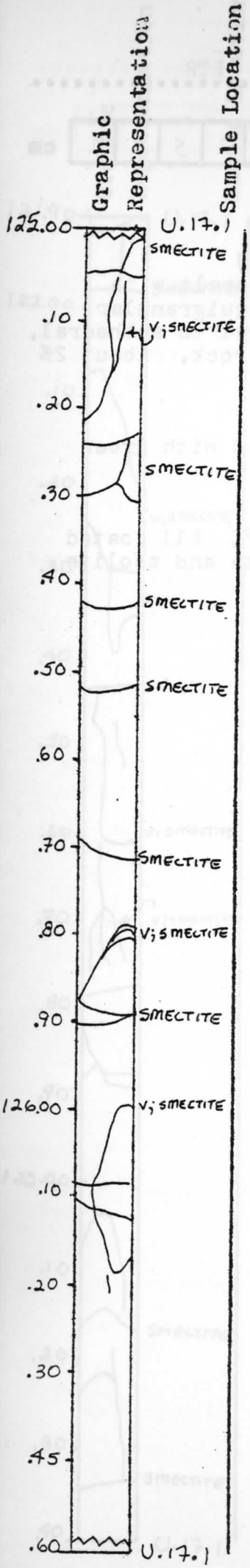
ICELAND RESEARCH DRILLING PROJECT

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

Depth Interval 1 2 5 0 1 **cm to** 1 2 6 5 8 **cm**

Box 20 , Section 4

Depth adjusted at base.



LITHOLOGY PETROGRAPHY - continues unit 17.1

Grey to greenish-grey, plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Phenocrysts 15-20%, mostly plagioclase with minor clinopyroxene. Plagioclase is euhedral to subhedral. Seriate 2-15mm, fresh.

VESICLES/AMYGDALES

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

FRACTURES - VEINS - BRECCIA

Most fractures 15-20°, a few to 35°. All coated with smectite. Smectite veinlets common, most 60-70°.

ROCK ALTERATION

None observed.

STRUCTURE

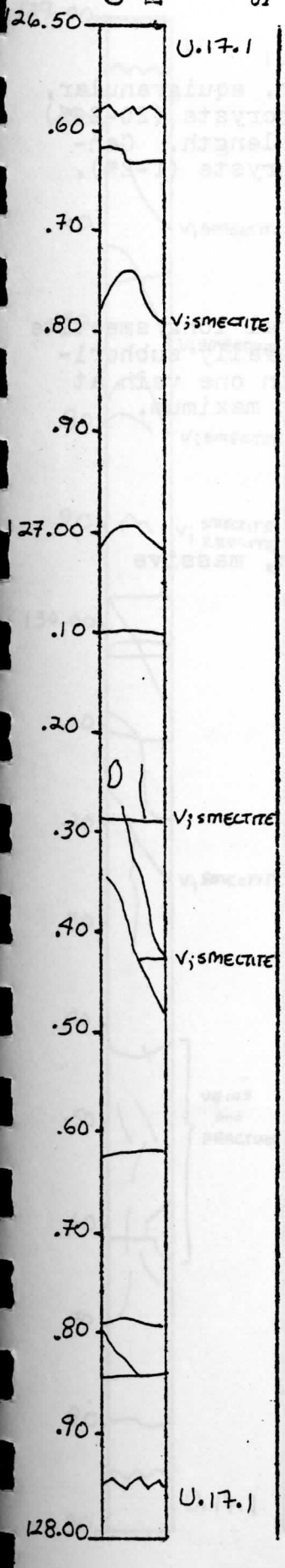
Fine- to medium-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 12658 **cm to** 12795 **cm**

Box 21 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Groundmass granular, fine-grained, holocrystalline, medium grey. Phenocrysts - clinopyroxene (rare) and euhedral plagioclase laths (20-25%) micro to 1.5cm length.

VESICLES/AMYGDALES
Rare small, dark amygdales.

FRACTURES - VEINS - BRECCIA
Rare - fractures lined with smectite. Generally horizontal fracture, one at 55-60°. Several high angled veinlets (75°).

ROCK ALTERATION
None observed.

