

11

Mt Judeau

UNITED STATES
DEPARTMENT OF THE INTERIOR

DI-6

APPROVED DECEMBER 1941

Logs in

Cabinet

10-25-51

G 2 Spider Creek Branch T16N R20W - Sec 31

SJ
5" BMSS 945
5'6" OSP
OE

OSP is wh limy ss

OE is wh limy ss & f. xlln dol & ool ls



Oct. 30, 1951
Sec 31 N. of Carrer Bridge, MT Judra Q

Small syncline indicated by dip of
St. Joe ls. The SJ-OSP
contact drops from 945' to 905'
in a short distance. Axis of
syncline runs NW-SE.

11-9-51

G5

NW $\frac{1}{4}$ Sec 33, T. 16 N, R. 19 W
 $\frac{OSP}{OE} \leftarrow 760'$

The top (?) Everton oolite here is
2' 9" thick & grades upward into
a 20' bed of St Peter ss. The
gradational zone is only 3" thick.
The oolite is underlain by ss.

G6

Center Sec 32, T. 16 N, R. 19 W.

$\frac{OSP}{OE} 870'$

The OE oolite is 15' thick & is
overlain & underlain by ss.

11-19-51

HIGHWAY #7, JASPER FORMATION SECTION
SW $\frac{1}{4}$ Sec. 13, T16N, R21W, NEWTON CO. MO.
SECTION STARTS AT BOTTOM OF GULLEY

50' UPSTREAM FROM HIGHWAY #7, THE
GULLEY IS 2.6 MILES S. ALONG HWY #7
FROM BRIDGE ON BIG BUFFALO RIVER &
2.9 MILES N. ON HIGHWAY #7 FROM BRIDGE
ON LITTLE BUFFALO RIVER AT JASPER

HA-1

THICK BEDDED SANDY DOLOMITE. 2' 4"
BROWNISH GRAY FINE XLN SANDY DOLO.
FINE ROUND SAND GRAINS SCATTERED OR
IN THIN STRINGERS IN LOWER PART &
INCREASE IN ABUNDANCE TO A DOLIC SS
IN THE UPPER HALF. Some Dol XLS IN LOWER PART

HA-2

FINE TO MEDIUM BEDDED (2"-8") DOLIC SS. 3' 2"
BROWNISH GRAY TO WHITE DOLIC FINE
ROUND SS. DOLOMITE CEMENT INCREASES
UPWARD TO DOL WITH FREE FLOATING SAND IN THE
UPPER 10".

HA-3

THICK BEDDED SANDY DOLOMITE 2' 10"
BROWNISH GRAY FINE ROUNDED SANDY
FINE XLN DOLOMITE. SAND GRAINS
ARE FREE FLOATING. SOME PURE
XLN DOLOMITE STRINGERS.

HA-4

MEDIUM BEDDED SANDSTONE 3' 10"
WHITE? (WEATHERS REDDISH-BROWN)
LIMY FINE ROUND SS. LIME IS
CEMENT ONLY.

Hwy #7, JASPER FORMATION (CONT)

HA-5	MEDIUM BEDDED SANDSTONE WHITE LIMY ^{ROUND} FINE GRAINED SS. FRIABLE (WEATHERING)	1' 3"
HA-6	MEDIUM BEDDED SANDSTONE WHITE FRIABLE ROUND FINE GRAINED SS-	2' 7"
HA-7	MEDIUM BEDDED SANDSTONE WHITE CALCAREOUS ROUND FINE GRAINED SS	1' 1"
HA-8 (HA-8P)	MEDIUM BEDDED LIMESTONE LIGHT-GRAY TO GRAY FINE XLN - VERY OOLITIC LIMESTONE	- 8"
HA-9	MEDIUM BEDDED (5") SANDSTONE LIGHT GRAY TO WHITE CALCAREOUS ROUND FINE GRAINED SS	1' 2"
HA-10 (HA-10P)	MEDIUM BEDDED LIMESTONE BROWNISH GRAY FINE TO MEDIUM XLLV OOLITIC & OSTRACODAL LIMESTONE. AT THE TOP COARSE XLN PYRITE ALTERING TO LIMONITE.	- 11"
HA-11	MEDIUM TO THICK BEDDED SS WHITE FRIABLE ^(WHEN WEATHERED) SLIGHTLY LIMY ROUND FINE GRAINED SANDSTONE	3' 6"
HA-12	MEDIUM TO THICK BEDDED LIMESTONE GRAY OOLITIC SLIGHTLY SANDY OSTRACODAL FINE XLN LIMESTONE	2' 11"

Hwy 57 JASPER LOCALITY SECTION (CONT.)

- | | | |
|-----------------|--|-------|
| HA-13 | VERY THIN BEDDED LIMESTONE
BROWNISH GRAY TO LIGHT GRAY FINE
XLLN TO DENSE LIMESTONE. MANY
FINE CLEAR CALCITE LLS. UPPER
BEDS SLIGHTLY SANDY. | 1' 8" |
| HA-14
HA-14P | MEDIUM TO THICK BEDDED LIMESTONE
GRAY FINE XLLN ^{T. DENSE} OOLITIC LIMESTONE.
SLIGHTLY SANDY. | 3' 7" |
| HA-15 | MEDIUM TO THICK BEDDED LIMESTONE
GRAY FINE XLLN TO DENSE OOLITIC LIMESTONE | 4' 5" |
| HA-16 | MEDIUM BEDDED LIMESTONE
GRAY FINE XLLN TO DENSE OOLITIC
LIMESTONE. SOME CLEAR CALCITE XLS. | 2' 6" |
| HA-17
HA-17P | THICK BEDDED LIMESTONE
GRAY WITH GREENISH TINT SANDY
FINE XLLN TO DENSE LIMESTONE
SCATTERED SAND GRAINS AT
BOTTOM BECOMING VERY SANDY
AT TOP WHERE LIME BRECCIA
FLOATS IN SAND. EOCYSTITES PLATE | 1' 3" |
| HA-18 | THICK BEDDED SANDSTONE
GREENISH-WHITE (WEATHERS YELLOW-BUFF) ROUND
FINE GRAINED CALCAROULS SANDSTONE HARD-
NOT FRIABLE | 1' 8" |

Hwy #7 JACPEL FORMATION (CONT.)

HA-19

MEDIUM BEDDED SANDSTONE

17"

WHITE & LIGHT GRAY BANDED CALCAREOUS

ROUND FINE GRAINED SANDSTONE. THE GRAY & WHITE BANDS ARE LESS THAN 1/16" TO 1/2" IN THICKNESS.

HA-20

MEDIUM BEDDED LIMESTONE

5"

GRAY OOLITIC SLIGHTLY SANDY FINE XLN LIMESTONE. MORE SAND AT BOTTOM & GRADING UPWARD INTO ALMOST PURE FINE TO MEDIUM XLN^{ool} LIMESTONE, VERY SMALL DISCONFORMITY AT THE TOP.

HA-21

MEDIUM BEDDED SANDSTONE

11"

WHITE & GRAY BANDED LIMY ROUND FINE GRAINED SANDSTONE. AT THE BASE IS A GREENISH GRAY SILTY SHALEY ZONE WHICH GRADES UPWARD TO A MORE CALCAREOUS SAND IN THE UPPER HALF.

HA-22

MEDIUM BEDDED LIMESTONE

1' 6"

HA-22P

GRAY OOLITIC FINE XLN LIMESTONE

SANDY IN THE LOWER & UPPER PARTS -- NOT IMMEDIATELY FRITTED & GREENISH SILT SCATTERED THROUGHOUT. CEPHALOPODS

HA-23

MEDIUM BEDDED SANDSTONE

HA-23P

LIGHT GRAY LIMY ROUND FINE GRAINED SANDSTONE. DENSE GRAY OOLITIC LIMESTONE FRAGMENTS IN THE BASE.

GRABATIONAL CONTACTS AT & BELOW OSTERGODS & SOMETHING

Hwy #7, JASPER FORMATION (CONT)

HA-24
HA-24P

THICK BEDDED LIMESTONE
GRAY OOLITIC DENSE LIMESTONE, PYRITIC,
SLIGHTLY SANDY IN LOWER BEDS. OOLITHIC

HA-25

THIN BEDDED SILICEOUS(?) LIMESTONE
GRAY DENSE SILICEOUS(?) PYRITIC LIMESTONE
GREENISH SILT PARTINGS (CAUSING THIN
BEDDING). GRADES INTO SANDSTONE WITH
LIMESTONE STRINGERS IN UPPER 3"

- 8"

HA-26

MEDIUM BEDDED SANDSTONE
GREEN TO GRAY-WHITE SILTY BOUND
FINE SANDSTONE

- 6"

HA-27

THICK BEDDED LIMESTONE
GRAY DENSE PYRITIC OOLITIC LIMESTONE
IRREGULAR SILT BANDS. SCATTERED
CALCITE XLSs - THIS LIMESTONE LOOKS
A GREAT DEAL LIKE PLATTIN - COULD BE

2' 10"

THIS IS OVERLAIN BY 6" OF BASAL
MISSISSIPPIAN SANDSTONE UNDERNEATH
ST. JOE LIMESTONE. THE FERRUGINEOUS
PINCHES OUT ABOUT 100 YARDS AROUND
THE CORNER TO THE NORTH.

