

MEASURED SECTIONS OF PENNSYLVANIAN
SEDIMENTARY ROCKS, TAOS TROUGH,
NORTHERN NEW MEXICO

J. M. Casey

These measured sections accompany a Ph.D. Dissertation
entitled:

DEPOSITIONAL SYSTEMS AND BASIN EVOLUTION
OF THE LATE PALEOZOIC TAOS TROUGH,
NORTHERN NEW MEXICO

THE UNIVERSITY OF TEXAS AT AUSTIN

May 1980

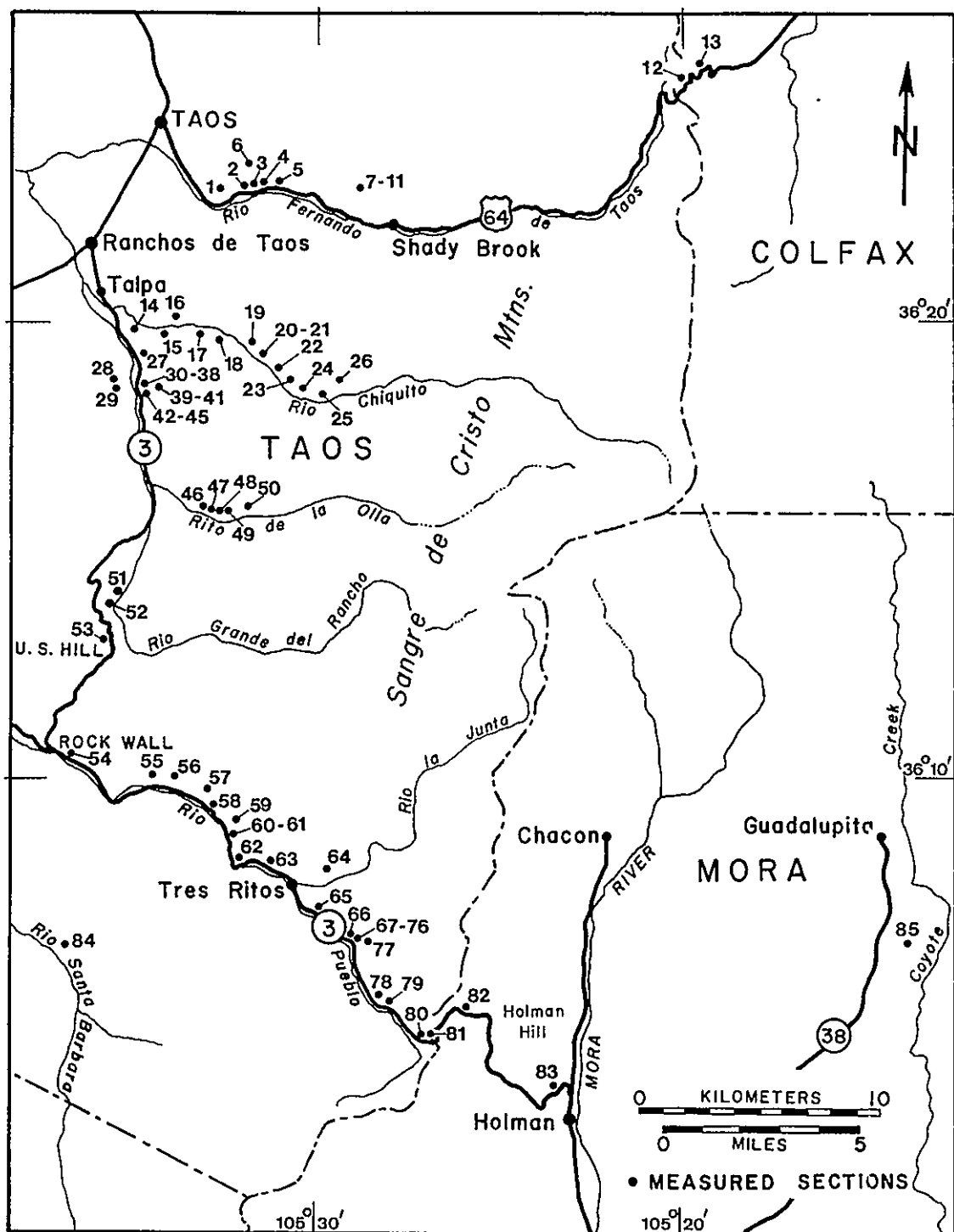


Figure 4. Map of study area with measured section localities indicated by numbers.

Measured Section Logging Form

Measured section data were recorded, graphically, on a standardized form (following page) using symbols shown in Figure 8. The logging form speeded section measuring and eliminated the need to later transform long written descriptions into graphic illustrations (measured section figures shown in text are exactly as they appear on the original field-recorded logging form).

NOTE: MEASURED SECTION LOCALITIES ARE SHOWN ON U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES

ALL MEASURED SECTIONS ARE IN METERS

[illegible]

SAMPLE LOGGING FORM (75% actual size).

NOTE: MEASURED SECTION LOCALITIES ARE SHOWN ON U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLES

ALL MEASURED SECTIONS ARE IN METERS

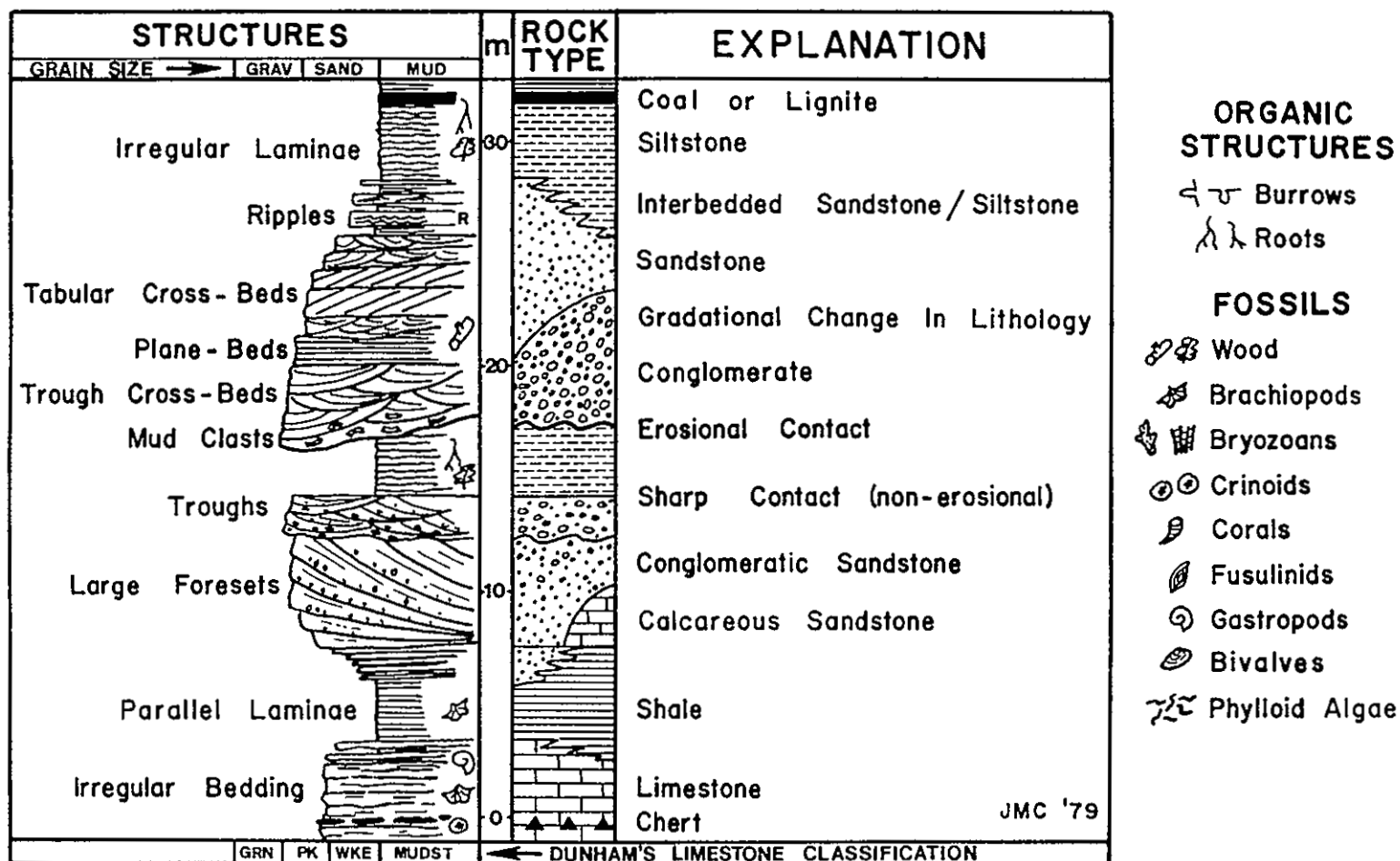


Figure 8. Explanation of symbols for sedimentary structures, lithology, and fossils used on all measured sections. Grain-size of clastic rocks and Dunham's (1962) classification of limestones are indicated in left-hand column. All sedimentary structures are depicted graphically as accurately as possible.

DEGREE OF BIOTURBATION

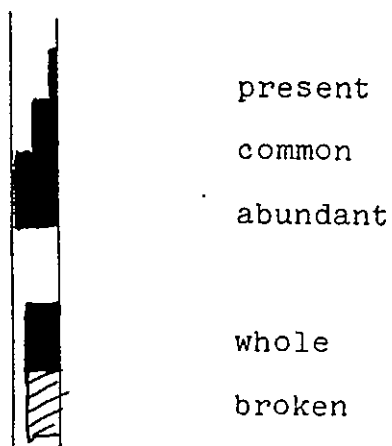
- § Weakly bioturbated
- §§ Moderately bioturbated
- §§§ Strongly bioturbated

COLOR

L - light	G - gray	C - cream
M - medium	B - brown	W - white
D - dark	R - red	Bk- black
m - mottled	O - orange	T - tan
	Y - yellow	
	Gn- green	
	Bl- blue	

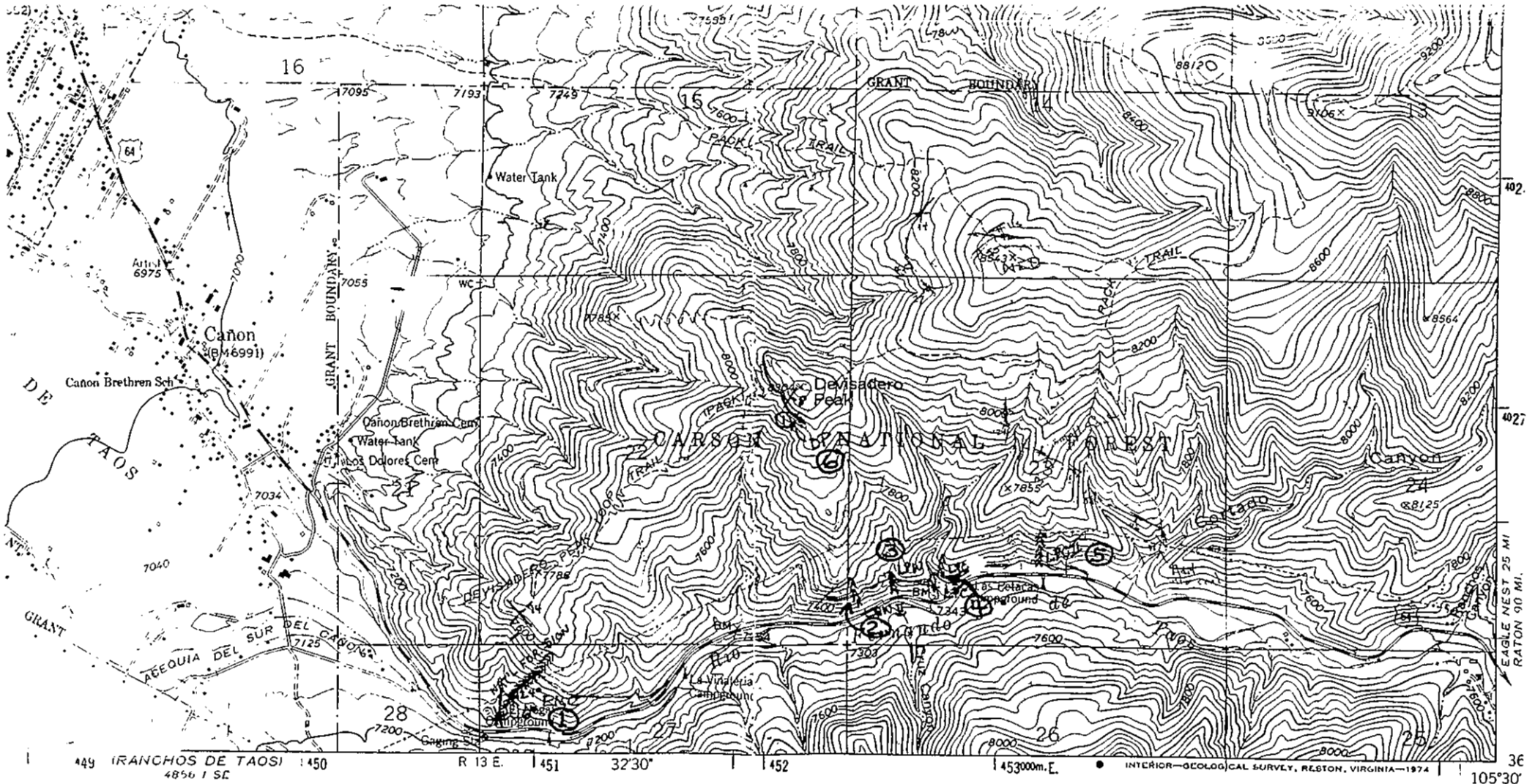
Example LBG - light brownish gray

FOSSILS

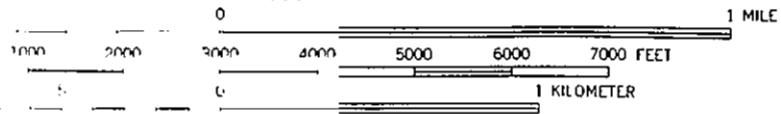


TAOS CANYON SECTIONS

MEASURED SECTIONS
I THROUGH 11

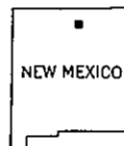


SCALE 1:24 000



CONTOUR INTERVAL 40 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929



QUADRANGLE LOCATION

ROAD CLASSIFICATION

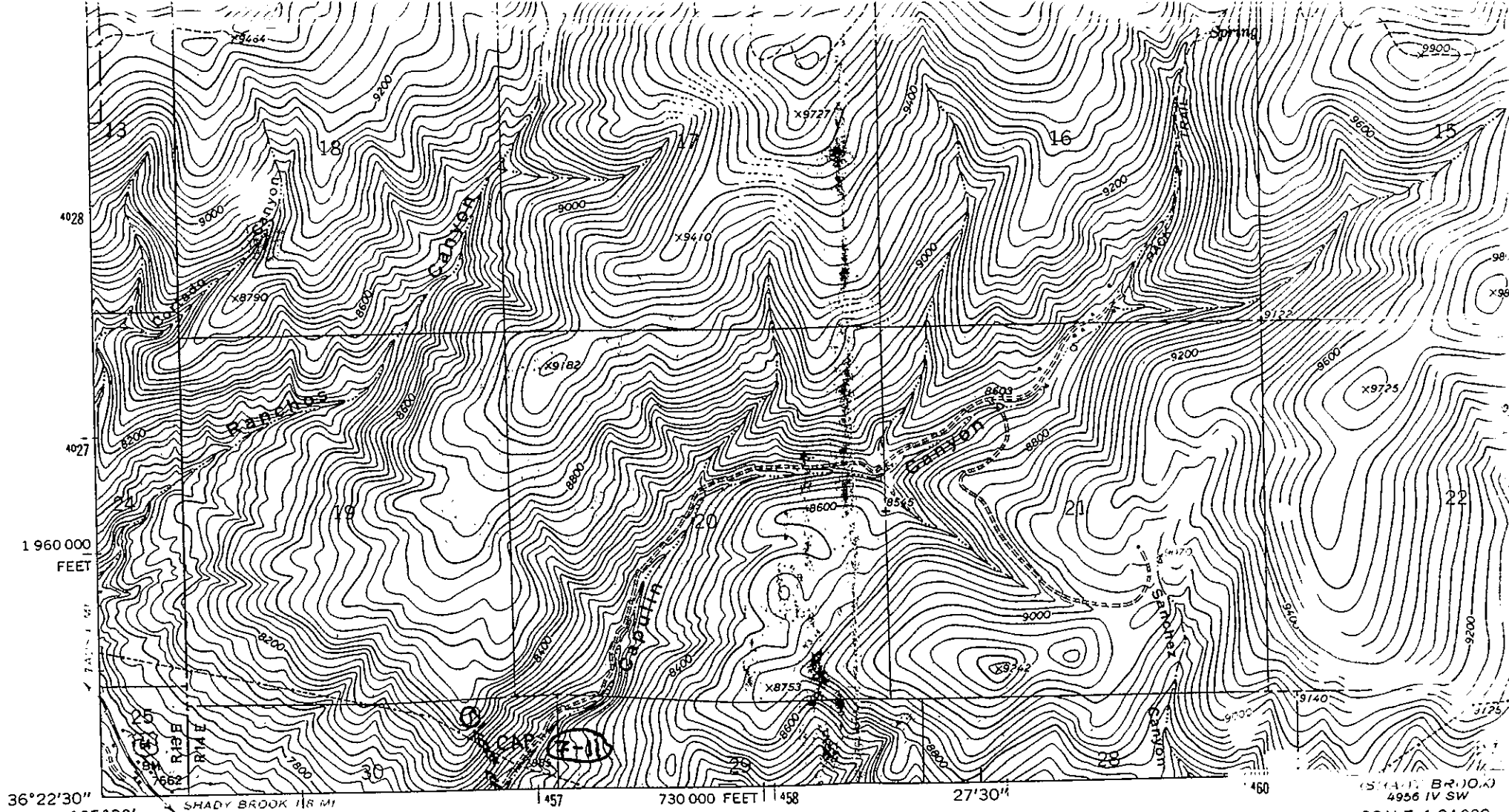
Heavy-duty ——— Light-duty ———
Medium-duty ——— Unimproved dirt ———
U.S. Route State Route

TAOS, N. MEX.
N3622.5-W10530/7.5

1964

AMS 4856 I NE-SERIES V881

MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
FOR ADDITIONAL TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

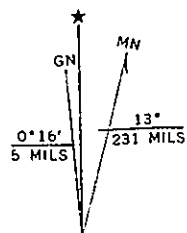


Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial

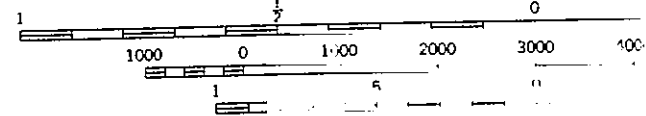
PUEBLO PEAK, N. MEX.
N3622.5—W10522.5/7.5

1965
AMS 4956 IV NW—SERIES V881

1965
datum
ordinate system,
grid ticks,
published



UTM GRID AND 1965 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



CONTOUR INTERVAL 40
DATUM IS MEAN SEA LEVEL

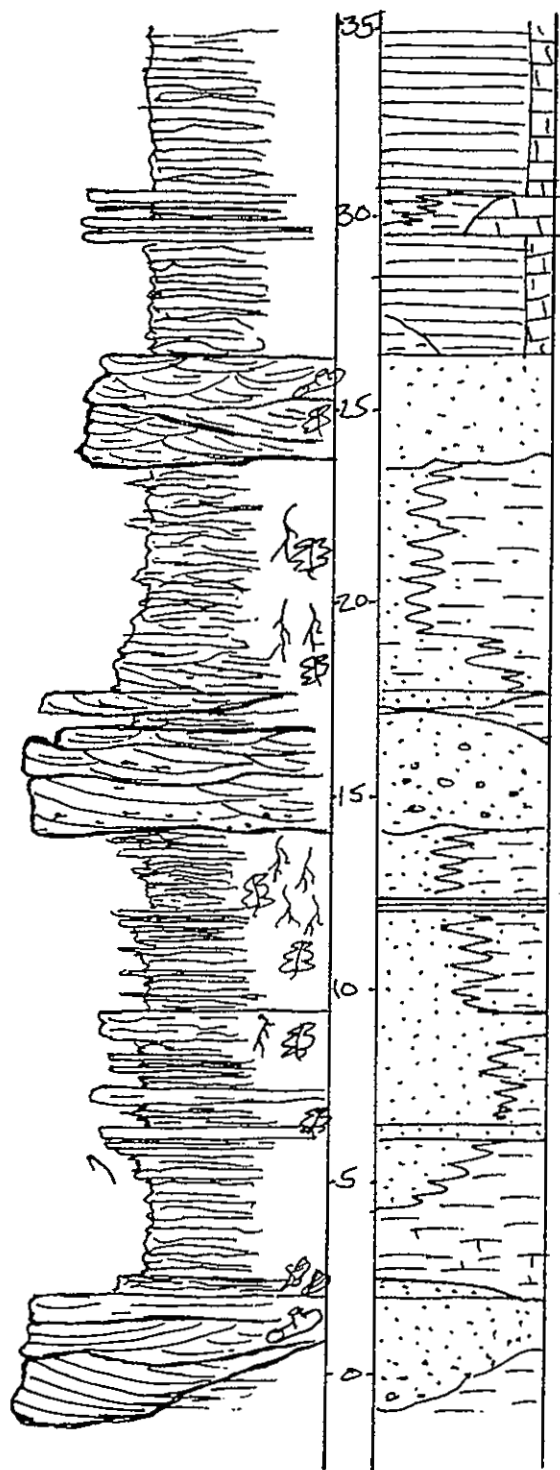
THIS MAP COMPLIES WITH NATIONAL MAP
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS

OS DE TAOS
4856 I SE

6

M.S. No. 1

PAGE 1



↘

↘

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↘

↑

↘

↓

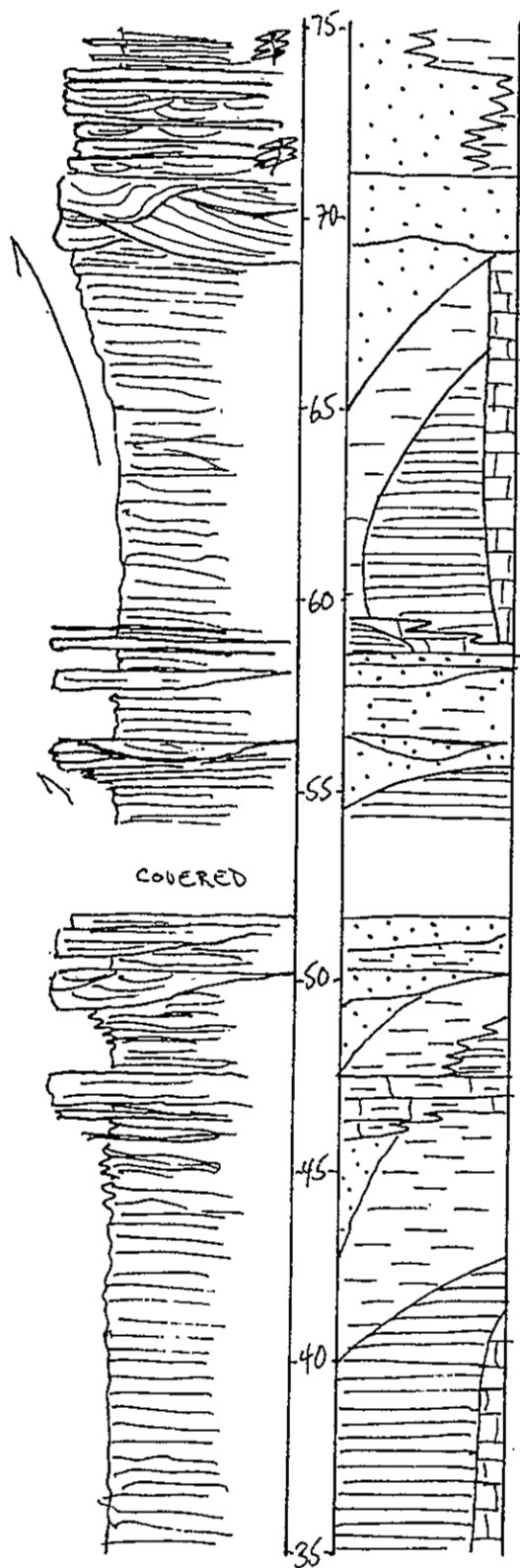
Brachs
Crinoids
Bryozoans
Bivalves



M.S. No. 1

PAGE 2

BRACHS
CRIN.
BRY.
BIVALVES



SS

SS

SS

SS

SS

SS

SS

SS

SS

SS

SS

SS



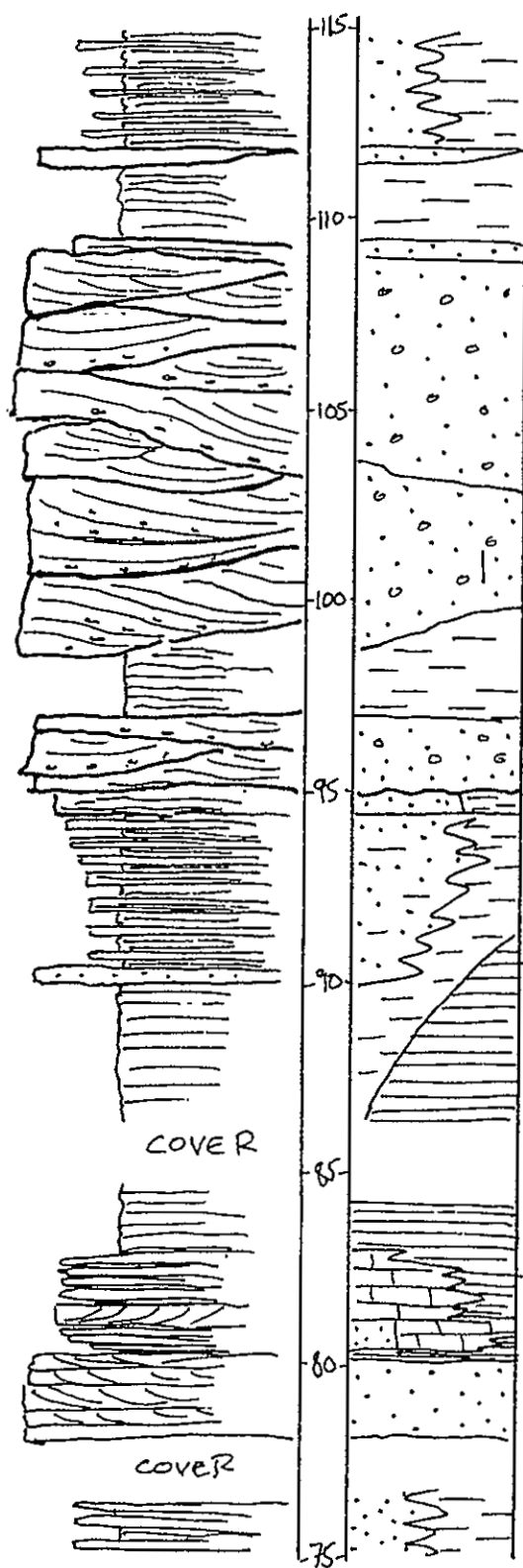
N7

ENC 11

M.S. No. 1

PAGE 3

BRACHS



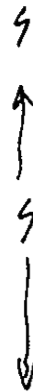
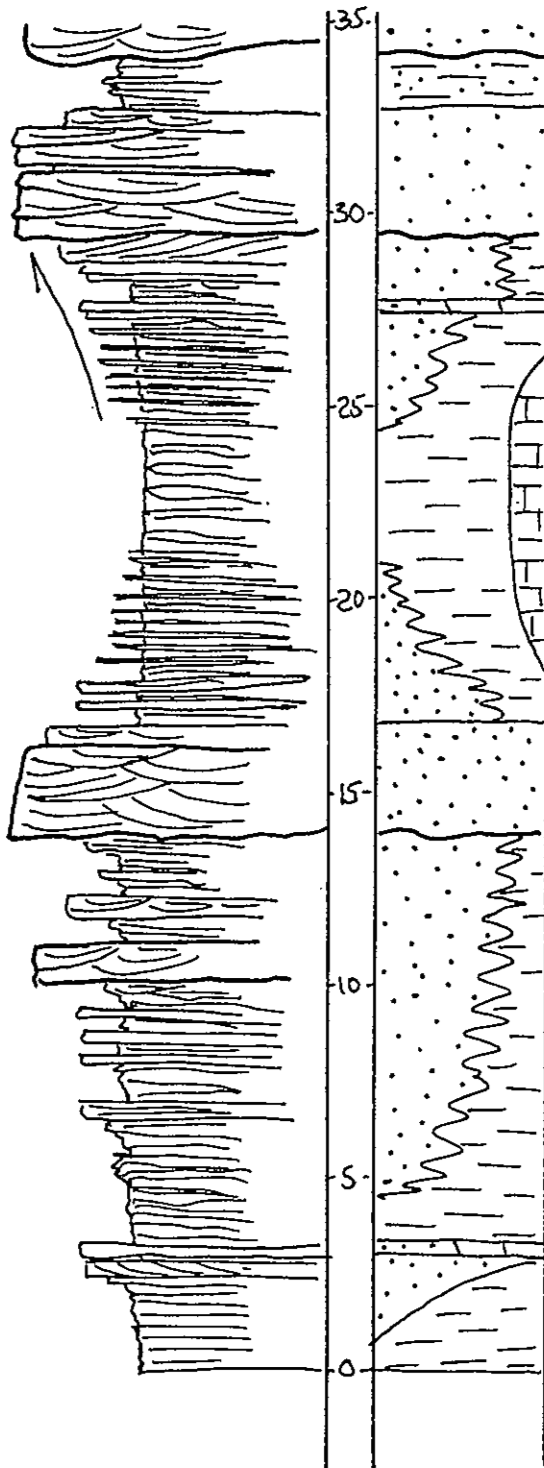
ENC

12

M.S. No. 2

PAGE 1

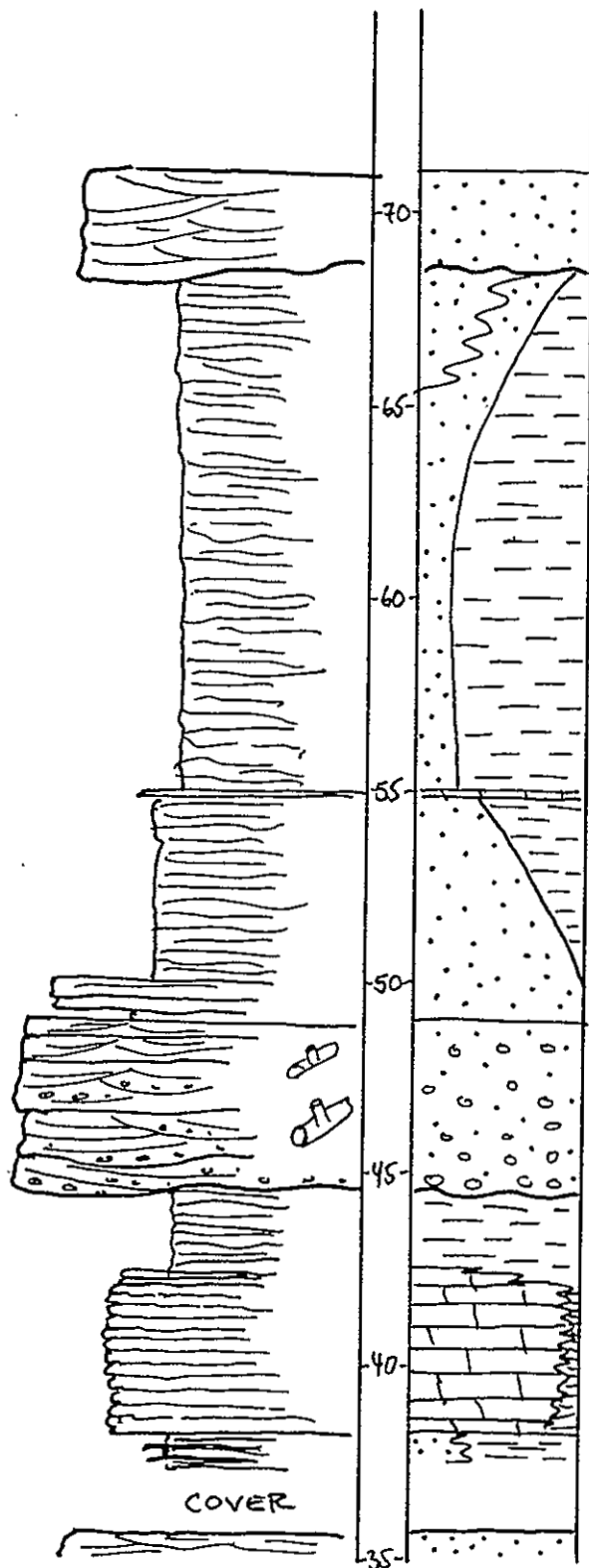
BRACHS



M.S. No. 2

PAGE 2

BRACHS
BRY
Phylloid Alg.



⚡

⚡

⚡
↑
SS
↓

—

—

—

—

Max CI

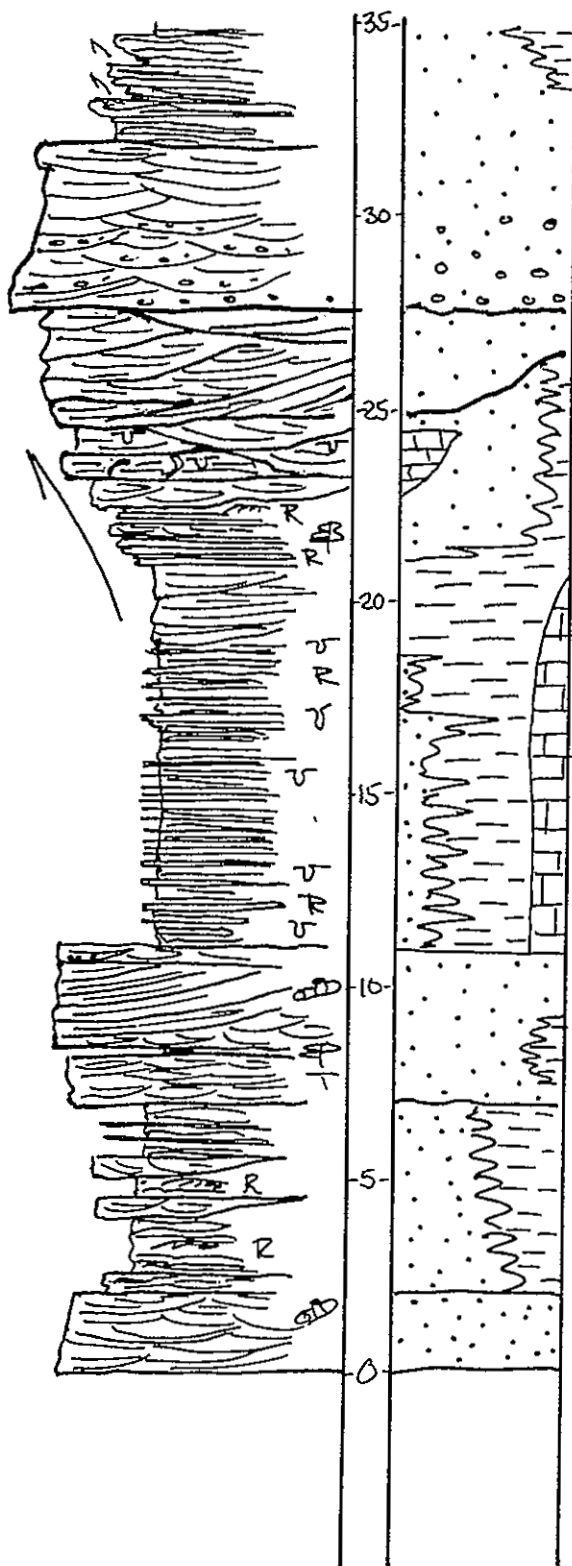
LPW II

1/1

M.S. No. 3

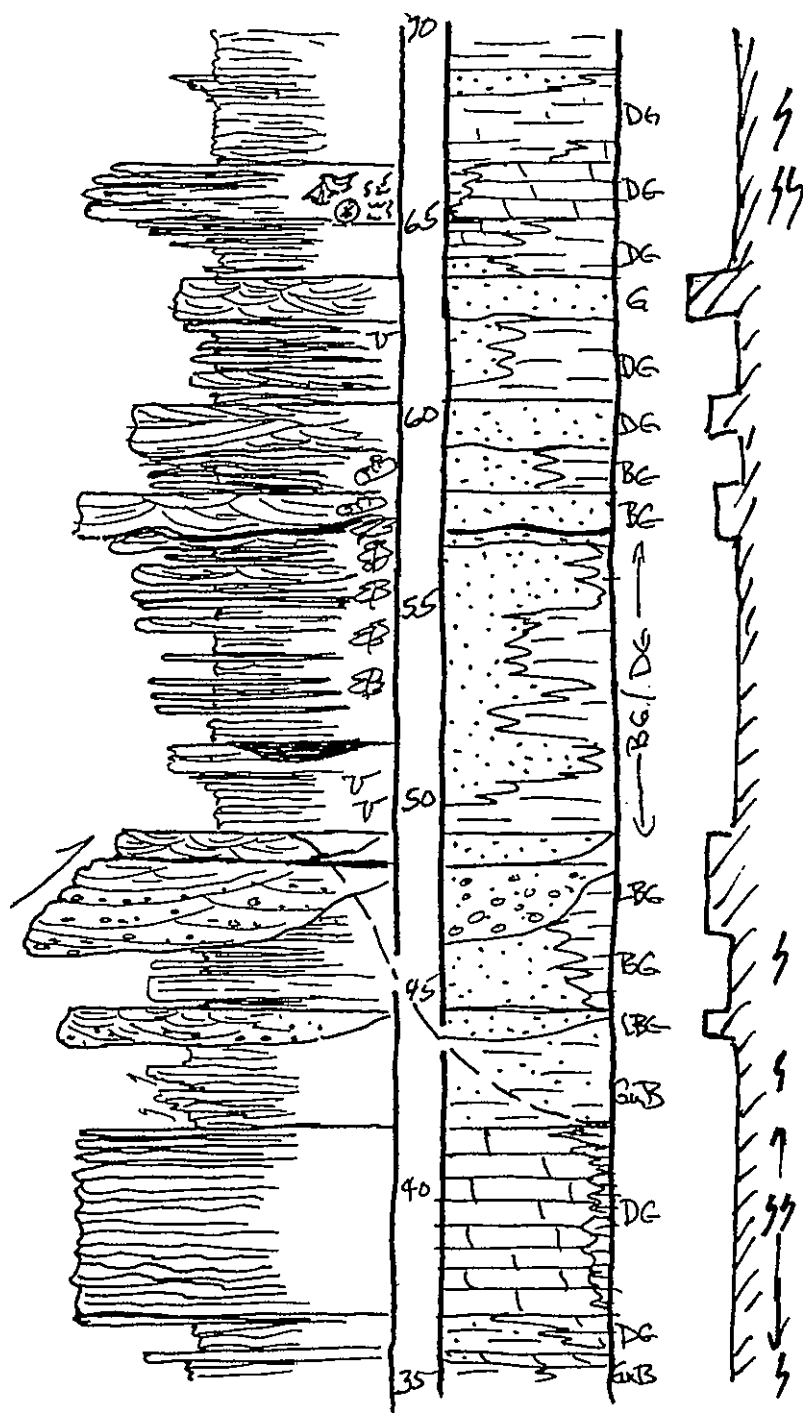
PAGE 1

Brachs
Crinoids
Bivalves



300° @ 24°
305° @ 28°
302° @ 32°

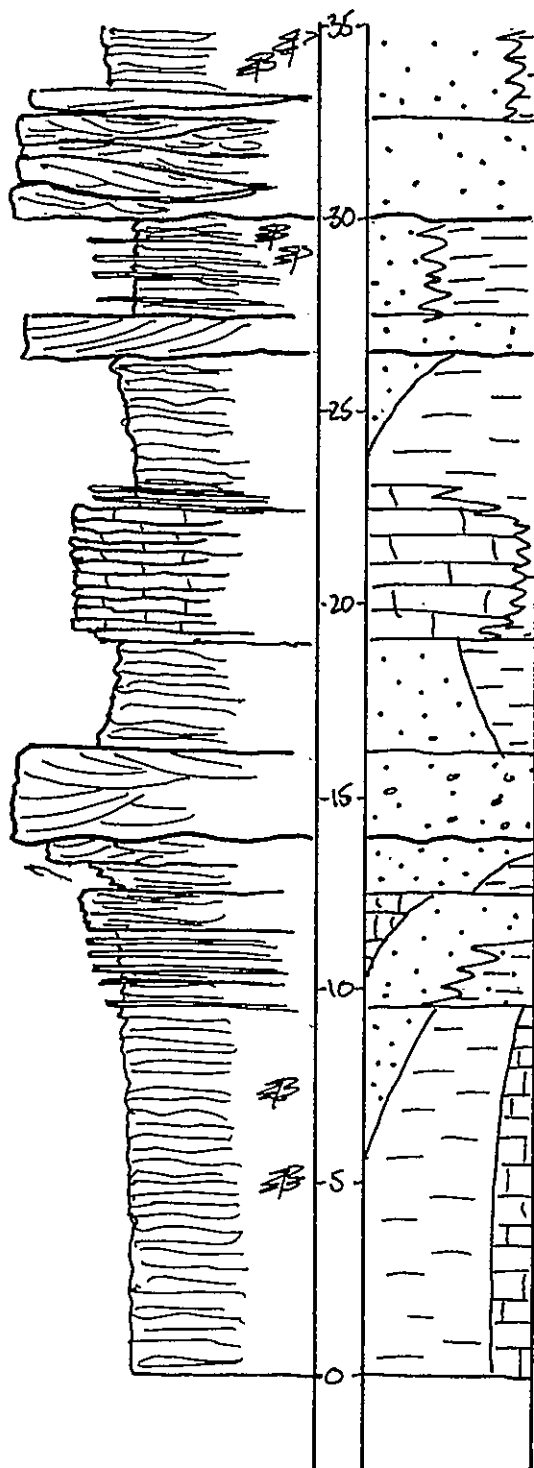
PAGE 2



M.S. No. 4

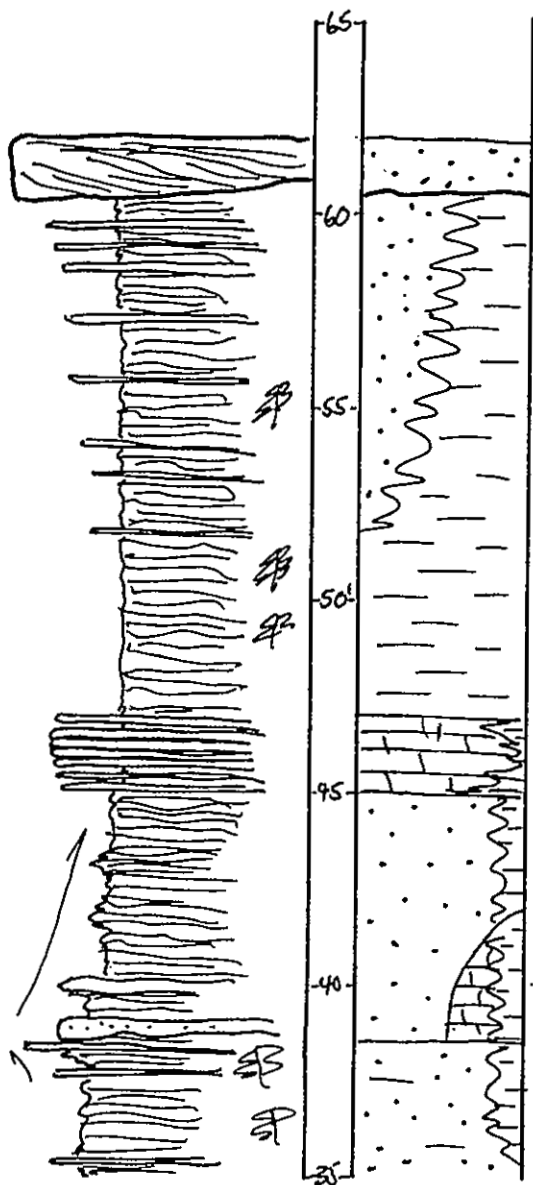
PAGE 1

BRACHS
BIVALES
BRYO.
Phy. Algae



M.S. No. 4

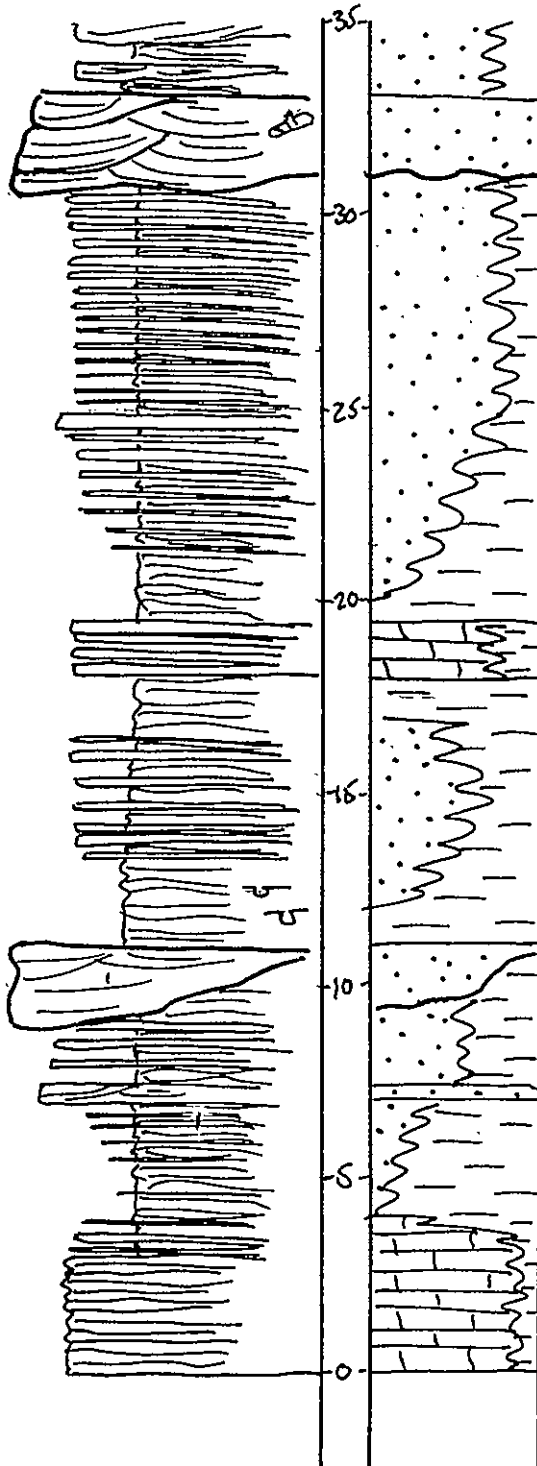
PAGE 2



M.S. No. 5

PAGE 1

BRACHS
CRY
PHY. ALGAE

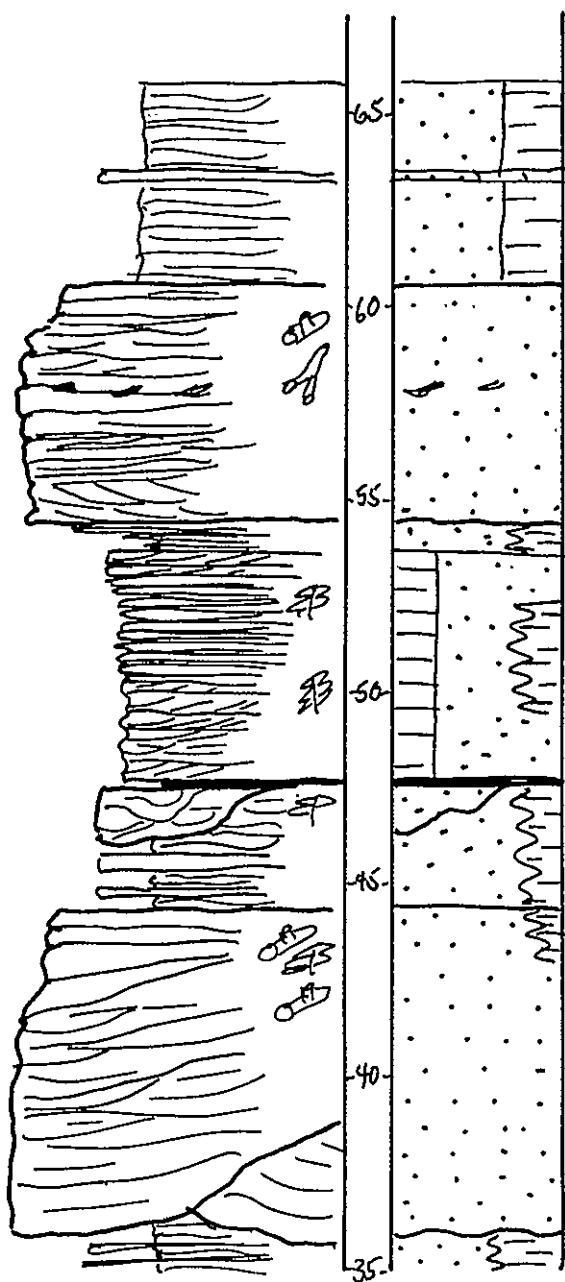


M.S. No. 5

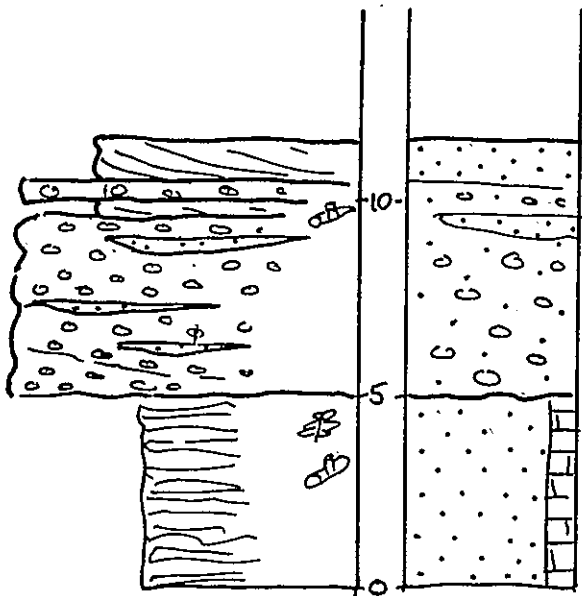
PAGE 2

BRACHS

CRINOIDS



M.S. No. 6



Geological map of the Devisadero Peak area, showing the location of the M.S. No. 6 site. The map includes a scale bar and a north arrow. The site is located in the center of the map, near the intersection of the main road and the road to the peak. The map shows the topography of the area, with the peak of Devisadero Peak to the north and the main road running east-west. The M.S. No. 6 site is marked with a small circle and labeled.

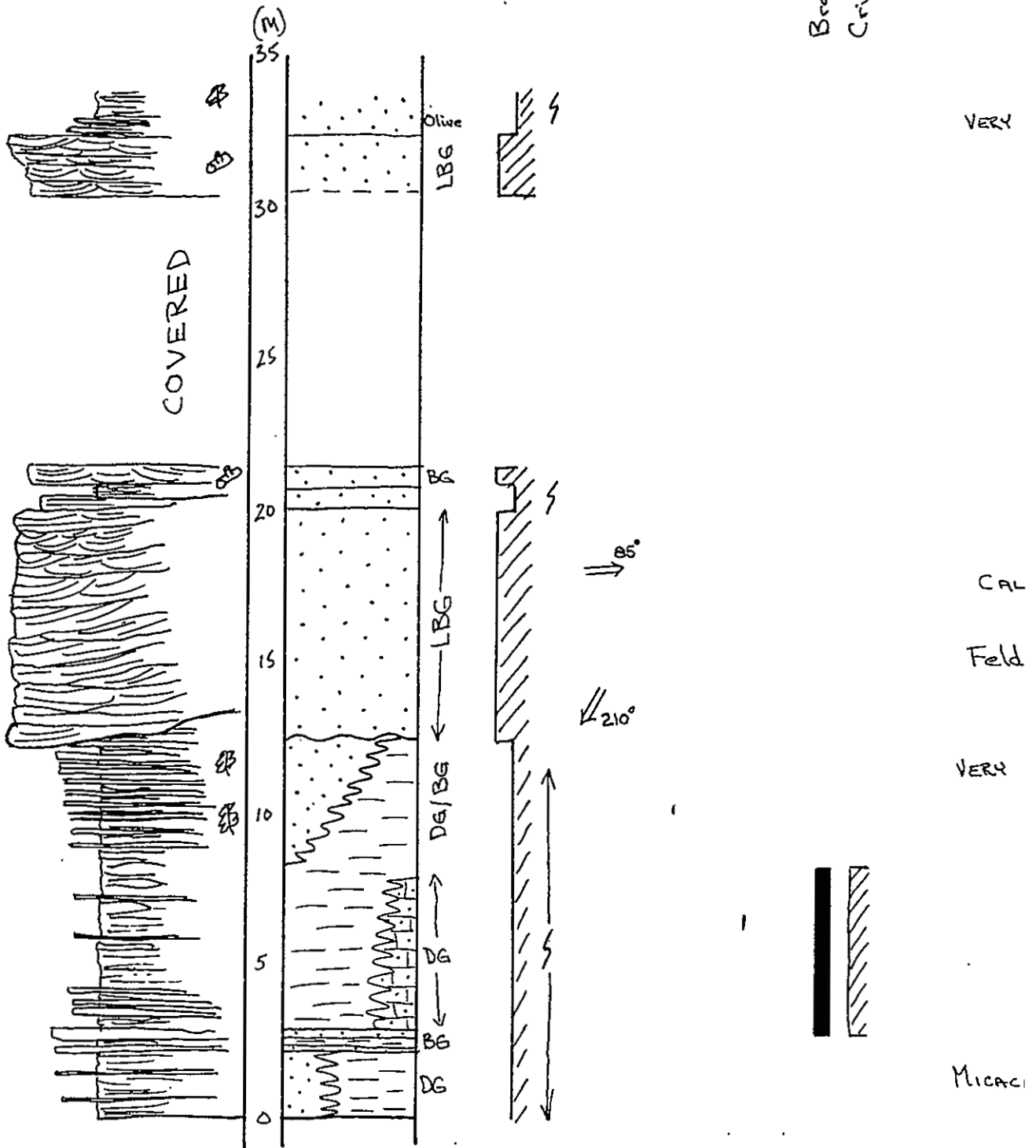
5

21

M.S. No. 7

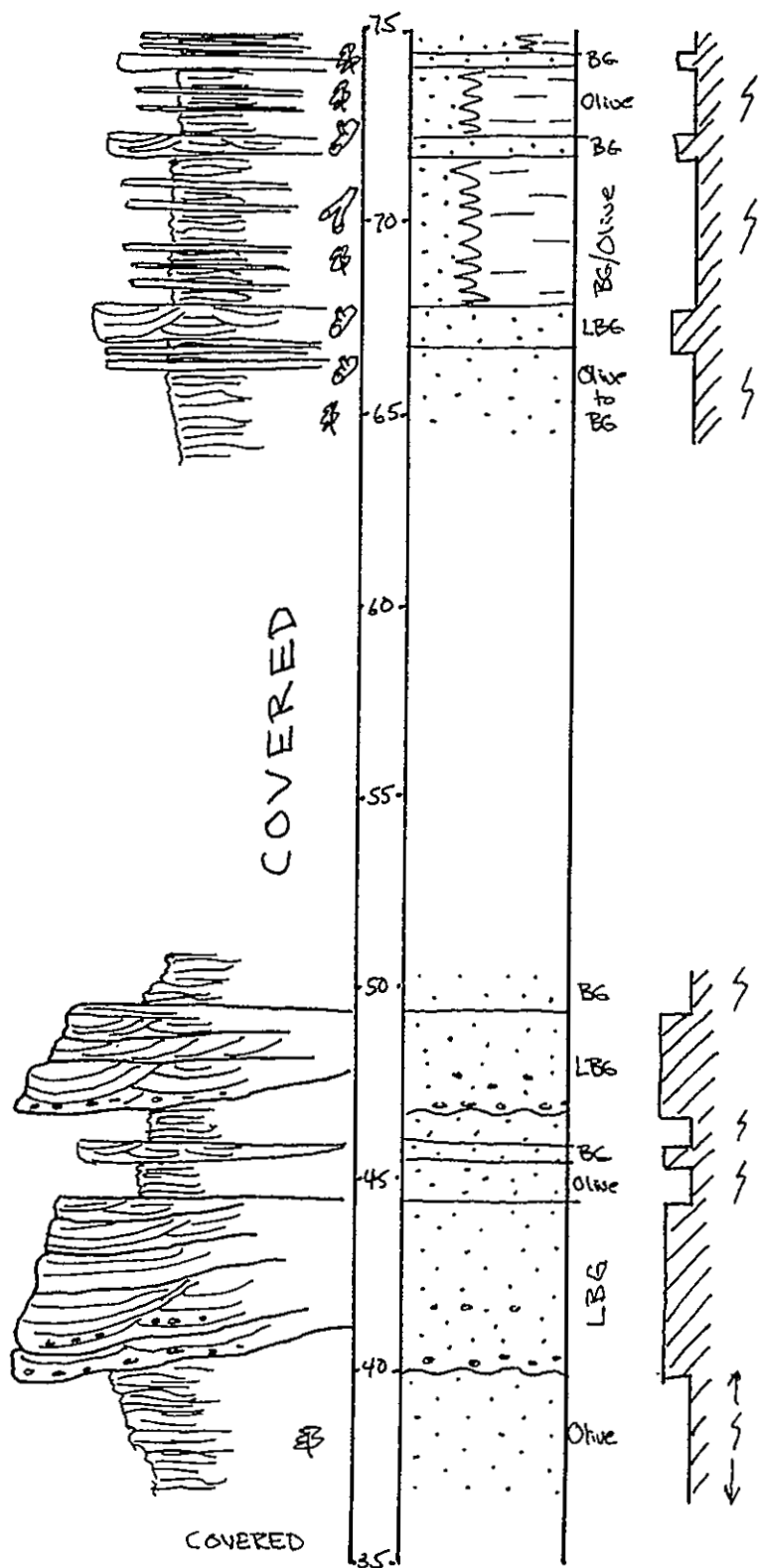
PAGE 1

Brachs
Crinoids



M.S. No. 7

PAGE 2



Mic

Mic

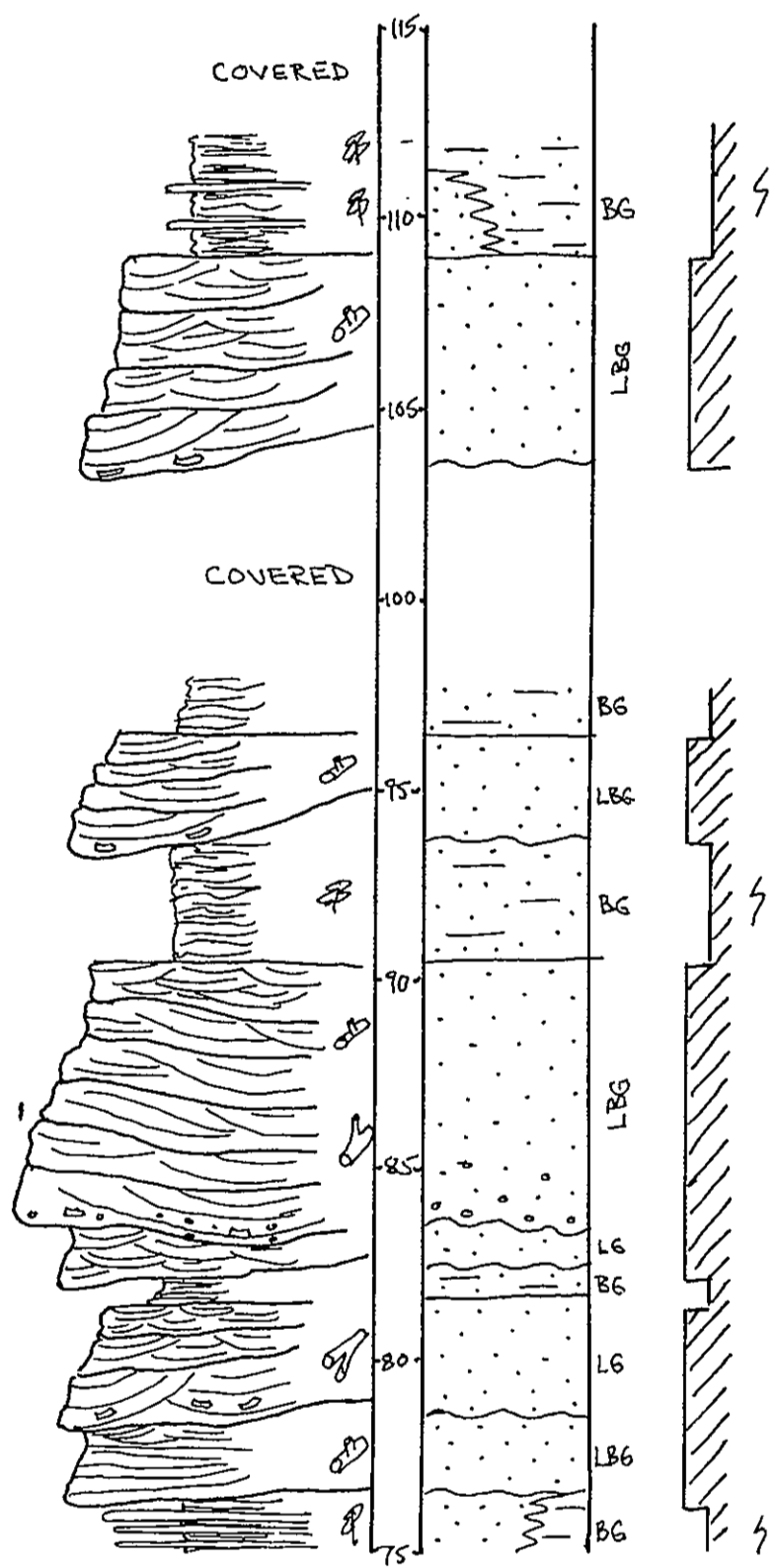
VERY

MCS

June
JM:

M.S. No. 7

PAGE 3



Mi

CF
Pinche

Mic

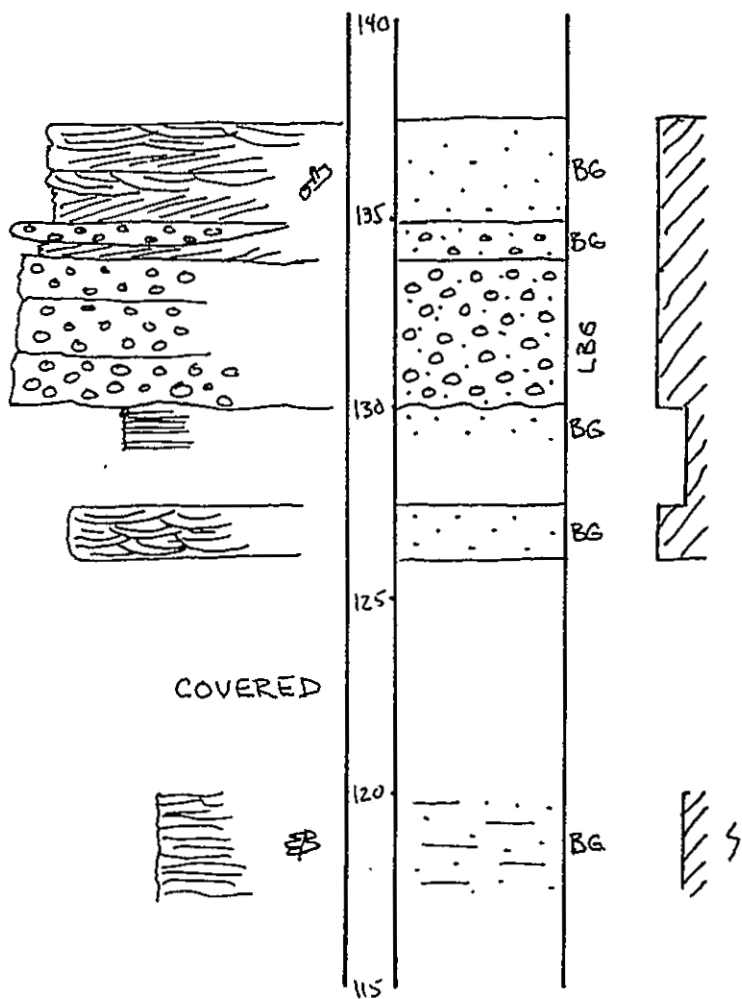
THIS
IS A
110
Thick

CA

Mic

M.S. No. 7

PAGE 4

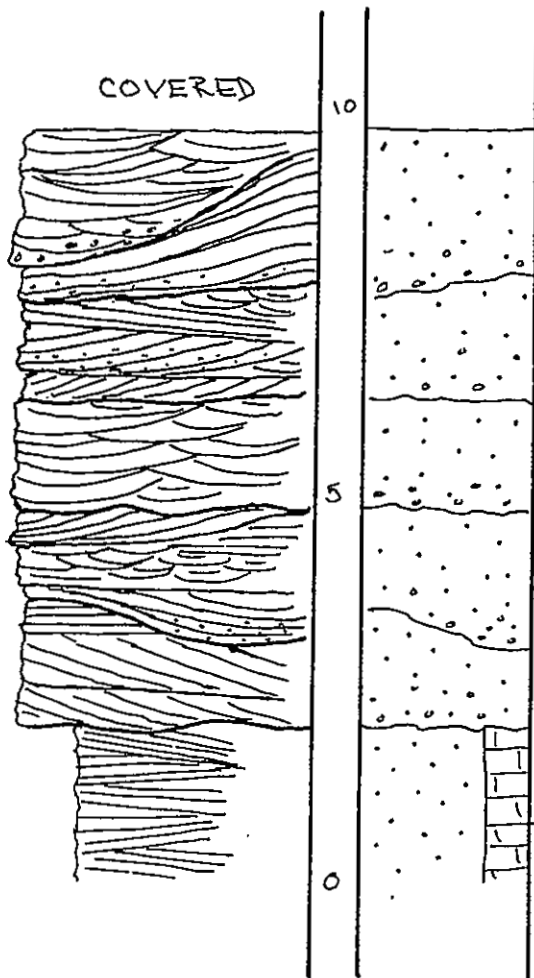


Tabbs
Trous
plac

Ave
Max
granul
dom
matri

Mica

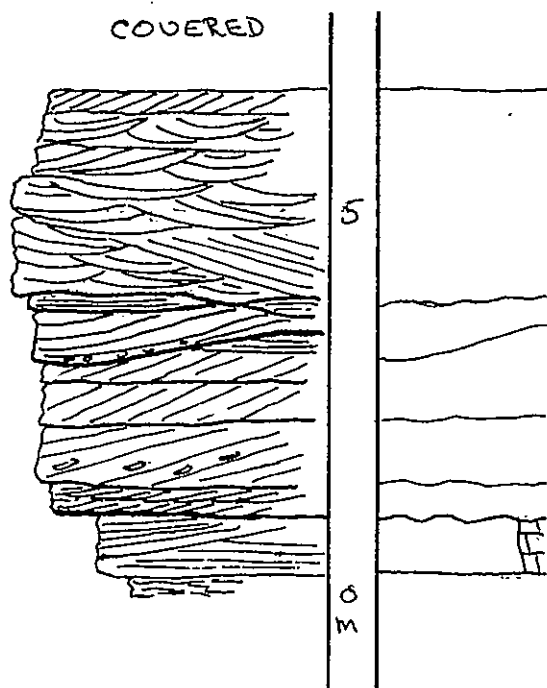
M.S. No. 8



~ 40 m S of TAP I

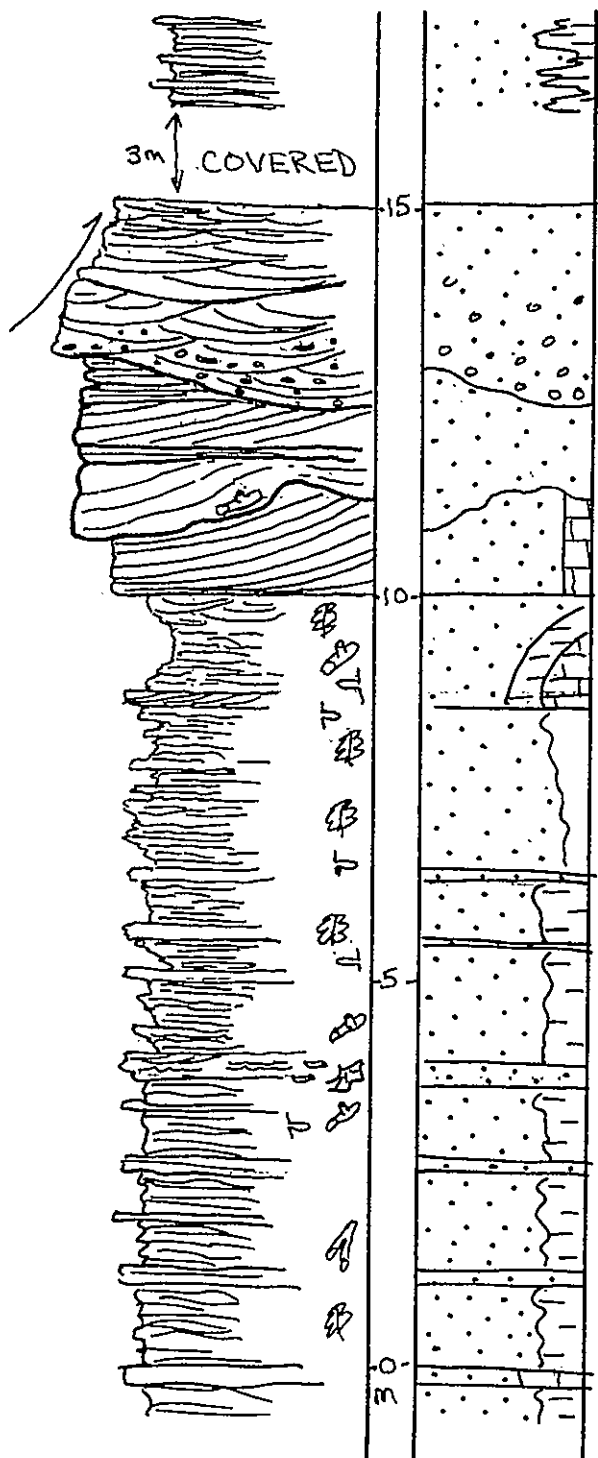
M.S. No. 9

10



24.04

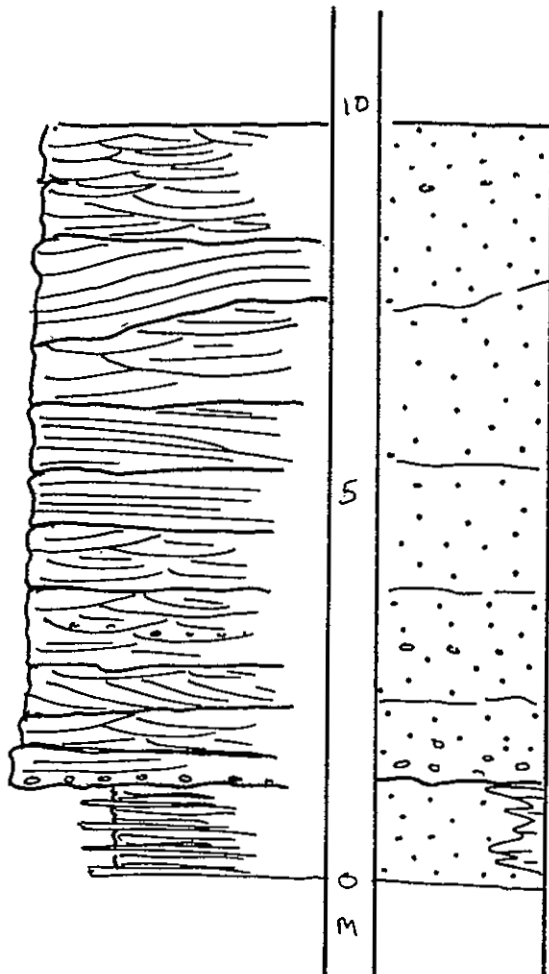
BAACHS



← VERY

M.S. No. 11

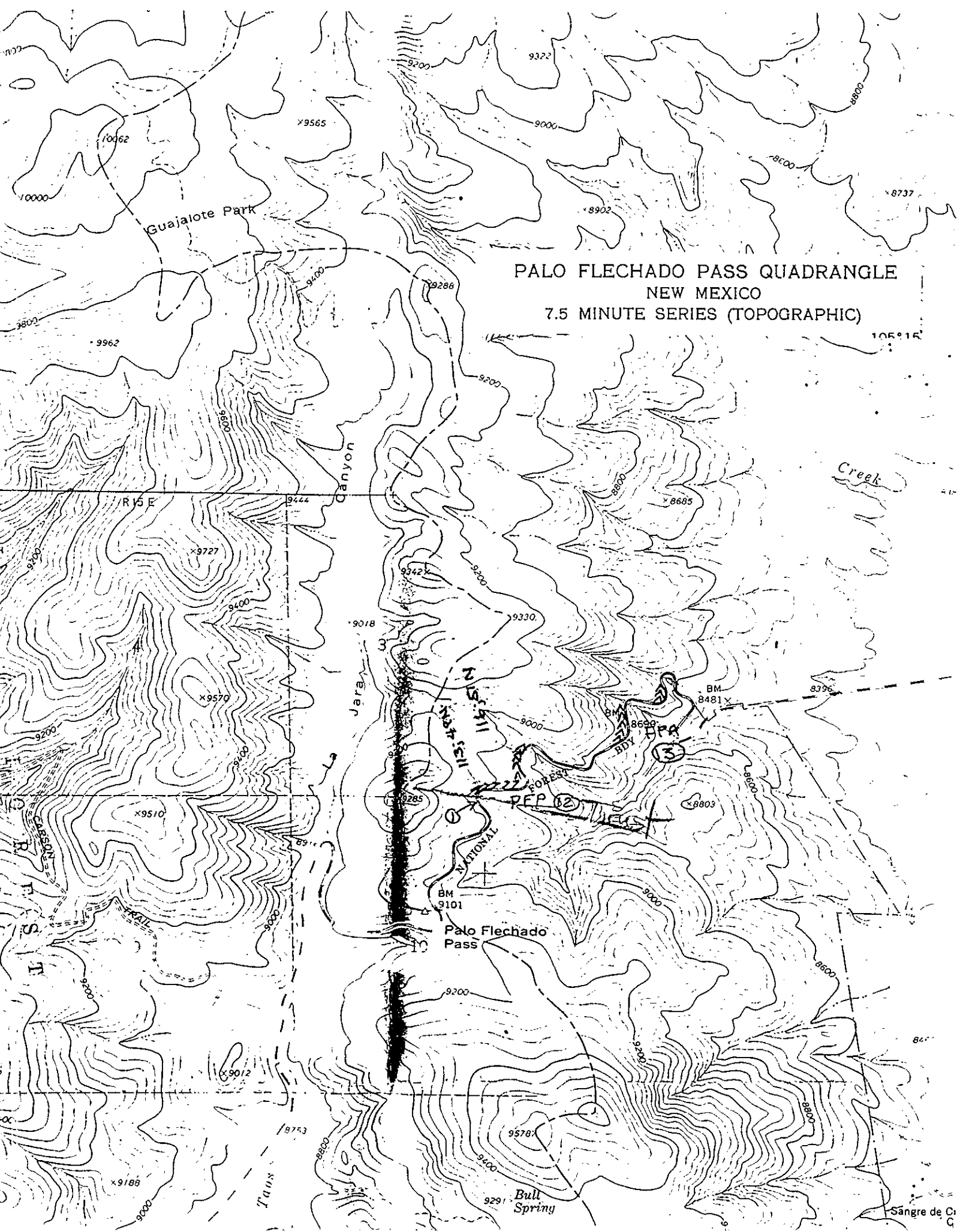
15



PALO FLECHADO PASS SECTIONS

MEASURED SECTIONS
12 AND 13

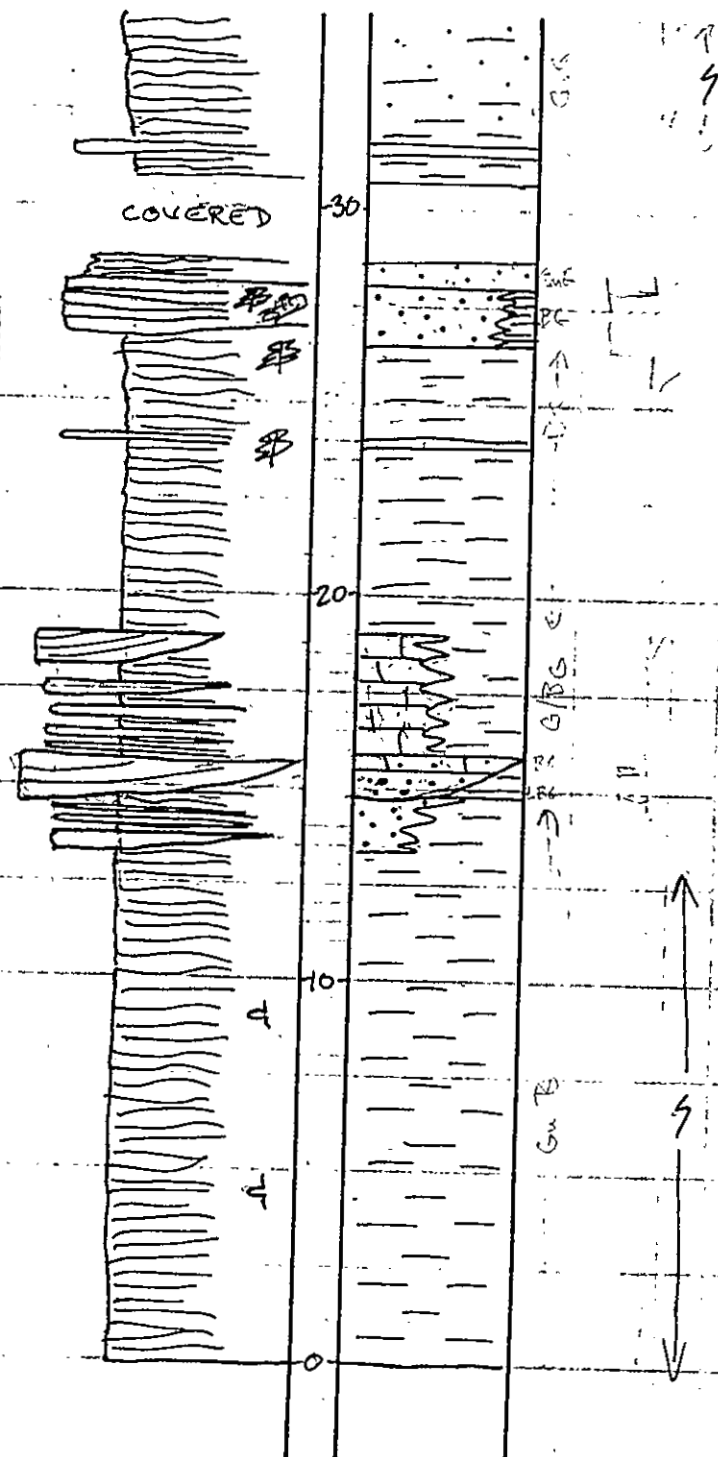
105° 15'



M.S. No. 12

PAGE 1

BRACHS
CRINOIDS



MICACEOUS
SLTY VFSS
TO
F SS

MISSISSIPPIAN
VS. 12

Hill

of diachronic axis
trends N-S



slaty / sdy ls to
calc. ss. close
gr. grains
PFP
above of grain
from P. s. in the
surface is at the
Calc. ss

Mississippian

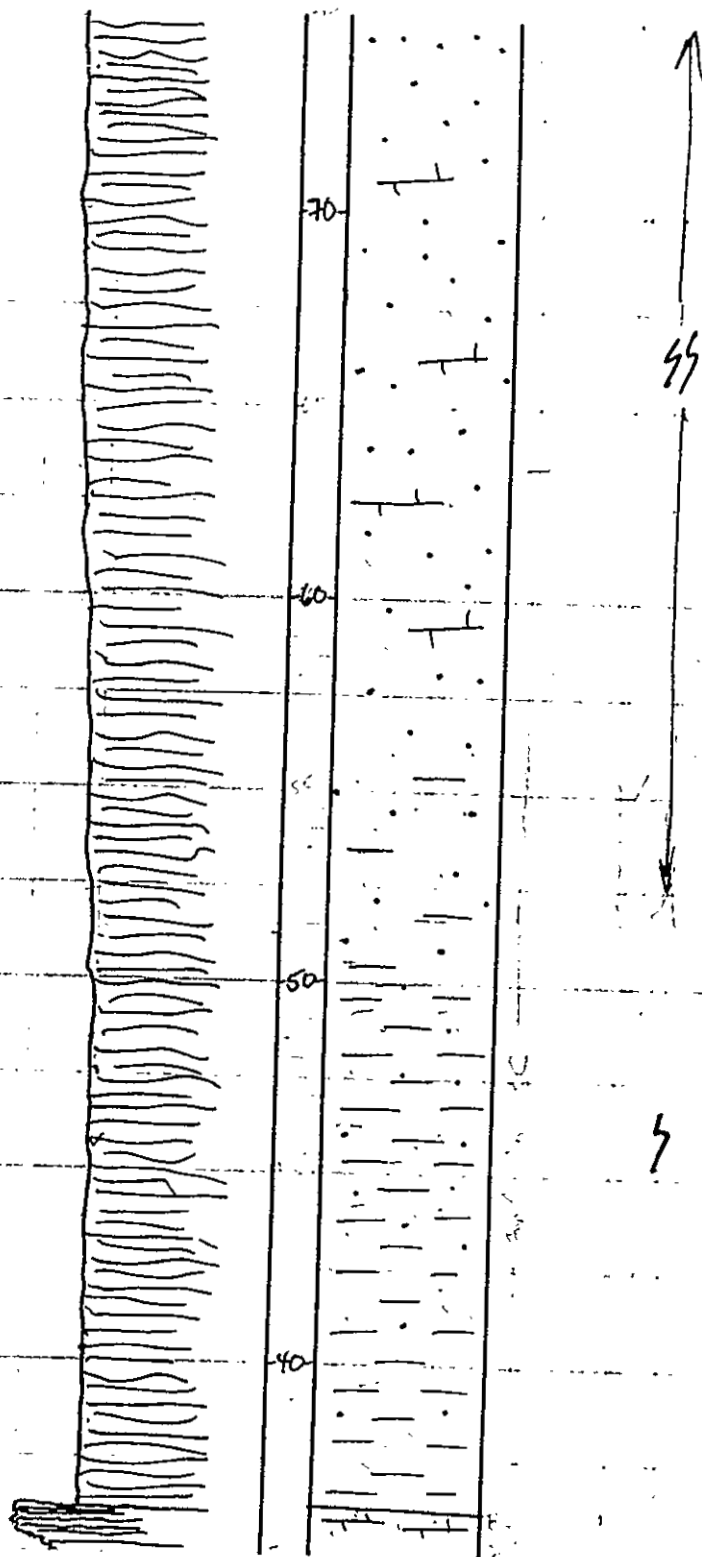
BASE OF
SECTION IS
FAULTED

Section of Sect.
Faulted

M.S. No. 12

PAGE 2

BRACHS
CRINOIDS



POORLY
EXPOSED

MICACEOUS
CALC.

micaceous
micaceous
micaceous
micaceous

Sandy siltst
grades
upward into
calc. f.g. ss.

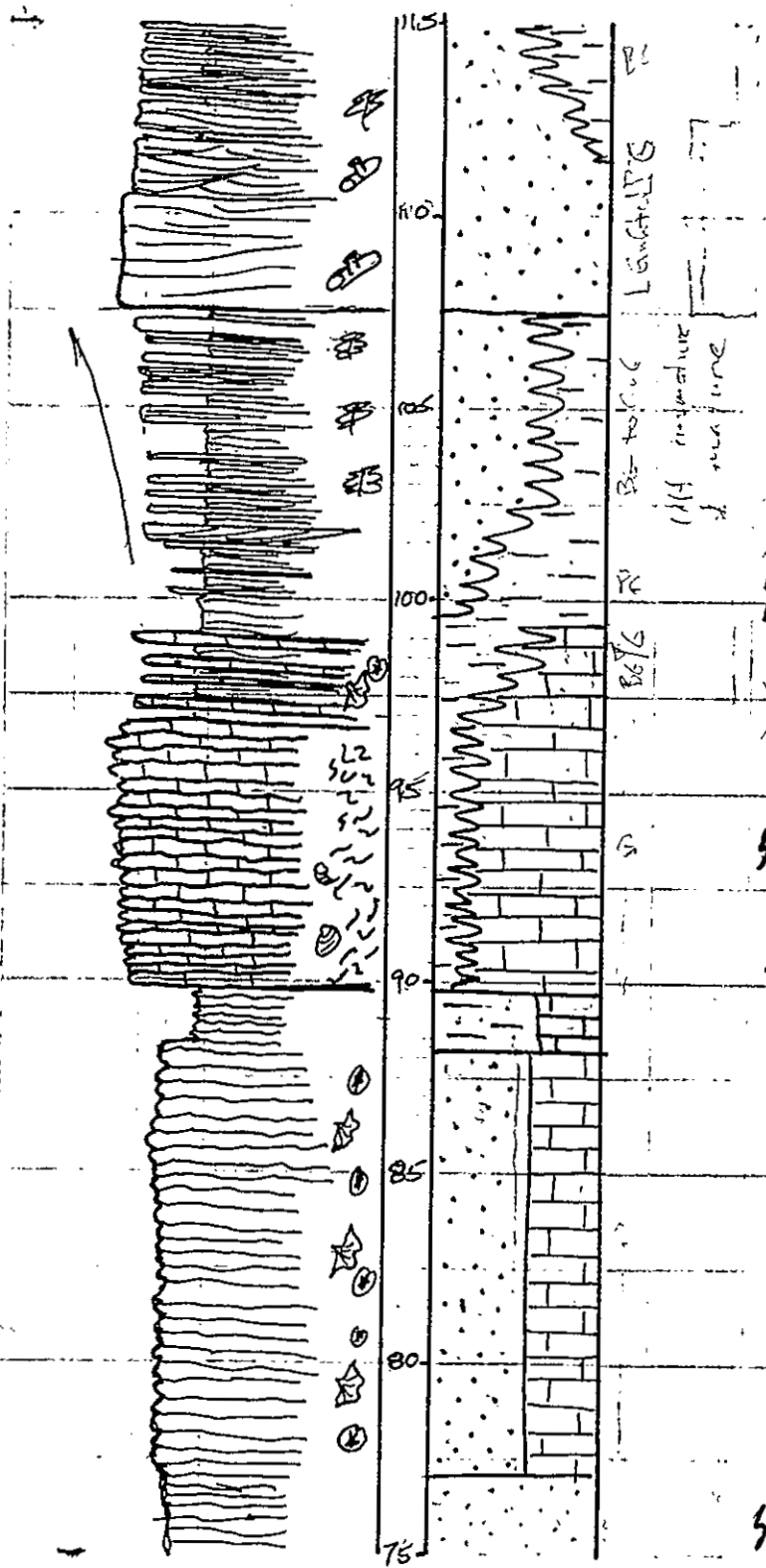
micaceous
micaceous
micaceous
micaceous

Micaceous
siltst

M.S. No. 12

PAGE 3

BRACHS
CRINOID
Phyt. Algae



FAULTED:
Thickness
Approx.
MICACEOUS
CALC.

Fossiliferous
MICACEOUS
CALC.

MICACEOUS

Plane bedded
& tabular
P.P. 2
MICACEOUS

Thin bedded / 1/2 in.

Thin bedded
Phyllites & thin
Wavy bedded
laminar
Pelecypods

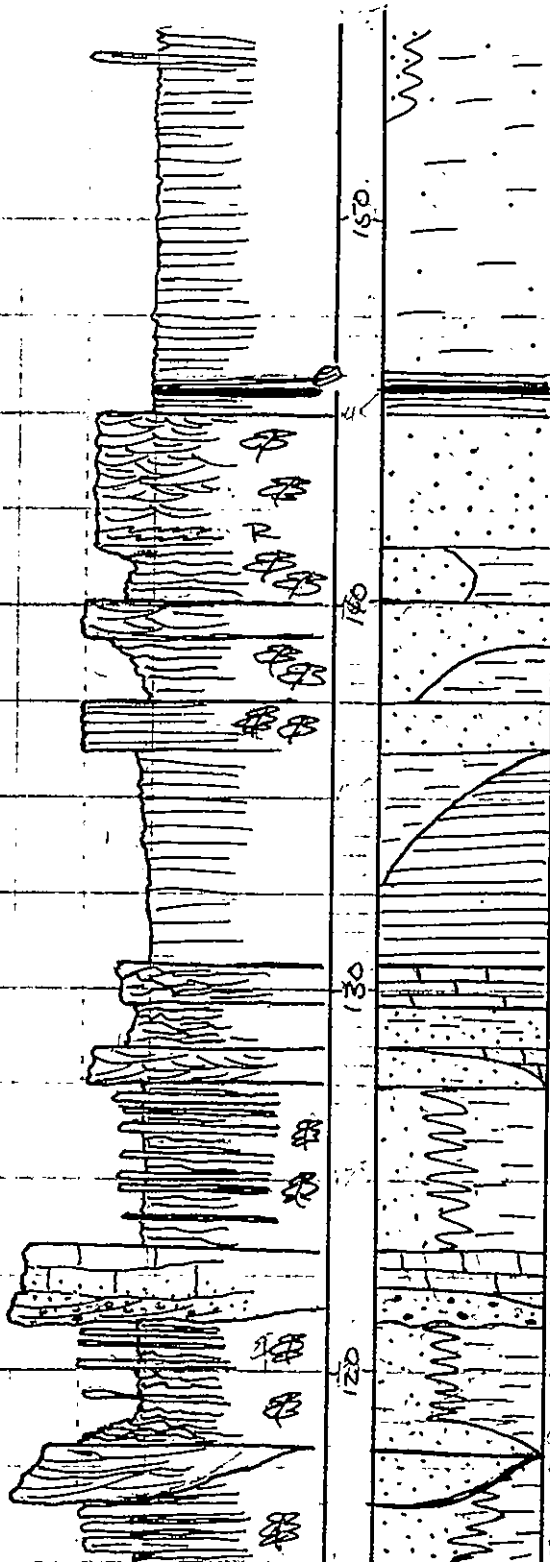
CALC. Ss/
IMPURE LS.

Calc. Ss. & ls.
Impure ls.

M.S. No. 12

PAGE 4

BIVALES



VERY MICACEOUS

Bds 3 to 20 cm thick

MICACEOUS

VC. ss grades up into oolitic grainst.

Avicula pectin
Bivalve

Shale
Micaceous
Carbonaceous

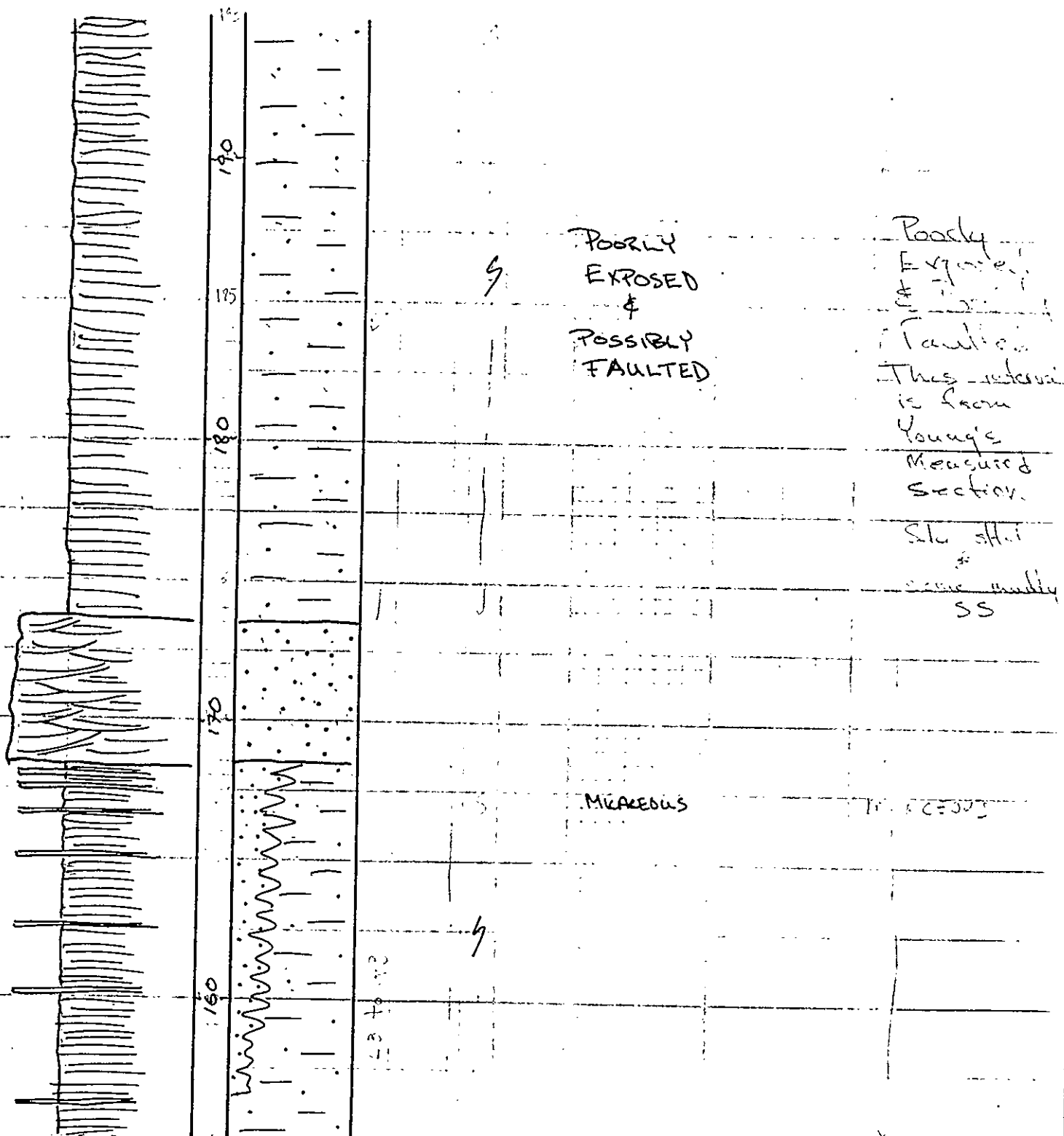
Upper dense
Micaceous

Micaceous

VC ss grades up into
Gk. (grainst.)
MCS 35 mm
Micaceous

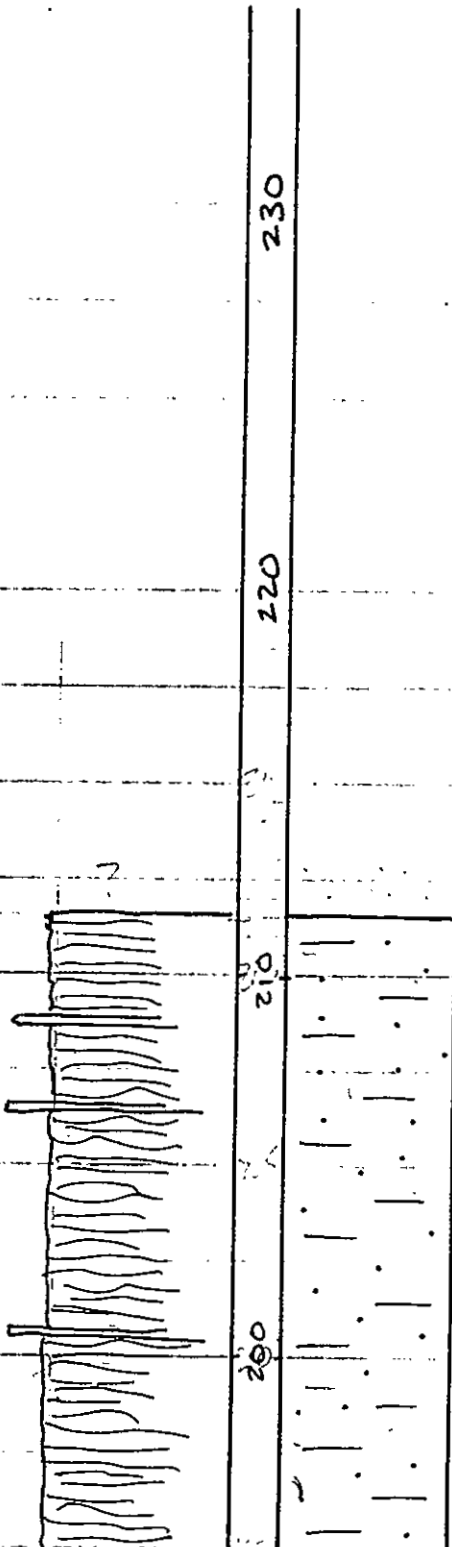
M.S. No. 12

PAGE 5



M.S. No. 12

PAGE 6

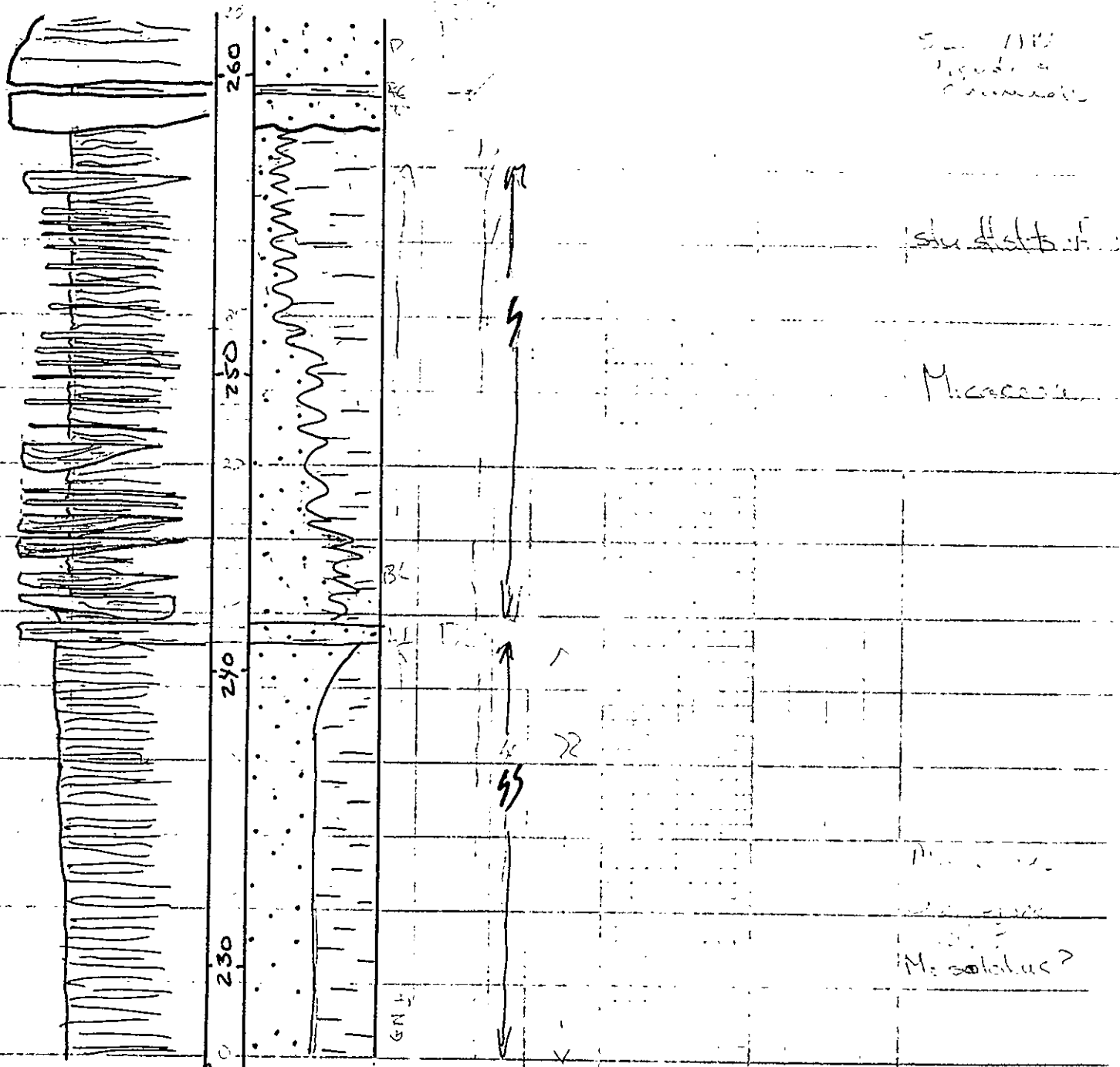


APPROX. 16m of
COVERED SECTION
TO NEXT
ROAD CUT

Air Force

M.S. No. 12

PAGE 7



SECTION SHIFTS
TO NEXT
ROAD CUT

This section
starts one
road cut
down hill
from top of road

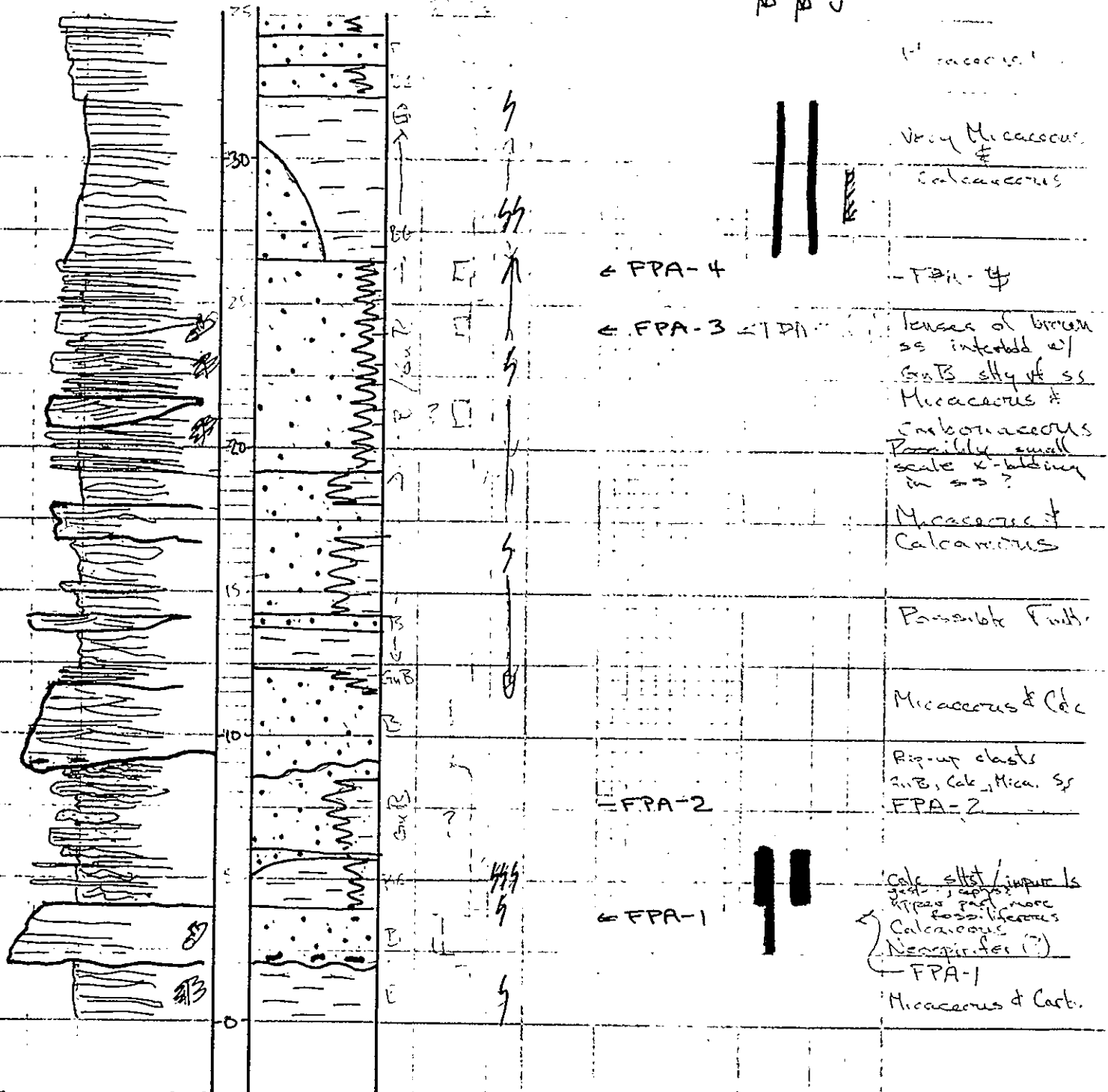
Top of road 28

M.S. No. 12
PAGE 8

270

M.S. No. 13

PAGE 1

BRACHS
BIVALVES
CRINOIDS

M.S. No. 13

PAGE 2

BRACHS

CRINOIDS

COVERED

POSSIBLY
FAULTED

Thickness
Approximate

Truncated
Faulted

Thickness
Approximate

FAULTED:

Top of is unit
broken out?

change from
this

← very change com
may be faulted

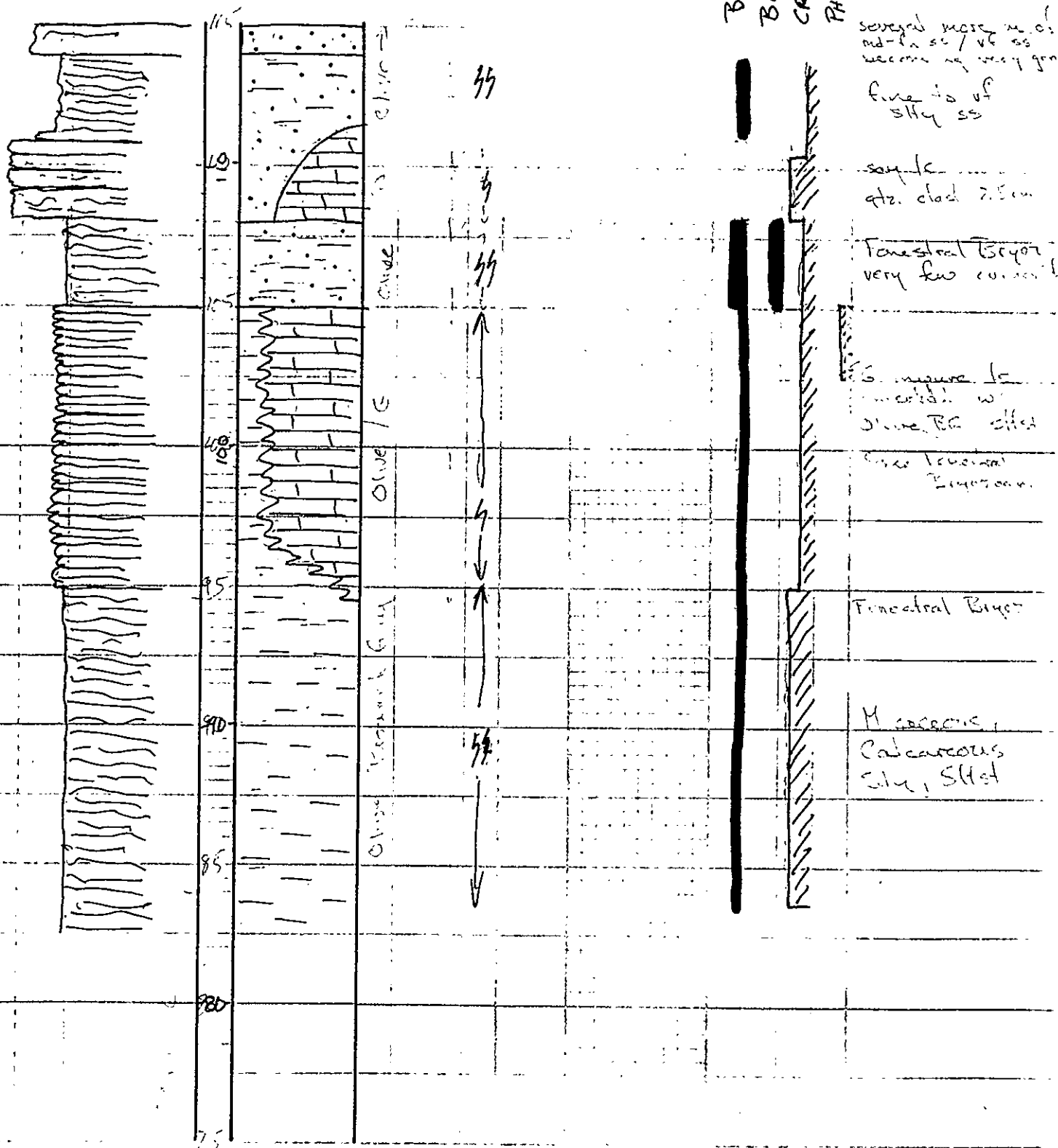
P. ...

← possible layer 121
412.

