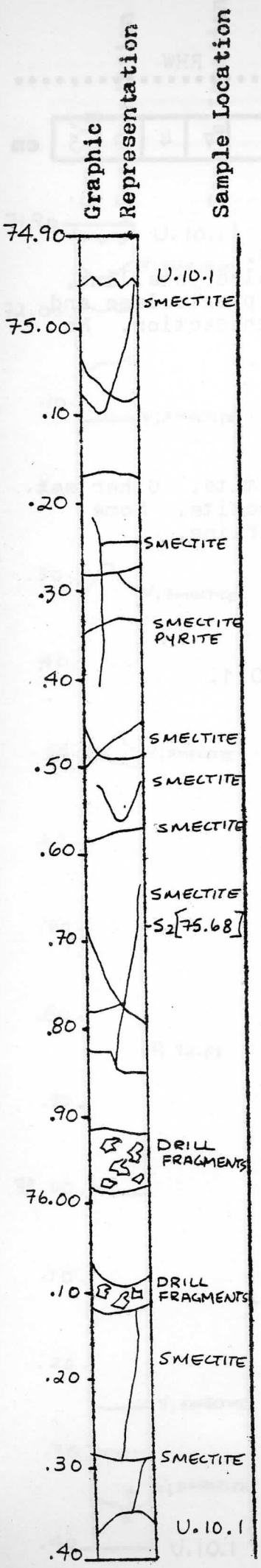
ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 7495 **cm to** 7635 **cm**

Box 12 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Subhorizontal set and steep set 70-90°. Many hairline to 2mm veins. All fractures and veins filled with green smectite.

ROCK ALTERATION
None observed.

STRUCTURE

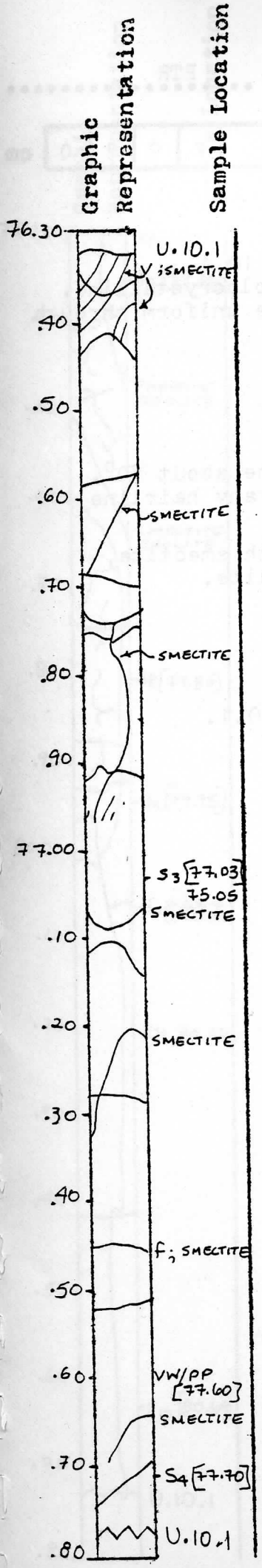
74.95 - 75.91	Medium-grained, massive basalt (unit 10.1)
75.91 - 75.98	Drill fragments.
75.98 - 76.07	Medium-grained, massive basalt (unit 10.1)
76.07 - 76.11	Drill fragments.
76.11 - 76.35	Medium-grained, massive basalt (unit 10.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 7635 **cm to** 7778 **cm**

Box 12 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
One set subhorizontal, some 50-60° and common veinlets, 70-90°. All coated with smectite and minor pyrite. Fracture at 77.45 coated with smectite and marked alteration halo, 5-10mm wide.

ROCK ALTERATION
None observed.

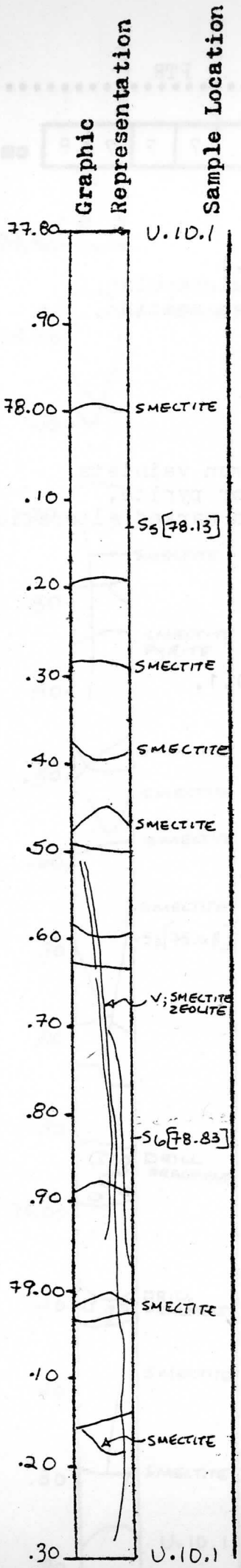
STRUCTURE
Medium-grained, massive basalt of unit 10.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** ....PTR.....

Depth Interval 7778 **cm to** 7930 **cm**

Box 12 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, aphyric basalt. Equigranular; grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
One set subhorizontal. One about 60°, one about 80°, coated with smectite and some zeolite. Many hairline veinlets of smectite.

78.54 Large vein is complex. Filled with smectite, and zeolite. Zeolite is possibly heulandite.

ROCK ALTERATION
None observed.

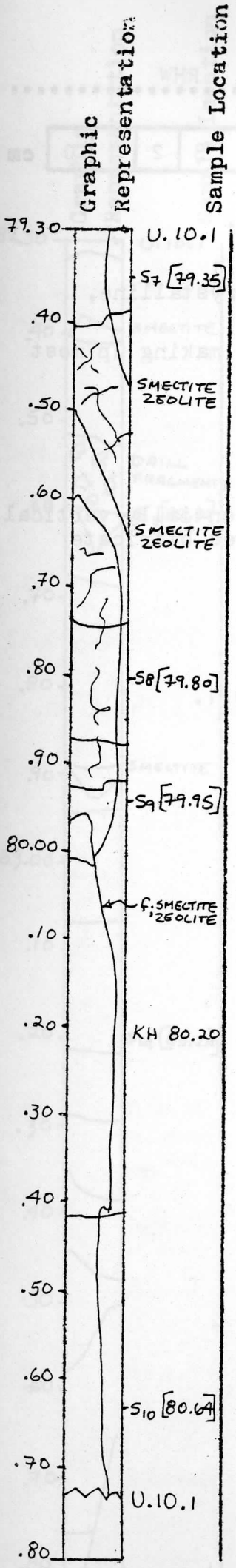
STRUCTURE
Medium-grained, massive basalt of unit 10.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 7930 **cm to** 8073 **cm**

Box 13 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 10.1
Medium-grain, holocrystalline, aphyric, light grey, granular equigranular basalt.

Veins and veinlets filled with smectite and zeolites (heulandite). Veins up to 1.5cm in width (80.10).

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Many high angled fractures (85°) or veinlets throughout length of core; filled with alteration products. Very fine veins from mesh pattern in upper half of core.

ROCK ALTERATION
None observed.

STRUCTURE
Medium-grained, massive basalt of unit 10.1.

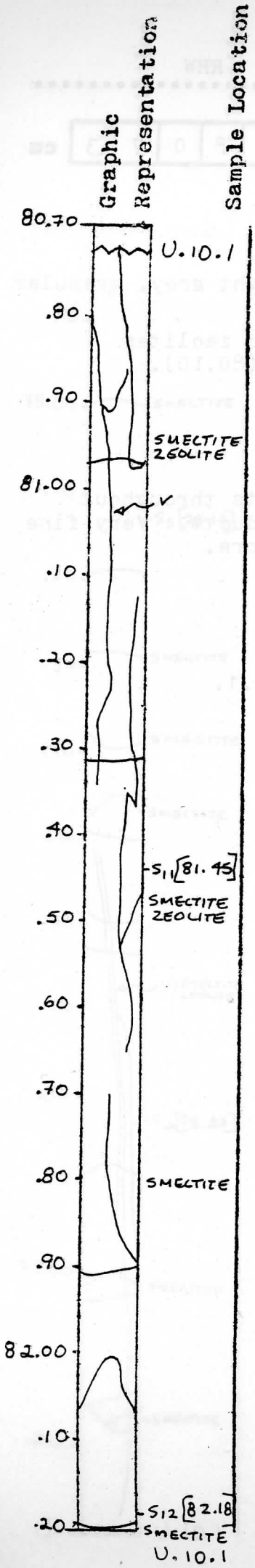
ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** .....RHW.....

