

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

ObserverJM.....

Depth Interval

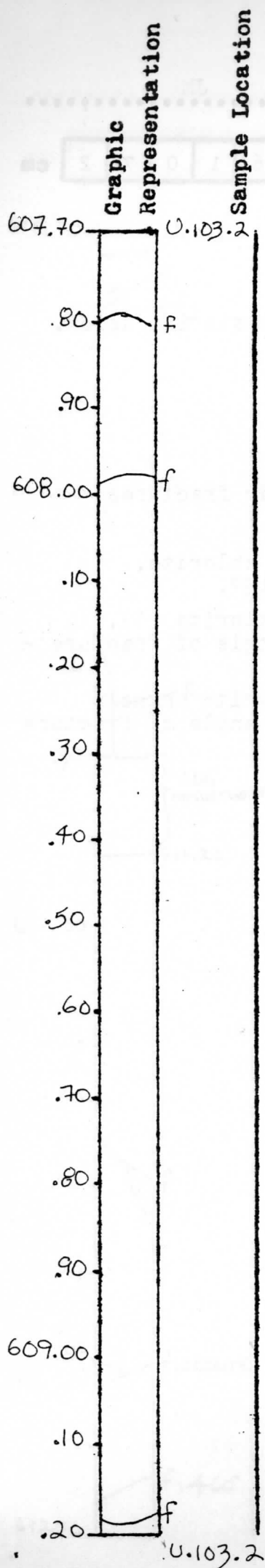
6 0 7 7 0

cm to

6 0 9 2 0

cm

Box 104 , Section 3



LITHOLOGY PETROGRAPHY

Fine-grained, aphyric, greenish-grey diabasic intrusion.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

607.80 Fracture - hairline.

607.98 Fracture - minor mineralization, green chlorite, white zeolite.

ROCK ALTERATION

None observed.

STRUCTURE

Unit 104.3 is massive.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

ObserverJM.....

Depth Interval

6 0 7 7 0

cm to

6 0 9 2 0

cm

Box 104 , Section 3

LITHOLOGY PETROGRAPHY

Fine-grained, aphyric, greenish-grey diabasic intrusion.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

607.80 Fracture - hairline.

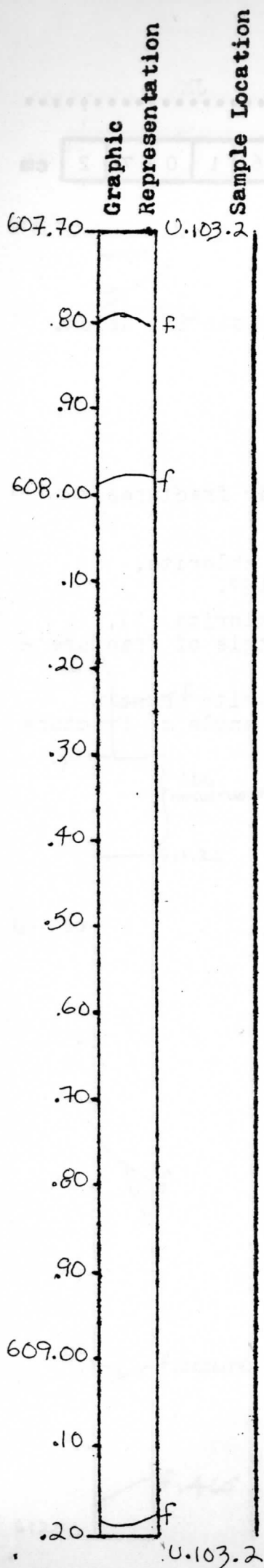
607.98 Fracture - minor mineralization, green chlorite, white zeolite.

ROCK ALTERATION

None observed.

STRUCTURE

Unit 104.3 is massive.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

ObserverJM.....

Depth Interval

6 0 6 2 5

cm to

6 0 7 7 0

cm

Box 104 , Section 2

LITHOLOGY PETROGRAPHY

As above. Greenish-grey, aphyric, fine-grained diabase intrusion.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

606.62 Fracture - slicken side, green phylosilicates, chlorite, smectite?, minor white and grey zeolites. Core angle of fracture - 50°.

606.86 Fracture - minor white, radiating zeolites, 40° angle to horizontal.

606.88 Hairline fracture.

607.25 Fracture - radiating white zeolites, and slicken sides with green phylosilicates.

607.37 Fracture - random pre-drilling and drill related fractures. Minor green phylosilicates, slicken sides, white radiating zeolite.

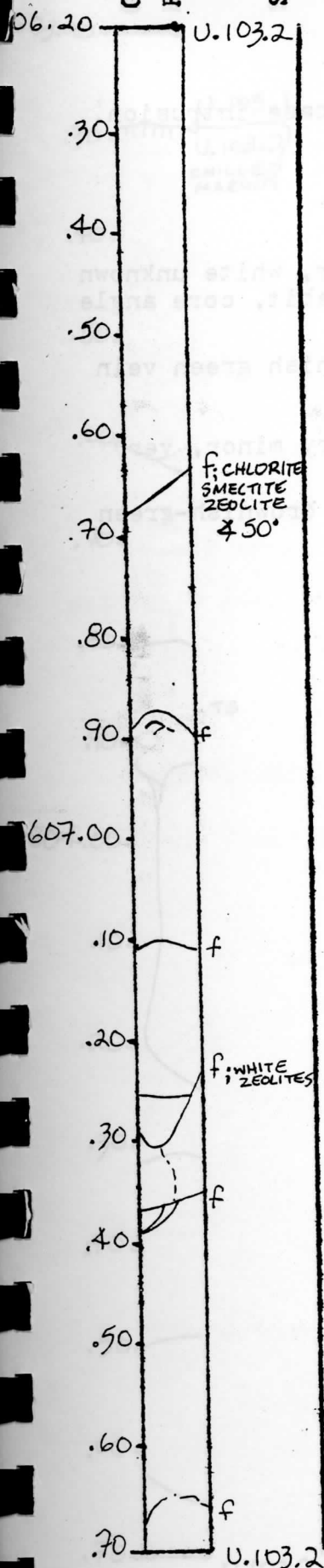
607.65 Fracture - green phylosilicates, hairline fracture.

ROCK ALTERATION

None observed.

STRUCTURE

Unit 103.2 is a massive unit.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer JM

Depth Interval

6	0	4	8	0
---	---	---	---	---

 cm to

6	0	6	2	5
---	---	---	---	---

 cm

Box 104 , Section 4

LITHOLOGY PETROGRAPHY

Greenish-grey, fine-grained, aphyric diabase intrusion.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

605.40 Fracture - 65°, simple, irregular, white unknown zeolite on fracture surface, radiating habit, core angle of fracture is 65°.

605.46 Vein - irregular, white and brownish green vein filling, hairline fractures.

605.75 Fracture - simple, irregular, very minor, very fine-grained pyrite.

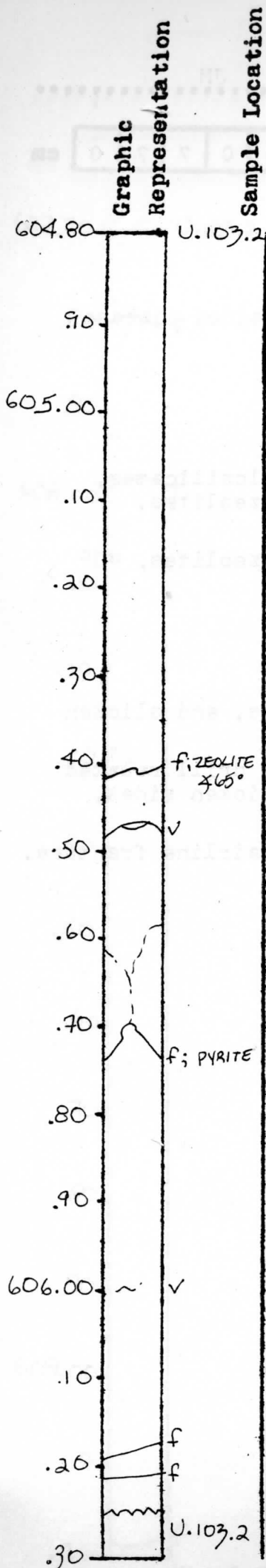
606.00 Vein - white unknown mineral and brownish-green mineral.

STRUCTURE

Unit 103.2 is massive.

ROCK ALTERATION

None observed.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer NG

Depth Interval

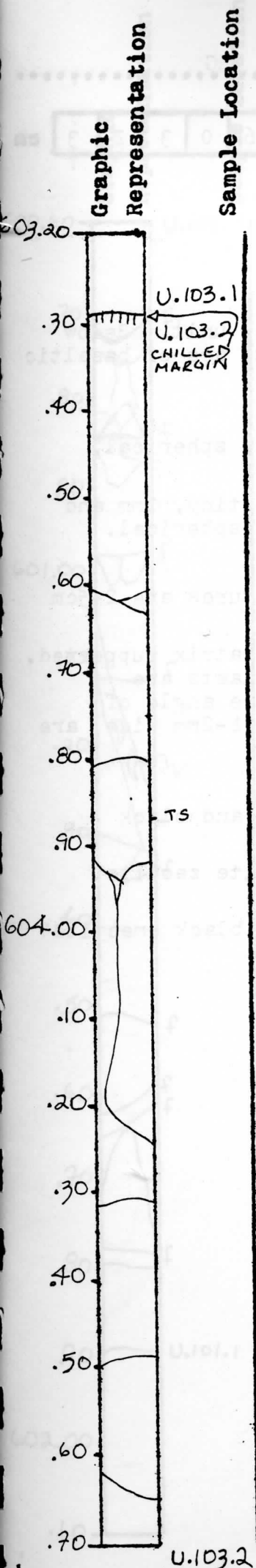
6	0	3	2	3
---	---	---	---	---

 cm to

6	0	4	8	0
---	---	---	---	---

 cm

Box 103. , Section 4



LITHOLOGY PETROGRAPHY

603.29 Unit 103.2. Contact between 103.2 and 103.1 is mostly missing. However, there is a band of chilled material 10mm long and 3mm wide at the top of this core that is interpreted to be the contact, with 103.2 as the younger unit. It is not possible to determine the angle of the contacts. Unit 103.2 is a grey-green, fine-grained diabase. Grain size is very fine-grained near contact and coarsens downward. Plagioclase laths are less than 1mm long. Phenocrysts are rare. There is an occasional phenocryst of plagioclase (1-2mm long). Rock is composed primarily of feldspar, pyroxene, pyrite, other opaques and alteration products of these minerals.

VESICLES/AMYGDALES

Vesicles are sparse near contact and become extremely rare away from contact. They are spherical and less than 1mm in diameter.

FRACTURES - VEINS - BRECCIA

Unit is not highly fractured. Veinlets are about 1mm wide. Vein between 603.55 and 604.23 is zoned with green smectite and calcite occurring on the edges of the vein and white zeolite in the centre. Calcite and pyrite also occur in fractures that are lined with green smectite?

