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GOVERNMENT OF INDIA  
CENTRAL GROUND WATER BOARD  
MINISTRY OF WATER RESOURCES

BASIC DATA REPORTS OF THE EXPLORATORY WELL AT LAMLAI,  
DISTRICT IMPHAL, MANIPUR

|                            |         |
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NORTH EASTERN REGION  
GUWAHATI  
FEBRUARY, 1988

CENTRAL GROUND WATER BOARD  
NORTH EASTERN REGION

BASIC DATA REPORT

GEOLOGY & HYDROGEOLOGY

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& Party.

Rig DR/VOL/55/72

(Direct Rotary)

DRILLING

SURVEYING

:

: Shri A. Pramanik, Sr. Surveyor.

SITE

: LAMLAI, Dist. Imphal,

Manipur

94° 03' 50" : 24° 52' 35"

INTRODUCTION

As part programme of ground water exploration and first approximate resource evaluation studies in Imphal basin, Manipur state, Central Ground Water Board drilled an exploratory bore hole at Lamalai district Imphal during FSP 1981-86. The formation encountered were mainly clay and silt belonging to recent age.

LOCATION :- The site is located 16 km. north of Imphal on Imphal Ukhrul Road. The bore hole is situated in the play ground of Lamalai High School at the North west corner about 10 m from the college building. The site plan <sup>is</sup> given in the plate No.1. The reduced level of the ground is 791.960 m MSL.

DRILLING HISTORY:

History of drilling operations are summarised below in chronological order.

| DATE                 | DESCRIPTION                                    |
|----------------------|------------------------------------------------|
| 1                    | 2                                              |
| 30-3-86              | Shifting of Rig to Lamalai from Mayang Imphal. |
| 31-3-86 to<br>3-4-86 | Shifting of store material to the site.        |

contd..2/-

| 1         | 2                                                                                                                                                          |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4-4-86    | Levelling and Mastng of the Rig.                                                                                                                           |
| 5-4-86    | Preparation of Mud pit and mud channel.                                                                                                                    |
| 6-4-87 to | Drilling started by 6 <sup>3</sup> / <sub>4</sub> R.R. bit and completed down to 64.00 m bgl. Further drilling hampered due to break down of Rig Radiator. |
| 7-4-87    |                                                                                                                                                            |
| 8-4-86 to | Drilling resumes and completed down to 98.30 m bgl.                                                                                                        |
| 9-4-86    |                                                                                                                                                            |

GEOLOGICAL DATA:FORMATION SAMPLING:

During the drilling, drill cuttings were collected at every three meter or where there was change in sub surface formation occurred. The samples were washed free of drilling mud, dried and stored in cloth and polythene bags.

LITHOLOGICAL LOG:

From a comparative study of drill cuttings obtained during pilot hole drilling and drill time log; final litholog was prepared which is summarised below. and the lithology chart is given in plate No.2.

LITHOLOG OF LANLAI EXPLORATORY BORE HOLE

| DESCRIPTION                                | DEPTH RANGE         | THICKNESS |
|--------------------------------------------|---------------------|-----------|
| Clay, brownish grey                        | 0.00 - 3.40 m.bgl.  | 3.40 m.   |
| Clay, blackish grey plastic                | 3.40- 19.00 m bgl   | 15.60 m.  |
| Clay, dark grey                            | 19.00 -28.20 m bgl  | 9.20 m.   |
| Clay, light brownish grey                  | 28.20- 46.50 m bgl  | 18.30 m.  |
| Clay, dark grey plastic                    | 46.50- 64.80 m bgl  | 18.30 m   |
| Clay, grey plastic                         | 64.80 -89.20 m bgl  | 24.40 m   |
| Clay, light greenish grey                  | 89.20 -95.30 m bgl. | 6.10      |
| Clay, brownish grey with nodules of shale. | 95.30- 98.30 m bgl. | 3.00      |