Depth Interval | | 8 | 0 | 7 | 3 | **cm to** | | 8 | 2 | 3 | 0 | **cm**

Box 13 , Section 2

Slight depth adjustment at base of core.



LITHOLOGY PETROGRAPHY - continues unit 10.1
Light grey, medium-grained, aphyric, holocrystalline, granular, equigranular basalt.

Veins filled with smectite lining, zeolite making up most (heulandite) of the mass in wider veins.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Predominantly high angled (70-80°) and essentially vertical veins and fractures (open veins). Fractures bifricate up in some cases, down in others.

ROCK ALTERATION
None observed.

STRUCTURE
Medium-grained, massive basalt of unit 10.1.

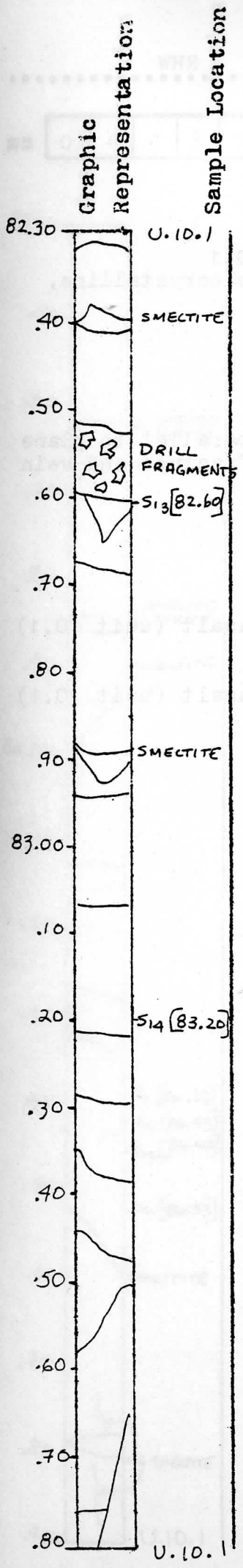
ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 8230 **cm to** 8392 **cm**

Box 13 , Section 3

Depth adjustment.



LITHOLOGY PETROGRAPHY- continues unit 10.1
Light grey, holocrystalline, aphyric, granular, equigranular, medium-grained basalt.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
High angled veins and fractures continue in this section. Large zones of alteration absent as opposed to layers just above.

ROCK ALTERATION
None observed.

STRUCTURE

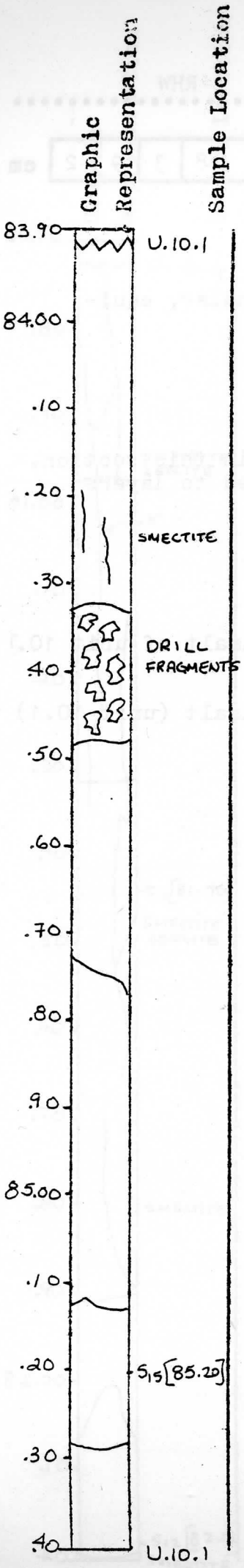
82.30 - 82,51	Medium-grained, massive basalt of unit 10.1
82.51 - 82.59	Drill fragments.
82.59 - 83.92	Medium-grained, massive basalt (unit 10.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 8392 **cm to** 8540 **cm**

Box 13 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 10.1
Medium-grained, equigranular, granular, holocrystalline, aphyric, light grey basalt.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
High angled fracture from 83.90 to 84.60 parallel to plane of table - otherwise, section relatively fracture and vein free.

ROCK ALTERATION
None observed.

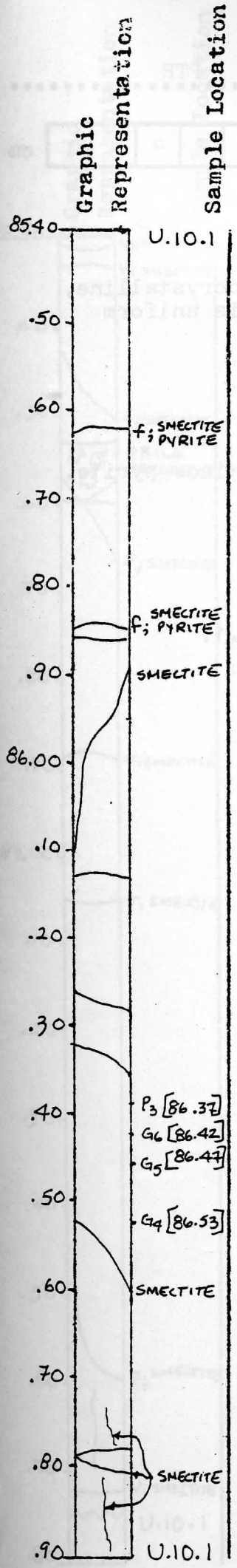
STRUCTURE
83.92 - 84.32 Medium-grained, massive basalt (unit 10.1)
84.32 - 84.48 Drill fragments.
84.48 - 85.40 Medium-grained, massive basalt (unit 10.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** .....PTR.....

Depth Interval | | 8 | 5 | 4 | 0 | **cm to** | | 8 | 6 | 9 | 0 | **cm**

Box 14 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Sparse - mostly subhorizontal, a few at 30°, a few 60-70°. All lined with smectite and some with minor pyrite. A few hairline veinlets filled with smectite.

ROCK ALTERATION
None observed.

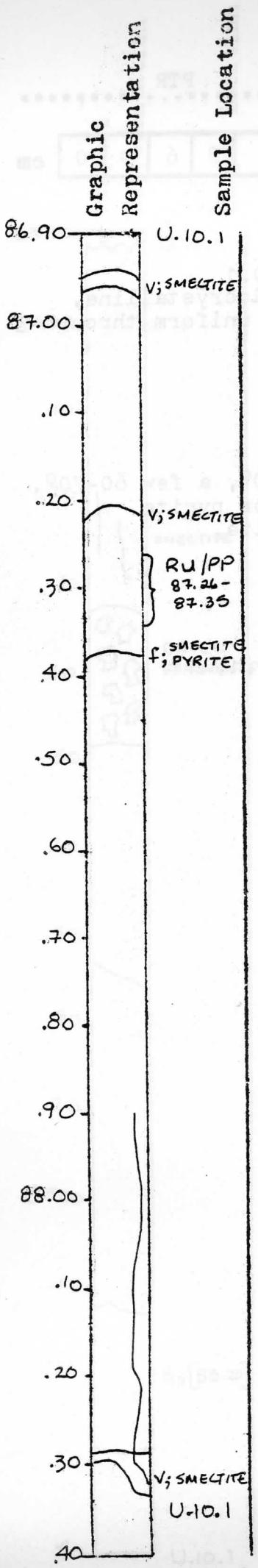
STRUCTURE
Medium-grained, massive basalt of unit 10.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 8690 **cm to** 8831 **cm**

Box 14 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size is uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Mostly about 15° coated with smectite and minor pyrite. A few smectite veinlets at 70-80°.

ROCK ALTERATION
None observed.