ROCK ALTERATION

Alteration products are a green mineral (chlorite?, smectite?), white zeolite (unknown), and calcite.

STRUCTURE

603.29 Chilled contact between units 103.1 and 103.2.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ... NC

Depth Interval

6 0 1 8 4

cm to

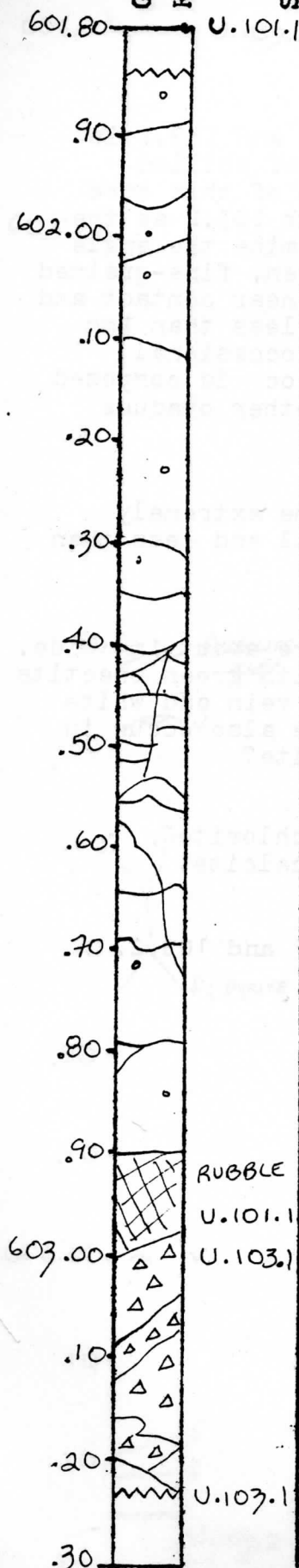
6 0 3 2 3

cm

Box 103 , Section 3

Graphic
Representation

Sample Location



LITHOLOGY PETROGRAPHY

Same as above.

602.95 Unit 103.1. Green-grey brecciated unit. Below vein clast size coarsens downward. Clasts are of basaltic composition.

VESICLES/AMYGDALES

601.84 Sparsely vesicular, less than 1mm, spherical, filled with green smectite.

602.95 Sparsely vesicular. Vesicles are tiny, 1mm and filled with green smectite? Vesicles are spherical.

FRACTURES - VEINS - BRECCIA

601.84 Hairlike to 3mm wide. Wider fractures are 2-5cm apart, core angle is predominantly 50-70°.

602.95 Brecciated fractured fracture is matrix supported. Matrix is fine-grained, white zeolite. Clasts are basaltic, less than 1cm, and angular. Core angle of fracture is 20°. Other, small fractures (1-2mm wide) are filled with green and black smectite?

ROCK ALTERATION

601.84 Veins primarily filled with green and black smectite except as noted below.

602.60 - 602.70 Fractures filled with white zeolite (laumontite?).

602.95 Alteration products are green and black smectite?

STRUCTURE

Unit 103.1 is brecciated.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

ObserverJC.....

Depth Interval

6 0 0 6 0

cm to

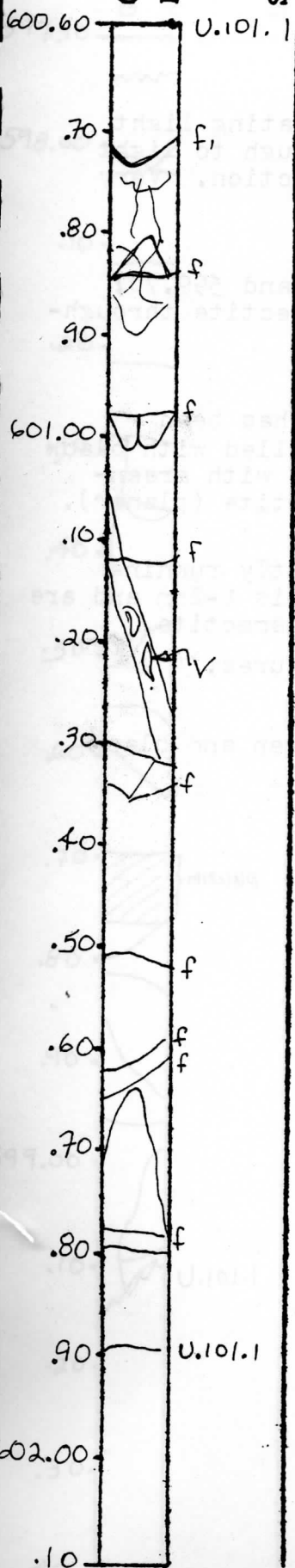
6 0 1 8 4

cm

Box 103 , Section 2

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Total section is fractured along vein boundary. Very massive and fine-grained with green and black smectite alteration along fractured veins. Total section consists of alternating colour bands ranging from medium grey through to light brown massive fine grained basalt.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

No consistent directions. Filled with green and black smectite.

ROCK ALTERATION

None observed.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ^{JC}

Depth Interval

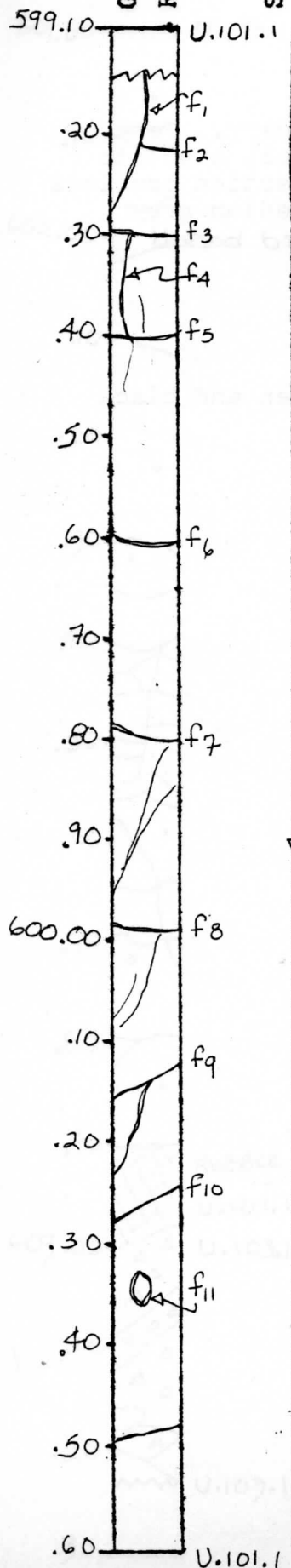
5 9 9 1 5

cm to

6 0 0 6 0

cm

Box 103 , Section 1



LITHOLOGY, PETROGRAPHY

Total length of section consists of alternating light and dark bands ranging from dark grey through to light brown. Continuous unit throughout this section. Very massive, fine-grained basalt.

VESICLES/AMYGDALES

Vesicles very scarce. Dominant at 599.20 and 599.70; filling material is predominantly black smectite throughout.

FRACTURES - VEINS - BRECCIA

Fractures f1-f11 are marked where section has been separated along veins. Fractures f1-f5 filled with black smectite. Fractures f6-f8 (planar) filled with green-black smectite. f9 filled with green smectite (planar). f10-f11 - green - black smectite (planar).

Number of veins throughout the section mostly running along its length. Average width of veins is 1-2mm and are predominantly filled with green and black smectite.

No consistency to the orientation of fractures.

ROCK ALTERATION

Massive and fine-grained with signs of green and black smectite alteration.

STRUCTURE

Very few vesicles.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer NG

Depth Interval

5	9	7	9	4
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 cm to

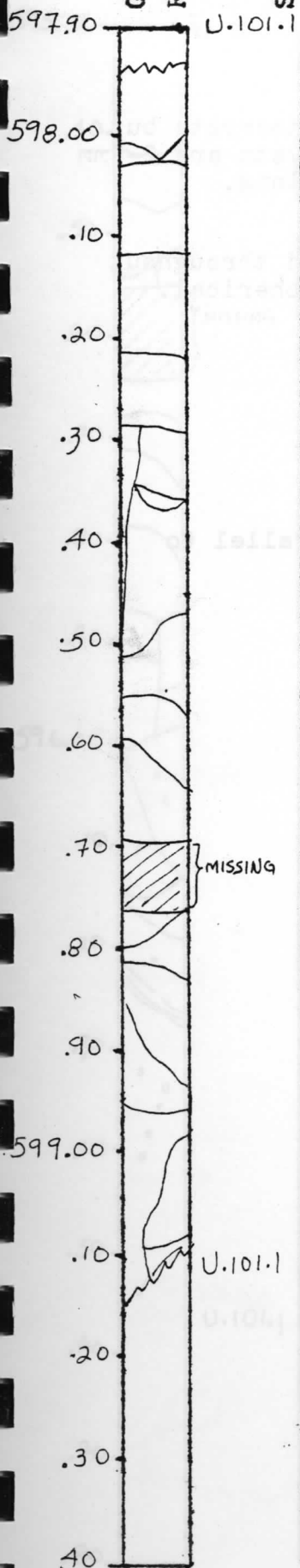
5	9	9	1	5
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 cm

Box 102 , Section 4

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

As above. Colour dark green-grey, medium-grained ground-mass, porphyritic. Phenocrysts = feldspar. Size of phenocrysts = 2-10mm.

VESICLES/AMYGDALES

1mm diameter, evenly disseminated throughout rock. About 1% of rock, spherical filled with chlorite.

FRACTURES - VEINS - BRECCIA

As above except vein at 598.55 has white zeolites.

ROCK ALTERATION

As above.

STRUCTURE

Feldspar phenocrysts preferentially oriented parallel to long axis of core.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer NG

Depth Interval

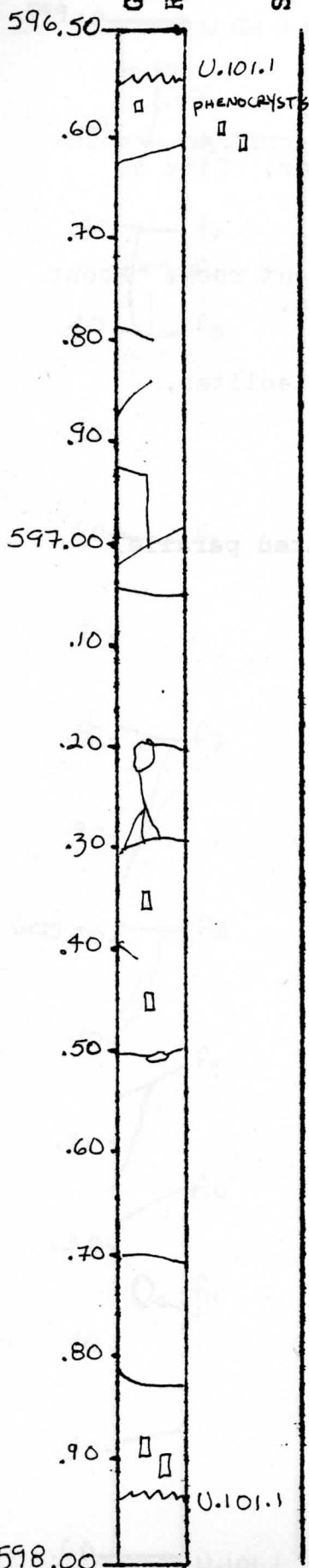
5	9	6	5	5
---	---	---	---	---

 cm to

5	9	7	9	4
---	---	---	---	---

 cm

Box 102 , section 3



LITHOLOGY PETROGRAPHY

Similar to 101.1 above. Contains more phenocrysts but always less than 1%. Above 597.30 phenocrysts are 2-3mm long. Where illustrated they are 1-1.3cm long.

