

doc. 517

UNITED STATES  
DEPARTMENT OF THE INTERIOR

DI-6

APPROVED DECEMBER 1941

K.M. Waage,

# Casselman Field Notes

*[Faint, illegible handwritten notes]*

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Note 21

Notes 364-6 to 365 - irreg. bedded  
ls + greenish str. ls masses with  
in situ fossils.

Bc-436

Black to gray siltstone, interbedded ss  
in basal foot.

436-443

Shaly claystone grading to silty claystone  
with limy nodules. Fe-stone cones in upper 1'

449-9

Dense gray <sup>massive</sup> sandstone, micaceous throughout  
upper part becoming silty below

467-4

Gray to dark gray silty claystone  
with micaceous <sup>in some streaks</sup> in upper 5'  
(3" blk cl. str. at base)

476-6

Gray silty claystone ~~grading to~~ becoming  
shaly <sup>with sandy streak</sup> downward. (Upper 6" with  
frequent large ~~lenticles~~  
masses)

481

Greenish gray siltstone, micaceous  
minor silty claystone at top

492-6

dotted bedded, gray siltstone &  
sandstone

496-10

Silty claystone & semiplastic clay, 3'  
dark gray silty clay at top.

504-7

dotted bedded siltstone and ss. & sandstone

507-7

Mottled gray silty clay & claystone  
irreg. transition massive

515

Gray shaly siltstone sandy streaks,  
~~some~~ <sup>some</sup> gray shale zones in lower part

517-4

Fine ss, silty streaks.

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Full list



- 532-8 Gray to black carbonaceous shale,  
with in upper 2'.
- 533-10 Coal. - (W. side). (split to  
536-2 Carbonaceous ~~conglomerate~~ <sup>conglomerate</sup> ~~shale~~ <sup>shale</sup>, streaks of coal.  
~~stem fragment~~ <sup>stem fragment</sup> ~~shale~~ <sup>shale</sup>)
- 538-9 Interlaminated dark shaly siltstone  
and white ss.
- 539-9 Black shale.
- 542-4 Coal - (W. side).
- 546-7 Dark gray silty claystone, few  
calc. pellets in lower half.  
563 argillaceous siltstone and silty  
conglomerate, zones of limy pellets  
and argill. limestone thrust.  
572-6 argillaceous siltstone <sup>with</sup> siltstone (dark)  
zones argill ls + limy pellets thrust.  
574 Argillaceous ls.
- 578 Fragmental claystone, grading to  
" semiplut + siliceous plint.  
Light gray to brown gray, whole  
shot thru with waxy zones &  
stringers (Lith Bol #1 upper 1' Bol #2  
Lower 1')
- 586-6 Finely silty gray to green clay <sup>semiplut</sup>  
clay locally finely silty, calc.  
stringers and fine sand mixed  
in basal 1 ft.
- 589-4 Fragmental silty chystone, + argill. siltstone  
and fine ss. (Lithostrat.) as  
dark gray siltstone <sup>massive</sup> (Lith B-3)

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Full list



- 589-8  
605-0 Argillaceous limestone:  
Light to dark gray semiplastic clay  
very finely silty locally, minor calc.  
stringers. Base 4' includes claystones  
and fragmental claystones.  
(Lith. B-4.75 from lower 4')
- 611-10  
617-7 Silty & sandy gray claystone  
Sandstone some interbedded  
siltstone.
- 623-7 Dark gray to carb. <sup>silty</sup> shale - plant frags  
interbedded ss in upper 18"
- 626-11  
635-9 Coal.  
Dark, light gray silty claystone  
2 feet of fragmental semiplastic  
clay at base (Lith H-1)
- 650-10 interbedded siltstone and sandstone  
minor clay shale in middle part
- 651-2 Carbonaceous shaly clay
- 656-11 Dark gray clayey siltstone; plant  
rootlets in upper part, ironstone  
in basal foot.
- 656-9 Dark gray clay shale grading to  
brownish semiplastic, finely  
silty.
- 668 Finely interbedded to interlaminate  
gray to black silty shale and light  
sandstone
- 670-2 Dark gray shale.
- 671-0 Coal + bone.
- 677-4 Carbonaceous to dark gray clay shale.

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~~and shaly clay~~ with plant rootlets  
throughout,

679-4

Coal

680-7

Dark gray silty claystone, plant  
rootlets

681-7

Fragmental <sup>fragments</sup> pyritic claystone & (Lith) LA-1  
siliceous flint clay

682-8

Silty claystone, brownish gray

693

interbedded siltstone and fine  
sandstone

724-8

Med. grained sandstone & clay  
partings, small stylonites

727-4

Dark, interbedded gray siltstone  
and fine sandstone (174 zone of  
intermixed clay & coal flecks at  
725-2)

736-2

Med. to med + quartzite, stylonites  
sandstone

746-4

Dark, interbedded dark gray  
siltstone & fine sandstone.

748-4

Dark gray, semiplastic clay, coaly  
zone at top.

749-11

Coal

752-7

One loss - diller says bone.

758-7

Gray to dark gray silty claystone  
semiplastic clay, 3" of ss at  
base.

758-9

Bone (coaly)

763-10

Gray silty claystone & semiplastic  
clay - rootlet remains.

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- 766 Carb shale coaly streaks.  
~~interbedded dark shale and~~
- 769-6 Med gr ss, with wavy interbedded carb. streaks.
- 770 Coal <sup>to brownish gray</sup>
- 775-8 Gray claystone, ~~massive~~ silty, ~~to~~ <sup>grading to</sup> siltstone in lower 1 1/2'
- 785-4 interbedded siltstone and fine sandstone.
- 787-6 Dark to carb. claystone, 6" of dark ~~sub~~ <sup>total</sup> ~~fine~~ <sup>semi</sup> flint.
- 790-5 Dark to carb shaly claystone. 2<sup>nd</sup> coaly band at top.
- 792-2 Coal.
- 795-8 Dark argillaceous siltstone with plant rootlets grading to sandy siltstone
- 9  
~~795-8~~

Bottom.

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MINE <sup>Owner</sup> Operator

1	- Slope	Beachy #1	Meyers Coal Co.	Upper Freeport
2	- Crop	Bersky		UF
3	- Crop	Butler		
4	- "	Gumshoe		UF
5	- "	Old Patton	Yaddes	UF
6	- "	Bowman Hill		
7	- Slope	Bender & Beachy		UF
8	- Crop	Shaw (Patton)		UF
9	- "	Beachy		Brush Creek
10	- "	no info		" "
11	- Crop	Bill prospect		?
12	- Crop	Shaw mine		UF
13	- Crop	Opel		UF
14	- "			↳ Bakerstown
15	- "	Hockman		UF
16	- "	Stanton, Guy	Shenway Miller	LB
17	- "	McKenzie	John Hershey	UF
18	- "		Fred Yoder	BC
19	- "		Earl Stanton	UF
20	- "	Ridgely Mine		UF
21	- "	Old " "	Norman Baker	"
22	- "		Paul Kinsinger	UB
23	- "		" "	LB
24	- "	7 openings	Orville	LB
25	- "	Harry Broadwater	Fred Yoder	LB
26	- "	Tadpole	John Hershey	LB
27	- "	Broadwater	Stanton - Hoffmann	LB?
28	- "	Old Brenneman		LB
29	- "	Brenneman		LB

?