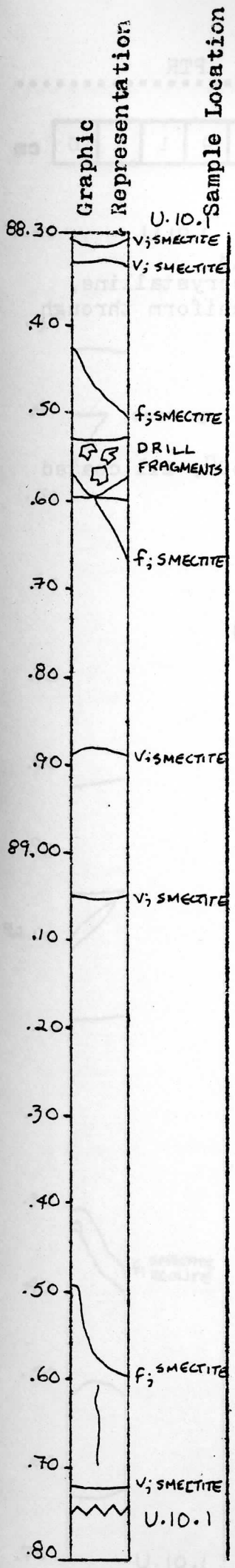
STRUCTURE
Medium-grained, massive basalt of unit 10.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 8831 **cm to** 8975 **cm**

Box 14 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Mostly less than 15°, some 50-60°. Coated with smectite and minor pyrite. A few smectite veinlets are near vertical.

ROCK ALTERATION
None observed.

STRUCTURE

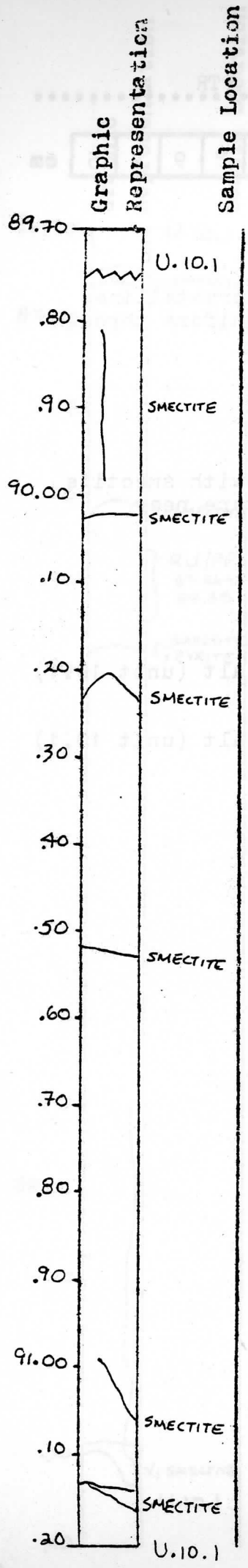
88.31 - 88.53	Medium-grained, massive basalt (unit 10.1)
88.53 - 88.57	Drill fragments.
88.57 - 89.75	Medium-grained, massive basalt (unit 10.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 8975 **cm to** 9120 **cm**

Box 14 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Sparse; mostly subhorizontal, a few about 60°, all coated with smectite.

ROCK ALTERATION
None observed.

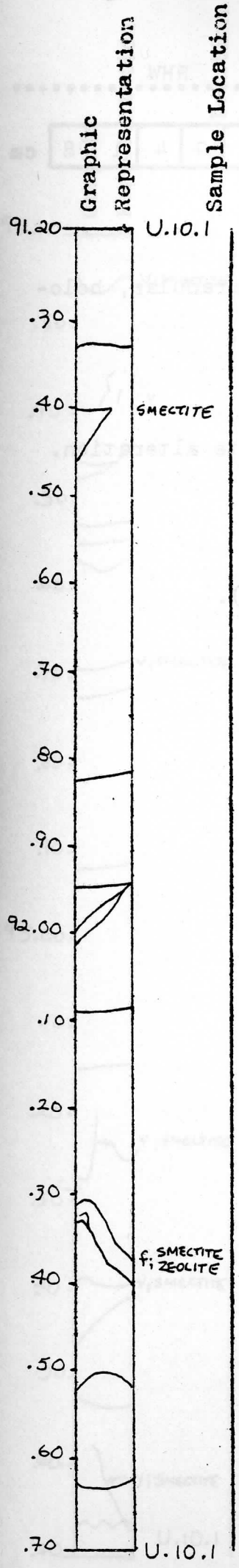
STRUCTURE
Medium-grained, massive basalt (unit 10.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** .....RHW.....

Depth Interval | | 9 | 1 | 2 | 0 | **cm to** | | 9 | 2 | 7 | 0 | **cm**

Box 15 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 10.1
Light grey, medium-grained, aphyric, equigranular, granular, basalt.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Rare fractures and veinlets, high angled (60°) - zeolite alteration in one fracture about 1mm wide.

ROCK ALTERATION
None observed.

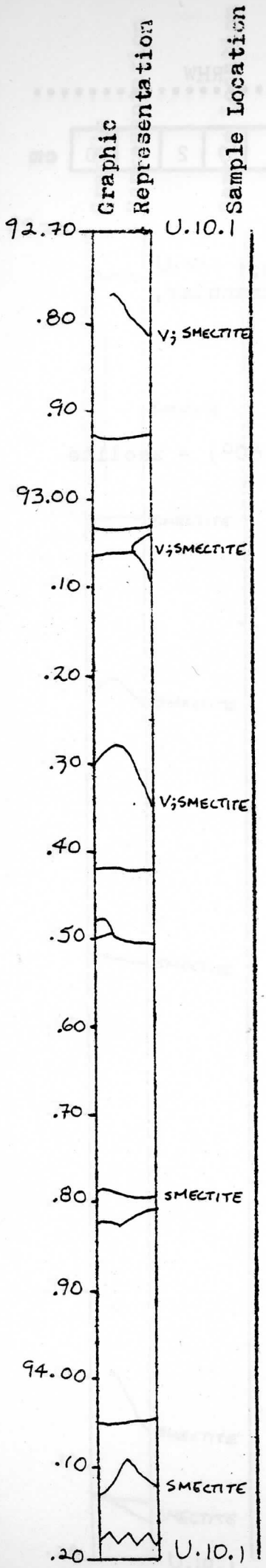
STRUCTURE
Medium-grained, massive basalt (unit 10.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** .....RHW.....

Depth Interval | | 9 | 2 | 7 | 0 | **cm to** | | 9 | 4 | 1 | 8 | **cm**

Box 15 ,Section 2



LITHOLOGY PETROGRAPHY - continues unit 10.1
Light grey, medium-grained, equigranular, granular, holocrystalline, aphyric basalt.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Rare fractures, rarer veinlets with smectite alteration.

ROCK ALTERATION
None observed.

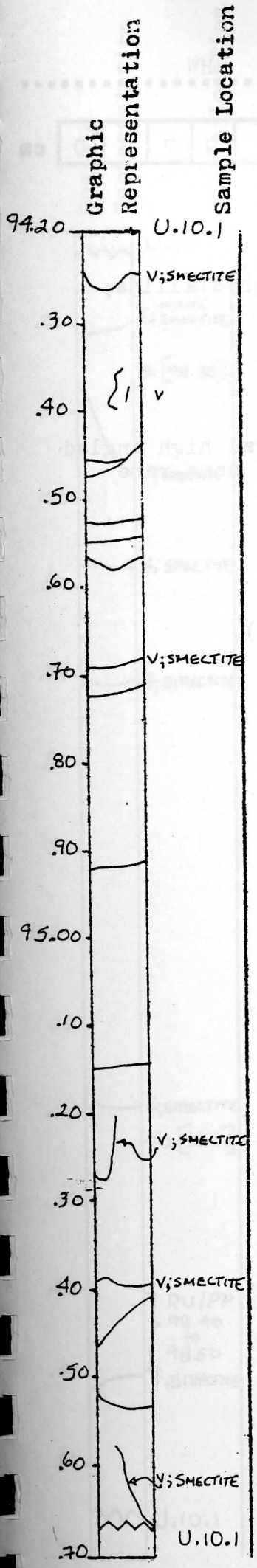
STRUCTURE
Medium-grained, massive basalt (unit 10.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 9418 **cm to** 9567 **cm**

Box 15 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 10.1
Medium-grained, light grey, equigranular, granular, aphyric, holocrystalline basalt.

