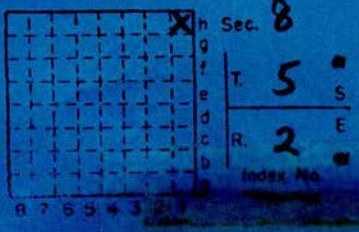
HERRIN

OLD BEN COAL CO.
MINE # 21

Mine Index No. 863 S-23



FRANKLIN COUNTY

Prepartion plant and surface works, main portal of Old Ben No. 21. Tipple of Old Ben No. 26 on skyline; view looking south. Photo by John Nelson, March 1981.

(Sheets) COAL PRODUCTION (Sheet)

OLD BEN COAL CO.
MINE NO. 21

Period Mo.	Day	Year	Tons		
1960	1	213	646		
1961	2	056	115		
1962	2	351	448		
1963	2	628	659		
1964	2	875	793		
1965	2	595	130		
1966	2	634	626		
1967	2	235	522		
1968	2	126	918		
1969	2	272	464		
1970	2	178	503		
1971	1	976	204		
1972	1	732	530		
1973	2	004	279		
1974	1	671	053		
1975	1	589	678		
1976	1	533	026		
1977	1	465	579		
1978	1	049	705		
1979	1	235	000		
1980	1	327	952		
1981	1	375	719		
1982	1	612	036		
1983	1	537	002		

SUMMARIES

No.	to	No.			
1960	thru	1983	45	278	587

Railroad, Wagon, Strip, Idle, Abandoned Shaft

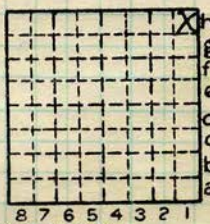
IDENTIFICATION

County No. _____ Coal No.

Coal Report No. S-23 ☐

Quad.

County Franklin



Sec. 8

T. 5 N. S.

R. 2 E.

Index No.

COAL MINE—PRODUCTION

ILLINOIS GEOLOGICAL SURVEY, URBANA

(2732—2M—7-41)

MOORE'S MODERN METHODS

(Sheets) COAL PRODUCTION (Sheet 2)

Period Mo.	Day	Year	Mo.	Day	Year	Tons		
OLD BEN C.C. MINE NO. 21								
		1984				1	180	984
		1985				1	364	990
		1986				1	302	303
		1987				1	473	009
		1988				1	714	960
		1989				1	155	305

Idle March '90 (coal week)

SUMMARIES

No. to No.

Railroad, Wagon, Strip, Idle, Abandoned

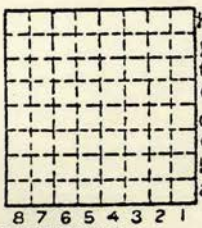
IDENTIFICATION

County No._____ Coal No. □ 6

Coal Report No. S-23

Quad.

County Franklin



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R. 2 E. W.

Index No.

COAL MINE—PRODUCTION

ILLINOIS GEOLOGICAL SURVEY, URBANA

(2732—2M—7-41)

ZEIGLER MAY MERGE MINES 21 AND 26; PLAN WOULD MINE LOW SULFUR RESERVES

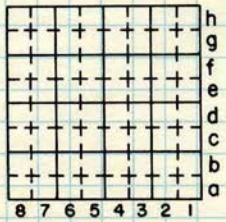
Zeigler Coal is considering a plan to "merge" its Old Ben No. 26 mine with the long-idled Old Ben No. 21 a few miles away to mine No. 21's lower-sulfur reserves without reopening the mine.

"If it happens, it will be in the next three or four months," Kenneth Dawes, a United Mine Workers of America subdistrict board member from Illinois, told *Coal Week*. A Zeigler spokesman confirmed the company has no plans to reopen No. 21 but remains interested in the mine's quality reserves.

Dawes said a company can merge two mines once one "has cut across into the other." In this case Old Ben would ship the No. 21 coal from No. 26's portal.

