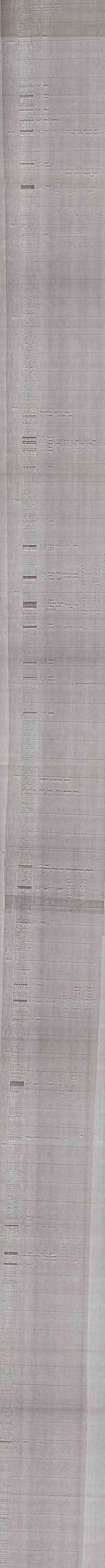


70-6
 (200)
 R298
 no. 1532

LEGEND

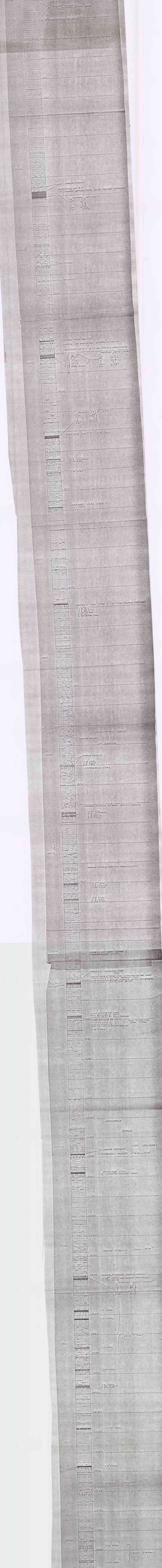
Drill Hole #1 Flatwoods - J.B.T. 2850FSL 12220FSL
 Location Near Tower, Flatwoods Mtn., Doran 75 quad
 Kentucky
 Core Log J.B.T. Co. Pike State Ky.
 4/21/62 - 7/31/62 by Mott Core Drilling Co.
 Elev. 2836 Logged by L. Jenkins - C.H. Rice
 Remarks Collar Elevation by Altimetry
 Core size NK (2.25" diam.) Log scale 1"=20'



(200)
R290
No. 1332

70-6

U.S. Geological Survey
Drill Hole NO. 11 * 4-78 3050' FNL 9325' FWL
Location HEAD OF FORT BRANCH-NORTH FORK KENTUCKY
RIVER ON THE VICCO, KY 7 1/2 QUADRANGLE
Carter Co. - Co. ABOVE Co. PERRY State KY
12-31-62 TO 2-7-63 BY MOTT DRILLING CO.
Collar 2170' Logged By C. RICE & TRENT
Remarks HOLE DRILLED 400' EAST OF DIXONS KNOB LOOKOUT
TOWER AND ABM 2165' ELEVATION
ELEVATION ABOVE SEA LEVEL DEPTH LOG SCALE 1"=20'



RECORDED
INDEXED
V66 34 1332
1
MAY 1964
U.S. GEOLOGICAL SURVEY

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U.S. Geological Survey

Drill Hole No. 2

* L-35 5240' FEL 17,450' FNL

Location: HEAD OF WOLFEN FORD OF LOWER POMREY CREEK

NEAR CENTER - MILLARD 7.5 MIN. TOPO. QUAD.

Center Coord. * Co. PIKE State Ky.

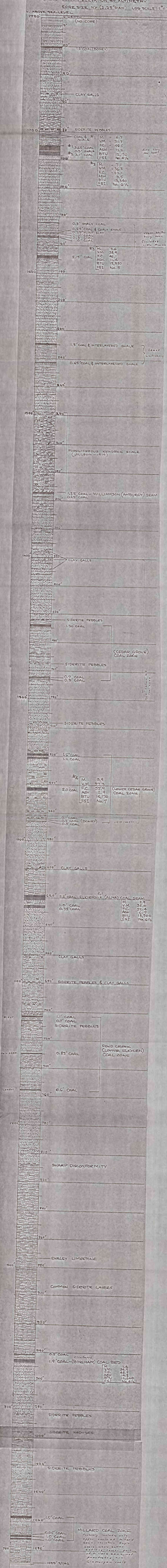
Drilled 7/16/62-7/1/62 BY MOTT CORE-DRILLING CO.