VESICLES/AMYGDALES
None observed,

FRACTURES - VEINS - BRECCIA
Rare - hairline veinlets and fractures lined with smectite, with some pyrite.

ROCK ALTERATION
None observed.

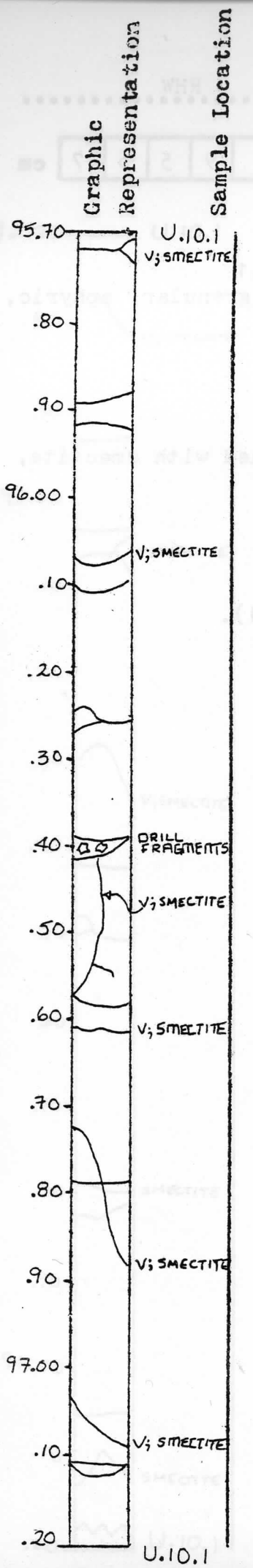
STRUCTURE
Medium-grained, massive basalt (unit 10.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 9567 **cm to** 9720 **cm**

Box 15 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 10.1
Light grey, medium-grained, aphyric, holocrystalline, granular, equigranular basalt.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Some 45° fractures and veinlets, and several high angled (80°) veinlets. Most lined with smectite, some rare pyrite.

ROCK ALTERATION
None observed.

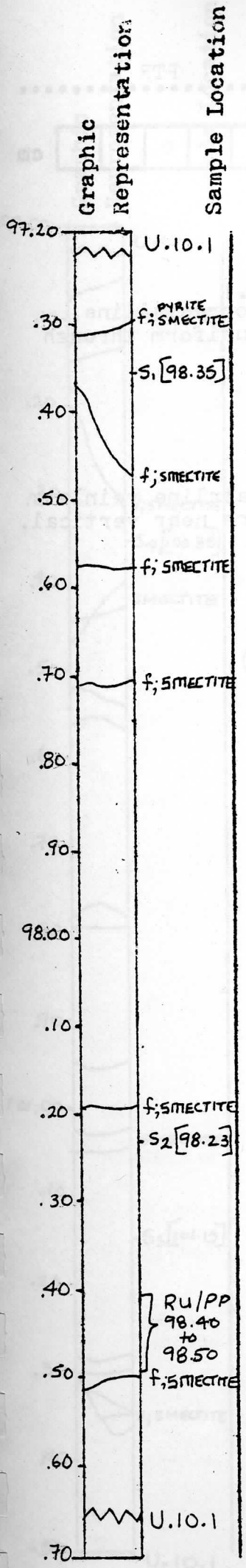
STRUCTURE
Medium-grained, massive basalt (unit 10.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** ..PTR.....

Depth Interval | | 9 | 7 | 2 | 2 | **cm to** | | 9 | 8 | 6 | 6 | **cm**

Box 16 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size is uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Most are subhorizontal, one dips about 65°. All coated with black smectite and some minor pyrite.

ROCK ALTERATION
None observed.

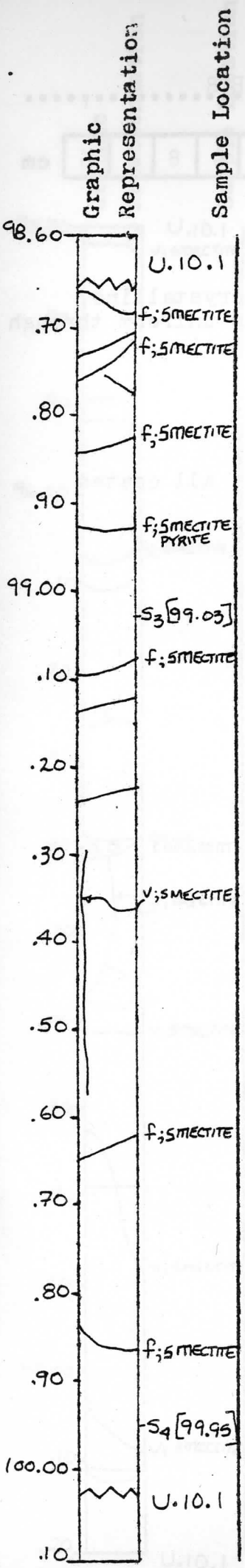
STRUCTURE
Medium-grained, massive basalt (unit 10.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 9866 **cm to** 10003 **cm**

Box 16 , Section 2



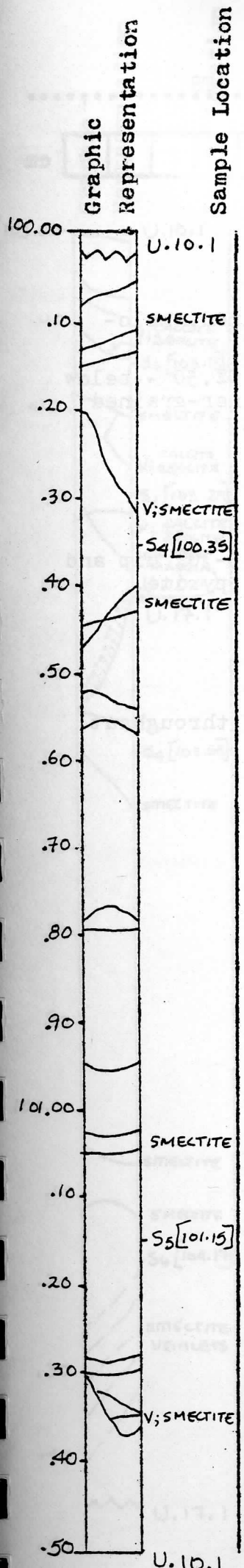
LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Most about 15-20° filled with smectite. Hairline veinlets of smectite also present - some of these are near vertical.

ROCK ALTERATION
None observed.

STRUCTURE
Medium-grained, massive basalt (unit 10.1).



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** .....PTR.....

Depth Interval 1 0 0 0 3 **cm to** 1 0 1 5 3 **cm**

Box 16 , Section 3

LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Most fractures 5-15°, a few 50-60°. All coated with smectite and minor pyrite on some.

ROCK ALTERATION
None observed.

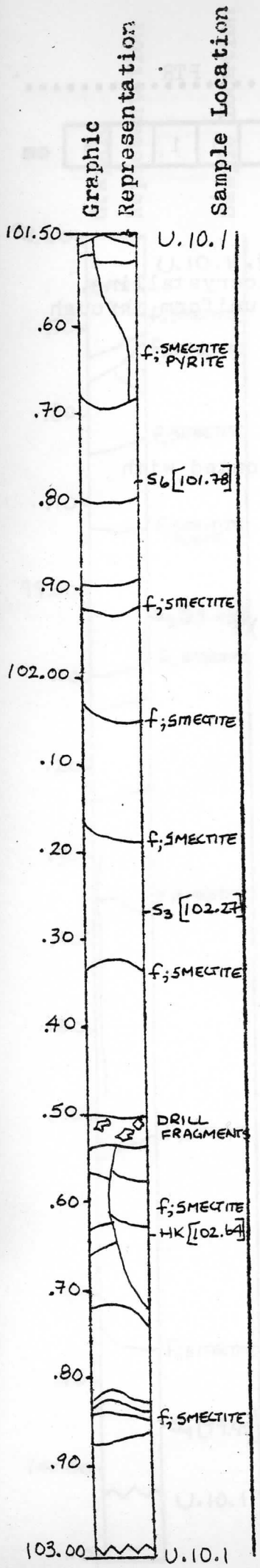
STRUCTURE
Medium-grained, massive basalt (unit 10.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** ....PTR.....

