

LADD

I.

UNITED STATES

DEPARTMENT OF THE INTERIOR
ALEXIS
DI-6

APPROVED DECEMBER 1911
RUSSELL

—————

ENIWETOK

K-1, K-1A, K-1B

Enwclak 1950-51

Jan. 2, 1951 - Tuesday

KENNEY NO. 1 - near Engle, NE Texas

- 0'0" - 7'6" - Mixture of pieces of worn coral, beach Foraminifera (*Calceulina*) and pieces of asphalt paving, etc.
- 7'6" - 10'0" - 10" recovery with jacking core barrel (3 3/4" ID) - Beach rock; well cemented, beach sandstone with many forams - partially worn through 2' of this material.
- 10'0" - 12'2" - drilled with rock bit; soft material; no cuttings taken.
- 12'2" - 22'8" - small cuttings seen from mud 7' from hole opening, *Margarita Calceulina*, *Holmella* section, small mollusks (shell part & pelecypods, small pieces of coral (some fresh and worn). This section had few hard streaks but drilled easily in 5 minutes.
- 22'8" - 33'2" - Beach forams, *Holmella* & coral; most of pieces appear worn; drilled easily like last. Small cuttings only, taken 7' from hole.
- 33'2" - 43'8" - Took first rock coarse cuttings from mouth of hole. Rich forams corals & many mollusks; many shells very fresh.

with bright orig. color; many
cherty masses that probably
are oolite. moll. include
Cypraea, Turbo, etc. - some
piled up with both rollers.
Deposit app. well consolidated -
with big James + Moore drive
barrel.

43' 8" - 46' 1"

(2)

James and Moore barrel driven
29" in 64 blows - with 27"
recovery; sand, coral + shell
not consolidated; put in
core box unwashed.

43' 8" - 54' 2"

Coral (including Helopora),
algae, shells; some of
coral appear worn; Halimeda
calcarinae fairly abundant
(from above?). Drilled easily

54' 2" - 59' 2"

Hole filled in 3-4' with
cuttings due to thinning
of mud so ran 5' drill
rod

54' 2" - 59' 2"

- coral, Halimeda + forams
(Calcarinae not so abundant
as at higher levels). Coral
appear to be most abundant
constituent

59' 2" - 64' 8"

Took off 5' rod + added
10' 6" rod. Worn coral +
Halimeda with few forams

64' 8" - 75' 2" *Alcanna - (Margaropora)*
Coal and *Alcanna* (brown)
Calcarina - *Margaropora*
- too soft to core

75' 2" - 81' 0" Stopped, a bundle of *Alcanna*
when hand motor was
encountered; no cuttings taken
(in about) (about 80')

81' 0" - 83' 6" Put on 4 1/2" Sealing core bit -
blocked after about 2' 6" -
recovered 10" broken core
all with shells, etc

2

83' 6" - 85' 8" Mostly pieces of coal (broken);
Margaropora - from above &
similar to that from *Alcanna*

85' 8" - 96' 2" Similar to that from *Alcanna*
from above? - coll full with
cuttings

96' 2" - 100' 0" Like last with *Alcanna* etc. from
above? - stopped at 100'
to set 8" casing

Set 79' 4" of 8" pipe (4 pieces welded
together) and to down last 2 sections & smooth
pipe welded to drive collar. Fell on hole
Spent balance of afternoon & until 9 PM
in fishing. Used last length of 4" pipe in
fishing tool. Got small amount *Alcanna* but
could bring up shell fish. From depth 60'

Jan 3, Wed.

Recovered first with 6" rock bit, hole cleaned to 100' with 7 7/8" rock bit; circumscribed on bottom, bringing up very coarse coral fragments & coarser than any cuttings obtained yesterday - apparently due to casing.

100'0" - 103'0" Put in Gailery 4 1/2" cor bit - considerable chunk chattered that sounded like hard coral - though driller claimed only vibration. Bit stuck after about 3'; recovered 19" core; piece at top looks worn but remainder may be in pts. of 1 colony, possibly in place.

(4)

100'0" - 110'6" Put in stabilizer (guide) of 6" pipe above 7 7/8" rock bit; worked slowly through casing. The end of casing probably not cramped by driving but there may be an angle bit with guide may have cut into stabilizer bit.

