University of California
Scripps Institution of Oceanography

EXPEDITION CHINOOK I

LOWERING LOG

JUNE - AUGUST, 1956

R. J. Hurley
CHINOOK CORE NO. 1

Ship: Spencer F. Baird  Core No. 1 a, b, c  9 July 1956
          C--triple

Depth, echo:  3045 fm  
Depth, wire:  3460 fm

Lat. 29-24 N  Long. 153-06 W

Geographic description: Murray Fracture zone

Station No. 3  Core diameter: 2 in. — 5/11

Tube length: 6 ft. each  Pathogram No. Chinook 2

Total core length: (a) 144 cm  Weight of corer: 160 lbs. each
(b) 61 in  480 lbs. total — 11/16
(c) 61 in

from above core: yes. P. Winchell
Bottom water collected  from cast: no.

Sediment type: Pacific brown clay

Measurements on sediment carried out on board: on 1 a strength, D. G. Moore. None on others.

Other operations at station: None; followed seismic line to the south 4 miles more or less.

Remarks: start down 2040, bottom at 2317, ball break at 6240 m. 11 min. wait after stop, then started up at 2328 with winch trouble; surface about 0345 10 July.

(See also composite sample of cutters a, b, and c.)
CHINOOK CORE NO. 2

12 July 1956

Ship: Spencer F. Baird

P and Peterson Grab as a trip

Depth, echo: Start 3075 fm 8423 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. Weight of corer: 900 lbs. plus barrel and wt. stand (14 wts.)

from above core: no.
Bottom water collected 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 ⅛" wire at 3580 meters. Barrel bent, Grab open, empty, and broken; ball breaker demolished.
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. Weight of corer: 175 lbs. -79 k.g.

from above core: yes--P. Winchell

Bottom water collected 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. Pathogram No. Chinook 3

Total core length: 163 cm Weight of corer: 175 lbs.
61\frac{1}{4}\text{"} plus cutter

from above core: yes.

Bottom water collected 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: 47-1/2" or 122 cm (94 cm + nose.)  Weight of corer: 175 lbs.

from above core: yes. P. Winchell

Bottom water collected 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.
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.
Bottom water collected 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. Pathom No. Chinook 3

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

from above core: yes.
Bottom water collected 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 094; 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. Pathogram 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.
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.