Elev. COLLAR - 1780.0' Logged By D.G. ALVORD & S.C. BERGMAN

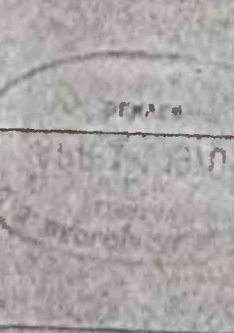
Remarks: COLLAR ELEVATION BY ALTIMETRY

CORE SIZE NX (2.25" DIAM) LOG SCALE: 1" = 20'

V. ABOVE SEA LEVEL



70-4



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U. S. Geological Survey

Drill Hole DDH-4 " K23; 6,000' FSL; 6,100' FSL.

Location 1,300' SE of Pike-Floyd Counties line on Abner Mountain.

Copter Co. - Ore Co. Pike State Ky.

Drilled 8/16 - 9/10/62 by Mott Core Drilling Company

Elev 2190' Logged By D.C. Alford & C.L. Rice

Remarks Altitude collar by altimetry; 2 1/2" core;

Scale of log: 1 inch = 20 feet

2190'

Plug bit, cuttings only

0.4' coal

0.6' coal

2100'

0.3' coal

Siderite pebbles

1.5' coal including 0.3' shale splits

1.7' coal Peach Orchard seam

Siderite pebbles

Siderite pebbles

1900'

Sampled: 305.45 - 308.95

M 2.1

VM 34.8

FC 48.0

A 15.1

S 1.9

Btu 12250

FSI 5 1/2

2.85' coal

0.2' shale Taylor seam

0.25' coal

0.7' coal

0.65' coal

0.45' coal

1.2' coal

Hawlin coal zone

1800'

0.2' coal

Fire Clay sider coal zone

1.3' coal

0.25' coal

Fire Clay (Hazard No. 4) coal bed

2.7' coal zone, core partly lost, includes 0.2' Flint clay and 0.6' shaly coal.

1700'

1.4' coal

0.1' coal and shale

Sampled: 552.5 - 555.3'

M 2.5

VM 28.3

FC 52.1

A 7.1

S 0.6

Btu 12500

FSI No. 6

1.4' coal

0.3' shale Whitesburg seam

1.1' coal

0.7' coal

1600'

0.7' coal

0.1' coal

1500'

Sampled: 693.3 - 696.0'

M 2.2

VM 38.4

FC 46.1

A 17.3

S 6.0

Btu 12610

FSI No. 4

2.7' coal Williamson seam

1.1' coal

1.3' coal

0.6' coal

0.2' coal

0.7' coal and shale

1400'

0.6' coal

0.2' coal

0.7' coal and shale

Sampled: 828.1 - 831.6'

M 3.5

VM 36.2

FC 57.6

A 2.7

S 0.6

Btu 12220

FSI No. 4

0.4' shaly coal

2.5' coal

0.4' coal

0.7' shale

3.0' coal

0.1' coal

1.55' coal

0.8' coal

U.E.-1

1200'

Siderite pebbles

1100'

1.3' coal Pond Creek (Lower Elkhorn) (2)

