DATE: 19 August 1984 SAMPLE: 55 DK box dredge

CRUISE ID: SO 33

LOC: VII

AREA: E

	time (GMT)	LAT (N)	LON (W)	water depth (m)	wire o
ON BOTTOM =	1307				1608
OFF BOTTOM =	1355				135

time on bottom = 48 min

RECOVERY WEIGHT: total 4.5 kg crust 1.5 kg
3 kg basaltic breccia

CRUST THICKNESS: 1-3 cm Avg = 1.5 cm
2 generations

SUBSTRATE: Basaltic breccia

COMMENTS:

* microbio sample

* confidential

55 DK

SO33 54GTV1	SO33 55DK1
Rock Type: Basaltic Hyaloclastite	→ -do-
Color: Moderate Brown (5YR 4/4)	→ -do-
Texture: Pyroclastic	→ -do-
Matrix: Basaltic glass shards, ± 60%	→ ± 65%
Basaltic rock fragments, ± 10%	→ ± 5%
Cement: Zeolites, ± 20%	→ ± 25%
Phosphorite, ± 7%	→ ± 3%
Calcite, ± 3%	→ ± 2%
Average grain size: ± 0.75 mm (coarse sand — fine gravel)	→ ± 0.50 mm
Grain shape: angular	→ -do-
Sorting: moderately poorly sorted	→ -do-
Porosity: ± 90%	→ -do-
permeability: ± 90%	→ -do-
Alteration: extensive — complete (oxidation, hydration, zeolitization, carbonate, silicification)	→ -do-
Remarks: pebble-to-boulder-size clasts dislodged by dredge from seafloor; probably a subaerially erupted vitric cinder deposit, possibly wind-sorted to some extent; probably deposited in water and subjected to hydrothermal activity which provided most of the alteration effects observed in the rock, including generation of cementing material; probably not disturbed subsequent to deposition; serves as substrate for encrustation by ± 5 mm-thick layers of knobby, warty ferro-manganese oxide.	→ -do-

Crust is similar, but much thicker (± 25 mm)