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Hole 22

- 07-18  
25-7 Dark gray, silty clay grading to shaly siltstone, sandy at base, (3' core loss)
- 28-6 Gray sandy shale, carbonaceous, pyritic at base.
- 29-5 Coal
- 44 1 Gray calcareous clay. becoming silty downward; zones siltstone in lower 4'.
- 78-6 Interbedded shaly siltstone and fine sandstone. x-lam.
- 97-2 Medium grained sandstone, coarse zones, gray to dark gray, coaly partings in middle part, carbonaceous at base
- 99-2 Calcareous silty clay.
- 104 Aquiliferous limestone.
- 123-0 Calcareous silty clay, inclusions of aquiliferous limestone.
- 135-2 Greenish gray and gray silty claystone & clay. Irony. nodules and streaks in upper part.
- 141-7 Interbedded siltstone and fine sandstone.
- 150-6 Gray silty clay shale, gray siltstone with carb. shale inclusions in basal foot
- 158-9 Silty semiplastic clay, grading to clayey siltstone
- 162-4 Silty gray clay, calcareous stringers

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- 183 Fine grained calcareous sandstone, siltstone interbedding in upper part.
- 191-4 Silty gray shale.
- 220-7 Black shale with marine fossils.
- 222-4 Coal.
- 248-0 ~~Irregularly interbedded~~ <sup>Chiefly</sup> limy gray clay & claystone with limestone pellets, zones of argillaceous limestone in upper part.
- 251 Mottled greenish gray & red shaley clay.
- 252-8 Dark gray to black shaley clay.
- 254-4 Silty green claystone.
- 257-6 Argillaceous limestone.
- 269-2 Greenish gray silty clay, limy pellets. in upper  $\frac{2}{3}$ .
- 273-6 Gray to dark gray semiplastic clay.
- 287-8 Greenish gray to gray shaley siltstone, limy zones in basal foot, minor shaley clay at top. (Sandy zone in middle part - *Salsburg?*)
- 290-5 Gray to black clay shale.
- 295 Gray shaley siltstone, limy & pyritic zones.
- 296-5 Black, pyritic silty claystone.
- 299-9 Coal - Upper Bakers town.
- 303 Irregularly interbedded sandy claystone and pyritic argillaceous limestone.
- 305 Black pyritic silty clay.
- 311-3 Silty clay & claystone, limy pellets & inclusions.
- 334-5 Gray and dark gray shaley siltstone, zones of silty claystone, 2' silty clay.

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30	c Jacob Kinsinger		LB
31	James Bittinger	Hampton, Butler	LB
32	Old Butler	" "	LB
33	New Butler	" "	LB
34	Harry Wildt		LB
35	Elyah Livengood	ACC	LB
36	Ray Bellmeyer	John Orr	LB
37	Everitt Platter		LB
38	Handwerk	Victor Mines	LB
39	Chris Fommers	" "	LB
40	Elmer Miller		LB
41	Butler Jess. Camp		BC
42	Morgan <sup>th</sup> # 1 (Louis) <small>non</small>	ACC	LB
43	Elmer Miller		LB
44	Harry Miller		LB ?
45	Morgan: UB		UB
46	Ross & Ambrose		LB
47	Hoover		LB

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- at. top.
- 336-9 Dark gray silty shale
- 338-7 Coal. Lower Bakerstown
- 346-4 Dark gray <sup>to gray</sup> silty clay. with 6" zone argillaceous limestone in middle part.
- 363 Gray silty shale, sandy in upper 4'.
- 373 Greenish gray + gray silty clay. (upper 1' dark, pyritic.) <sup>Fe</sup>suboxide pellets in lower part. (locally calc)
- 377-8 Red + green claystone, limy zone in middle part.
- 383-L Fine sandstone with zones. sandy siltstone
- 402 Interbedded shaly siltstone + fine sandstone. ~~Dark gray~~ siltstone in lower 2'
- 405-5 Black silty shale with calc nodules + marine fossils.
- 405-6 Coal
- 412 Gray silty clay, limy pellets
- 434 Greenish gray ~~shaly~~ siltstone, calc stringers. Sandstone 430-433
- 451 Gray shaly siltstone grading to dark gray silty shale
- 467-11 Black shale, with calc nodules + marine fossils
- 469-4½ Coal. Brush Creek.
- 485 Silty gray + dark gray clay + claystone with calc pellets + zones argillaceous limestone.
- 499 Gray silty claystone and siltstone <sup>zone</sup> Sandstone 489 to 491.

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## Major stratigraphic trends in Castleman

### Conemaugh:

Presence of marine zone between  
Brush Creek and Lower Bakerstown.  
Occurs locally above Buffalo  
sandstone.

Development. —

Max. = Coal (thin) overlain by marine  
shale (fossils) and underlain  
by calcareous underclay.

A considerable thickening of the  
L.B. - B.C. interval accompanies the  
occurrence — also peripheral  
zone marked by

1. Increased L.B. - B.C. interval.

2. Limy clays of underclay type  
at about 60% 65' above B.C.

Further from holes with marine zone  
L.B. - B.C. interval decreases and  
red bed — often with calc.  
nodules, comes in at the horizon.

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Church property E end  
Altitude on coal.  
140 N.E., 80 W

More on Pig Shado  
60 N.E. 80 SW

July 11  
Town near Horseville.  
#1. two openings with 15 ft shale roof.  
Manganese shale - Harlow

July  
D&S in a logmat strip N 45 E. 40 W

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5 20  
14

- 506-6 Interbedded green siltstone with zones of calcareous sandstone.
- 509-6 ~~Interbedded~~ fragmental sandy claystone and silty clay.
- 529-8 Interbedded greenish gray siltstone + shaly siltstone, zones fine SS in upper half.
- 537-4 Gray silty claystone.
- 558-6 Green to gray siltstone and shaly siltstone minor silty claystone in upper part. Lower 4' with much interbedded fine SS.
- 567-4 Gray to dark gray shale.
- 569-4 Dark gray to black clay with numerous <sup>oily</sup> partings in upper part.
- 571-4 ~~Dark~~ shale.
- 577-9 Green, interbedded dark gray siltstone and white sandstone.
- 590-2 Dark gray shale, some sandy streaks.
- 594-6 Coal. Upper Freeport.
- 603-10 Argillaceous limestone + limey claystone.
- 607-10 Fragmental silty claystone.
- 617-0 Light to dark gray, tough, silty, semiplastic clay.
- 621-8 Gray semiplastic clay, zones argillaceous, limaceous + ironstone concretionary.
- 631-2 Gray silty claystone passing to siltstone. Sandy zones in basal 2'.
- 652-10 Medium grained quartzitic, siltstone.