Merging the mines also could create a seniority headache for the UMWA, Dawes said. Some miners currently employed at No. 26 could be bumped in favor of laid-off No. 21 miners with more seniority with the company.

Coal Week, 12/5/94



By_____ Date_____

Quadrangle_____

County_____ Sec._____ T_____ R_____

Illinois Department of
Mines and Minerals
NEWS

FOR IMMEDIATE RELEASE
December 24, 1985

CONTACT: Sue Laue
217/782-4970

Old Ben Mine #21 mining permit issuance okayed

SPRINGFIELD, IL. -- December 24 -- An administrative review hearing officer has upheld the Illinois Department of Mines and Minerals' June 20 decision to issue a coal mining permit for Old Ben Coal Company's Mine #21, an underground, longwall mine.

The Department's decision was challenged by Old Ben and Jack and Stacie Phillips of Sesser, whose property has been undermined and subsided, raising a variety of issues.

Regarding Old Ben's challenge, the hearing officer affirmed permit findings that Old Ben is required to repair or compensate property owners for subsidence related damages to structures, in accordance with state regulations which require repair to both land and structures.

Speaking to an issue raised by the Phillipses, the decision stated that Illinois' 1980 surface mining and reclamation act gives coal operators the right to mine and subside where they have obtained legal authority.

Further, the hearing officer determined that Old Ben has obtained valid existing rights, or legal authority, to mine under the Phillips' property.

"I find that Old Ben has the right to enter, mine and subside the area beneath the Phillips' home. I also find that the Department has

a continuing duty to ensure that the mandatory damage mitigation measures . . . are fully implemented," the hearing officer stated.

According to the ruling, the Department's requirements for repair are no more stringent than the federal regulations upon which they are based, contrary to Old Ben's contention.

The hearing officer commended Old Ben for attempting subsidence damage prevention measures in the Phillips' case although not required to do so. He stated that the offer was rejected by the Phillipses.

He also said it appears the Department intends to assure Old Ben mitigates damages at the Phillips' property, quoting Department response to public comment: "the Department will utilize its enforcement power to ensure that any material damage caused the Phillipses by Old Ben's planned subsidence operation is mitigated."

In other issues raised by the Phillipses the hearing officer determined that Old Ben's subsidence control plan for subsided (shadow) areas meets Department regulations and that a reclamation plan is only required for the permit area.

Additionally, the hearing officer found Old Ben correctly listed buildings both inside and those outside the permit area which would be subsided, including the Phillips' property.

Further, it was determined that land will be capable of supporting pre-mining uses after mining, and that the Department may issue a permit containing conditions as in the case of Mine #21.

Lastly, the hearing officer found that the state act only gives the Department the option of suspending mining in urbanized areas where imminent danger exists, contrary to the Phillips' contention.

A formal administrative review hearing requested by the Phillipses was held July 23. Subsequently Old Ben requested administrative review of the Department's decision to issue a permit for Mine #21 and the

Chi Tribune July 18 - 1985

Dream home falling into coal mine

SESSER, Ill. [UPI]—Jack and Stacie Phillips and their four children spent Tuesday night in a motel because their $350,000 dream home south of town is sinking.

The Phillipses were unsuccessful in their efforts in court and before the Illinois Department of Mines and Minerals to stop Old Ben Coal Co. from using the longwall mining system in extracting coal 600 to 700 feet below their home.

Mrs. Phillips said cracks began appearing in their 2½-story, 12-room home on July 6, just four years after they moved in.

"You can stick your fist into one crack in the steel-reinforced basement and see daylight through it," Mrs. Phillips said.

Cracks have appeared in walls throughout the house, she said. One of two 60-foot chimneys is crumbling and the other is cracking, she said.

The 108-foot-long house has dropped about six inches on the east end, and the worst is yet to come, she said.

"An engineer has predicted it will drop two feet on the west end and five feet on the east end," she said.

"It's unbelievable," Mrs. Phillips said. "There are cracking, popping and ripping noises."

She said they had to abandon a building used in the grave-monument business they operated on their 80-acre farm.