(96-100')

96'0" - 106'6" Coarse mostly coral (as above) - and Helopora + shell fragments (Strombolia, etc) - tan color - calcareous - pale from above

106'6" - 117'0" - more fresh coral, rounded frags - Helopora, Helimeda & worm

(29)

- Marguopora; coral gray-to white,
hard. Internal drilled easily
- 117'0" - 127'6" Very similar to last; drilled
a little harder; coral, forams, Pecten
some calcareous
- 127'6" - 138'0" - Similar to last; each species, -
mostly white coral
- 138'0" - 148'6" - mostly white coral, algae (?).
Pecten shell; some light calcite;
some coral well preserved; some
white small forams - some worn
Colcarina & Marguopora;
Helipora rare; color very light
gray.
- 148'6" - 159'0" Very similar to last but with
large pieces with beach forams
cemented in (covered from above)
Some good white beach type forams.
- 159' - 169'6" Coral is similar to last; some
algal nodules; rare Hamatium
and Helipora. Some of
coral appear to be yellow
calcite + prob. in microcrystals
Well preserved micro-moll
- 169'6" - 175'0" (Under 3' long 4" cor. bit
& an 5 1/2"; recovery 32");
hard coral heads at top and
soft sand with moll. below
(put in box un washed)

(5)

X

Note -

201 - 232½ contain many
well preserved mollusks
- last 10½' esp. rich

(30)

Jan. 4, 1951 ~ Thursday
Night tower

169'6" - 180'0" - like earlier cuttings,
... ..

Jan. 4, 1951 ~ Thursday
Night to water

- 169'6" - 180'0" - like earlier cuttings,
possibly finer; rare *Heteropora*
- no filling in hole following
7 hr. shut down.; Halimeda, many
worn Calcarena & Mg.; Brac (small)
- 180'0" - 190'6" - White coral (worn, pale),
cidarid spine, rare *Homotrema*,
brownish calcite; few worn
beach forams; rare micro-
gast.; note large piece
yellowish calcite.
- 190'6" - 201'0" - similar to last; some moll.
Soft. - rare *Homotrema*, piece
brownish calcite; well preserved
Cerithium, *Tellinid*, etc. - looks like
lagoon fauna
- 201'0" - 211'6" - Corals, algae, good
moll., small cidarid - this
almost surely in a lagoon
fauna; some forams.
- 211'6" - 222'0" Corals & shell (these cuttings
and all later ones taken directly
from surface of casing) - good
moll.; few small white forams.
- 222'0" - 232'6" Corals & shell, soft. Very rich in
well pres. moll., many worn
beach forams; Halimeda,
- lagoon suggested near shore
- 232'6" - 243'0" - Corals, shell, forams, Halimeda,
- soft. - moll. not as abundant
as in last interval - gast.

243'0" - 253'6" Same as last - many forams,
Noted *Polinoides* + other gast.,
(some with orig. color pattern),
Halimeda, etc. Evidently
shallow lagoon fauna
Drilled easily

253'6" - 258'6" True *Porolithothamnion* 4 1/4" cor. still
no casing in hole. Material
hard to work with many shells;
coral not conspicuous
- possible change from ^{last} appearance
yellow calcite? [The calcite
from the next cor. - big xls
from borings in same]

6

34" recovered

253'6" - 264' Back with 7 1/2" rock bit, no
casing; coral + shell; drilled
like last. Some yellow calcite
- in xls. *Halimeda* + some
beach type forams

264'0" - 274'6" Gray ls with abundant red
yellow calcite - some purple
sh. - dog-tooth spec - forams,
moll, *Halimeda*, etc. - except
for abundance of calcite does not
differ greatly from last 2
intervals!

274'6" - 285'0" Similar to last; lots of
yellow calcite

285' - 295'6" gray ls & piece brown material
shells & some ls. calcite
- drilled like last. [Note foss.
brown nodules of brown
calcite - these more abundant
at lower levels - e.g. 412 - 422 1/2 -
wrapped in paper] - brown
calc. & small nodules abundant

295'6" - 302'6" - Drilled harder 3 1/2 feet from
end of rock; pulled out to
core; gray ls - good small
(Polymers); yellow calcite
not conspicuous; margin -
open

302'6" - ³⁰⁷310'0"
 ⑦
Darker 4 1/2" core 2 small - hard
for 1" - then softer - 12" core
39" core ls (upper 1" with head)
- note recryst. to calcite & also
having corallites & branching in
same.