HIGHWAY #7 & BIG BUFFALO 11-23-51
RIVER SECTION SW $\frac{1}{4}$ SEC 6, T16N,
R 20 W, NEWTON COUNTY, ARK. = 7752
SECTION BEGINS AT RIVER LEVEL

ABOUT 200 YARDS UPSTREAM FROM
BRIDGE

- HC-1 THIN BEDDED LIMESTONE 1" 6"
GRAY (WEATHERS YELLOWISH GRAY)
FINE XLLN OOLITIC SLIGHTLY SANDY
LIMESTONE, SOME BANDING OF DENSE
LIGHT GRAY LIME & THIN TRANSPARENT
CALCITE (?).
- HC-2 MEDIUM BEDDED SANDSTONE - 6"
WHITE FINE TO MEDIUM GRAINED
CALCAREOUS FRIABLE SANDSTONE
SORTING IS POOR & SAND GRAINS
APPEAR TO ALMOST FLOAT IN
CALCITE CEMENT. THERE ARE
SOME PITTED CALCITE PEBBLES
TO $\frac{1}{8}$ " IN DIAMETER
- HC-3 VERY THIN TO THIN BEDDED LIMESTONE 1"
GRAY OOLITIC CLASTIC (?) SLIGHTLY
SANDY FINE XLLN LIMESTONE
- HC-4 MEDIUM BEDDED SANDSTONE - 6"
WHITE FRIABLE LIMY FINE TO
MEDIUM (POORLY SORTED)
HARDER & MORE LIME IN UPPER
2"

Hwy #7 & BIG BUFFALO SECTION (CONT) 11-23-57 (11)

HC-5 MEDIUM TO THICK BEDDED LIMESTONE 2' 2"
GRAY-BROWN DENSE OOLITIC & CLASTIC

LIMESTONE. WAVY-BANDED APPEARANCE
CAUSED BY BANDS OF DENSE
LIMESTONE AND BANDS OF OOLITIC,
& SANDY (ESPECIALLY IN UPPER 1/2)
LIMESTONE. SOME CHERT (?) IN THESE
BANDS

HC-6 THIN TO MEDIUM BEDDED SANDSTONE
YELLOWISH GRAY-WHITE CALCAREOUS
FINE GRAINED SANDSTONE, HARD
NON FRIBBLE SANDSTONE, LOWER 3"
ARE SANDY LIMESTONE (GRADATIONAL
CONTACT) SOME CHERT (?)

HC-7 PLATY TO VERY THIN BEDDED LIMESTONE 1' 9"
GRAY DENSE & OOLITIC LIMESTONE, BANDED
WITH DENSE GRAY & OOLITIC LIMESTONE
BANDS. BASAL 2" VERY SANDY - SCATTERED
FLOATING SAND THROUGHOUT. TOP 2" ARE
VERY SANDY - GRADING INTO THE OVERLYING UNIT

HC-8 MEDIUM BEDDED SANDSTONE -- 9"
WHITE CALCAREOUS HARD FINE TO MEDIUM
GRAINED SANDSTONE. SAND GRAINS SEEM
TO FLOAT IN CEMENT.

Hwy #7 & Big Buffalo Section (cont) 11-23-51 (12)

HC-9

MEDIUM BEDDED LIMESTONE

5'

GRAY BROWN FINE XLLN TO DENSE
OOLITIC LIMESTONE. SCATTERED
FLOATING SAND GRAINS & THIN
SAND STRINGERS, THIN BANDS
OF DENSE LIMESTONE & OOLITIC
LIMESTONE. THIN SANDY ZONE
15" FROM TOP - GRADES LATERALLY
INTO LIMESTONE

HC-10

MEDIUM BEDDED SANDSTONE

1' 4"

WHITE TO GRAY CALCAREOUS
MEDIUM GRAINED SANDSTONE
LOWER 4" VERY CALCAREOUS - GRADUAL
WITH UNDERLYING LIME

HC-11

THIN TO MEDIUM BEDDED LIMESTONE

3' 3"

GRAY & WHITE SANDY DENSE LIMESTONE
^{ESILTY}
BASAL 2" VERY SANDY, BANDED & STREAKED
WITH CALCITE & THIN SAND STRINGERS

HC-12

VERY THIN TO THIN BEDDED LIMESTONE

1' 8"

GRAY OOLITIC, CLASTIC DENSE LIMESTONE
SOME SCATTERED SAND GRAINS & SAND
STRINGERS. BEDDING IS DETERMINED
BY GREENISH WEATHERING SILTY
PARTINGS. BED 2" ABOVE BASE
CONTAINS XLLN CALCITE WITH
PYRITE (?)

Hwy #1 & Big Buffalo Section (CONT)

11-23-57

(13)

HC-13

MEDIUM TO THICK BEDDED LIMESTONE

1' 1"

LIGHT GRAY OOLITIC, CLASTIC & DENSE LIMESTONE

FINE TO MEDIUM GRAINED SAND GRAINS

HC-14

MEDIUM BEDDED SANDSTONE

1' 1"

WHITE & LIGHT GRAY CALCAREOUS FINE TO MEDIUM GRAINED SANDSTONE, HARD

BASAL 1" HAS SMALL FLATTENED PEBBLES OF DARK GRAY SANDSTONE & OF DARK GRAY DENSE LIMESTONE. CALCITE

COATING ON OUTSIDE FROM WEATHERING

HC-15

THIN TO MEDIUM BEDDED SANDSTONE

1' 3"

WHITE LIGHT GRAY LIMY FINE TO MEDIUM SANDSTONE. BASAL 2"

IS A GRAY DENSE TO F-LLN OOLITIC LIMESTONE WITH SCATTERED SAND GRAINS.

HC-16

MEDIUM BEDDED LIMESTONE

1' 6"

GRAY-BROWN DENSE OOLITIC LIMESTONE--

CLASTIC IN PART. SOME FLOATING SAND GRAINS.

HC-17

VERY THIN TO MEDIUM BEDDED LIMESTONE

8"

GRAY BROWN DENSE OOLITIC LIMESTONE

CLASTIC IN PART. LOWER 6" CONTAINS

VERY THIN BEDS OF LIMESTONE

& SANDSTONE. SCATTERED SAND

GRAINS IN ALL OF THE LIMESTONE.

Hwy 7 & N ... A10. SEE (CONT)

1-23-51

C-18 MEDIUM TO THICK BEDDED SANDSTONE 6' 6"
LIGHT GRAY TO WHITE CALCAREOUS

FINE TO MEDIUM SANDSTONE. SOME BANDS (3" TO 4") ARE VERY HARD (WEATHERING?) OTHERWISE THE SAND IS FRIABLE.

HC-19 MEDIUM BEDDED LIMESTONE 2' 6"

LIGHT GRAY TO GRAY FINE YLLN DOLIC LIMESTONE, MATRIX BETWEEN OOLITES IS SILTY (?) -- AT LEAST IT IS VERY LIGHT IN COLOR.

11-24-51

HC-20 THICK BEDDED SANDSTONE 4' 3"

WHITE CALCAREOUS ROUND FINE TO MEDIUM GRAINED SANDSTONE. THIS IS HC-21 OUTCROP IN A SMOOTH ROUNDEL CLIFF. FRIABLE TO HARD - POORLY SORTED.

HC-21 THICK BEDDED SANDSTONE 4' 8"

WHITE FRIABLE TO HARD CALCAREOUS ROUND FINE GRAINED SANDSTONE

22 THIN TO VERY THIN ^{BEDDED} SANDSTONE 1' 3"

LIGHT GRAY CALCAREOUS FINE TO MEDIUM ROUND GRAINED SANDSTONE. THIS IS A GRADATION AL UNIT - CALCAREOUS SAND AT BOTTOM GRADING UPWARD TO A VERY SANDY LIMESTONE AT TOP.

HWY #7 & BIG BUFFALO SEC (CONT.)

