

UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

FANFARE EXPEDITION 1959

LIST OF CORES AND DREDGE SAMPLES

COPIED FROM SHIPBOARD LOGS

L. M. Smith
of

(Depths corrected with Matthews' tables)

FANFARE EXPEDITION:

GEOLOGICAL SAMPLES COLLECTED BY THE HUGH M. SMITH.

- FAN HMS 1G: 8 July 1959, approx. 0440-0550 hrs.; $28^{\circ} 12'N$, $117^{\circ} 16'W$; depth 3690 m.; core length 166 cm.; light brown clay. Subdued relief.
- HMS 2G: 9 July 1959, approx. 1630 hrs.; $30^{\circ} 17'N$, $118^{\circ} 14'W$; depth 2970 m.; core length 147 cm. (divided into two sections, 90 cm. and 57 cm.). Rough topography. Core may be contaminated on the outer surface.
- HMS 3G: 9 July 1959, 2028-2136 hrs.; $30^{\circ} 06'N$, $118^{\circ} 42'W$; depth 3535 m.; core length 182 cm.; light brown clay. Subdued relief.
- HMS 4G: 11 July 1959, 0221-approx. 0340 hrs.; $28^{\circ} 28'N$, $118^{\circ} 01'W$; depth 3080 m.; core length 168 cm.; tan clay. On top of ridge south of Guadalupe Island.
- HMS 5G: 12 July 1959, 0005-0110 hrs.; $28^{\circ} 35'N$, $118^{\circ} 42'W$; depth 3470 m.; core length 154 cm.; brown above, greenish below. Subdued relief on a broad rise.
- HMS 6G: 15 July 1959, 1705-1835 hrs.; $35^{\circ} 18'N$, $124^{\circ} 16'W$; depth 4170 m.; core length 104 cm. (top 1-2 cm. lost); greenish silt with brownish upper layer. On Monterey Fan.
- HMS 7G: 16 July 1959, 0235-0345 hrs.; $36^{\circ} 06'N$, $123^{\circ} 14'W$; depth 3530 m.; core length 132 cm.; very soft greenish mud, brownish at top. Channel in fan at foot of Monterey Canyon.
- HMS 8G: 16 July 1959, 1510-1630 hrs.; $37^{\circ} 03'N$, $123^{\circ} 46'W$; depth 3550 m.; core length 133 cm.; fine greenish silt. Deep-sea fan off San Francisco.
- HMS 9G: 16 July 1959, 1938-2055 hrs.; $37^{\circ} 01'N$, $124^{\circ} 18'W$; depth 3980 m.; core length 120 cm.; fine greenish silt. Deep-sea fan off San Francisco.
- HMS 10G: 17 July 1959, approx. 0030 hrs.; $37^{\circ} 01'N$, $124^{\circ} 50'W$; depth 4240 m.; core length 112 cm.; fine greenish silt. Deep-sea fan off San Francisco.
- HMS 11G: 17 July 1959, 0455-0640 hrs.; $37^{\circ} 01'N$, $125^{\circ} 21'W$; depth 4350 m.; core length 155 cm.; fine greenish silt with brownish layer at top. Deep-sea fan off San Francisco.

- HMS 12G: 17 July 1959, 1635-1805 hrs.; $38^{\circ} 03'N$, $126^{\circ} 24'W$; depth 4430 m.; core length 179 cm. (top 10 cm. lost, including brownish layer); greenish silt, stratified, with soft shale pebbles. Delgada deep-sea fan.
- HMS 13G: 18 July 1959, 1457-1600 hrs.; $39^{\circ} 44'N$, $125^{\circ} 22'W$; depth 3210 m.; core length 12 cm.; fine greenish silt. Delgada deep-sea fan.
- HMS 14G: 21 July 1959, 0430-0555 hrs.; $41^{\circ} 58'N$, $128^{\circ} 36'W$; depth 3300 m.; core length 160 cm.; top 10 cm. brown, then bluish, and greyish-tan at bottom. Minor depression in deep-sea plain.
- HMS 15G: 22 July 1959, 0332-0413 hrs.; $40^{\circ} 23'N$, $127^{\circ} 32'W$; depth 1450 m.; several small, somewhat rounded pebbles with a thin Mn crust. South side of northern ridge of Mendocino Escarpment.
- HMS 16G: 22 July 1959, 0425-0500 hrs.; $40^{\circ} 22'N$, $127^{\circ} 33'W$; depth 1450 m.; several chips of a Mn crust. Southern ridge on crest of Mendocino ridge.
- HMS 17G: 23 July 1959, 1828-1900 hrs.; $39^{\circ} 51'N$, $129^{\circ} 39'W$; depth 4550 m.; core length 125 cm.; brownish at top, overlying stiff greenish clay, with perhaps a thin manganeseous zone between. Abyssal plain south of Mendocino Escarpment.
- HMS 18G: 23 July 1959, 2305-0037 hrs.; $39^{\circ} 26'N$, $129^{\circ} 13'W$; depth 4320 m.; core length 183 cm. (2 cm. lost from top); brownish at top, greyish below. On a broad isolated rise between the Mendocino Ridge and the Pioneer Ridge.

