

University of California
Scripps Institution of Oceanography

EXPEDITION CHINOOK I

S. F. ...

LOWERING LOG

JUNE - AUGUST, 1956

R. J. Hurley

686

5B-2

CHINOOK CORE NO. 2

12 July 1956

Ship: Spencer F. Baird

P and Peterson Grab as a trip

Depth, echo: Start 3075 fm 5623 m
Depth, wire: fm 6250 m

Lat. 35-09 N

Long. 157-17.5 W

Geographic description: Between Mendocino and Murray Escarpments

Station No. 4

Core diameter 2.441 in.

Tube length: 30 feet

Fathogram No. Chinook 2

Total core length: 28½ in. 2

Weight of corer: 900 lbs. plus barrel and wt. stand (14 wts.)

Bottom water collected from above core: no.

from cast: yes--Chinook 4 deep section, B. Bryer.

Sediment type: Brown clay over red clay.

Measurements on sediment carried out on board: strength of sample from catcher measured by Moore.

Other operations at station: Hydro Cast Chinook #4

Remarks: start down 1310 at 1554 with 6520 meters out and no break, commenced recovery; no pull out apparent. Up at 1945; 4 strands wire broken in ½" wire at 3580 meters. Barrel bent, Grab open, empty, and broken; ball breaker demolished.

SB-3

CHINOOK CORE NO. 3

Ship: Spencer F. Baird (G) 15 July 1956

Depth, echo: 2790 fm 5005 m
Depth, wire: fm 5705 m

Lat. 39-56.2 N Long. 158-38.0 W

Geographic description: North Flank of Mendocino Scarp.

Station No. 5 Core diameter: 2 in.

Tube length: 6 ft. Fathogram No. Chinook 2

Total core length: 48-1/2 in. 123 Weight of corer: 175 lbs. -79 kg

Bottom water collected from above core: yes--P. Winchell
from cast: yes--B. Bryer

Sediment type: soft tan, red clay.

Measurements on sediment carried out on board: shear strength measurements from near top and bottom.

Other operations at station: Hydro Cast.

Remarks: start down at 1147; good break at 1215 at 5705 meters. Pull out force heavy at 5692 meters; up at 1340.

(No cutter sample)

CHINOOK CORE NO. 4

Ship: Spencer F. Baird (G) 17 July 1956

Depth, echo: 2950 fm m
Depth, wire: fm 6140 m (break)
6132 m (pullout)

Lat. 42-29.9 N Long. 162-08.2 W

Geographic description: North of Mendocino Escarpment

Station No. 5 Core diameter: 2 in.

Tube length: 6 ft. Fathogram No. Chinook 3

Total core length: 163 cm Weight of corer: 175 lbs.
61 1/4" plus cutter

Bottom water collected from above core: yes.
from cast: yes.

Sediment type: Brown clay over stiff dark chocolate brown clay; contact not observed.

Measurements on sediment carried out on board: see sample sheet for D. G. Moore mech. tests.

Other operations at station: Cast

Remarks: start down at 1215, break at 1244 at 6140 m., pull out at 6132 m, up at 1402.

Cutter sample in jar.

CHINOOK CORE NO. 5

Ship: Spencer F. Baird (G) 18 July 1956

Depth, echo: 2950 fm m
Depth, wire: fm 6070 m--(pullout)

Lat. 43-16.2 N Long. 163-40.0 W

Geographic description: on hill north of Mendocino

Station No. 6 Core diameter: 2 in.

Tube length: 6 ft. Fathogram No. Chinook 3

Total core length: $47\frac{1}{2}'' = 122 \text{ cm}$ Weight of corer: 175 lbs.
(94 cm + nose.)

Bottom water collected from above core: yes. P. Winchell
from cast:--

Sediment type: Tan clay over brown clay---contact not observed.

Measurements on sediment carried out on board: D. G. Moore; see sample sheet (Mech. tests)

Other operations at station: start seismic station a few miles north.

Remarks: start down 0418, break 0450, 6100-6115 meters, pull out at 6070 m at 0455. Core up at 0612.

Cutter sample in jar.

