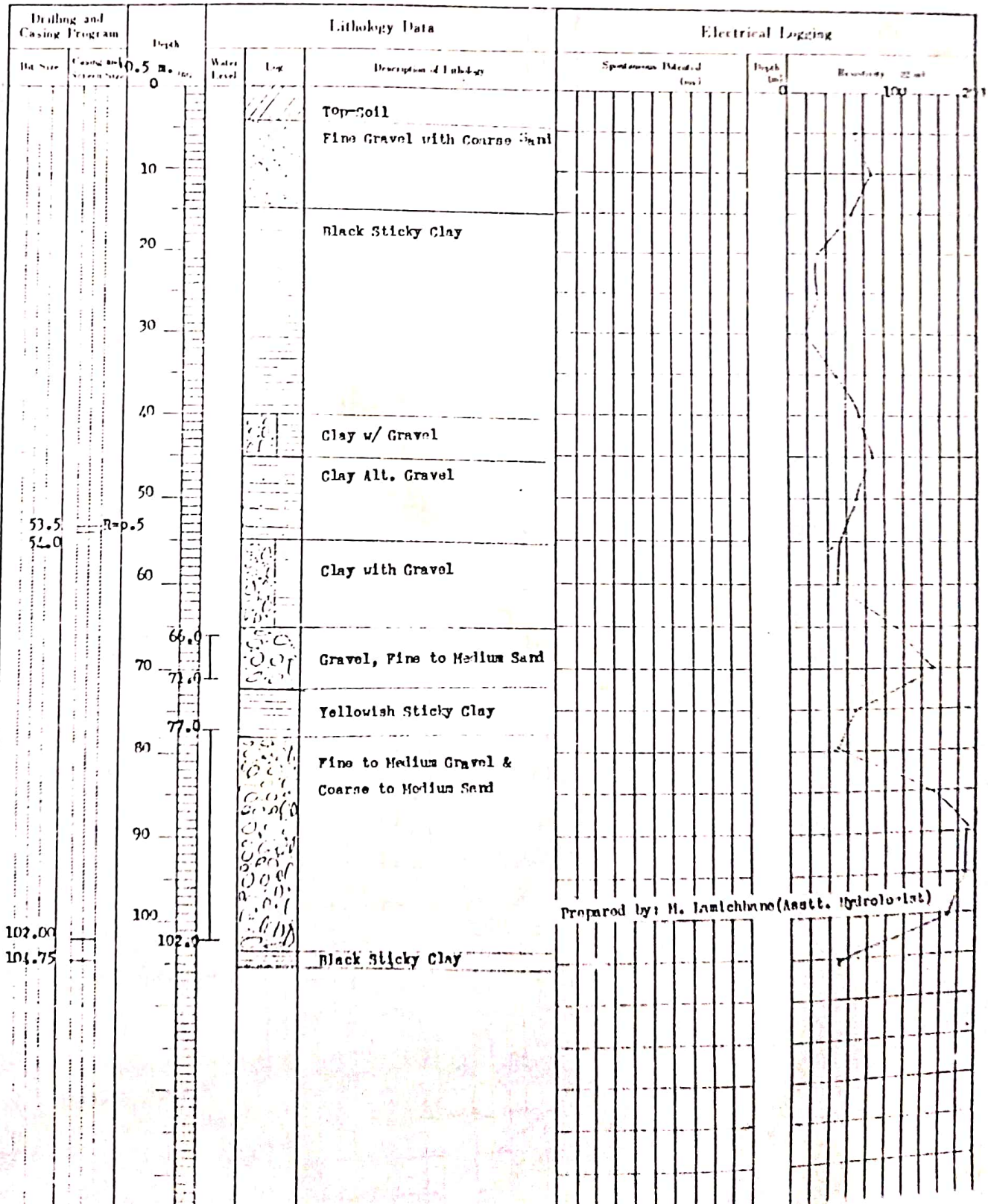
144.0m

WELL LOG

Well Form: B-6

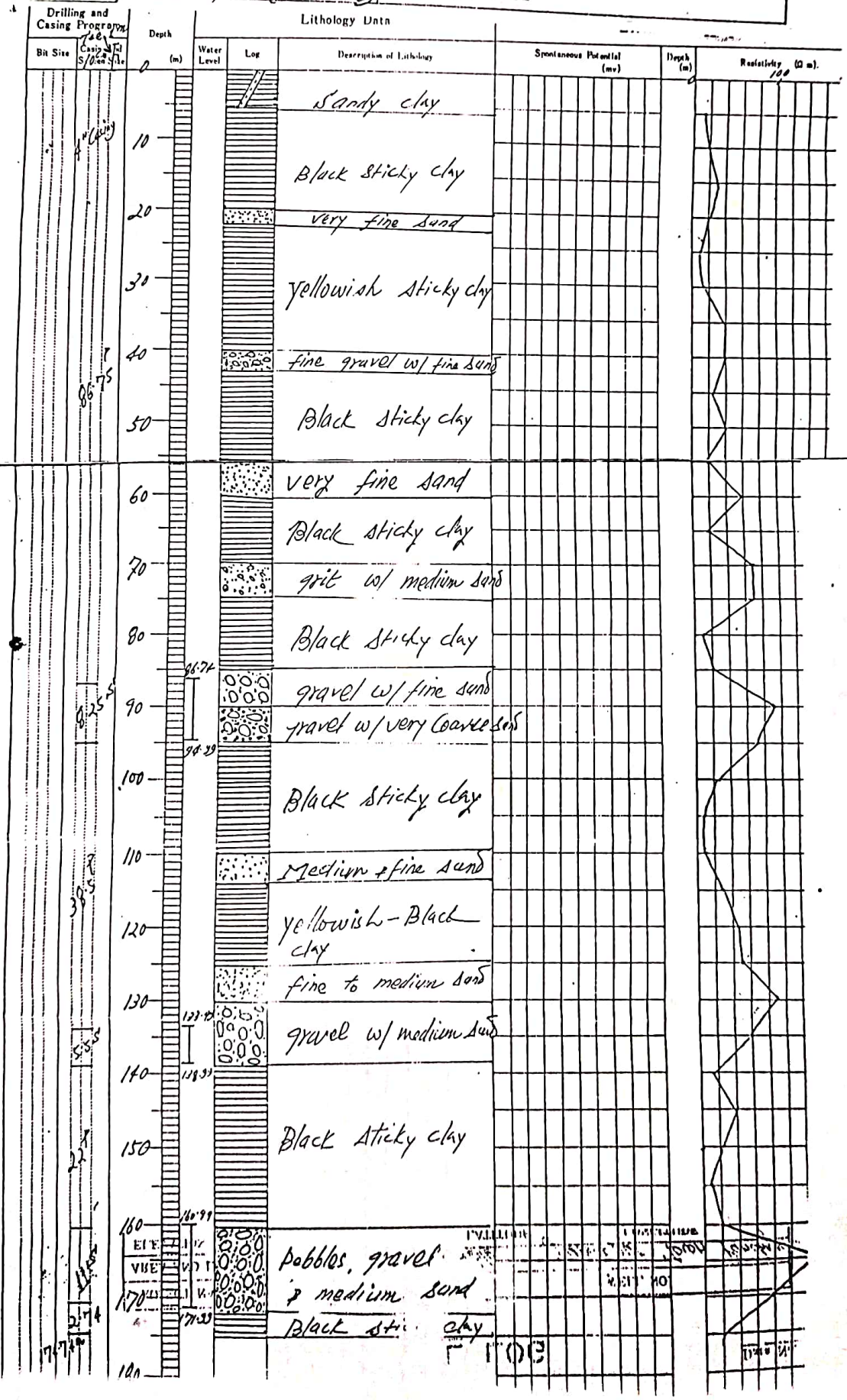
PROJECT NAME J.A.D.P.	Size: 14"/8"
AREA AND LOCATION LAKHANPUR, Bharatpur Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 104.75 m	DRILLING RIG TRD-500
DRILLING STARTED	DRILLED BY Mr. G. Joshi
WELL COMPLETED Feb., 1986	LOGGED BY Mr. M. Lamichhane

STATIC WATER LEVEL -32.00 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µmho/cm
PUMPING RATE 1500.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



AREA AND LOCATION	Janaki Temple, Janakpur Town Panchayat	WELL NO.	
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	174.74 m	DRILLING RIG	R. B. K. Co.
DRILLING STARTED		DRILLED BY	"70P "150" (Tractor Mounted)
WELL COMPLETED	May 1986	LOGGED BY	P. Mukhiya

STATIC WATER LEVEL	+1.000 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-5.00 m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	25.0 ℓ/sec (m³/d)	pH	
SPECIFIC CAPACITY	5.0 ℓ/sec (Artesian)	TOTAL HARDNESS	



WELL LOG

Well Form [illegible]

PROJECT NAME: J.A.D.P.	Size: 6"/6"
AREA AND LOCATION: J.A.D.P. Centre, Naktajhij	
ELEVATION: m	LATITUDE: LONGITUDE:
TOTAL DEPTH: 135.0 m	DRILLING RIG: T3I 22"A"
DRILLING STARTED: 17 Dec., 1974	DRILLED BY: Mr. D.B. Karki & Mr. Y. Hida (NISSAKU)
WELL COMPLETED: 3 Jan., 1975	LOGGED BY: Mr. K. Sugimatsu (NISSAKU)

STATIC WATER LEVEL: -14.350 m	WATER TEMPERATURE: °C
DYNAMIC WATER LEVEL: -27.50 m	CONDUCTIVITY: μʊ/cm
PUMPING RATE: 660.0 l/min (m³/d)	pH
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS

Drilling and Casing Program — Depth — Lithology Data (Water Level, Log, Description of Lithology) — Electrical Logging

Depth (m): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140

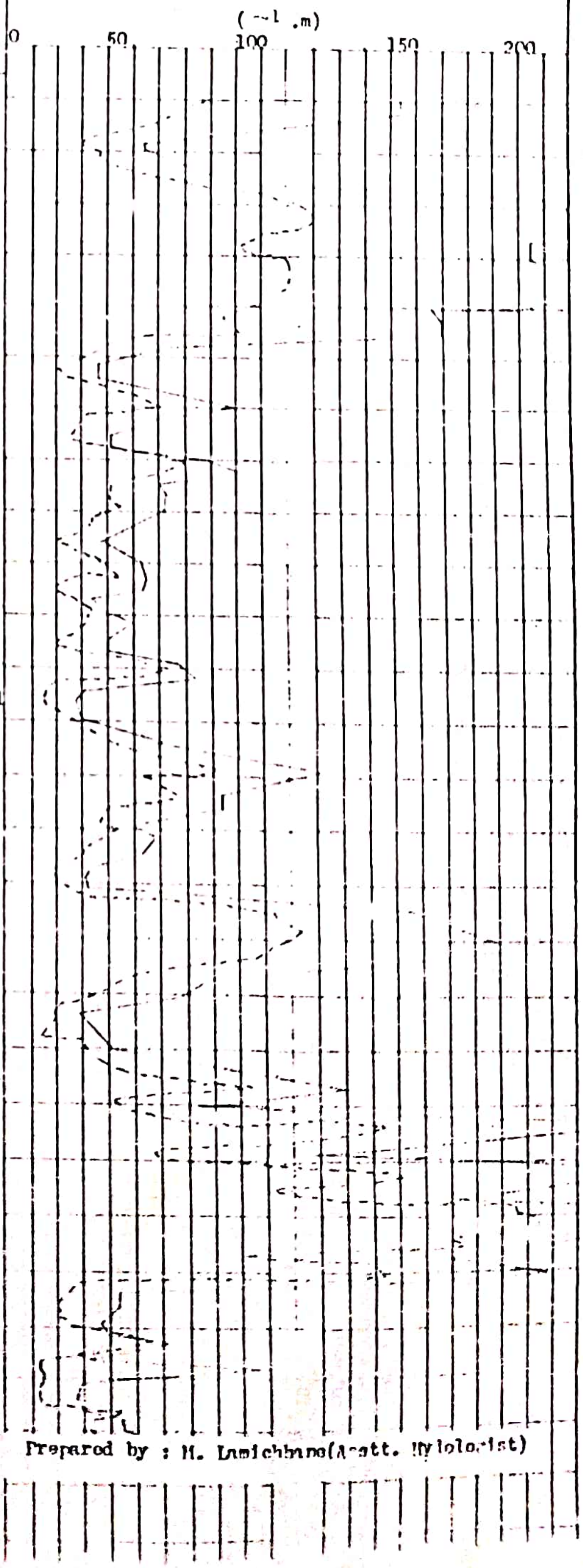
Casing: 135.0

Screen intervals: 58.5–61.5, 67.0–76.0, 81.5–90.5, 96.0–102.0

Description of Lithology:

- Fine Sand/Silty Clay
- Grit & Fine Sand
- Gravel, Fine to Medium Sand
- Grit and Fine Sand
- Gravel and Medium Sand
- Gravel with Very fine Sand
- Grit with Coarse Sand
- Clay mixed fine Sand & Gravel
- Gravel & Fine Sand
- Fine Gravel to Medium Sand
- Pebbles, Gravel & Coarse Sand
- Grit & Coarse Sand
- Pebbles, Boulders, Coarse Sand
- Sandy Clay
- Fine Gravel, Medium Sand

Electrical Logging

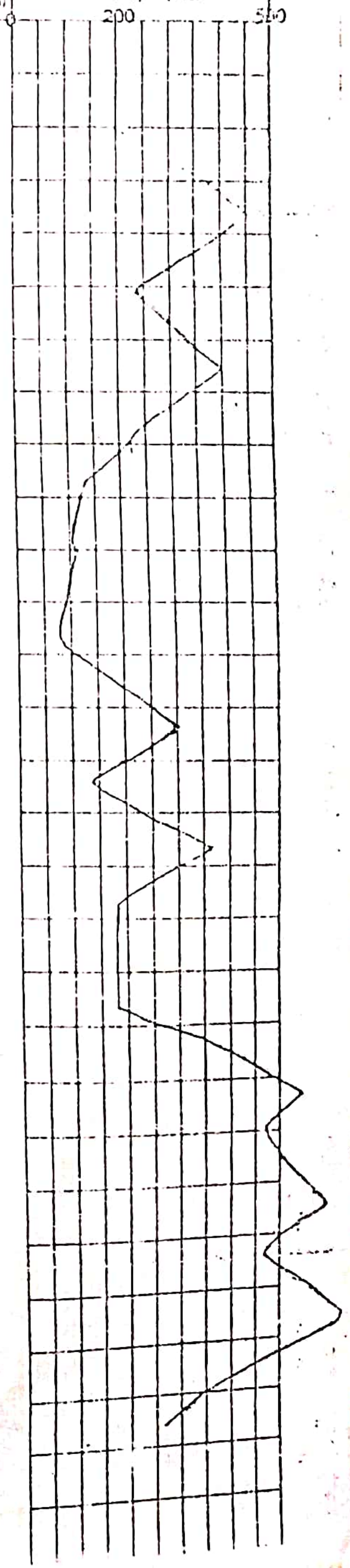


Prepared by : M. Lamichhane (Asstt. Hydrologist)

PROJECT NAME	T.I.A.T.S.P.	Size: 14"/8"	
AREA AND LOCATION	H...YON, Sarlahi-District, Janakpur-Zone.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	136.0 m	DRILLING RIG	TRD 500
DRILLING STARTED		DRILLED BY	Sudesk Rani
WELL COMPLETED	Mar,1987	LOGGED BY	P.Mukhiya

STATIC WATER LEVEL	-51.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-59.0 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1500.0 (min) m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Program		Depth (m)	Lithology Data			Electrical Logging		
Bit Size	Casing and ...		Water Level	Log	Description of Lithology	Spontaneous Potential (mv)	Depth (m)	Resistivity (Ω m)
	0-40.50m	0–10			Sand & Silt			
		10–33			Boulders,Cobbles & Coarse Sand.			
		33–45			Sand and Gravel			
		45–60			Black Sticky Clay			
		60–73			Clay with Boulders.			
	R=78	73–83			Gravel and Sand			
		83–94			Clay with boulders.			
96.5		94–121			Boulders,Cobbles,Coarse to Medium Sand			
118.0		121–124			Black Sticky Clay			
124.0		124–133			Gravel& Fine Gravel Fine to Medium Sand			
132.0 / 136.0		133–136			Black Sticky Clay.			

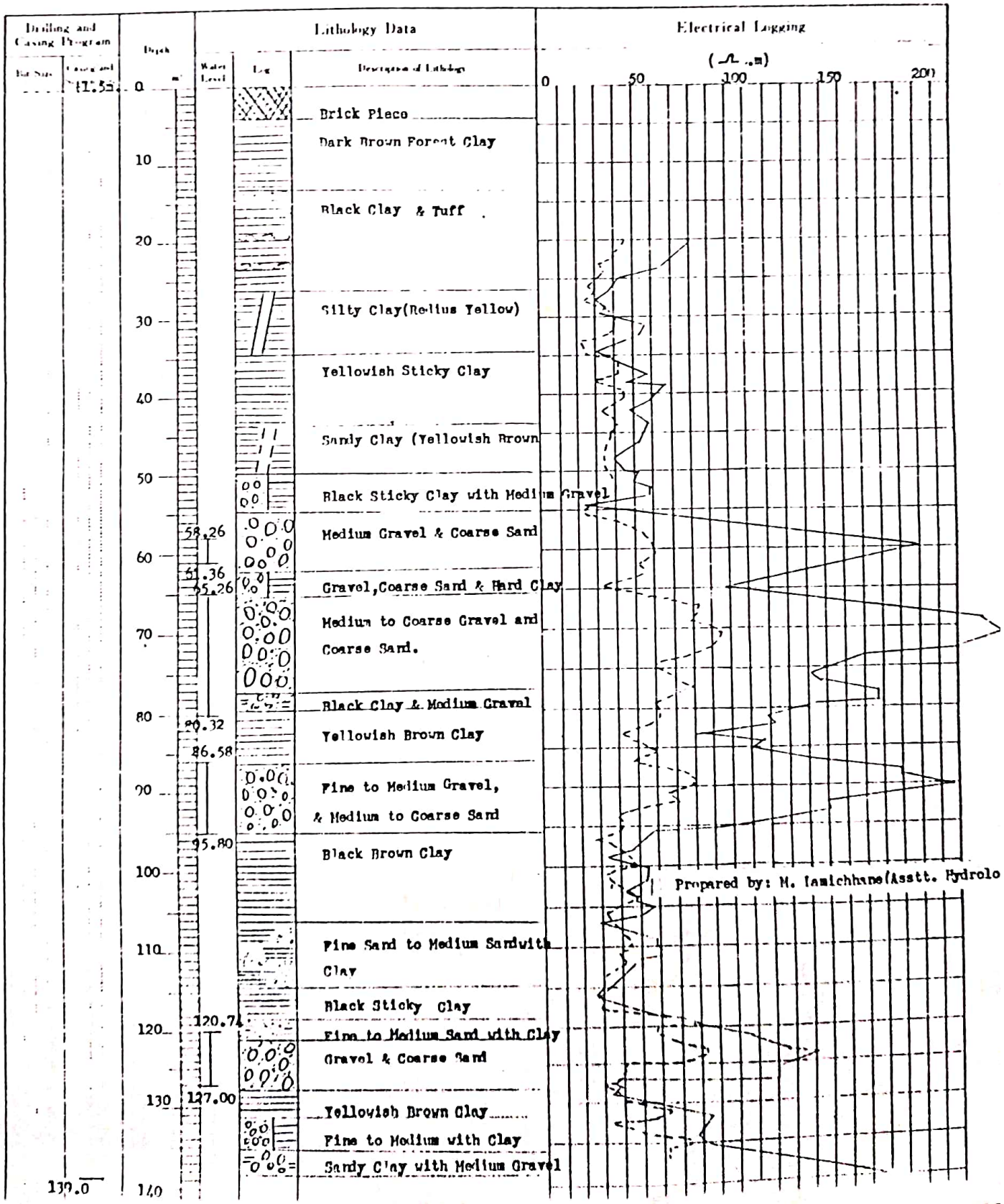


WELL LOG

Well No: J-15

PROJECT NAME J.A.D.P	Size: 8"/8"
AREA AND LOCATION JANAKPUR HORTICULTURE FARM, Janakpur-Dham	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 139.0 m	DRILLING RIG TPM 72"A"
DRILLING STARTED 10 Nov.,1976	DRILLED BY Mr. D.B.Karki
WELL COMPLETED 2 Dec.,1976	LOGGED BY Mr. M. Lamichhane

STATIC WATER LEVEL +1.000 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -15.560 m	CONDUCTIVITY μ℧/cm
PUMPING RATE 900.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

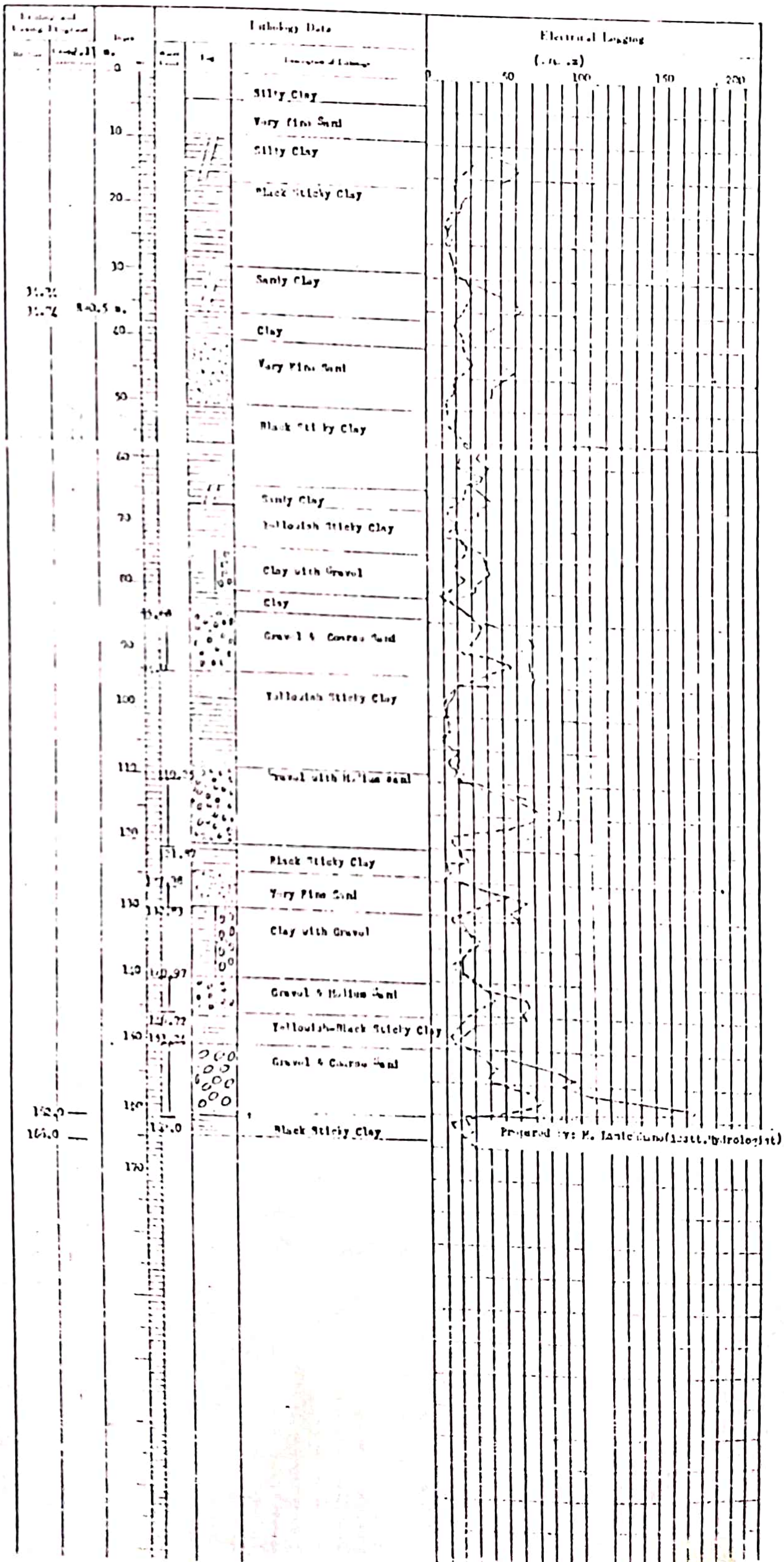


Well No.: J-17

WELL LOG

PROJECT NAME: J.T.D.P	Size: 12"/8"
AREA AND LOCATION: GODHAS, SHAJHA SASTHAN, DHANUSA,	
ELEVATION: m	LATITUDE / LONGITUDE
TOTAL DEPTH: 166.0 m	DRILLING RIG: [illegible]
DRILLING STARTED: 6 May., 1979	DRILLED BY: Mr. B. [illegible] & Mr. P. [illegible]
WELL COMPLETED: 16 June 1979	LOGGED BY: Mr. M. [illegible]

STATIC WATER LEVEL: +1.359 m	WATER TEMPERATURE:
DYNAMIC WATER LEVEL: -25.021 m	CONDUCTIVITY:
PUMPING RATE: 2270.0 [illegible] m³/d	pH:
SPECIFIC CAPACITY: m³/d/m	TOTAL HARDNESS:



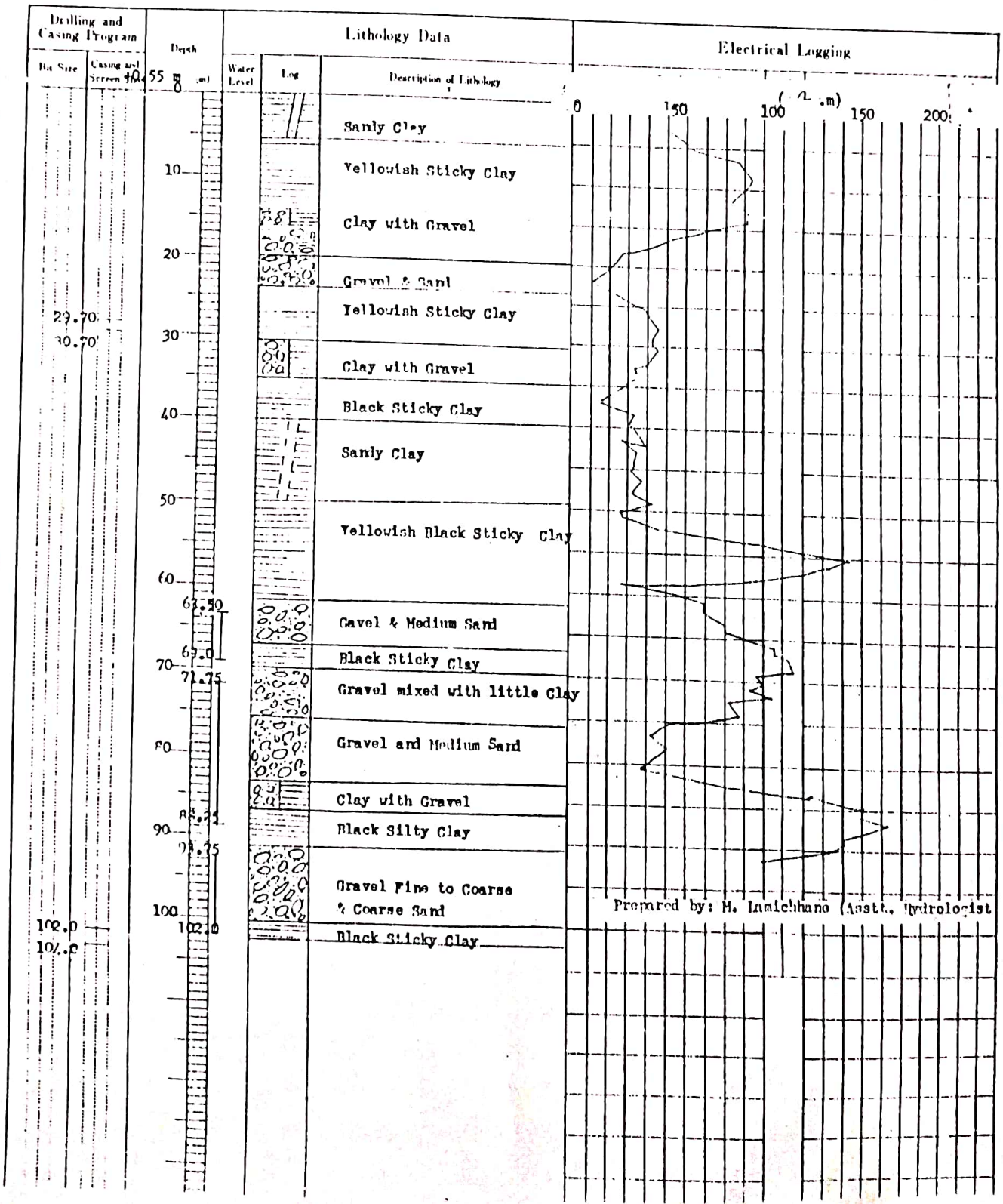
Prepared by: M. [illegible] (Asstt. Hydrologist)

WELL LOG

Well Name: J-5

PROJECT NAME	J.A.D.P.	Size: 12"/8"	
AREA AND LOCATION	HORDIHATH AGRICULTURE FARM, No 3, Paniniya		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	104.60 m	DRILLING RIG	TIM 72"A"
DRILLING STARTED		DRILLED BY	Mr. S.Lamichhane & Mr. P. Mukhiya
WELL COMPLETED	13 June,1980	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	+ 2.000 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-27.000 m	CONDUCTIVITY	µ℧/cm
PUMPING RATE	2118.0 l/min m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