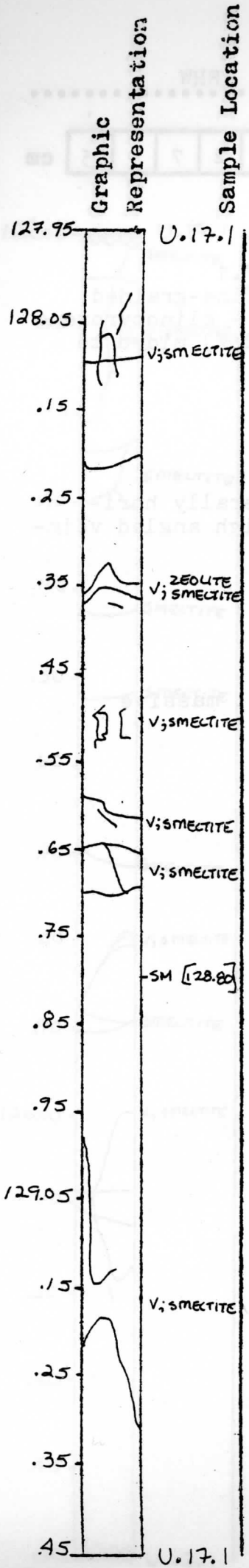
STRUCTURE
Fine-grained, holocrystalline, porphyritic, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 12795 **cm to** 12945 **cm**

Box 21 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Groundmass of granular, equigranular, holocrystalline, medium grey basalt. Phenocrysts (20-25%) mainly plagioclase laths micro to 1.5cm in length. Generally euhedral. Rare clinopyroxene phenocrysts (1-2%).

VESICLES/AMYGDALES
Rare, small, dark amygdales.

FRACTURES - VEINS - BRECCIA
Fractures rare, lined with smectite. Several long smectite veinlets at high angles (70°). Cracks generally subhorizontal (10-15° maximum). Zeolite filling in one vein at 128.32; Probably laumontite. 1cm thick at maximum.

ROCK ALTERATION
None observed.

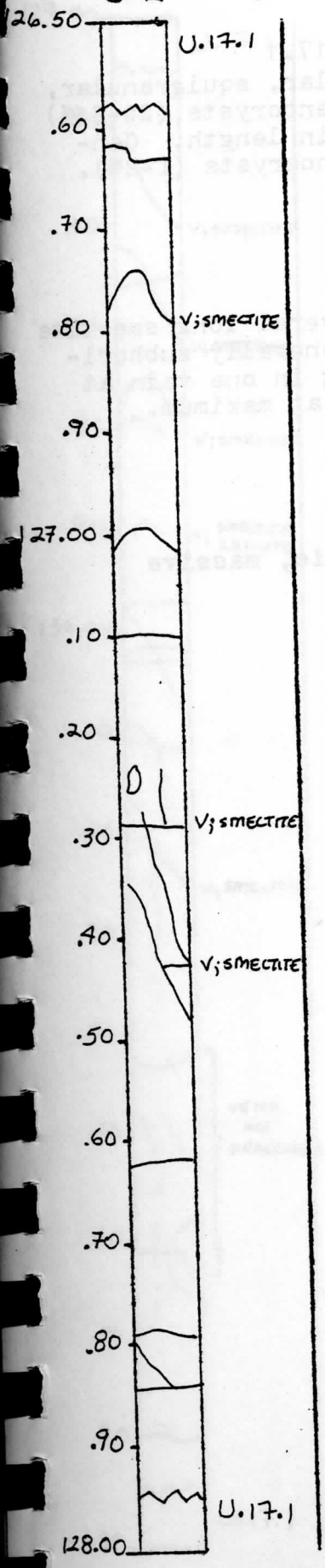
STRUCTURE
Equigranular, holocrystalline, porphyritic, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 12658 cm to 12795 cm

Box 21 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Groundmass granular, fine-grained, holocrystalline, medium grey. Phenocrysts - clinopyroxene (rare) and euhedral plagioclase laths (20-25%) micro to 1.5cm length.

VESICLES/AMYGDALES
Rare small, dark amygdales.

FRACTURES - VEINS - BRECCIA
Rare - fractures lined with smectite. Generally horizontal fracture, one at 55-60°. Several high angled veinlets (75°).

ROCK ALTERATION
None observed.