SB-6

CHINOOK CORE NO. 6

Ship: Spencer F. Baird (G) 19 July 1956

Depth, echo: 2830 fm m
Depth, wire: fm 5956 m.

Lat. 46-57 N Long. 164-49.5 W

Geographic description: Abyssal Plain.

Station No. -- Core diameter: 2 in.

Tube length: 6 ft. Fathogram No. Chinook 3

Total core length: 71 in. Weight of corer: 175 lbs.

Bottom water collected from above core: yes.
from cast: yes.

Sediment type: Brown clay and Manganese nodules

Measurements on sediment carried out on board: None.

Other operations at station: Cast.

Remarks: start down 1149, ball break at 1227, 5966 m., pullout at 5956 m., up at 1339. No catcher or cutter sample.

CHINOOK CORE NO. 7

Ship: Spencer F. Baird

(G)

19 July 1956

Depth, echo 2830 fm. 5050 m
Depth, wire fm. 5779 m

Lat. 47-10 N

Long: 165-45 W

Geographic description: Abyssal Plain.

Station No. --

Core diameter; 2 in.

Tube length 6 ft.

Fathogram No. Chinook 3

Total core length: 69-1/2"

Weight of corer: 175 lbs.

Bottom water collected:--

Sediment type: Brown clay with Manganese nodules

Measurements on sediment carried out on board:--

Other operations at station: None

Remarks: start down at 2139. 2150 wire under ship--stopped lowering; started lowering 2205 hours, break at 2225-1/2 hours, 5779 meters; core up at 2358.

CHINOOK CORE NO. 8

Ship: Spencer F. Baird (G) 26 July 1956

Depth, echo: 1995 fm. 3660 m.
Depth, wire: fm. 4530 m.

Lat. 53-01.5° N Long. 176-15.0 W

Geographic description: Bering Sea.

Station No. 9 A Core diameter: 2 in.

Tube length: 6 ft. Fathogram No. Chinook 3

Total core length: 48-1/2" Weight of corer: 175 lbs.

Bottom water collected from above core: yes.
from cast: yes.

Sediment type: 6 in. brown clay over grey-brown mud; sand observed.

Measurements on sediment carried out on board: None

Other operations at station: Cast--start seismic line 9.

Remarks: wind 28 knots--180°T. 0124-1/2 start down. Stop 0154 with 4700 m. out, no break; reported good pullout at 4530 m. at 0217. Many "holes" in wire 150 m. above corer; finally up about 0340. (No cutter sample)

CHINOOK CORE NO. 9

Ship: Spencer F. Baird

(G)

26 July 1956

Depth, echo: 1880-1870 fm. 3440 m.

Depth, wire: fm. 3752 m.

Lat. 52-25.2 N

Long. 176-24.5 W

Geographic description: Bering Sea, base of slope.

Station No. 9 B

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No. Chinook 3

Total core length: 33-1/2 in.

Weight of corer: 175 lbs.

Bottom water collected: --

Sediment type: brown clay over green mud--much sand noted.

Measurements on sediment carried out on board: None

Other operations at station: Seismic listening 9 B, and core 10.

Remarks: start down 1252, break at 1310 with 3765 m. pullout force at 3752 m. up at 1348.

Cutter sample in glass jar--green mud.

CHINOOK CORE NO.10

Ship: Spencer F. Baird (G) 26 July 1956

Depth, echo: end, 1885 fm. 3448 m.
start, 1875 fm. 3430 m.

Depth, wire: fm. 3728 m.

Lat. 52-25.2 N

Long 176-19.8 W

Geographic description: Bering Sea, base of slope.

Station No. 9 B

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No. Chinook 3

Total core length: 33-1/2"

Weight of corer: 175 lbs.

Bottom water collected: --

Sediment type: Bottled for Chem. Study in washed liner; extruded on board
for organic analyses.

NO SED DATA

Measurements on sediment carried out on board: None.

Other operations at station: seismic listening 9 B and Core 9

Remarks: Start down 1407. Break at 1422 with 3750 m. Pullout at 3728 m.