Springs have developed along a creek that runs through the property because of the sinking.

Old Ben uses the longwall mining system that permits almost complete recovery of coal at its No. 21 mine near Sesser in Franklin County.

Old Ben, which employs about 2,000 miners, also has applied for longwall permits at three other mines it operates in the county. It says the system is more efficient and permits it to remain competitive in the coal business.

Old Ben is the only mining company in Illinois using the longwall technique, in contrast to the room-and-pillar system of mining, which leaves pillars of coal to support the roof.

Sinkage in room and pillar is more gradual, sometimes occurring years after a mine is abandoned.

Coal industry observers in Illinois say other mining companies are closely watching the outcome of the Phillips case.

The Phillipses and their attorney, Ivan Elliott Jr. of Carmi, contend that the mineral rights obtained by Old Ben around 1910 were based on the room-and-pillar system.

"They can say that it's legal for them to take that coal and disturb the surface, but I'll never believe it," Mrs. Phillips said.

The Phillipses were denied a temporary restraining order against the longwall system.

Elliott said a permanent injunction request hearing is pending, as is another administrative hearing next Tuesday in Springfield before the Department of Mines and Minerals.

Mine originally operated by: (1)

Date

imber:

p.

R OPERATORS

Operator

Name or No.

Coal suit threatens Old Ben economy

Kankakee
8-11
24 May 85

SESSER (AP) – Old Ben Coal Co. officials warn that at least 2,000 jobs and 10 percent of Illinois' coal production are threatened by a lawsuit by a family opposing longwall mining under their home.

"We won't be able to mine," Syd Robertson, company vice president for administration, said Tuesday after a media tour of the company's No. 26 mine.

Longwall mining is a highly efficient process that extracts coal from large tracks up to an eighth of a mile wide and one or two miles long. Many believe the technology may be the salvation of the underground mining industry.

Old Ben's mining practices have been challenged by Jack and Stacie Phillips, who are asking Franklin County Circuit Court to stop No. 21 mine from longwall mining under the couple's $350,000 house.

Judge Loren Lewis has said he plans to rule on the Phillips' request for a preliminary injunction by next week to block the digging.

company in Illinois, has invested $60 million since 1975 to install longwall equipment in their four Franklin County Mines.

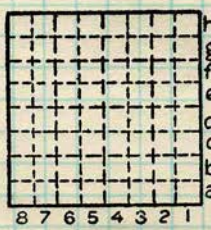
5-24-85
Kankakee

#See ownership sheet

Abandoned

Coal No.

☐



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Quad.

County

COAL MINE OPERATOR

(92753—1M—6-54)

2

W. Frankfort, Ill. American
Thursday, February 18, 1960

27

New Franklin County Mine

Old Ben Coal Co's new No. 21 mine near Sesser will start commercial production May 27, it was an nounced today by Old Ben officials, and will employ 500 men when maximum production is reached, ex- pected to be in September of this year. The mine, which will have a life of 35 to 40 years, is engineered o produce 15,000 tons of coal daily and the company is aiming for an average of 30 tons of coal per man hift.

FRANKLIN

mn-3a-002.18

Mine originally operated by: (1)

Date

Original name or number:

Illinois Coal Report p.

LATER OPERATORS

Couple plays another card in longwall mining battle

So. Ill. No. 5 Sh 6-26 p-10 1985

By Elizabeth Renshaw
Of The Southern Illinoisan

Longwall mining operations near Sesser could be called to a temporary halt if a Springfield hearing officer rules Friday to reconsider Old Ben Coal Co.'s mining permit.

Jack and Stacie Phillips, whose $350,000 home now is being undermined, are asking the Illinois Department of Mines and Minerals to revoke a permanent mining permit granted Old Ben last week.

A hearing officer will decide Friday whether the Phillipses have legitimate grounds to challenge the permit.

If the officer rules in favor of the couple's "temporary relief" request, the department could force Old Ben to stop mining until a full administrative hearing is held on the matter next month.