Depth Interval 1 0 1 5 3 **cm to** 1 0 2 9 9 **cm**

Box 16 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 10.1
Grey to greenish-grey, medium- to fine-grained, holocrystalline, aphyric basalt.

Rock is uniformly medium-grained to about 102.50 - below this the rock rapidly becomes darker and finer-grained to base of section. No contacts in section.

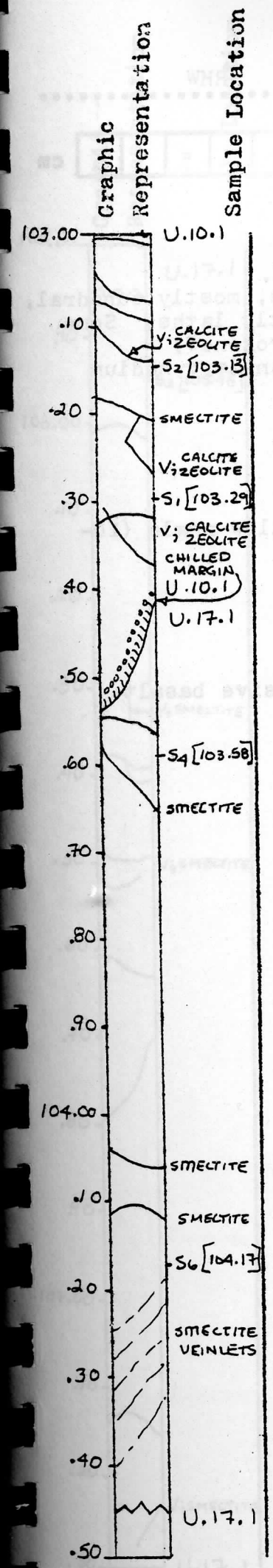
VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Fractures in three groups: subhorizontal, 25-30° dip and 60° dip. All coated with smectite and some pyrite.

ROCK ALTERATION
None observed.

STRUCTURE
Medium-grained, massive basalt (unit 10.1) throughout section.

102.50 - 102.54 Drill fragments.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR .....

Depth Interval 1 0 2 9 9 **cm to** 1 0 4 4 5 **cm**

Box 17 , Section 1

LITHOLOGY PETROGRAPHY - continues unit 10.1
Dark grey, fine-grained, holocrystalline, aphyric basalt. Grain size decreases downward to chilled contact against porphyritic basalt of lower unit. Contact dips about 70°. Clearly an intrusive contact.

103.41 Unit 17.1. Overlain by chilled contact at base of unit 10.1. No grain size change in unit 17.1 near contact.

Greenish-grey, porphyritic basalt with fine- to medium-grained, holocrystalline groundmass. Phenocrysts (15-20%) are plagioclase laths, mostly euhedral though with some rounded grains. Rock is seriate porphyritic with plagioclase crystals, ranging from about 2mm to 1.5cm. Plagioclase has faint greenish cast. Minor dark clinopyroxene is associated with the plagioclase.

Groundmass is microgranular, even grained and medium grey.

Rock is uniform through lower part of section.

VESICLES/AMYGDALES
1cm wide zone of vesicles 1-2mm across at 103.40, runs parallel to chilled contact. Filled with calcite and zeolite?

103.41 1-2%, about 1mm, spherical filled with green smectite.

FRACTURES - VEINS - BRECCIA
Fractures dip 20-40°, coated with smectite. Hairline veinlets of calcite and minor zeolite (?) common.

103.41 Sparse, dip about 15° and 60-70°. Coated with smectite. Many hairline fractures filled with green smectite between 104.17 and 104.45.

ROCK ALTERATION
103.41 Basalt is partly altered to smectite in zone 1cm wide along contact.

STRUCTURE
102.99 - 103.41 Medium-grained, massive basalt (unit 10.

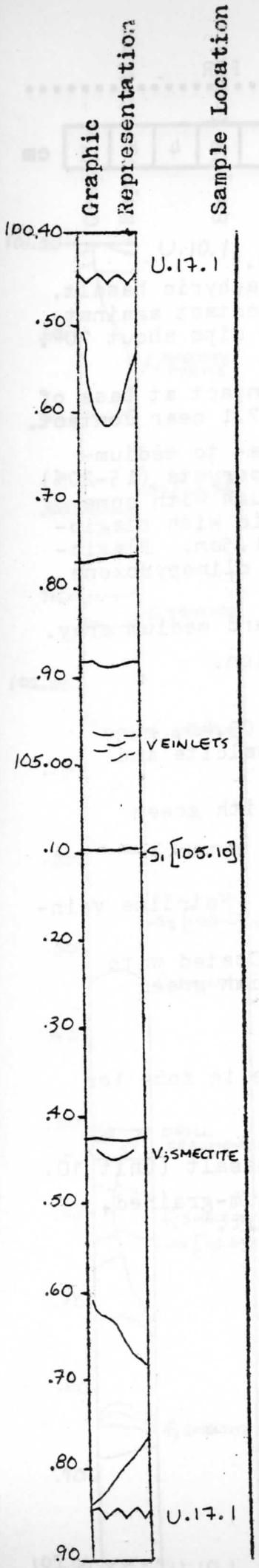
103.41 - 104 45 Unit 17.1 ; Fine- to medium-grained, porphyritic, holocrystalline, massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 1 0 4 4 5 **cm to** 1 0 5 8 5 **cm**

Box 17 ,Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. About 30% phenocrysts, mostly euhedral, varying in size from micro to 1.5cm. Mostly laths. Some phenocrysts of euhedral pyroxene (clinopyroxene?) Groundmass fine-grained, granular, equigranular, medium grey.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Rare fractures and veinlets at either shallow angle (10-20°) or about 60°.

ROCK ALTERATION
None observed.

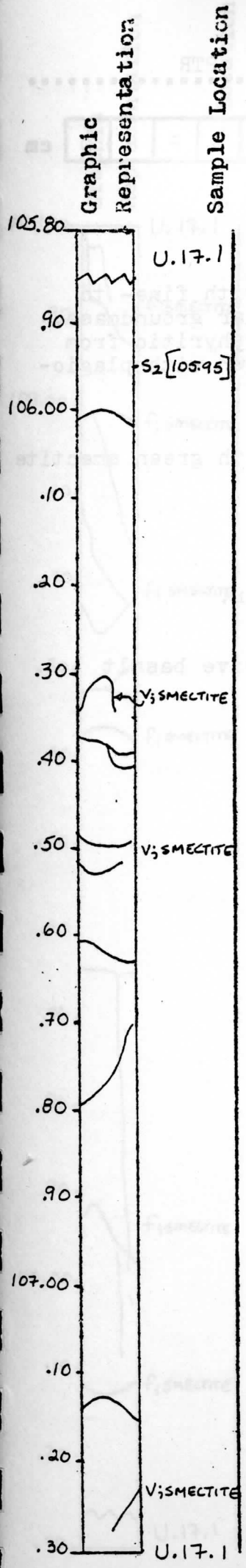
STRUCTURE
Fine- to medium-grained, porphyritic, massive basalt of unit 17.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 1 0 5 8 5 **cm to** 1 0 7 3 0 **cm**

Box 17 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. About 30% plagioclase phenocrysts, minor clinopyroxene(?). Plagioclase laths euhedral, micro to about 1cm. Groundmass, fine-grained, equigranular, granular, holocrystalline, medium grey.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Fractures rare, high angled (70°) or subhorizontal. Smectite coating of most fractures.

ROCK ALTERATION
None observed.