11-24-59

(15)

- HC-23 THICK BEDDED LIMESTONE 1' 9"
 LIGHT GRAY CLASTIC LIMESTONE
 COMPOSED OF OOLITES & GRAY
 DENSE LIMESTONE PEBBLES PLUS
 SOME MEDIUM SAND IN THIN
 BANDS & FLOAT IN & GRAINS.
 UPPER BEDS MORE SANDY
- HC-24 THIN TO MEDIUM BEDDED SANDSTONE 2' 6"
 LIGHT GRAY TO WHITE ^{CALCAREOUS} FINE TO
 MEDIUM GRAINED POORLY SORTED
 SANDSTONE. WEATHERS TO YELLOW
 ORANGE. THE BASAL BEDS
 ARE GRADATIONAL WITH THE
 UNDERLYING LIMESTONE & CONTAIN
 GRAY LIMESTONE STRINGERS. NON-FRIABLE
- HC-25 THIN TO MEDIUM BEDDED SANDSTONE 2' 9"
 LIGHT GRAY TO WHITE ^{CALCAREOUS} FINE TO MEDIUM
 GRAINED POORLY SORTED SANDSTONE
- HC-26 MEDIUM BEDDED LIMESTONE 9"
 GRAY FINE CRYSTALLINE LIMESTONE
 SILTY PARTINGS. CAUSE A FINE, WAVY
 BANDING - CRYPTOZOANS (?)
- HC-27 MEDIUM BEDDED LIMESTONE 2'-
 BROWN-GRAY CLASTIC LIMESTONE OF
 DENSE GRAY LIME, OOLITES (?) & SAND
 BASAL 4" VERY SANDY LIMESTONE
 TO LIMY SANDSTONE

HWY #7 & BIG BUFFALO SEC. (CONT)

- | | | |
|-------|---|-------|
| C-28 | THIN TO MEDIUM BEDDED SANDSTONE
WHITE TO LIGHT GRAY CALCAREOUS | 5' 8" |
| | FINE TO MEDIUM GRAINED SANDSTONE
ALTERNATELY FRIABLE & HARD | |
| HC-29 | VERY THIN TO THIN BEDDED LIMESTONE
LIGHT GRAY SANDY, SILTY FINE YLLM
LIMESTONE. SAND IS FLOATING GRAINS
BEDDING IS IRREGULAR | 10" |
| HC-30 | THIN TO MEDIUM BEDDED SANDSTONE
WHITE FRIABLE SLIGHTLY CALCAREOUS
FINE TO MEDIUM GRAINED POORLY
SORTED SANDSTONE. GREEN WEATHERING | 5' - |
| HC-31 | THIN TO MEDIUM BEDDED SANDSTONE
WHITE FRIABLE SLIGHTLY CALCAREOUS
FINE TO MEDIUM GRAINED SANDSTONE
GREEN WEATHERING | 5' - |
| HC-32 | THIN TO MEDIUM BEDDED SANDSTONE
WHITE SLIGHTLY CALCAREOUS FRIABLE
FINE SANDSTONE. GREEN WEATHERING | 5' - |
| 4C-33 | MEDIUM BEDDED SANDSTONE
WHITE SLIGHTLY CALCAREOUS ROUND
FINE TO MEDIUM GRAINED SANDSTONE
WEATHERS GREEN. | 5' |

HWY #7 & BIG BUFFALO SECTION (CONT) 11-24 (17)

- HC-34 MEDIUM BEDDED SANDSTONE 5' -
WHITE FRIABLE SLIGHTLY CALCAREOUS ROUND
FINE TO MEDIUM GRAINED SANDSTONE
-
- 11-25-5)
- HC-35 MEDIUM BEDDED SANDSTONE 5' -
WHITE FRIABLE VERY SLIGHTLY CALCAREOUS
ROUND FINE TO MEDIUM GRAINED SANDSTONE
- HC-36 MEDIUM BEDDED SANDSTONE 4' 3"
WHITE FRIABLE ROUND FINE TO MEDIUM
GRAINED SANDSTONE. UPPER 2' VERY CALCAREOUS
- HC-37 MEDIUM BEDDED LIMESTONE 1' -
HC-37P BROWN-GRAY VERY COHESIVE DENSE LIMESTONE
SOME FREE COARSE XL LN CALCITE.
SLIGHTLY SANDY (?). A VERY FEW
OSTRACODES. CLASTIC (?). SOME
VERY THIN SILTY PARTINGS (STYLLITES?)
UPPER 2" VERY SANDY & MANY OSTRACIDS.
- HC-38 THIN TO MEDIUM BEDDED SANDSTONE 5' -
WHITE FRIABLE CALCAREOUS FINE TO
MEDIUM GRAINED SANDSTONE. BASAL
BED (3") VERY LIMY. LIME DECREASES
UPWARD.
- HC-39 MEDIUM BEDDED SANDSTONE
WHITE FRIABLE ^{UPWARD} FINE TO MEDIUM
GRAINED SANDSTONE

HWY #7 & BIG BUFFALO SEC (CONT)

(8)

HC-40 THIN TO MEDIUM BEDDED SANDSTONE 5'-
 BUFF-WHITE SLIGHTLY FRIABLE ROUND

Road FINE GRAINED SANDSTONE. (THIS IS
 THE ZONE INTO WHICH THE ROAD IS CUT)
 CROSS BEDDED (?)

HC-41 THIN TO MEDIUM BEDDED SANDSTONE 5'-
 BUFF-WHITE SLIGHTLY FRIABLE ROUND
 FINE GRAINED SANDSTONE. CROSS-BEDDED (?)

HC-42 THIN TO MEDIUM BEDDED SANDSTONE 5'-
 BUFF-WHITE SLIGHTLY FRIABLE ROUND
 FINE GRAINED SANDSTONE. CROSS-BEDDING (?)
 GIVES THE APPEARANCE OF AN ANGULAR
 UNCONFORMITY IN THE CENTER OF THIS
 SECTION

HC-43 THIN TO MEDIUM BEDDED SANDSTONE 3' 10"
 WHITE FRIABLE SLIGHTLY CALCAREOUS
 FINE GRAINED SANDSTONE

HC-44 MEDIUM BEDDED DOLOMITE - 9"
 GRAY FINE XLLTY SILTY (?) DOLOMITE
 SOME SCATTERED FINE SAND GRAINS.
 LOWER 3" IS DOLIC SANDSTONE WHICH
 IS BROWNISH IN COLOR.

HC-45 MEDIUM BEDDED SANDSTONE 4' 1"
 GRAY TO BROWN-GRAY DOLIC FINE
 TO MEDIUM GRAINED SANDSTONE
 CONTAINS TWO WHITE CALCAREOUS
 SAND BANDS (3") IN THE UPPER 1/3 OF
 THE UNIT. MORE DOLOMITE IN UPPER 1/4.

TRAIL #7 & BIG BUFFALO SECTION (CONT)

(19)

- HC-46 MEDIUM BEDDED DOLOMITE 3' 6"
 DARK GRAY FINE XLN DOLOMITE
 VERY HARD, SILTY
- HC-47 MEDIUM BEDDED SANDSTONE - 5"
 WHITE TO LIGHT GRAY SLIGHTLY CALCAREOUS
 FINE GRAINED SANDSTONE
- HC-48 THIN TO MEDIUM BEDDED DOLOMITE - 10"
 DARK GRAY TO BLACK FINE XLN TO
 DENSE PETROLIFEROUS (?) DOLOMITE, VERY
 HARD. SOME FLOATING SAND GRAINS.
- HC-49 MEDIUM BEDDED SANDSTONE 3' 5"
 WHITE FRIABLE TO HARD ROUND FINE
 TO MEDIUM GRAINED SANDSTONE
 CALCAREOUS (?)
 ONE MASSIVE BED FORMS A LEDGE.
- HC-50 MEDIUM BEDDED SANDSTONE & DOLOMITE 2' -
 LIGHT BROWN DOLIC SANDSTONE
 & WHITE FINE TO MEDIUM
 GRAINED SANDSTONE & GRAY
 FINELY XLN SILTY (?) DOLOMITE. THE
 DOLOMITE IS IN THE UPPER 1/2 OF
 THE UNIT.

(THIS UNIT & ALL OF THE FOLLOWING
 ONES ARE ON AN IRREGULAR SLOPE
 THAT REQUIRES CONSIDERABLE
 JUMPING FROM OUTCROP TO OUTCROP
 IN ORDER TO GET A CONTINUOUS
 SECTION)

HWY # 7 & BIG BUFFALO SEC.

- HC-51 MEDIUM BEDDED DOLOMITE 5'-

DARK TO LIGHT GRAY FINE XLLN TO DENSE DOLOMITE - SCATTERED XLLN DOLOMITE WHITE SAND DIKES IN UPPER BEDS.

- HC-52 MEDIUM BEDDED DOLOMITE 3'-

GRAY - DARK GRAY FINE XLLN TO DENSE DOLOMITE. SCATTERED FLOATING SAND GRAINS IN UPPER 1/2" SOME XLLN DOLOMITE.
- HC-53 MEDIUM BEDDED SANDSTONE 1' 8"

LIGHT GRAY - BROWN FINE TO MEDIUM GRAINED SANDSTONE. ROUNDED & POORLY SORTED.
- HC-54 MEDIUM BEDDED DOLOMITE 2' 2"

LIGHT GRAY TO GRAY SLIGHTLY SANDY (FLOATING GRAINS) FINE XLLN DOLOMITE GRADES UPWARD INTO A DOLOMITIC SAND THE TOP 3" IS VERY SANDY & CONGLOMERATIC WITH DARK DOLOMITE REBBLES TO 1/4" FLOATING IN A MATRIX OF SAND & DOLOMITE CEMENT.
- HC-55 MEDIUM BEDDED SANDSTONE 1' 6"