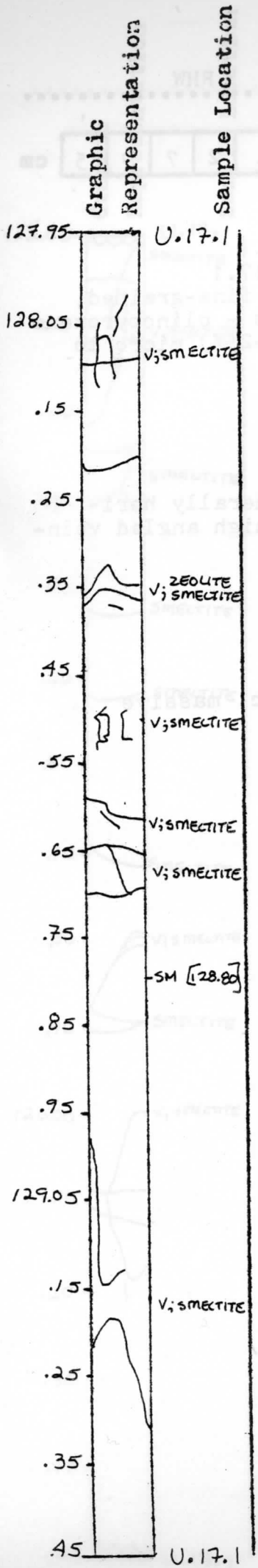
STRUCTURE
Fine-grained, holocrystalline, porphyritic, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 1 2 7 9 5 **cm to** 1 2 9 4 5 **cm**

Box 21 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Groundmass of granular, equigranular, holocrystalline, medium grey basalt. Phenocrysts (20-25%) mainly plagioclase laths micro to 1.5cm in length. Generally euhedral. Rare clinopyroxene phenocrysts (1-2%).

VESICLES/AMYGDALES
Rare, small, dark amygdales.

FRACTURES - VEINS - BRECCIA
Fractures rare, lined with smectite. Several long smectite veinlets at high angles (70°). Cracks generally subhorizontal (10-15° maximum). Zeolite filling in one vein at 128.32; Probably laumontite. 1cm thick at maximum.

ROCK ALTERATION
None observed.

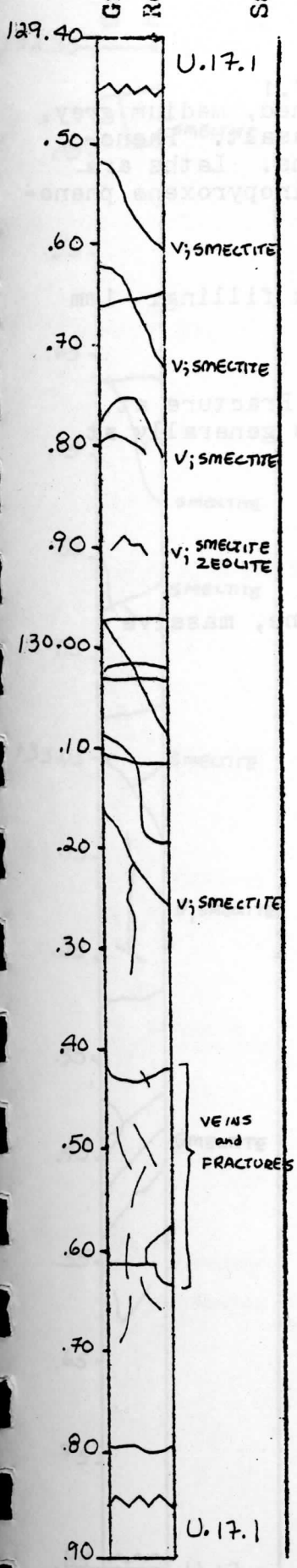
STRUCTURE
Equigranular, holocrystalline, porphyritic, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 12945 **cm to** 13085 **cm**

Box 21 , Section 3



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Groundmass fine-grained, medium grey, holocrystalline, granular, equigranular basalt. Phenocrysts of plagioclase, euhedral laths generally. About 20-25% volume. Rare clinopyroxene phenocrysts (1-2%). Plagioclase phenocrysts micro to 1.5cm length.

VESICLES/AMYGDALES
Rare - small, dark amygdales.

FRACTURES - VEINS - BRECCIA
Fractures generally subhorizontal (10° maximum). Veinlets at high angles (65°), "swarm" at 130.50 to 130.60. Generally hairline to 2-3mm. Fractures are smectite lined.

ROCK ALTERATION
None observed.