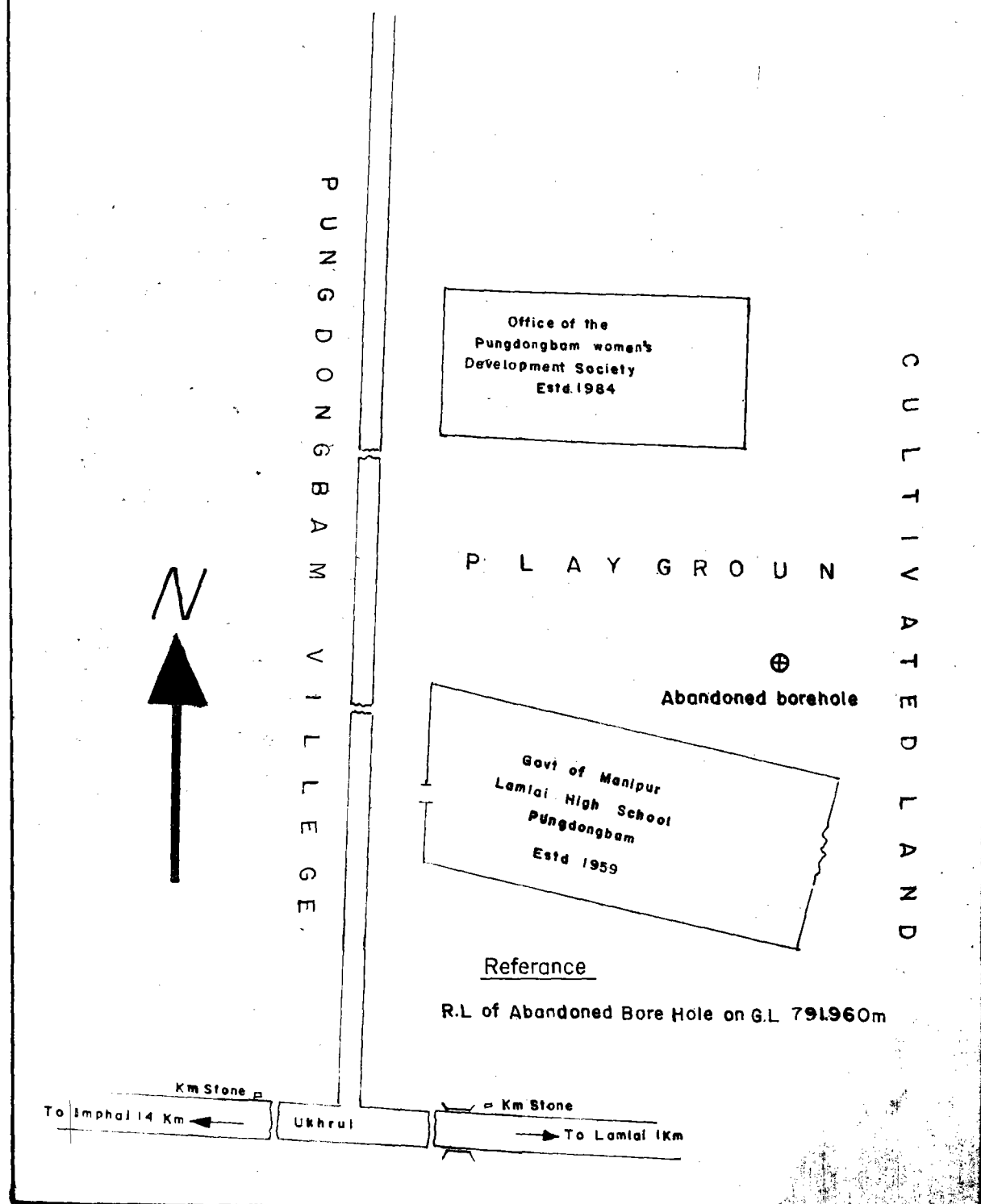
SUMMARY

In view of absence of granular zone in the bore hole drilled at the point, the bore hole was abandoned and rig was shifted to next point.

# SITE PLAN OF ABANDONED BOREHOLE AT LAMLAI, IMPHAL DISTRICT, MANIPUR

SCALE

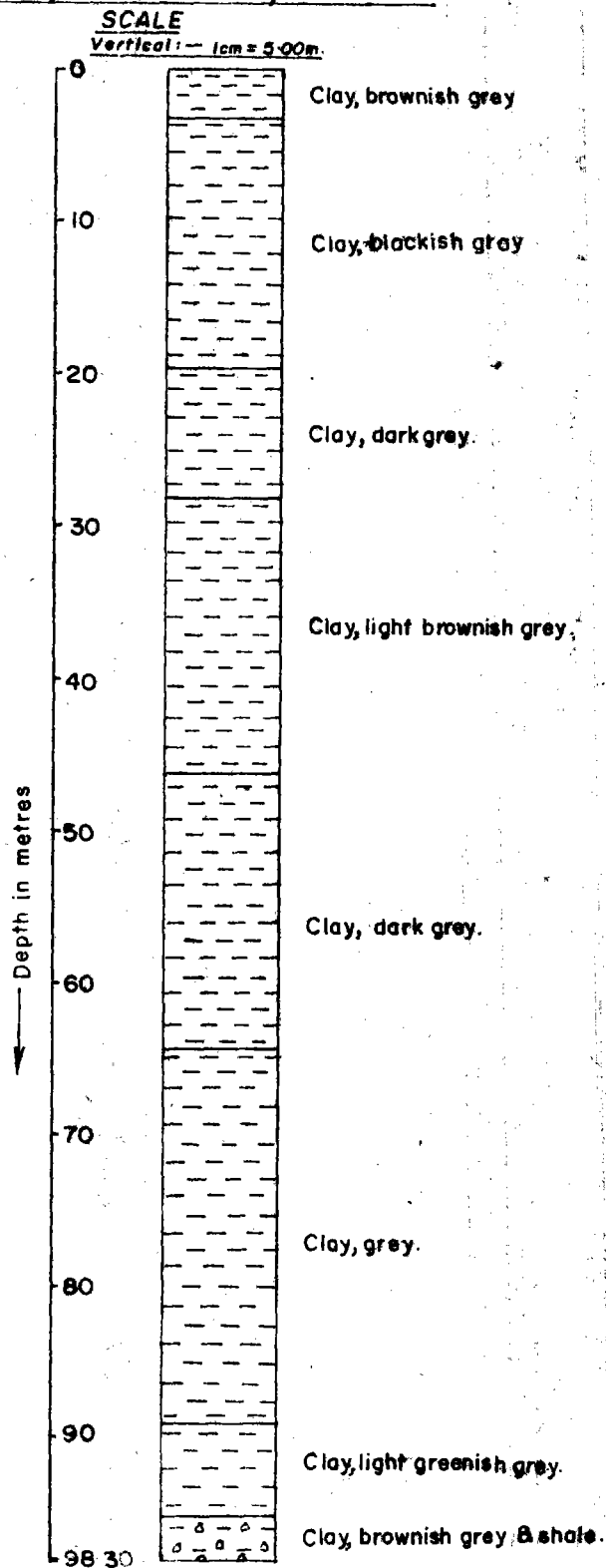
1cm = 10m



Referance

R.L of Abandoned Bore Hole on G.L 791.960m

# LITHOLOGY CHART OF EXPLORATORY BOREHOLE AT LAMLAI, IMPHAL DIST., MANIPUR



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