CHINOOK CORE NO. 11

Ship: Spencer F. Baird (G) 30 July 1956

Depth, echo: 2650 fm. 4850 m.
Depth, wire: fm. 5372 m.

Lat. 49-39.5 N Long. 177-39 W

Geographic description: Rise south of Aleutian Trench

Station No. -- Core diameter: 2 in.

Tube Length: 6 ft. Fathogram No. Chinook 4

Total core length: 52 in. Weight of corer: 175 lbs.

Bottom water collected: --

Sediment type: brown clay over light brown clay over very stiff grey-green clay.

Measurements on sediment carried out on board: None.

Other operations at station: None (core 12)

Remarks: start down 0856, break at 5372 m, pullout weak at 5349 m at 0917, up at 1046. Core cutter sample stored in 3 oz. jar (red fragments are from floor of lab.)

CHINOOK CORE NO. 12

Ship: Spencer F. Baird (G) 30 July 1956

Depth: echo 2842 fm. m.
Depth: wire fm. m.

Lat. Long.

Geographic description: Rise south of Aleutian Trench.

Station No. -- Core diameter: 2 in.

Tube length: 6 ft. Fathogram No. Chinook 4

Total core length: in. Weight of corer: 175 lbs.

Bottom water collected: --

Sediment type:

Measurements on sediment carried out on board: None.

Other operations at station: None.

Remarks: Fouled some 150 m of wire. No core. Start down 1055. Let out 5712 m, stopped at 1126, no break. Pullout at 5330 (over by 382 m). Finally up at 1325.

CHINOOK CORE NO. 13³

Triple core of 5/16" wire

Ship: Spencer F. Baird

(G)

1 August 1956

Depth, echo: start 2640 fm. 4835 m.

end 2750 fm. 4710 m.

Depth, wire: fm. 5070 m.

Lat. 173-02 N.

Long. 44-45 W.

Geographic description: in large hill in region of 1-200 fm hills.

Station No.--

Core diameter: 2 in.

Tube length: each 6 feet

Fathogram No.

Bottom water collected:

Sediment type: see below

Measurements on sediment carried out on board:

Other operations at station:

1. 45 in. chem. core, siliceous ooze in catcher in blebs; extruded for organic analysis. Cutter sample in plastic box.
2. 40 in. Same material; no cutter sample.
3. 44-1/2 in. plus cutter sample in plastic box.

Remarks: Start down 1015; break at 1215 with 5070 m. of wire. Up at 1436. Manganese nodules on surface.

CHINOOK CORE NO. 14³

Second triple on 5/16" wire

Ship: Spencer F. Baird

(G)

2 August 1956

Depth: echo	start	3100	fm.	5700	m.
	end		fm.	5650	m.
Depth: wire			fm.		m.

Lat. 41-37.5 N

Long. 172-49.0 W

Remarks: Start down 1257; stopped, no break, at 6350 m. at 1515.

Wire parted at 4874 m. on the way up; end triple corer.

CHINOOK CORE NO. 15

Ship: Spencer F. Baird

(G)

4 August 1956

Depth, echo: start down 2290 fm. 4195 m.
Start up 2330 fm. 4260 m.
Depth, wire: more than 4511 m.

Lat. 36°-30' N

Long. 173° - 16.2' W

Geographic description:

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length:

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: No core

Measurements on sediment carried out on board: None.

Other operations at station:

Remarks: start down at 0828 in 2290 fm (4195 m)--very doubtful break 4511 m;
stop at 0852 when bottom at 2330 fm. (4260 m). Up at 0939--no bottom touched.

Sent down for #16.

CHINOOK CORE NO. 16

Ship: Spencer F. Baird

(G)

4 August 1956

Depth, echo: 2290 fm. 4195 m.

Depth, wire: fm. 4709 m.

Lat. 36-30 N

Long 173-16.2 W

Geographic description:

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length: 30-1/2"

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: Buff clay over globigerina ooze.

Measurements on sediment carried out on board: None.

Other operations at station:

Remarks: Start down 0941; break at 1001, at 4709 m. Up at 1055.
Cutter sample in plastic box.