VESICLES/AMYGDALES

Less than 1mm diameter, evenly disseminated throughout this section of unit. About 1% of rock, spherical.

FRACTURES - VEINS - BRECCIA

As above.

ROCK ALTERATION

As above.

STRUCTURE

Phenocrysts are preferentially oriented parallel to long axis of core.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ... NG

Depth Interval

5 9 5 3 0

cm to

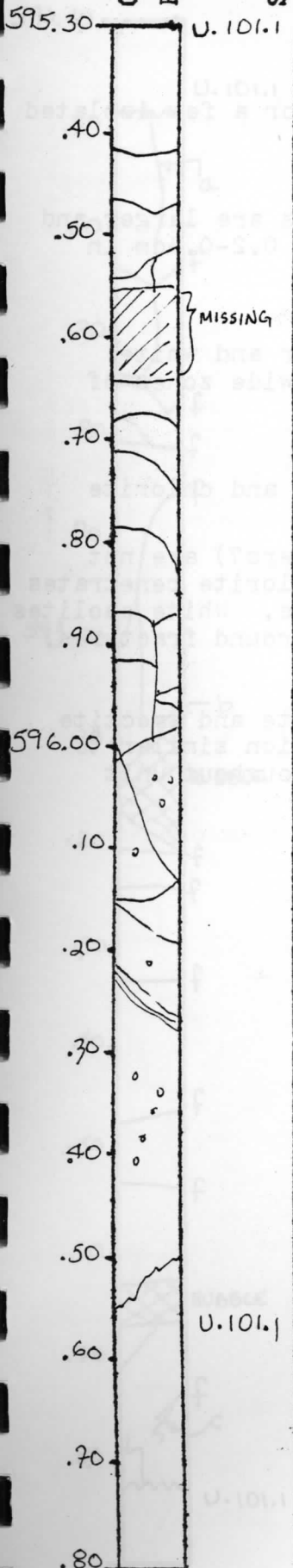
5 9 6 5 5

cm

Box 102 , Section 2

Graphic
Representation

Sample Location



LITHOLOGY PETROGRAPHY

Similar to 101.1 above. Phenocrysts are rare.

VESICLES/AMYGDALES

Sparse except in lower section where indicated. Small less than 1mm.

FRACTURES - VEINS - BRECCIA

As above. Between 596.20 to 596.30 groups of braided veins filled with white zeolites.

ROCK ALTERATION

Mostly chlorite and smectite except between 596.20 and 596.30 - white zeolite zone.

STRUCTURE

594.25 Phenocrysts are 1 to 1.5 cm. long and elongated parallel to long axis of core.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

ObserverNG.....

Depth Interval

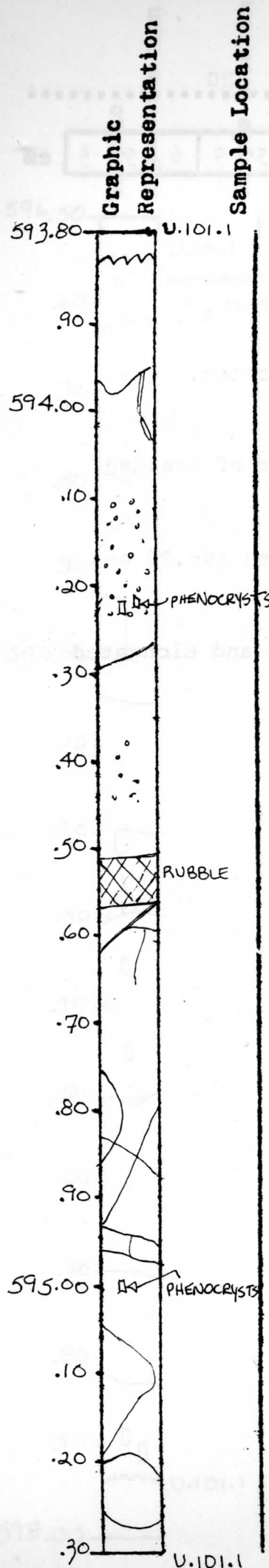
5 9 3 8 3

cm to

5 9 5 3 0

cm

Box 102 , Section 1



LITHOLOGY PETROGRAPHY

Phenocrysts are not abundant, and except for a few isolated occurrences around 594.25 and 595.00.

VESICLES/AMYGDALES

In 15cm zone from 594.10 to 594.25 vesicles are larger and more abundant (about 10% of rock). Size - 0.2-0.4cm in diameter. They are filled with chlorite.

FRACTURES - VEINS - BRECCIA

Fractures and veins are planar to irregular and white zeolite veins commonly occur on 0.2-0.3mm wide zones of hairlike veins in a braided pattern.

ROCK ALTERATION

593.80 Alteration products are laumontite and chlorite ± smectite.

594.20 White zeolites (laumontite and others?) are not abundant (confined to hairlike veins). Chlorite penetrates rock and is pervasive throughout groundmass. White zeolites are confined to fractures and 1-2mm zone around fractures.

OTHER

On surfaces of fractures lined with chlorite and smectite there is a tightly spaced, hairlike lineation similar to slicken sides. This texture is common throughout unit 101.1.

ObserverNG

5	9	2	4	8
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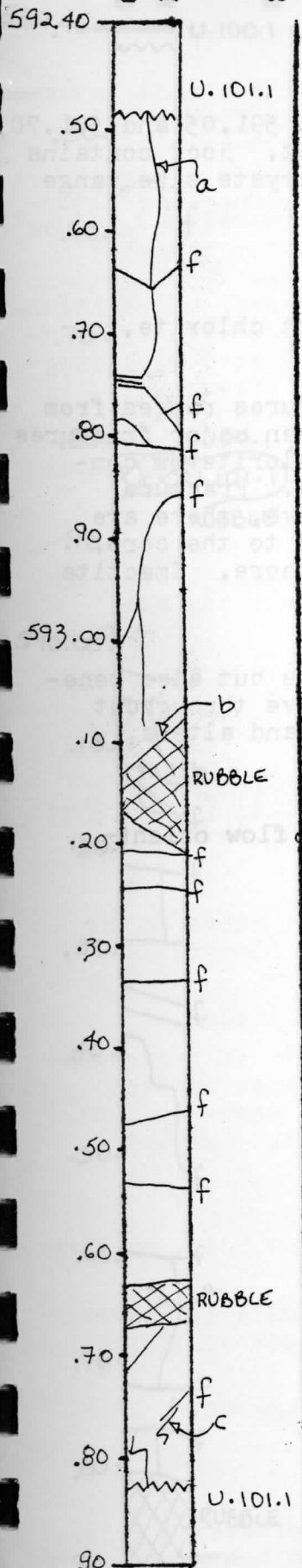
cm to

5	9	3	8	3
---	---	---	---	---

CM

Graphic Representation

Sample Location



This section is similar. Phenocrysts are relatively abundant from 592.50 and 592.65, and 593.30 to 593.70. They are feldspar.

As above - no variation.

As above - three sets of fractures. Two inclined to core, one perpendicular to core. Fracture size ranges from hairlike to 2cm. Veins occur in braided patterns up to 0.6cm wide, best examples are at 593.00, fracture 'b' and 593.75. Between 592.49 - 593.05 and 593.75 - 593.80, laumontite and other white zeolite? are common, elsewhere chlorite and smectite prevail. Fracture 'a' is zoned with chlorite penetrating surrounding rock. Fracture 'b' - laumontite is euhedral and has grown into a cavity. Fracture 'c' is a braided arrangement of hairlike fractures filled with laumontite and white zeolite?

Rubble section below fracture 'b' is highly altered to chlorite and laumontite and other white zeolite? and is poorly indurated. Feldspars altered to chlorite.

593.30 - 593.70 Well developed preferred orientation
phenocrysts parallel to long axis of core.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer NG

Depth Interval

5 9 1 0 0

cm to

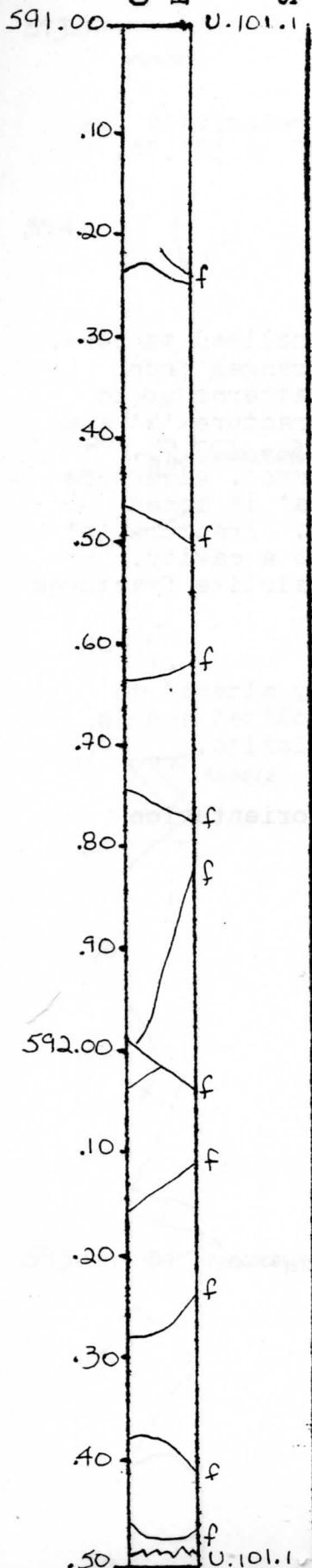
5 9 2 4 8

cm

Box 101, Section 3

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Similar to unit 101.1 above except between 591.05 and 591.70 where phenocrysts become much more abundant. Rock contains about 3% phenocrysts in this zone. Phenocrysts size range from 2-3mm to 13mm.

This unit is similar to 87.4 and 94.1.

VESICLES/AMYGDALES

Moderately - sparsely abundant, filled with chlorite.