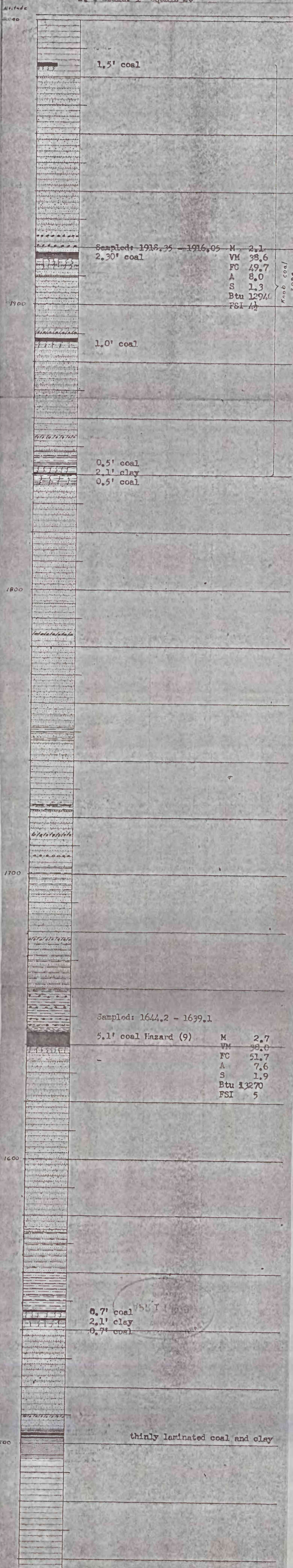
Total depth: 1109.8'

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R 290
no. 1382

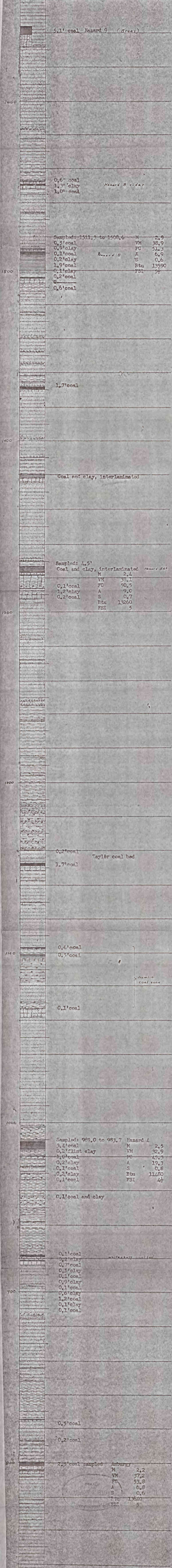
Revised 8-16-48

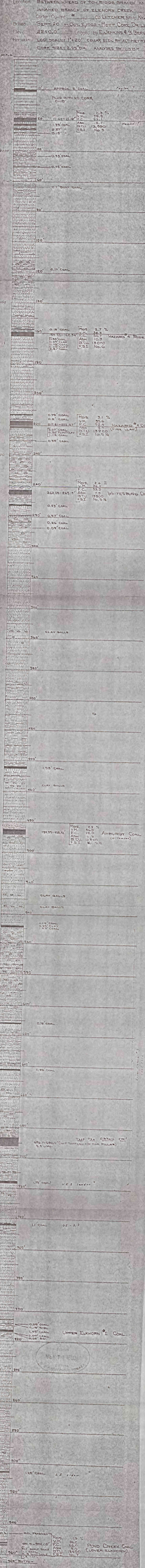
U. S. Geological Survey

Drill Hole: DDH-5 * I 76: 3,960 FSL; 4,210' FFL
Location: 850' E of Buffalo triangulation station;
head of Buffalo Creek.
Carter Co-ord. * Co. Parry State Ky.
Drilled: Oct. 16, 1962 to Nov. 6, 1962
Elev: 1990 Logged By W. Guterbridge & W. Ruffett
Remarks: Collar elevation by barometer, core diameter
2 1/2", scales 1" equals 20'



Drill Hole: DDH 5a * 176; 8,940 FEET, 5180 FEET
Location: 1400' SW of Buffalo triangulation point
Carter Co-ord * Co. Perry State Ky.
Drilled: Nov. 8, 1962 to Dec. 14, 1962
Elev: 1644 Logged By W. D. Fisher, Jr. & W. P. Pettit
Remarks: Collar elevation by barometer, core diameter
2 1/2". Scale: 1" equals 20'





Top of hole is (200) R390
 Rechecked by G.C. 1382
 120' ID

Revised 8/16/68 70-6

claystone underlay or seatrock
 siltstone siderite pebbles and/or oolite
 sandy siltstone fossiliferous siltstone
 silty sandstone fossiliferous concretions
 sandstone calcareous sandstone

