

**NÁTTÚRUFRAEÐISTOFNUN NORÐURLANDS**  
(THE AKUREYRI MUSEUM OF NATURAL HISTORY)  
P.O. BOX 580 - 602 AKUREYRI - ICELAND

DYSNES, SOILTHICKNESS SOUTH OF PÁLMHOLTSLÆKUR  
English translation

Halldór G. Pétursson  
geologist

By the request of Iðnþróunarfélag Eyjafjarðar

Akureyri, july 1990

The 13. and 14. July, 1990 holes to measure soil thickness south of Pálmholtslækur in Arnarneshreppur, were dug. Responsible for the work were Halldór G. Pétursson, Náttúrufræðistofnun Norðurlands and Eiríkur Jónsson, Verkfræðistofu Norðurlands. Information on location of the holes and examples of the underlying sediments can be obtained from Verkfræðistofu Norðurlands. The purpose of this research was to get information on soil thickness and nature of sediments in the area.

Soilcover is thin, considerable lesser than north of Pálmholtslækur. The northwestern edge is deep bog.

Moraine is sandrich and often contains a lot of rocks. The moraine forms a hummocky landform, with gentle depressions coved by thin bogs. It is compact and workable. Groundwater flow is observed in some holes.

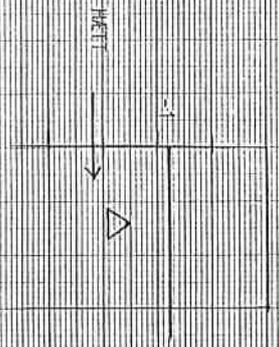
Gravel is observed at Pálmholtslækur.

Different gravel is observed nearest to Hörgá. Considerable groundwater flow is in the gravel (spring?). There is a possible source of difficulty by groundwater flow, when working in the gravel.

Whaleback forms are observed in the area and the cover of the bedrock is many places thin.

The area is considered suitable building area, except the northwest area. It is a deep bog.

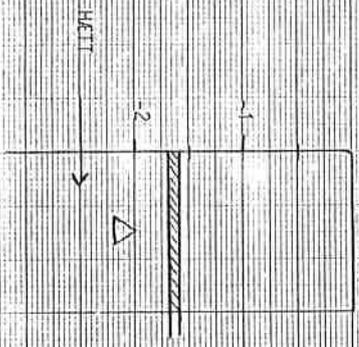
A-4



SOIL  
GRAVEL AND SANDRICH MORAINES  
DRY

BOUNDARY OF SOIL AND MORAINES - 0.8m  
STOPPED AT -1.6m POSSIBLE TO DIG DEEPER

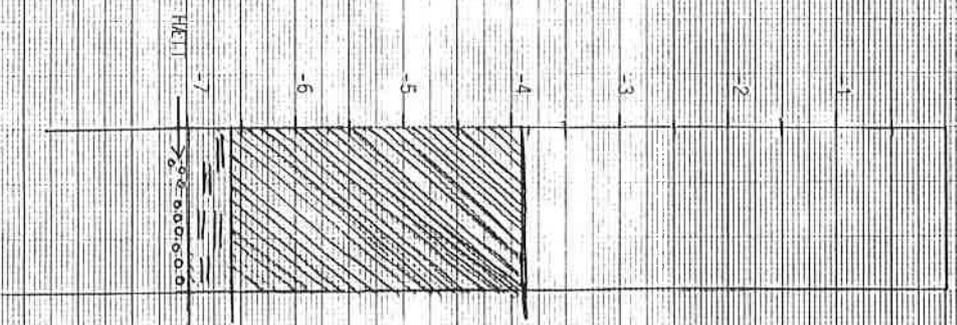
A-5



SOIL  
SAND, ASH  
SANDRICH MORAINES MORE  
COMPACT DOWNWARDS, AND MORE  
ROCKS.

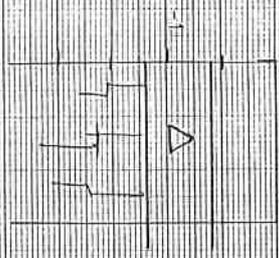
BOUNDARY OF SOIL AND ASH - 1.6m  
BOUNDARY OF ASH AND MORAINES - 1.3m  
STOPPED AT -2.5m, DIFFICULT BECAUSE OF  
ROCKS

A-6



PEAT  
SAND, ASH  
GYTTJA  
GRAVEL

BOUNDARY OF PEAT AND ASH - 3.9m  
BOUNDARY OF ASH AND GYTTJA - 6.6m  
BOUNDARY OF GYTTJA AND GRAVEL - 7.0m  
STOPPED AT -0.2m, GROUNDWATER FLOW FROM GRAVEL