FRACTURES - VEINS - BRECCIA

Moderately fractured spacing between fractures ranges from 2-18cm. There is commonly about 3cm between major fractures. Fractures are most commonly filled with chlorite or contain hair width interiors of white zeolite. Fracture width ranges from hairlike to 2mm. As above, there are three sets of fractures. Two are inclined to the core, and a third is about perpendicular to the core. Smectite is also common in fractures.

ROCK ALTERATION

Chlorite alteration originates in fractures but also penetrates area around fracture and is pervasive throughout groundmass. Chlorite also fills vesicles and alters phenocrysts.

STRUCTURE

591.05 - 591.70 Moderately well developed flow orientation of phenocrysts.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer NG

Depth Interval

5 8 9 4 2

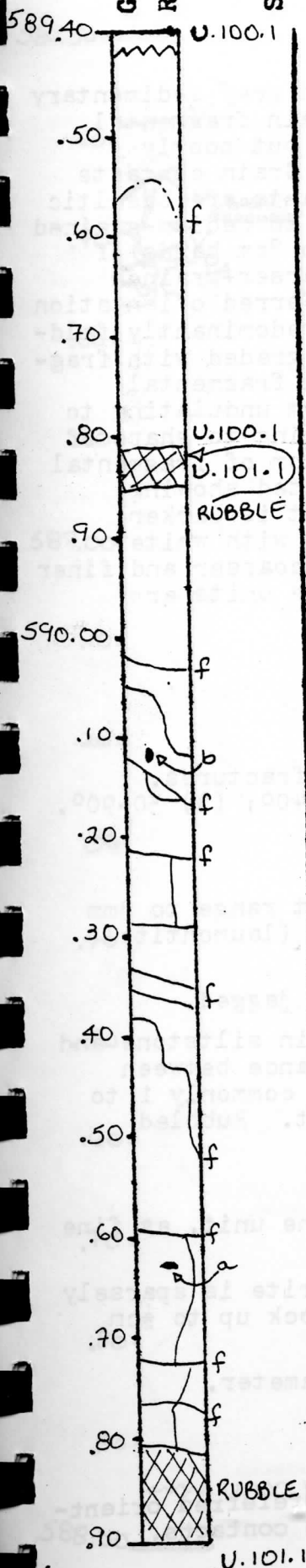
cm to

5 9 1 0 0

cm

Box 101 , Section 2

Graphic
Representation
Sample Location



LITHOLOGY PETROGRAPHY

Similar to above siltstone and sandstone unit with the exception of nature of fractures.

589.82 Unit 101.1. Green-grey, fine-grained sparsely phyrlic basalt. Unit coarsens downward. About 8cm below contact flow feldspar laths are visible in groundmass. Phenocrysts average 3mm in length, but are as long as 3cm. 'a' and 'b' mark location of two large phenocrysts. Phenocrysts are feldspar. Contact is sharp. Pyrite occurs on unit 100.1 side of contact and as veins in 101.1. Feldspar laths near contact are about 1mm long and are oriented parallel to contact. Core angle contact 200°. Unit 101.1 is chilled again to 100.1, indicating 101.1 is younger.

VESICLES/AMYGDALES

589.42 None observed.

589.82 Moderately abundant, 1-2mm diameter filled with chlorite. Mostly spherical except within 3cm of upper contact they are irregularly shaped.

FRACTURES - VEINS - BRECCIA

589.42 All fractures are hairlike. Most commonly they are irregular, two prominent sets of fractures: (1) core angle fracture - 40°; (2) core angle fracture - 90°. Filled with white zeolite ± chlorite ± smectite.

589.82 Three sets of fractures: (1) core angle fracture - 0°; (2) core angle fracture - 30-60°; (3) core angle fracture - 80-90°. Material filling fractures is the same for each set of fractures but varies slightly between individual fractures. Some are filled only with chlorite ± smectite. Others are zoned with a chlorite rim and hair width centre of white zeolite. Others have only white zeolite filling. Width of fractures varies from hairlike to 2mm. No pyrite observed.

ROCK ALTERATION

589.82 White zeolites appear to originate infilling cracks but also penetrate into groundmass. Phenocrysts are altered to chlorite.

590.58 Open cavity is filled with euhedral laumontite. Pyrite mineralisation cut contact indicating it occurred after dike intrusion.

STRUCTURE

U.101.1 Phenocrysts preferentially oriented with long axis parallel to long axis of drill core.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ^{NG}

Depth Interval

5 8 7 9 4

cm to

5 8 9 4 2

cm

Box 101, Section 1

LITHOLOGY PETROGRAPHY

Total core length is alternating black and grey sedimentary unit, with alternating bands of coarse grain fragmental material with clast size averaging 1.5cm, but poorly sorted, ranging from angular to rounded. Grain contacts range from sutured to point contacts. Clasts are basaltic and of homogeneous composition; and fine- to medium-grained moderately well sorted siltstone with $\frac{1}{2}$ to 2cm bands of intercoloured sandy siltstone in which coarser-grained clasts have moderately well developed preferred orientation and are angular. Coarser fragments are predominantly feldspar. Coarse-grained fragmental layer is graded with fragments coarsening upward. Contacts between fragmental and siltstone to sandstone units range from undulating to planar. Contact 'a' is undulating conforming to shape of the fragments. Contact 'b' is planar bottom of fragmental unit is finer-grained and clasts are oriented showing shear along contact. Upper portion of unit is darker coloured. There is a hairlike vein filled with white zeolite at the contact. Contacts between coarser and finer grained portions of the siltstone-sandstone units are sharp to gradational.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

587.94 There are three pervasive sets of fractures. Average angle of each set: (1) 45°; (2) 340°; (3) 50-90°. Sets 1 and 2 are most abundant.

588.23 Hairlike vein cuts contact.

588.30 Fractures are commonly hairlike but range to 3mm width. They are filled with white zeolite (laumontite) ± pyrite.

588.60 Fractures and veins are planar but jagged.

588.82 Fractures are more tightly spaced in siltstone and sandstone unit than fragmental unit. Distance between fracture: $\frac{1}{2}$ to 5cm apart, fragmental unit, commonly 1 to less than 2cm, siltstone and sandstone unit. Rubbled sections shown in illustration.

ROCK ALTERATION

Pyrite is sparsely disseminated in siltstone unit, as fine grained crystals.

588.70 Vein filled with white zeolite; pyrite is sparsely disseminated throughout vein and in host rock up to 2cm away from vein.

589.37 Three blebs of pyrite up to 2mm diameter.

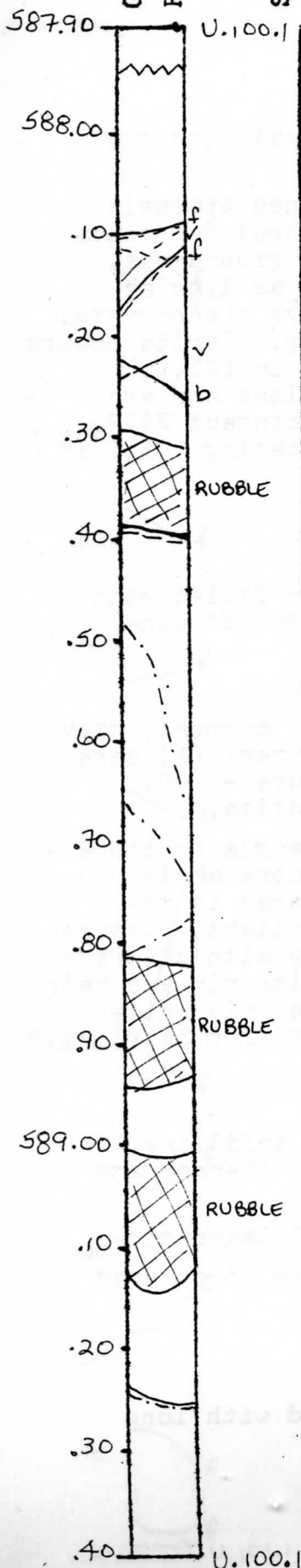
STRUCTURE

Fragmental unit fines downward.

In siltstone and sandstone unit there is preferred orientation of 1mm. elongated clasts parallel to contacts.

Graphic Representation

Sample Location



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer JPD

Depth Interval

5 8 6 5 1

cm to

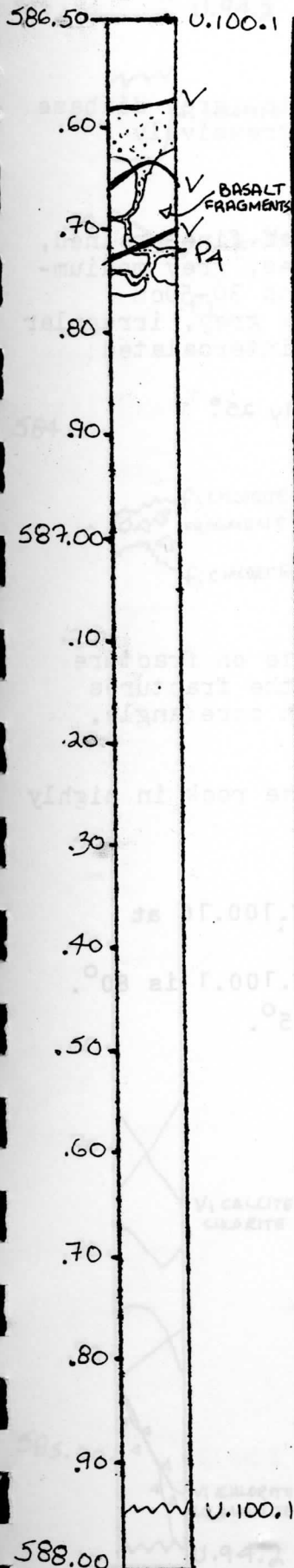
5 8 7 9 4

cm

Box 100, Section 4

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Mudstone.

Grain size increases.

586.65 Fragmental portion of the unit. Consists of large fragments of basalt with sediment between some fragments. Other fragments have sutured boundaries against adjacent fragments.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

None observed.

ROCK ALTERATION

586.65 Pyrite crystals are distributed evenly through the rock and often occur adjacent to or with plagioclase crystals.

STRUCTURE

None Observed.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer JRD

Depth Interval

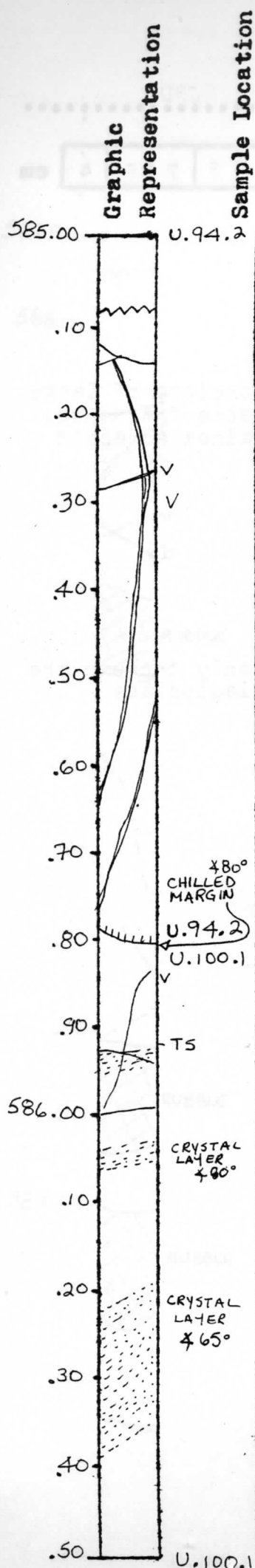
5 8 5 0 8

cm to

5 8 6 5 1

cm

Box 100, Section 3



LITHOLOGY PETROGRAPHY

Medium-grained, homogeneous, non porphyritic, grey diabase dike. Grain size of diabase decreases progressively toward contact below.