M Moisture
 VM Volatile matter
 FC Fixed carbon
 A Ash
 S Sulphur
 Btu British thermal unit
 FSI Free-swelling index

U.S. Geological Survey

Drill Hole LDH #7, Elkhorn City, K27, 10450' FSL, 4400' FSL
 Location Just south of top of Beaver Knob, Elkhorn City
 7 1/2' quadrangle, Kentucky
 Core Coord. K27 Co. Pike State Ky.
 Drilled 9/24/62 - 10/24/62 by Mott Core Drilling Co.
 Elev. 2120 ft. Logged by C.L. Rice & W.F. Outerbridge
 Remarks Core size Nx (2.25" dia.) Log scale: 1" to 20"
 Collar elevation by Altimetry

1' coal
 0.5' shale
 5' coal collar elevation: 2120'

2100'

2.8' coal Upper Elkhorn

M	6.8
VM	30.5
FC	52.7
A	10.0
S	2.1
Btu	12450
FSI	7

0.5' coal
 0.5' shale poor recovery
 0.5' coal

assayed without shale splits

M	4.4
VM	30.0
FC	43.4
A	11.5
S	0.0
Btu	12850
FSI	7

0.5' coal
 2.4' coal Elkhorn

M	5.3
VM	31.9
FC	60.6
A	8.3
S	0.7
Btu	12210
FSI	8

1.3' coal
 2.1' coal

M	5.3
VM	32.1
FC	56.7
A	5.9
S	0.7
Btu	13650
FSI	8

0.0' coal
 0.0' coal
 0.5' coal

1900'

5.2' coal Elkhorn #2

M	3.2
VM	31.4
FC	59.5
A	1.9
S	1.2
Btu	14320
FSI	8

0.1' shale Elkhorn #2
 2.0' coal Elkhorn #2

1800'

0.7' coal
 0.6' coal

1700'

estimate
 3.5' coal Pond Creek
 poor recovery
 recovery

M	2.7
VM	31.2
FC	60.7
A	3.4
S	1.2
Btu	14160
FSI	8

1600'

1500'

Wright - Marine zone?

M	1.9
VM	33.4
FC	53.6
A	11.1
S	2.2
Btu	12430
FSI	7

0.1' coal Elkhorn
 2.7' coal Elkhorn

1400'

1.5' coal Elkhorn
 1.75' coal Elkhorn

assayed without shale splits

M	3.2
VM	29.7
FC	50.9
A	17.1
S	1.8
Btu	12210
FSI	5

2' coal Upper Elkhorn
 2.2' coal Elkhorn

1300'

assayed without shale splits

M	2.9
VM	31.3
FC	60.6
A	5.6
S	0.8
Btu	14280
FSI	8

1.6' coal
 0.6' shale
 1.6' coal
 0.6' shale
 0.6' coal
 0.6' shale
 0.6' coal

1200'

1100'

assayed with shale splits

M	1.2
VM	29.7
FC	55.9
A	13.2
S	1.1
Btu	13210
FSI	6

2.02' coal Elkhorn
 0.08' shale Elkhorn
 0.5' coal Elkhorn

Marine zone?
 coal horizon?

assayed without shale splits

M	1.6
VM	31.5
FC	56.8
A	10.1
S	1.8
Btu	13740
FSI	7

0.6' coal
 0.7' shale
 0.6' coal
 0.6' shale & coal
 0.25' coal

1000'

marine or brackish water fossils

seatrock - Elkhorn coal horizon? Upper Elkhorn

900'

800'