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limestone  
655-10 Coal - Upper Kittanning.  
660 Argillaceous limestone grading to  
limy chertstone.  
662 Gray siltstone.

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13.

April 10 - 1914  
3rd 1/2 mile  
small  
2  
Lodge

27.

10/14  
10-30



10-30  
10-30

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11

121

15

17

37

32-0

44

42

51

1/2 1/2

1/2

1/2

1/2

1/2

1/2

1/2

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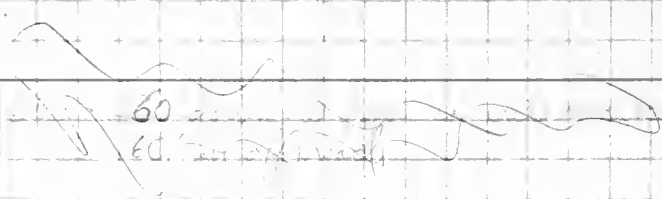
29

30

Handwritten notes in cursive script, including a large section of text starting with "The first part of the book..." and ending with "The second part of the book..."

1/2 1/2

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12/11/19

12/11/19

12/11/19  
12/11/19  
12/11/19  
12/11/19  
12/11/19  
12/11/19  
12/11/19  
12/11/19  
12/11/19  
12/11/19

12/11/19 present 12/11/19  
12/11/19 12/11/19

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direction of dip is ...  
 564) ~~24P~~ ~~→~~ Layer at base of ...  
 showing that ... Dip  $9^{\circ}$  ...  
 ...  
 ...

... ..

D $1$  N  $88^{\circ}$  E, T  $12^{\circ}$  W at SE cor  
 of ...

- ... ..
- ... ..
- SS corals
- 18" Coal

#10 ~~...~~ ...  
 3 ...



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Bowman Bros. shipping

Wash. or. limestone

Coal 18"

Burde: 1"

Coal 23-24"

~~Small pieces of limestone~~  
~~Small pieces of limestone~~

Meadow Mt. —

Altitude — shaly siltstones & ss  
17 lower cut - Morebeau Mine  
N. 28° E, 7° W.

" — In gutter 100' + E of entrance to  
Morebeau Mine, S side US 40  
N. 18° E 10-20° W

102 - 10

11

91 10

- 71-6 - 71-11 - Silty semihard clay
- 72-3 Fragmental claystone
- 72-7 Limestone-pyrite concretions
- 74-5 Dark gray and black, locally shaly  
semiplastic clay. Pyritic.
- 76-7 Argillaceous ls. (inclusions in matrix which  
becomes less limy downward).
- 80-9 Gray to black semiplastic clay  
limy nodules in upper part,  
shaly clay at base
- 84 Argillaceous limestone - interbedded  
clay & claystone in basal 2'

Hole # 26.	
0 - 27	Surface material.
34-10	Weathered clay & claystone, limy pellets in upper part.
39-9.	Greenish gray silty claystone <sup>grading to</sup> siltstone, limy stringers, and ironstone inclusions + stringers.
58	Interbedded greenish gray siltstone and silty shale. A few yrs. fine ss, some limy.
62-4	Interbedded gray shale and argillaceous limestone.
65-10	Irregularly interlamined gray and black shale, pyritic, coal streaks.
68-7 1/2	Coal, Upper Bakerstown.
71-6	Gray clay and claystone, limy nodules, 3" argillaceous limestone at top.
84	Interbedded gray + dark gray <sup>clay</sup> claystone and argillaceous limestone.
92.	Gray shaly claystone grading to shale, ironstone concs. in middle part.
108-6	Black shale, pyritic in lower part, ironstone concretions throughout.
110-3	Coal, lower Bakerstown.
115	Dark to light gray clay + claystone, <del>calcareous</del> <sup>limy</sup> pellets.
117-8	Silty claystone grading to siltstone.
121-11	Fine grained sandstone.
134.	Interbedded siltstone and fine sandstone, <del>some</del> <sup>some</sup> claystone in lower part.

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$$\begin{array}{r} 16^{\Delta} \\ 7-8 \\ \hline 171.8 \end{array}$$

144 0

6

24

152-8

Old tram - SS ledge, N 39° E, 12 W. may be xlam.

# 26 (cont)

- 135-8 Mottled gray semi-hard clay.
- 150-8 Mottled red, & green semiplastic clay, silty at base.
- 152-8 Green silty shaly claystone.
- 154-2 Argillaceous limestone.
- 171-8 Interbedded siltstone and fine sandstone.
- 172-6 Mottled gray and tan shaly clay (semi-hard to semiplastic as in 135-8) with scattered brackish or marine fossils.
- 179-9 Greenish semiplastic clay, large inclusions argillaceous limestone in upper 2'.
- 200-6 Fine grained sandstone - minor & ~~gray~~ interbedded siltstone, upper 3' calcareous.
- 226-1 Interbedded dark gray silty shale & siltstone and 1-2" zones white ss. in all but lower 6'. Plant fragments throughout.
- 245 Gray to black silty ~~shale~~<sup>shale</sup> & shale with marine fossils & lime-ironstone concretions. pyritic in lower 3'.
- 246-10 Coal - Brush Creek.
- 245-7 Gray silty claystone, locally finely fragmental.
- 255 Limey ~~mottled~~<sup>fragmental</sup> gray claystone with zone argillaceous limestone at top and base.
- 58-3
- ~~263-3~~ Gray finely silty semiplastic

53-16  
0-1  
-09 9

270-2 to 274-10 Gray mottled to fragmented  
~~claystone~~ <sup>finely silty</sup> semiplastic clay zones  
 fine red dirt pellets, lower 18"  
~~shaly claystone~~  
 to ~~276-2~~ ~~shaly claystone~~

279-5 Hard dense claystone  
 + fragmental claystone  
 shades of gray.

280-8 Silty gray clay shale  
 zone argillaceous ls  
 + ~~concretion~~ <sup>concretion</sup> comes in  
 upper 18"

286-10 Variegated zone of green  
 + gray claystone +  
 fragmental claystone.