585.78 Chilled against sediments.

585.80 Unit 100.1. Alternating sequence of fine-grained, dark brown to black mudstone with siltstones, grey medium-grained crystal-rich layers, 2-3cm thick and 30-50cm fragmental zones composed of light and dark grey, irregular fragments of basalt (1-2cm diameter) with intercalated sediment.

586.20 Crystal-rich layer. Dip approximately 25°.

586.35 Mudstone.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

585.80 Hairline fractures localize pyrite on fracture surface and with 1-2mm envelope. Most of the fractures which bound pieces of core have a very high core angle.

ROCK ALTERATION

585.80 Pyrite is distributed throughout the rock in highly variable amounts.

STRUCTURE

585.78 Chilled contact between U.94.2 and U.100.10 at dip of 80°.

Dip of crystal layers in upper section of U.100.1 is 80°.

586.20 - 586.36 Crystal layer with dip of 65°.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer JRD

Depth Interval

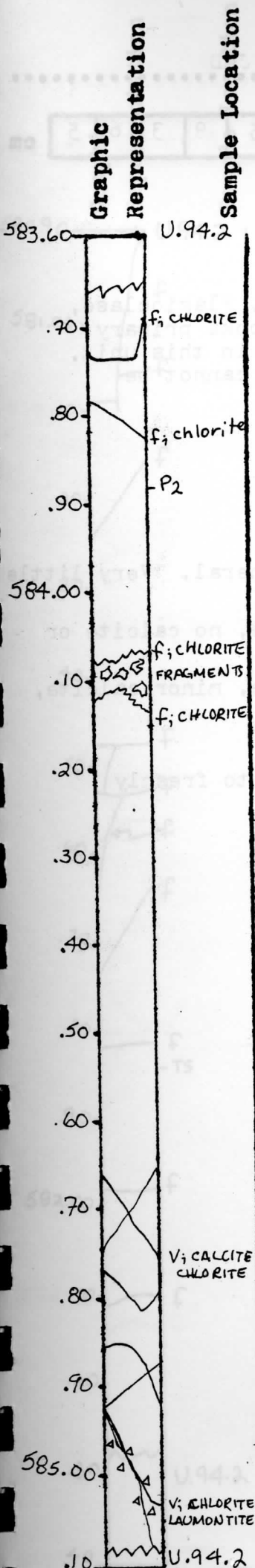
5 8 3 6 5

cm to

5 8 5 0 0

cm

Box 100, Section 2



LITHOLOGY PETROGRAPHY

Medium-grained, homogeneous, non porphyritic, grey diabase. Plagioclase, pyroxene (olivine?). Pyrite looks primary.

584.07 Fragments - continuity lost.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

583.74 Fracture - minor chlorite on surface.

583.78 Fracture - minor chlorite on surface.

584.07 Fracture - minor chlorite on surface.

584.70 Vein - Laumontite, calcite, (chlorite) filling complex veinlet.

584.93 Vein - slightly brecciated veinlet, 8mm wide, filled with laumontite, chlorite. No calcite.

ROCK ALTERATION

Minor chloritic alteration..

STRUCTURE

None observed.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer JRD

Depth Interval

5 8 2 2 8

cm to

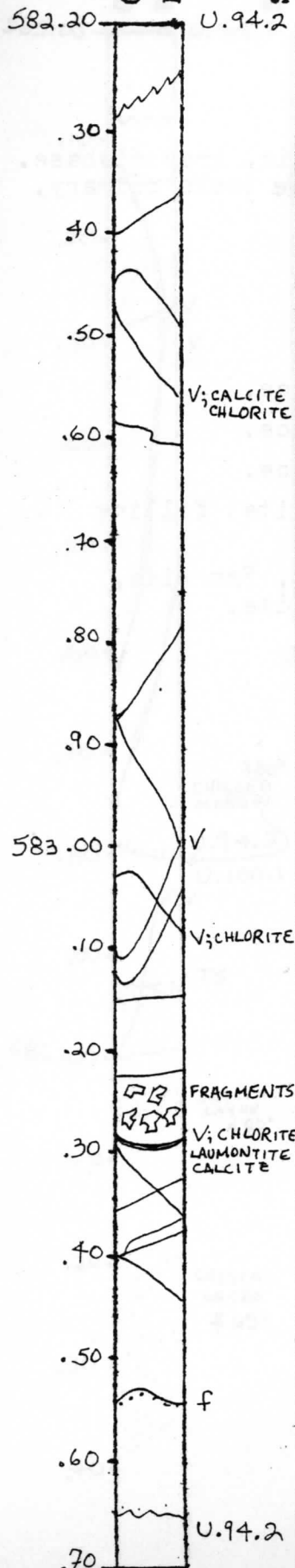
5 8 3 6 5

cm

Box 100, Section 1

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Medium grained, homogeneous, grey Diabase. Plagioclase, pyroxene, possibly some olivine? Pyrite looks primary. There is very little lithologic variation in this unit. 583.23 Fragments at discontinuity. Core cannot be matched across here.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

582.36 Vein - calcite, chlorite.

583.00 Vein - unknown radiating white mineral. Very little chlorite.

583.10 Vein mostly chlorite, minor pyrite, no calcite or laumontite.

583.29 Veinlet with laumontite?, chlorite, minor calcite, about 2mm.

ROCK ALTERATION

Weak chloritization imparts greenish cast to freshly broken surface.

STRUCTURE

None observed.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ^{RHW}

Depth Interval

5 8 0 8 8

cm to

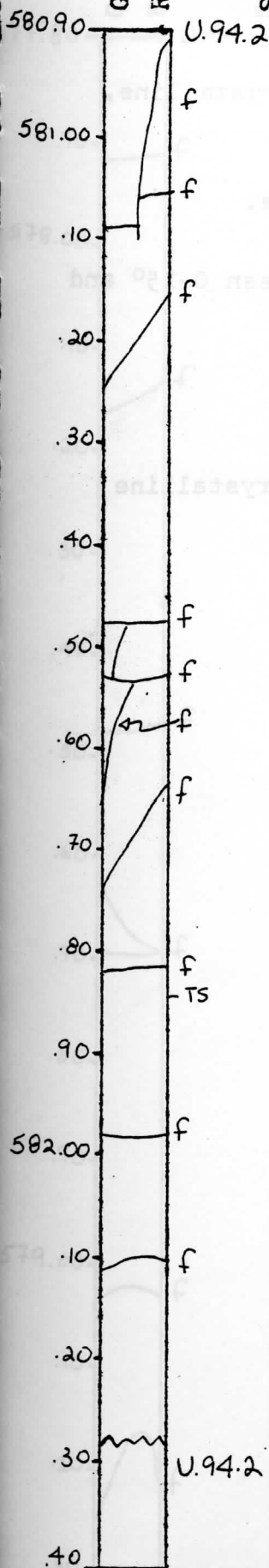
5 8 2 2 8

cm

Box 99, Section 4

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Medium grey, medium-grained, aphyric, holocrystalline, granular, equigranular basalt.

VESICLES/AMYGDALES

Rare small (less than 1mm) blebs of smectite.

FRACTURES - VEINS - BRECCIA

Fractures at various angles, generally between 0-15° and 65-80°. Smectite and zeolite lined.

ROCK ALTERATION

None observed.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer RHW

Depth Interval

5 7 9 4 3

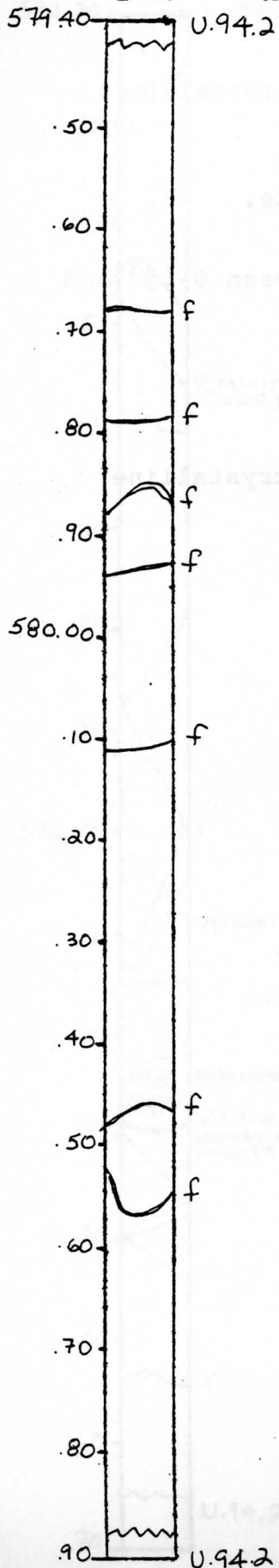
cm to

5 8 0 8 8

cm

Box 99, Section 3

Graphic
Representation
Sample Location



LITHOLOGY PETROGRAPHY

Medium grey, medium-grained, aphyric, holocrystalline, granular, equigranular basalt.

VESICLES/AMYGDALES

Rare small (less than 1mm) blebs of smectite.

FRACTURES - VEINS - BRECCIA

Fractures at various angles, generally between 0-15° and 65-80°. Smectite and zeolite lined.