303'0" - 307'0" Went to 7 1/2 rock ball - coral,
shells (1 lb. each) & nodules
calcite some algal nodules
- part of coral interval (1 ft core
for sample for circulating mat)

307'0" - 317'6" Similar to last - corals and
delicate branching form that
are common (drill. apparently
drilled hard) with as usual;
encrusted Hal. sea

~~317~~ (3)

(33)

except for last
3' ±

317'6" - 328'0" - drilled hard - mostly

(33)

except for shell
3' ±

317'6" - 328'0" - drilled hard, mostly
recryst. coral chips, mostly
through large holes in
coral knolls.
Rare *Hemostroma*.

328'0" - 338'6" - mostly hard drilling, same
as last except for rare *Hemostroma*;
few forams - most of the
interval app. through recryst.
coral

338'6" - 349'0" - softer in latter half; cuttings
similar to last.

349'0" - 359'6" - softer in upper half, harder below.
Similar to last; some small
white forams

← Kenney collects cuttings to bottom K-1 →
359'6" - 370'0" - Red coral, calcite, algal
nodules, beads forams; a very
few particles are light brown
in color.



8

1

(34)

370'0" - 380'6"

Mainly coral (used) with molok
at both places + gulf, some

370'0" - 380'6"

Mainly coral (re-?) with molds of both pelley + gale, some forams, few yellowish-brown pieces (mostly red calcite), few small worm forams - some pieces pure white banded calcite.

380'6" - 391'0"

Re-? coral + coral + moll. molds, some yellow calcite.

391'0" - 396'0"

Put in 4 1/4" Harding bit, & borts bit - recovery 100% of Hard, porous coralliferous li with numerous molds large moll. - coral also preserved as molds.

8

391'0" - 401'6"

Re-? coral, moll. molds, Nalmedy, white, yellow + brown calcite, marginopora, etc

401'6" - 412'0"

Re-? coral, white, yellow + brown calcite

412'0" - 422'6"

Similar to last with molds of Pecten & other moll. (large shell, tridacna from above?) - leach form (+ globigerinids?) in brownish calcite matrix -

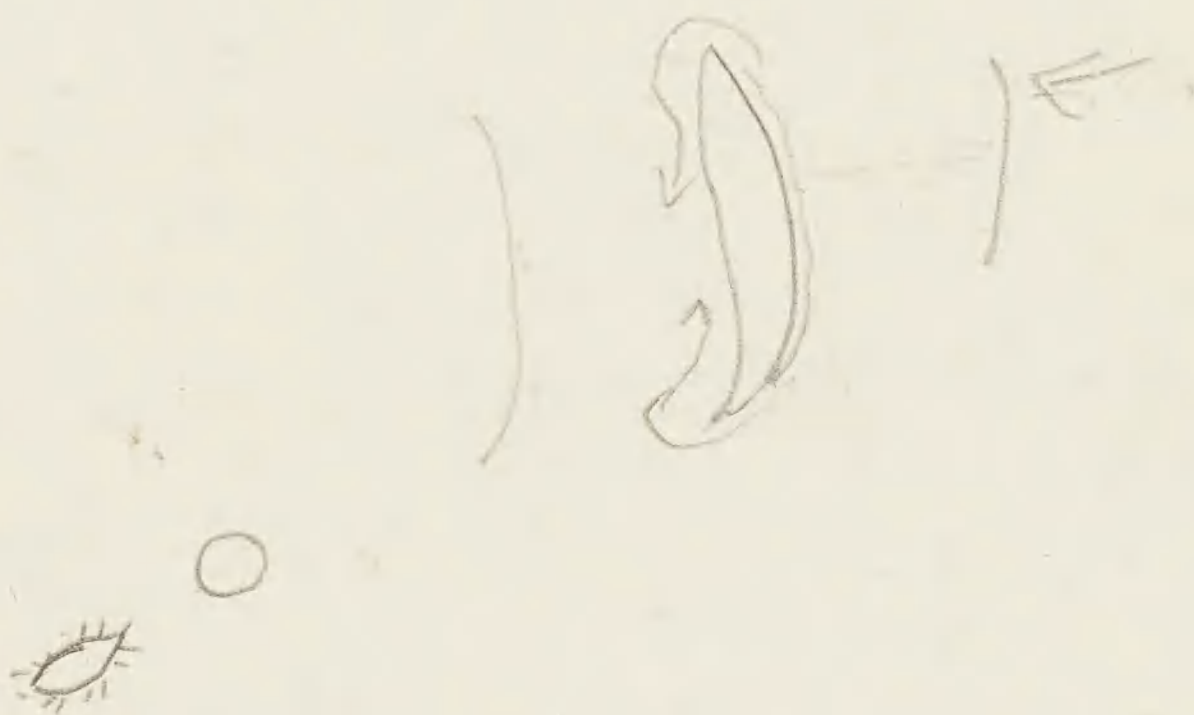
[these occur above 285 - 295 1/2]