[ 285 - green claystone zones  
 fragmental red green  
 gray + varicolored shaly  
 286-10 Dark gray mottled to  
 fragmental claystone

290 Silty greenish gray semiplastic l.  
 with calc. + concretion zones  
 + stringers



- 266-1 mottled to fragmental clay,  
Greenish gray silty claystone, minor  
semiplastic clay, zones & streaks.  
siltite.
269. Fine grained sandstone.
- 270-2 Shaley claystone,
290. Interbedded semiplastic clays and claystones,  
gray & green, zone fragmental zone, and  
minor zones argillaceous limestone.
- 293 Green shaley siltstone.
- 300-9. Mottled green red & gray semiplastic  
clay & claystone. Shaly fragmental
- 307-4 Greenish gray silty claystone grading  
to siltstone, limestone stringers,  
sandstone.
- 317-2 Interbedded siltstone & fine sandstone  
some shaley zones, shale.
- 323-4 Fine grained sandstone, minor zones  
shaly siltstone.
- 325 Intermixed gray claystone, sandstone  
- siltstone, 6" silty claystone at base.
- 330-6 Intermixed dark & light gray clay  
shale.
- 338-4 Gray claystone with stringers dark  
pyritic claystone & some intermixed sand <sup>(coaly frags)</sup>
- 340-10 Silty brownish gray claystone with  
zones fine ss, 2' fine argillaceous  
ss at top.
- 365-9 Finely interbedded to interlamination  
dark gray to black silty shale & white

426-14  
8-10  
418 4

∫

357-4  
7-6

~~357-4~~

7-6  
375-11  
382 17  
383-5

- fine grained ss. (344-4 carb. siltstone  
constr. + 346-2 to 346-8 carb. clay)
- 367-1 Pyritic carb. shale.
- 370-11½ Coal. UPPER FREEPORT
- 379-11 Argillaceous limestone (varies from  
limestone claystone w. small sh., some  
green sh. from clay.)
- 383-5 Fragmental thin claystone
- 387-6 Silty claystone grading to siltstone  
with zones fine sandstone.
393. Sapropelic clay, fragmental in upper  
w. grading to silty claystone
- 406 Irregularly interbedded siltstone,  
silty claystone & fine sandstone. (thin  
limestone, ironstone comes in lower part)
- 406-5 Dark gray to black claystone
- 408-5 Limestone
- 410-6 Fragmental claystone & limestone, ironstone  
concretions.
- 418-4 Dark gray silty claystone.
- 419-2 <sup>part</sup> Claystone, 2" ls at base
- 430-6 Interbedded fine ss. & <sup>dark</sup> siltstone
- 432-3 Dark gray to carbonaceous shale
- 435-4 Coal — UPPER KITTANNING
- 438 Argillaceous limestone.
- 439-10 Fragmental claystone & argillaceous limestone,  
ironstone inclusions at base
- 445 Gray siltstone & silty claystone.

$$\begin{array}{r}
 9 \quad 215 \\
 \hline
 3-2 \\
 11-11=0
 \end{array}$$

$$\begin{array}{r}
 8 \quad 1 \\
 \hline
 9 \quad 215 \\
 11-11=0
 \end{array}$$

Tom McKenzie - worked Boucher mines  
Ray Wilburn -

1 PM Sunday with Mr McKenzie

AMO 12-59

1. coal blossom - gray clay - coal. Hebs. - surficial  
2. Platey SS N48°E 10-15°E - may be x-bedded  
from here to 3 ss. platy to shaly.
3. Blossom - about as in 1. nothing in place  
On down hill vertical stuff. with considerable  
plastic clay ss. matrix.
4. On shale - N 36°E, 15°E  
Lies in crevices - has a tendency to grade  
dip.
5. Local gray sand underlain by 4 to 6' clay, locally  
fraz. with plant rootlets, then  
by dark gray silty clay.
6. E. shale - very little - about 3' thick in  
dip.
7. Light gray weathered soft clay - surficial
8. Leaky ss, N 2°E, 14°E may be x-bedded  
but clay underbedded siltstone + ss.
9. Smectonaceous clay in surficial clay -  
caliche rather than coal inclusion  
underlain downhill by  
10. Silty claystone + siltstone with

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plant fragments and ironstone  
concretions, - whole is red weathered

11 Coal smut in gutter, - includes flags & which  
becomes shaly, up hill to N then comes  
black shale.

Lawn mill wash - at (12) surficial clay with  
shale and mud in

(13) Surficial <sup>with</sup> clay <sup>(new)</sup> calc. sh. (coal sh.)

Postive

UFB Co. West Mt. Shipping #1

1 Ms coal & beds above from middle of  
strip (1/2 way into rd & over)

Then closing coal & clay - thinning as  
first - then 2 slots of entire  
section exposed.

557-5 - 532-8 Flint clay, slightly stony in spots

559-7 - Tan <sup>or grey</sup> semiplastic clay + claystone - Lucina Rom

~~Tan to grey~~  
b 42 claystone + semiflint clay.



# 256

- 535-7  
Lay. gray siltstone, plant rootlets,  
shaly in lower part
- 536-1  
Coal seam with interlamated sandstone  
Coal + bone.
- 536-4  
Silty claystone, irregular patches  
fine ss.
- 546-9  
Fine ss, grading to interbedded <sup>shaly</sup> siltstone  
and fine ss.
- 554-5  
Gray siltstone, zone coal shale +  
zone <sup>shaly</sup> siltstone in lower half.
- 557-3  
Coal + bone - Mainly <sup>shaly</sup> siltstone  
zone.
- 565-10  
Dark gray to black siltstone and fine  
fine ss
- 569-4  
Gray siltstone grades to gray shale  
Coal + bone
- 571-2  
Coal + bone
- 578-8  
Gray ~~siltstone~~ siltstone, plant rootlets  
~~zone~~ shaly in lower part
- ~~578-8~~  
586  
interbedded siltstone + fine ss
- 605-4  
Fol. <sup>shaly</sup> siltstone ss.
- 608-9  
Conglomeratic inclusions of coal, 606-6 to 608
- 631  
Med. grained siltstone ss. <sup>shaly</sup>  
coarse zones

K.M. Woods



Aug 12-46

1. Clay - with red streaks, probably  
with nearly vertical zones -  
at least an. conc. part. SS float  
showing on slopes on either side  
of rd. +

2. Pace traverse of Rd from fence corner  
at (2) conc. rd.  
From 13 to 21 - flat with sparse grass, crows  
(not walked)

Paces

- A 15. (2) Edge of fence to little field  
↓ Observed
- B 10 E to end of fence to road, flat to rd  
↓
- C 12 Between C & B Seepage in grassy flat  
surface of clay with SS pebbles in  
gutter coal blossom at (B+11)  
↓
- D 17 West of G. with no trees, white grass  
& yellow. some small logs.
- E 30 D to E no ground exposed in gutter  
SS float present + topsoil deep  
suggest ledge S
- N A to E is small deep
- F 19 E to F. No description. SS float but  
next air soil in gutter minor  
shows upper part. Below sandy  
silty clay (superficial + in last  
part weathered shells some in

KM Waade

- 8. A-E - Black shale
- G. ↓  
 F-G - Black shaly siltstone  
 and silty shale with plant remains  
 Attitudes N 26 E, 8 to 11°
- 26. ↓  
 Minor fault down to unit G  
 slates N 52 W, slight N dip.
- H. ↓  
 5. ↓  
 Interbedded, black silty sh + siltstone  
 + sand lenses up to several ft  
 thick. In lower G & P chiefly  
 ss. Some interbedded shaly siltstone  
 Attitudes dip siltstone. <sup>5° to 10° E</sup>  
 N 16 E, 6-10° E
- A. H. Tankhouse sh with coal thinning  
 streaks, in which the ss. contains  
 From H-I all ~~but 2~~ but in shaly  
 (2 ± 1 ft. covered)  
 Tuffaceous comes out of I. <sup>shaly</sup>  
 weathered shaly claystone + clay.  
 This seems a bit shaly sand  
 ss bed with pebbles in it  
 not coal locally
- I. ↓  
 7. ↓  
 J to J obscured, thin ss part.
- J. ↓  
 5. ↓  
 K. J-K - shaly siltstone +  
 silty claystone

KM 11000



K Gray to black silty loam - plant frags

↓ 20

L All shaly ss thin, vertically  
(unconformity?)