ROCK ALTERATION

None observed.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer RHW

Depth Interval

5	7	7	8	0
---	---	---	---	---

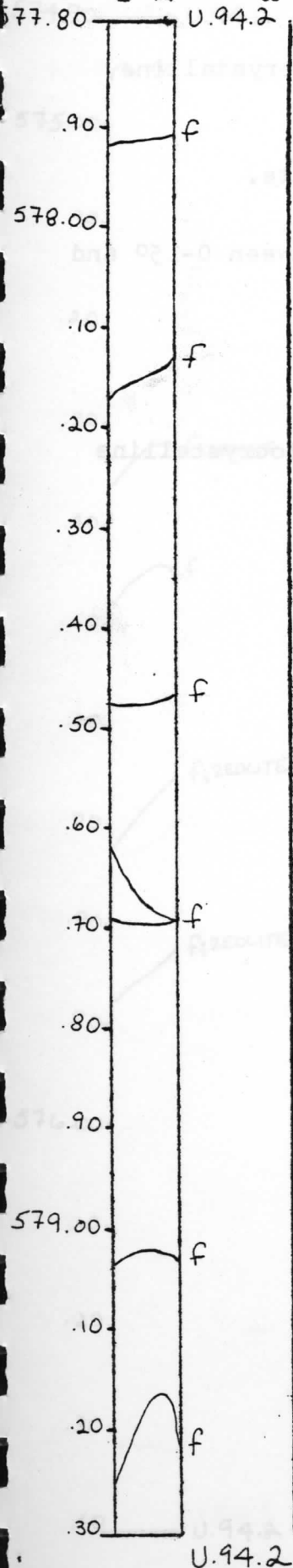
 cm to

5	7	9	4	3
---	---	---	---	---

 cm

Box 99, Section 2

Graphic Representation
Sample Location



LITHOLOGY PETROGRAPHY

Medium grey, medium-grained, aphyric, holocrystalline, granular, equigranular basalt.

VESICLES/AMYGDALES

Rare small (less than 1mm) blebs of smectite.

FRACTURES - VEINS - BRECCIA

Fractures at various angles, generally between 0-15° and 65-80°. Smectite and zeolite lined.

ROCK ALTERATION

None observed.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ...RHW.....

Depth Interval

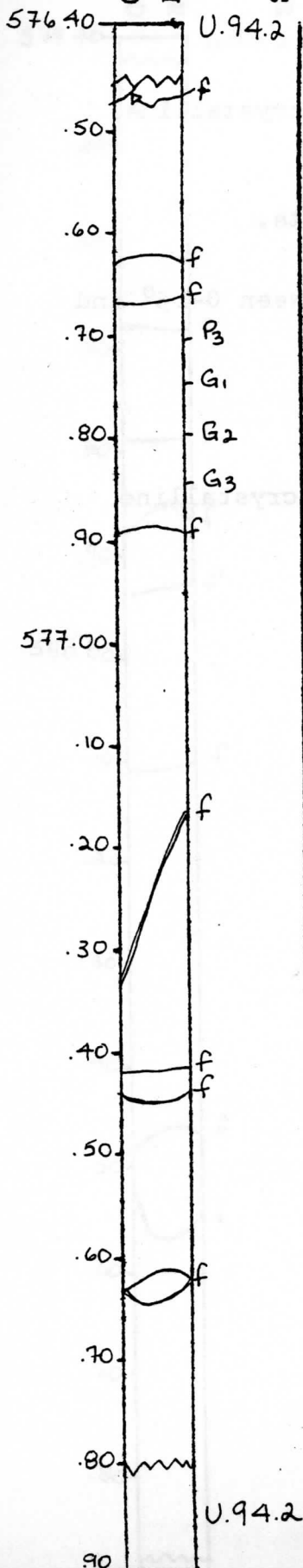
5 7 6 4 5

cm to

5 7 7 8 0

cm

Box 99, Section 1



LITHOLOGY PETROGRAPHY

Medium grey, medium-grained, aphyric, holocrystalline, granular, equigranular basalt.

VESICLES/AMYGDALES

Rare small (less than 1mm) blebs of smectite.

FRACTURES - VEINS - BRECCIA

Fractures at various angles, generally between 0-15° and 65-80°. Smectite and zeolite lined.

ROCK ALTERATION

None observed.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ^{ILG}

Depth Interval

5 7 4 9 5

cm to

5 7 6 4 5

cm

Box 98, Section 4

LITHOLOGY PETROGRAPHY

Aphyric, holocrystalline, green-grey, medium-grained basalt.

VESICLES/AMYGDALES

Small smectite filled amygdals.

FRACTURES - VEINS - BRECCIA

Very few 'zeolite' filled fractures about 1mm wide.

575.63 Zeolite filled fracture.

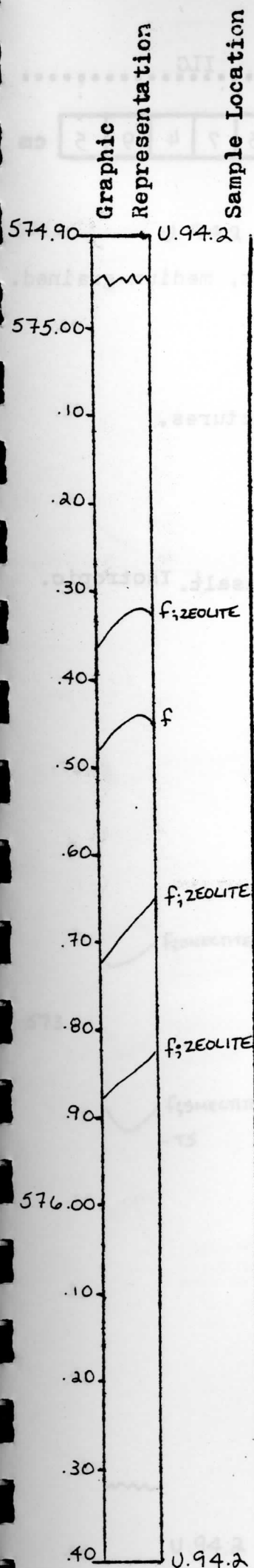
575.78 Zeolite filled fracture.

ROCK ALTERATION

None observed.

STRUCTURE

Aphyric, medium grained, holocrystalline basalt. Isotropic.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

ObserverILG.....

Depth Interval

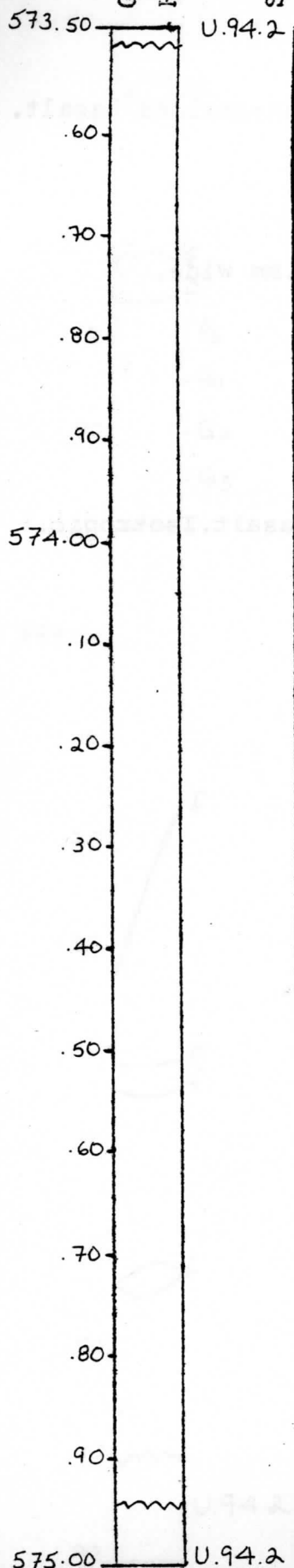
5 7 3 5 2

cm to

5 7 4 9 5

cm

Box 98, Section 3



LITHOLOGY PETROGRAPHY

Aphyric, holocrystalline, green-grey basalt, medium-grained.

VESICLES/AMYGDALES

Very rare smectite amygdalae.

FRACTURES - VEINS - BRECCIA

Almost none. Two hair-like 'zeolitic' fractures.

ROCK ALTERATION

Only a little smectite alteration.

STRUCTURE

Aphyric, medium grained, holocrystalline basalt. Isotropic.

Observer ILG

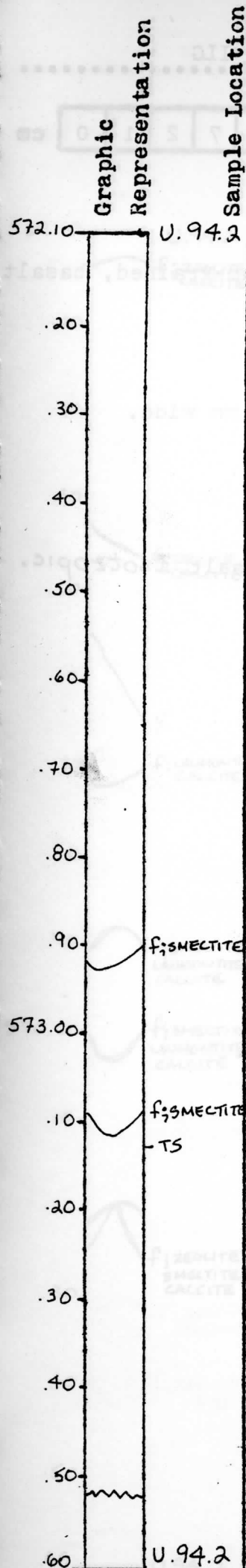
5	7	2	1	0
---	---	---	---	---

cm to

5	7	3	5	2
---	---	---	---	---

CD

Aphyric, medium grained, holocrystalline basalt. Isotropic.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer LV

Depth Interval

5 6 7 5 6

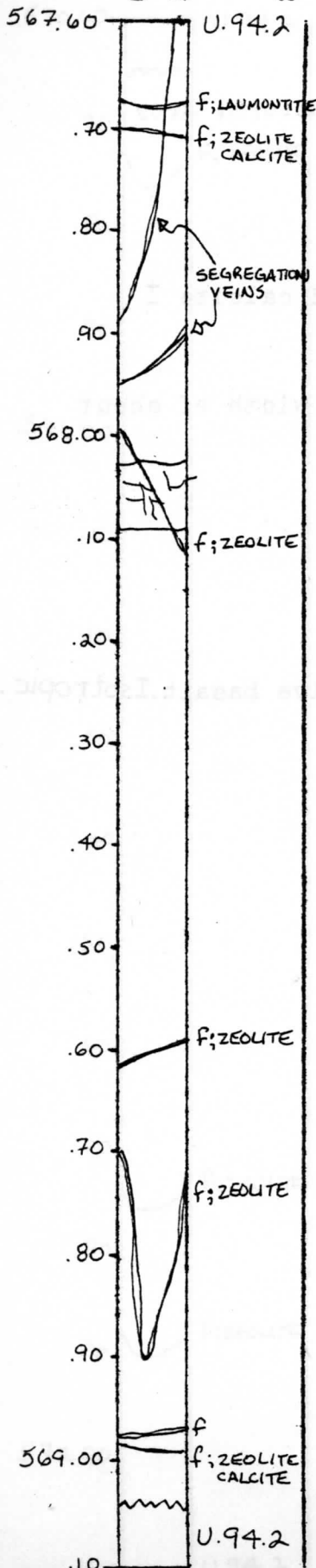
cm to

5 6 9 0 4

cm

Box 97, Section 3

Graphic
Representation
Sample Location



LITHOLOGY PETROGRAPHY

Uniform sequence of massive, medium-grained, grey basalt, aphyric.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

Fractures are generally coated by zeolite, less often calcite.

567.56 - 567.97 Segregation veins (less mafic).