? =>

422'6" - 433'0"

possible change of formation? - Re-? mat. with some forams in brown calcite like last - on frag. then Tellinid could be from above



(35)

433'0" - 443'6" - like last but with higher percentages of dark de with

(38)

433'0" - 443'6" - Like last but with higher percentage of dark dk with very small forams.

Jan. 5 ~ Friday

Reached depth 433'6" before midnight Jan 4; circulated balance of night, cleaned up casing. Started to run 6" pipe in morning but unable to get string past slight dogleg below 8" casing; no sub available to use in doubling pipe down so decided to start rig forward 5'9" (N65W) + set 6" casing in new hole. This → will be K-1A; to be drilled with 9" rock bit - no sample above level of bottom of K-1.

K-1A

Jan 6 ~ Saturday

Night shift drilled to 280 ± ft down - with new 20' stabilizer + 8 7/8" Reed rock bit. During early morning lost all circulation at 329'. + bit frozen but later able to rotate; bit plugged - unable to pull with cable (Benson claim 2" cavity encountered) - bit drilled over

too fast + no mud in reserve. All the
 free string sufficiently to rotate and by
 running small pipe inside drill pipe
 unplugged bit; pumped in about
 50 bbl. mostly mixed mud but
 could not get back circulation. Backed
 off (1 joint!) + abandoned hole before
 midnight.

Also is a fine example of how
 radically section changes in short
 distances - in this case 69 inches!

$$\begin{array}{l} \text{mud } \approx 1\frac{1}{4} \text{) } \approx 5 \frac{\#}{\#} \times 4'' \text{ inch} \\ \text{# } 1\frac{1}{2} \text{) } \times 4'' \times 4'' \text{ for} \end{array}$$

54.5
 57.5
 53.5
 49
 24 (20.5)
 24

34.3
59.5
37.5
49
24
32

K-1B

(36)

Jan. 7 ~ Sunday

→ Night shift skidded rig back
24' S65E of K-1 to new site = K-1B
Pulled 8" casing from K-1 with big crane
but same machine failed on attempt to
pull string from K-1A; Built up 8 3/4"
Red Rock bit by adding rollers from smaller
bit - to make 13" rock bit
Started K-1B in PM - to about 40'
by midnight. No difficulty going through
beach rock.

Jan. 8 ~ Mon.

To 70' ± by 6:30 AM; losing appreciable
quantity mud. Set 80' 30" of 8" casing
cementing to to prevent loss of mud
by overflow. Started drilling with 7 7/8"
rock bit in late afternoon.

Jan 9 ~ Tues

Down to 315' by 7 AM; section harder
than either of other legs; lost circulation
momentarily at about 329' (where
cavity was encountered in K-1A); no
further loss circulation during drilling
of next rock.

K-1B

337'4" - 347'10" / 1. P.M. Started taking cuttings
of K-1B at 337'4" ft. Fragments
are sharp, hard coral; few gastropods
uniformly light colored.

347'10" -

(Supply of aquagel running low and because no shipment is due for several days, the decision was made to use aquagel straight until 6" casing had to be put in & cemented. thereafter Baroid (barium sulphate) will be used for drilling mud, to dilute aquagel.

Cuttings similar to last.

- Out of hole to inspect bit - cones loose but good for another 100' (only bit of this size we have) Russell

358'4" - 368'10" -

Resumed drilling 3:45 PM mostly fragments hard coral few pieces calcite - drills hard coral is white - calcite is light brown very few forams

368'10" - 379'4" -

mostly hard coral - increasing numbers of forams - Halimeda drills easier than last ten ft. some mollusc fragments - pieces of delicate branching coral

379'4" - 389'10"

hard white coral - have been adding water to mud since 4 PM

389' 10" - 400' 4" ✓ white coral ls - still adding water to drilling mud - some light brown recrystallized coral ls. no forams, mollusca, gastropods observed