Prepared by: M. Lamichhane (Asstt. Hydrologist

वैल-६, हनुमाननगर-५

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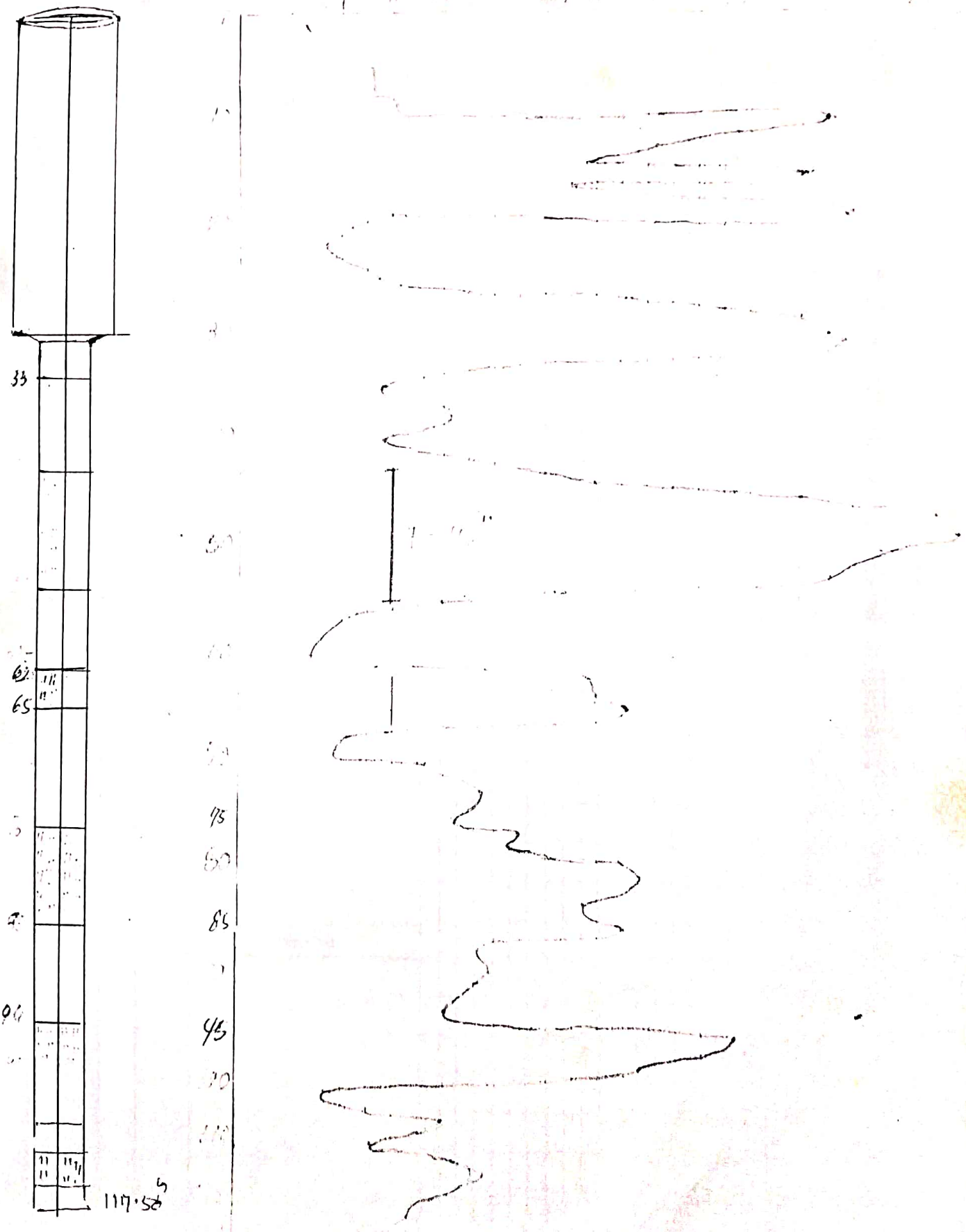
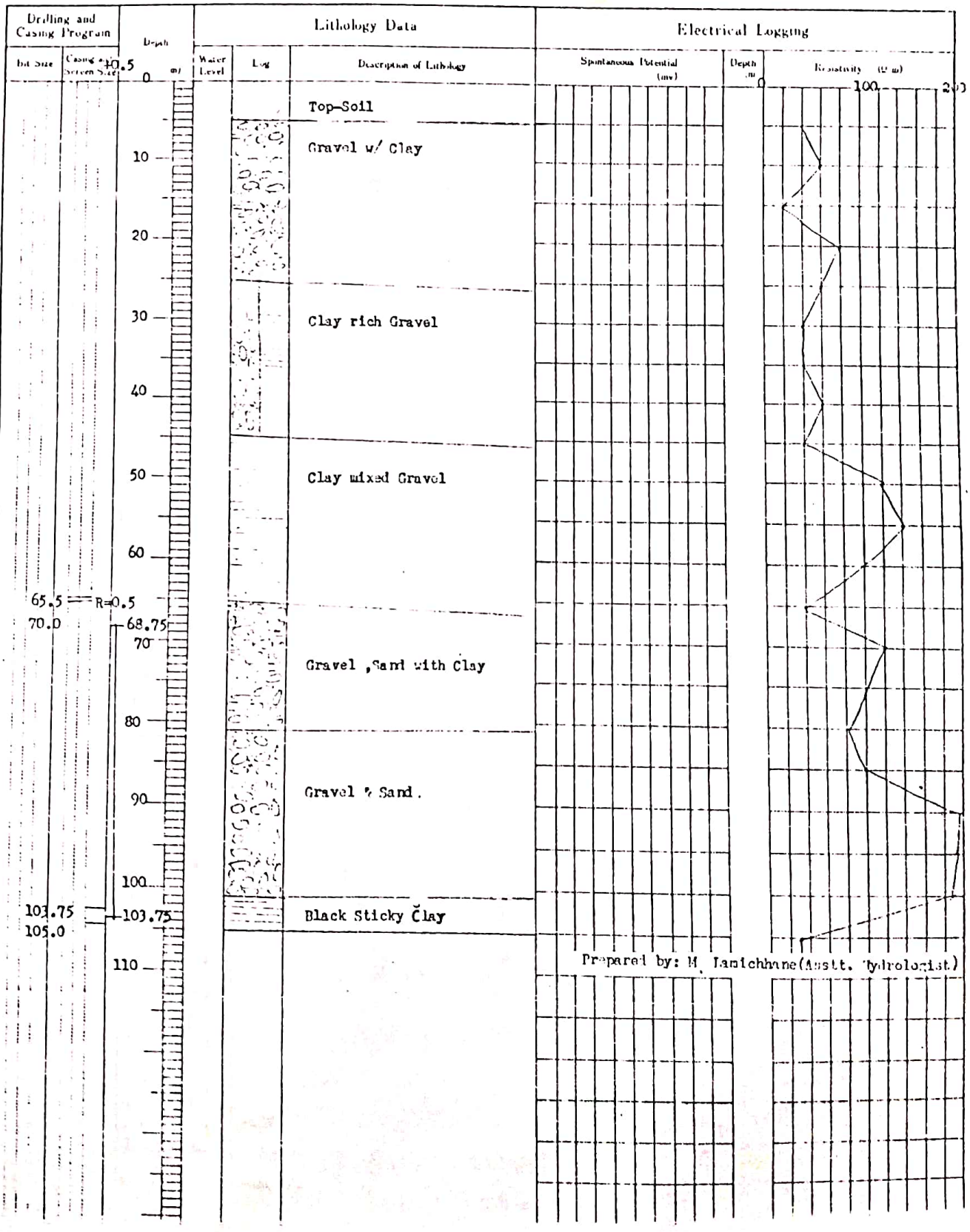
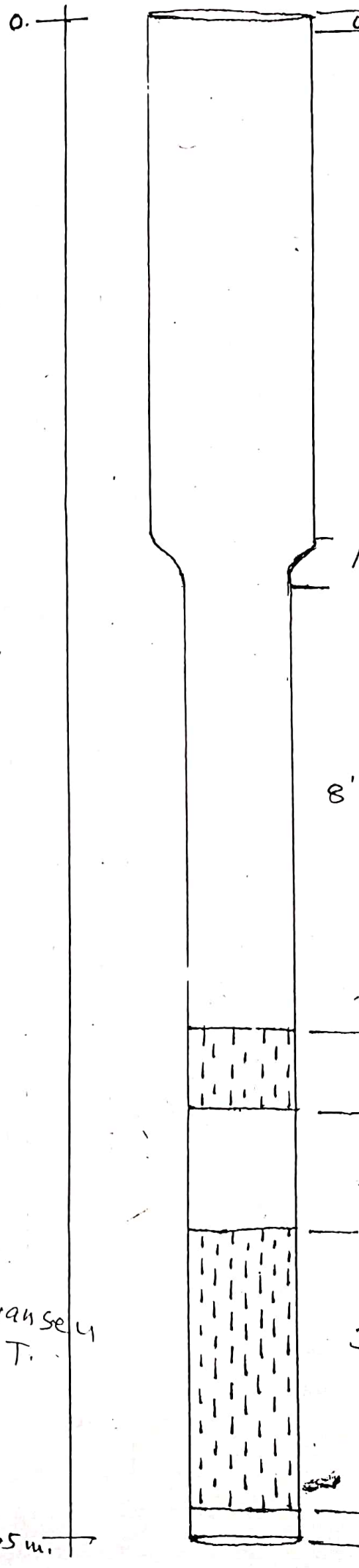


PROJECT NAME	J.I.D.P.		Size: 14"/8"
AREA AND LOCATION	LALVITTI, Hariharpur Village Panchayat.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	105.0 m	DRILLING RIG	YDH-501"R"
DRILLING STARTED		DRILLED BY	Mr. S. Jha
WELL COMPLETED	Apr.,1986	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-62.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	900.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	





Total Depth - 172.5m.

14" pipe - 42.0m.

14"x8" Red. - 0.5m.

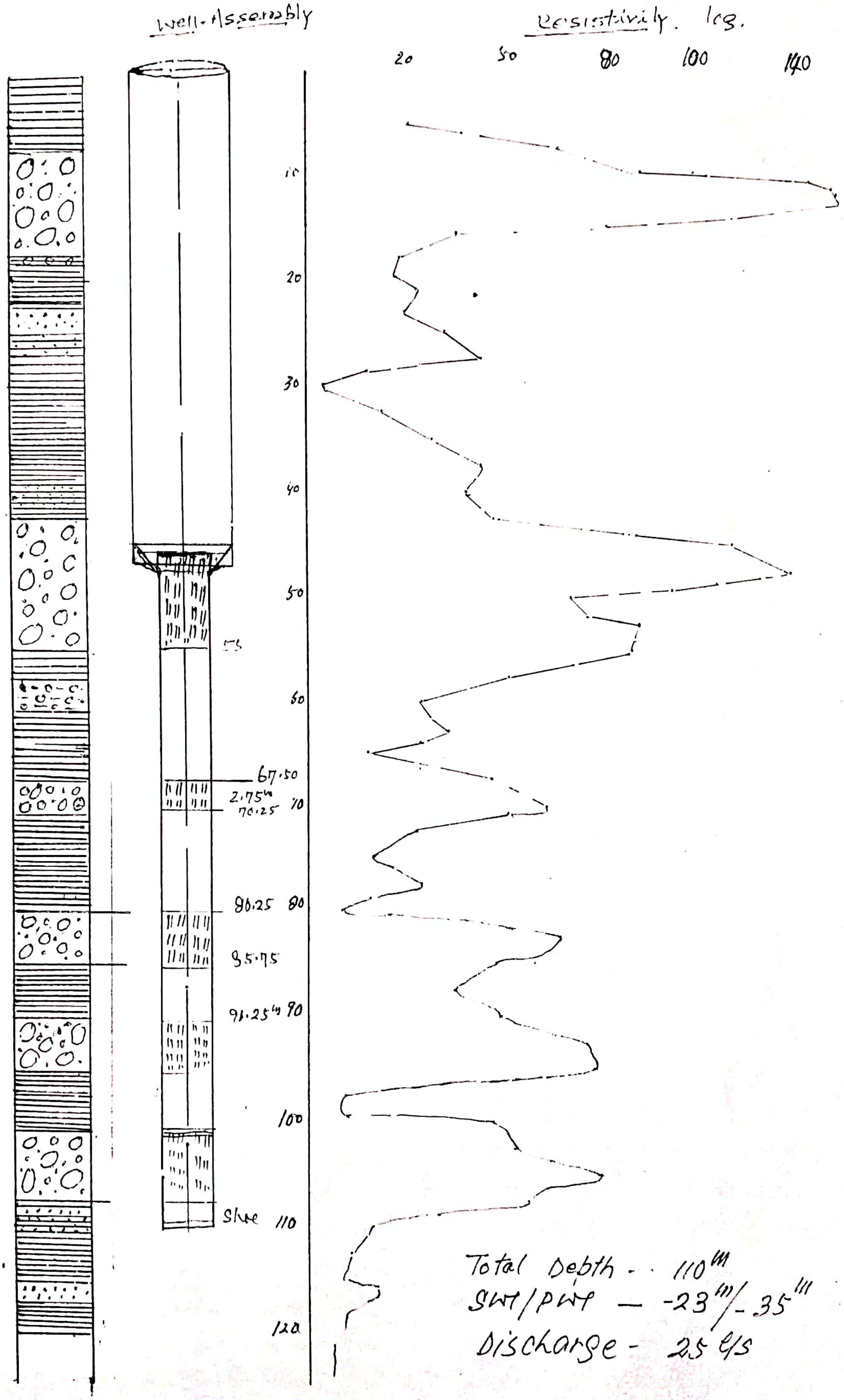
8" pipe - 94.0m.

8" slotted pipe - 36.0m.

Total 172.5m.

Dip Narayan Seth
W. D. T.

Well-9 Adampur 8



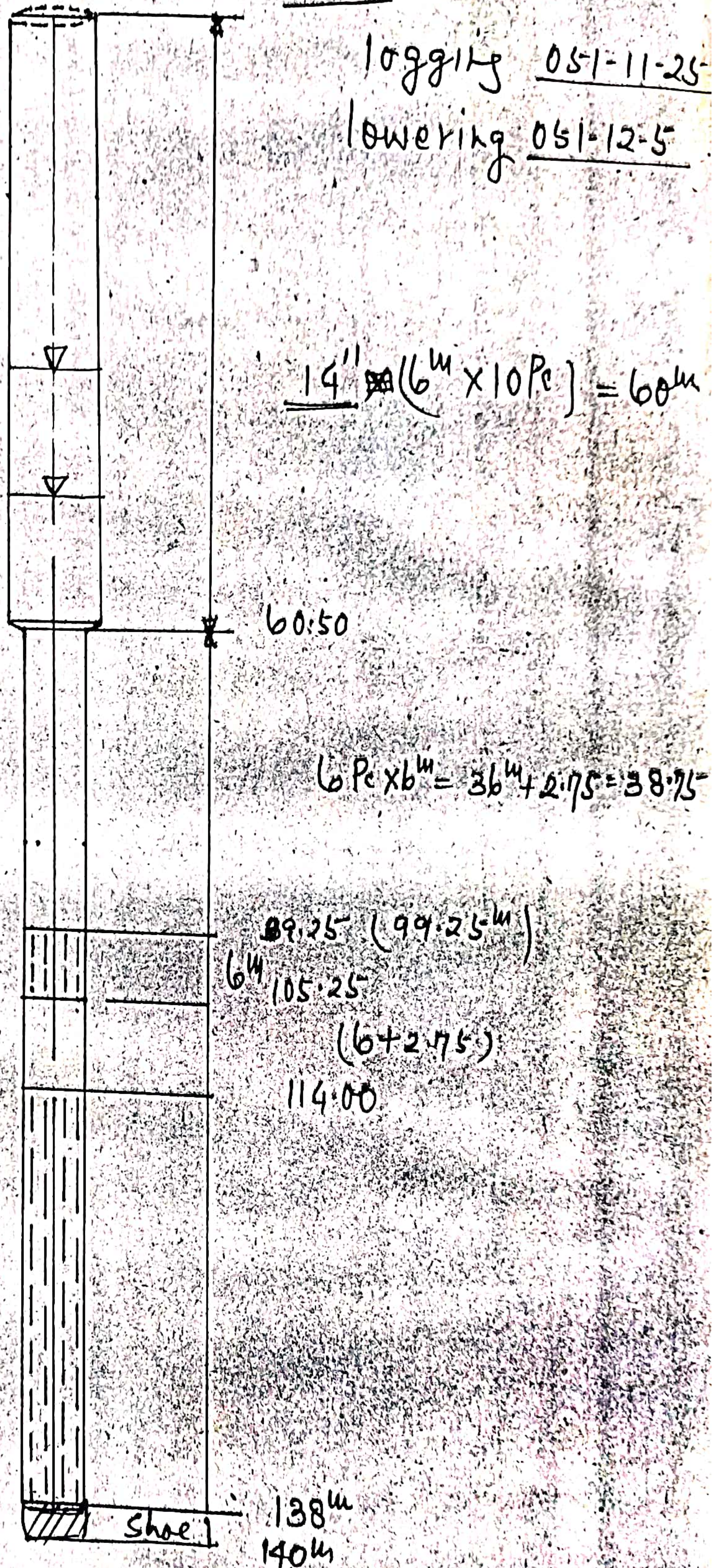
Well-1 (051/52)
Sarlahi - Dist.

Drilled by - Sowa Chau
logged: S. Jha 051/52
Hariou

logging 051-11-25
lowering 051-12-5

Total Depth — 155m
pipe lower - 051-12-5

Dis → 25 l/s
Swl — 38m
pwl — 50m

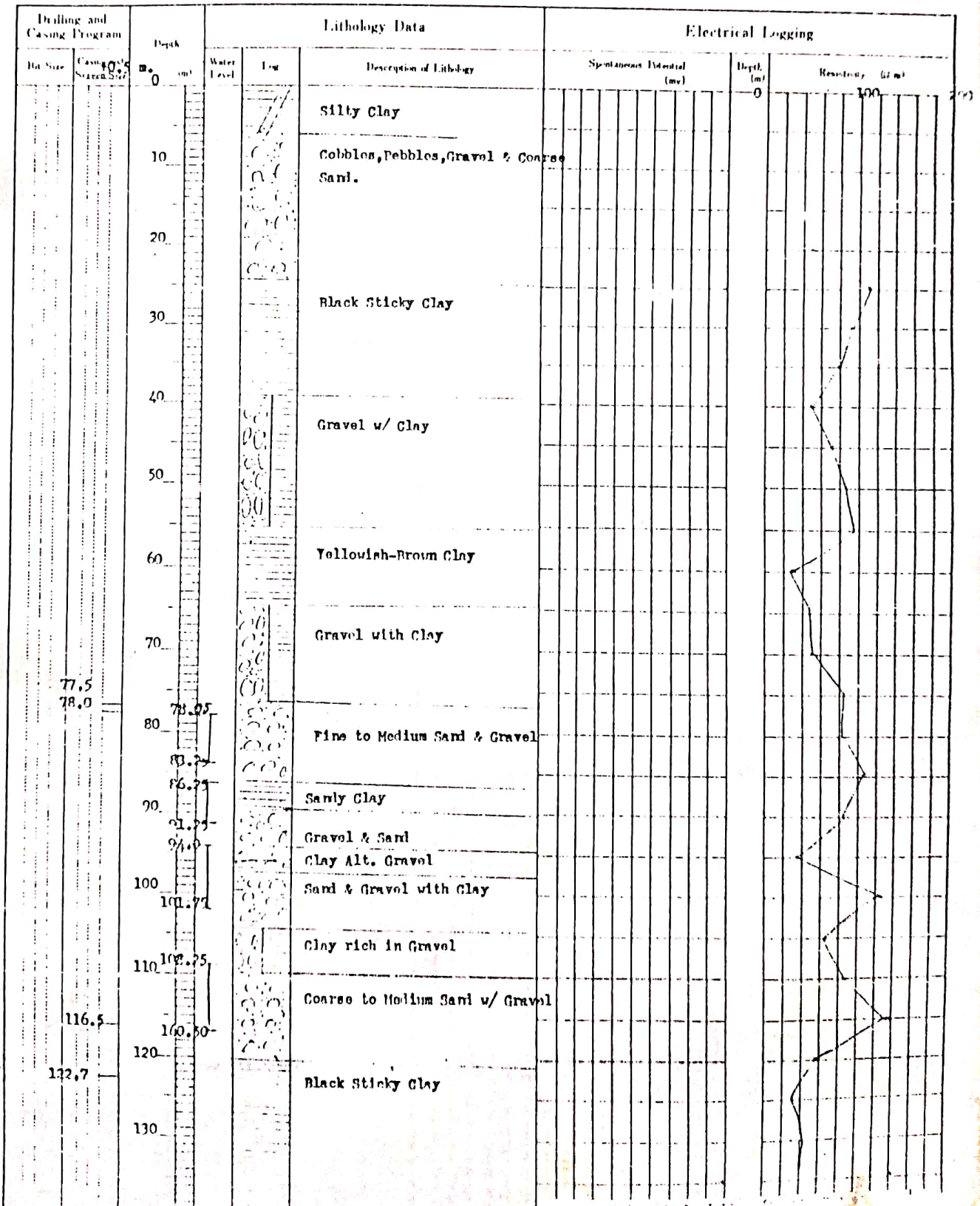


WELL LOG

N-3

PROJECT NAME J.A.D.P.	Size: 14"/8"
AREA AND LOCATION HURIYA, Yagyabhumi Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 122.70 m	DRILLING RIG YBD 501BH
DRILLING STARTED	DRILLED BY Mr. D.N. Sen
WELL COMPLETED Jan., 1996	LOGGED BY Mr. M. Lamichhane

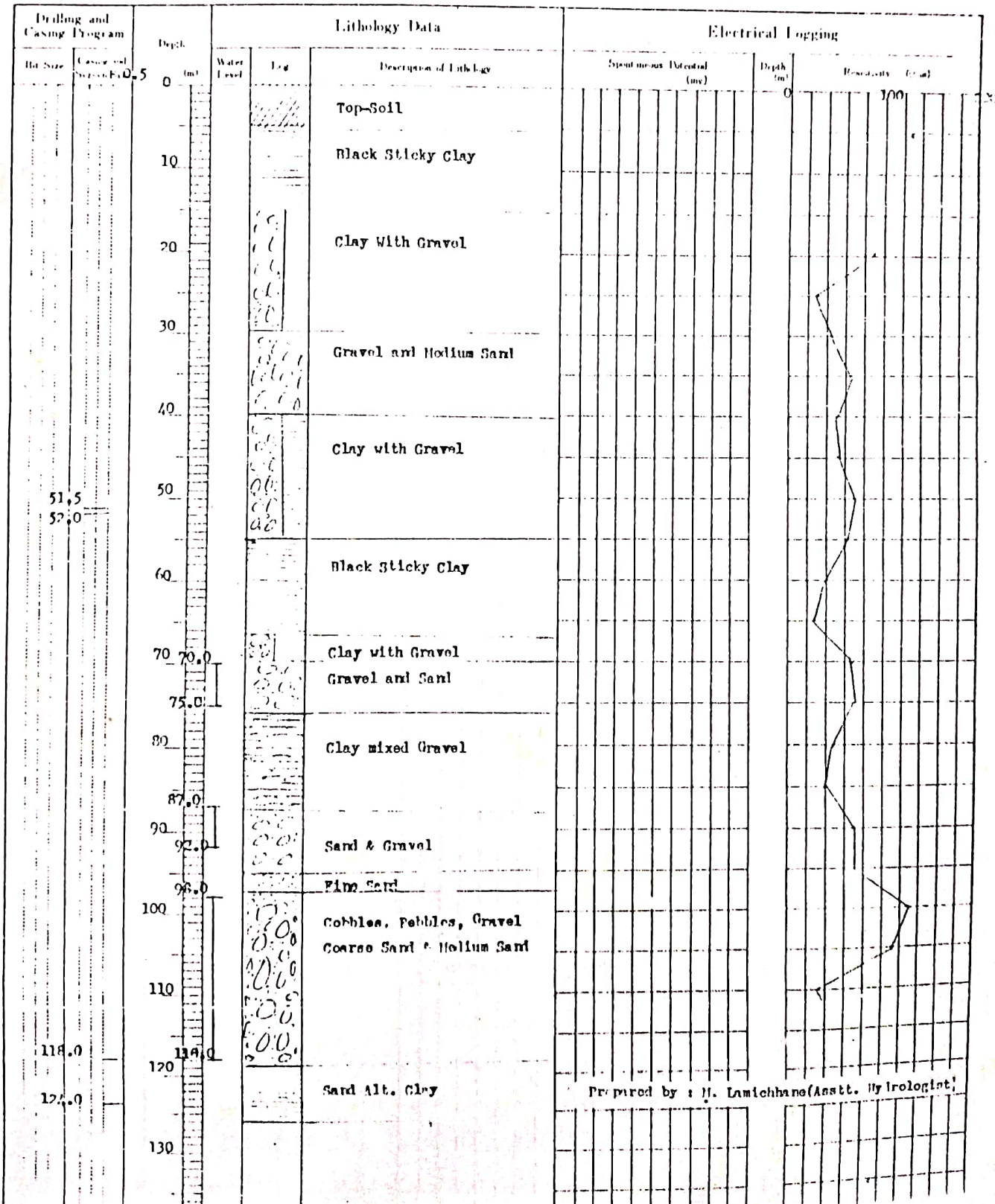
STATIC WATER LEVEL -52.00 m	WATER TEMPERATURE °
DYNAMIC WATER LEVEL m	CONDUCTIVITY μ℧ cm
PUMPING RATE 1200.0 ℓ/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



WELL LOG

PROJECT NAME J.I.D.P.	Size: 14"/8"
AREA AND LOCATION BIRENDRA NAGAR, Bharatpur Village Panchayat	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 124.0 m	DRILLING RIG YRD 501"R"
DRILLING STARTED	DRILLED BY Mr. G. Joshi
WELL COMPLETED Dec., 1235	LOGGED BY Mr. H.Lamichhane

STATIC WATER LEVEL -34.0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL m	CONDUCTIVITY µ℧/cm
PUMPING RATE 1500.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

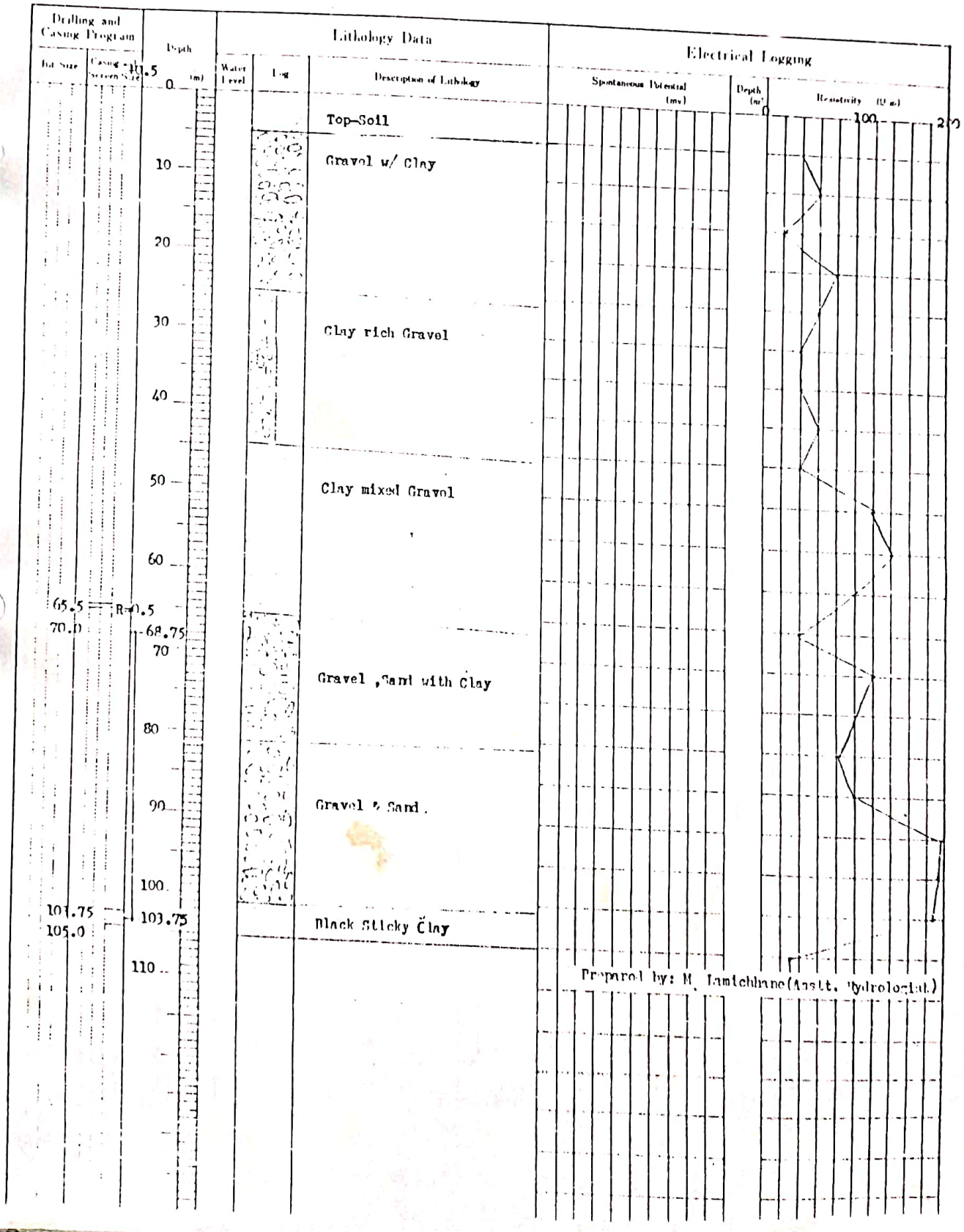


Prepared by : H. Lamichhane(Asstt. Hydrologist)

Well Log

PROJECT NAME	J.A.D.P.		Size: 14"/8"
AREA AND LOCATION	LALVITTI, Partharpur Village Panchayat.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	105.0 m	DRILLING RIG	YDH-501"R"
DRILLING STARTED		DRILLED BY	Mr. S. Jha
WELL COMPLETED	Apr., 1986	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-62.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	µS/cm
PUMPING RATE	900.0 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDINESS	"

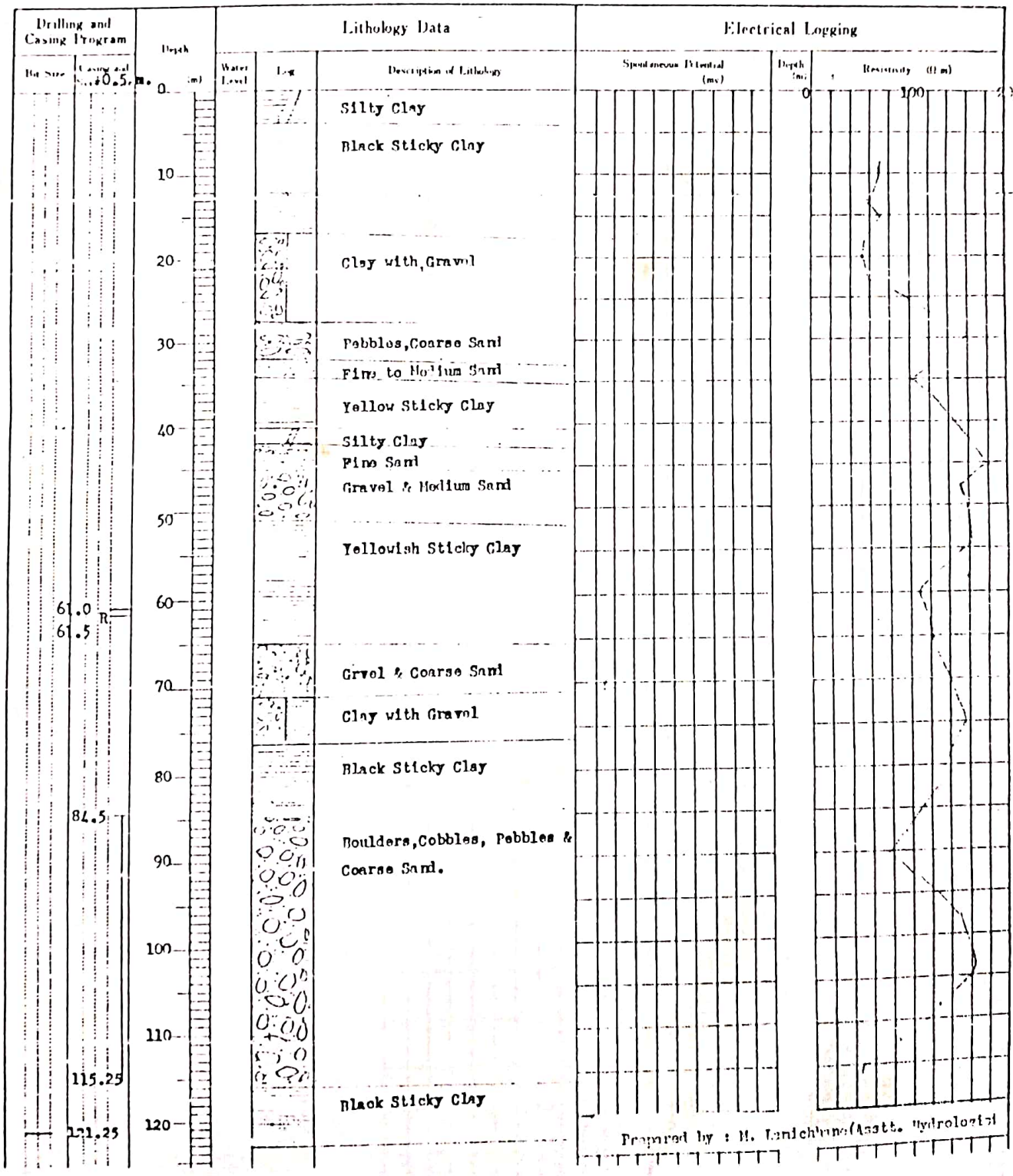


WELL LOG

Well Name: [illegible]