LIGHT GRAY - BROWN DOLIC FINE TO MEDIUM GRAINED SANDSTONE

- 4C-56 MEDIUM BEDDED DOLOMITE - 8"
 LIGHT GRAY DENSE DOLOMITE WITH
 SCATTERED FINE ROUND SAND GRAINS

- 4C-57 MEDIUM BEDDED SANDSTONE 2'
 LIGHT BROWN-GRAY TO WHITE
 DOLIC FINE TO MEDIUM GRAINED
 SANDSTONE. 1" OF SILTY (P) DOLOMITE
 IN CENTER OF UNIT,
- HC-58 MEDIUM BEDDED DOLOMITE 3' 2"
 HC-58P GRAY-BROWN VERY SANDY (DOLOMITIC
 SANDSTONE IN LOWER 4" - SCATTERED
 SAND ABOVE THAT) FINE XLLN DOLOMITE
- HC-59 THIN BEDDED SANDSTONE - 6"
 LIGHT GRAY-WHITE ROUND FINE TO
 MEDIUM GRAINED SANDSTONE
- HC-60 MEDIUM BEDDED DOLOMITE - 6"
 DARK GRAY TO GRAY FINELY XLLN
 TO DENSE DOLOMITE
- HC-61 MEDIUM BEDDED SANDSTONE 3' 10"
 LIGHT GRAY TO BROWNISH-GRAY DOLIC
 FINE TO MEDIUM GRAINED SANDSTONE.
 STRINGERS 1" TO 2" OF PURE DARK
 GRAY DENSE DOLOMITE. THESE STRINGERS
 OF DOLOMITE HAVE GRADATIONAL
 CONTACTS WITH THE SAND. UPPER
 BED IS A SANDSTONE

Hwy # 2 & 1016 BUFFALO SECTION (CONT)

HC-62 MEDIUM BEDDED DOLOMITE 2' 4"

BROWN-GRAY TO LIGHT GRAY FINE X LLN

TO DENSE DOLOMITE, SLIGHTLY SANDY - SCATTERED FINE TO MEDIUM FREE FLOATING SAND - VERY HARD.

HC-63 MEDIUM BEDDED SANDSTONE 3' 5"

GRAY TO BROWN-GRAY DOLIC ROUND FINE TO MEDIUM GRAINED SANDSTONE GRADES UPWARD TO A SANDY

DOLOMITE - SAND GRAINS ARE FLOATING IN THE UPPER PART.

11-26-51

HC-64 MEDIUM BEDDED DOLOMITE 5'

GRAY-BROWN VERY SANDY FINE X LLN TO DENSE DOLOMITE, SAND UP TO 50% IN PART - SAND GRAINS ARE BARELY FLOATING - SOME VERY SMALL STRINGERS OF PURE DOLOMITE

HC-65 MEDIUM BEDDED DOLOMITE 5'

HC-65? GRAY-BROWN SLIGHTLY SANDY TO VERY SANDY FINE X LLN TO DENSE DOLOMITE. SAND IS FINE TO MEDIUM & IS FROM 0 TO 50% FLOATING IN DOLOMITE. NUMEROUS OSTERCOGS IN LOWER 3%. VERY SANDY AT THE TOP, BUT GRAINS ARE BARELY FLOATING IN DOLOMITE

11-26-51

(23)

HWY # 7.9 19 SEALS SECTION (CONT)

HC-66
(BMSS)

THIN BEDDED SANDSTONE
LIGHT GRAY TO WHITE - WEATHERS

BLUE - ROUND FINE TO MEDIUM
GRAINED SLIGHTLY CALCAREOUS
SANDSTONE, SMALL PHOSPHATE
PEBBLES. (UNIT IS POORLY EXPOSED
& THE THICKNESS MAY NOT BE
QUITE CORRECT)

APPARENTLY THERE IS A SLIGHT
ANGULAR UNCONFORMITY BETWEEN
THIS SANDSTONE & THE UNDER-
LYING EVERTON DOLOMITE

HC-67
(ST. JOE LS)

THIN BEDDED LIMESTONE 2' -
PINK & WHITE CRINOIDAL FINE
GRANULAR LIMESTONE

11-26-51

Big Buffalo River section
Section 7, ^{NE 1/4} NW 1/4, T16N, R20W Newton Co.
Ark. Section begins at river level approximately 1/4 mile
downstream from bridge across river on Highway 7

- HD-1 Medium bedded dolomite 6'
Dark gray dense dolomite with very dense
stringers of sand and green weathering
silt.
- HD-2 Medium to thick bedded sandstone 3'10"
Gray-white very dolic, medium crystalline
round sand. Dolomite up to 50%. 5" of
pure white limestone at bottom [sand?]
- HD-3 Medium bedded dolomite 1'8"
Gray to dark gray, medium crystalline
dolomite. Has a few greenish, silty, streaks.
Very silty in lower 1/3.
- HD-4 Medium bedded sandstone 5'8"
White to gray, fine
dolomitic and gray in upper part; lower
part pure and white
- HD-5 Medium bedded dolomite 9"
Dark gray, medium crystalline, rhombic
dolomite

- HD-6 Medium bedded sandstone 8'11"
 Grayish white fine grained sandstone. Some very hard layers and stringers of almost pure white sand. Limy, also?
- HD-7 Medium bedded sandstone 3'
 Gray, fine to medium grained, very dollic sandstone. Some zones of more than 50% dolomite. Sand increases upward.
- HD-8 Medium bedded sandstone 1'3"
 White, fine grained sandstone.
- HD-9 Medium bedded sandstone 3'10"
 Gray to dark gray, fine to medium grained dollic sandstone. Dolomite to about 50% throughout.
- HD-10 Medium bedded sandstone 1'1"
 Gray-white, fine grained, limy sandstone.
- HD-11 Medium bedded dolomite 1'7"
 Gray-brown, medium crystalline dolomite. Very sandy in lower 3 inches, but sand decreases upward to pure dolomite with few scattered sand grains. Unit is very badly weathered - due to silty nature?

- HD-12 Medium bedded sandstone 5'
 White, fine to medium grained
 very sandstone. Lower 1' composed
 of white very fine to fine grained
- HD-13 Medium bedded sandstone 5'
 White, fine, round grained sandstone
 Friable when struck
- HD-14 Medium bedded sandstone 4'
 White fine round grained sandstone
 Friable when struck
- HD-15 Medium bedded limestone 5'
 HD-15-P Gray, oolitic limestone, Ostracods (HD-15-P)
 scattered in local zones. Silty partings
 which weather blue-green. Weathers blue-gray
- HD-16 Medium bedded limestone 5'
 Light gray oolitic to dense limestone.
 Weathers blue-gray
- HD-17 Medium bedded limestone 4'3"
 HD-17P Light gray oolitic ostracodal
 limestone

HD-18	Medium bedded limestone	4"
HD-18P	Light gray oolitic limestone Greenish-gray stylolite partings; ostracodal.	
HD-19	Medium bedded sandstone Gray green to white, fine grained sandstone Very lumpy & hard in lower part (gray colored) One foot (1') from top is 2" thick gray oolitic limestone band	5'4"
HD-20	Medium bedded limestone Gray, oolitic, limestone with green shale partings. Also has greenish tinge in part from weathering	1'3"
HD-21	Medium bedded sandstone	8"
HD-21P	Gray, fine grained, very lumpy ostracodal sandstone	
HD-22	Thin bedded limestone	2' (8")
HD-22P	Gray to dark gray sandy, fine crystalline limestone. Sand grains float in lime, thick in lower 4 inches and scattered in upper 4". Also oolitic in upper 4 inches.	

HD-23 Medium bedded limestone 1' 7"
 Light gray, dense slightly oolitic.
 Numerous clear crystalline calcite
 blebs, conchoidal fracture.
 Limeritic. Most numerous limeritic
 blebs in upper bed at 6"

BMSSC { HD-24 Medium bedded sandstone 10"
 Greenish gray fine to medium grained
 sandstone with phosphate pebbles
 May be more sand with St Joe ls above
 but covered on slope

Finis

11-26-51 4:10 PM

ZOO.P.M 12-5-57

GRAVEYARD SECTION -
NW 1/4 Sec 34, T16N, R19W, NEWTON CO, ARK
(SECTION BEGINS AT THE LEVEL OF

THE BIG BUFFALO RIVER -- BLUFF IS ON THE LEFT SIDE OF THE RIVER)

YA-1) MEDIUM TO THICK BEDDED DOLOMITE 5' 2"
GRAY FINE TO MEDIUM XLLM SANDY (FLOATING SAND) DOLOMITE. SOME BANDS (TO 3") OF MORE CONCENTRATED SAND.

YA-2 THIN (1"-3") BEDDED QUARTZITIC SANDSTONE - 8"
WHITE TO LIGHT GRAY FINE TO MEDIUM GRAINED DOLOMITE (?) SANDSTONE. GRAINS ARE FIRMLY CEMENTED AS IN QUARTZITE (ESPECIALLY THE LOWER HALF) NO GRADATION INTO OVERLYING & UNDERLYING BEDS.

YA-3 TO THICK MEDIUM BEDDED DOLOMITE 4' 10"
GRAY TO LIGHT GRAY FINE TO MEDIUM XLLM SANDY DOLOMITE. THE SAND IS MOSTLY FLOATING WITH A FEW STRINGERS OF MORE CONCENTRATED GRAINS.

YA-4 MEDIUM BEDDED DOLOMITE 5' -
LIGHT GRAY TO GRAY VERY FINE XLLM VERY SLIGHTLY SANDY DOLOMITE. SAND GRAINS ARE WIDELY SCATTERED EXCEPT FOR A FEW LOCAL SAND STRINGERS.

