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UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

# TETHYS EXPEDITION

June - July 1960

## LIST OF CORES

Copied from Shipboard Logs.

Depths Corrected by Matthews' Tables.

R/V S.F. Baird

TET 1: 18 June 1960, 0505-0625 hrs.; 24°14'N, 120°36'W; depth 4169m.; brown mud.

TET 3: 23 June 1960, 0050-0240 hrs.; 13°14'N, 127°06'W; depth 4758 m.; core length 68 cm.; brown mud.

TET 4: 27 June 1960, 0623-0725 hrs.; 4°34'N, 130°37'W; depth 4478 m.; core length 124 cm.; brown calcareous mud.

TET 5: 30 June 1960, 2357-0112 hrs.; 1°47'S, 133°44'W; depth 4403 m.; core length 127 cm.; calcareous ooze.

TET 6: 2 July 1960, 0530-0645 hrs.; 2°31'S, 137°04'W; depth 4118 m.; core length 34 cm.; calcareous ooze.

TET 7: 3 July 1960, 0959-1115 hrs.; 00°09'S, 138°51'W; depth 4406 m.; core length 146 cm.; calcareous ooze.

TET 8: 5 July 1960, 0300-0425 hrs.; 2°32'N, 141°08'W; depth 4435 m.; core length 138 cm.; calcareous ooze.

TET 9: 5 July 1960, 2110-2225 hrs.; 4°57'N, 142°55'W; depth 4882 m.; core length 160 cm.; brown calcareous clay.

TET 10: 8 July 1960,0423-0635 hrs.; 9°44 'N, 146°46'W; depth 5247 m.; 12 small pieces of (probably) manganese.

TET 11: 10 July 1960, 2120-0004 hrs.; 14°41'N, 151°20'W; depth 5590 m.; core length 164 cm.; brown clay.

TET 12: 12 July 1960,0630-0740 hrs.; 17°10 'N, 153°57'W; depth 5115 m.; core length 14 cm.; indurated greyish-brown clay.

TET 13: 17 July 1960, 1450-1528 hrs.; 20°58'N, 158°04'W; depth 2760 m.; core length 69 cm.; brown calcareous clay.

TET 14: 17 July 1960, 1937-2055 hrs.; 20°23'N, 158°36'W; depth 4409 m.; Core length 78 cm.; brown calcareous silty clay.

TET 15: 17 July 1960, 2131-2247 hrs.; 20°18'N, 158°39'W; depth 4295 m.; core length 69 cm.; brown silty clay.

TET 16: 18 July 1960, 0736-0904 hrs.; 18°57'N, 159°38'W; depth 4809 m.; core length 166 cm.; brown clay, greyish below.

TET 17: 18 July 1960, 1010-1125 hrs.; 18°49'N, 159°43'W, depth 4795 m.; core length 175 cm.; brown silty clay.

TET 18: 18 July 1960, 1920-2051 hrs.; 17°40'N, 160°39'W; depth 5393 m.; core length 22 cm.; indurated brownish silty clay.

TET 19: 18 July 1960, 2135-2258 hrs.; 17°36'N, 160°42'W; depth 5490 m.; core length 43 cm.; indurated brownish silty clay.

TET 20: 19 July 1960, 0735-0900 hrs.; 16°19'N, 161°36'W; depth 5585 m.; core length 13 cm.; indurated brownish silty clay.

TET 21: 19 July 1960, 0952-1120 hrs.; 16°13'N, 161°40'W; depth 5285 m.; core length 83 cm.; chocolate zeolitic clay.

TET 22: 19 July 1960, 1220-1305 hrs.; 16°06'N, 161°45'W; depth 2400 m.; several 2-cm. pieces of manganese nodules. Near top of a seamount.

TET 23: 19 July 1960, 1938-2105 hrs.; 15°11'N, 162°25'W; depth 5490 m.; core length 88 cm.; chocolate zeolitic clay. On a small hill.

TET 24: 19 July 1960, 2235-0020 hrs.; 15°02'N, 162°31'W; depth 5666 m.; core length 85 cm.; dark brown zeolitic clay with 1.5 cm. Mn nodule at top.

TET 25: 20 July 1960, 0810-0935 hrs.; 13°50'n, 163°23'W; depth 5589 m.; core length 139 cm.; dark brown zeolitic clay.

TET 27A: 20 July 1960, 1937-2105 hrs.; 13°05'N, 163°10'W; depth 5413 m.; a 2 cm. Mn nodule with adhering shark tooth, and a few grams of Eocene radiolarian ooze.

TET 27B: 20 July 1960, 2128-2300 hrs.; 13°05'N, 163°10'W; depth 5430 m.; core length 104 cm.; brown zeolitic clay.

TET 28: 20 July 1960, 2353-0122 hrs.; 12°58'N, 163°09'W; depth 5430 m.; core length 102 cm.; chocolate zeolitic clay with 1 cm. Mn nodule at top.