FPA .5

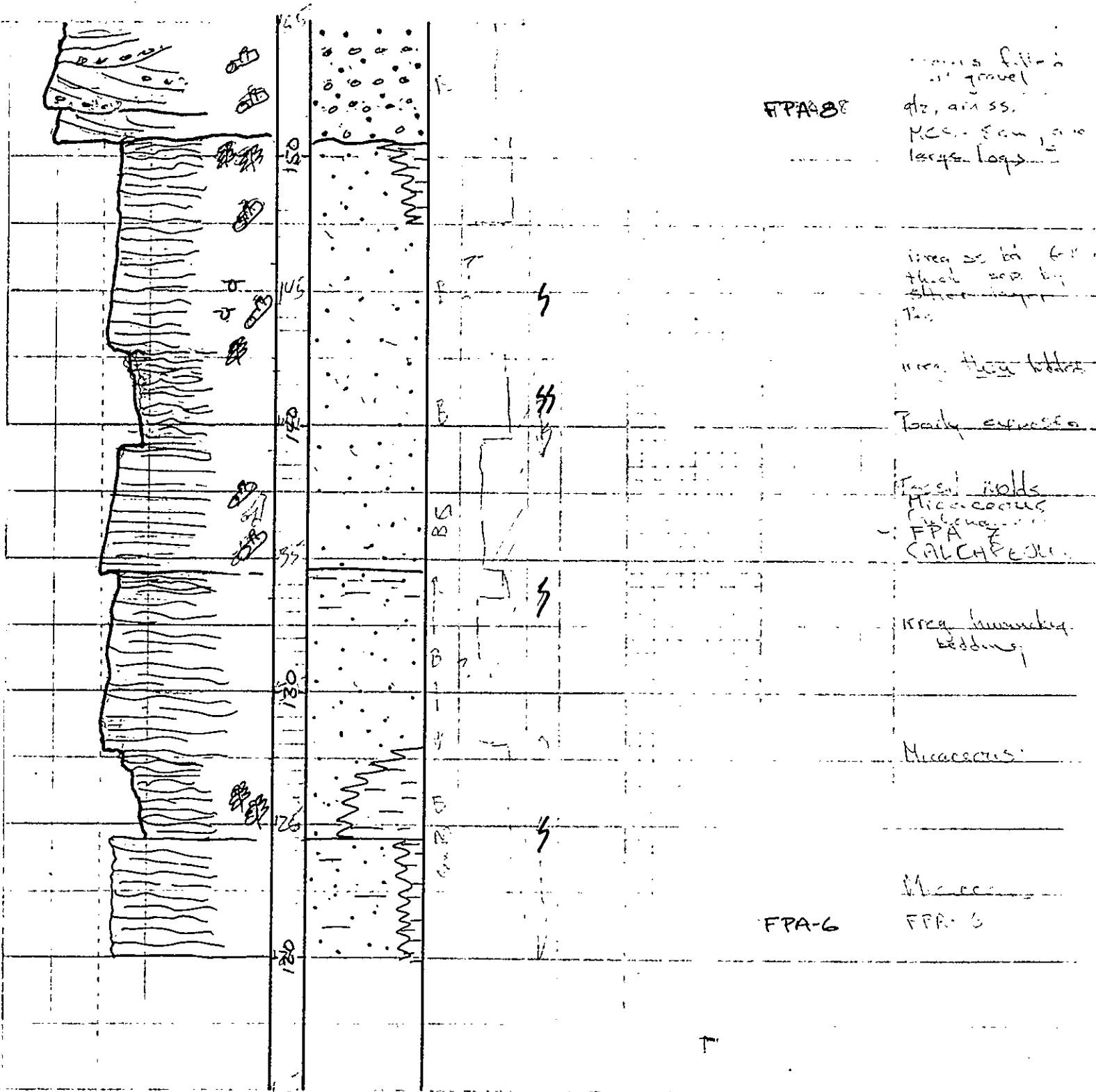
M.S. No. 13

PAGE 3



M.S. No. 13

PAGE 4



FPA-8
 fine ss. in gravel
 flz, and ss.
 MCS. - fine, and
 large logs

fine ss. in flz.
 thick and by
 thin layer
 120

very thin beds
 fairly exposed

Fossil beds
 Microcosmus
 FPA
 CALCHPEOL

Irreg. hummocky
 bedding

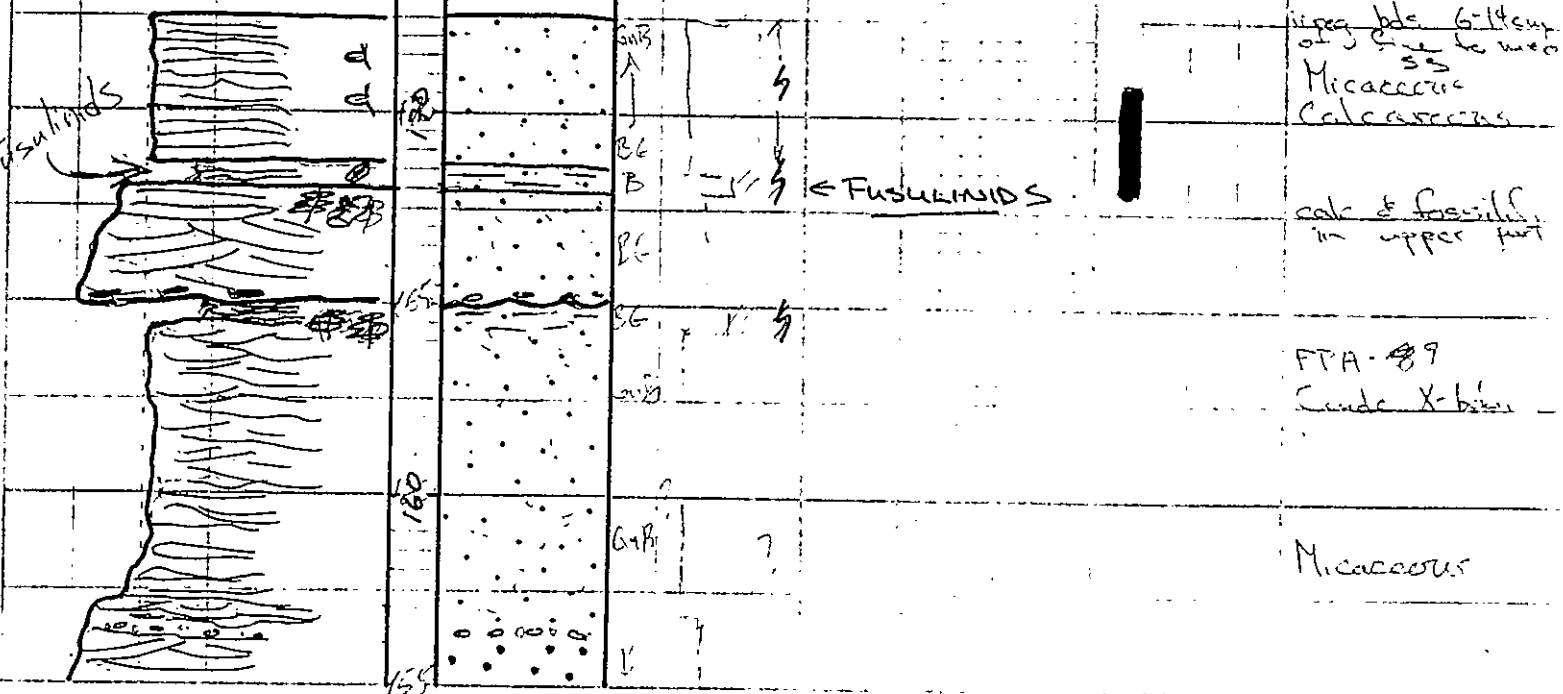
Microcosmus

FPA-6
 FPA-3

M.S. No. 13

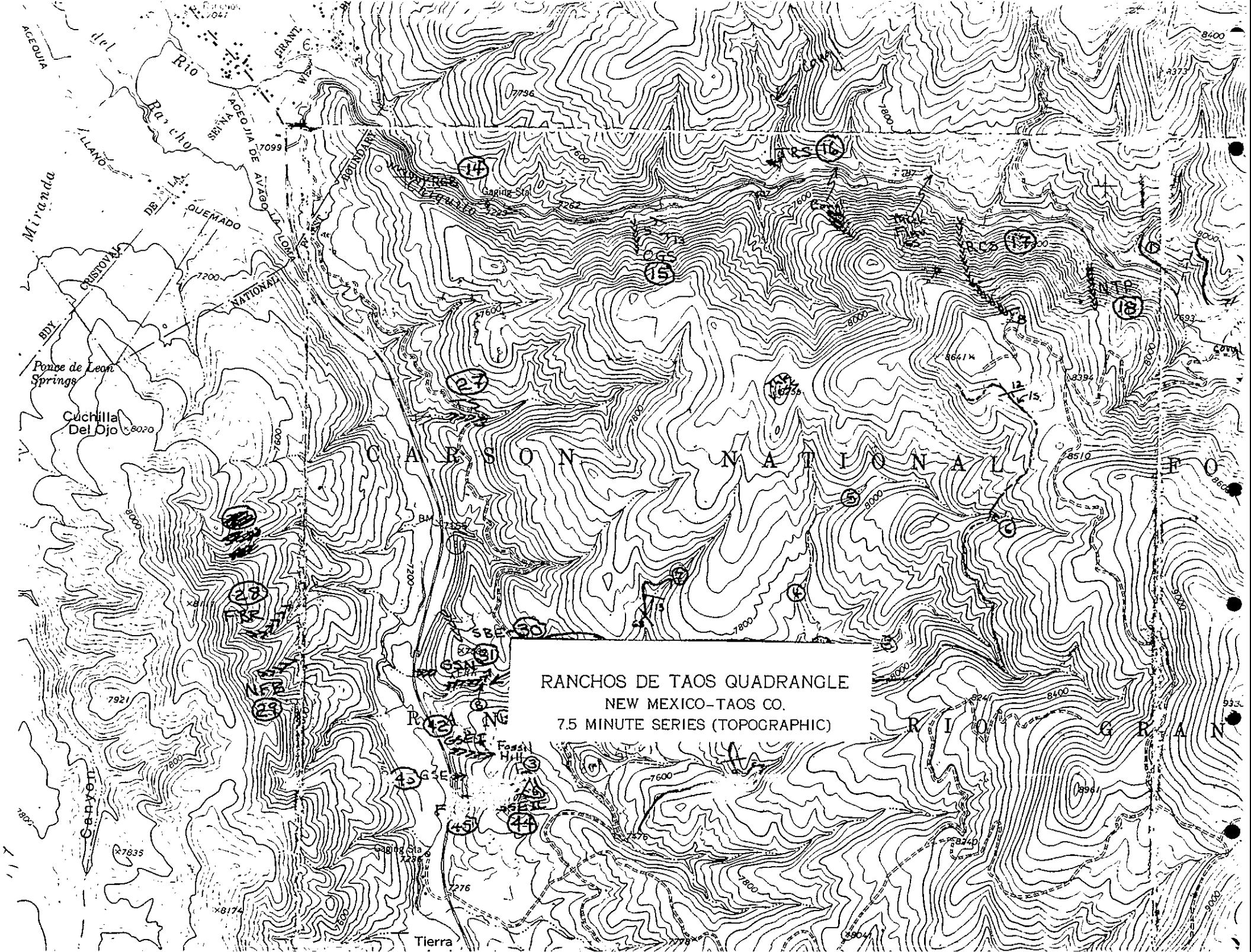
PAGE 5

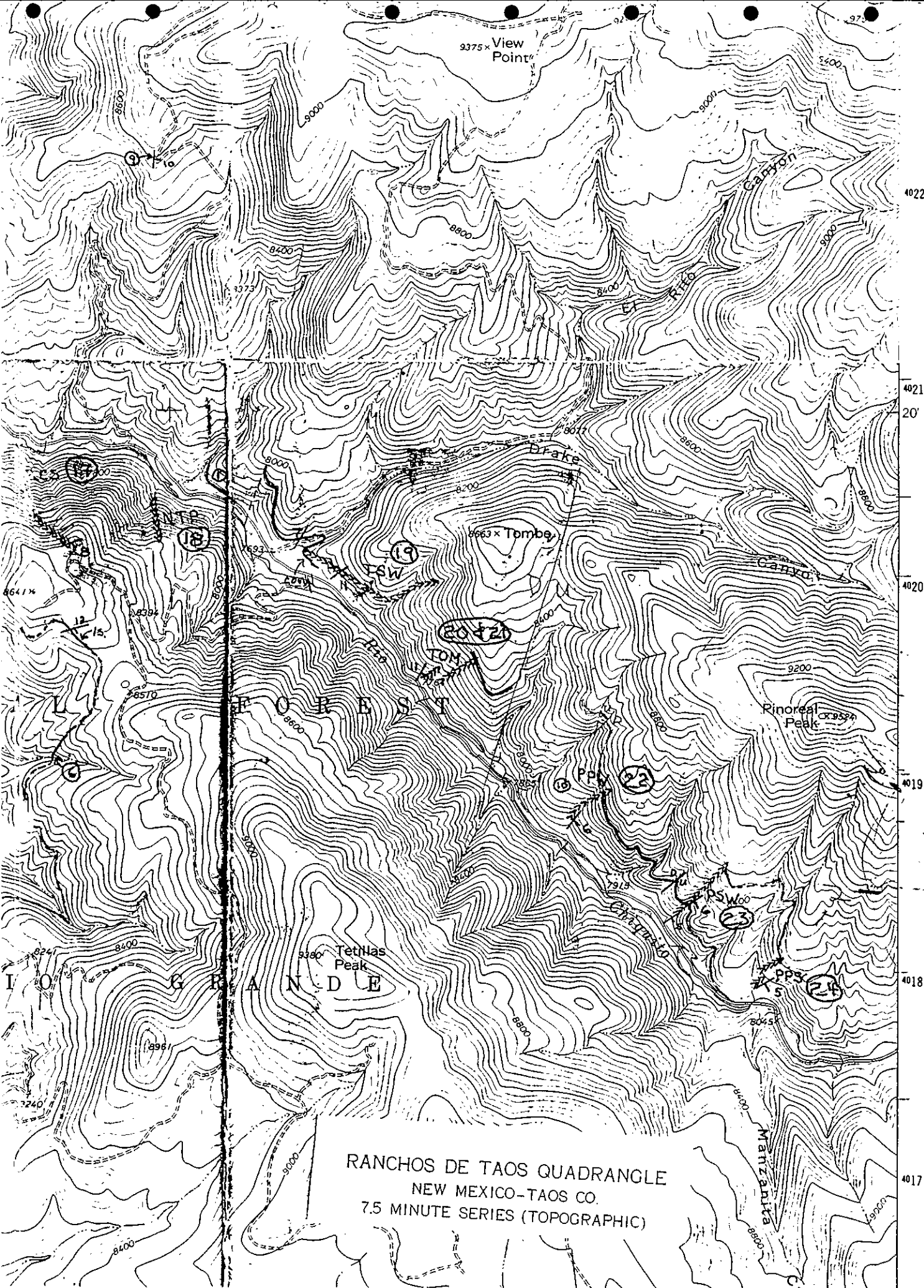
BRACKS



RIO CHIQUITO SECTIONS

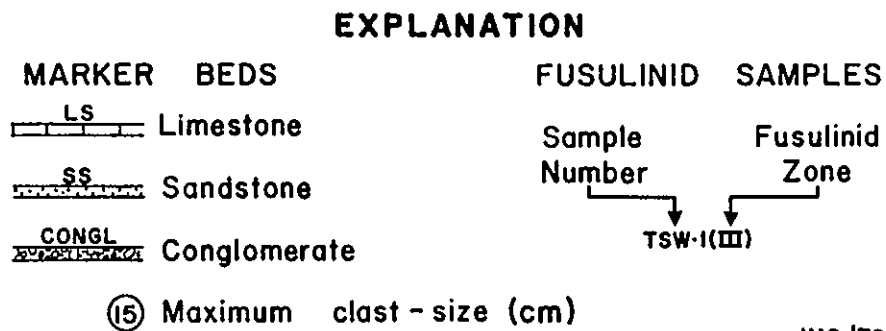
MEASURED SECTIONS
14 THROUGH 26





RANCHOS DE TAOS QUADRANGLE
NEW MEXICO-TAOS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

Figure 10. Correlation of Rio Chiquito measured sections with fault displacements removed (approximate displacement indicated in parentheses). Maximum clast size of laterally persistent conglomerate zone is also shown. Fusulinid sample numbers refer to samples listed in Table 2.



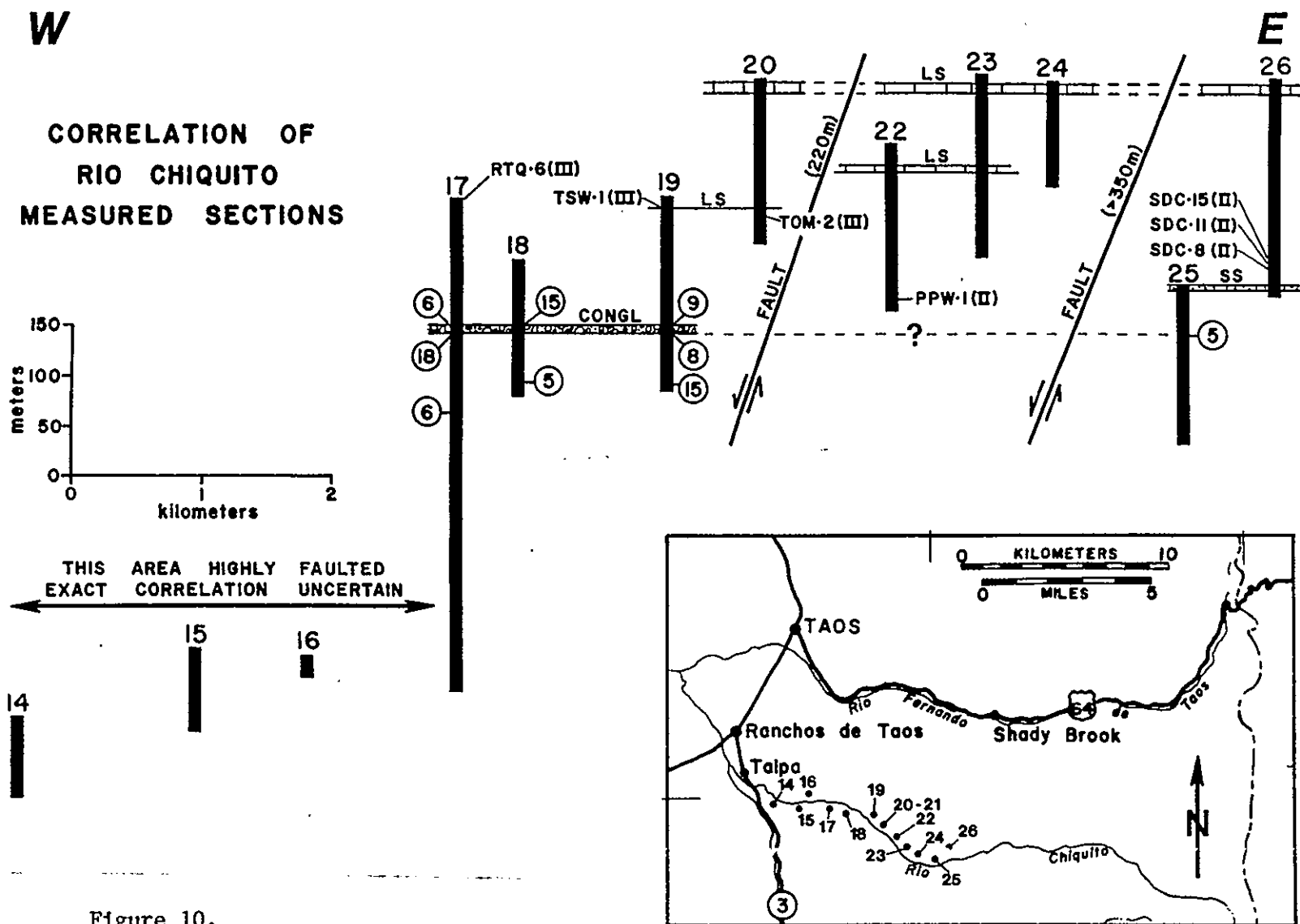
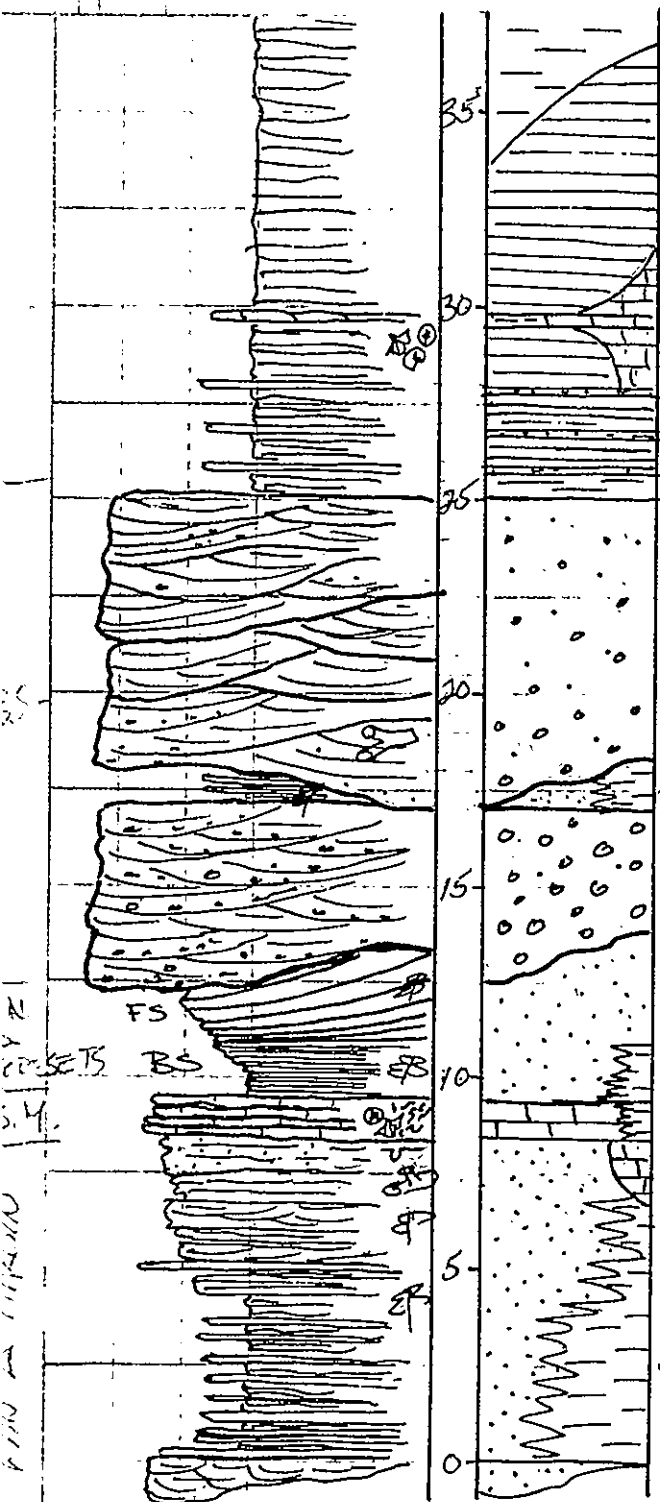


Figure 10.

PAGE 1

PAGE 1



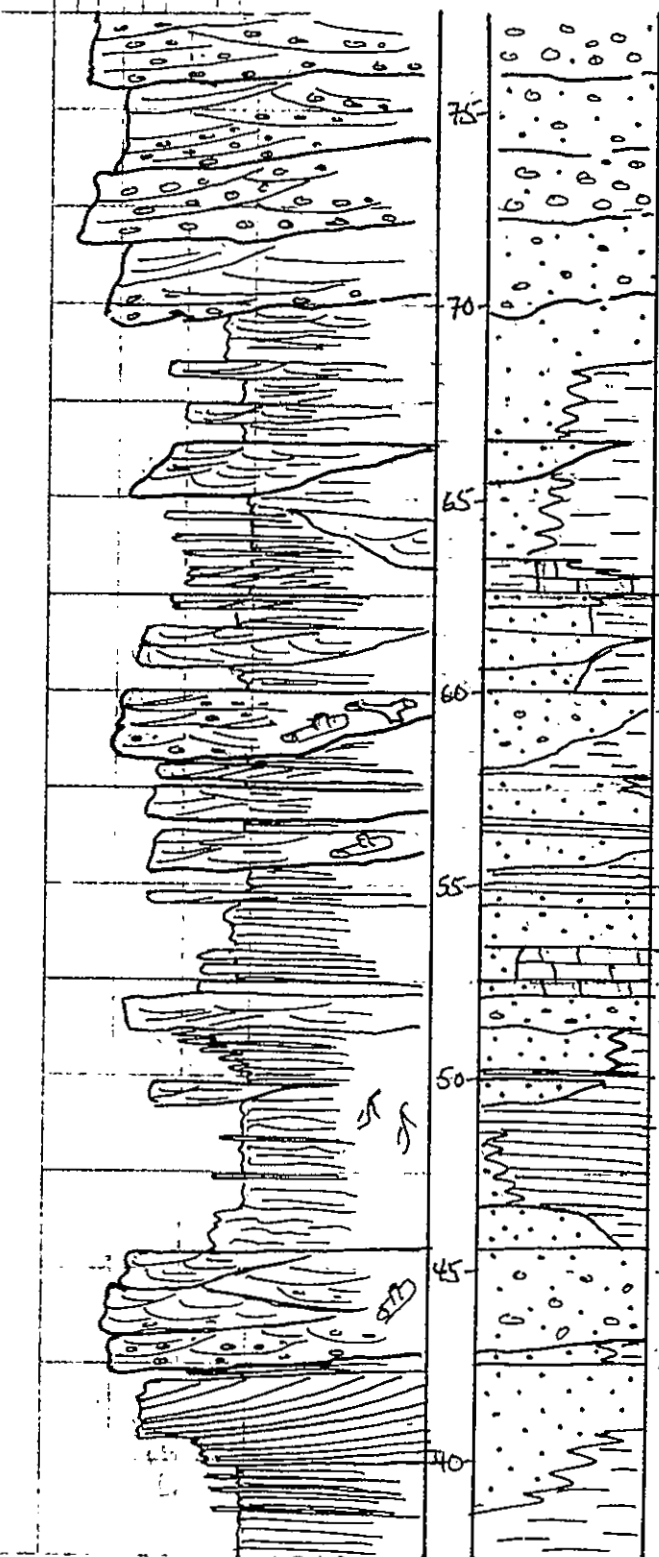
RCB

51

M.S. No. 14

PAGE 2

BRACHIS



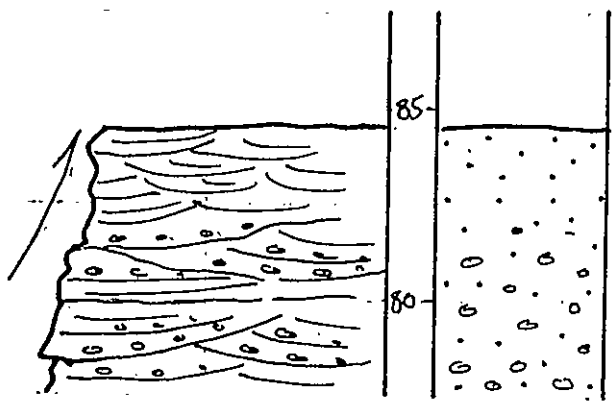
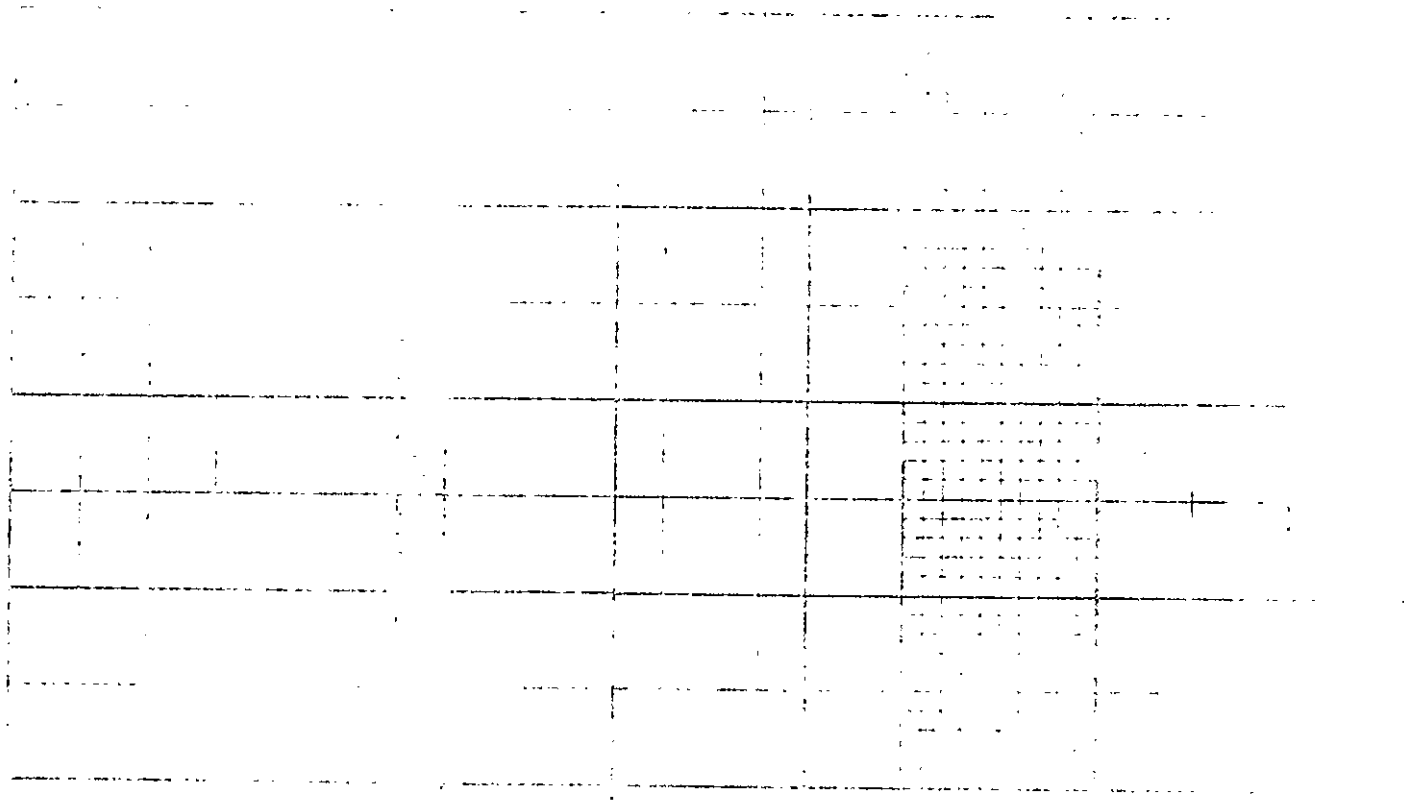
laterally persistent
foresets

RCB

52

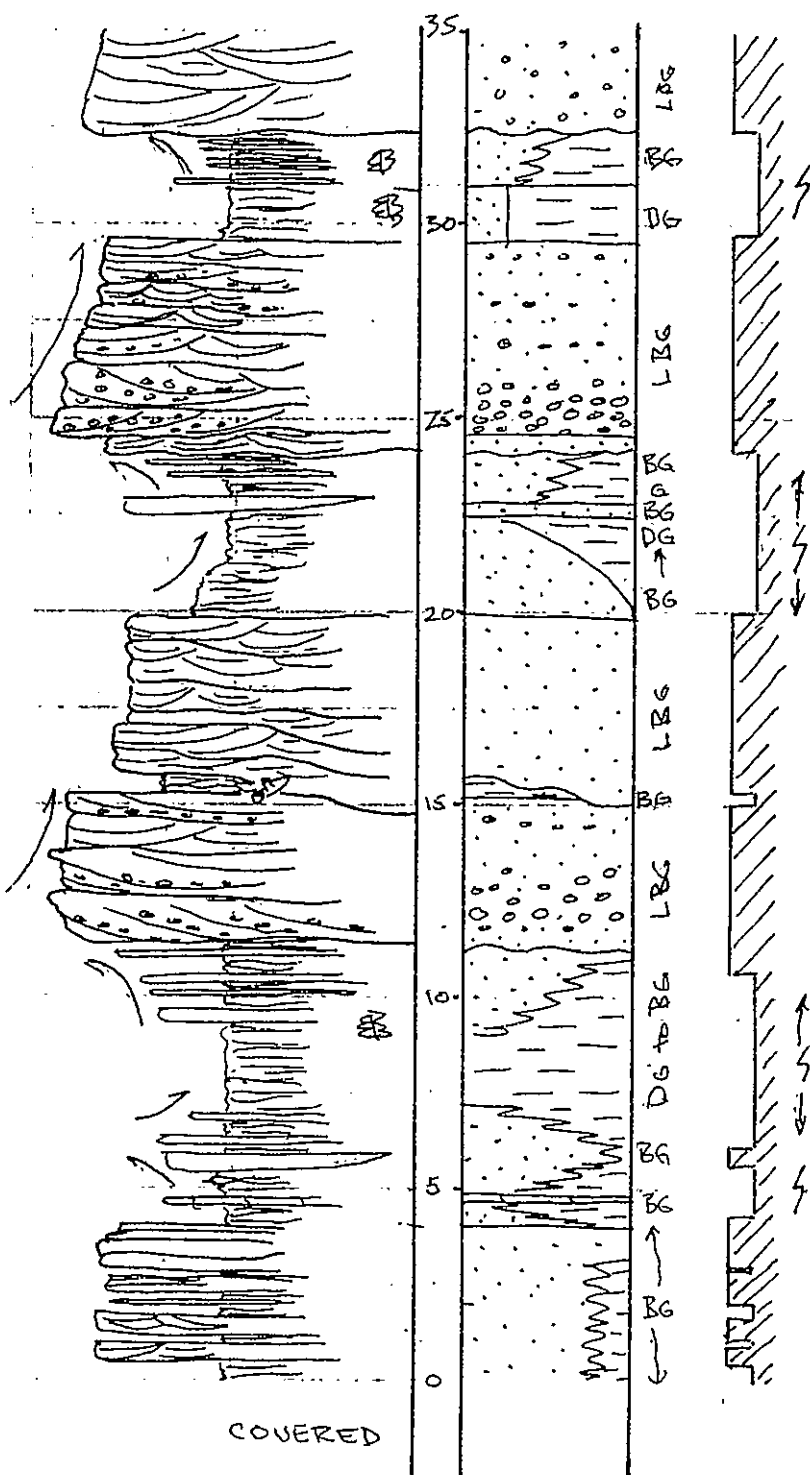
M.S. No. 14

PAGE 3



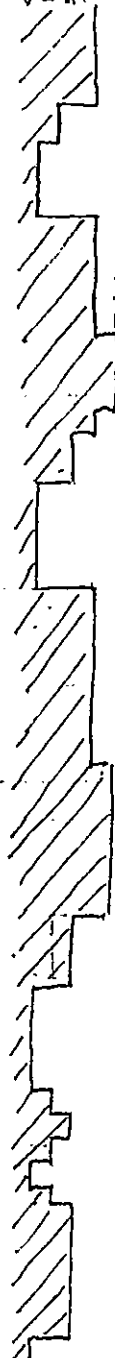
M.S. No. 15

PAGE 1

Bed
Thickness

1-5
5-25
25-1m
> 1m

BRACHS
PELECYPODS
CRINOIDS



MCS = 9 cm

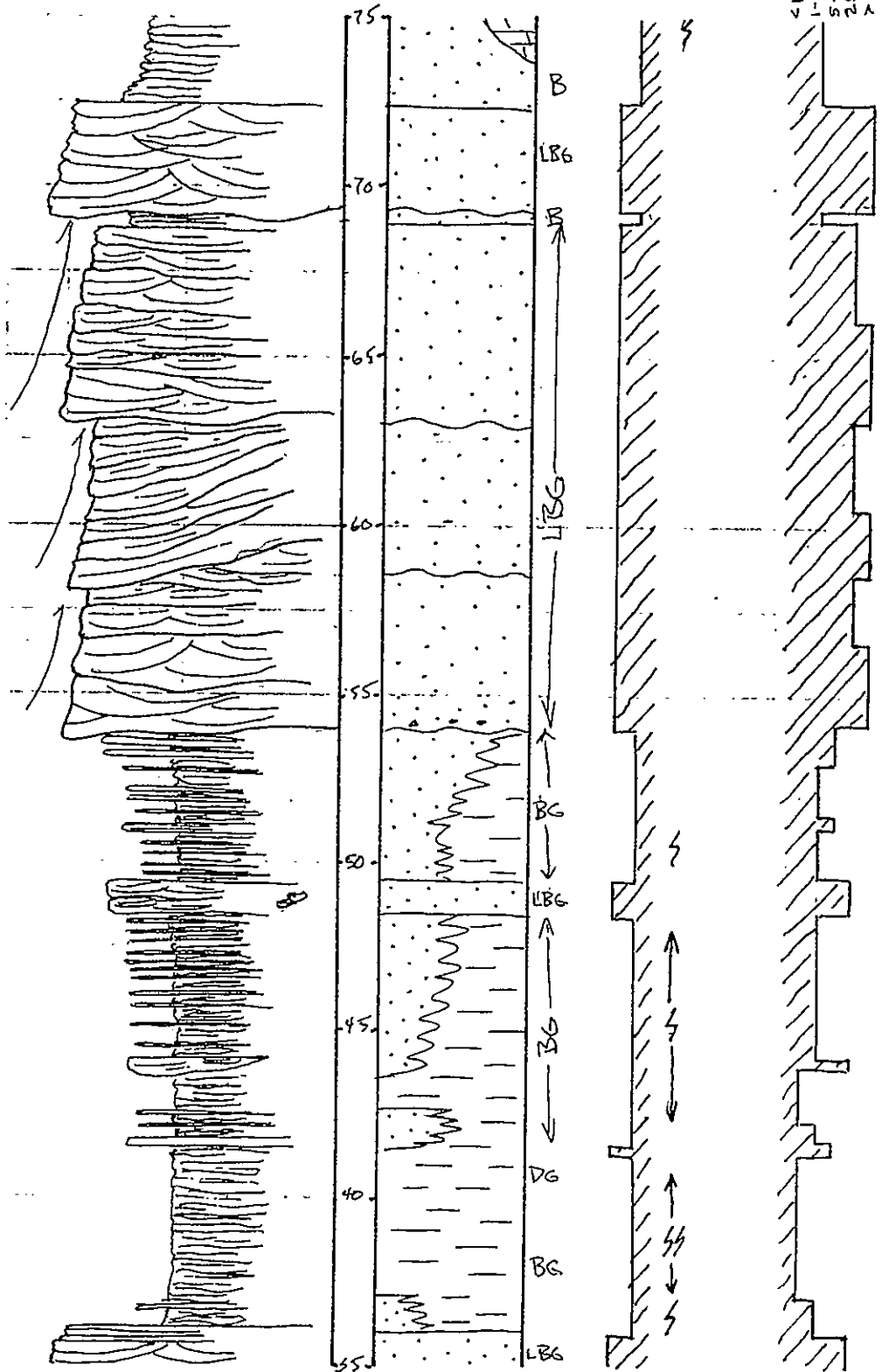
MCS = 10 cm

← impure ls

110; 5°S

M.S. No. 15

PAGE 2



PELECY
CRINOIDS
GASTROPODS

Discoidal
Lenticles
Fossils
1



CGS

June 23, 1978

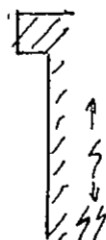
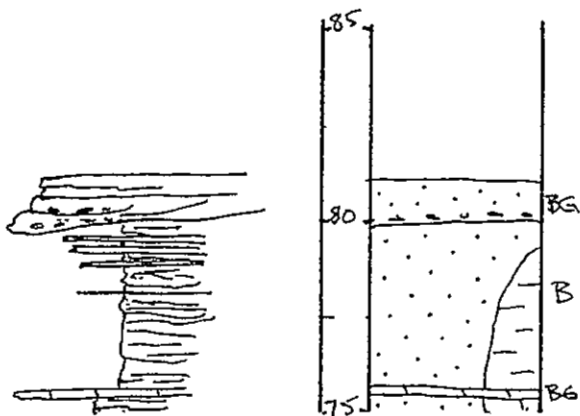
JHC

M.S. No. 15

PAGE 3

Bed
Thickness
(cm)
1-5
5-25
25-100
100-200

BRACHS
Pelecypods
CRINOID
CASTS.



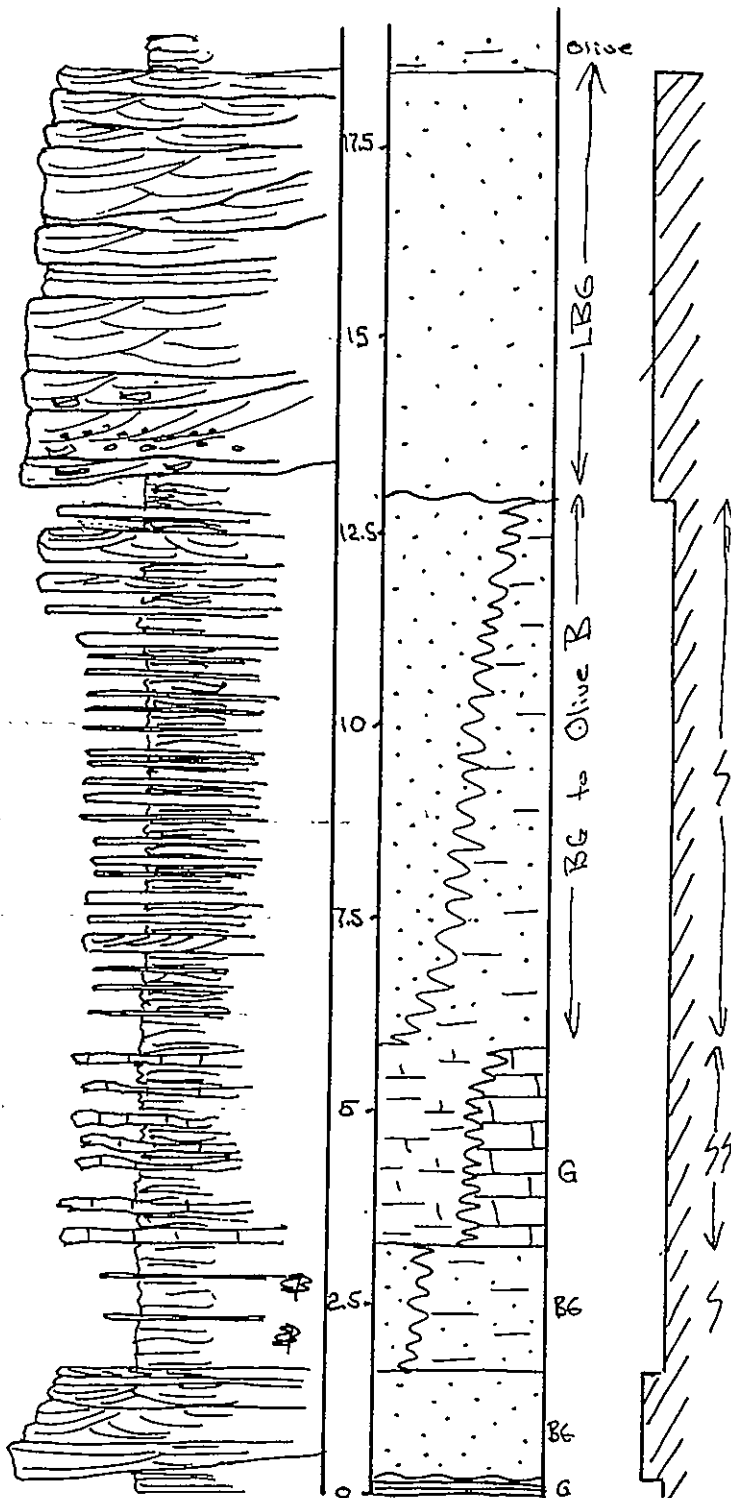
CGS

Page = 3 of 3

Table

related to Phylloid
Algae
56

M.S. No. 16



CRINOIDS
BRACHIOPODS

CALCAREOUS

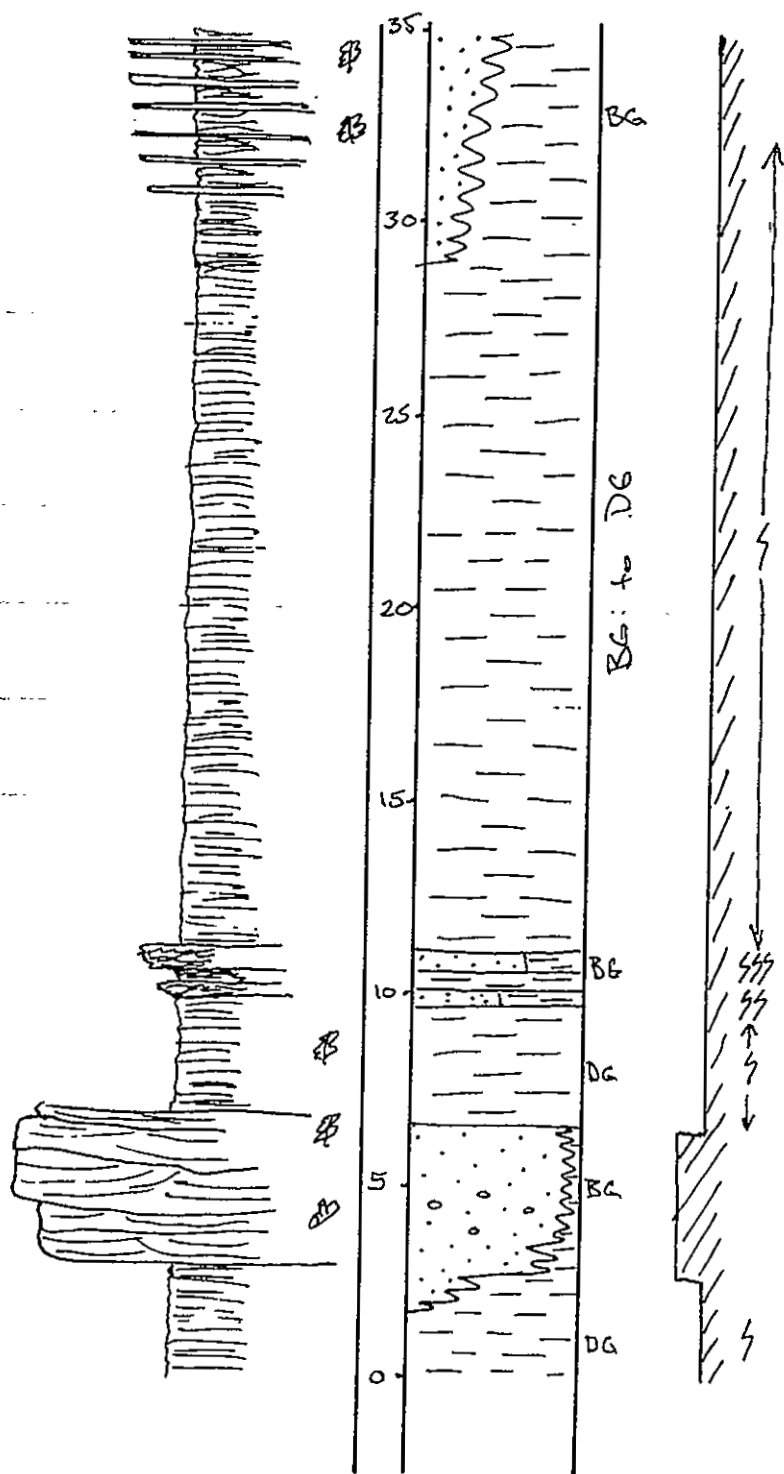
MICACEOUS

MICACEOUS

CALCAREOUS

JMC

PAGE 1



MICACEOUS &
CALCAREOUS

Micaceous

$$MCS = 7 \text{ cm}$$

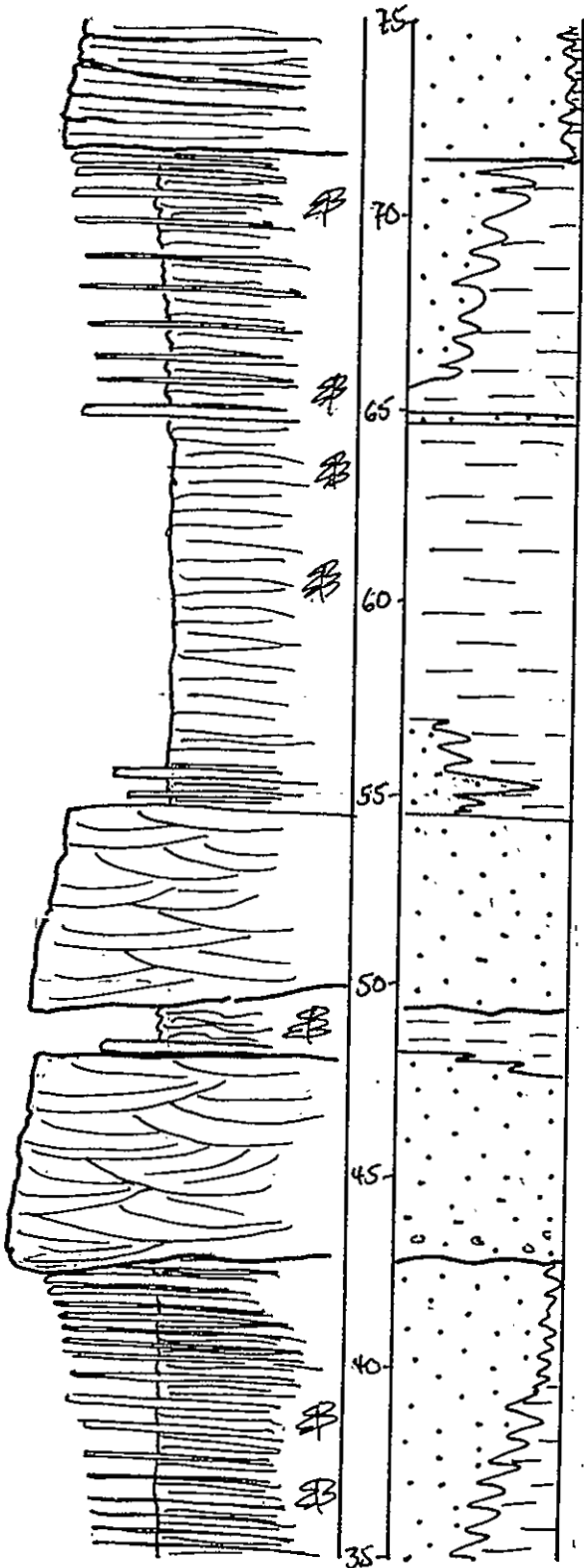
7-14-1957

23 May 1944

→

M.S. No. 17

PAGE 2



Thin bedded
sandstone

Shale with
thin sandstone
layers

Shale

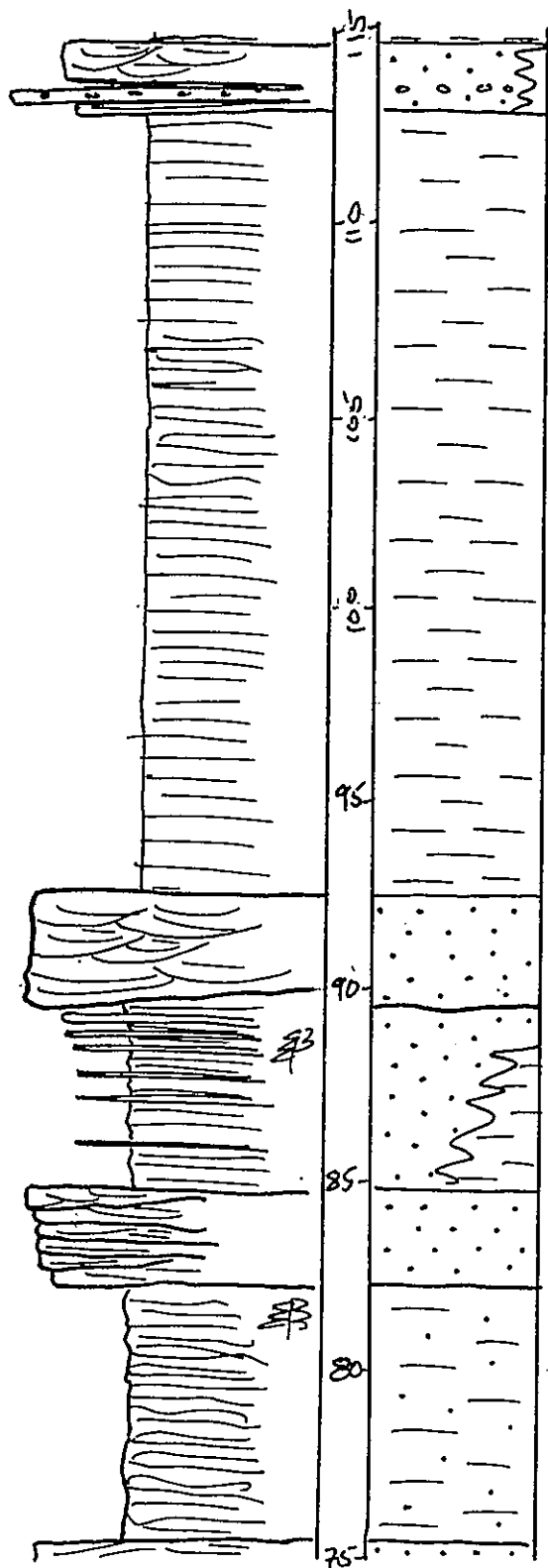
Thin bedded
sandstone

Shale

Thin bedded
sandstone

M.S. No. 17

PAGE 3



⚡

POORLY
EXPOSED

⚡

⚡

⚡

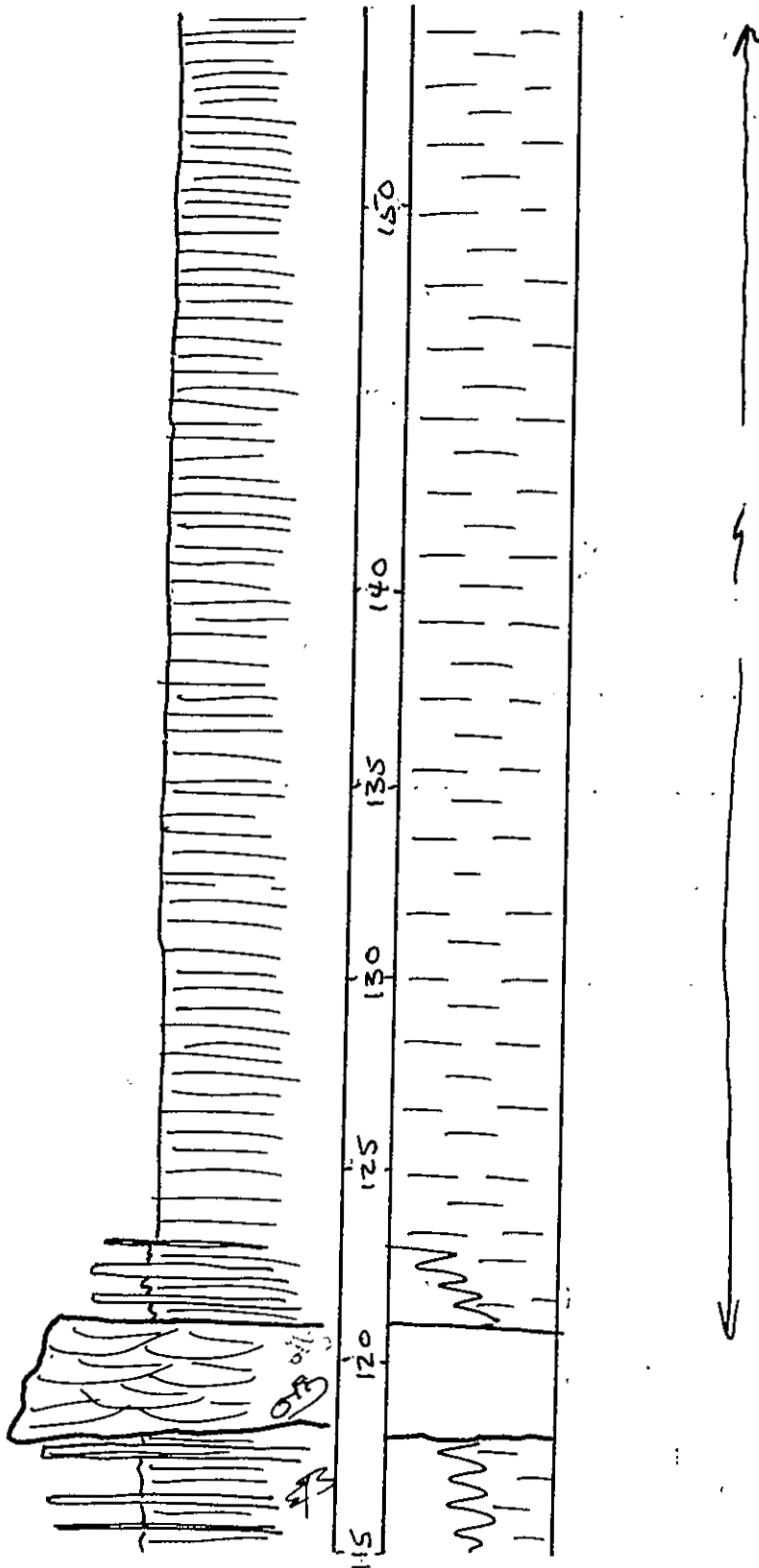
POORLY
EXPOSED

Only exposed
a thin layer
of rock
is visible

Thin layer of
rock is visible

M.S. No. 17

PAGE 4



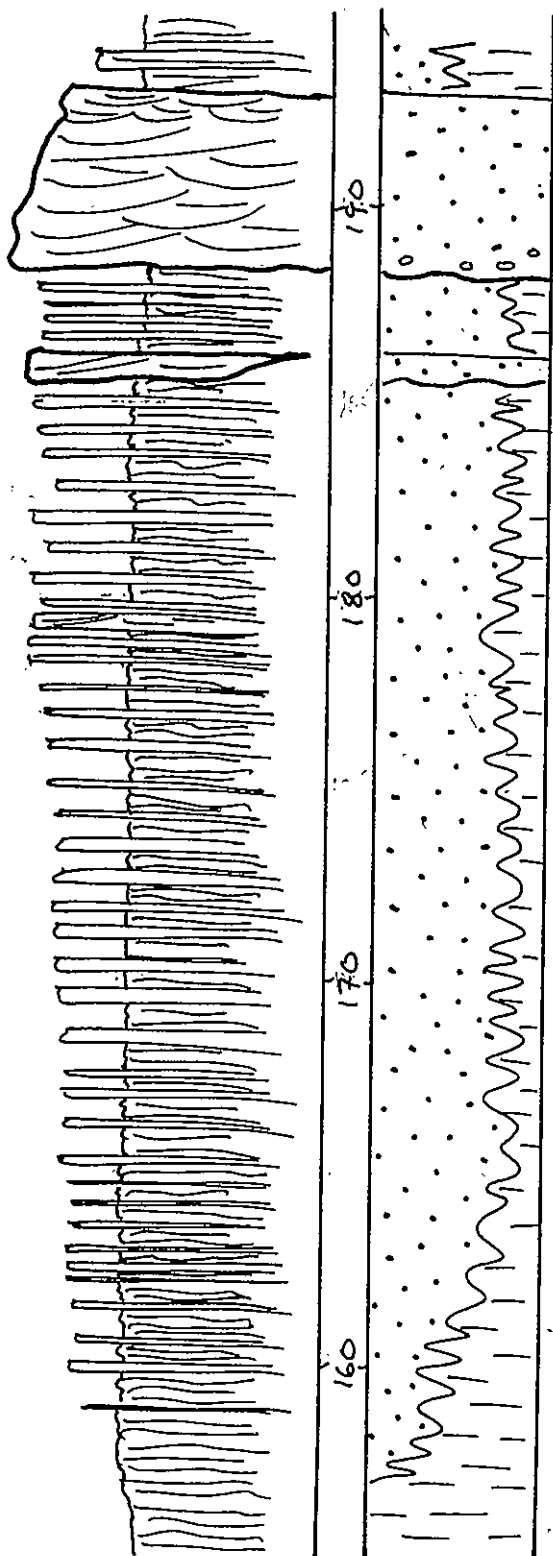
PARTLY
COVERED

Upper part of
covered

Lower part of
covered

M.S. No. 17

PAGE 5

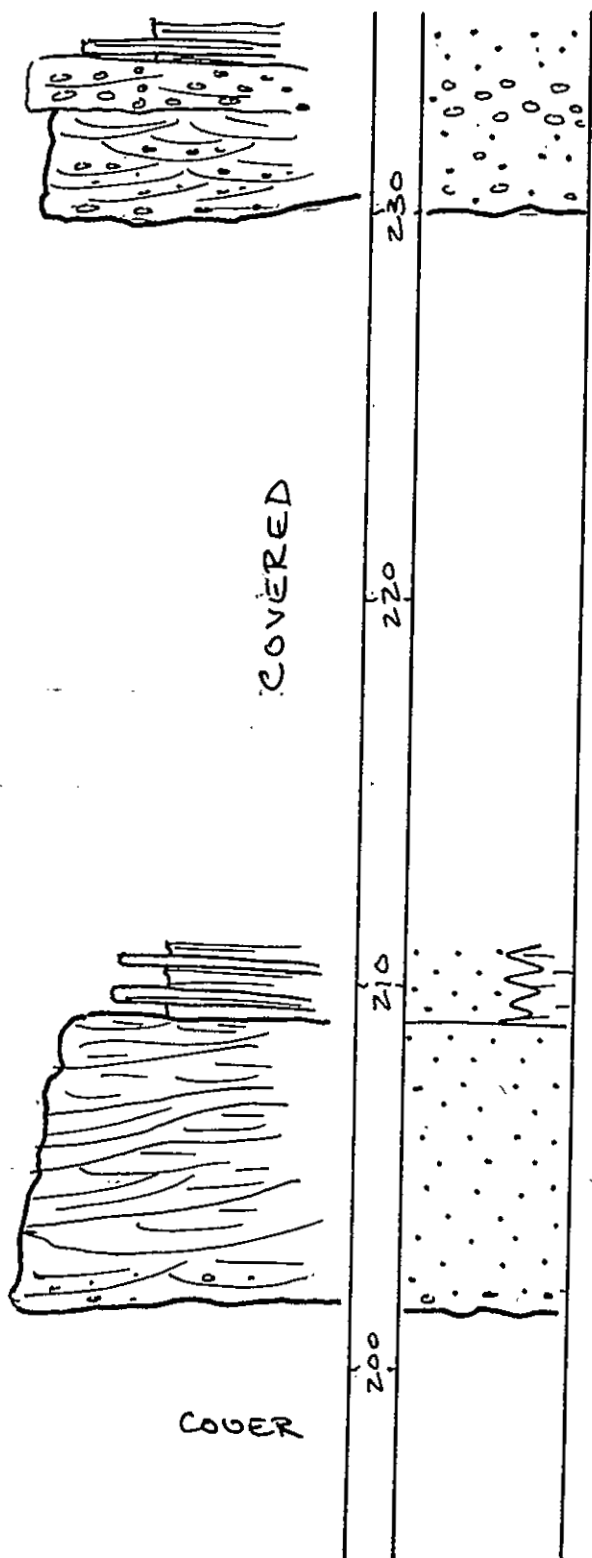


Handwritten notes in the right margin, including the word "Section" and some illegible text.

Handwritten notes at the bottom right, including the word "T." and some illegible text.

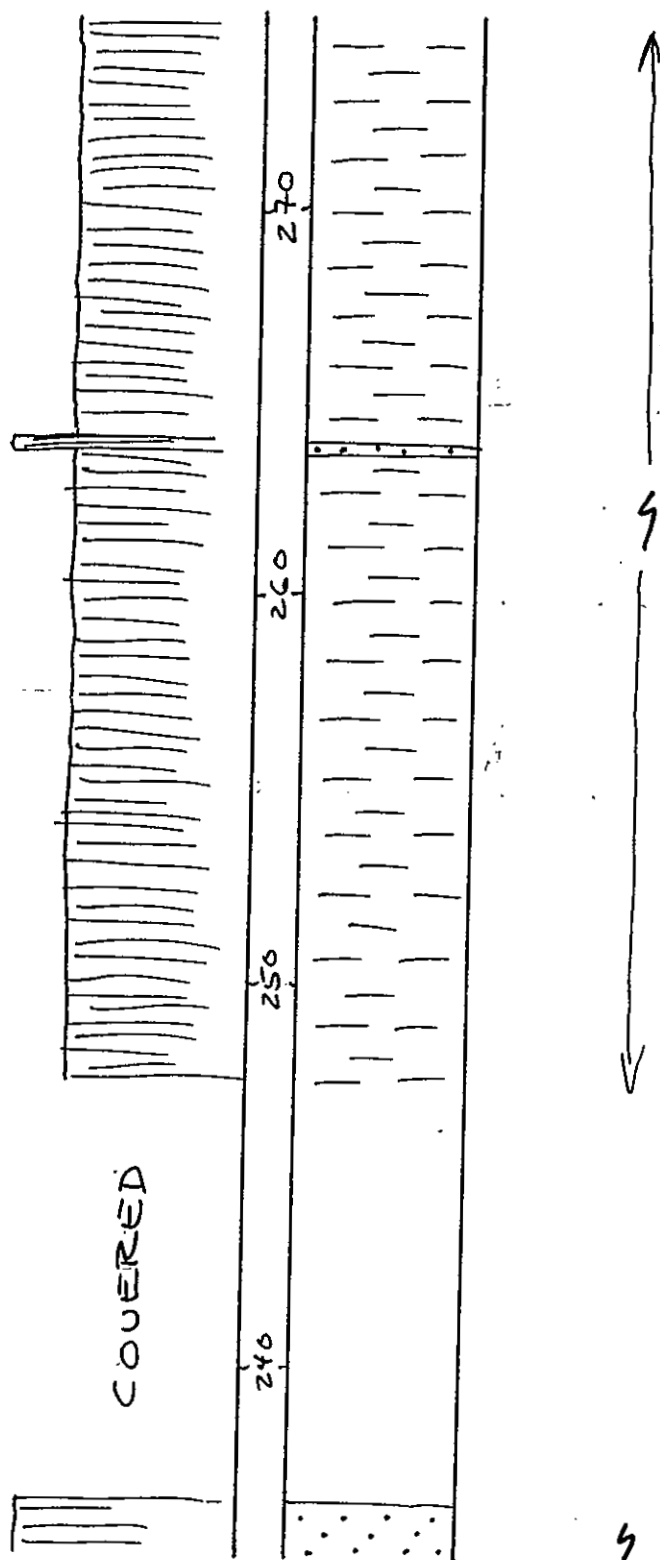
M.S. No. 17

PAGE 6



M.S. No. 17

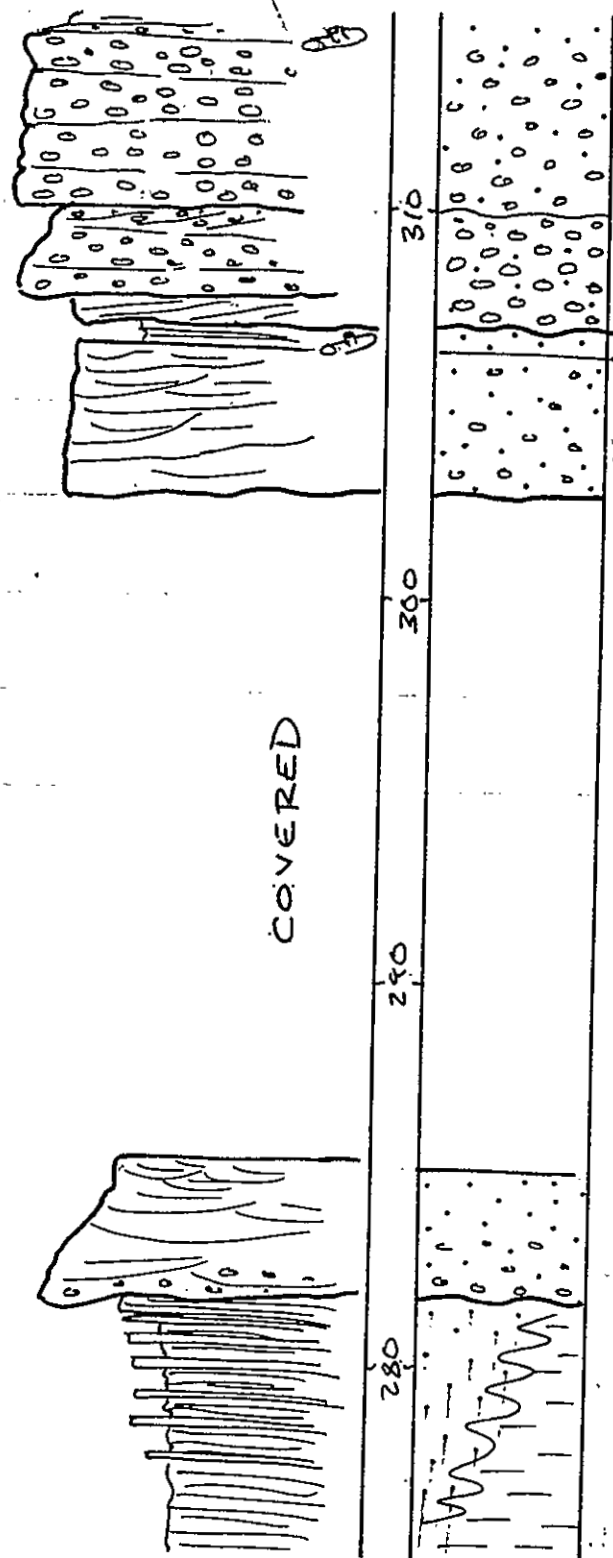
PAGE 7



CALC. &
MICACEOUS
horiz. feeding
trails

M.S. No. 17

PAGE 8



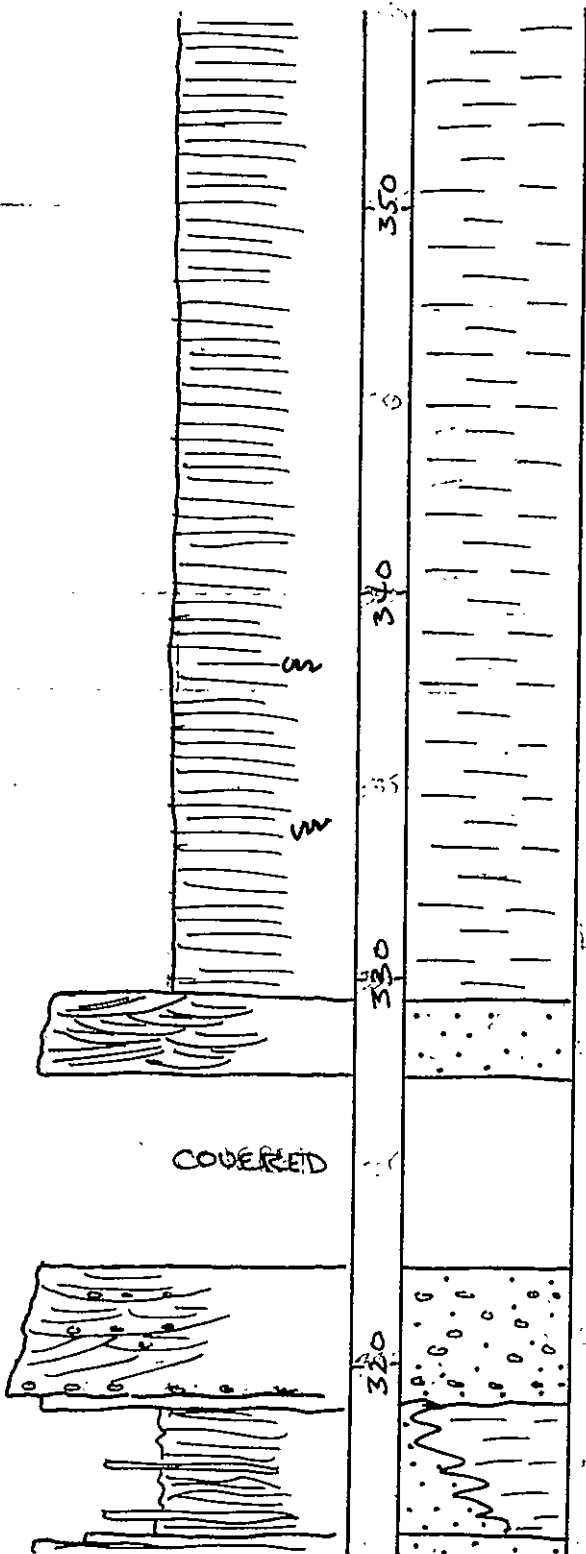
MAX. CLAST
= 18 cm

For ...
The ...
Matrix ...

For ...
Max ...
Matrix ...

M.S. No. 17

PAGE 9



MICACEOUS

CALC

Thin bedded
micaceous

Thin bedded
micaceous

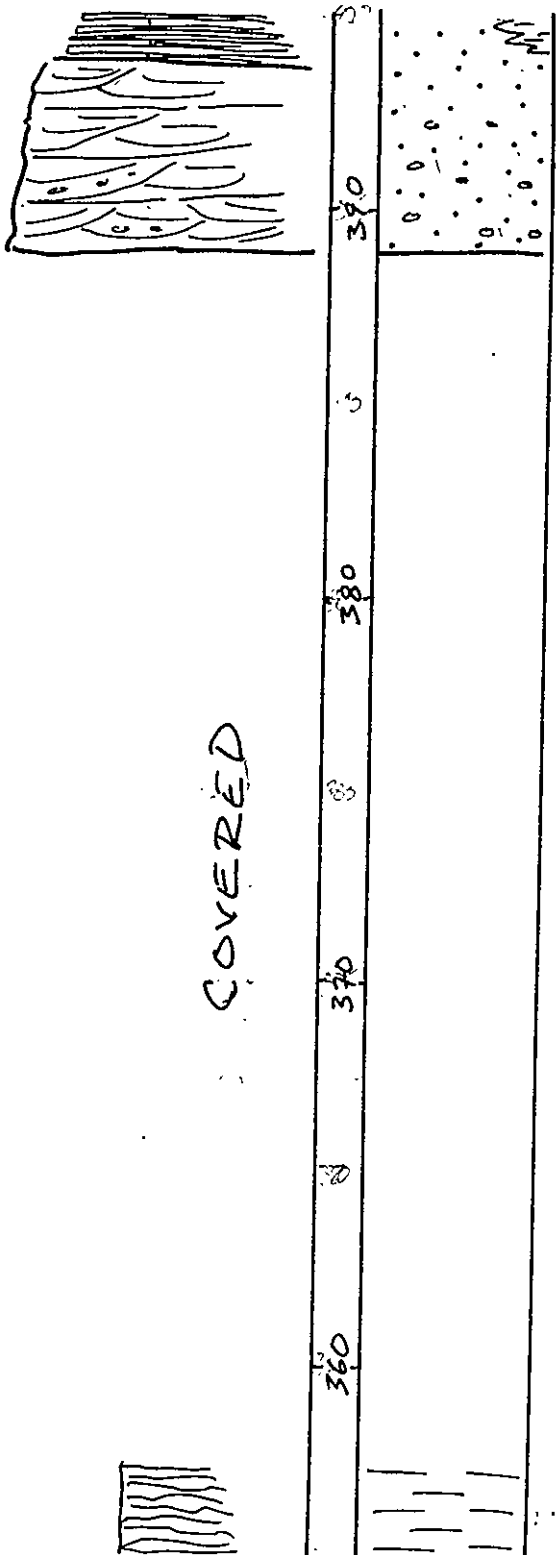
Thin bedded
micaceous

Thin bedded
micaceous

Thin bedded
micaceous

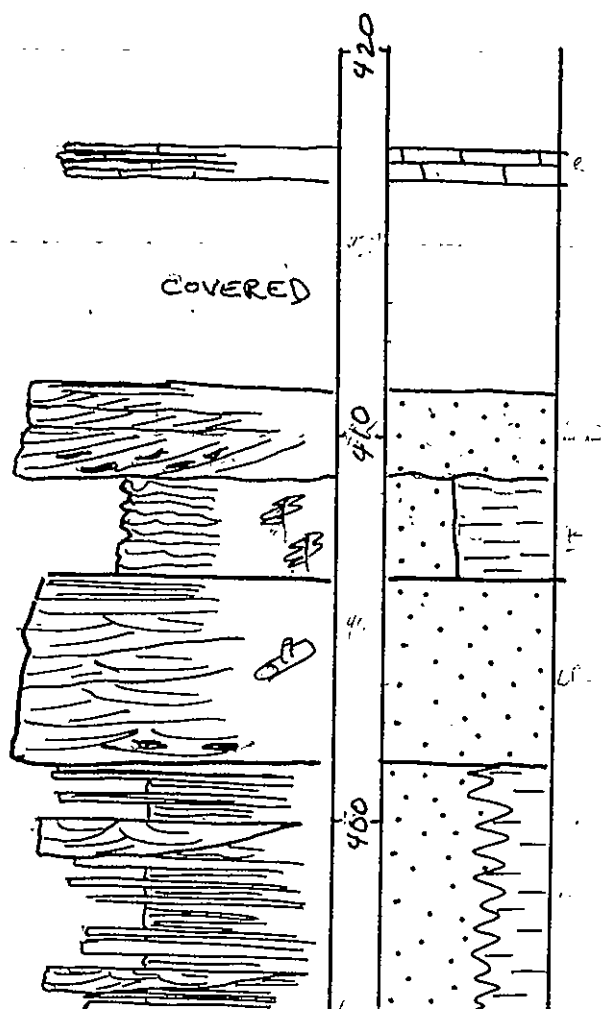
M.S. No. 17

PAGE 10



M.S. No. 17

PAGE 11



Brachs., Phyl. Algae, gast., Echin. PA. with
bryoz.

44

5' to 10' or more
Feibergian
pro -
no. 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

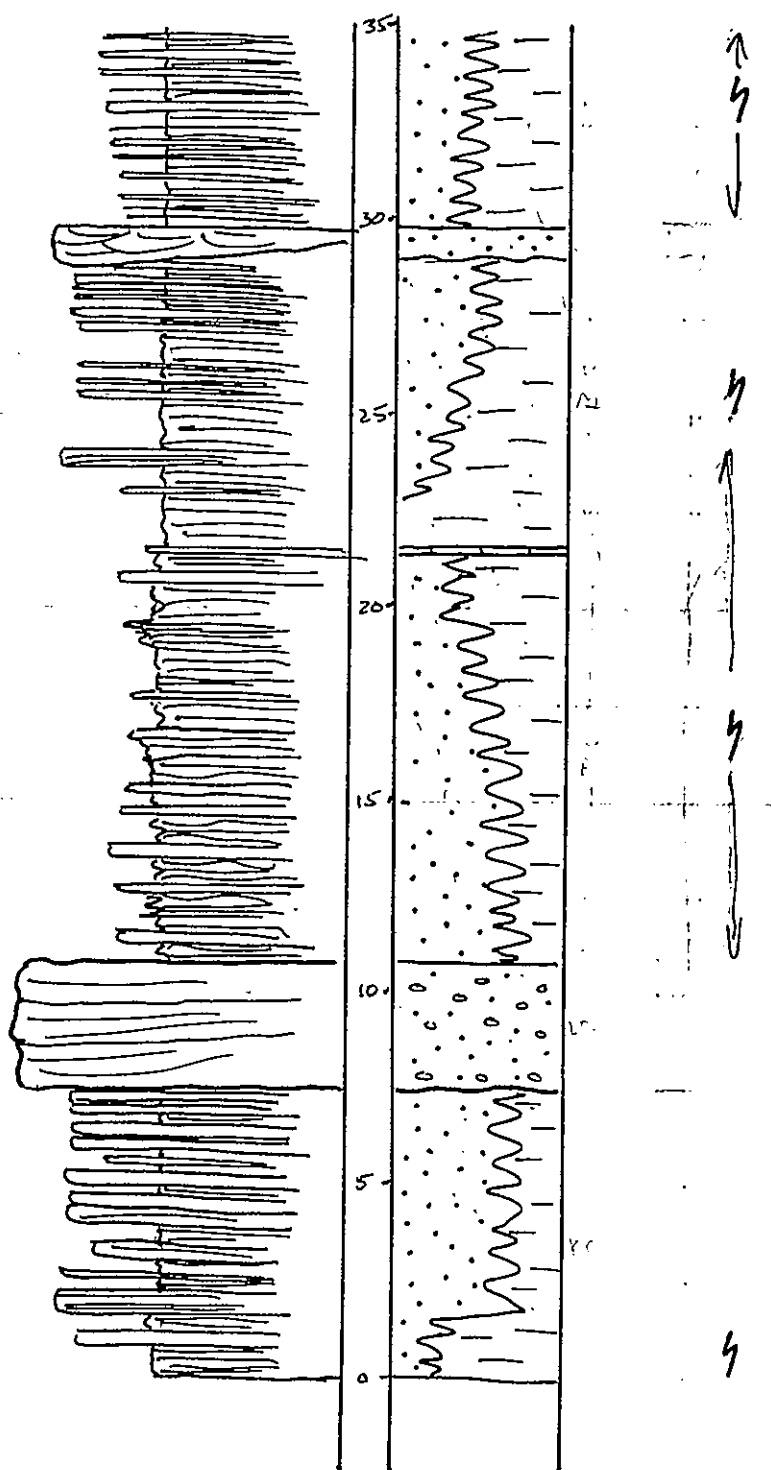
NTP
NW of Tetillas Peak, S of FR437
starts in gully & runs up hillside

June 16, 1978

JMC

M.S. No. 18

PAGE 1



M.S. No. 18

PAGE 2

COVERED

70

60

COVERED
COVERED

50

40

30

100 ft. of
100 ft. of
100 ft. of
100 ft. of

100 ft. of
100 ft. of
100 ft. of
100 ft. of
100 ft. of

100 ft. of

100 ft. of

100 ft. of

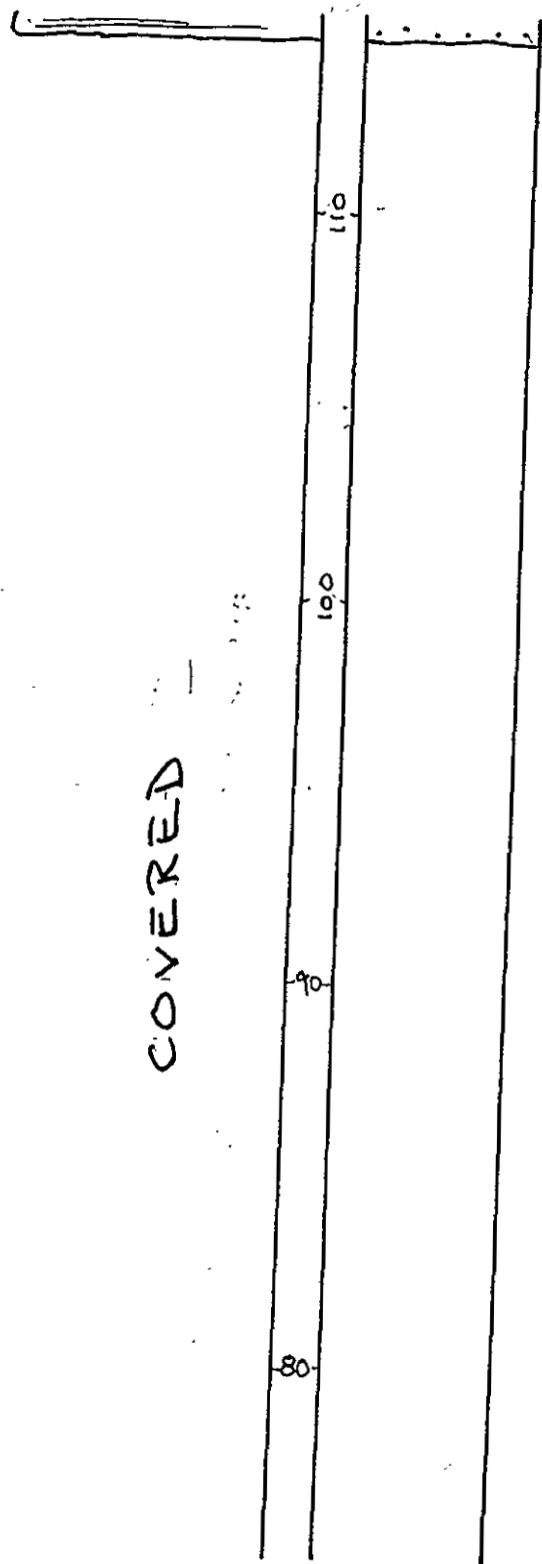
100 ft. of

100 ft. of
100 ft. of
100 ft. of
100 ft. of
100 ft. of

100 ft. of
100 ft. of
100 ft. of
100 ft. of
100 ft. of

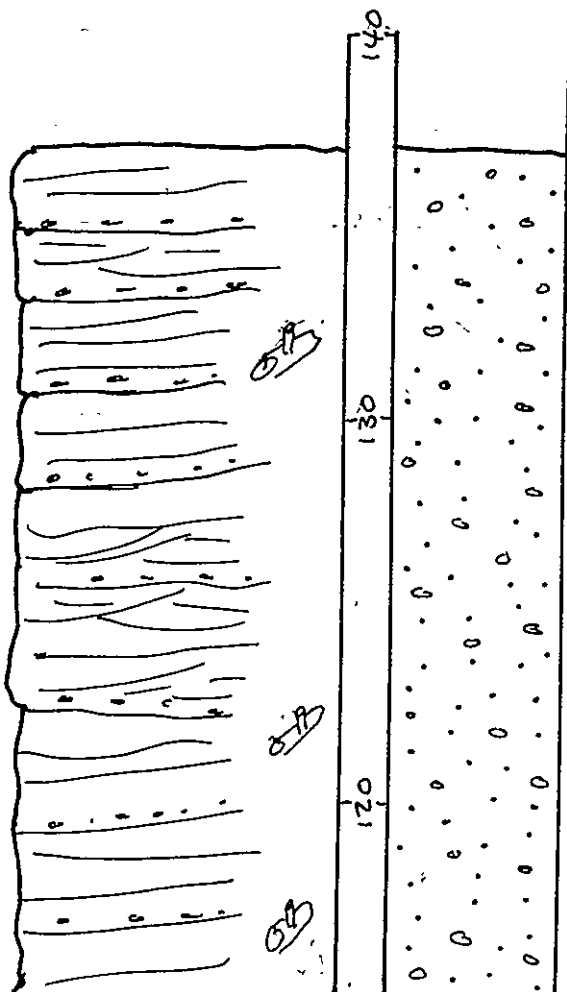
M.S. No. 18

PAGE 3



M.S. No. 18

PAGE 4



POORLY
EXPOSED

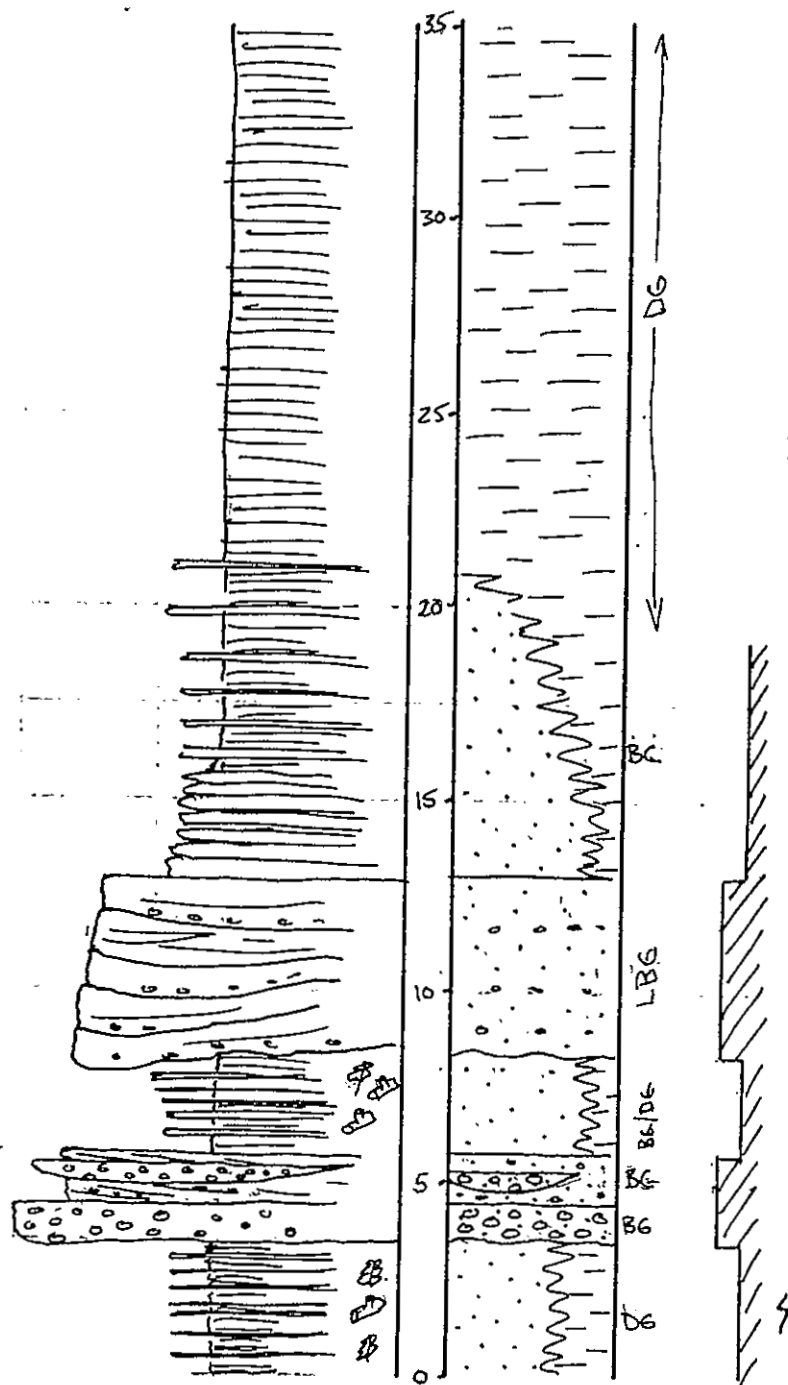
TSW
SW of Tomb off FR 437
Hillside

June 9, 1978
JMC
(started May 24)

M.S. No. 19

PAGE 1

BIVALVES
BRACHS



150°

MCF 1000

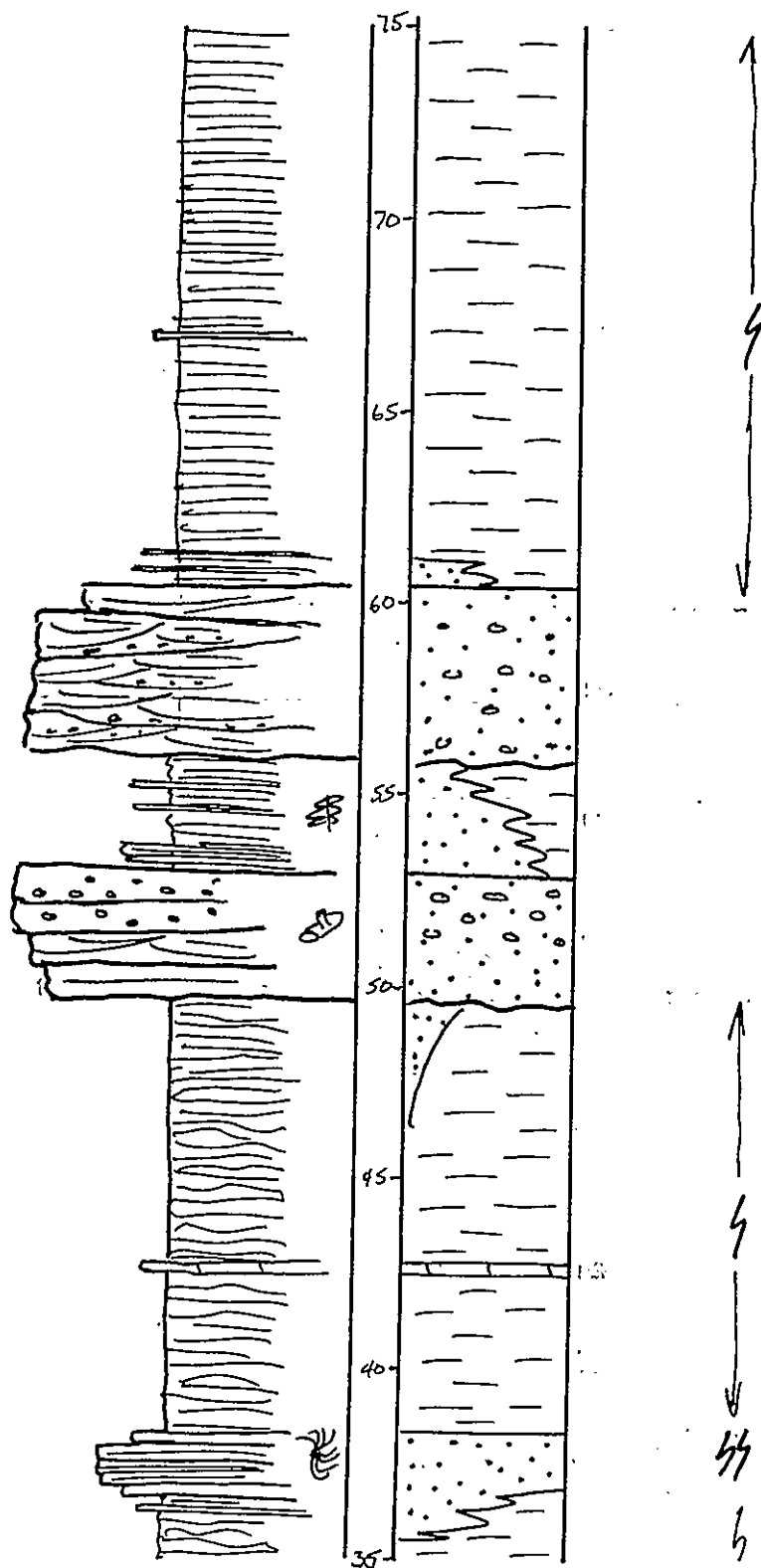
TSW

page

1 of 5 73

M.S. No. 19

PAGE 2

BIVALVES
BRACHS

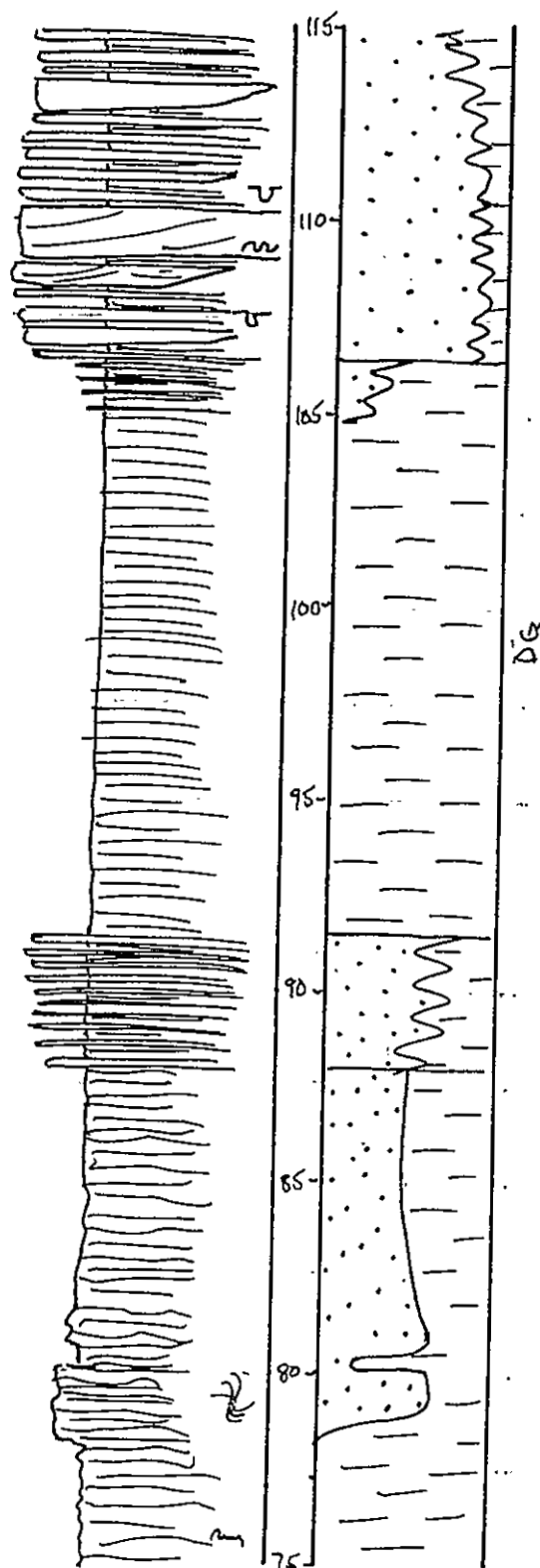
Zoophycus



M.S. No. 19

PAGE 3

BRACHS



lenses & thin
bed of micaceous
& calc ss

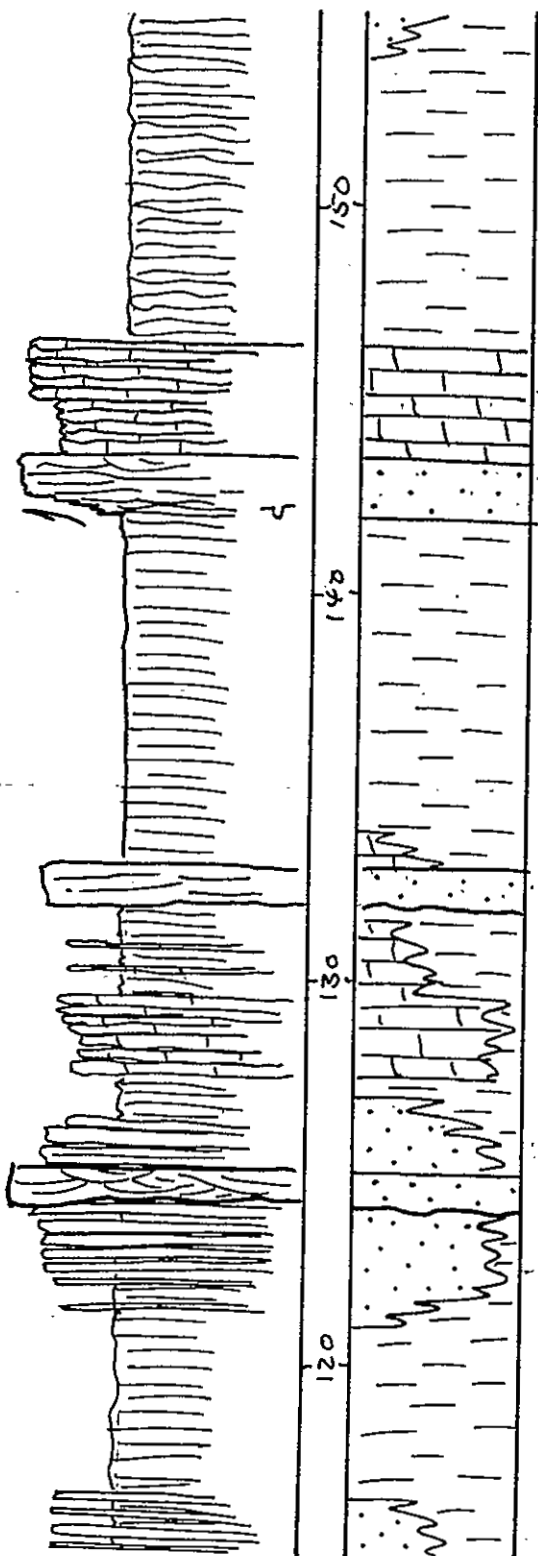
Micaceous

Zoophycus

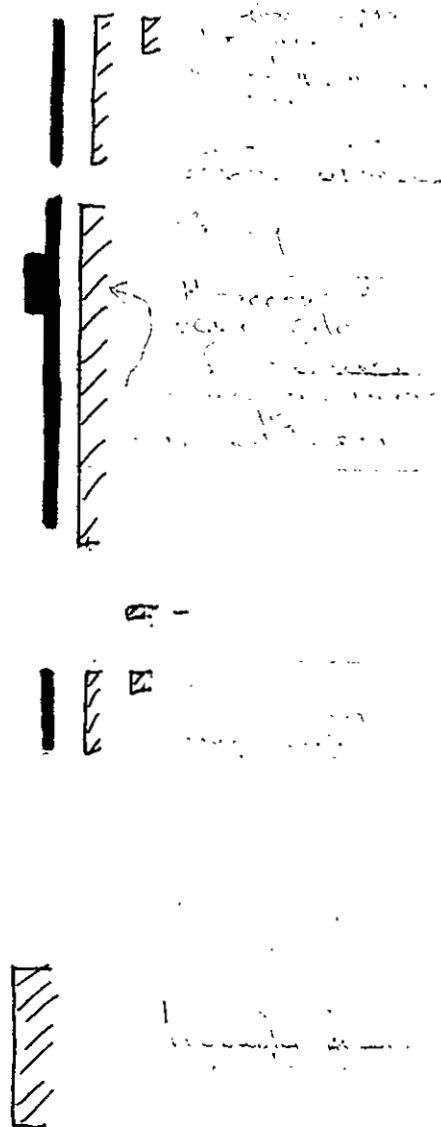
M.S. No. 19

PAGE 4

BRACHS
CRINOIDS
Pht. Algae



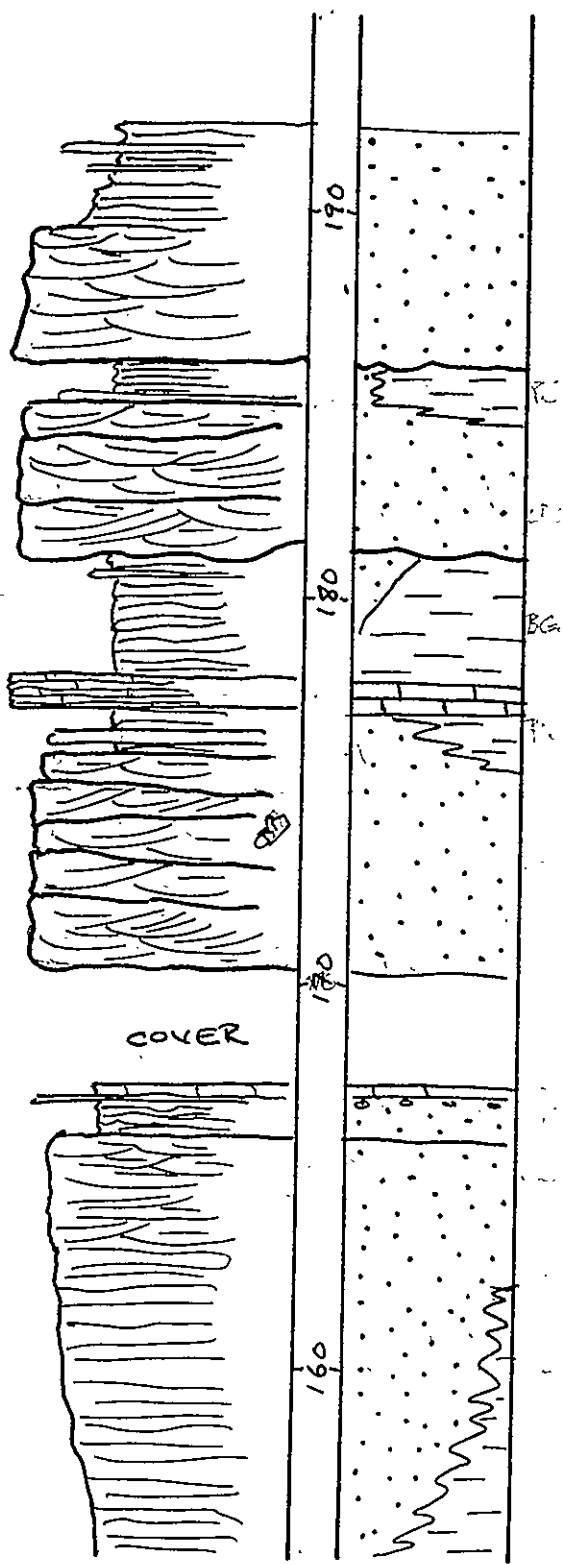
Gastropods



M.S. No. 19

PAGE 5

BRACHS
CRINOIDS



4

5

5
5

← TOM 34m
FUSULINIOS TSW-1



TSW-1

COVER

55

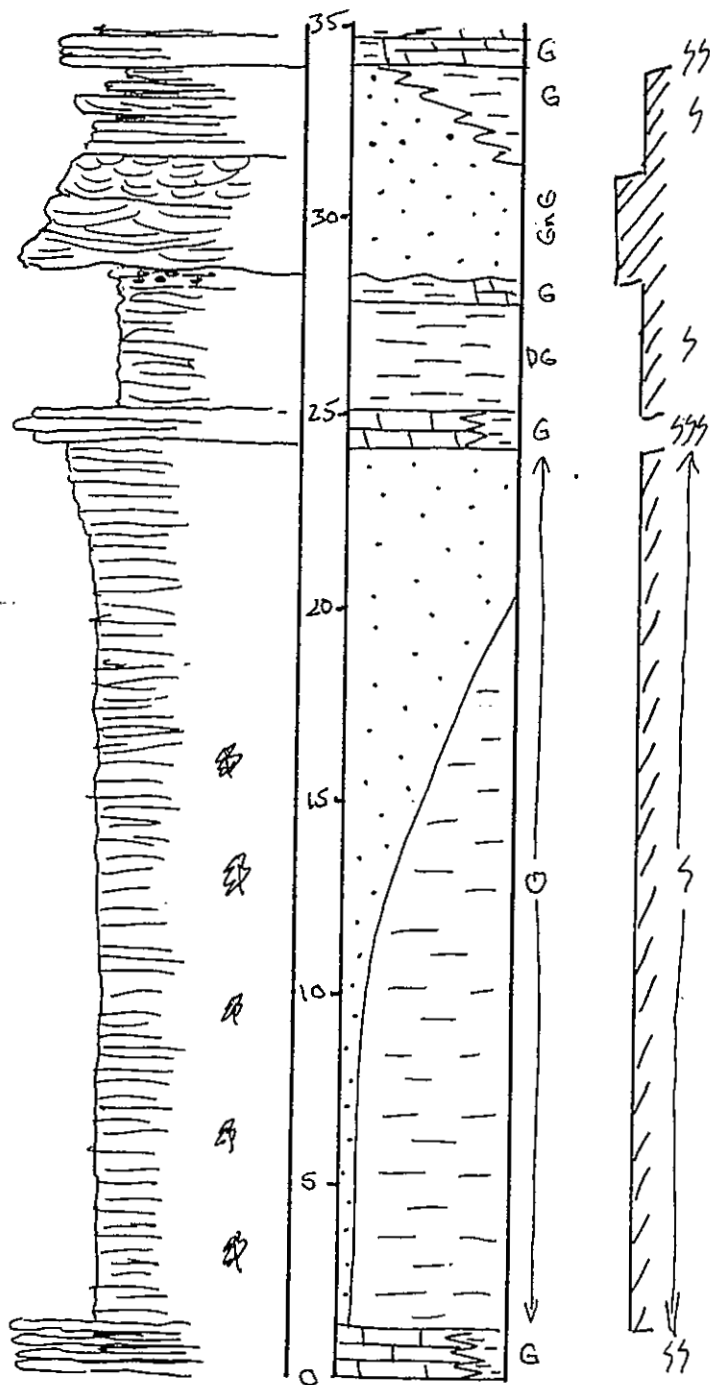
← Pebbles up to 2cm

CALC &
MICACEOUS

5

June 1, 1978
JMC

Phylloid Algae
Brachys
Fusulinids
Crinoids



-- TON 170m   60° 12 SE

TOM-2-Fas PK

Micaceous
Fossils Resist.
Cliff

30; 11'E

2 also a few coral
TOM-1

- Phylloid Algae
- Bracts
- Fus
- Cinnoids



TOM-4

$$H_2CO_3 + CaCO_3$$

Rep. of Dist.
1900

of layers placed on
by hand
Calc

Mr. [redacted]

15

Miscellaneous from
Huron Fault
section should
to next quarter
to E.

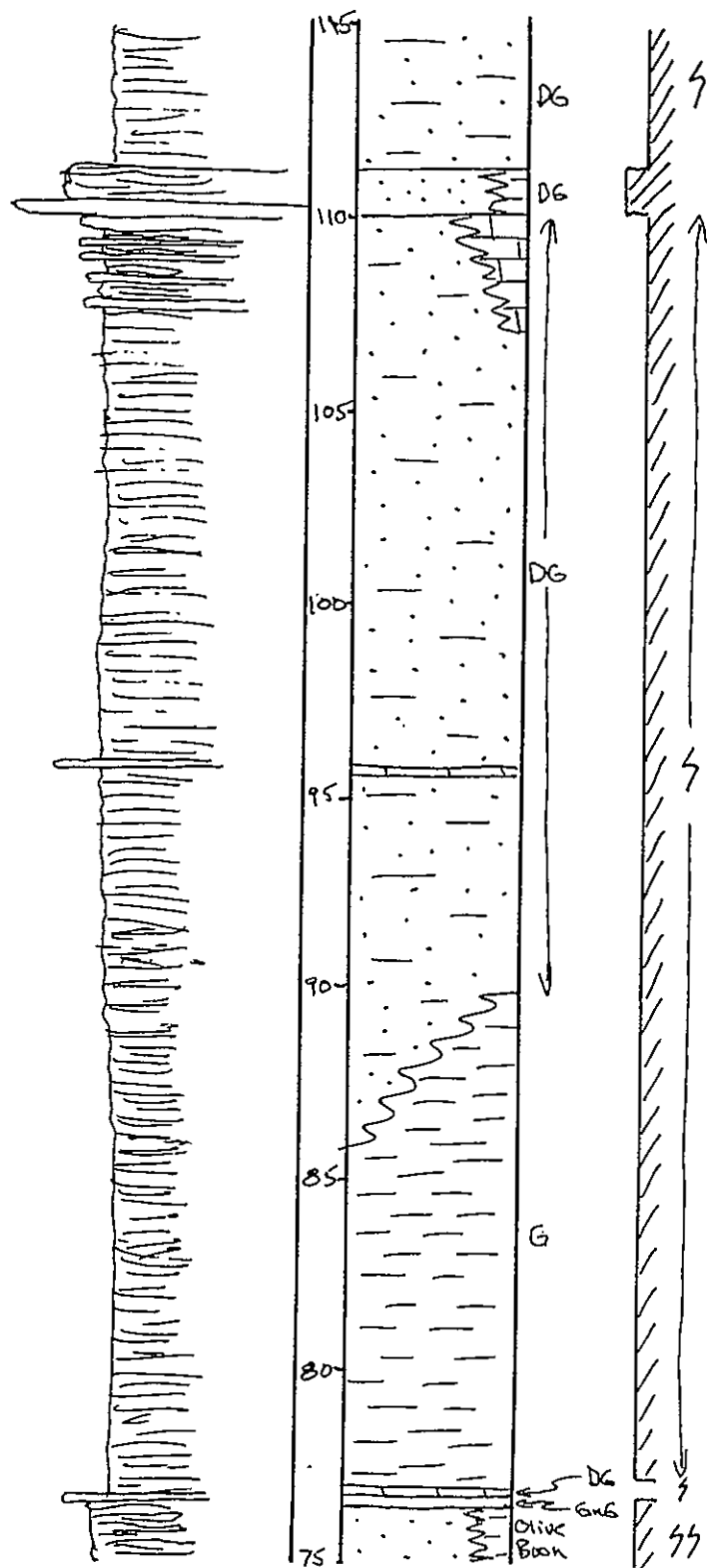
calc w/ p
up to 55
Hz, MRF, 5...

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

1. The first group of people who are not in the labor force are those who are not in the labor force because they are not in the labor force.

③ M.S. No. 20
PAGE 3

Phylloid Algae
Brachiopods
Foss.
Coronoids



1

DG vs. Fossiliferous
normal and
is...
k...S

MINOR FAULTING
... on ...
may be ...
(up to 6 m.)
M...

...
'Sealing' ...

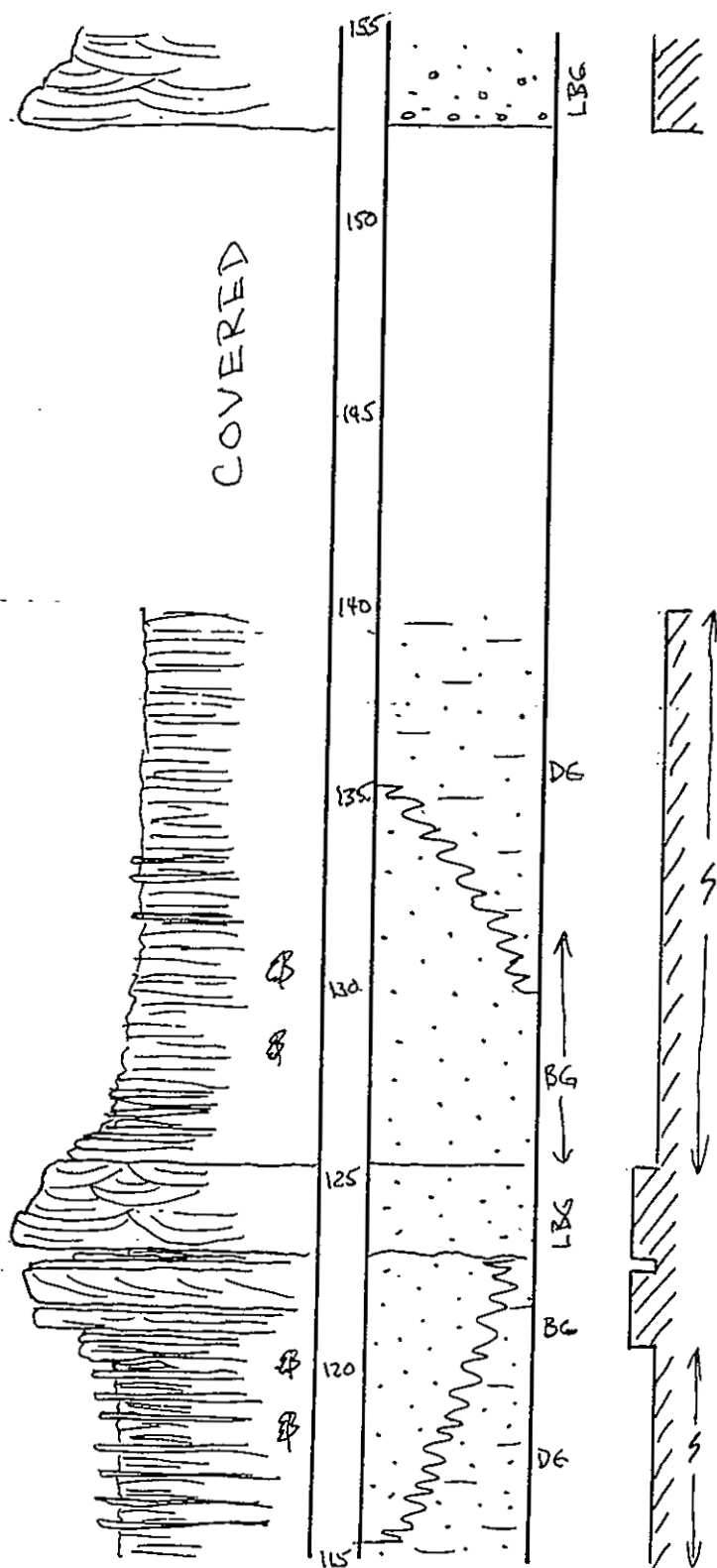
1

2

Microscopic
Calc. ...
w/ ...
LS

...
F.C.A.