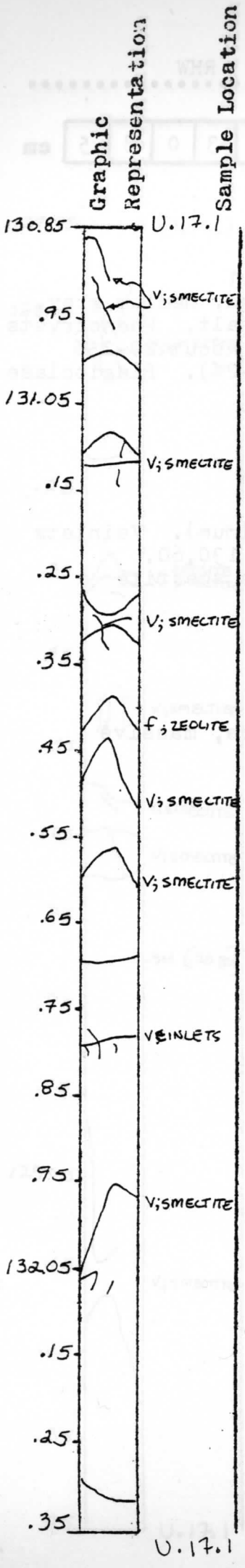
STRUCTURE
Fine-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 13085 **cm to** 13235 **cm**

Box 21 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Groundmass fine-grained, medium grey, holocrystalline, granular, equigranular basalt. Phenocrysts (20-25%) of mostly plagioclase laths. Laths are euhedral, micro to 1.5cm length. Rare clinopyroxene phenocrysts (1-2%). Several mm's across.

VESICLES/AMYGDALES
Rare small amygdales or vesicles with dark filling. 1mm across.

FRACTURES - VEINS - BRECCIA
Fractures subhorizontal to about 35-40°. Fracture at 131.40 zeolitized (laumontite?). Veinlets generally at higher angles (70°), hairline.

ROCK ALTERATION
None observed.

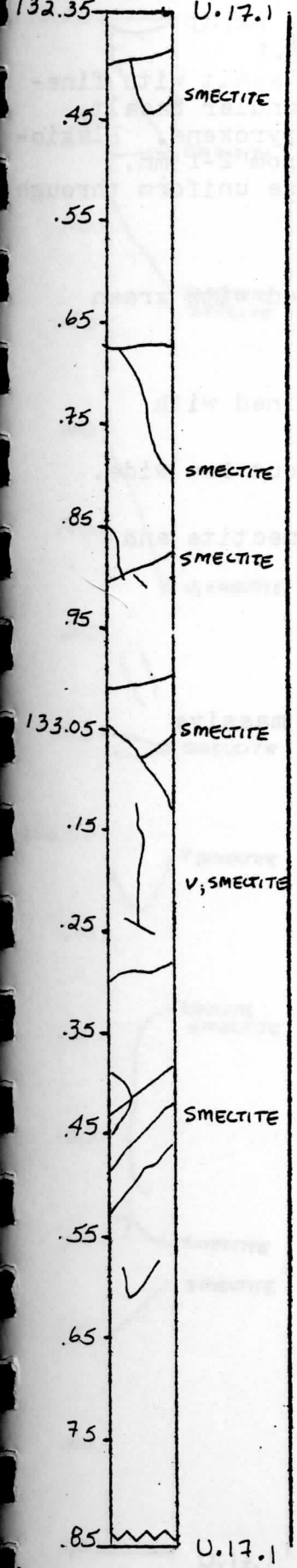
STRUCTURE
Fine-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

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

Depth Interval 13235 **cm to** 13384 **cm**

Box 22 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Phenocrysts 15-20% mostly plagioclase which is seriate 2-15mm and mostly euhedral to subhedral laths. Clinopyroxene is about 2% and is angular. Crystals intergrown with plagioclase.

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

FRACTURES - VEINS - BRECCIA
Two sets of fractures: one about 20°, the other 50-60°, all filled with smectite. Smectite veinlets also about 60°.

ROCK ALTERATION
None observed.

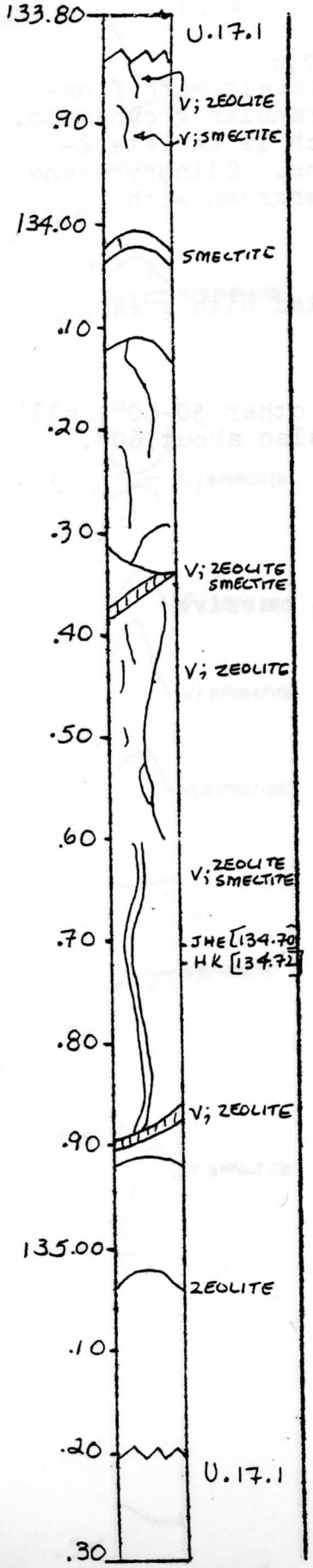
STRUCTURE
Fine- to medium-grained, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 13384 **cm to** 13520 **cm**