CHINOOK CORE NO. 17

Ship: Spencer F. Baird

(G)

4 August 1956

Depth, echo: about 2260 fm. 4150 m.

Depth, wire: fm. 5075 m.

Lat. 36-30 N

Long. 173-16.2 W

Geographic description:

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length: 26-1/2"

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: see Chinook 16.

Measurements on sediment carried out on board:

Other operations at station:

Remarks: start down at 1102. Stop at 1126 at 5075 m in 4400 m water. No break. Up at 1330 after some 300m of fouled wire.

26-1/2" core to chemistry for organic content; extruded on board.

CHINOOK CORE NO. 18

Ship: Spencer F. Baird

(G)

7 August 1956

Depth, echo: 1200 + fm. 2200 m.
Depth, wire: fm. 3100 m.

Lat. 28-56.5 N

Long. 170-54.1 W

Geographic description: on summit of seamount.

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length:

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: small amount of foram. sand and a manganese crusted altered greenish vesicular rock fragment with a fresh break.

Measurements on sediment carried out on board:

Other operations at station:

Remarks: start down 0726. 0742 start up 3100 m; no break. Up at 0833.

CHINOOK CORE NO. 19

Ship: Spencer F. Baird

(G)

7 August 1956

Depth, echo: 1400 + fm. 2560 m.
Depth, wire: - fm. m.

Lat. 28-56.5 N.

Long. 170-54.1 W.

Geographic description: on flank of seamount.

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length: No core.

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type:

Remarks: start down 0842 at 0955. Break at 2838 m. Pullout force at 2809 m.
Up at 1031.

No core; breaker came up all cocked.

CHINOOK CORE NO. 20

Ship: Spencer F. Baird

(G)

7 August 1956

Depth, echo: 1965 fm. 3595 m.
Depth, wire: fm. m.

Lat.

Long.

Geographic description:

Station No.

Core diameter: 2 in.

Tube length:

Fathogram No.

Total core length:

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type:

Measurements on sediment carried out on board:

Other operations at station:

Remarks: start down 1645. Start up 1703 with 4312 m. out. Up at 1812;
no touch bottom.

Fathometer scale error; depth is 2500-2600 fm.

CHINOOK CORE NO. 21

Ship: Spencer F. Baird

(G)

7 August 1956

Depth, echo: 2480 fm. 4540 m.

Depth, wire: fm. m.

Lat.

Long.

Geographic description:

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length: No core.

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: Some red clay on weights.

Measurements on sediment carried out on board:

Other operations at station:

Remarks: start down at 1815; 1840, 5300 out. No break. Pullout force at 5114 m.
Up at 2025.

Prebreak in ball. No core; indications of red clay.

No Position

CHINOOK CORE NO. 22

Ship: Spencer F. Baird (G) 8 August 1956

Depth, echo: 2430 fm. 4450 m.
Depth, wire: fm. 4877 m.

Lat. 26-22 N Long. 168-53 W

Geographic description:

Station No. Core diameter: 2 in.

Tube length: 6 ft. Fathogram No.

Total core length: 65 in. Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: Brown clay and globigerina ooze.

Measurements on sediment carried out on board:

Other operations at station:

Remarks: start down 1306; 2430 fm. at 1327. Break 4912 m. Pullout force at 4877 m. Up at 1430.

Cutter sample in plastic box.

CHINOOK CORE NO. 23

Ship: Spencer F. Baird

(G)

8 August 1956

Depth, echo: 2430 fm. 4450 m.
Depth, wire: fm. 4906 m.

Lat. 26-22 N

Long. 168-53 W

Geographic description

Station No.

Core diameter: 2 in.

Tube length: 6 ft.

Fathogram No.

Total core length: 60 in.

Weight of corer: 175 lbs.

Bottom water collected:

Sediment type: brown clay and globigerina ooze. Core extruded for organic analysis.

Measurements on sediment carried out on board:

Other operations at station:

Remarks: start down 1507, 4450 m. At 1531 good break at 4926 m. Pullout force at 1906 m. Up at 1627.

Cutter sample in plastic box.