567.67 Fracture - laumontite coated.

568.00 Fracture - angle of dip is 70°.

568.70 Fracture - angle of dip is 70°.

ROCK ALTERATION

Relatively fresh.

OTHER

Uniform dike.

STRUCTURE

Aphyric, medium grained, massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer LV

Depth Interval

5 6 6 0 8

cm to

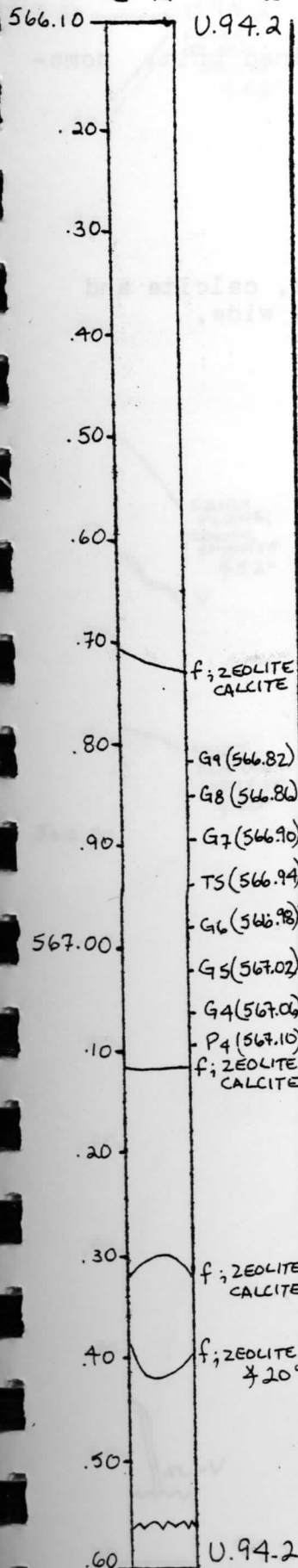
5 6 7 5 6

cm

Box 97, Section 2

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Massive, dense, homogeneous, medium-grained, grey unit.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

Fractures either coated with zeolite and/or calcite.

567.30 Fracture with angle of dip about 20°.

ROCK ALTERATION

Relatively fresh.

OTHER

Homogeneous dike.

STRUCTURE

Dense, medium grained, homogeneous unit.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer LV

Depth Interval

5 6 4 6 3

cm to

5 6 6 0 8

cm

Box 97, Section 1

LITHOLOGY PETROGRAPHY

Grey, dense, massive, aphyric, medium-grained unit; homogeneous throughout the section.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

564.63 Segregation veins.

Fractures are generally coated by zeolites, calcite and pyrite occur. Fractures are less than 1mm wide.

565.03 Fracture with dip angle of 30°.

565.78 Fracture with dip angle of 80°.

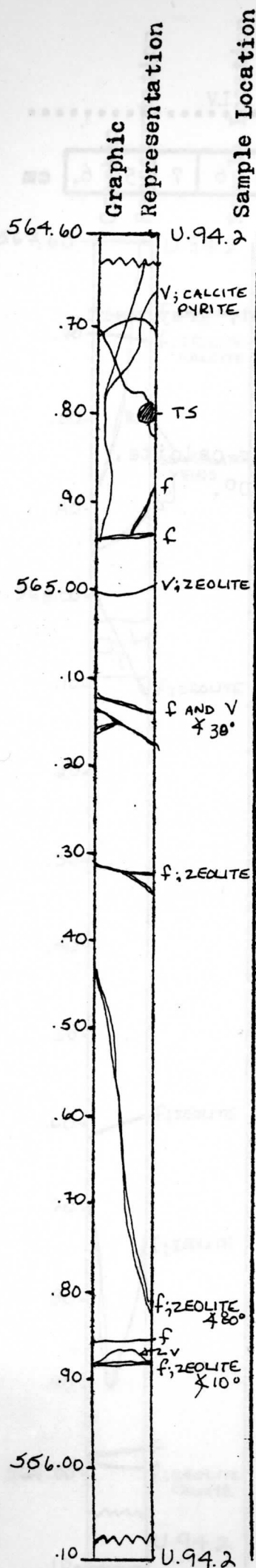
565.85 Fracture with dip angle of 10°.

ROCK ALTERATION

Relatively fresh.

STRUCTURE

Aphytic, medium grained, massive basalt.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer KH

Depth Interval

5 6 3 1 4

cm to

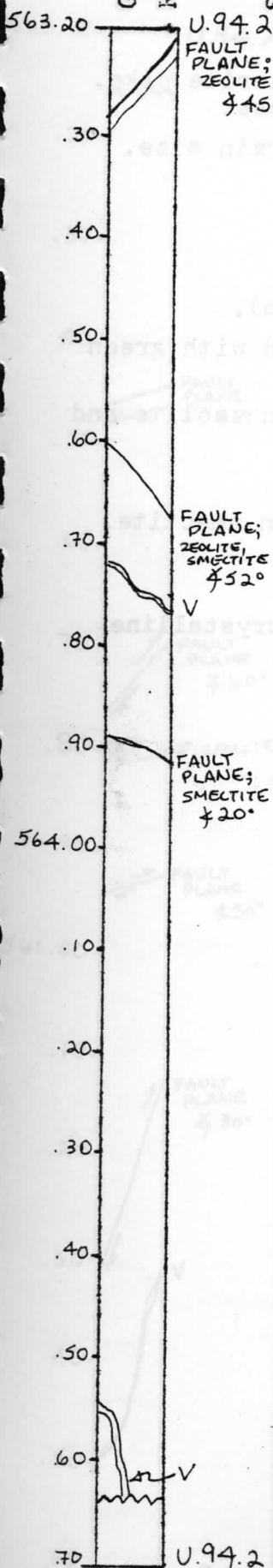
5 6 4 6 4

cm

Box 96, Section 4

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Holocrystalline, greyish-green colour, dolerite dike, phenocrysts: olivine, pyroxene.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

563.20 Fault plane covered with zeolite (angle 45°).

563.60 Fault plane covered with zeolite and green smectite (angle 52°).

563.73 Segregation vein containing white coloured plagioclase rich pyroxene.

563.87 Fault plane covered with green smectite (angle 20°).

564.55 Segregation vein (about 7mm). Plagioclase rich white coloured vein with minor pyroxene grain.

ROCK ALTERATION

Just aside of the fault plane, green smectite occurs. Partly phenocryst is replaced by green smectite.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ^{KH}

Depth Interval

5	6	1	6	6
---	---	---	---	---

 cm to

5	6	3	1	4
---	---	---	---	---

 cm

Box 96, Section 3

LITHOLOGY PETROGRAPHY

Holocrystalline, greyish-green coloured, dolerite dike.
Phenocrysts: olivine, pyroxene and plagioclase.

Very homogeneous. No colour or change in grain size.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

561.92 Vein filled with zeolites (about 2mm).

562.30 Fault (45°). Fault plane is covered with green smectite.

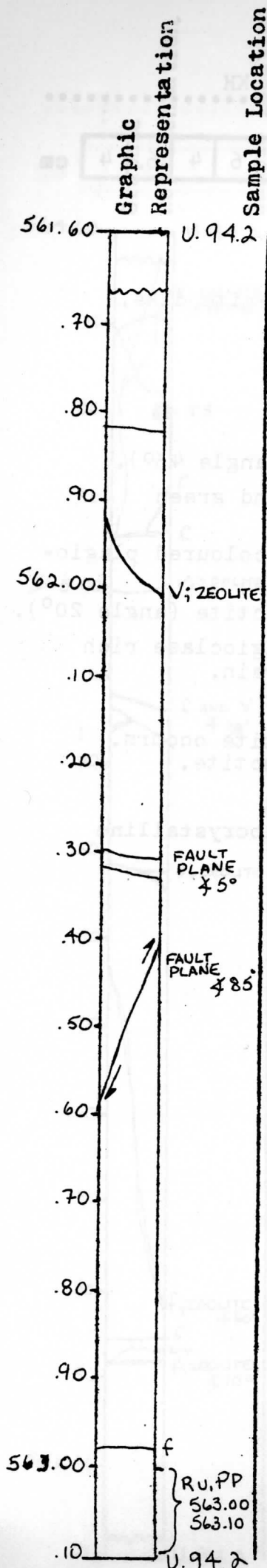
562.45 Fault with angle of 85° covered with zeolite and green smectite.

ROCK ALTERATION

Some olivine phenocryst is altered to green smectite.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ^{KH}

Depth Interval

5 6 0 1 5

cm to

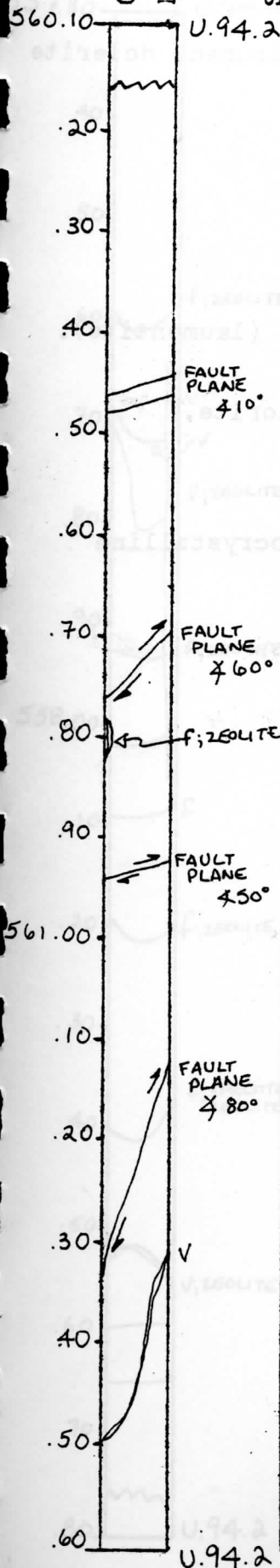
5 6 1 6 6

cm

Box 96, Section 2

Graphic
Representation

Sample Location



LITHOLOGY PETROGRAPHY

Holocrystalline, greyish-green coloured, dolerite dyke, phenocrysts: olivine, pyroxene and plagioclase.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

560.45 Fault with angle of 10°. Fault plane is covered with green smectite.

560.60 Fault with angle of 60°. Fault plane is filled with zeolite.

560.82 Fracture, filled with zeolite.

560.93 Fault with angle of 50°.

561.12 Fault plane is covered with green smectite (small zeolite and small quartz). Angle of 80°.

561.42 Vein, 3mm wide, plagioclase rich.

ROCK ALTERATION

None observed.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer KH

Depth Interval

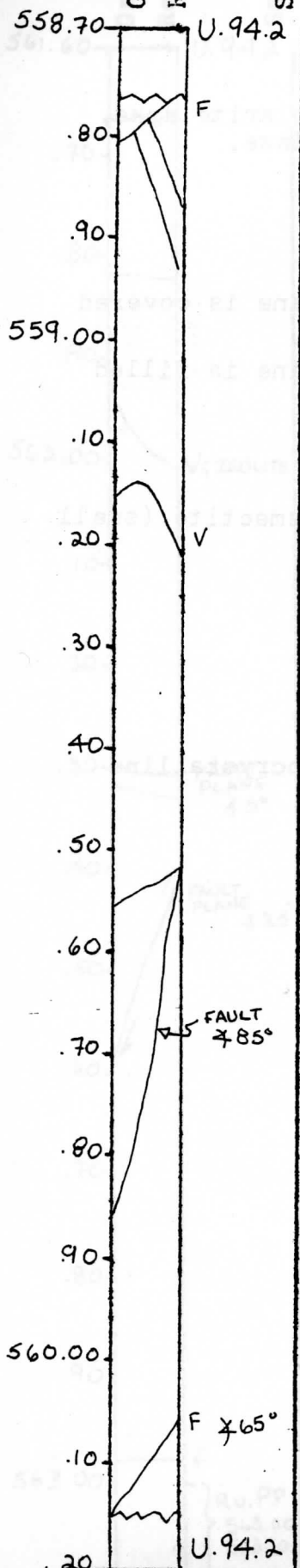
5	5	8	7	6
---	---	---	---	---

 cm to

5	6	0	1	5
---	---	---	---	---

 cm

Box 96, Section 1



LITHOLOGY PETROGRAPHY

Holocrystalline, greyish-yellowish-green coloured, dolerite dyke, phenocryst: olivine and pyroxene.