Box 22 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey, plagioclase-phyric basalt with fine- to medium-grained, holocrystalline, equigranular basalt. Phenocrysts 15-20% plagioclase, 1-2% clinopyroxene. Plagioclase euhedral to subhedral laths seriate from 2-15mm. Clinopyroxene 2-3mm and angular. Grain size uniform through section. No contacts.

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

FRACTURES - VEINS - BRECCIA
Fractures subhorizontal or 40-50°. Most lined with smectite and some zeolite.

134.35 - 134.40 Zeolite-smectite vein, about 1cm wide. Zeolite probably laumontite.

134.61 - 134.53 Nearly vertical vein of smectite and zeolite, 5-10mm wide.

ROCK ALTERATION
None observed.

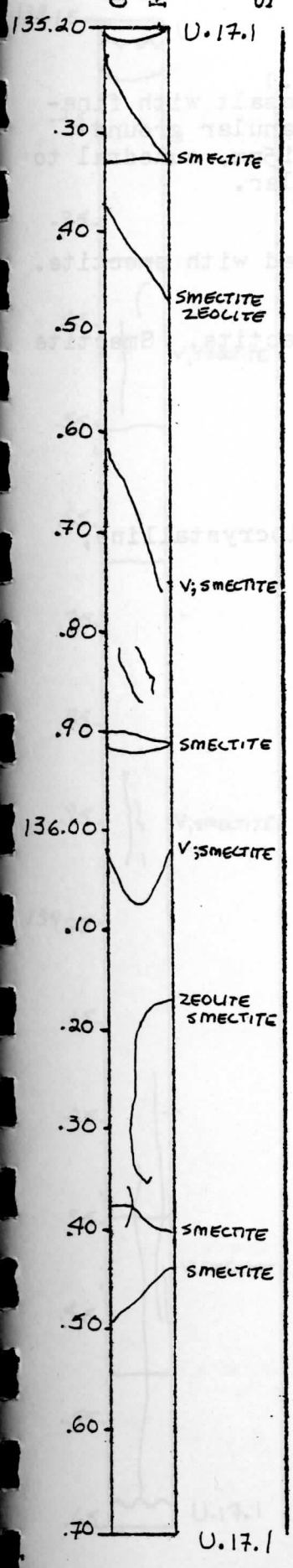
STRUCTURE
Fine- to medium-grained, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** PTR

Depth Interval 135.20 **cm to** 136.70 **cm**

Box 22 , Section 3



LITHOLOGY PETROGRAPHY -continues unit 17.1
Grey to greenish-grey plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular basalt. Plagioclase phenocrysts 15-20%, clinopyroxene 1-2%. Plagioclase euhedral to subhedral laths seriate 2-15mm. Clinopyroxene about 2-3mm, anhedral. Grain size uniform through section. No contacts.

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

FRACTURES - VEINS - BRECCIA
Fractures less than 20° and about 60°. Coated with smectite and minor zeolite. Veinlets of smectite and zeolite are steep - about 70-80°.

ROCK ALTERATION
None observed.