TET 29: 21 July 1960, 0811-0928 hrs.; 11°44'N, 162°41'W; depth 5265 m.; core length 158 cm.; chocolate zeolitic clay.

TET 30: 21 July 1960, 1048-1208 hrs.; 11°32'N, 162°36'W; depth 5340 m.; core length 118 cm.; chocolate zeolitic clay.

TET 31: 21 July 1960, 1937-2100 hrs.; 10°19'N, 162°07'W; depth 5151 m.; core length 101 cm.; chocolate zeolitic clay.

TET 32: 21 July 1960, 2154-2315 hrs.; 10°09'N, 162°05'W; depth 5063 m.; core length 131 cm.; chocolate zeolitic clay.

TET 33: 22 July 1960, 0757-0915 hrs.; 8°38'N, 161°39'W, depth 5063 m.; a very small smear of calcareous ooze with discoasters that seem to be Late Tertiary (not kept).

TET 34: 22 July 1960, 0947-1105 hrs.; 8°34'N, 161°39'W; depth 5070 m.; core length 122 cm.; calcareous ooze with brown layer at top.

TET 35: 22 July 1960, 1920-2035 hrs.; 7°14'N, 161°03'W; depth 3935 m.; core length 144 cm.; calcareous ooze.

TET 36: 22 July 1960, 2200-2313 hrs.; 7°04'N, 160°58'W; depth 4143 m.; core length 149 cm.; calcareous ooze.

TET 37: 23 July 1960, 0830-0930 hrs.; 5°33'N, 160°33'W; depth 3600 m.; core length 76 cm.; calcareous ooze.

TET 38: 23 July 1960, 1045-1137 hrs.; 5°21'N, 160°30'W; depth 3614 m.; core length 124 cm.; calcareous ooze.

TET 39: 24 July 1960, 1703-1800 hrs.; 4°57'N, 160°18'W; depth 3342 m.; core length 177 cm. (few cm. lost from top); calcareous ooze.

TET 40: 24 July 1960, 2020-2115 hrs.; 5°18'N, 160°05'W; depth 3816 m.; core length 182 cm. (few cm. lost from top); calcareous ooze.

TET 41: 25 July 1960, 0751-1912 hrs.; 6°52'N, 158°44'W; depth 4407 m.; core length 138 cm.; calcareous clay.

TET 42: 25 July 1960, 1034-1140 hrs.; 7°03'N, 158°35'W; depth 4407 m.; core length 121 cm.; calcareous ooze.

TET 43: 25 July 1960, 1902-2014 hrs.; 8°14'N, 157°51'W; depth 4675 m.; core length 144 cm.; chocolate zeolitic clay.

TET 44: 25 July 1960, 2302-0013 hrs.; 7°53'N, 157°29'W; depth 4989 m.; core length 182 cm. (few cm. lost from top); calcareous clay at top, dark brown clay below.

TET 45: 26 July 1960, 0338-0502 hrs.; 7°29'N, 157°04'W; depth 5075 m.; core length 182 cm. (few cm. lost from top); calcareous clay at top, dark brown clay below.

TET 46: 26 July 1960, 0740-0904 hrs.; 7°56'N, 156°48'W; depth 5075 m.; core length 182 cm. (few cm. lost from top). Chocolate zeolitic clay.

TET 47: 26 July 1960, 1110-1245 hrs.; 8°14'N, 156°38'W; depth 5266 m.; core length 175 cm.

TET 48: 26 July 1960, 1818-1945 hrs.; 9°10'N, 156°25'W; depth 5285 m.; core length 122 cm.; chocolate clay.

TET 49: 27 July 1960, 0007-0133 hrs.; 9°52'N, 156°09'W; depth 5277 m.; core length 105 cm.; brown clay.

TET 50: 27 July 1960, 0618-0751 hrs.; 10°39'N, 155°56'W; depth 5188 m.; a smear of zeolitic manganous clay.

TET 51: 27 July 1960, 0830-0949 hrs.; 10°39'N, 155°56'W; depth 5188 m.; core length 157 cm.; chocolate zeolitic clay.

TET 52: 27 July 1960, 1028-1152 hrs.; 10°47'N, 155°54'W; depth 5234 m.; core length 110 cm.; dark brown zeolitic clay.

TET 53: 27 July 1960, 1840-2003 hrs.; 11°27'N, 155°48'W; depth 5206 m.; core length 138 cm.; dark brown zeolitic clay.

TET 54: 28 July 1960, 0020-0140 hrs.; 12°05'N, 155°29'W; depth 4970 m.; core length 70 cm.; dark brown zeolitic clay, and a 1-cm. Mn nodule in core-catcher. On a 100-fm. rise.

TET 55: 28 July 1960, 0805-0930 hrs., 13°07'N, 155°01'W; depth 5518 m.; core length 132 cm.; dark brown zeolitic clay.