③ M.S. No. 20
PAGE 4



Green MRF's
Faintly, calc
MCS = 18 mm

T.G. Micaceous
Calc - 114 ft 4 in
v.f. 2 in

Micaceous

Calcareous

Micaceous
&
Calcareous

(2)

M.S. No. 20

PAGE 5

Phylloid Algae
Branches
Fus
Crinoid

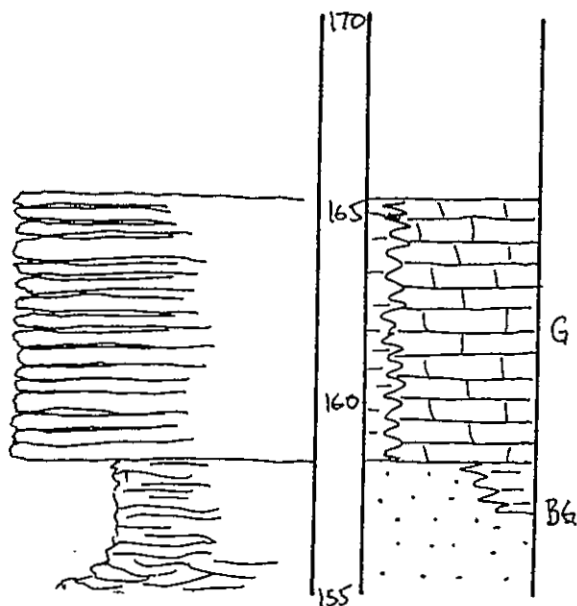
137

138

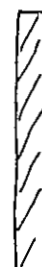
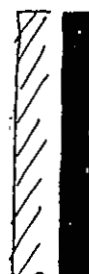
139

140

141



POORLY EXPOSED
TO TOP OF
HILL



Highly
exposed
to
top of
hill

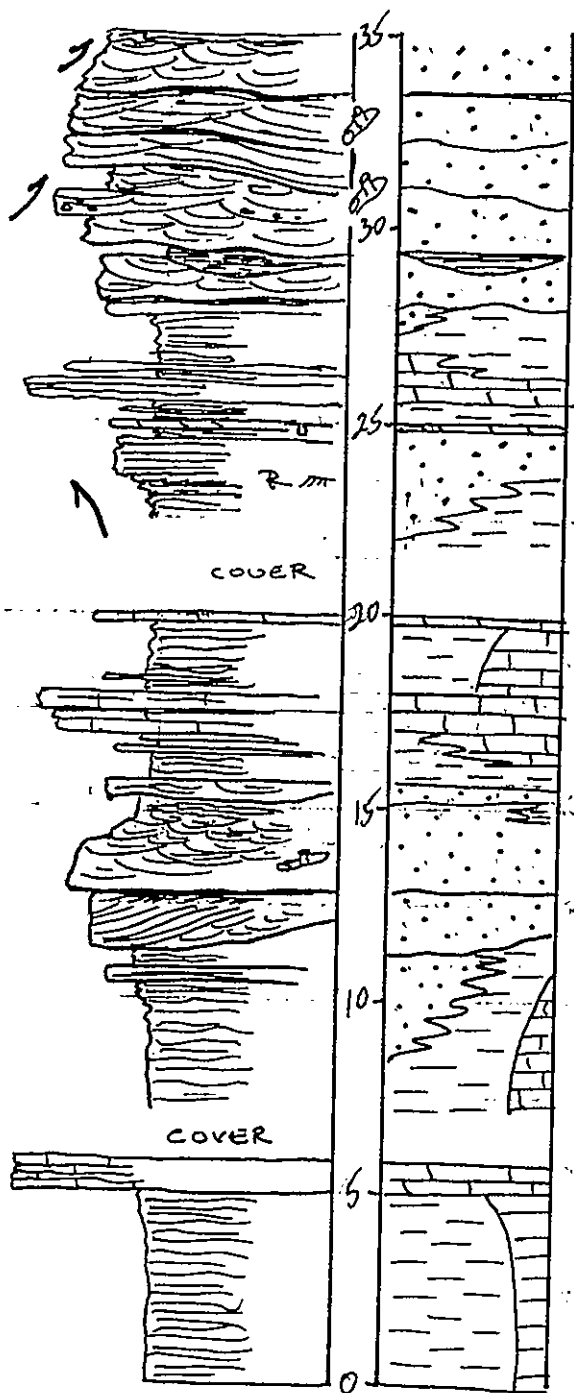
Highly
exposed

TOM II
Gully: E of TOM

M.S. No. 21

PAGE 1

BRACHS
CRINOIDS
FUS
GAST



⚡
⚡
⚡

⚡
⚡

⚡

⚡

⚡

2. $\left\{ \begin{array}{l} 100 \text{ f } 26 \\ 100 \text{ f } 26 \\ 100 \text{ f } 26 \end{array} \right.$

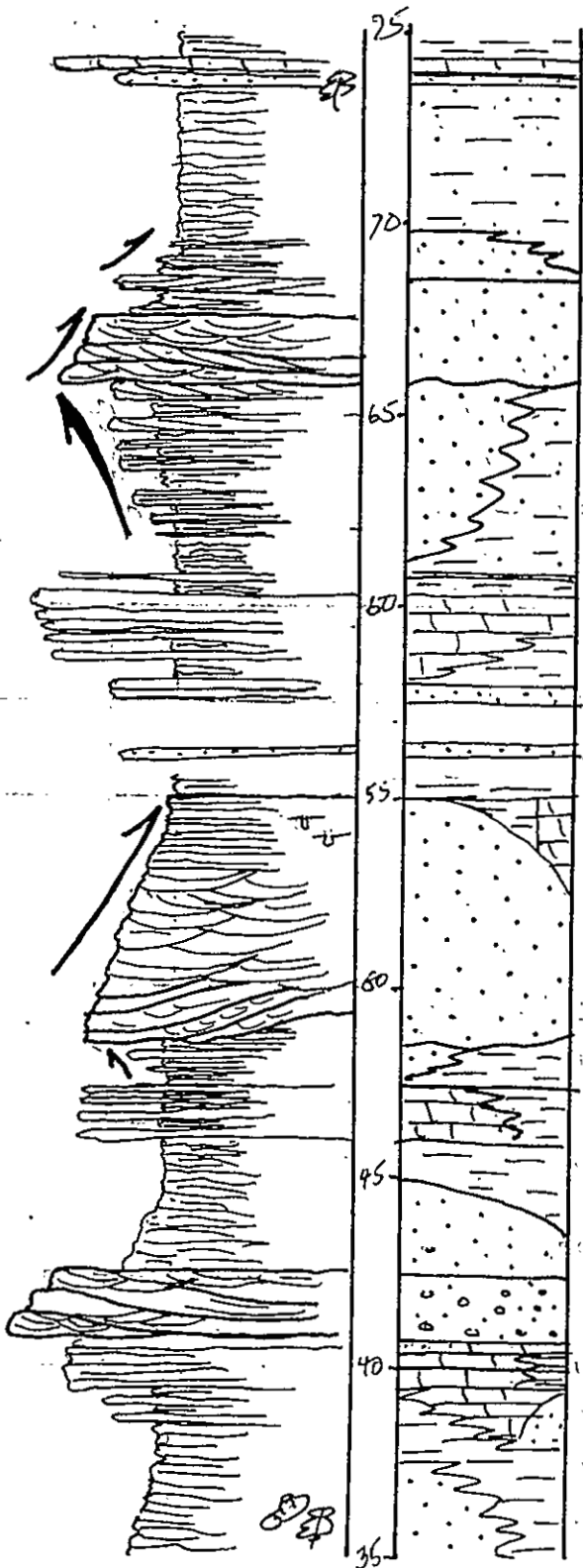


M.S. No. 21

PAGE 2

BRACHS

GAST



SS

BRACHS

SS

BRACHS

SS

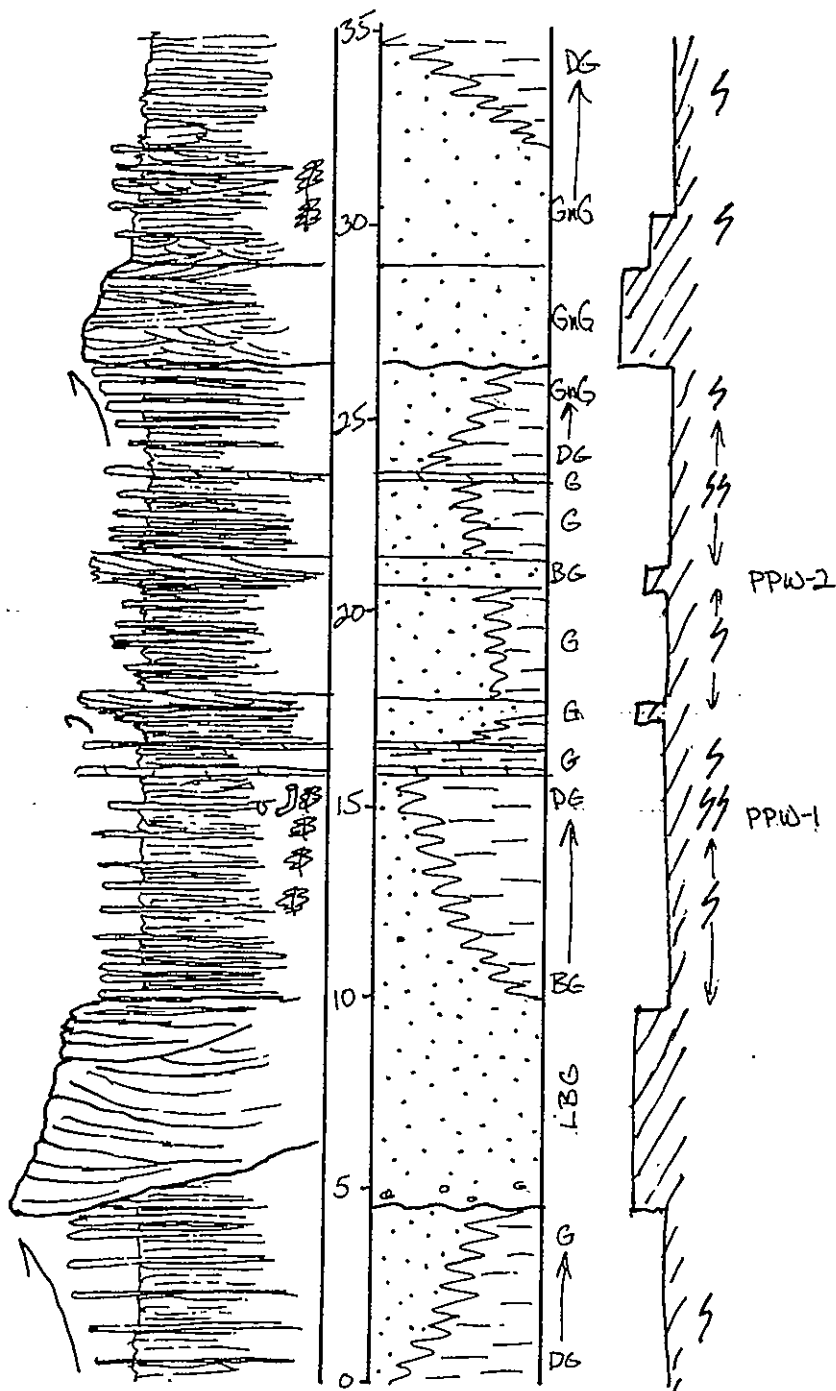
SS

SS

SS

M.S. No. 22
PAGE 1

BRACHS
CRINOIDS
GASTS.



Ripples

dark & silty sand

rock & bone

brachio. from 100'

SEE NOTEBOOK

38; 6°E
Plane to low 4 tabs

thin bedded
micaceous
to dark grey
to black

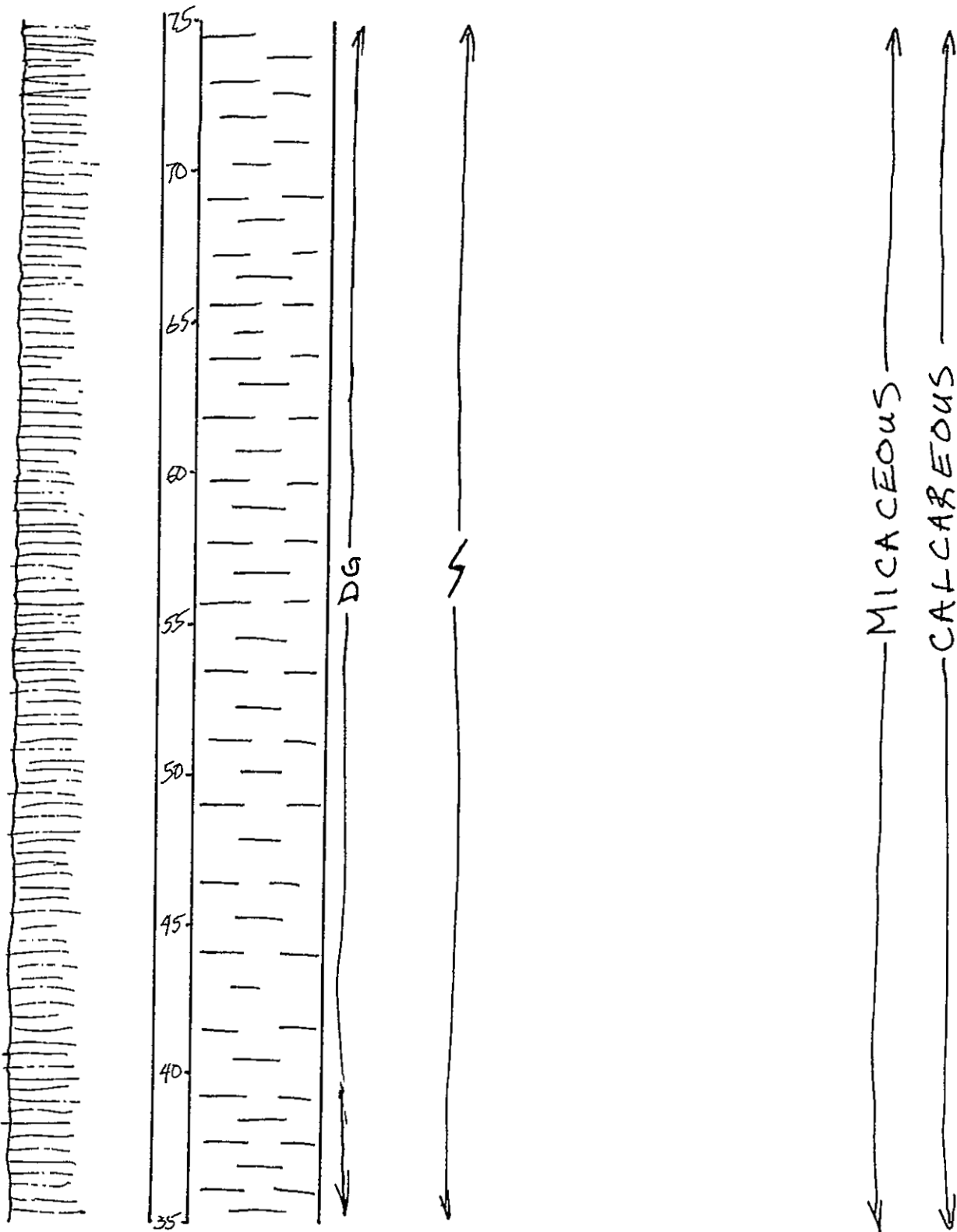
Micaceous

Calc. & Mica.

Micaceous

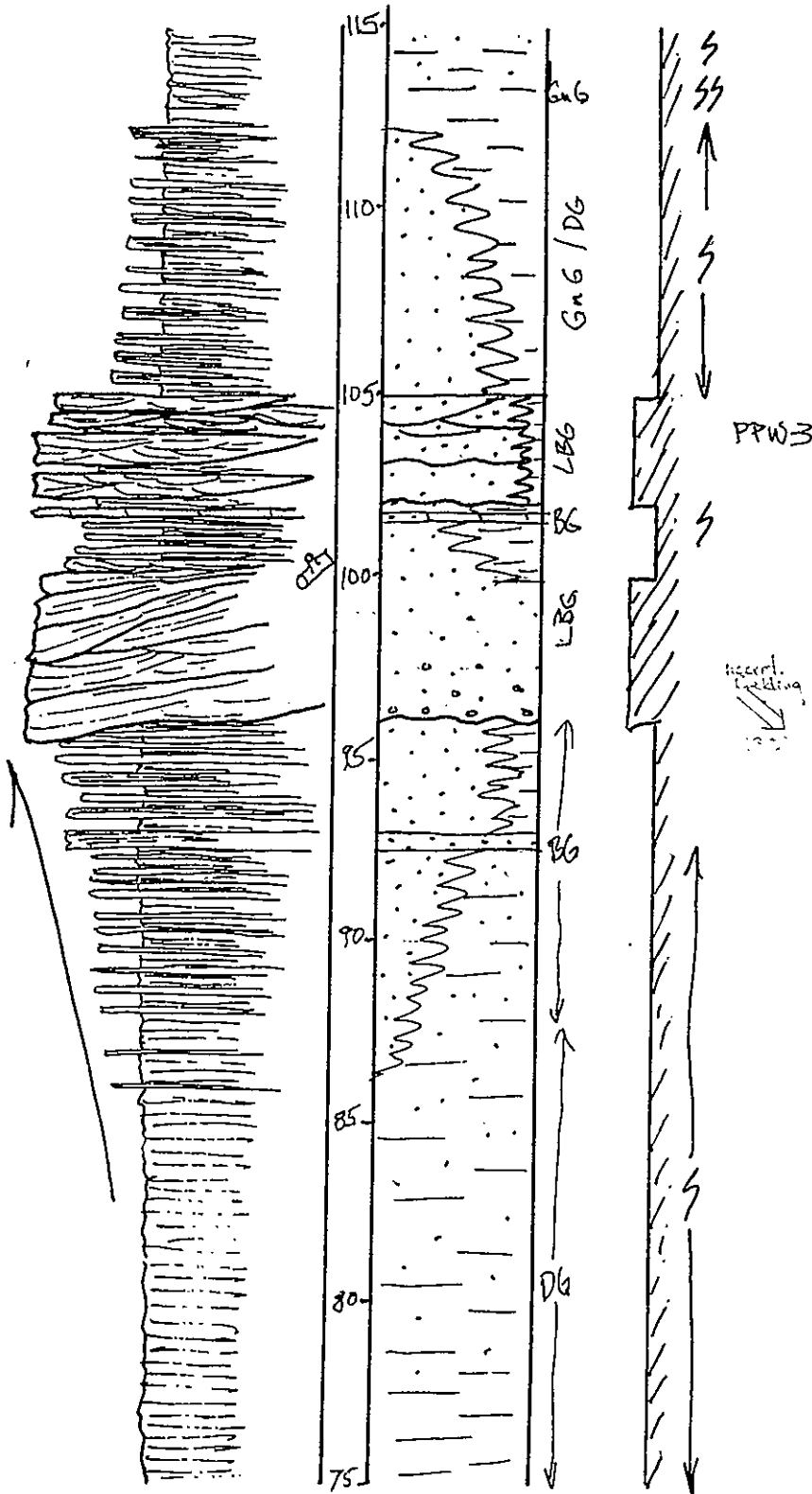
② M.S. No. 22

PAGE 2



(M) M.S. No. 22
PAGE 3

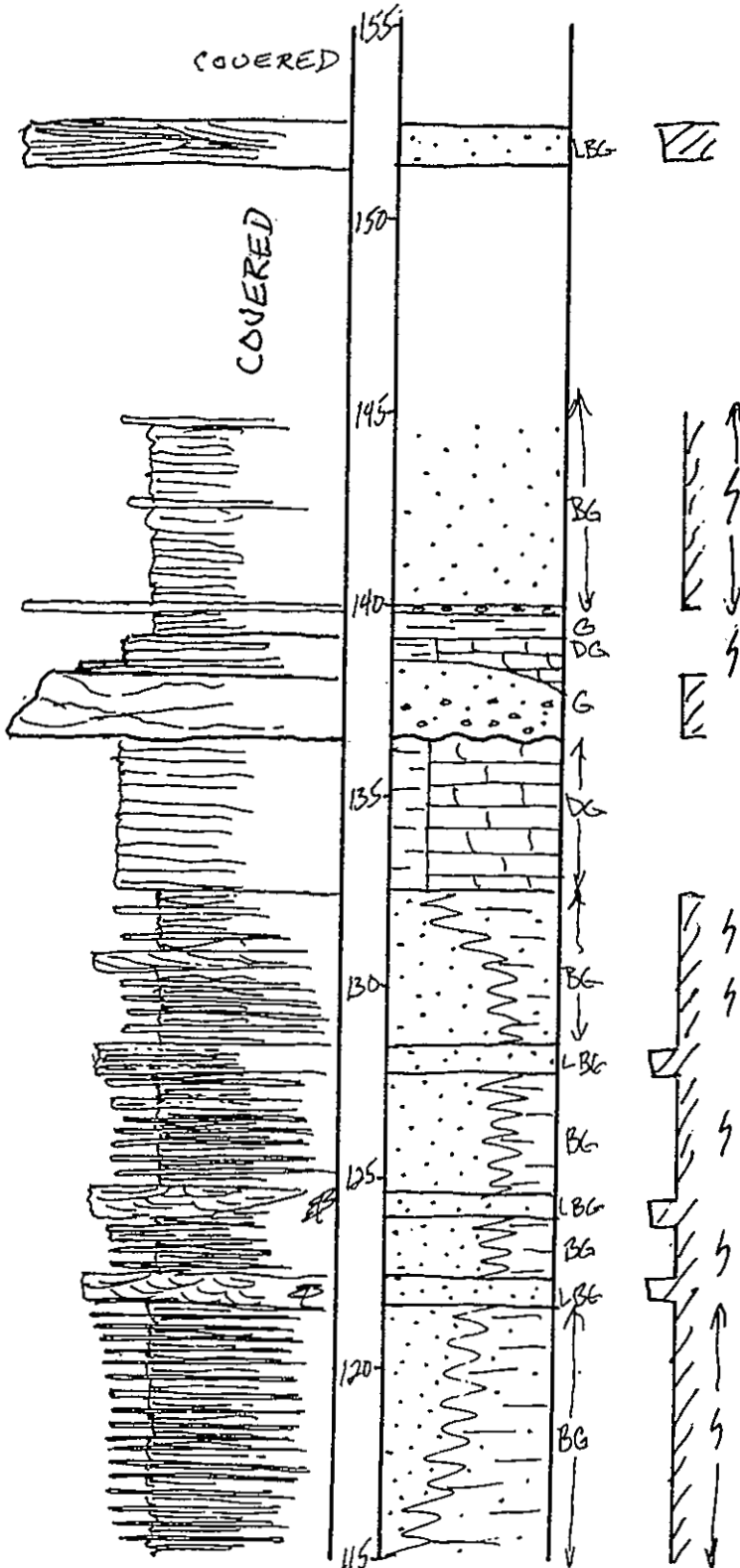
Phylloid Algae



M.S. No. 22

PAGE 4

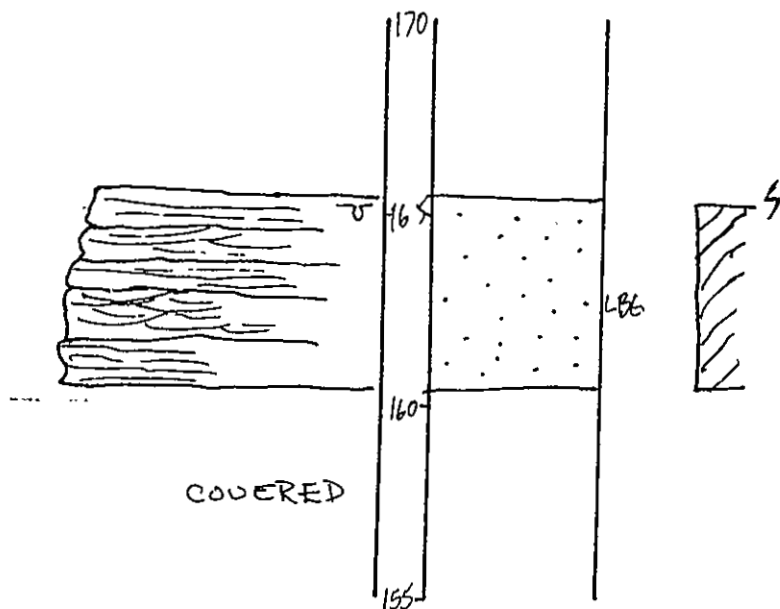
Crinoids



Low & Tabs

PPW-4

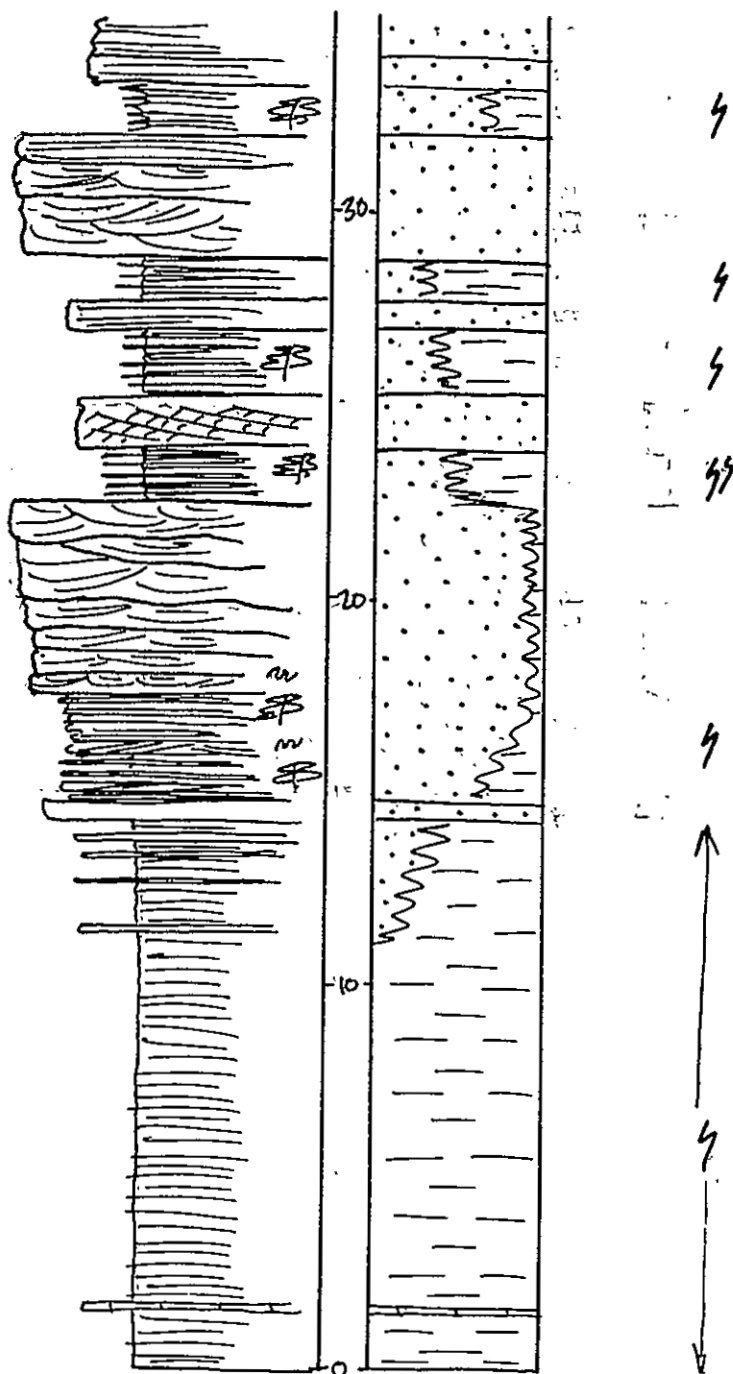
(u) M.S. No. 22
PAGE 5



Calcareous

M.S. No. 23

PAGE 1

Phyll. Algae
crinoids

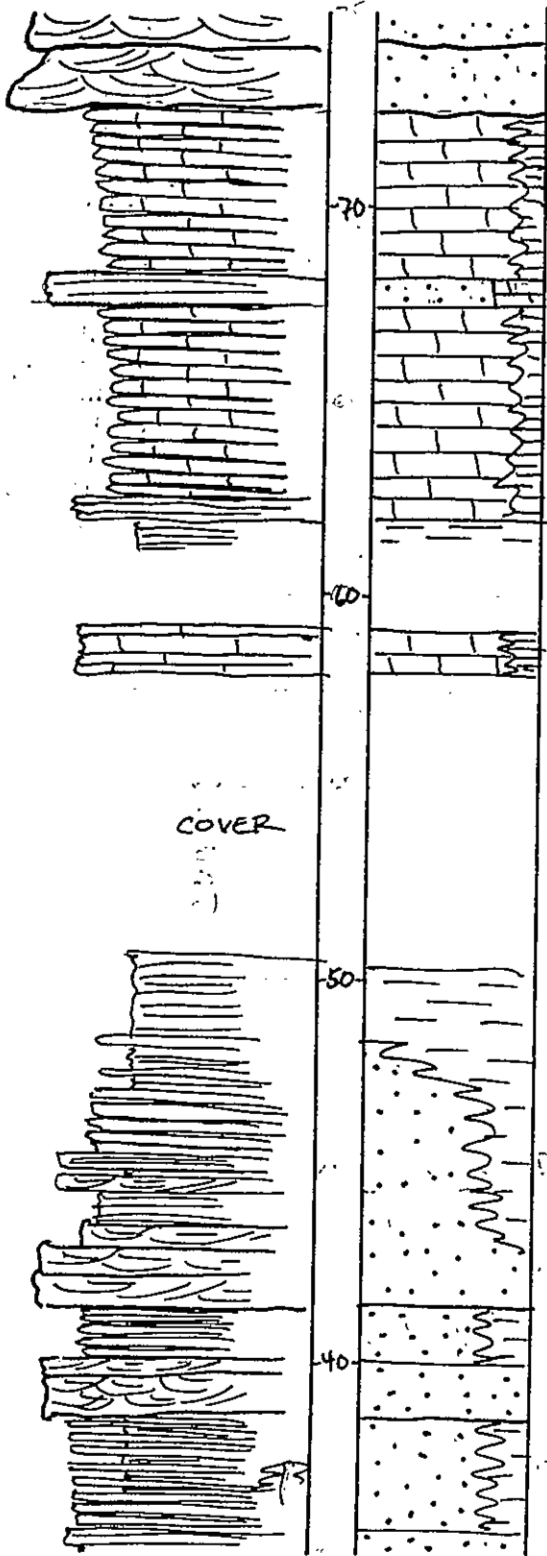
1111 1111 11

1111 1111
1111 1111 11111111 1111
1111 1111 11111111 1111
1111 1111 1111Very thin
at 1111 1111
1111 1111 1111
1111 1111 11111111 1111
1111 1111 1111

M.S. No. 23

PAGE 2

Phyll. Algae



very Good fossil

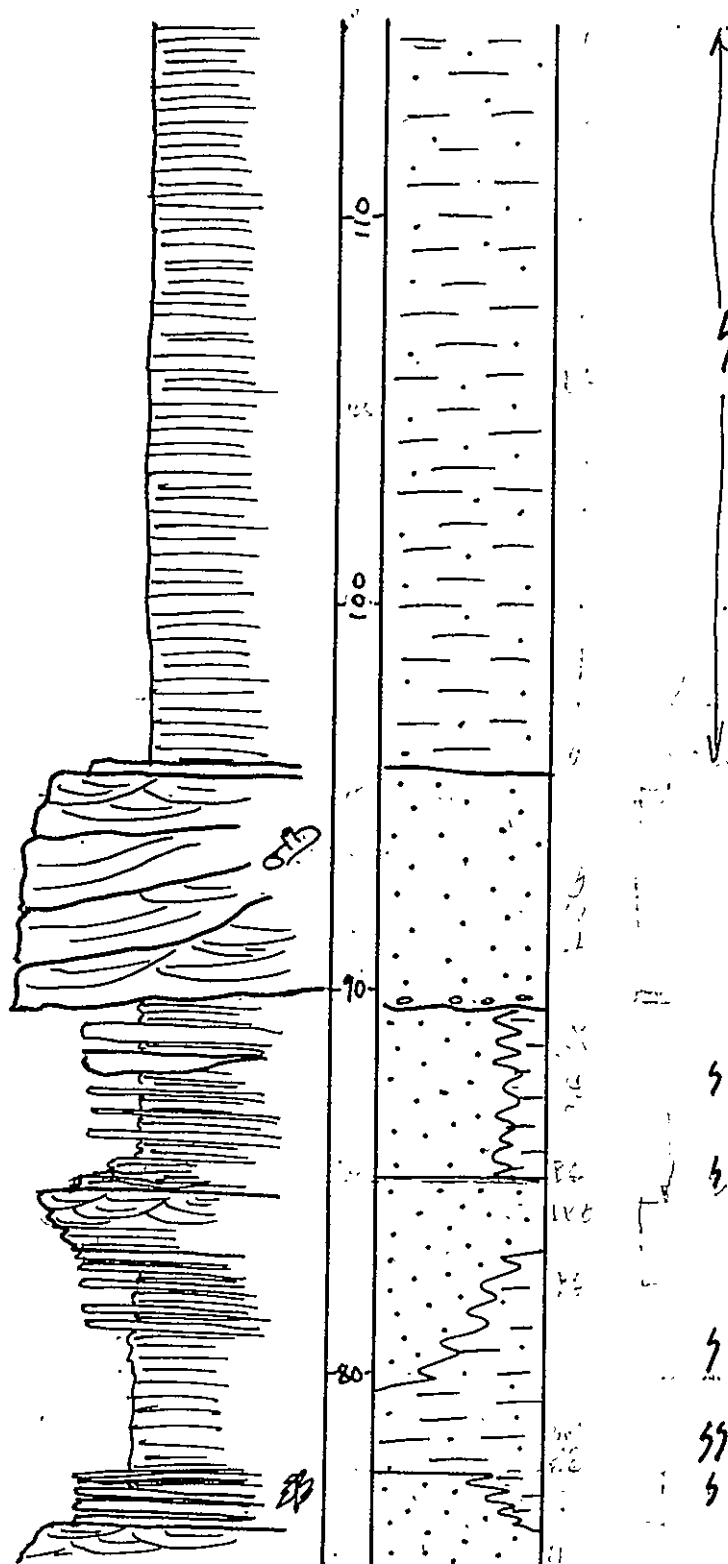
... S
...
...



M.S. No. 23

PAGE 3

BIVALES
GASTS.



POORLY
EXPOSED
POSSIBLY
FAULTED

MICACEOUS
CALC. SDY.
SILTST.

Thinly bedded
micaceous
siltstone.

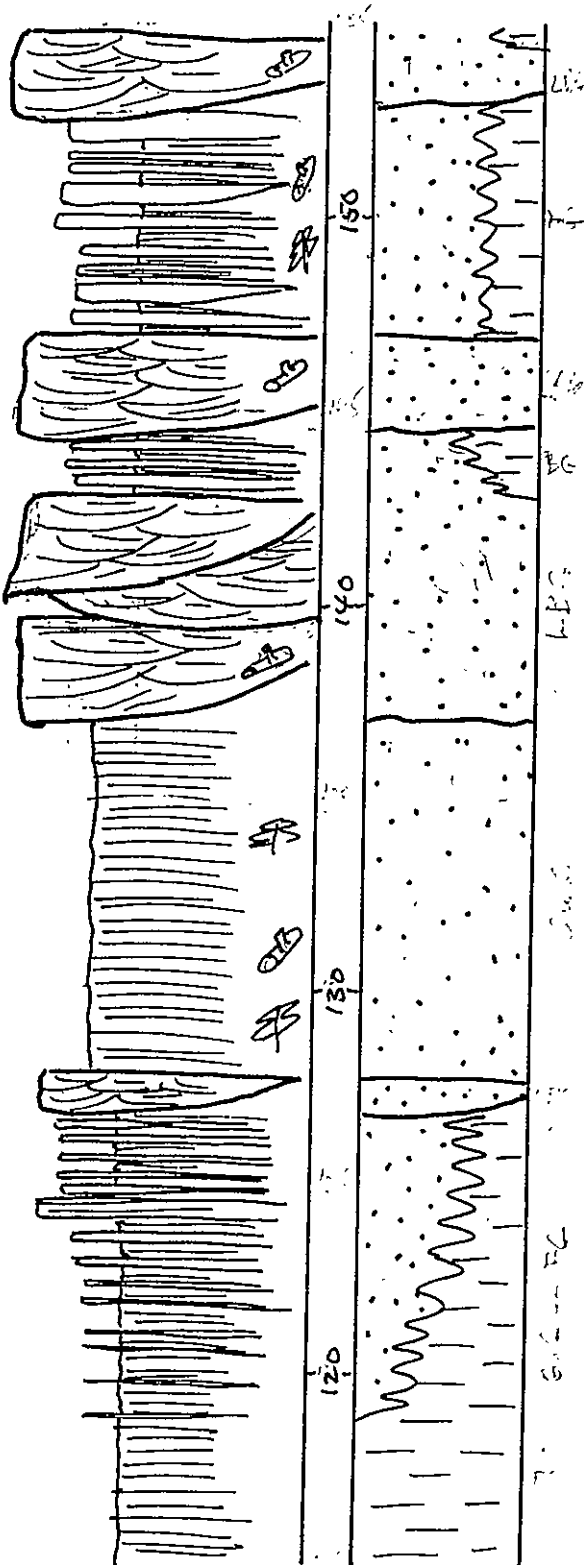
Micaceous
calc. siltst.
and sh.

Thinly bedded
micaceous

micaceous
siltstone
and shale
micaceous
siltstone
and shale

M.S. No. 23

PAGE 4



Micaceous

Large clastic
sym. ss lenses

VERY
MICACEOUS
&
CARBONACEOUS

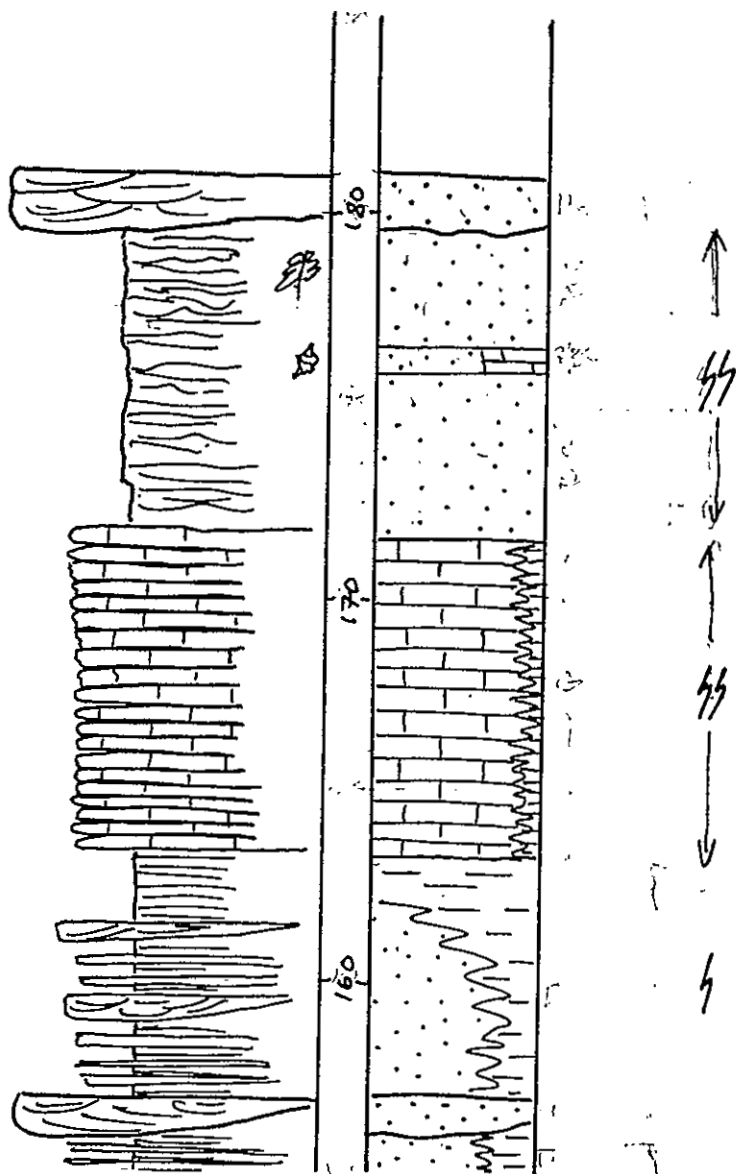
PSW-3
fine micaceous
& Carbonaceous

11-60

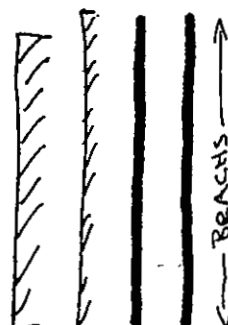
M.S. No. 23

PAGE 5

Pyl Algae
 Crinoids
 Brachiopods
 Gastros.



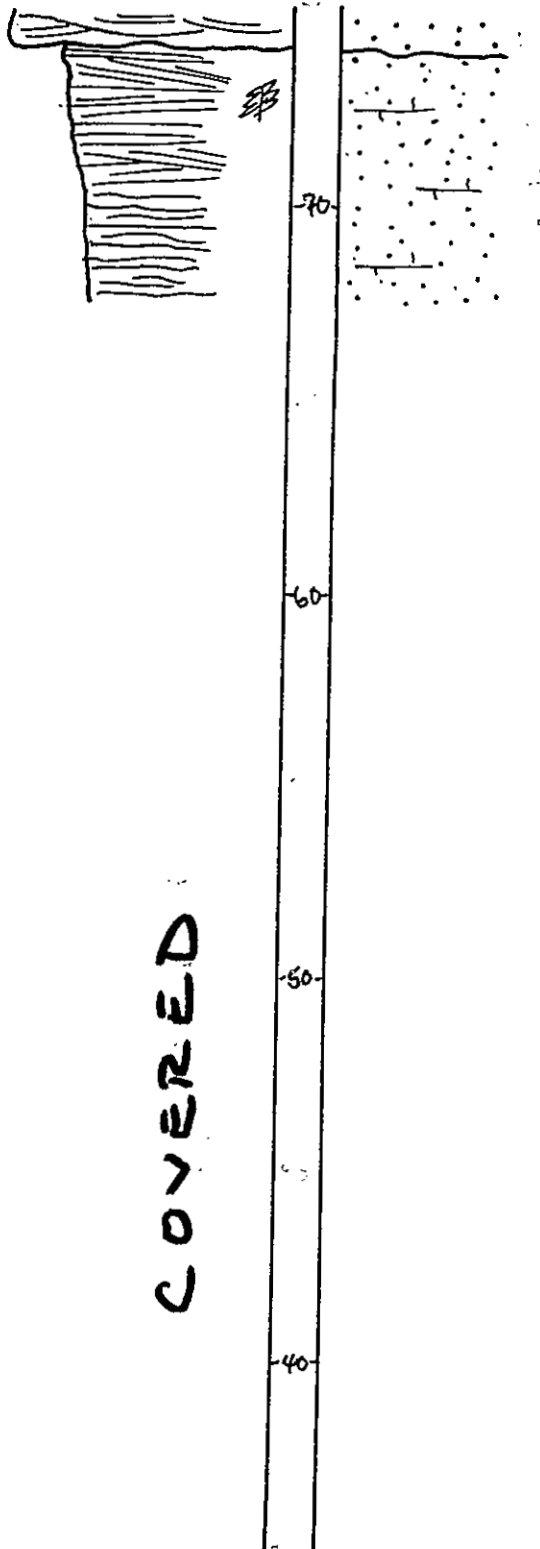
Impure
 Nodular
 Limest.



SILTY
 M. L. L. L.
 BRACHIOPODS
 P. G.
 F. L. L. L.
 P. G. L. L. L.

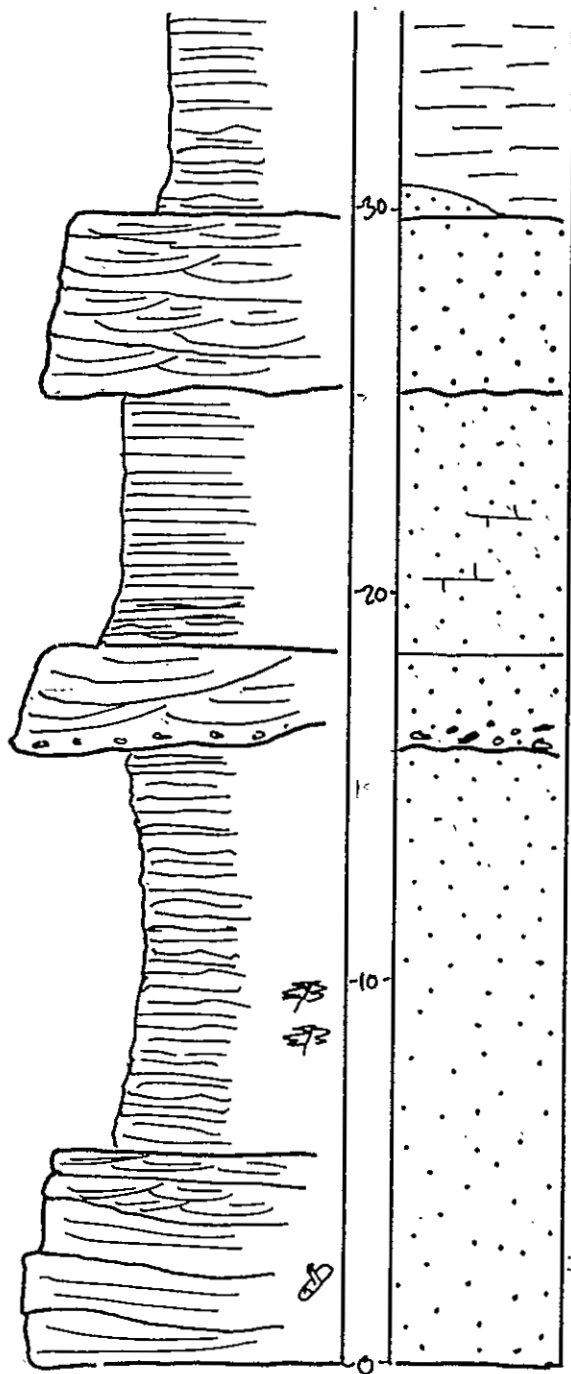
M.S. No. 24

PAGE 2



M.S. No. 24

PAGE 1



1. ...
2. ...
3. ...

Ch. 1, 2, 3, 4

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...

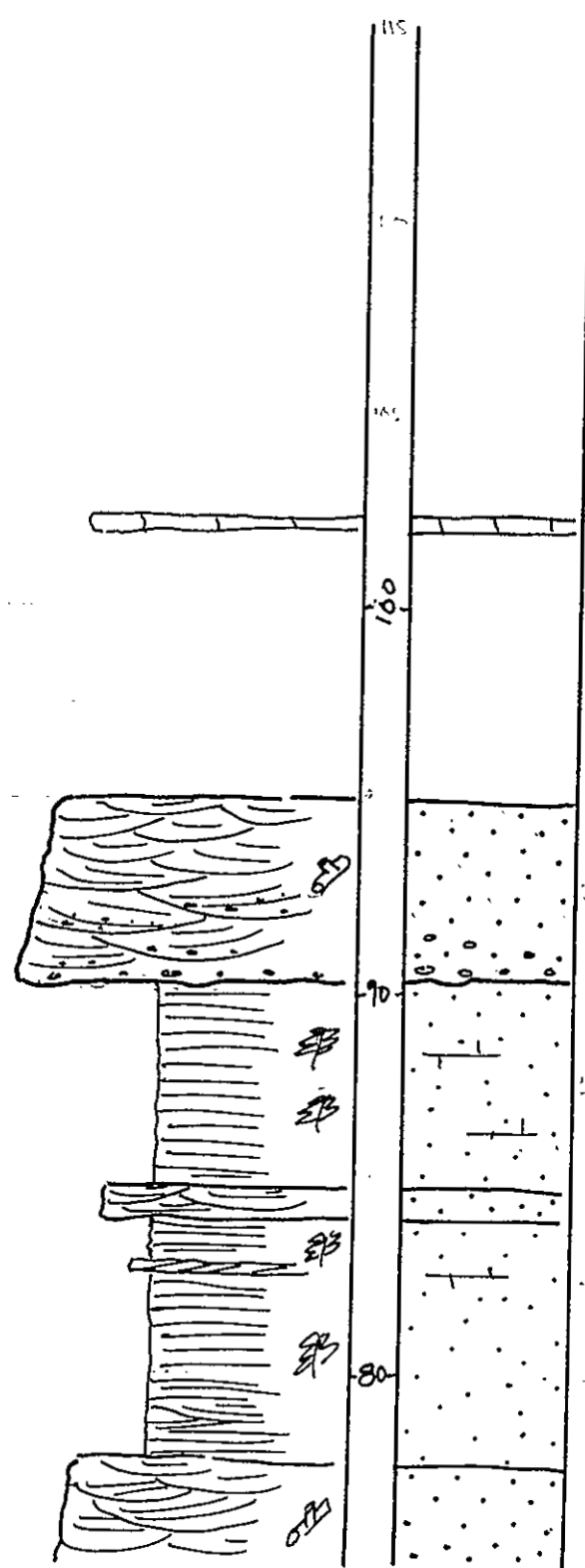
Page 1 of 3
1. ...
2. ...
3. ...

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...

1. ...
2. ...
3. ...
4. ...
5. ...
6. ...
7. ...
8. ...
9. ...
10. ...

M.S. No. 24

PAGE 3

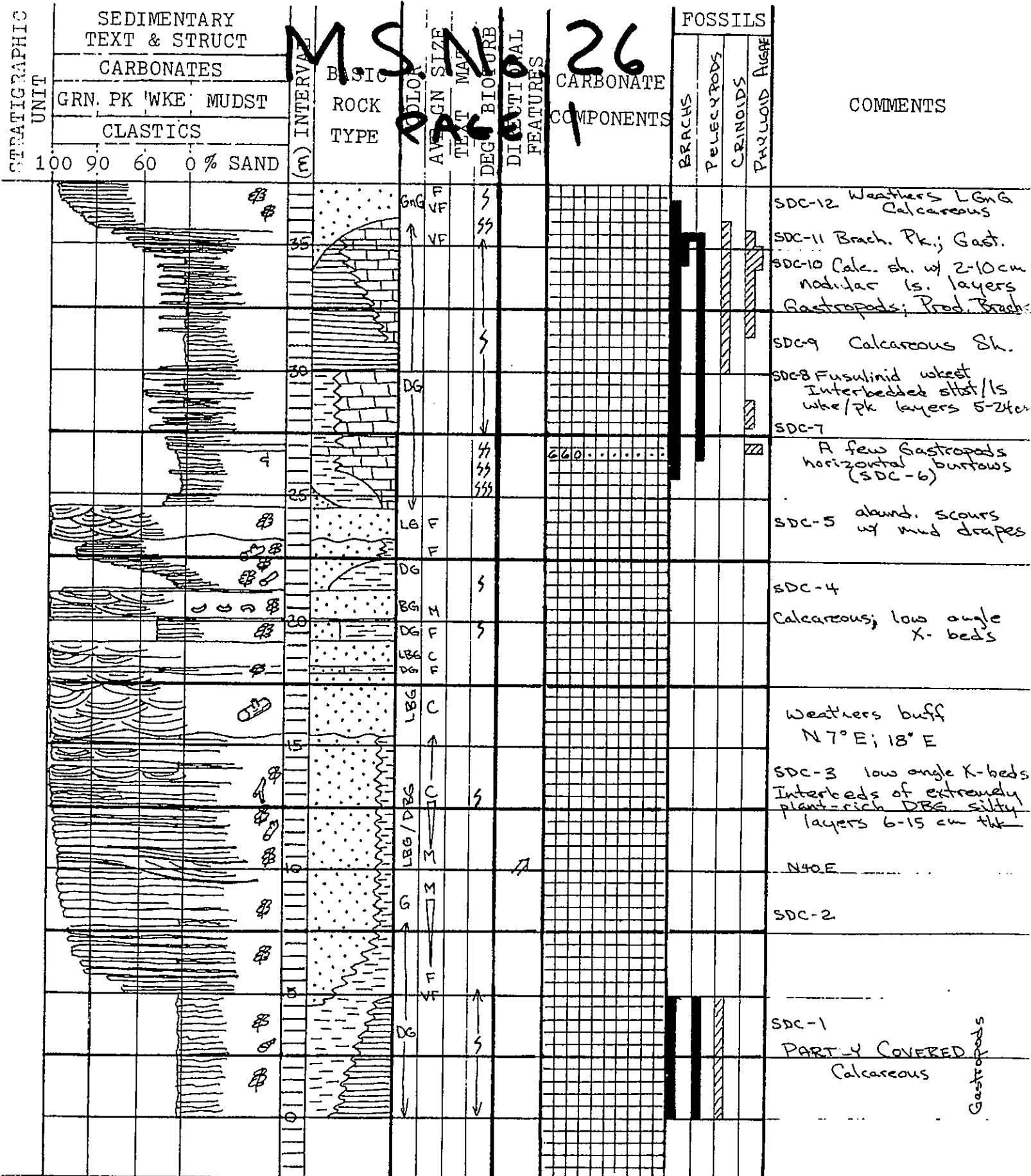


Phylloid Algae ls.

↑
↓
↑
↓

MEASURED SECTION NO. SDCDATE July 21, 1977LOCALITY S of Drake Canyon

STRATIGRAPHIC UNIT

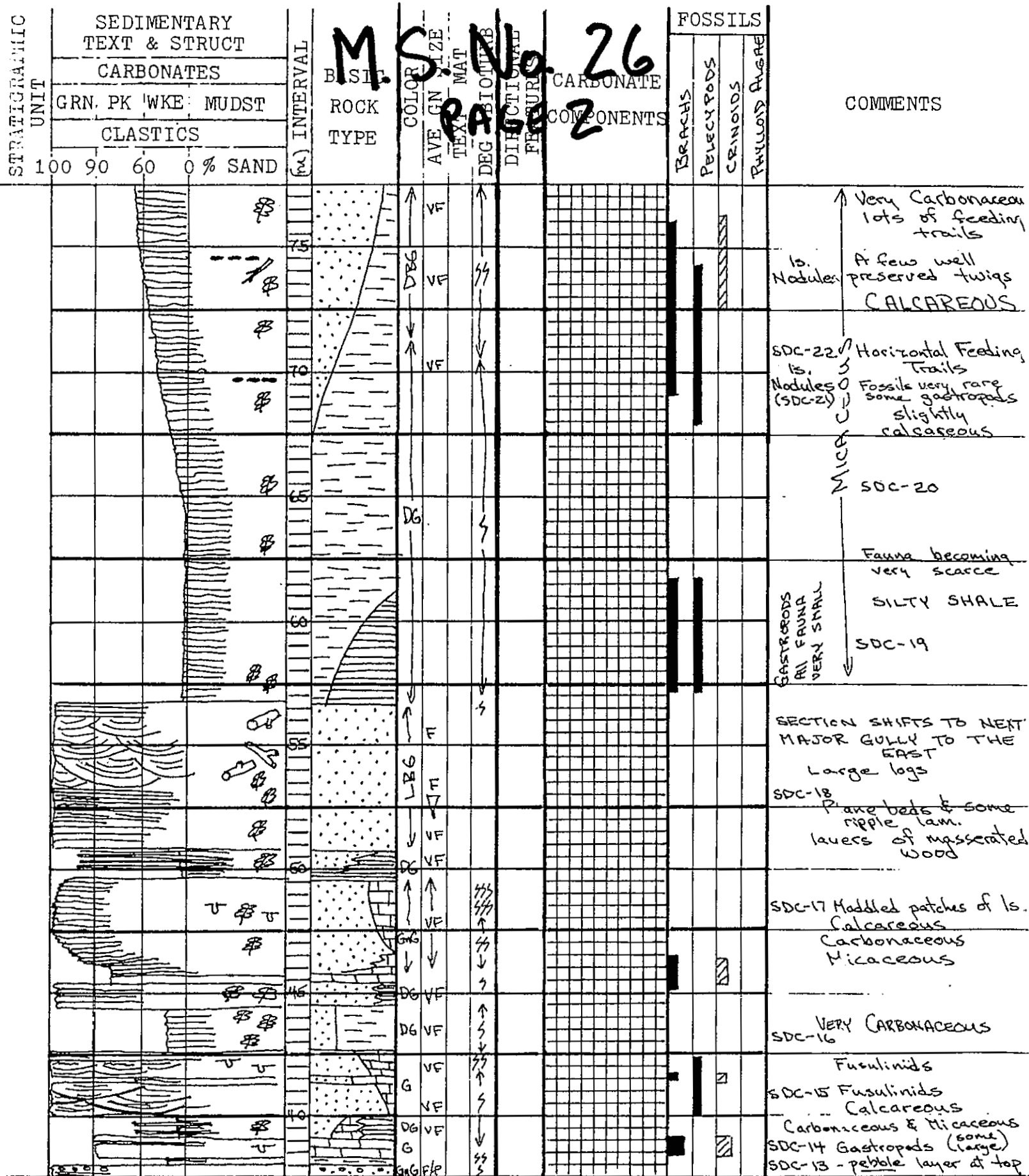
SETTING Side Canyon off Rio ChiquitoMEASURED BY JMC

MEASURED SECTION NO. SDCDATE July 22, 1977

LOCALITY _____

STRATIGRAPHIC UNIT _____

SETTING _____

MEASURED BY JMC

SDC

Page 2 of 2

C.9

MEASURED SECTION NO. SDC

DATE _____

LOCALITY _____

STRATIGRAPHIC UNIT _____

SETTING _____

MEASURED BY JMC

[illegible]

SDC

PAGE 3 of 6

100

[illegible]

DATE _____

STRATIGRAPHIC UNIT _____

MEASURED BY JMC

102

DATE _____

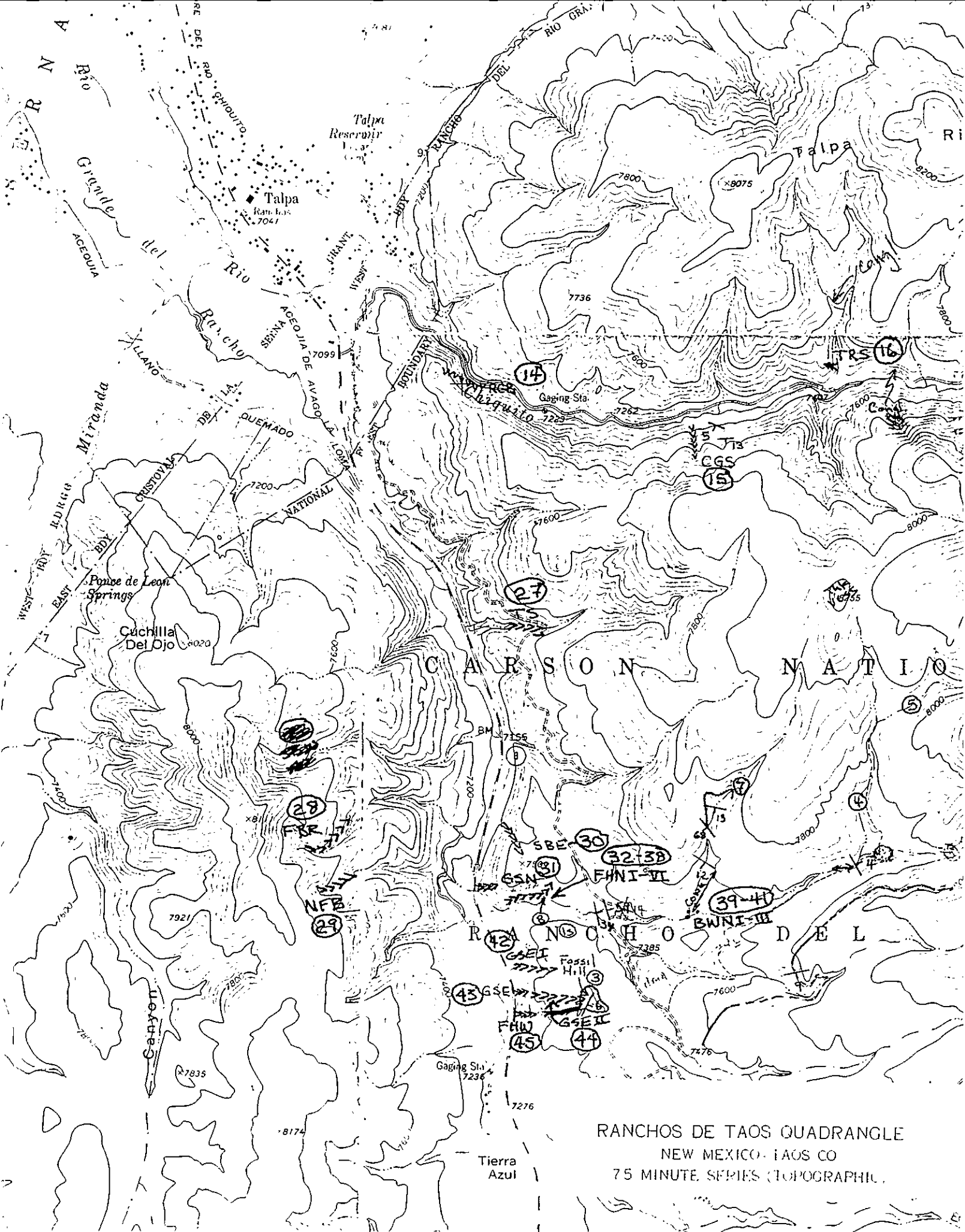
STRATIGRAPHIC UNIT _____

MEASURED BY _____

103

TALPA SOUTH SECTIONS

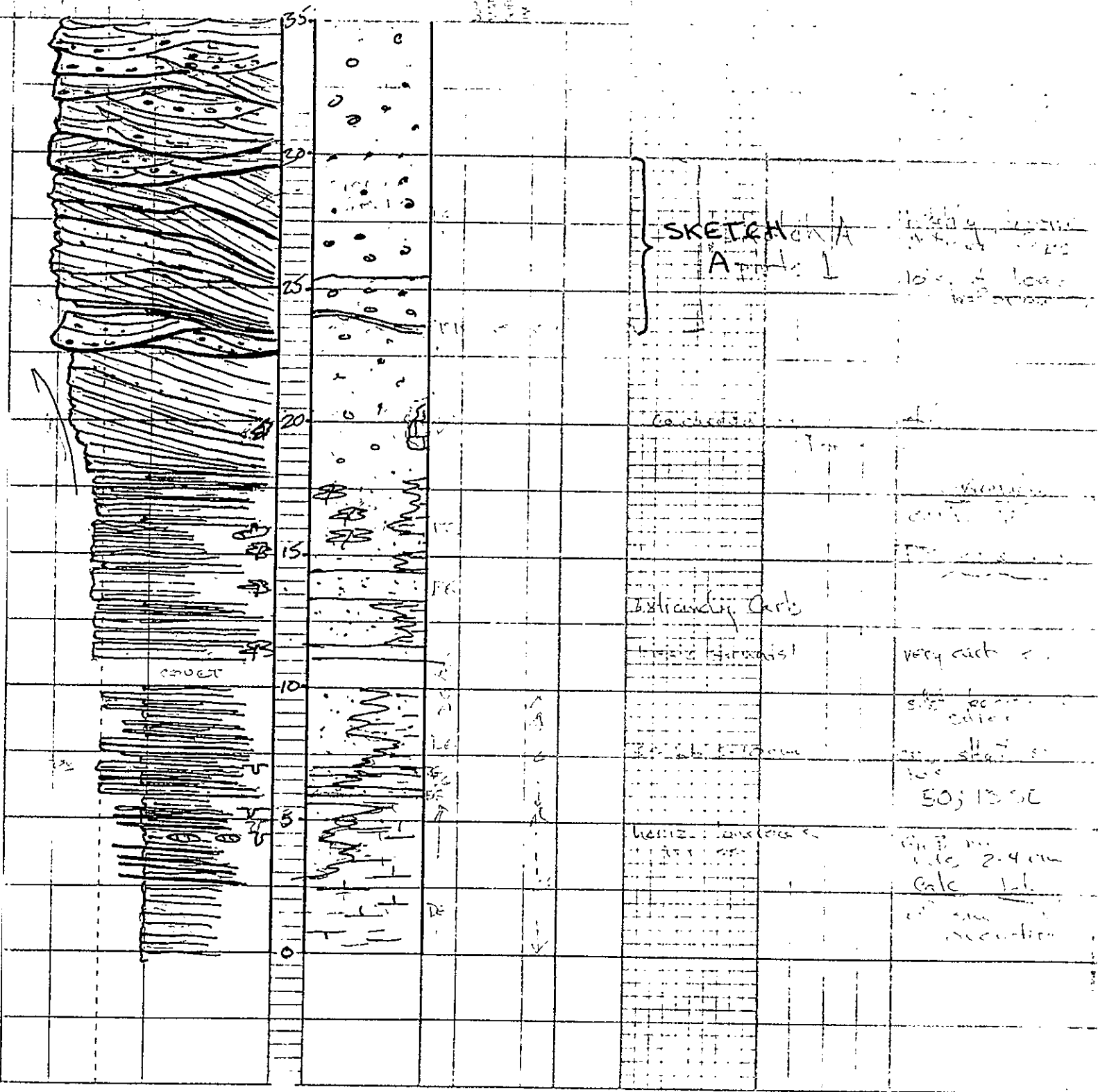
MEASURED SECTIONS
27 THROUGH 45



RANCHOS DE TAOS QUADRANGLE
NEW MEXICO: TAOS CO
75 MINUTE SERIES (TOPOGRAPHIC)

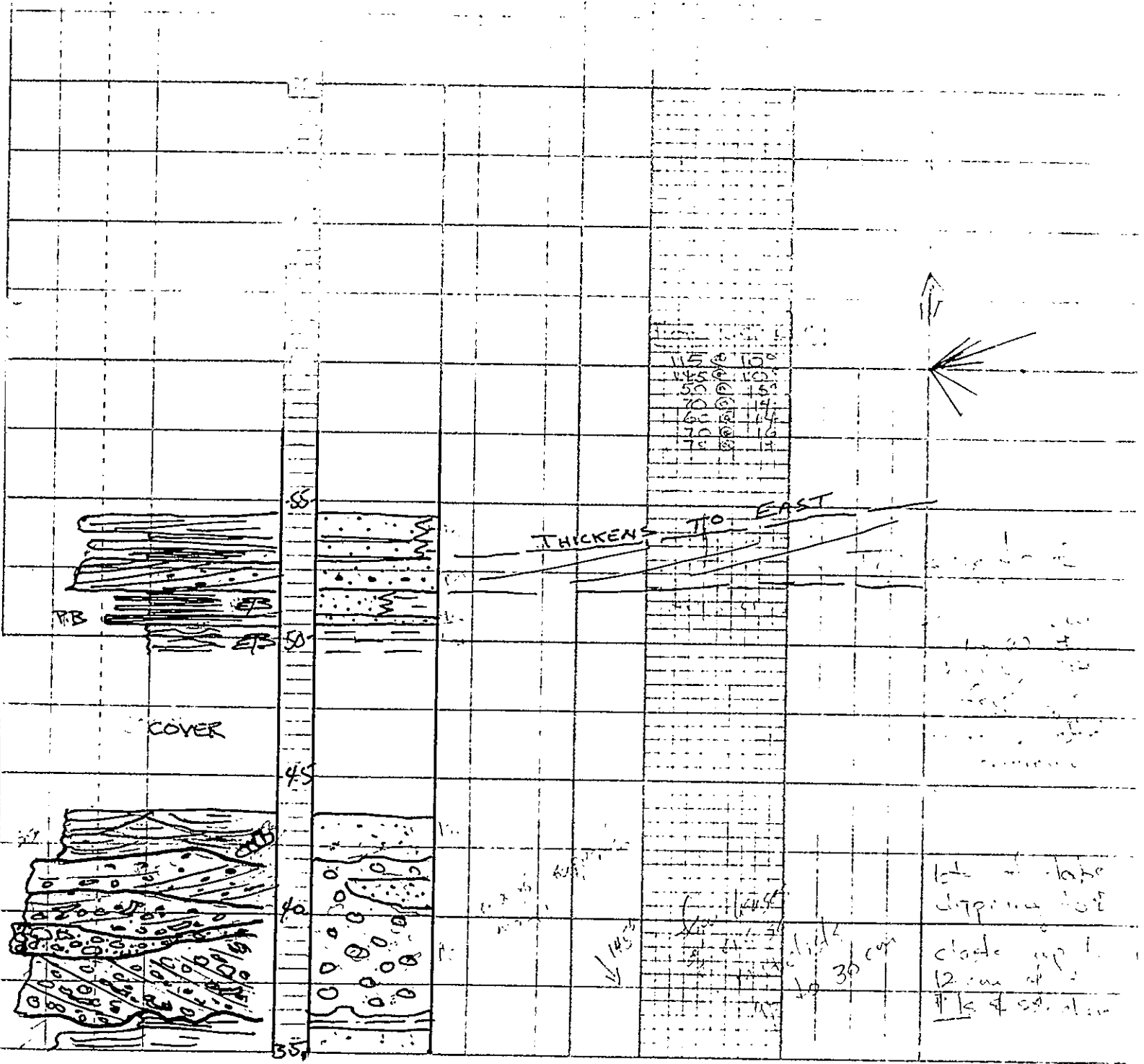
64-117000-100000

COLLEGE
TEXAS
MATHEMATICS
DIRECTOR
TEACHING



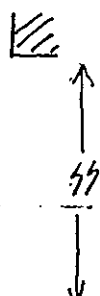
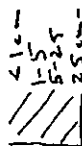
SECTION 10
 1921
 CARBONATES
 CORN PR WEP. MUDST.
 75.5705

M.S. No. 27 PAGE 2



PAGE 1

Bed
Thick mass



1. 1000

10. 11. 1941

- P/Hes

12. Lesson
and thing

The figure consists of two schematic diagrams, (a) and (b), illustrating the experimental setup. Diagram (a) shows a laser beam entering from the left, passing through a lens, and then a beam splitter. The beam is then directed towards a sample. Diagram (b) shows a similar setup, but with a different beam splitter configuration, where the beam is split into two paths before reaching the sample.

Week

N3200 200

was - he almost had
a search.

PAGE 2



July 2, 1978

JMC

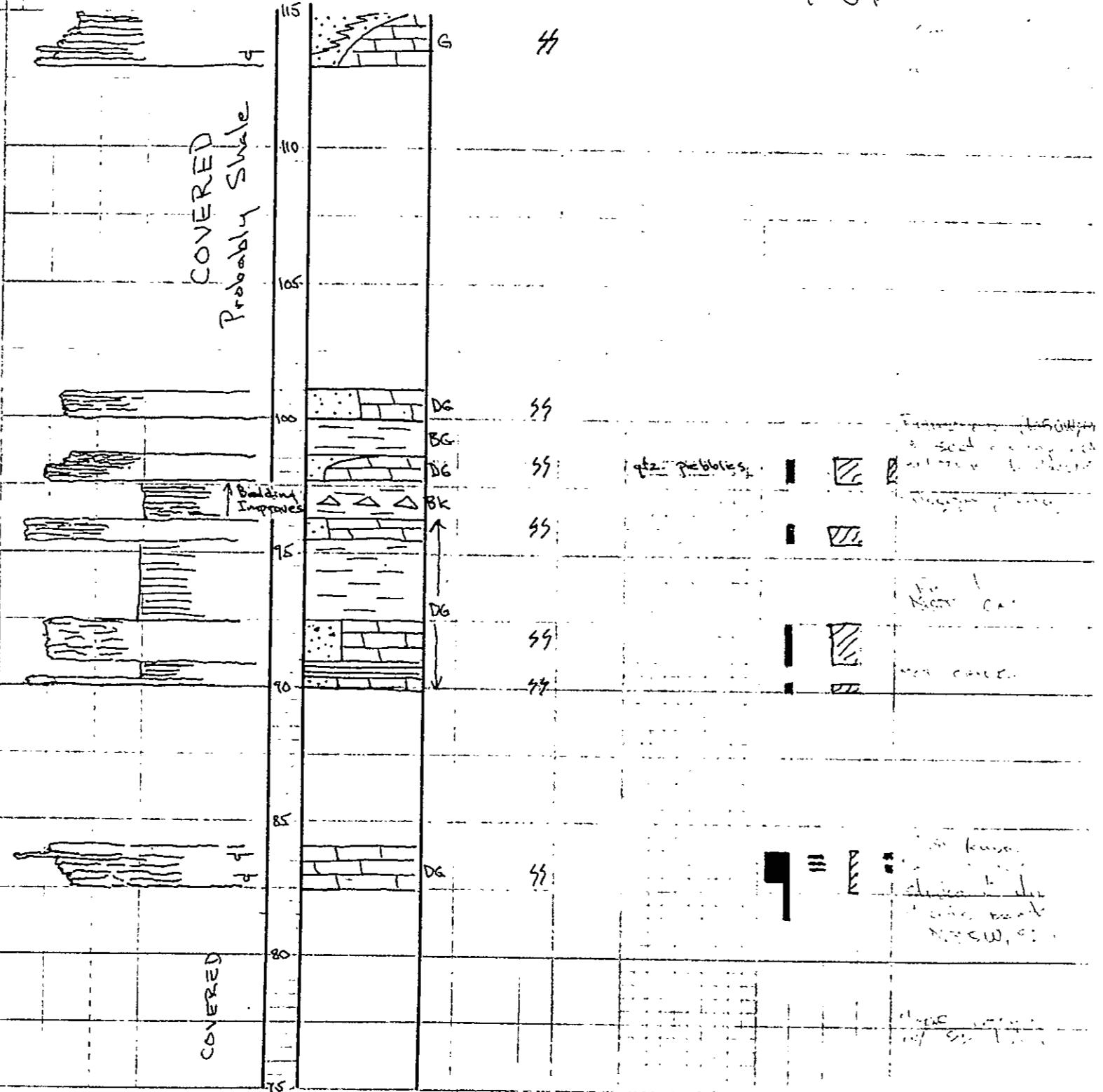
M.S. No. 28

PAGE 3

BRACHS
Pylloids Algae
Crinoids
BryozoaAIR
GRN PK
CL

GRN

64 4



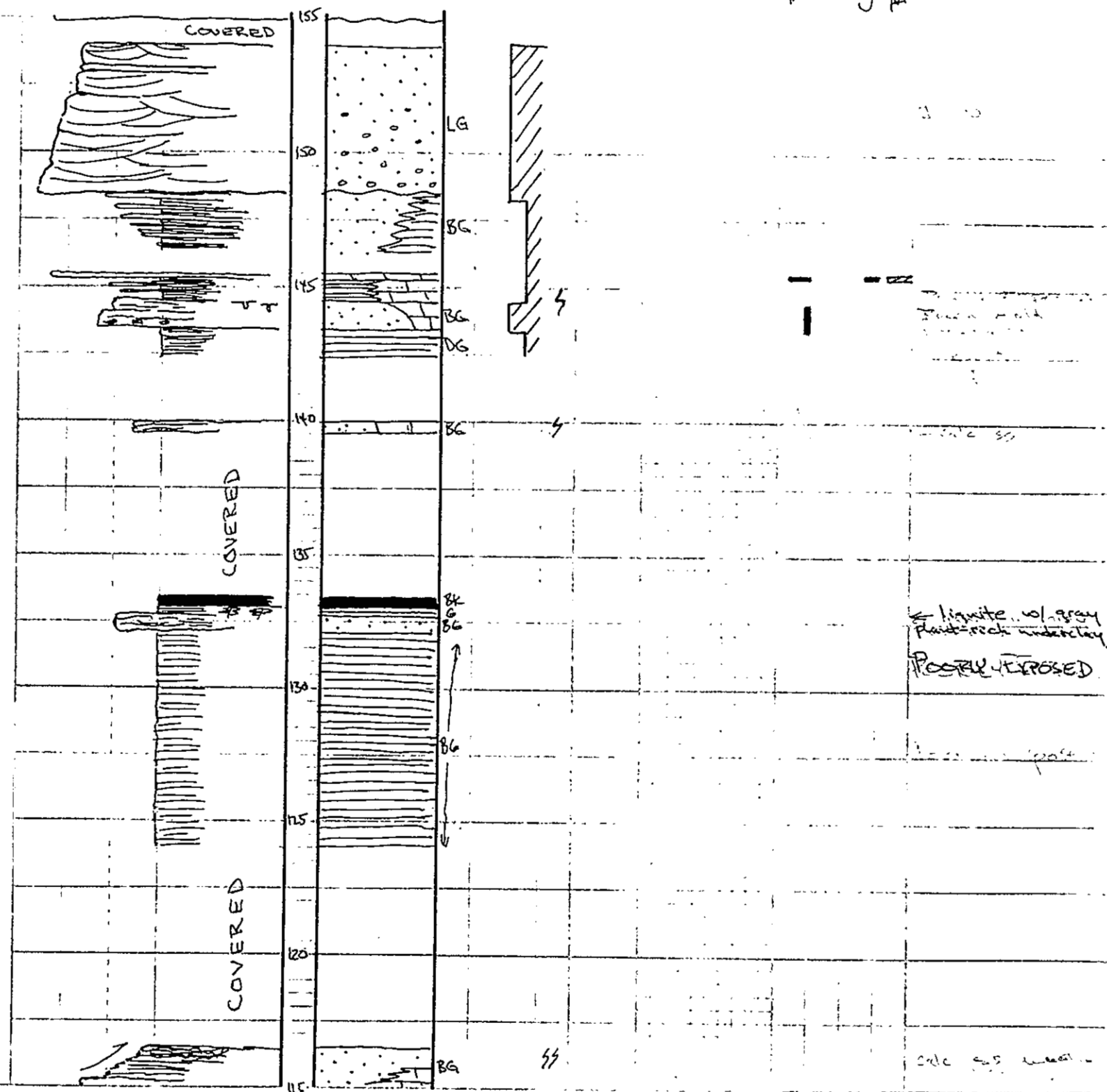
M.S. No. 28

PAGE 4

Beach

Crinoids

Bryozoa

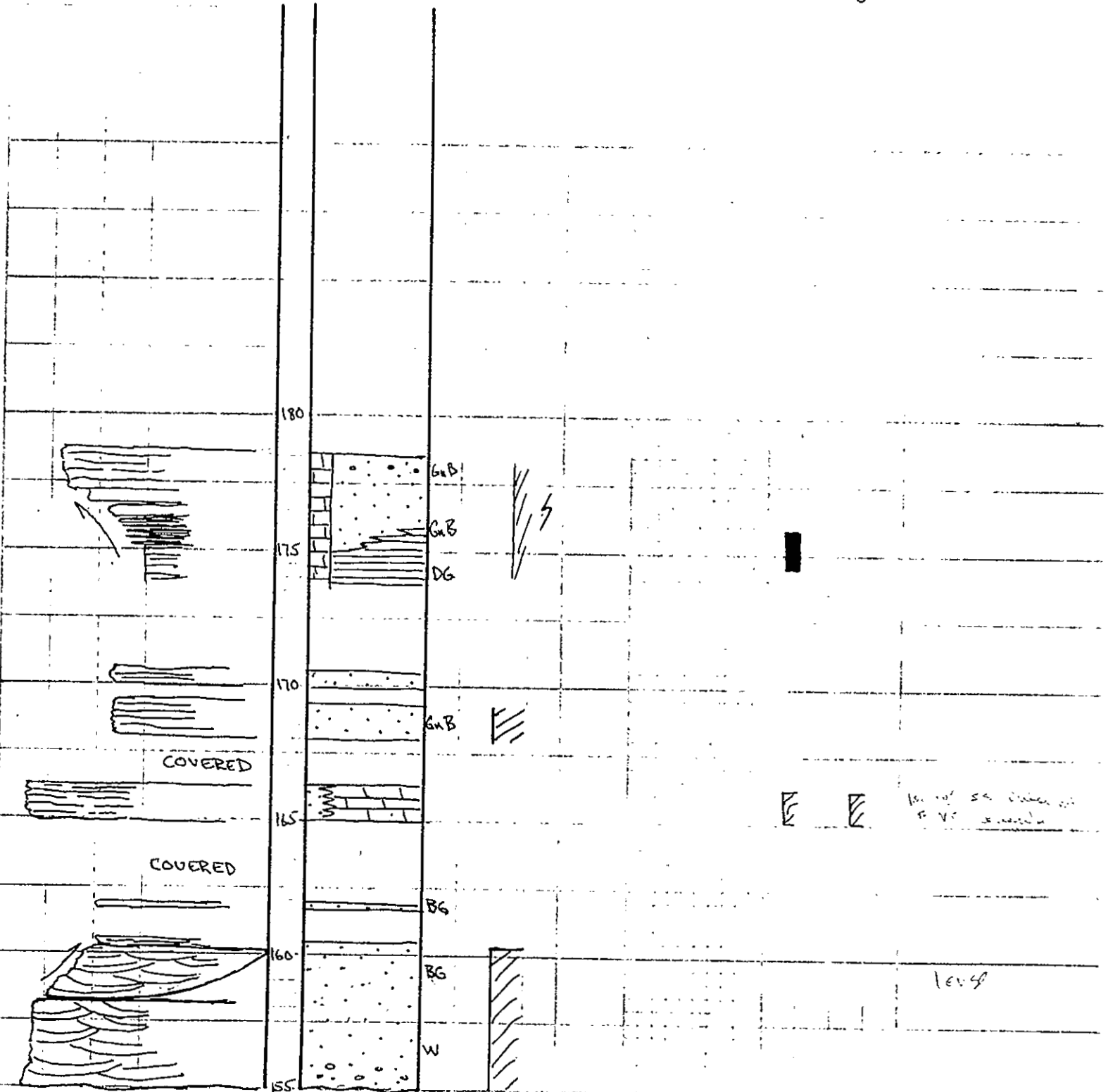


M.S. No. 28

PAGE 5

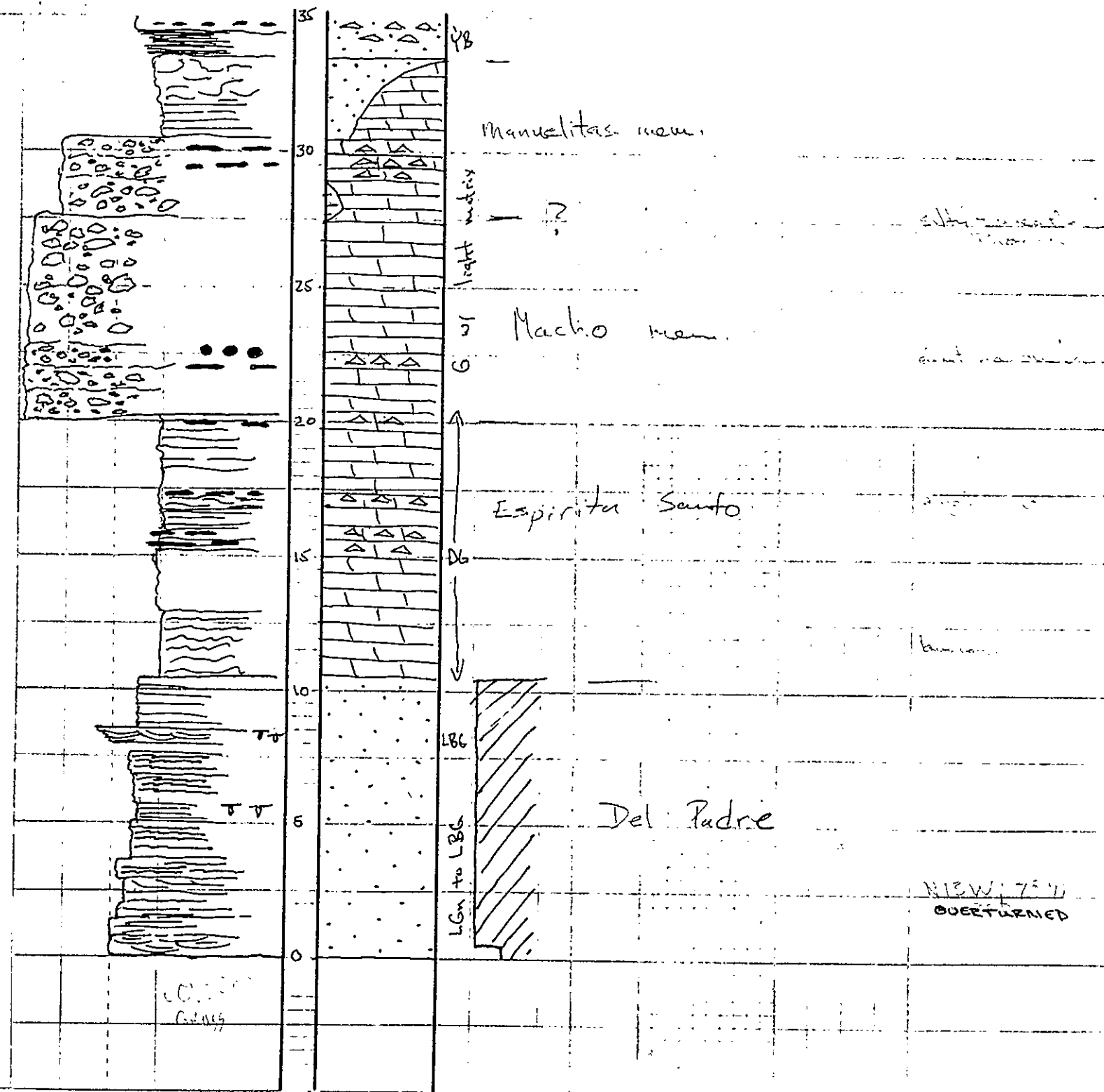
Bochs

Crinoids



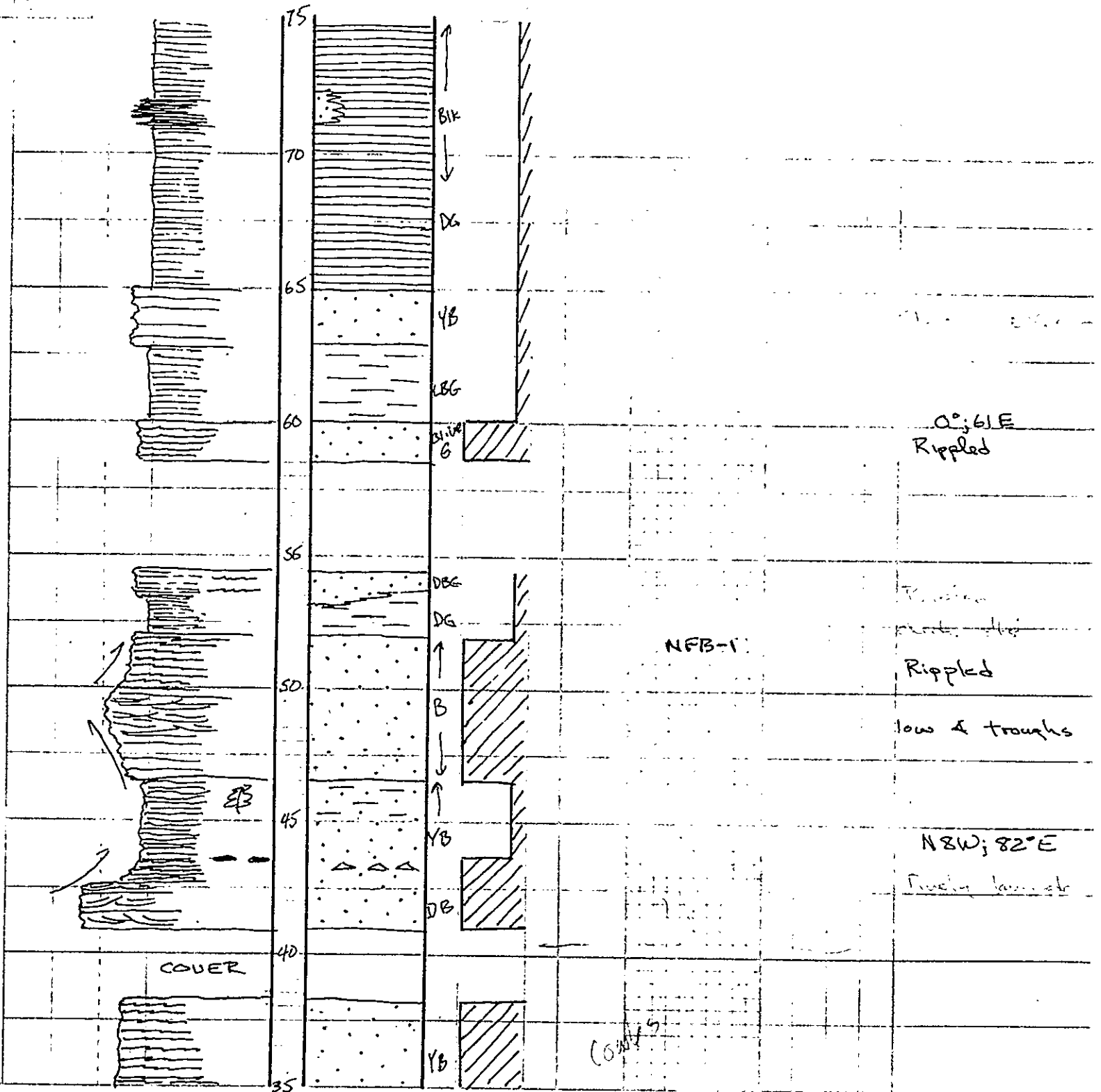
M.S. No. 29

PAGE 1



M.S. No. 29

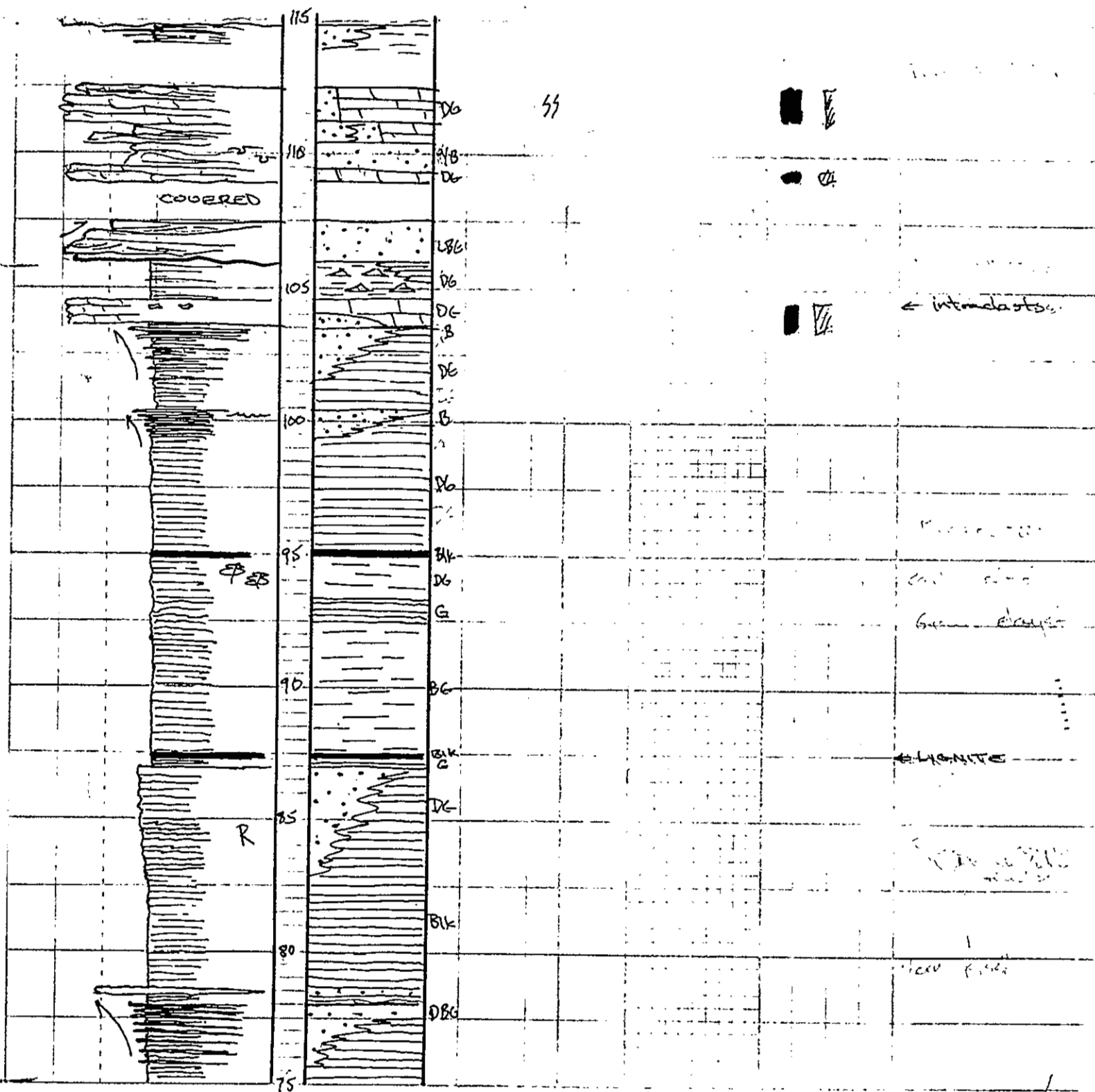
PAGE 2



M.S. No. 29

PAGE 3

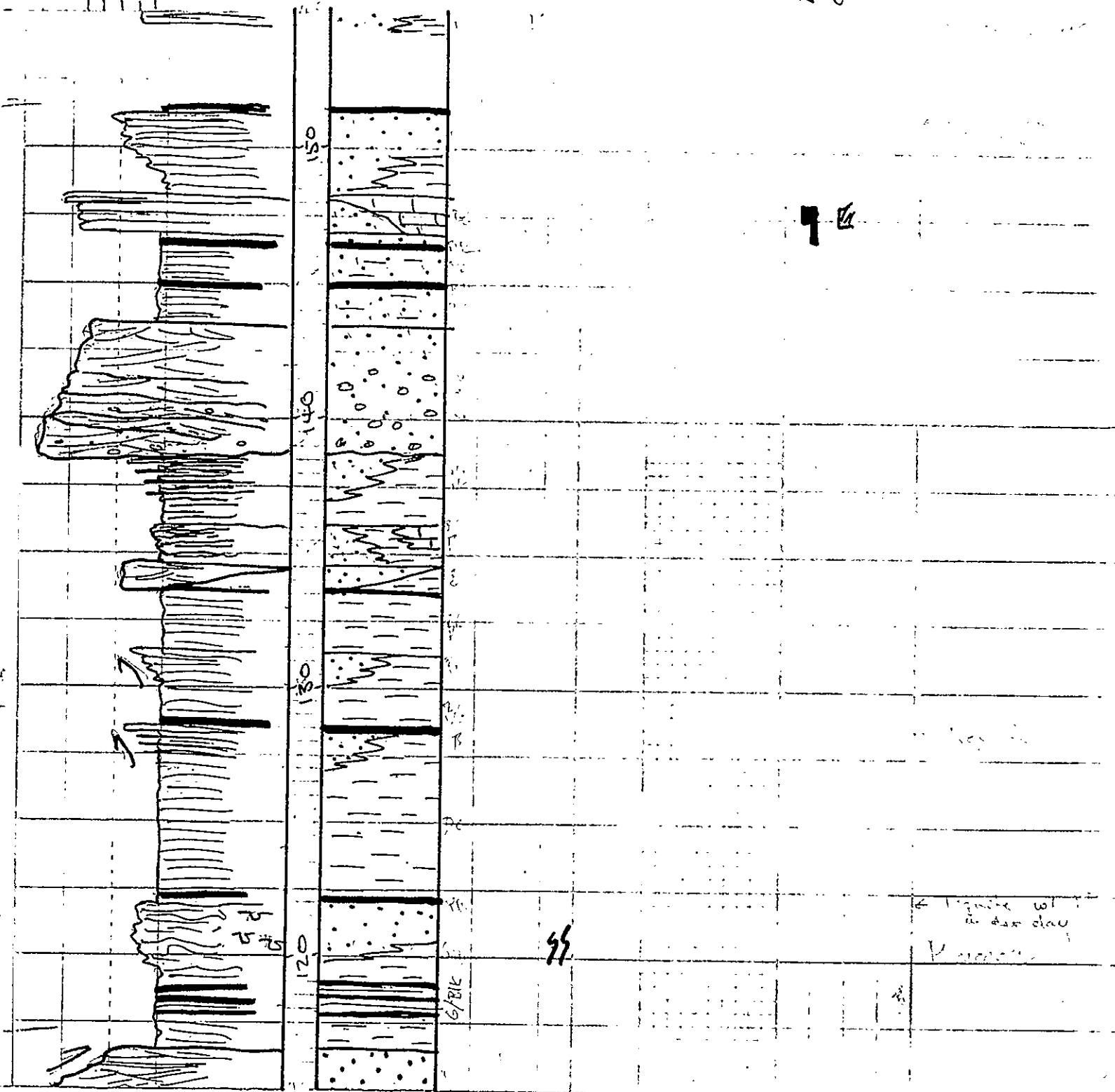
BRACHS



M.S. No. 29

PAGE 4

BRACHS
GASTS

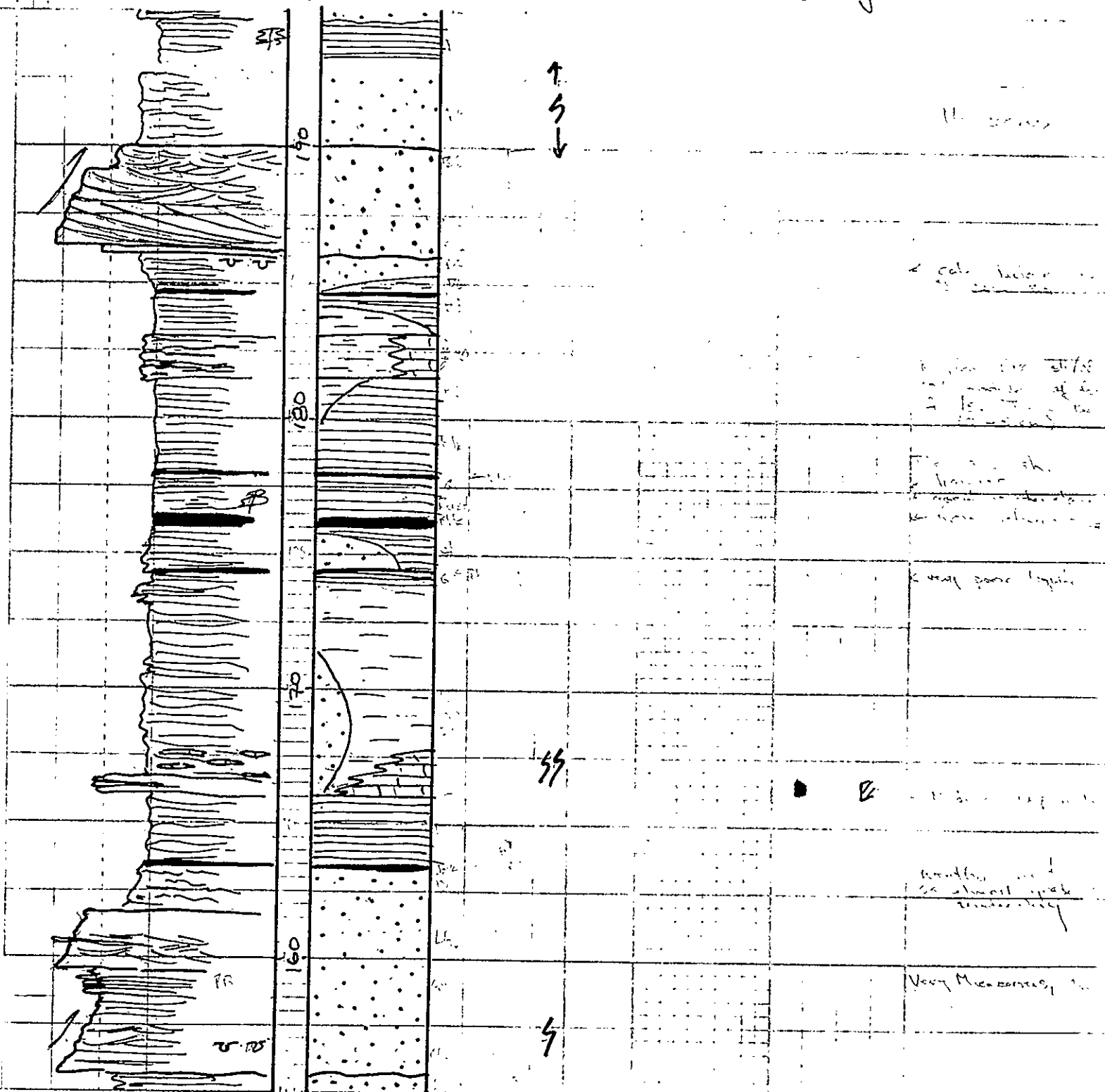


M.S. No. 29

PAGE 5

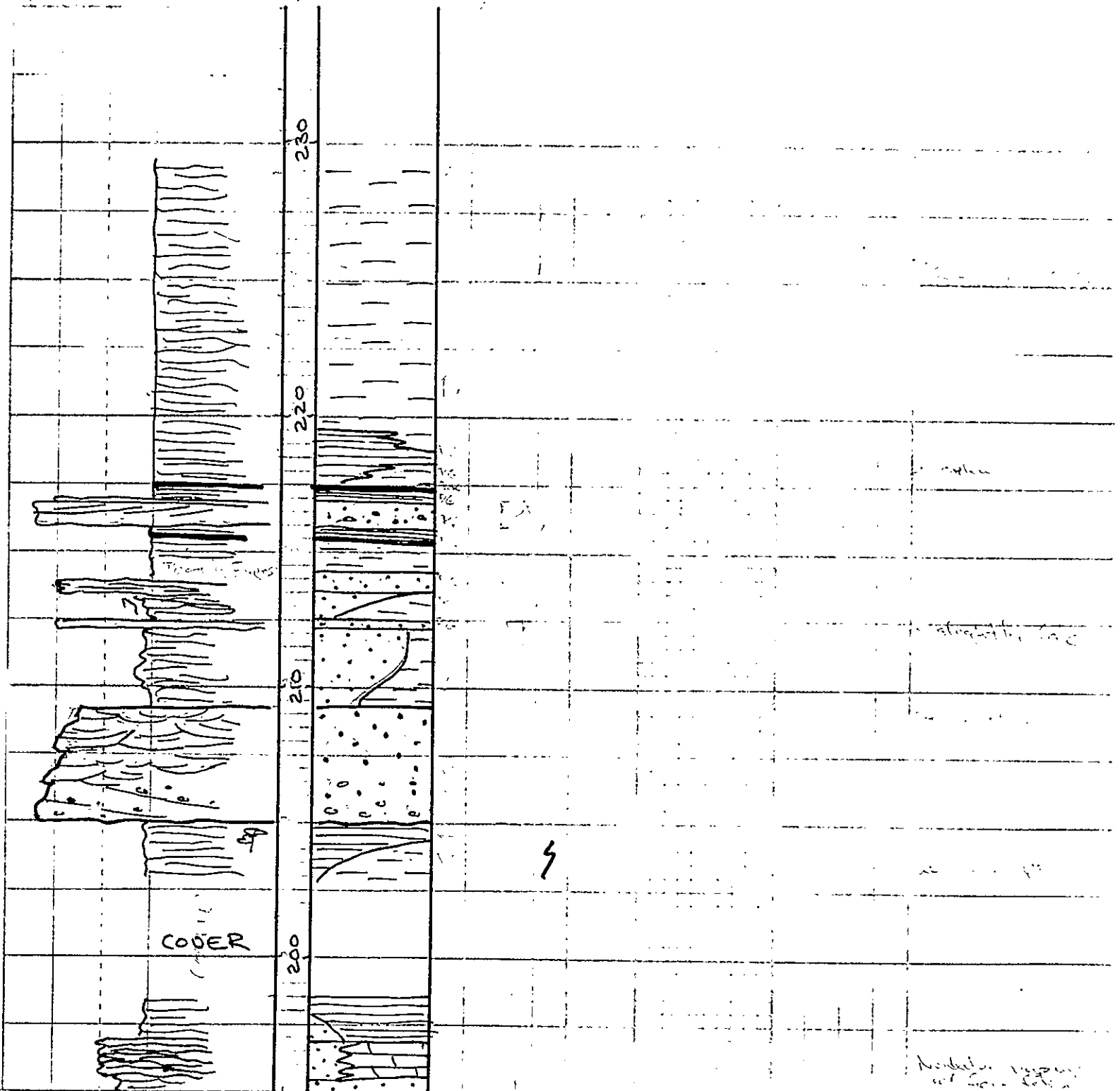
BRACHS

CRINOIDS



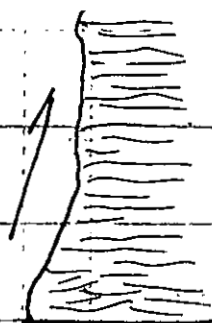
M.S. No. 29

PAGE 6

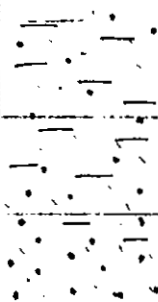


M.S. No. 29

PAGE 7



270

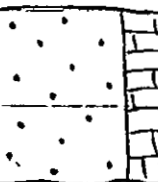


COVER

260



250



44

COVER

240

DATE JUNE 28, 1977

STRATIGRAPHIC UNIT _____

MEASURED BY JMC

[illegible]

DATE JUNE 28, 1977

STRATIGRAPHIC UNIT _____

MEASURED BY JMC

Page 2 of 3

MEASURED SECTION NO. _____

DATE June 29, 1977LOCALITY SNOKEY BEAR EAST

STRATIGRAPHIC UNIT _____

SETTING GullyMEASURED BY JMCSTRATIGRAPHIC
UNITSEDIMENTARY
TEXT & STRUCT

CARBONATES

GRN. PK WKE MUDST

CLASTICS

100 90 60 0 % SAND

INTERVAL

BASIC
ROCK
TYPE

AVERGN SIZE

TEXTURE

DEG BIOTURB

DIP/TIONAL

FEATURES

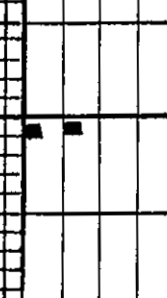
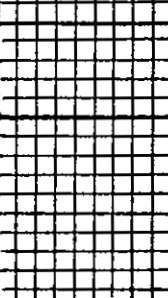
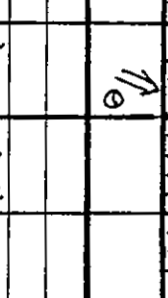
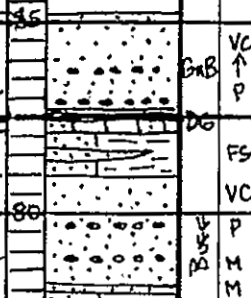
CARBONATE
COMPONENTS

FOSSILS

BRACHS

PELECYPODS

COMMENTS

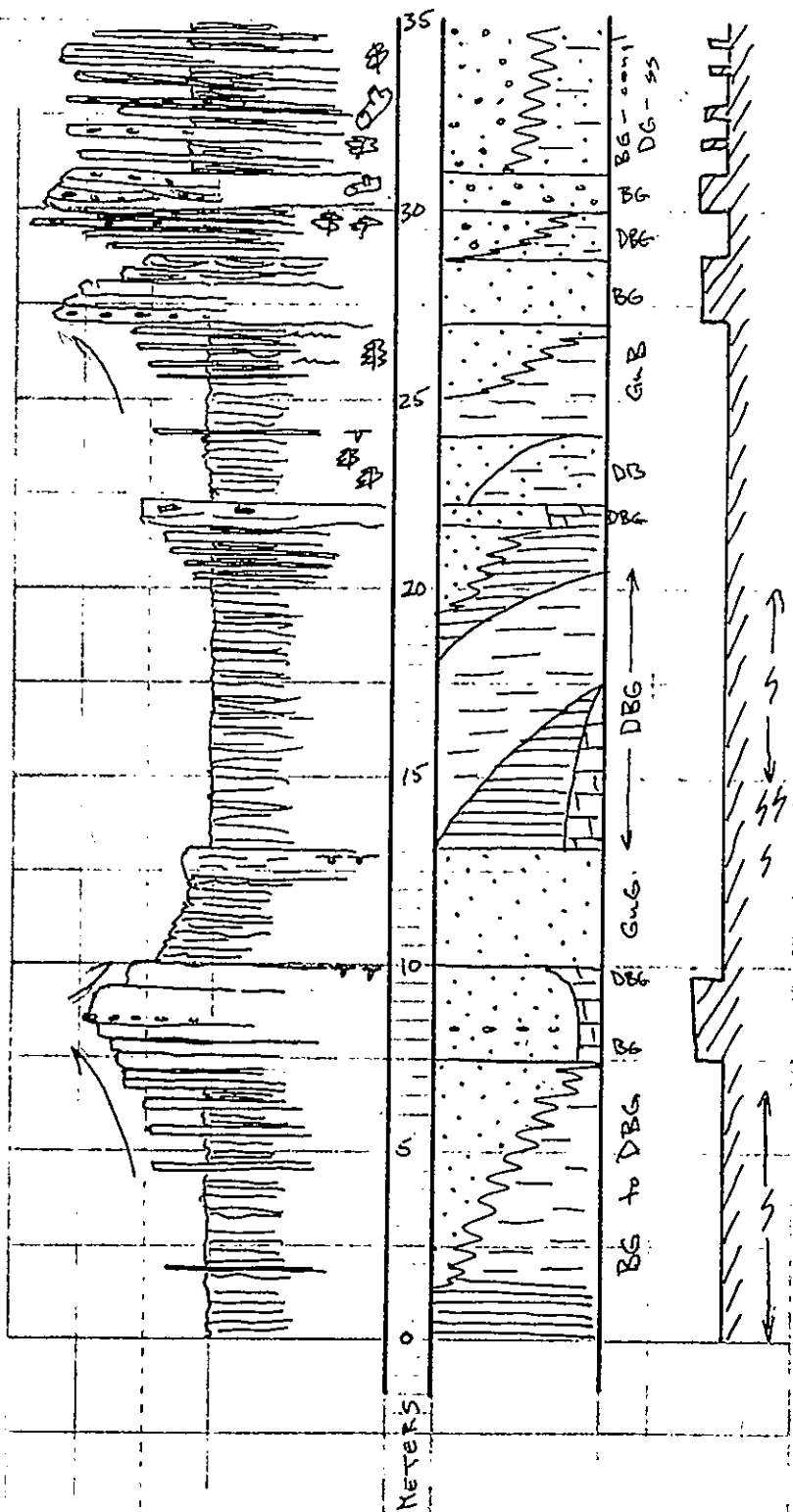
M.S. No. 30
PAGE 3

Highly weathered & friable
MCS = 130 mm
SBE-15 @ S70°E @ 44°
inarticulated brachs SBE-11

M.S. No. 31

PAGE 1

GAST
BRACHYS



low & X-bds
dip STSE @ 13

MCS = 5 cm

Ripples

a few thin bds &
nodules of micrite
straight ceph.