PROJECT NAME	J.A.D.P.	Size: 14"/8"	
AREA AND LOCATION	DHALKHEDAR, Dhalkhedar Village Panchayat		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	121.25 m	DRILLING RIG	YTO 501"R"
DRILLING STARTED		DRILLED BY	Mr. D.N.Sen
WELL COMPLETED	Dec.,1985	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	-60.0 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	1200.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



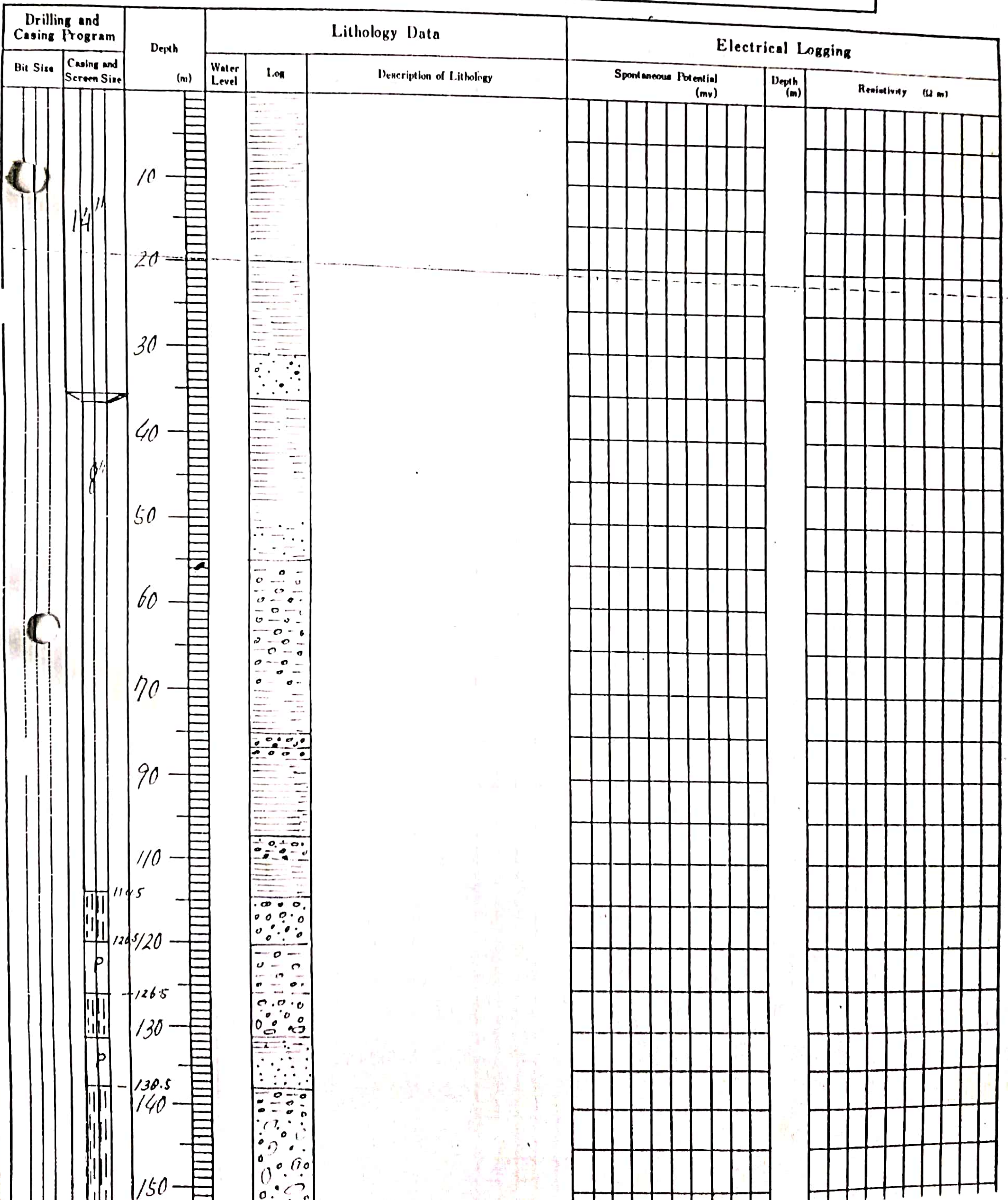
WELL LOG

Data No. [illegible]

PROJECT NAME	Agriculture Dev project		WELL NO.
AREA AND LOCATION	Lagma , Dhanusha		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	175 m m	DRILLING RIG	YRD 500
DRILLING STARTED	2051-9-	DRILLED BY	Meghlal Uraw
WELL COMPLETED	2051-10-27	LOGGED BY	S. JHA

Artisean 20818

STATIC WATER LEVEL	+ 0.75 m m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	2700 l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

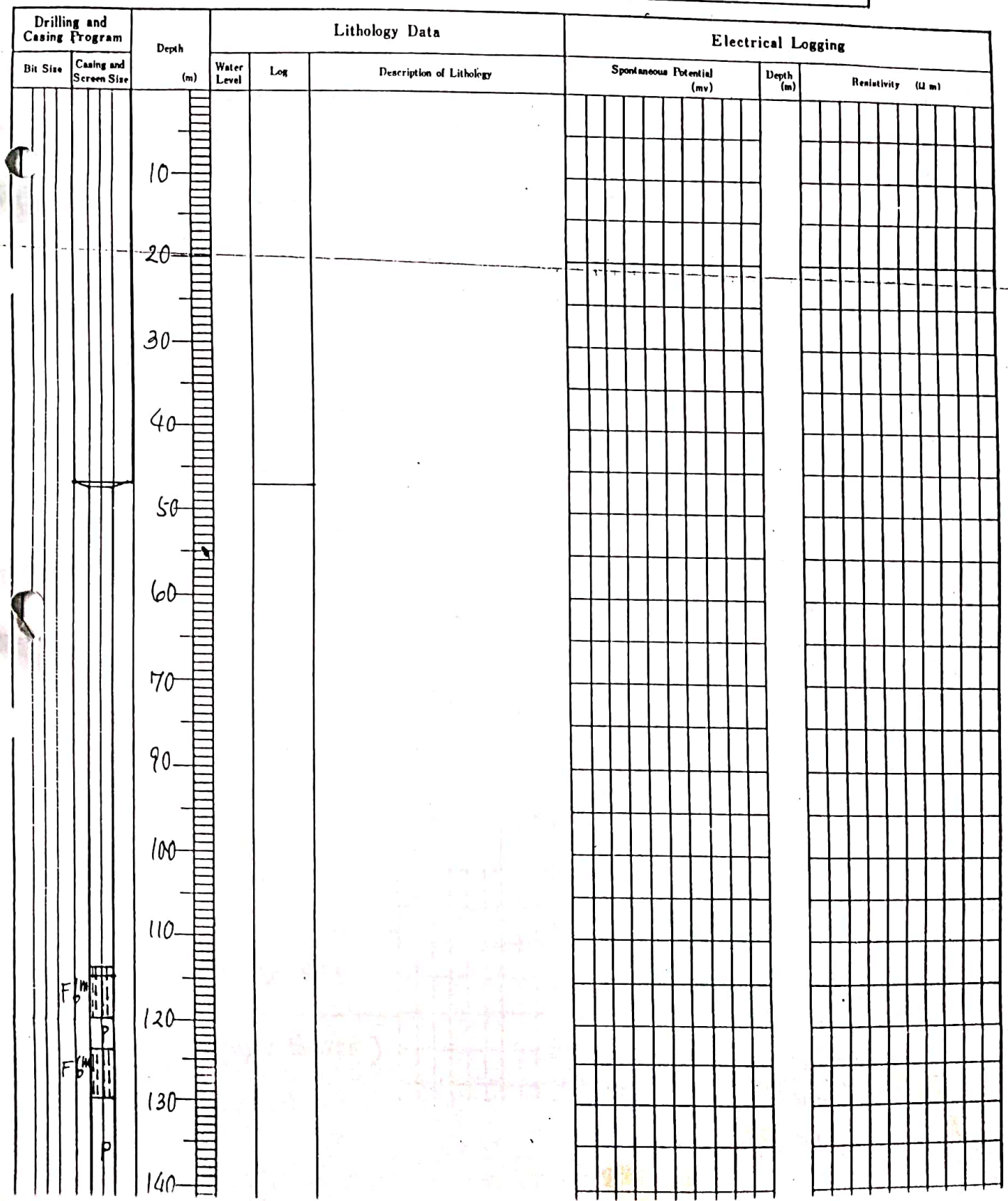


WELL LOG

Data No. 051/3—

PROJECT NAME	Agriculture Dev. Project	WELL NO.	
AREA AND LOCATION	Dagma		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	175M m	DRILLING RIG	YBM 500
DRILLING STARTED	2051-11-8	DRILLED BY	Meghlal
WELL COMPLETED	2051-12-	LOGGED BY	S. JHA

STATIC WATER LEVEL	m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

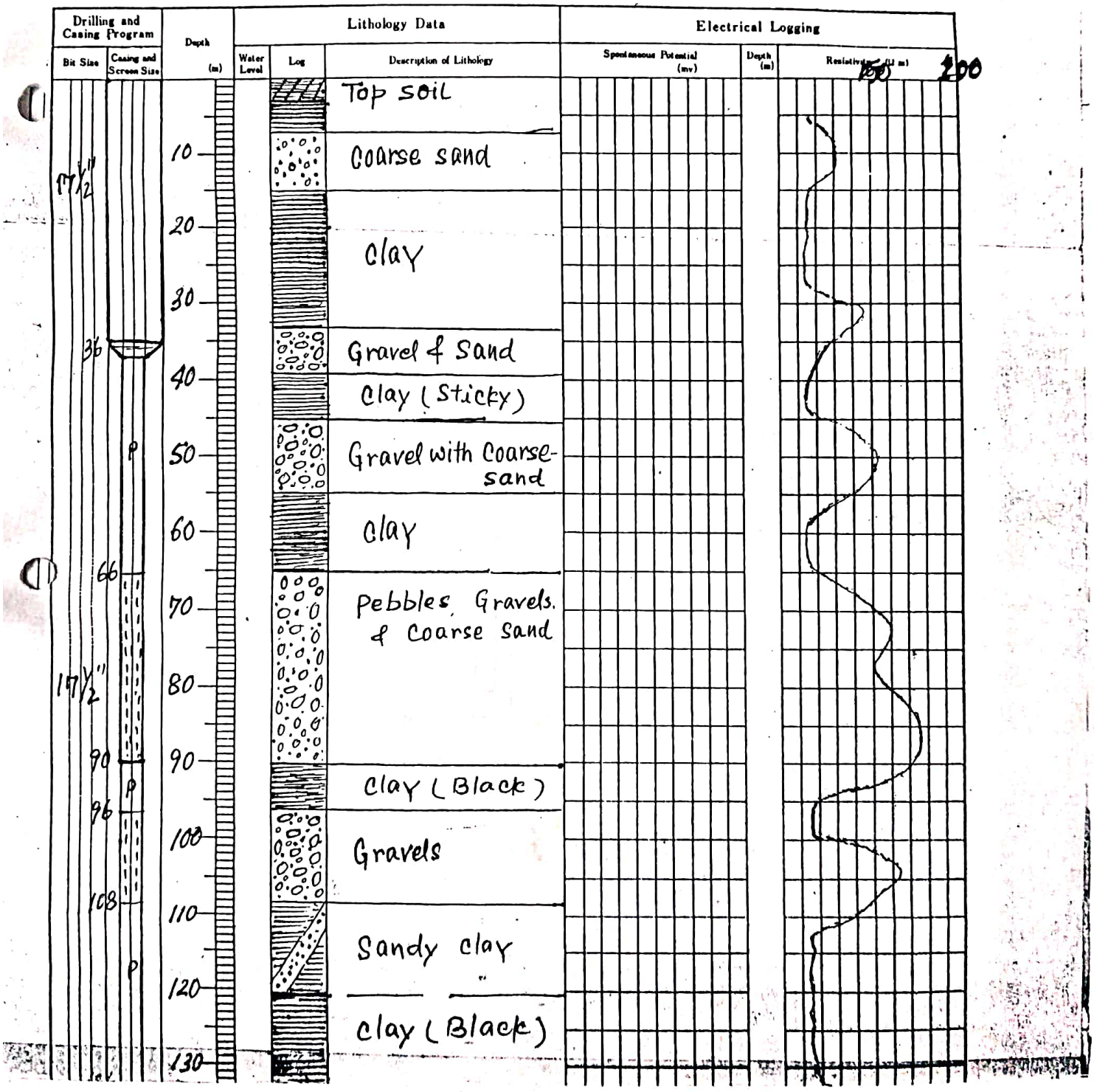


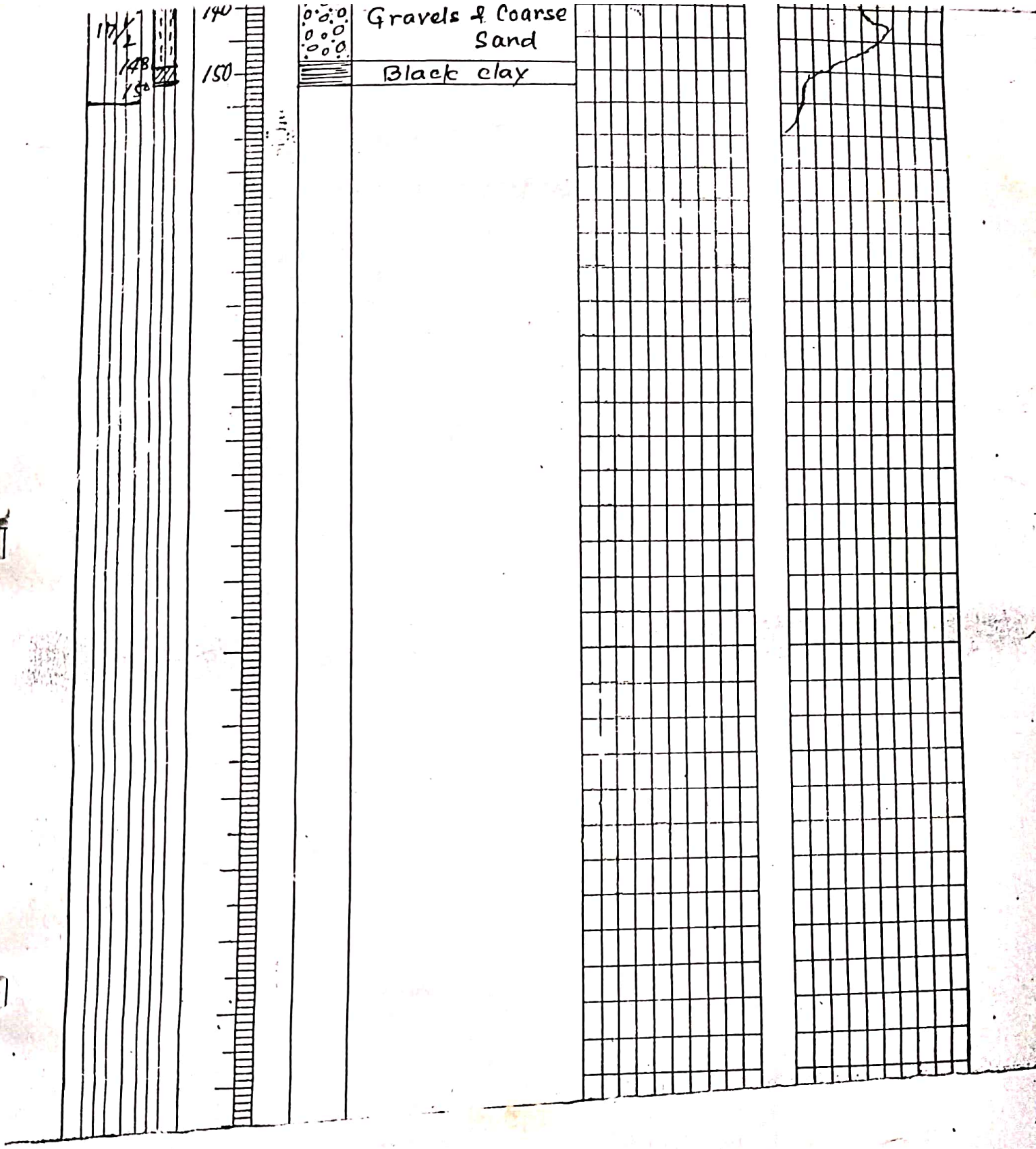
WELL LOG

Data No. _____

PROJECT NAME	Agriculture Dev. Project, Janak	WELL NO.	1.
AREA AND LOCATION	Bhoraha - 3		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	150 M m	DRILLING RIG	TRD 500
DRILLING STARTED	2049-1-24	DRILLED BY	R.B.P.C
WELL COMPLETED	2049-3-25	LOGGED BY	M. Lamichhane

STATIC WATER LEVEL	9.80 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	14.20 m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	3600 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



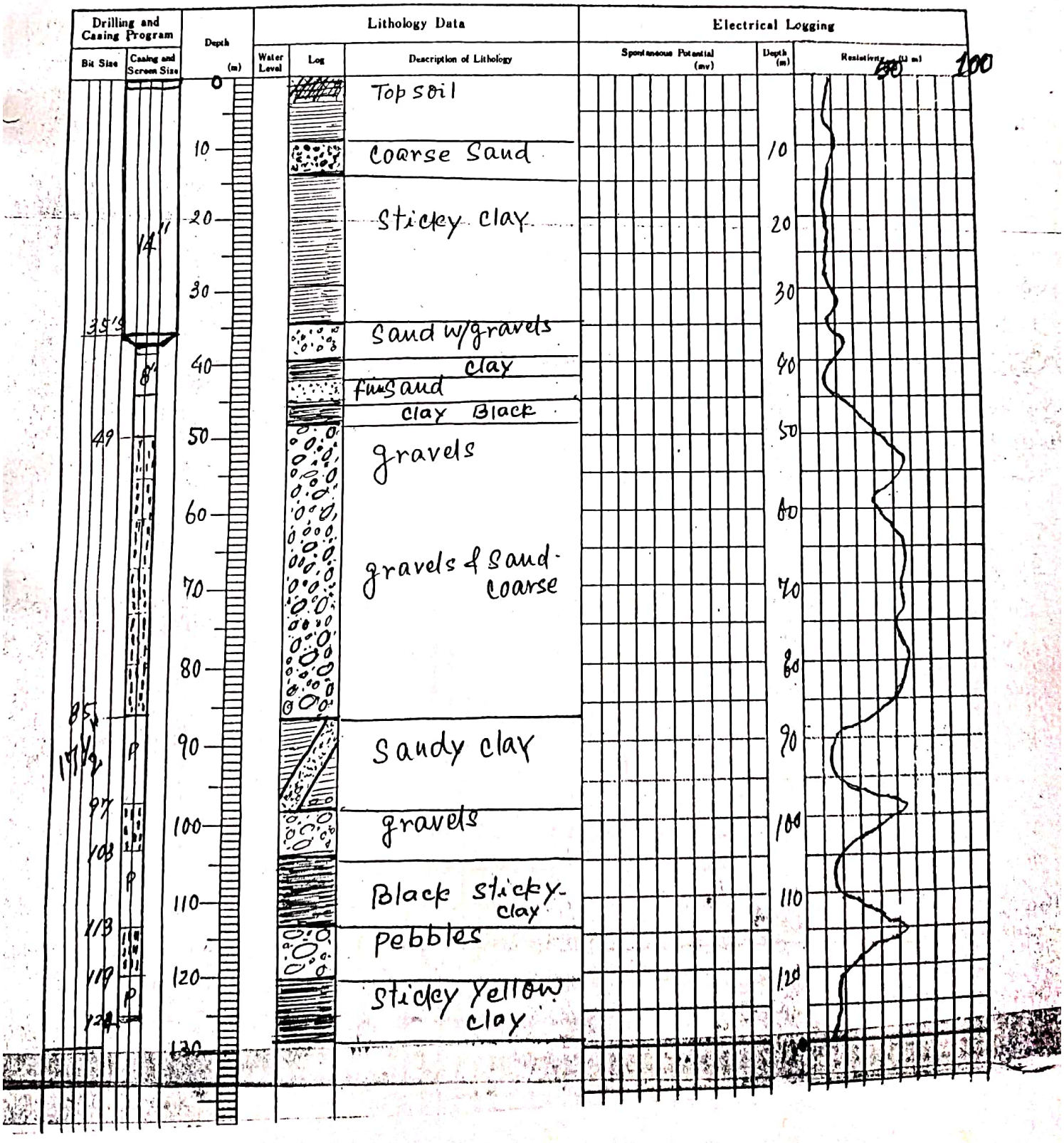

140
150
Gravels & Coarse Sand
Black clay

WELL LOG

Data No. _____

PROJECT NAME	Agri Development Project Janakpur	WELL NO.	2
AREA AND LOCATION	Bhoraha-4		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	124.00 m	DRILLING RIG	TRD 500
DRILLING STARTED	2049-3-30	DRILLED BY	R.B.K.C
WELL COMPLETED	2049-5-17	LOGGED BY	M. Tamichhane

STATIC WATER LEVEL	8.66m m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	13.00 m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	3600 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



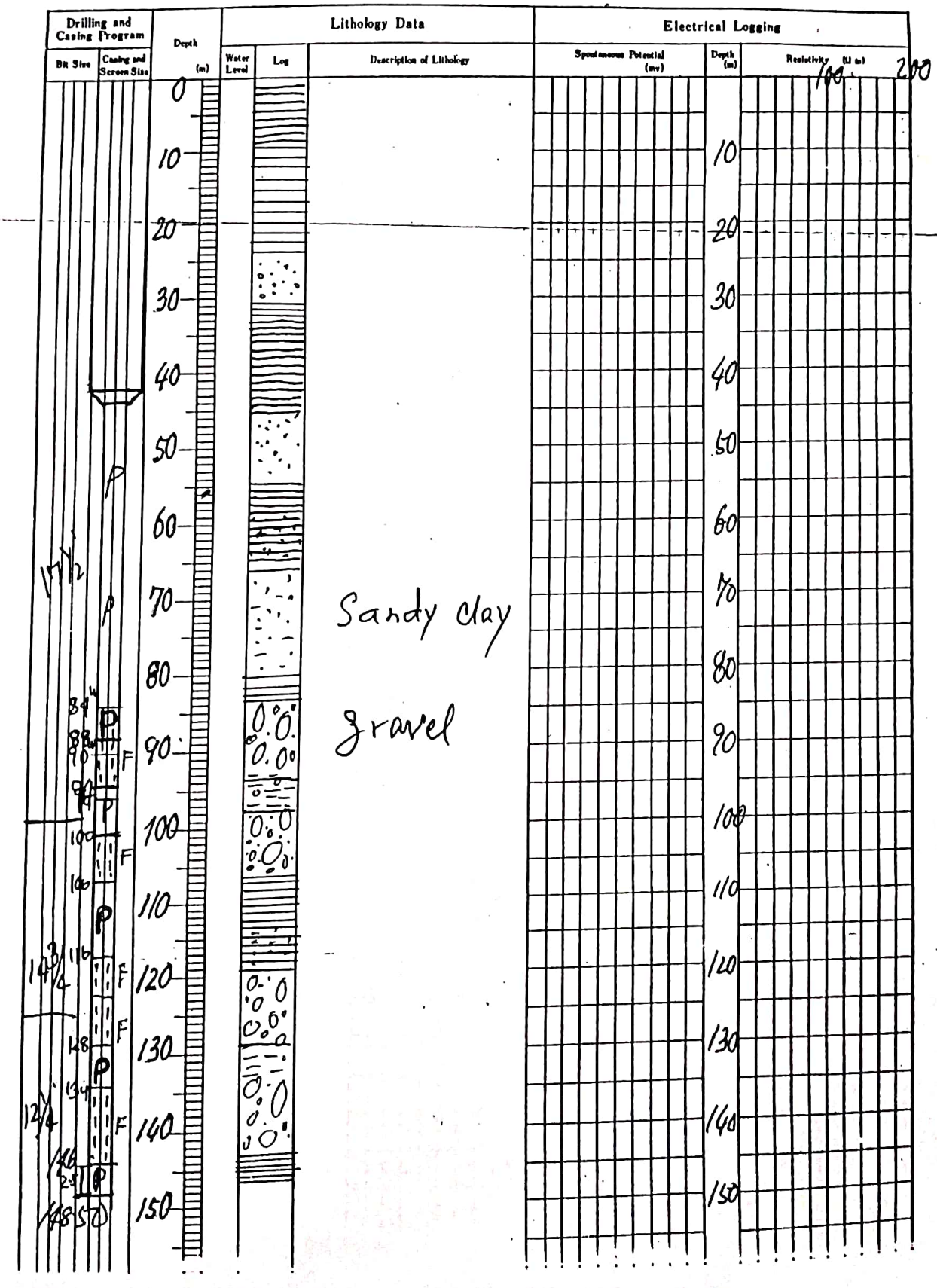
Agriculture Development Project, Janakpur Nakalghij

WELL LOG

Data No.

PROJECT NAME	Agriculture dev. Project, Ja	WELL NO.	
AREA AND LOCATION	SUGA MADHUKARHI, DHANUSHA		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	150 m	DRILLING RIG	YRD 500
DRILLING STARTED	2051-2-05	DRILLED BY	Meghlal Uraw
WELL COMPLETED	2051-3-10	LOGGED BY	Satyendra Jha

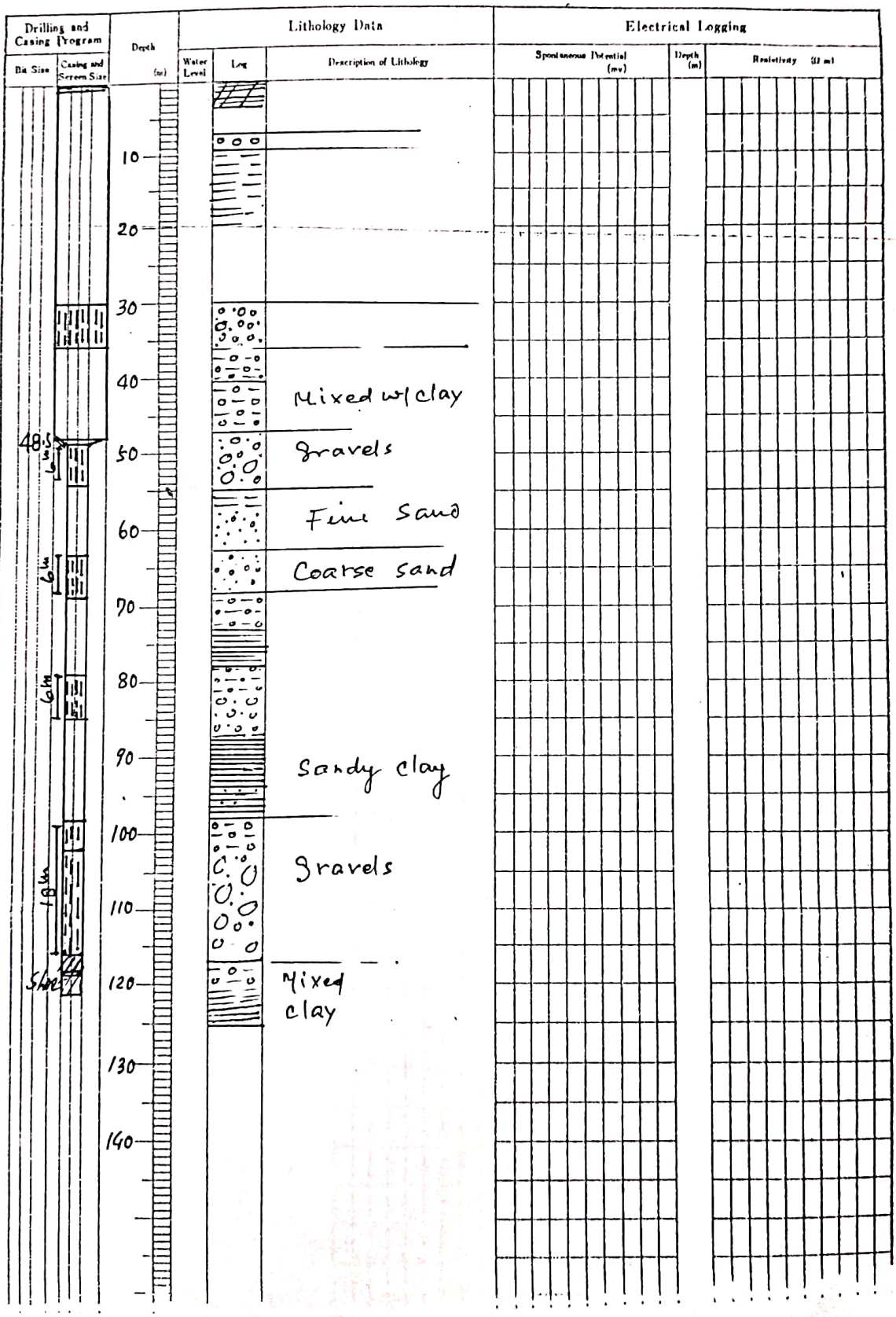
STATIC WATER LEVEL	+ 0.5 M m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	20 M m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	2100 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

PROJECT NAME	Agri Dev. Project	WELL NO.	8 (052/53)
AREA AND LOCATION	Govindpur-1		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	117.50 m	DRILLING RIG	YRD500 (214)
DRILLING STARTED	052/11/6	DRILLED BY	
WELL COMPLETED	052/12/5	LOGGED BY	