TET 57: 28 July 1960, 2230-0003 hrs.; 14°12'N, 155°08'W; depth 5600 m.; small amount of greyish-brown, indurated silty clay.

TET 58: 29 July 1960, 0810-0936 hrs.; 15°42'N, 155°22'W; depth 5377 m.; core length 11 cm.; indurated silty clay.

TET 59: 29 July 1960, 1040-1155 hrs.; 15°49'N, 155°22'W; depth 5210 m.; core length 7 cm.; indurated silty clay.

TET 60: 29 July 1960, 1753-1915 hrs.; 15°17'N, 155°59'W; depth 5406 m.; core length 18 cm.; indurated silty clay.

TET 61: 29 July 1960, 2103-2232 hrs.; 15°05'N, 156°13'W; depth 5563 m.; core length 69 cm.; brownish-grey silty clay.

TET 62: 29 July 1960, 2318-0050 hrs.; 15°00'N, 156°19'W; depth 5550 m.; a smear of silty clay.

TET 63: 30 July 1960, 0432-0615 hrs.; 14°28'N, 156°51'W; depth 5766 m.; core length 55 cm.; brownish-grey silty clay.

TET 64: 30 July 1960, 1203-1327 hrs.; 15°36'N, 156°53'W; depth 5400 m.; core length 17 cm.; indurated silty clay.

TET 65: 30 July 1960, 1428-1555 hrs.; 15°44'N, 156°56'W; depth 5360 m.; core length 35 cm.; brownish-grey silty clay with indurated surface.

TET 66: 30 July 1960, 1655-1824 hrs.; 15°54'N, 156°58'W; depth 5322 m.; core length 36 cm.; brownish-grey silty clay.

TET 67: 30 July 1960, 2207-2327 hrs.; 16°36'N, 157°08'W; depth 5189 m.; small amount of buff silty clay.

TET 68: 31 July 1960, 0025-0145 hrs.; 16°43'N, 157°10'W; depth 5160 m.; one small pebble in core-catcher.

TET 69: 31 July 1960, 0733-0855 hrs.; 17°49'N, 157°27'W; depth 4795 m.; a smear of silty clay.

TET 70: 31 July 1960, 0925-1037 hrs.; 17°53'N, 157°28'W; depth 4790 m.; core length 88 cm.; brownish-grey silty clay.

TET 72: 31 July 1960, 2007-2115 hrs.; 19°12'N, 157°26'W; depth 4546 m.; core length 129 cm.; brown silty clay.

TET 73: 31 July 1960, 2210-2314 hrs.; 19°19'N, 157°29'W; depth 4220 m.; core length 30 cm.

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Key to Abbreviations Used in Sample Descriptions ("core logs")

G: Gravity core

P: Piston core

PG: Gravity core obtained in conjuction with a piston core, and bearing the same sample number. This is also known as a "trip gravity" core since in this instance a gravity corer is used to trip the arm of the piston corer.

Note: In some core logs (e.g. Monsoon) it will be noted that there is sometimes a PG core with no accompanying P core (or vice versa). This is a result of no P sample having been obtained; therefore, even the attempt was ignored when the log was compiled. (Obviously, however, there was an attempt or there would be no PG.)

V: Heat probe core, short and of small diameter (c. 1"), developed by R. von Herzen. Occasionally regular gravity cores are used instead.

GV: AMPHITRITE Expedition ONLY: Gravity cores taken for a specific person and purpose.

Note: Such "special request" cores are frequently taken on SIO cruises; but, with the above exception, are not usually designated differently than other samples. Frequently, also, such cores are used in their entirety by the person for whom they were taken and are no longer in the SIO collection, even though they may appear in the log.

C: Very small cores obtained by corers attached to the frame of a camera.

T: Triple corer samples, some are very small, others are regular gravity cores.

Grab: Designated as such (e.g., MSN 135 grab).

S: Snapper: The proper term for "grab". May also be spelled out.

D: Dredge samples. Also used to designate subaerial samples.

H: Hydrographic PBS (Phleger Bottom Sampler). See Downwind, Horizon, DWHHI.

Abbreviations of ship names:

A: R/V Argo (e.g., LSDA)
H: R/V Horizon (e.g., LSDH, DWH)
B: R/V Spencer F. Baird (e.g., DWB)
HMS: R/V Hugh M. Smith (e.g., FAN, HMS)
S: R/V Stranger

Note: In the LUSIAD-ARGO (LSDA) core log will also be found SCS: South China Sea.

Use of lower case letters and prime (′): Used to indicate that two (or more) attempts were made to obtain a sample; e.g., 101 G (first attempt), 101 Ga (second attempt); or 101 Ga (first attempt), 101 Gb (second attempt). Occasionally, as in Chubasco Roman-numeraled samples, a prime mark (′) has been used for this purpose, e.g., CHUB Vg, V′g. (Note that this log also uses lower case for gravity and piston core designations).

Occasionally no letter designation is used if all cores of an expedition were gravity cores.