GRAVEYARD SECTION (CONT)

12-5-57

- THIN TO
 YA-5 MEDIUM BEDDED DOLOMITE 5' 7"
 GRAY - LIGHT GRAY SANDY FINE TO
 MEDIUM XLLN DOLOMITE. SLIGHT AMOUNT
 OF FLOATING SAND, SOME VERY
 FINE BANDING, SOME VERY SANDY
 PATCHES & STRINGERS
- YA-6 MEDIUM BEDDED DOLOMITE 3' 4"
 GRAY & LIGHT GRAY RHOMBIC FINE TO
 MEDIUM XLLN SLIGHTLY SANDY DOLOMITE
- YA-7 THIN TO MEDIUM BEDDED DOLOMITE 5' -
 GRAY TO DARK GRAY FINE TO
 MEDIUM XLLN SANDY DOLOMITE.
 SAND IS SCATTERED & IN THIN
 STRINGERS THAT ARE SILICEOUS
 & WEATHER OUT AS WAVY BANDS.
- YA-8 THIN TO MEDIUM BEDDED DOLOMITE 5' -
 GRAY TO LIGHT GRAY SANDY FINE
 TO MEDIUM XLLN DOLOMITE, SOME
 SAND STRINGERS IN LOWER 18" BUT
 ONLY SLIGHT AMOUNT OF SCATTERED
 SAND IN THE UPPER 3' 6".
- YA-9 MEDIUM BEDDED DOLOMITE 4' 7"
 LIGHT GRAY FINE TO MEDIUM XLLN
 SLIGHTLY SANDY (SCATTERED GRAINS)
 DOLOMITE

GRAVEYARD SECTION (CONT.)

12-6-51
YA-10

MEDIUM BEDDED DOLOMITE 5' -
GRAY TO LIGHT GRAY FINE TO MEDIUM XLLN

SLIGHTLY SANDY SILTY (?) ^{RHOMBIC} DOLOMITE.
SAND IS IN SMALL PATCHES & FINE STEAKS

YA-11

MEDIUM BEDDED DOLOMITE 5' -
GRAY TO LIGHT GRAY FINE TO MEDIUM XLLN

SLIGHTLY SANDY SILTY (?) ^{RHOMBIC} DOLOMITE.
SAND IS IN PATCHES & FINE STRINGERS

YA-12

MEDIUM BEDDED DOLOMITE 5' -
GRAY TO LIGHT BROWNISH GRAY SLIGHTLY

SANDY RHOMBIC DOLOMITE, LOCALLY
SILTY & CALCAREOUS (?).

YA-13

MEDIUM BEDDED DOLOMITE 2' 8"
GRAY RHOMBIC VERY SLIGHTLY SANDY (?)

FINE TO MEDIUM XLLN DOLOMITE,

YA-14

MEDIUM BEDDED SANDSTONE 1' -
WHITE TO LIGHT GRAY VERY DOLIC

ROUND FINE TO MEDIUM GRAINED SANDSTONE
DOLIC CEMENT DECREASES UPWARD,
BROWN CALCITE IS SECONDARY ALONG
SOLUTION CRACKS.

YA-15

MEDIUM BEDDED DOLOMITE 4' -
GRAY TO LIGHT GRAY FINE TO

MEDIUM XLLN RHOMBIC DOLOMITE
VERY SLIGHTLY SANDY, BROWN
CALCITE ON SURFACE. UPPER 6"
HAS SAND STRINGERS.

GRAVEYARD SECTION (CONT)

YA-16	MEDIUM BEDDED SANDSTONE	2' 10"
	WHITE TO LIGHT GRAY DOLIC MEDIUM GRAINED SANDSTONE. PURE (?) WHITE SAND IN DARKER DOLIC SAND	
YA-17	MEDIUM BEDDED DOLOMITE	5'
	GRAY SANDY FINE TO MEDIUM XLN DOLOMITE, BASAL 18" IS VERY SANDY (DOLIC SANDSTONE)	
YA-18	MEDIUM BEDDED DOLOMITE	4' 4"
	GRAY TO LIGHT GRAY FINE TO MEDIUM XLN SLIGHTLY SANDY DOLOMITE	
YA-19	MEDIUM BEDDED DOLOMITE	3' 9"
	GRAY TO LIGHT GRAY FINE TO MEDIUM XLN SLIGHTLY SANDY DOLOMITE. SAND IS SCATTERED IN IRREGULAR PATCHES & STRINGERS. SOME GREENISH SHALEY (?) PARTINGS.	
YA-20	VERY THIN TO THIN BEDDED DOLOMITE	1' 10"
	GRAY FINE XLN DOLOMITE. SOME VERY THIN STRINGERS OF CALCITE.	
YA-21	MEDIUM BEDDED SANDSTONE	3' 7"
	GRAY TO LIGHT BROWN-GRAY VERY DOLIC ROUND FINE TO MEDIUM GRAINED SANDSTONE. SOME FINE XLN DOLOMITE STRINGERS	

Graveyard section (Cont'd)

- YA-22 Medium bedded dolomite 4' 11"
 Gray fine to medium crystalline rhombic sandy dolomite. Sand localized in stringers
- YA-23 Medium bedded sandstone 0' 10"
 Gray-white, very dolic, hard, fine to medium grained sandstone.
- YA-24 Platy to thin bedded limestone 3' 1"
 Light gray, medium crystalline, Many of platy beds from 1/2" to 1" thick. Has small amount of sand in lower part. About 50% rhombs (dolomite?). A limestone halfway altered to dolomite? Well developed cryptozoan(?) colonies.
- YA-25 Thick bedded sandstone 2' 5"
 Gray-brown, limy, dolic(?) fine to medium grained sandstone. Sand 50+% at bottom. Not more than 25% sand at top.
- YA-26 Medium bedded (10"-12") sandstone/dolomite
 White & gray streaked limy, dolic, medium grained sandstone. White sandy limy streaks and gray dolic streaks.

Graveyard Section (Cont'd)

- | | | |
|-------|---|-------|
| YA-27 | Medium bedded Sandstone
Light gray, limy, fine to medium
grained sandstone. Sand comprises
50% of unit all the way through. | 1'4" |
| YA-28 | Medium bedded sandstone
White to lt gray, very limy, fine grained
sandstone. | 1'3" |
| YA-29 | Medium bedded limestone
Light gray, medium crystalline, slightly
sandy limestone. Rhombic, may be dolic.
Sand increases slightly upward. | 1'4" |
| YA-30 | Medium bedded sandstone
White to light gray, fine to medium grained
limy, friable sandstone. | 1'4" |
| YA-31 | Medium bedded limestone
Light gray, medium crystalline, limestone.
Cephalopod colonies well developed. | 3'10" |
| YA-32 | Medium bedded limestone
Light gray, sandy to very sandy, fine
crystalline limestone. Fine to medium
sand grains floating at base and grading
into a 6" limy sandstone at top of unit. | 1'7" |

Graveyard Section (Cont'd)

- | | | |
|-------|--|--------|
| YA-33 | Thin (3") bedded limestone
Gray medium crystalline limestone | 1' 5" |
| YA-34 | Medium bedded (10") limestone
White to light gray, very sandy, fine crystalline limestone. Sand up to 60% or a little less. | 0' 10" |
| YA-35 | Medium bedded limestone
Gray, fine crystalline, oolitic limestone
1' 5" from bottom a band 2" thick of fine grained calcareous sandstone. | 2' 10" |
| YA-36 | Medium bedded limestone
Light medium crystalline limestone. Could very easily be dolomite rhombs in calcite cement. Pales. speckles in upper 10" of unit (YA-36 P) | 2' 11" |
| YA-37 | Medium bedded limestone
Gray fine to medium dolio limestone
Dark gray dolomite streaks in lower part and dolomite crystals probable throughout
Very few scattered sand grains | 2' 6" |
| YA-38 | Medium bedded sandstone
White limy fine grained sandstone
Mostly lime in upper 3" | 1' 10" |

Graveyard Section (Cont'd)

- | | | |
|-------|---|------|
| YA-39 | Medium bedded limestone
Dark gray fine crystalline, solitoid limestone | 1'6" |
| YA-40 | Medium bedded limestone
Dark gray, slightly sandy, fine crystalline
Lower 3" Very sandy, scattered grains
in remainder of unit | 2'1" |
| YA-41 | Medium bedded limestone
Gray very sandy, fine crystalline
limestone. Sand grains are floating | 1'4" |
| YA-42 | Thin to medium bedded sandstone
White to gray, fine grained, lumpy sandstone
Friable when struck. | 5'- |
| YA-43 | Medium bedded sandstone
White to gray, fine grained, lumpy, friable
sandstone | 5'- |
| YA-44 | Medium bedded sandstone
White to gray, fine grained, lumpy,
sandstone. Friable when struck | 1'3" |

Graveyard Section (Cont'd)

YA-45	Medium bedded limestone Light gray brown medium gr. fine limestone. Rhombic crystals may be dolomite in calcite cement.	1' 2"
YA-46	Medium bedded sandstone Gray, fine to medium, very thin, hard sandstone. 2 small beds of white fine sand - remainder very hard.	2' 10"
2-7-51		
YA-47	MEDIUM BEDDED SANDSTONE WHITE TO LIGHT BROWNISH GRAY FINE TO MEDIUM GRAINED VERY DOLIC SANDSTONE AT 2' 11" FROM BASE IS A 10" BAND OF DARK GRAY DOLOMITE. OTHERWISE THE DOLIC CEMENT ALMOST FLOATS THE SAND GRAINS.	7'
YA-48	MEDIUM BEDDED DOLOMITE DARK GRAY FINE XLLN DOLOMITE, SOME WHITE COARSE XLLN DOLOMITE WHICH WEATHERS TO AN ORANGE COLOR. SOME FLOATING SAND IN THE UPPER 4".	2' 9"
YA-49	MEDIUM BEDDED DOLOMITE DARK GRAY DENSE TO VERY FINE XLLN SANDY DOLOMITE, BASAL 1' IS TRANSITIONAL FROM A WHITE SAND TO A SANDY DOLOMITE. ABOVE THIS THERE IS VERY LITTLE SAND	3' 10"

(GRAVEYARD SECTION CONT.)