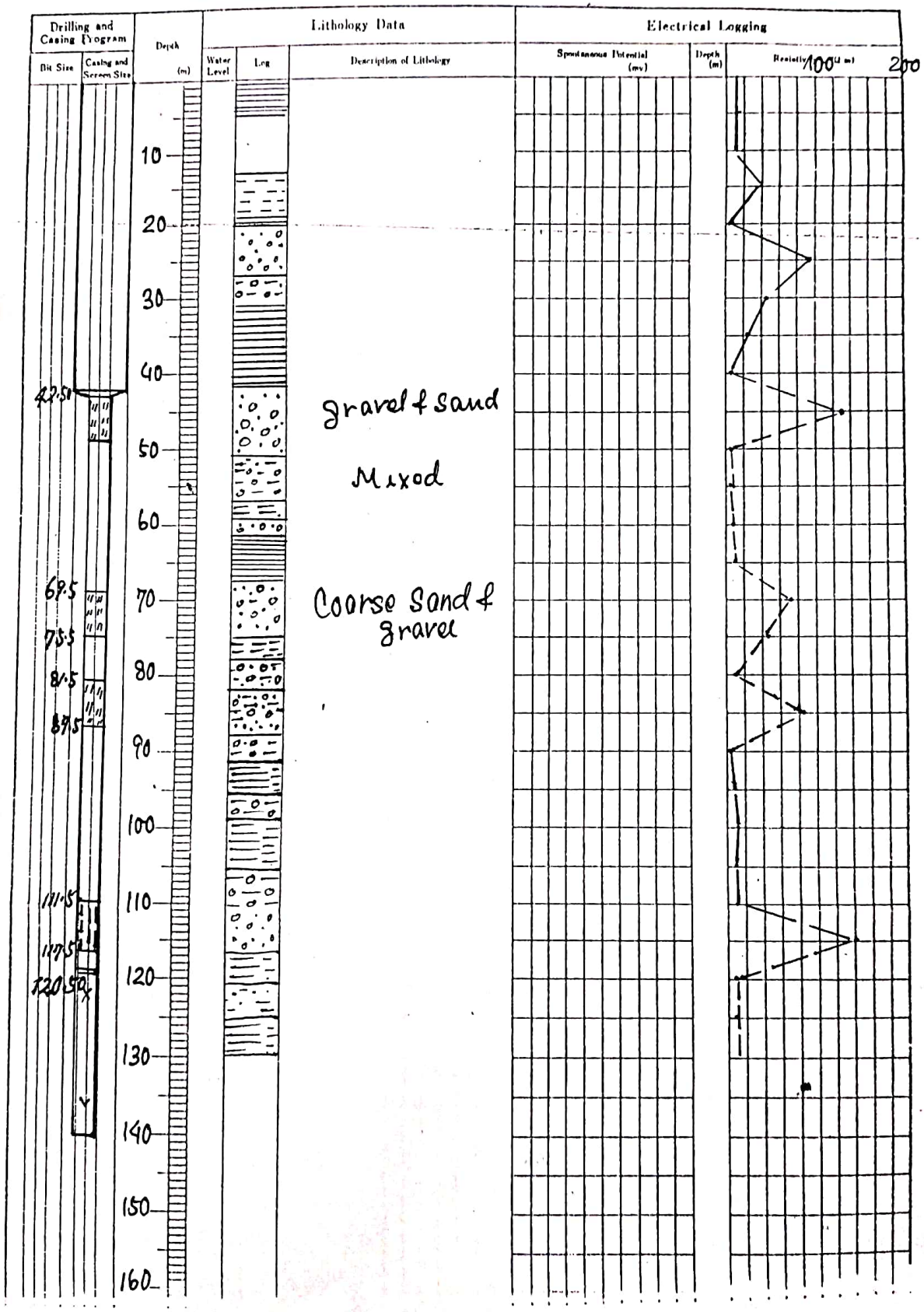
STATIC WATER LEVEL	17 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	32 (A) m	CONDUCTIVITY	μ℧/cm
PUMPING RATE	2100 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

PROJECT NAME	Agri. Dev. Project.	WELL NO.	"4" 052/53
AREA AND LOCATION	GOVINDPUR-5 JHITKI		
ELEVATION m		LATITUDE	LONGITUDE
TOTAL DEPTH	120.50m m	DRILLING RIG	J.A.214 YRD
DRILLING STARTED	2052/6/	DRILLED BY	Jitendra & Rajlal
WELL COMPLETED	2052/7/6	LOGGED BY	Satyendra JHA

STATIC WATER LEVEL m		WATER TEMPERATURE °C	
DYNAMIC WATER LEVEL	42.0m m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

PROJECT NAME		WELL NO.	
AREA AND LOCATION	Turkiya, Talpur		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	200m m	DRILLING RIG	YRDS00
DRILLING STARTED		DRILLED BY	
WELL COMPLETED		LOGGED BY	S. JHA

STATIC WATER LEVEL	m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μΩ/cm
PUMPING RATE	ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

Drilling and Casing Diagram

Bit Size | Casing and Screen Size | Depth (m) | Water Level | Log

Lithology Data

Description of Lithology

170 clay

180 clay

190

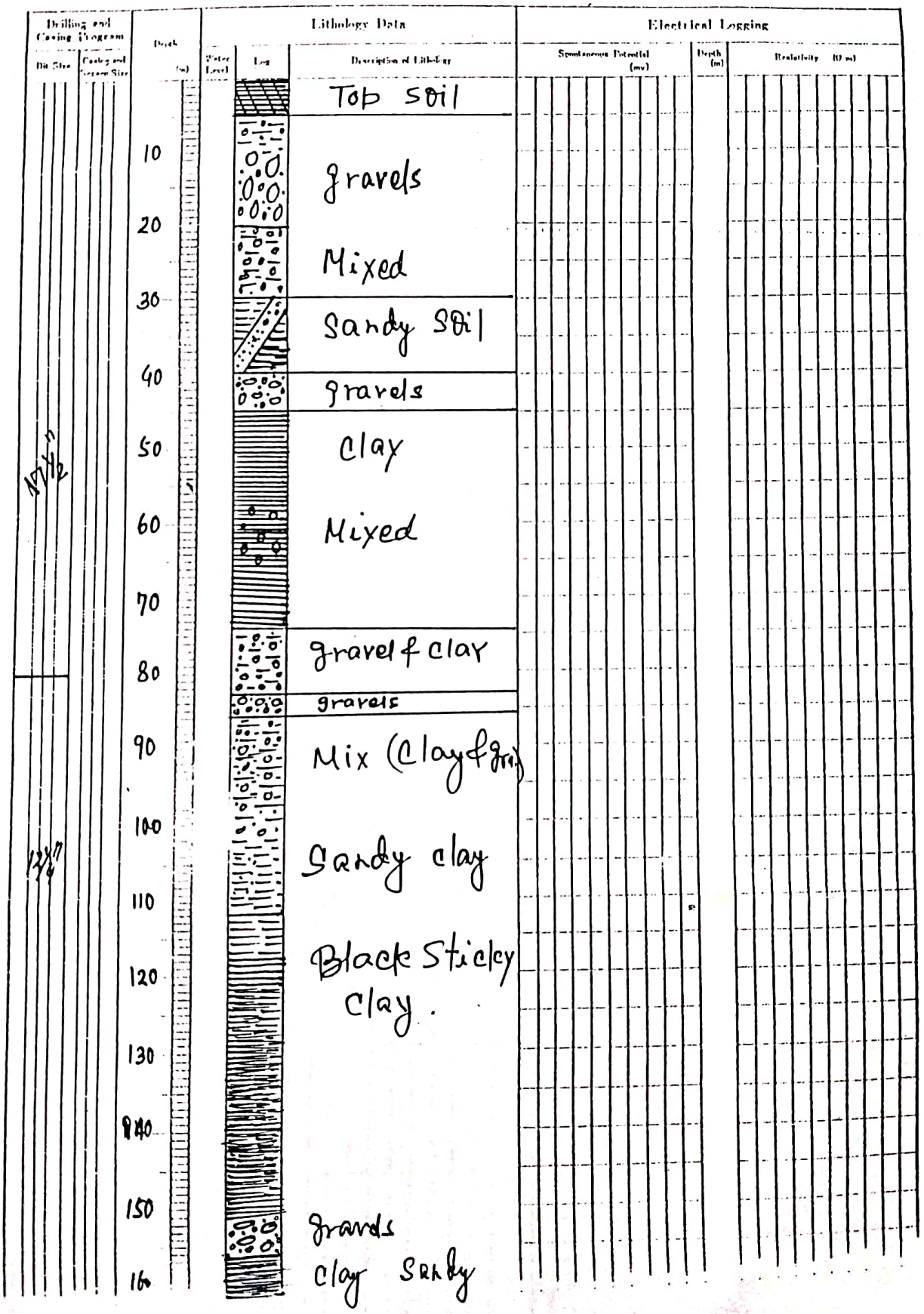
200 2052/2/5

Electrical Logging

Spontaneous Potential (mv) | Depth (m) | Resistivity (Ω m)

PROJECT NAME	Agriculture dev. Project	WELL NO.	
AREA AND LOCATION	Turkiya, Dalpur VDS		
ELEVATION m		LATITUDE	LONGITUDE
TOTAL DEPTH	200m m	DRILLING RIG	→ Rajlal & Jitendra
DRILLING STARTED	2051-12-14	DRILLED BY	
WELL COMPLETED	2051-2-12	LOGGED BY	S. Jha

STATIC WATER LEVEL m		WATER TEMPERATURE °C	
DYNAMIC WATER LEVEL m		CONDUCTIVITY μΩ/cm	
PUMPING RATE l/min (m³/d)		pH	
SPECIFIC CAPACITY m³/d/m		TOTAL HARDNESS	

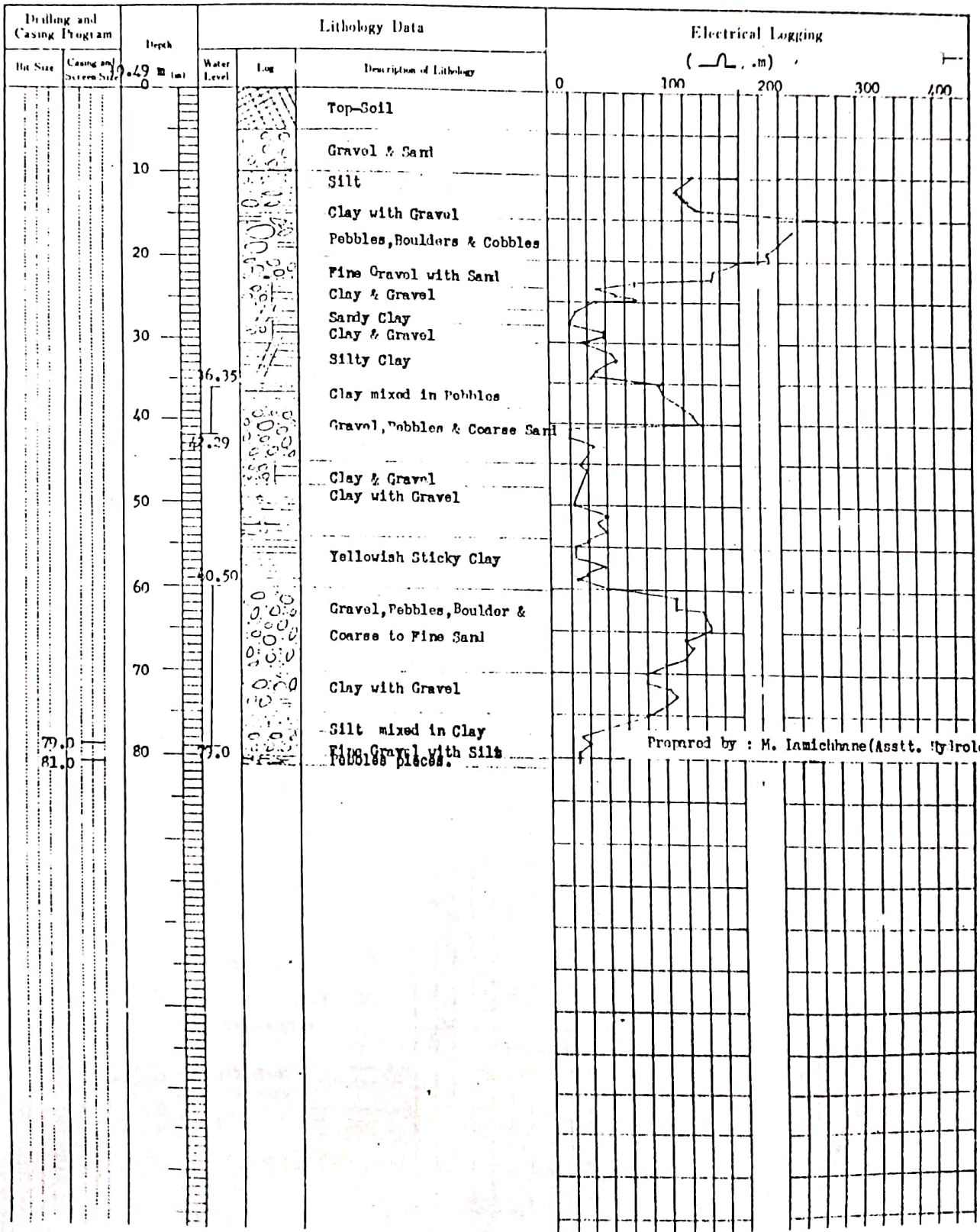


WELL LOG

Well Number J-18

PROJECT NAME J.A.D.P.	Size: 6"&6"
AREA AND LOCATION Farmer Mr. Bhim Bahadur Ramnagar, Jhhottari-District	
ELEVATION . m	LATITUDE LONGITUDE
TOTAL DEPTH 81.0 m	DRILLING RIG TIML 72"A"
DRILLING STARTED	DRILLED BY Mr. S.Lamichhane & Mr. P. Mishra
WELL COMPLETED Feb., 1978	LOGGED BY Mr. M.Lamichhane

STATIC WATER LEVEL - 23.0 m. m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -54.0 m. m	CONDUCTIVITY µS/cm
PUMPING RATE 900.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d·m	TOTAL HARDNESS



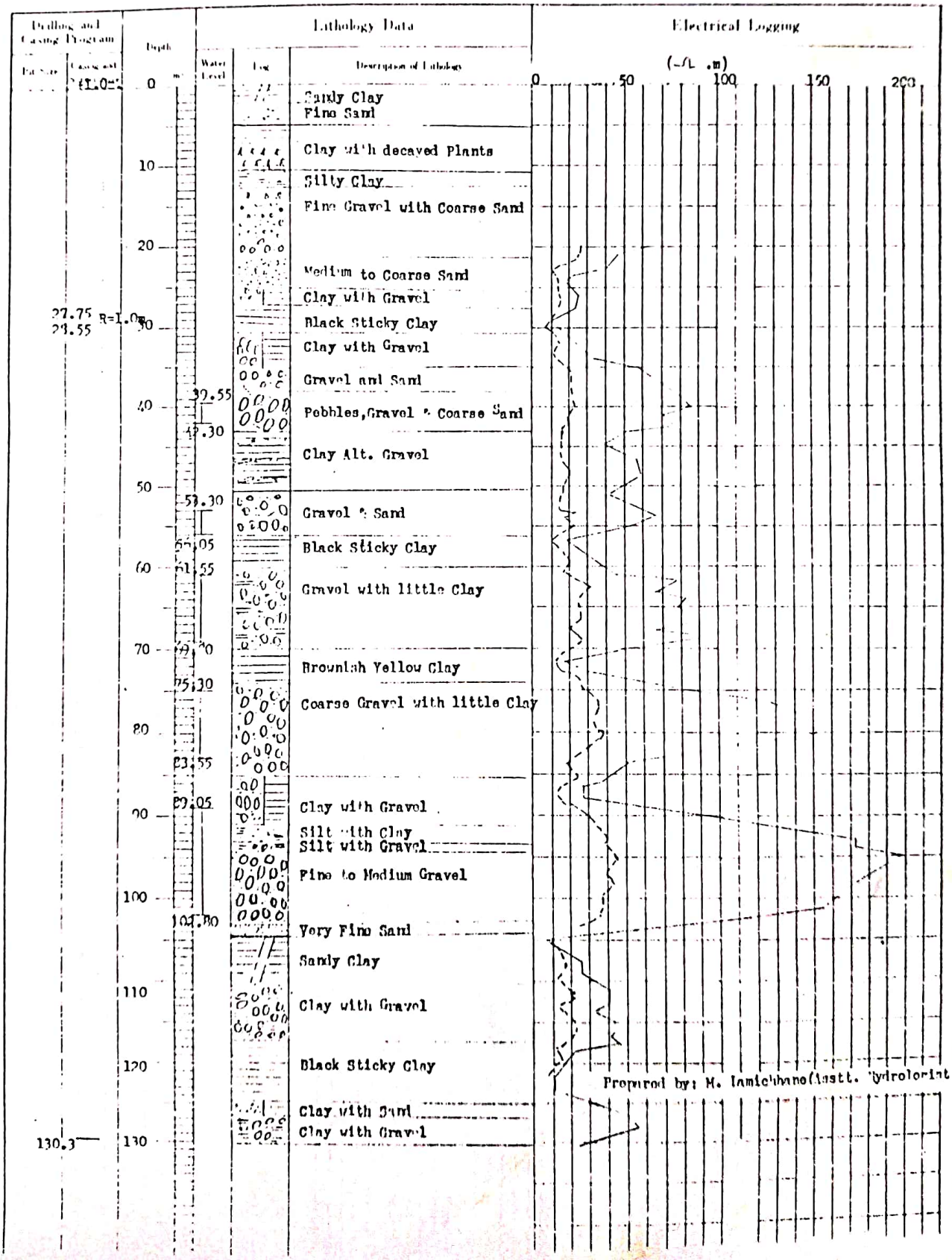
Prepared by : M. Lamichhane (Asstt. Hydrologist)

WELL LOG

Well No:J-14

PROJECT NAME J.A.D.P.	Size: 12"/8"
AREA AND LOCATION J.A.D.P.Area No.9	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 130.3 m	DRILLING RIG TEH 72"A"
DRILLING STARTED 1 May.,1977	DRILLED BY Mr. D.B. Karki & Mr. T.Takahasi (Kawasaki)
WELL COMPLETED 11 May.1977	LOGGED BY Mr. M. Iamichhane

STATIC WATER LEVEL 15.390 m	WATER TEMPERATURE °
DYNAMIC WATER LEVEL -6.843 m	CONDUCTIVITY μ℧/cm
PUMPING RATE 2434.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



WELL LOG

Well Name: J-12

PROJECT NAME	J.A.D.P.	Size:	12" 8"
AREA AND LOCATION	J.A.D.P. Area No. 7		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	156.0 m	DRILLING RIG	TOM 7??
DRILLING STARTED	27 Feb., 1975	DRILLED BY	Mr. D.?. Markl & ?. ?ida (??)
WELL COMPLETED	2 Mar., 1975	LOGGED BY	Mr. K. Sugimoto (??) & M. Lakichham

STATIC WATER LEVEL	Artesian m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μS/cm
PUMPING RATE	1500.0 l/min	pH	
SPECIFIC CAPACITY	m³/d·m	TOTAL HARDNESS	

Depth (m)	Lithology Data – Description
0	Top-Soil
	Sandy Clay
10	Clay with Gravel
30	Brown Clay
50	Gravel & Medium Sand
60	Clay with Gravel
	Grit with Fine Sand
70	Black Sticky Clay
	Clay with Gravel
	Fine Sand with Clay
100	Clay with Gravel
	Grit with Fine Sand
110	Gravel with Medium to Coarse Sand
	Pebbles, Gravels & Fine Sand
130	Gravel with Fine Sand
140	Gravel with little Clay
150	Gravel with Medium Sand

Casing / screen positions: 51.5 – 62.0; 77.0 – 90.0; 121.0 – 121.5; R 1.0 m (22.7); total 156.0

Electrical Logging (Ω·m): 0, 50, 100, 150, 200

Prepared by: M. Lakichham (Asstt. Hydrologist)

Well No. 3-1

WELL LOG

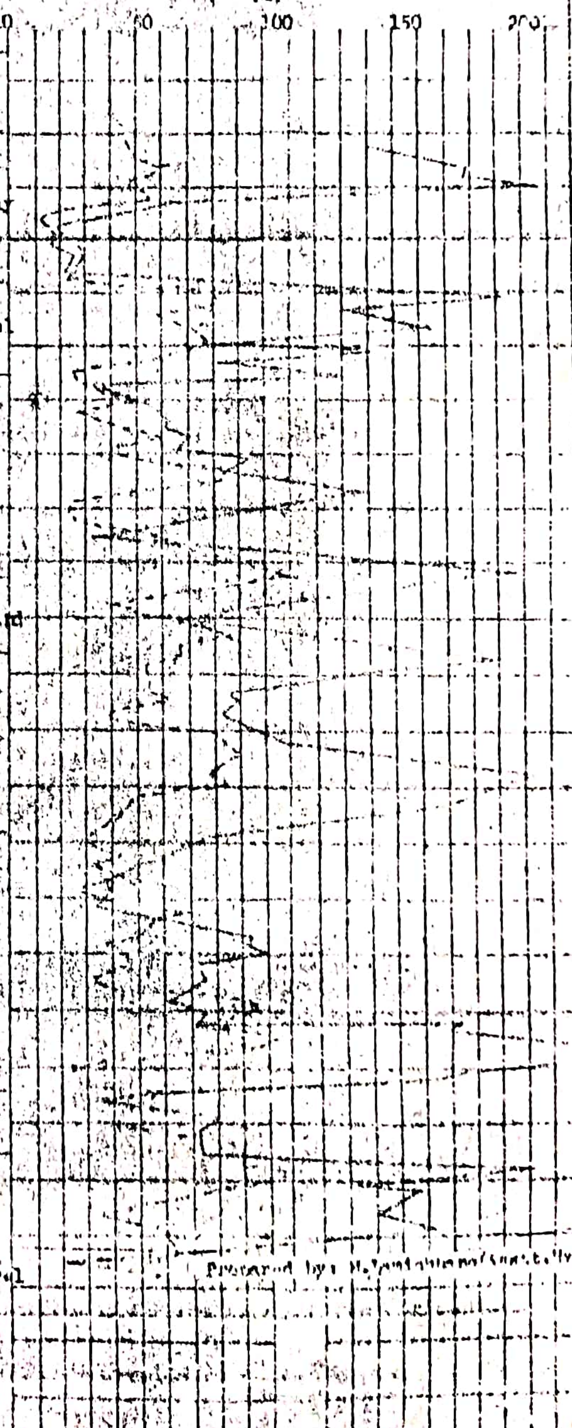
PROJECT NAME J.A.D.P.	Sheet 62/47
AREA AND LOCATION DIAKGUTAR TEST BORING, Dhalkolar	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 125.0 m	DRILLING RIG TBM 72AAT
DRILLING STARTED 26 June, 1977	DRILLED BY Mr. D.B. Karki
WELL COMPLETED 22 July, 1977	LOGGED BY Mr. M. Ianiahhara

STATIC WATER LEVEL -45.0 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL 68.0 m	CONDUCTIVITY μS/cm
PUMPING RATE l/min (m³/d)	pH
SPECIFIC CAPACITY 240.0 m³/d/m	TOTAL HARDNESS

Depth (m)	Description of Lithology
0	Top-Soil
	Sandy Clay
	Gravel with Sand
10	Coarse Sand
	Gravel with very little Clay
20	Clay with Gravel
30	Clay with Very little Gravel
	Clay mixed with Gravel
40	Gravel & Medium Sand
	Sandy Clay
50	Boulders & Fine Sand
	Pebbles, Gravel & Coarse Sand
60	Boulders, Pebbles, Gravel and Fine Sand
	Coarse Sand
70	Gravel & Coarse Sand
	Clay with Gravel
80	Gravel with little Clay
	Sandy Clay
90	Gravel & Medium Sand
	Gravel with little Clay
100	Black Sticky Clay
	Gravel and Coarse Sand
110	Black Sticky Clay with Gravel
120	

Drilling and Casing Diagram: 43.0, 45.15, 51.3, 54.7, 57.25, 61.05, 67.25, 72.65, 91.3, 95.5, 102.7, 110.0, 111.0

Electrical Logging



Prepared by: M. Ianiahhara (Asst. Hydrologist)

Dhanusha - Dist village :- Lagma →

Size – 14"/8"

Depth → 170m

14" Housing – 42m

8" Screen – 42m

8" Pipe – 80m

self flowing

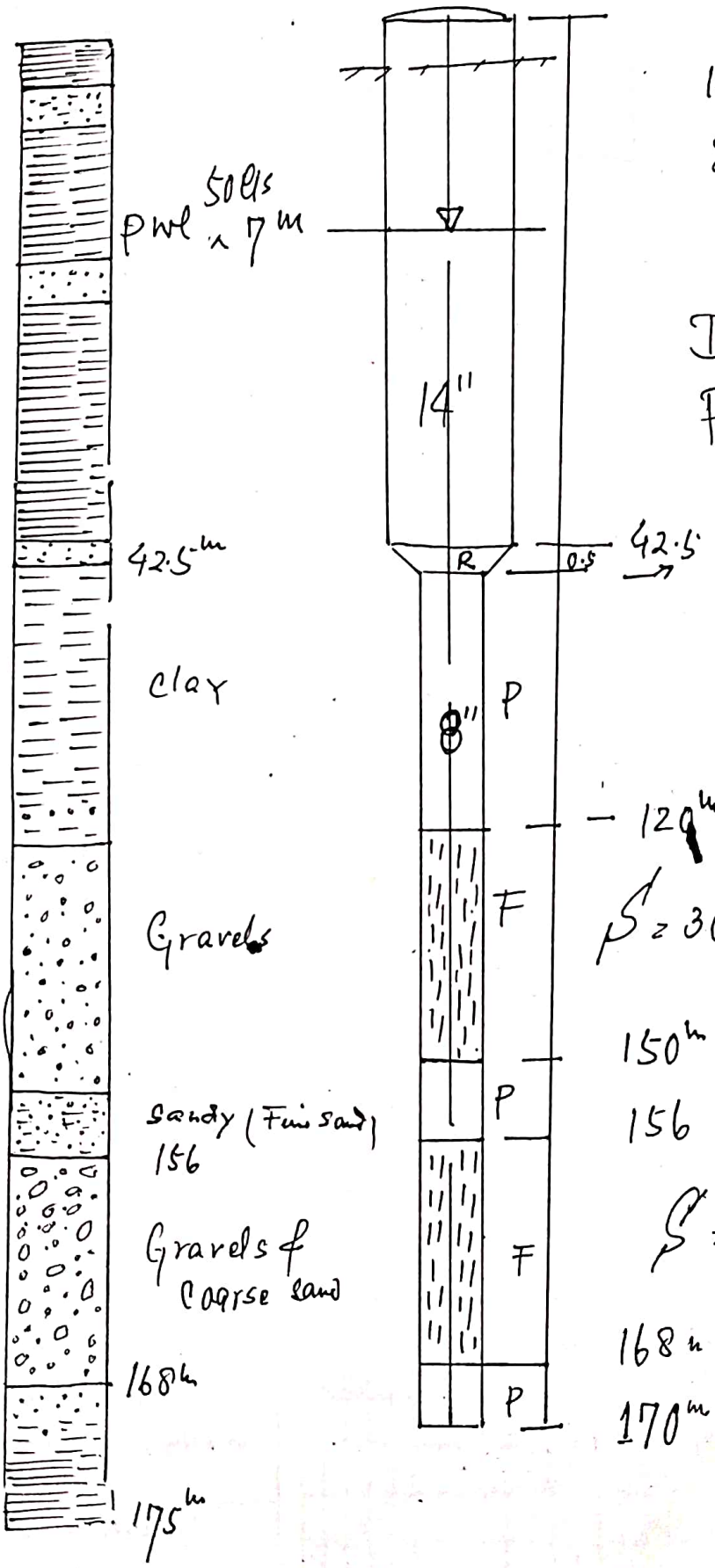
Discharge - 20 l/s

Pumping dis – 50 l/s

Draw Dawn → 7m

water level = +1m

pumping wl = -10m

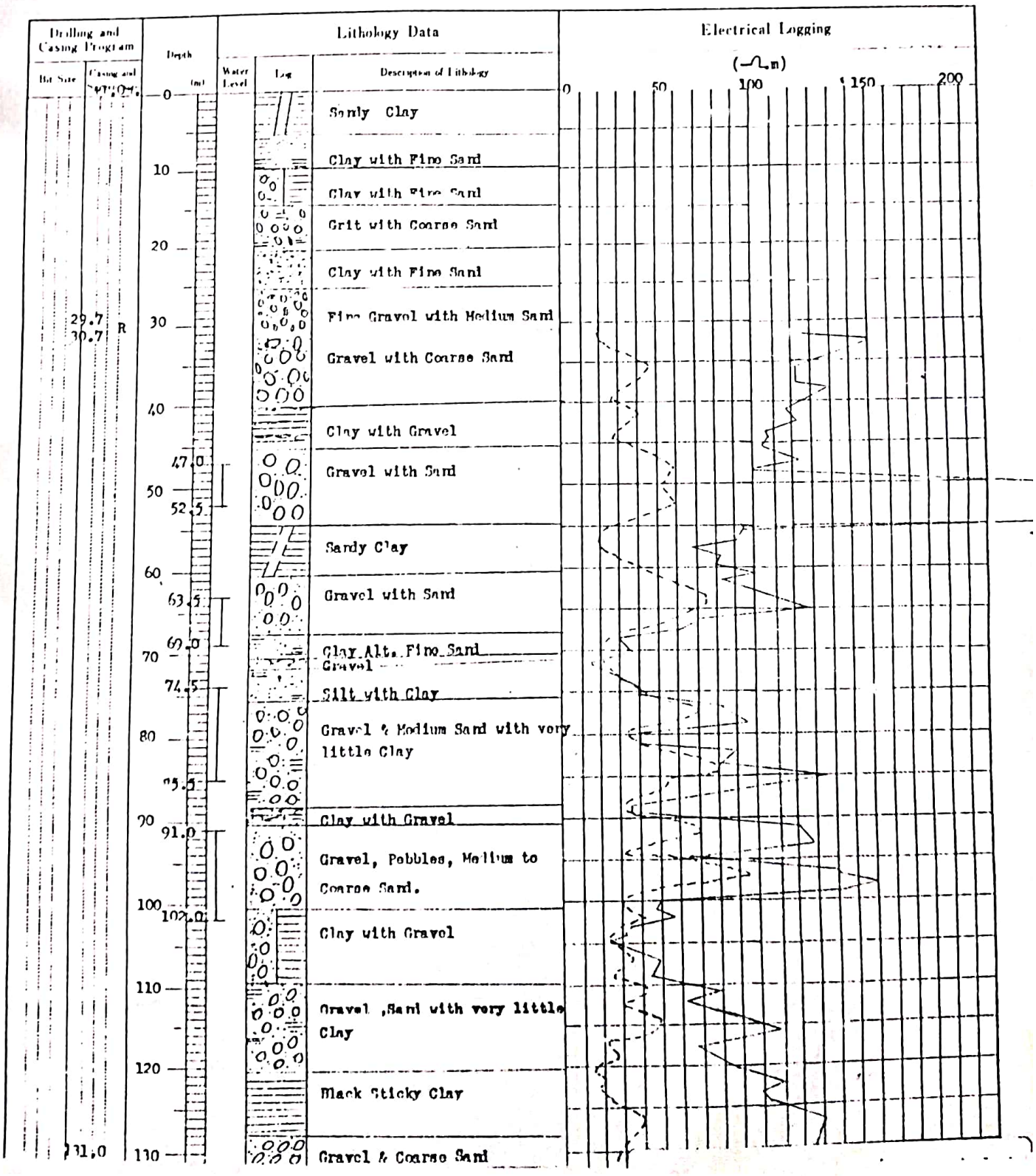


WELL LOG

Well Name: J-11

PROJECT NAME	J.A.D.P.	Size: 12"/8"	
AREA AND LOCATION	I.A.F.Area No 6.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	131.0 m	DRILLING RIG	TH1 72"A"
DRILLING STARTED	2 Feb.,1976	DRILLED BY	Mr. D.B. Karki & Y. Hida
WELL COMPLETED	17 Feb.,1976	LOGGED BY	Mr. K. Sugimatsu & M.Lamichhane