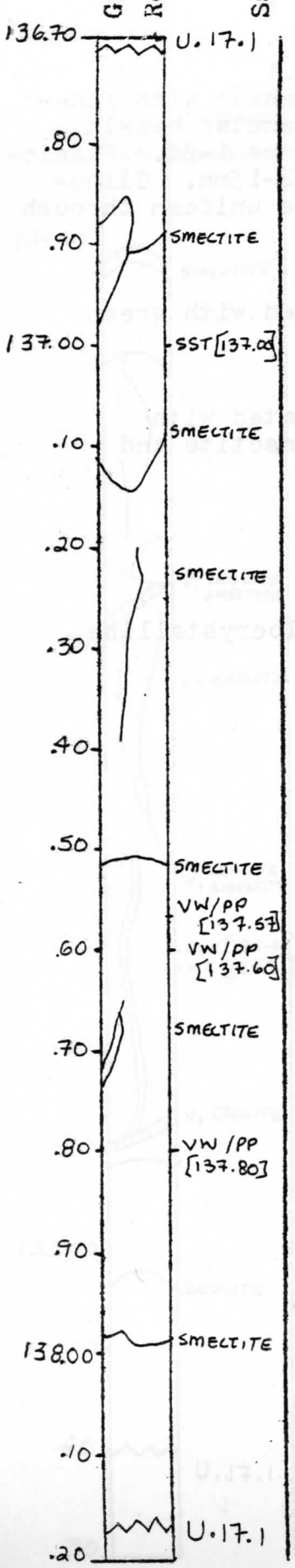
STRUCTURE
Fine- to medium-grained, equigranular, holocrystalline, massive basalt (unit 17.1).

ICELAND RESEARCH DRILLING PROJECT

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

Depth Interval 136.71 cm to 138.17 cm

Box 22 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 17.1
Grey to greenish-grey plagioclase phyric basalt with fine- to medium-grained, holocrystalline, equigranular groundmass. Plagioclase 15-20%, seriate from 2-15mm, euhedral to subhedral laths. Clinopyroxene 1-2%, angular.

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

FRACTURES - VEINS - BRECCIA
Fractures about 20° and 60°, coated with smectite. Smectite veinlets 60-70°.

ROCK ALTERATION
None observed.

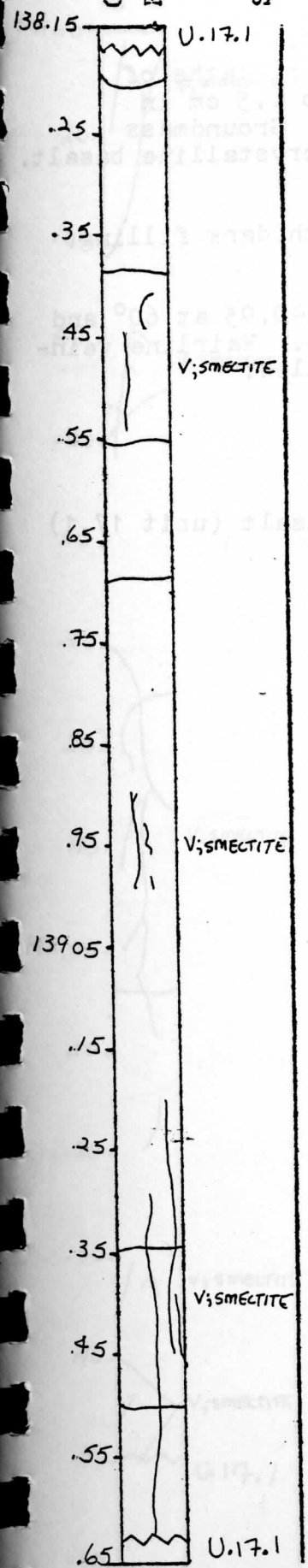
STRUCTURE
Fine- to medium-grained, equigranular, holocrystalline, massive basalt.

ICELAND RESEARCH DRILLING PROJECT

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

Depth Interval 1 3 8 1 7 **cm to** 1 3 9 6 3 **cm**

Box 23 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic Basalt. Groundmass medium grey, equigranular, granular, holocrystallinebasalt. Phenocrysts of plagioclase (laths) micro to 1.5cm length, euhedral. Rare clinopyroxene (1-2%). Phenocrysts 20-25%.

VESICLES/AMYGDALES
Rare small (1-2mm) vesicles or amygdales with dark filling.

FRACTURES - VEINS - BRECCIA
Fractures subhorizontal (0-10°) and subvertical (75-90°) lined with smectite. Veinlets generally high angled (75-90°) - hairline, smectite filled.

ROCK ALTERATION
None observed.