↓ 14

M - L to M fluvial ss 2 to 6" pebbles heavy  
but lower 3 ft may be block

↓

G Observed part - soft beds.

N.

13

O N to O, dark gray to black silty sh with  
plant fossils. All the pieces, weather  
pale. A. to be used with the clay part  
dark in color part of clay may be  
cluster units

↓ 8

At O - good coal bed

P

shaly and bluish in basal deep  
then shaly, Part drummed.

↓ 6

Observed part - patches bluish  
continuous.

Q

↓ 28

Observed. ~~thin~~ flint ss seems to

R

come in on upper 12 ft. <sup>not as thick</sup>  
R is at start of red & mottled.

not as thick

KM 10000



surface clays at 1

3-

Coal crop in gully shows overburden  
inclined, con. 15" coal. Prob. Harker,  
50' down stream on E bank old dig hole.

1

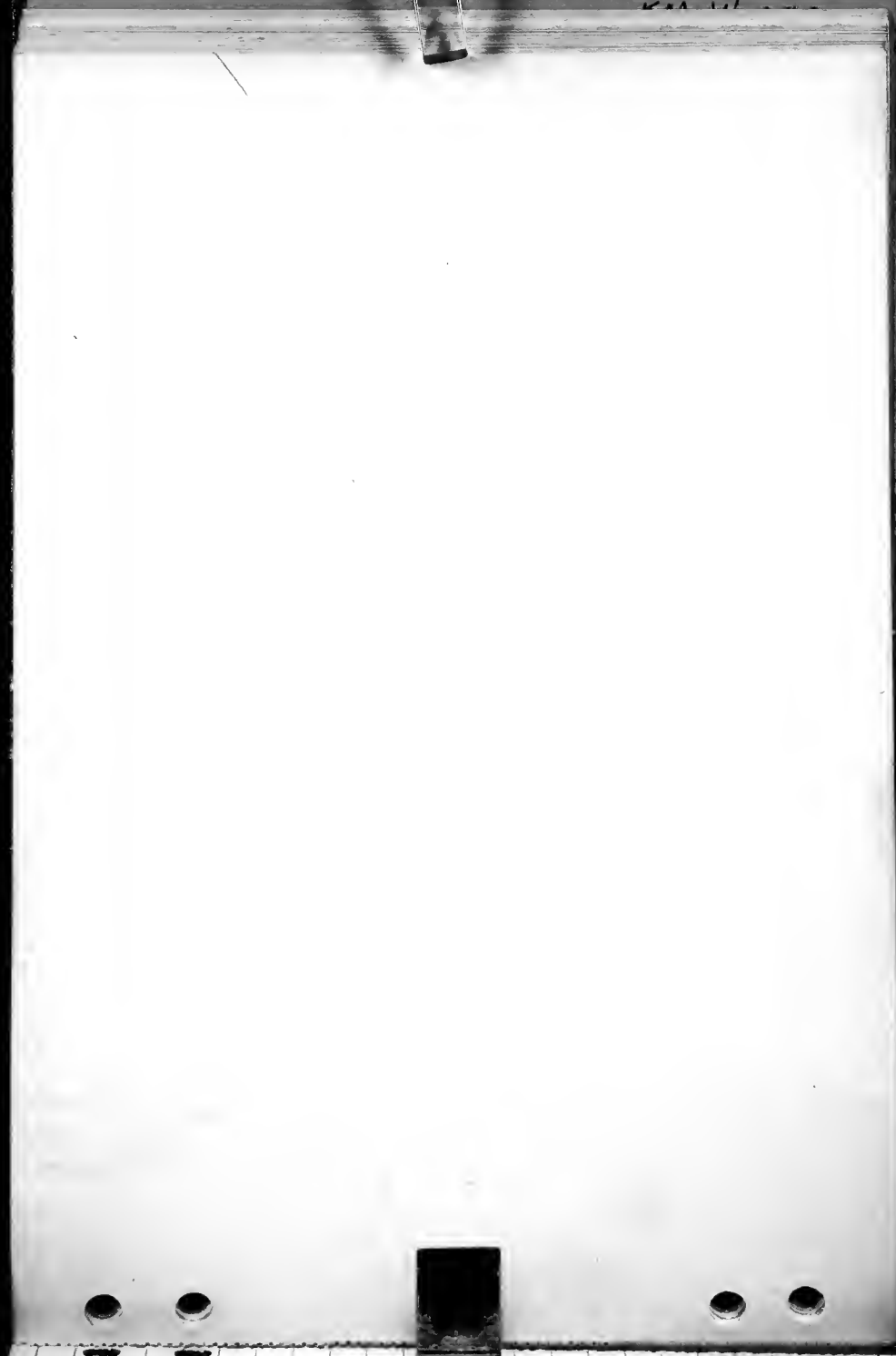
Old road towards N 30°  
Base of hill is in view.



moh

x

① Stone house wd. cut - <sup>11</sup>th level on silty sh + clay  
N 63°E, 7°W  
just below tuffation



AMO 12, 58

①

Dark shale over clay, ss float to N,  
weathered, no attitude - looks flat lying.

Same as  
22

Patry, Dunst Mine - 30' + coal at shale  
roof. Platy ss 25' above

✓ James P. Willey -  $\left. \begin{matrix} 25' \\ \text{split} \\ 1/2' \end{matrix} \right\}$