STATIC WATER LEVEL	+ 1.330 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	- 14.980 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1212.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

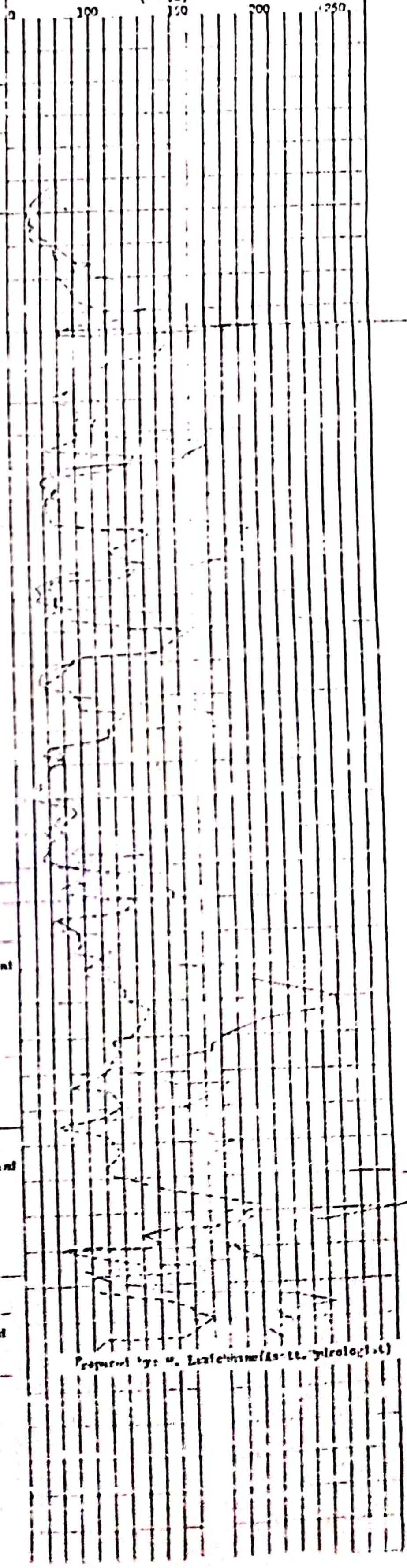
PROJECT / AREA: J.I.D.P.	Size: 12"/m
AREA AND LOCATION: [illegible] No.?	LATITUDE / LONGITUDE
ELEVATION: m	DRILLING RIG: [illegible]
TOTAL DEPTH: 201.0 m	DRILLED BY: Mr. D.[illegible].Varki & Y.[illegible]
DRILLING STARTED: 13 Jan.,1975	LOGGED BY: Mr. [illegible]
WELL COMPLETED: 7 Feb.,1975	

STATIC WATER LEVEL: +3.600 m	WATER TEMPERATURE: °C
DYNAMIC WATER LEVEL: -11.000 m	CONDUCTIVITY: µS/cm
PUMPING RATE: 1440.0 l/min	pH
SPECIFIC CAPACITY:	TOTAL HARDNESS

Lithology Data

Depth (m)	Description of Lithology
0	Sandy Clay
	Brown Clay
10	Sand & Gravel
20	Clay Alt. Gravel
30	Sandy Clay with Gravel Intrusion
50	Gravel & Sand
52.6 – 57.0	Clay with Gravel
70	Sandy Clay
79.0	Gravel & Sand
85.5	Clay with Gravel
96.5	Gravel & Sand
102.0	Coarse to Medium Sand
107.5	Sand & Gravel
113.0 – 120	Clay with Gravel
130	Sand & Gravel
	Fine to Medium Sand
	Sand & Gravel
140	Fine Sand
146.0	Pebbles, Cobbles & Fine Sand
157.0 – 160	Coarse to Fine Sand
173.5	Pebbles, Cobbles & Fine Sand
184.5 – 190	Silty Clay
	Grit, Gravel & Medium Sand
201.0	

Electrical Logging



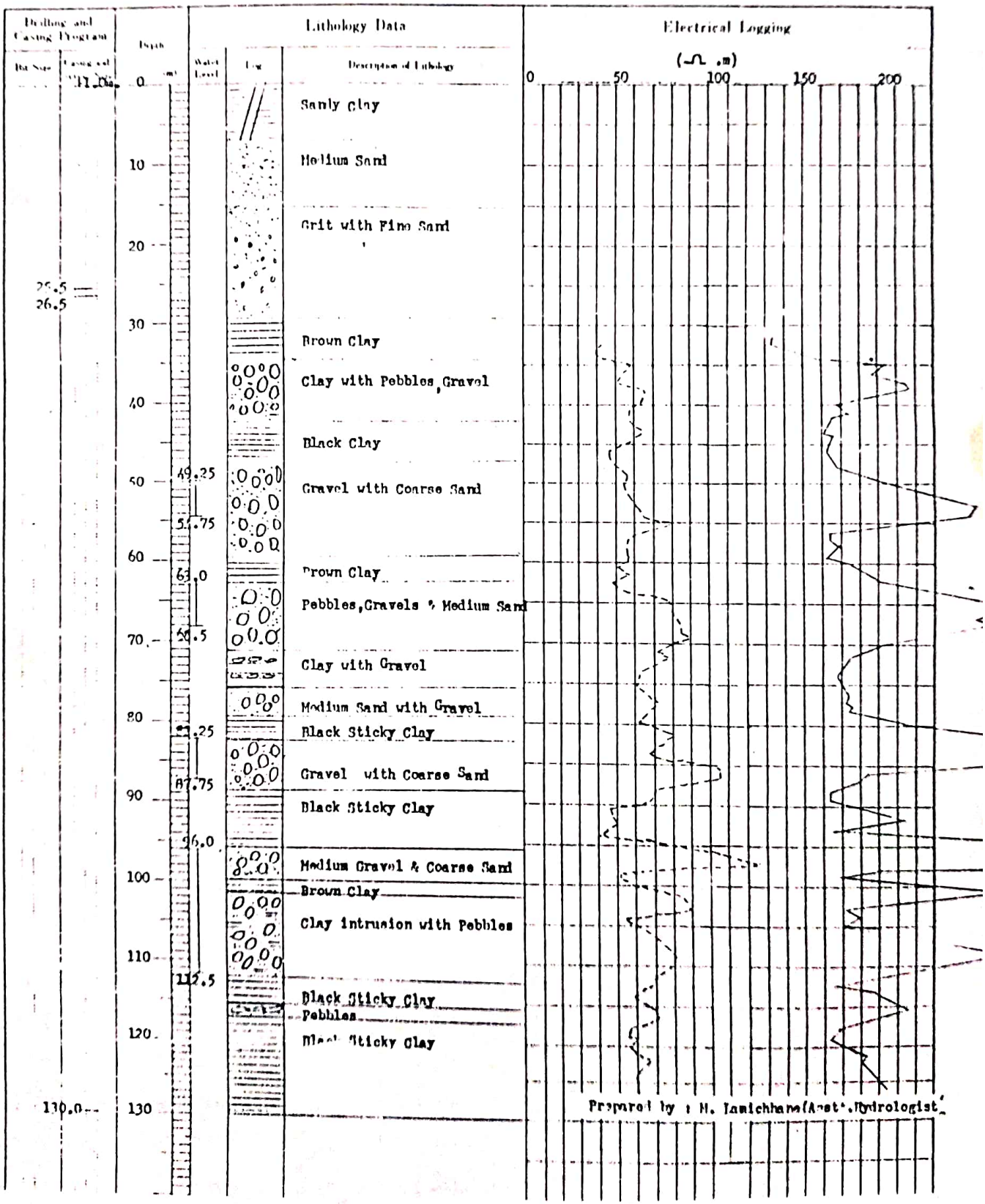
Prepared by: [illegible] (Asstt. Hydrologist)

WELL LOG

Well No:J-10

PROJECT NAME J.A.D.P.	Size: 12"/8"
AREA AND LOCATION I.A.P.Area No 5	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 130.0 m	DRILLING RIG TEI "72"A"
DRILLING STARTED 5 May 1976	DRILLED BY Mr. Y. Hida & D. B. Karki
WELL COMPLETED 11 May 1976	LOGGED BY Mr. Sugimatsu & M. Ismichhane

STATIC WATER LEVEL +1.000 m	WATER TEMPERATURE °
DYNAMIC WATER LEVEL -20.630 m	CONDUCTIVITY μS/cm
PUMPING RATE 2118.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

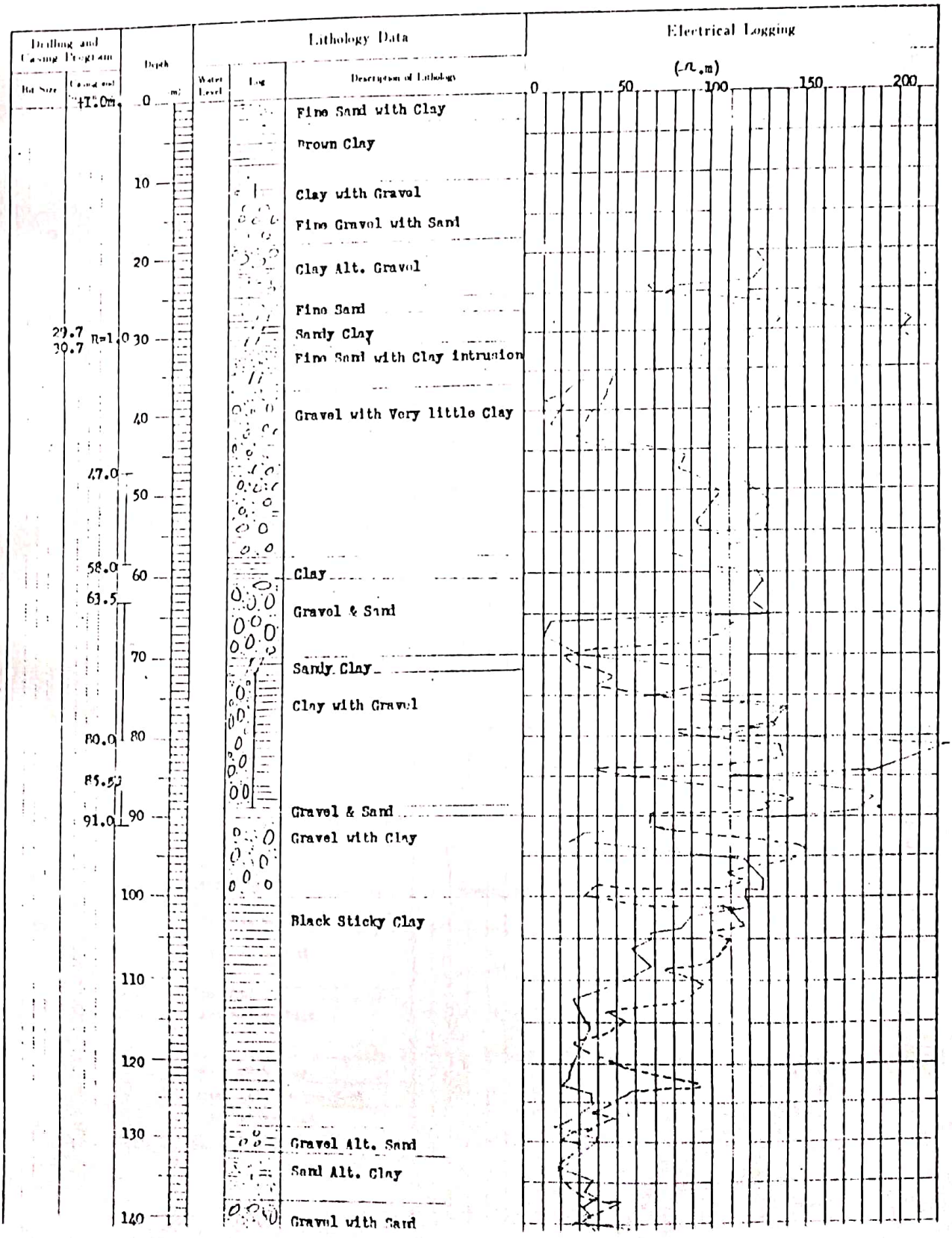


Well Name:J-9

WELL LOG

PROJECT NAME	J.A.D.P.		Size:12"/8"
AREA AND LOCATION	J.A.D.P.Area No4		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	146.0 m	DRILLING RIG	TBM 72"A"
DRILLING STARTED	19 Mar.,1975	DRILLED BY	Mr. D.B. Karki & Y. Hida
WELL COMPLETED	25 Mar.,1975	LOGGED BY	Mr. K. Sugimatsu & M. Tamichika

STATIC WATER LEVEL	+5.430 m	WATER TEMPERATURE	C
DYNAMIC WATER LEVEL	-17.022 m	CONDUCTIVITY	μ℧ cm
PUMPING RATE	2394.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d m	TOTAL HARDNESS	

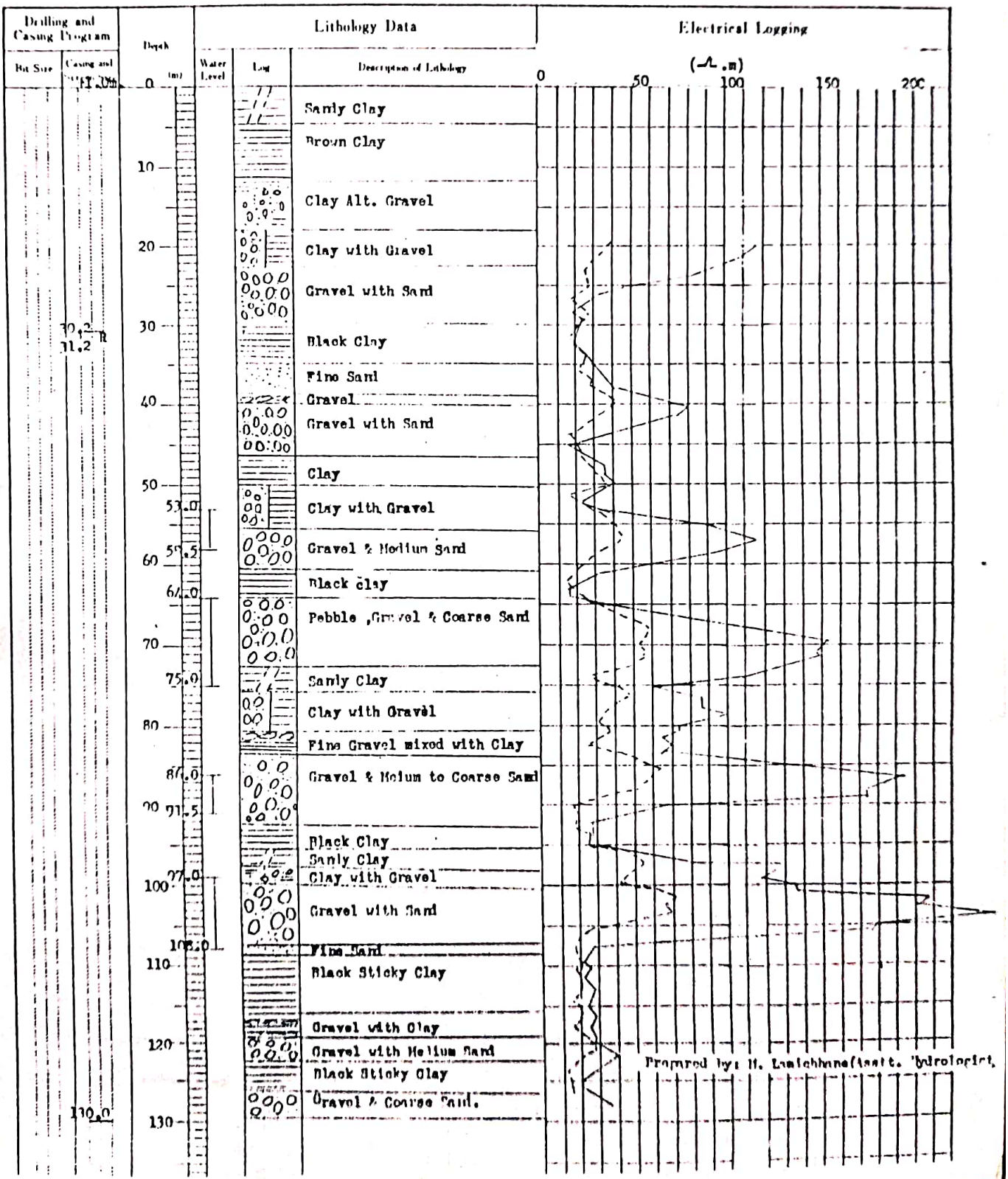


WELL LOG

Well Number J-8

PROJECT NAME J.A.D.P.	Size:12"/8"
AREA AND LOCATION J.A.D.Area No. 3	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 130.0 m	DRILLING RIG TRM "A"
DRILLING STARTED 23 Jan.,1977	DRILLED BY Mr. D.B. Park & Mr. T. Takahas
WELL COMPLETED 12 Feb.,1977	LOGGED BY Mr. H. Lamichhane

STATIC WATER LEVEL +3.200 m	WATER TEMPERATURE C
DYNAMIC WATER LEVEL -2.000 m	CONDUCTIVITY µS/cm
PUMPING RATE 2118.0 l/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS

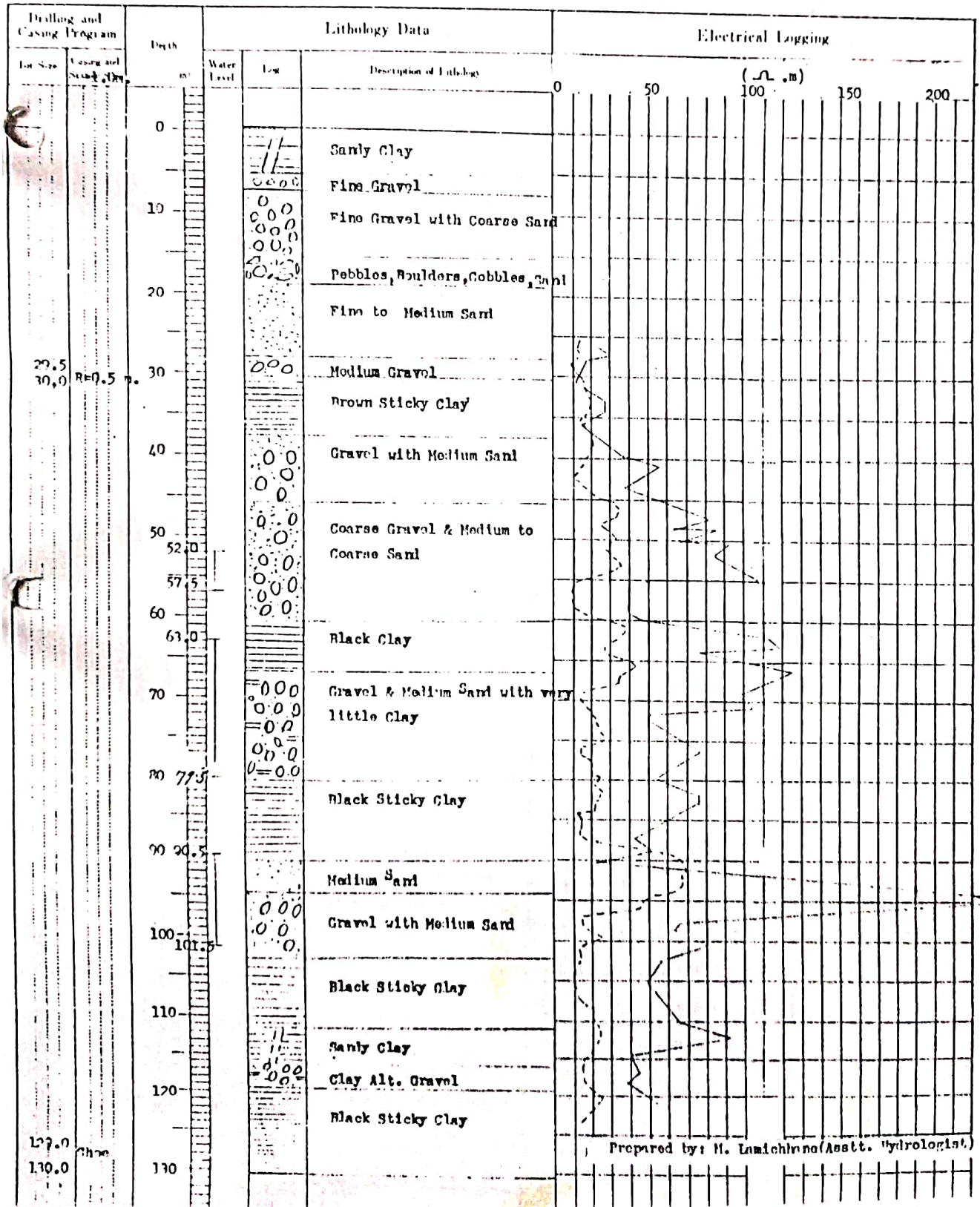


WELL LOG

J-7

PROJECT NAME	J.A.D.P.	Size: 12"/8"	
AREA AND LOCATION	I.I.P. Area No. 2		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	130.0 m	DRILLING RIG	TRL 72"A"
DRILLING STARTED	7 Apr., 1976	DRILLED BY	Mr. D.P. Kari & Mr. Y. Hida (Toa)
WELL COMPLETED	19 Apr., 1976	LOGGED BY	Mr. M. Lamichhane

STATIC WATER LEVEL	+1.300 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	-15.400 m	CONDUCTIVITY	μS/cm
PUMPING RATE	2178.0 ℓ/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

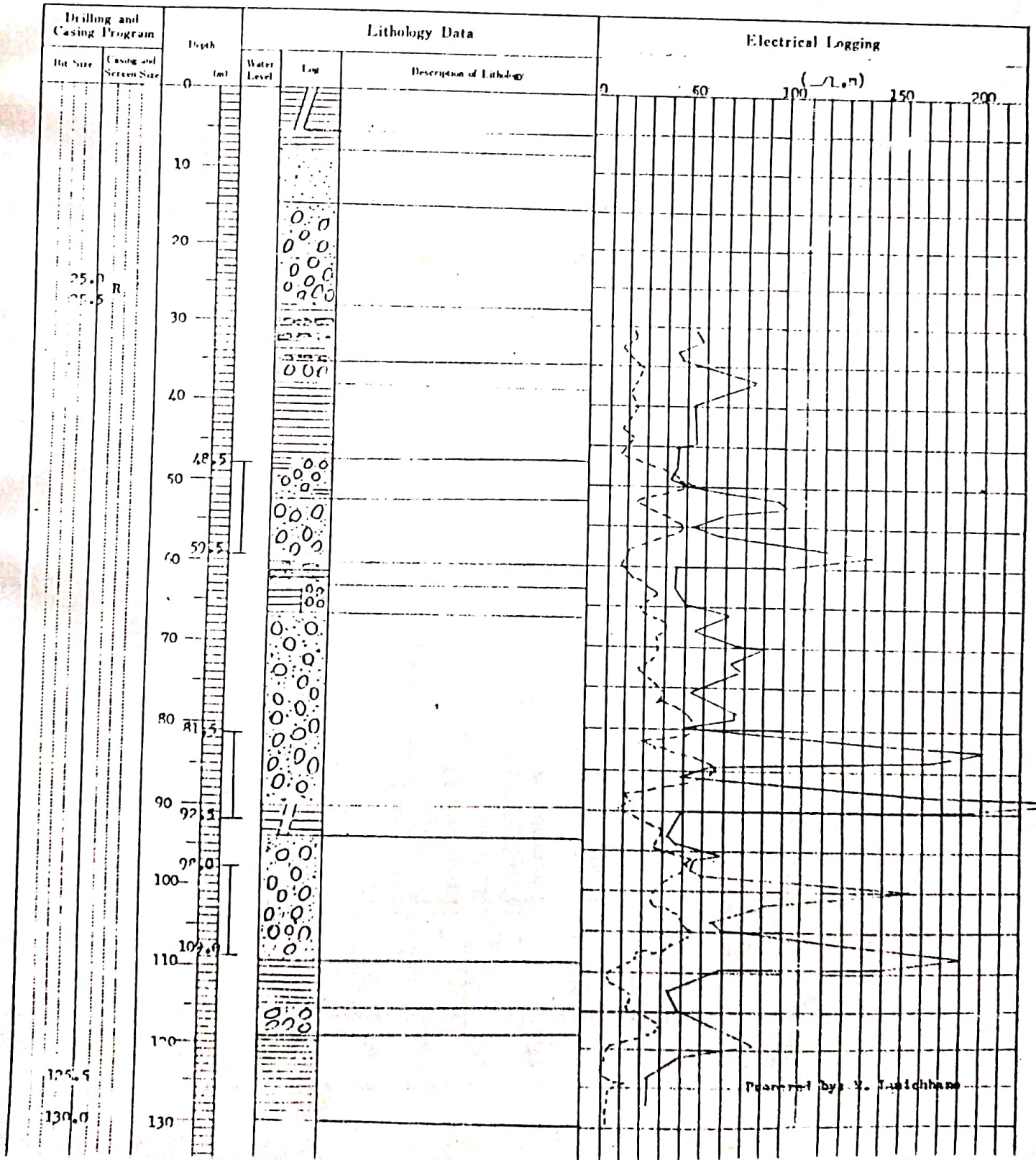


WELL LOG

Well No: J-6

PROJECT NAME J.A.D.P.	Size: 12"/8"
AREA AND LOCATION I.A.P.Area, No 1.	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 130.0 m	DRILLING RIG TEM 72"A"
DRILLING STARTED 5 Mar., 1976	DRILLED BY Mr. D.B. Karki & Mr. Y.Hida(TOMZ)
WELL COMPLETED 21 Mar., 1976	LOGGED BY Mr. M.Tomichiro

STATIC WATER LEVEL -11.260 m	WATER TEMPERATURE °C
DYNAMIC WATER LEVEL -11.360 m	CONDUCTIVITY μS/cm
PUMPING RATE 2640.0 ℓ/min (m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



CHITWAN DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
162.		Madhavpur "A" Panchakanya 4	14"x8"	91.0	1993	42.0	−10.0	−29.0	45.0	36.0	E + F
163.		Jayamangala Panchakanya 9 "A"	14"x8"	89.0	1994	42.0	−11.0	−33.0	40.0	36.0	E + F
164.		Madhavpur "B" Panchakanya 4	14"x8"	92.0	1994	42.0	−12.0	−32.0	40.0	42.0	E + F
165.		Amiliya 5	14"x8"	84.0	1994	42.0	−10.0	−30.0	40.0	36.0	E + F
166.		Torikheat Bharatpur 14	14"x8"	54.0	1993	30.0	−8.0	−17.0	40.0	20.0	E + F
167.		Kalanpur Bharatpur 14	14"x8"	60.0	1994	30.0	−8.30	−21.0	45.0	24.0	E + F
168.		Parasnagar Bharatpur 8	14"x8"	70.0	1994	30.0	−7.5	−27.0	30.0	36.0	E + F
169.		Rab Bag Bharatpur 13	14"x8"	75.0	1994	30.0	−10.5	−28.5	35.0	42.0	E + F
170.		Girauna Panchakanya 7	14"x8"	77.0	1994	36.0	−12.5	−23.0	42.0	36.0	E + F
171.		Chainpur "A"	14"x8"	84.5	1994	42.0	−12.0	−21.0	45.0	42.0	E + F
172.		Lanku Bharat 6	14"x8"	73.5	1994	36.0	−22.0	−28.0	35.0	34.5	E + F
173.		Pithuwa 3A	14"x8"	84.5	1994	36.0	−9.0	−32.0	40.0	42.0	E + F
174.		Pithuwa 3B	14"x8"	88.5	1994	42.0	−13.0	−31.0	45.0	42.0	E + F
175.		Pithuwa 3C	14"x8"	90.5	1994	36.0	−14.0	−32.0	35.0	48.0	
176.		Chainpur B	14"x8"	90.5	1995	36.0	−11.0	−32.0	30.0	48.0	E + F
177.		Lankline Jutpari 9 (Jutpani)	14"x8"	78.5	1995	36.0	−14.5	−29.5	30.0	42.0	

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
178.		Dumre 5	14"x8"	75.0		36.0	−4.0	−20.0	45.0	36.0	
179.		Pithuwa 7	14"x8"	90.0		36.0	−10.0	−30.0	45.0	42.0	
180.		Jayamangala "B"	14"x8"	85.9		42.0	−10.0	−33.0	45.0	36.0	
181.		Rampur Campus "A"									
182.		Rampur Campus "B"									
183.		Rampur Campus "C"									
184.		Fish Farm Bhandara "A"									
185.		Fish Farm Bhandara "B"									

LIST OF D.T.W.
DHANUSHA DISTRICT

S.No.	Well No.	Location	Size (Inch	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
1.	J–1	Dhalkewar	6"x4"	115.0	July 1997	25.64	–45.00	–68.00	4.0	45.0	
2.	J–2	J.A.D.P.	6"x6"	135.0	Jan. 1975	27.00	–14.35	–27.5	11.0	–	
3.	J–3	Tobacco Factory	12"x8"	116.6	April 1980	38.44	–6.00	–21.0	20.0	40.65	
4.	J–4	Hordinath No. 2	12"x8"	116.6	April 1977	33.0	+3.43	–27.61	30.0	29.95	
5.	J–5	Hordinath No. 3	12"x8"	104.0	June 1980	30.25	+2.0	–27.0	35.30	29.7	
6.	J–6	IAP Area No. 1	12"x8"	130.0	March 1976	33.0	+1.26	–11.36	44.0	25.0	Centrifugal pump
7.	J–7	IAP Area No. 2	12"x8"	130.0	April 1976	33.0	+1.3	–15.4	36.0	29.5	Centrifugal pump
8.	J–8	IAP Area No. 3	12"x8"	130.0	Feb. 1977	33.0	+3.2	–9.94	35.3	30.2	Centrifugal pump
9.	J–9	IAP Area No. 4	12"x8"	146.0	March 1975	33.0	+5.43	–17.03	39.90	29.7	Centrifugal pump
10.	J–10	IAP Area No. 5	12"x8"	130.0	May 1976	33.0	+1.0	–20.63	35.30	25.5	Centrifugal pump
11.	J–11	IAP Area No. 6	12"x8"	131.0	Feb. 1976	33.0	+1.3	–14.98	30.20	29.7	Centrifugal pump
12.	J–12	IAP Area No. 7	12"x8"	156.0	March 1975	33.0	Artesion	By air lift	25.0	28.7	Centrifugal pump
13.	J–13	IAP Area No. 8	12"x8"	201.0	Feb. 1975	44.0	+3.6	–11.0	24.0	29.7	Centrifugal pump
14.	J–14	IAP Area No. 9	12"x8"	130.3	May 1977	35.75	+5.39	–6.85	43.9	27.75	Centrifugal pump
15.	J–15	Horticulture Farm Janakpur	8"x8"	139.0	Dec. 1976	33.64	+1.0	–15.56	15.0	–	