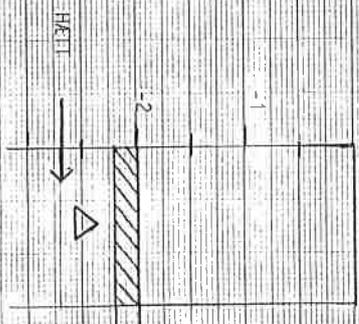


SOIL

SAND RICH MORaine WITH STONES

BEDROCK

BOUNDARY OF SOIL AND MORaine - 0.6m  
 BOUNDARY OF MORaine AND BEDROCK - 1.2m  
 THE BEDROCK IS A PART OF WHALEBACK FORM

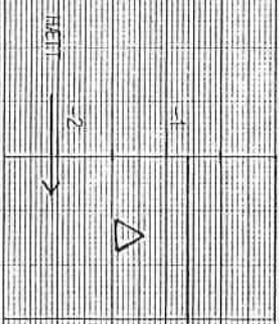


PEAT

SAND, ASH

SAND- AND GRAVEL RICH MORaine WITH SOME CLASTS

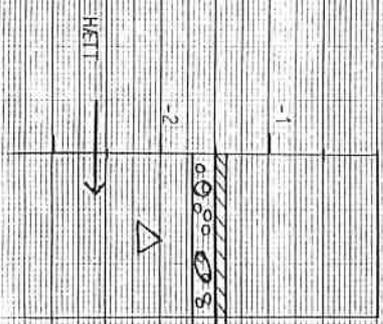
BOUNDARY OF PEAT AND ASH - 2.0m  
 BOUNDARY OF ASH AND MORaine - 2.2m  
 STOPPED AT -2.7m, DIFFICULTY, HIGH CONTENT OF ROCKS



SOIL

SAND- AND GRAVEL RICH MORaine COMPACT

BOUNDARY OF SOIL AND MORaine - 0.8m  
 STOPPED AT -2.1m, DIFFICULT TO DIG IN THE COMPACT MORaine



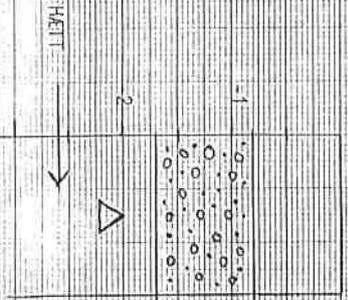
PEAT

SAND, ASH GRAVEL

DRY FINE MORaine WITH FEW GRAVEL CLASTS, ON TOP GYTTJA

BOUNDARY OF PEAT AND ASH - 1.4m  
 BOUNDARY OF ASH AND GRAVEL - 1.5m  
 BOUNDARY OF GRAVEL AND MORaine - 1.7m  
 STOPPED AT 0.6 POSSIBLE TO DIG DEEPER

C-1



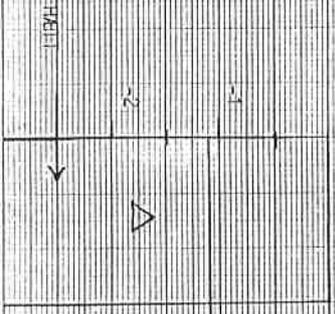
SOIL

GRAVEL, WET

SANDRICH MORaine, WITH PEBBLE CLASTS

BOUNDARY OF SOIL AND GRAVEL - 0.8m  
 BOUNDARY OF GRAVEL AND MORaine - 1.7m  
 STOPPED AT -2.6m, POSSIBLE TO DIG DEEPER, BUT COMPACT

