DATE: 14 August 1984 SAMPLE:
CRUISE ID: SO 33 42 DK box dredge
LOC: VI
AREA: D (near SP Lee Guyot)

	time (GMT)	LAT (N)	LON (W)	water depth (m)	wire o
ON BOTTOM =	1821	9°10.176	164°46.662	~ [illegible]	224
OFF BOTTOM =	2000				150

RECOVERY WEIGHT = total 200 kg crust 5 kg

CRUST THICKNESS = Veneer to 4 cm
mostly .5 – 1 cm Avg .5 cm
2 generations (Germans say 3cm)

SUBSTRATE = basaltic flow rock with gas cavities (big holes), breccia, (rusty-looking in parts
Big basalt boulder (1m × .46m × .50m)

COMMENTS:
Some scour surfaces on crusts
* 2 bio taken.
* 1 microbio ?

42 DK

SO33 42DK1

Rock Type: Olivine Basalt (AOB?), vesicular

Color: Moderate brown (5YR 3/4) to Dusky yellowish-brown (10YR 2/2)

Texture: Subaphyric, hyalopilitic

Phenocrysts: Olivine, ±5%, ± 2mm dia. avge
(Single anhedral - euhedral)

Groundmass: Glass
Olivine ?
Plagioclase ?
Clinopyroxene ?
Opaques ?
} (Not determined)

Vesicles: %: ±15%
Size: varies greatly on small scale; ± 1mm avge (range: ± 0.10 mm – ± 5mm)
Shape: irregular, coalescing
Filling: most are lined with calcite, zeolites?

Alteration: extensive - complete(?)
(Oxidation, hydration, iddingsitization of olivines, smectitization?, zeolitization)

Remarks: cobble-size, subangular - subround clasts, presumably dislodged from outcrop by dredge (some may be bombs); serves as substrate for moderately (± 5mm) thick encrustation of Warta, knobby ferromanganese oxide.

Sample No. SO33 42 DK 2

Rock Type Olivine Basalt (AOB?), Amygdaloidal

Color: varies greatly: - Dark yellowish-brown (10YR 4/2) to grayish brown (5YR 3/2) to light brown (5YR 5 to dark yellowish-orange (10YR 6/6) to grayish-red (5R 4/2)

Texture: Phyric, hyalopilitic

Phenocrysts: Olivine, ± 25%, ± 0.5 mm dia. (varies in concentration from place to place.)

Groundmass: Olivine
Plagioclase ?
Clinopyroxene ?
Glass ?
Opaques
} (not determined)

Vesicles: % (varies greatly) ± 20% — 50+% (scoria)
Size: extremely variable (± 1mm dia. avge)
Shape: round to irregular
Filling: Calcite (± 80%

Alteration: extensive to complete (oxidation, carbonation, zeolitization, iddingsitization of olivines, hydration)

Remarks: Giant fragment of flow basalt (probably not agglomerate); convoluted structure with many scoriaceous (boulder) zones; intensely altered hydrothermally.