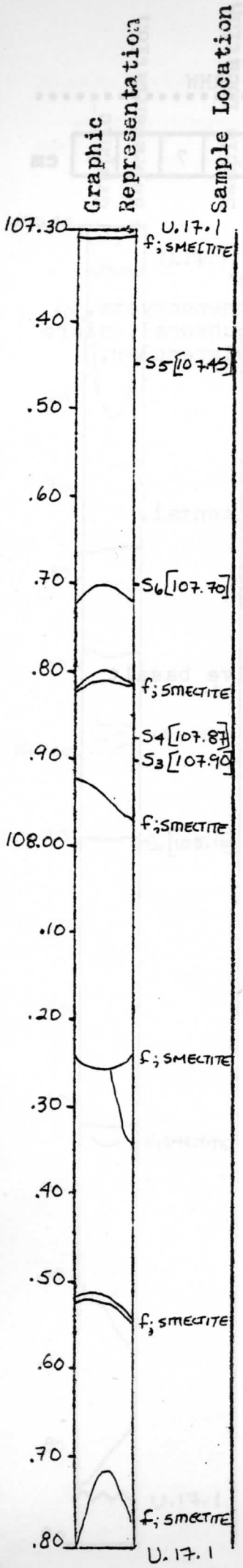
STRUCTURE
Fine- to medium-grained, porphyritic, massive basalt of unit 17.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 10730 **cm to** 10880 **cm**

Box 17 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, porphyritic basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Plagioclase phenocrysts 15-20%, seriate porphyritic from 2mm to 1.5cm. Minor clinopyroxene intergrown with plagioclase.

VESICLES/AMYGDALES
About 1%, 1mm or less, spherical, filled with green smectite

FRACTURES - VEINS - BRECCIA
Fractures mostly 60°, coated with smectite.

ROCK ALTERATION
Fresh, except for greenish stain on feldspar.

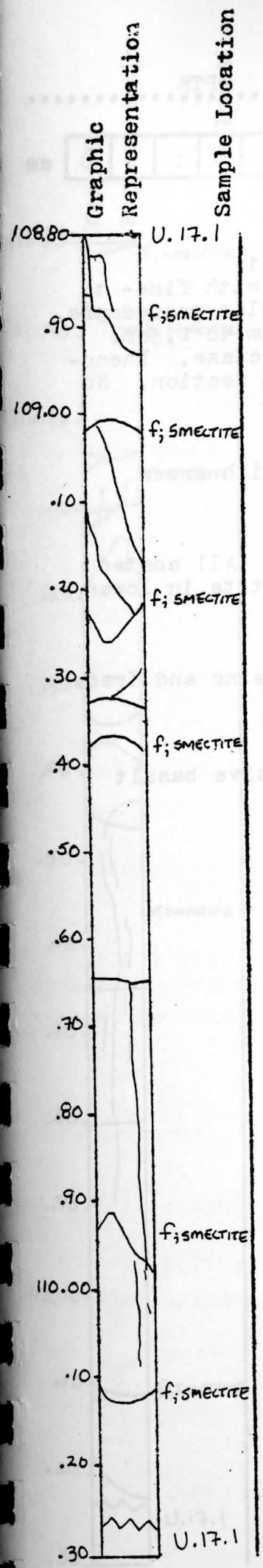
STRUCTURE
Fine- to medium-grained, porphyritic, massive basalt of unit 17.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** ..PTR.....

Depth Interval 1 0 8 8 0 **cm to** 1 1 0 2 7 **cm**

Box 18 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, porphyritic basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Plagioclase phenocrysts 15-20%, seriate porphyritic 2mm-1.5cm; minor clinopyroxene with plagioclase. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
About 1%, 1mm or less, spherical, filled with green smectite.

FRACTURES - VEINS - BRECCIA
More highly fractured than higher cores. Most fractures are steep - about 70°, some about 15°.

ROCK ALTERATION
Minor discolouration along fractures.

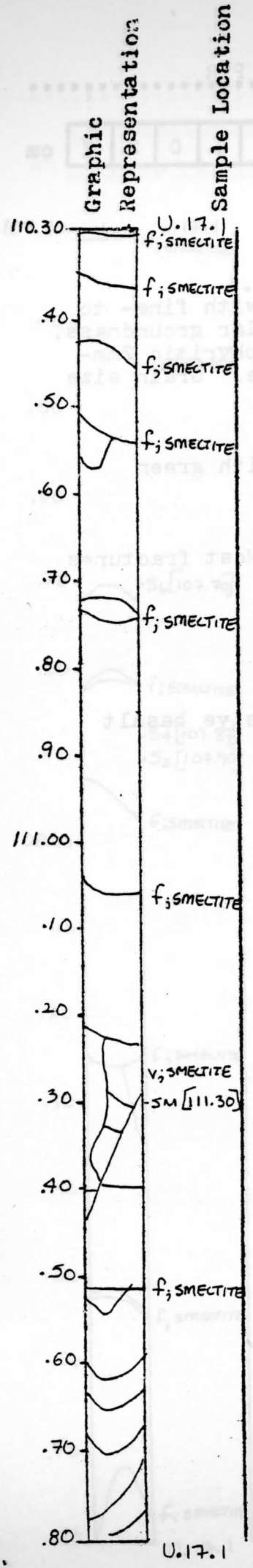
STRUCTURE
Fine- to medium-grained, porphyritic, massive basalt of unit 17.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 110.27 cm to 111.80 cm

Box 18 ,Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, porphyritic basalt with fine- to medium grained, holocrystalline, equigranular groundmass. Plagioclase phenocrysts seriate in size 2mm to 1.5cm. Minor clinopyroxene associated with plagioclase. Phenocrysts 15-20%. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
About 1%, 1mm or less, spherical, filled with green smectite.

FRACTURES - VEINS - BRECCIA
Most fractures less than 20°, some 60-70°. All coated with smectite, many steep veinlets of smectite in lower part of section.

ROCK ALTERATION
Minor smectite alteration along walls of veins and fractures.

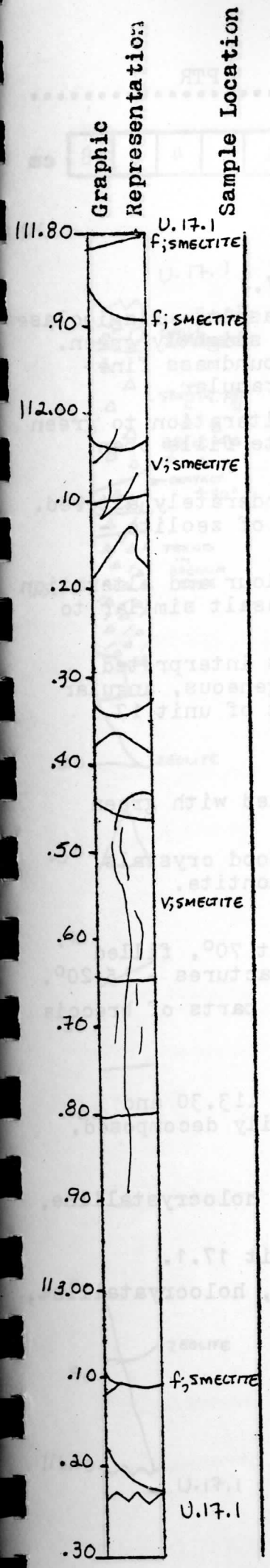
STRUCTURE
Fine- to medium-grained, porphyritic, massive basalt of unit 17.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 1 1 1 8 0 **cm to** 1 1 3 2 4 **cm**

Box 18 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, plagioclase phyric basalt. Plagioclase phenocrysts 15-20%, seriate 2mm to 1.5cm, mostly euhedral laths. Minor clinopyroxene associated with plagioclase. Groundmass fine- to medium-grained, holocrystalline, equigranular.

VESICLES/AMYGDALES
About 1%, 1mm or less, spherical, filled with green smectite.

FRACTURES - VEINS - BRECCIA
Most fractures less than 30° coated with smectite. Veins and veinlets are much steeper - 70-80°, most filled with smectite with minor zeolite.

ROCK ALTERATION
None observed.

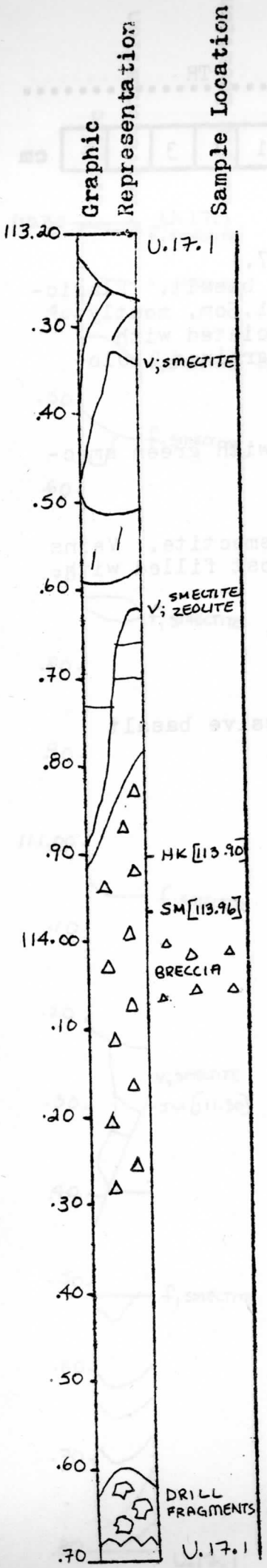
STRUCTURE
Fine- to medium-grained, porphyritic, massive basalt of unit 17.1.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR .....