slightly calc
Rippled

Iron stained

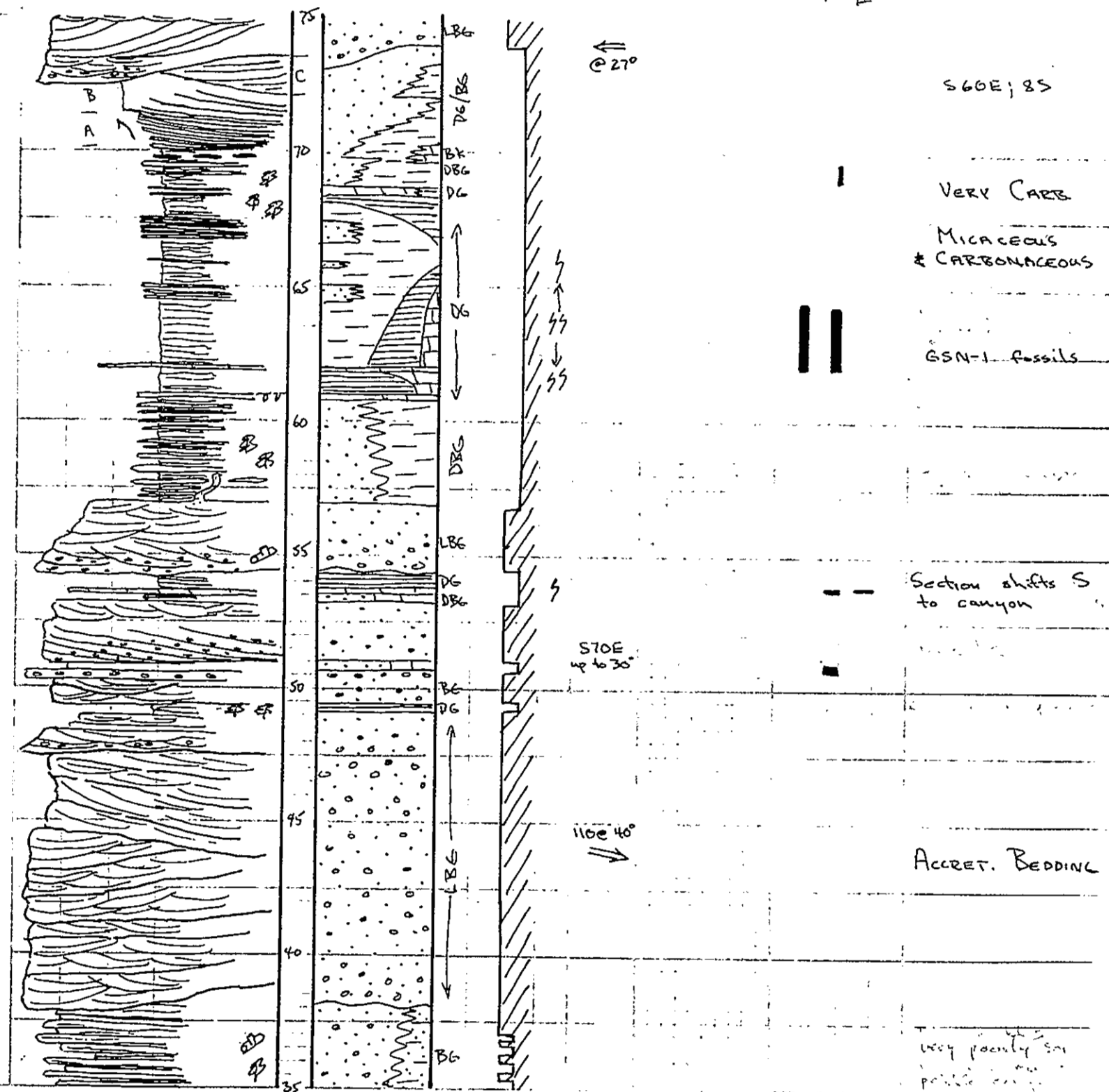
Dips
N80E; 15S

Section starts @
bottom of hill just
N of mouth of
canyon - ~ 60m
from road

M.S. No. 31

PAGE 2

GASTS
BRACHS
PHYCLOID ALGAE

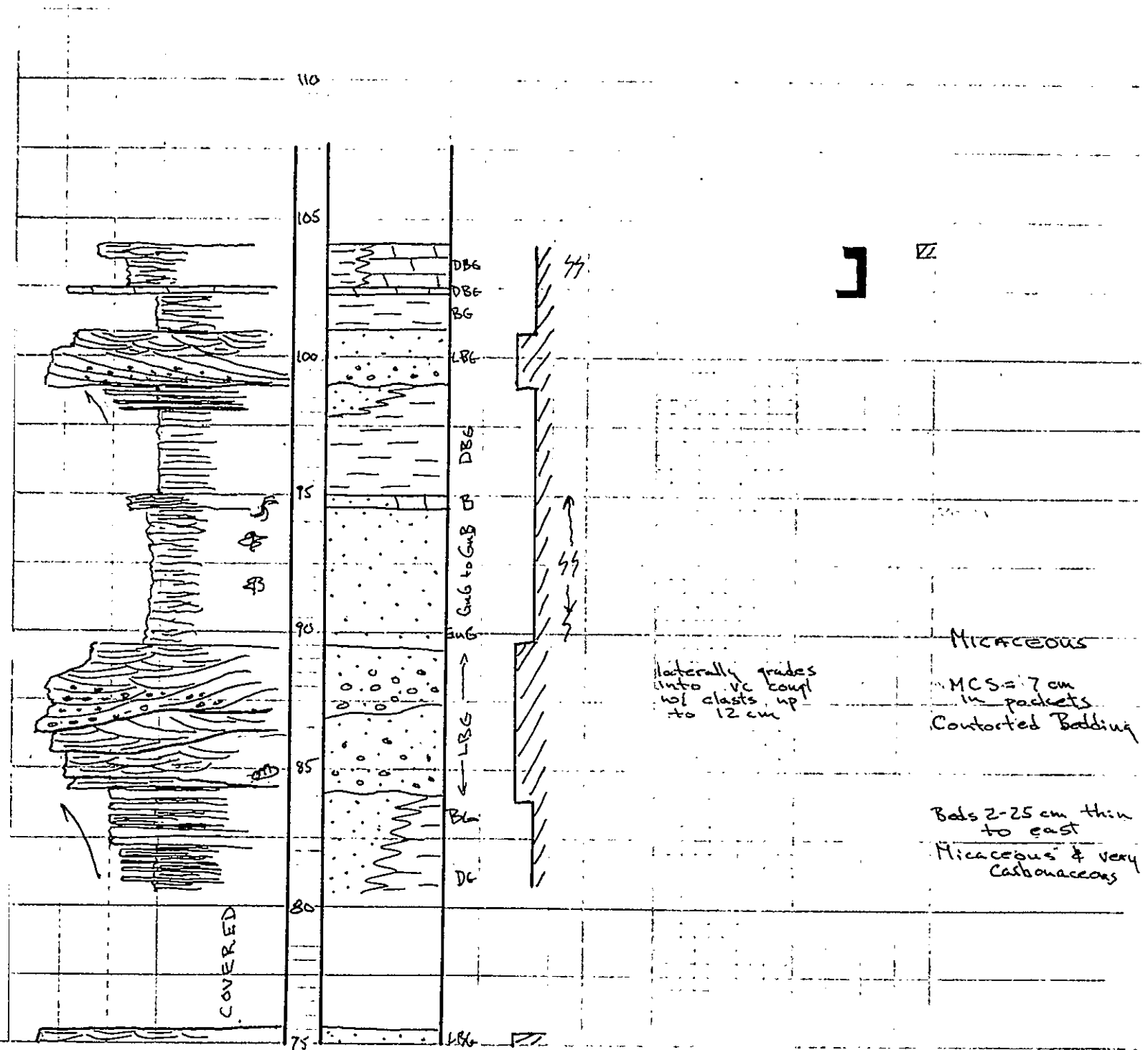


M.S. No. 31

PAGE 3

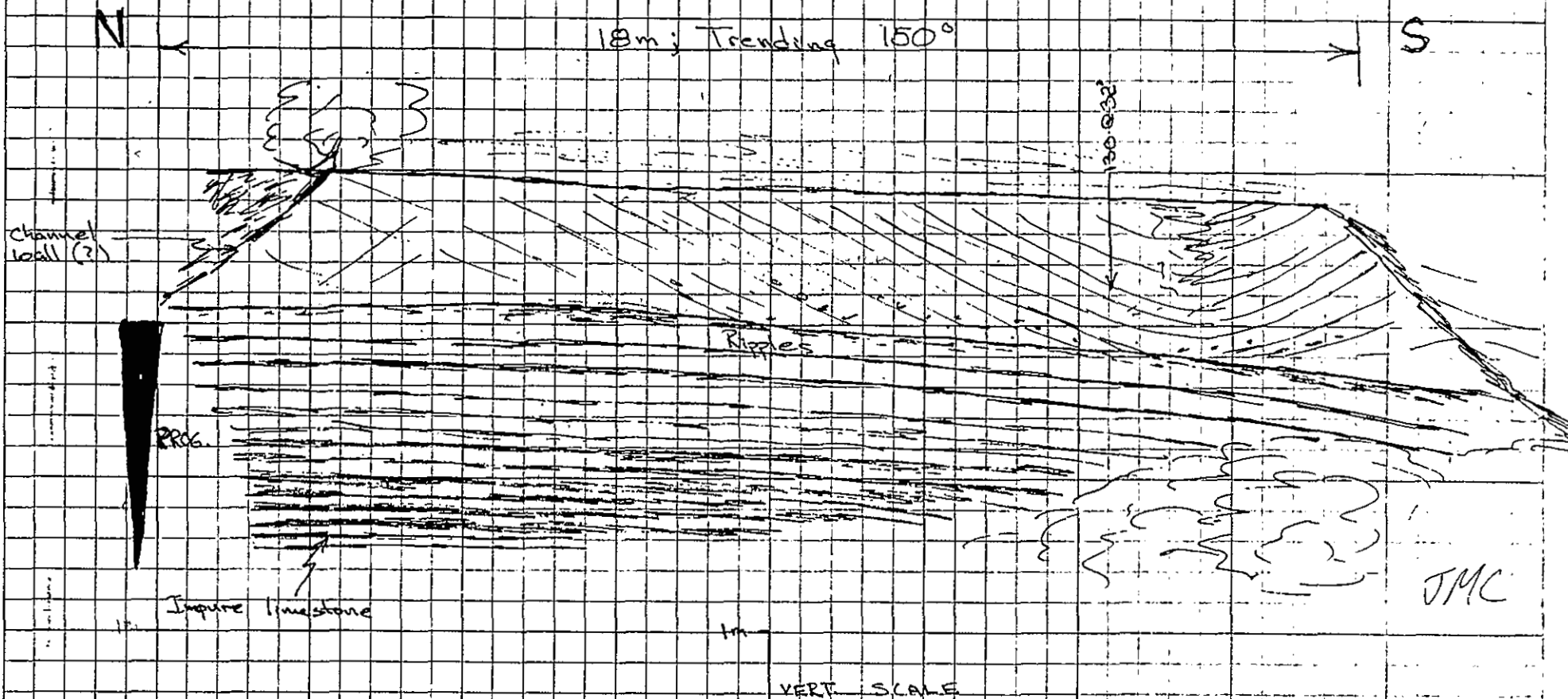
BRACHS

CRINOIDS



E WALL OF BOX CANYON (FHN)

SKETCH I

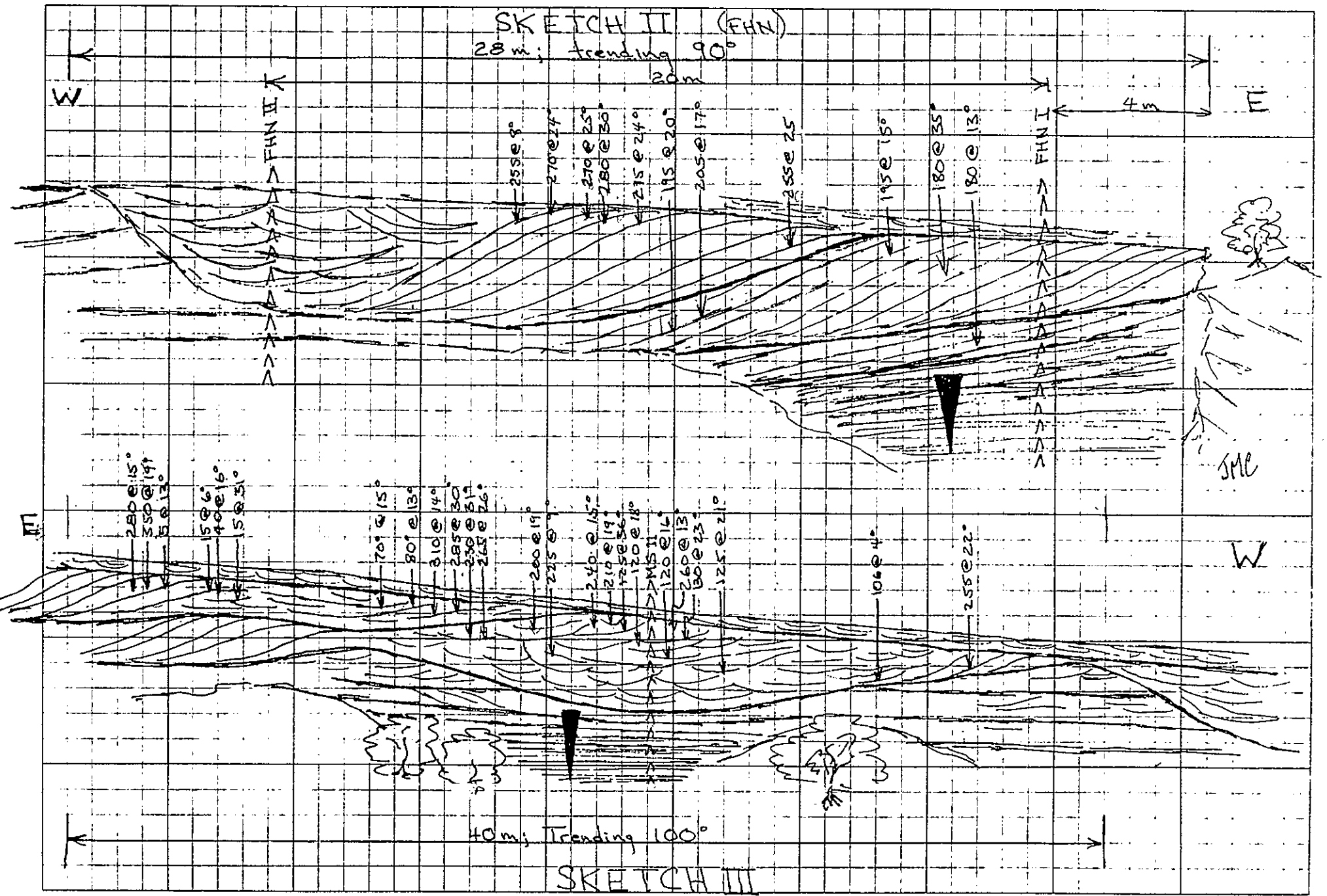


- MS 32 = FHN I
- MS 33 = FHN II
- MS 34 = FHN III
- MS 35 = FHN IV
- MS 36 = FHN V
- MS 37 = FHN VI
- MS 38 = FHN VII

Note: MEASURED SECTIONS
FHN I - VII ARE LOCATED
ON SKETCHES I - VII; SEE
SKETCH II FOR MAP VIEW
OF SKETCHES

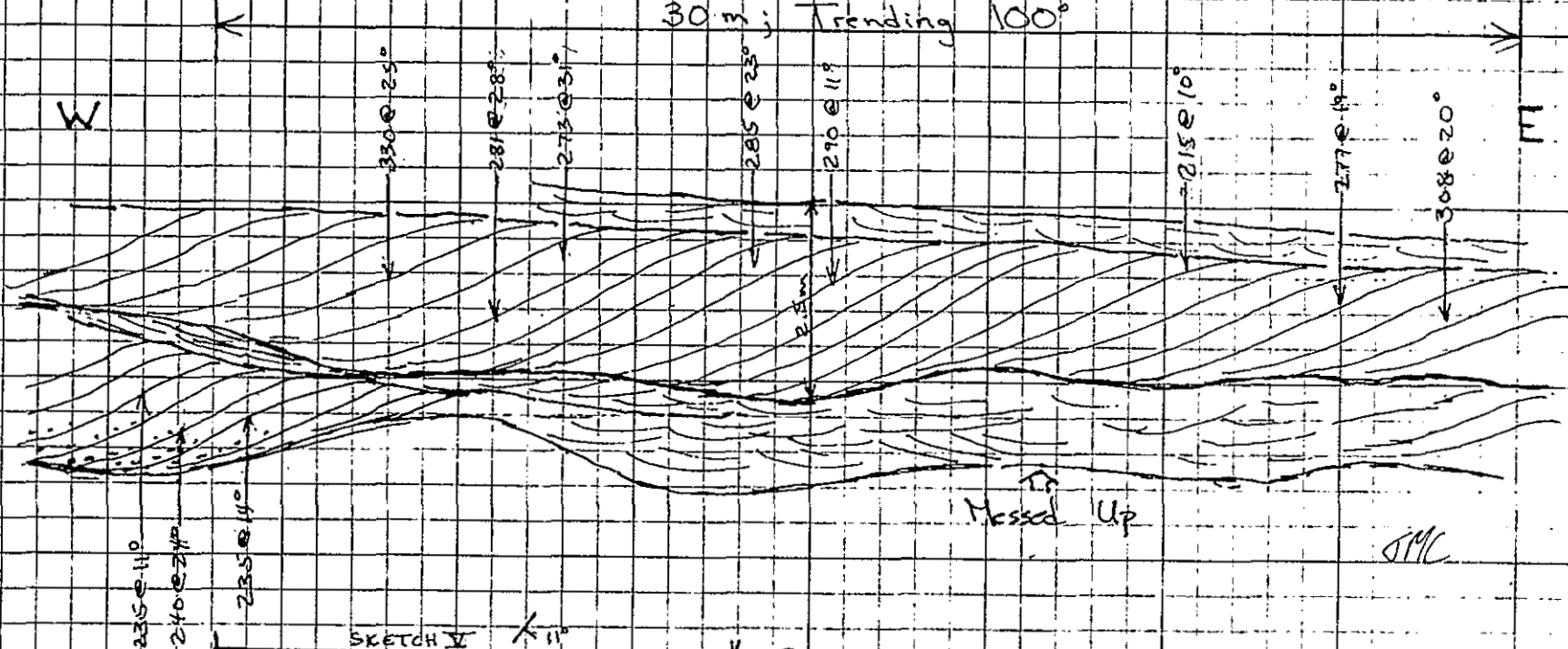
SKETCH II (FHN)

28 m; trending 90°



SKETCH IV (FHN)

30 m; Trending 100°



Messed Up

SM

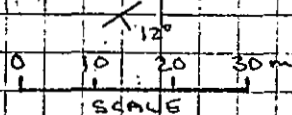
SKETCH V

Sketch IV

Sketch in

SKETCH II

$\frac{K}{s^2}$



MAP VIEW OF FHN SKETCHES

2

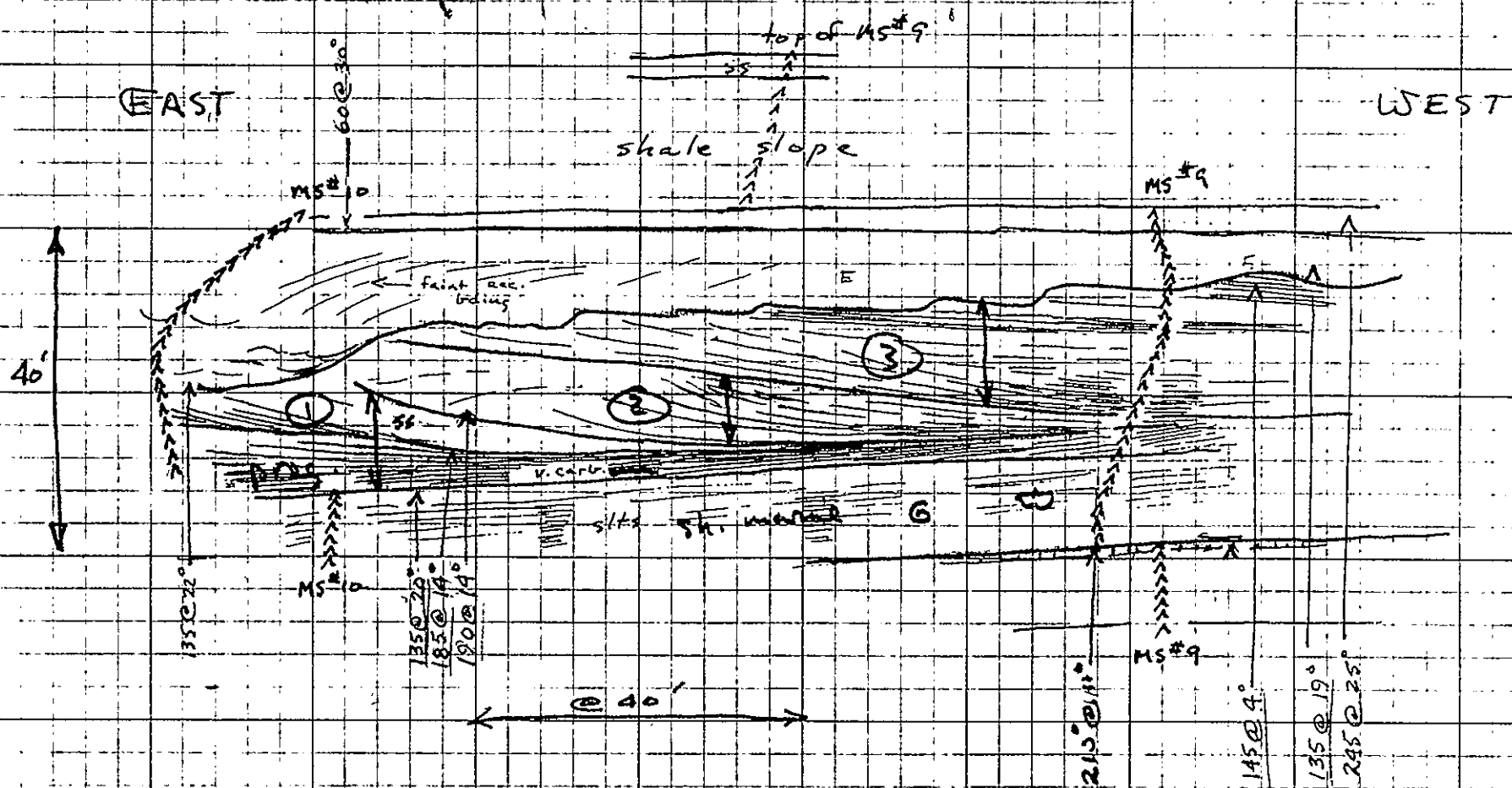
SKETCH-III
ADMI 800

40 mi 80

Fig 7

SKETCH VI

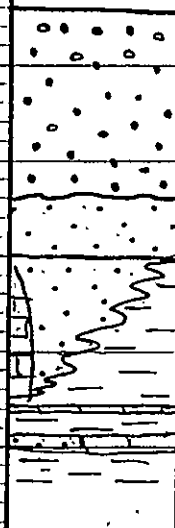
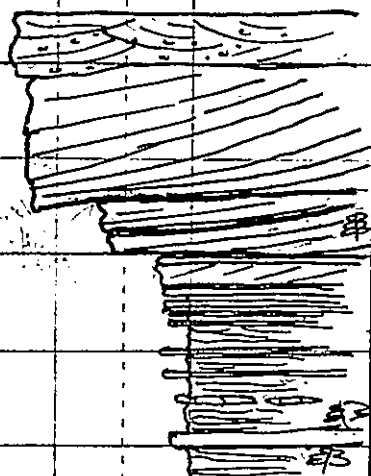
South wall of Canyon as viewed from top of MS^{#2} & MS^{#3}.



F4N I
Canyon N of Fossil Hill
N side of Canyon

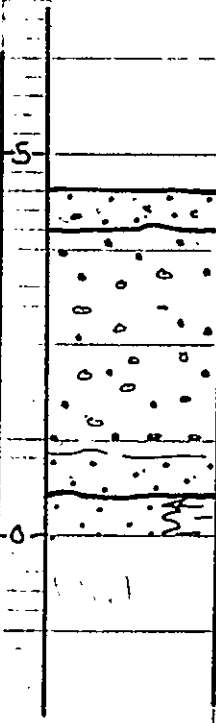
July 8, 1978
JMC

M.S. No. 32



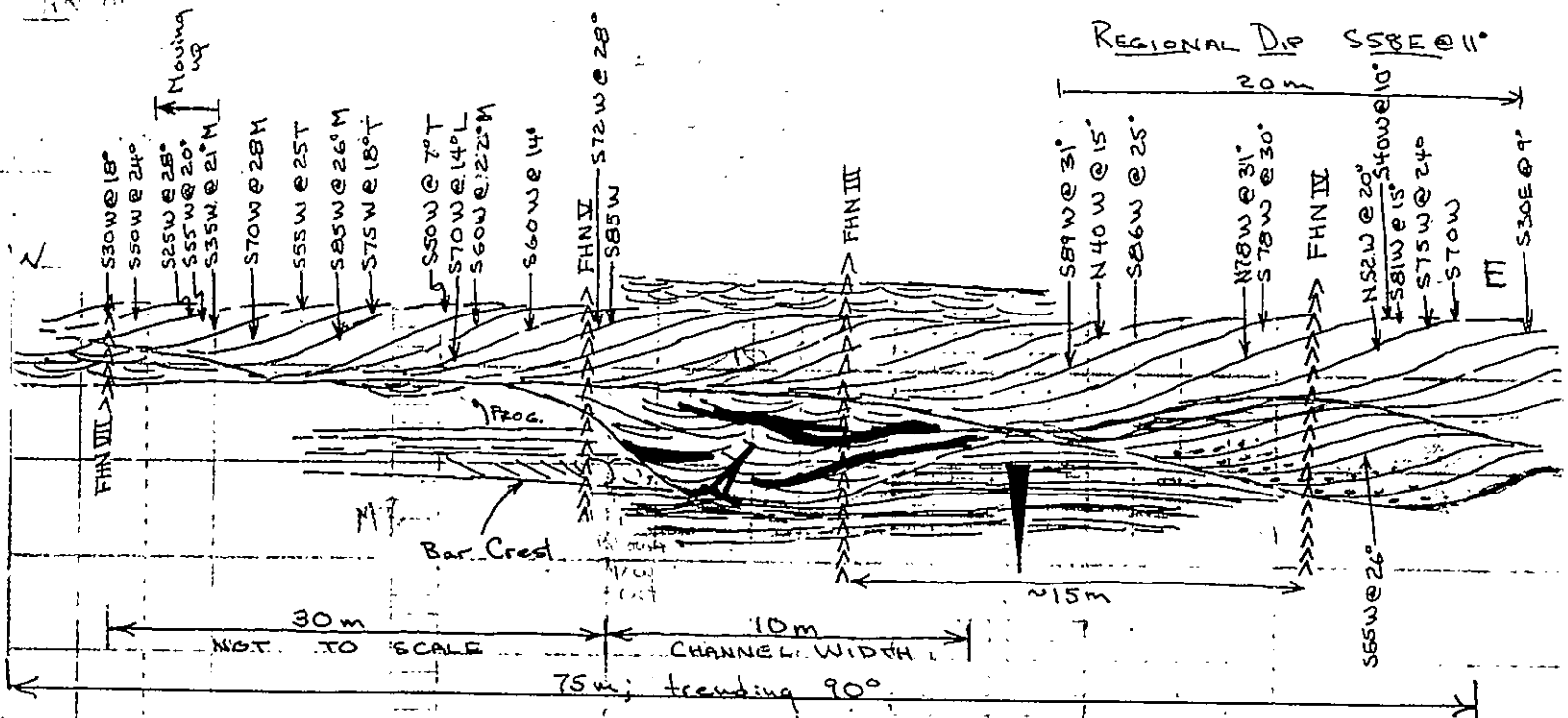
B.K. Micaceous
Modules

M. S. No. 33



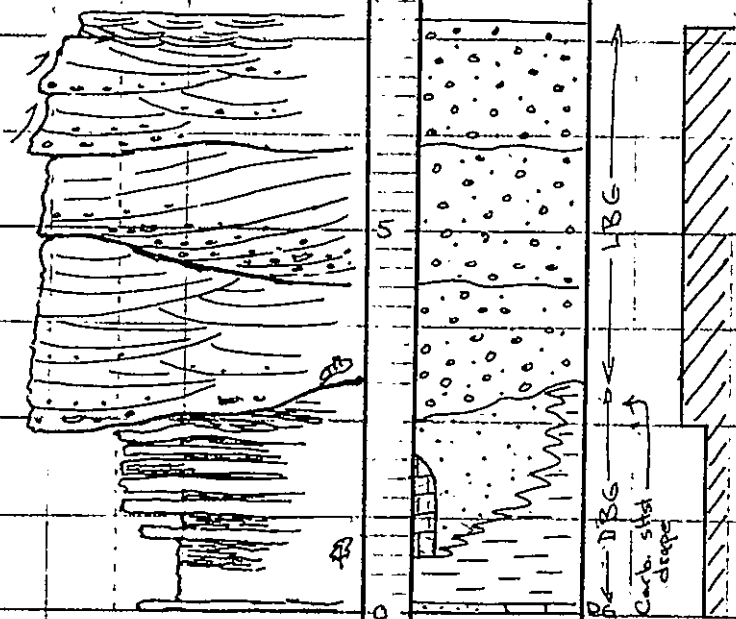
July 8, 1978

JMC



SKETCH V

M.S. No. 74



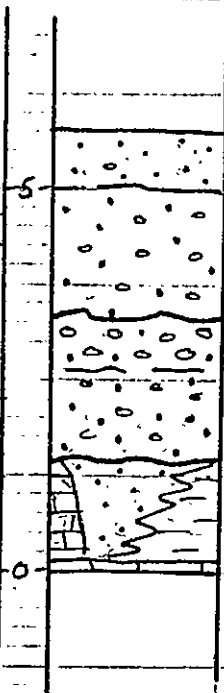
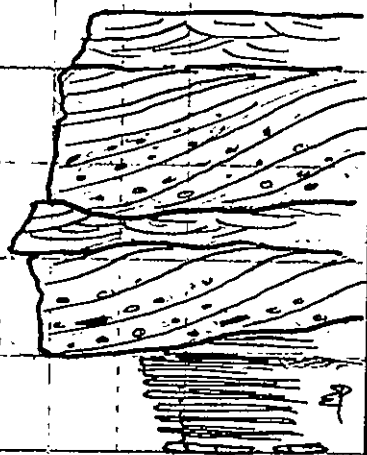
AXIS OF
CHANNEL
TRENDS
N35E

Accret. Bedding

Rip-up clasts
VERY CARBONACEOUS
MICACEOUS
Faint ripples & mottles in ss
ss & s are rippled

Section starts: 115m
due west of FHN I

M.S. No. 35



Rip-uped. layer
Bk. Shale

lower and lower set
Shale, wavy & mottled

fine grain size - 3mm

ss clasts

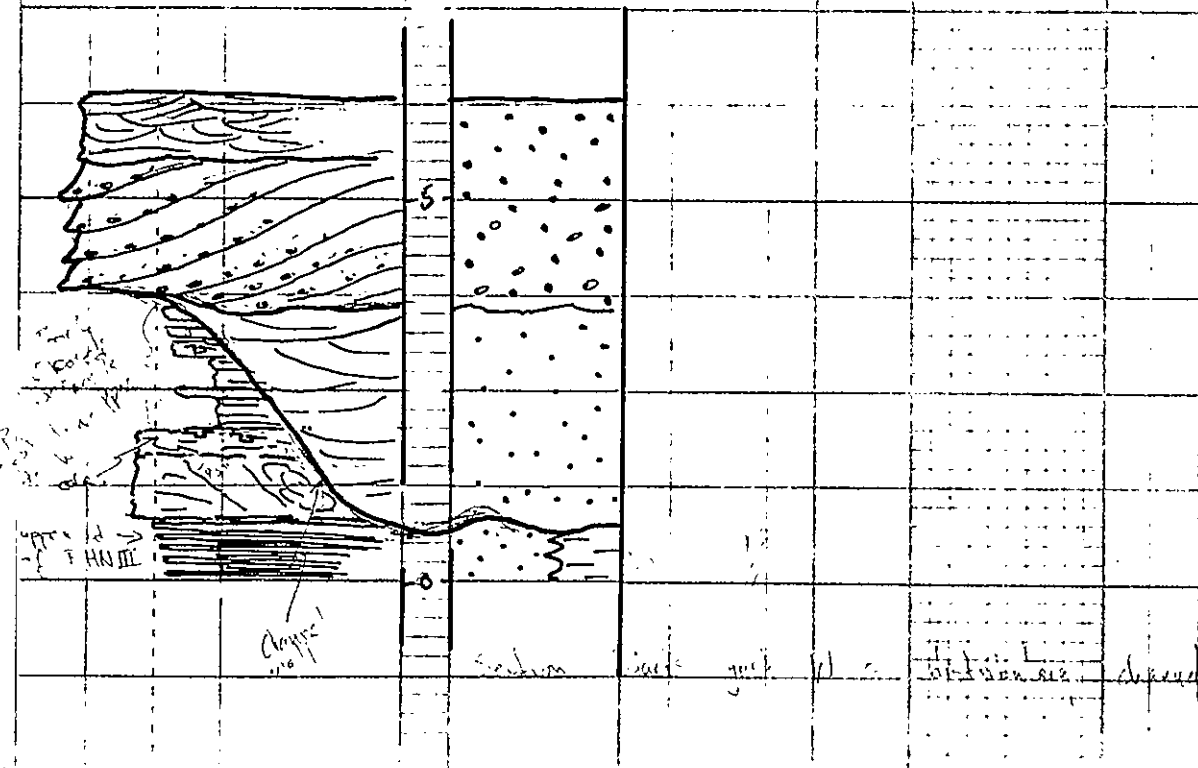
> 7m relief on top

very calcareous

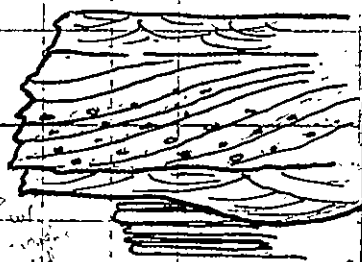
small ripple

Microcryst. Crs

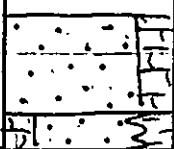
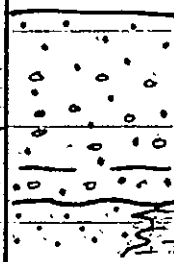
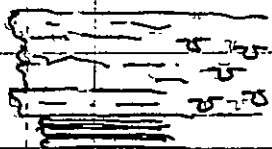
M.S. No. 36



M.S. No. 37

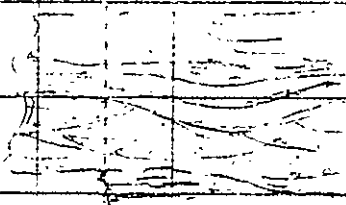


COVERED



eastward from base
filling

Section starts ~
8 m W of FHNJ!

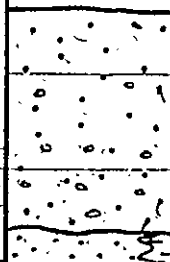
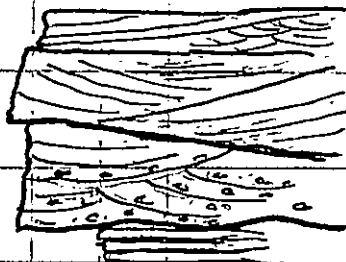


F.S. of ...

FHN VIII

Section ...

M.S. No. 38



125

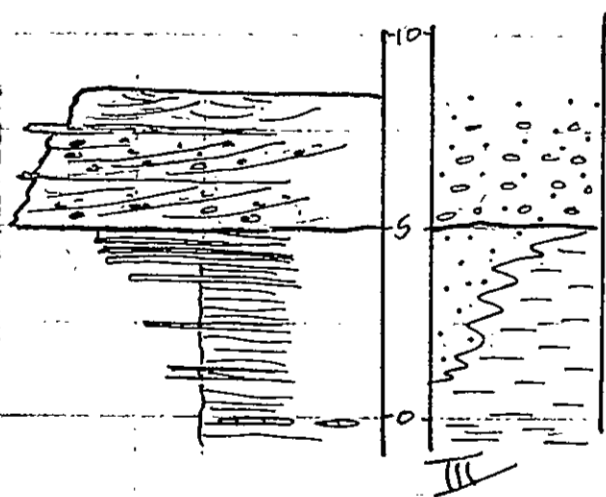
FHN VII

100 ...

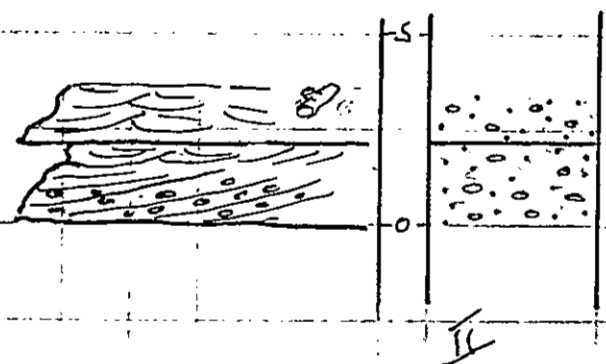
Section ...



M.S. No. 39



} M.S. No. 41



} M.S. No. 40

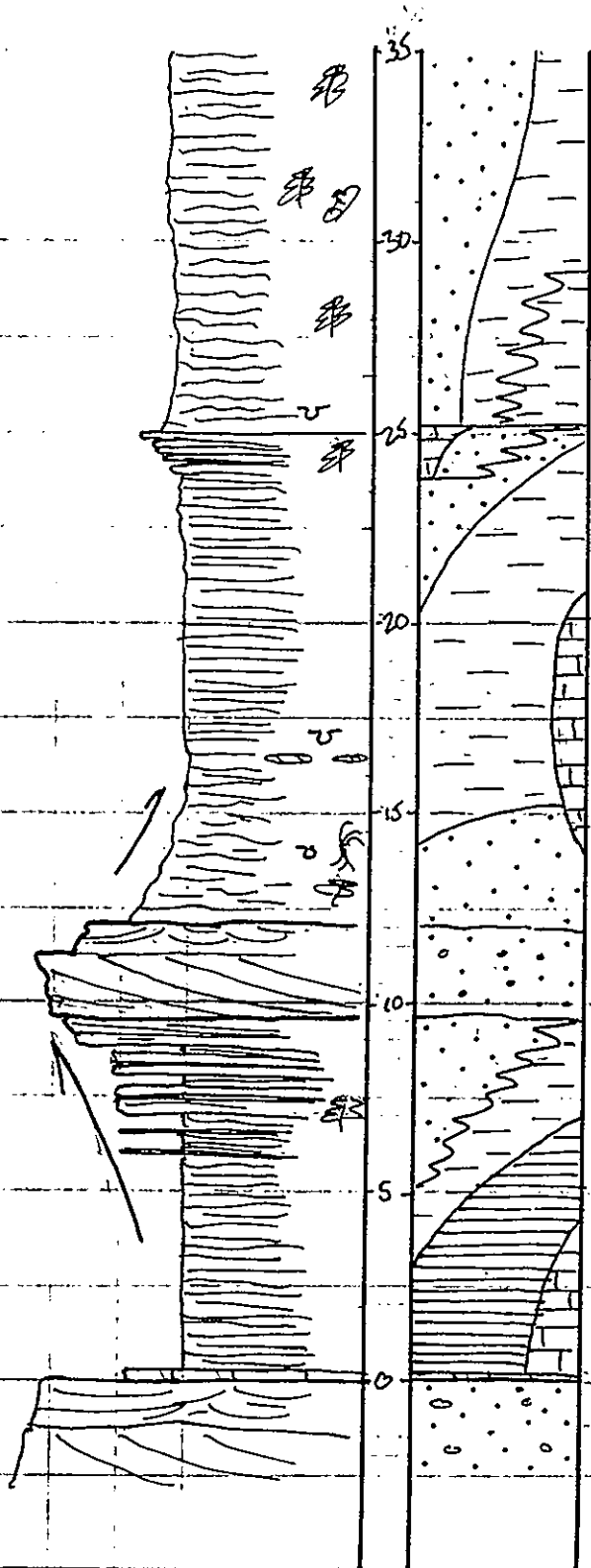
→

N. 50° W. 15°
S. 10° E. 15°
S. 10° W. 15°
S. 10° E. 15°

M. S. No. 42

PAGE 1

Ceph.
 Bivalves
 Brachs
 Crinoids
 Phylloid Algae
 Gast



4

44

4

44

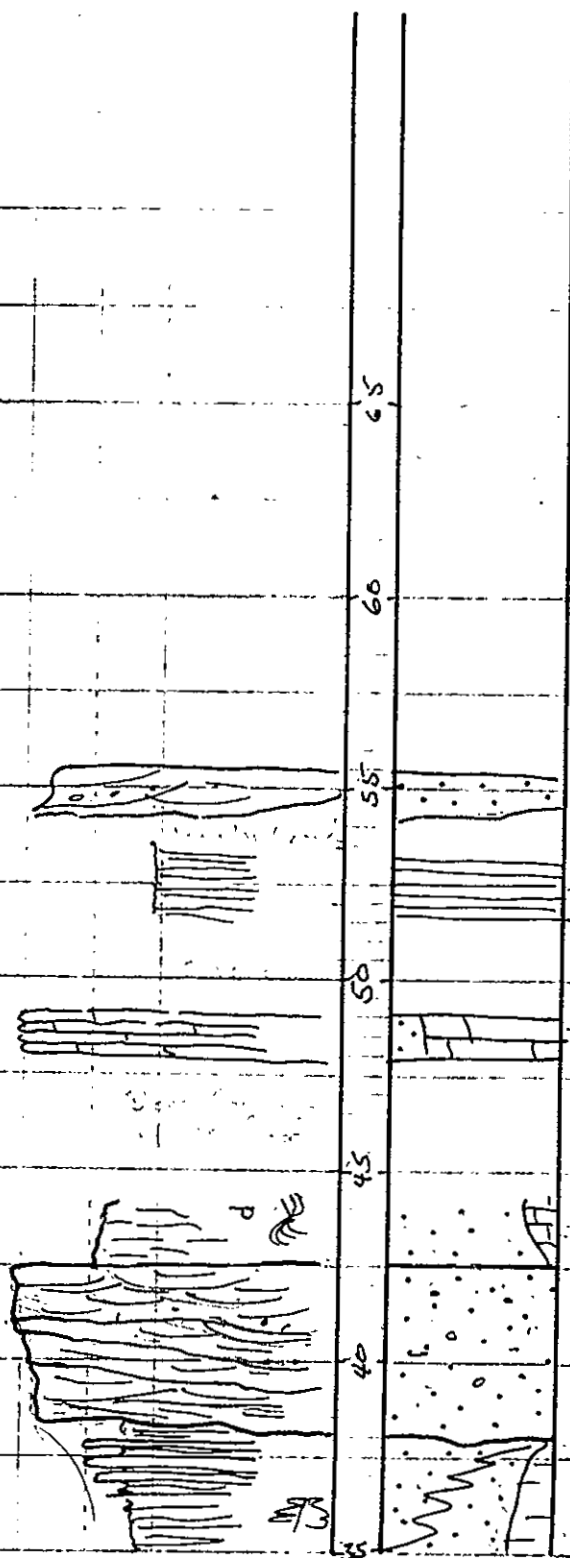
|||

|||

M.S. No. 42

PAGE 2

Brachys
Grinoids
Phylloid Algae
Gast.



MEASURED SECTION NO. _____

DATE

July 2 1977

LOCALITY E of Gauging Station Hwy 3 STRATIGRAPHIC UNIT _____SETTING Roadcut

MEASURED BY

JNC

STRATIGRAPHIC
UNITSEDIMENTARY
TEXT & STRUCT

CARBONATES

GRN. PK WKE MUDST

CLASTICS

100 90 60 0 % SAND

M.S. No. 43

BASIC
ROCK
TYPE

COLOR

AVE GN SIZE

TEXT

MAX

DEG BIOTURB

DIRECTIONAL

FEATURES

CARBONATE

COMPONENTS

FOSSILS

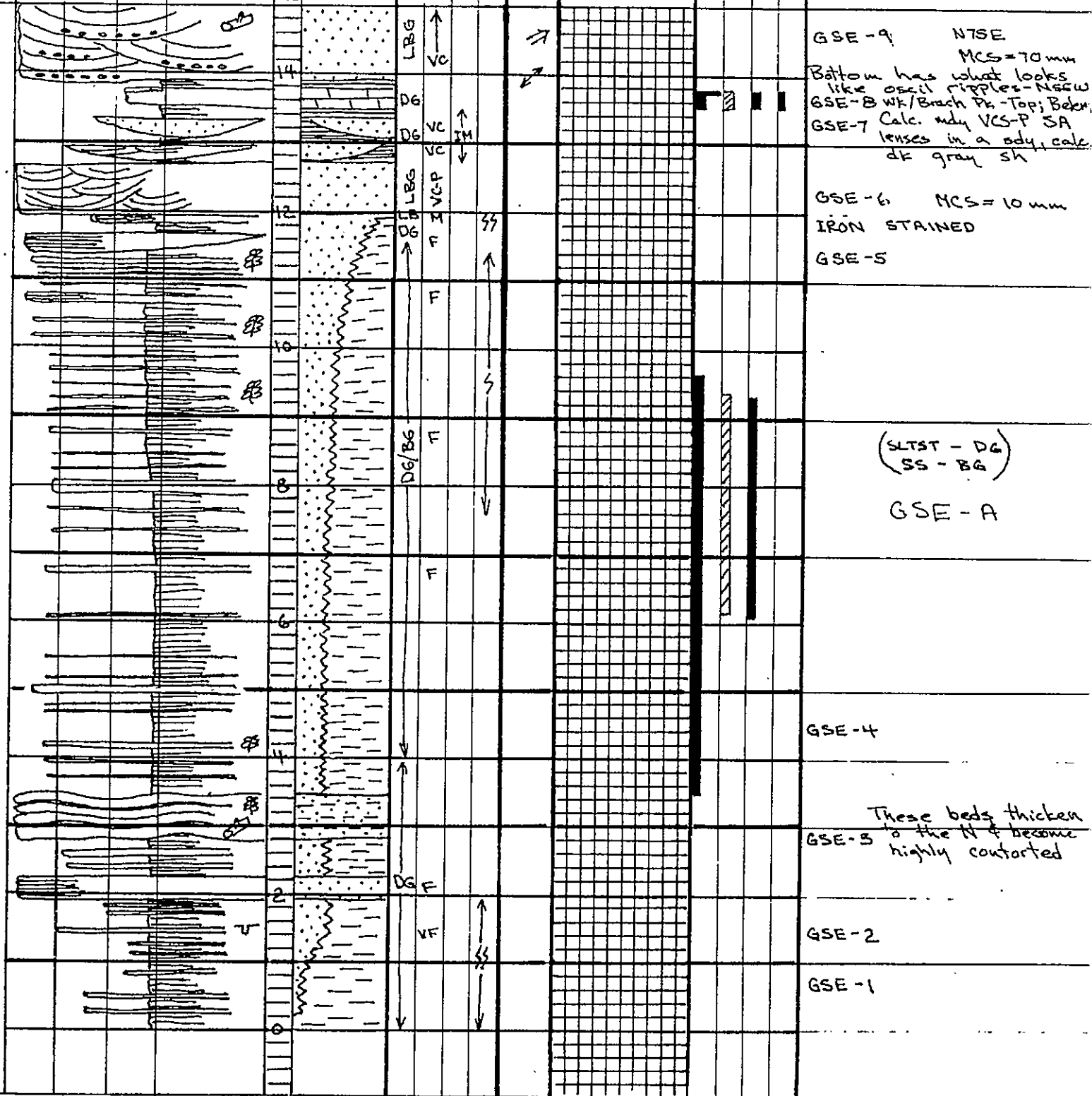
BRACHS

CRINIDS

GASTROPODS

PELECYPODS

COMMENTS



GSE

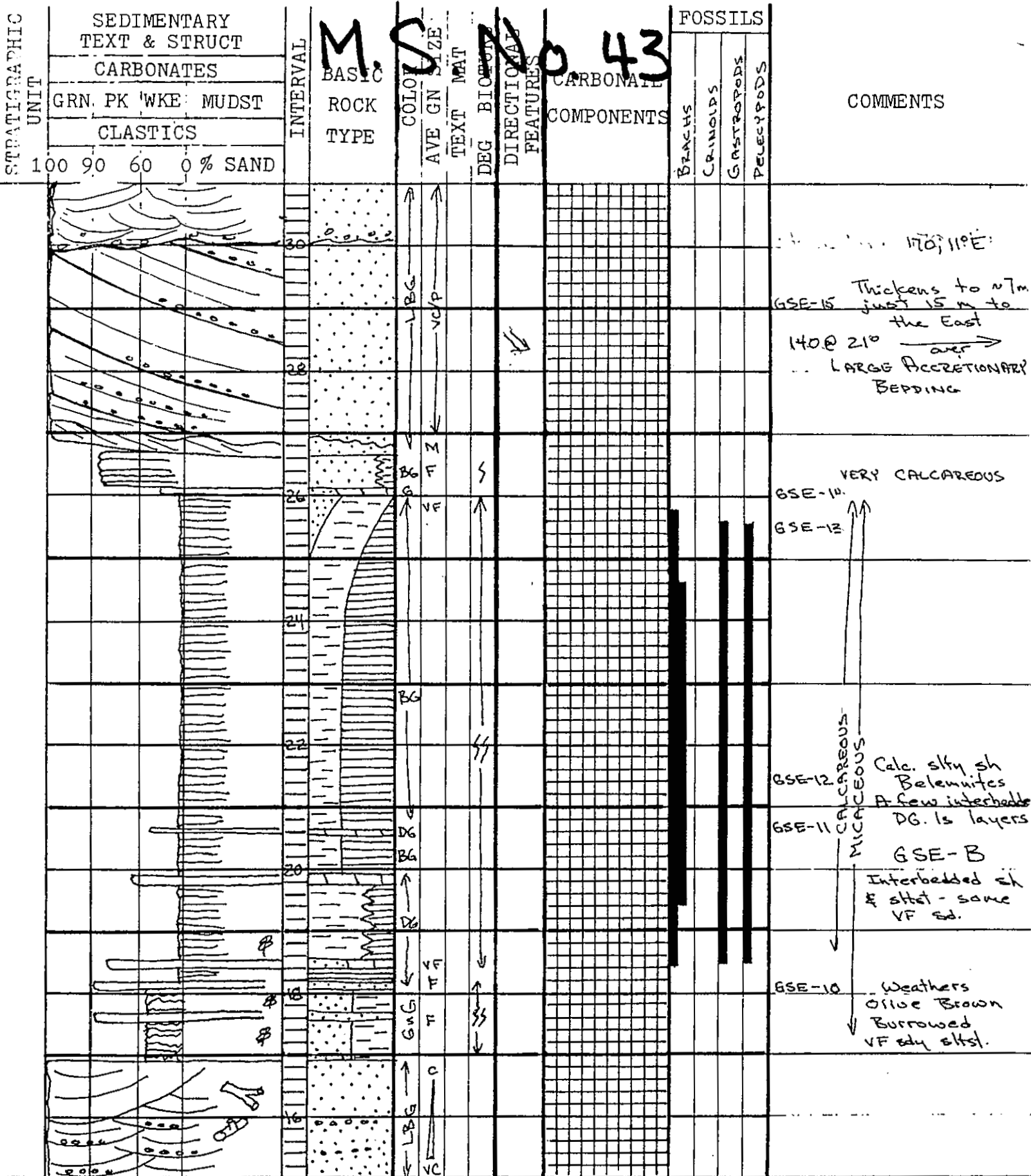
Page: 3

41

DATE _____

STRATIGRAPHIC UNIT _____

MEASURED BY _____



DATE _____

STRATIGRAPHIC UNIT _____

MEASURED BY _____

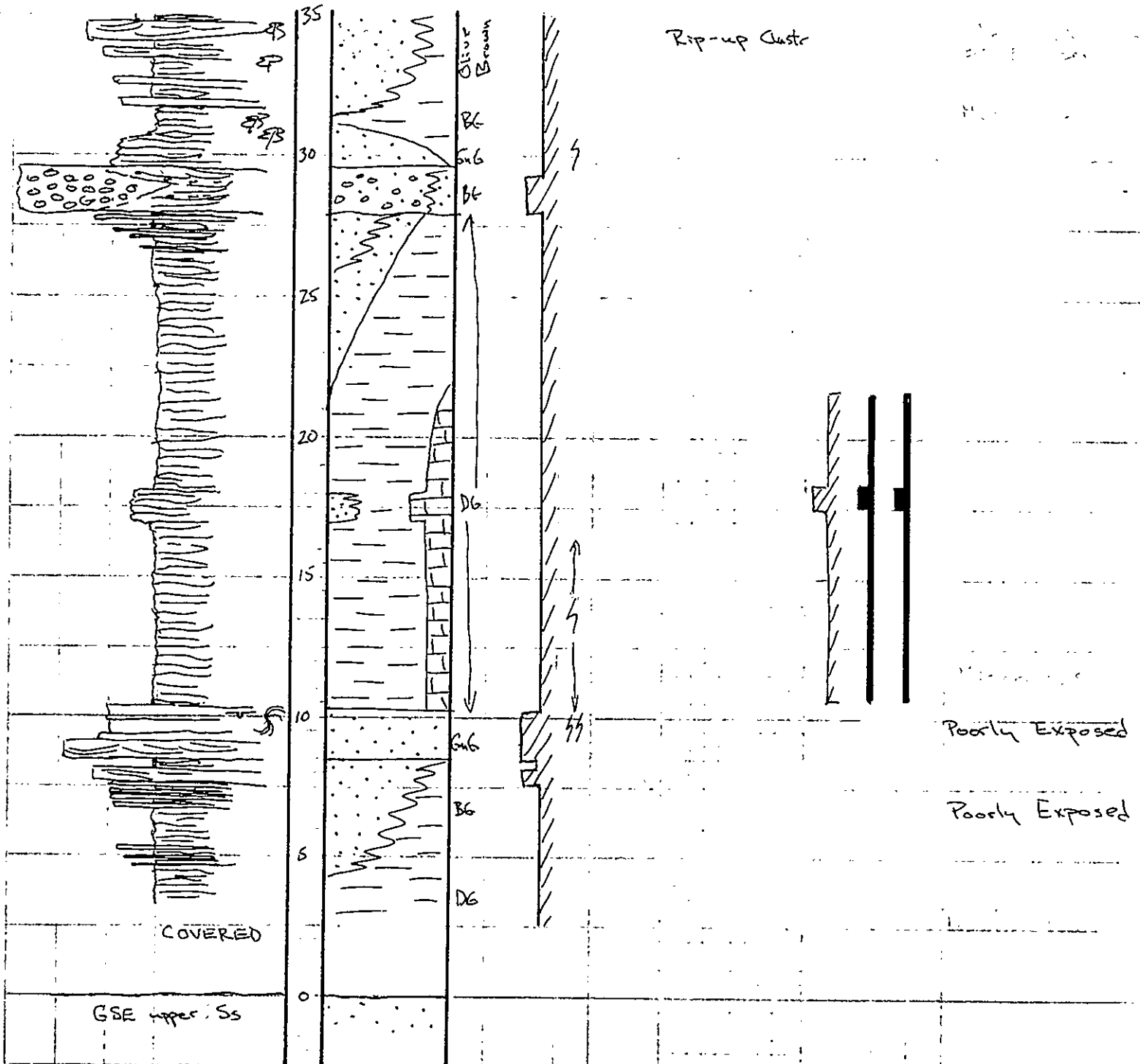
GSE

(3)

M.S. No. 44

PAGE 1

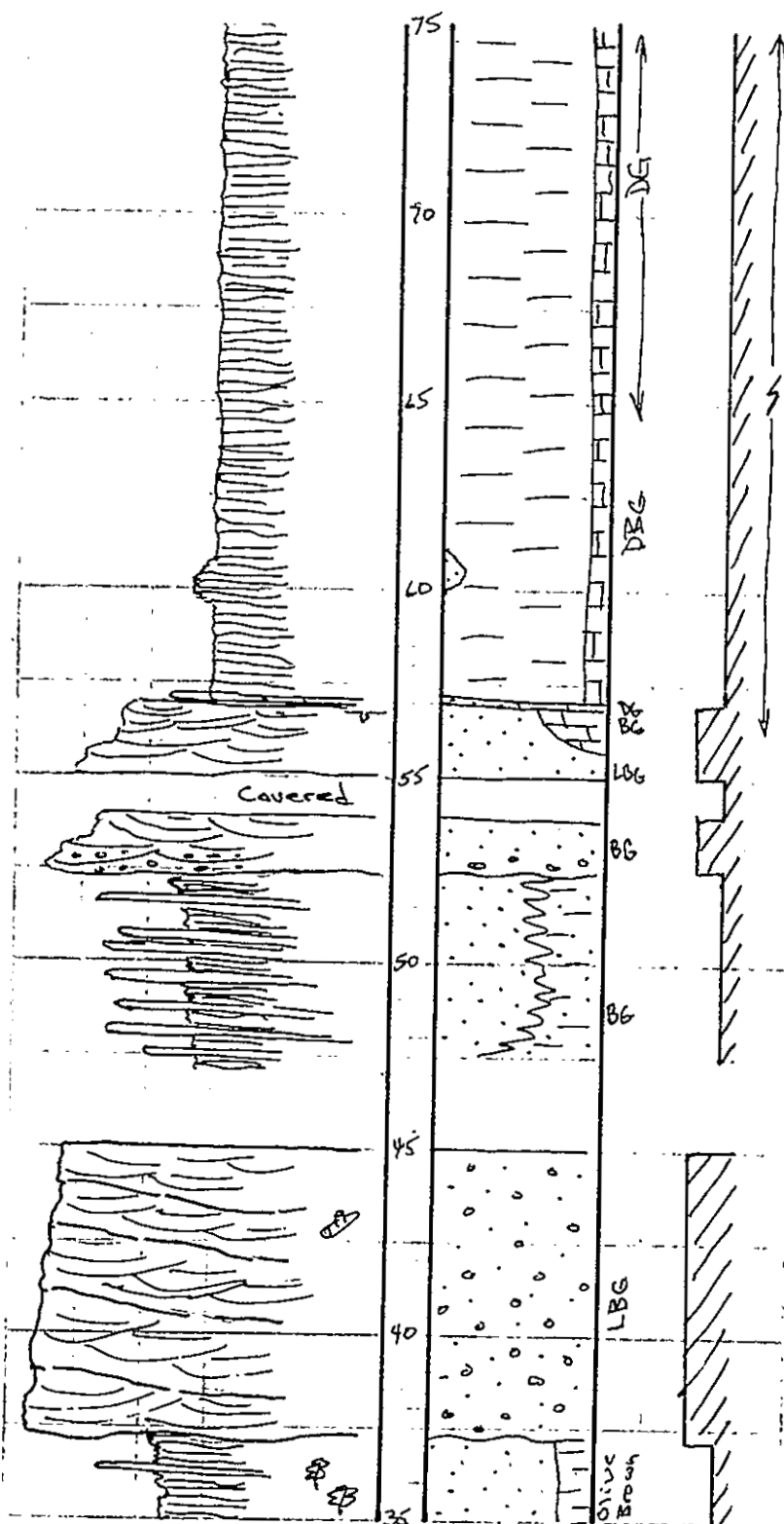
Crinoids
Gast
Brachs



(3)

M.S. No. 44

PAGE 2



A few Fossils

Micaceous

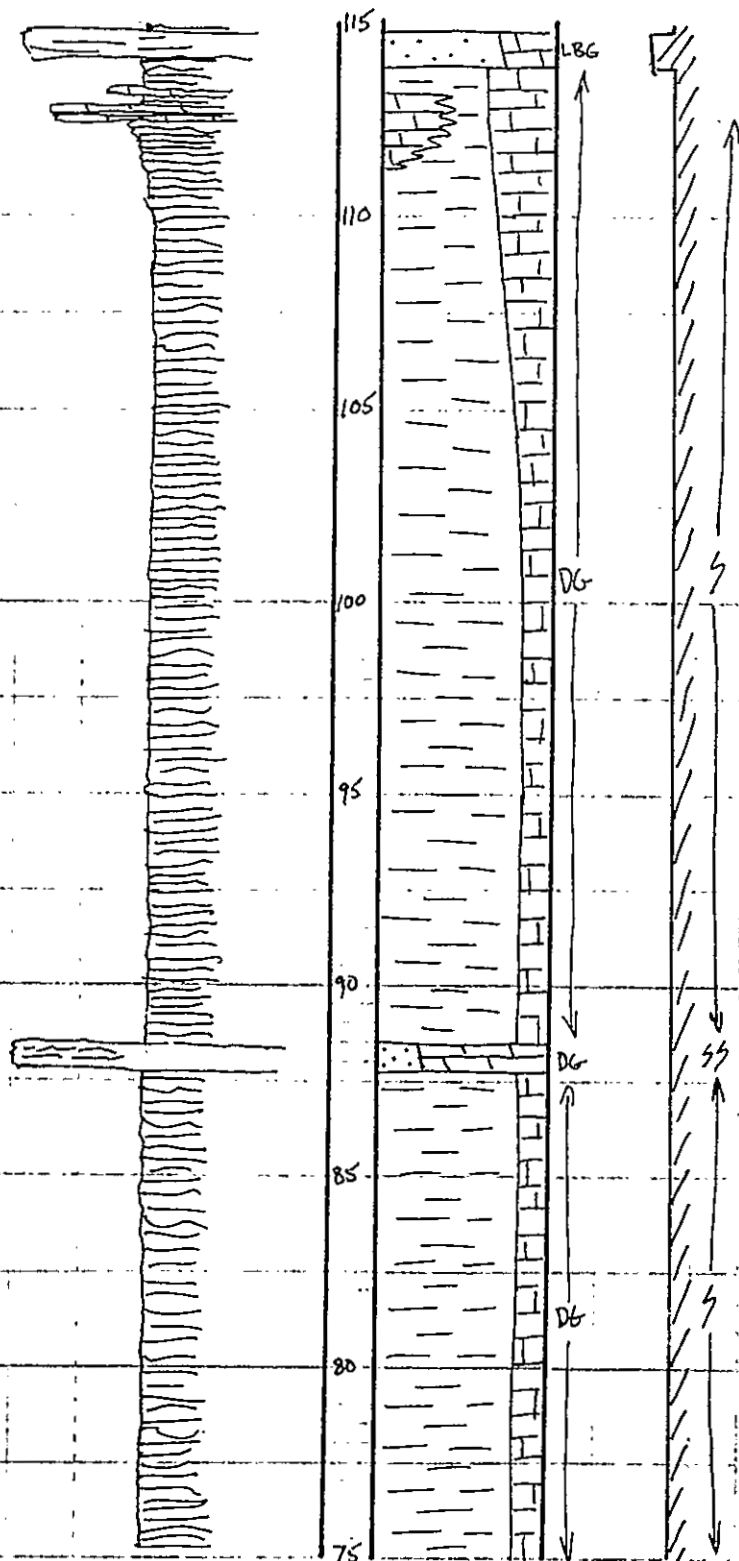
M. S. No. 44

PAGE 3

(M)

BRV
 CORAL
 REVER
 CRINOIDS
 GAST
 BRACH
 RHIZOID ALGAE

VC SS !



edge is weathered
 rust brown

M.S. No. 44

PAGE 4

Bry
Coral
Pel
Crinoids
Gast.
Brach
Phy. Algae

135

130

125

120

115

D6

W

D6

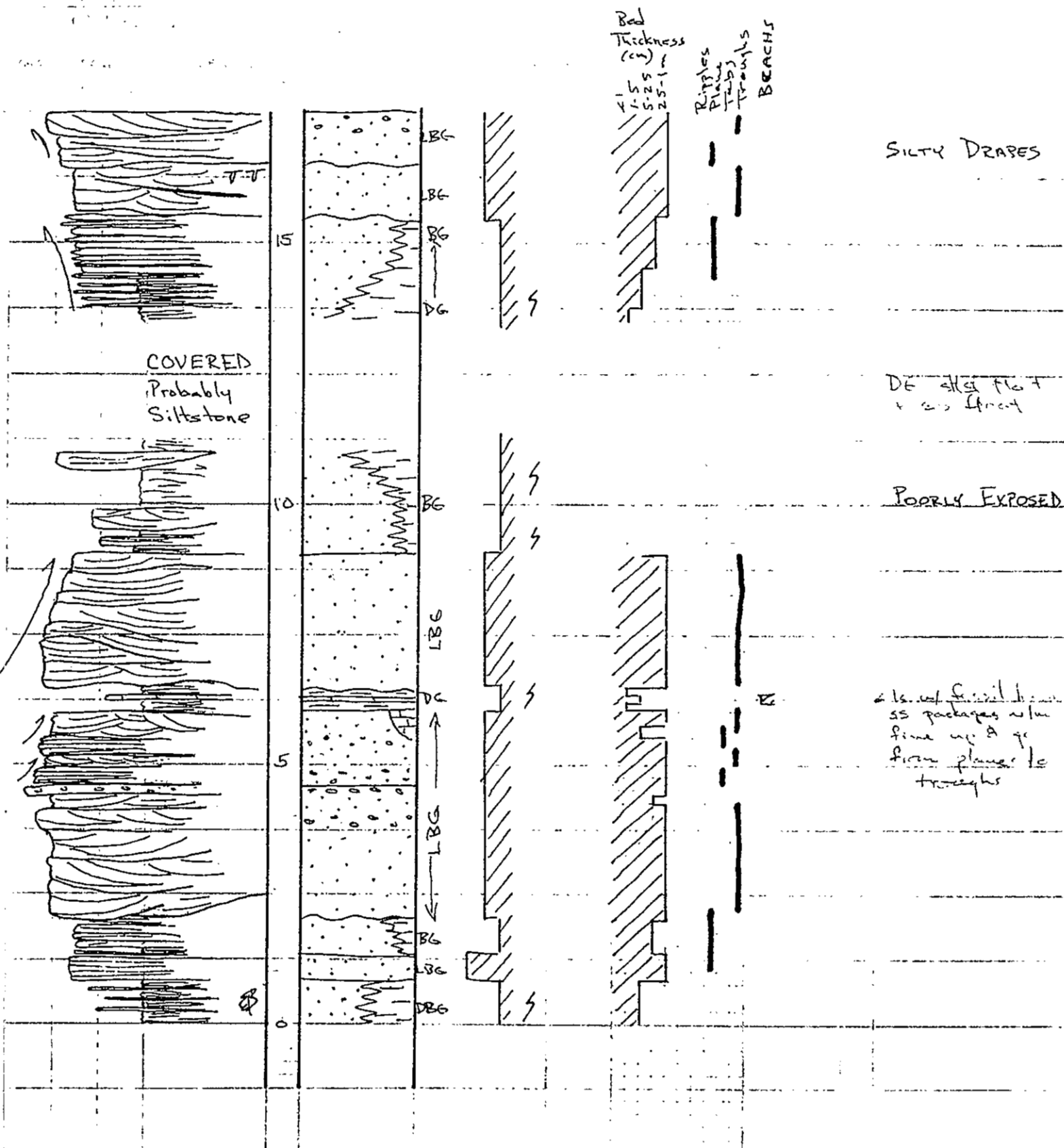
351

TOP OF FOSSIL
HILL← FUSULINIDS
IN SDR LS= Samples RTQ-3
RTQ-6

COVERED

M.S. No. 45

PAGE 1



Bed
Thickness
vis
vis
vis

M.S. No. 45

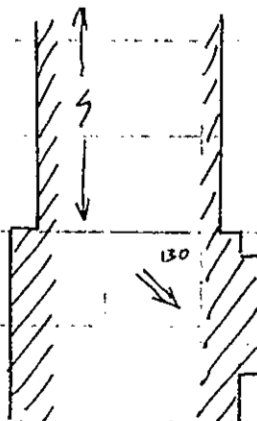
PAGE 2

25

20

BG

LBS

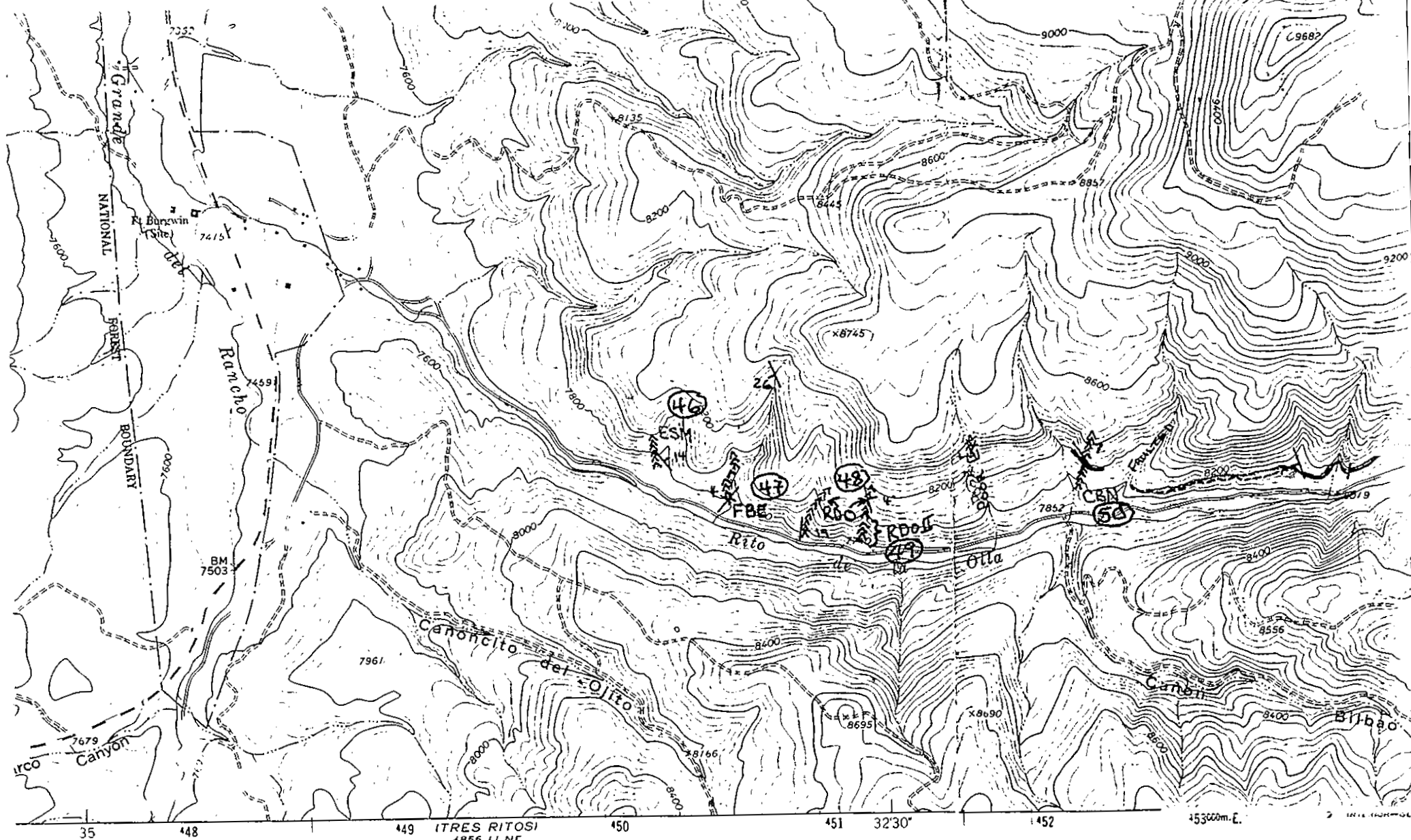


POORLY EXPOSED

FORESETS
Most beds
fine upwards

RITO DE LA OLLA
SECTIONS
(Forest Road 438)

MEASURED SECTIONS
46 THROUGH 50



RANCHOS DE TAOS, N. MEX.

N3615 W10°40'25"

1964

AMS 48° 10' SE - SERIES ---

Heavy-duty.

Medium-duty.

U.S.

R.

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U.S. GEOLOGICAL SURVEY, GENEVA, CALIFORNIA 94501 OR WASHINGTON, D.C. 20540

ESM

Gully off FR 438

May 27, 1978

JMC

M.S. No. 46

PAGE 1

BRACHS
PELEC
CRINOIDS

MICACEOUS
CALCAREOUS

occasional HPT
chert up to 8cm

MICACEOUS

lot of these in thin
impure nod. to
Calcarenous
avg about 1/4 ft

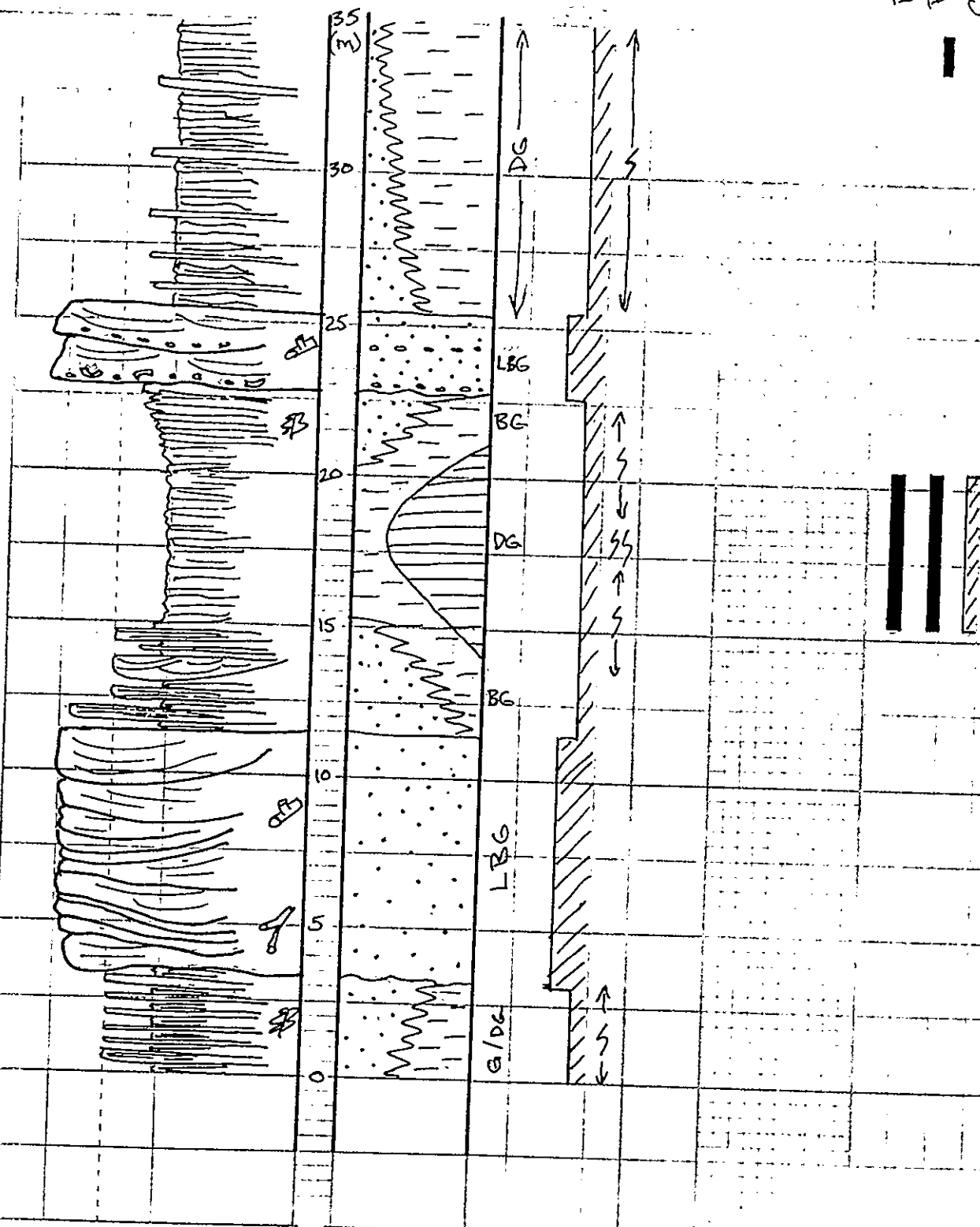
lenses of thin
beds of chert

large zones of
fill

CALCAREOUS

calc. nodules
very common

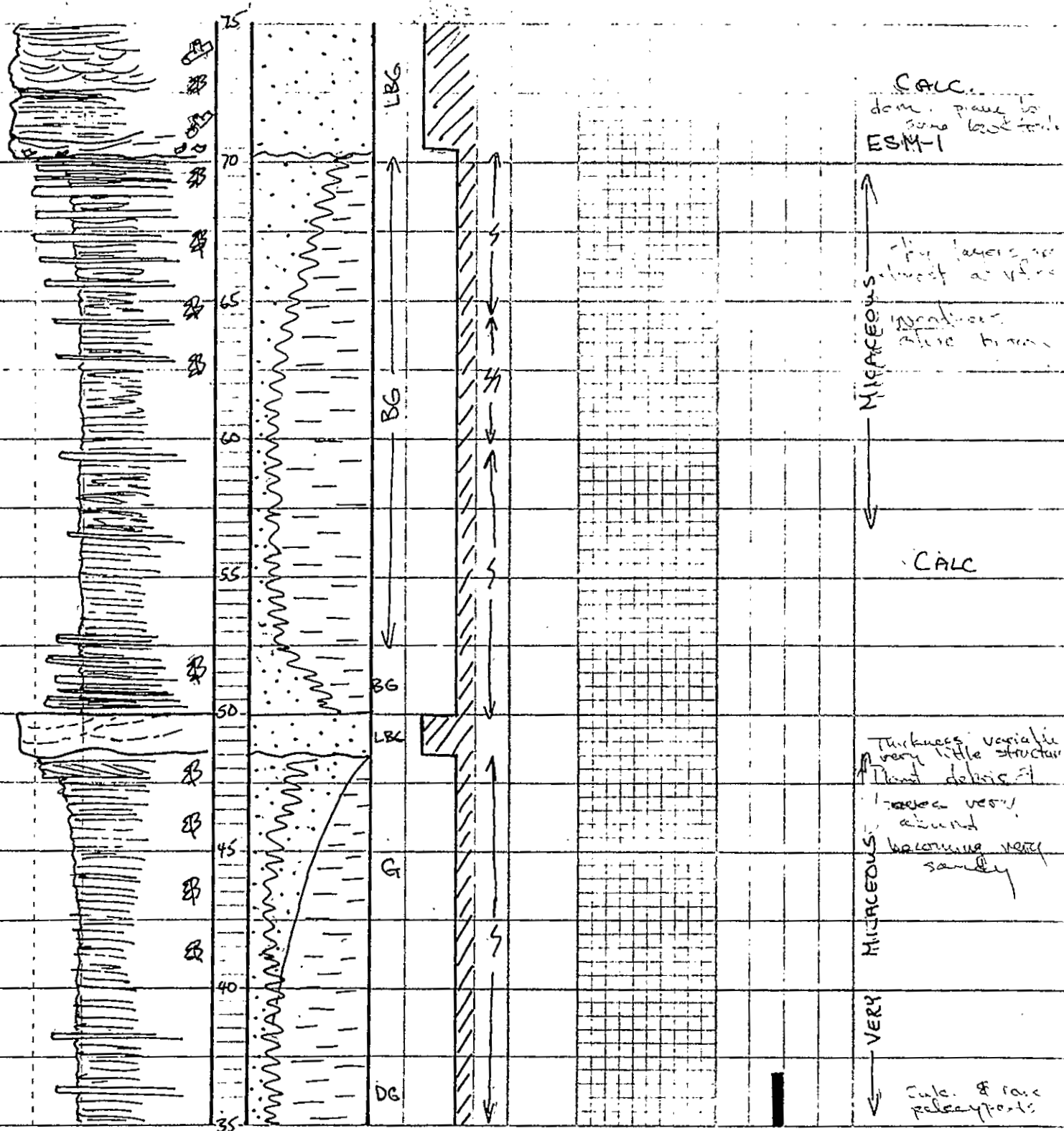
gray and ss, calc
in chert, interbedded with
dk gray micc, calc
siltst



May 27, '78
JMC

M.S. No. 46

PAGE 2

BRACHS
PELEC
CRINOIDS

ADDRESS
CITY
STATE
ZIP

M. S. NO. 46

PAGE 3

10

110

105

100

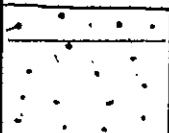
95

90

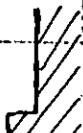
85

80

75



LBG



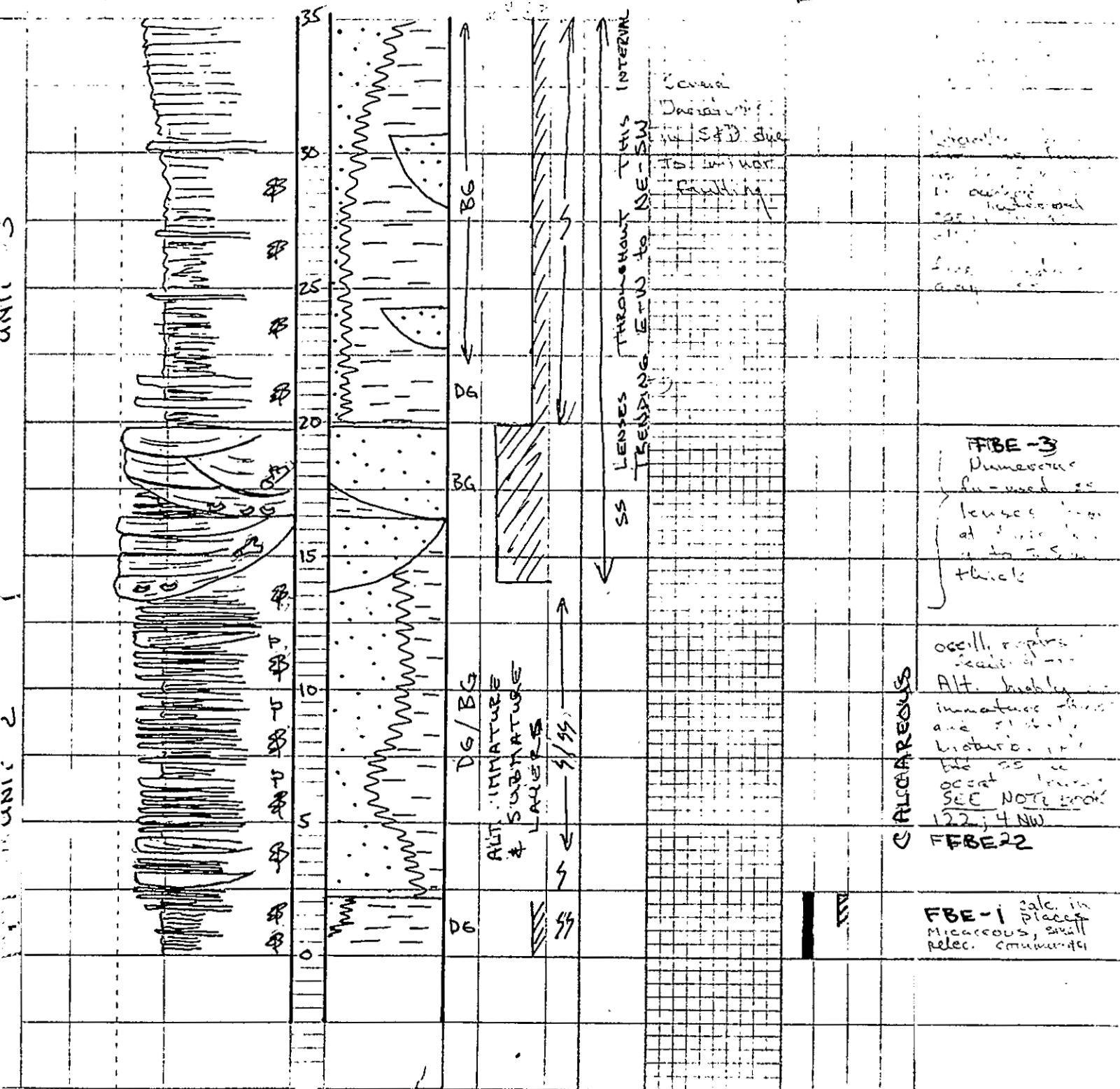
Section disrupted
by numerous
small faults

May 20, 1978
Sandra
Casey

M.S. No. 47

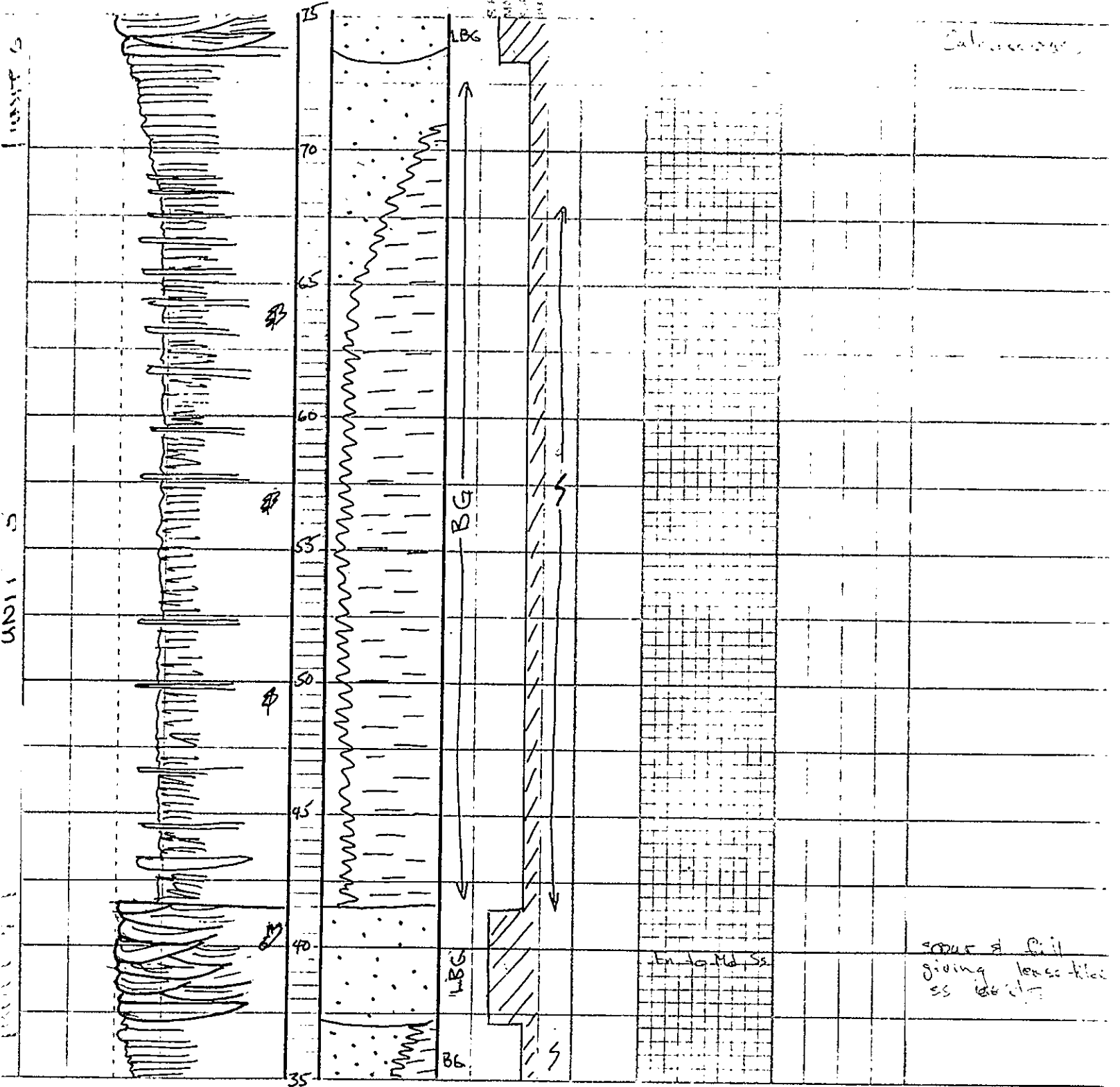
PAGE 1

PELEC
GAST



M.S. NO. 47

PAGE 2

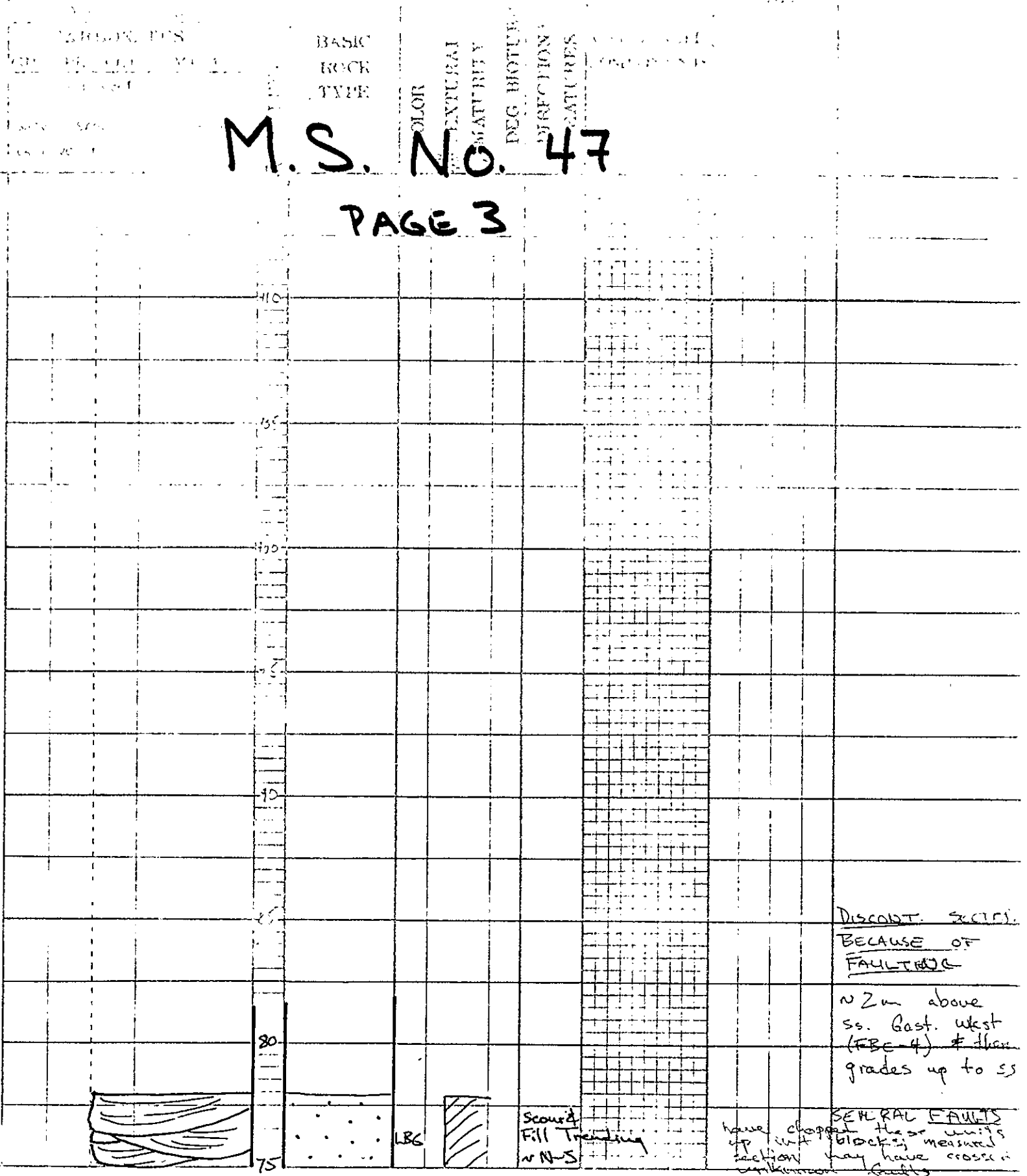


Forest Rd FBE
438

May 20, 1978
Section

M.S. NO. 47

PAGE 3



DISCONT. SECT.
BECAUSE OF
FAULTING

N 2m above
ss. Gast. west
(FBE-4) # then
grades up to ss

Scour &
Fill Trenching
~ N-S

LBG

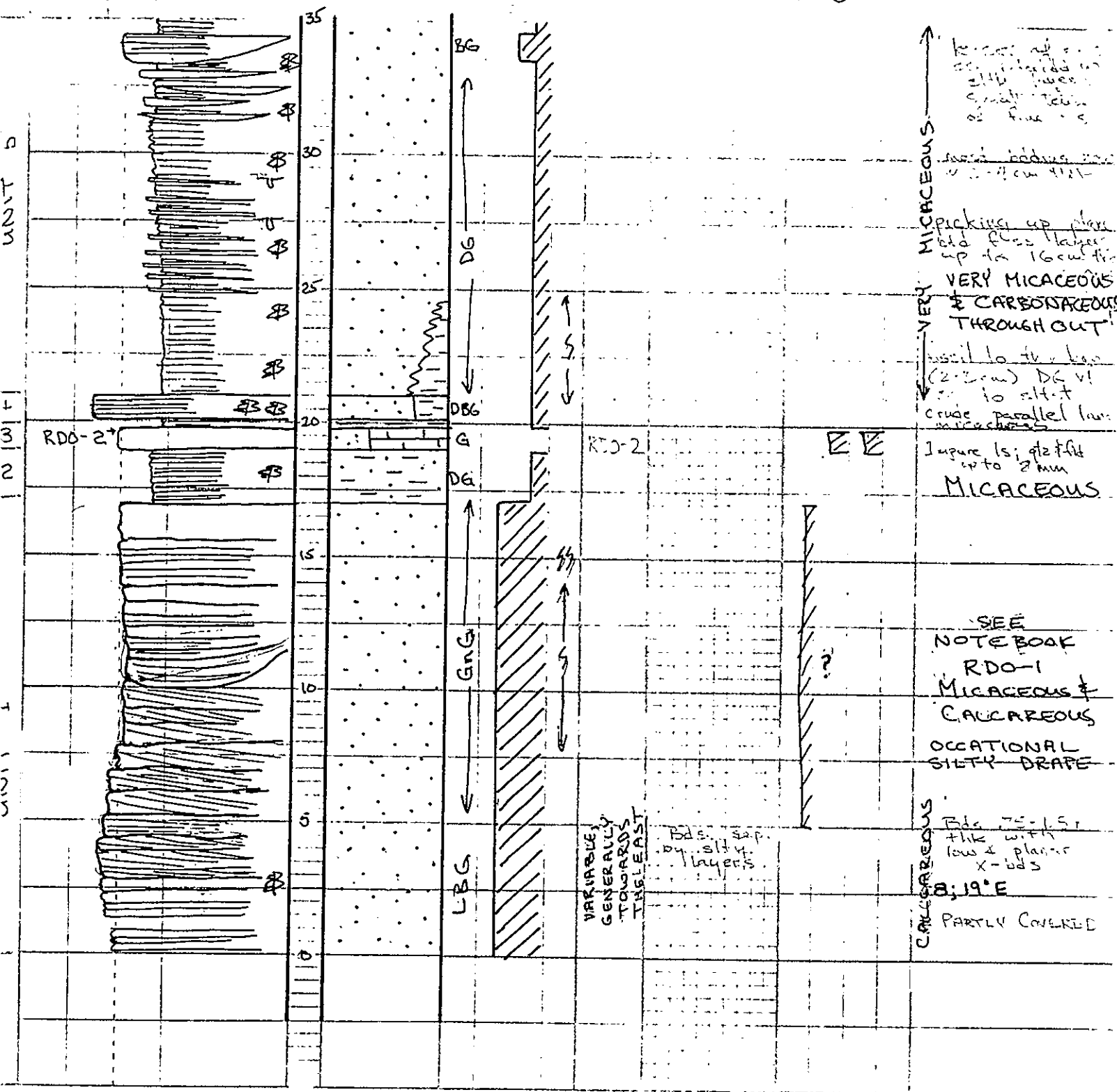
SEVERAL FAULTS
have chopped these units
up into blocks; measured
section may have crossed
unknown faults

7

May 29, 1978
JMC

PAGE 1

BRACHS
CRIBBDS
CORAL (HORN)



M.S. No 48

PAGE 2

COVERED

In next gully
to the E
can see
nice crenulating
up trend.

MICACEOUS

very calc
fine ss and
shy alt.

CALC & MICA.

SECTION NOW
STARTS UP E
SIDE OF GULLY

CALC

Some sand & silt
down troughs
some tabs to
planar beds
large silted
to N w/ rip-up
clasts & gravel
lag; white felt
up to 4 cm
Rip-up clasts

RDO-3

Thickness
may be wrong! ?!Some shaly
bioturbated
layers

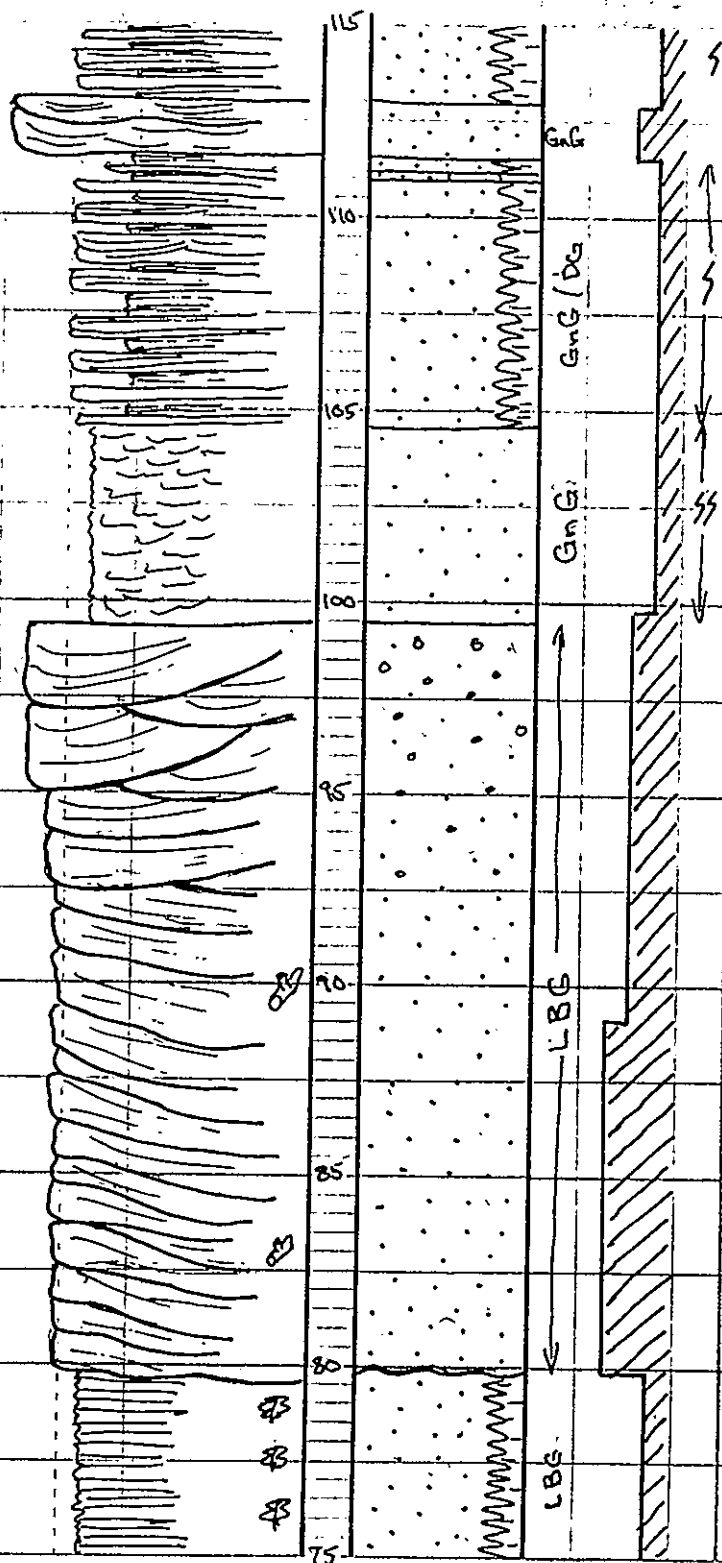
MICACEOUS

RDO

May 29
JMC

M.S. No 48

PAGE 3



RDO-44

very impure ls
ss bds up to
1.5m thick w/
sharp bases
& often bioturb.
in upper part
SECTION SHIFTS
TO GULLY TO
THE EAST

micaceous, bioturb.
fine to med ss
crude X-bedding-
bioturb. X-bedding

MCS = 4cm

large scour &
fill

crsens upward

CALCAREOUS

Account Bldg
to the SE

EROSIONAL

MICACEOUS
CALCAREOUS
CARBONACEOUS
Thin bdd (2-4")

RDO

May 29
JMC

M.S. No. 48

PAGE 4

CRINOIDS

PELECK

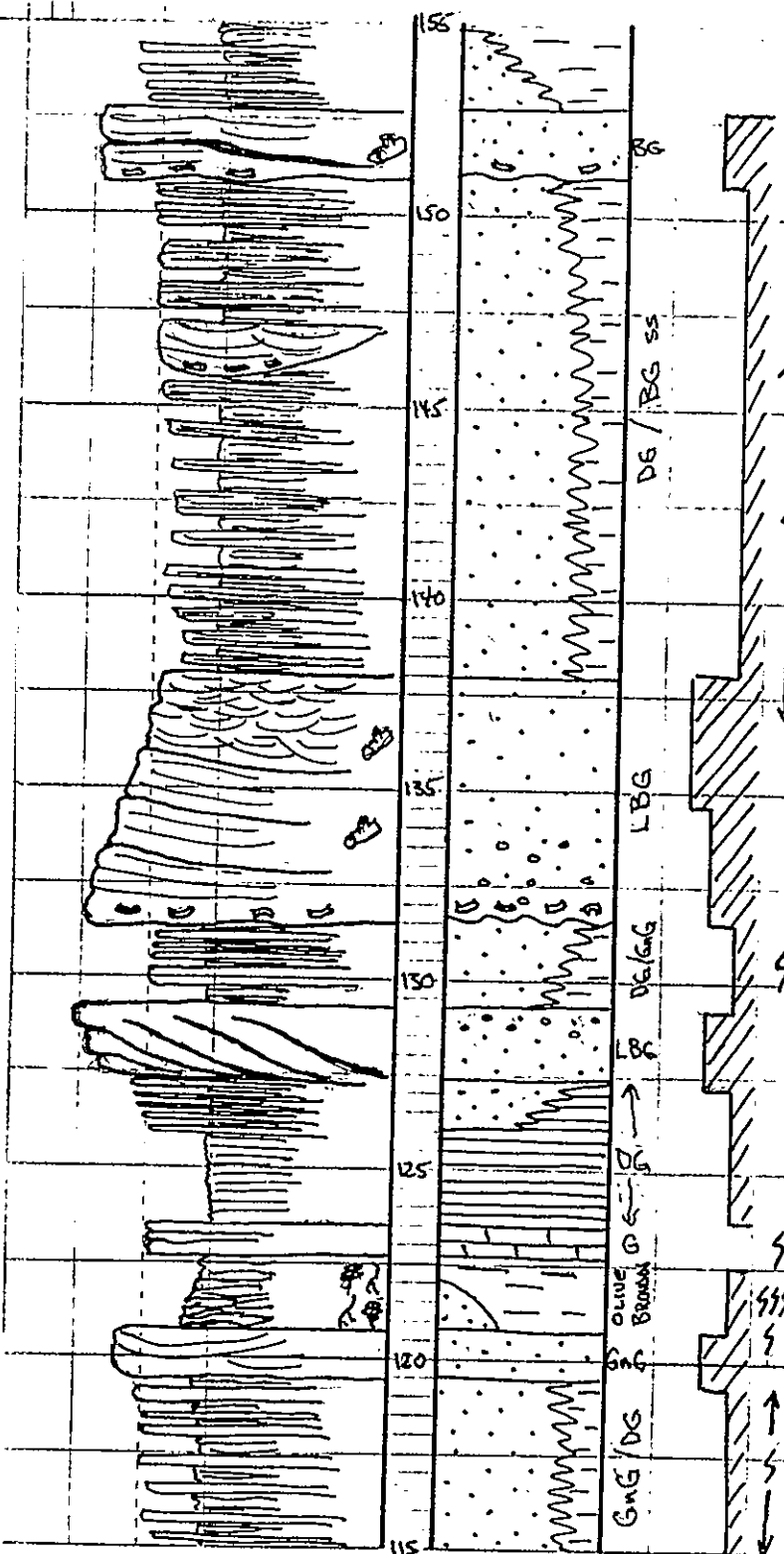
THIS GRADES
UP INTO SLTST
AT BASE OF CBN
165: 4° NE
lines 1-100 in
middle low & accreted
bedding
Fluvial beds in
thin & X-beds

Bedding becomes
more distinct
upward

Laterally there
are some
scour & fill channels
up to 2m deep
w/ VC sed.

Zip-up clasts 12cm
dips 30° to 45°
accret. bedding w/
fine drapes which
die out upwards

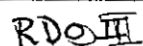
RDO-5 also taller
just



M.S. No. 49
PAGE 1

INTERVAL	BASIC	NO	40
	TYPE	COLOR	DIRECTOR
PAGE	TEXTURE	MAJORITY	FEATURES

DEG. MOTURN
DIRECTOR
FEATURES



M.S. No 49

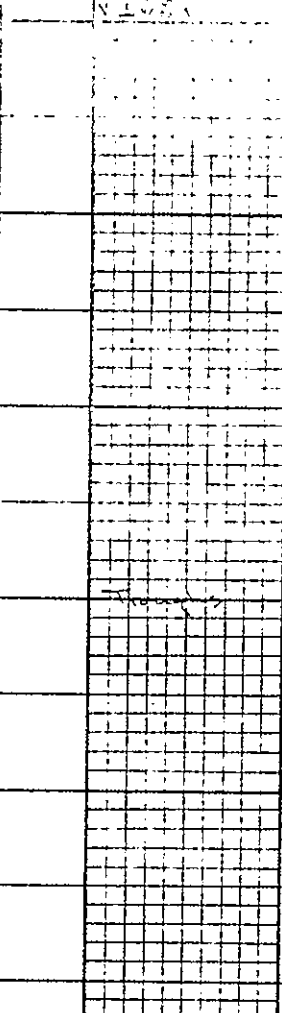
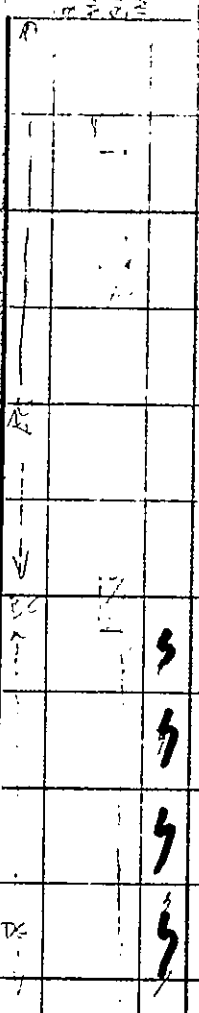
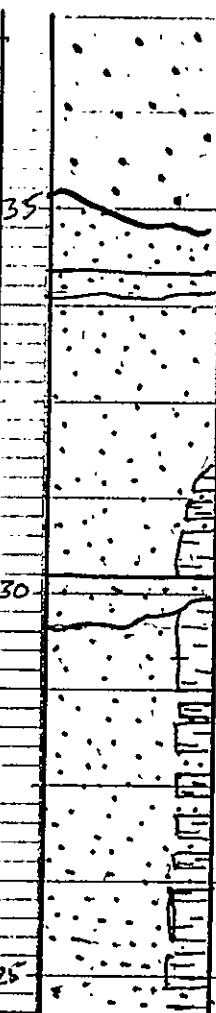
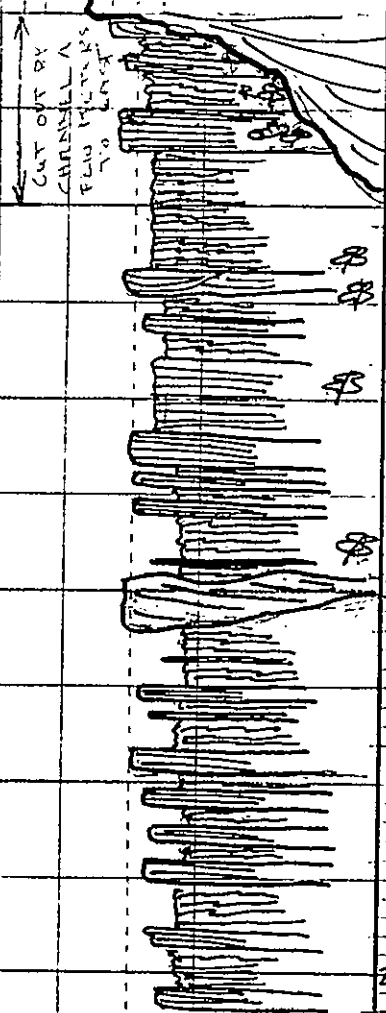
PAGE 2

SEDIMENTARY
 TEXTURE
 CARBONATES
 GRN PE WFF M. OSH
 CLASTICS

FOSSILS

GRN PE WFF M. OSH

CLASTICS



Chert
 Changing back & forth
 between planes
 & ripples
 All planes & ripples
 Micaceous
 and for top when
 intersected
 Trenches out to E
 Five layers are
 plane bedded
 Above are plane in
 220; 7 E
 Micaceous
 in places

COVERED

LOCALITY

DATE
TIME
UNIT
FIELD NO.

SPERMATOPHYTES
ANGIOSPERMS
CARBONATES
GRN PR WEL
CLASTICS

M.S. No. 49

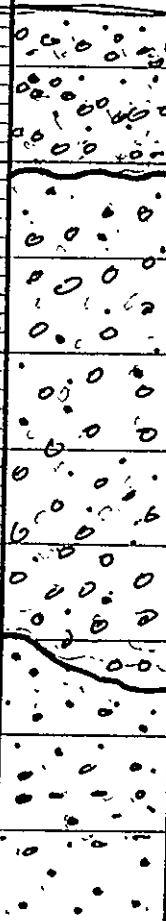
FOSSILS

CPAV SAND
64.4 VCC M. FLE

BASIC
ROCK
TYPE

CO
TECTURAL
MAJORITY
DEFORMATION
DIRECTIONAL
FEATURES

INTERVAL



50
45
40

↑
S. var green ss

Acute Bedding

bedded w/ gravels
contorted bedding
locally

logs S85E
S65E

DATE 3-1-51

CBN

May 27, 1978

JMC

M.S. No. 50

PAGE 1

PELEG.