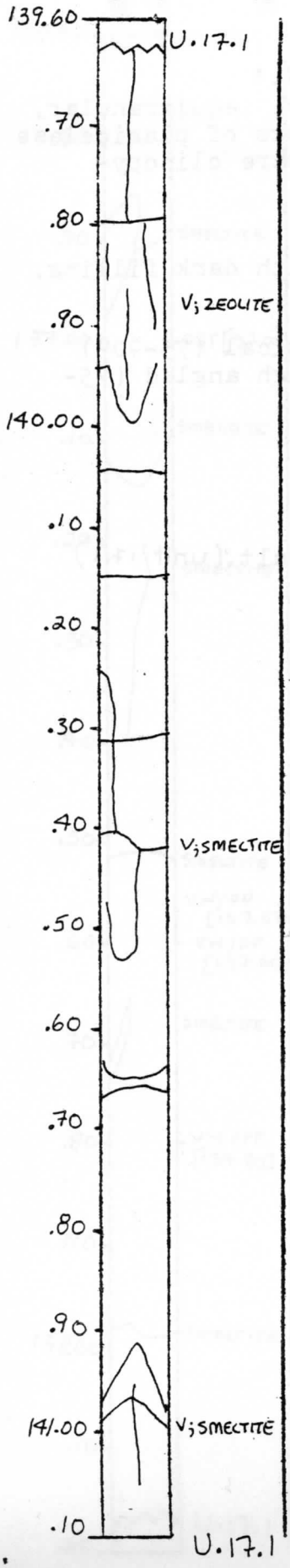
STRUCTURE
Equigranular, holocrystalline, massive basalt.(unit 17.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 13963 cm to 14110 cm

Box 23 , Section 2



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic Basalt. Phenocrysts (20-25%) of laths of plagioclase, euhedral in general, micro to 1.5 cm in length. Rare clinopyroxene 1-2mm (1-2%). Groundmass granular, equigranular, medium grey, holocrystalline basalt.

VESICLES/AMYGDALES
Rare small (1mm) vesicles or amygdales with dark filling.

FRACTURES - VEINS - BRECCIA
Fractures generally subhorizontal except 140.95 at 60° and top at 90°. Generally lined with smectite. Hairline veinlets at high angles (80-90°), smectite filled.

ROCK ALTERATION
None observed.

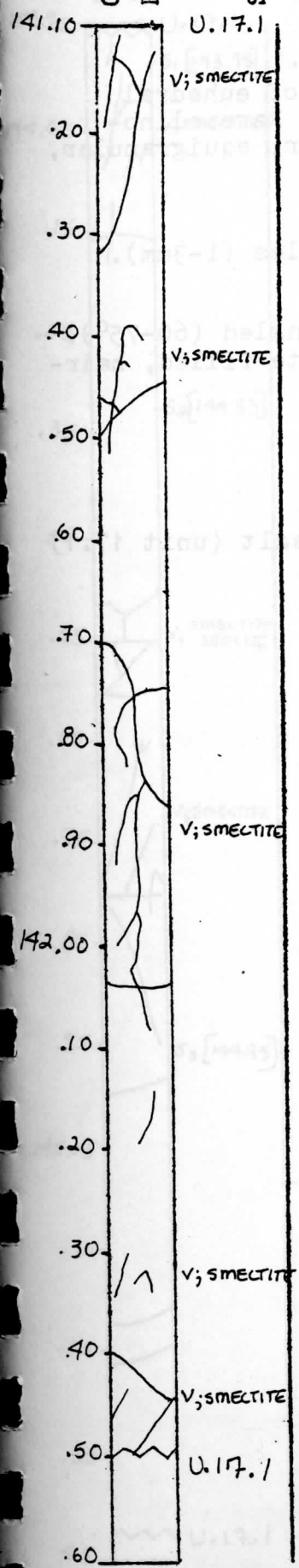
STRUCTURE
Equigranular, holocrystalline, massive basalt (unit 17.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 14110 **cm to** 14250 **cm**

Box 23 , Section 3



LITHOLOGY PETROGRAPHY -continues unit 17.1
Porphyritic basalt. Phenocrysts (20-25%), mainly laths of plagioclase, micro to 1.5cm in length, euhedral. Rare clinopyroxene (1-2mm) (1-2%). Groundmass granular, equigranular, holocrystalline, light grey basalt.

VESICLES/AMYGDALES
Rare vesicles and amygdales with dark filling.

FRACTURES - VEINS - BRECCIA
Fractures vary in dip, subhorizontal, 45° and high angled (65-80°) lined with smectite. Veinlets generally high angled (75-90°), hairline and smectite filled.

ROCK ALTERATION
None observed.