Depth Interval 1 1 3 2 4 **cm to** 1 1 4 6 8 **cm**

Box 18 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 17.1

Grey to greenish-grey plagioclase,phyric basalt. Plagioclase phenocrysts 15-20%, seriate 2mm to 1.5cm, slightly green. Minor clinopyroxene with plagioclase. Groundmass fine- to medium-grained, holocrystalline, equigranular.

113.78 Zone of brecciation and intense alteration to green smectite and zeolite (laumontite). Zeolite fills open spaces and is later than smectite.

113.95 Rock is somewhat brecciated and moderately altered. Rock is light green, cut by many veinlets of zeolite - hairline to 2mm.

114.30 Brecciation dies out but green colour and alteration continues. Rock is clearly porphyritic basalt similar to upper part of section.

This material continues to next box and is interpreted as altered fault breccia. Fragments homogeneous, angular and highly altered. Still considered part of unit 17.1 based on porphyritic nature.

VESICLES/AMYGDALES

Less than 1%, 1mm or less, spherical, filled with green smectite.

113.87 - 113.93 Large mass of zeolite. Good crystals filling open spaces in rock, probably laumontite.

FRACTURES - VEINS - BRECCIA

Fractures and veinlets mostly steep - about 70°, filled with smectite and minor zeolite. A few fractures - 15-20°.

133.78 Almost net veining with zeolite in parts of breccia zone.

ROCK ALTERATION

Upper part to 113.80 quite fresh. Between 113.30 and 113.93 rock highly altered, porous and easily decomposed.

STRUCTURE

113.24 - 113.95 Fine- to medium-grained, holocrystalline, equigranular, massive basalt (unit 17.1).

113.95 - 114.30 Brecciated segment of unit 17.1.

114.30 - 114. 62 Fine- to medium-grained, holocryatalline, equigranular, massive basalt (unit 17.1).

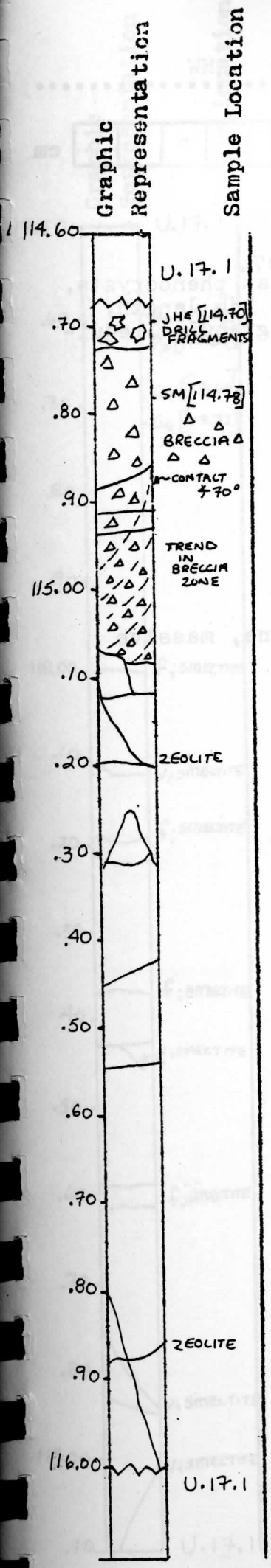
114.62 - 114.68 Drill fragments.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 1 1 4 6 8 **cm to** 1 1 6 0 0 **cm**

Box 19 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Top of the unit consist of altered breccia (fault?) zone. Basalts altered to olive green, low density material. Fine grained "mylonite", white zeolite composition (laumontite) in the main. Alteration gradually fades out, grading back into porphyritic basalt. Phenocrysts of plagioclase (laths), fairly euhedral, micro to 1.5cm, about 25%. Groundmass fine-grained, granular, equigranular. Basalt is holocrystalline.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Fractures more common in brecciated section, rare in unaltered section. Low angled (15-20°) and high angled (70°).

ROCK ALTERATION
Alteration most intense in upper section, grading gradually out by 115.30.

STRUCTURE
114.68 - 114.72 Drill fragments.

114.72 - 115.07 Brecciated segment of unit 17.1.

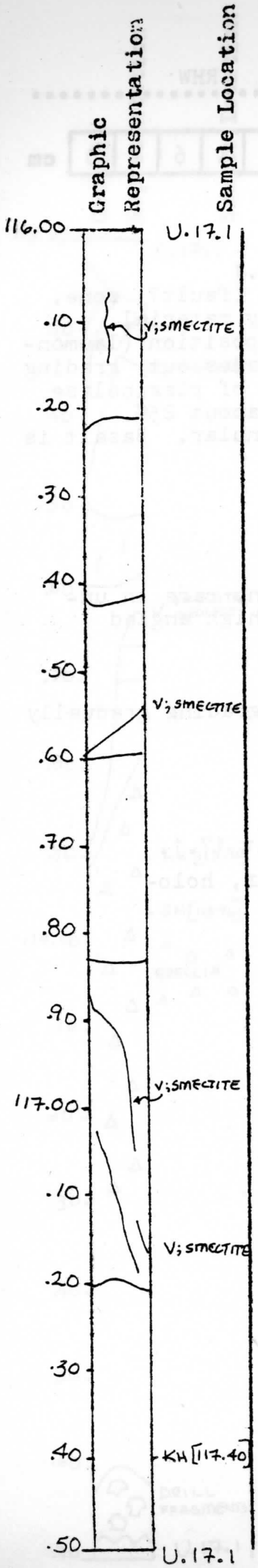
115.07 - 116.00 Fine-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 11600 **cm to** 11750 **cm**

Box 19 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Laths of plagioclase as phenocrysts, minor clinopyroxene. Plagioclase micro to 1cm length, euhedral (25%). Groundmass fine-grained, granular, equigranular, holocrystalline basalt.

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Smectite lining fractures and in veinlets.

ROCK ALTERATION
None observed.

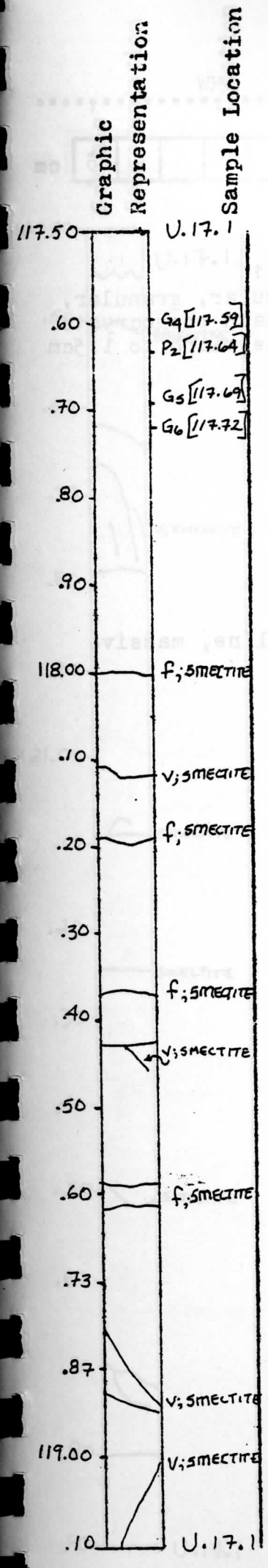
STRUCTURE
Fine-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** .....RHW.....