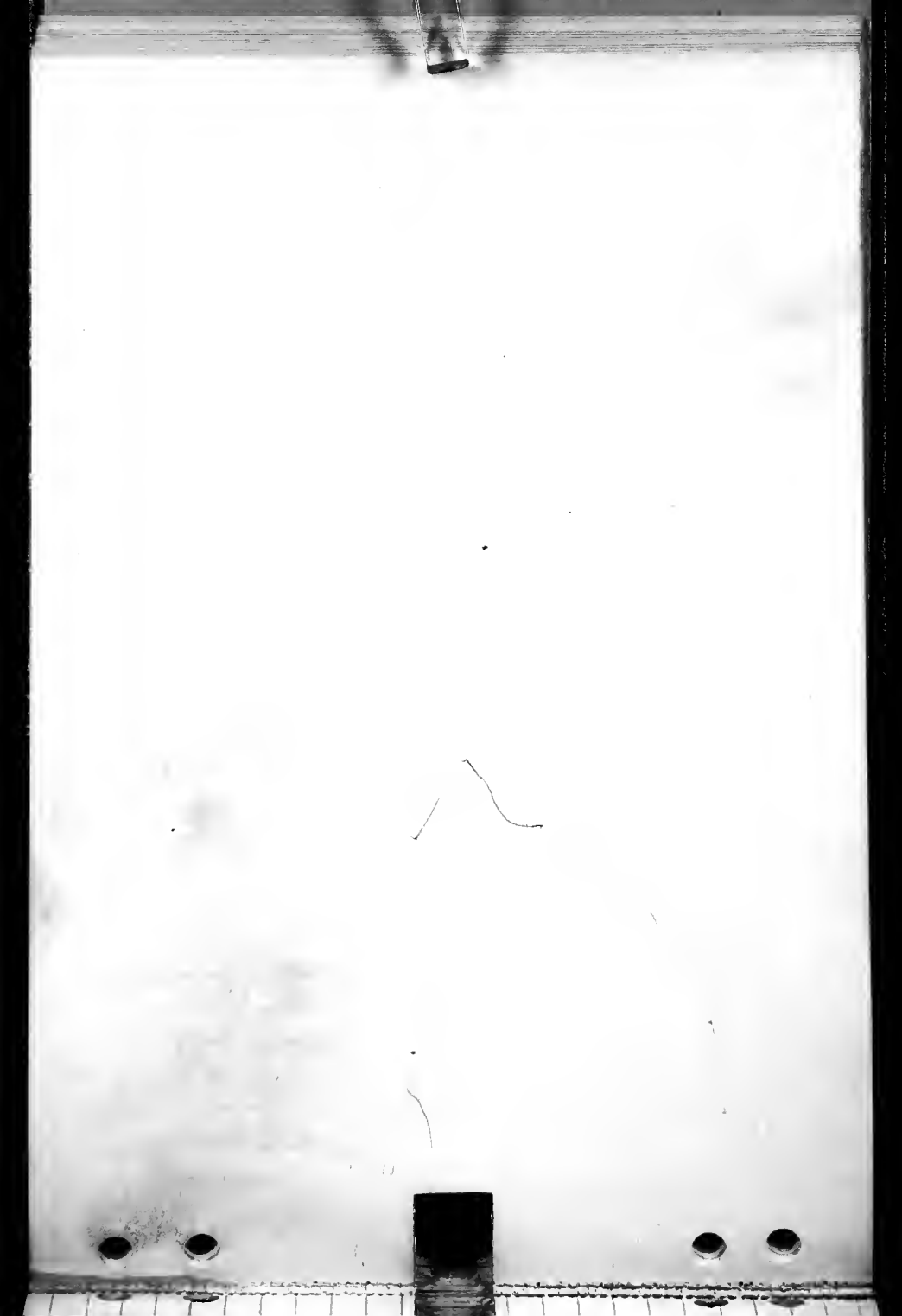
✓ Willey - 3ft up gild

✓ Clarence Reek approved it

<sup>Grant</sup>  
Mr. Willey - Salsburg road

✓ Mrs Hettrich

✓ S. 28 W. 7' - Amish rd in Salsburg  
above 3 houses, west of road



Ed Baker, Wagner, Eisel - About 200'  
about 38" coal.

Blue + white  
Blue Ridge Tunnel

Standard Time  
2:30

10:30

7

Leave C

Arrive B





Ashby's well - 46' deep.

5' flint

27''

Coal at 44'

5' flint

27' soapstone

44-46' coal

(3)

3' Surface  
 2' Soft cl.  
 3' Flint  
 6' Soft,

---

14 TD

(1)

4' Surf  
 5' Shals  
 4'6" Coal+Sh  
 6" Rastings  
 5' Soft fine clay  
 4'6" Flint  
 6'6" Soft Clay + ROM.

---

T.D. 30'

(2)

6'6" Surf  
 3'6" Soft Cl  
 6' Bl. sh.  
 6" SS  
 2'6" Coal + slate  
 2' Soft Cl  
 6" SS  
 4'6" Soft + Cl  
 14'6" Sandy clay  
 6" SS

---

41 TD.

(4)

2'6" Surface  
 1' Flint  
 6'6" Soft Cl.  
 1' Ore + flint  
 13' Run of Mine  
 7' Rock SS

---

31'

Morgart drilling U.F.B.Co

# Stat 1	N 39 30' E, 18.3	to	<del>Hole</del> 1
	N 68 30 W, 136.5	to	<del>Hole</del> 2 (VA 5-10)
	S 34 W, 108.7	To	Hole 3 (VA 7-10)
	S 19° 45 W, 76.4	to	hand hole. (VA 10°-50')
	S 10° 30 E, 191.7	to	crop,
	S 52° 30 E, 211.	"	"

Hole 3      S 64 30 W      211.0  
 → S 81 20 W      54.6      to #4

Hole 4      N 2 E      49.7      Hole 5

Hole 5      N 2 E      50      Hole 6

Hole 6      N 2 E      35.5      Hole 7

Hole 1      N 65 E      71      Hole 8

Hole #1 to Sta 1A      N 24-30 E, 174.8

1 to 2      S 67° E      234.9

1 to 3      N 5-20 W      144.3

3 to 4      N 0-30 E      200.9

4 to #2 <sup>Driller</sup>      N 85-30 E      158

2 to 5      N 73° 30 E      135.95

5 to 6      N 50 30 E      146

6 to 7      N 47 E      110.2

7 to 8      N 3 W      92.6

(5)

Surf. 3'  
 Coal & Slate 5'  
 Soft Clay 6'  
 Sandy Cl 2'  
 SS 1'  
 ROM 14'  


---

 31 TD.

(6)

Surf 4'6"  
 Boulders 1'  
 SS 1'  
 Coal 4'  
 Soft Cl 5'6"  
 Sandy cl 3'6"  
 SS 5'  


---

 TD 24'6"

(7)

Surf 6'  
 Sandst 2'6"  
 Coal 4'  
 Soft Cl 5'  
 SS 4'  


---

 TD 21'6"

(8)

4' Surf  
 4' Shale  
 1'6" SS  
 5' Coal & Slate  
 5' Soft Cl  
 1'6" Flint  
 2'6" Mixed flint  
 6' ROM  


---

 27' TD

(9)

Surf 1'7"  
 Coal & Sl 2'  
 Soft Cl. 7'  
 SS 6"  
 ROM 9'6"  


---

 TD 31'

(10)

Surf 6'  
 Dark Soft cl 4'6"  
 SS 6"  
 Light soft cl 4'6"  
 SS 6"  
 Soft Cl. 2'  
 Brown shale 7'  
 Coal & slate 6'  
 Soft Cl. 1'  
 Flint cl. 3'  
 Soft Cl. 4'  


---

 T.D. 39

8 to Hole 10	N 2 W	94.6.
Hole 10 to H. 11	S 70 E	100.9
H 11 to 9	E 3	77.8
9 to Sp	S 35 15 E	158.

Hole #4 to 10	S 2-30 W	110.3
10 to #9	N 88-45 W	369.