- YA-50 MEDIUM BEDDED DOLOMITE 2'-
 LIGHT GRAY FINE YLLN DOLOMITE, SCATTERED
 SAND GRAINS IN THE UPPER 1"
-
- YA-51 THICK BEDDED DOLOMITE 2'-
 LIGHT GRAY SANDY DOLOMITE, FINE
 TO MEDIUM GRAINED SAND BARELY FLOATING
 AT BASE & DECREASING IN AMOUNT
 UPWARD. UPPER 6" HAS STREAKS &
 SPOTS OF DARK GRAY DOLOMITE.
- YA-52 MEDIUM BEDDED DOLOMITE 2' 3"
 LIGHT GRAY FINE GRAINED TO DENSE
 DOLOMITE WITH A FEW SCATTERED SAND
 GRAINS.
- YA-53 THIN BEDDED DOLOMITE 1' 5"
 DARK GRAY DENSE TO FINE YLLN DOLOMITE.
 HARD. SILTY (?)
- YA-54 MEDIUM BEDDED DOLOMITE 4' 11"
 GRAY TO LIGHT BROWN-GRAY DENSE TO
 VERY FINE YLLN DOLOMITE. VERY
 FEW WIDELY SCATTERED SAND
 GRAINS. SOME CALCITE YLLS.
 THIS UNIT IS PROBABLY A MIXTURE OF
 LIMESTONE & DOLOMITE.

GRAVEYARD SECT N (CONT)

YA-55

MEDIUM BEDDED DOLOMITE

1' 4"

LIGHT GRAY FINELY XLLN DOLOMITE.

VERY HARD. VERY SCATTERED SAND GRAINS - ALMOST NONE.

YA-56

MEDIUM BEDDED DOLOMITE

6'

GRAY TO LIGHT GRAY SANDY FINE XLLN DOLOMITE. SAND IS SCATTERED, IN STREAKS, & PATCHES & RUNS FROM 50% TO VERY LITTLE SAND. SOME BEDS (4"-5") OF CALCAREOUS WHITE SAND & SOME THIN BEDS OF PURE DOLOMITE. BUT 85% OF THE UNIT IS SANDY DOLOMITE. UNIT 2' FROM TOP IS 4 1/6" UNIT OF MOSTLY WHITE FRIABLE SAND.

YA-57

MEDIUM BEDDED SANDSTONE

2' 7"

WHITE (WEATHERS GREEN) SLIGHTLY CALCAREOUS FINE TO MEDIUM GRAINED SANDSTONE. SECONDARY ENLARGEMENT OF GRAINS.

COVERED INTERVAL

1'

PROBABLY SAND AS BELOW - WEATHERS BACK

GRAVEYARD SECTION (CONT)

YA-58 THIN TO MEDIUM BEDDED DOLOMITE - 10"
 GRAY SANDY FINE YLL IV DOLOMITE

YA-59 THIN BEDDED SANDSTONE - 5"
 WHITE (WEATHERS GREEN) CALCAREOUS (?)
 FINE TO MEDIUM GRAINED SANDSTONE

YA-60 Medium bedded dolomite 3'-
 Gray sandy fine to medium crystalline
 dolomite. Mostly dolomite in lower 1'
 50-50 above. Upper 4" very hard dolomite (?)
 Concordal fracture which breaks across the
 sand grains. Some leaching in sand
 stringers

YA-61 Medium bedded sandstone 4' 6"
 Light gray, very dolic, fine to medium grained
 sand stone. 1' from bottom 6" white, liny,
 friable, sandstone. Lime in small quantities
 in all of unit. Another 6" bed of sand 1' 6"
 from top overlying 6" of pure dolomite.
 Top unit is another 8" bed of white friable
 sand.

YA-62 Medium to thick bedded dolomite 4' 8"
 Dark gray to gray brown, fine crys talline
 dolomite. Very sandy. sand increases slightly
 upward

Graveyard Section (Cont'd)

- | | | |
|-------|--|--------|
| YA-63 | Thin bedded dolomite
Dark gray to gray brown, sandy, dense dolomite. Dark gray stringers (1/2" to 1") dense dolomite and stringers of lighter gray sandy dolomite. Upper half silty (?) weathers platy. | 1' |
| YA-64 | Medium to thick bedded sandstone
Gray-brown to dark gray, very calc, 50% poorly sorted fine to medium grained sandstone. Often breaks across sand grains in unweathered portions. | 2' 7" |
| YA-65 | Medium bedded dolomite
Gray to dark gray, sandy, dense, dolomite. Pieces of dense dolomite float in sandy dolomite. Dense dolomite decreases upward. Only sandy dolomite (50-50) on top. | 2' 6" |
| YA-66 | Medium to thick bedded dolomite
Gray sandy dolomite, fine crystalline sand grains barely floating throughout. Lower 4" medium crystalline ostracodal limestone. | 3' 3" |
| YA-67 | Medium bedded dolomite
Gray sandy fine crystalline dolomite. Lower 4" a firm sandstone, above which is 1' of gray dolomite chips or stringers in sandy dolomite. Sandy dolomite to top of unit. | 3' 11" |

Graveyard Section (Cont'd)

- YA-63 Thin to medium bedded sandstone 1' 4"
 White fine grained limy friable sand.
 2" bed of pure dark gray dolomite
 about 3" above base
- ↓ YA-69 Medium bedded sandstone 2' 7"
 Gray, very dolic, fine to medium
 grained, poorly sorted, sandstone.
 Sand practically flats in dolomite.
 Limy at top
- YA-70 Medium to thin bedded dolomite 1' 2"
 Gray fine crystalline silty dolomite.
 Banded. A cryptozoan bed which has been
 dolomitized?
- YA-71 Medium bedded dolomite 4' 11"
 Gray to gray brown, sandy, slightly
 limy, medium crystalline dolomite
 Sandy at base; 6" zone of no sand,
 overlain by sandy dolomite. Extremely
 sandy at top
- YA-72 Medium bedded sandstone 2' 10"
 Gray-brown, dolic, fine grained sandstone
 Slightly friable in part - weathering?

Grave yard Section (Cont'd)

- YA-73 Medium bedded sandstone 4' 11"
 Gray-brown, hard very dolie fine grain
 sandstone. Basal 6" pure dolomite with
 dolomite stringers. Dolomite up to 50%
 throughout.
- YA-74 Thin bedded sandstone 3' 8"
 White to gray brown, dolie, fine grained
 sandstone. Weathers back & not well
 exposed. White friable & brownish
 dolie sand
- YA-75 Medium bedded dolomite 1' 8"
 Gray-brown, rhombic, dolomite
 limy reaction due to weathering?
 Badly weathered - does it have sand?
 thin to
- YA-76 Medium bedded sandstone 2' 8"
 White to gray-brown, fine grained
 sandstone. Brown & dolie in lower 4" -
 rest is friable and non-limy (due to
 weathering?) Ostracodal (YA-74 P)
- YA-77 Thin to medium bedded limestone 1' 6"
 Gray, oolitic, medium crystalline
 limestone. The lime is only 8" thick -
 is 4" above and below a sand?

Graveyard Section (Cont'd)

YA-78	Medium bedded sandstone White, fine grained, limy friable sandstone	2'1"
YA-79	Medium bedded limestone Gray, fine crystalline oolitic limestone. Lower 4" ostracodal	2'2"
YA-80	Medium bedded Sandstone White, fine grained limy sandstone	3'6"
12-9-51 YA-81	Medium bedded dolomite Gray, slightly oolitic, medium crystalline dolomite; probably slightly sandy in base	-6"
YA-82	Medium bedded limestone Light dove gray, oolitic, fine crystalline limestone. Dolie? Ostracodal (YA-82P)	3'2"
YA-83	Medium bedded dolomite Gray-brown, slightly limy, sandy & silty, medium crystalline rhombic dolomite Sandy basal 4"; silty above	1'5"
YA-84	Medium bedded limestone Gray fine crystalline to clastic slightly sandy and oolitic limestone. Basal 5" is dense ls., darker in color and more oolitic; clastic ls with ls pebbles and sand grains above	3'4"

Graveyard Section (Cont'd)

- | | | |
|-------|--|--------|
| YA-85 | Medium bedded limestone.
Lower 1' clastic and sandy-
Upper 2' crystalline, fine, colitic
and ostracodal (YA-85 P) | 3'- |
| | Covered interval
Probably sand as above (YA-86) | 3'- |
| YA-86 | Medium bedded sandstone.
White to gray brown, hard, slightly
lumpy, dolio(?) fine grained sandstone.
Harder and more dolio upward. Gradational
with overlying unit | 4' 7" |
| YA-87 | Medium bedded dolomite.
Gray to dark gray rhombic medium
crystalline dolomite. Lower 1' sandy,
grading out at YA-86 | 3'- |
| YA-88 | Thin bedded dolomite
Gray-green slightly sandy, very silty
fine crystalline dolomite. Has green
shale(?) chunks | 1' 10" |
| YA-89 | Medium bedded sandstone
Gray-white (weathers green-brown)
fine grained sandstone | 4' 4" |

Graveyard Section (Cont'd)

YA-90 Medium bedded dolomite 2'7"
 Gray, silty(?), fine xllrs (Lower 6")
 rhombic medium crystalline above

YA-91 Medium bedded sandstone 1'9"
 Gray, dolic, fine grained sandstone
 Clean sand at bottom, increasingly silty
 in middle and top. Grades into unit
 above

YA-92 Medium bedded dolomite -7"
 Gray, Rhombic, medium crystalline
 silty(?) few floating sand grains in
 base 2".