400' - 4' - 410' 10" 1/2 white coral ls. 1/2 yellow calcite(?) (recrystallized coral?) drills hard - still adding water to mud

410' 10" - 421' 4" ✓ Stopped adding water to mud at 7³⁰ PM
8⁰⁰ PM Pit 28.3°C Hole 30.2 Air 26.2
very little white coral - mostly buff coral ls. - some light brown, recrystallized coral - drills hard
few mollusca and forams - buff color above less pronounced in daylight

May be point of salt where some seeps in

421' 4" - 431' 10" - 8¹⁵ Pit 28.6° Hole 30.6 Air 26.3°C
sample similar to that above - drills hard - started out of hole at 8³⁰ for coring

started coring 10³⁰ PM completed
12⁰⁰ PM recovered 13" out of
4'3" 26% recovery - ls. with
many molds of molluscs - a leached
ls. much like last core (391-396) but with
less coral. -COA

431'10" - 442'4" Jan. 10, 1951 M. Russell

(Started drilling this run 2.25 AM Jan 10
with 41 rods on string. 12. Midnight til 2.25
to replenish water supply and restring rods)

Examination under artificial light, with
magnifying glass - hard, angular, sharp
fragments, many pieces of unaltered
coral, only one mollusk shell noted
no forams recognized. few dent with
calcite xls. Occasional fragments
darker than most.

9
core

SESS
contin?

442'4" - 452'10"

Fragments hard, sharp, angular. Pieces
of fine coral branchlets, as long as
3/4". Generally uniform light color
(artificial light) few darker fragments.
Some show clear line of demarcation
between light and dark material.
No organic structure other than above
corals recognized. (Greater % of fines
due to finer screen used this
sample).

452'10" - 463'4"

Sharp fragments of uniform, textured ls. coral structure on many. ~~Smooth~~ Smooth curved surfaces on rare fragments may be molds of mollusk shells. Fragments mostly light, very few darker (artificial light). Duller rays from soft & drilled part all the way.

463'4" - 473'10". Duller rays formation, soft for first 2 feet (463'4" - 465'4") then harder the rest of the way, which, he said, resulted in only (fine) fragments.

Vertical light
Fragments uniformly small, sharp. Surfaces (under binocular) granular, small tubes (worm burrows?) filled with clear calcite (as noted). 1 fragment *Nalimeda* stood out because much whiter than rest, may be contamination. Possible echinoid spines. Organic structures, probably coral, but fragments too small for immediate identification.

473'10" - 484'4"

Duller rays first 5 feet softer than last 5 feet which was "hardest we've drilled all night" (since 431'10"). Fragments sharp edged. Some have

granular surface + appear more porous than others which have smoother surface. Various forms of delicate, lacy organic structures, probably algal "fibers" a few of which are completely full of interstitial cementing calcite, color light to few dark fragments. One tubular fragment noted (unfilled)

484' 4" - 494' 10"

Subangular fragment with granular surface. Lacy, single layered mats of possibly Bryozoa but no pores visible, ergo probably algae. Remains of calcite (pencilpod shell fragment), tubular structure, (worms?) filled with clastic material.

Note: Driller says that from 457' 10" through 494' 10". The drilling has been smooth, the circulation very good, and loss of water (and mud) normal.

494' 10" - 505' 4"

Chips + sharp edged fragments of hard ls. Color (artificial light) uniformly light tan. Organic structures plentiful but difficult to identify owing to 1) small size of fragments 2) alterations probably re + hydration 3) well-cemented matrix of calcite. Many are undoubtedly

coral, others; rods, tubes, "bumps"
could be echinoid spines, sponges,
algae (red *Nalimeda*) molluscs.

505'4" - 515'10"

most fragments ~~subangular~~ subangular
with granular surface. Well
lenticular fragments appear mottled
or speckled with darker areas, probably
clear calcite & white areas unaltered
sand or organic material too fine
to be distinguished. Many organic
structures, some coral, others obscure.
1 gastropod (mold probably)
1 fragment with smooth sides
meeting at obtuse angles, uniform
texture but with white branching
fibers through out (similar to
fibers permeating watermelon rind).

515'10" - 526'4"

First sample viewed this date
(Jun 10, 1951) in natural light.
Probably same as last few samples
but difference in shades of
color more distinct and division
between light & dark seemingly
more equal. Fragments rough
edges, organic structures moderately
plentiful but in form of molds,
much recrystallized calcite & several

fragments with clear crystal
faces. Single pelecypod shell
fragment probably contamination
from above.