Syd Robertson, vice president for administration at Old Ben, said in May that the company could not mine coal in Southern Illinois if longwall operations are shut down at Mine No. 21.

However, Old Ben officials would not comment on the latest mining permit challenge, claiming company officials had not received copies of the permit mailed to its Kentucky headquarters last Thursday.

The modified permit, which IDMM has considered since June 1984, places additional conditions on Old Ben's longwall mining operation at Mine No. 21 beyond the state's 1983 regulations.

But the permit stops short of forcing Old Ben to explain why it cannot use other mining methods under the Phillipses' home, according to the couple's attorney. The longwall method causes immediate subsidence, unlike other methods, in which subsidence may be avoided.

"The department has the duty and responsibility to make Old Ben show why it must use this planned subsidence under (the Phillipses') house," said Ivan Elliot, a Carmi attorney representing the family.

Illinois mining regulations force coal companies to try to prevent structural damage from planned subsidence. Generally, IDMM has interpretated the provision as a coal company's obligation to attempt to support a structure directly above a longwall mining tract until ground subsidence is complete.

But Elliot is trying to prove preventing subsidence damage should include the coal company considering use of other mining techniques — such as the traditional room-and-pillar method — which do not cause instantaneous subsidence.

"Old Ben has shown in other instances it can employ other mining techniques that do not cause this extensive — and irreparable — damage, so why must it use the method here?" Elliot said.

Doug Downing, supervisor of the department's land reclamation division, said Tuesday he was not surprised by the Phillipses' request for an immediate hearing.

"This did not take us by surprise, especially considering the timing of mining in the area," Downing said.

Downing said that if the Phillipses can show they have a good chance of proving the department erred in issuing the permanent permit, the department has authority to force Old Ben to stop mining it No. 21 tract.

"The burden of proof is squarely on the Phillipses' shoulders," he said.

IDMM has never faced a "temporary relief" request on a major mining permit, Downing said.

"This is certainly a unique case and it would be impossible to speculate how an independent third party will decide," he said.

A Springfield attorney, not associated with the department, will be selected to preside over the hearing.

The permanent permit in question puts to rest — at least with the Mine No. 21 operation — a long-standing dispute between state regulators and the coal company over subsidence damage recovery.

The permit clearly states all damaged structures must be "restored, removed or repaired to the original state, without exception."

In the past, Old Ben has denied any legal responsibility to restore damages if the company purchased a "waiver of liability" to damage surface structures.

p sheet

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COAL MINE OPERATOR

(92753—1M—6-54) 2

JUL . 66

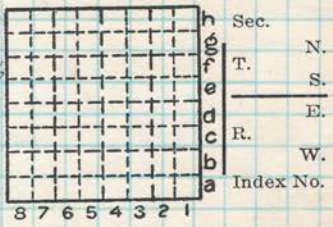
mn-3a-003.tif

Old Ben #21 Hoist for man and materials.

By F.N.M. & K.E.P. Date June 30, 1966

Quad..... Part.....

County.....



99 JUL

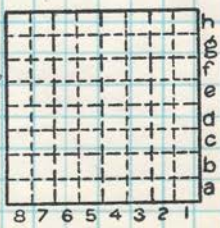
Old Ben #21 coal hoist.

mn-3A-004.e.8

By F.N.M. K.E.P. Date June 30, 1966

Quad. Part

County



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T. N. S.
R. E. W.
Index No.