GEOLOGICAL SAMPLES COLLECTED BY THE SPENCER F. BAIRD.

- FAN BG 1: 10 July 1959, approx. 1800 hrs.; $29^{\circ} 09'N$, $117^{\circ} 33'W$; depth 3620 m.; core length approx. 180 cm. (top portion lost); chocolate brown clay. Rolling hills.
- BP 2: 11 July 1959, 0912-1215 hrs.; $28^{\circ} 32.5'N$, $117^{\circ} 20'W$; depth 3580 m.; core length 6 m. (top section #1, 47 cm.; #2, 135 cm.; #3, 156 cm.; #4, 121 cm.; bottom section #5, 140 cm.). Smooth bottom, very subdued hills. No gravity core.
- BG 3: 11 July 1959, 1340-1450 hrs.; $28^{\circ} 33'N$, $117^{\circ} 19.6'W$; depth 3580 m.; core length approx. 180 cm. (top disturbed). Smooth bottom with rolling hills.

- BG 4: 11 July 1959, approx. 1830 hrs.; $28^{\circ} 52'N$, $117^{\circ} 20'W$; depth 3560 m.; core length 184 cm. (top disturbed). Rolling hills, 10 fm. relief.
- BG 5: 12 July 1959, approx. 0800 hrs.; $29^{\circ} 00'N$, $117^{\circ} 30'W$; depth 3590 m.; core length approx. 180 cm. (top lost); chocolate brown clay.
- BD 1: 12 July 1959. No sample. Dredge lost.
- BG 6: 12 July 1959, approx. 1330 hrs.; $28^{\circ} 59'N$, $117^{\circ} 28'W$; depth 3535 m.; core length 292 cm. (cut into two parts, 133 and 159 cm.); chocolate clay with worm burrowing throughout. Subdued low hills.
- BG 7: 13 July 1959, 1310-1420 hrs.; $30^{\circ} 43'N$, $119^{\circ} 50'W$; depth 3900 m.; core length 288 cm. (cut into two parts, 148.5 and 139 cm.); greenish clay. Smooth low hills.
- BG 8: 14 July 1959, 1213-1325 hrs.; $32^{\circ} 48'N$, $121^{\circ} 48'W$; depth 4090 m.; core length 159 cm.; brown at top, greenish below. Southern end of Arguello Fan.
- BG 9: 15 July 1959, approx. 0800 hrs.; $35^{\circ} 08'N$, $123^{\circ} 19'W$; depth 4025 m.; core length 47 cm.; brown at top, greenish below - corer stopped by sand layer. Channel in Monterey Fan.
- BP 10: 15 July 1959, approx. 1130 hrs.; $35^{\circ} 06'N$, $123^{\circ} 19'W$; depth 4100 m.; core length approx. 3 m., cut into three sections (#C, at top, 0-60 cm.; #B, 60-190 cm.; #A, at bottom, disturbed, approx. 100 cm. long); silt, with a good deal of nearly dry green clay, and 1 cm. flat pebbles of shale, and shell fragments. Monterey Fan, near channel.
- BG 11: 15 July 1959. No sample.
- BG 12: 15 July 1959, approx. 2030 hrs.; $35^{\circ} 31'N$, $123^{\circ} 19'W$; depth 4300 m.; core length 87 cm.; brown at top, greenish sandy clay below. Monterey Fan.
- BG 13: 15 July 1959, 2330-0040 hrs.; $35^{\circ} 51'N$, $123^{\circ} 21'W$; depth 3660 m.; core length 56 cm. (core originally longer, but much of the sample fellell out of the corer); greenish clay. Monterey Fan.
- BG 14: 16 July 1959, approx. 0800 hrs.; $36^{\circ} 33'N$, $123^{\circ} 21'W$; depth 3470 m.; core length 71 cm.; sandy green mud. West side of Monterey Fan.