C-3

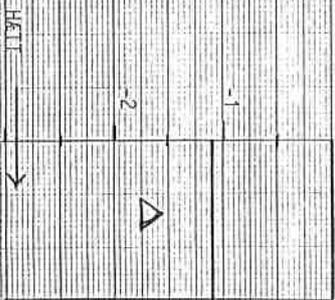


PEAT

SANDRICH MORaine, WITH GRAVEL AND STONES, WET

BOUNDARY OF PEAT AND MORaine - 1.1m  
 STOPPED AT -2.5m, POSSIBLE TO DIG DEEPER

C-2

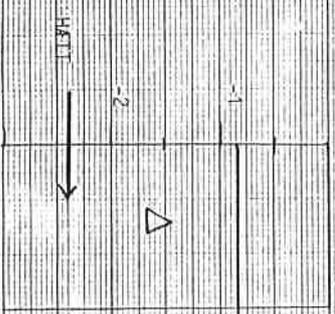


SOIL

SANDRICH MORaine WITH HIGH ROCK CONTENT, DRY

BOUNDARY OF SOIL AND MORaine - 1.1m  
 STOPPED AT -2.9m, DIFFICULT TO DIG, HIGH ROCK CONTENT

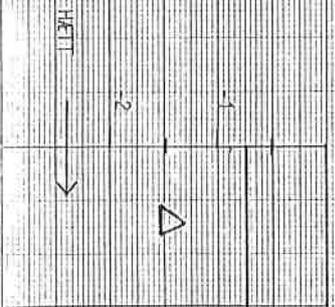
C-4



SOIL

SAND AND GRAVEL RICH MORaine WITH ROCKS

BOUNDARY OF SOIL AND MORaine - 0.8m  
 STOPPED AT -2.4m, POSSIBLE TO DIG DEEPER

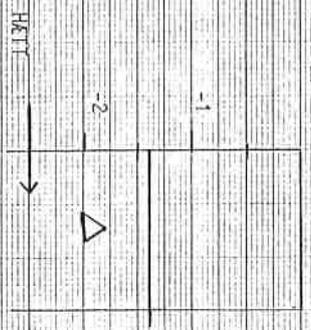


SOIL

SANDRICH MORaine WITH GRAVEL AND ROCKS, DRY

BORDER OF SOIL AND MORaine - 0.7m  
 STOPPED AT -2.4m, POSSIBLE TO DIG DEEPER

C-6

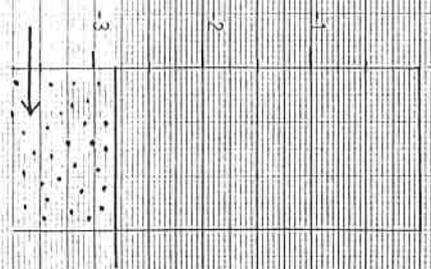


SOIL

SANDRICH MORaine WITH FEW PEBBLECLASTS, WET

BORDER OF SOIL AND MORaine - 1.4m  
 STOPPED AT -2.5m, POSSIBLE TO DIG DEEPER

D-1

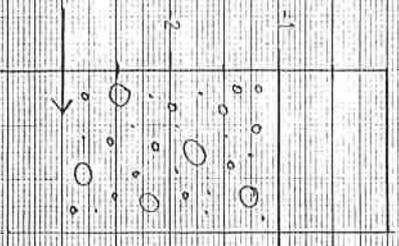


BOUNDARY OF PEAT AND SAND - 2.8 m  
 STOPPED AT -3.6m, POSSIBLE TO DIG DEEPER  
 GROUND WATER FLOW FROM GRAVEL

MEDIUM SAND, WET

PEAT

D-2

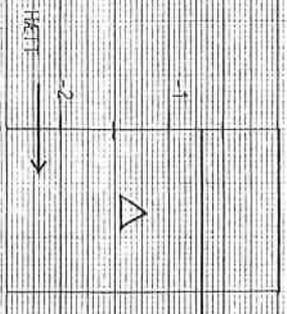


BOUNDARY OF SOIL AND GRAVEL - 1.0 m  
 STOPPED AT -3.0m, GROUNDWATER FLOW

SOIL

GRAVEL, SAND AND STONES  
 ROUNDED

D-3

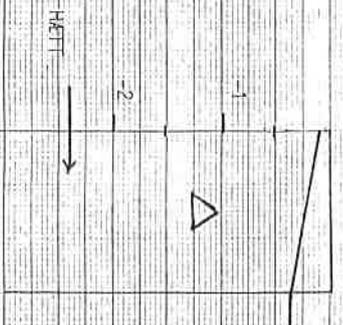


BOUNDARY OF SOIL AND MORAINES - 2.2 m  
 STOPPED AT -2.2m, POSSIBLE TO DIG DEEPER  
 BEDROCK PROBABLY SOON

SANDRICH MORAINES WITH ROCKS

SOIL

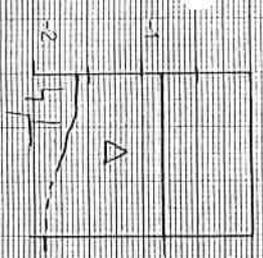
D-4



BOUNDARY OF SOIL AND MORAINES - 2.4 m  
 STOPPED AT -2.4m, DIFFICULTY OF ROCKS

SOIL

SANDRICH MORAINES WITH  
 HIGH ROCKCONTENT



BORDER OF SOIL AND MORAINES - 0.7m  
 BEDROCK AT -1.6-1.9m  
 BEDROCK EXPOSED TO THE WEST

SOIL

SANDRICH MORAINES WITH HIGH ROCK CONTENT

BEDROCK

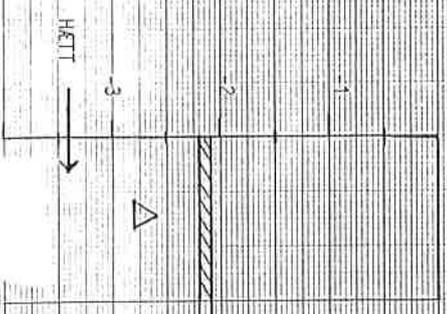


PEAT

GYTJA WITH HIGH CONTENT OF ANGULAR STONES PROBABLE MORAINES

BEDROCK?