YA-93 Medium bedded sandstone 4'5"
 Gray brown, very dolic, fine to
 medium grained sandstone. Sand-
 dolomite ratio averages about 50-50,
 with variations either way. A 3" dolomite
 band 4" from top of unit. (Fine
 xllrs in dk. gray dolomite)

Covered interval 1'7"
 Appears to be dolic sand as
 shown below

Graveyard Section Cont'd

YA-94 Thin to medium bedded sandstone 4'1"
 White gray to dark gray, fine to
 medium grained very calc. sandstone
 Dolomite locally better than 50% of
 volume.

YA-95 Thin bedded sandstone 1'4"
 White, weathers green, fairly hard,
 fine grained sandstone. Fair sorting
 in grains of sand.

YA-96 Platy bedded sandstone 3'10"
 White with greenish weathering
 fine grained sandstone. Cross bedding
 beautiful.

YA-97 Medium bedded sandstone 4'0"
 White (gray, brown, and black weathering)
 very fine to fine grained sandstone.
 Whole unit weathers back. Some
 bands appear to be harder than
 others.

YA-98 Thin to medium bedded sandstone 2'7"
 White (gray brown and black weathering)
 very fine to fine grained sandstone.
 Badly weathered.

Covered interval 13'-
Contains float block on surface
and buried of St Peter type sands

YA 99 Covered interval 4'-
Contains at least a 14 inch exposed
bed of sample as collected
Is this St Peter or basal Plattin?
Might extend downward thus being
a interfingering silty phase in upper
St Peter type sands.

Overlain by Plattin limestone

Finis 2:30 P.M.

12-9-51

CARYER #2 SECTION..

SE $\frac{1}{4}$ Sec 31, T16N, R19W,

NEWTON COUNTY, ARKANSAS

(SECTION BEGINS AT RIVER LEVEL

- JA-1 MEDIUM BEDDED SANDSTONE 2' 5"
LIGHT GRAY TO BROWN-GRAY FINE TO
MEDIUM GRAINED CALCAREOUS
SANDSTONE. LIME INCREASES UPWARD
& SAND IS BARELY FLOATING IN
THE TOP OF THE UNIT. GRADATIONAL
WITH OVERLYING UNIT,
- JA-2 MEDIUM BEDDED LIMESTONE 2' 2"
DARK BROWN-GRAY DENSE OOLITOID (?)
CLASTIC (?) SANDY LIMESTONE.
SAND IS WIDELY SCATTERED & FLOATING
IN THE LOWER PART OF THE UNIT &
IS BANDED & SCATTERED ALONG BEDDING
PLANES IN THE UPPER PART
- JA-3 MEDIUM BEDDED SANDSTONE 1' 1"
GRAY-BROWN VERY CALCAREOUS FINE
TO MEDIUM GRAINED SANDSTONE
LIME INCREASES UPWARD & BECOMES
INDISTINCT STRINGERS IN THE
UPPER 4"

CARVER #2 SECTION (CONT)

- JA-4 MEDIUM BEDDED LIMESTONE - 11"
GRAY TO BROWNISH GRAY DENSE
TO FINE XLLN DOLITIC (?) CLASTIC
SANDY LIMESTONE. FLOATING SAND
GRAINS NUMEROUS. IN LOWER PART
& DECREASE UPWARD TO A PURE
LIMESTONE IN THE UPPER 4".
- JA-5 MEDIUM BEDDED LIMESTONE - 10"
GRAY TO GRAY-BROWN DENSE TO FINE
XLLN SANDY LIMESTONE. MAKES
A DISTINCT BREAK WITH THE
UNDERLYING UNIT, BUT BECOMES
MORE SANDY UPWARD & GRADES
INTO OVERLYING UNIT.
- JA-6 MASSIVE BEDDED SANDSTONE 5'
WHITE TO LIGHT BROWNISH GRAY
CALCAREOUS ROUND FINE TO MEDIUM
GRAINED SANDSTONE, SHOWS LITTLE
OR NO BEDDING OR PARTING EVEN ON
WEATHERED SURFACE.
- JA-7 MEDIUM TO THICK BEDDED SANDSTONE 38"
WHITE TO BUFF (WEATHERING) CALCAREOUS
ROUNDED, FINE TO MEDIUM GRAINED
SANDSTONE. BROWN CALCITE
WEATHERING ON OUTSIDE

CARYER #2 (CONT.)

- JA-8 THIN TO MEDIUM BEDDED SANDSTONE 4' 9"
WHITE (WEATHERS BROWN) FINE TO
MEDIUM ROUNDED GRAINED CALCAREOUS
SANDSTONE
- JA-9 MEDIUM BEDDED SANDSTONE 5'-
WHITE TO LIGHT GRAY ROUNDED FINE
TO MEDIUM DOLIC SLIGHTLY CALCAREOUS
SANDSTONE. THE WHITE LIMY SAND
& GRAY DOLOMITIC SAND ARE
IRREGULARLY BEDDED. 1' ABOVE THE
BASE IS 1" OF VERY SLIGHTLY SANDY
DOLOMITE.
- JA-10 MEDIUM BEDDED SANDSTONE 3' 3"
WHITE TO LIGHT GRAY-BROWN FINE
TO MEDIUM GRAINED DOLIC & CALCAREOUS
SANDSTONE. WHITE CALCAREOUS SANDSTONE
& GRAY-BROWN SANDSTONE IRREGULARLY
BEDDED BECOMING MORE DOLIC
UPWARD - UPPER 1" IS SLIGHTLY
SANDY DOLOMITE.
- JA-11 THIN TO MEDIUM BEDDED DOLOMITIC SANDSTONE 3' 4"
DARK TO LIGHT BROWNISH-GRAY DENSE SANDY
DOLOMITE & LIGHT GRAY-BROWN DOLOMITIC
SANDSTONE. LOWER 1" IS SLIGHTLY
SANDY DOLOMITE. SAND INCREASES
UPWARD WITH THE UPPER 1/2 BEING DOLO-
SANDSTONE.

CARYER #2 SECTION (CONT)

JA-12 MEDIUM BEDDED DOLOMITE & SANDSTONE 3' 7"
 LIGHT GRAY-BROWN DOLOMITE & SANDSTONE.
 BOTTOM 3" GRAY-BROWN SLIGHTLY
 SANDY DOLOMITE, SAND INCREASES
 UPWARD WITH UPPER 2 OF UNIT BEING
 DOLIC SANDSTONE.

JA-13 MEDIUM BEDDED DOLOMITE 2' 9"
 LIGHT GREENISH-GRAY FINE XLLN TO
 DENSE SILTY (?) SLIGHTLY SANDY
 DOLOMITE. SAND IS WIDELY SCATTERED
 FLOATING GRAINS.

JA-14 MEDIUM BEDDED SANDSTONE 2' 8"
 LIGHT GRAY DOLIC FINE TO MEDIUM GRAINED
 (POORLY SORTED) SANDSTONE. GRADATIONAL
 WITH UNDERLYING UNIT - SANDY DOLOMITE
 GRADING UPWARD INTO DOLIC SANDSTONE
 SAND DECREASES ^{UPWARD} IN UPPER HALF WITH
 TOP 8" BEING A DOLOMITE WITH FLOATING
 SAND GRAINS.

JA-15 MEDIUM BEDDED DOLOMITE 4'
 GRAY FINE TO VERY FINE XLLN DOLOMITE
 BASAL 1' 6" IS SANDY WITH SAND
 DECREASING UPWARD - SOME
 COARSE XLLN DOLOMITE.

CARVER #2 SECTION (CONT.)