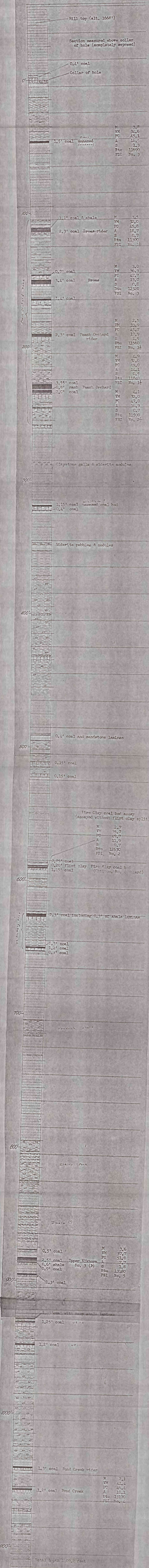
marine fossils

1.2' coal Elkhorn coal
 0.6' shale Kennedy coal of Buchanan Co., Va.
 0.2' coal Top of Lee Formation

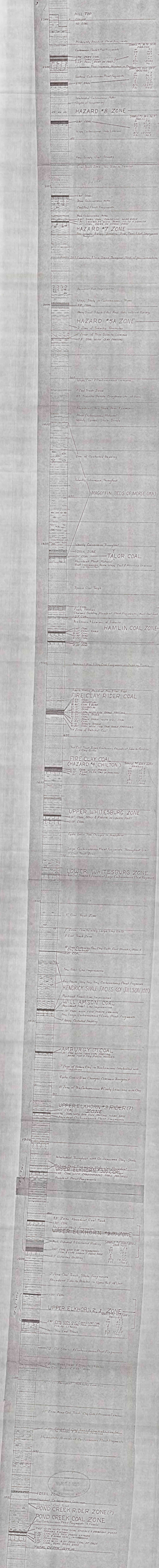
quartzose sandstone

quartzose sandstone

(200)
 R 290
 No. 1332
 Drill Hole
 Location DDH-8 * M24, 1900' FWL, 5000' FNL
 Between heads of Mare, Buffalo, and
 Caney Creeks, Broad Bottom 7 1/2' Quadrangle.
 Carter Co. ord. See *** Co. Pike State Ky.
 Drilled 10/19 - 11/12/62 by Mott Core Drilling Company
 Elev. 1625' Logged By D. C. Alford
 Remarks: Altitude of collar by altimetry; 2 1/2" core;
 Scale of log: 1 inch = 20 feet.



(200)
R290
10.1382
U.S. Geological Survey
Drill Hole DDH-9, LOVES BRANCH (OF ROCKHOUSE CREEK)
Location J-81, 8650' FWL 4550' FSL, NEAR KNOTT-
LETCHER COUNTY LINE
Carter Co. Ord J-81 COLETON State Ky.
Drilled 11-2-62 To 12-20-62 By MOTT COLE DRILLING CO.
Elev COLLAR 2240 Logged By JENKINS, CUTERBRIDGE, RICE
Remarks COLLAR ELEVATION BY ALTIMETRY, HOLE DRILLED
FROM HILL TOP, TOTAL DEPTH - 1279.10'



U. S. Geological Survey
OPEN FILE REPORT

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

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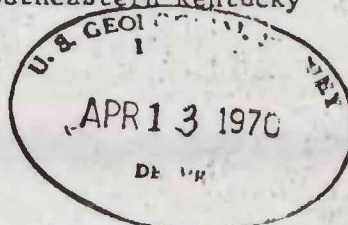
Logs of cores from drill holes in southeastern Kentucky