SECTION 1
100' x 100' x 100'
AD. WASTES
GRN. PL. ALP. 100'
CL. 100'

BASE
RPT.
TYPE

COLOR

TEXTURE

STRUCTURE

COMPOSITION

MINERALOGY

PALEONTOLOGY

GEOPHYSICS

GEOCHEMISTRY

ISOTOPES

ENVIRONMENTAL

RESEARCH

TECHNOLOGY

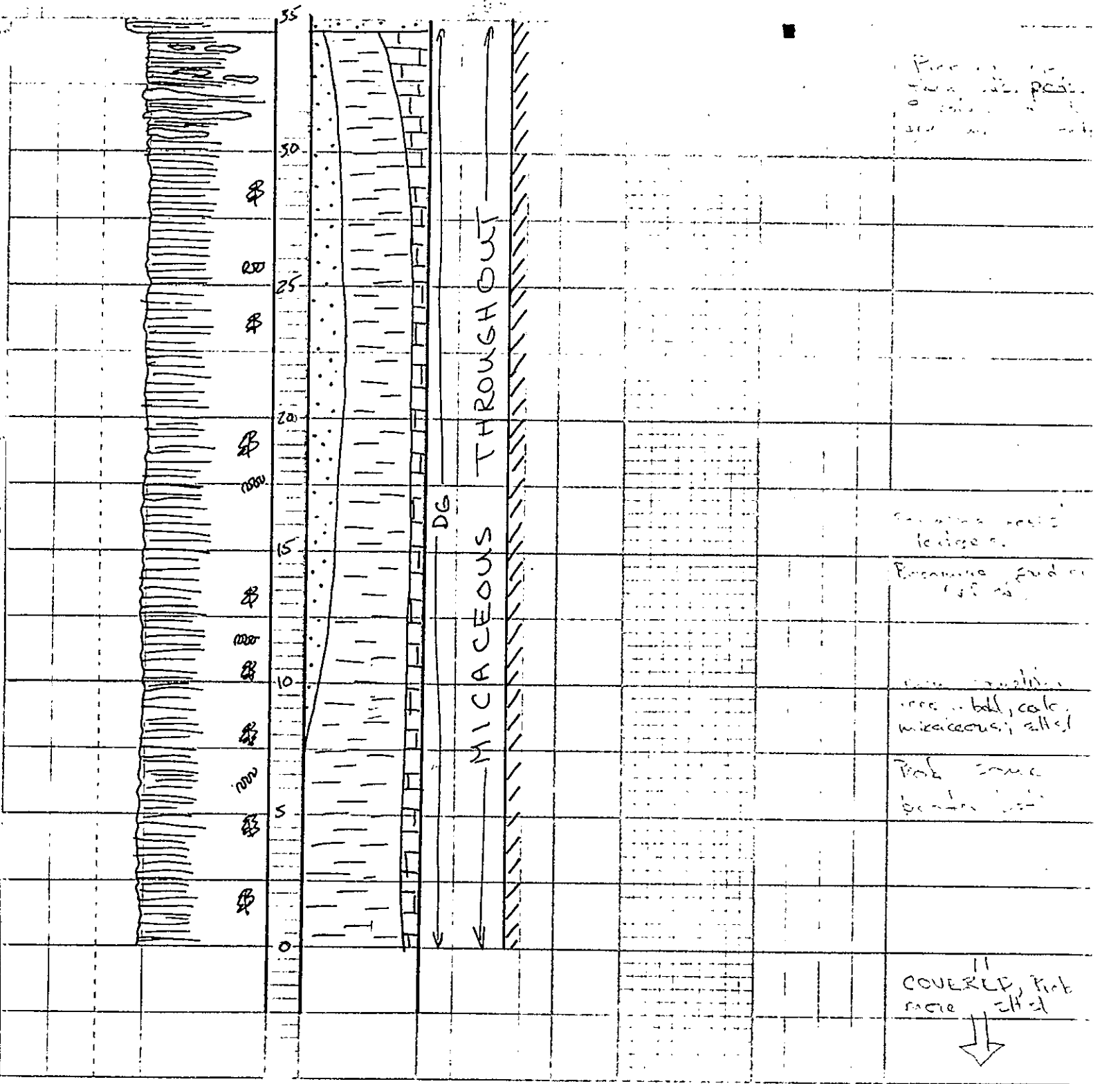
INDUSTRY

AGRICULTURE

MINING

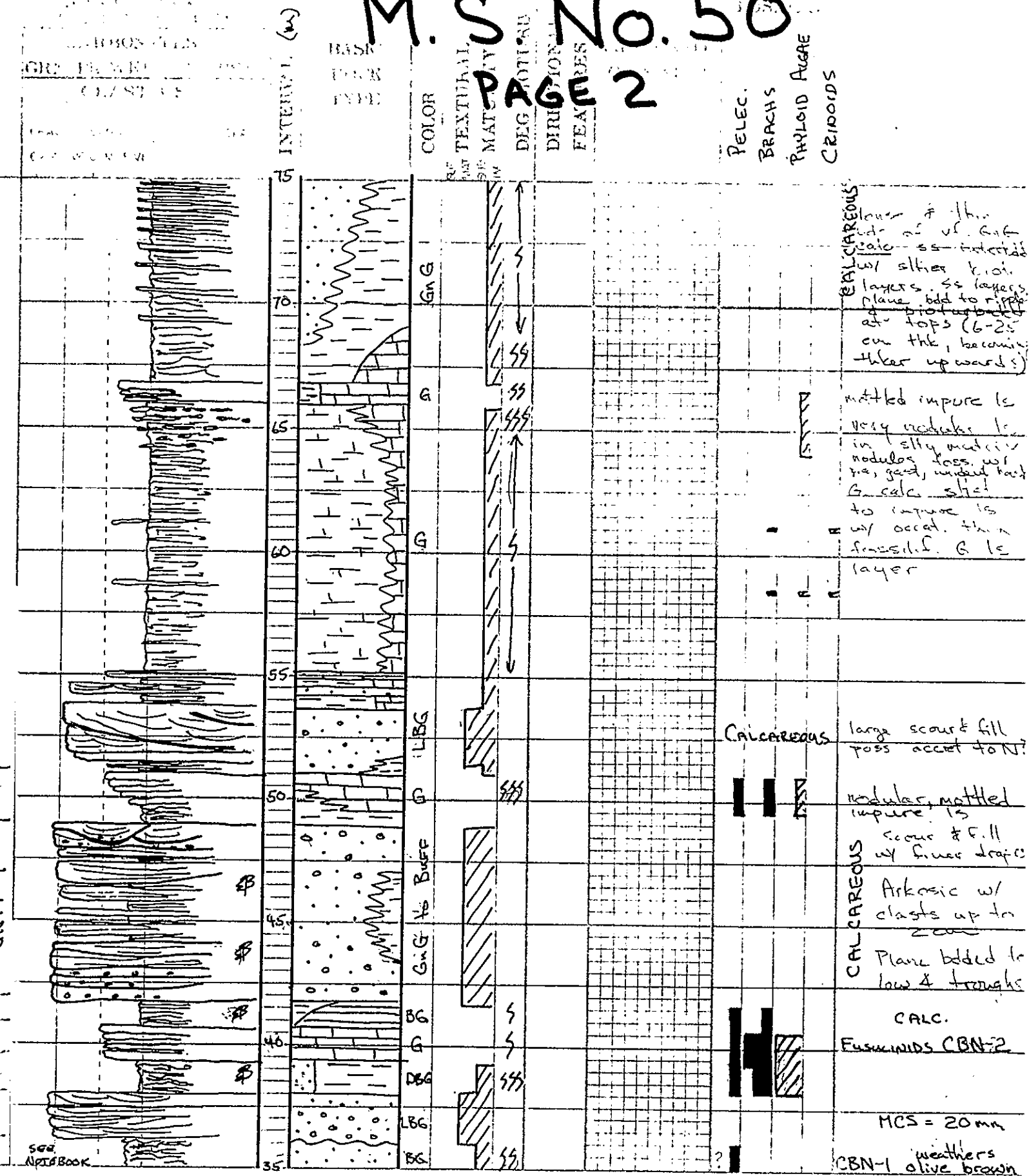
CONSTRUCTION

TRANSPORTATION



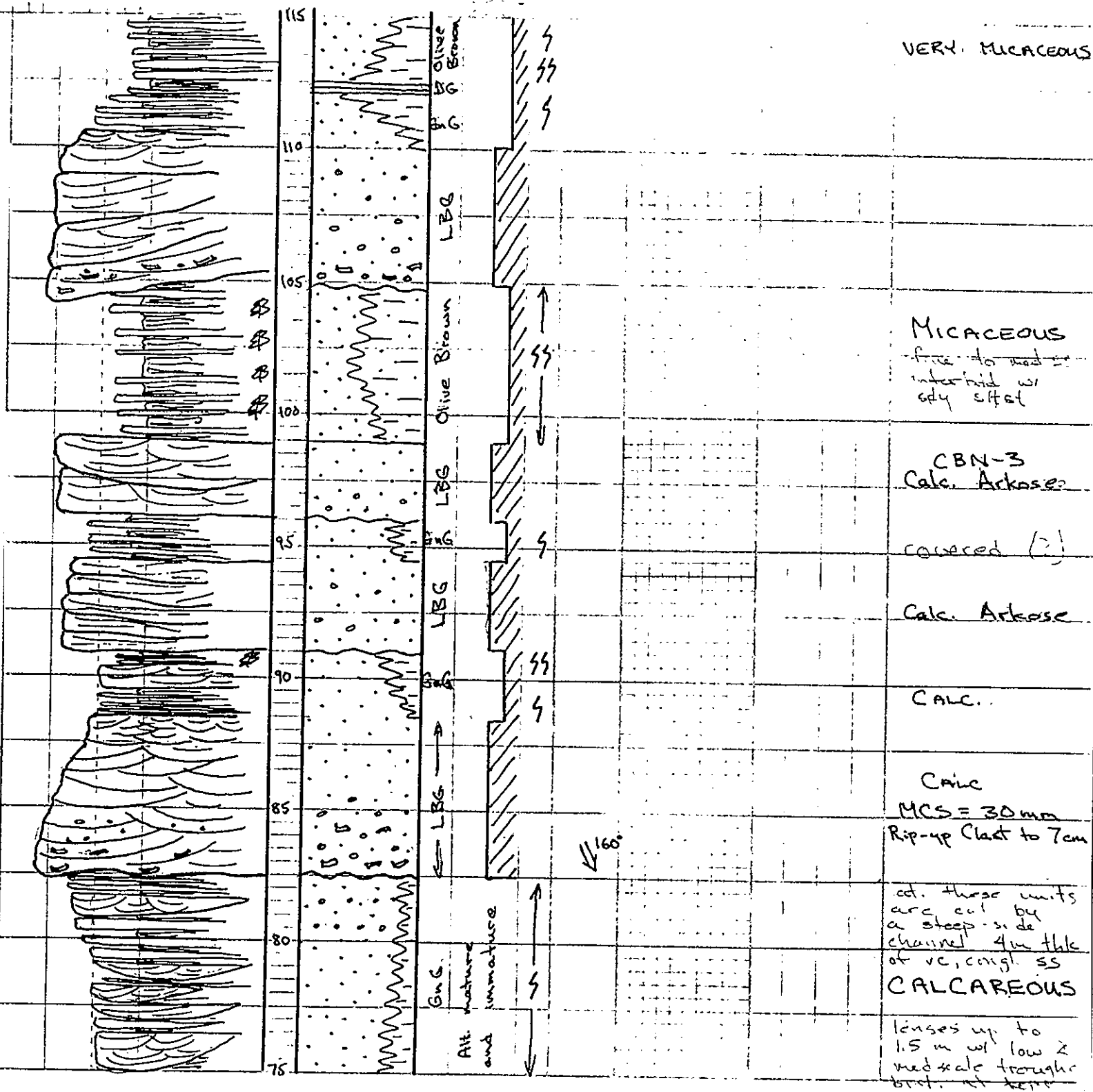
M. S. No. 50
PAGE 2

PELEC.
BRACHS
PHYLOID ACUAE
CERIPORDS



SEMI-ANNUAL
FERTILIZER
CARBONATES
GRN PK WBL
CLASTOS
GRAY SAND
64.4 VCC P. 11

③ M.S. No. 50
PAGE 3



M.S. No. 50

PAGE 4

BASIC
UNIT
TYPE

COLOR

TEXTURAL

MAINT

DESCRIPTION

DIRECTIONAL

FEATURES

155

150

145

140

135

130

125

120

115

Becomes vc &
conglomeratePOORLY
EXPOSED
TO TOP
OF HILL
at least 40
more metersPoorly Exposed
fin to med ss
w/ thin bdy,
low & tabs
calc. & micac.
Some layers
very coarsedown low &
X-bds (tabs.)
Thin & becomes
interbed w/ finer
sed. to NE

GnG to BG

LBS

U. S. HILL SECTIONS

MEASURED SECTIONS
51 THROUGH 53

17A05 34B

445

245, 1881.

447

448

449

487)
BRANCHO

4011000m. N.

4010

4009

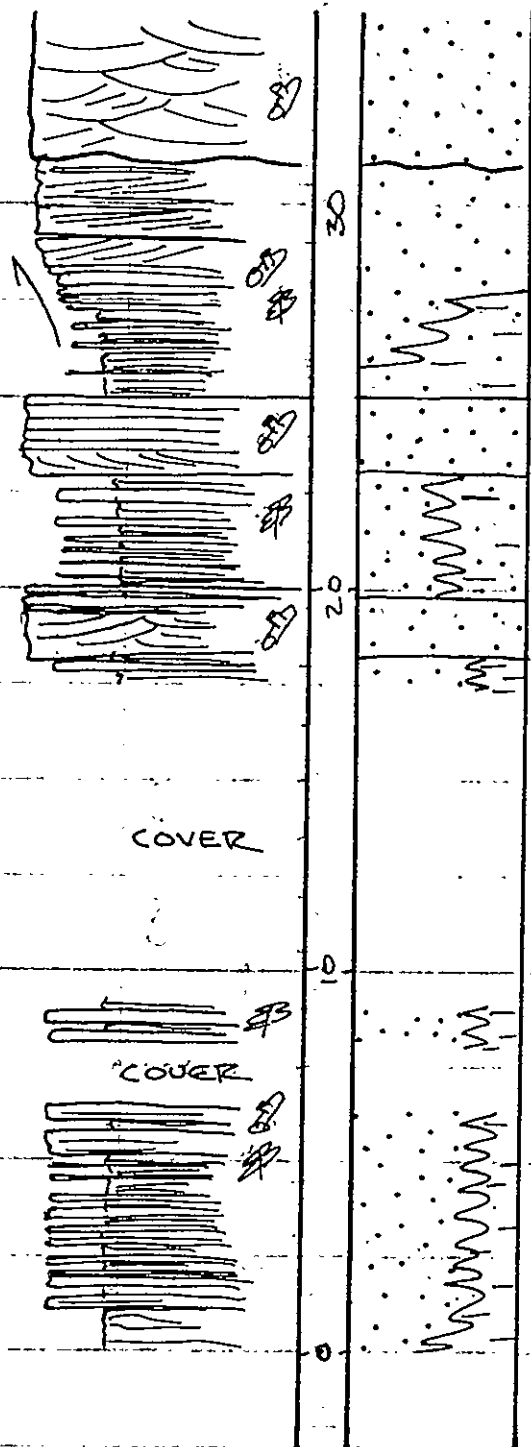
4008

TRES RITOS QUADRANGLE
NEW MEXICO-TAOS CO
7.5 MINUTE SERIES (TOPOGRAPHIC)

17x

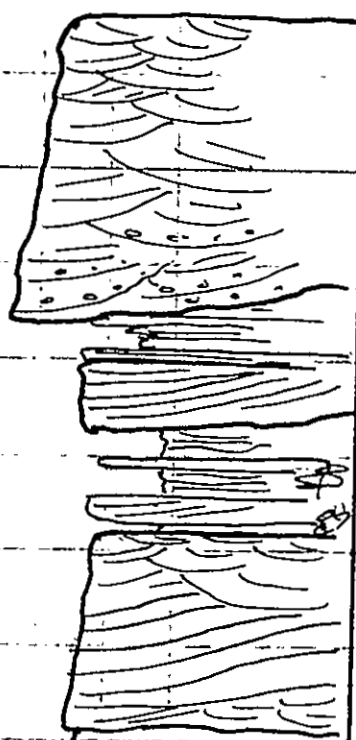
M.S. No. 51

PAGE 1



M. S. No. 51

PAGE 2



50

40



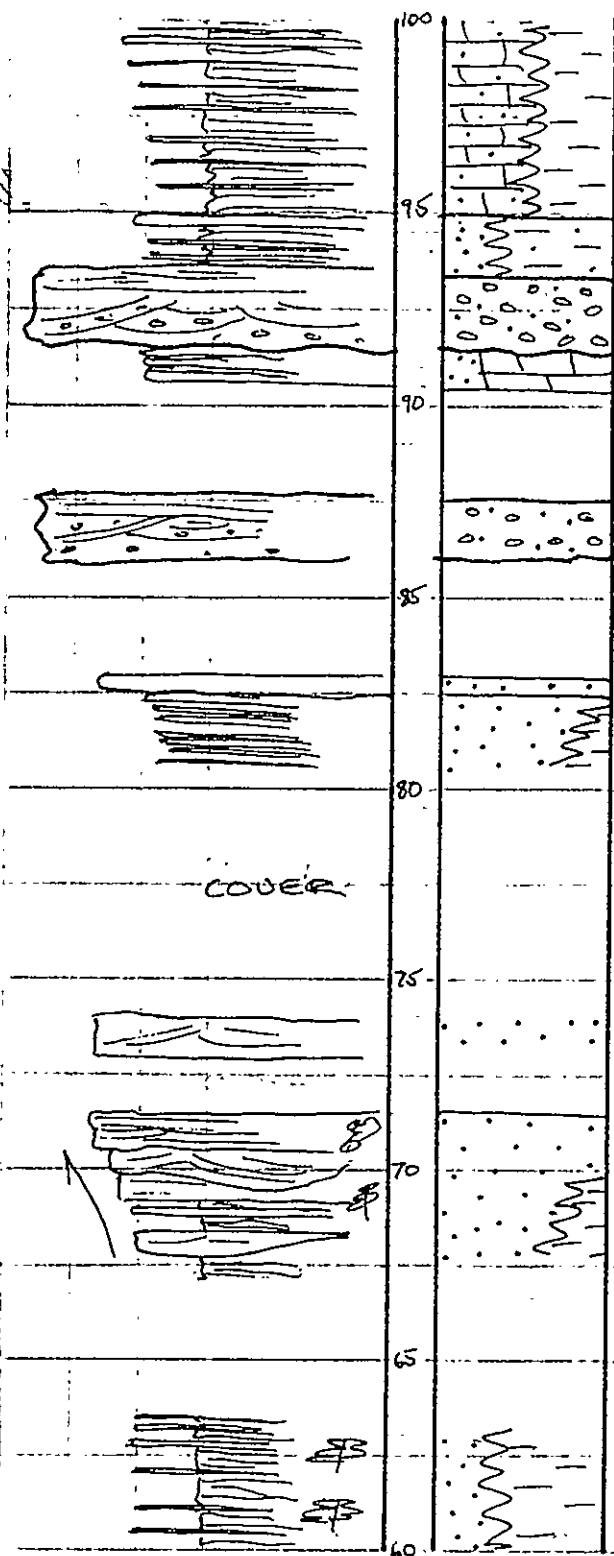
PAGE 1



M.S. No. 52

PAGE 2

CRINOIDS
BRACHS
Phylloids Algae



EXTREMELY
MICACEOUS

← FAULT

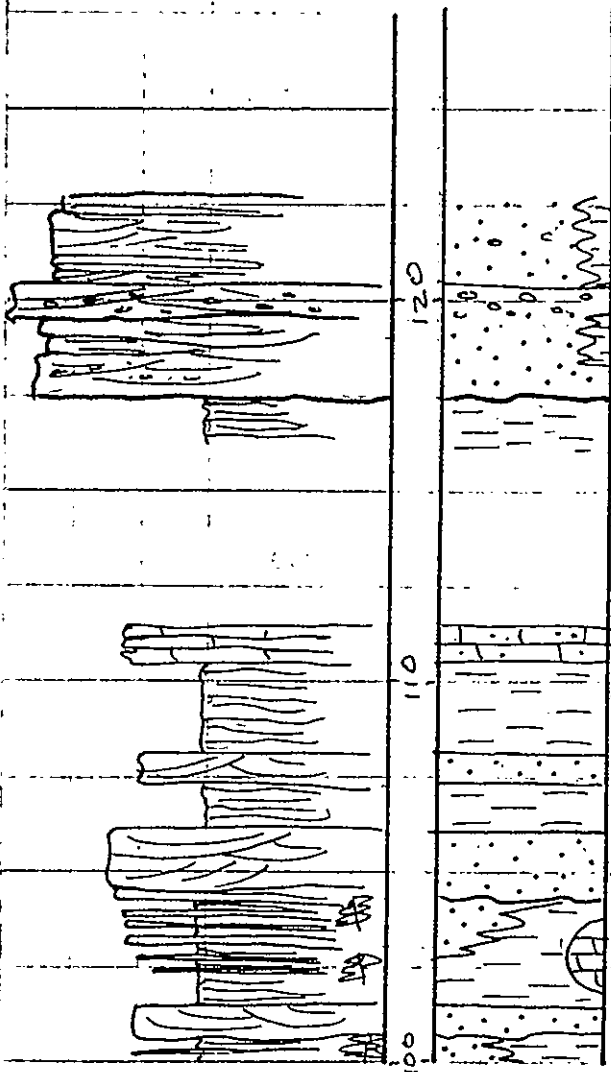
Displacement
Unknown

M.S. No. 52

PAGE 3

CRINOIDS
BRACHS

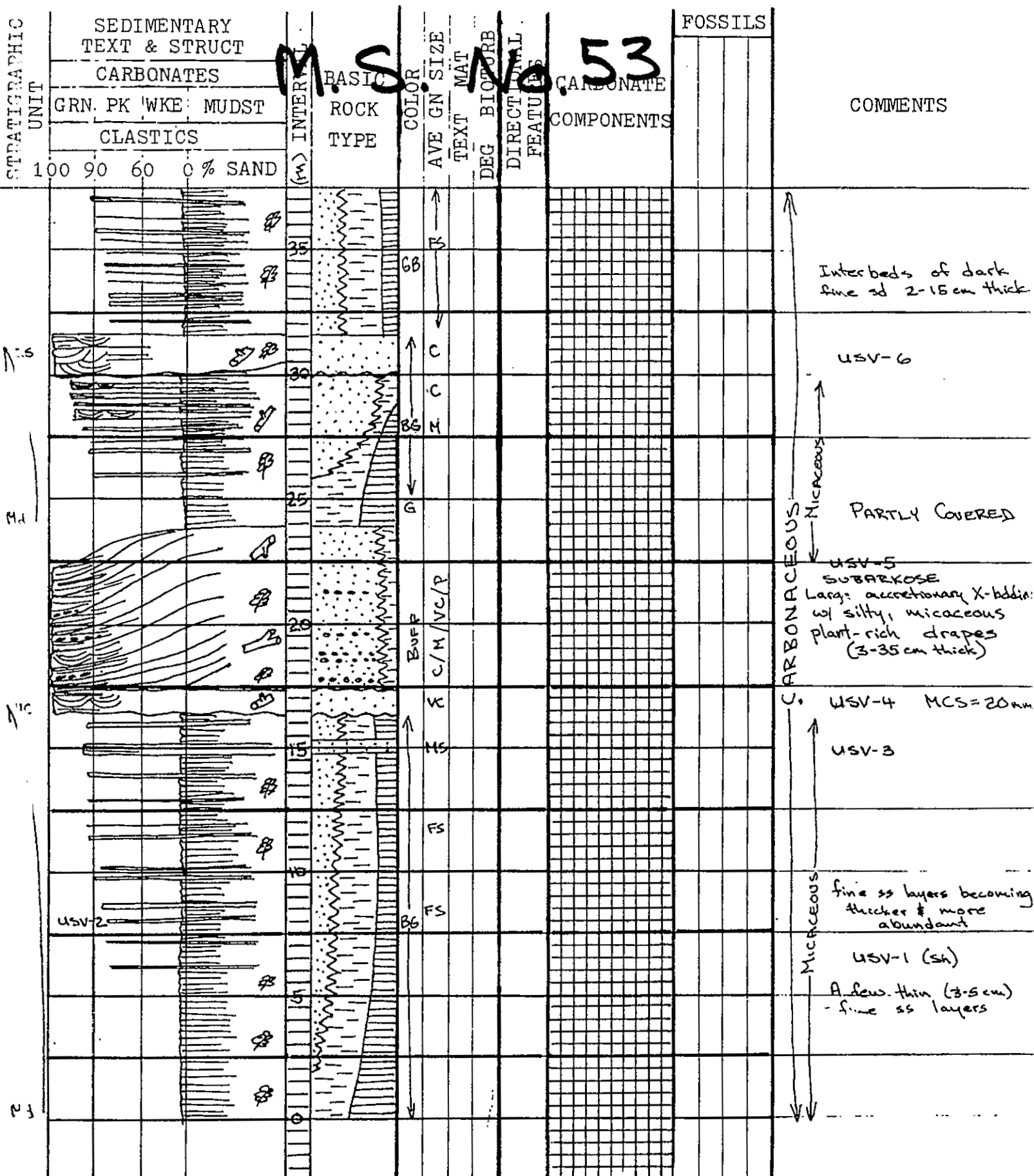
GASTS



MEASURED SECTION NO. _____

DATE JUNE 30, 1977LOCALITY U.S. Hill VISTA

STRATIGRAPHIC UNIT _____

SETTING ROAD CUTMEASURED BY JMC

DATE _____

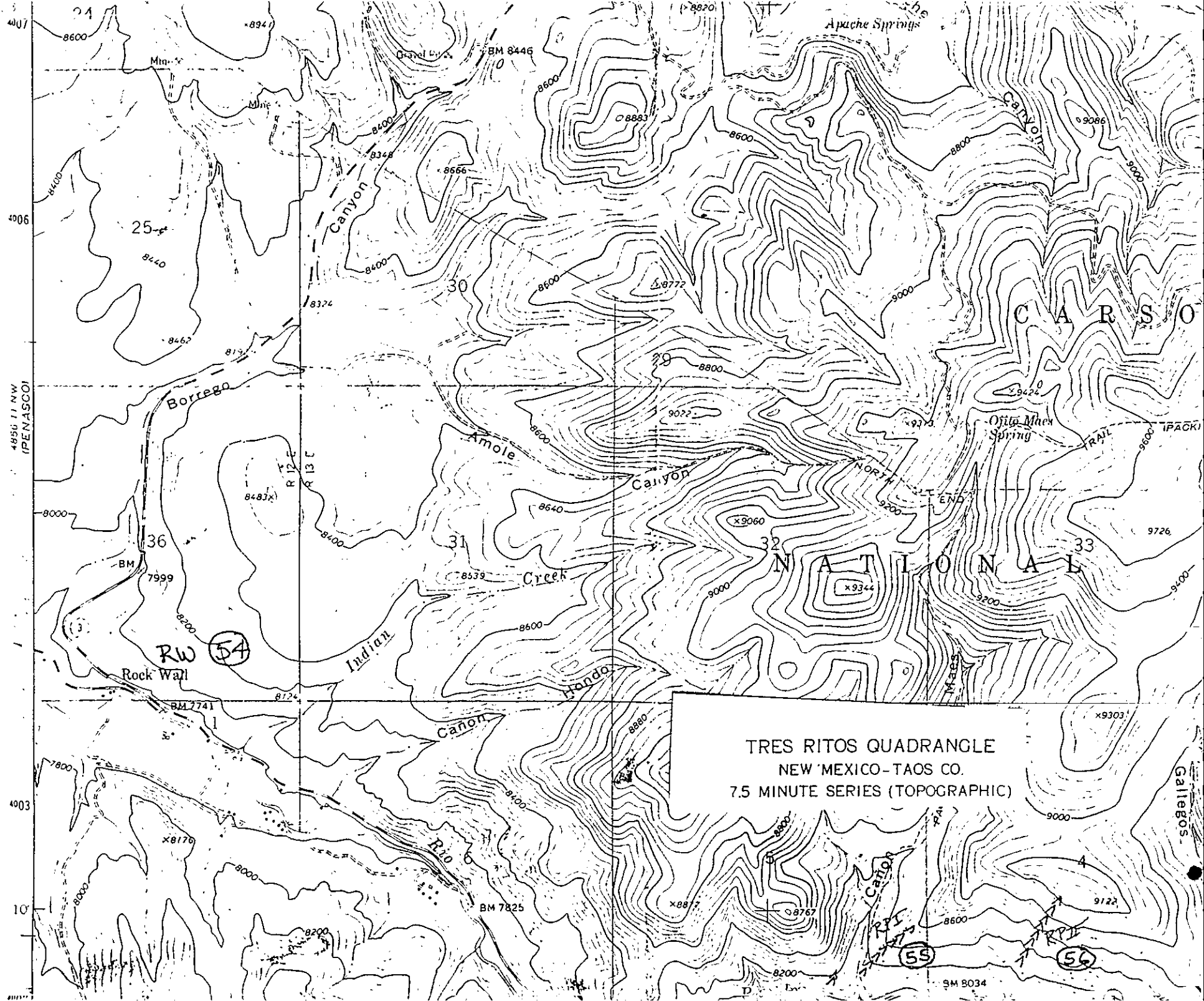
STRATIGRAPHIC UNIT _____

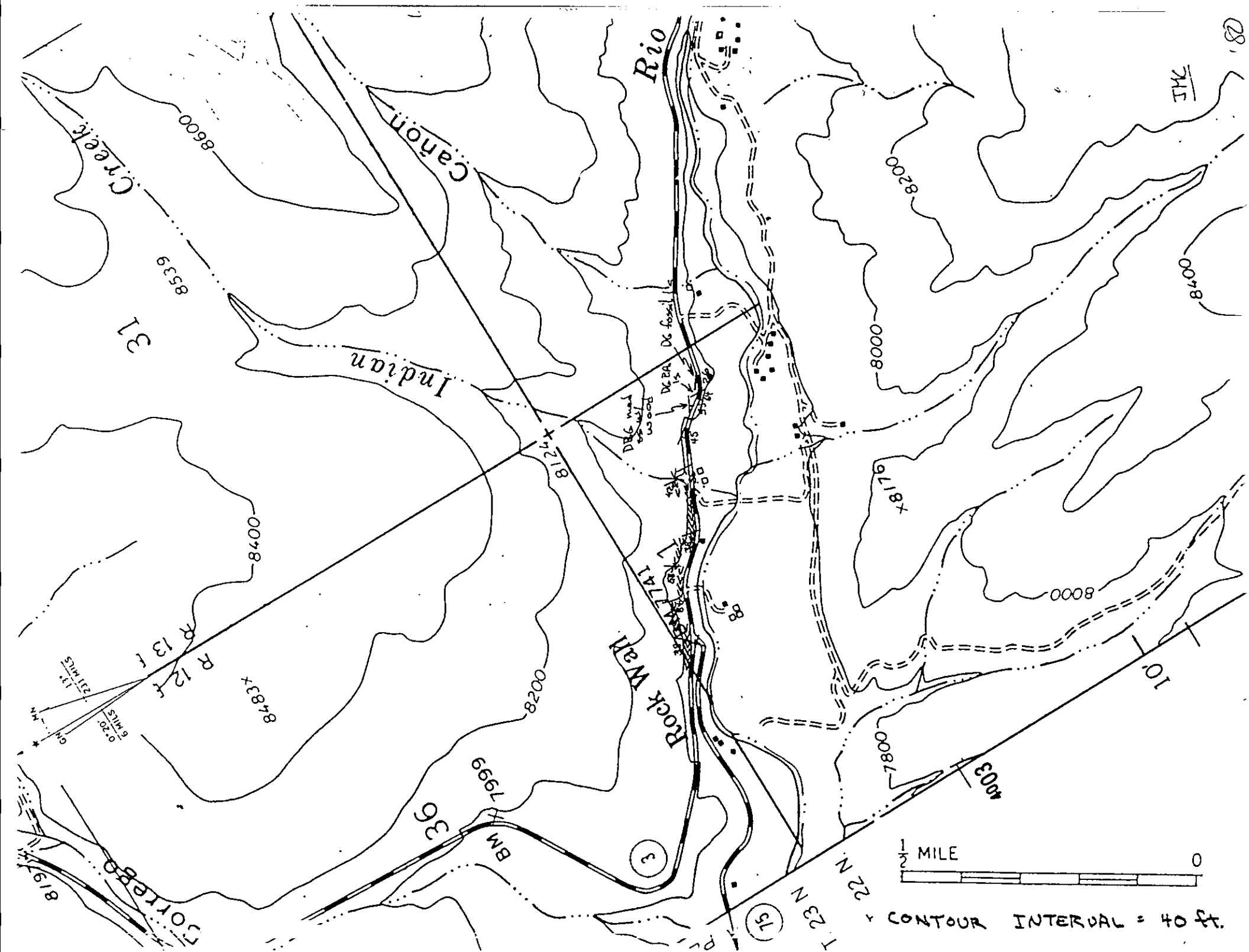
MEASURED BY JMC

77

ROCK WALL SECTION

MEASURED SECTION
No. 54





RW
Rock Wall, Hwy 3

Aug. 4, 1978

JMC

(3)
M.S. No. 54

BRACHS
CRINOIDS
Phylloid Algae



Silty
beds 5-25 cm thick

MCS = 4 cm (qtz)

5; 42° W

COVERED

COVERED

ACCRET.
BEDDING

RW=1

Stream bed

10; 38 W MCS = 3 cm
MICACEOUS
Section starts in
Indian Creek Gully
~100 m from
highway

RW mile 1 of 10

181

RW

Aug. 4

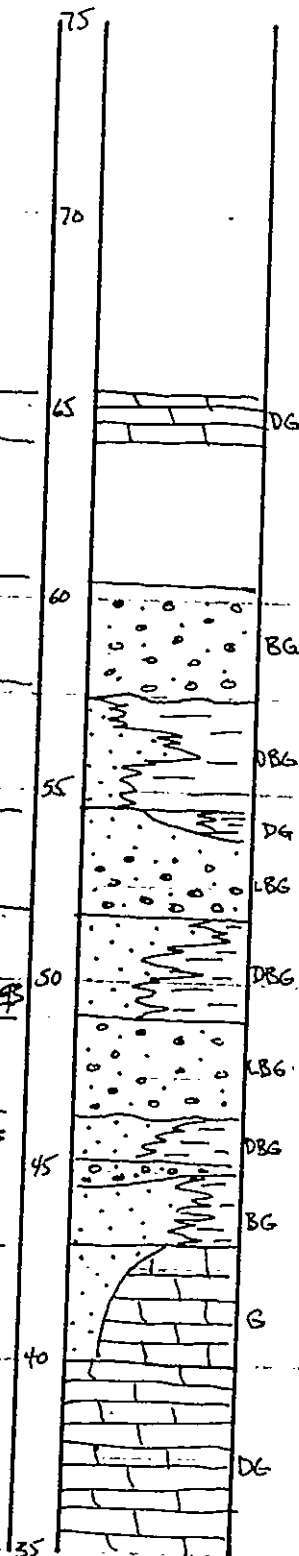
JHC

(3)

M.S. No. 54

Brachiopods
Crinoids
Phylloid Algae

COVERED



5



COVERED SLOPE
w/ ls talus

Poorly Exposed

Very Micaceous

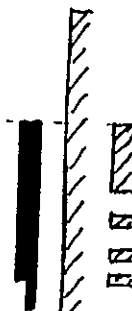
MCS = 10 cm; #2. &
sandstone (granite)
RW-3.

Very micaceous
Carbonaceous

laterally top
grades into
interbedded
micaceous, carb.
slt. # 55.

Section Shifts
to Road Cut

RW-2



Bedding decreases in
thickness (~5cm) &
becomes more
fossilif.

Is cut by several
faults

RW

Aug 5

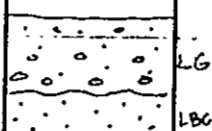
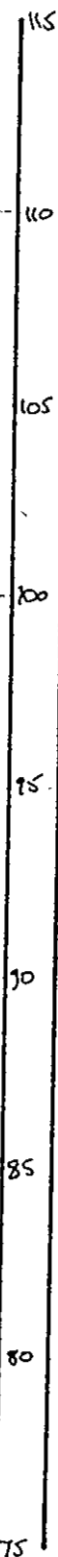
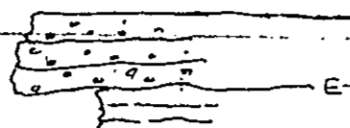
JML

(3)

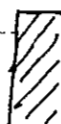
M.S. No. 54

COVERED

DIRT COVERED
SLOPE w/ BLOCKS
OF VC. SS.



LG
LBC



MCS = 11.6m
Very Poorly Sorted
10; 38° W

COVERED

JMC

M.S. No. 54

Brachs

Diff. in resist. bds
now just appears
to be diff. in
carb content

30;58 W

Calc., mica, carb. Bc
med ss layers 2-15c
thick interbed w/
lower slty Dc
layers

SIGNIFICANT CHANGE
IN STRIKE &
DIP AT THIS
POINT

ROCKY BEDDING

$$MCS = 7 \text{ cm}$$

RW Page ... 11 0

784

RW

Aug 5

JMC

(3)

M. S. No. 54

Brachs
Crinoids

COVERED

Micaceous &
Calcareous

RW-5

Irreg.
low & tabs (?) w/
occasional higher
& troughs

Pebbles up to 7mm

low & X-bds?

Brach frags in
resist ss
layers

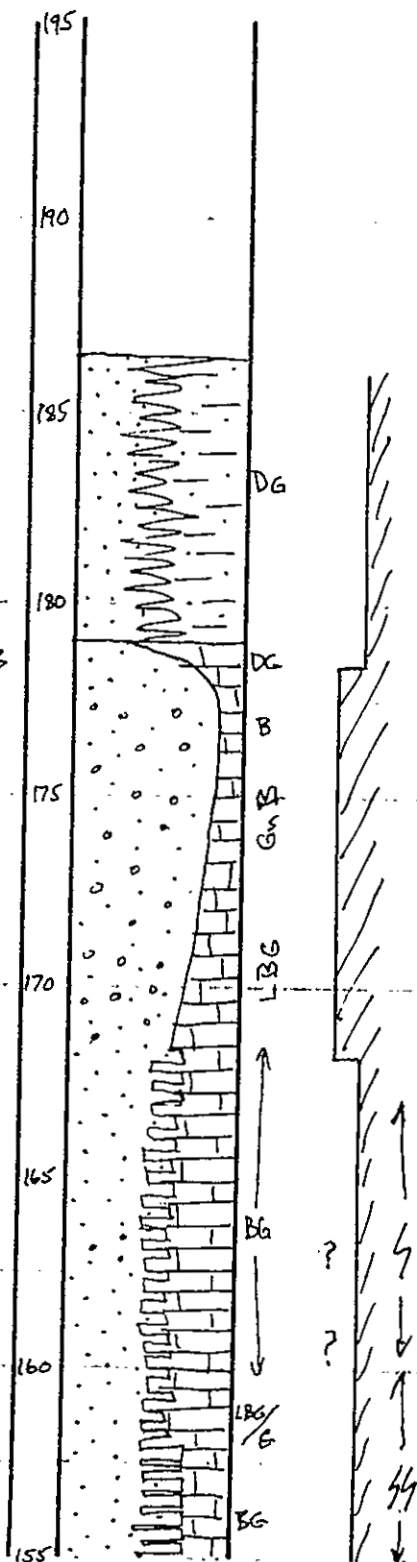
RW-4
Resist. well cemented
very calc, fossilif
ss layers / less well
cemented ss

185

RW

Aug 5

Resist.
ss
7-25cm
thick

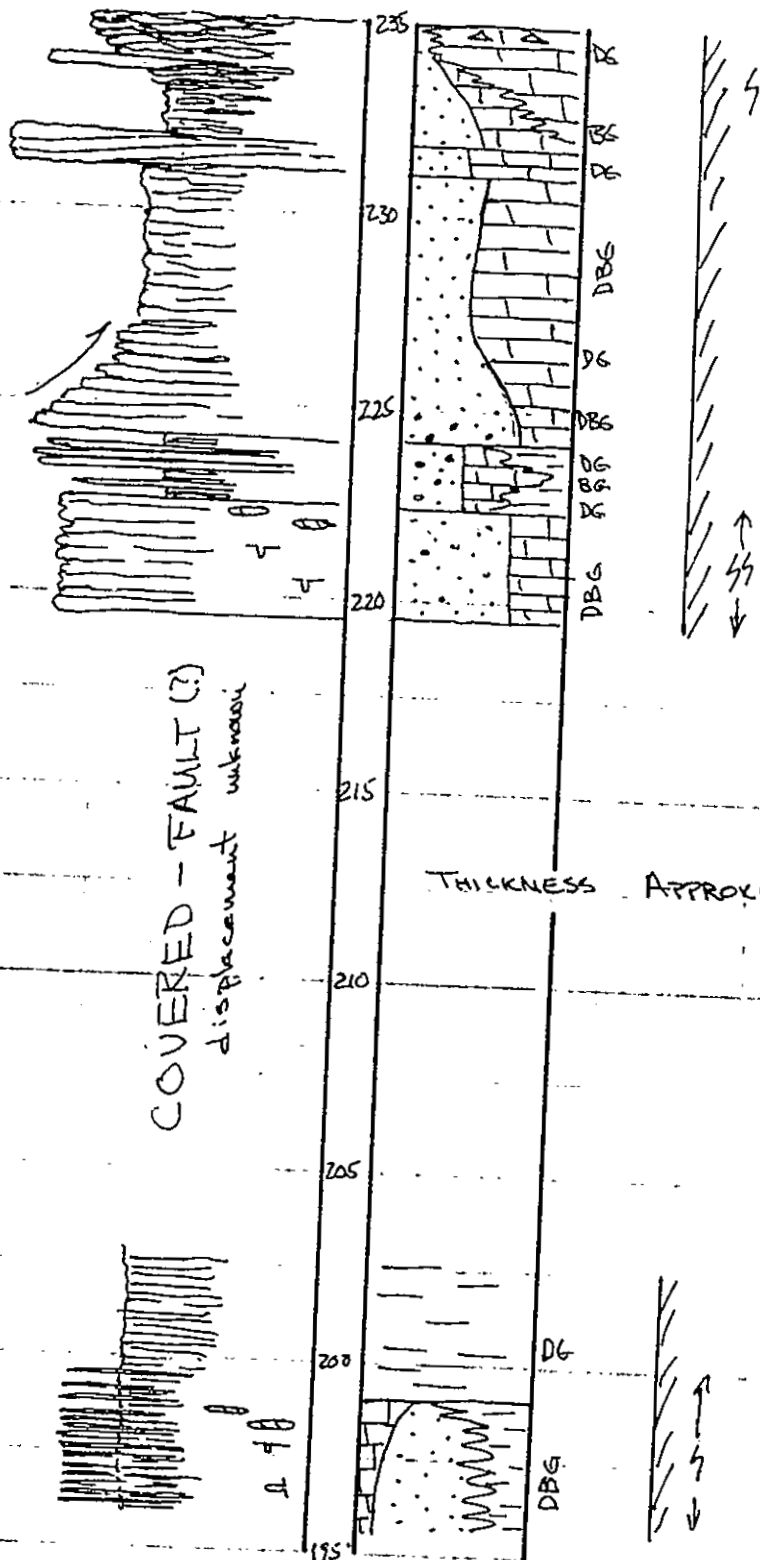


JMc

(m)

M.S. No. 54

Brachs
Crownids



1. The first part of the document is a list of names and addresses, which appears to be a directory or a list of contacts. The names are written in a cursive script, and the addresses are listed below them.

1. The first part of the document
 discusses the importance of
 maintaining accurate records.
 It emphasizes that without
 proper documentation, it is
 difficult to track progress and
 identify areas for improvement.

Fusulinid
Sample
16-1

underlying
ss/slst. sequence
repeats. but is
striking 80; Z2N

MICACEOUS
CALCAREOUS

sl filled burrows
up to 4cm diam

355; 584

2 N case of

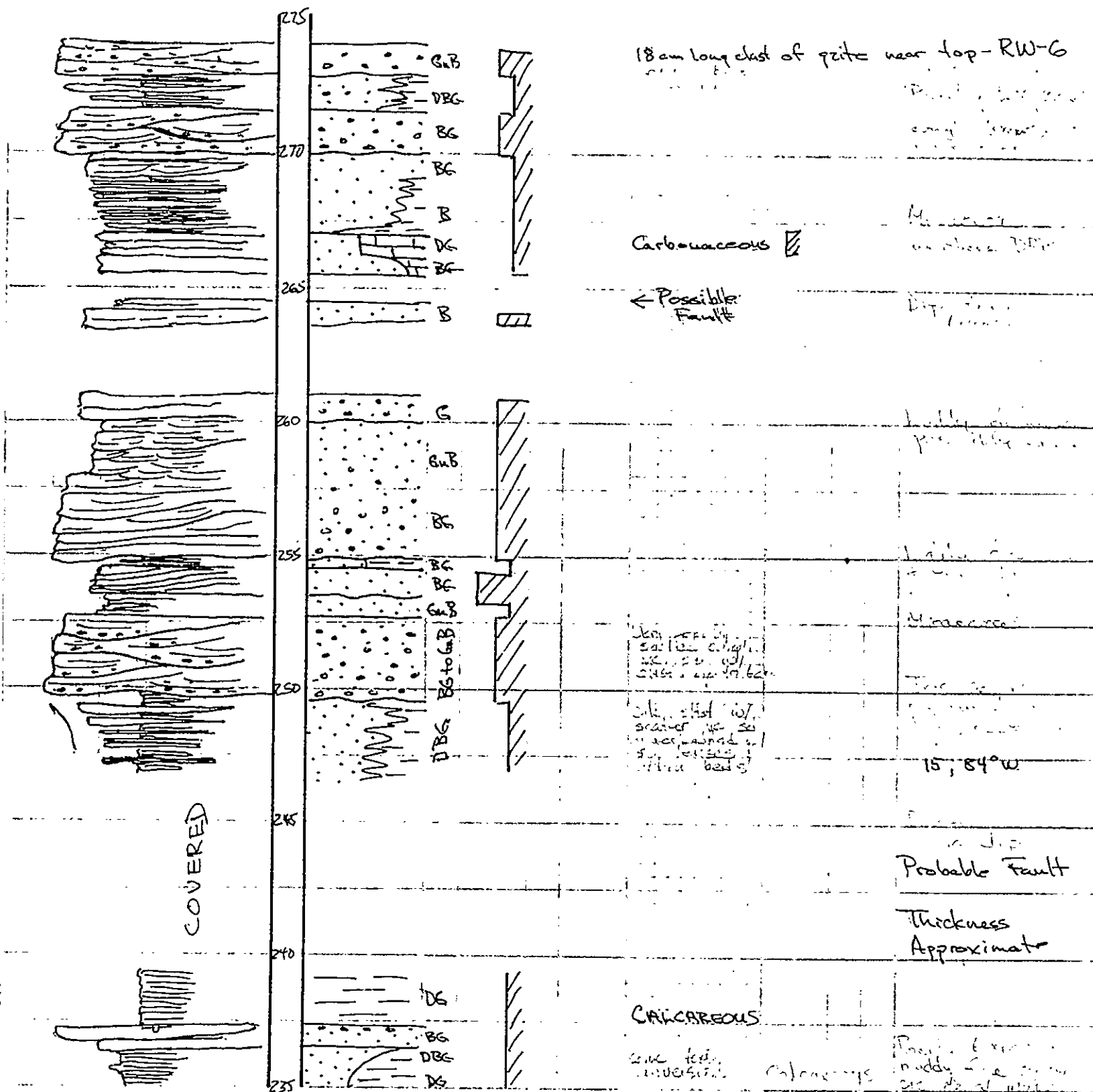
796

Aug. 6
JMC

(3)

M.S. No. 54

Brachs



RW

Aug 6

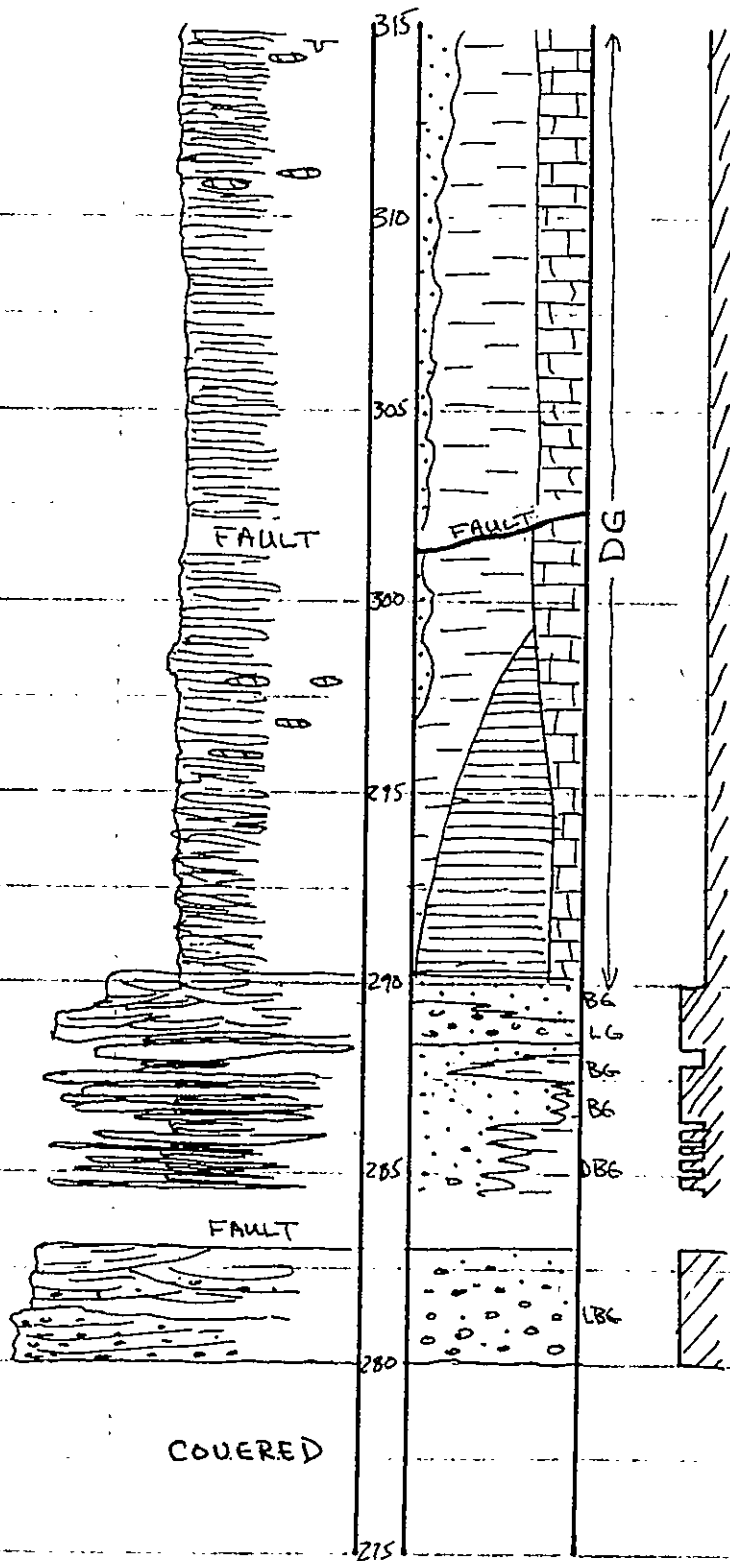
JMC

(Σ)

M.S. No. 54

Brachs
Crinoids

40; 38°W
whispy lam.
possibly biot.
ripples



Rare Ceph.
Black micritic
nodules
selenite veinlets

silty, calc.
shale
highly chaotic
& brecciated
POSSIBLE
FAULT
several lignite
bds exposed
in roadcut
Muddy ss

SECTION SHIFTS
TO ROADCUT

FAULT

MCS = 11 cm

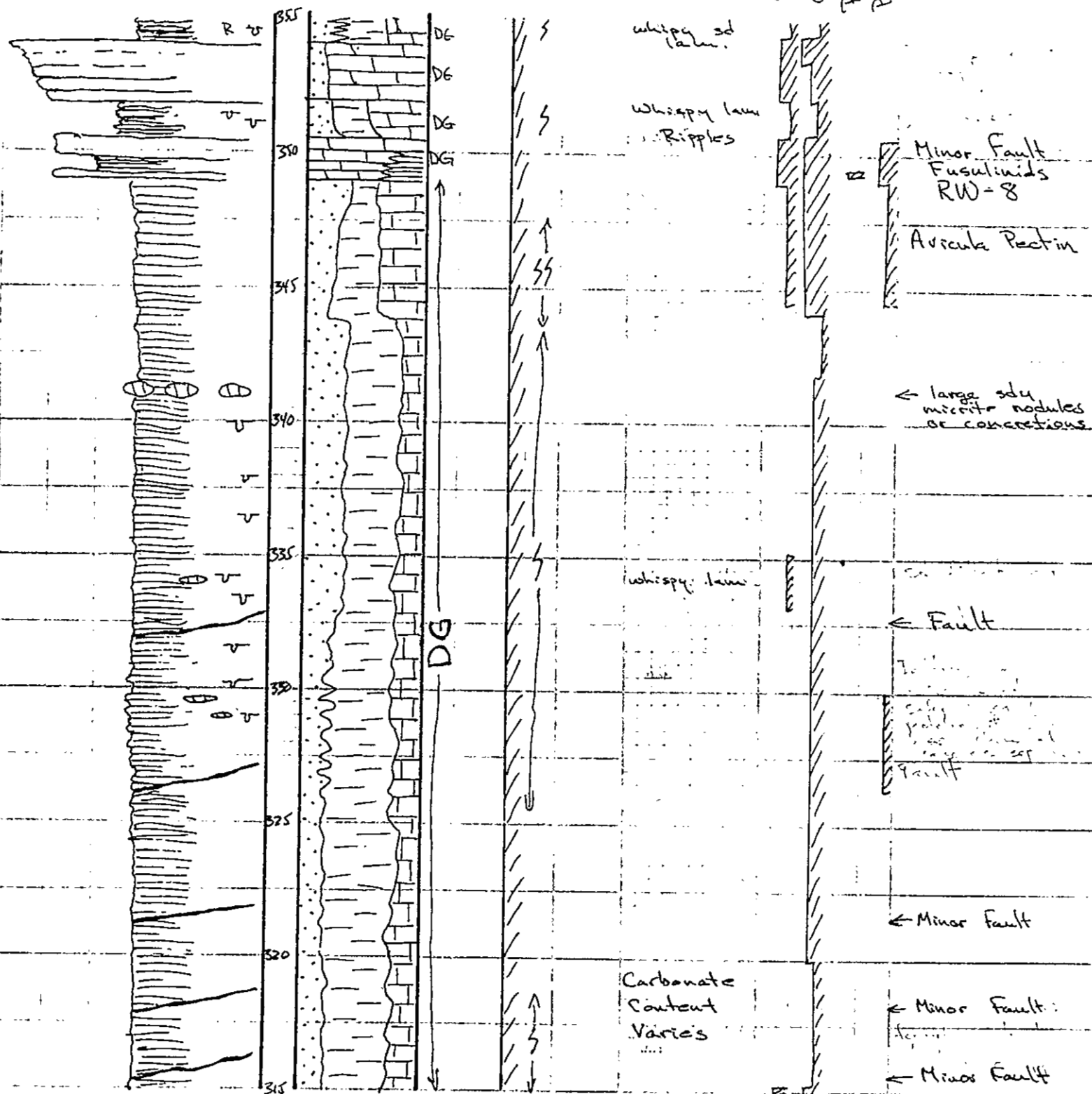
RW

Aug. 6

JMC

(2)

M.S. No. 54



RW

Aug. 6

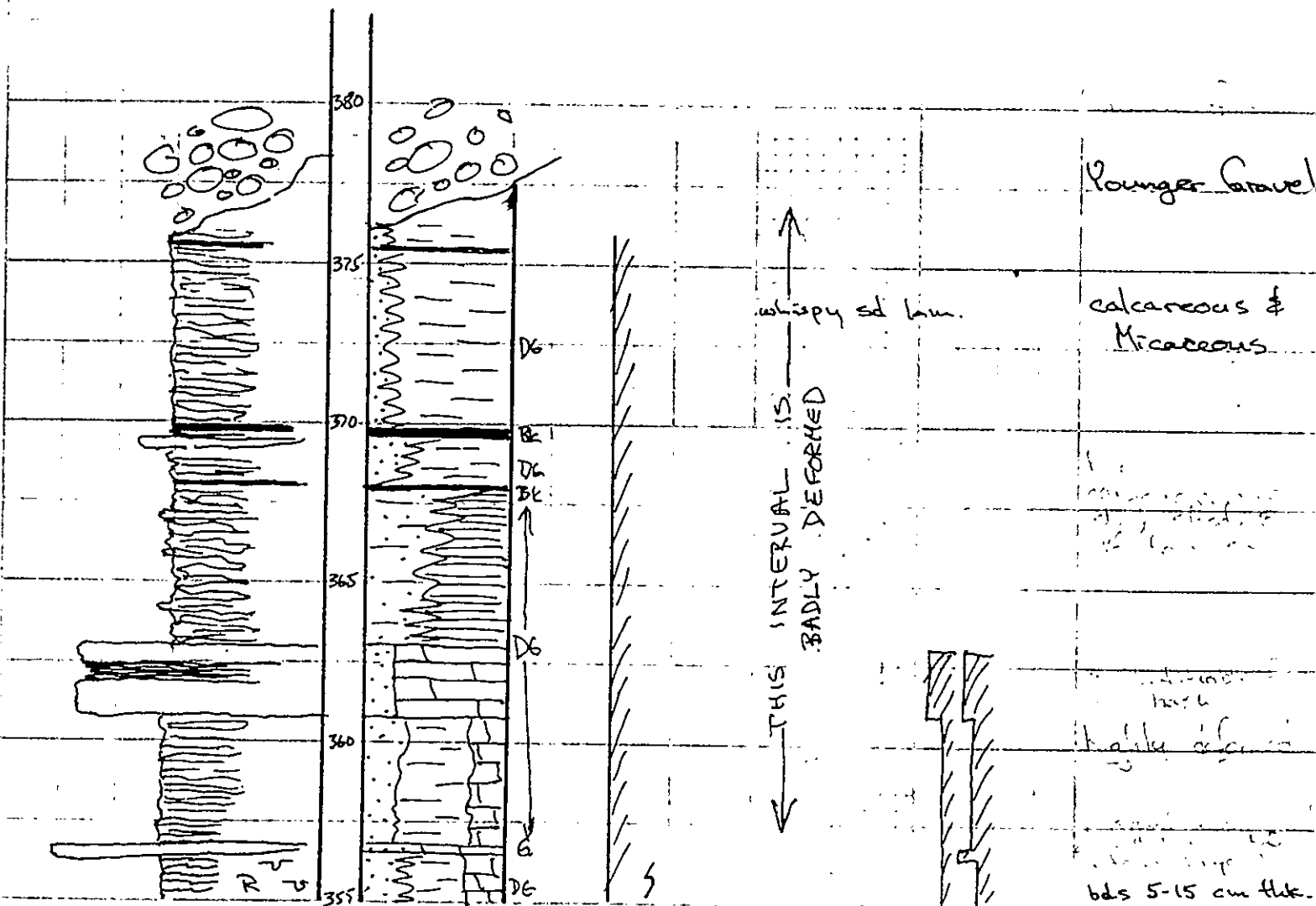
JMC

(M)

M.S. No. 54

Brachs
Crinoids

Sample RW-9 is from a nodular DG, fossilif. (abund brachs) ls. which is exposed up the hill from this section. It is up to 9m thick & directly overlies a thick VC angl. (w/ clasts up to 10 cm). This lo may belong strat. below the units exposed at 220 m.

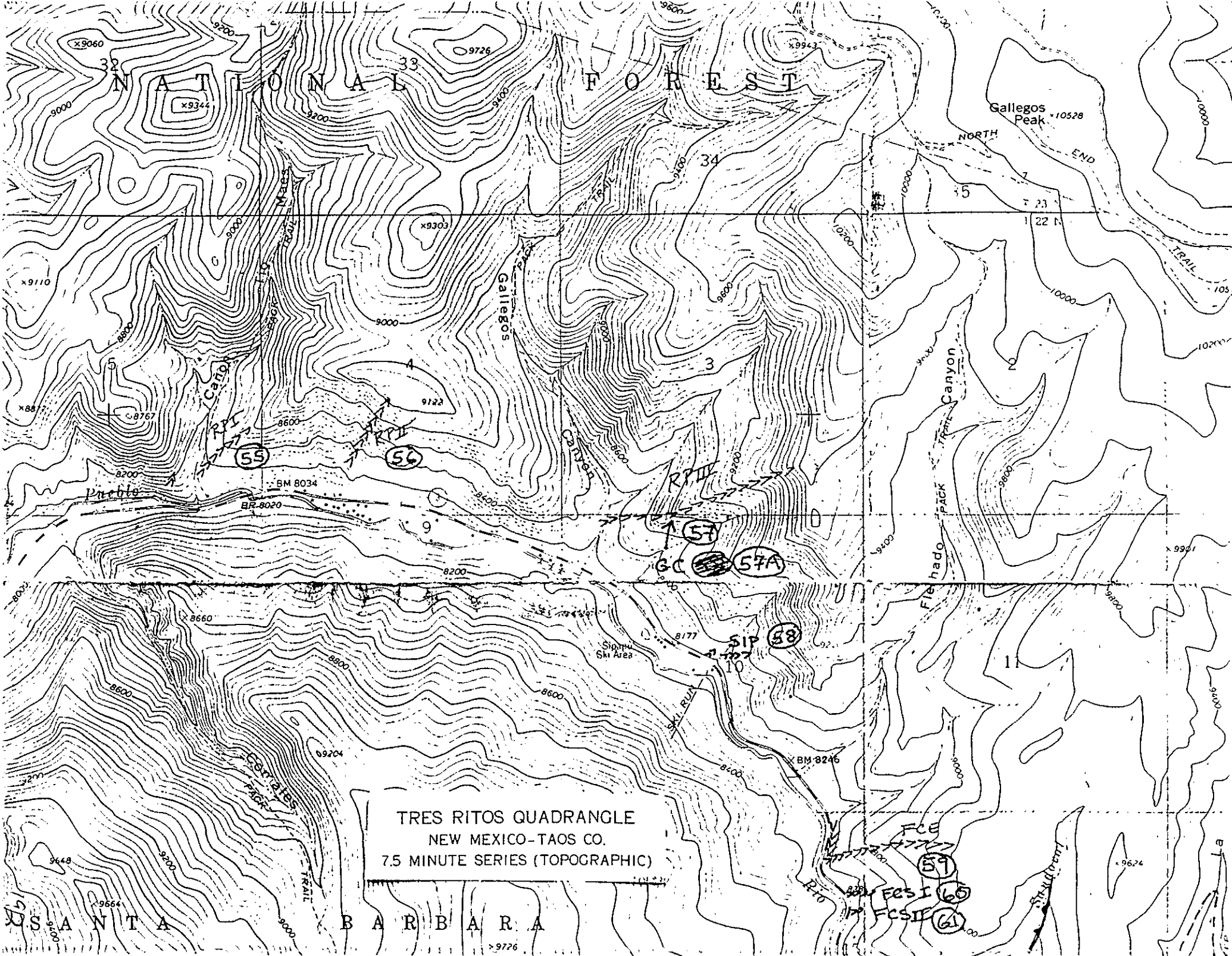


RW back 0 of 10

190

RIO PUEBLO SECTIONS

MEASURED SECTIONS
55 THROUGH 63

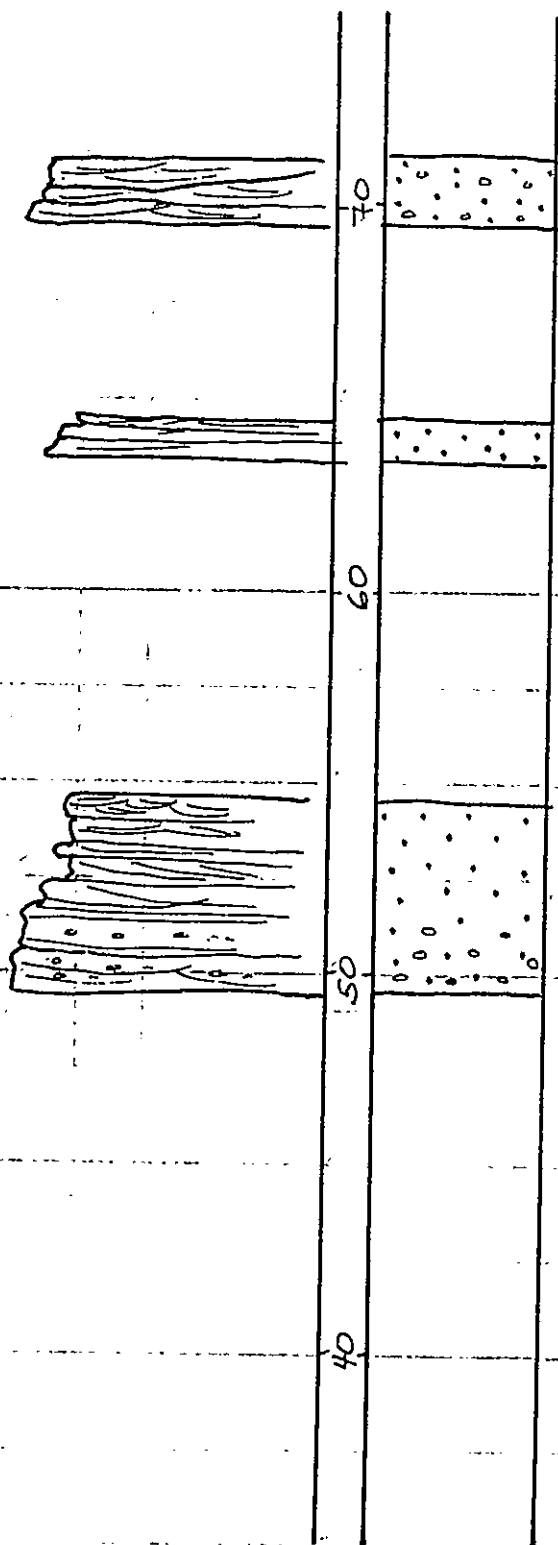


TRES RITOS QUADRANGLE
NEW MEXICO-TAOS CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

BARBARA

M.S. No. 55

PAGE 1

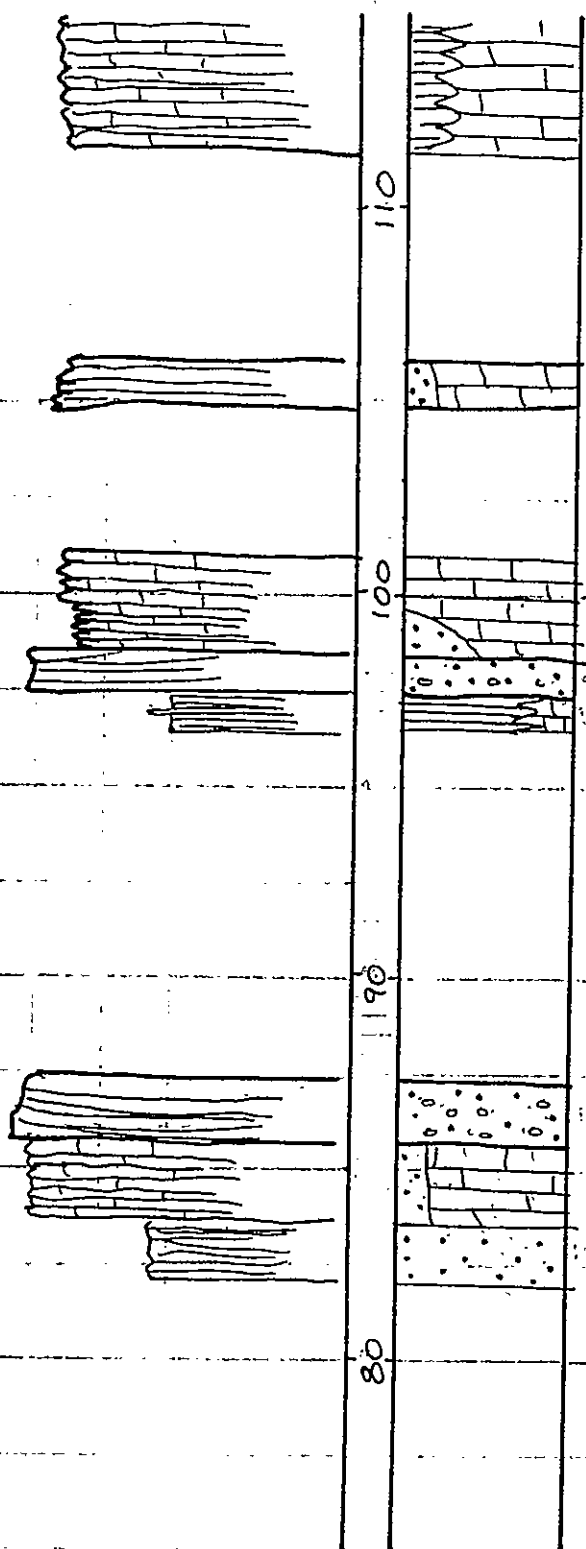


SECTION BEGINS
APPROX. 50 m ABOVE
THE MISS. / PENN.
UNCONFORMITY

M.S. No. 55

PAGE 2

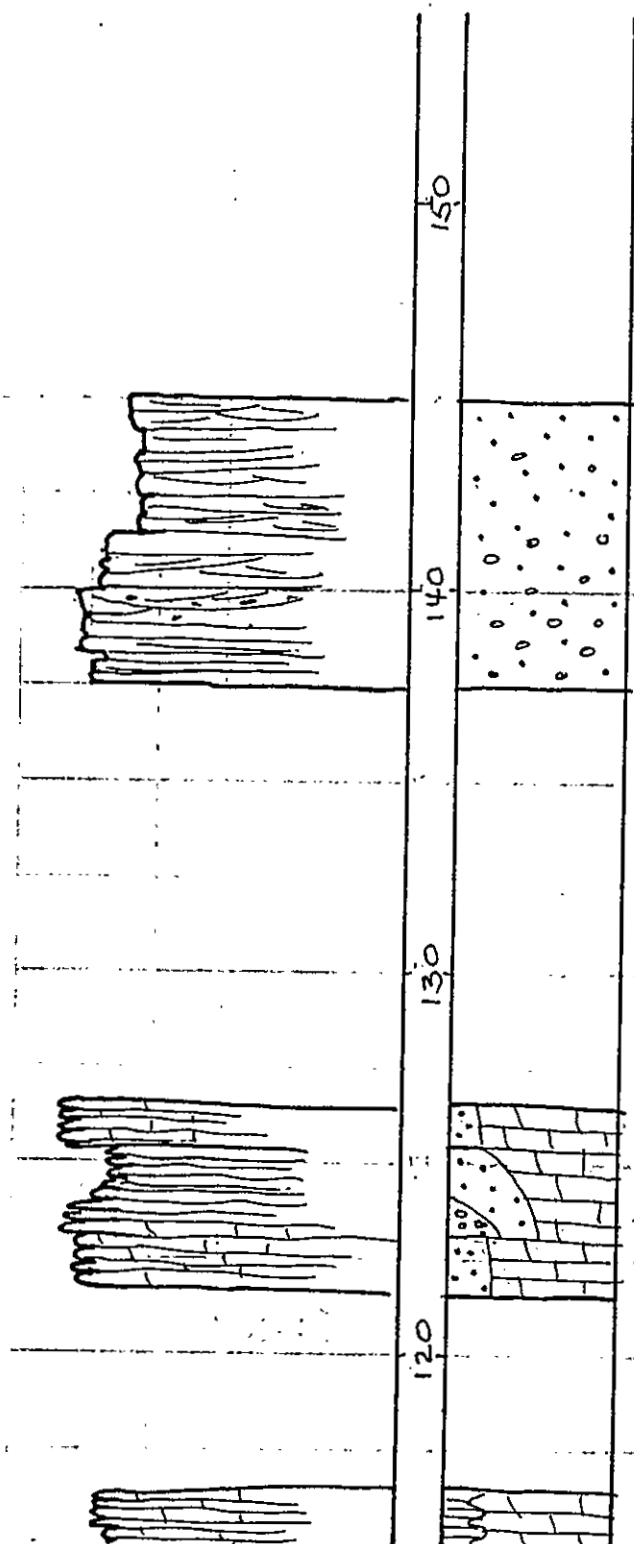
Brach
Crinoids
Phyl. Algae
Bry



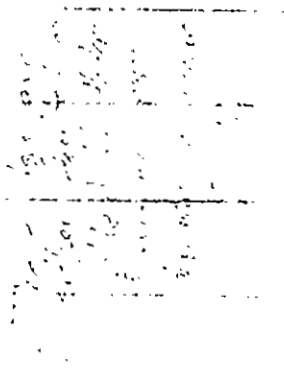
M.S. No. 55

PAGE 3

Brachs
Crinoids
Phyl. Algae
Bry



note: the fossils are
the product of the
crinoid stems



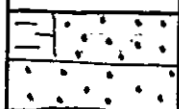
M.S. No. 55

PAGE 4

Crinoids

COVER

190



4



180



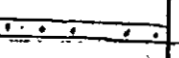
4

Distance 1/2 mi

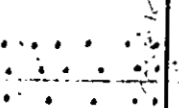
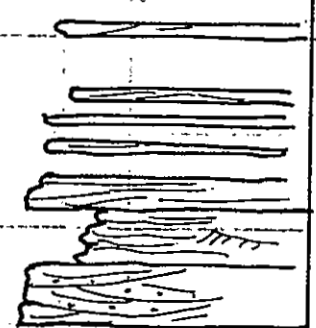
1/2 mi
1/2 mi
1/2 mi



170



POORLY EXPOSED



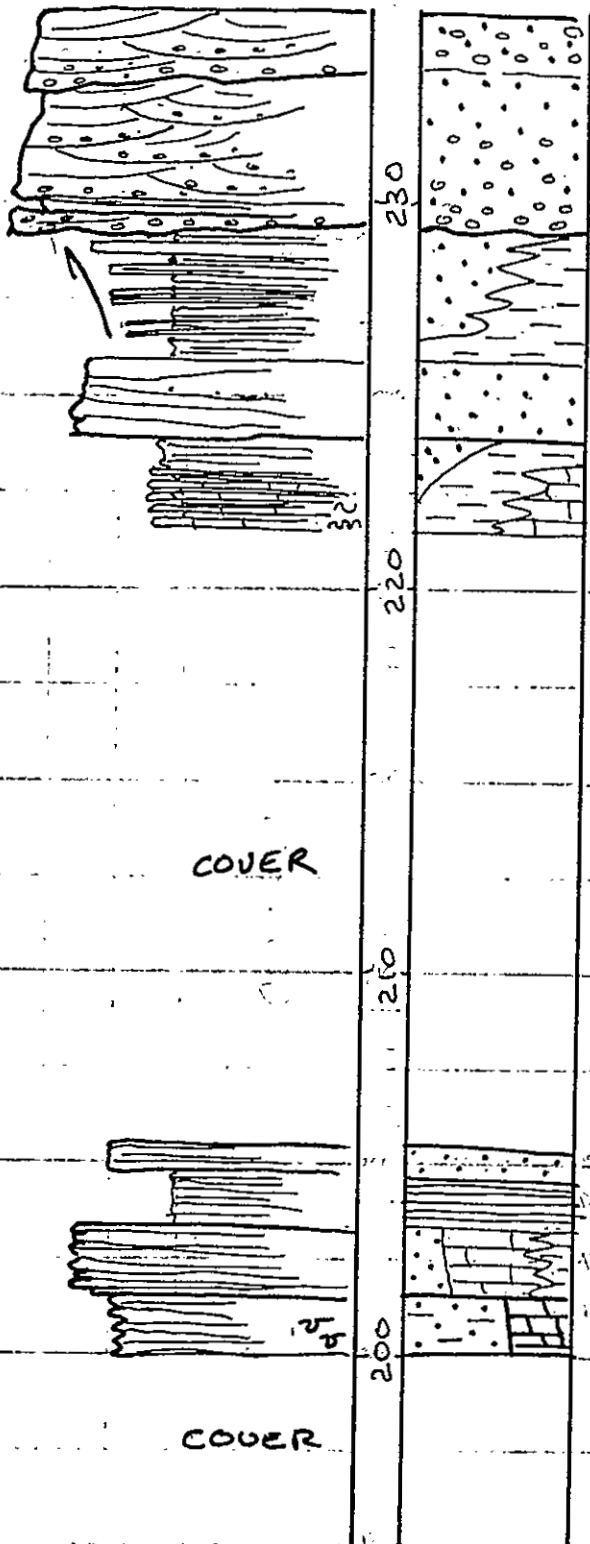
160

COVER

M.S. No. 55

PAGE 5

BRACHIS



M. S. No. 55

PAGE 6

COVER

270

260

250

COVER

240

Barly Evans

Barly Evans

M.S. No. 55

PAGE 7

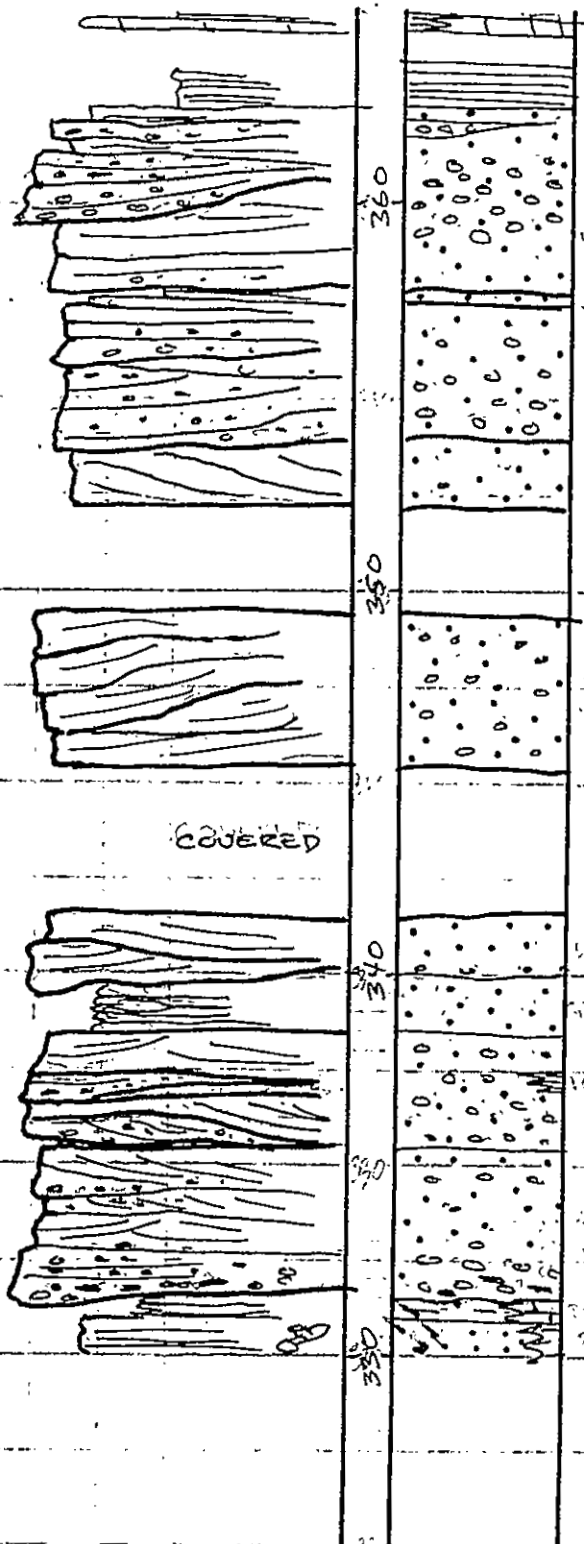
SECTION SHIFTS
SOUTH EASTWARD
TO M.S. NO. 56
CORRELATION BASED
ON SUTHERLAND (1963)

COVER

M.S. No. 56

PAGE 1

Brachs



as shown in 201

Basal layer

M. carbon.

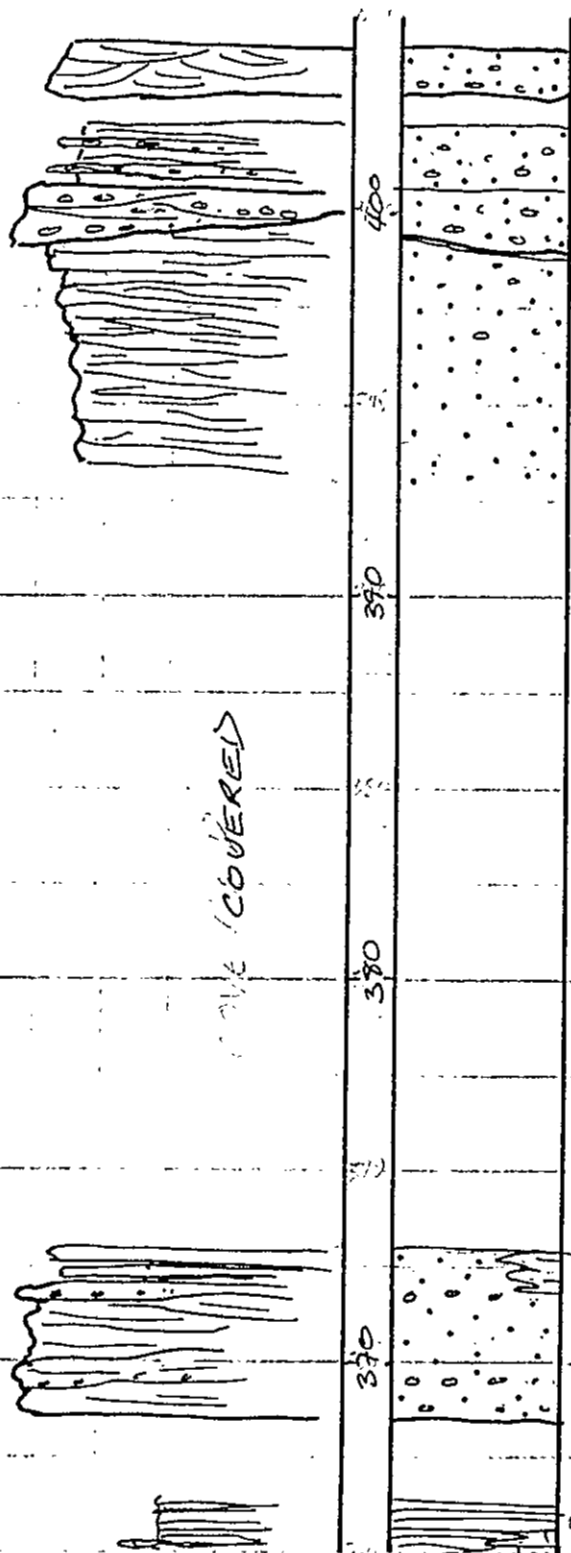
← sdy 3d drop
small

← sdy 3d drop
small

SECTION CONTINUES
UP- SECTION FROM M.S. No 55

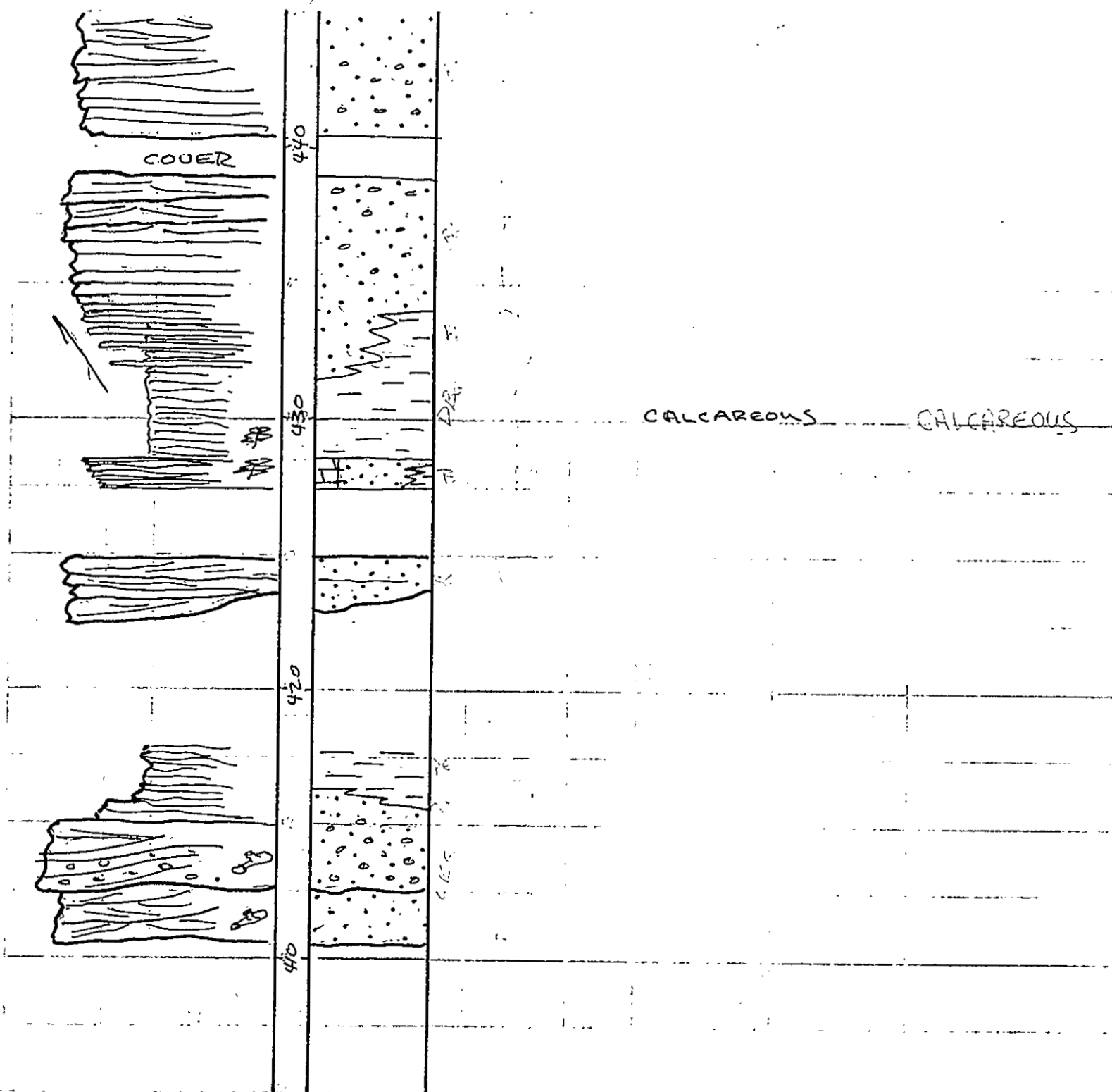
M.S. No. 56

PAGE 2



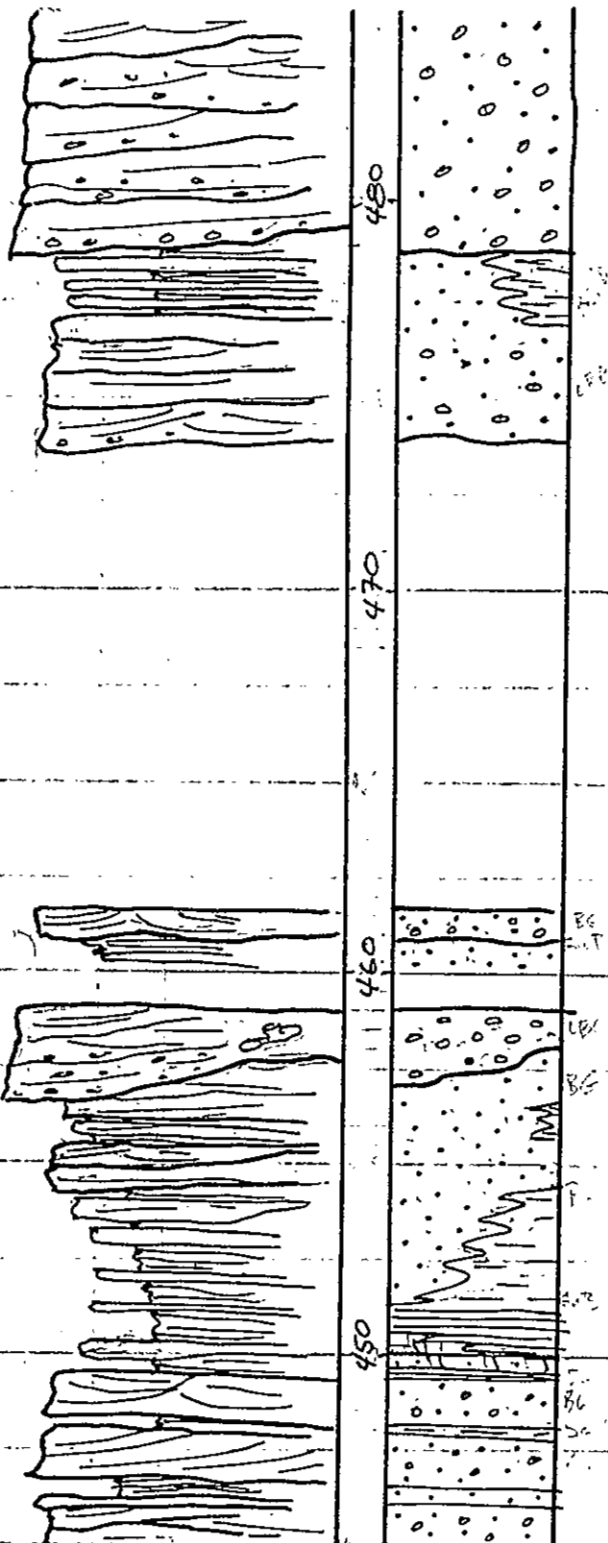
M.S. No. 56

PAGE 3



M.S. No. 56

PAGE 4



Rock formation

sky is

weathered and

204

M. S. No. 56

PAGE 5

Brachs
Crinoids
Phyll. Algae
Bryo.

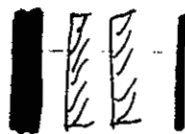
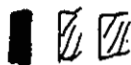
COVERED

520

570

500

490



Coral

Lower Fossil

M.S. No. 56

PAGE 6

COVER

560

550

540

530

COVERED

M.S. No. 56

PAGE 7

COVER

570

580

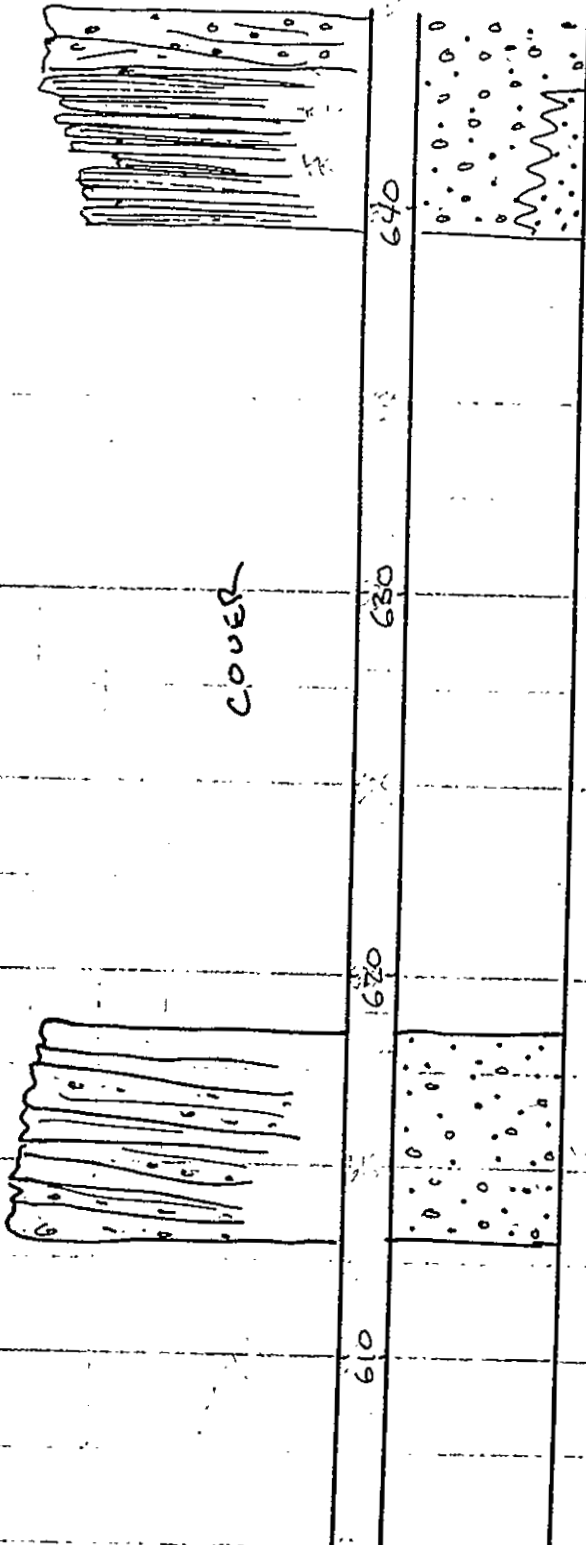
590

600

812

M.S. No. 56

PAGE 8



MCS = 12cm

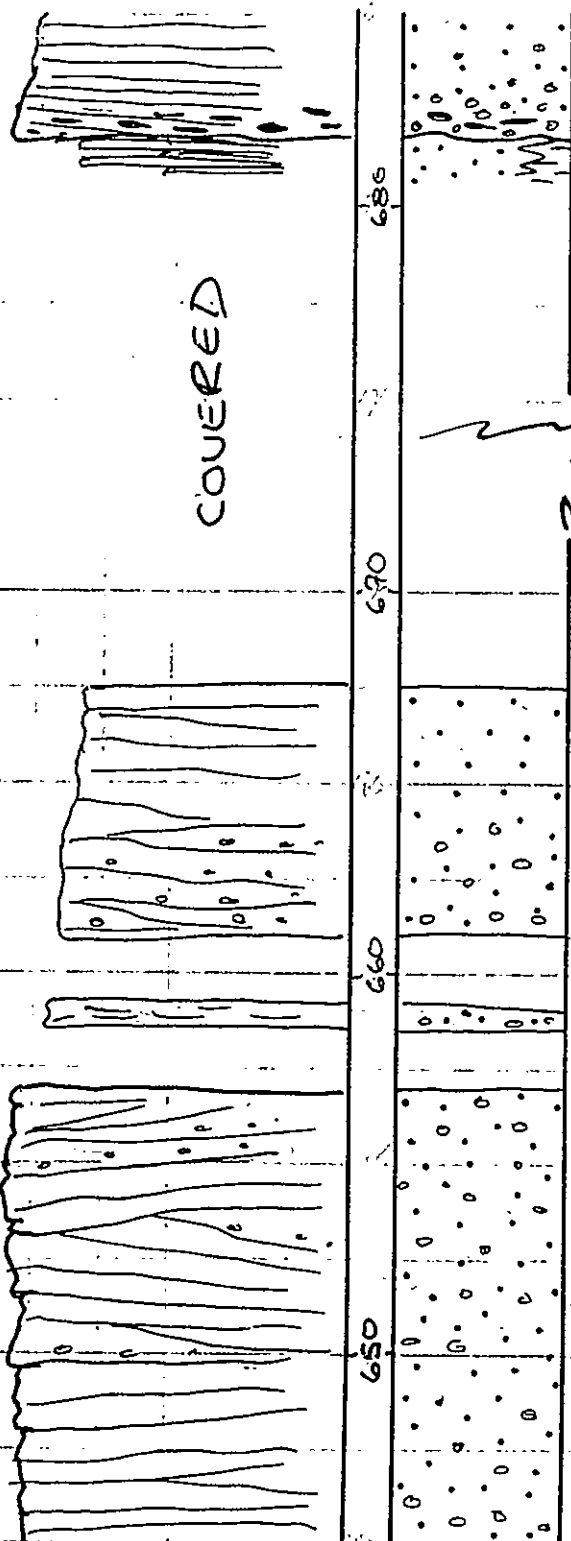
MCS = 12cm

MCS = 8cm

MCS = 8cm

M.S. No. 57

PAGE 1



RP-5

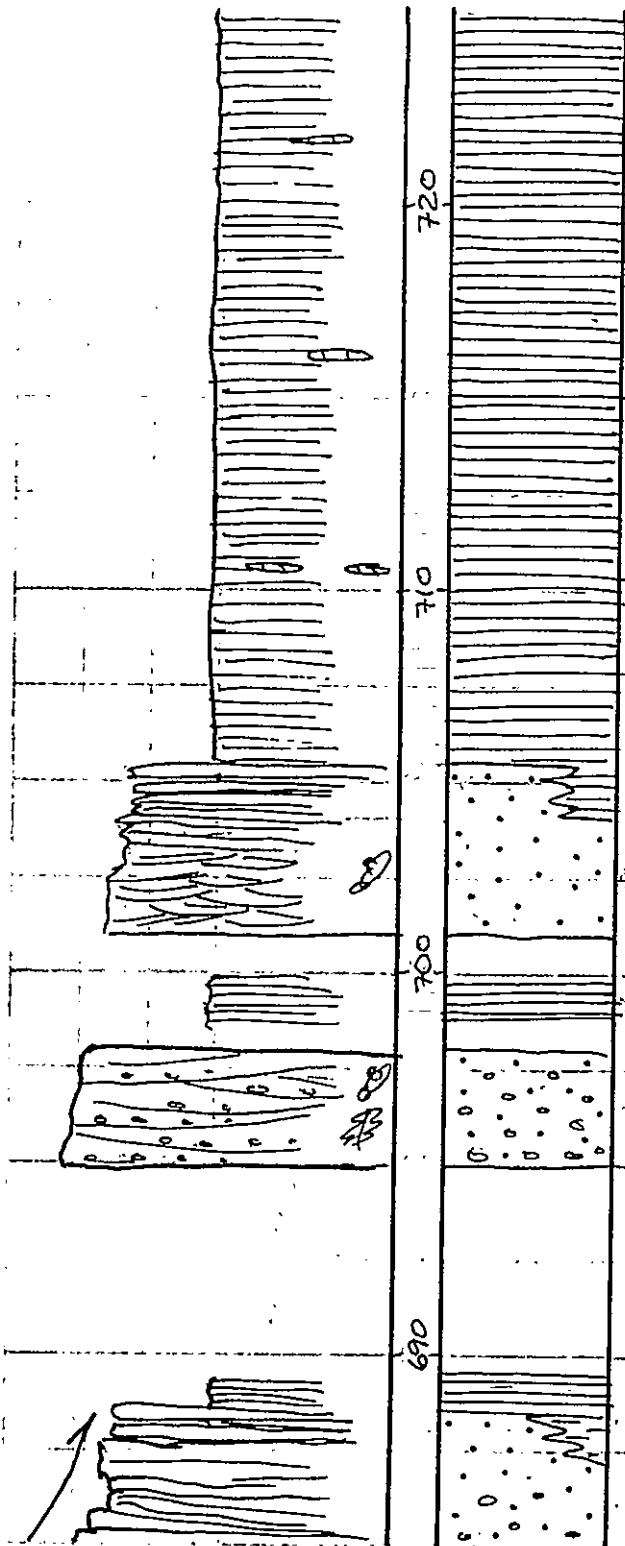
MCS = 7cm

SECTION SHIFTS
SOUTHEAST WARD
TO GALLEGOS
VALLEY (M.S. No. 57)

Correlation based
on Sutherland (1963)

M.S. No. 57

PAGE 2



M.S. No. 57

PAGE 3

COVERED



730

740

750

760

M.S. No. 57

PAGE 4

COVERED

770

780

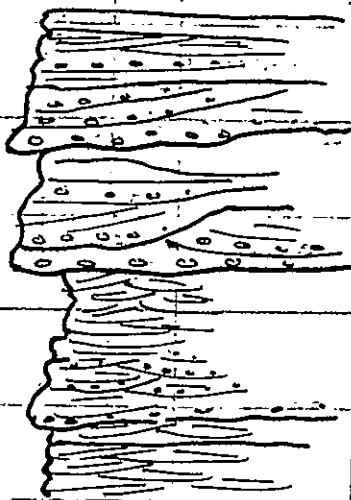
790

800

M.S. No. 57

PAGE 5

COVER



840

830

820

810



MCS = 8cm

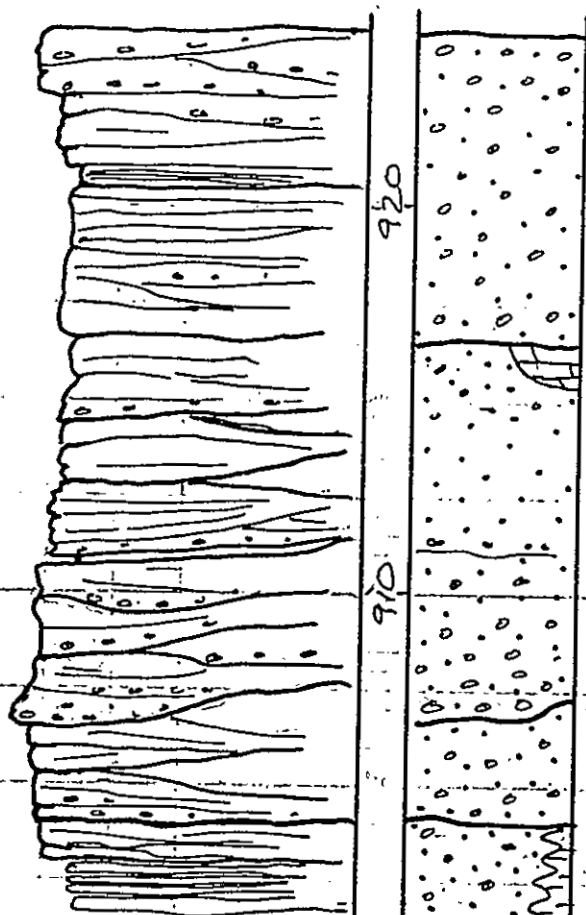
MCS = 6cm

MCS = 7cm

MCS = 6cm

M.S. No. 57

PAGE 6

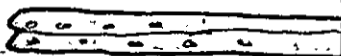


M. S. No. 57

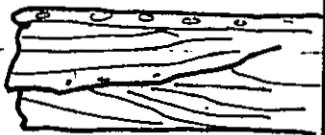
PAGE 7

COVERED

960

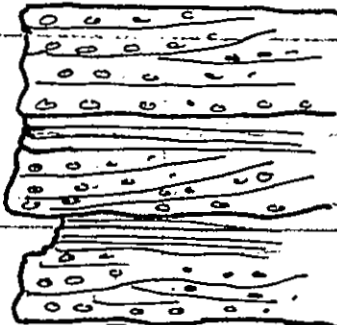


950

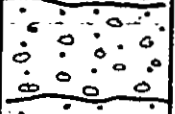
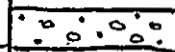


940

COVER



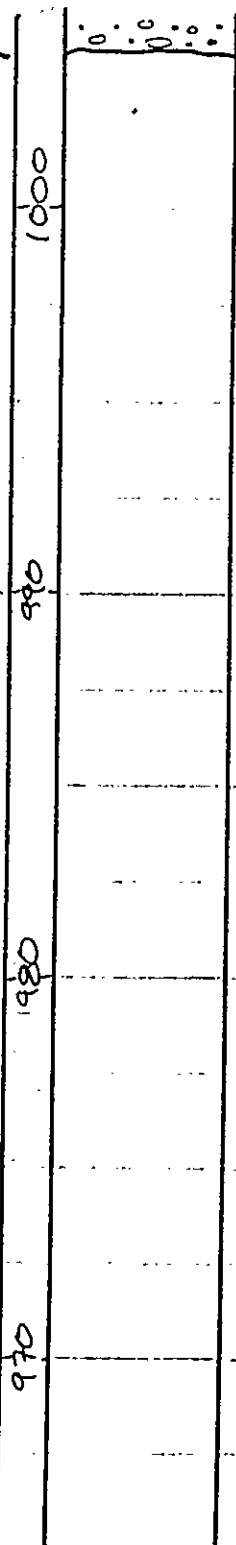
930



M. S. No. 57

PAGE 8

COVERED

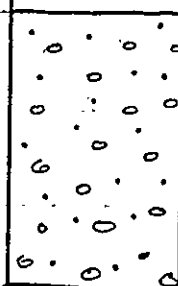
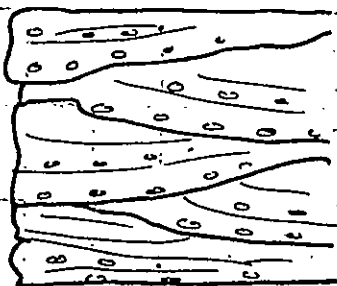


M. S. No. 57

PAGE 9

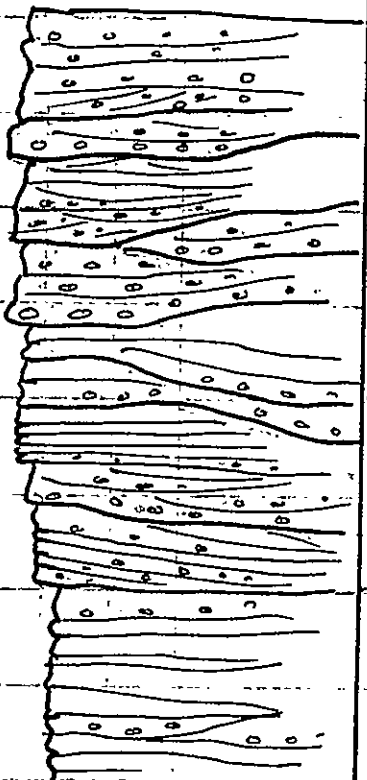
COVER

1040

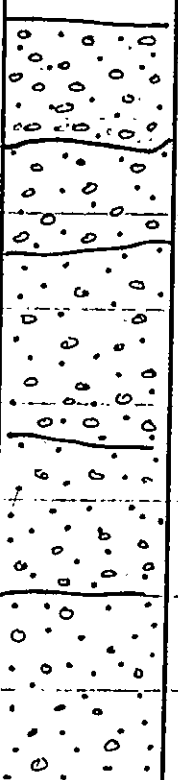


COVER

1030



1020



1010

MCS = 7 cm

POORLY
EXPOSED



M.S. No. 57

PAGE 10

COVER

1080

1070

MCS = 10 cm

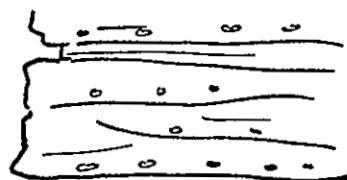
COVER

1060

1050

M.S. No. 57

PAGE 11



1120

1110

1100

1090

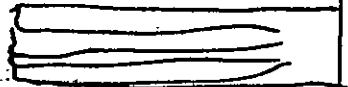
COVERED

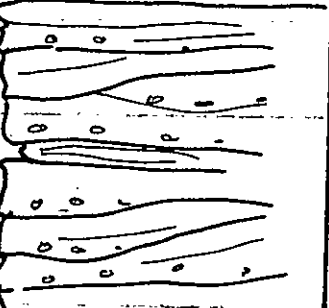


POORLY
EXPOSED

M. S. No. 57

PAGE 12

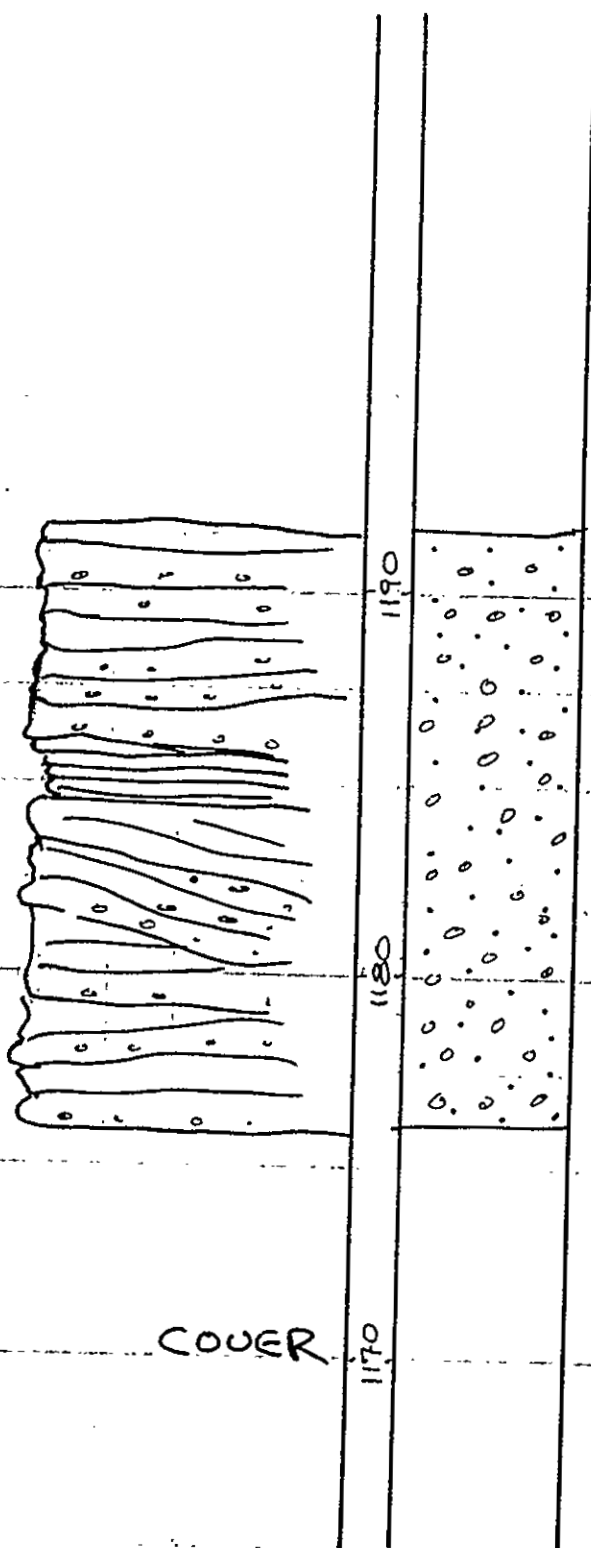
COVER



1130	1140	1150	1160
			

M. S. No. 57

PAGE 13



= LOWEST UNIT
OF M.S. No. 59

MEASURED SOUTH
LOCALITY Rio Puerto-Gallinas Canyon E
SETTING ~~W~~ side

DATE July 9, 1979
STRATIGRAPHIC UNIT 4th Bg. ss. - RPT III
MEASURED BY JHC

SEDIMENTARY
TEXT & STRUCT
CARBONATES
GRN PK WKL MUDST
CLASTICS

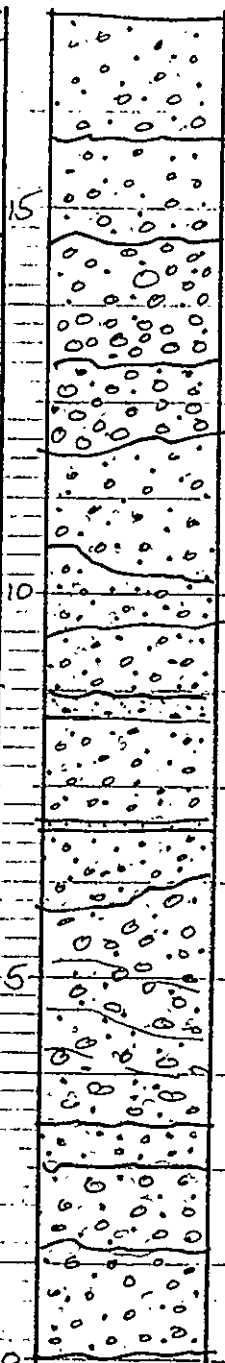
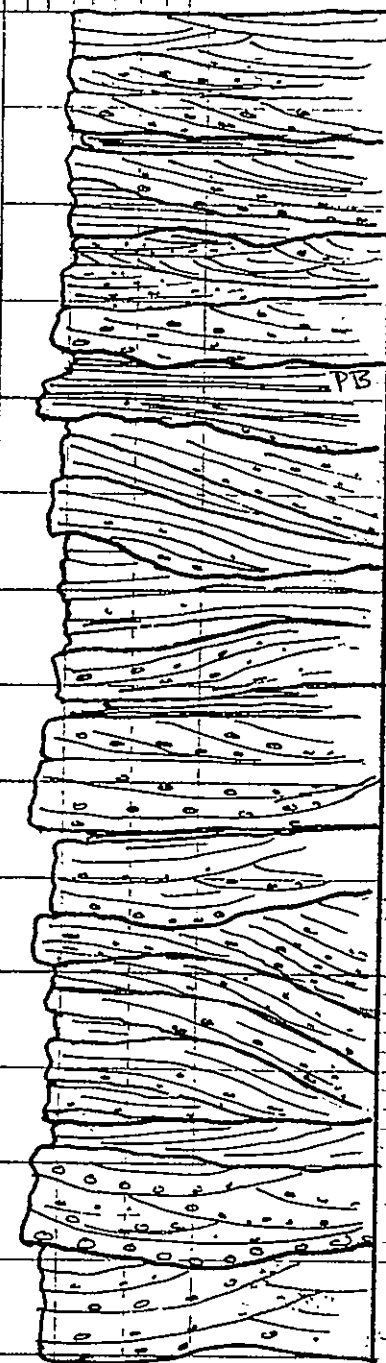
M.S. No. 57 "A"

PAGE 1

FOSSILS

GRAV SAND SILT & CLAY
12.5 64.4 VCC M FVF

DEC ROTULUS
DIRECTOR
FEATURE



Vertical text labels on the right side of the column, including 'PB', 'COVER', and 'COVERED'.