9 AM. Jan 10, 1951

Went to 526'4" (49 rods on string)
& began to pull prior to taking core.
Pulled 28 rods (294 feet) when
obstruction hindered pulling. (Bit
was at 232'4") Kelley put
back on & driller tried to clean
out obstruction. Cleared OK in
one try.

526'4" - 530'10" Cored 4'6"

12 Noon 10 January 1951 C. Alexis

10

Pulling core at change of shift

Obtained 7" of core - 13% Recovery

Started back in hole 12⁴⁵/PM

core mostly coral - some molluscs

526'4" - 537'3" Drilling with 5⁷/₈" rock bit

Started drilling 3⁰⁰/PM

tan recrystallized coral - considerable
calcite - some corals well preserved.

May be edge noted at Bikini

Mud pit 29.9 Hole 29.2 Air 29.9

537'3" - 547'9" small fragments tan coral -

few bits white shell - noted

one spherical foram

Pit 29.8 Hole 29.5 Air 30.5

547'9" - 558'3"

small fragments tan coral ls.
few larger pieces well preserved
coral - no forams observed

Pit 29.7° Hole 29.8 Air 30.8°C

558'3" - 568'9"

small fragments tan coral ls. -
many specimens of branching
forms - drills easily -
take long time to take sample
must be many fines - this
fact observed all shift -

Pit 29.8°C Hole 29.9°C Air 27.0

568'9" - 579'3"

similar to above

579'3" - 589'9"

similar to above

15 min required to sample
drilled easy except for a few
harder spots

Pit 28.8 Hole 29.8 Air 25.8

589'9" - 600'3"

mostly
small fragments tan coral ls.
fragments of thin shelled
molluscs - some appear to have
traces of original color
drills easily

600' 3" - 610' 9" Pit 28.6°C Hole 29.8° Air 25.4°C
tan fragments coral ls.
drills easy - fragments
small - 15 minutes to
collect sample - mostly
branching type of coral

610' 9" - 621' 3" tan fragments coral ls. - many
brown semi-spherical forams
drills easy as before -
15 minutes to collect sample

Attn { Started out of hole at 10 PM for
core run - will use Dames and
Martin Moore type - Do Not Wash
Russell Core - place in core box
as is.

12.10 AM Jan 11, 1950. M. RUSSELL
Arrived to take over new shift. In
addition to above, "ATTN MR" found
note reading "(AT) 300' look for
mollusc shells - if rich in
these, core with Fehling barrel,
do not core before 300 feet."

① ~~Da~~ 621' 3" - 622' 5" - Dames + Moore core barrel
driven 14 inches. Recovery 5 inches
or about 35%. Core held loosely

in barrel and was eased
out of core barrel into core
box by holding barrel over
box (correctly oriented with
ref to top & bottom) & easing wire
out with hammer handle,
close examination impossible
because sample perpetuated
& covered with drilling mud.
Top $\frac{2}{3}$ appears unconsolidated
coarse material bound together
with drilling mud. Lower $\frac{1}{3}$
(less than 2 inches) is solid.

621' 3" - 631' 9"

Tan, ls. coral fragments,
calcite xls - forams,
mollusk fragments

631' 9" - 642' 3"

Tan ls. corals, molluscs (some
white). Recovery poor - because
full box washed down to less
than half.

642'3" - 652'9"

Driller says "very loose formation" refuses to say whether unconsolidated or not. ~~but~~ If cemented must be only very loosely so. Downward rate of drill very fast. Tan ls. coral fragments (out of matrix) pelecypod shell fragments (unaltered) brachiopod gastropods, moll. look fresh; much coral.

?? ← top Upper Ter. here or next →
lower interval? ~~11/11~~

652'9" - 663'3"

Drill going down very fast. Driller says "loose as a goose." Tan, many corals. Molluscs, principally pelecypods. Good molluscs both gastropods & pelecypods; echin spike; num thin discoid forams such as one found in interval below

663'3" - 673'9"

Tan. many free, unaltered molluscs

several whole gastropods, coral
fragments. Still making
table feet; appear to be same
assembly of shells, with + worn forams
that characterize section at least to 726'3"
- may be upper Ter - not Venetian +
white marginopora.