by

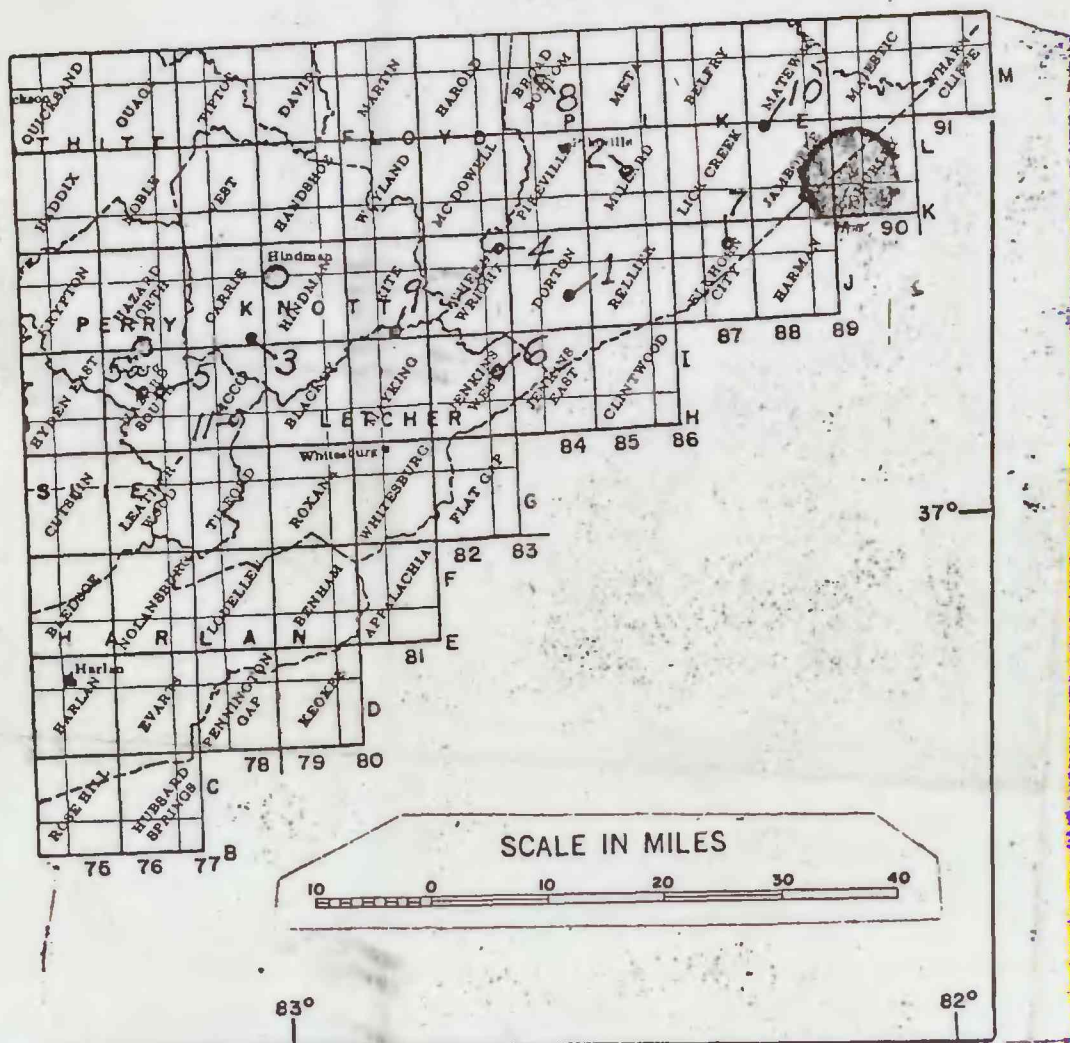
Donald C. Alvord

1970

PREPARED IN COOPERATION WITH
THE COMMONWEALTH OF KENTUCKY
UNIVERSITY OF KENTUCKY
KENTUCKY GEOLOGICAL SURVEY
WALLACE W. HAGAN, DIRECTOR AND STATE GEOLOGIST



This report consists of graphic lithologic logs of cores from twelve holes drilled in southeastern Kentucky for stratigraphic and coal-bed correlations within the Breathitt Formation of Pennsylvanian age. The cores were drilled in 1962 and 1963 under the cooperative mapping program of the Kentucky Geological Survey and the U.S. Geological Survey. The logs are at a scale of 1 inch to 20 feet and range in depth from 495 to 1,705 feet.



Index Map

Showing location of drill holes in the 7½-minute quadrangles and 5-minute Carter Coordinates, designated by letters and numbers.

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