559.10 Very homogeneous.

VESICLES/AMYGDALES

None observed.

FRACTURES - VEINS - BRECCIA

558.76 Fracture, angle 60-80°.

559.60 Fault plane is covered with zeolite (laumontite).

ROCK ALTERATION

Olivine phenocryst is partly altered to chlorite. Especially just aside of the fault planes.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer PTR

Depth Interval

5 5 7 3 1

cm to

5 5 2 7 6

cm

Box 95, Section 4

LITHOLOGY PETROGRAPHY

Very uniform, grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Rock has subophitic texture. Grain size uniform through section. No contacts.

Interpreted as a dike.

VESICLES/AMYGDALES

About 1%, 1-2mm, spherical, filled with smectite.

FRACTURES - VEINS - BRECCIA

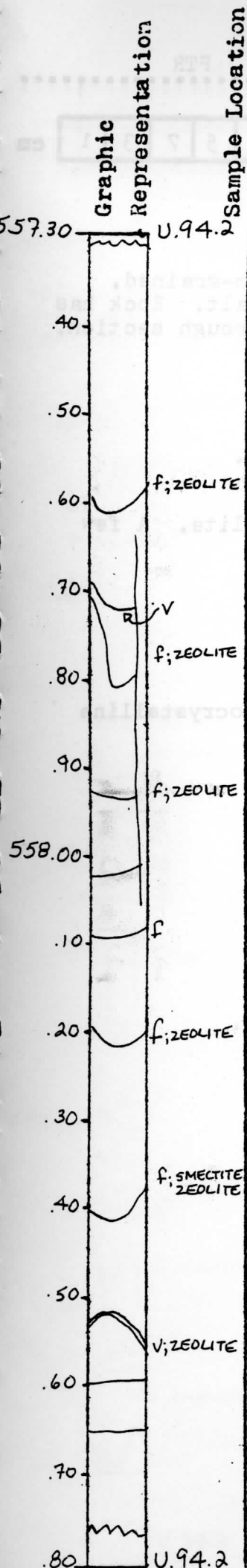
Fractures mostly 60-70°, some at 30-45°. All lined with zeolite, some with smectite. Many fractures are along zeolite veins, mostly 1mm wide. Zeolite is probably laumontite(?).

ROCK ALTERATION

Very little.

STRUCTURE

Aphyric, medium grained, equigranular basalt.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer PTR

Depth Interval

5 5 7 3 1

cm to

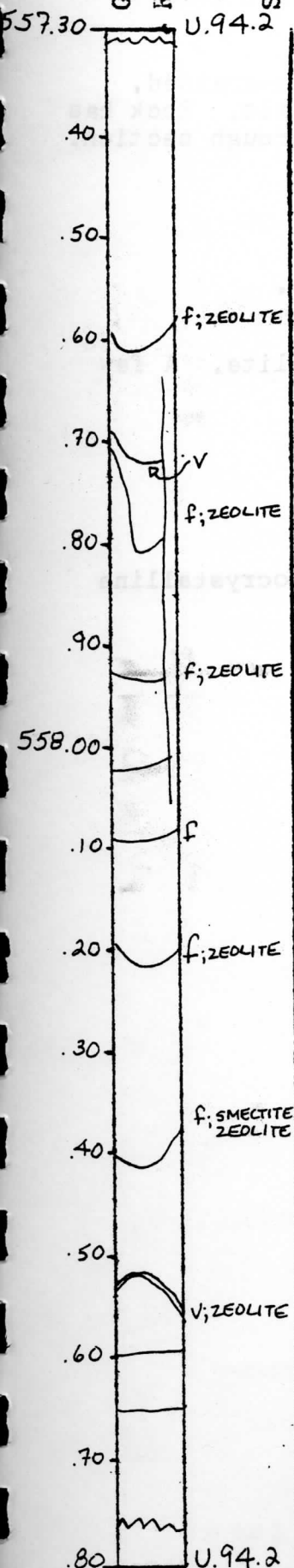
5 5 8 7 6

cm

Box 95, Section 4

Graphic Representation

Sample Location



LITHOLOGY PETROGRAPHY

Very uniform, grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt.. Rock has subophitic texture. Grain size uniform through section. No contacts.

Interpreted as a dike.

VESICLES/AMYGDALES

About 1%, 1-2mm, spherical, filled with smectite.

FRACTURES - VEINS - BRECCIA

Fractures mostly 60-70°, some at 30-45°. All lined with zeolite, some with smectite. Many fractures are along zeolite veins, mostly 1mm wide. Zeolite is probably laumontite(?).

ROCK ALTERATION

Very little.

STRUCTURE

Aphyric, medium grained, equigranular basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer PTR

Depth Interval

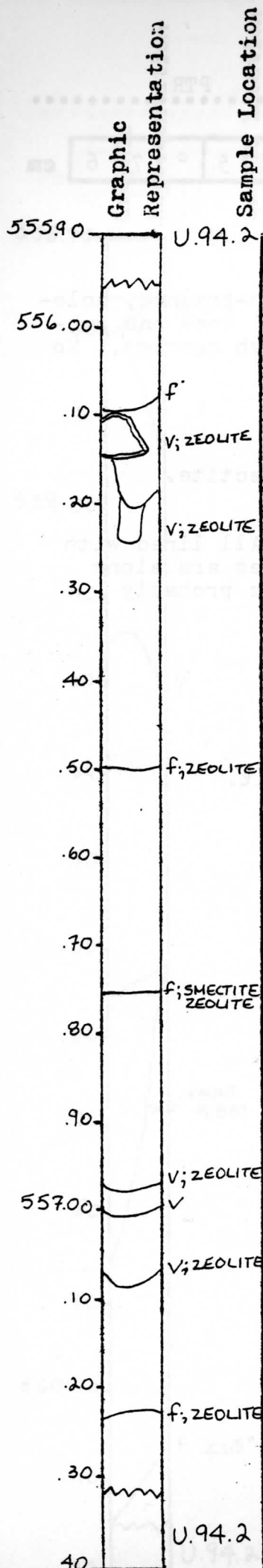
5	5	5	9	5
---	---	---	---	---

 cm to

5	5	7	3	1
---	---	---	---	---

 cm

Box 95, Section 3



LITHOLOGY PETROGRAPHY

Very uniform, grey to greenish-grey, medium-grained, holocrystalline, equigranular, aphyric basalt. Rock has subophitic texture. Grain size uniform through section. No contacts.

Interpreted as a dike.

VESICLES/AMYGDALES

1%, 1-2mm, spherical, filled with smectite.

FRACTURES - VEINS - BRECCIA

Most fractures 50-70° dip, filled with zeolite. A few about 15°.

ROCK ALTERATION

Very little.

STRUCTURE

Aphyric, medium grained, equigranular, holocrystalline massive basalt.

ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ... ILG

Depth Interval

5 5 1 7 7

cm to

5 5 3 0 8

cm

Box 94, Section 4

LITHOLOGY PETROGRAPHY

Medium-grained aphyric basalt. Plagioclase and clinopyroxene.

VESICLES/AMYGDALES

Isolated zeolite filled amygdalae.

FRACTURES - VEINS - BRECCIA

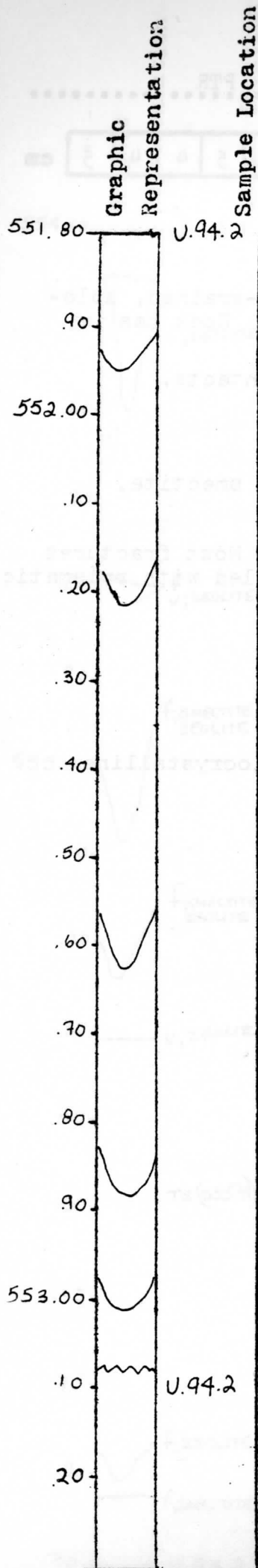
Regular set of fractures cut this section of core. Dip at 60°. Most are coated with zeolite and smectite, calcite.

ROCK ALTERATION

? Little alteration.

STRUCTURE

Aphyric, medium grained basalt.



ICELAND RESEARCH DRILLING PROJECT

Visual Core Description

Observer ILG

Depth Interval

5 5 0 2 5

cm to

5 5 1 7 7

cm

Box 94, Section 2

LITHOLOGY PETROGRAPHY

Medium-grained aphyric basalt throughout.

VESICLES/AMYGDALES

Isolated smectite filled amygdalae up to 2mm in diameter.

FRACTURES - VEINS - BRECCIA

Very few fractures in section.

550.65 Smectite and zeolite filled planar fracture.

551.22 Smectite and zeolite filled planar fracture.

ROCK ALTERATION

? Some smectite.

STRUCTURE

Aphyric, medium grained basalt.

Graphic Representation

Sample Location