Depth Interval 1 1 7 5 0 **cm to** 1 1 9 1 0 **cm**

Box 19 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 17.1

Porphyritic basalt. Medium grey, granular, fine-grained matrix. Holocrystalline. Plagioclase laths as phenocrysts (25-30%). Euhedral, micro to 1.5cm length. Rare pyroxene.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

Almost absent. Most fractures lined with smectite. Several short veinlets, one high angled (70°).

ROCK ALTERATION

None observed.

STRUCTURE

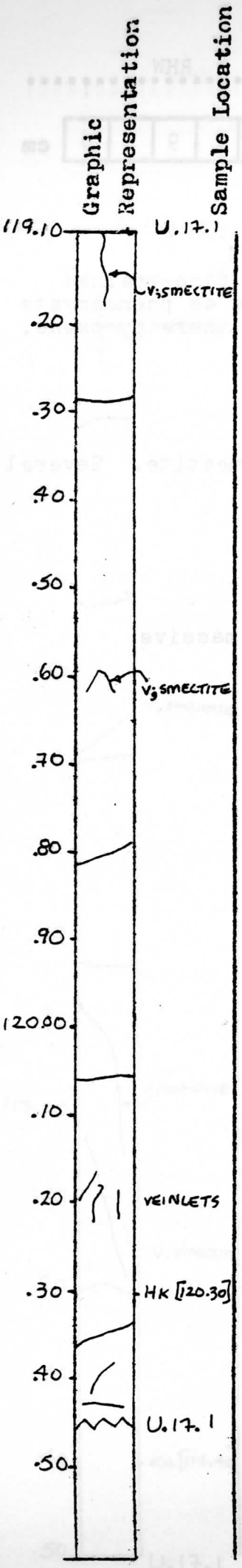
Fine- to medium-grained, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 1 1 9 1 0 **cm to** 1 2 0 4 5 **cm**

Box 19 ,Section 4



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Medium grey, equigranular, granular, holocrystalline groundmass. Plagioclase lath phenocrysts with pyroxene (rare). Euhedral plagioclase micro to 1.5cm length (25-30%).

VESICLES/AMYGDALES
None observed.

FRACTURES - VEINS - BRECCIA
Rare. Fractures lined with smectite.

ROCK ALTERATION
None observed.

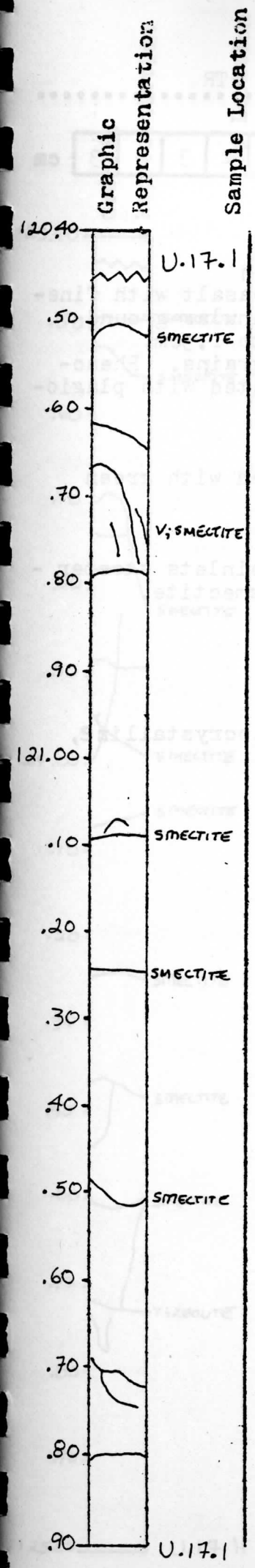
STRUCTURE
Medium-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** ....PTR.....

Depth Interval 1 2 0 4 5 **cm to** 1 2 1 9 0 **cm**

Box 20 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Plagioclase is seriate 2mm to 1.5cm, euhedral laths, with a few irregular crystals; a few black clinopyroxene crystals associated with plagioclase. Grain size uniform through section. No contacts.

VESICLES/AMYGDALES
Less than 1%, 1mm or less, spherical, filled with green smectite.

FRACTURES - VEINS - BRECCIA
Most fractures are less than 20°, one about 40°; all coated with smectite. A few hairline veinlets of smectite dip about 70-80°.

ROCK ALTERATION
None observed.

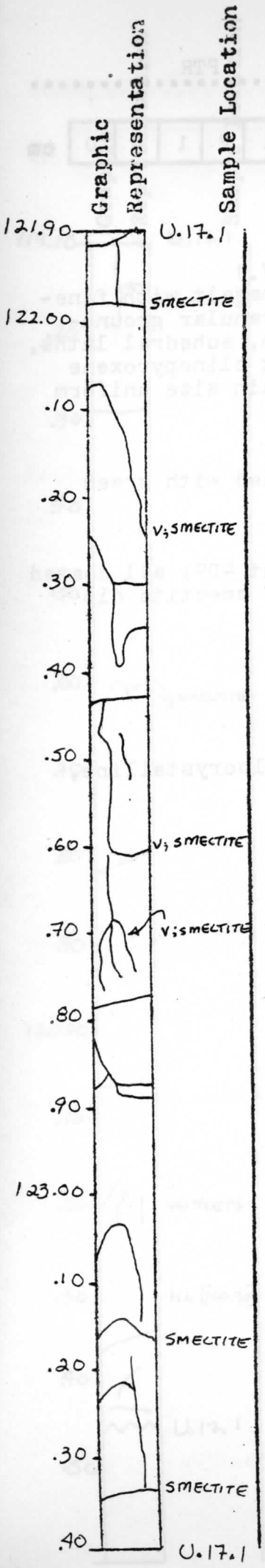
STRUCTURE
Fine- to medium-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 1 2 1 9 0 **cm to** 1 2 3 4 3 **cm**

Box 20 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Plagioclase seriate from about 2mm to 1.5cm, euhedral laths; a few anhedral to rounded grains. Phenocrysts 15-20%. Minor clinopyroxene associated with plagioclase.

VESICLES/AMYGDALES
Less than 1%, 1mm or less, spherical, filled with green smectite.

FRACTURES - VEINS - BRECCIA
Fractures mostly less than 20°, smectite veinlets steeper - about 70-80°. Fractures also coated with smectite.

ROCK ALTERATION
None observed.

STRUCTURE
Fine- to medium-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

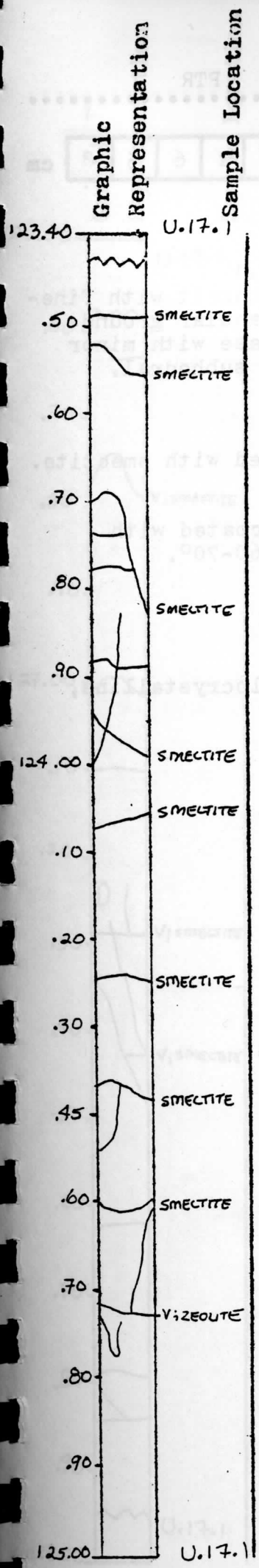
ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 1 2 3 4 3 **cm to** 1 2 5 0 1 **cm**

Box 20 , Section3

Depth interval adjusted.



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Plagioclase phenocrysts euhedral to subhedral, seriate 2mm to 1.5cm and make up 15-20% of rock. About 2% clinopyroxene intergrown with plagioclase.

VESICLES/AMYGDALES
Less than 1%, 1mm or less, spherical, filled with green smectite.

FRACTURES - VEINS - BRECCIA
Fractures mostly less than 20°, some 50-60°. All coated with smectite. A few veinlets with smectite and zeolite are about 70-80°.

ROCK ALTERATION
None observed.