673'9" - 684'3"

Fine, delicate fragments
of molluscs + coral. Forams.
(Marginopora); some thick discoid
forms are badly worn; don't appear
on rock in mollusks or cuts unimpaired.
above + below

684'3" - 694'9"

Fine, delicate + thin fragments
of molluscs + corals. Disc
like forams (Marginopora?)
Dull mud this sample
was very thin possibly
explaining why fragments
are so delicate + free of solid
heavy fragments which may
have settled back.

Some brown discoid involute forams that
are clearly worn; much like several intervals
that occur - if they are up. Ter. the part
is too.

⇒ - change in color to brown in many cases

Hets
507

694'9" - 705'3"

(Driller says that since resuming hole making after last core at 621'3" there have been no more than 3 "streaks" which gave any resistance to drill.

Feasibility of trying to get core of any sort in this material very doubtful).

Cuttings uniform tab. Very few fragments which do not show distinct organic structure. Molluscs and corals predominate.

Question of coring a problem at this time. Fragments fit conditions stipulated in note for taking core (rich in molluscs at 700 feet) but driller insists that material is too loose. Too pick up anything in falling barrel (Tyre requested). Instructed him to add 1 more drill pipe but stop and take core immediately he strikes anything giving resistance to drill. If we strike nothing before 735 (which is regular 100 ft coring program place) will stop & take core regardless of condition of formation.

Very similar to 2 intervals that follow & very possible upper tertiary H₂. (Many fragments of large corals, 1st gast. & pelecys, small Corallina, Operculina (?), brown Margospongia, small ech. spine)

705'3" 715'9"

Dark, Tan cuttings. Fragments
have fine detail. Molluscs, coral
disc-like forams. (Where such
molluscs, start is very possibly Tertiary
ie on basis of *Bekini bunnings*^{etc} - *Vexillum*
and commonest, now *Halimeda* (from above?);
Cordium (most of moll. spp. small species) - small ^{spines}

715'9" - 726'3"

Dark tan (artificial light) cuttings.
Many varied molluscs, free
& unfiltered. Coral structure
distinct & delicate. No indication
of abrasion or cutting action of
drill saw. Small size of material.
Moll. mostly gastropods (*Arctium*, *Vexillum* etc)
My guess is this is upper Tertiary. SS
(Forams (*Margammina*, *Opaculina* (?), fine)
Chone

(Note: Started pulling pipe at 6.40 AM
to take Barnes & Moore core).

726'3" - Barnes & Moore core. Tried
Seventy Two (72) hammer blows
with no appreciable progress
seen at top. When drawn
no recovery. Rubber packing
ring found at lower top of
core barrel when drawn.

1451

Jan 11 - 10 AM
 Intend to clean out 7 3/8
 hole to 530 feet & set 6-inch
 casing; (this to be floated down on
 cement plug & cemented, will then clean
 out rat hole section (530 - 726) &
 try Failing (or Red) core bbl.

- cleaned hole and ran 535' 6-inch casing to
 point 10" off bottom; completed by 6 PM;
 cemented in evening, pushing wooden plug
 down in casing. Loss of mud during placing
 of plug suggests escape of cement into formation.

Jan. 12 - Friday

Cleaned pumps, etc. following cement
 job of last evening; finished tightening
 up guy wires on rig. (Badly worn slips
 sent off for sharpening - 2nd pair ordered
 yesterday by teletype - to be safe handed out;
 Last 1000' drill pipe on ship due here
 1/22)

circulated, adding water to thin mud;
 with water shut off lost 2" in pit.

In with 34 double & Kelly + bbl

34	=	726' 3" = bottom of
21		rat hole - no resistance
34		
68		
71' 4" Kelly		
10" 4" Kelly		
1" 11" bbl		
726' 3"		

726'3" - 736'9" Dark tan cuttings with much well preserved coral - small branching forms; few Marginopora - both brown & white; frag. moll abundant; no worn discord forams seen in brief exam. (Cuttings contain bits of wood & rubber from plug used with cement).

Out of hole to core

736'9" - 746'9" In with Harley 4 1/4" bit with bity - drilled very soft - no recovery

(12)

736'9" - 747'3" Back to 5 3/8" rock bit to ream cored interval; very soft, app. unconsolidated coral & shell almost uniformly tan color (artificial light) - many small gastropods.

747'3" - 757'9" Drilled soft; cuttings like last but coarser; difficult to catch large sample because of losses in washing out wood from go-devil. Second sack contains unwashed sample (for fine)

(See Book II)