COVER

COVERED

MEASURED SECTION
LOCALITY LA
SETTING LA

DATE 1951
STRATIGRAPHIC UNIT LA
MEASURED BY LA

SEDIMENTARY
TEXT & STRUC.

FOSSILS

CARBONATES

GRN

PK

WKE

MUDST

GLASTIC

CLASTIC

CLASTIC

CLASTIC

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CLASTIC

GRN PK WKE MUDST

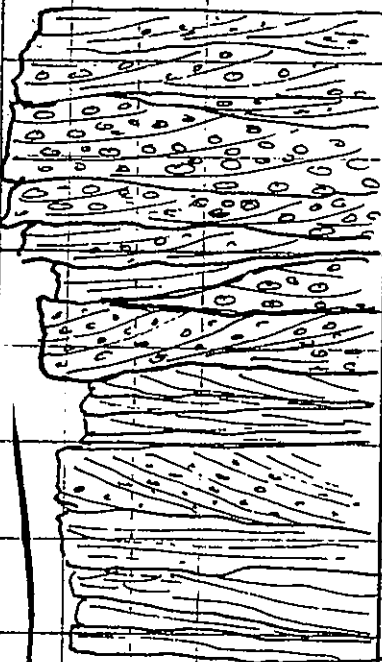
CLASTIC

GRAY SAND
4 VCC M

M.S. No. 57 "A"

PAGE 2

COVERED



COVERED

?

AV 33 34

AV 35 36

AV 37 38

low X red
200 X 100

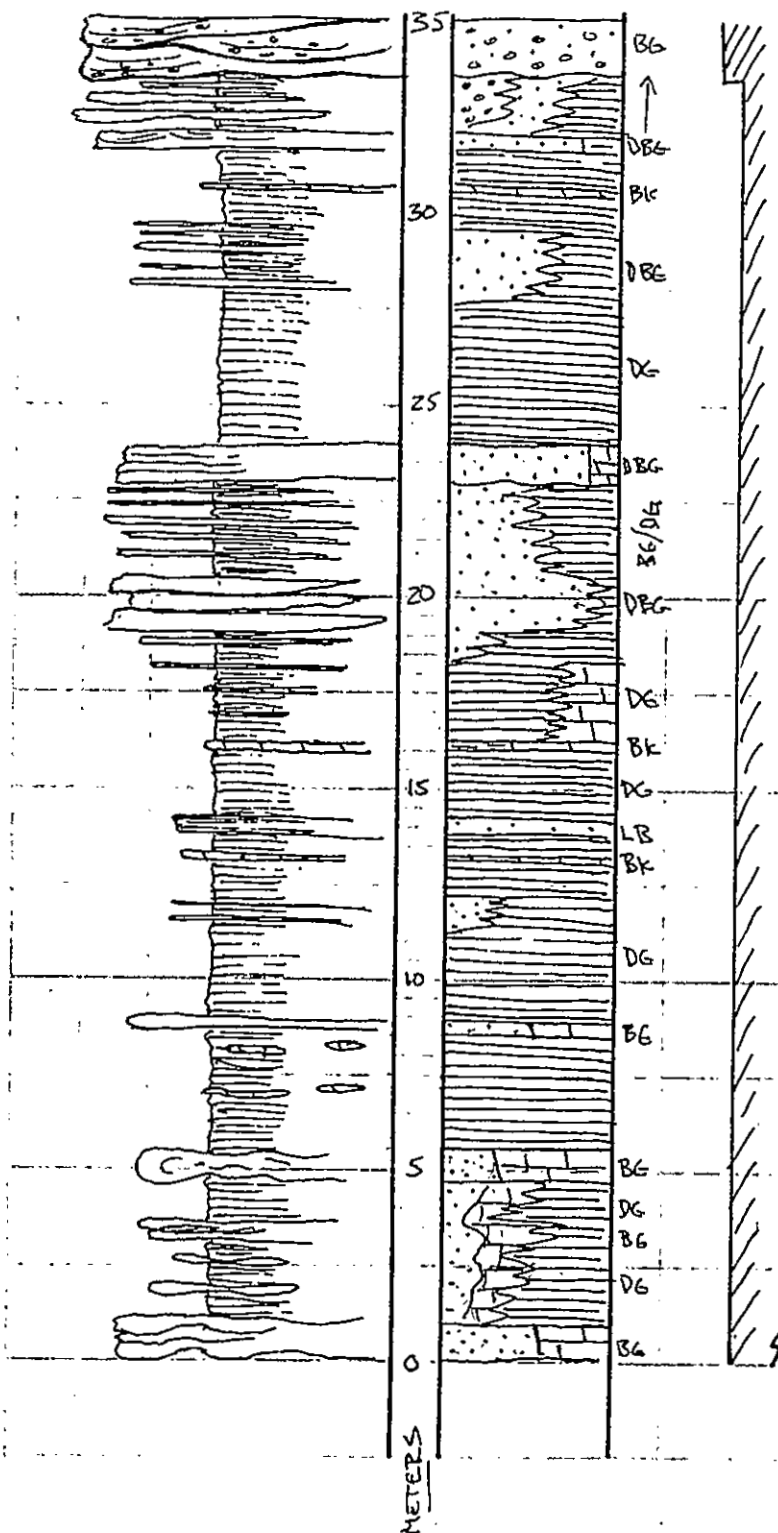
POORLY
EXPOSED

SIP
directly across hwy 3 from
Sipapu Lodge; Hillside

Aug 6, 1978
JMC

M.S. No. 58

PAGE 1



Partly Sorted
MCS = 2 cm

Microscopic
fossils

micro laminar
lower part

Microscopic

Rip-up clasts

large
fossils
up to 2 cm
fossils
fossils

Microscopic

CALCAREOUS

BK microfossils

CALCAREOUS

Microscopic
fossils
fossils
fossils

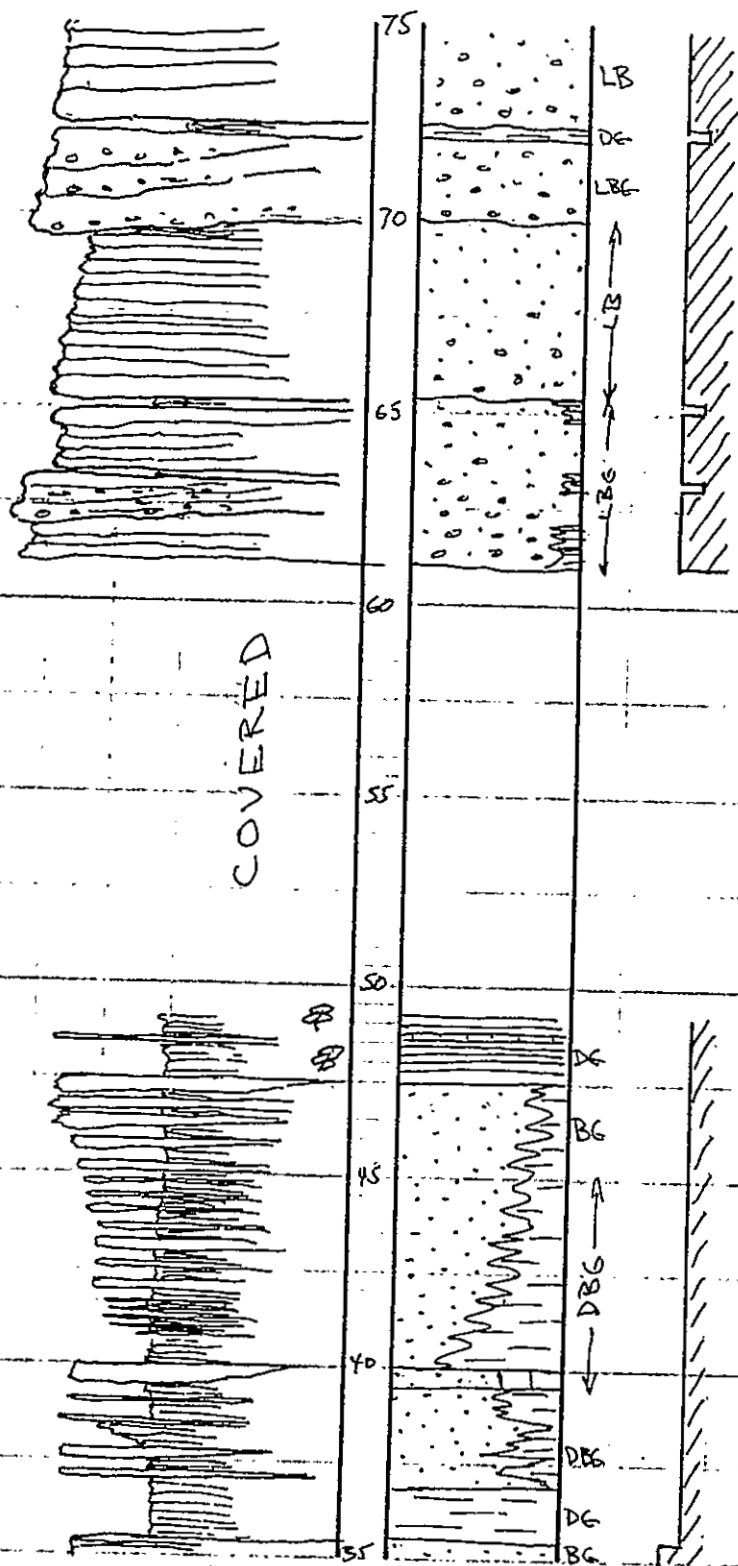
Microscopic

Microscopic

Aug 6, 1978
JMC

M. S. No. 58

PAGE 2

Very Poorly
Sorted

Beds ~ 25 cm thick

MCS = 25 cm

COVERED

POORLY
EXPOSED

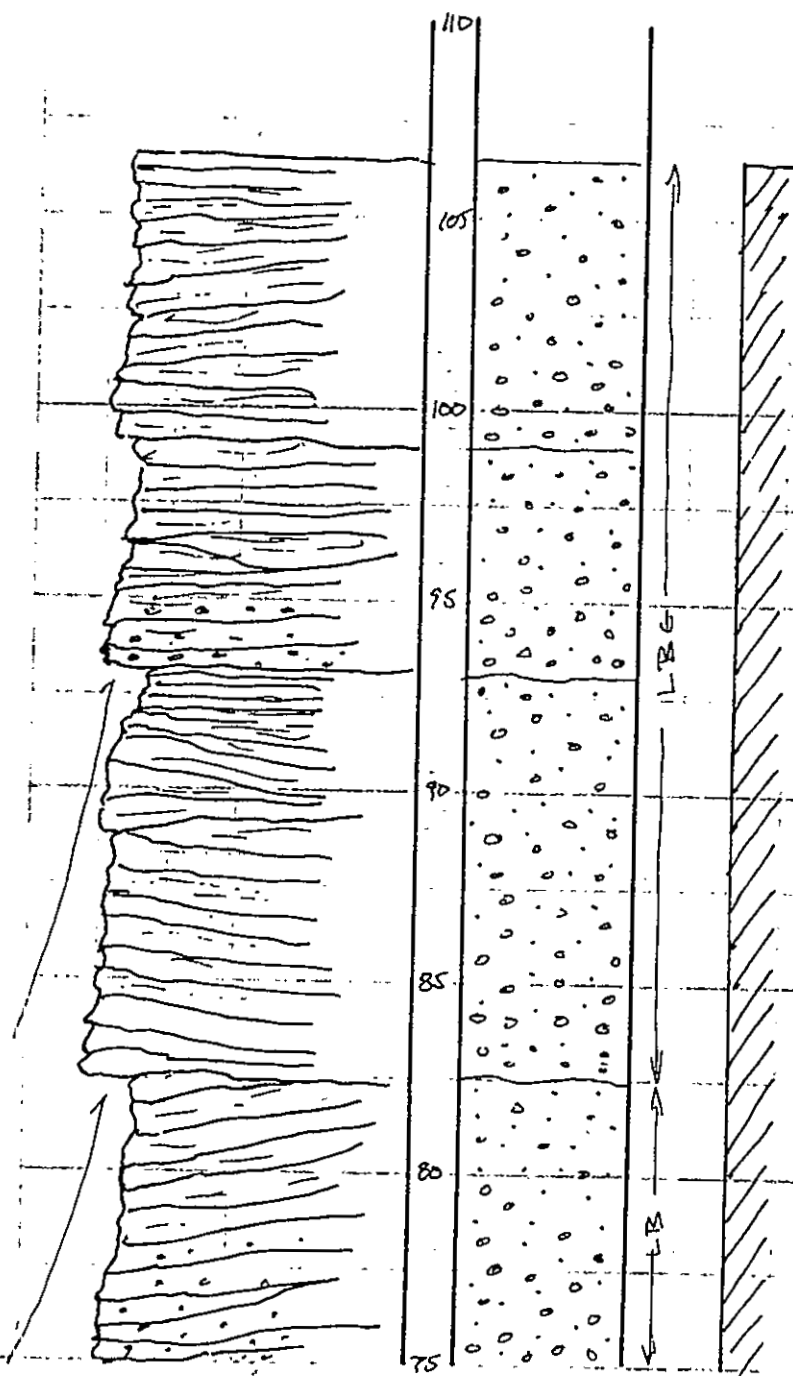
Very Coarse grained

Very Coarse grained
thin bedded

Tonalite exposure

M.S. No. 58

PAGE 3

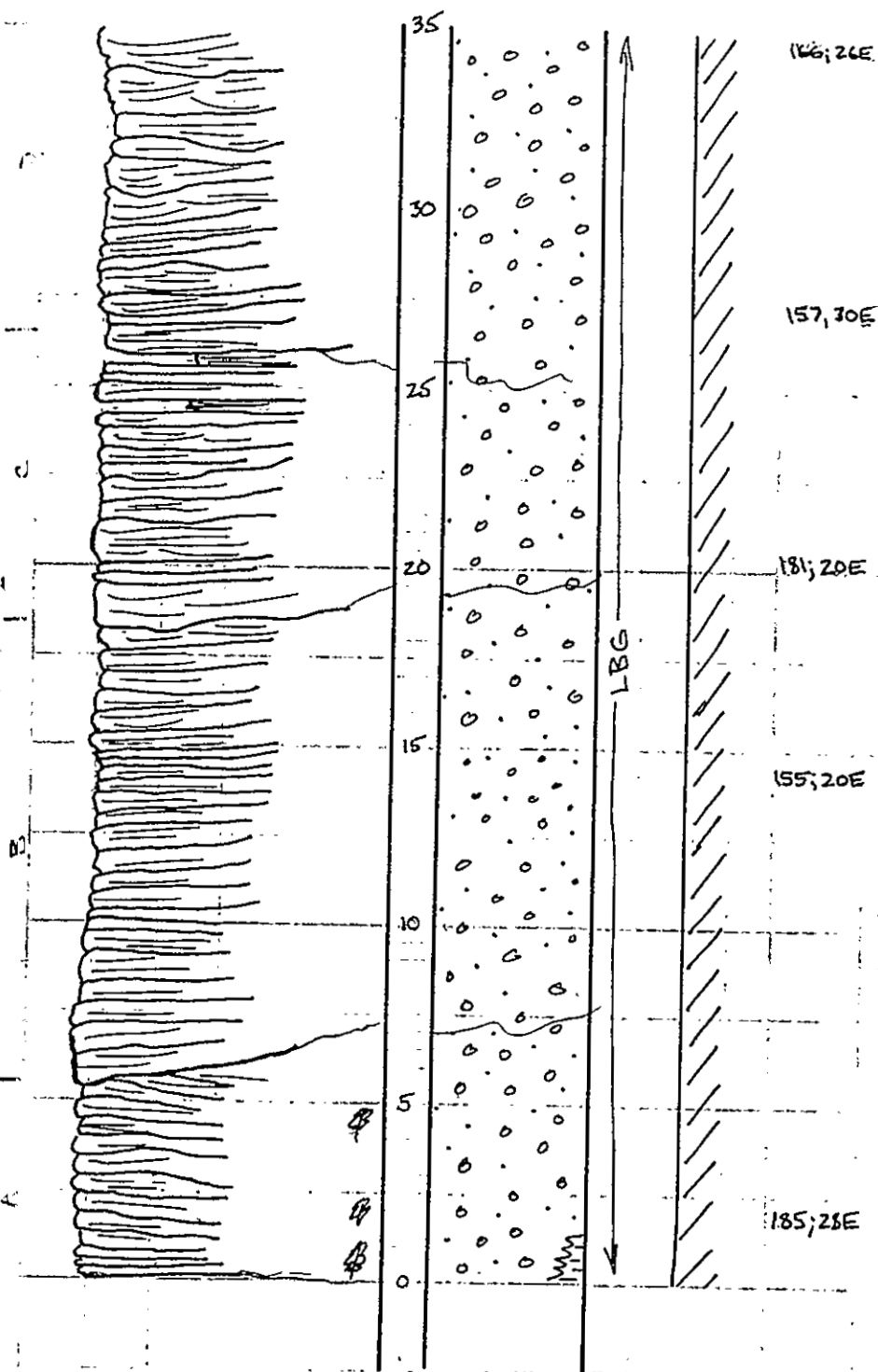


Next 15 m is
a ss covered
slope w/ crs.
congl. ss again
at 15 m

ACCRET.
BEDDING

③ M.S. No. 59

PAGE 1



30E, 26E
 157; 30E
 181; 20E
 155; 20E
 185; 28E

Interbedded
 argill. & calc.

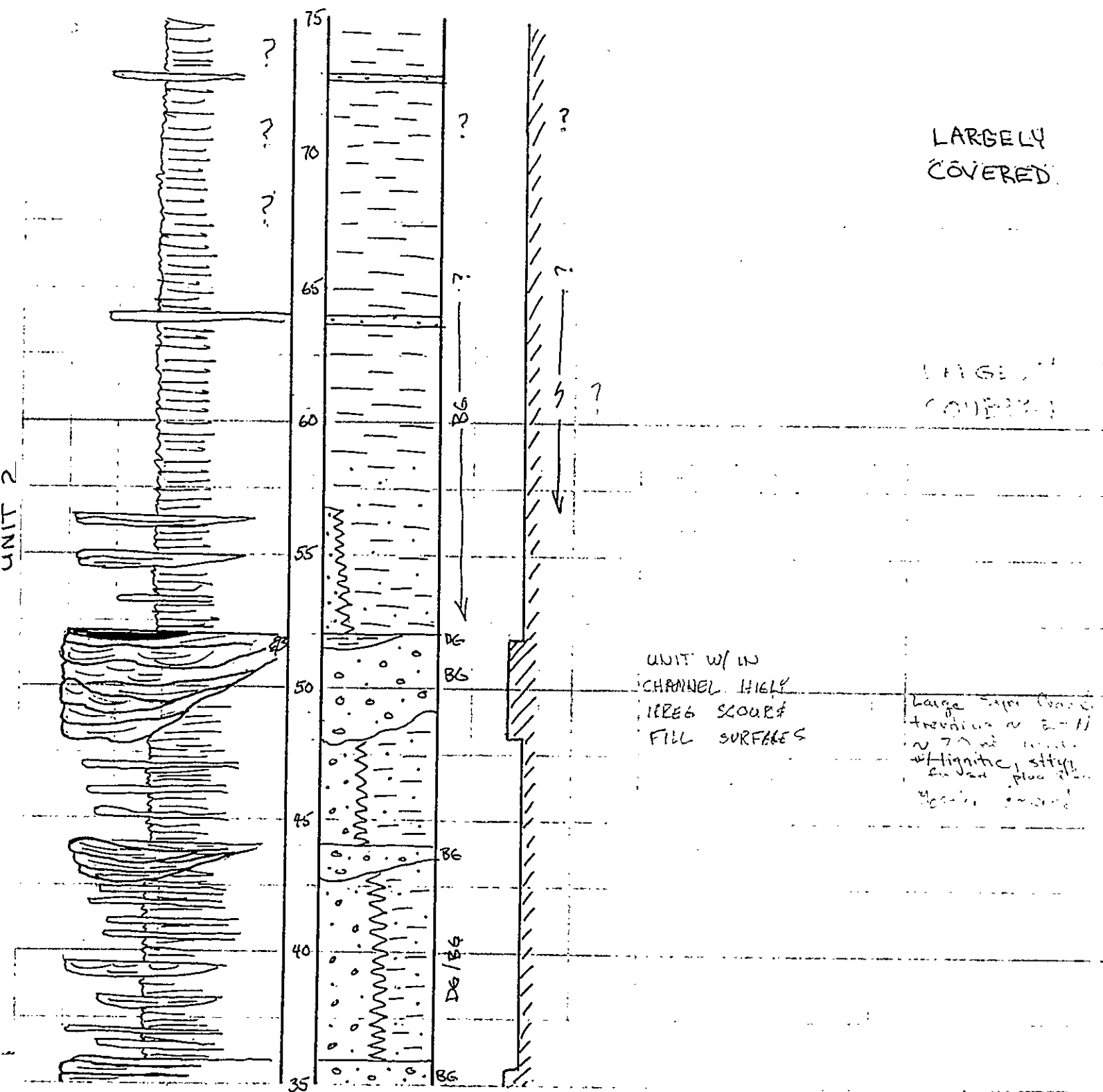
Bds. very thin
 in thickness
 thin & irregular

Interbeds of arg.
 micaceous sh. & calc.

(iii)

M.S. No. 59

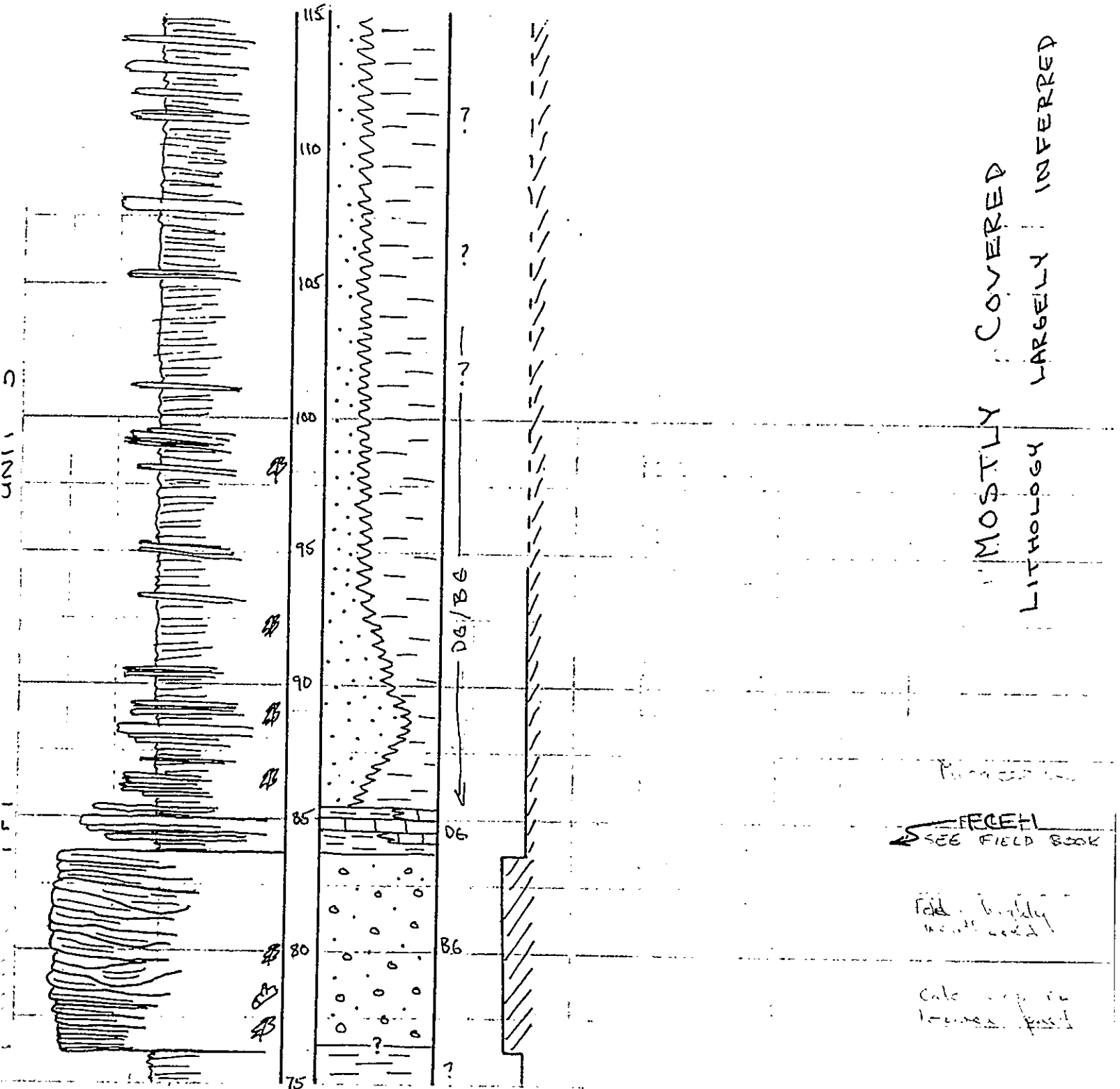
PAGE 2



(2)

M.S. No. 59

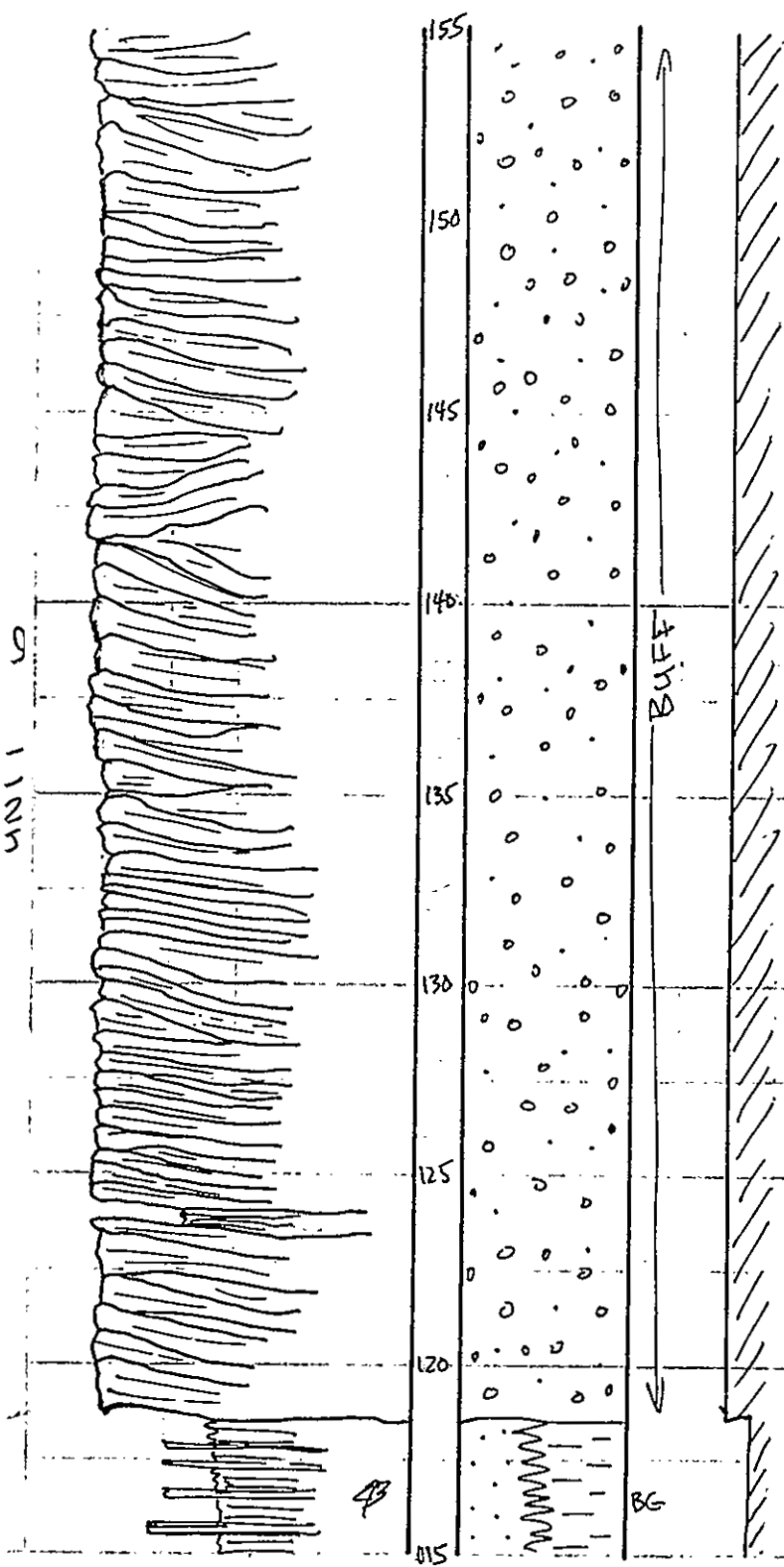
PAGE 3



(3)

M.S. No. 59

PAGE 4



155 -
 150 -
 145 -
 140 -
 135 -
 130 -
 125 -
 120 -
 115 -
 UNITS

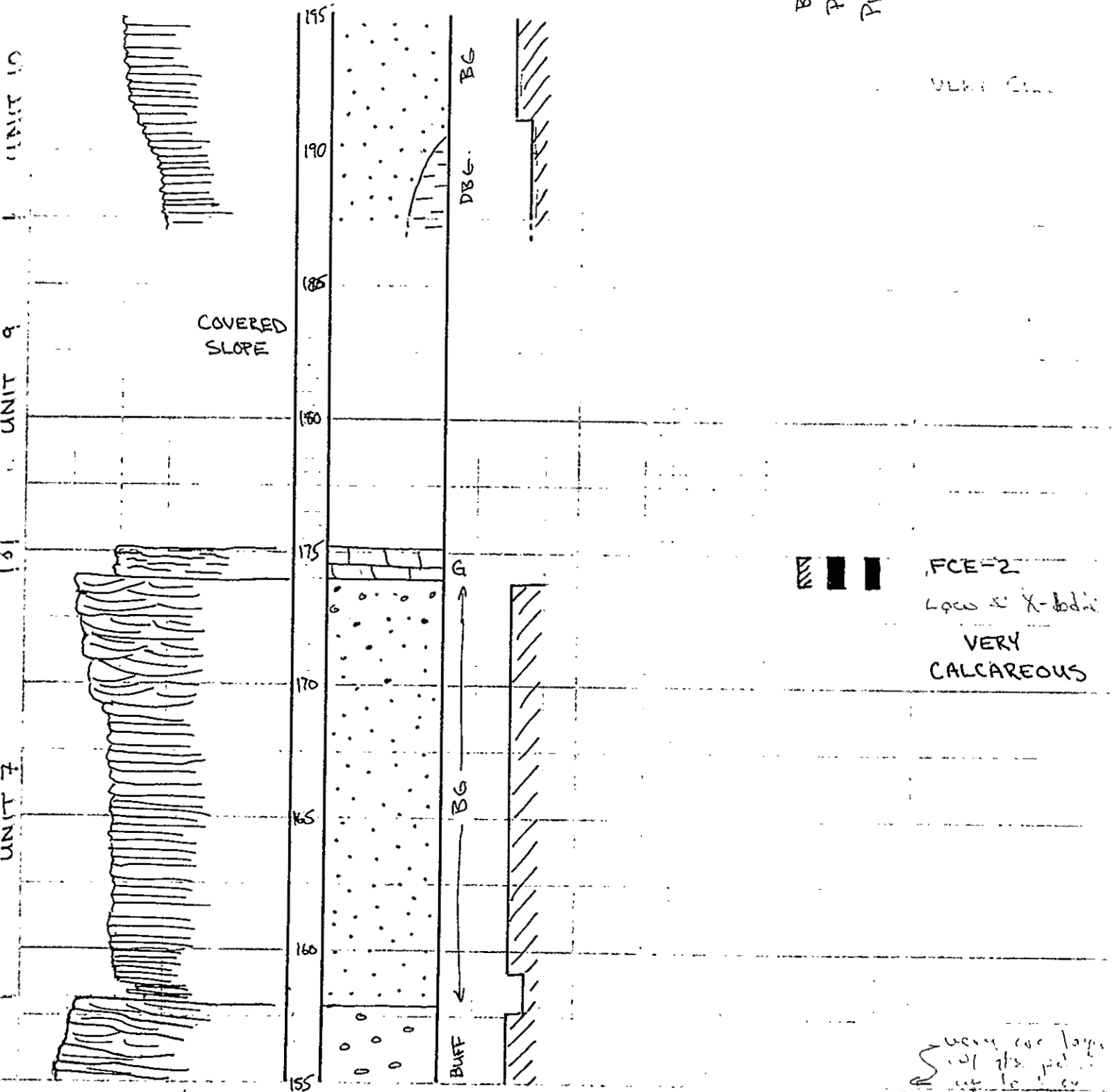
155 -
 150 -
 145 -
 140 -
 135 -
 130 -
 125 -
 120 -
 115 -
 SS

230

M.S. No. 59

PAGE 5

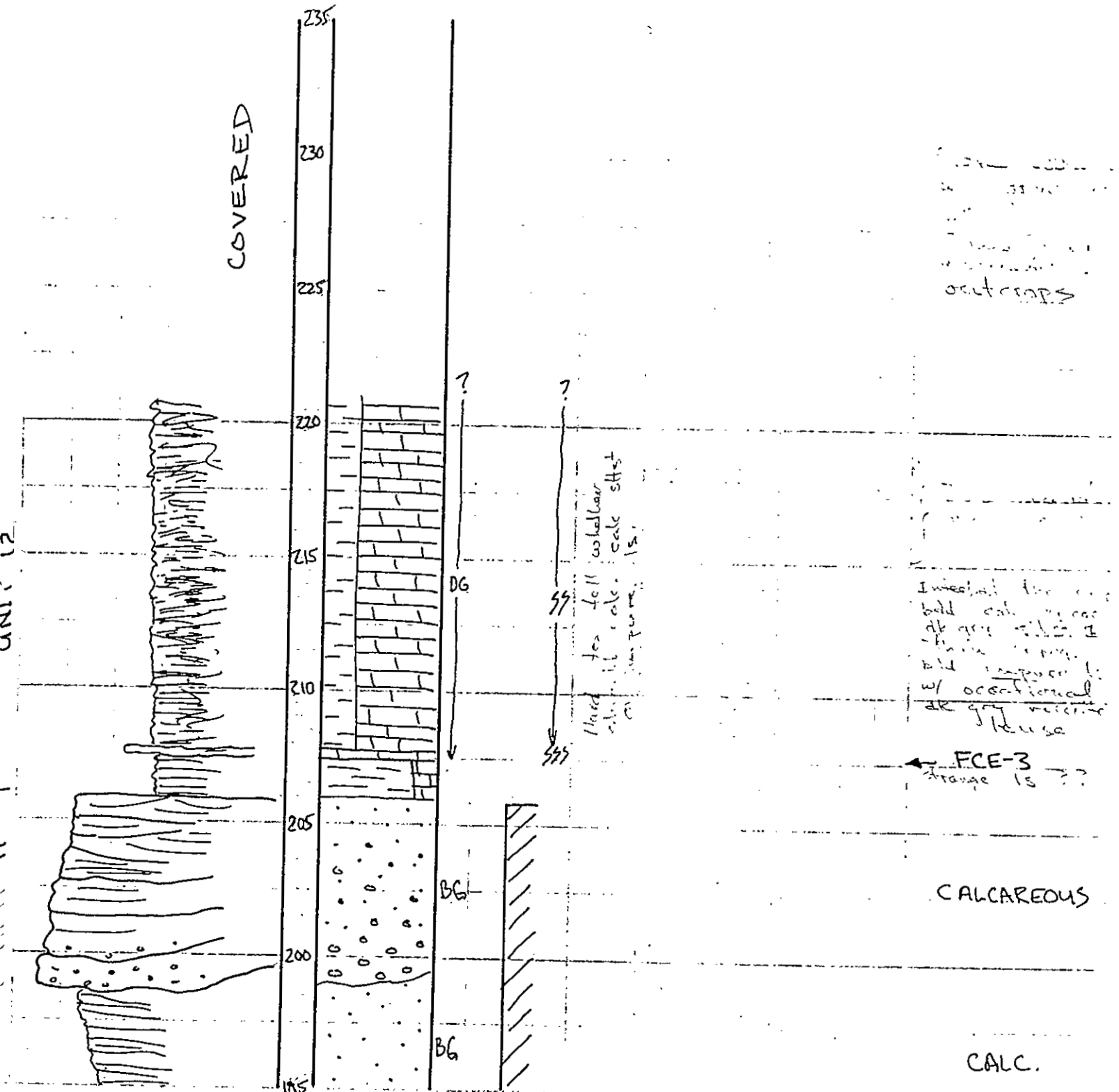
BRACHS
PELEC
Phylloid Algae



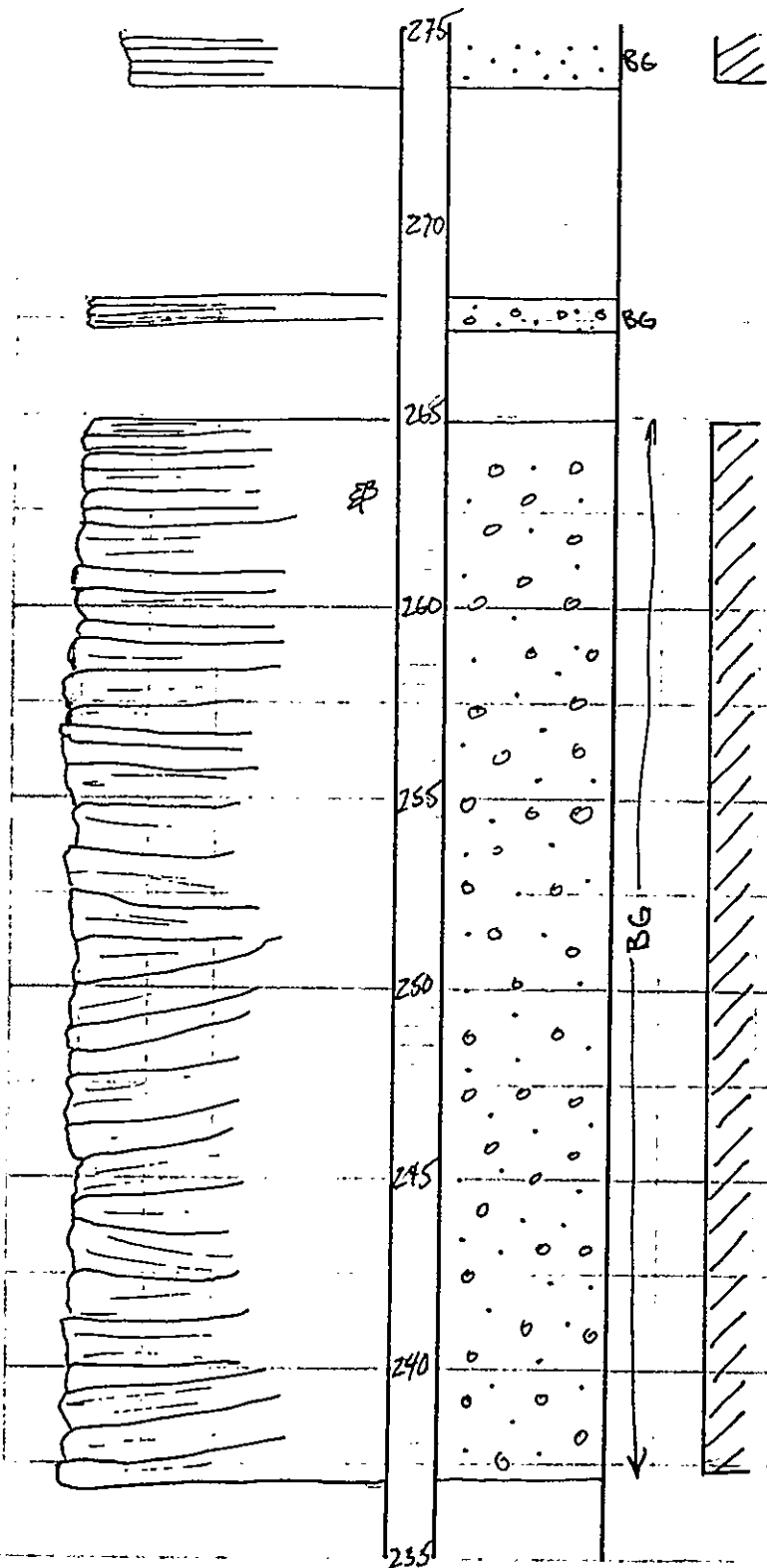
②

M.S. No. 59

PAGE 6



③ M.S. No. 59
PAGE 7



CONCRETE
at base of
section

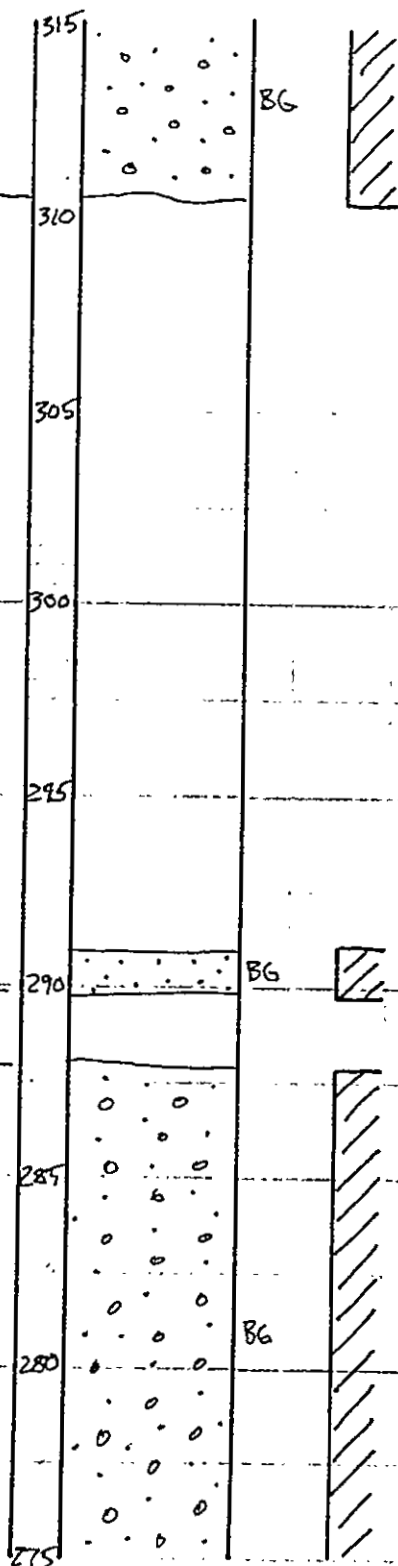
PROBABLY
ACCRET.
BEDDING

(2)

M.S. No. 59

PAGE 8

COVERED



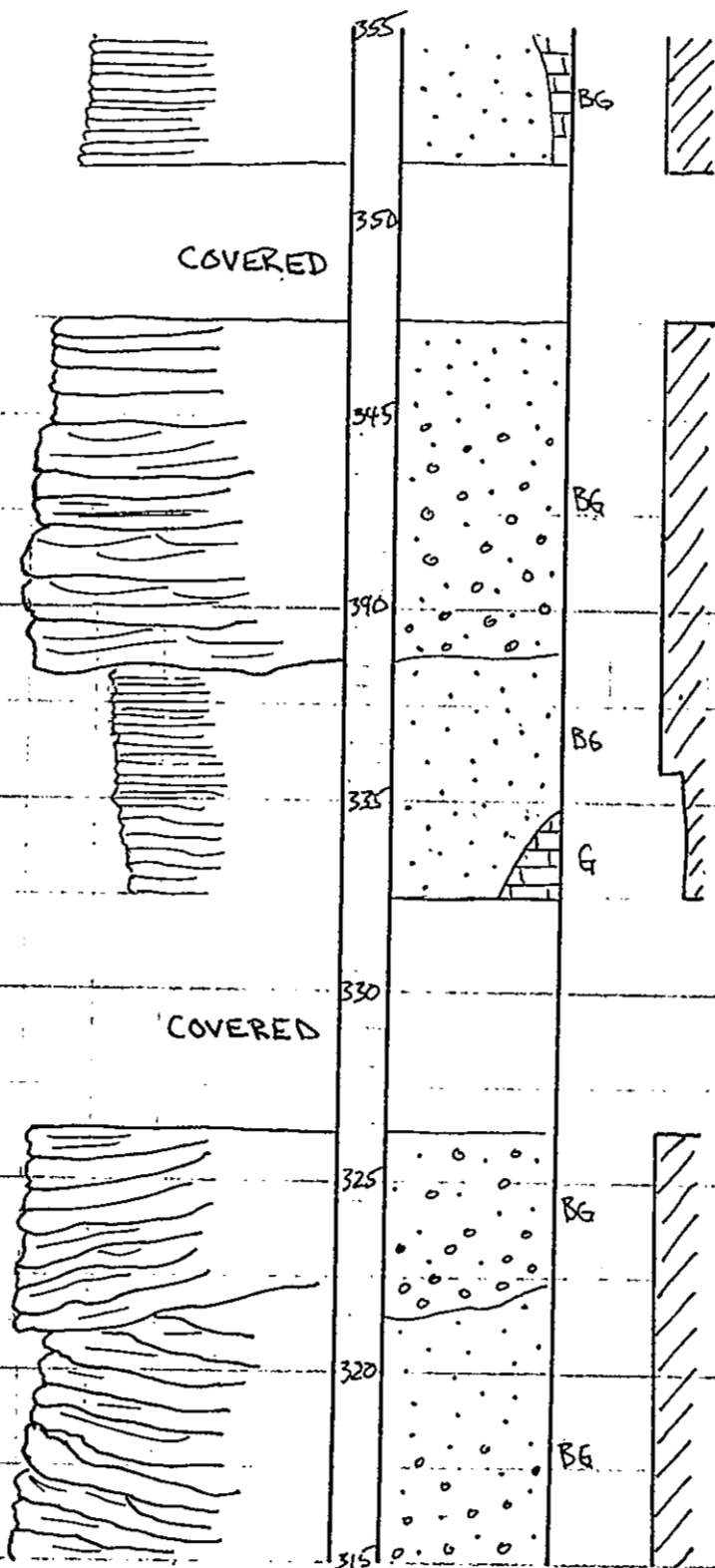
COVERED

Gentle S. S.
2 1/2' thick
SS

F

M.S. No. 59

PAGE 9



CALC.

Gneiss

MICACEOUS

Gneiss
 235
 230
 225
 220
 215
 210
 205
 200
 195
 190
 185
 180
 175
 170
 165
 160
 155
 150
 145
 140
 135
 130
 125
 120
 115
 110
 105
 100
 95
 90
 85
 80
 75
 70
 65
 60
 55
 50
 45
 40
 35
 30
 25
 20
 15
 10
 5
 0

(2)

M.S. No. 59

PAGE 10

COVERED

395

390

385

380

375

370

365

360

355

Gentle
Slope
↑

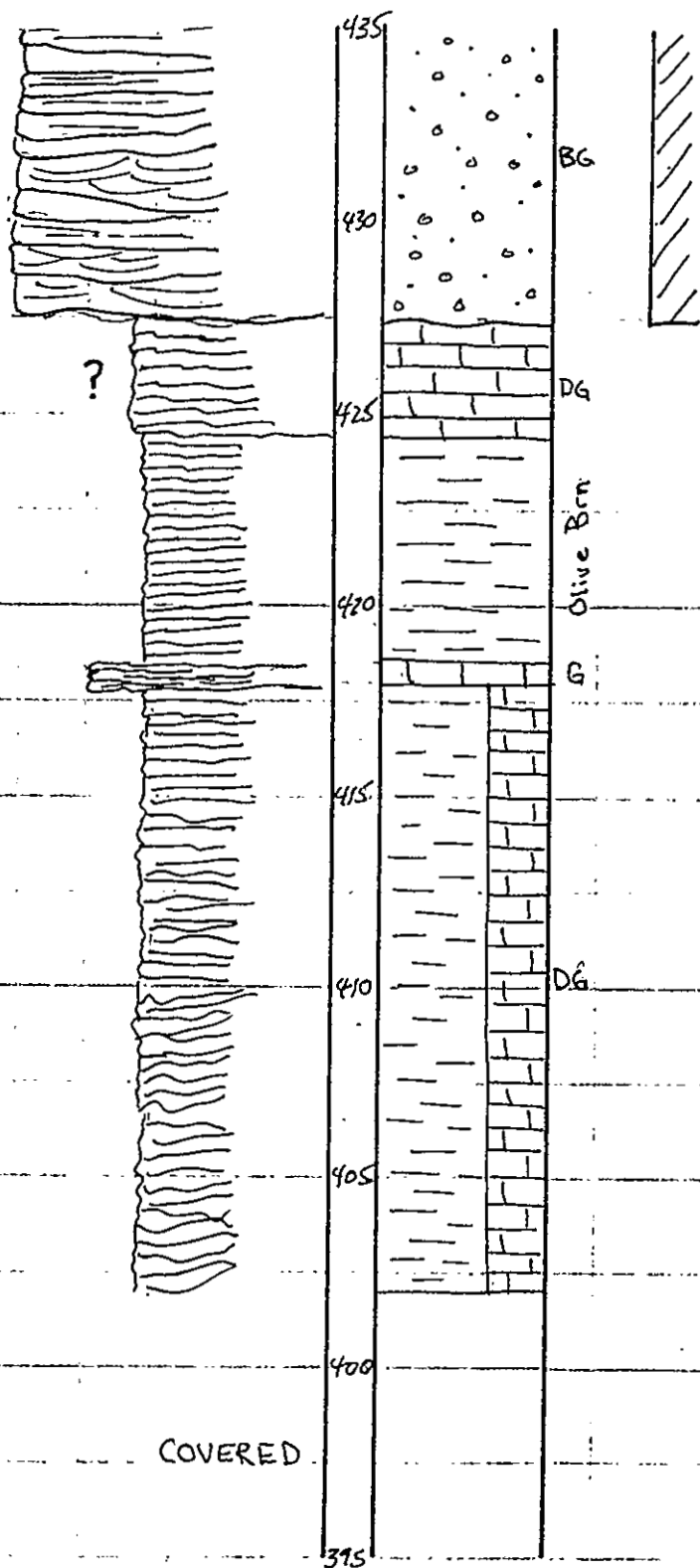
FLAT

Assumed comparison
to new topFCE 236
June 10 of 14

(3)

M.S. No. 59

PAGE 11



FUSULINIDS

NOT VERY
WELL EXPOSED!Indicate original
to be correctmarginal
strat to be
SS

FUSULINIDS FCE-4

In excess of
1000 ft of
graptolite
stratigraphic
unit is+ occasional
micrite lenses

(2)

M.S. No. 59

PAGE 12

COVERED

475

470

465

460

455

450

445

440

435

COVERED

COLLECTED
EXCEPT FOR
A FEW VC
SS LENSES

Phylloid Algae

?

Upper Part
Not Well
Exposed

BG

(w)

M. S. No. 59

PAGE 13

COVERED

515

510

505

500

495

490

485

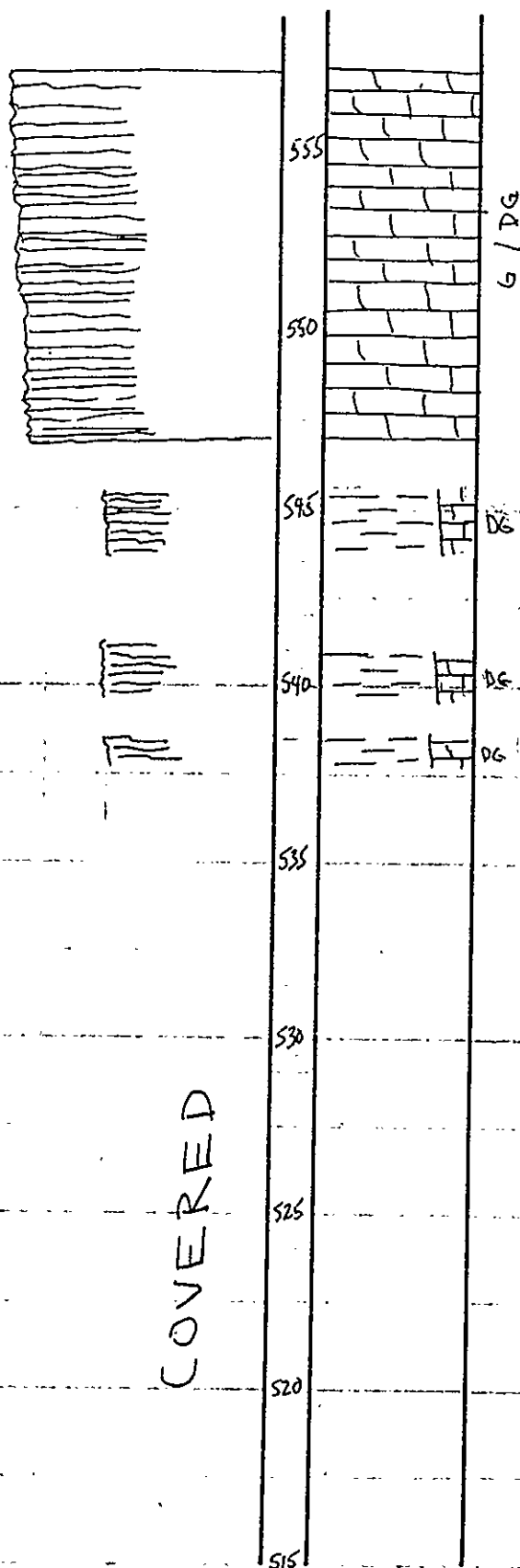
480

475

(4c)

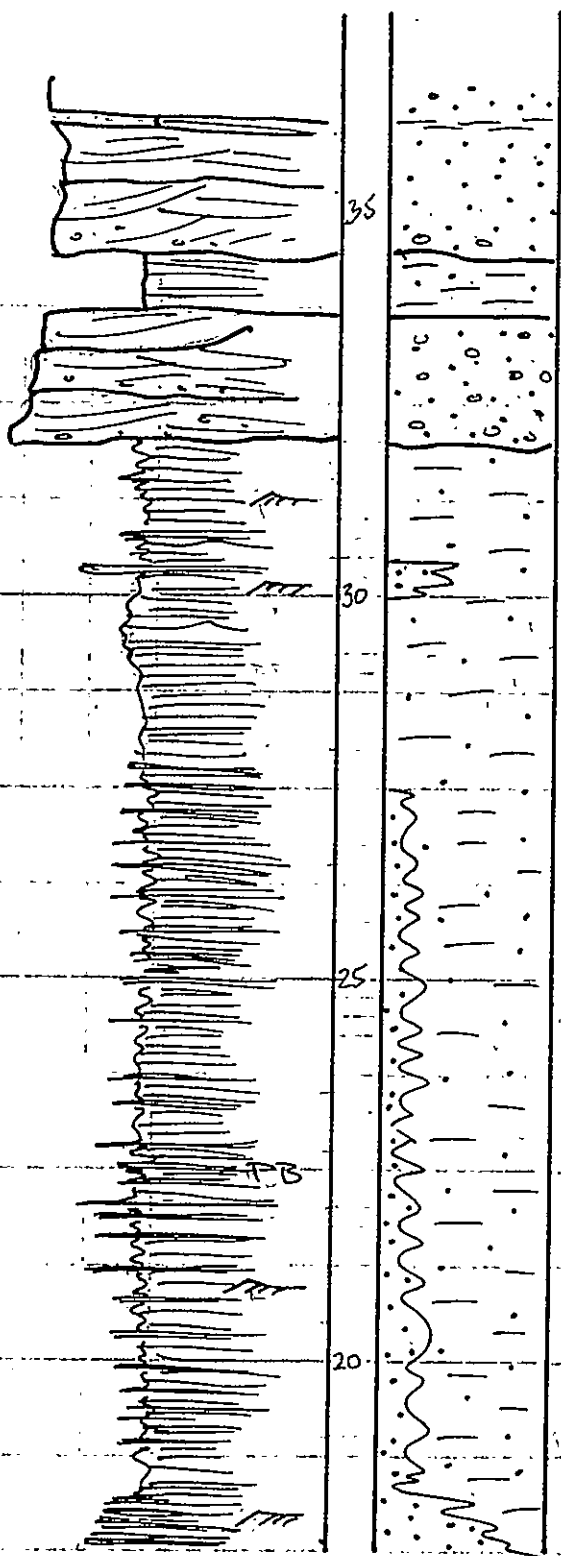
M. S. No. 59

PAGE 14

DIVERSE

M. S. No. 60

PAGE 2



horiz. bedding

Micaceous
silty very
fine-grained
sandstone
with thin
interbeds of
fine to med-
grained ss.

Thinly bedded
silty sandstone
with thin
interbeds of
fine to med-grained ss.

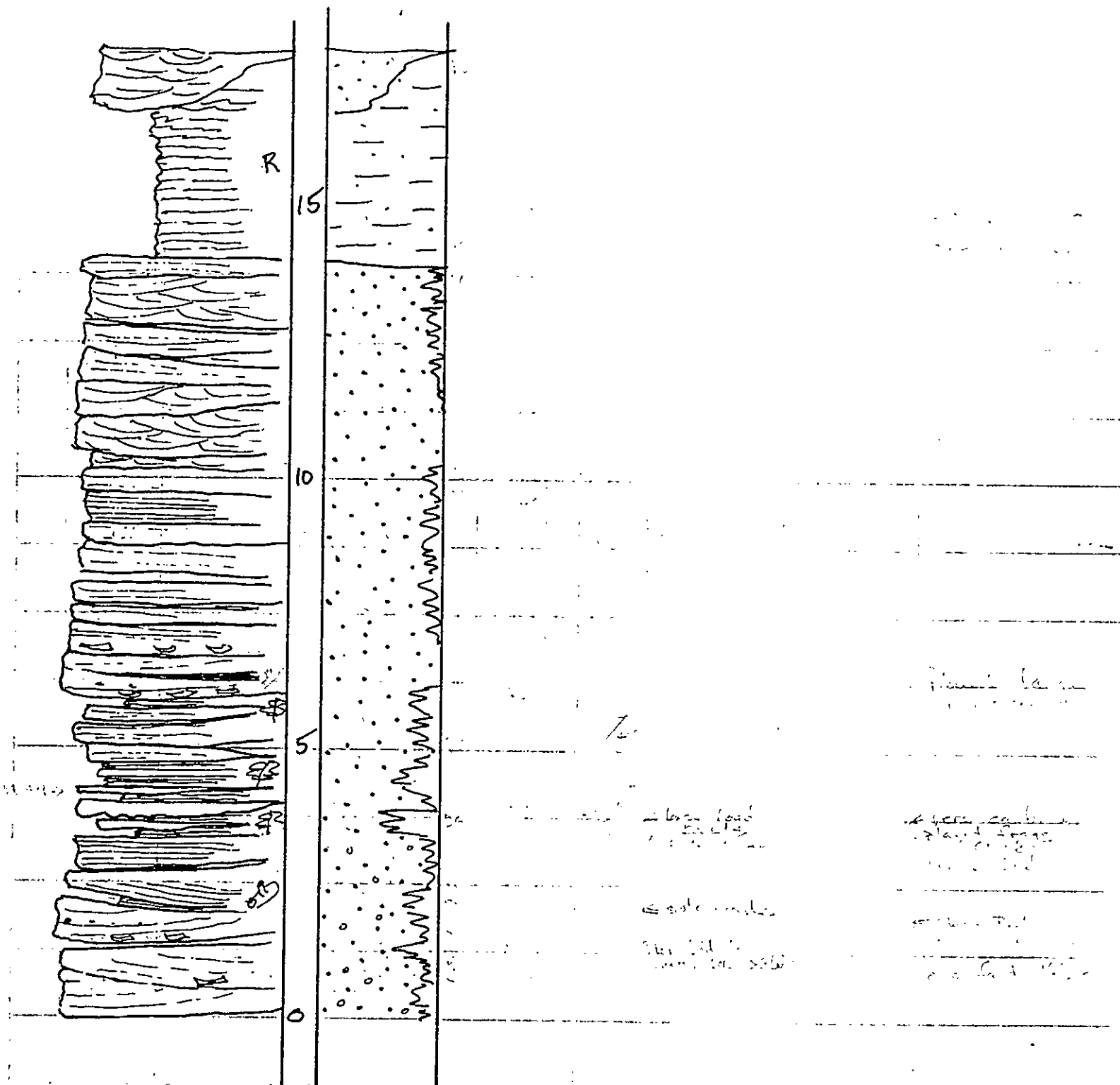
Micaceous
silty very
fine-grained
sandstone
with thin
interbeds of
fine to med-grained ss.

Thinly bedded
silty sandstone
with thin
interbeds of
fine to med-grained ss.

Very fine-grained
silty sandstone
with thin
interbeds of
fine to med-grained ss.

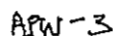
M.S. No. 61

PAGE 1



Casey

PAGE 1



APW-2

APW+V

A1-A4

3015112

[illegible]

secret bin
of ...
~~secret bin~~

Some liamini -
~~Lepidoptera~~
 M. c. c. c. c. c. c.
 air scatter - 2 years
 to 10 years old
 / Crat

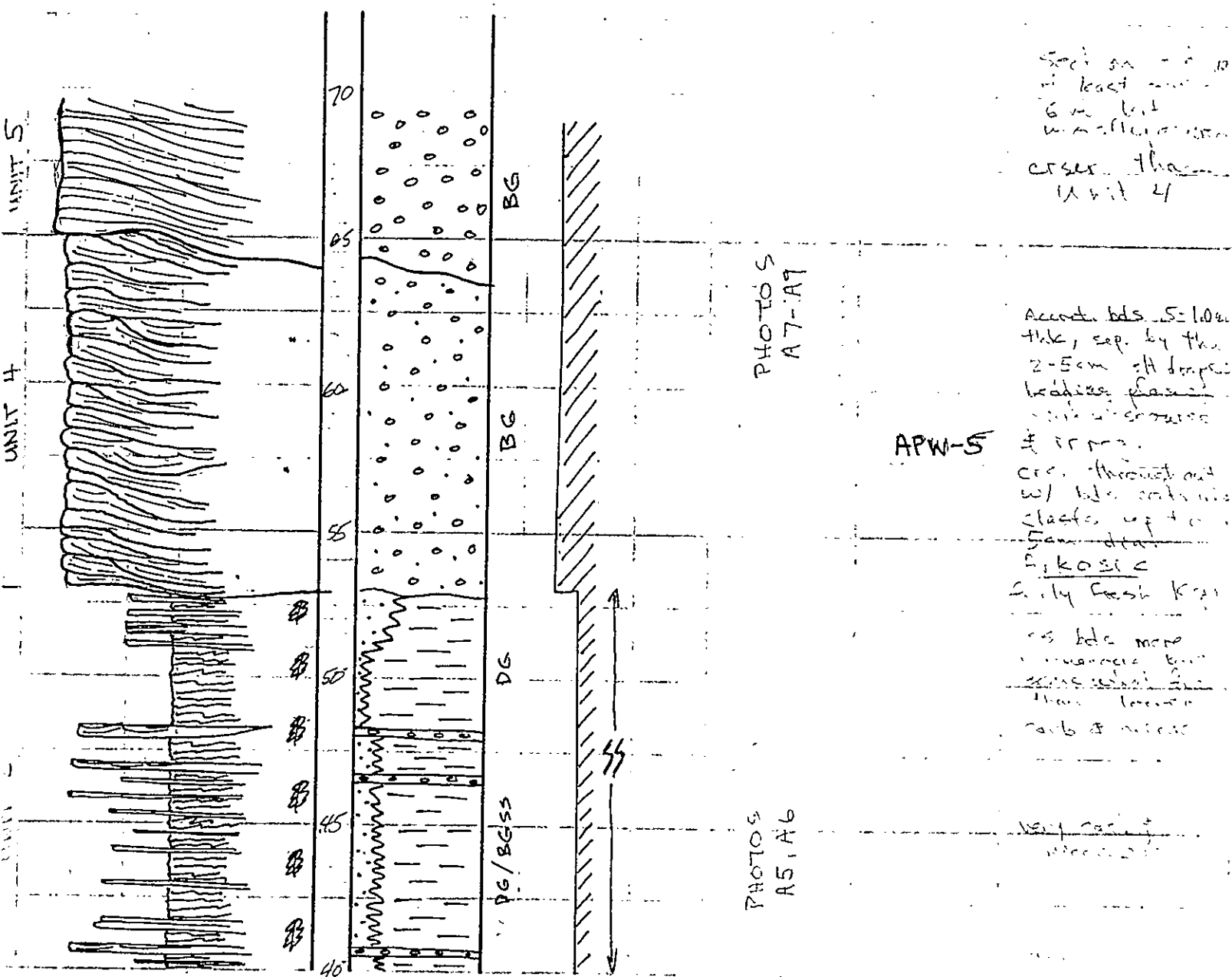
arkose, c
MC - c
sh. - c
m. - c
f. - c
s. - c
l. - c
t. - c
b. - c
g. - c
r. - c
o. - c
n. - c
u. - c
p. - c
q. - c
v. - c
w. - c
x. - c
y. - c
z. - c

355, 56th

APW Pac 2 lot 2 Hx

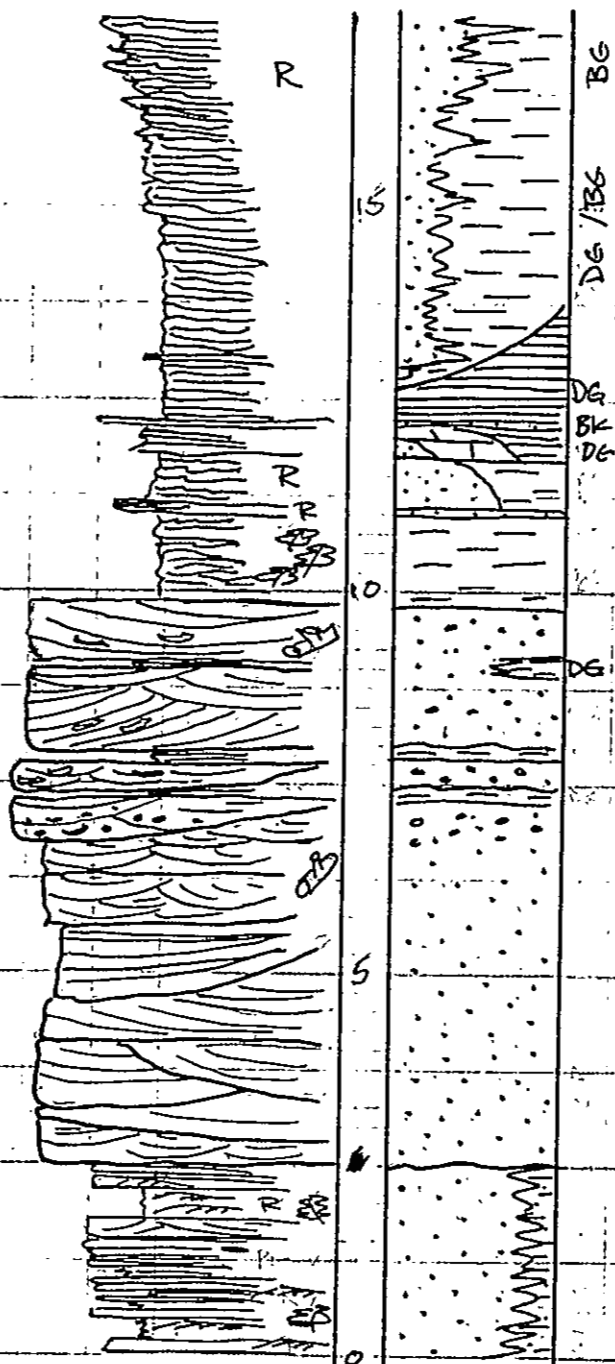
M.S. No. 62

PAGE 2



PAGE 1

Gast
Brach



[Faint handwritten notes]

10. *Conclusions*

1910. 1911. 1912. 1913. 1914. 1915. 1916. 1917. 1918. 1919. 1920. 1921. 1922. 1923. 1924. 1925. 1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937. 1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 2199. 2200. 2201. 2202. 2203. 2204. 2205. 2206. 2207. 2208. 2209. 2210. 2211. 2212. 2213. 2214. 2215. 2216. 2217. 2218. 2219. 2220. 2221. 2222. 2223. 2224. 2225. 2226. 2227. 2228. 2229. 2230. 2231. 2232. 2233. 2234. 2235. 2236. 2237. 2238. 2239. 2240. 2241. 2242. 2243. 2244. 2245. 2246. 2247. 2248. 2249. 2250. 2251. 2252. 2253. 2254. 2255. 2256. 2257. 2258. 2259. 2260. 2261. 2262. 2263. 2264. 2265. 2266. 2267. 2268. 2269. 2270. 2271. 2272. 2273. 2274. 2275. 2276. 2277. 2278. 2279. 2280. 2281. 2282. 2283. 2284. 2285. 2286. 2287. 2288. 2289. 2290. 2291. 2292. 2293. 2294. 2295. 2296. 2297. 2298. 2299. 2300. 2301. 2302. 2303. 2304. 2305. 2306. 2307. 2308. 2309. 2310. 2311. 2312. 2313. 2314. 2315. 2316. 2317. 2318. 2319. 2320. 2321. 2322. 2323. 2324. 2325. 2326. 2327. 2328. 2329. 2330. 2331. 2332. 2333. 2334. 2335. 2336. 2337. 2338. 2339. 2340. 2341. 2342. 2343. 2344. 2345. 2346. 2347. 2348. 2349. 2350. 2351. 2352. 2353. 2354. 2355. 2356. 2357. 2358. 2359. 2360. 2361. 2362. 2363. 2364. 2365. 2366. 2367. 2368. 2369. 2370. 2371. 2372. 2373. 2374. 2375. 2376. 2377. 2378. 2379. 2380. 2381. 2382. 2383. 2384. 2385. 2386. 2387. 2388. 2389. 2390. 2391. 2392. 2393. 2394. 2395. 2396. 2397. 2398. 2399. 2400. 2401. 2402. 2403. 2404. 2405. 2406. 2407. 2408. 2409. 2410. 2411. 2412. 2413. 2414. 2415. 2416. 2417. 2418. 2419. 2420. 2421. 2422. 2423. 2424. 2425. 2426. 2427. 2428. 2429. 2430. 2431. 2432. 2433. 2434. 2435. 2436. 2437. 2438. 2439. 2440. 2441. 2442. 2443. 2444. 2445. 2446. 2447. 2448. 2449. 2450. 2451. 2452. 2453. 2454. 2455. 2456. 2457. 2458. 2459. 2460. 2461. 2462. 2463. 2464. 2465. 2466. 2467. 2468. 2469. 2470. 2471. 2472. 2473. 2474. 2475. 2476. 2477. 2478. 2479. 2480. 2481. 2482. 2483. 2484. 2485. 2486. 2487. 2488. 2489. 2490. 2491. 2492. 2493. 2494. 2495. 2496. 2497. 2498. 2499. 2500. 2501. 2502. 2503. 2504. 2505. 2506. 2507. 2508. 2509. 2510. 2511. 2512. 2513. 2514. 2515. 2516. 2517. 2518. 2519. 2520. 2521. 2522. 2523. 2524. 2525. 2526. 2527. 2528. 2529. 2530. 2531. 2532. 2533. 2534. 2535. 2536. 2537. 2538. 2539. 2540. 2541. 2542. 2543. 2544. 2545. 2546. 2547. 2548. 2549. 2550. 2551. 2552. 2553. 2554. 2555. 2556. 2557. 2558. 2559. 2560. 2561. 2562. 2563. 2564. 2565. 2566. 2567. 2568. 2569. 2570. 2571. 2572. 2573. 2574. 2575. 2576. 2577. 2578. 2579. 2580. 2581. 2582. 2583. 2584. 2585. 2586. 2587. 2588. 2589. 2590. 2591. 25

~~W.S. Lewis, Lewis~~
1. 1000 on 10/1/51

[illegible]

Index

LETTER MEMORANDUM

But no desks have been set up

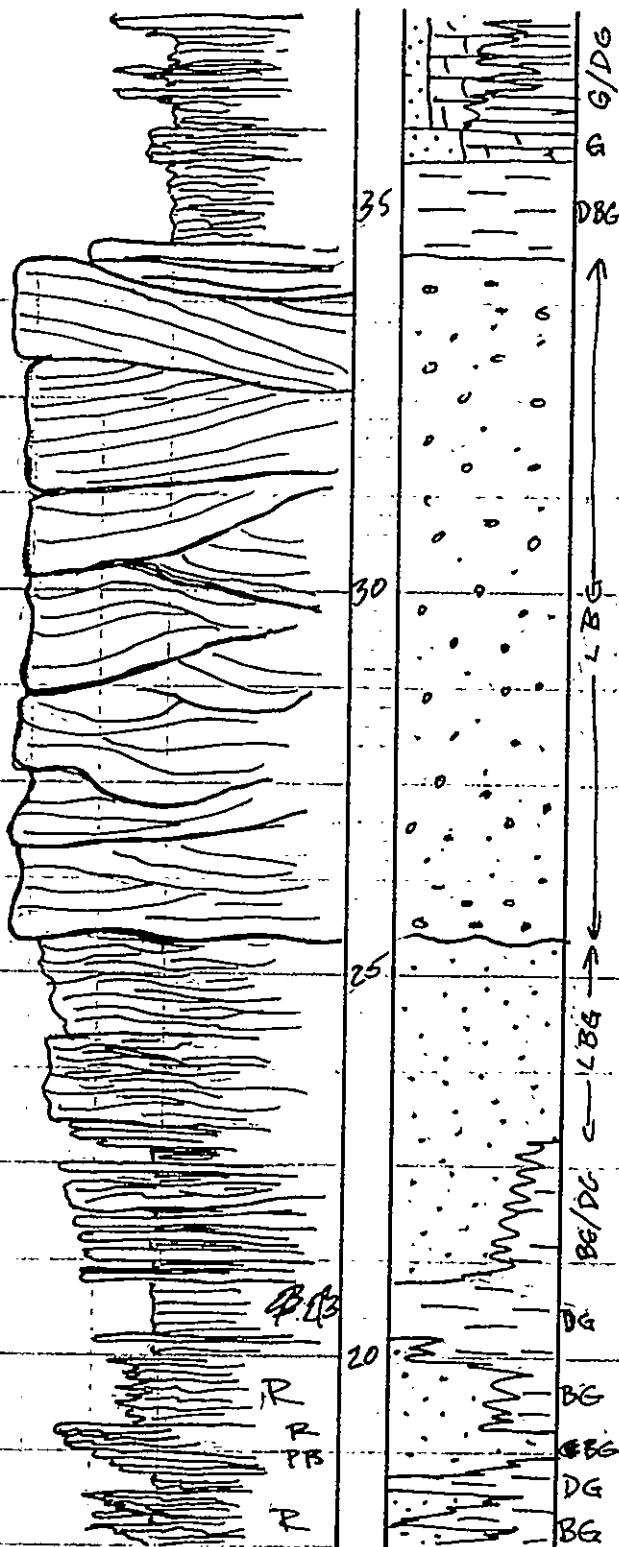
TRW

Page 1 of 5 246

M.S. No. 63

PAGE 2

11 Petecypod
11 Pylloid Algae



↑
↓

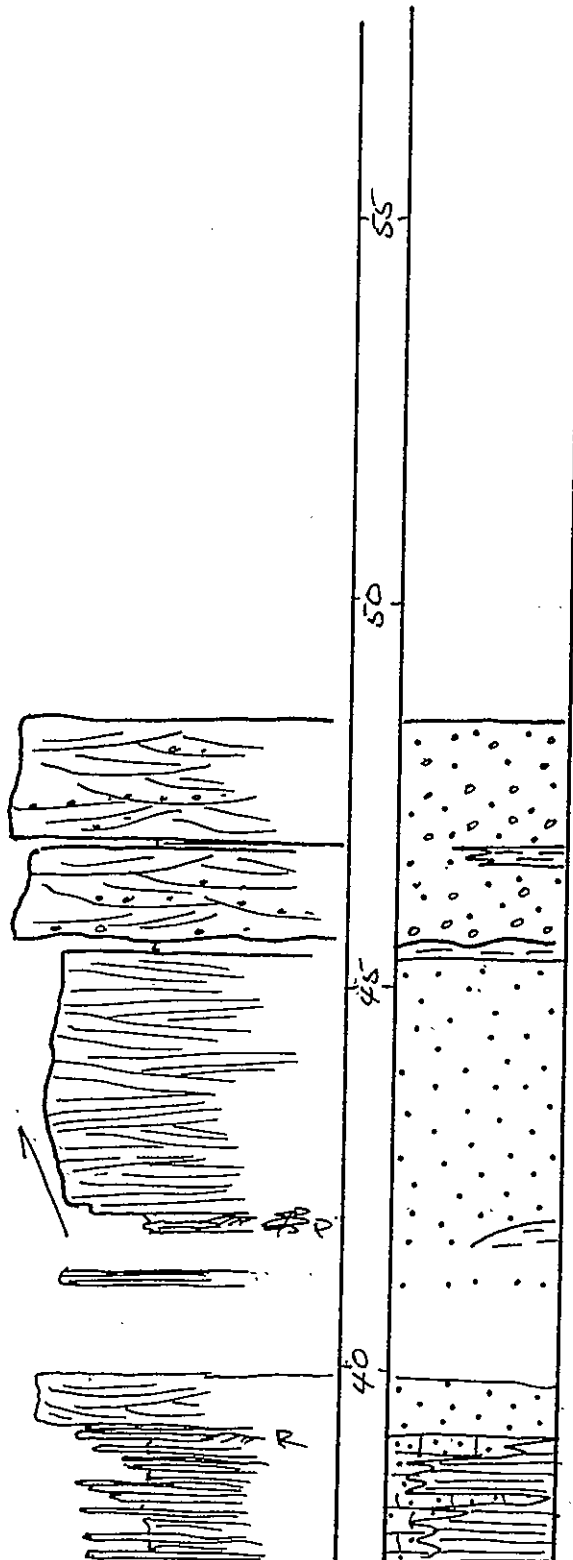
TRW

page 2 of 5 247

M.S. No. 63

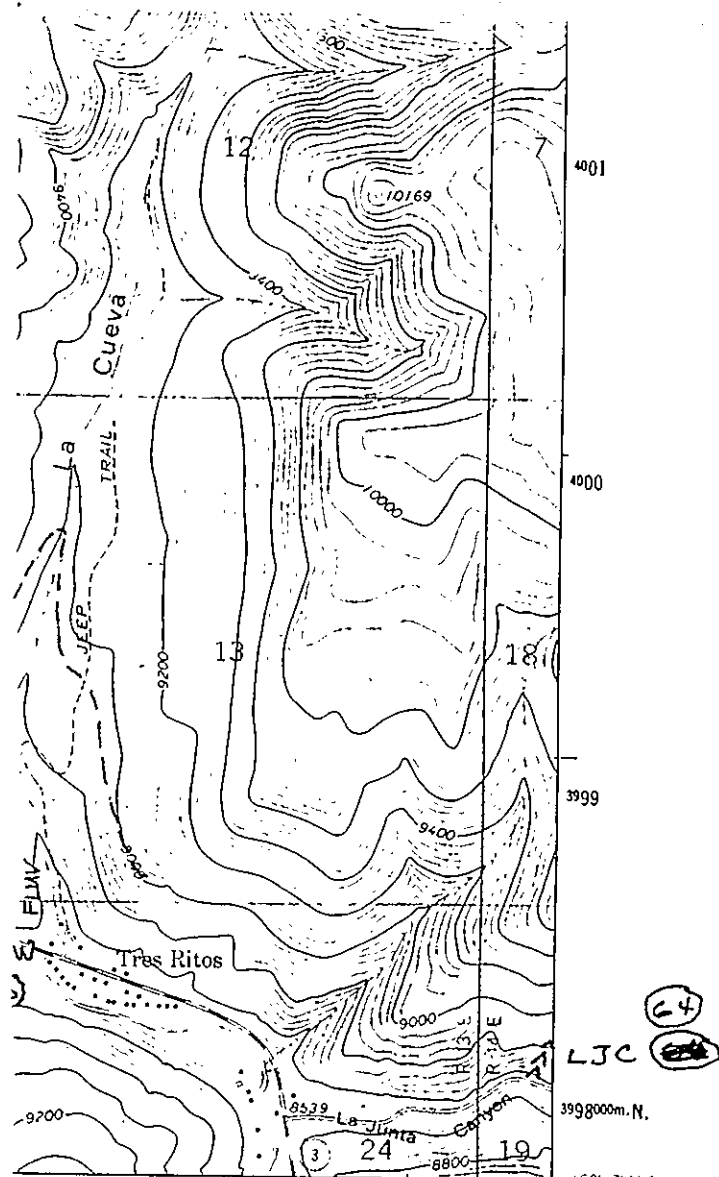
PAGE 3

Bivalves



LA JUNTA CANYON

MEASURED SECTION No. 64



ROAD CLASSIFICATION

Unimproved dirt

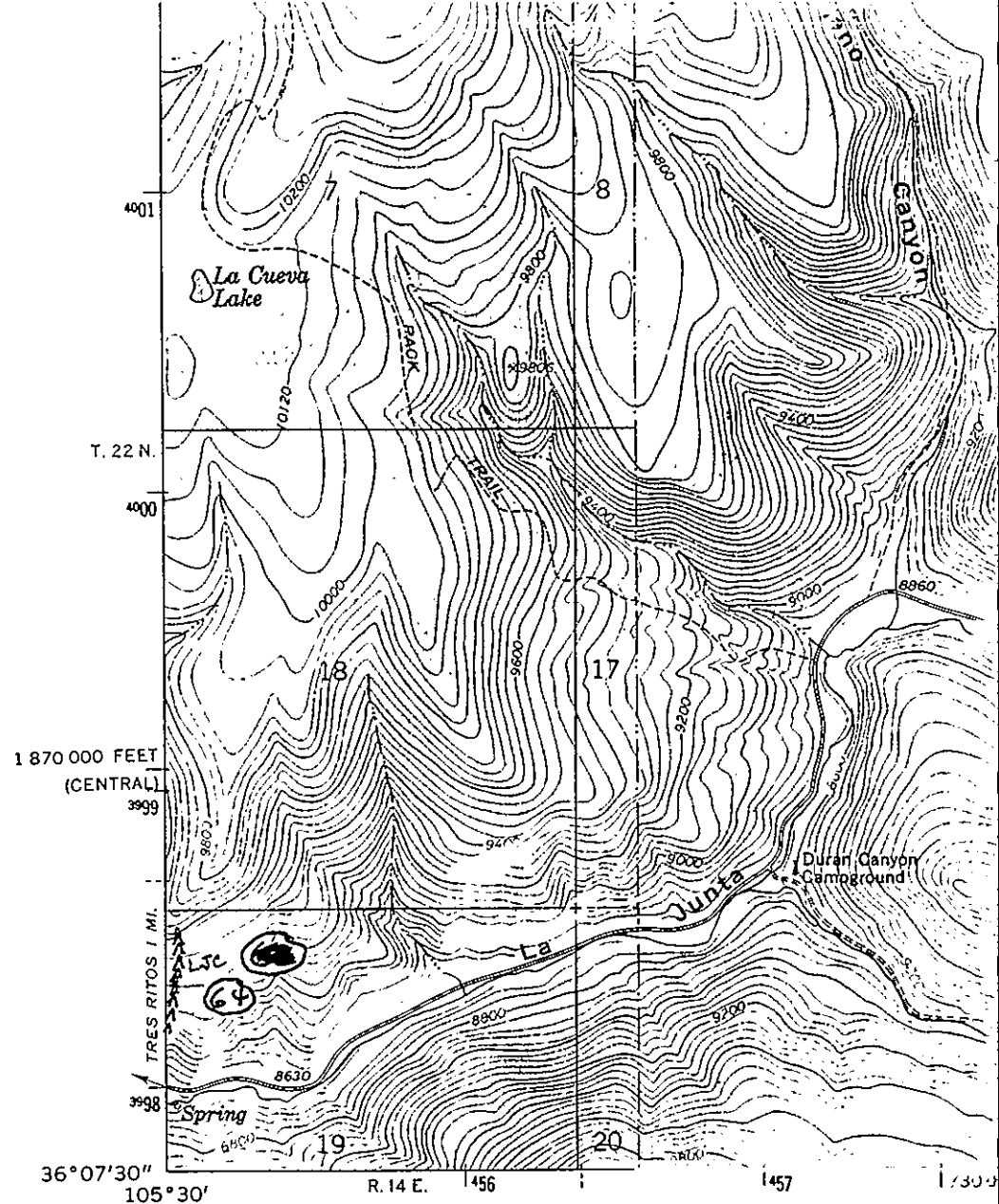
Light-duty

State Route

TRES RITOS, N. MEX.

N3607.5 W10530.7.5

1:25,000



Mapped, edited, and published by the Geological Survey

Cont:

Topo CERRO VISTA, N. MEX.

phot N3607.5—W10522.5/7.5

Poly 10,000

central and east zones

1000-meter Universal Transverse Mercator grid ticks,

zone 13, shown in blue

Where omitted, land lines have not been established

UTM GRID AND DECLINATION

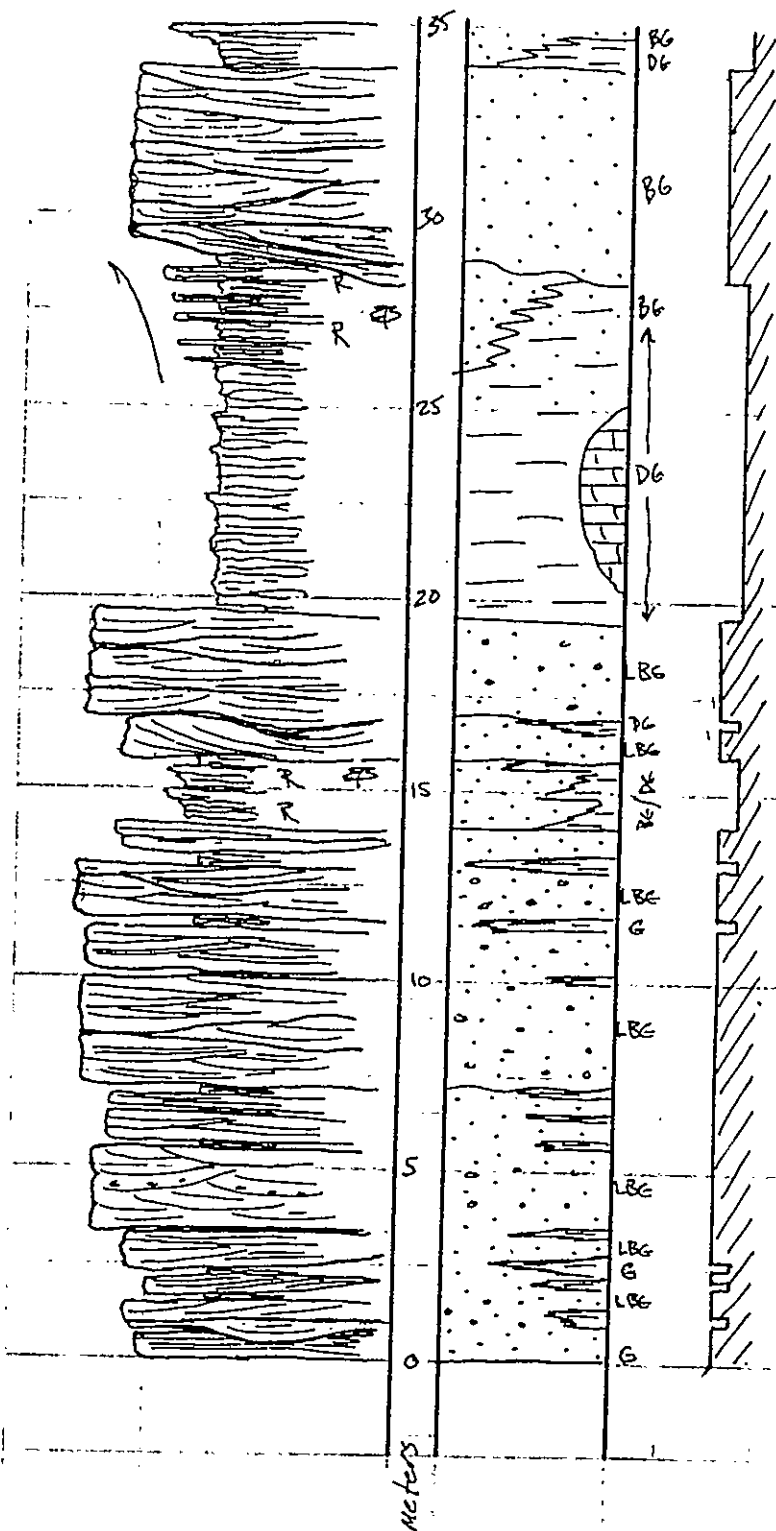
LJC
La Junta Canyon
Hillside

July 26, 1978

JMC & JCM

M.S. No. 64

PAGE 1



BECOMING
SANDY

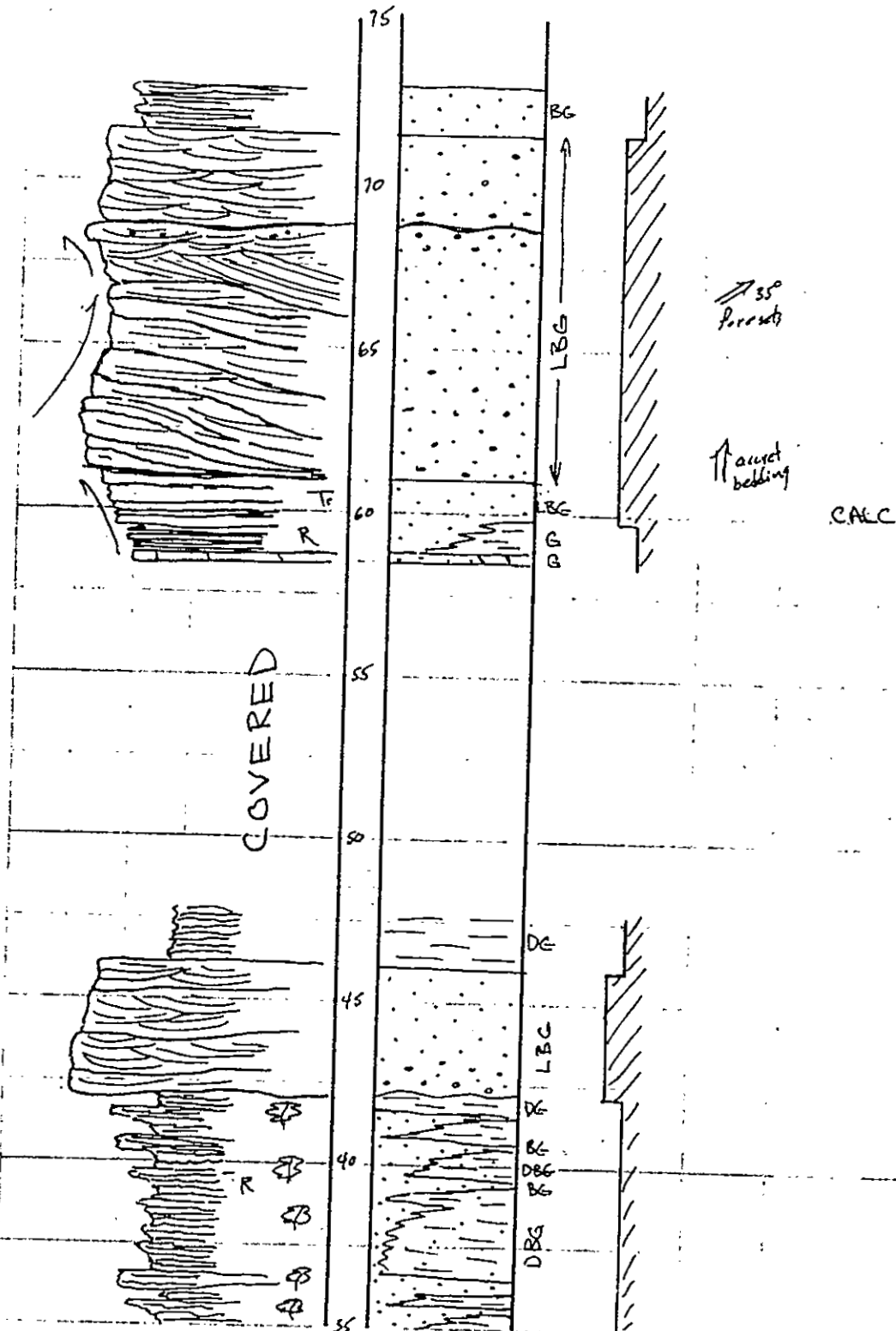
Very thin bedded

LJC

251

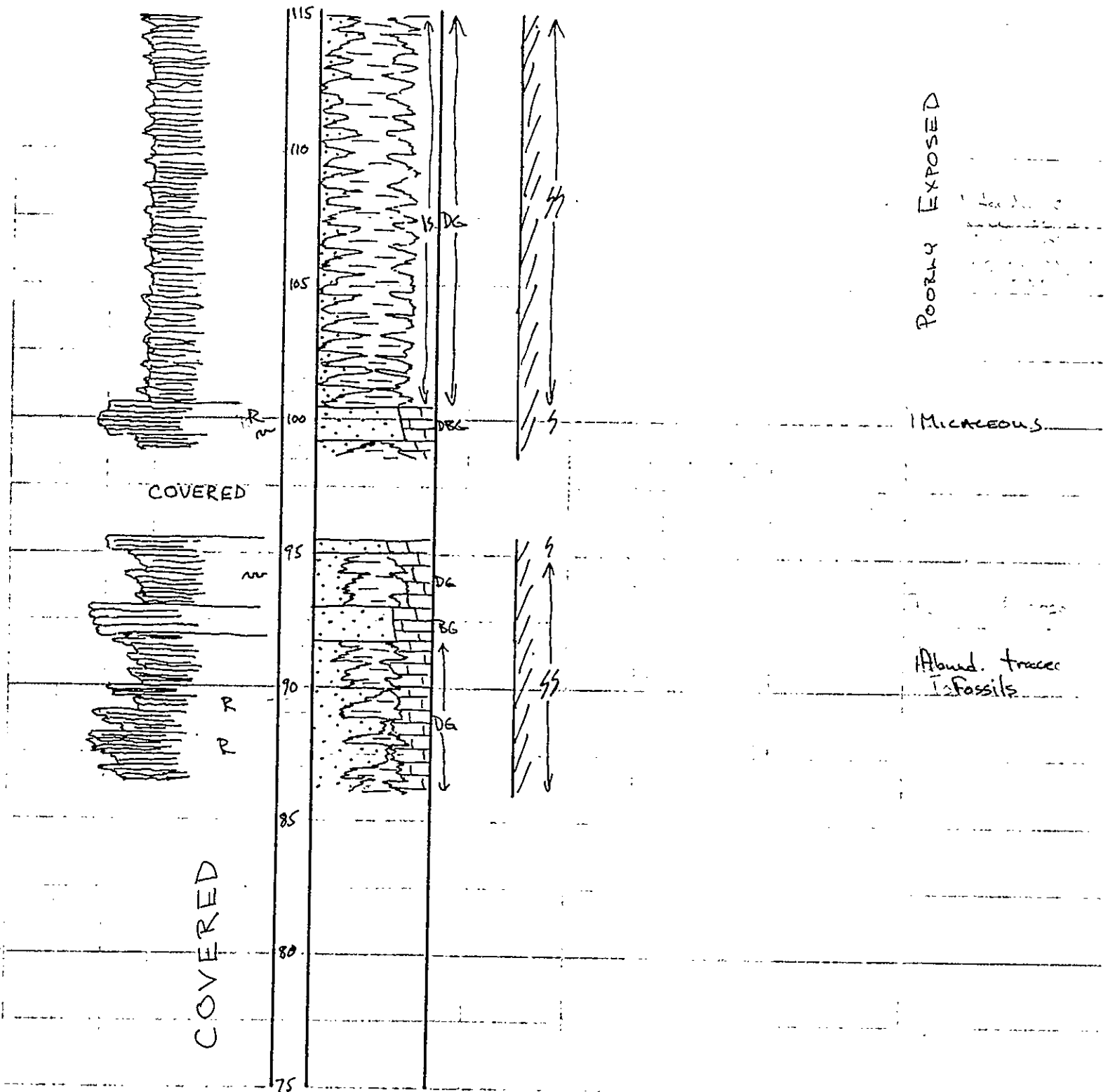
M.S. No. 64

PAGE 2



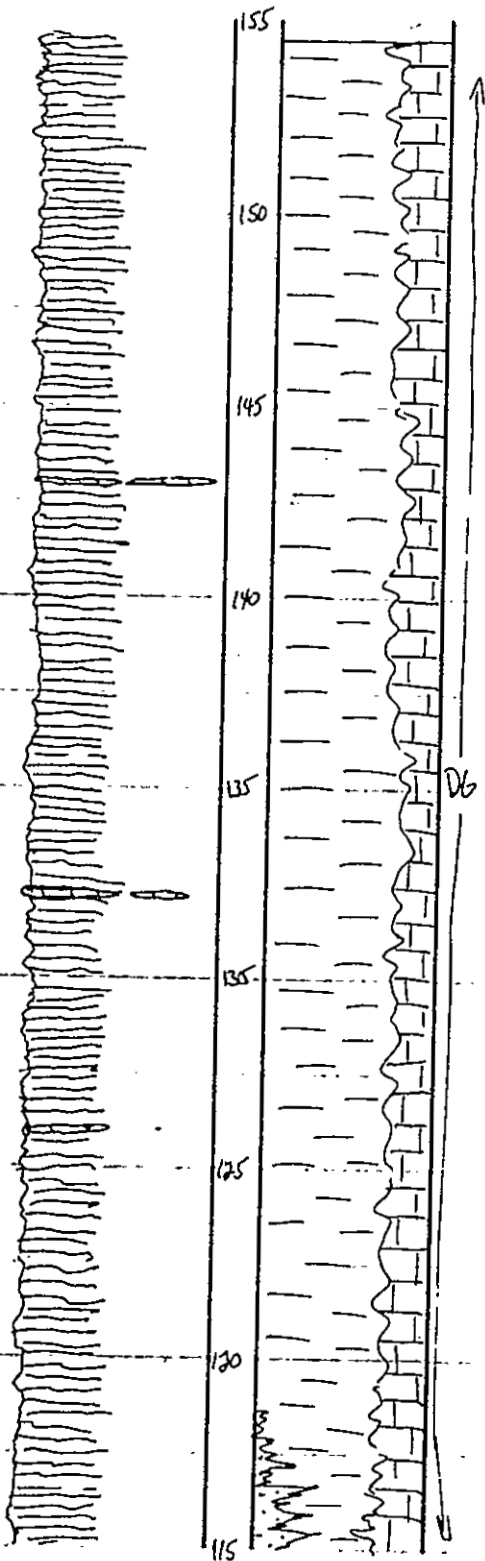
M. S. No. 64

PAGE 3



M.S. No. 64

PAGE 4



D6

//

POORLY EXPOSED
w/ only an
occasional
outcrop

Calc. slt. / sh.
w/ rare micrite
lenses

LJC

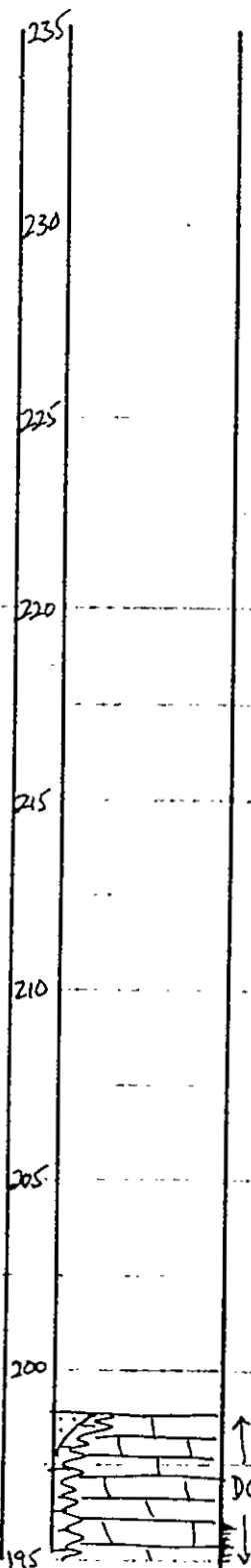
JMC

M.S.No. 64

PAGE 6

Crinoids
Phylloid Algae
Brachio.

COVERED



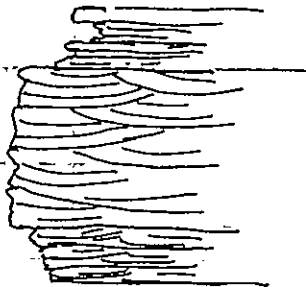
LJC

255

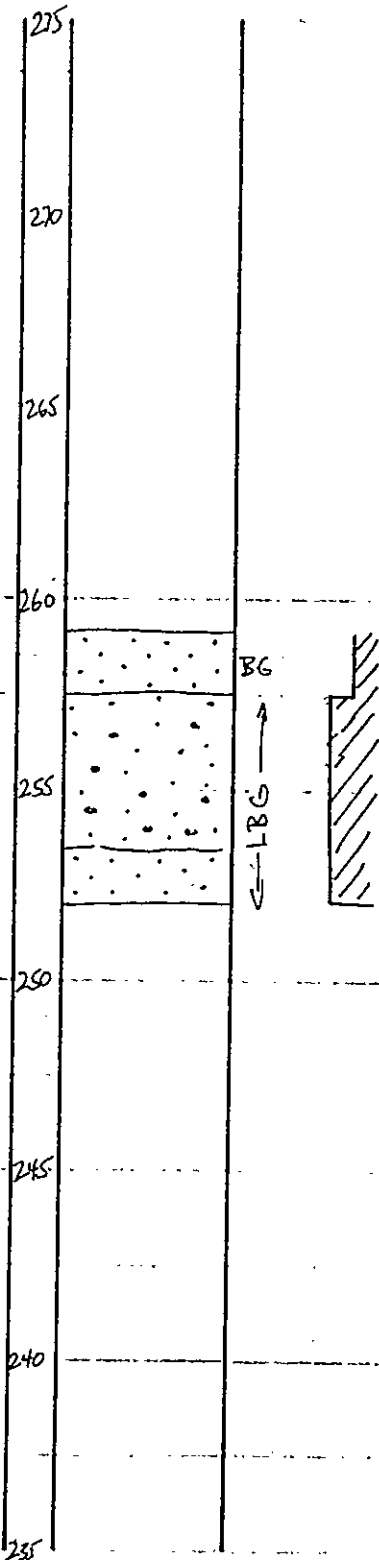
M.S. No. 64

PAGE 7

COVERED



COVERED



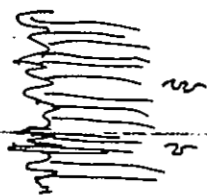
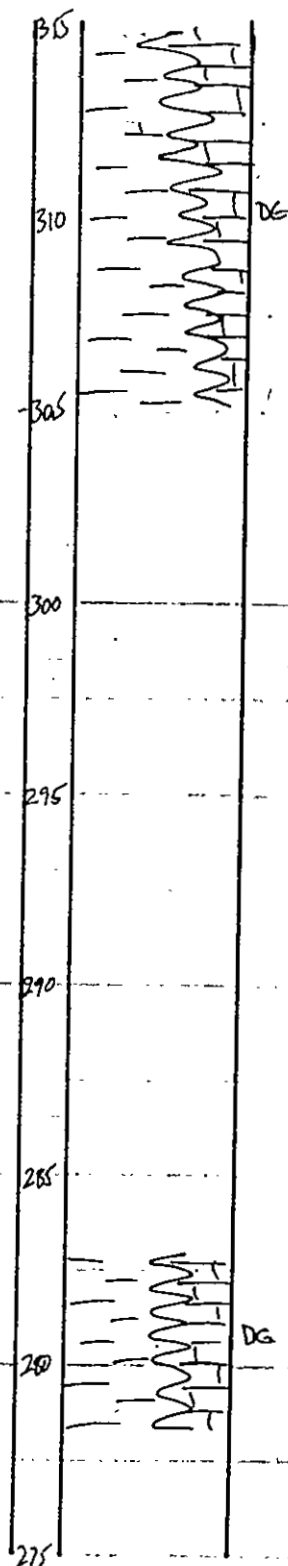
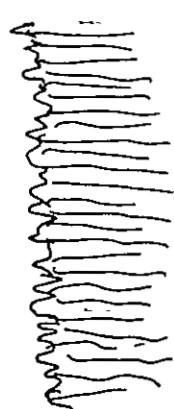
MCS = 30 mm

M.S. No. 64

PAGE 8

Crinoids

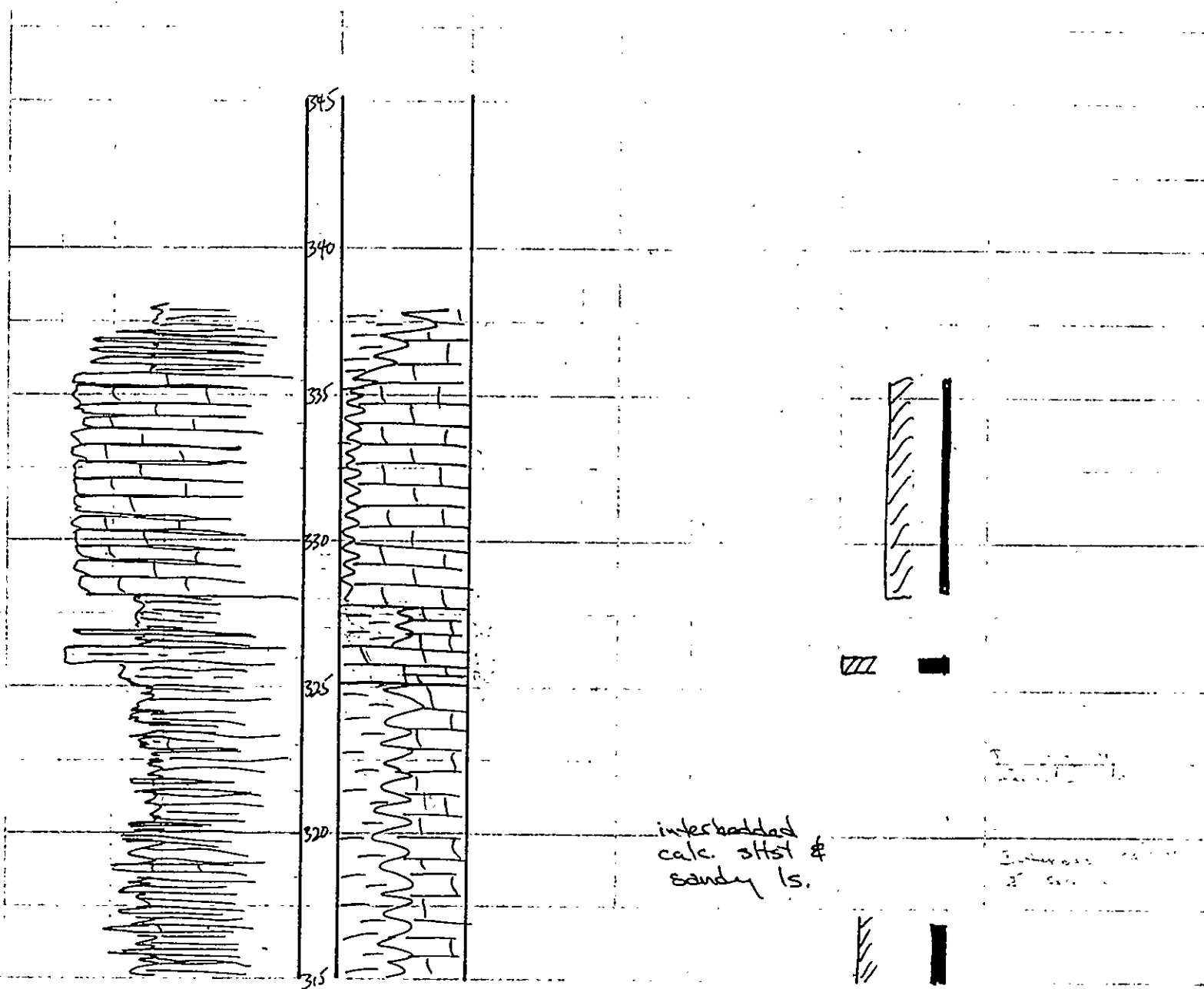
Brachs



M.S. No. 64

PAGE 89

Grinoids
Phylloid Algae
Brachiopods



LSC

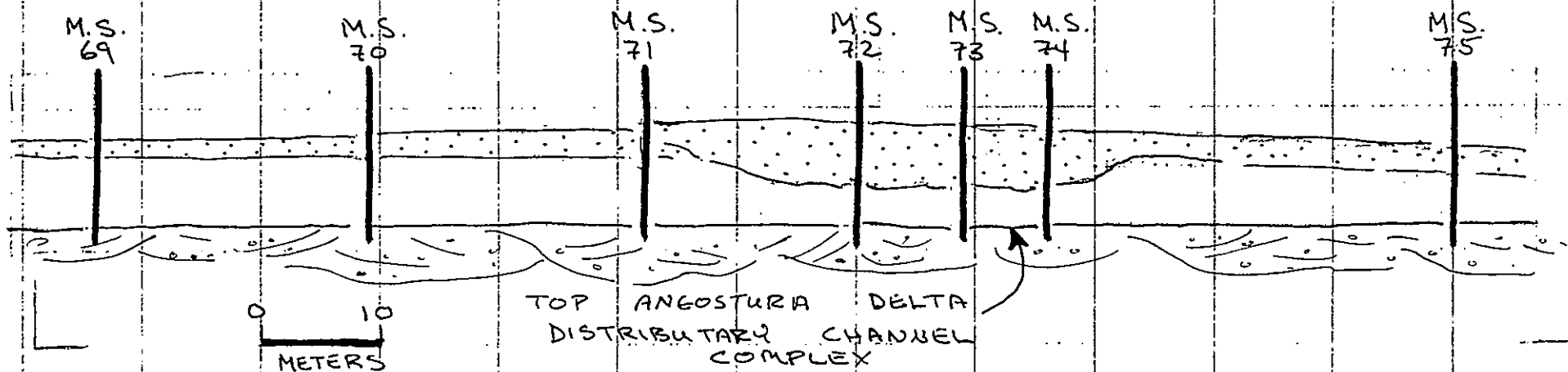
258

ANGOSTURA SECTIONS

MEASURED SECTIONS

65 THROUGH 78

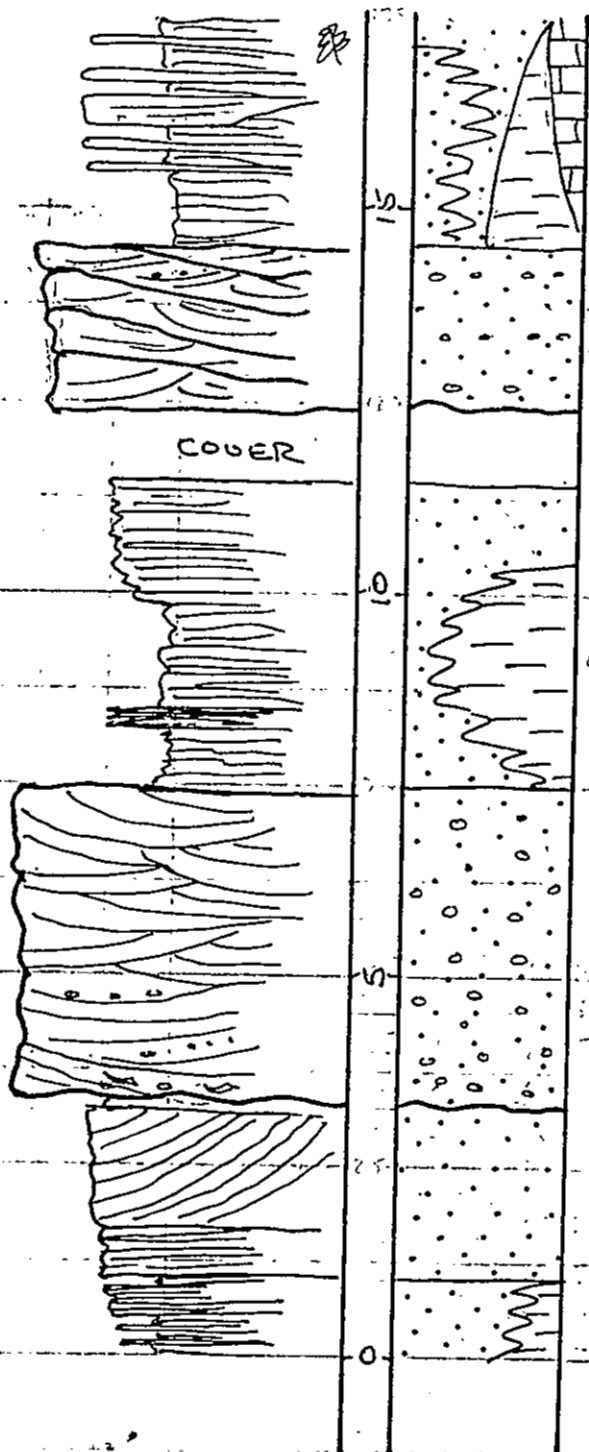
RELATIVE POSITIONS OF MEASURED SECTIONS 69-75



M.S. No. 65

PAGE 1

Brachs



Cal. ...
...