#6

Bottom

coal	2'9"	-	51-2
"	1'5"	-	181-3
"	4'10"	-	298-10
"	2'1"	-	363-4
"	1'2"	-	381-1
"	1'7"	-	386-2

Dark Sh. 18'10"

Hard clay 4'2" (409-2)

Iron ore 4"

Gray sandy sh. 13'6 (423)

Striped Blue-gray 1'1" (424-1)

Dark sandy sh. 20'8" (444-9)

Sandy sh, Strs ss 56'3" (501)

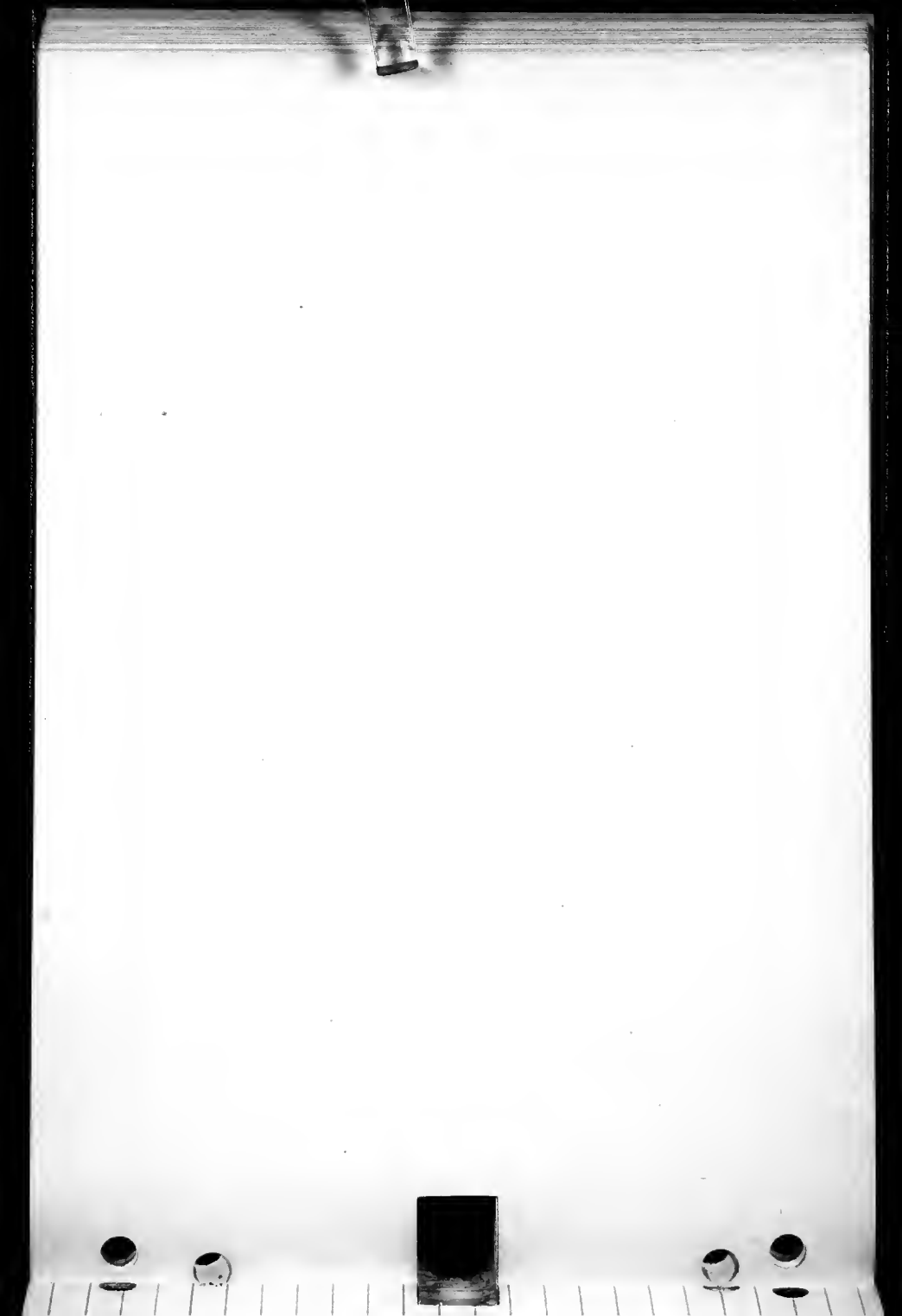
Cgl. — 4' (505)





200' Beyond face of old #1 Tunnel  
 2 mi NW Mt Savage near old Patty Collins farm.  
 TD

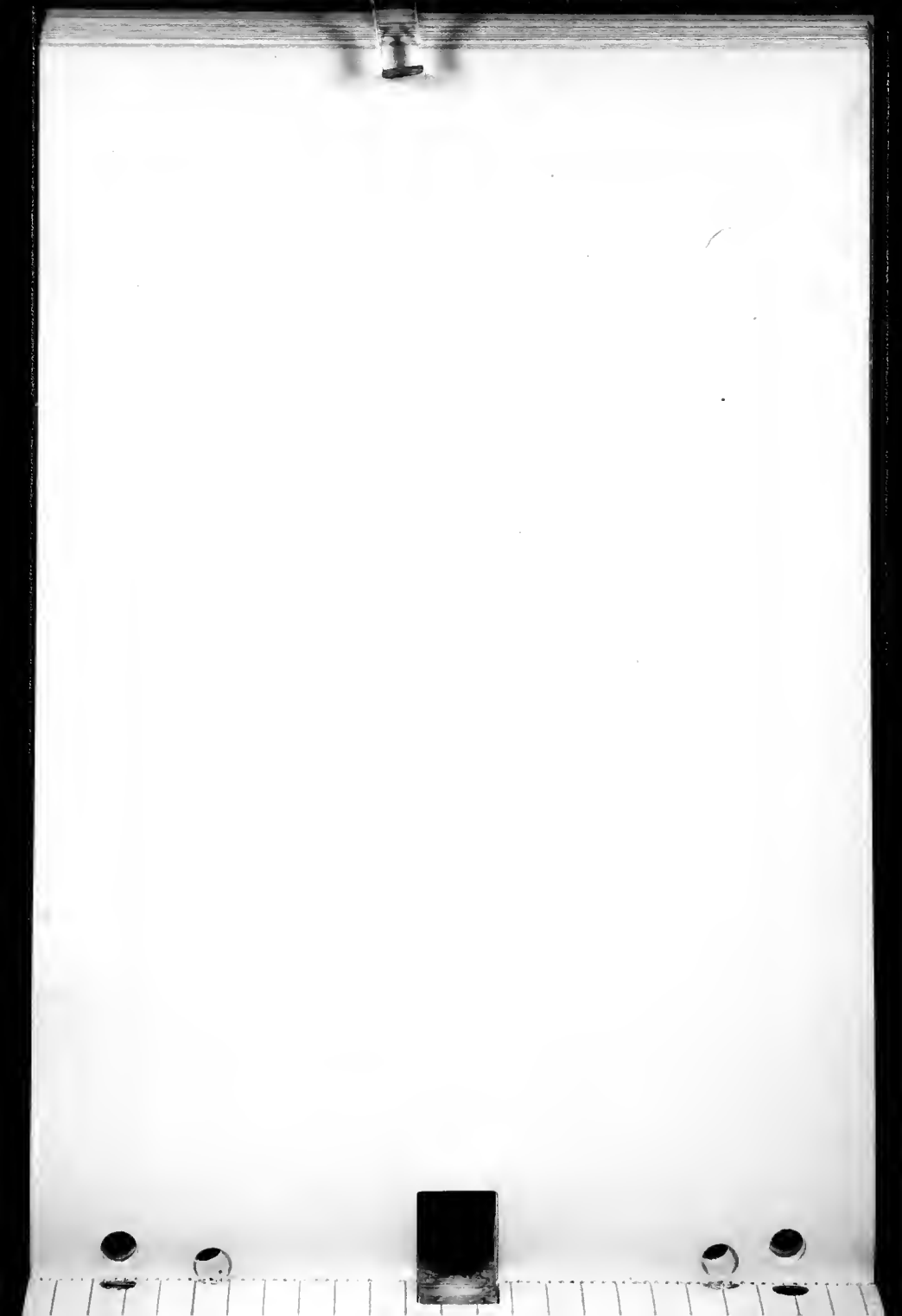
40	Surf.	
45	Broken ss	85
14	Wash	99
4	Sandy sh	103
2	Dark sh	105
-6	Coal	105-6
4	Rotten sh	109-6
5	Rough sft cl.	114-6
3-6	SS	118
4	Hard fire cl	122 (Cone 33)
5	Dk. shale	127
6	SS + sh	133
6	SS	139
9	Dk sh.	148
4	State + coal	152
7	Rough cl.	159
2	Boney coal	161
4	Rough sft cl	165
13	Sh. + sand.	178
34	SS (hard)	212
14-6	Dk. sand sh	231-6
1-6	Fire Cl. Soft mng	233
6	Fire Cl. Sft	239
14-6	SS	258-6
9-4	Dk ss sh	267-10
14-8	SS hard	282-6
2-6	Dk sh	285
3-6	Fired soft mng	288-6
2	Sandy sh	290-6
34-6	SS - med hd	345