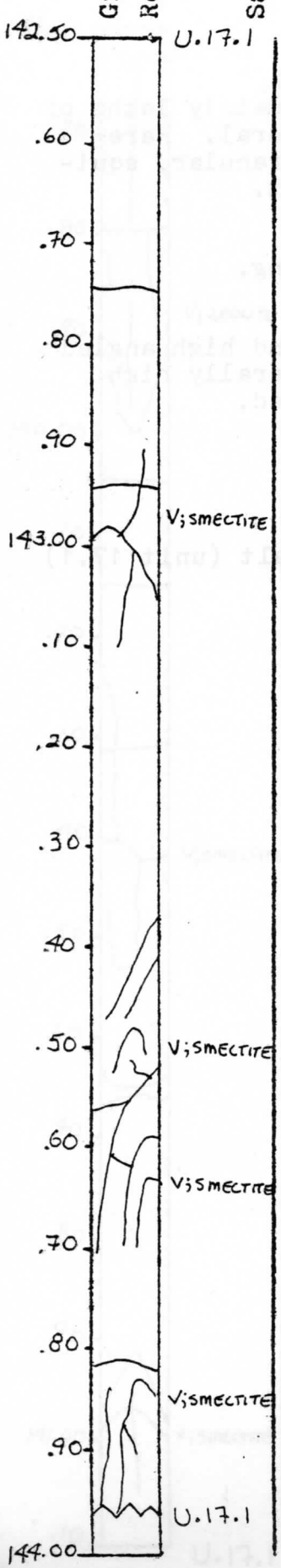
STRUCTURE
Equigranular, holocrystalline, massive basalt (unit 17.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 142.50 **cm to** 143.96 **cm**

Box 23 , Section 4



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Phenocrysts (20-25%) of euhedral plagioclase laths, micro to 1.5cm length. Rare clinopyroxene 2-3mm (1-2%). Groundmass granular, equigranular, holocrystalline, medium grey basalt.

VESICLES/AMYGDALES
Rare small vesicles and dark filled amygdales (1-3mm).

FRACTURES - VEINS - BRECCIA
Fractures subhorizontal (0-10°) and high angled (60-75°). Smectite lined generally. Veinlets smectite filled, hairline.

ROCK ALTERATION
None observed.

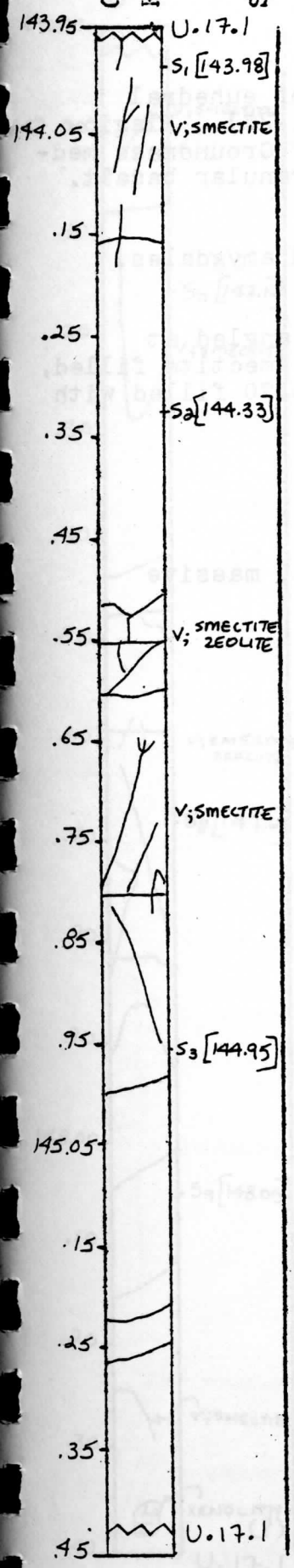
STRUCTURE
Equigranular, holocrystalline, massive basalt (unit 17.1)

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description **Observer** RHW

Depth Interval 143.96 **cm to** 145.43 **cm**

Box 24 , Section 1



LITHOLOGY PETROGRAPHY - continues unit 17.1
Porphyritic basalt. Phenocrysts (20-25%) of plagioclase laths (euhedral), micro to 1.5cm in length. Groundmass granular, equigranular, holocrystalline, medium grey basalt.

VESICLES/AMYGDALES
Rare small (1-2mm) vesicles and dark filled amygdales.

FRACTURES - VEINS - BRECCIA
Fractures subhorizontal to about 30°. Veinlets hairline, smectite filled, generally high angled (70-90°).

ROCK ALTERATION
None observed.

STRUCTURE
Equigranular, holocrystalline, porphyritic, massive basalt (unit 17.1).