Heaven ...
...

Partly exposed

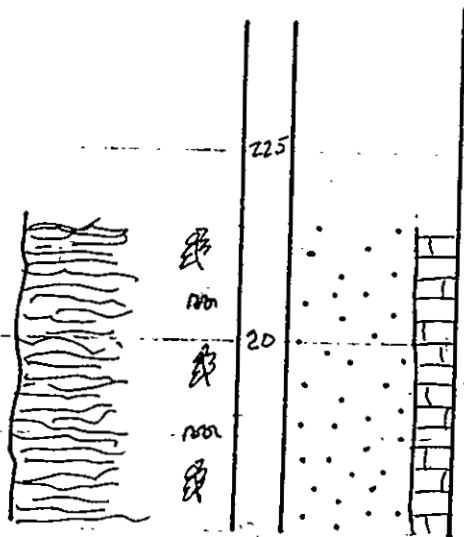
115 4'
25' 2'

Revised ...
X-10

M.S. No. 65

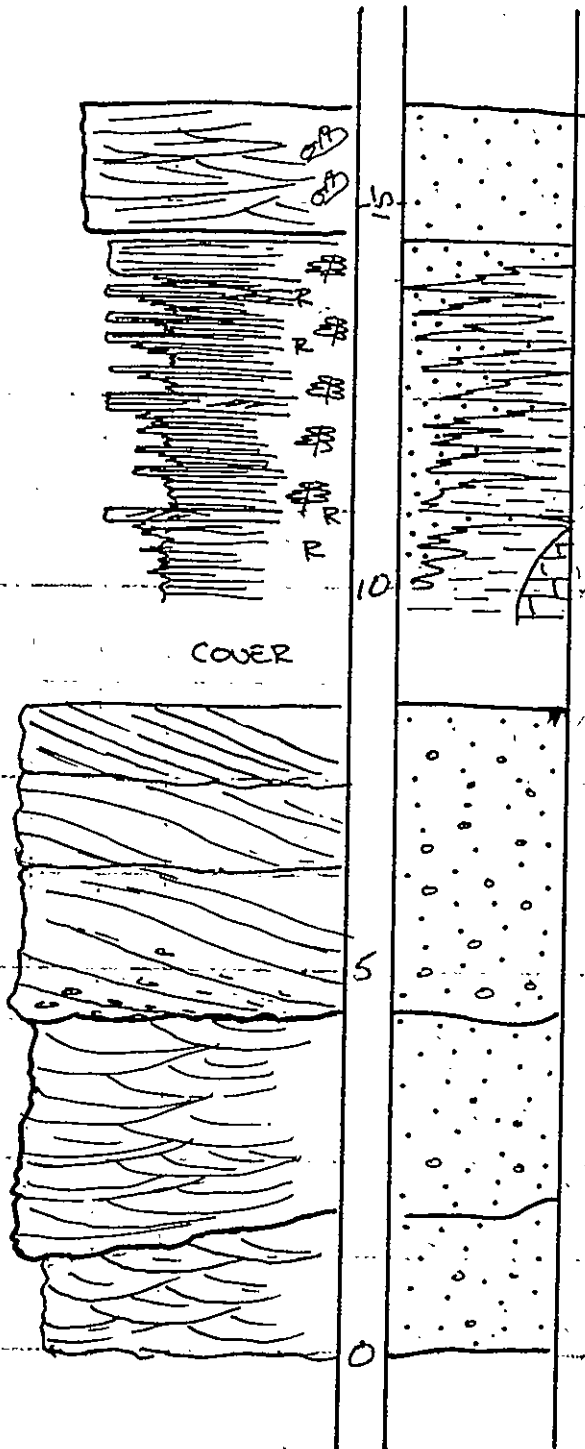
PAGE 2

Brachs



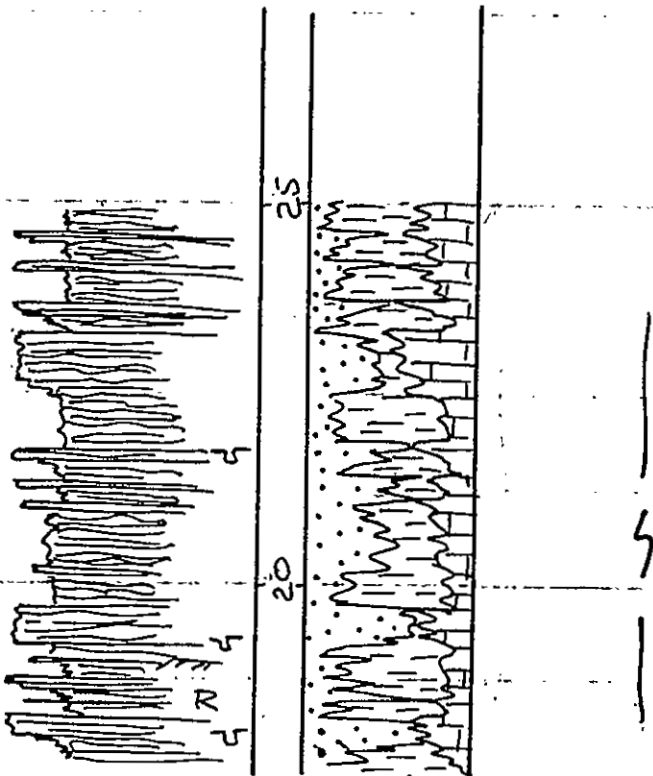
M.S.No. 66

PAGE 1



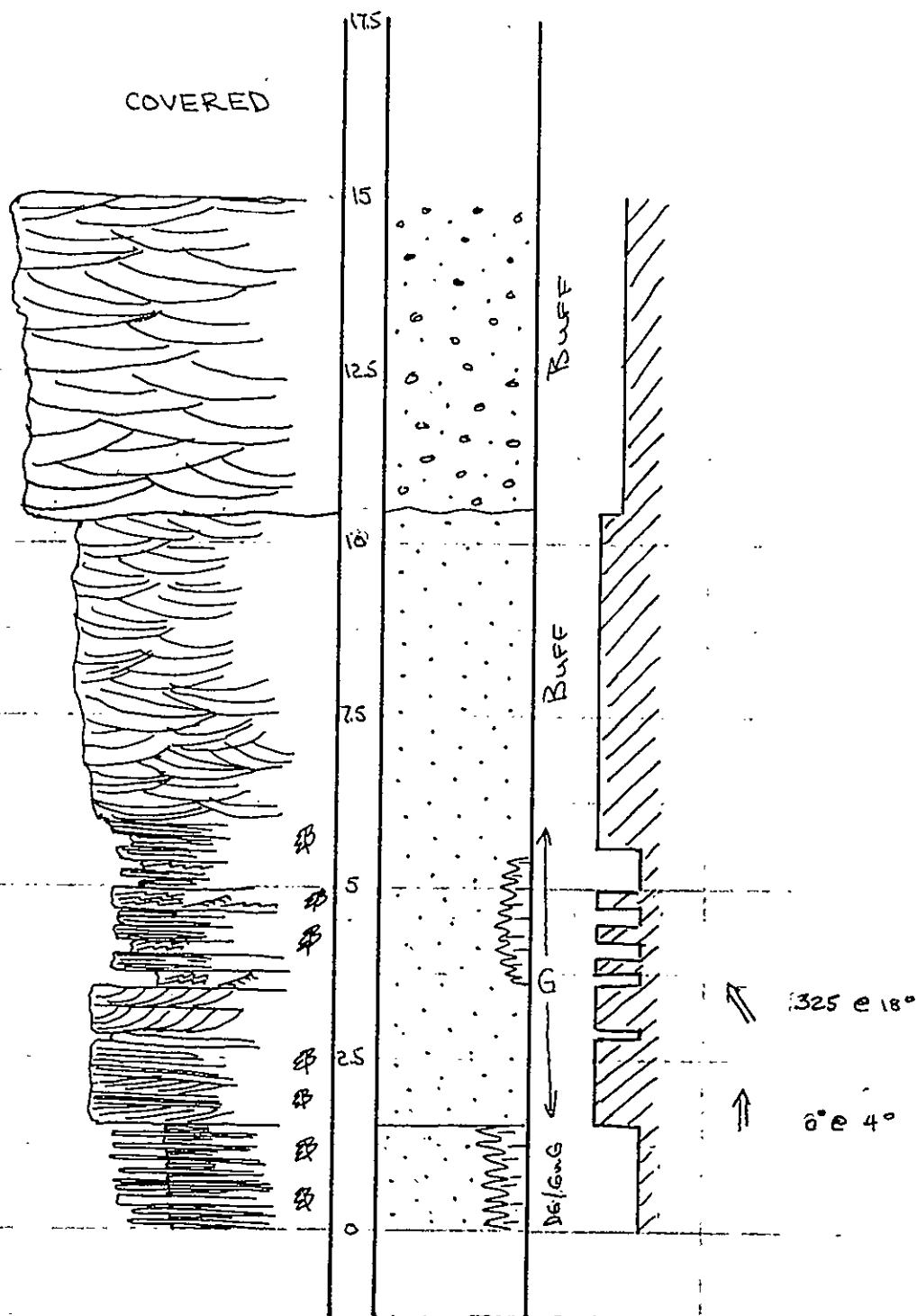
M.S. No. 66

PAGE 2



M.S. No. 67

PAGE 1



MCS = 36 mm

CHALKY LIME

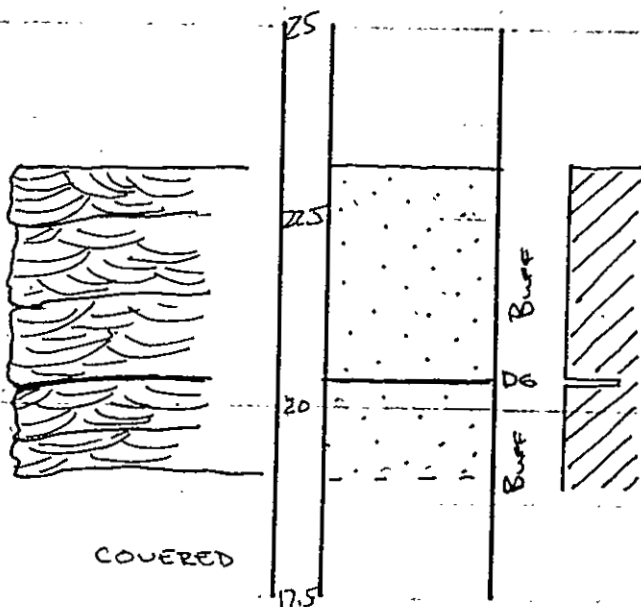
CHALKY LIME

Thin layers are DE.
are not layers.
apparent
alt. 2-4 cm
MICACEOUS
Moss
Main to look to

Microscopic
ss layers 3-12 cm to
rippled

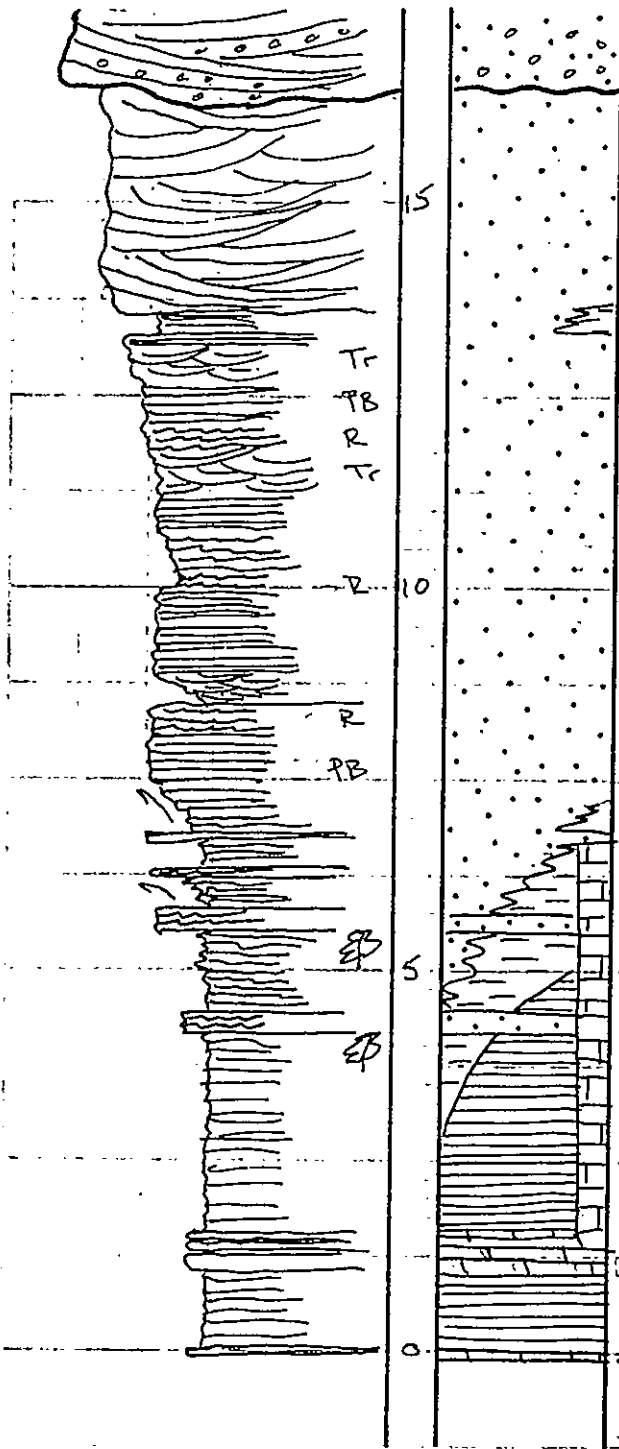
M.S. No. 67

PAGE 2



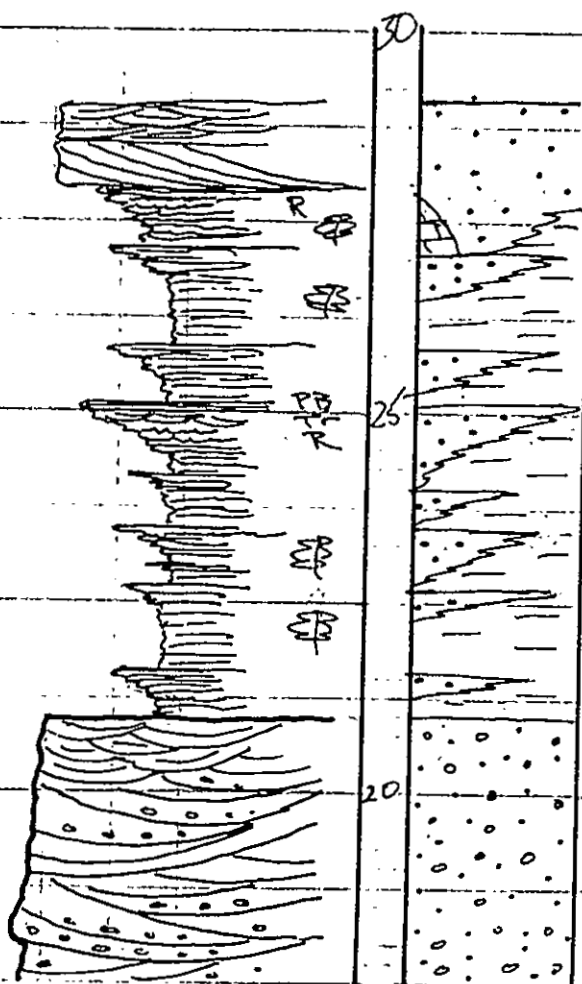
M.S. No. 68

PAGE 1



M.S. No. 68

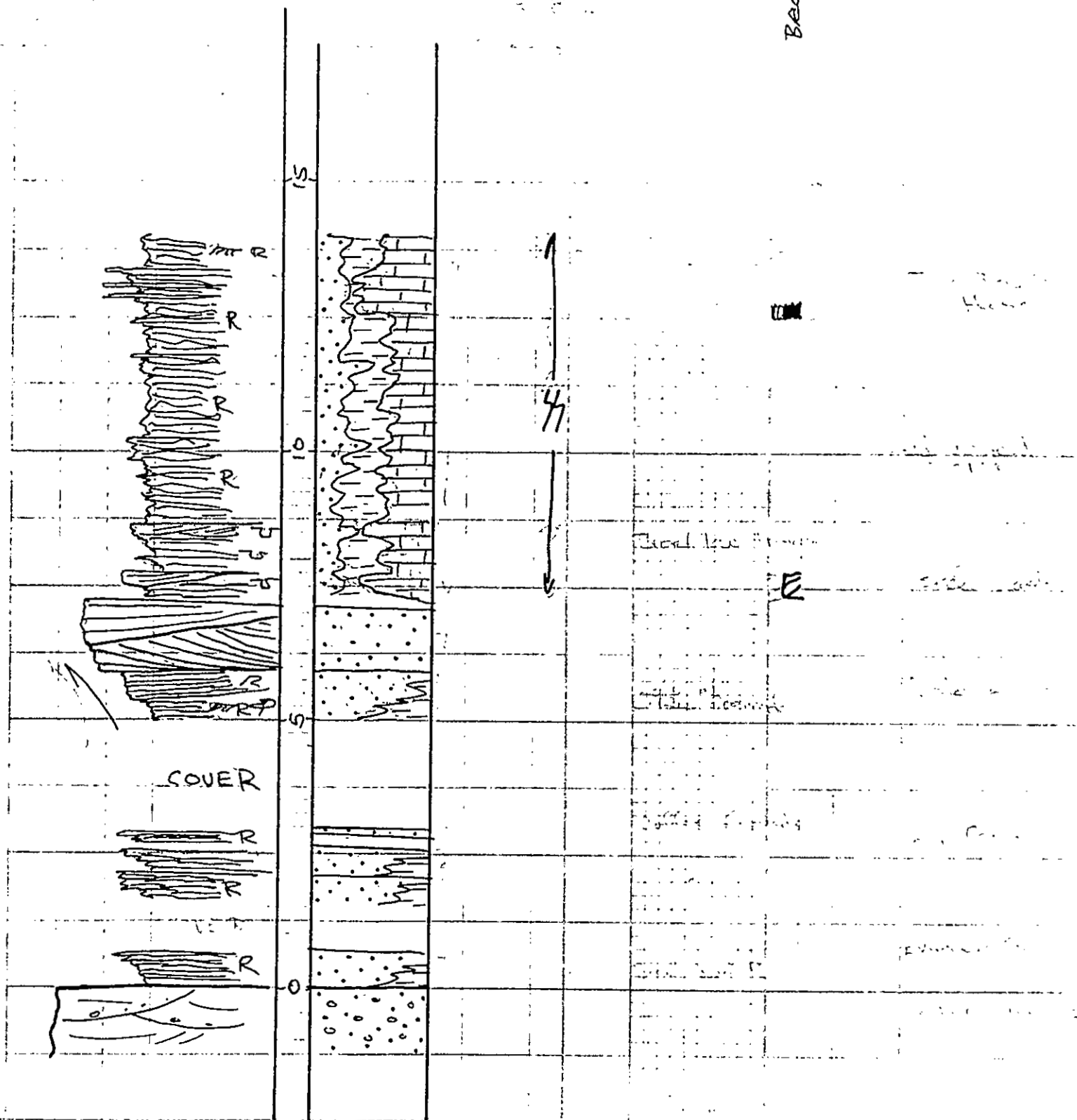
PAGE 2



M.S. No. 69

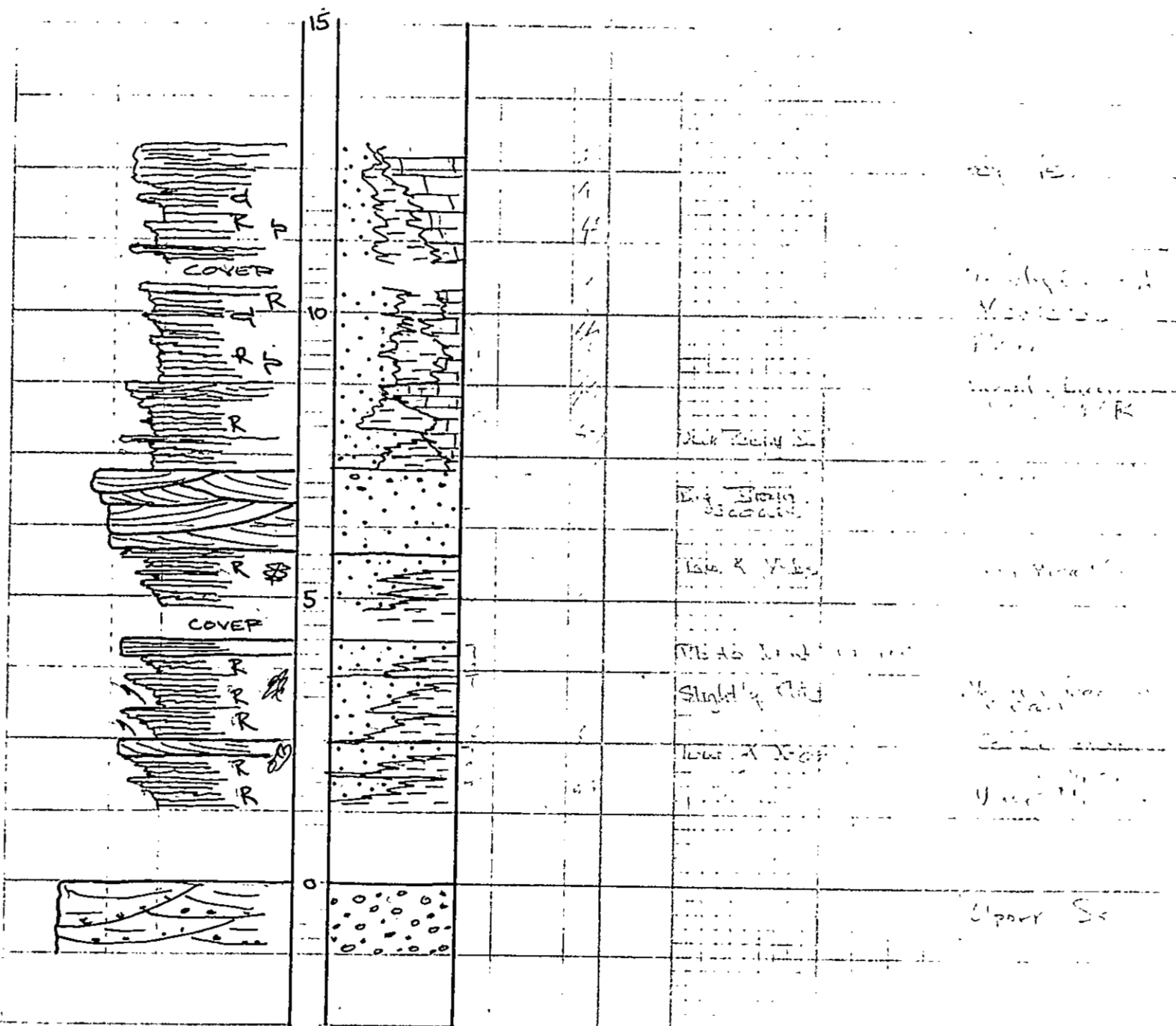
PAGE 1

Becks

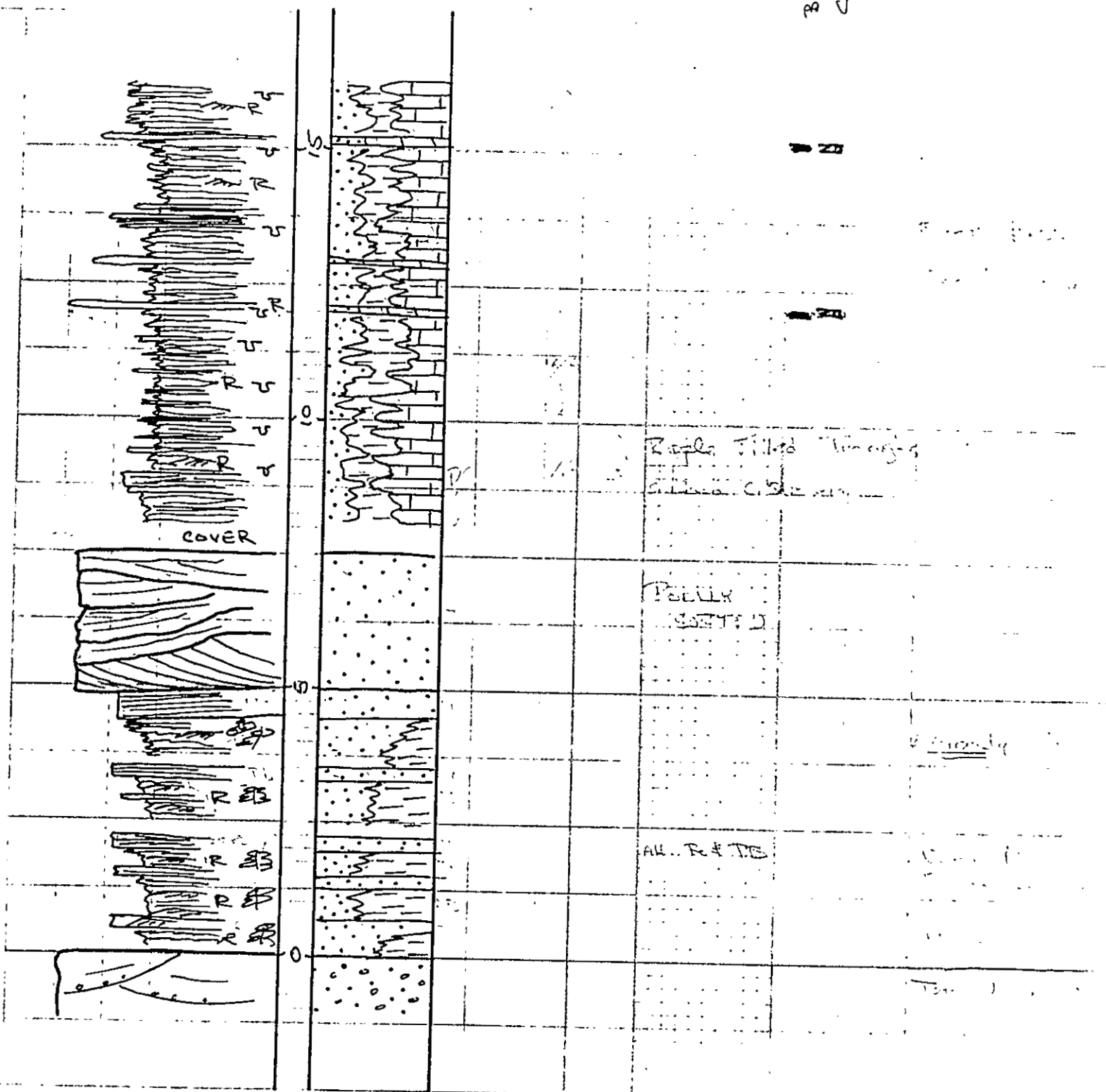


PAGE 1

PAGE 1



Brachs
Crinoids



MEASUREMENTS
LOCALITY
SETTING

STRATIGRAPHIC UNIT
MEASURED BY

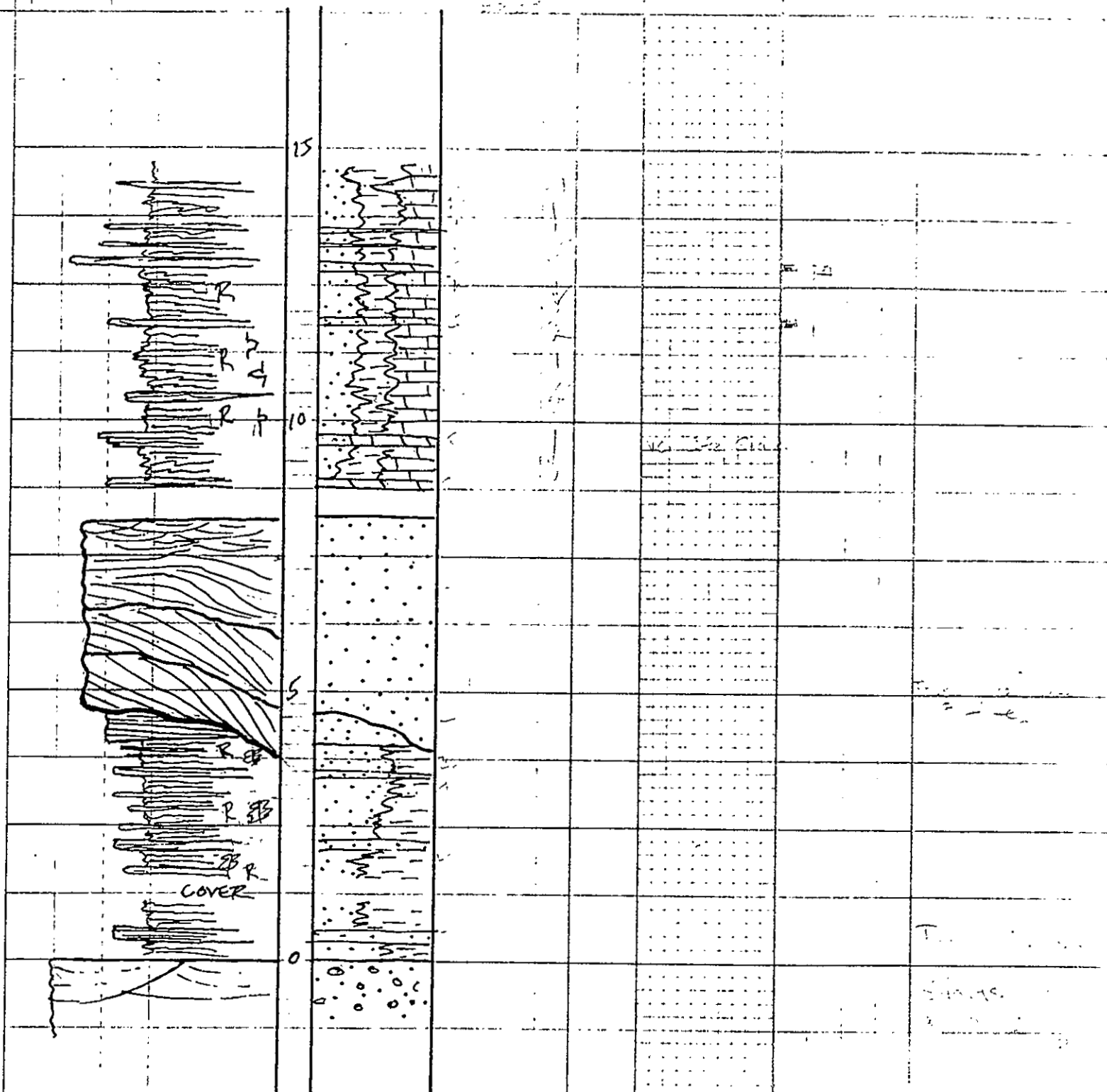
M.S. No. 72

SEDIMENTARY
TEXT & STRUCTURE
CARBONATES
GRN PR WEE MUDST
CLASTICS

GRAV SAND T. C. V.
E4.4 1/2 N. 1/2 E

MAXIMUM
DEGRADATION
DIRECTION
FEATURES

FOSSILS
COMPOSITION



ALASKA REGION
LOCALITY
SETTING

DATE
STRATIGRAPHIC UNIT
MEASURED BY

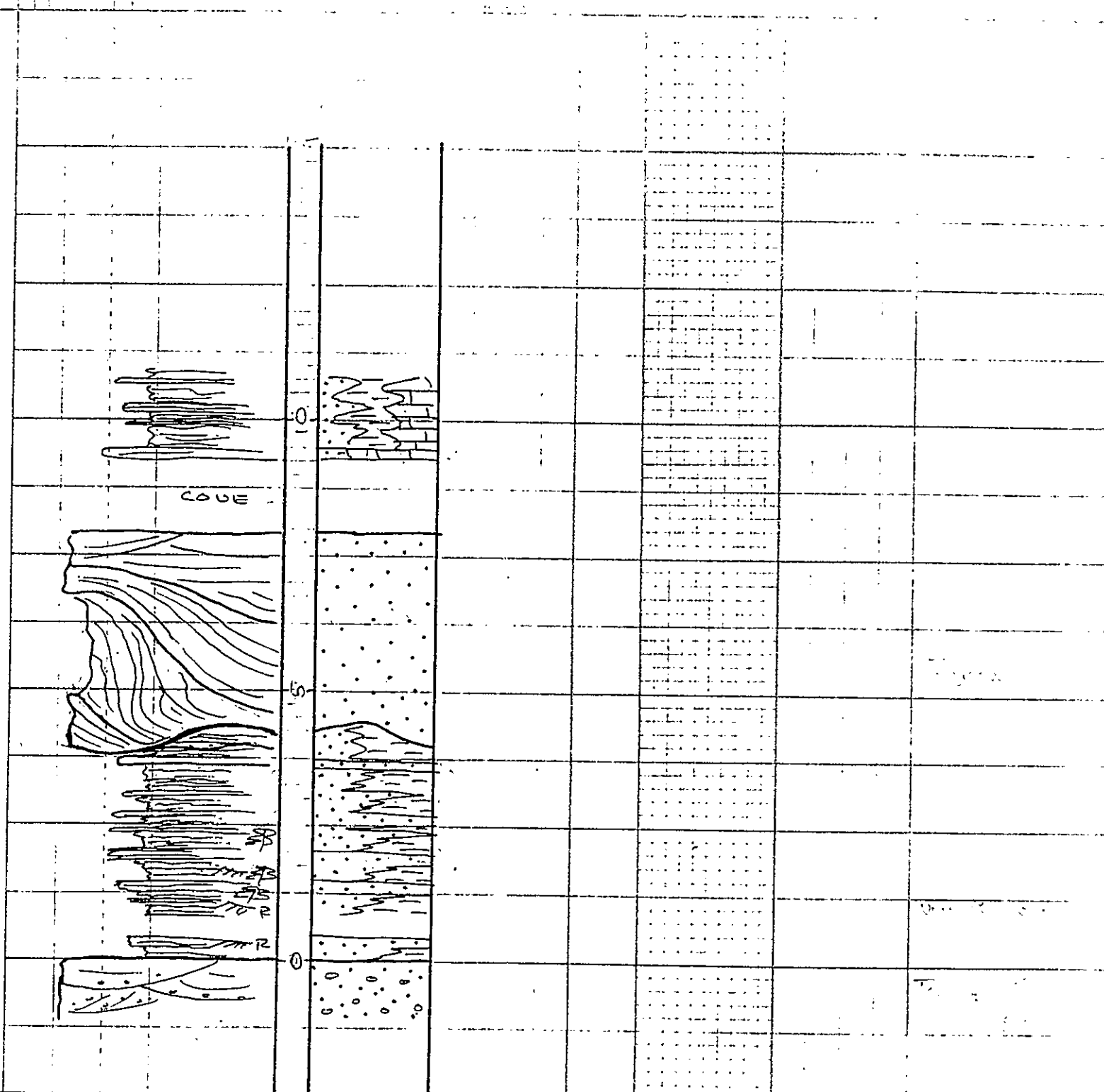
SEDIMENTARY
TEXT & STRUCTURE
CARBONATES

M.S. No. 73

GRN. PK. WEE. SL. (C)
CLASTICS

CRAY. SALT

54.4 200 M. FIVE



MANUSCRIPT NO. 74
LOCALITY
SETTING

DATE
STRATIGRAPHIC UNIT
MEASURED BY

SEDIMENTARY
TEXT & STRUCTURE
CARBONATES
GRN PK WKE MUDST
CLASTICS

M.S. No. 74

FOSSILS

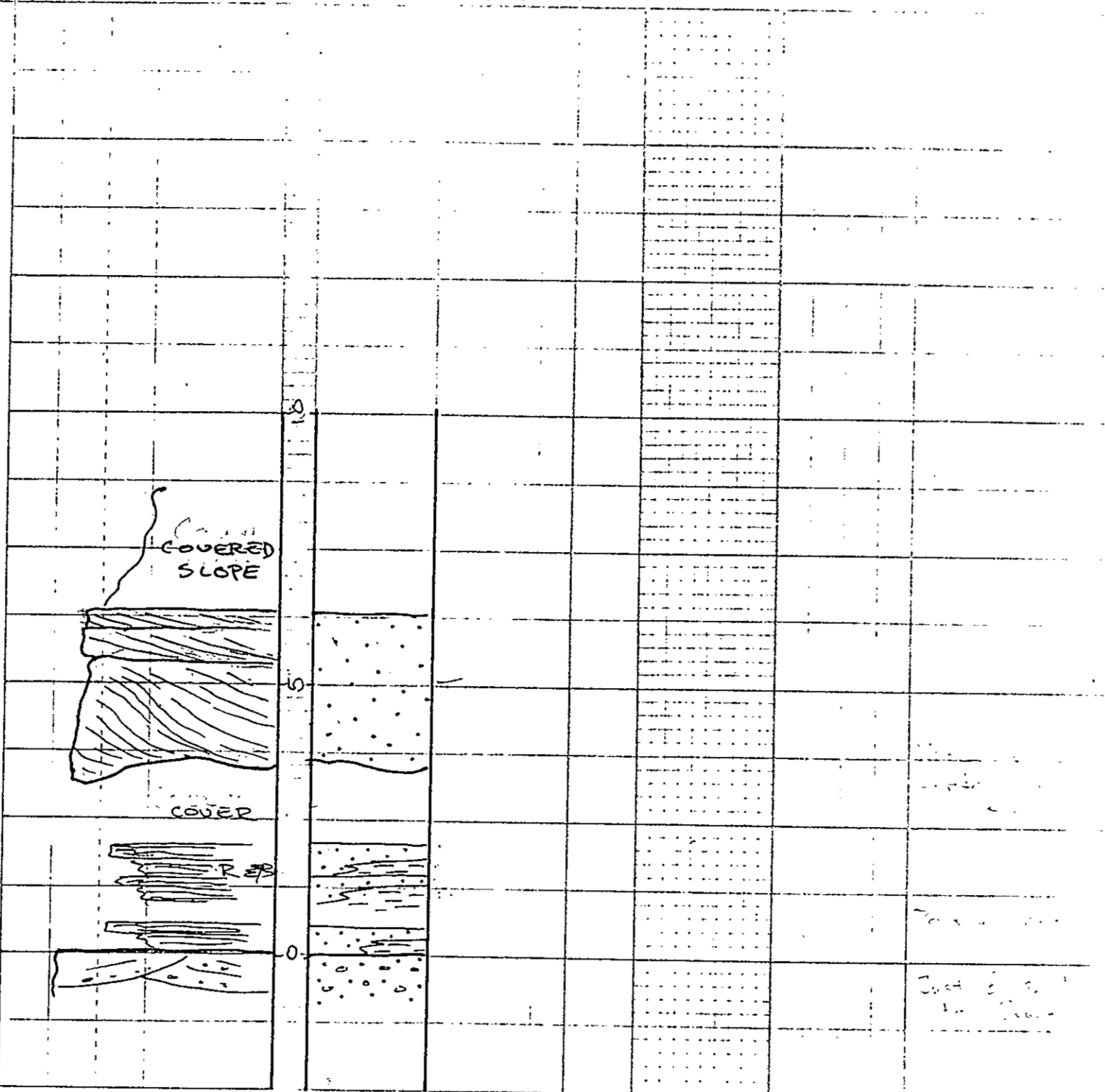
CARBONATE
COMPONENTS

GRAV SAND

64.4 VOL M FUL

11

MAINTENANCE
DEPT. REPORT
DIRECTION
FEATURE



MEASURED BY
LOCALITY
SETTING

DEPT
STRATIGRAPHIC UNIT
MEASURED BY

SEDIMENTARY
TEXT & STR. C.
CARBONATES
GRN/PK WKE M. DEPT
CLASTIC

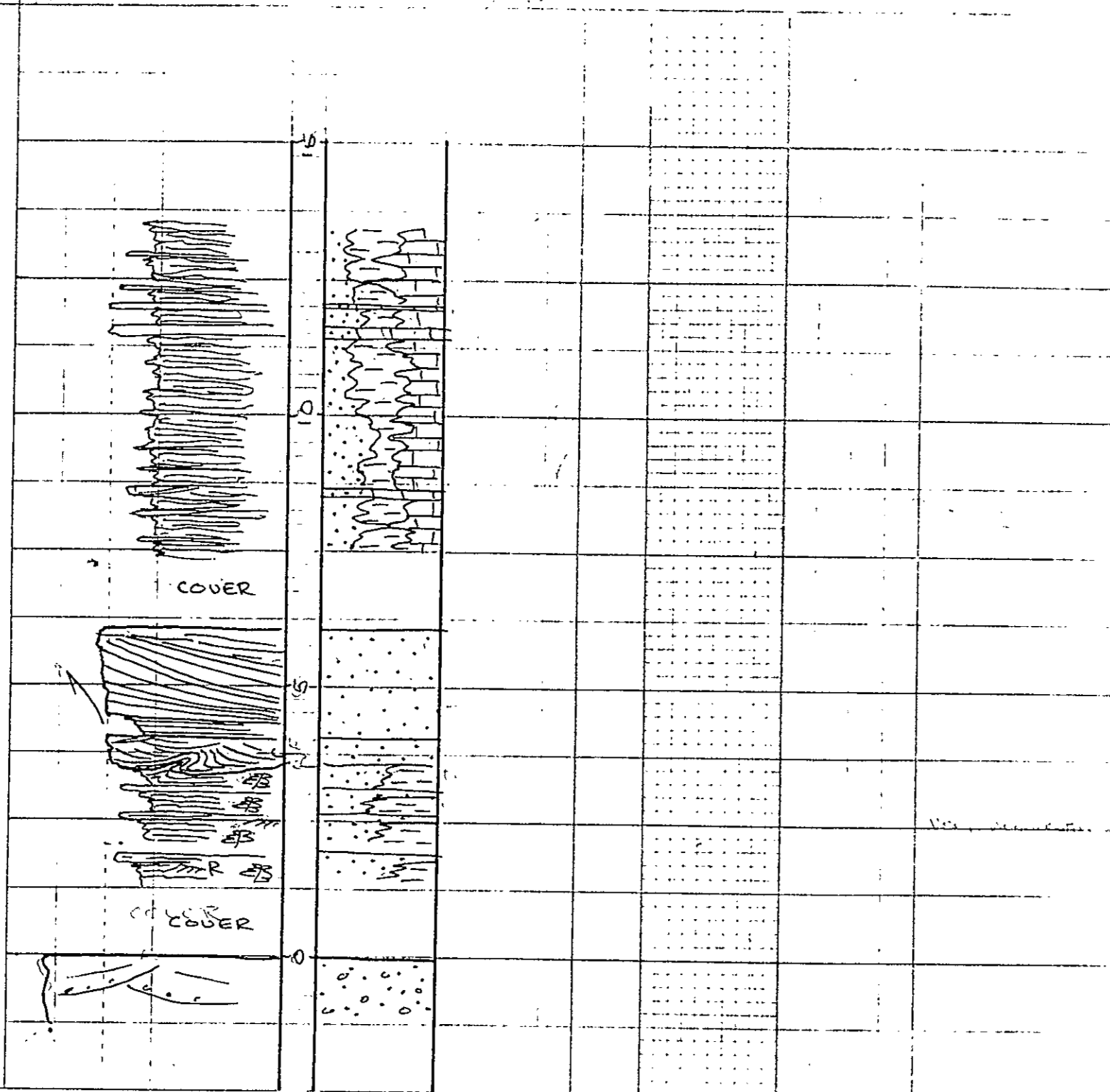
M.S. No 75

FOSSIL

GRAY SAND

244 VOL. 115

FEATURES
COMPONENTS



June 21, 1978
Sandia
JMC

PAGE 1

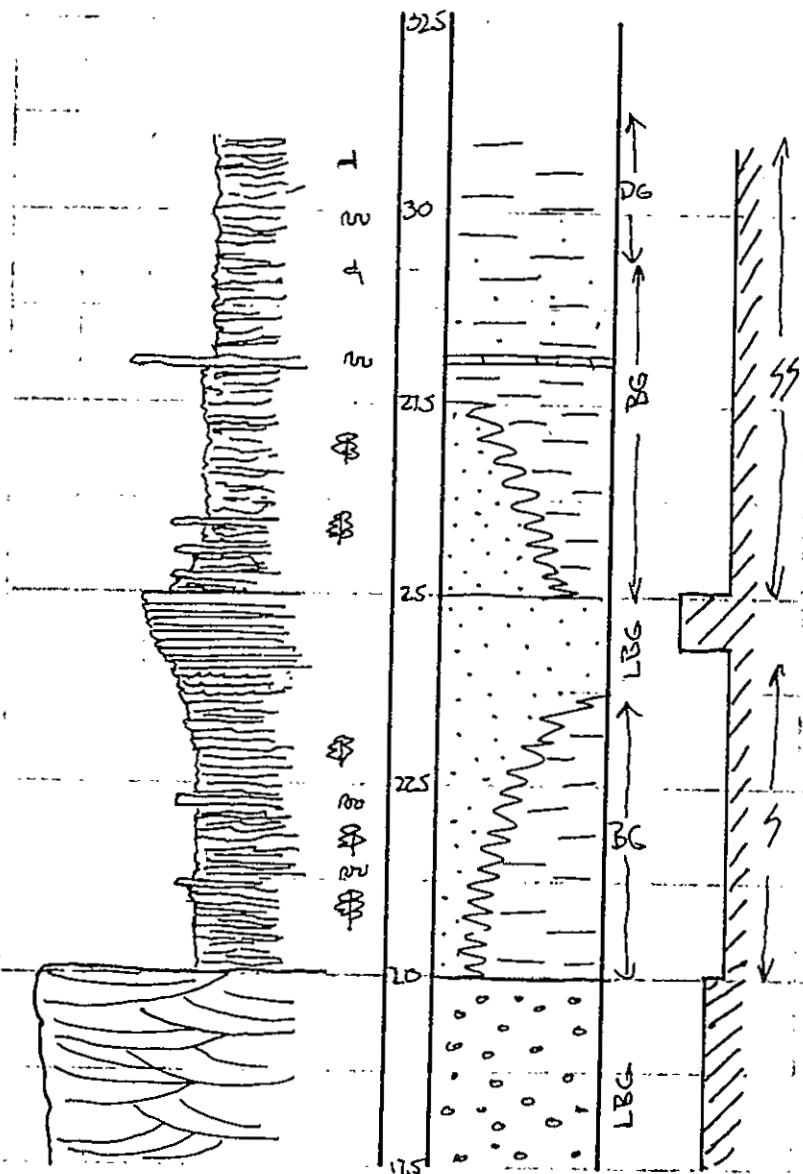


June 21, 1978

JMC

M.S. No. 76

PAGE 2



Microscopic
Calc.
Fossils
Grainy texture

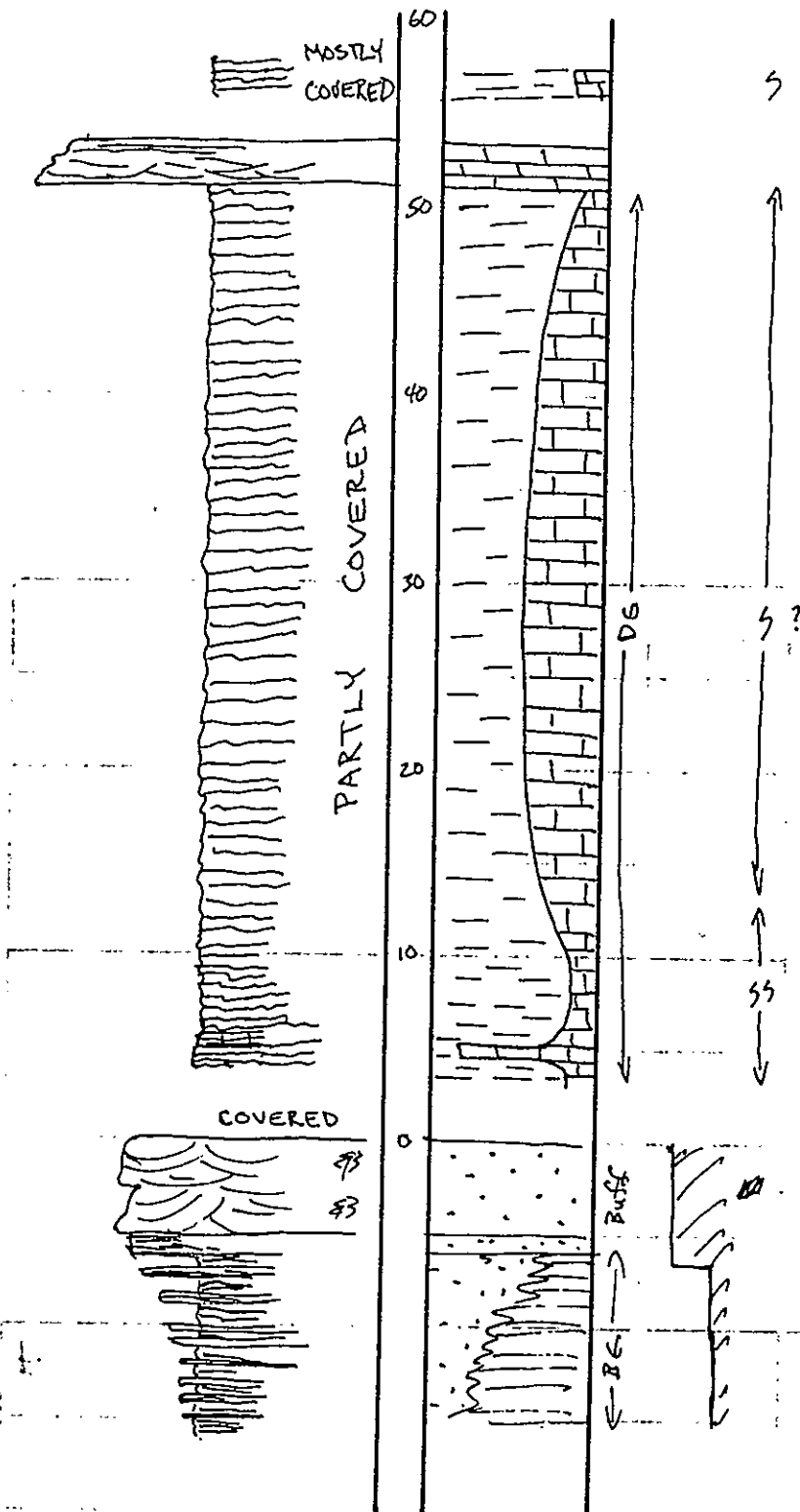
Thin, fine, elongated
laminated texture
Grainy texture

Microscopic
Fossils

Micro. 4 cm
Grainy texture

PAGE 1

BRACHS
CRINOIDS
PELEC



NOTE
SCALE

ANGOSTURA
△
OR
ELK LODGE
△

This is
From section
measured at
Elk Lodge

ASH
Across from Angostura Summer
Gully up Angostura Ridge Homes

May 15, 1978
Sandia / lower Mad.
Casey

M.S. No. 77

PAGE 2

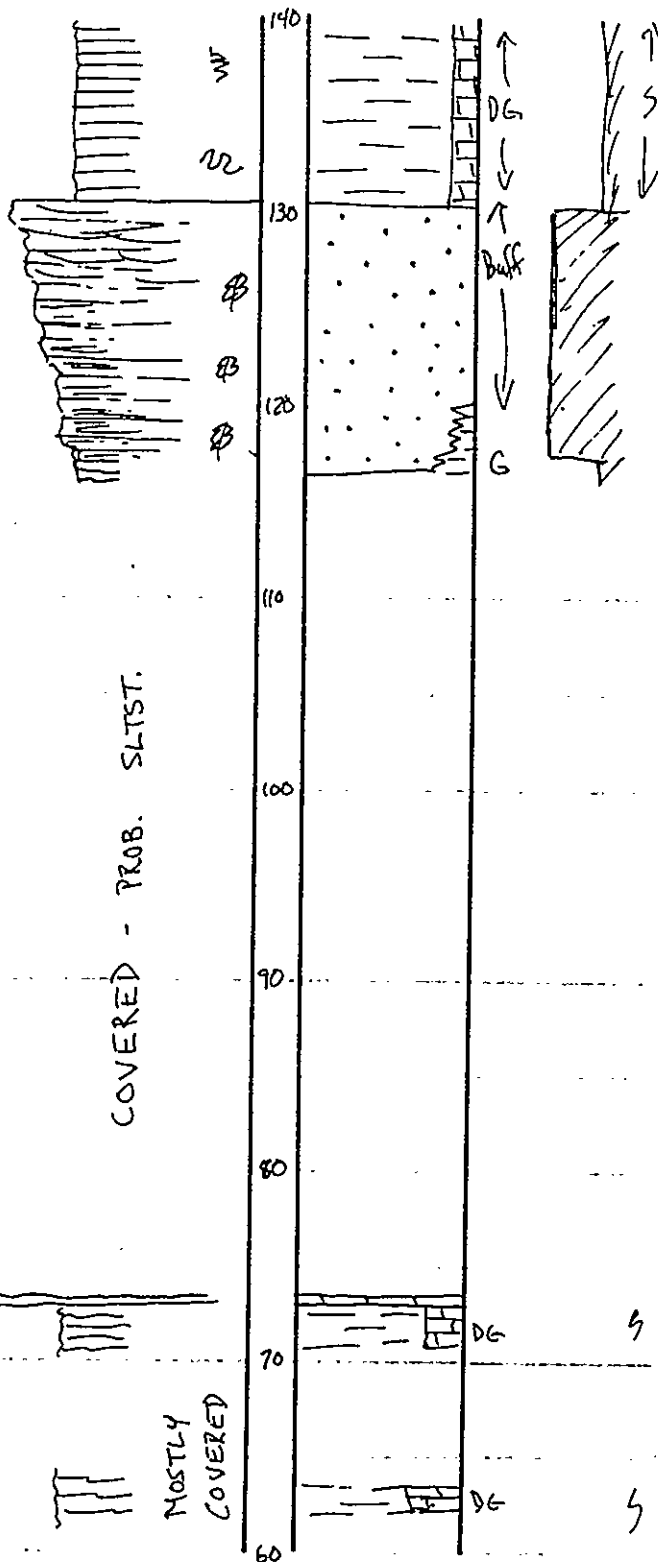
BRACHS
CRINOIDs



Very micaceous
horiz. feeding
trails

UPPER PART
MOSTLY COVERED
→ upper contact
approx.

Calcareous
Very micaceous
+ abund. macerated
plant debris



ASH

May 15, 1978
Casey

M.S. No. 77

PAGE 3

220

210

200

190

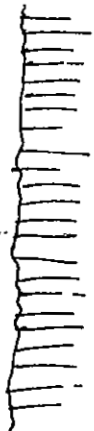
180

170

160

150

140



281

MEASURED BY
LOCALITY
SETTING

STRATIGRAPHIC UNIT
MEASURED BY

SEDIMENTARY
TEXT & STRUCTURE
CARBONATES

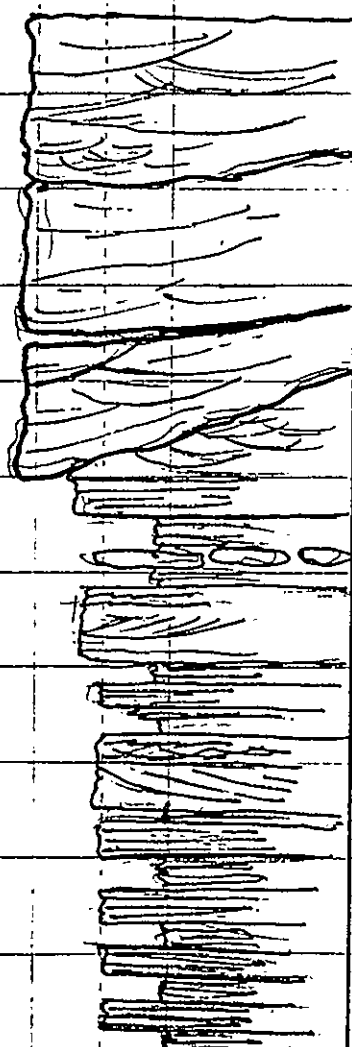
M.S. No. 78A

GRN PK WRE
CLASTIC

(Measured by A. J. Scott)

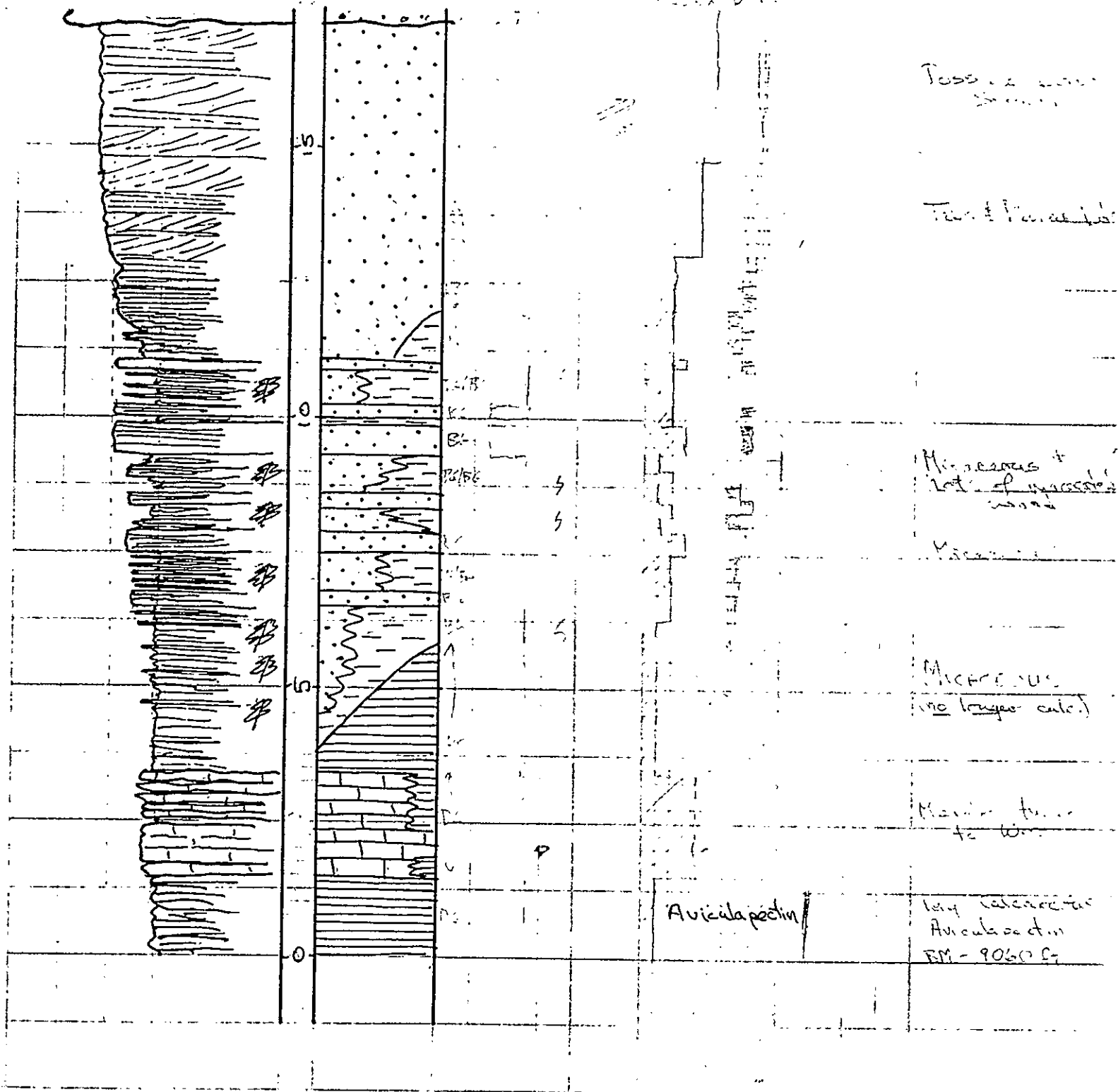
GRAV SAND

64.4 VCC M FVA



M. S. No. 78 "B"

100
 100
 100
 100



M. S. No. 78 "B"

CONTINUED ON NEXT
PAGE AT DIFFERENT
SCALE

Micaceous &
calcareous

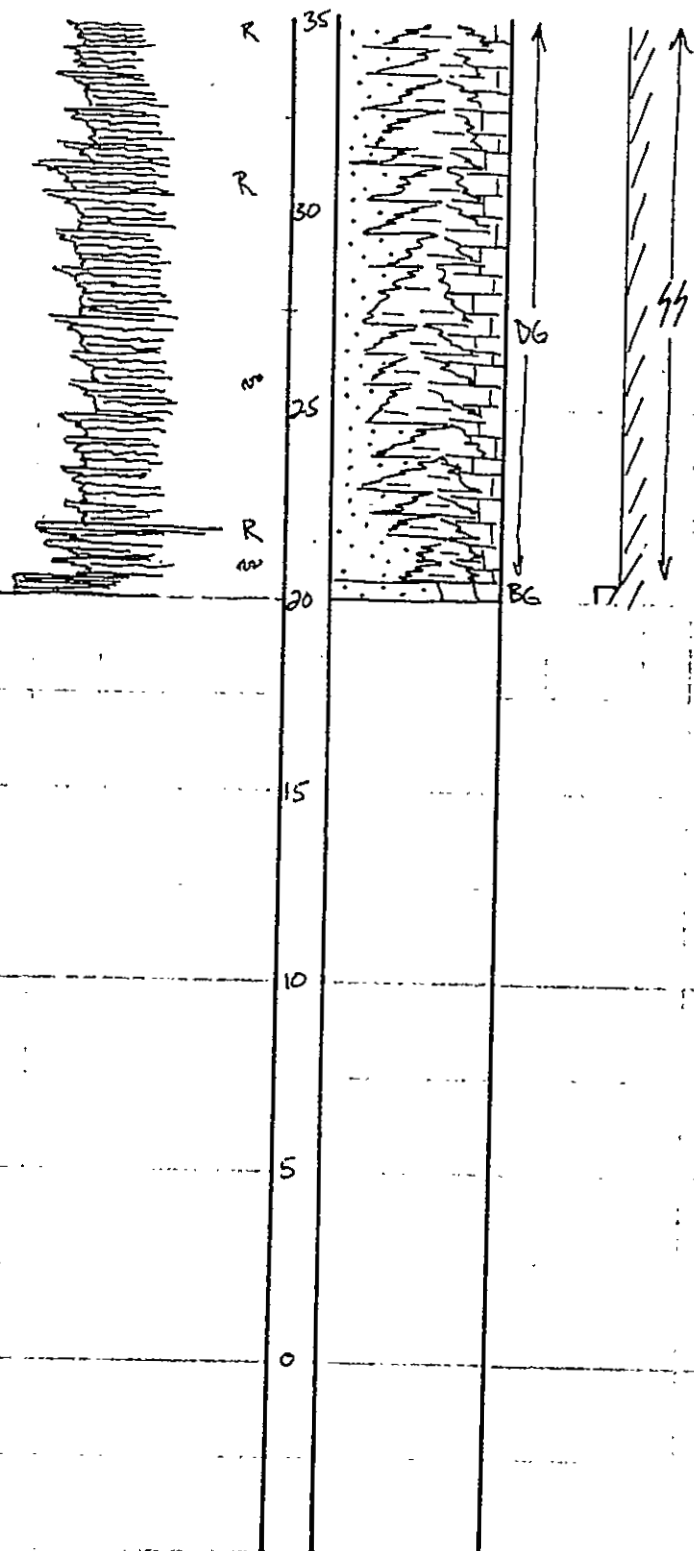
Red and yellow

E of Elk Lodge Hillside ELE upper part

July 25, 1978

JMC

M.S. 78 B



scattered gravel at
TOP of SS

NOTE CHANGE
IN SCALE

ELE

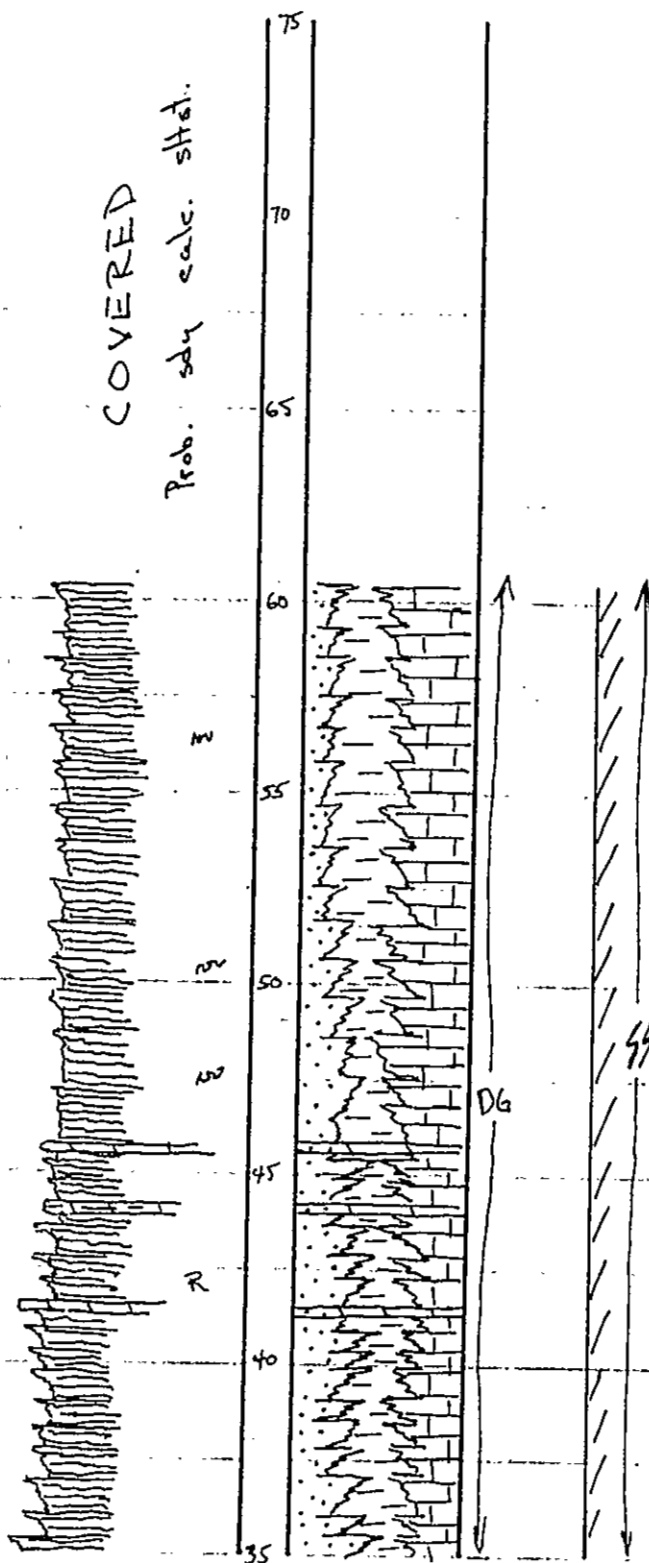
785

M.S. No. 78E

BRACHS
CRINOIDS

COVERED

Prob. sdy calc. shd.

SLOPE COVERED
w/ ls & some
ss TALUSSand content is
dropping outBECOMING MORE
CALC

A few unident. fossils

Pole ...

ABUNDANCE
FOSSILS

ELE

July 25

JMC

M.S. No. 78 B

BRACHS
CRIN
GAST
RHIZOID ALGAE

COVERED

Gentle Slope
w/ some ss
float

OOHITE, COATED
GRAIN - GRNST
ELE-1

Slightly Calc

POORLY EXPOSED

Chert Nodules

UNIDENT FOSIL
FRAGS.

COVERED

COVERED

ELE

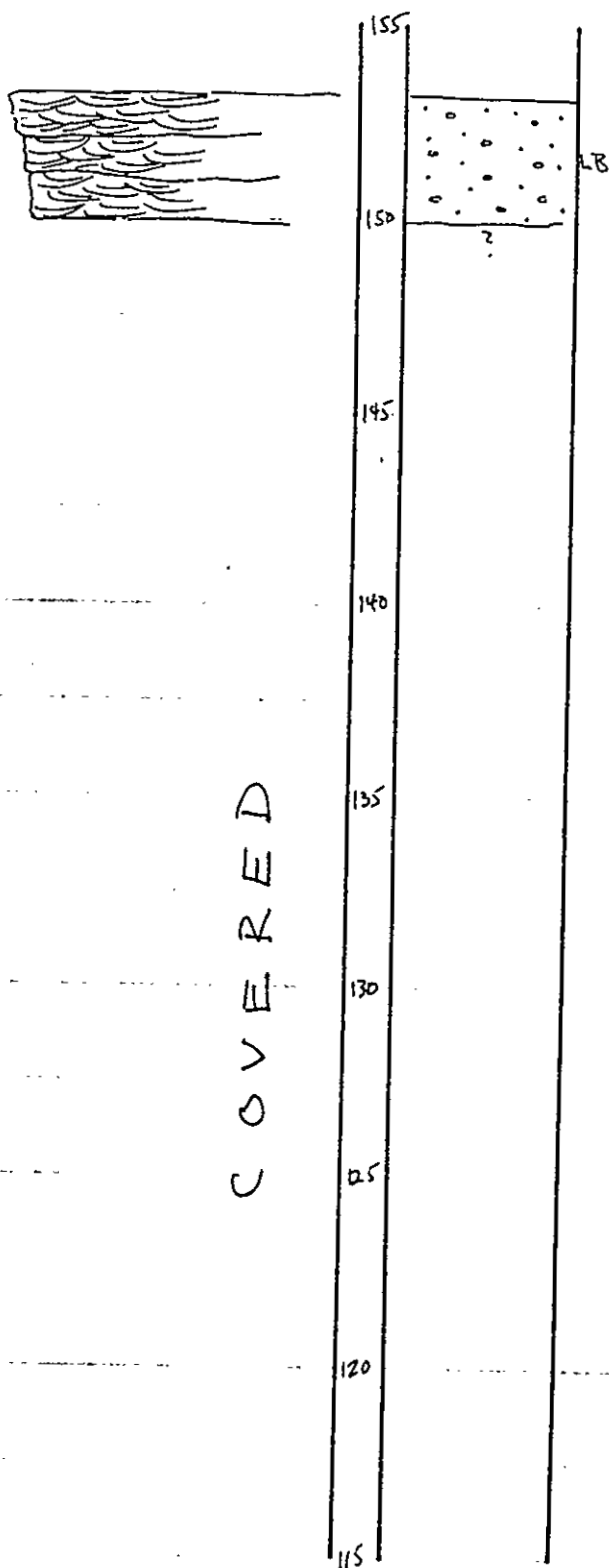
287

ELE

July 25

JMC

M.S. No. 78E



Varies from 40° to 145° POORLY SORTED ARKOSE

MCS = 29 mm
Thickness Uncertain

CONTACT COVERED

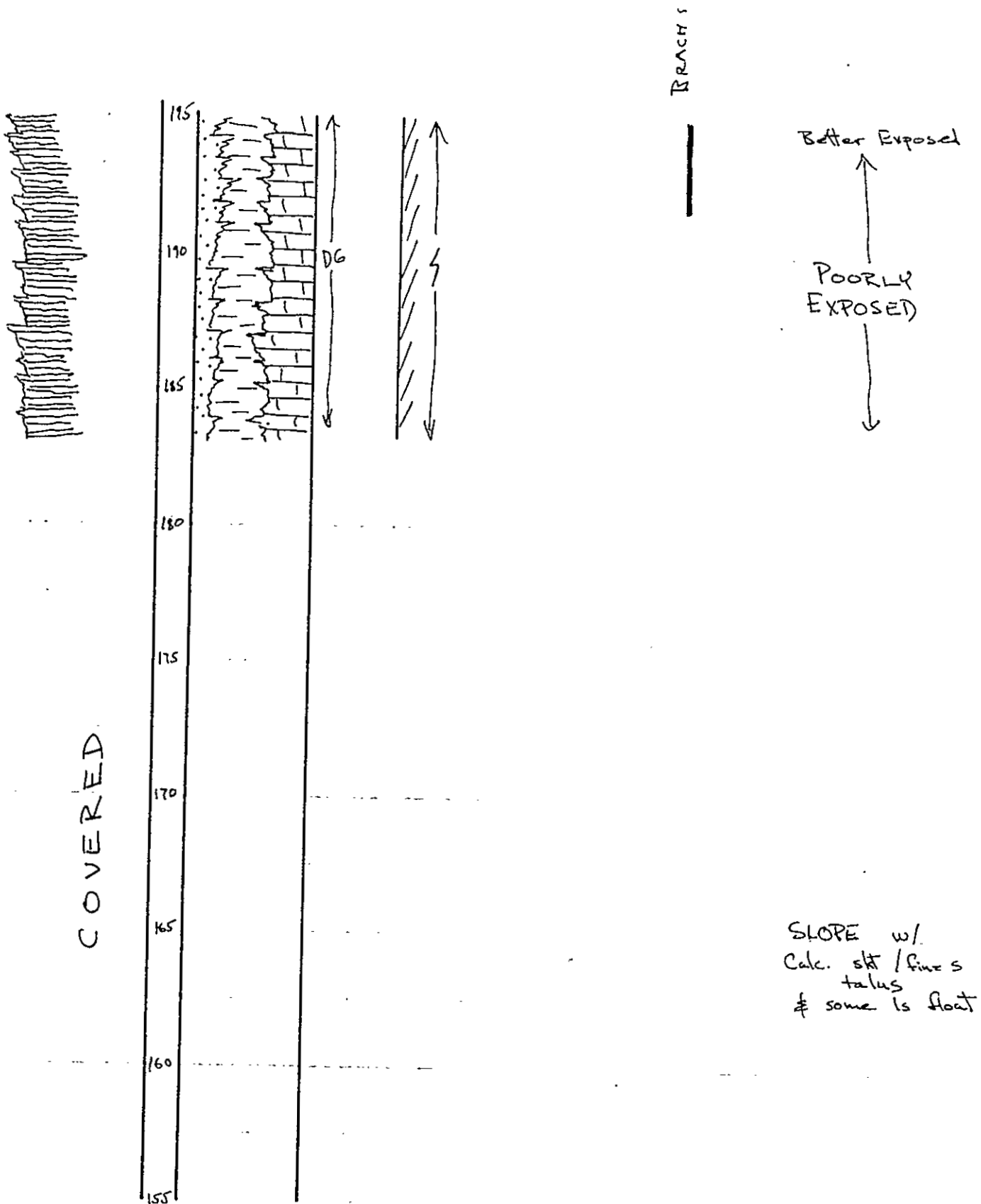
SLOPE STEEPENS
and is covered w/
ve ss talus.

ELE

July 25

JMC

M.S. No. 78 R



ELE

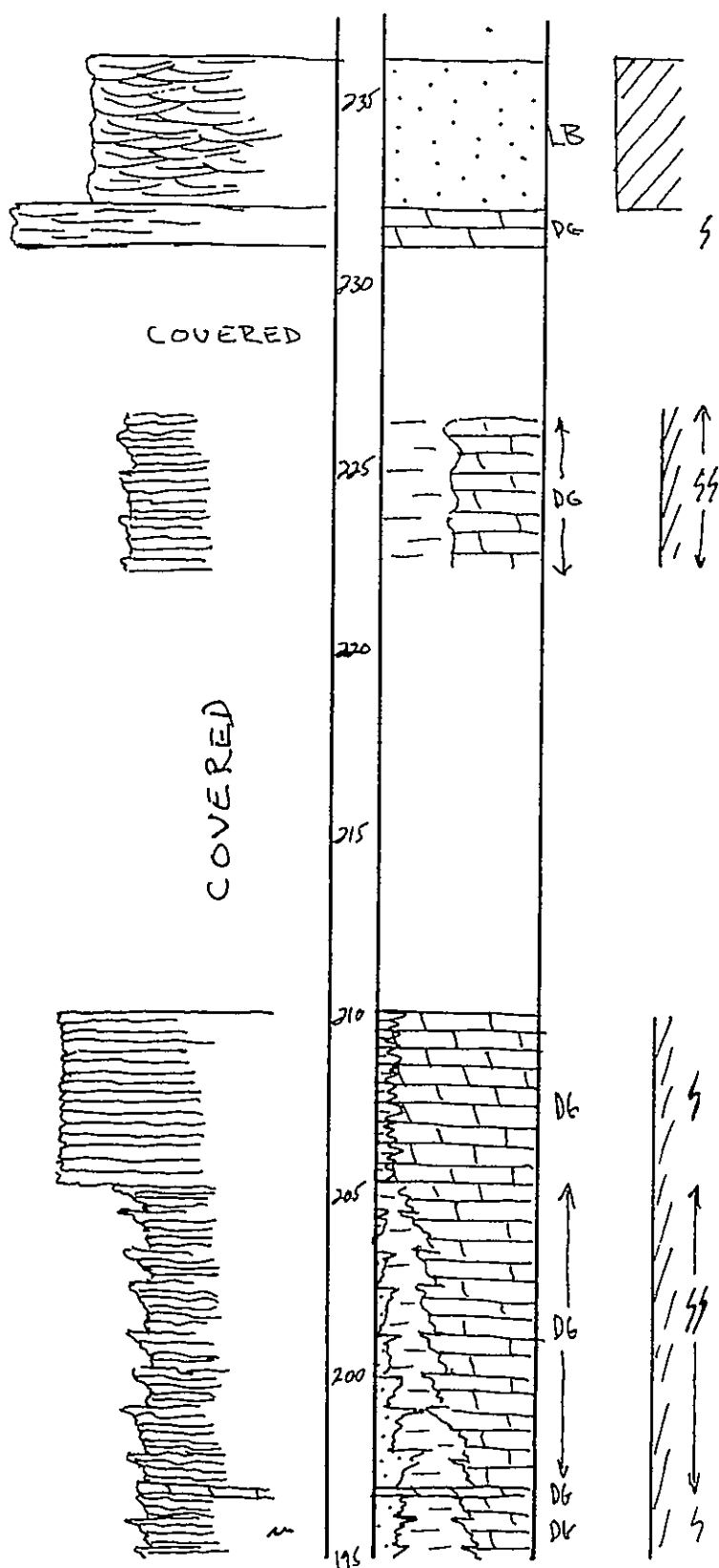
289

ELE

July 25

JMC

M.S. No. 78 F



BRACHS
CRIN

RAYCOLD ALGAE

Top of Hill
CALC



a few fus.
ELE-2

Calc., very mica.
fine ss w/
abund. trace
fossils

GRASSY SLOPE



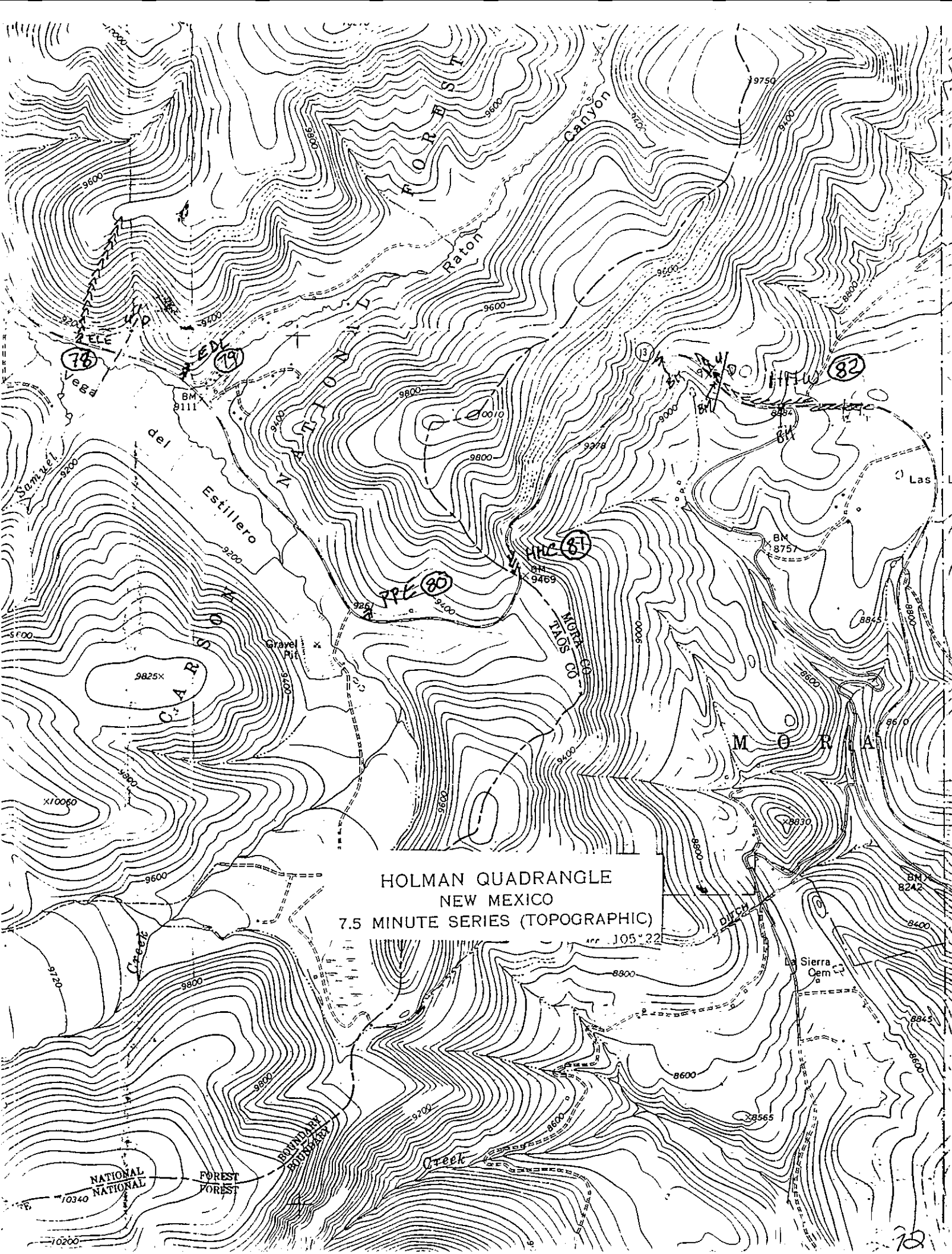
ELE

Abund. trace fossils

290

HOLMAN HILL SECTIONS

MEASURED SECTIONS
79 THROUGH 83



HHW (82)

BM
8757

Las Lagunas

Holman Hill

HOLMAN QUADRANGLE
NEW MEXICO
7.5 MINUTE SERIES (TOPOGRAPHIC)

105° 22'

Mora River

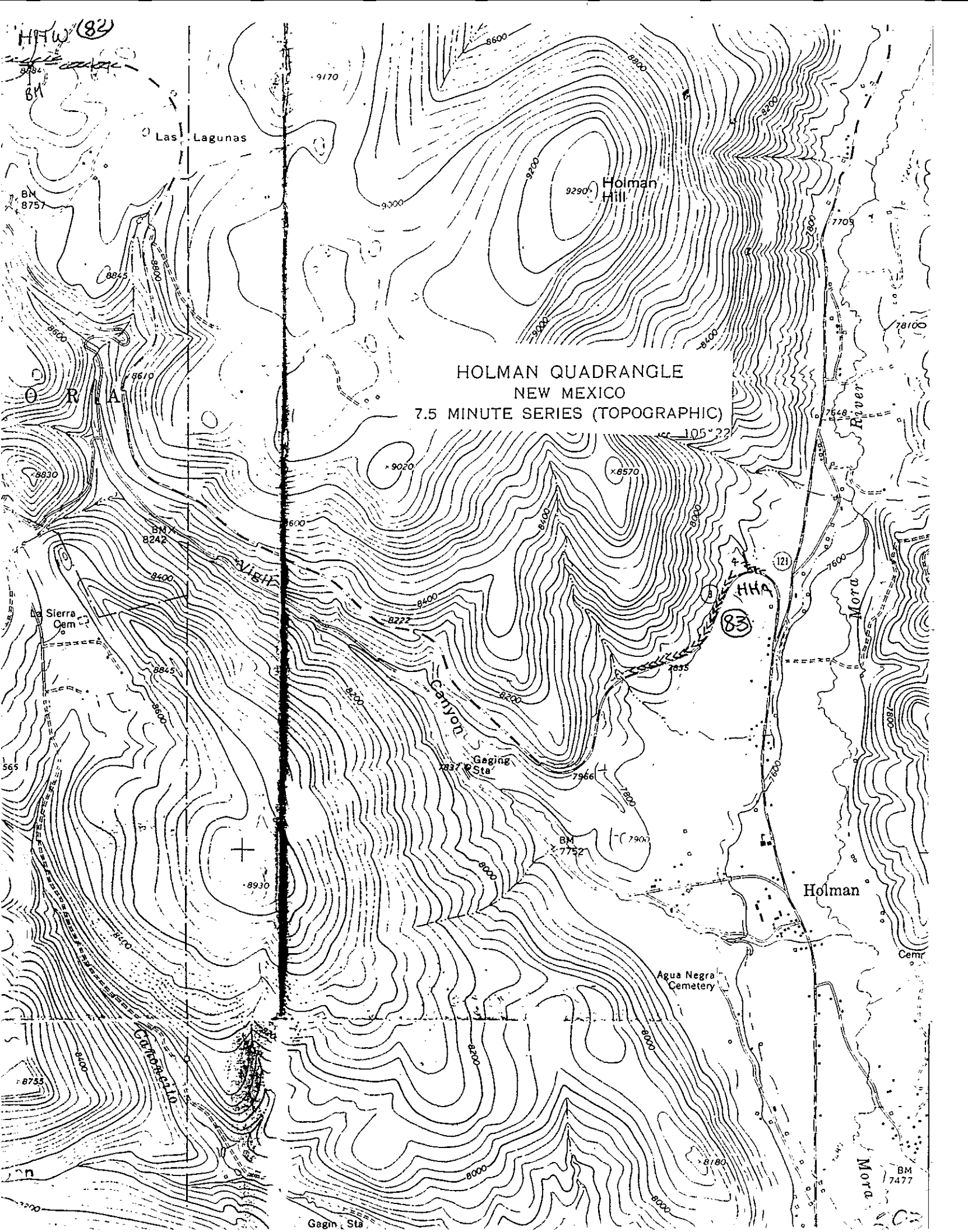
Holman

Agua Negra Cemetery

Mora

BM
7477

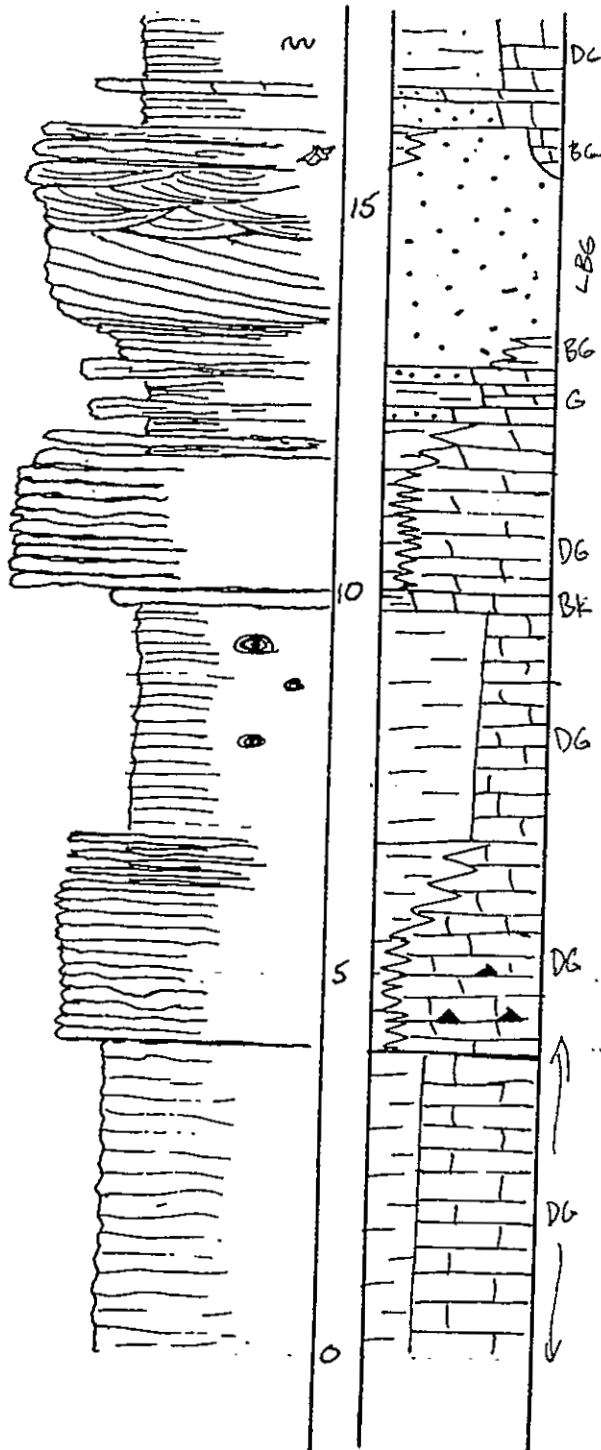
Gagin Sta



M.S. No. 79

PAGE 1

Brachs
Crinoids
Phylloid Algae
Pelecys



EDL-4

EDL-3

EDL-2

EDL-1

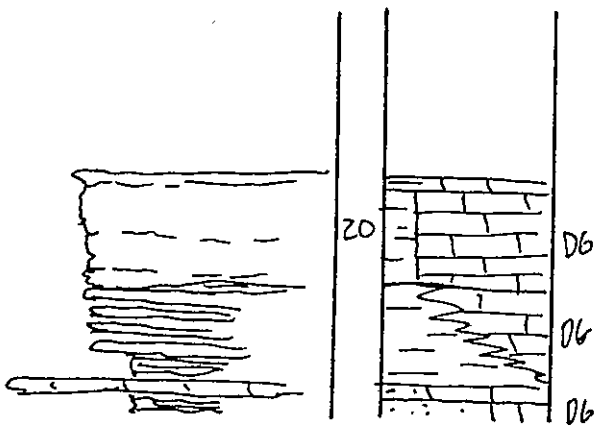
EDL

Aug 22, 1978

M.S. No. 79

PAGE 2

Brachs
Crinoids



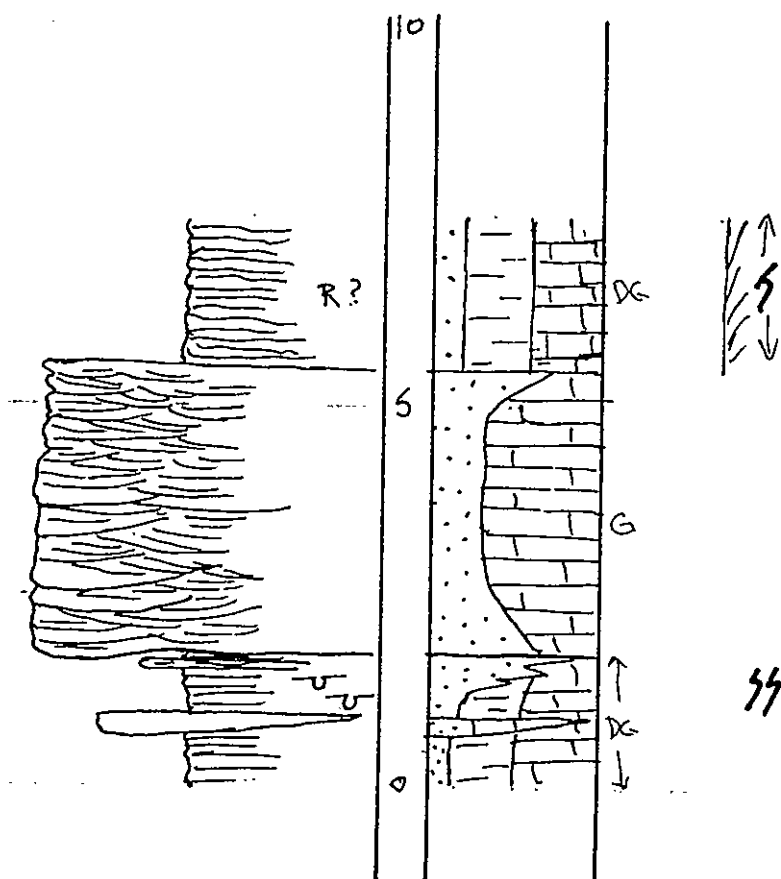
5

57

12

M.S. No. 80

Crinoids
Brach's
Bryoz.
Fusulinids



Y. up to 100 ft
V. F. 100
100 ft. thick.

Y. up to 100 ft
V. F. 100
100 ft. thick.

Y. up to 100 ft

E

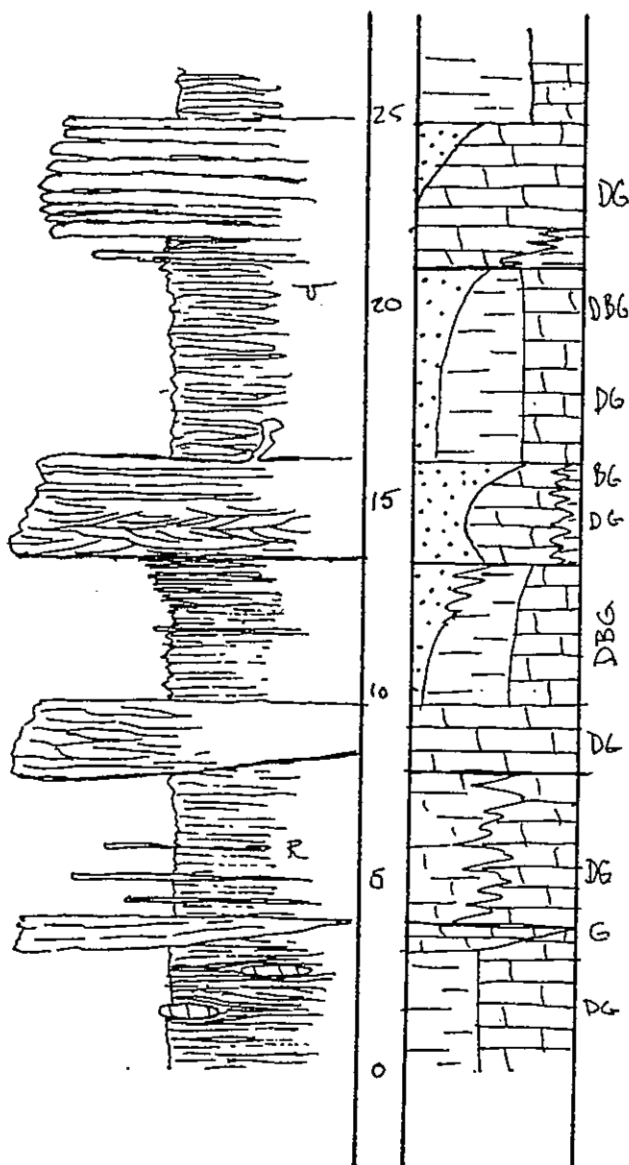
R

M.S. No. 81

Brachs
Crinoids
Pelecyp
Bryozoan

35

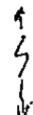
30



HHC-5 FUSULINIDS



Phy. Algae
R.A., Gasto, etc.



HHC-4

HHC-3

HHC-2

containing small
crinoid stems
and bryozoan
colonies
in the matrix



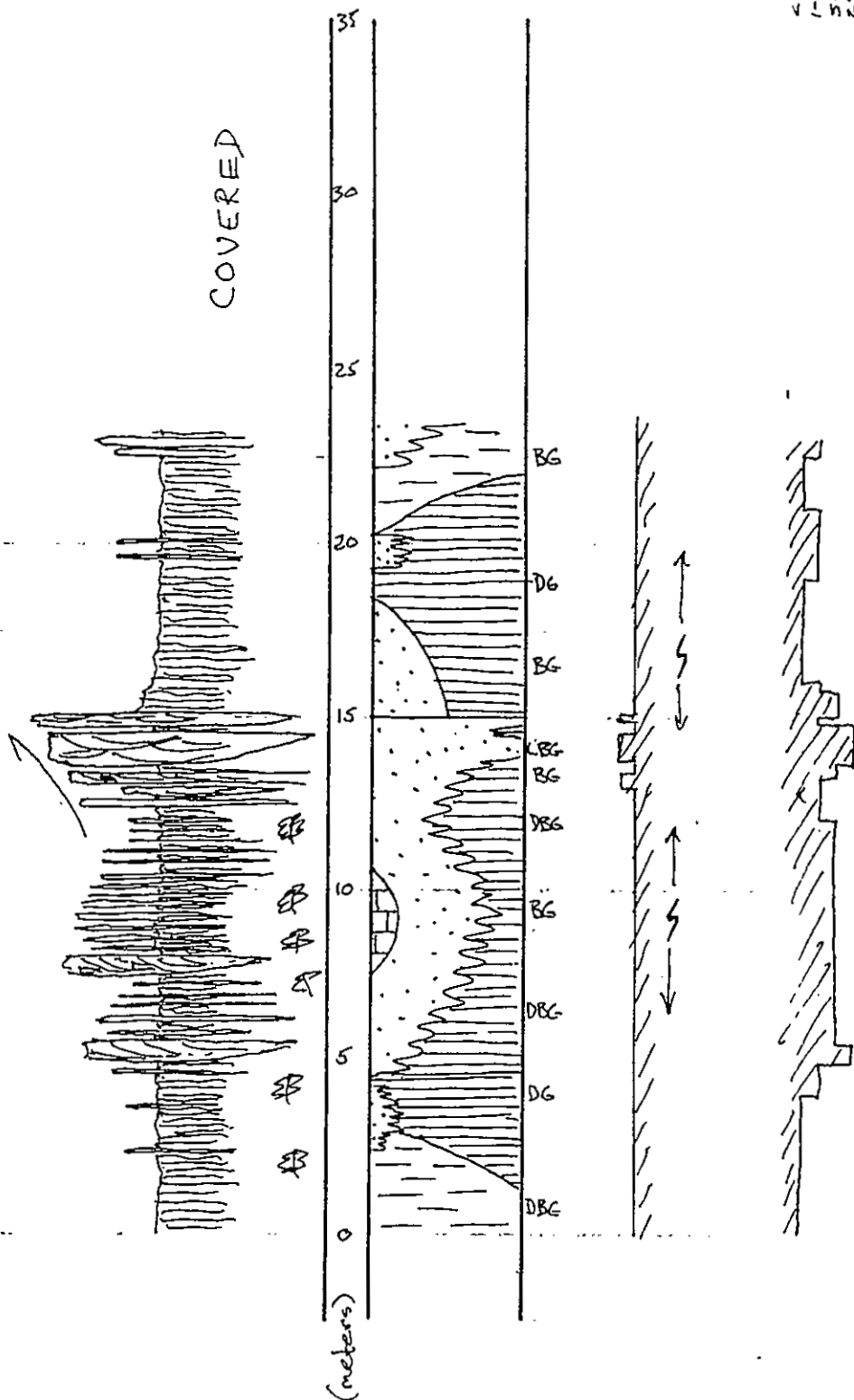
Gnst. dike

JMC

PAGE 1

Bed Thickness

25-1m
5-254
1-50
2-17



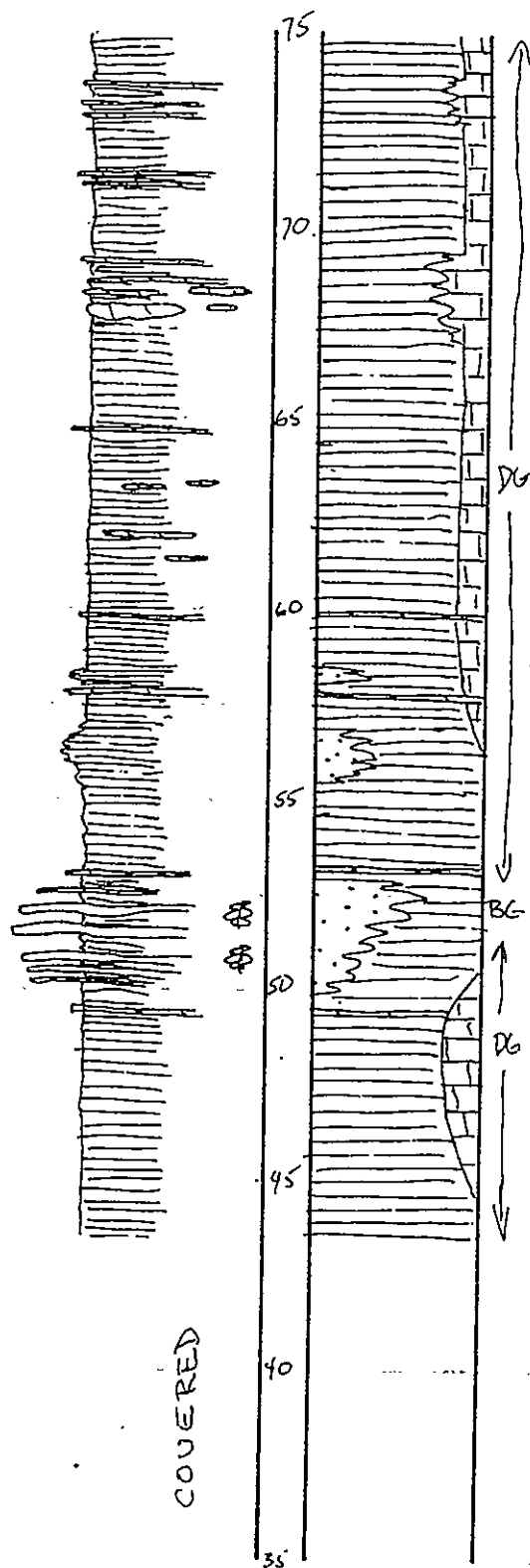
MCS = 23 mm. (ftz)
Micaceous
Rip-up clasts
Abund. load casts

SECTION CUT BY
SEVERAL MINOR
FAULTS

M.S. No. 82

PAGE 2

Bt Thickness



40°; 6°W
 Micrite lds
 4-12 cm thk
 weather brown

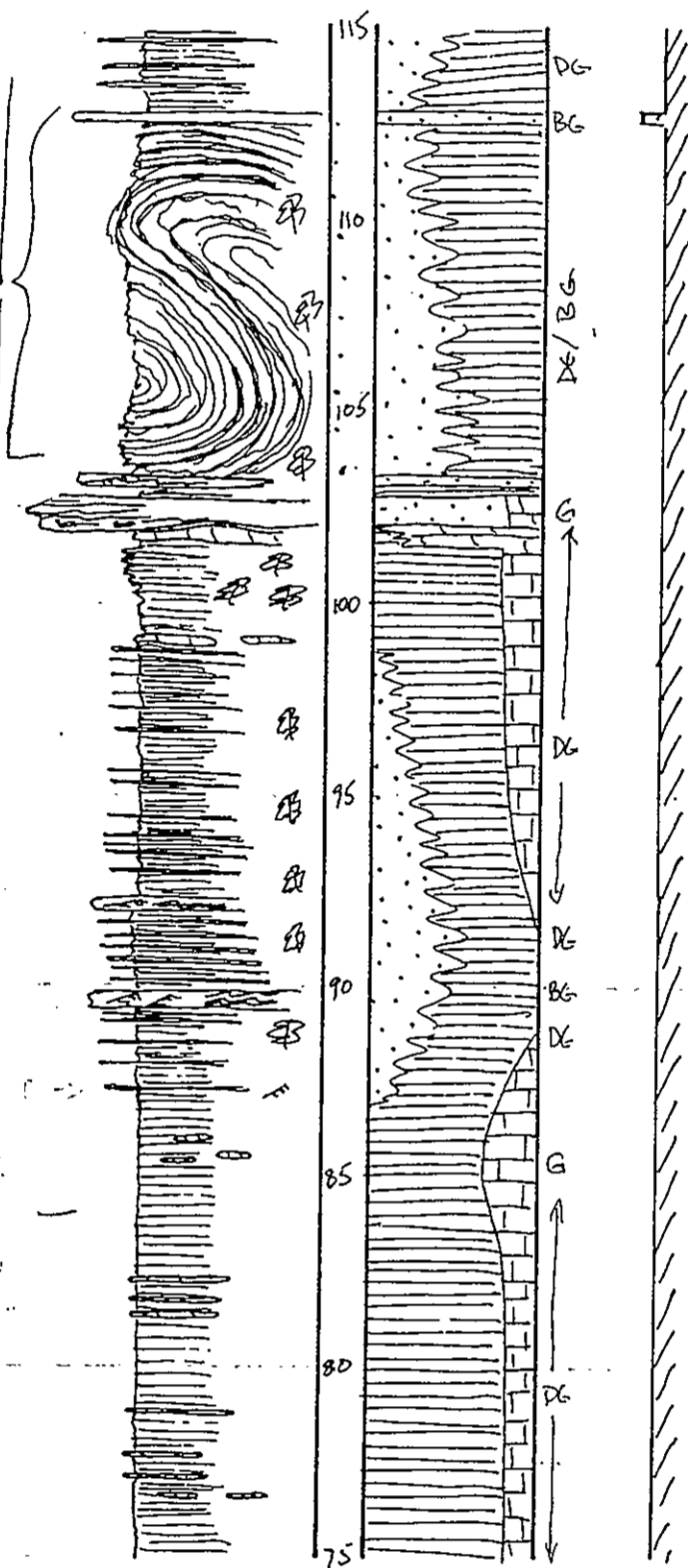
CALCAREOUS

← BM 8995 ft

M.S. No. 82

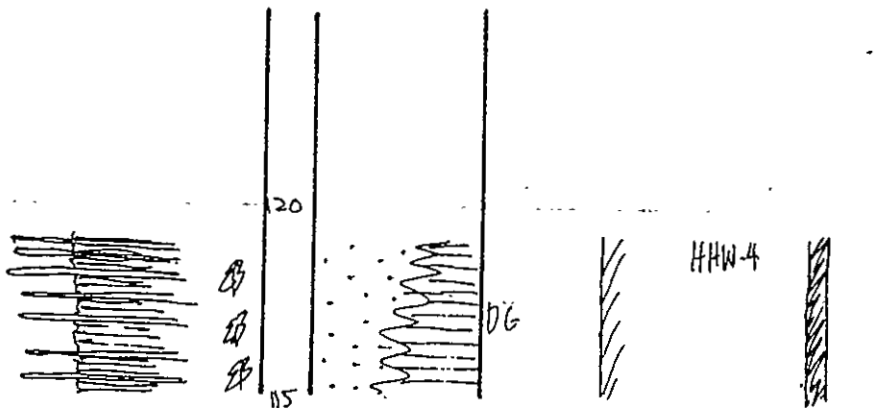
PAGE 3

Auricularia (?)

This thickness is
exaggerated x 2

M.S. No. 82

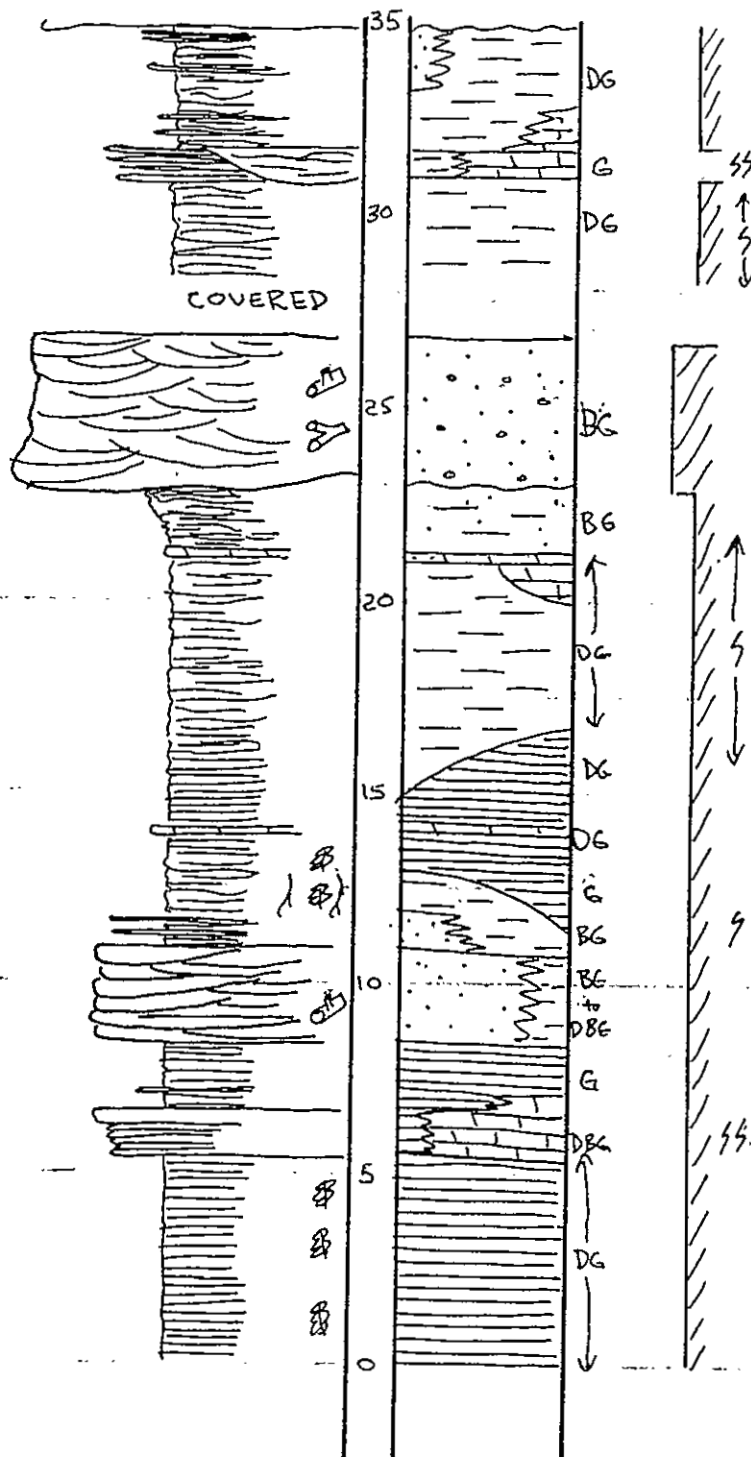
PAGE 4



M.S. No. 83

PAGE 1

BRACHS
CRINOIDS
PHYLLOID ALGAE
PELECYPODS



Section shifts up hill to next roadcut

SECTION SHIFTS UP HILL TO NEXT ROADCUT
135; 4°W

very micaceous, fine ss
very micaceous to
calc DG shift

HHA-4
HHA-3
MICACEOUS

HHA-2

HHA-1
49; 5°W ??