- BG 15: 16 July 1959, approx. 1000 hrs.; $36^{\circ} 32'N$, $123^{\circ} 20'W$; depth 3470 m.; core length 212 cm., cut into two parts of 113 and 99 cm. (approx. 1 cm. lost between these sections); greenish, with no obvious brown layer at top. West side of Monterey Fan.
- BG 16: 16-17 July 1959, 2315-0028 hrs.; $37^{\circ} 11'N$, $124^{\circ} 34'W$; depth 3850 m.; core length 172 cm.; dark brown above, greenish below. A high in the Monterey Fan.
- BP 17: 17 July 1959, approx. 1000 hrs.; $37^{\circ} 34'N$, $125^{\circ} 53'W$; depth 4350 m.; core length 805 cm. (section G, at top, approx. 50 cm.; F, 132 cm.; E, 149 cm.; D, 127 cm.; C, 132 cm.; B, 117 cm.; A, at bottom, 98 cm.). Green clay with silt, sand, and perhaps gravel layers. Axis of Delgada Channel.
- BG 17: 17 July 1959, approx. 1000 hrs.; $37^{\circ} 34'N$, $125^{\circ} 53'W$; depth 4350 m.; core length approx. 120 cm.; brown at top, greenish clay below. Axis of Delgado Channel.
- BP 18: 18 July 1959, approx. 1000 hrs.; $39^{\circ} 14'N$, $125^{\circ} 03'W$; depth 3200 m.; core length 663 cm. (section E, at top, 133 cm.; D, 134 cm.; C, 133 cm.; B, 120 cm.; A, at bottom, 143 cm.); greenish clay with sand and silt layers. Axis of Delgada Channel.
- BG 18: Simultaneously with BP 18; core length 171 cm.; brown at top, greenish clay below.
- BG 19: 19 July 1959, 0905-1005 hrs.; $41^{\circ} 06'N$, $125^{\circ} 57'W$; depth 3120 m.; core length 129 cm.; brown at top, greenish clay below. Flat bottom.
- BD 20: 20 July 1959, 0915-1430 hrs.; $40^{\circ} 15'N$, $128^{\circ} 27'W$ to $40^{\circ} 18'N$, $128^{\circ} 29'W$; one sack of Mn nodules, spherical and flat, largest 20 cm. across, and one whale ear-bone. Depth 4500 m. South side of Mendocino Escarpment.
- BD 21A: 20 July 1959. No sample.
- BD 21B: 20 July 1959. No sample.
- BG 22: 21 July 1959, 0822-1040 hrs.; $41^{\circ} 16'N$, $128^{\circ} 32'W$; depth 3220 m.; core length approx. 150 cm.; brown at top, green clay below. Rolling hills.
- BD 23: 21 July 1959, approx. 1300 hrs.; $41^{\circ} 14'N$, $128^{\circ} 36'W$; depth 3300 m.; nothing but some sand and clay adhering to the dredge.

- BG 24: 21 July 1959, approx. 2100 hrs.; $41^{\circ} 10'N$, $128^{\circ} 16'W$; depth 2600 m.; a pierced Mn nodule or crust, and no core. On a rise.
- BD 25: 22 July 1959, 2150-0100 hrs.; $40^{\circ} 23'N$, $127^{\circ} 59'W$; depth 1260 m.; 400 lbs. of basalt pebbles and cobbles coated with Mn. Top of Mendocino Ridge.
- BG 26: 23 July 1959, approx. 0115 hrs.; $40^{\circ} 23'N$, $127^{\circ} 58'W$; depth 1310 m.; practically no sample - only a few Forams. Crest of Mendocino Ridge.
- BG 27: 23 July 1959, approx. 1115 hrs.; $40^{\circ} 08'N$, $128^{\circ} 12'W$; depth somewhat more than 4507 m.; clay core, brown at top, greenish below. Abyssal hills, 5 fm. relief.
- BG 28: 23 July 1959. Core dropped into sea while removing barrel.
- BG 29: 24 July 1959, approx. 0830 hrs.; $38^{\circ} 32'N$, $127^{\circ} 56'W$; depth 4660 m.; core length 40 cm.; brown clay at top, greenish below. Gently undulating bottom.
- BG 30: 24 July 1959, approx. 1030 hrs.; $38^{\circ} 30'N$, $127^{\circ} 58'W$; depth 4665 m.; small sample of brown clay. Gently undulating bottom.
- BG 31: 24 July 1959, 1450-1605 hrs.; $38^{\circ} 25'N$, $128^{\circ} 00'W$; depth 4660 m.; core approx. 60 cm. long, very fluid, stored in two boxes.
- BG 32: 25 July 1959, approx. 0800 hrs.; $40^{\circ} 16'N$, $127^{\circ} 40'W$; depth 3730 m. Base of Mendocino Escarpment.
- BD 33: 25 July 1959, approx. 0945 hrs.; $40^{\circ} 19'N$, $127^{\circ} 39'W$; depth 3925 m.; 100 lbs. rock and siliceous sponges. South side of Mendocino Escarpment.
- BG 34: 26 July 1959; $40^{\circ} 27'N$, $127^{\circ} 42'W$; depth 3200 m.; core length approx. 60 cm.; brown at top, greenish clay below. Base of Mendocino Ridge.
- BD 35: 25 July 1959. No sample.
- BD 36: 26 July 1959, approx. 0800 hrs.; $40^{\circ} 24'N$, $125^{\circ} 32'W$ to $40^{\circ} 19'N$, $125^{\circ} 43'W$; depth 1820-2390 m.; 9 bags of rocks. Crest of Gorda Escarpment.