3-10	Dk gray sh	348-10
3	SS Havel	351-10
4-2	Dk gray sh	356
3-3	sand sh	359-3
12-2	SS	371-5
4-7	Dk sdy sh	376
16-4	" " "	392-4
4	Sndy sh	396-4
68-8	SS	465
15	Green sh	480
3	Red sh	483.

# 11  $\frac{1}{2}$  toward Pa line from where old plane crossed it. about 150 or 200' above RR.

6	Surface	6
1-6	Hard fire clay	7-6
141-6	Gray sh.	22
8	Gray sdy sh	30
41	(Havel) SS	71
9-4	Dk gray sh	80-4
1	Coal dirty	82
6"	Dk gray sh	82-6
13-6	Fire cl rough sft	96
6"	Havel Fire cl. good	96-6
11"	Rough soft fire cl.	97-5
17' 7"	SS coarse sh	115
18-6	SS. hd	133-6
4-8	Dk sdy sh	138-2



1-8	Soapstone	139-10
3-2	Dk sandy sh	143
1	fine cl soft	144
2	Gray rk	146
2-6	Dk sandy sh	148-6
12	Hard ss coal str	160-6
1-8	Dk gray sh	162-2
33-10	SS Hd	196
7-4	SS ash hd	203-4
15-8	SS med hd.	219
9"	coal	214-9
3"	Dk sand sh	220
5-3	Rough soft cl	225-3
5-7	Light sand sh	230-10
4-2	SS + sh	235
17-4	SS med.	252-4
10-6	Lt sandy sh	262-10
50-8	SS hd	313-6
21-7	Dk gr sh	335-1
11-5	Dk green sand sh	346-6
6	Red + green ch	352-6
3-6	Red sh	356

} SS



Johnson's Porcupine #21 for UMC  
on Mt Savage

14	Surface	14
8	SS	22
9	Snd sh	31
14	Dk gr sh	45
19	Lt snd sh	64
2	Sl + Coal	66
14-6	Dk gr sh	<del>80</del> -6
6	Fred rough	86-6
14-6	Lt sh.	101
3	SS	104
2-8	Dk gr sl	106-8
2	Sl + Coal	108-8
7	Fred soft	115-8
15-4	Lt shale	131
2	Sl + coal	133
12	Dk gr sh	145
13-3	Dk snd sh	158-3
29	SS hard	187-3
2-6	Dk gr sh	189-9
6"	Coal + Sl	190-3
6-4	Imp ls.	196-7
3-5	Lt gray sh	200
11-8	Fred clay hard	211-8
3-4	Dk snd sh	215
7	SS + sh	222



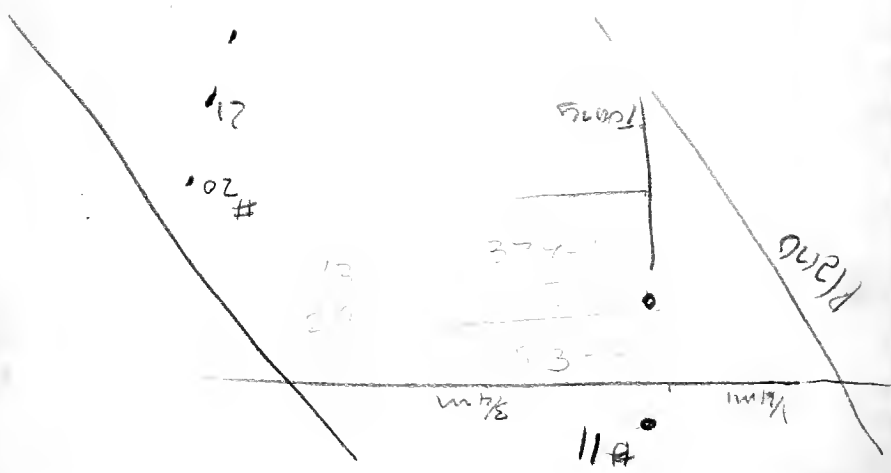


Big Savage Slip -

Coal  
 Soft clay — 3 or 4 ft  
 Sandstone — 2-3' <sup>siltsone</sup> some part shaly  
 Silty claystone — 4 to 6 + shaly  
 Soft Clay stone — 12' variable acts hard  
 Soft claystone — soft  
 (12' hard in rip on slip)  
 Plastic (some grade) — (at base soft)  
Basal

Coal  
 Sandstone — 2'  
 Bone — 3"  
 Sandstone — 7"  
 Coal — 2"  
 Bone — 5"  
 Coal — 20"  
 Soft clay

Over coal — 10-15' interbedded ss + silty  
 1-2' thin bedded ss



Mrs. Taylor's coat of arms

