DATE: 12 August 1984 SAMPLE:
CRUISE ID: SO 33 34 DK box dredge
LOC: V
AREA: C

	time (GMT)	LAT (N)	LON (W)	water depth (m)	wire
ON BOTTOM =	0925 /	6°17.3900	162° 58.1946	2486	2680
OFF BOTTOM =	1120	6°18.0462	162° 55.6375	1409	1414

RECOVERY WEIGHT = total: 25 kg

crust
12 kg
10 kg basal
3 kg biota

CRUST THICKNESS = Veneer to 4 cm
1 generation (finally getting thicker)
Avg = 3.5 cm

SUBSTRATE = basalt

COMMENTS:

* 1 bio sample (plastic bag).

24 DK

1

Rock type: Olivine basalt (AOB?) (Pillow lava)

Color: Pale brown 5YR5/2 – moderate brown (5YR 3/4)

Texture: Phyric, hyalopilitic

Phenocrysts: Olivine, % varies greatly, ±1 mm dia (up to 35%?)

Groundmass: Glass, Olivine, plagioclase?, clinopyroxene?, opaques? } not determined

Vesicles: % quite variable from place to place. Size quite variable from place to place (±1 mm avg). Shape: round – irregular, coalescing

Alteration: Extensive – complete (smectitization, zeolitization, iddingsitization, hydration, oxidation) all the olivine crystals have been altered to iddingsite, vesicles lined with phillipsite crystals in some pieces; glassy rind totally altered to palagonite

Remarks: formation of pillow lavas with (in some cases) remnants of palagonitized glassy rinds adhering to upper surfaces, typical (of pillow lava fragments) segregation into bands of vesicles, [illegible] abundances; some pieces have thick (±3 cm) layers of laminated and dendritic [illegible], Mn-oxide on exposed surfaces.

2

Tuffaceous chalk (marl)

Very pale orange (10YR 8/2)

Texture: pyroclastic/granular

Matrix: foraminifera?, basaltic glass shards?, basalt rock fragments, Mn-micronodules? } not determined

Cement: calcite

avge grain size: ±0.25 mm

Sorting: moderately well-sorted

Grain shape: angular to [illegible] (MICR[illegible] glass sh[illegible]

porosity: ±50%

permeability: ±50%

Alteration: Smectitization, zeolitization, phosphorization, oxidation

Remarks: Similar to [illegible] tuff and chalk – phosphorite of [illegible] [illegible] concentration of ferromanganese oxide [illegible]; serves as substrate for thin, nodular (±1 mm) ferromanganese oxide coating on exposed surfaces

~~Ex: AOB(?) [illegible] (Metaphyre)~~

~~Color: Yellow brown (10YR 7/6 – 5YR 4/4)~~