HHA

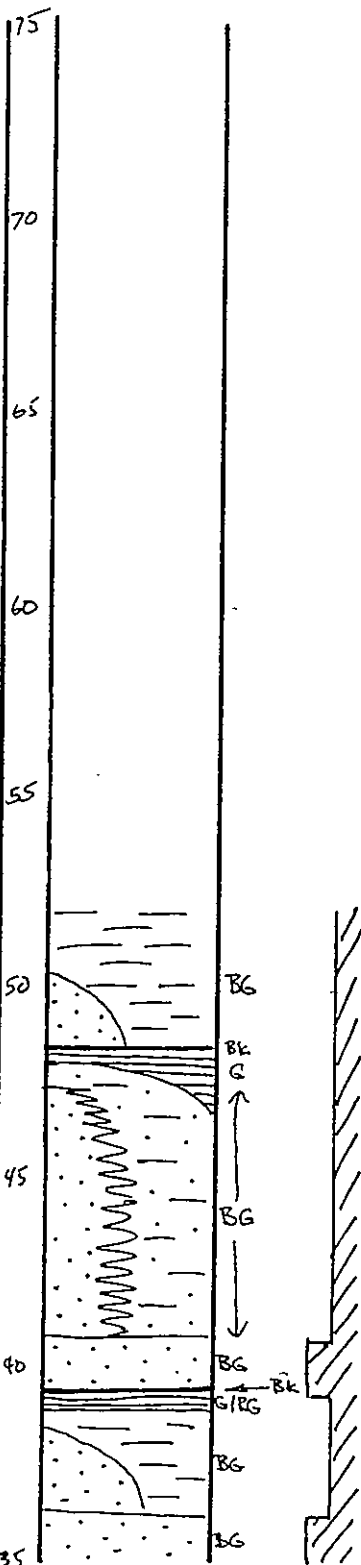
June 14, 1978
lower Sandiac
GMC

M.S. No. 83

PAGE 2

Brachys

COVERED



SECTION
SHIFTS
TO
NEXT
ROADCUT

THICKNESS
APPROXIMATE

Extremely Micaceous
w/ large logs
← Lignite

VERY MICACEOUS

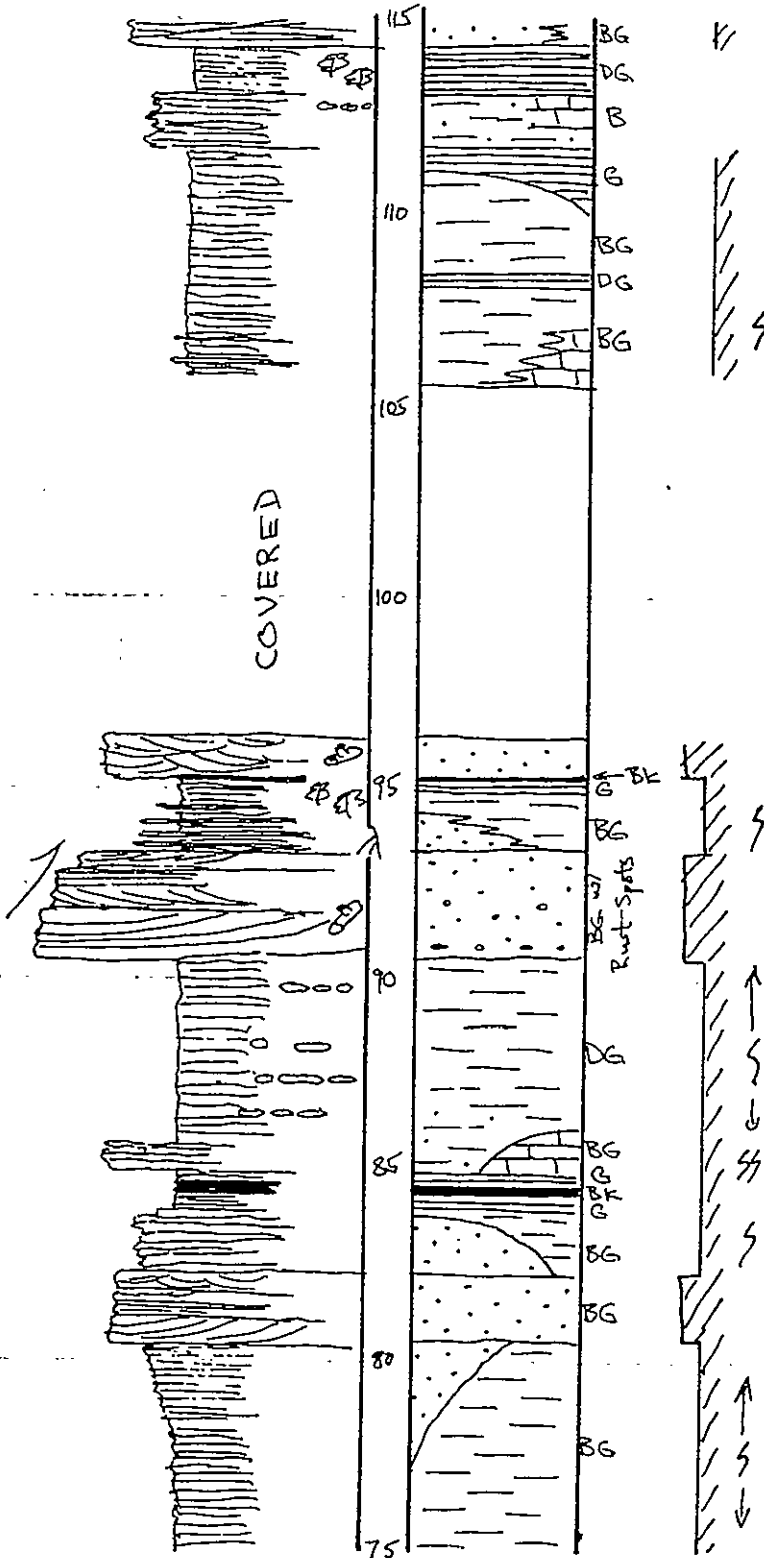
calc, or calcareous, ss
← lignite
in calcareous ss
in calcareous ss

HHA-5

M.S. No. 83

PAGE 3

Brachs
Crinoids
Phylloid Algae
Pelecypods



Septarian Iron
Mudstone HHA-5

← Elev. 7833 ft.

SECTION
SHIFTS TO
FORTH
ROADCUT

VERY MICACEOUS

Thin, to 1/2 in E
Contact sharp but
slightly
Micaceous
Mudstone
down to 7833

Better. Cast.
Mesolobus, prot, etc
MICACEOUS
Laminar, LB
CALCAREOUS
Arceuthobium

M. ...
P. ...

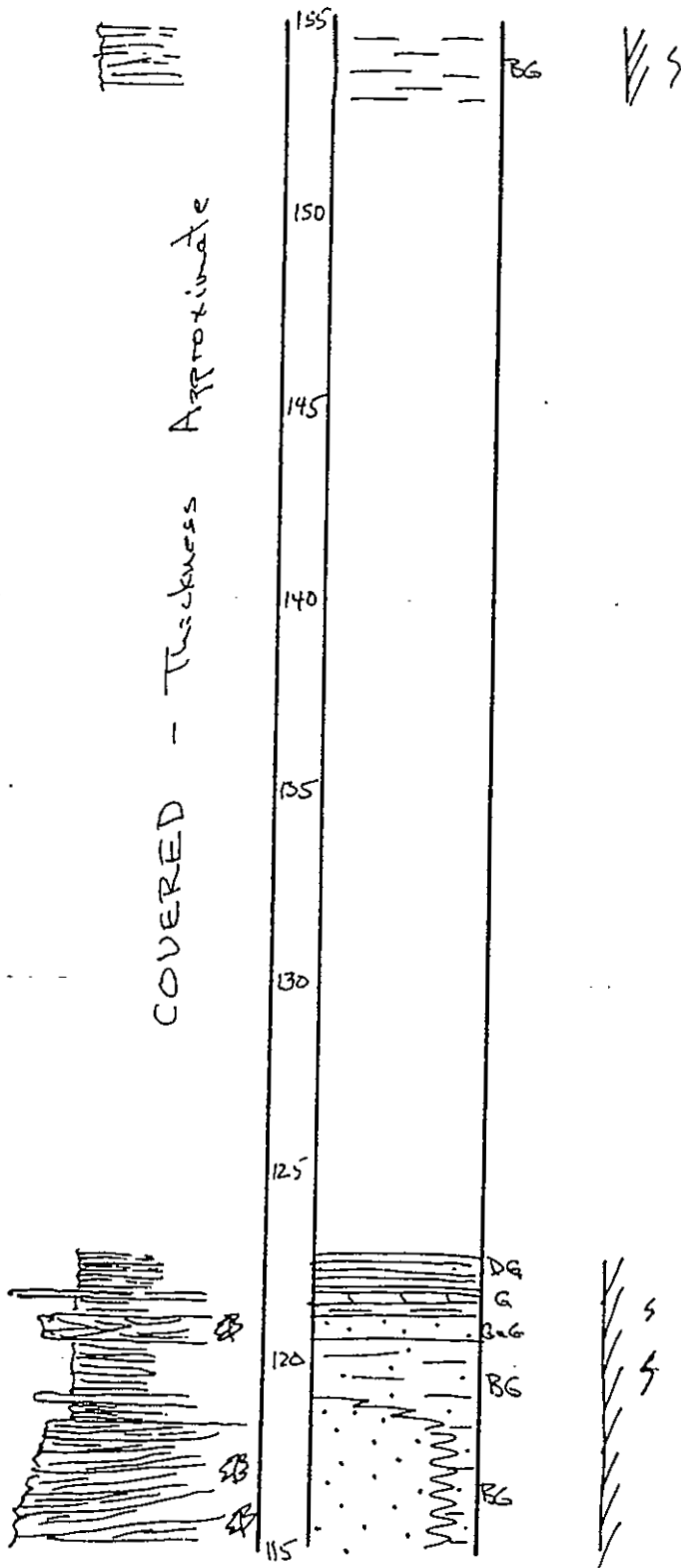
M.S. No. 83

PAGE 4

Beach

Micaceous

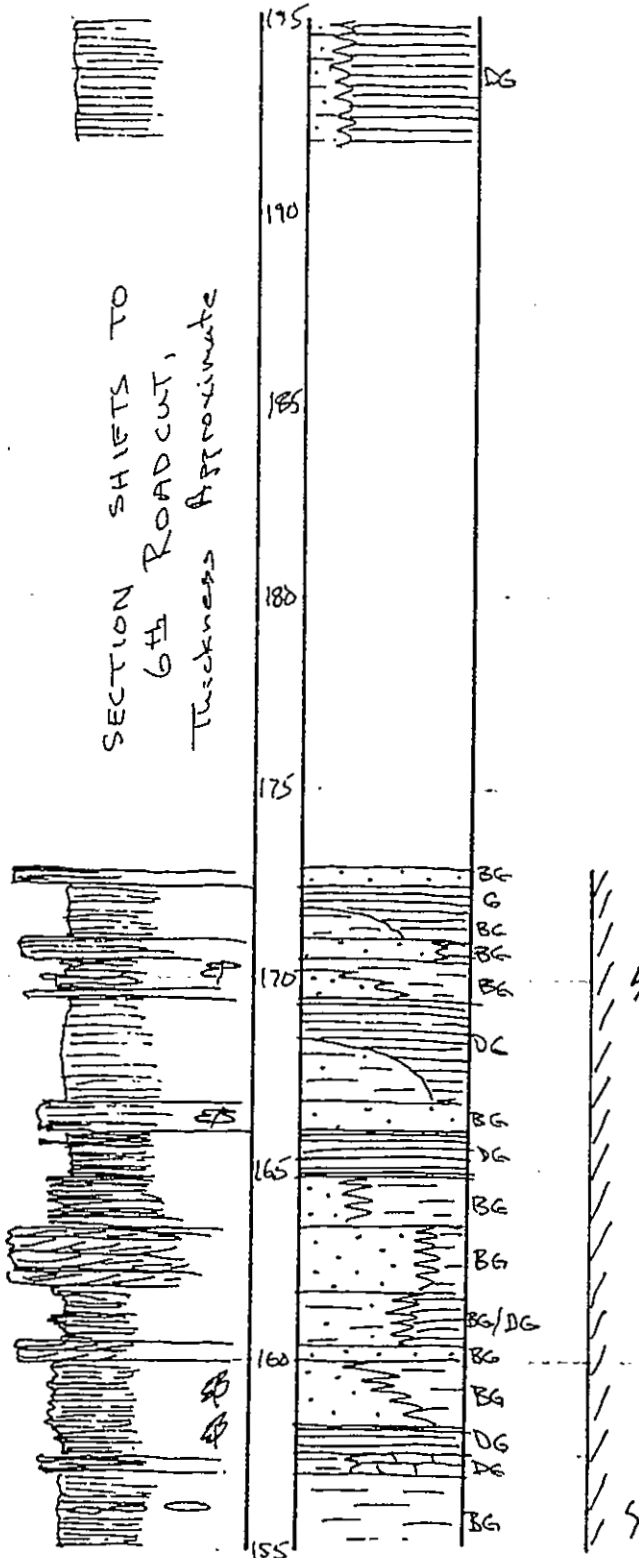
SECTION
SHIFTS
TO
FIFTH
ROADCUT



micaceous

PAGE 5

Brachs
Crimids



↓
SOME MINOR
FAULTING

Edmund Morgan

14-02-1975

Case in house and
Tang Sh. Hing
1977

11 - accus,

10/10/10

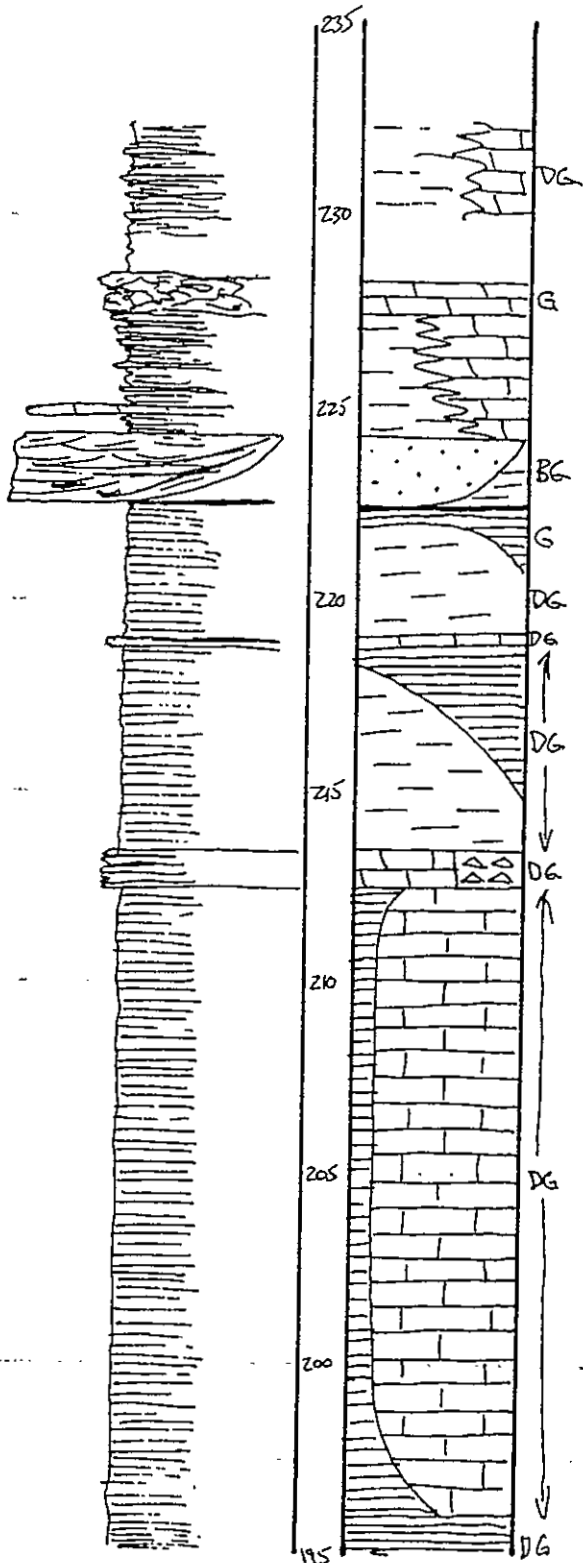
H. ...
 ...
 ...
 ...
 ...
 ← SER. IRON CAL.
 RUSTBONE
 Iron Content.

M.S. No. 83

PAGE 6

Brachs
Cenoids

Pelarypods



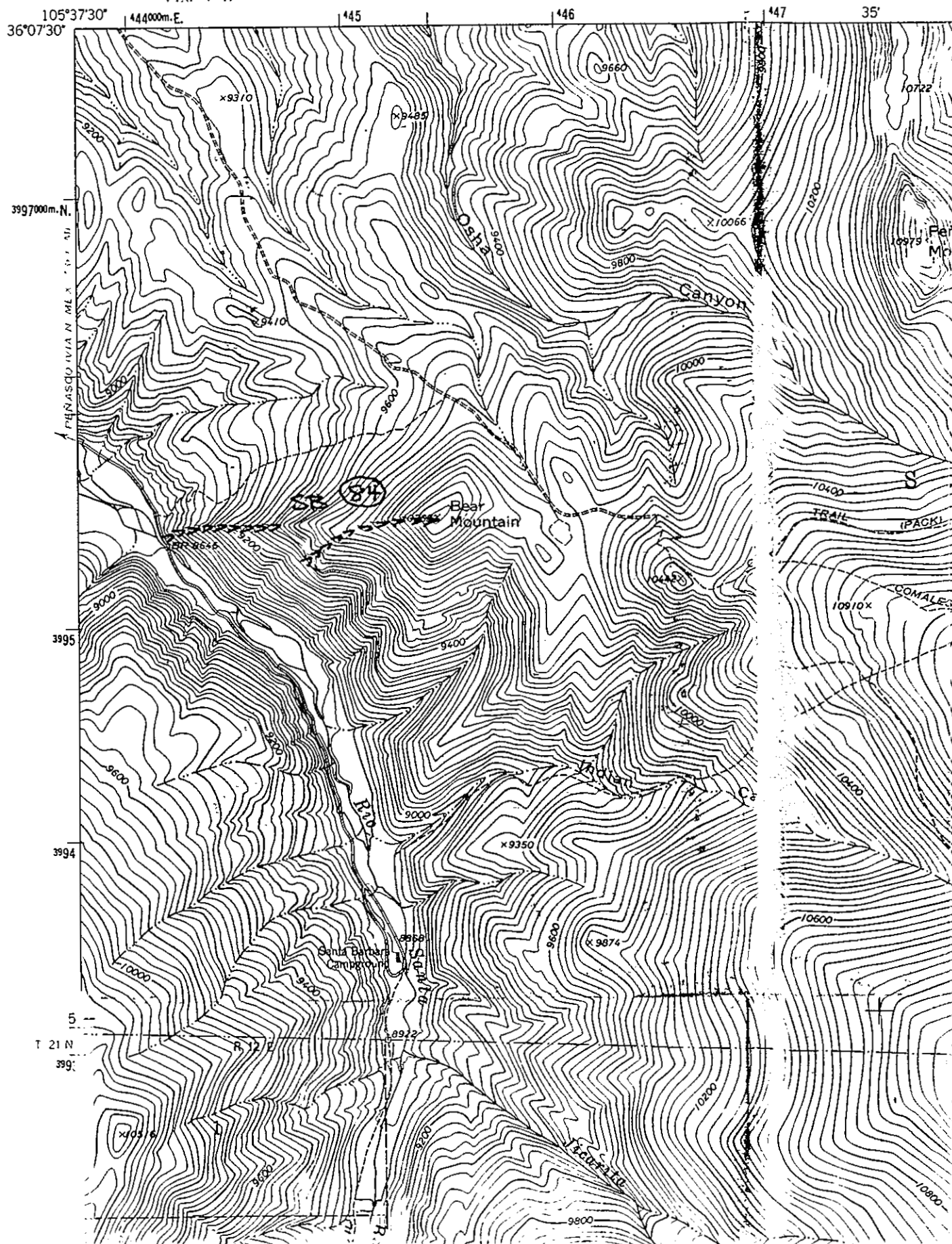
← STRANGE LS Breccia
← HHA-7
← HHA-6
Selenite Beller. Gast
BM Elev 7978 ft.
HHA-8

BEAR MOUNTAIN SECTION

MEASURED SECTION 84

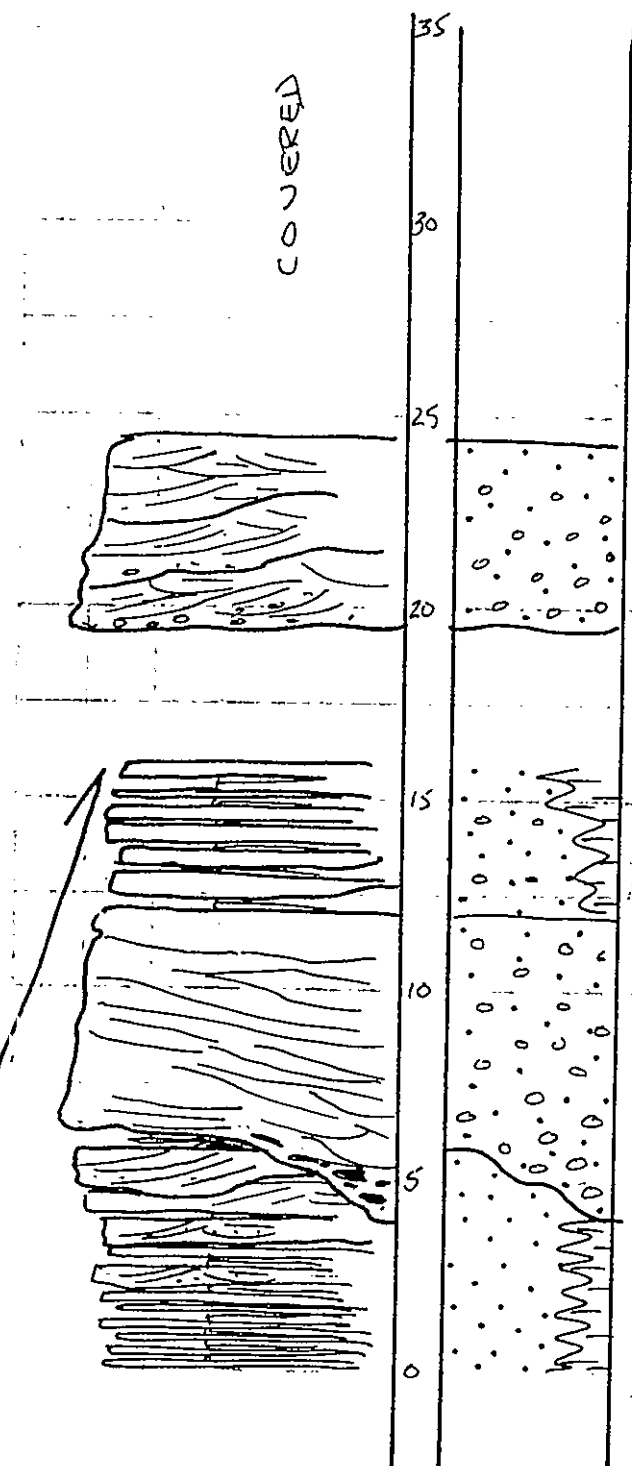
8551 NW
(PENASCO)

JICARITA PEAK QUADRANGLE
NEW MEXICO
7.5 MINUTE SERIES (TOPOGRAPHIC)



M.S. No. 84

PAGE 1

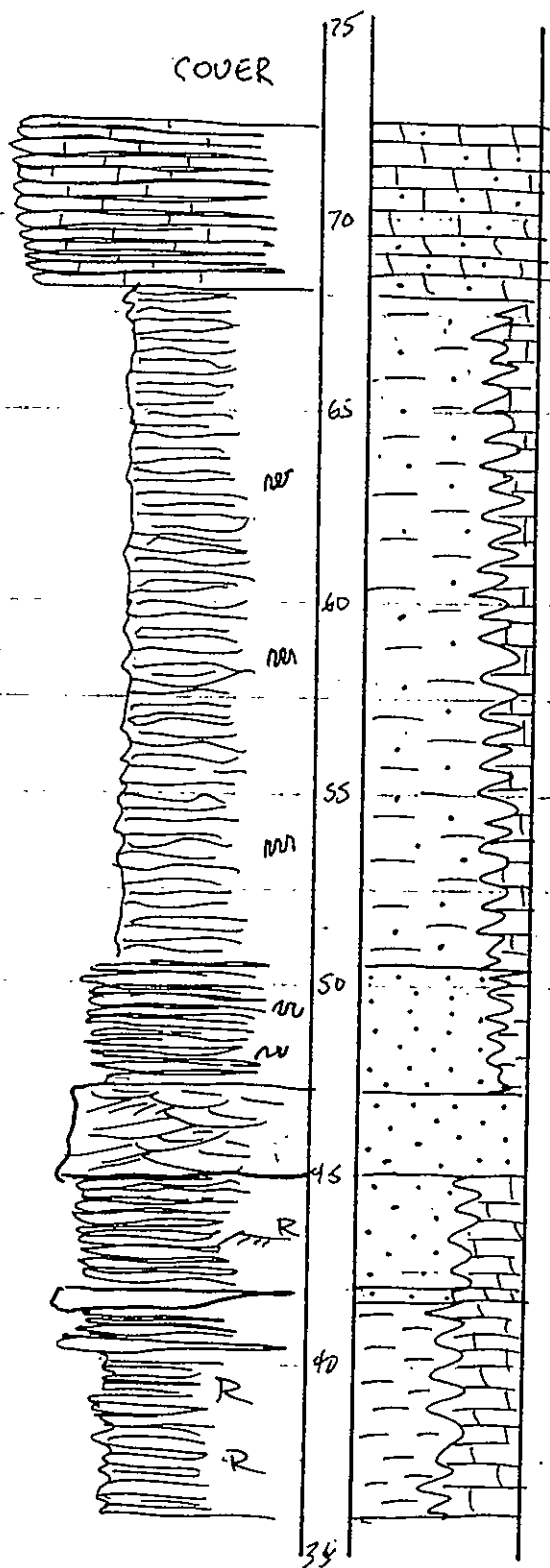


THIS SECTION CORRESPONDS
TO SUTHERLAND'S (1963)
MEASURED SECTION 25.

M.S. No. 84

PAGE 2

Brachs
Grinoids
Phyl. Algae

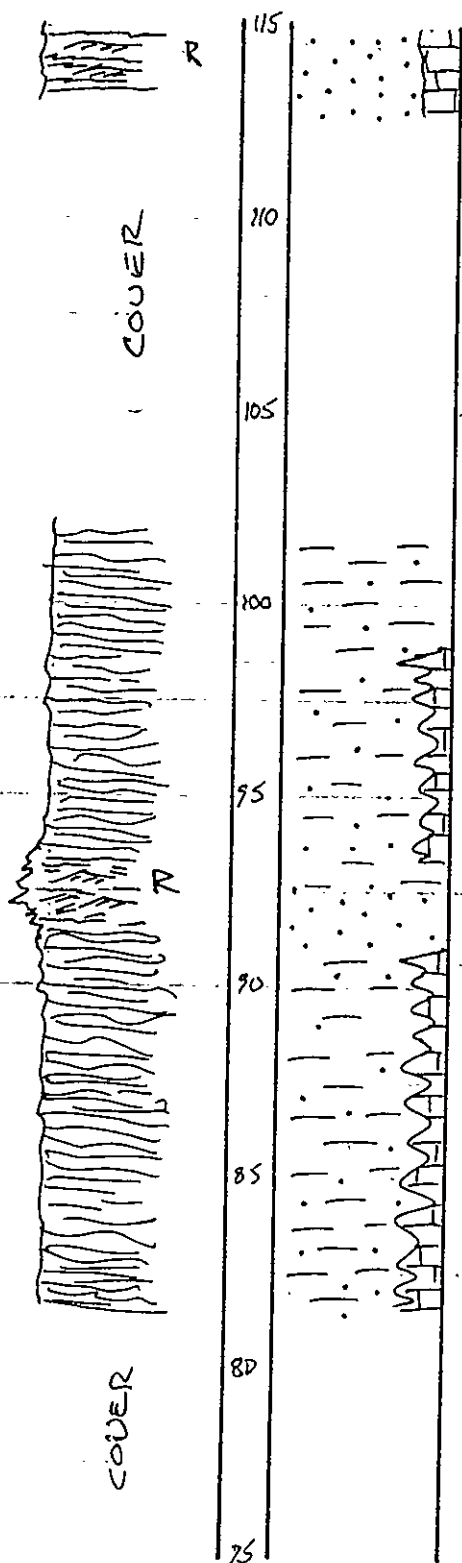


calc., micaceous,
sdy sltst
w/ interbeds
of sltst.

M.S. No. 84

PAGE 3

Brachs
Crinoids

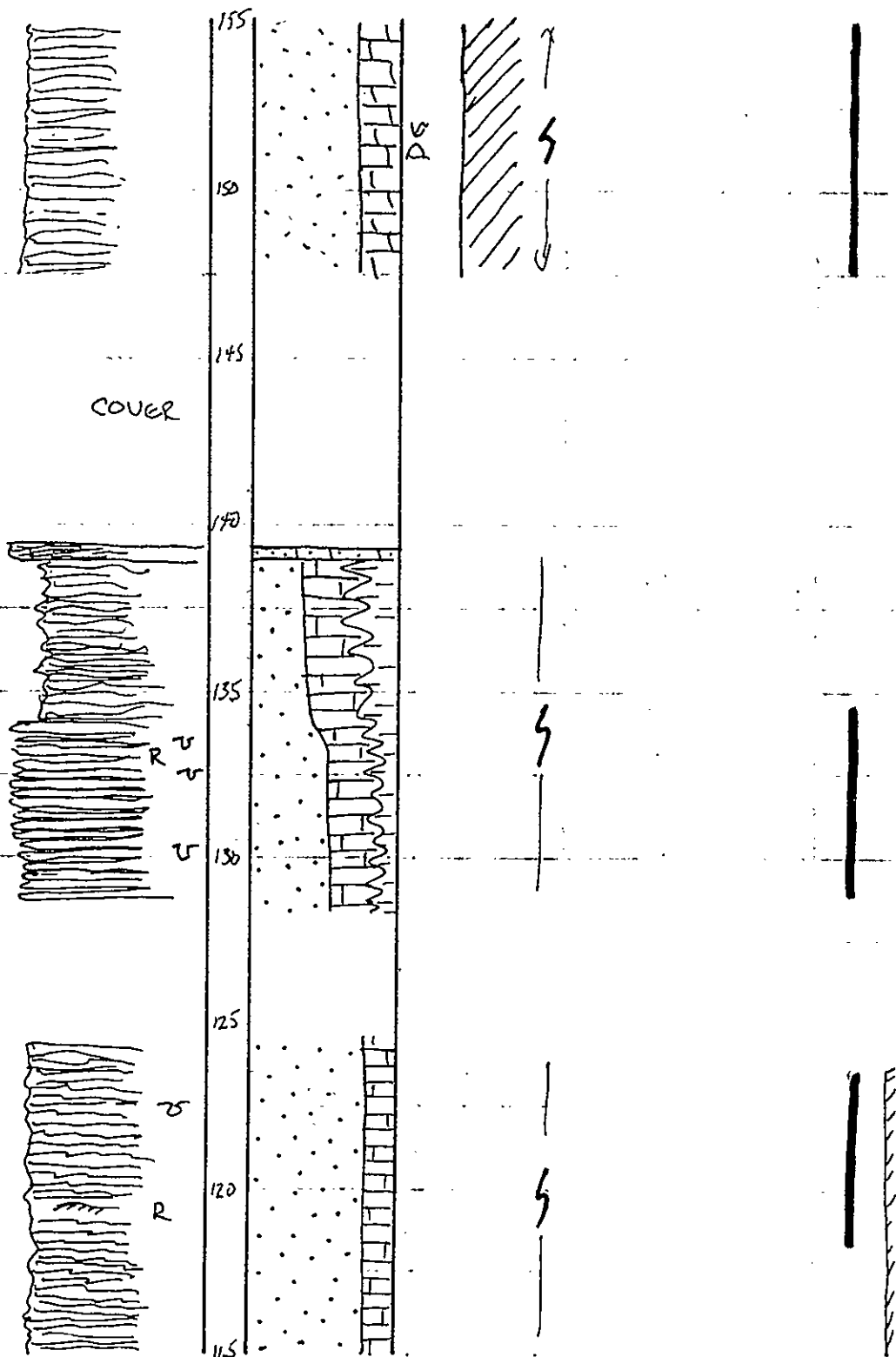


Calc, Sdy Slst
w/ thin ls.
interbeds

M.S. No. 84

PAGE 4

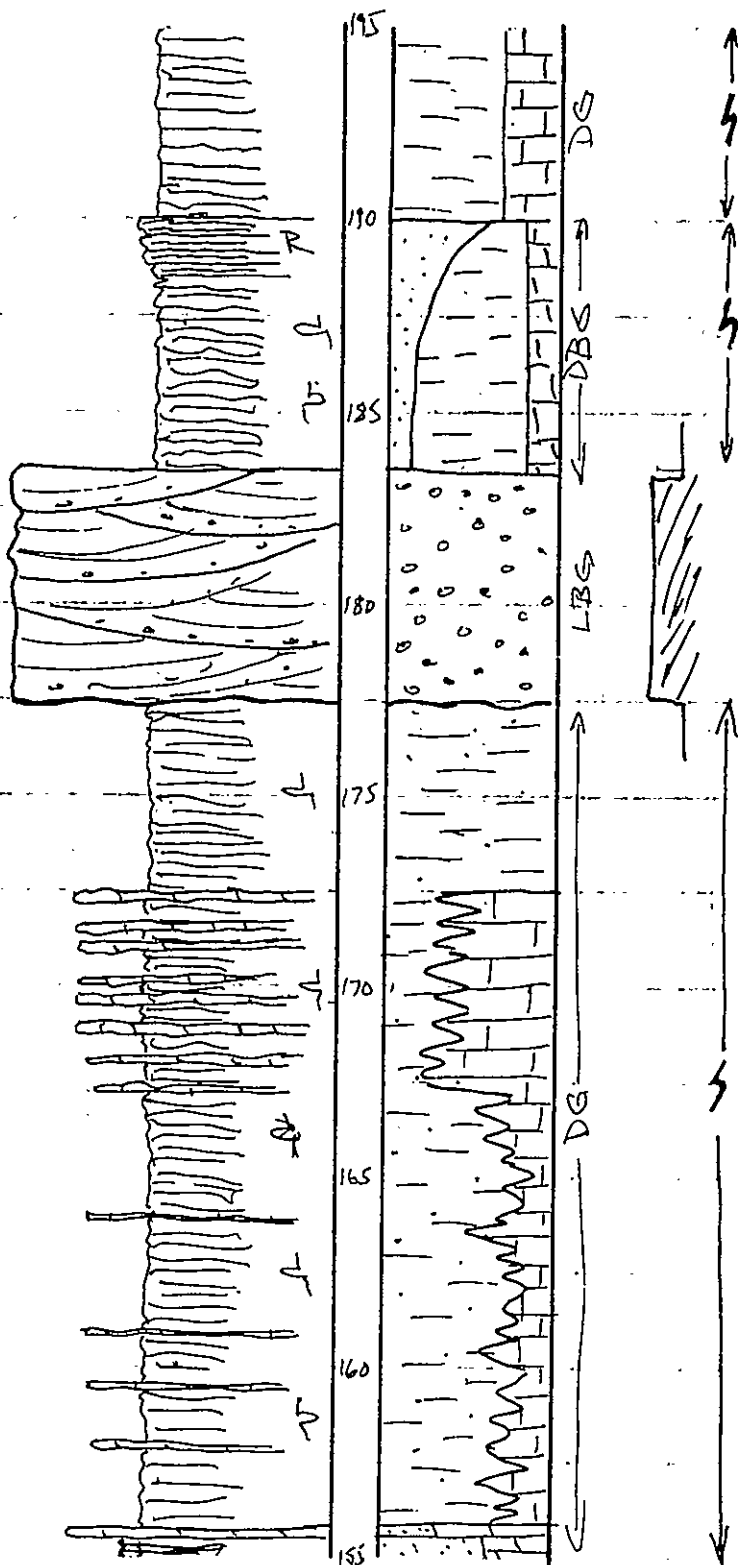
Brachs
Cenoids



M.S. No. 84

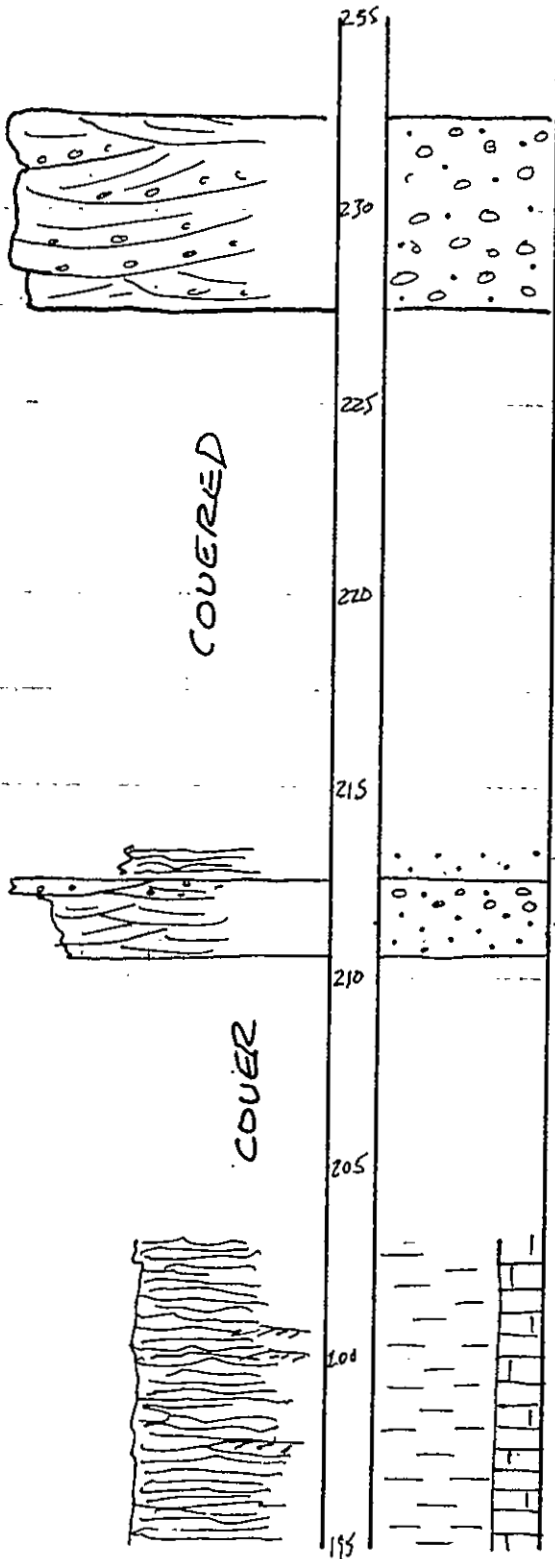
PAGE 5

Brachs



M.S. No. 84

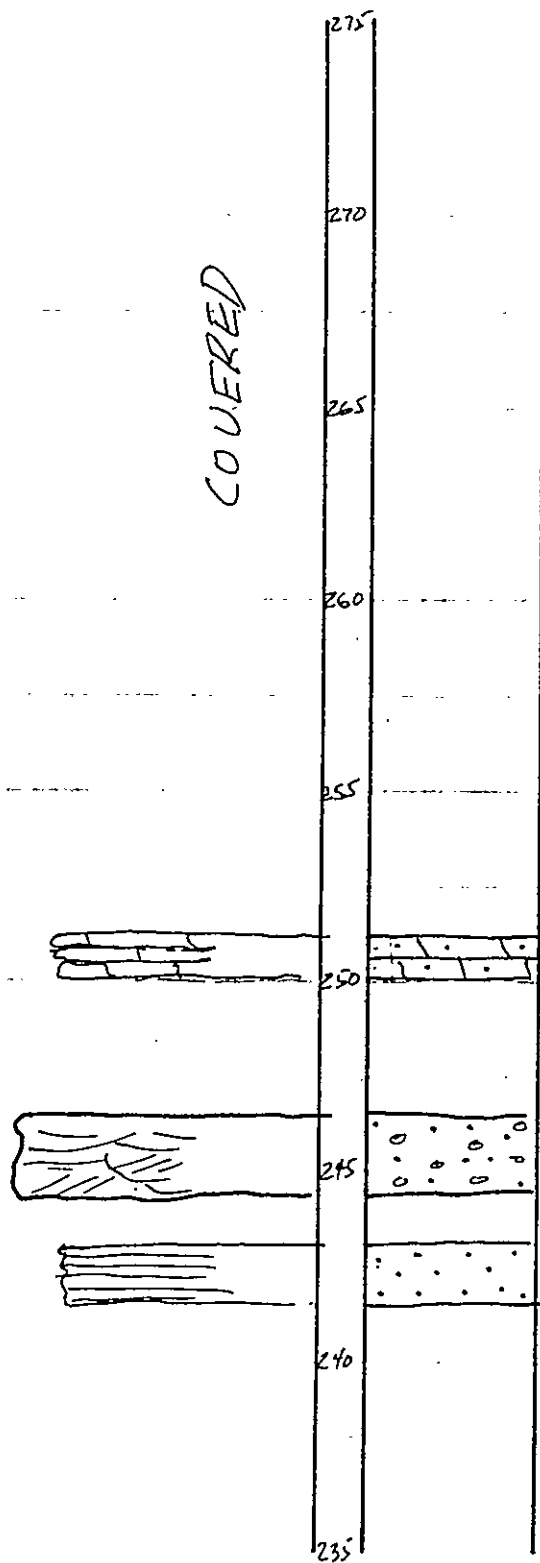
PAGE 6



M. S. No. 84

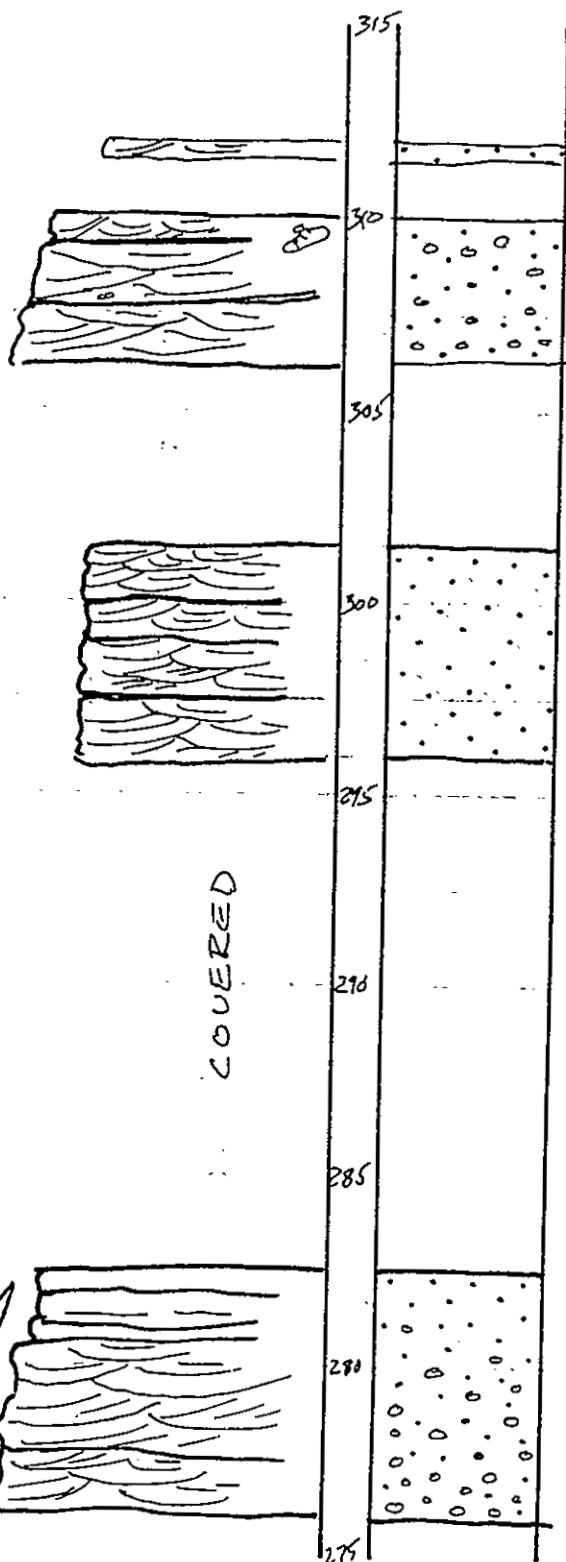
PAGE 7

Phyl. Algae



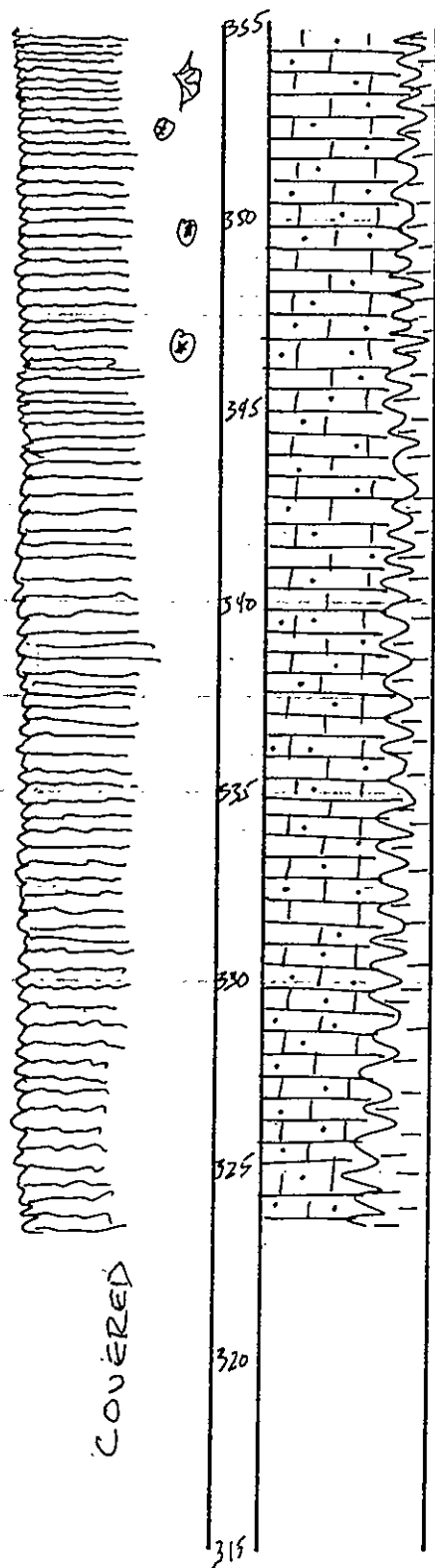
M.S. No. 84

PAGE 8



M.S. No. 84

PAGE 9



Brachs
Crinoids

Irreg. beds
of sdy ls
(15-25cm)
interbedded
with calc.
sdy. siltst.

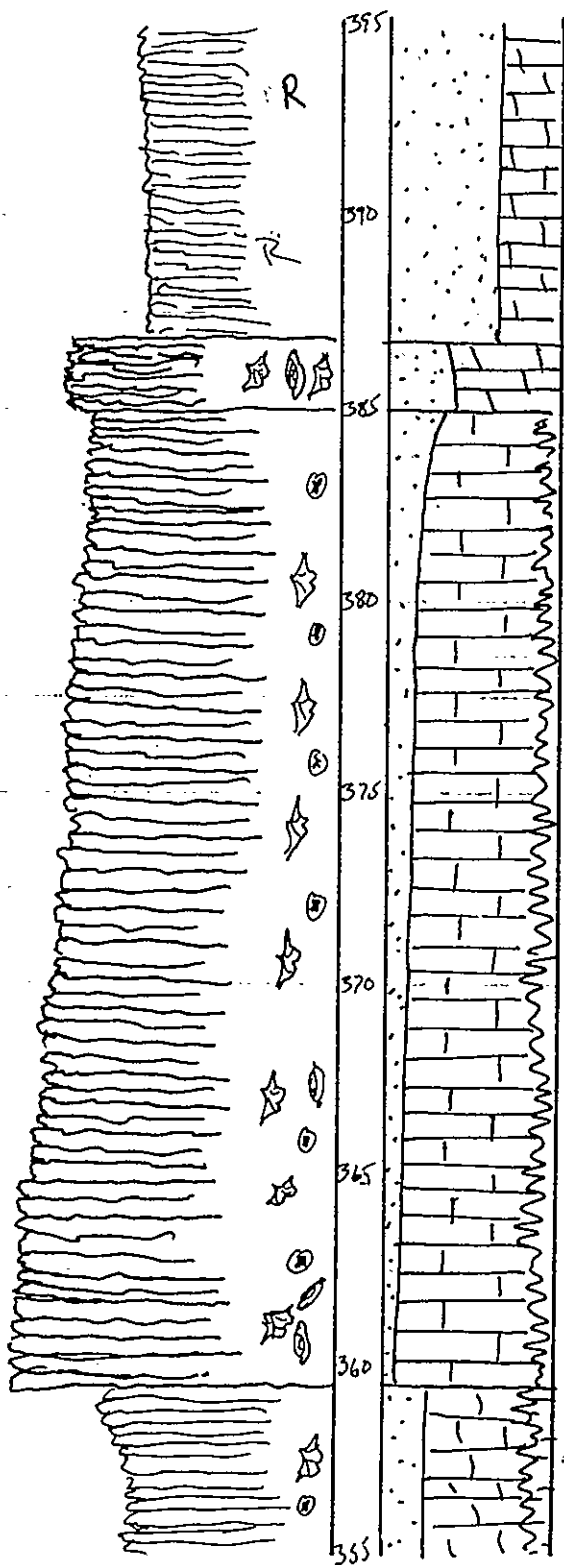
FORMS HIGH CLIFF

M.S. No. 84

PAGE 10

Brachs
Crinoids
Puz. Algae
Fus.

Inner lining Sand Content



SS

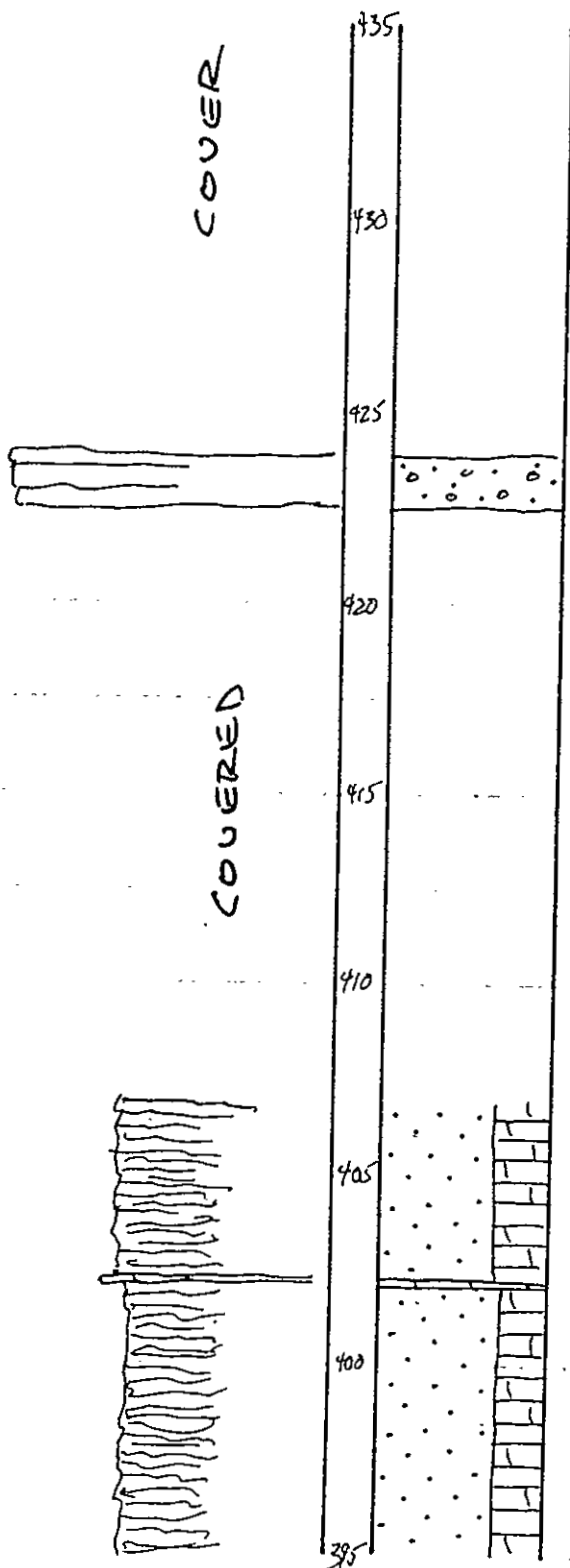


occasional coral

M.S. No. 84

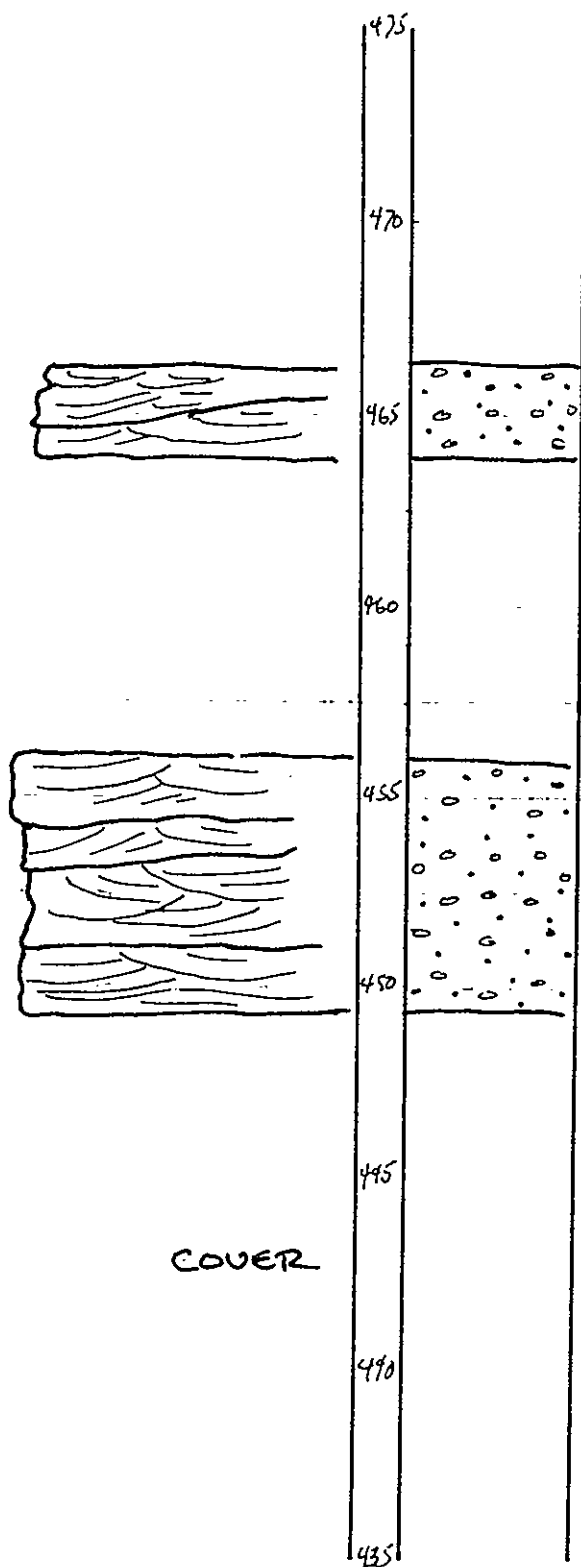
PAGE 11

Brachs



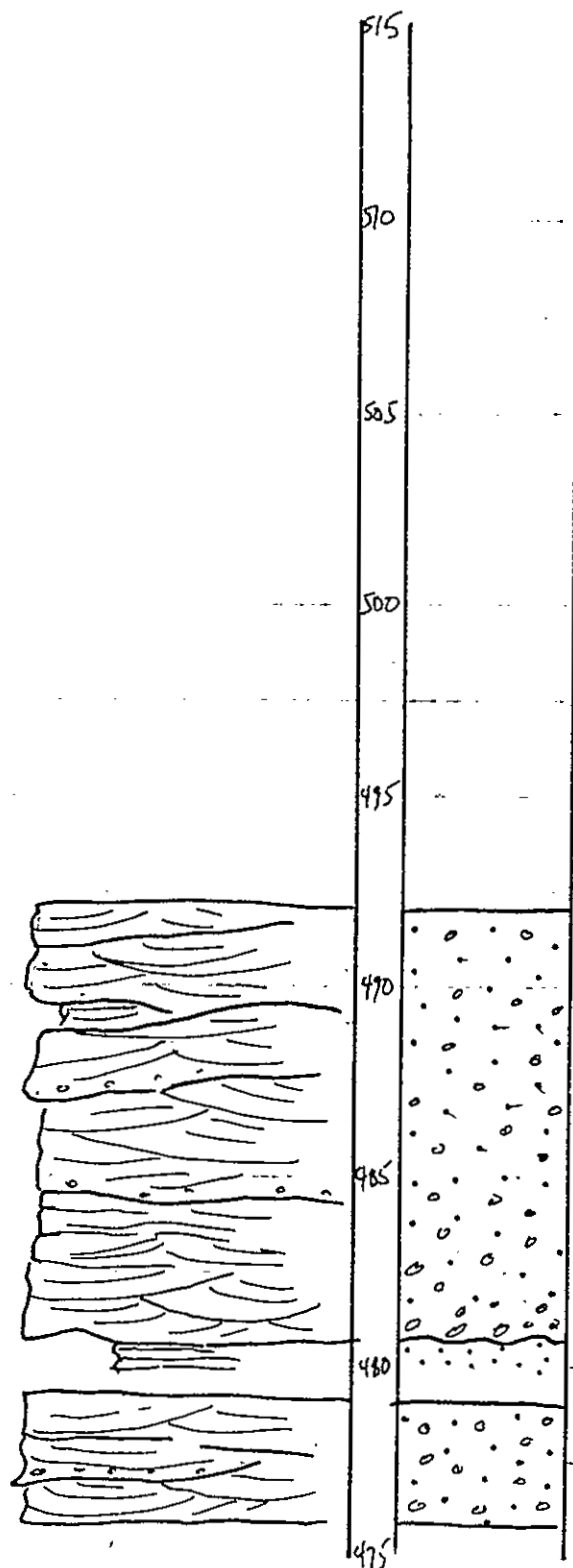
M.S. No. 84

PAGE 12



M.S. No. 84

PAGE 13

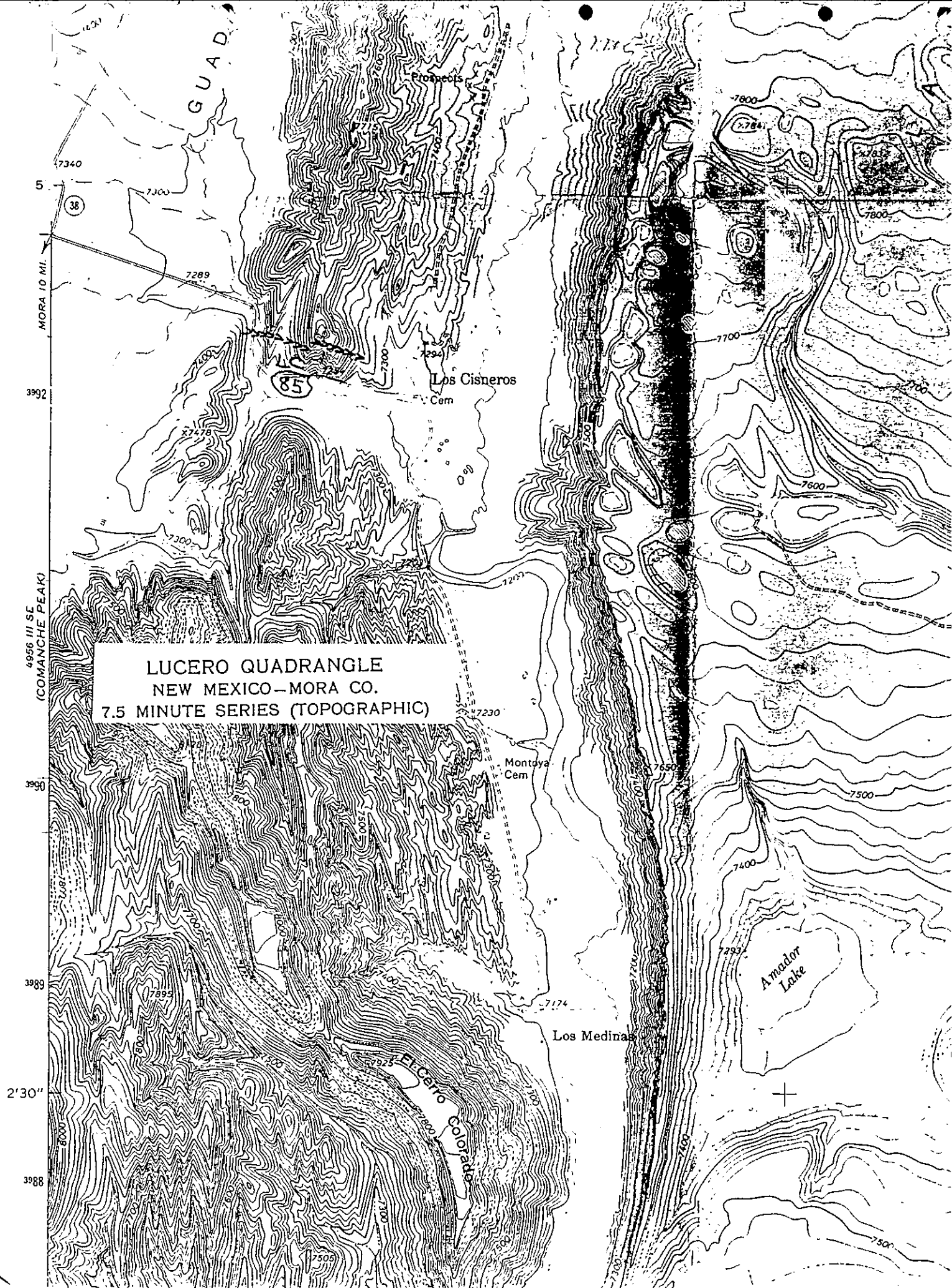


FORMS MASSIVE
CLIFF

LOS CISNEROS SECTION

MEASURED SECTION 85

(Arkosic Ls. Member - Madero Fm.)

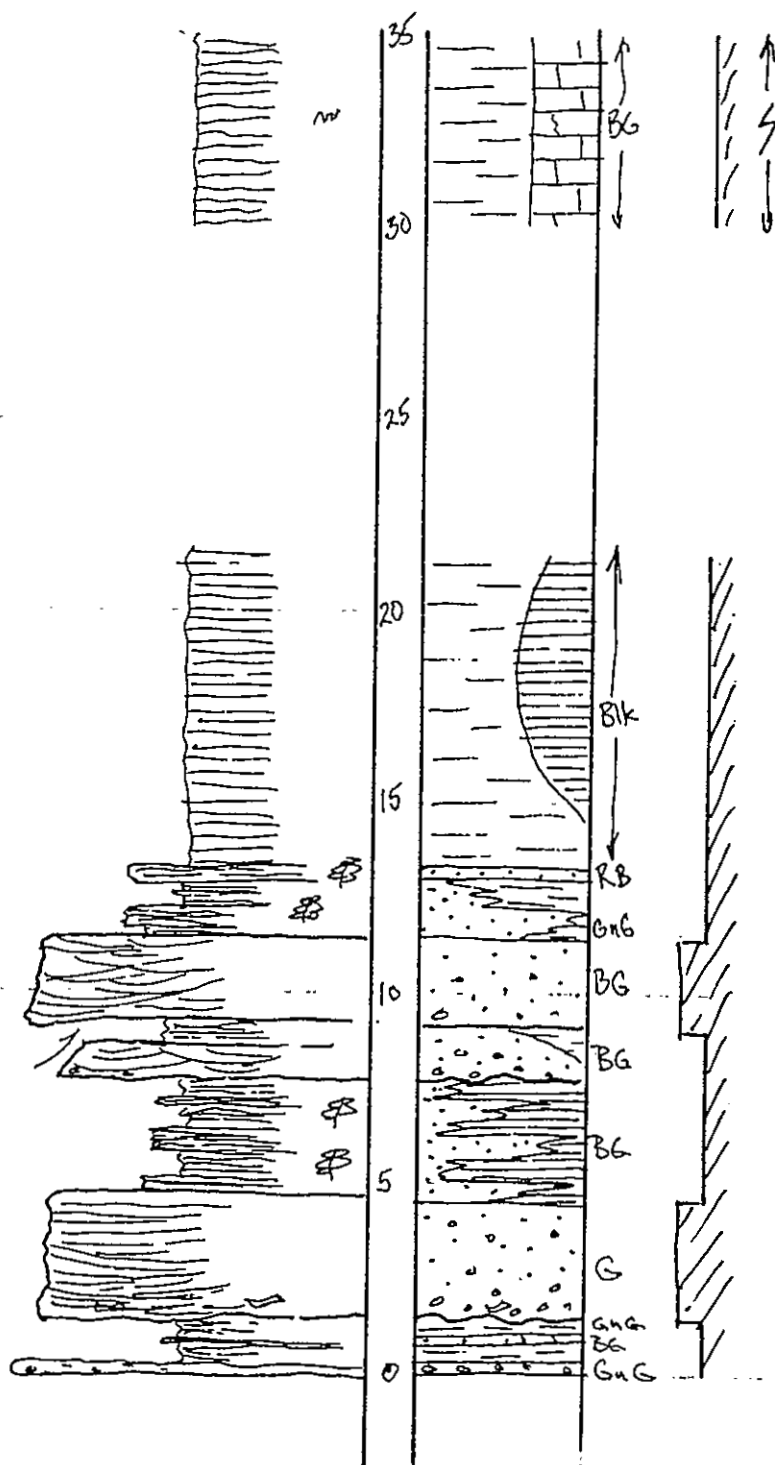


24

W. of Los Cisneros ^{LC}

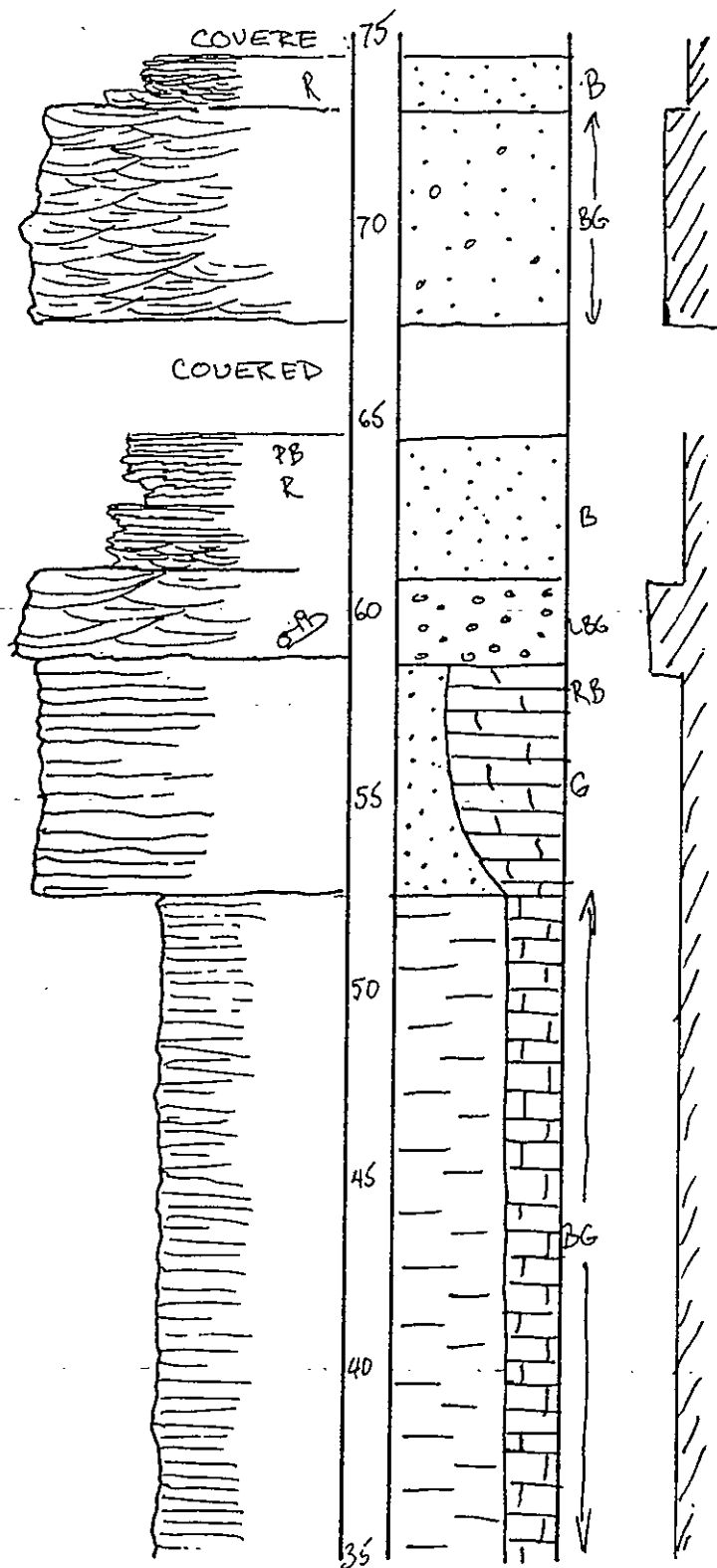
EB & JMC
(Elmo Brown)
(J. H. Casey)

(M) M.S. No. 85



(M) M.S. No. 85

Crinoids

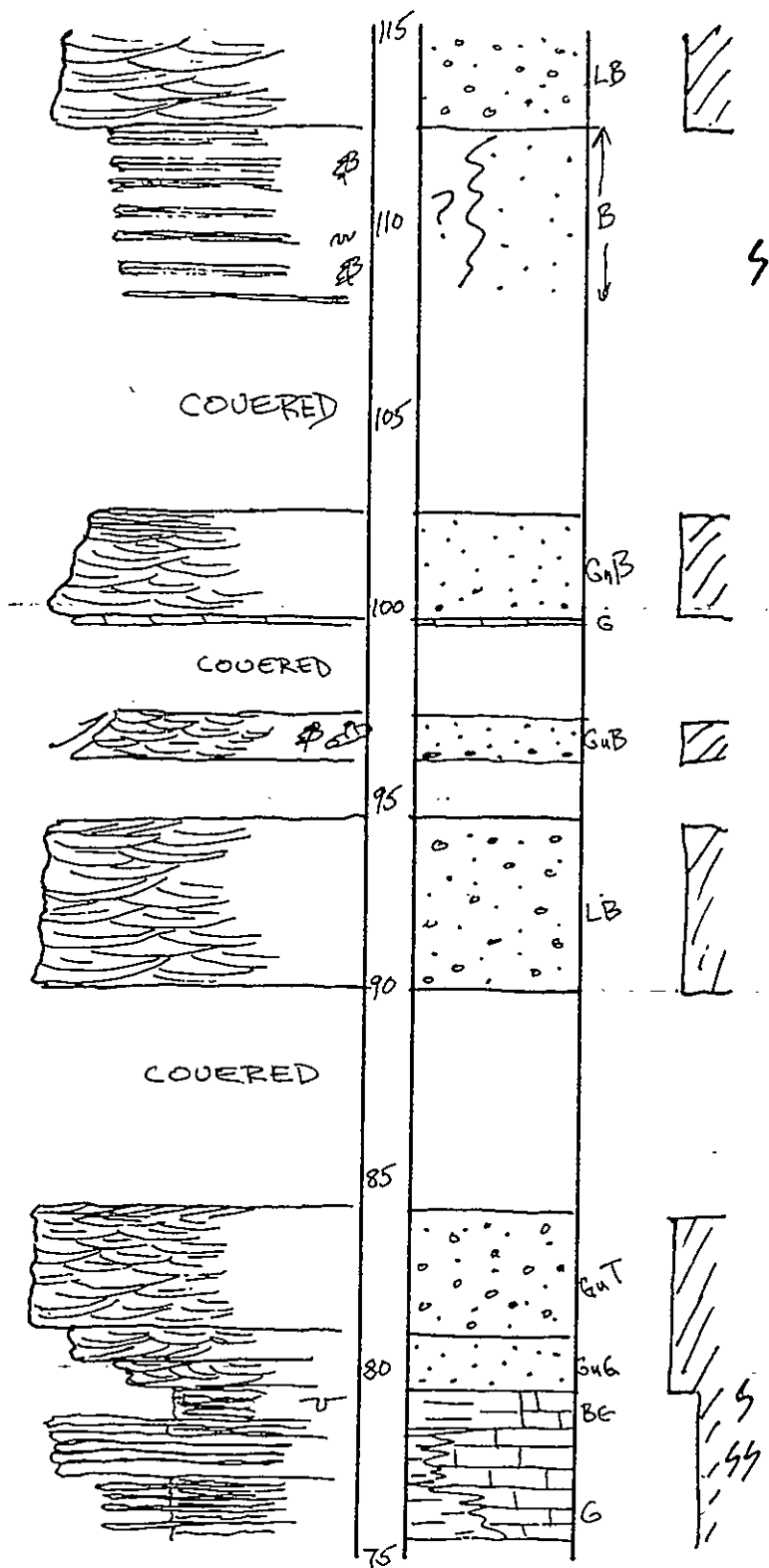


LC

EB ≠ JMC

(m) M.S. No. 85

Crinoids
Brachs
Fusulinids



POORLY
EXPOSED

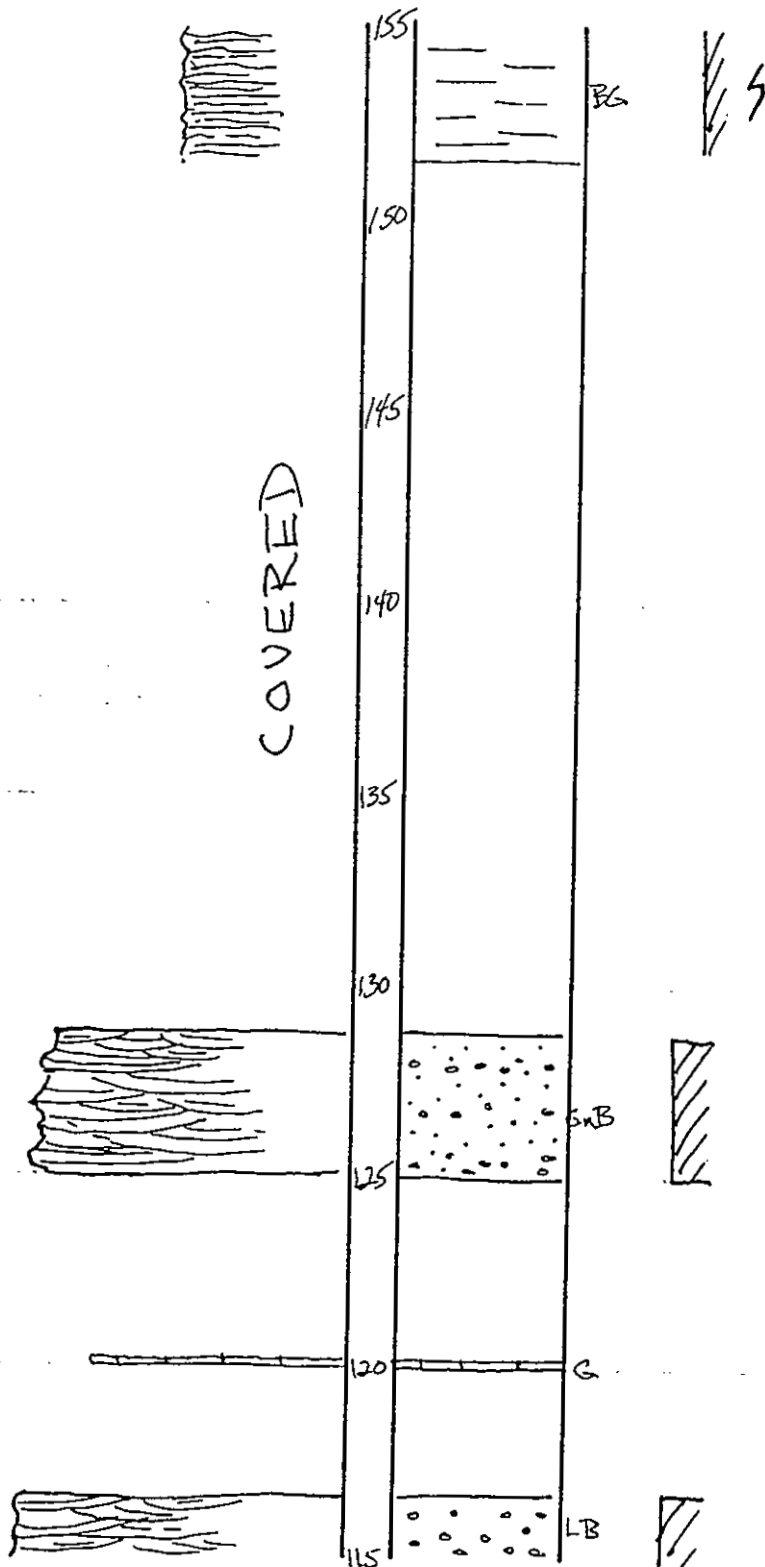


LC-1 Nodular ls
& calc. stst

LC

EB # JMC

(N) M.S. No. 85



CALC

MICACEOUS

← Small...Gasts.

LC

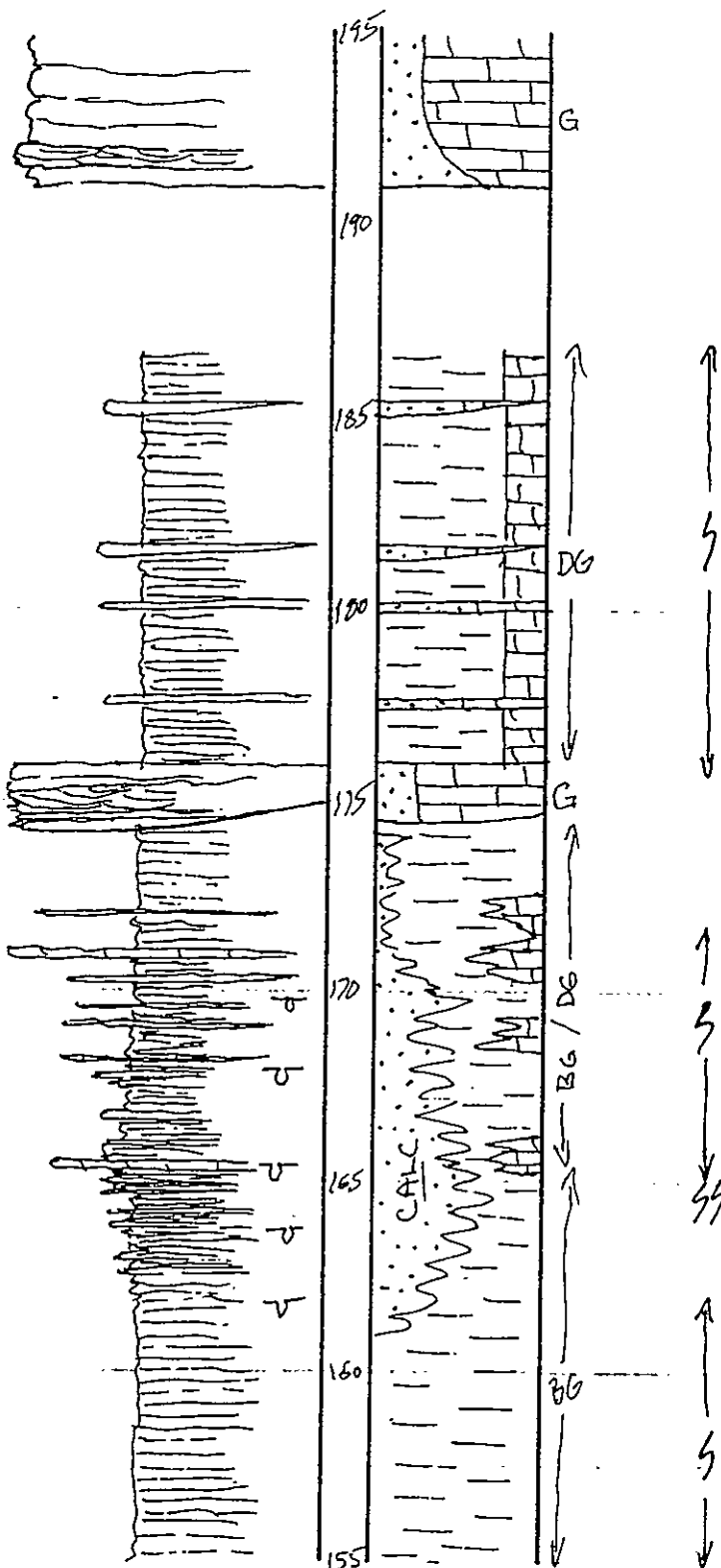
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LC

EB # JMC

(M) M.S. No. 85

Crinoids
Brachs
Ply. Algae
Bryozoan



lenses of rippled
fine calc ss.

thins to N & S



Discont. lenses of
calc w/ ss w/
whispy lam. &
Crinoid pkt
lenses

Some crinoid
pkt. lenses

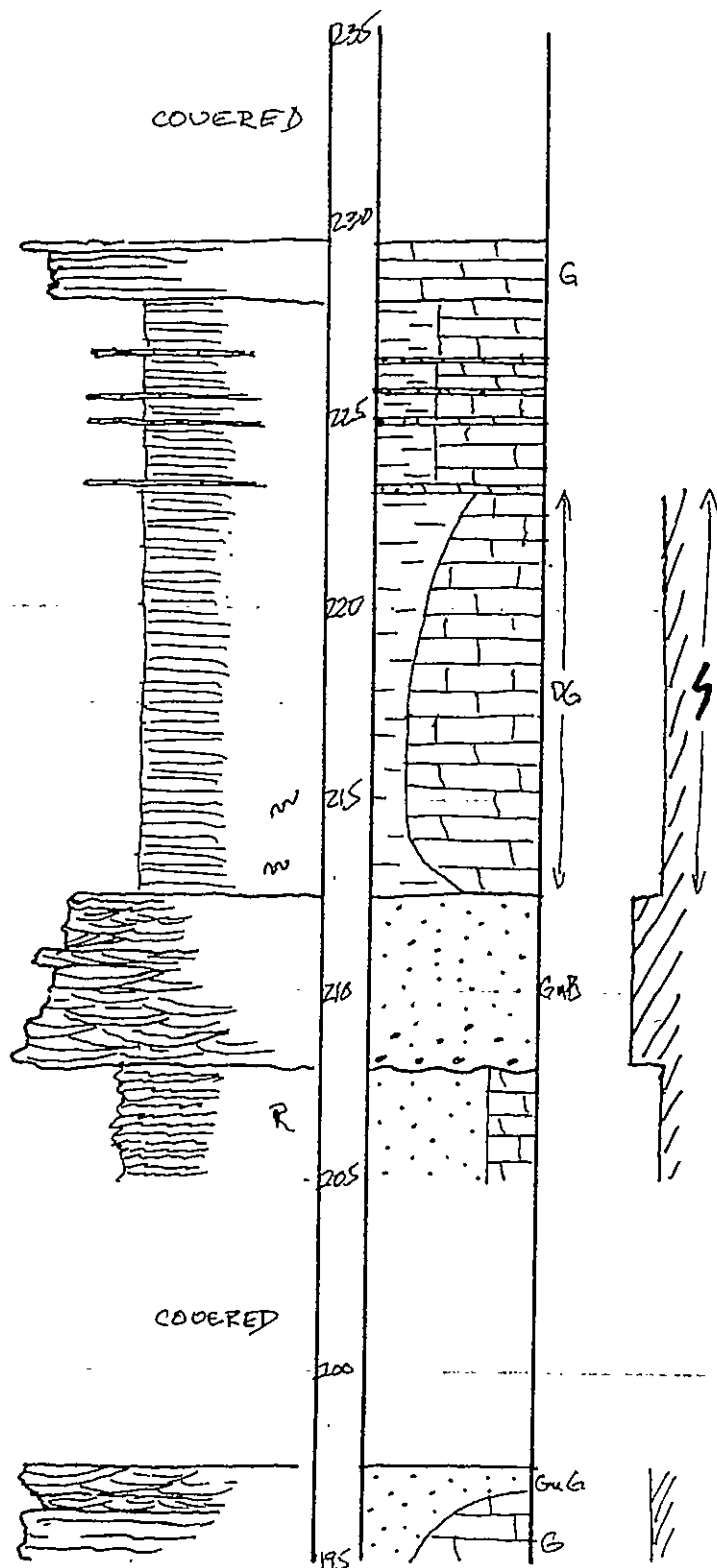
CALC.

LC

EB + JMC

(m) M.S.No. 85

Crinoids
Brachs



Fusulinid Pkt/Wkt
LC-3

Rippled

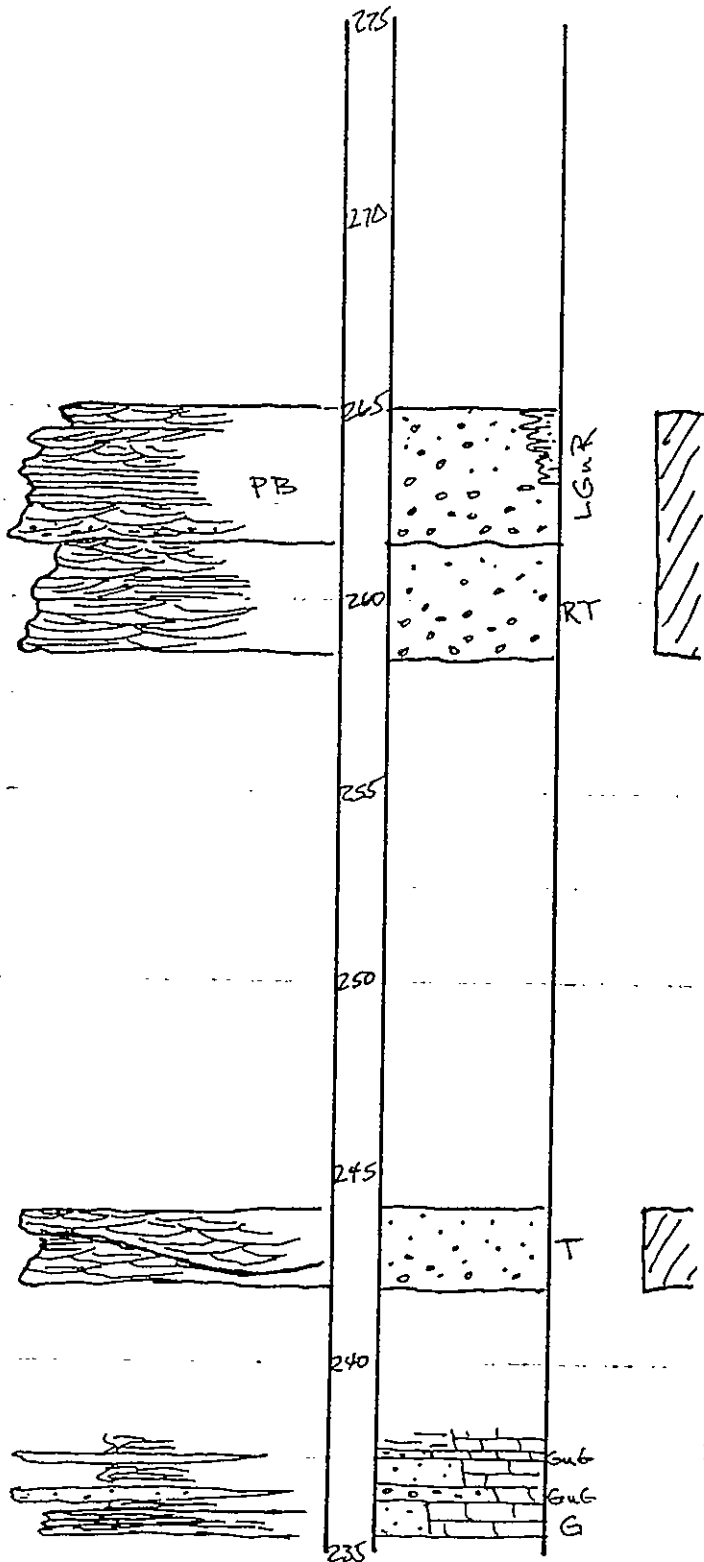
Pink fcll.

LC

page 6 of 14 330

(M) M.S. No. 85

Crinoid
Branches

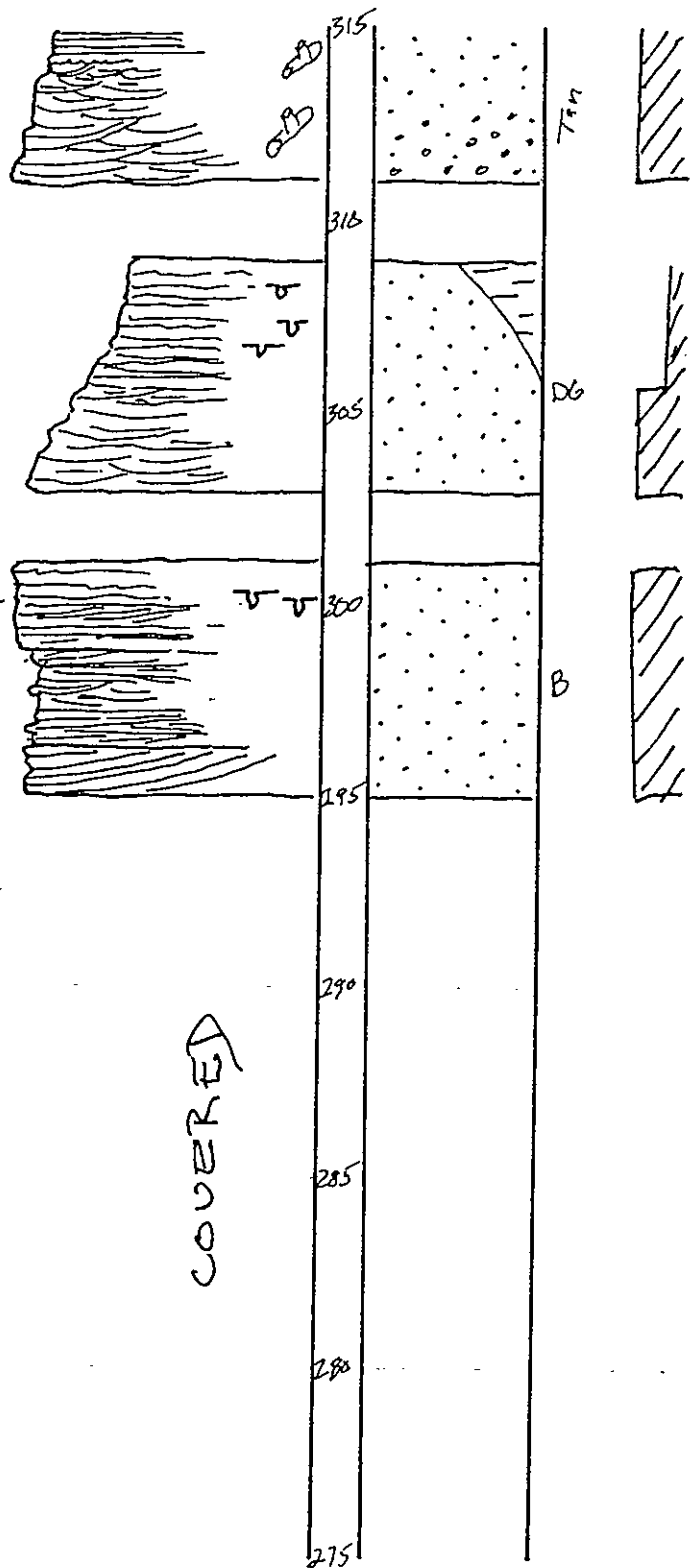


MCS = 35 mm
Some MRF's

fresh pink feld
LC-4

a few fusulines
very micaceous
crinoid hash

(m) M.S. No. 85



burrows filled
w/ tan ss.

Very micaceous
& slightly dk.

LC-5

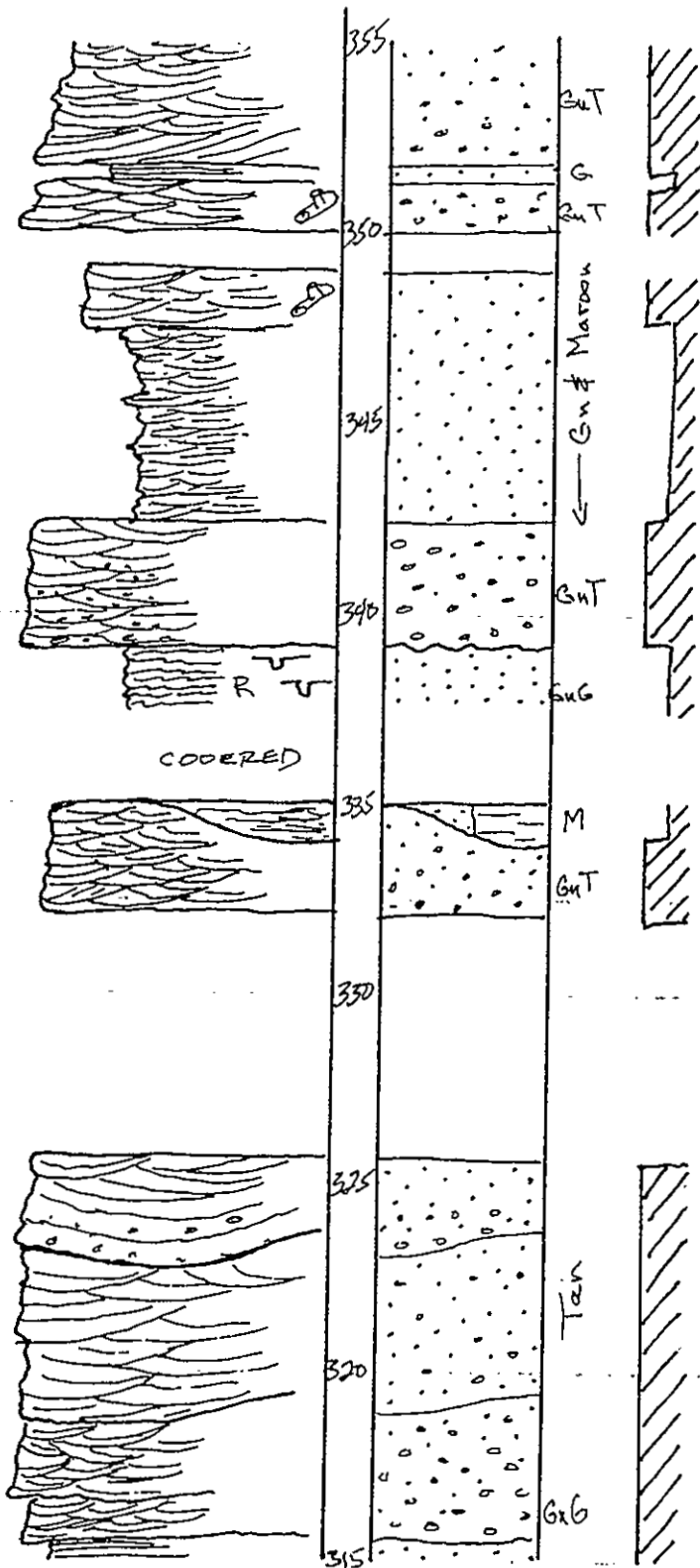
low & Tabs

low & Tabs

LC

EB & JMC

(M) M. S. No. 85



Very Micaceous

Abund. pink K-spar

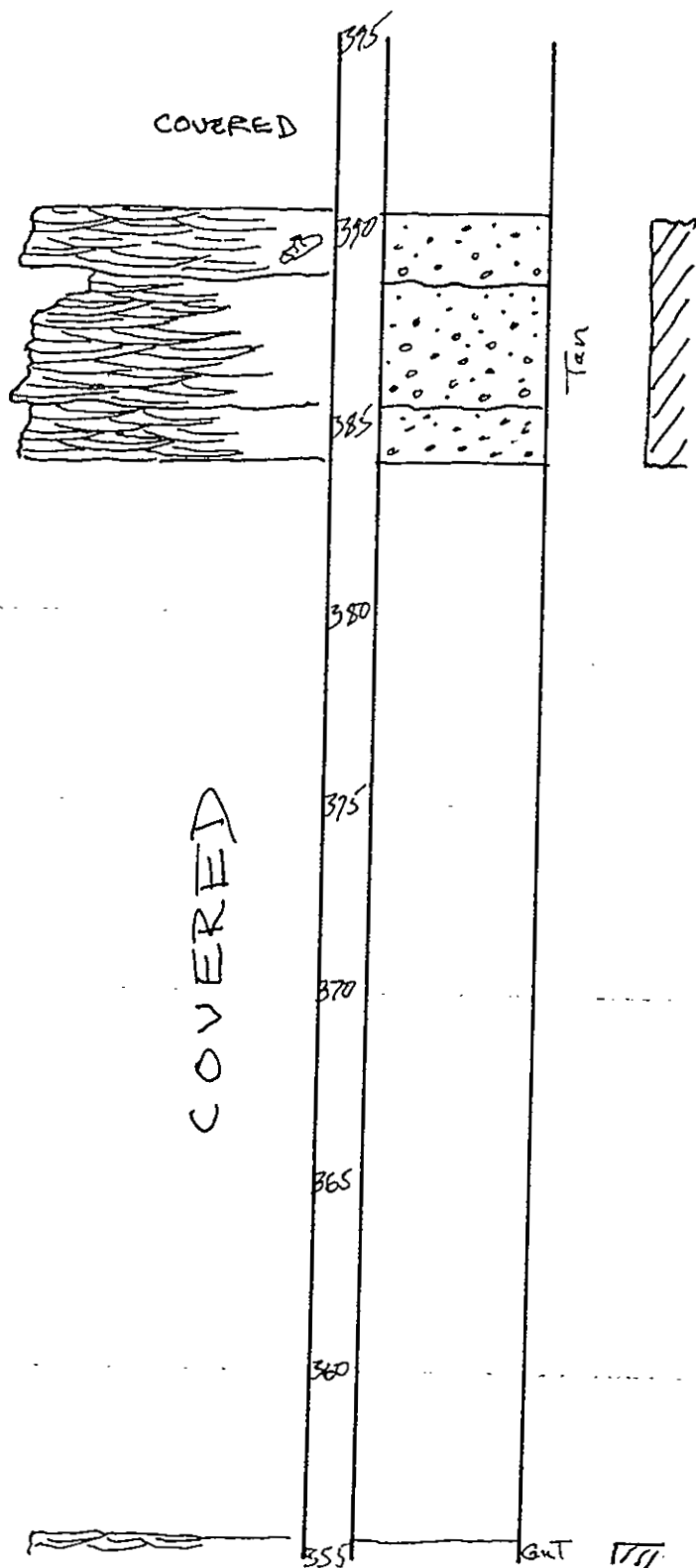
very micaceous LC-6

Maroon

med-scale troughs

fresh pink K-spa:

(M) M.S. No. 85



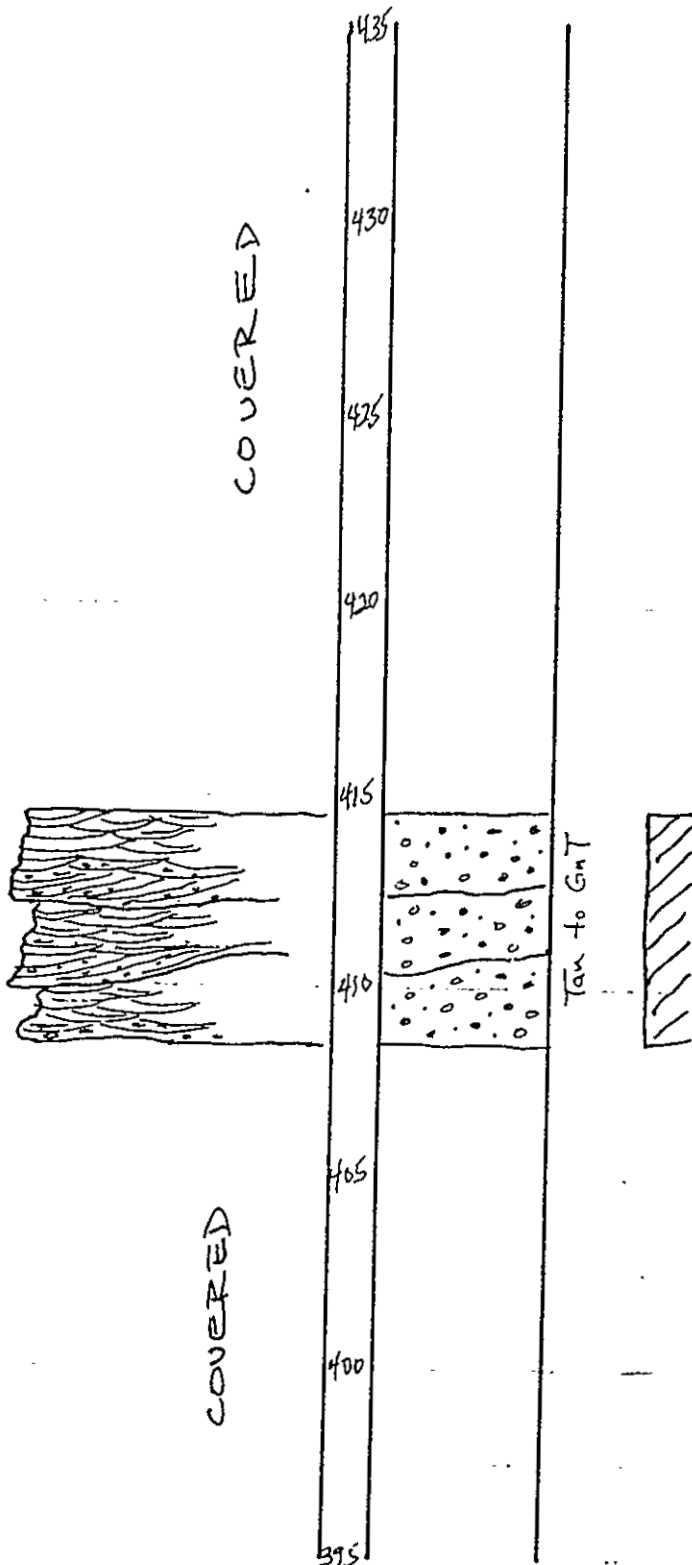
MICACEOUS

low & troughs

LC

EB & JMC

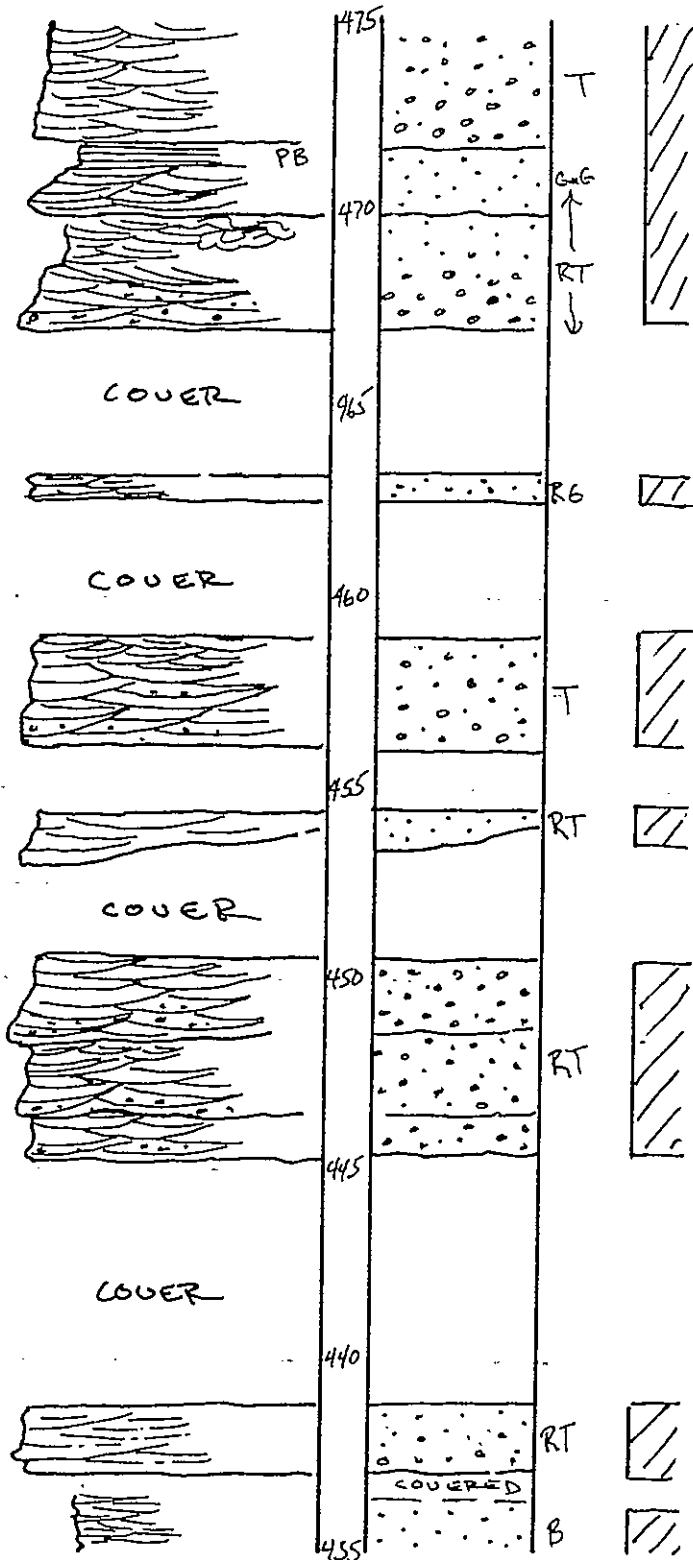
(M) M.S. No. 85



MCS = 5 cm

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(m) M.S. No. 85



Micaceous
Contorted X-beds

Red Soil

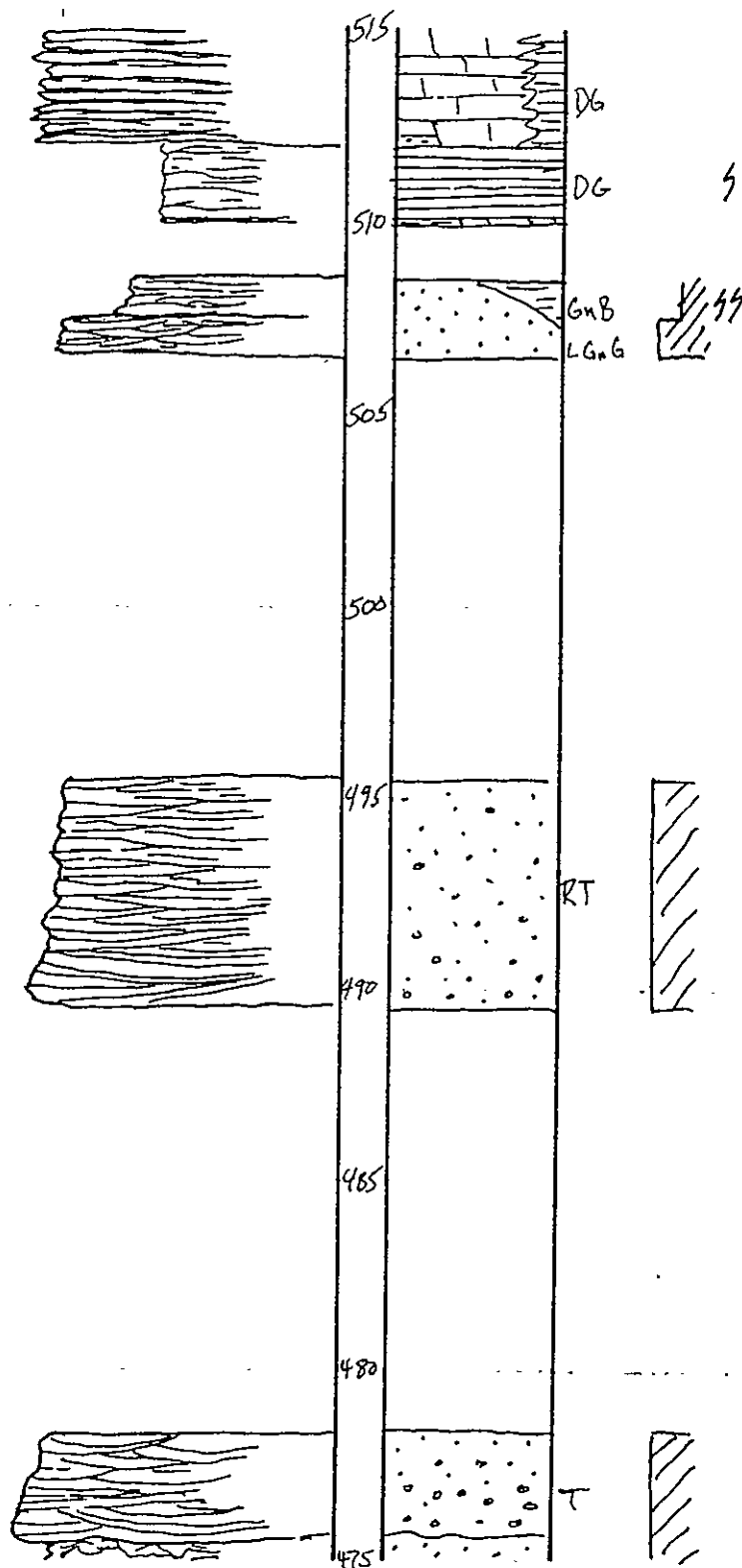
Red Soil

Ridge Former

LC

EB # JMC

(M) M.S. No. 85



Brachs
Phylloid Algae

Composite brachs
few small gast
pelec(?),
← thin impure ls

Very micaceous

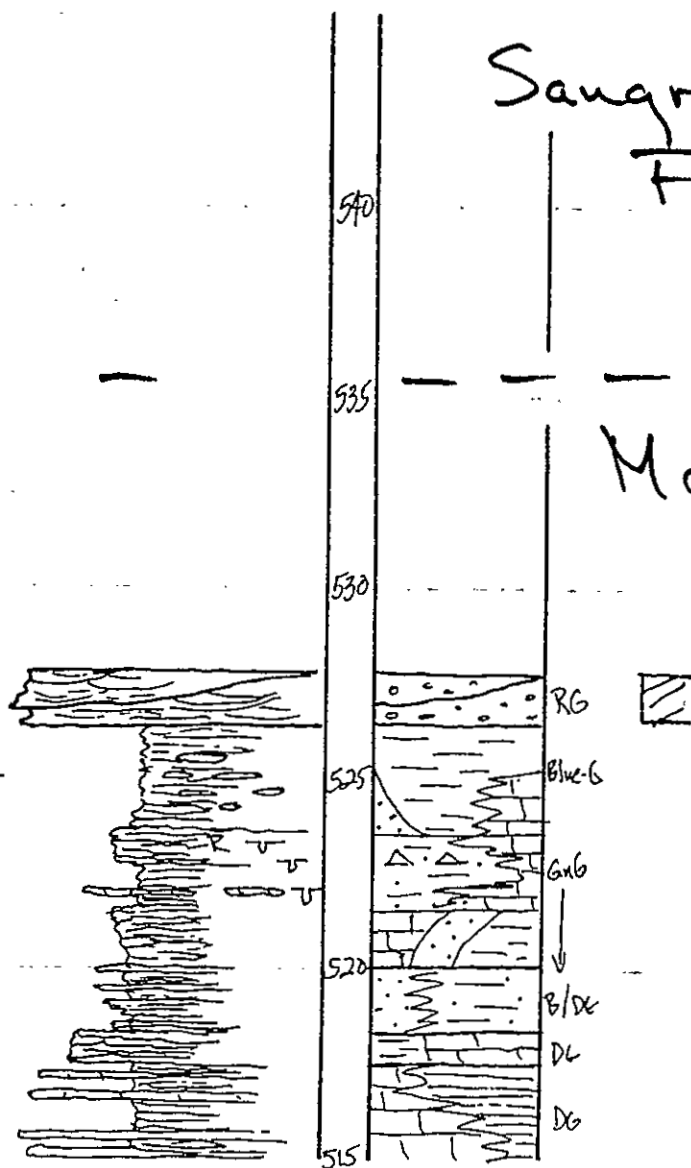
Very low 4 X-bds

M.S. No. 85

Brachys

Sangre de Cristo
Formation

Madera



LC-8

patches of calc. cement, rest silica cement LC-7

siliceous vt ss
w/ sdy B calc. pat.
nodular gray lsalt. calc fu ss &
calc sdy stst
nod. ls w/ patchy
silty chert