- JA-16 THIN TO MEDIUM BEDDED DOLOMITE 2' -
 GRAY DENSE TO VERY FINE XLLN
 DOLOMITE WITH COARSE XLLN
 MINERAL DOLOMITE.
- JA-17 MEDIUM BEDDED DOLOMITE 5' 2"
 GRAY TO GRAY-BROWN FINE XLLN TO
 DENSE DOLOMITE. SLIGHT AMOUNT
 OF SAND IN THE FORM OF SANDY
 STRINGERS. LOCALLY SILTY (F)
- JA-18 MEDIUM BEDDED DOLOMITE 5' -
 GRAY FINE XLLN RHOMBIC DOLOMITE
 SANDY - FROM VERY SANDY DOLOMITE TO
 WIDELY SCATTERED GRAINS. UPPER 2'
 BROWNISH GRAY & SANDY THROUGHOUT - ALMOST
 A DOLOMITIC SAND.
- JA-19 MEDIUM BEDDED DOLOMITE 5' -
 BROWN-GRAY FINE TO MEDIUM XLLN
 SLIGHTLY SANDY DOLOMITE. RHOMBIC
 XLLS SCATTERED.
- 20 MEDIUM BEDDED DOLOMITE 5' 4"
 DARK BROWNISH GRAY TO GRAY
 FINE TO MEDIUM XLLN SANDY DOLOMITE.
 VERY SANDY IN A FEW MINOR SPOTS
 BUT MOSTLY RHOMBIC DOLOMITE
 LOWER 3' ON A STEEP ROCK FACE
 & SAMPLES COULD NOT BE TAKEN
 DUE TO CERTAIN TO DOLOMITE

CARVER #2 SECTION (CONT.)

- JA-21 MEDIUM BEDDED SANDSTONE & DOLOMITE 5'
 GRAY-BROWN FINE TO MEDIUM
 GRAINED ^{DOLIC} SANDSTONE & DARK GRAY
 SLIGHTLY SANDY RHOMBIC MEDIUM XLLN
 DOLOMITE. DOLOMITE MUCH IN
 MINORITY. SAND IS FROM FLOATING
 GRAINS TO FRIABLE BROWN & WHITE
 DOLIC SANDS
- JA-22 Medium bedded dolomite 5'
 Gray to dark gray fine xlln sandy dolomite
 Sand barely floating in lower 4' except
 for white friable sand 2' from bottom
 Upper 1' dense hard dolomite
- JA-23 Medium bedded dolomite 5'
 Gray to gray-brown, sandy, fine
 xlln dolomite, sand barely floating in
 lower 2' and only slight amount of
 sand in next 2' and sand increases
 in upper 1'
- JA-24 Medium bedded dolomite 5'6"
 Gray to gray-brown. Sandy dolomite
 sand grains barely floating in all except
 lower 6" where it is more floating.
 Grades up from last unit.

Carver #2 Section (Cont'd)

12-18-51

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|-------|---|-------|
| JA-25 | Medium bedded sandstone
White, limy, medium grained, with secondary growth, friable sandstone | 1' 4" |
| JA-26 | Medium bedded dolomite
Gray to gray-brown very sandy, (sand barely floating throughout) fine xllm dolomite. Upper 4" dark gray, medium xllm dolomite without sand. | 3' 4" |
| JA-27 | Medium bedded sandstone
White fine to medium grained, slightly friable sandstone. Grades into JA-28. | -10" |
| JA-28 | Medium bedded sandstone and dolomite
Gray-brown dolomitic sandstone and very sandy dolomite. Lower 1/2 is dolomitic sand with sand barely floating, if at all. Upper 1/2 has sand which barely floats. | 5' 3" |
| JA-29 | Medium bedded sandstone
Gray-brown with light gray to white banded, slight limy dolic, medium grained sandstone. Becomes more dolic, darker and harder in the upper 1'. | 5' |

Carver # 2 Section (Cont'd)

JA-30	<p>Medium bedded sandstone. Light gray to gray very dolic fine to medium grained sandstone. Upper 16" not as dolic and less hard than rest of unit. Upper 16" limy with limestone pebbles? in upper 4"</p>	3'5"
JA-31	<p>Fine to medium bedded limestone. Gray, sandy, clastic, fine xllr, limestone. Ostracodal? (No P-sample taken.)</p>	1'-
JA-32	<p>Thick bedded sandstone. White, weathers gray-brown fine grained limy sandstone.</p>	2'11"
JA-33	<p>Thin to medium bedded limestone. Gray to gray-brown, sandy, clastic fine xllr limestone. Ostracodal (JA-33 P). Sandy in lower 4" only - transitional from JA-32</p>	2'6"
JA-34	<p>Thick bedded sandstone. Gray-white, very limy, fine grained sandstone. Sand almost float in limy cement.</p>	3'4"

Carver #2 Section (Cont'd)

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|-------|--|------|
| JA-35 | Medium bedded limestone
Light gray clastic(?) medium grained limestone Oolitic in upper 6" | 1'6" |
| JA-36 | Medium bedded sandstone
Gray, white, fine grained, very limy, sandstone | 2'8" |
| JA-37 | Medium bedded limestone & sandstone
Gray medium xln, slightly oolitic limestone in lower 9" and upper 11". An 8" white friable limy sand lies between the 2 limes | 2'4" |
| JA-38 | Thin to
Medium bedded sandstone
White, limy, fine grained, friable sandstone | 3'4" |
| JA-39 | Thin to medium bedded limestone
Light gray fine to medium xln, either slightly sandy and silty or oolitic in different strata. | 4'6" |
| JA-40 | Thin bedded limestone and sandstone
Gray to light greenish gray fine xln oolitic, silty, limestone and light gray to greenish-white, medium grained, very limy sandstone. Lower 6" is oolitic limestone; Upper 7" is very limy sandstone or sandy limestone. Contact is gradational. Limestone is ostracodal (JA-40P) | 1'1" |

Carver #2 Section (cont'd.)

JA-41	Thick bedded limestone Light gray, slightly sandy, oolitic fine xlm limestone. Sandy at base, grading out in 1'. At 2' same occurrence. Sandy at top of unit. Few ostracods JA-41P	5'6"
JA-42	Thick bedded limestone Gray, oolitic, fine grained, limestone Ostracodal (JA-42P)	2'4"
JA-43	Thick bedded limestone Gray, oolitic, fine xlm, limestone Upper 6" dolic.	4'4"
JA-44	Thin to medium bedded dolomite Dark gray fine xlm to dense, slightly oolitic, limy dolomite	2'1"
JA-45	Thin bedded sandstone White, slightly limy, friable, medium grained sandstone. Becomes increasingly limy upward - sand flats in lime at top	2'6"
JA-46	Medium bedded sandstone and limestone White, weathers green, limy, fine grained sandstone. Some parts more friable than others. A 5" oolitic (?) fine to medium xlm ls at base of unit. Lime increases upward; unit becomes limestone in upper 1'1" (Light gray, oolitic fine to medium grained) Ostracodal in lime and sandy transition zone	4'10"

Carver #2 Section (Cont'd)

JA-47	Medium bedded sandstone and limestone Light gray fine xln limestone and gray white, medium grained sandstone Lower 9" sandy, grades upward to limestone. Top 4" is gray white very limy fine grained sandstone.	2'5"
JA-48	Medium bedded limestone Light gray, medium xln, slightly oolitic limestone.	2'6"
JA-49	Medium bedded sandstone White fine grained, limy, slightly friable sandstone. Dark brown to black in part, weathering (?) in upper 1/2	4'7"
—	Covered interval	1'—
JA-50	Thin bedded sand & siltstone Greenish yellow-gray, fine to very fine grain sand in silt or weathered dolomite	2'3"
JA-51	Medium bedded sandstone White fine grained, slightly limy sandstone	1'4"

Carver # 2 Section (Cont'd)

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|-------|---|------|
| JA-52 | Medium bedded dolomite.
Dark gray, gray to brown medium
xln rhombic dolomite. Silty. | 4'7" |
| JA-53 | Medium bedded dolomite
Dark gray, fine to medium xln
dolomite, rhombic, silty dolomite | 4'4" |
| JA-54 | Medium bedded sandstone & dolomite
Lower 18" - White, hard, friable when struck,
fine to medium grained limy sand.
Remainder is dk. gray-brown rhombic
medium xln dolomite with floating sand | 1'9" |
| | Note: Dis conformity at top of this unit
Could this be top of Everton? | |
| JA-55 | Medium bedded sandstone.
White and gray, fine and medium
grained, limy sandstone
Clean white sand in all except lower
1' | 5'8" |
| JA-56 | Medium bedded sandstone
White & greenish. fine to medium
grained sandstone. Poorly exposed
and deeply weathered. Sample is
from broken material under covered
slope | 5' |

Core #2 Section (Continued)

-	Covered interval	9'-
JA-57	Thick bedded sandstone. Very fine to medium, greenish white, sandstone. Dolic increases upward	2' 11"
JA-58	Medium to thin bedded dolomite & Sandstone 2' 8" Gray-brown, extremely sandy, very fine sandy fine xltm dolomite. Lower 5" is silty; Next 1' 7" very hard dolic sandstone which is quartzitic. Upper 8" again silty, very fine sandy dolomite thin bedded in upper 8"; Medium bedded below	
JA-59	Thin to medium bedded sandstone White, fine to medium grained friable sand.	1' 5"
-	Covered interval	10'-
JA-60	Medium bedded sandstone Yellow gray fine grained silty dolic sandstone	2'-
-	Covered interval to base of St Joe limestone	11' 6"
-	1' sand (B.M.S.S) exposed below St Joe Fine 4.5 SRM.	