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
16.	J–16	Fisheries Dev. Centre Janakpur No. 1	12"x8"	140.0	Feb. 1979	25.5	+1.35	–25.03	48.0	34.24	
17.	J–17	Ghodghas Sajha	12"x8"	166.0	June 1979	39.33	+1.35	–25.03	48.0	34.24	
18.	J–24	Janaki Temple	4"x"4	174.7	May 1986	24.75	+1.0	–5.0	5.0	–	
19.	J–27	Sigyahi Madan	12"x8"	87.7	April 1986	21.0	–1.0		43.70	23.0	Okamoto Pump + Isuzu Engine
20.		Fisheries Dev. Centre No.2	12"x8"	142.0	1989	30.0				27.0	
21.		Fisheries Dev. Centre No.3	14"x8"	144.0	1990	33.0				30.0	
22.		Everest Paper Mill	14"x10"	118.0	1990	27.0	–15.0	–30.0	35.0	42.0	Pull out by factory
23.		Nepal Rastra Bank Janakpur	4"x"4		June 1996						
24.	T–1	Dharapani	14"x8"	158.0	June 1985	30.0	–46.5		5.0	50.0	
25.	T–2	Pusbalpur	14"x8"	130.0	June 1985	35.0	Dry Well		–	48.0	
26.	T–3	Bharatpur	14"x8"	82.0	May 1985	30.0	–24.10	–31.0	40.0	35.0	Ebara Pump + Fiat Engine
27.	T–4	Kumraha	14"x8"	180.0	July 1985	50.0	–31.60	–44.46	10.0	49.0	E+F
28.	T–5	Godar	14"x8"	135.0	Dec. 1985	45.0	–22.58	–45.55	20.0	50.0	E+F
29.	T–6	Dhalkewar	14"x8"	135.0	Jan. 1986	45.0	–63.9	–84.48	5.0	60.0	Submersible
30.	T–7	Gauripur	14"x8"	127.0	Feb. 1986	50.0	–20.9	–36.45	25.0	50.0	

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
31.	T–8	Radhapur	14"x8"	150.0	Jan. 1986	35.0	–23.8	–37.51	42.0	49.5	
32.	T–9	Mangalpur	14"x8"	173.0	Jan. 1986	50.0	–23.73	–34.7	20.0	59.0	E+F
33.	T–10	Sarsa	14"x8"	150.0	Jan. 1986	45.0	–18.21	–42.15	20.0	50.0	
34.	T–11	Gohiya	14"x8"	154.0	Feb. 1986	35.0	–27.9	–35.56	40.0	50.0	
35.	T–12	Janakinagar	14"x8"	165.0	Feb. 1986	45.0	–12.52	–45.22	10.0	50.0	
36.	T–13	Kajara Ramaul	14"x8"	168.0	Feb. 1986	40.0	–9.31	–51.38	10.0	50.0	
37.	T–14	Laliya	14"x8"	165.5	March 1986	75.0	–4.6	–16.4	30.0	50.0	E+F
38.	T–15	Hanspur Kattapula	14"x8"	175.0	Feb. 1986	50.0	Artisior	–45.85	7.0	50.0	
39.	T–16	Jhatiyahi	14"x8"	160.0	March 1986	60.0	–2.26	–35.95	25.Q	50.0	E+F
40.	N–1	Birendra Bazzar	14"x8"	124.0	Dec. 1985	30.0	–34.0		25.0	51.5	E+F
41.	N–2	Chhihatar Bigha	14"x8"	162.0	Jan. 1986	42.75	–11.0		30.0	79.5	E+F
42.	N–3	Murgiya	14"x8"	122.7	Jan. 1986	26.0	–52.0		20.0	77.5	
43.	N–4	Lal Viti	14"x8"	105.5	April 1986	35.0	–62.0		5.0	65.5	
44.	N–5	Dhalkewar	14"x8"	121.3	Dec. 1985	30.75	–60.0		10.0	61.0	Water supply sumbersible
45.	N–6	Lakhanpur	14"x8"	104.8	Feb. 1986	30.0	–32.0		15.0	53.5	

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
46.	N–7	Kesharkuti	14"x8"	165.0	March 1986	35.6	–30.0		30.0	69.0	
47.	N–8	Kishanpur	14"x8"	120.3	April 1986	30.0	–31.0		25.0	59.5	
48.	N–9	Digambarpur	14"x8"	133.5	May 1986	35.0	–26.5		20.0	59.5	
49.	N–10	Hariharpur	14"x8"	120.0	Dec. 1985	35.0	–30.5		30.0	52.0	E+F
50.	N–11	Umaprempur No. 3	14"x8"	129.0	April 1986	45.0	–33.0		40.0	59.5	E+F
51.	N–13	Backchaura	14"x8"	158.5	April 1986	40.0	+0.20		40.0	59.5	
52.	N–14	Hanumannagar	14"x8"	173.8	Feb. 1986	37.5	+0.50		50.0	49.5	E+F
53.	N–15	Sonapara	14"x8"	175.0	March 1986	33.0	+0.00		50.0	53.5	
54.	N–16	Umaprempur	14"x8"	124.8	April 1986	40.0	–40.0		10.0	59.5	
55.	N–17	Kathpulla (Hanspur)	14"x8"	144.0	Jan. 1986	40.0	+0.00		10.0	35.8	
56.	N–18	Kumraha Tole	14"x8"	154.2	Feb. 1986	35.0	0.00		10.0	59.7	
57.	N–19	Puspalpur	14"x8"	125.5	April 1986	22.0	–45.0	–60.0	10.0	65.50	
58.	N–20	Bhimanchauk	14"x8"	119.5	Feb. 1986	32.75	–42.0		15.0	65.5	
59.	N–21	Dada Tole	14"x8"	97.8	Feb. 1986	35.0	–38.0		15.0	59.5	
60.	N–22	Mal Tole	14"x8"	132.0	March 1986	32.50	–45.0		10.0	65.5	

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
61.	N–24	Kesharkuti	14"x8"	182.0	Feb. 1986	Drilling hole abandoned as drilling component (drilling bit, stablilizer) clogged.					
62.	N–27 (Test 1)	Jamunibas	14"x8"	150.0	March 1987	52.0	–37.0	–66.0	1.0	72.0	
63.	N–28 (Test 2)	Mujeliya	14"x8"	210.0	Feb. 1987	60.0	0.00	Well damaged.		54.0	
64.	N–29 (Test 3)	Ranibazzar	14"x8"	212.0	March 1987	40.0	+0.20		3.00	56.0	
65.	N–33	Naktajhig	14"x8"	113.5	March 1987	24.0	–40.0	–61.0	30.0	77.0	E+F
66.	N–35	Mahendranagar	14"x8"	118.0	April 1987	25.0	–10.2	–20.2	20.0	48.0	O+F
67.	N–36	Godar	14"x8"	112.5	Feb. 1987	35.0	–22.0	–52.0	30.0	60.0	E+F
68.	N–40	Bateswar	14"x8"	120.0	May 1987	28.0	–42.0	–54.0	25.0	66.0	E+F
69.	N–45 (Test 5)	Basahiya	14"x8"	200.0	Feb. 1986	50.41	+1.00	–6.00	55.0	70.0	E+F
70.	N–48	Nagarayan	14"x8"	166.0	May 1988	38.5	+1.5	–20.0	55.0	47.5	E+F
71.	N–50	Ranibazzar	14"x8"	193.0	March 1988	45.0	+1.0	–21.0	42.0	54.0	Centrifugel
72.	N–51	Laxmibas	14"x8"	122.5	April 1988	25.0	–37.25	–44.52	30.0	60.5	E+F
73.		Mahuwa 5	14"x8"	140.0	August 1992	30.0	+0.5	–27.0	30.0	32.0	E+F
74.		Kanakpati	14"x8"	150.0	April 1993	36.0	+0.5	–16.0	40.0	36.0	E+F
75.		Suga Madhukarhi	14"x8"	148.5	March 1994	48.0	+0.5	–20.0	35.0	42.0	

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
76.		Tulsiyahi 2	14"x8"	198.0	June 1993	30.0	+0.5	−12.0	35.0	42.0	Self Flowing
77.		Lagama 5	14"x8"	174.5	March 1994	42.0	+1.0		20.0	36.0	Self Flowing
78.		Lagama 7	14"x8"	170.5	March 1995	42.0	+1.0	−7.0	45.0	42.0	Self Flowing
79.		Lagama 4	14"x8"	172.5	April 1995	36.0	+1.0	−9.0	50.0	42.0	Self Flowing
80.		Basahiya	14"x8"	198.5	June 1995	36.0	+1.0	−	25.0		Self Flowing
81.		Phulgama	14"x8"	204.5	August 1995	36.0	+0.5	−8.0	45.0	36.0	Self Flowing
82.		Shantipur	14"x8"	125.5	July 1995	36.0	−15.5	−36.0	30.0	54.0	O + E
83.		Ramnagra	14"x8"	171.5	June 1995	48.0	−8.0	−11.0	50.0	42.0	E + F
84.		Laxminibas-5	14"x8"	126.5	Nov. 1995	42.0	−48.0	−54.0	30.0	60.0	
85.		Laxminibas 7	14"x8"	108.5	Feb. 1996	42.0	−35.0	−46.0	35.0	54.0	
86.		Nagarain	14"x8"	203.5	March 1996	30.0	+0.5	−15.0	50.0	24.0	
87.		Basahiya (Sonapada)	14"x8"	208.0	April 1995	42.0	0.5	−12.0	40.0	30.0	
88.		Basahiya (Sonapada)	14"x8"	198.5	March 1996	36.0	+0.5	−10.0	40.0	24.0	
89.		Baniniya	14"x8"	109.5	August 1995	30.0	−0.5	25.0	50.0	36.0	E + F
90.		Lagama	14"x8"	175.0	Dec. 1995	42.0	+.75	−8.0	45.0	36.0	Self Flowing

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remark
91.		Kurtha	14"x8"	195.5	Oct. 1995	42.0	+0.5	−21.0	30.0	42.0	
92.		Sinurjoda	14"x8"	168.5					30.0		
93.		Jhoji Kathaiya	14"x8"	183.5					50.0		S.F
94.		Dewpura Rupaitha 9	14"x8"	192.5					40.0		S.F
95.		Dewpura Rupaitha 2	14"x8"	222.5					42.0		S.F
96.		Deupura Rupaitha 3	14"x8"	172.5					45.0		S.F
97.		Lohana 3	14"x8"	176.5	April 1996	36.0	+0.5	10.0	30.0	18.0	S.F
98.		Lohana 4	14"x8"	166.5	May 1996	36.0	+0.5	12.0	25.0	24.0	S.F
99.		Backchora	14"x8"	159.5	Jan. 1995	36.0	−3.0	−12.5	40.0	41.0	O + E
100.		Jhoji Kataiya	14"x8"	175.5					48.0		S.F
101.		Naktajhij −I	14"x8"	155.00	April 22, 1991	36.0	−36.78	45.13	38.0	61	F + E
102.		Naktajhij −2	14"x8"	138	March 21, 1991	36.0	−40.86	43.87	38.0	71	F + E
103.		Basahiya 1	14"x8"	215.5	April 4, 1991	48.76	+0.5	25.78	49.0	43.77	I+E
104.		Basahiya 2	14"x8"	218.0	April 16, 1991	48.76	+0.5	22.20	49.0	42.75	I+E
105.		Basahiya 3	14"x8"	203.02	April 26, 1991	51m	+0.75	6.40	55	49.42	I+E
106.		Basahiya 4	14"x8"	206.00	May 16, 1991	51m	+0.75	15.95	55	43.86	I+E
107.		Hariharpur 11	14"x8"	132.02	March 8, 1991	36.4	−20.50	23.49	40	52.70	
108.		Hariharpur 2 Ganga Sagar Bateshwar	14"x8"	136.45 195.5 120.5	March 3, 1991 1996/97 1997	37.28 39 36	−21.39 +.5 −36.0	27.28 −10 −45	40 45.0 30.0	57 17.50 60.0	

SARLAIII DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
109.	J–21	Nawalpur	12"x8"	70.0	Dec. 1981	25.0	–22.0	–33.0	16.0	33.0	H.F (Govn. Farm)
110.	J–22	Nawalpur	12"x8"	72.5	Sept. 1979	17.0	–21.3	–39.50	45.0	39.79	(Govn. Farm)
111.	J–23 N–1	Sagarnath	12"x8"	97.6	Feb. 1982	22.5	–11.0	–35.0	25.0	40.0	Forest DPT (Govn. Farm)
112.	J–29 N–2	Sagarnath	12"x8"	98.0	April 1982	22.5	–11.0	–35.0	25.0	40.0	Forest DPT
113.	N–31	Sasapur	14"x8"	96.2	March 1987	29.0	–30.0	–42.0	20.0	42.0	Forest DPT
114.	N–32	Palar	14"x8"	81.0	April 1987	22.0	–33.0	–58.0	30.0	58.5	E+F
115.	N–37	Bhaktipur	14"x8"	112.5	April 1987	32.0	–1.5	–29.0	60.0	54.0	E+F
116.	N–38	Lalbandi	14"x8"	107.5	Feb. 1987	25.0	–34.0	–48.0	20.0	61.0	Screen collaps
117.	N–39	Hariyon	14"x8"	136.0	March 1987	29.5	–51.0	–59.0	5.0	78.0	
118.	N–43	Bhaktipur	14"x8"	115.0	Feb. 1987	35.0	–1.5	–54.0	2.0	Tube well pulled due to screen damage.	
119.	N–44	Nawalpur	14"x8"	105.0	March 1987	30.0	–21.0	–31.0	40.0	48.0	
120.	N–47 (Test 7)	Brahmapuri	14"x8"	261.0	March 1988	The drilling hole is abandoned due to the lack of acquifer					
121.	N–52	Sri Nagar	14"x8"	106.0	March 1988	30.5	–17.0	–21.0	42.0	59.5	E + O
122.	N–53	Iswarpur	14"x8"	95.0	April 1988	28.0	–30.7	–40.65	43.0	54.4	E + F
123.	N–54	Balganga	14"x8"	92.5	May 1988	28.0	–17.0	–21.43	48.0	50.5	E + F
124.		Hariyon	14"x8"	126.5	April 1991	–30	–51	–59	38.0	78.	E + F

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
125.		Hariyon	14"x8"	116.5					25.0		
126.		Srinagara	14"x8"	108.50	March 1993		−14	−28	42.0	48	E + F
127.		Karmaiya 5	14"x8"	92.0	May 1994	36	−34	−40	30.0		E + F
128.		Srinagar 7	14"x8"	108.50	July 1994	36	−15	−30	38.0	48	E + F
129.		Nawalpur (H.)	14"x8"	96.5					40.0		
130.		Lalbandi 4	14"x8"	105.5					25.0		E + F
131.		Netragang 1	14"x8"	95.5					30.0		
132.		Netragang 2	14"x8"	97.5					55.0		
133.		Hariyon 4	14"x8"	113.5					20.0		
134.		Hariyon 5	14"x8"	138.0					20.0		
135.		Ramganj 2	14"x8"	98.0					25.0		
136.		Ghurkauli 8	14"x8"	114.5					35.0		
137.		Hariyon 6	14"x8"	113.5					20.0		
138.		Bhaktipur	14"x8"	108.5					40.0		
139.		Bhaktipur 7	14"x8"	114.5					40.0		
140.		Sugar Factory Hariyon	12"x8"	118.0	June 1994	30	42.50	54.50	35.0		Private sector financed by factory

MAHOTTARI DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
141.	J–18	Ramnagar	6"x6"	81.0	Feb. 1978	24.4	–22.0	–54.0	15.0		
142.	J–19	Aurahi	10"x6"	111.0	August 1979	36.17	–1.00	–7.00	60.0	28.76	
143.	J–20	Hatilet	8"x8"	94.5	August 1985	24.7	–42.30	–60.0	25.0		Forest
144.	N–30 (Test 4)	Parkauli	14"x8"	240.0	Jan. 1987	60.0	–0.30	–60.0	5.0	72.0	
145.	N–34	Hatilet	14"x8"	118.0	May 1987	33.5	–41.0	–61.0	25.0	66.0	E+F
146.	N–45 (Test 6)	Kisannagar	14"x8"	165.3	March 1988	44.0	–27.5		14.6	85.0	I+O
147.	N–49	Kusumadi (Ramnagar)	14"x8"	96.8	March 1988	27.25	–28.0	–31.0	42.0	59.5	E+F
148.	N–55	Saharwa	14"x8"	210.0	May 1988	44.4	+0.50	–14.0	45.0	51.5	
149.		Ekrahiya	14"x8"	240.0					30.0		Self flowing
150.		Ratwara	14"x8"	218.5					5.0		
151.		Suga	14"x8"	216.0	1994	54.0	+0.5	–10.0	45.0	54.0	
152.		Laxminiya	14"x8"	118.0	1994				30.0	36.0	
153.		Pashupati Nagar	14"x8"	114.5					30.0		
154.		Ram Nagar 7	14"x8"	114.5					30.0		
155.		Ram Nagar 1	14"x8"	114.5					40.0		
156.		Ram Nagar 6	14"x8"	90.5					35.0		
157.		Bijalpura 6	14"x8"	110.5					35.0		I+E
158.		Ekarahiya 1	14"x8"	202.5					30.0		
159.		Pipara 2	14"x8"	210.5					30.0		
160.		Dhirapur 5	14"x8"	218.5					30.0		
161.		Matihani	14"x8"	211.5					30.0		

JHAPA DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
204.		Topgachhi–3 "A"	14"x8"	120.5	1995	42.0	–7.5	–16.5	60.0	36.0	
205.		Topgachhi–3 "B"	14"x8"	122.5	1995	42.0	–7.75	–15.0	60.0	36.0	
206.		Dharampur –8	14"x8"	130.5	1995	42.0	–15.0	–26.5	40.0	48.0	
207.		Topagachhi–5	14"x8"	180.5	1995	42.0	–8.25	–21.0	50.0	42.0	
208.		Satasidham –7	14"x8"	166.5	1995	42.0	–20.0	–42.5	30.0	48.0	

MORANG DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
209.		Bhoraha–3	14"x8"	150	1993	48.0	9.8	14.20	60.0	36.0	
210.		Bhoraha–4	14"x8"	124	1993	48.0	8.66	13.0	60.0	36.0	
211.		Majhare	14"x8"	113.5	1994	48.0	6.5	22.0	60.0	36.0	
212.		Soralhag	14"x8"	105.5	1994	48.0	6.3	20.0	30.0	36.0	

SUNSARI DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
213.		Training center Jhunka	6"x6"	96.0	June 1992	42.0	–2.5	–6.0	15.0		

RUPENDEHI DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
214.		Fisheries Dev. C. Bhairahwa	14"x8"	136.0	Sep.1990	42.0	+0.5	−10.0	20.0	48.0	
215.		Fisheries Dev. C. Bhairahwa	14"x8"	118.0	Feb. 1991	42.0	+0.5	−10.0	15.0	48.0	

BANKE DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
216.		Nepalgunj		261.0		Abadone					
217.		Nepalgunj		192.0		Abadone					

BARA DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
218.		Parwanipur Farm	8"x8"	122.5				30.0			

PARSA DISTRICT

S.No.	Well No.	Location	Size (Inch)	Depth (M)	Date	Total Screen (M)	S.W.L. (M)	P.W.L. (M)	Discharge (l/sec.)	Housing (M)	Remarks
219		Agr. Tools Factory Birgunj	8"x8"	115.5				30.0			

AGRICULTURAL DEVELOPMENT PROJECT JANAKPUR

NAKTAJHIJ

REVIESED UNIT PRICE OF SPAREPARTS FOR TS 80 YANMAR PUMPSET

S. No.	Item No.	Part's No.	Part's Name	FOB Unit Price in (NRs.)	JADP Subsidised price (proposed) 2/3 of FOB unit	Reviesed price in JADP (NRs.)	Total Quantity delivered in 1995 2052/2053	Total Amount on (Reviesed) price (NRs.)	Remarks
1	60	104300-01750	Cap, Filter	130.56	87.00	30	5	450|-	
2	71	102103-55510	cover Retrainer	244.80	163.00	65	20	1300 |-	
3	73	110250-55610	Ring, Retaining	87.04	58.00	40	10	400	
4	25	104300-14102	Gear, Camshaft	1931.20	1287.00	630	10	6300	
5	26	103388-14200	Tappet	255.68	170.00	80	10	800	
6	68	113200-53110	Spendle inter	43.52	29.00	20	10	200	
7	11	704400-01900 Y	Liner W/ o' ring	3435.05	2292.00	1350	20	27000	
8	41	104300-21203	Gear, Crankshaft	1044.48	696.00	600	10	6000	
9	24	104300-13200	Gasket (Packing)	54.40	36.00	20	10	200	
10	10	104300-01330	Gasket Cylinder head	255.65	170.00	85	100	8500	
11	75	104400-59501	Pipe, Fuel Injection	348.16	232.00	85	20	1700	
12	216	103338-22300 (105300-22300)	Pin Piston	435.20	290.00	380	10	3800	
13	12	103288-01300	O. Ring, Cyl. Liner	65.28	46.00	25	40	1000	
14	22	106300-12050	Gasket (Packing or Air Cleaner)	16.30	11.00	10	10	100	
15	003	26214-100552	Stud M10x 55	119.68	80.00	45	20	900	
16	17	106300-11120	Spring, Valve	54.40	36.00	30	100	3000	
17	79	106430-66090	Spring Regulator	157.76	105.00	45	10	450	

18	30	104200-54230	Shimset	108.80	76.00	30	20	600	
19	23	104304-13511 (706300-13700)	Silencer Assy	3209.60	2140.00	450	10	450	
20	27	1044400-14400	Rod, Push	70.72	117.00	55	10	550	
21	007	984180-R0000	Rubber Coupling	5113.60	3409.00	650	500	325000	
22	39	0441100-21100	Weight Balance	500.48	334.00	230	310	71300	
23	78	1011100-61520	Bush, Gov. Lever	97.92	65.00	40	50	2000	
24	20	704300-11520	Bonnet Assy, Head	1969.28	1313.00	900	5	4500	
25	52	104300-23201	Bolt Rod (Connecting Rod)	168.64	112.00	45	20	900	
26	65	104200-54080	Bolt, F-i Pump Body	38.08	25.00	15	50	750	
27	80	174200-34591	Bolt	32.64	22.00	10	20	200	
28	005	9840R4-0161A	Washer Seal	59.84	40.00	30	5	150	
29	28	24101-060064	Ball Bearing 6006 (Camshaft)	255.68	170.00	250	20	5000	
30	37	105600-02310	Roller Bearing	1762.56	1175.00	1050	100	105000	
31	36	105600-02300	Ball Bearing 6310	1213.12	809.00	800	110	88000	
32	72	102102-55520	Gasket (O - Ring)	38.08	25.00	25	20	500	
33	59	24341-000440	O-Ring	32.64	22.00	20	10	200	
34	15	101218-11100	Valve Suction	299.20	200.00	225	25	5625	
35	16	101218-11110	Valve Exhaust	250.24	167.00	200	25	5000	
36	008	101158-03061	Valve Check	27.20	18.00	15	40	600	
37	19	105010-11920 (104200-11920)	Cock (Draincock, Peacock)	353.60	236.00	150	40	6000	
38	34	706300-02501	Housing Assy, Bearing	10662.40	7108.00	3,500	5	17500	
39	14	704307-11700	Head, Assy Cylinder	9302.40	6202.00	3,500	800	2800000	
40	61,74	103854-39140	Bolt Pipe Joint	157.76	105.00	100	16	1600	
41	21	104300-12510	Air Cleaner	1327.36	885.00	800	140	112000	
42	58	104200-35150	Element Lub Oil (Mobil Filter)	228.48	152.00	125	15	1875	
43	64	101300-51300	Valve W/Seat Delivery (Delivery	272.00	181.00	270	25	6750	

			Valve)						
44	43,44	704300-22507	Ring Set (Piston Ring)	554.88	363.00	350	60	21000	
45	18	106300-11160	Guide Valve	359.04	239.00	120	50	6000	
46	55	101200-34530	Glass Oiler	92.48	62.00	50	50	2500	
47	63	101204-51100	Plunger W/Barrel (Element)	1370.88	914.00	1,250	100	125000	
48	001	24107-063064	Ball Bearing 6306	620.16	413.00	550	110	60500	
49	002	984R04-0189A	YKS-40G Land Packing	560.32	394.00	50	500	25000	
50	004	26714-100002	Nut MIO	48.96	33.00	25	6	150	
51	006	984180-0550Y	Coupling Assy	10608.00	7072.00	550	400	220000	
52	29	104200-54010	Bracket, F.I. Pump	832.32	555.00	525	30	15750	
53	31	704200-54500	Guide Assy, Roller	467.84	312.10	250	10	2500	
54	32	104300-76400	Gear, Starting	353.60	236.00	250	20	5000	
55	33	26156-100451	Bolt M 10 X 45 (M 10 X 50) Plated	21.76	15.00	15	20	300	
56	35	24421-506809	Seal TC 506809, Oil	136.00	91.00	90	100	9000	
57	38	704400-21700 (706400-21701)	Crankshaft Assy	10988.80	7326.00	5600	10	56000	
58	40	104271-21100	Bolt	27.20	18.00	15	20	300	
59	47	704400-23100	Rod Assy, Connecting	6582.40	4388.00	2400	5	12000	
60	48	103338-23910	Bush, Piston Pin	359.04	239.00	150	50	7500	
61	49,50,51	103288-23300	Bearing Pin (conn rod bearing)	767.04	511.00	500	60	30000	
62	53	704300-01510	Cover Assy Side (Cover)	7072.00	4715.00	2500	15	37500	
63	54	101200-34520	Rotor Oiler	81.60	54.00	50	16	800	
64	56	103884-34540	Clamp	97.92	65.00	40	20	6000	
65	57	104300-32150	Rotor Assy	489.60	326.00	300	20	15000	
66	66	704500-53100	Valve Assy F injection	2578.56	1719.00	1500	10	75000	
67	67	172100-53000	Nozzle Assy F injection	826.88	551.00	750	100	15500	
68	42	104300-22090	Piston W/Rings	2355.52	1570.00	1550	10	12500	

69	69	704400-55700	Tank Assy, Fuel	7126.00	4751.00	2500	5		
70	70	104700-55710	Element Fuel	125.12	83.00	75	100	7500	
71	76	105582-59150	Bolt Pipe Joint	70.72	47.00	50	20	1000	
72	77	706300-61700	Governor Assy	1403.52	936.00	550	50	27500	
73	81	26759-060002	Locknut M6 Plated	10.88	7.00	5	70	350	
74	82	106300-21500	Shaft Assy, Stub	1327.36	885.00	750	10	7500	
75	13	26116-	Bolt M6 X 10 Plated	21.76	15.00	15	40	600	
76	62	706410-44530	Hopper	9302.40	6202.00	1500	5	7500	
							Total -	4437400	

AGRICULTURAL DEVELOPMENT PROJECT JANAKPUR

NAKTAJHIJ

REVIESED UNIT PRICE OF SPARPARTS FOR TS 60 YANMAR PUMPSET

Proposed

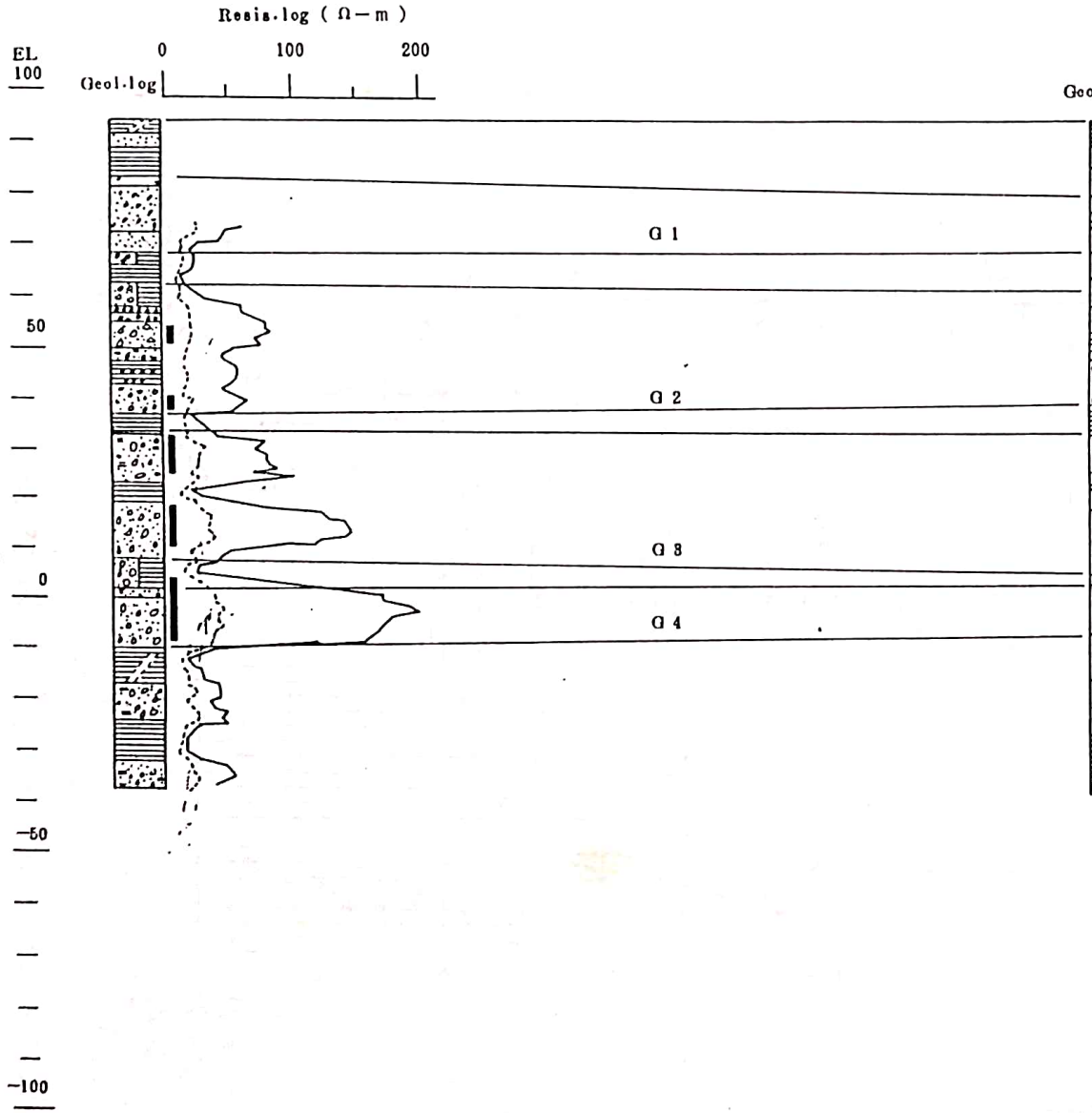
S. No.	Item No.	Part's No.	Part's Name	FOB Unit Price in (NRs.)	JADP Subsidised price (proposed) 2/3 of FOB unit	Reviesed price in JADP (NRs.)	Total Quantity delivered in 1995 (2052/2053)	Total Amount on Reviesed price (NRs.)	Remarks
1	80	26756-060002	Locknut M6 Plated	10.88	7.00	5	50	250	
2	5974	103554-39140	Bolt Pipe Joint	157.76	105.00	55	250	13750	
3	79	174210-34591	Bolt	32.64	22.00	15	50	750	
4	66	104200-54080	Bolt(F. Pump Body)	38.08	25.00	20	50	1000	
5	38	104200-21100	Weight balance	473.28	316.00	250	40	10000	
6	61	706210-44530	Hopper	8214.40	5476.00	1200	10	12000	
7	15	704207-11701	Head Assy, Cylinder	9030.40	6020.00	3500	20	70000	
8	20	105010-11920 (23691-020010)	Cock (Peacock ordinary Cock)	353.60	236.00	200	20	4000	
9	13	105215-01300 (101204-01300)	Orring, Cylinder (Packing in)	65.28	44.00	25	100	2500	
10	004	26214-10552	Sud (M 10 X 55)	119.68	80.00	75	40	3000	
11	75	106230-66110	Spring, Regulator	157.76	105.00	100	50	5000	
12	76	706300-61700 (706300-61520)	Governer Assy (Support Governer)	1403.52	936.00	550	50	27500	
13	002	9540T4-0241A	Shaft Impeler	1169.60	780.00	350	20	7000	
14	5657	24341-000440	O-Ring	32.64	22.00	20	70	1400	
15	22	104200-12510	(Air Cleaner)	1321.92	851.00	750	20	15000	