BORDER OF PEAT AND MORAINES - 1.4m  
 STOPPED AT -2.4m, DIFFICULT TO DIG  
 GROUNDWATER FLOWING IN, POSSIBLY TOP OF BEDROCK

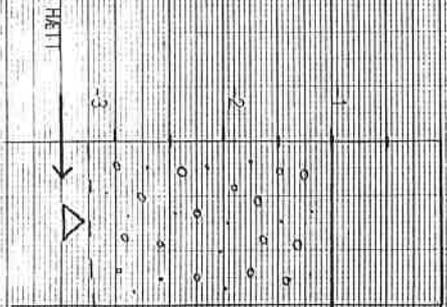


PEAT

SAND, ASH

GYTJA WITH HIGH CONTENT OF ANGULAR ROCKS POSSIBLY BEDROCK

BORDER OF PEAT AND ASH - 2.1m  
 BORDER OF ASH AND GYTJA - 2.2m  
 STOPPED AT -3.4m, DIFFICULT TO DIG  
 GROUNDWATER FLOW, POSSIBLY BEDROCK SURFACE



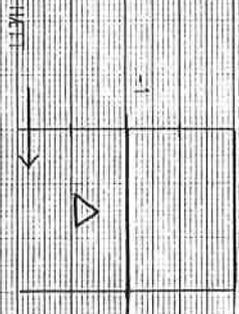
PEAT

FINE SAND AND GRAVEL

SANDRICH MORAINES

BORDER OF PEAT AND GRAVEL - 1.0m  
 BOUNDARY OF GRAVEL AND MORAINES - 3.2m  
 STOPPED AT -3.5m, POSSIBLE TO DIG DEEPER  
 GROUNDWATER FLOW AT BOTTOM.

E-3

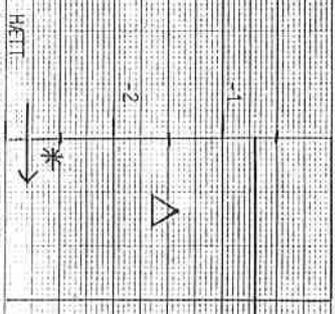


SOIL

SANDRICH MORAINES WITH HIGH  
 ROCKCONTENT, WET

BOUNDARY OF SOIL AND MORAINES - 1.20m  
 STOPPED AT -1.9m, DIFFICULT TO DIG

E-4

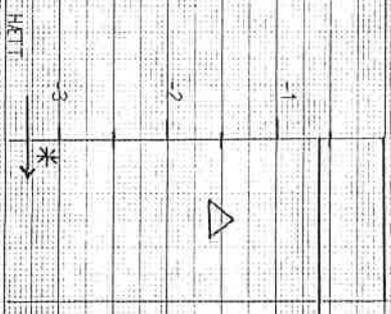


SOIL

SAND- AND GRAVEL RICH MORAINES

BOUNDARY OF SOIL AND MORAINES - 0.7m  
 STOPPED AT -2.8m, POSSIBLE TO DIG DEEPER  
 EXAMPLE: -2.07m

E-5

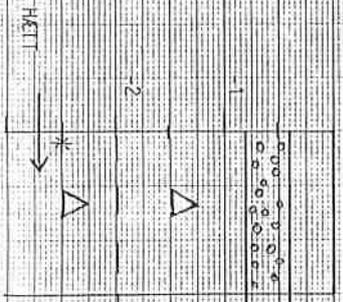


SOIL

SAND- AND GRAVEL RICH MORAINES

BOUNDARY OF SOIL AND MORAINES - 0.6m  
 STOPPED AT -3.3m, POSSIBLE TO DIG DEEPER  
 EXAMPLE: -3.27m

E-6



SOIL  
GRAVEL

SANDRICH MORRINE, HARD AND  
COMPACT

SANDRICH MORRINE, NOT AS  
HARD.

BOUNDARY OF SOIL AND GRAVEL - 0.4m  
BOUNDARY OF GRAVEL AND MORRINE - 0.8m  
STOPPED H.T. - 2.7m, POSSIBLE TO DIG DEEPER.