16	27	104200-14101	Gear, Camshaft	1702.72	1135.00	1050	50	52500	
17	40	106250-21200	Gear, Crankshaft	805.12	537.00	550	50	27500	
18	23	106100-12050	Gasket	16.32	11.00	10	40	400	
19	32	704200-54500	Guide Assy, Roller	467.84	312.00	300	20	6000	
20	25	104100-13200	Gasket (Packing Silencer)	32.64	22.00	20	20	400	
21	52	101200-34530	Glass Oiler	92.48	62.00	50	200	10000	
22	11	104200-01330 (104264-01330)	Gasket, Cyl Head	239.36	160.00	150	100	15000	
23	44	104200-22300	Pin Piston	353.60	236.00	216	20	3420	
24	41	104200-22090	Piston W / Ring Assy	2056.32	1371.00	1250	50	62500	
25	71	102103-55510	Cover Strainer	250.24	167.00	150	20	3000	
26	26	104200-14010	Cam Shaft	2078.08	1385.00	750	20	15000	
27	60	706200-01500	Cover Assy Side	7996.05	5331.00	2550	20	51000	
28	007	984135-R0000	Rubber Coupling	4308.48	2872.00	1000	500	500000	
29	008	9840R4-0091A	Valve Assy Check	206.72	138.00	120	100	12000	
30	29	104200-14400	Rod Push (valve)	65.28	44.00	50	20	1000	
31	65	704200-51550	Regulator Assy	658.24	439.00	250	200	50000	
32	28	104200-14200	Tappet	168.64	112.00	100	20	2000	
33	69	704200-55700	Tank Assy, Fuel	6038.40	4026.00	2500	10	25000	
34	65	113200-53110	Spindle Inter	43.52	29.00	30	50	1500	
35	30	24101-060044	Ball Bearing 6004	159.76	105.00	150	40	6000	
36	55	104200-35150	Element Luboil	228.48	152.00	75	200	15000	
37	36	1051110-02310	Roller Bearing	1485.12	990.00	950	50	47500	
38	35	105400-02300	Ball Bearing 6309	1098.38	733.00	750	50	37500	
39	17	104200-11110	Valve Exhaust	239.36	160.00	200	40	8000	
40	62	104210-51100	Plunge r w/barrel	1360.00	907.00	1250	200	250000	
41	42	704200-22502 (704210-22500)	Ringset (Piston Ring)	511.36	341.00	350	50	17500	

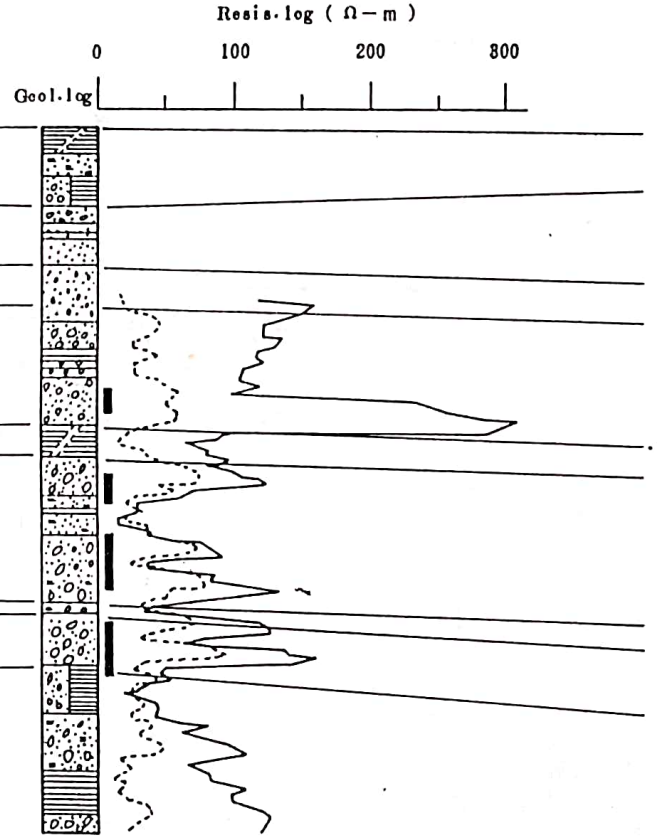
42	54	104200-32150	Rotor Assy Pump Lub Oil	489.60	326.00	400	100	40000	
43	70	104200-55710	Element Fuel strainer	125.12	83.00	75	200	15000	
44	001	24107-063064	Ball Bearing 6362	620.16	413.00	450	40	18000	
45	003	9840R4-0188A	Packing	522.24	348.00	50	500	25000	
46	005	26714-100002	Nut M10	218.96	33.00	25	40	1000	
47	006	984135-0530Y	Copling Assy	6528.00	4352.00	2000	40	80000	
48	10	95110R4-0161AL	Washer Seal	59.84	40.00	25	200	10000	
49	12	705240-01900Y	Liner w/o ring	3013.76	2009.00	1050	50	52500	
50	14	26116-060109	Bolt M6X10 Plated	21.76	15.00	40	100	4000	
51	16	104200-11100	Valve Suctron	255.68	170.00	200	210	42000	
52	18	106100-11120	Spring Valve	54.40	36.00	50	210	10500	
53	19	105282-11160	Guide Value	353.60	236.00	80	400	32000	
54	21	704200-4520	Bonnet Assy, Head	1762.56	1175.00	850	20	17000	
55	24	104204-13511	Silencer	3084.48	2056.00	250	20	5000	
56	31	104200-54010	Bracket, F.I. Pump	826.88	551.00	300	20	6000	
57	33	706200-02501	Housing Assy, Bearing	2056.32	1371.00	900	10	9000	
58	34	24421-456209	Seal TC 456209, Oil	108.80	73.00	55	50	2750	
59	37	706250-21701	Crankshaft Assy	8812.80	5875.00	2400	20	48000	
60	39	104271-21100	Bolt	27.20	18.00	15	40	600	
61	43	704210-22572	Ringset 0.25	609.28	406.00	280	50	14000	
62	45	704210-23110	Rod Assy, Connecting	6038.24	4026.00	1800	20	36000	
63	46	104200-23910	Bush, Piston Pin	201.28	134.00	85	100	8500	
64	47,50	104200-23340	Bearing Pin(conn.Rodbearing)	712.64	475.00	250	200	50000	
65	48	104200-23350	Bearing Pin (0.25 U.S.) Conn.Rod bearing	799.68	533.00	350	100	35000	
66	49	104200-23360	Bearing Pin (0.50 U.S.)	799.68	533.00	350	100	35000	

			ConnRod bearing						
67	51	101200-34520	Roter Oiler	81.60	54.00	50	100	5000	
68	53	103884-34540	Clamp	92.92	65.00	35	50	1750	
69	58	26116-060182	Bolt M 6 X 18	10.88	7.00	3	50	150	
70	63	101300-51300	Valve with Seat Delivery	272.00	181.00	150	200	30000	
71	64	172110-51340	Retainer	304.64	203.00	85	10	850	
72	67	172100-53000	Nozzle Assy, F Injection	826.88	551.00	750	200	150000	
73	72	102103-55520	Gasket (O-Ring)	33.08	25.00	15	20	300	
74	73	110250-55610	Ring, Retaining	87.04	58.00	40	20	800	
75	75	105582-59150	Bolt Pipe Joint	70.72	47.00	25	150	3750	
76	77	104100-61520	Bush Governen Lever	103.36	69.00	40	200	8000	
77	81	101400-76500	Seal VC 26405, Oil	92.48	62.00	35	50	1750	
78	82	704100-21500	Shaft Assy, Stab	897.60	598.00	400	50	20000	
							Total -	2212070	

I.A.P TUBE WELL No.9



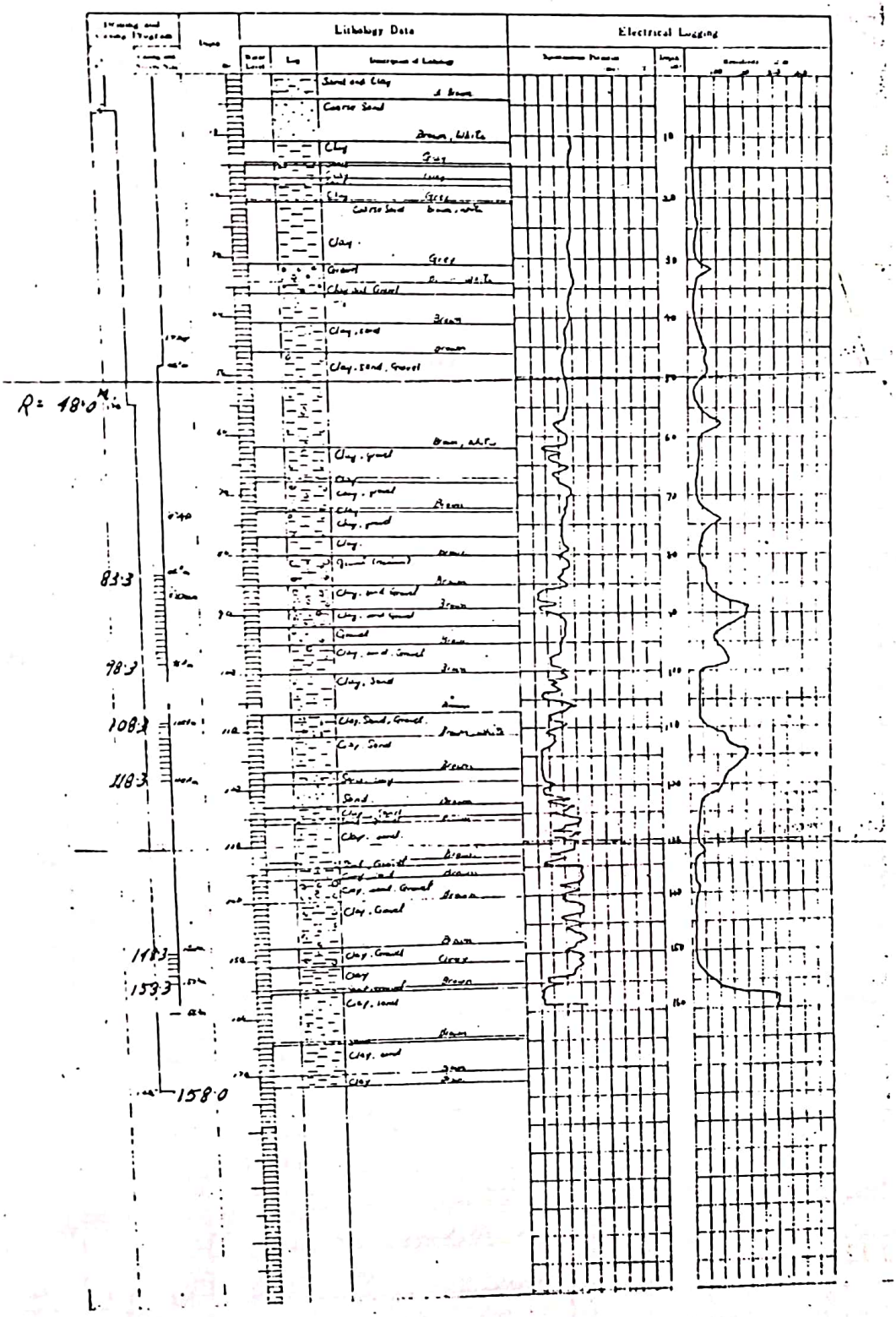
I.A.P TUBE WELL No.6



WELL LOG

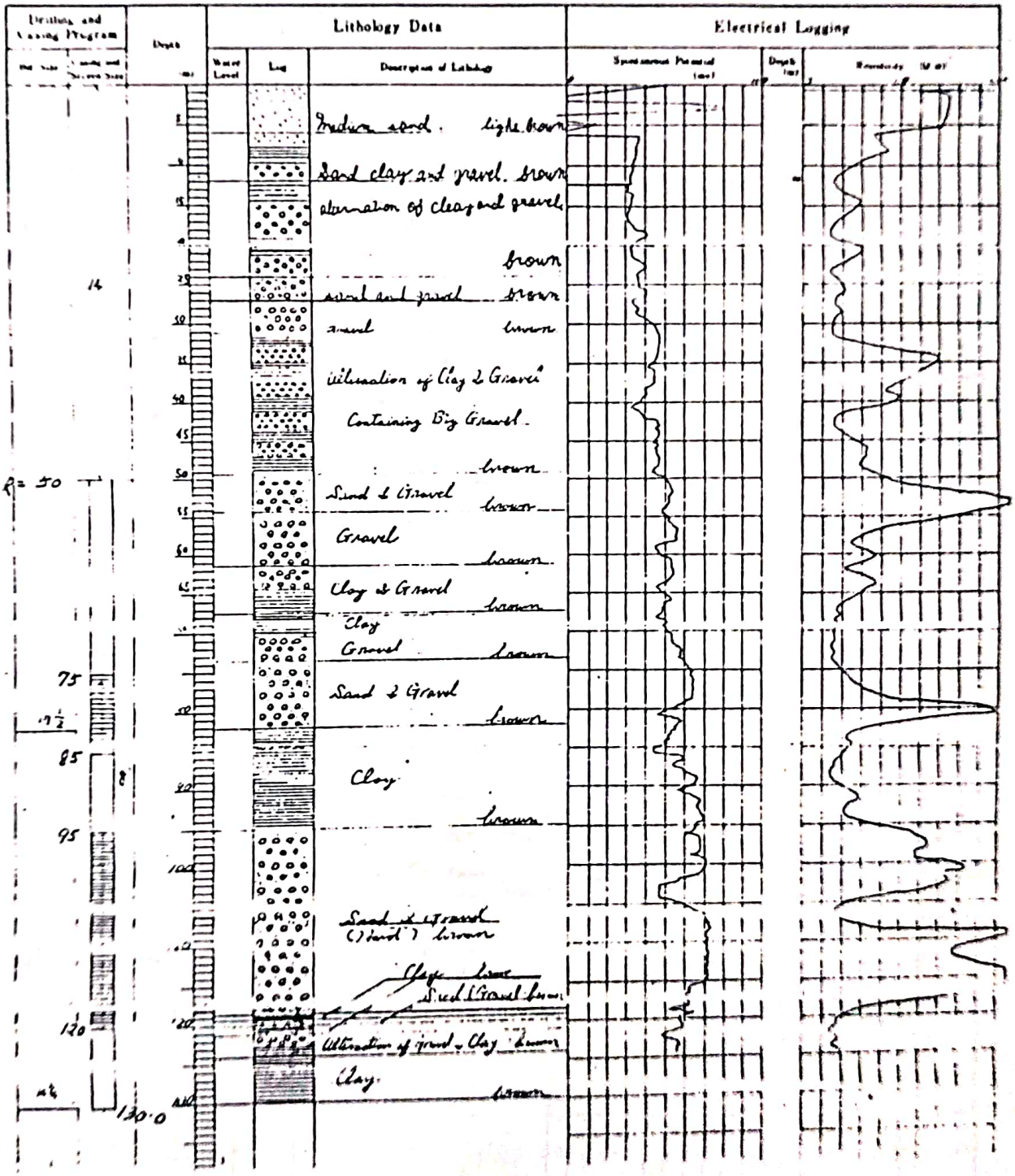
PROJECT NAME	D.T.I Project	WELL No.	2-1
AREA AND LOCATION	Dhanpani		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	158.0(6720) m	DRILLING RIG	1
DRILLING STARTED	01.05.1985	DRILLED BY	K. Higuchi
WELL COMPLETED	11 Ch. 1985	LOGGED BY	K. Higuchi

STATIC WATER LEVEL	46.48 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	68.10 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1,800 l/min (2,592 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



PROJECT NAME	D.T.I Project	WELL NO.	4-2
AREA AND LOCATION	Pustpalpa		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	130 m	DRILLING RIG	2
DRILLING STARTED	12.05.'85	DRILLED BY	K.MATSUZAKI
WELL COMPLETED	08.06.'85	LOGGED BY	K.MATSUZAKI

STATIC WATER LEVEL	Dry Well m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	m	CONDUCTIVITY	μS/cm
PUMPING RATE	l/min (m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

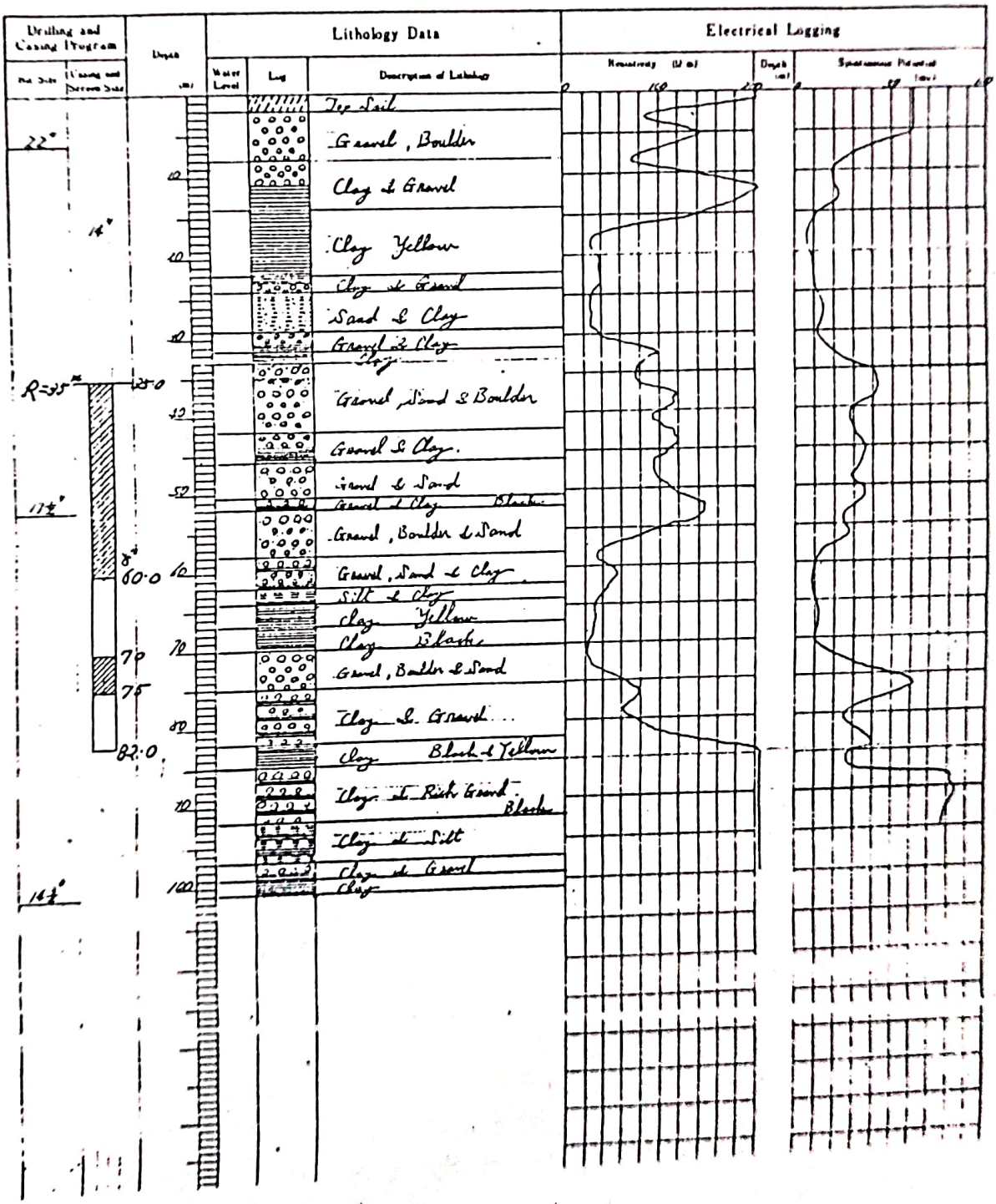


WELL LOG

Data No. 3

PROJECT NAME	D.T.I. Project	WELL NO.	1-3
AREA AND LOCATION	Janakpur, Bharatpul		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	82.0 (101) m	DRILLING RIG	No.3
DRILLING STARTED	26th. May, '85	DRILLED BY	T.OZEKI & P.MUKHIYA
WELL COMPLETED	21st June, '85	LOGGED BY	K. MATSUZAKI

STATIC WATER LEVEL	24.10 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	81.10 m	CONDUCTIVITY	μmho/cm
PUMPING RATE	2400 l/min 3456 m³/d	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

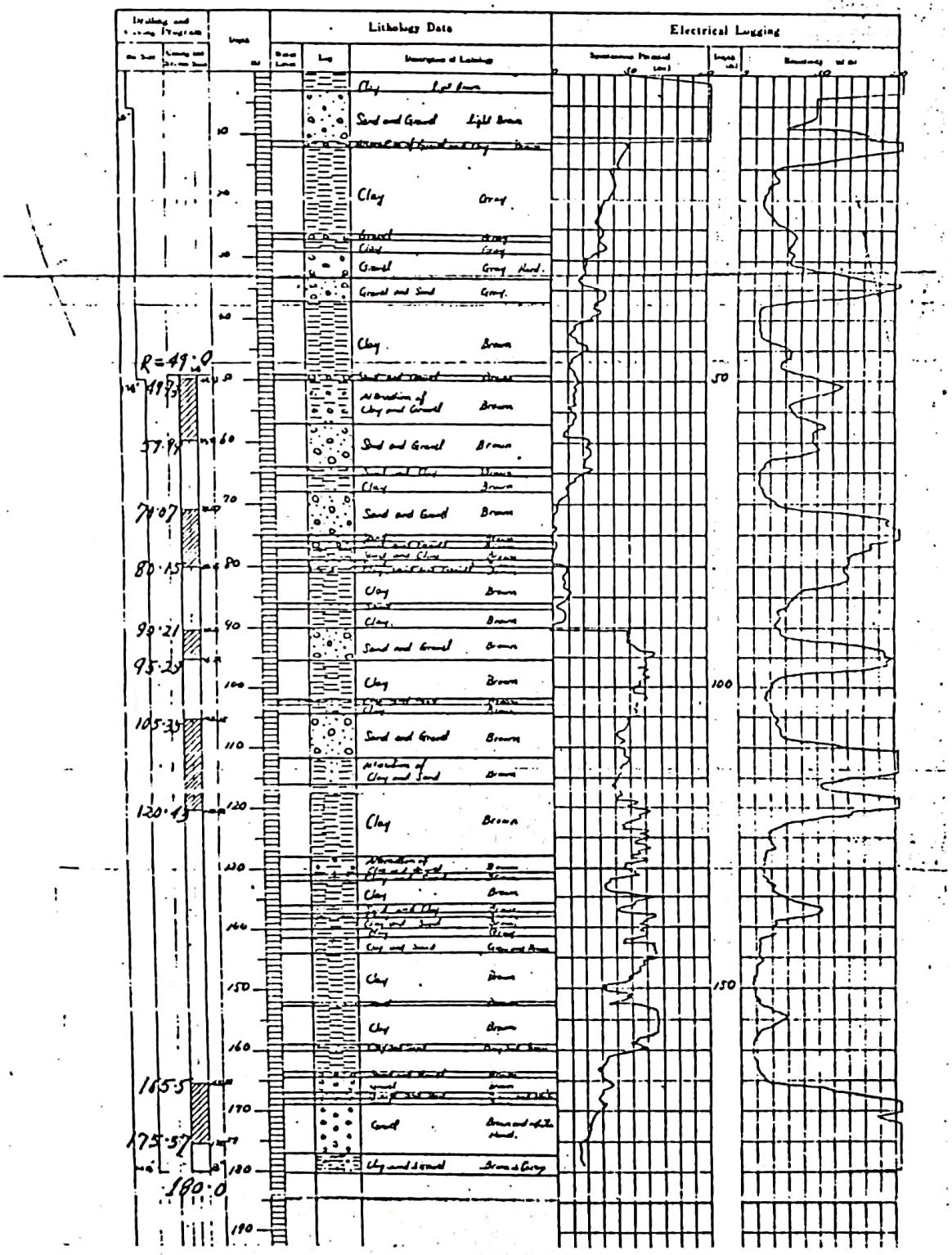


WELL LOG

Data No. 4

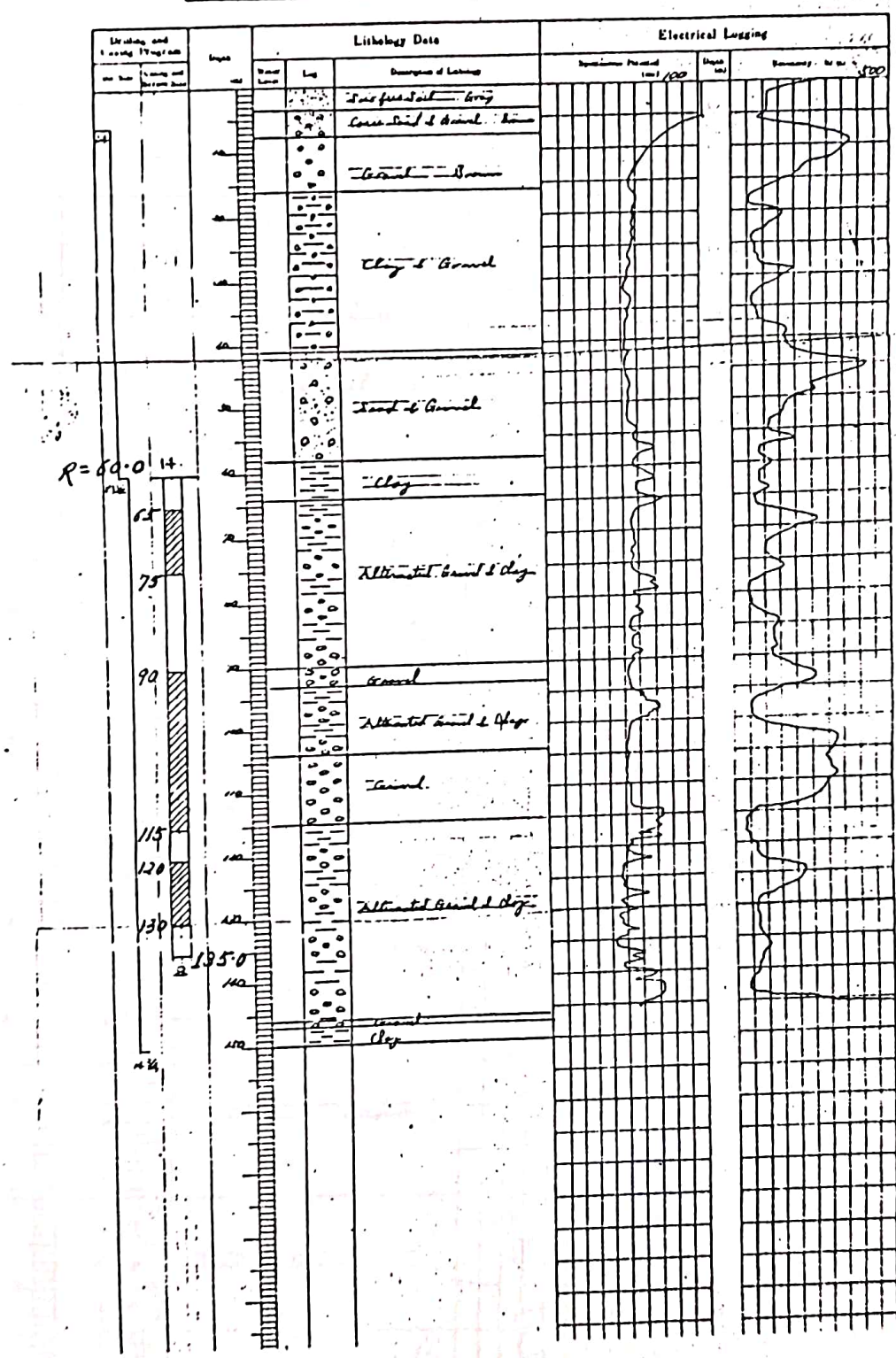
PROJECT NAME	Deep Tubewell Irigation	WELL NO	2-4
AREA AND LOCATION	Jinja, Kampala		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	180.0 (180.10)	DRILLING RIG	Rig 2
DRILLING STARTED	9th June '85	DRILLED BY	K. Hijuli & K. Matsuzaki
WELL COMPLETED	9th July '85	LOGGED BY	date

STATIC WATER LEVEL	31.60 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	44.46 m	CONDUCTIVITY	μΩ m
PUMPING RATE	600 l/min (864 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



PROJECT NAME		WELL NO. 4-6	
AREA AND LOCATION	DHALKEBAR		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	135.0 (145.) m	DRILLING RIG	1
DRILLING STARTED	4, Dec., 85	DRILLED BY	H. ISHIKAWA
WELL COMPLETED	6, Jan., 86	LOGGED BY	H. KAWABATA

STATIC WATER LEVEL	63.30 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	84.45 m	CONDUCTIVITY	μmho/cm
PUMPING RATE	400 l/min (4296 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

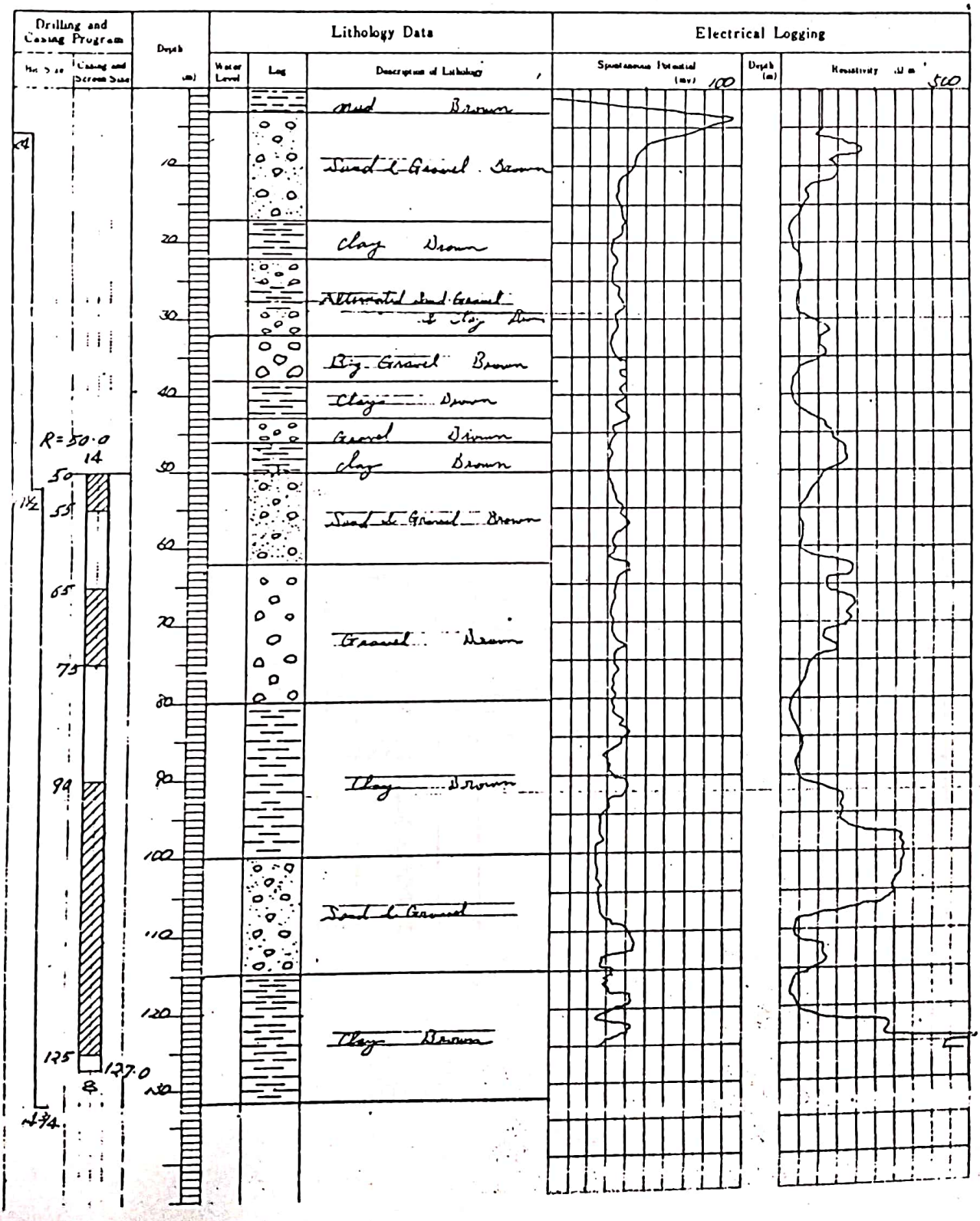


WELL LOG

Data No. 7

PROJECT NAME		WELL NO.	1-7
AREA AND LOCATION	GAURIPUR DHANUSHA		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	127.0 (132.) m	DRILLING RIG	3
DRILLING STARTED	14, Dec., '85	DRILLED BY	K. MATSUZAKI
WELL COMPLETED	6, Feb., '86	LOGGED BY	— do —

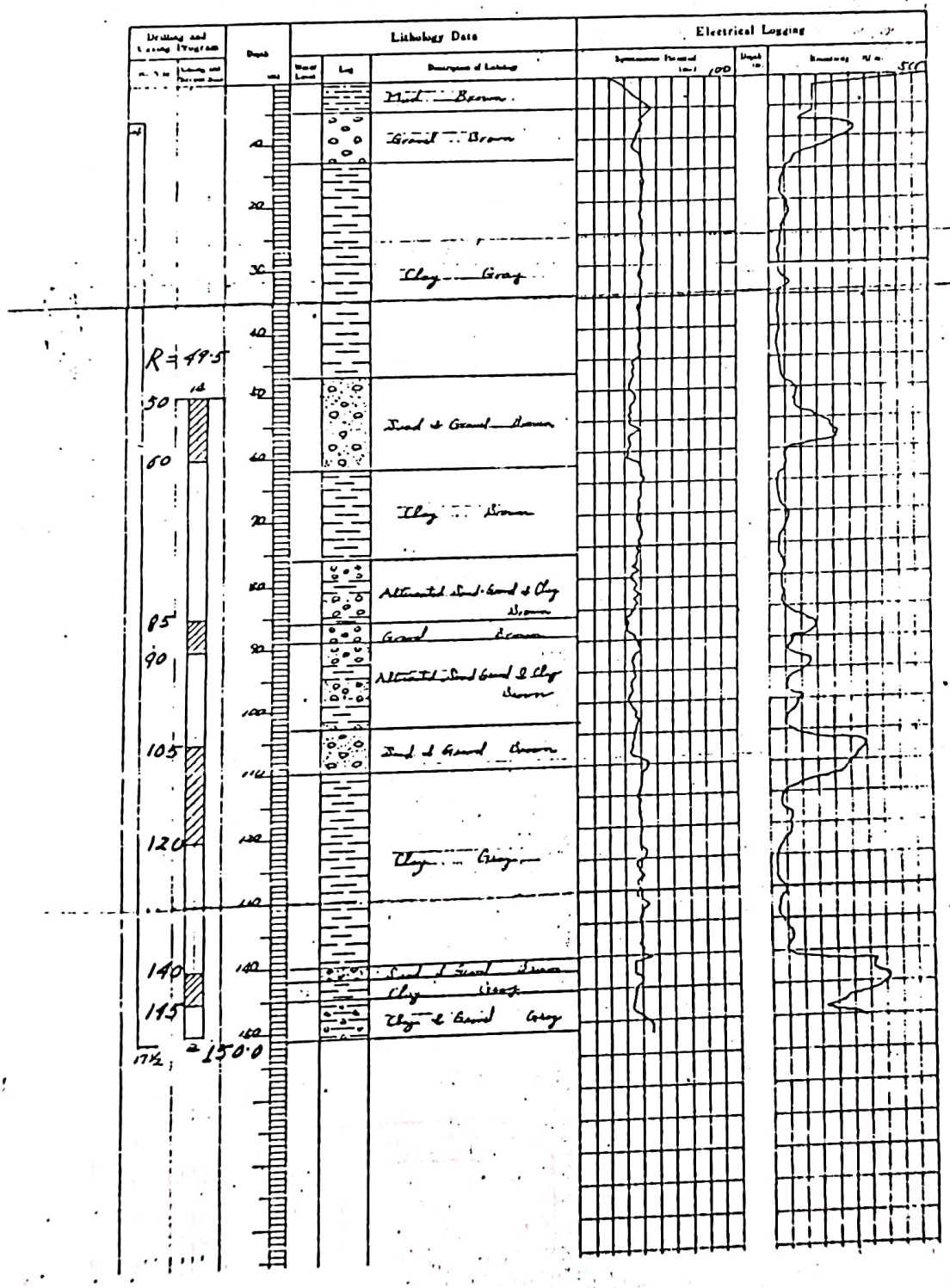
STATIC WATER LEVEL	20.90 m	WATER TEMPERATURE	°C
DYNAMIC WATER LEVEL	36.45 m	CONDUCTIVITY	μS/cm
PUMPING RATE	1,500 l/min (2,160 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

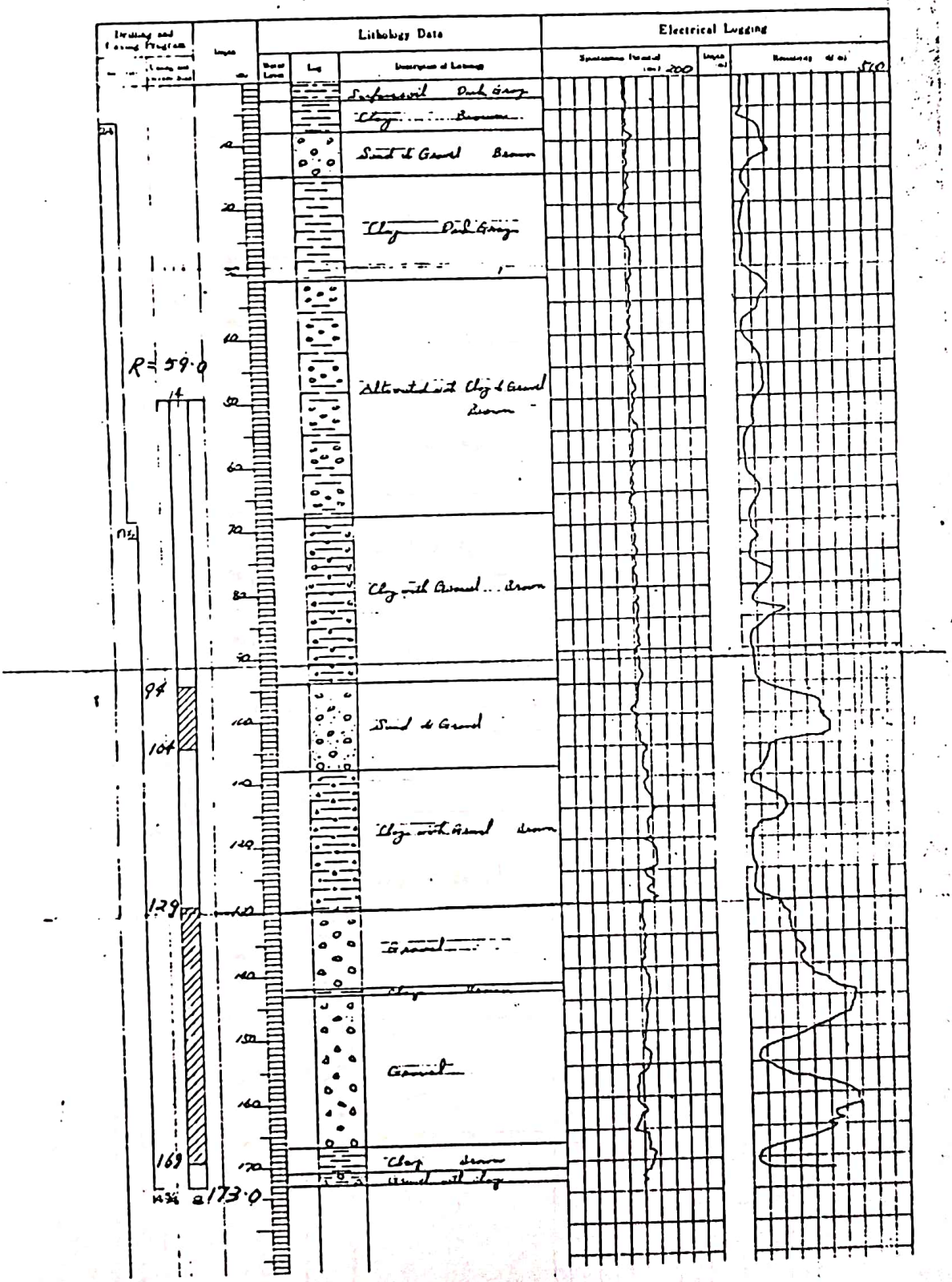
PROJECT NAME		WELL NO.	1-B
AREA AND LOCATION	RADHAPUR		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	150.0 (151.) m	DRILLING RIG	J
DRILLING STARTED	31, Dec., 85	DRILLED BY	K. MATSUZAKI
WELL COMPLETED	25, Jan., 86	LOGGED BY	—do—

STATIC WATER LEVEL	21.10 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	37.51 m	CONDUCTIVITY	μS/cm
PUMPING RATE	2,520 l/min (362.88 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



PROJECT NAME			WELL NO. 3-9
AREA AND LOCATION	MANGALPUR		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	173.0 (172.) m	DRILLING RIG	2
DRILLING STARTED	22, Dec., 85	DRILLED BY	M. KAKUDA
WELL COMPLETED	7, Jan., 86	LOGGED BY	H. KAWABATA

STATIC WATER LEVEL	23.74 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	34.17 m	CONDUCTIVITY	μΩ cm
PUMPING RATE	5,000 l/min (4.320 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	

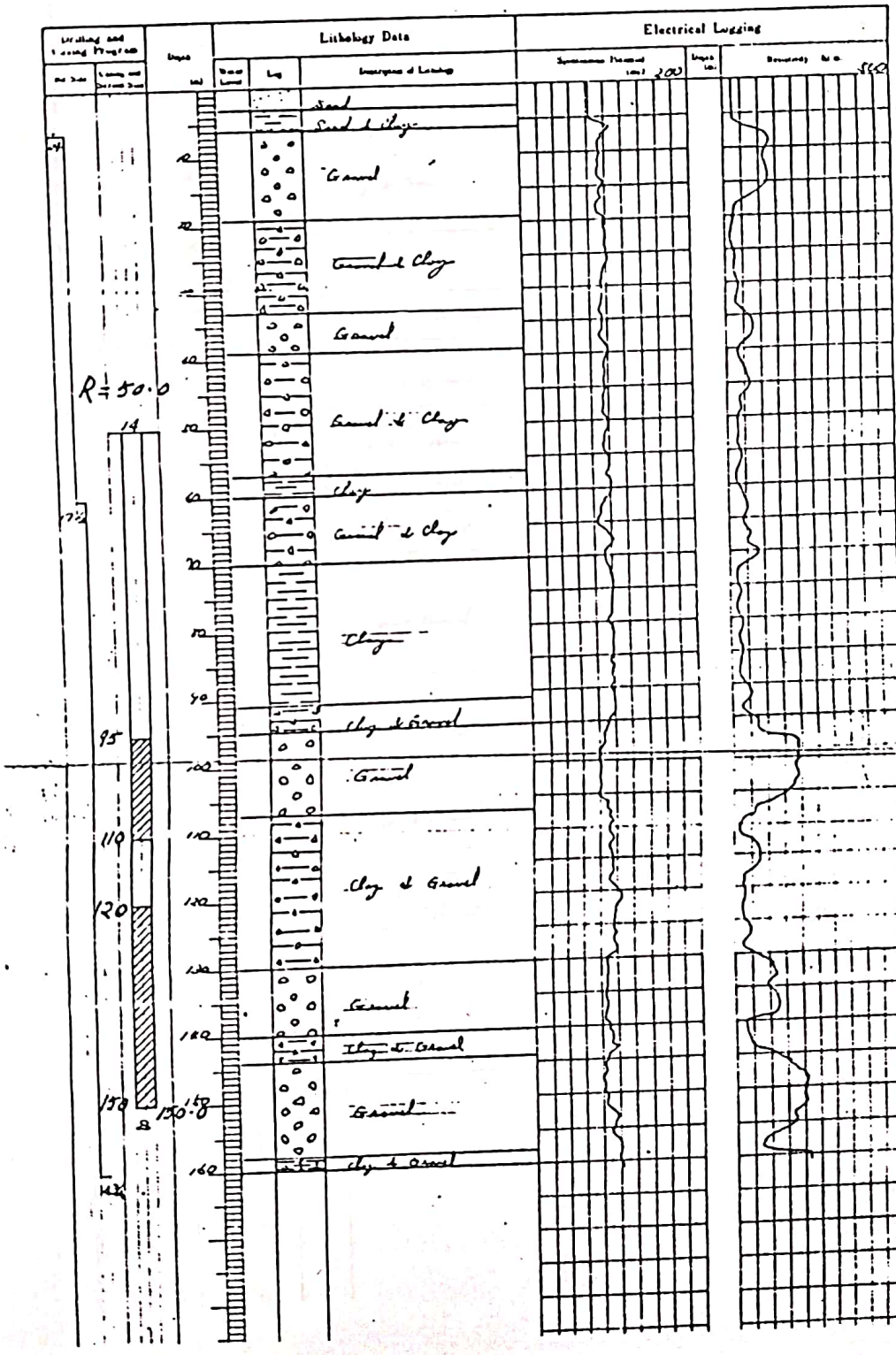


Data No. 10

WELL LOG

PROJECT NAME		WELL NO. 3—10	
AREA AND LOCATION	SARSA		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	150.0 (160) m	DRILLING RIG	I
DRILLING STARTED	7, Jan., 76	DRILLED BY	H. ISHIKAWA
WELL COMPLETED	31, Jan., 76	LOGGED BY	H. KAWABATA

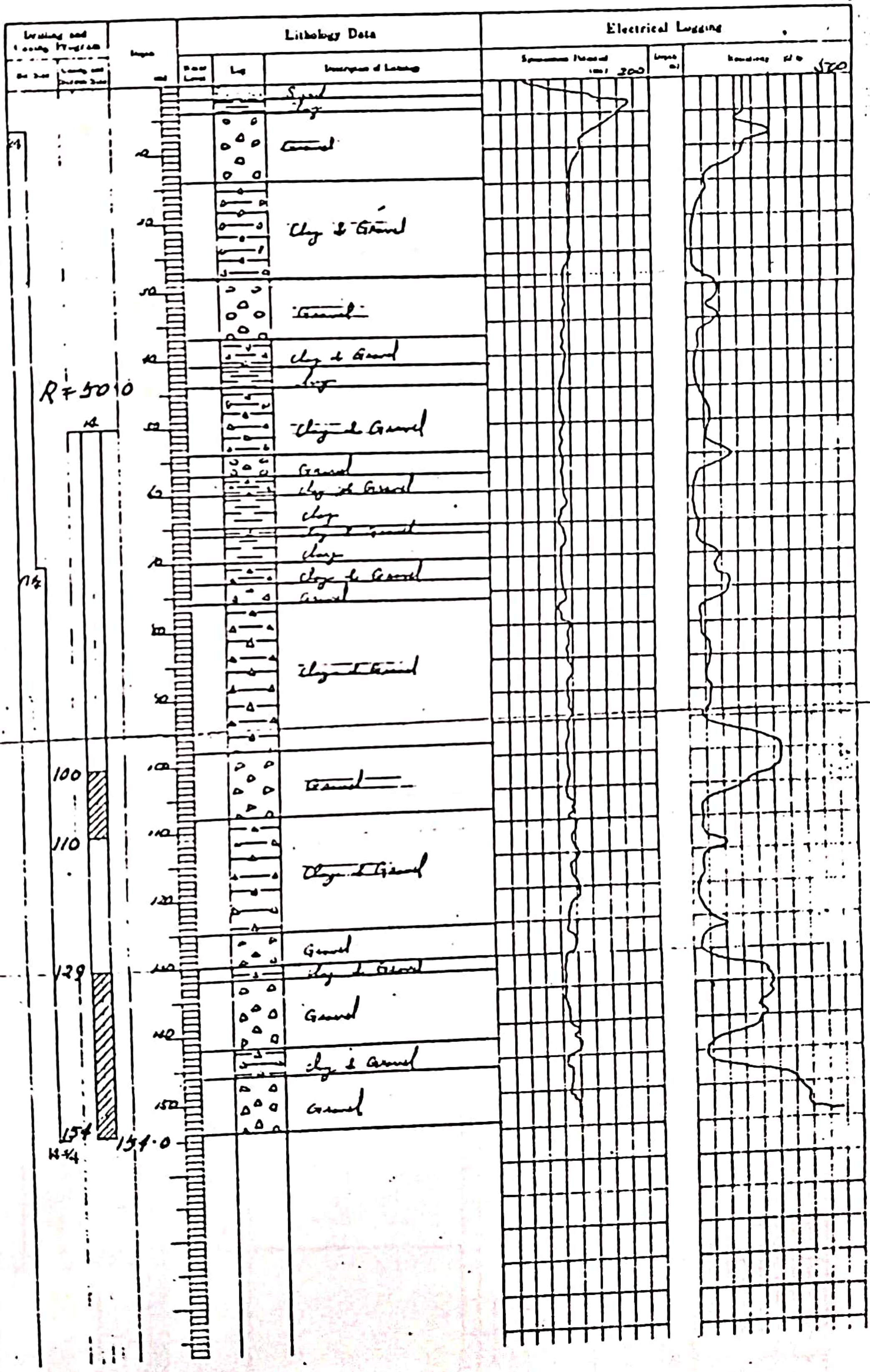
STATIC WATER LEVEL	18.41 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	42.15 m	CONDUCTIVITY	μmho
PUMPING RATE	1,200 l/min (1,745 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS	



WELL LOG

PROJECT NAME		WELL NO 3—11	
AREA AND LOCATION GHOJYA...			
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	154.0 (155) m	DRILLING RIG	
DRILLING STARTED	2. Feb, 76	DRILLED BY	H. ISHIKAWA
WELL COMPLETED	24. Feb, 76	LOGGED BY	H. KAWABATA

STATIC WATER LEVEL	27.70 m	WATER TEMPERATURE ℃
DYNAMIC WATER LEVEL	35.52 m	CONDUCTIVITY μΩ·cm
PUMPING RATE	1,450 l/min 12,456 m³/d	pH
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS

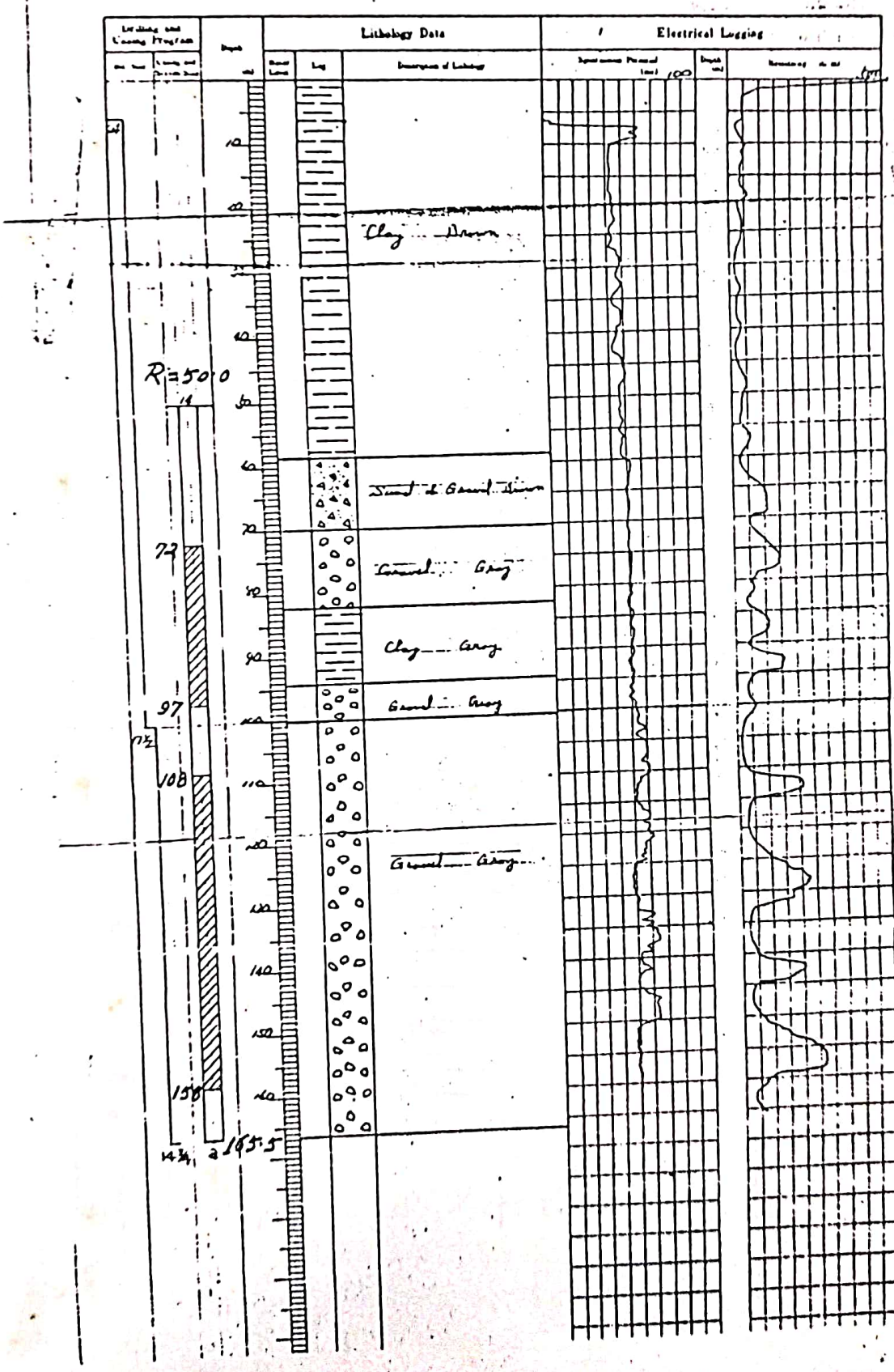


WELL LOG

Data No. 14

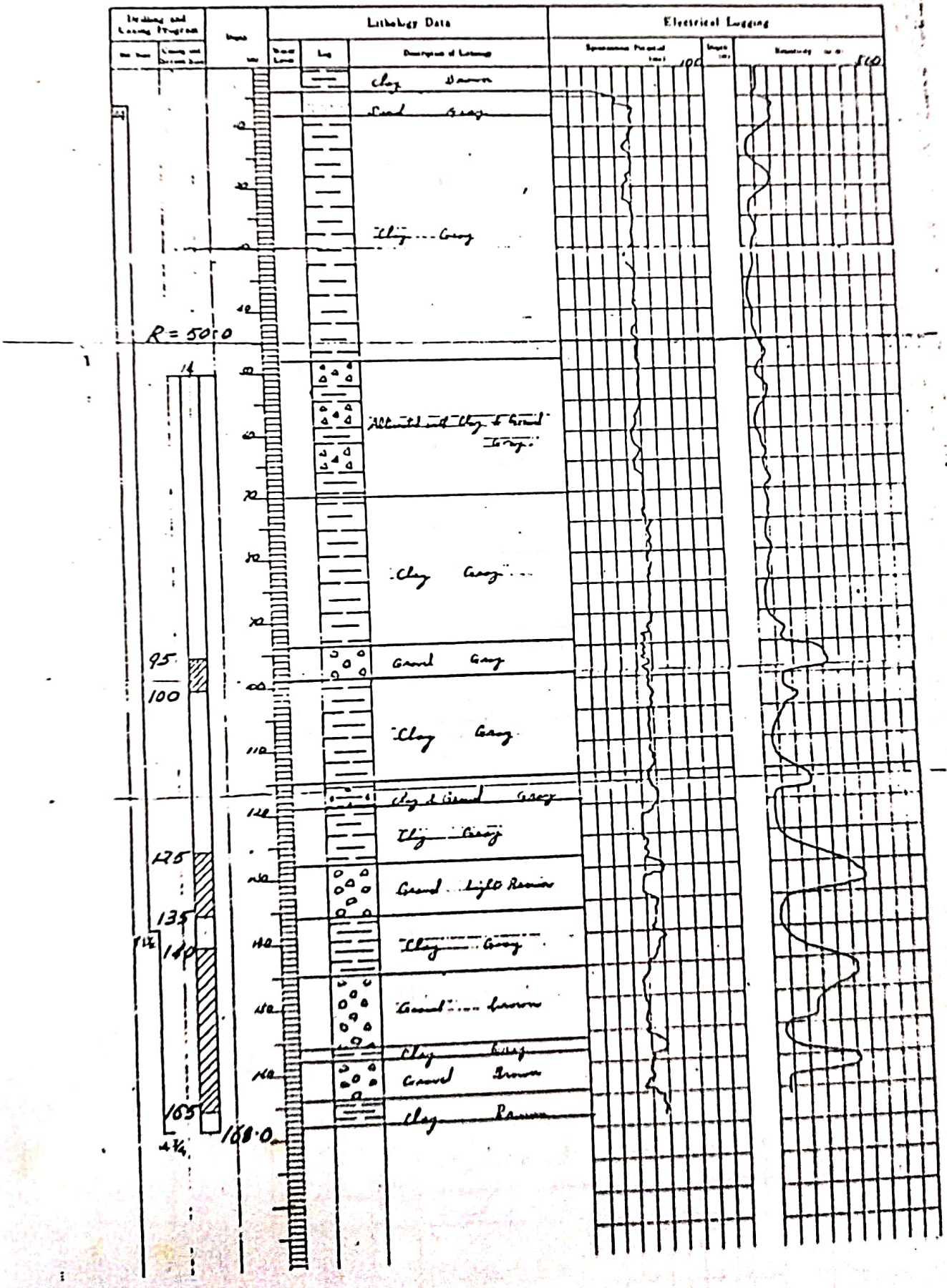
PROJECT NAME	WELL NO. 7-14
AREA AND LOCATION LALIYA	
ELEVATION m	LATITUDE LONGITUDE
TOTAL DEPTH 185.5 (608.4 ft) m	DRILLING RIG 2
DRILLING STARTED 2 Nov., 86	DRILLED BY M.KARUDA & K.ABE
WELL COMPLETED 15 Nov., 86	LOGGED BY K. ABE

STATIC WATER LEVEL 6.6 m	WATER TEMPERATURE ℃
DYNAMIC WATER LEVEL 16.40 m	CONDUCTIVITY μS/cm
PUMPING RATE 1800 l/min (2592 m³/d)	pH
SPECIFIC CAPACITY m³/d/m	TOTAL HARDNESS



PROJECT NAME			WELL NO. T—13
AREA AND LOCATION	KATARA — RAMOUR.		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	168.0 (170) m	DRILLING NO.	3
DRILLING STARTED	28, Jan., 76	DRILLED BY	K. MATSUZAKI
WELL COMPLETED	11, Feb., 76	LOGGED BY	— Ja —

STATIC WATER LEVEL	9.41 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	54.38 m	CONDUCTIVITY	μmho/cm
PUMPING RATE	600 l/min (3.6 m³/h)	pH	
SPECIFIC CAPACITY	m³/h/m	TOTAL HARDNESS	



WELL LOG

Data No. 12

PROJECT NAME		WELL NO.	7-12
AREA AND LOCATION	JANAKI-NAGAR		
ELEVATION	m	LATITUDE	LONGITUDE
TOTAL DEPTH	165.0 (130) m	DRILLING RIG	2
DRILLING STARTED	17 Jan, 74	DRILLED BY	M. KAKUDA
WELL COMPLETED	9 Feb, 74	LOGGED BY	H. KAWABATA

STATIC WATER LEVEL	12.52 m	WATER TEMPERATURE	℃
DYNAMIC WATER LEVEL	45.22 m	CONDUCTIVITY	μmho/cm
PUMPING RATE	600 l/min (864 m³/d)	pH	
SPECIFIC CAPACITY	m³/d/m	TOTAL HARDNESS