(62920—3M—8-48) ILLINOIS GEOLOGICAL SURVEY, URBANA

Old Ben Coal Co. - Mine #21 - No. 6 Coal -

81 south off 5th west; 400' E., 1500' N., SW/c Sec. 1, T. 5 S., R. 1 E., Channel sample #3 - 29.8.67

6'5" of coal sampled
10' of coal

Measured from top down to -

Coal - normally bright banded, minor calcite on vertical fractures; ½" bony band at 8"; ¼" soft fusain at 9"	2'
Fusain ½"	
Coal - normally bright banded	3'
Fusain 1" soft	
Coal - normally bright banded, calcite in vertical fractures; 1/8" soft fusain approximately 1-2" apart	4'
Coal - bright banded but not as bright as in upper part; calcite in vertical fractures	5'5"
Shale - gray "Blue Band" omitted from sample - 2"	5'7"
Coal - normally bright banded, calcite in vertical fractures	6'5"

Old Ben Coal Co. - Mine #21 - No. 6 Coal -
Gluskoter, Mullaney, Christian

31 south off 5 east - 200' E., 600' N., SW/c Sec. 3,
T. 5 S., R. 2 E. - Face channel sample #1 - 29.8.67

6'2" of coal sampled - approximately
1' of coal left on top

Measured from top down to —

Coal - normally bright banded, calcite on vertical fractures; fusain, soft, less than 1/8" at 6" and 8½" and at bottom of section — 13"

Coal - normally bright banded, calcite on vertical fractures; ¼" fusain bands at 1'5", thin fusain lenses 1/8" at 9½", 21", 12½"; ¼" bony band at base — 24"

Coal - normally bright banded, minor calcite on vertical fractures; ¼" bony band at 39½" — 48"

Fusain soft with thin vitrain stringers — 49"

Coal - normally bright banded but not as bright as in upper 4'; 1/8" fusain soft at base — 58"

Shale - gray "Blue Band" omitted from sample — 59"

Coal - normally bright banded, calcite and some minor pyrite on vertical fractures — 74"

Old Ben C.C. ✓ No. 6 Coal

Mine #21

31 South 07E5 EAST

200' E, 660'N SW Cor Sec 13 T6S, R2E

29.8.67

F.C. Sample #1

Gluskoter, Mullaney Christian

6'2" of Coal Sampled

Aprox. 1' of coal left on Top.

	Top	Bottom
Coal, N.B.B., Calcite on vertical fractures; fusain, soft less than 1/8" at 6" and 8½" and at bottom of section		13"
Coal N.B.B. calcite on vertical fractures; 1/4" fusain bands at 1', 1'5" thin fusain seams < 1/8" at 9½", 21, 12½", 1/4" bony band at base		24"
Coal, N.B.B. Minor calcite on vertical fractures 1/4" bony band at 39¼"		48"

fusain soft with thin vitrain stringers 49"

Coal, NBB but NOT as bright as in upper 4'1 1/8" fusain soft at base, 58"

Shale, grey "blue-band", 59"

Coal NBB, calcite and some minor pyrite on vertical fracture 74"

~~Remainder of seam~~

Omitted from sample

Old Ben Coal Co. - Mine #21 - No. 6 Coal -
Gluskoter, Mullaney, Christian

28 south off the 5th east - ~~600'~~ 650' W., 1000' N., SE/c of
Sec. 4, T. 5 S., R. 2 E., Face channel sample #2 - 29.8.67

6'7" of coal sampled - 1' of coal left on top - top of section bedding plane with pyrite	
Coal - normally bright banded, calcite and minor pyrite on vertical fractures, soft fusain 1/8" at 4 3/4"	Measured from top down to -
Thin pyrite stringer 1/8" thick at base	9"
Coal - normally bright banded, calcite and minor pyrite on vertical fractures; soft thin fusain at 1'4" and 1'8"; ½" bony band at base	22"
Coal - normally bright banded, calcite on vertical fractures	3'8"
Fusain, soft 1/8" thick	
Coal - normally bright banded, calcite and minor pyrite on vertical fractures	4'6"
Coal - bright banded, but not as bright as above; becomes duller downward to base	5'5"
Coal - normally bright banded, calcite on vertical fractures	5'10"
Coal, bony	5'10½"
Shale, gray "Blue Band" omitted from sample	6'
Coal - normally bright banded	6'7"

Old Ben No. 6 Coal

Mine # 21 — 28 South of the ~~27~~ 5th EAST

F chan # 2

29.8.67

Gluskoter, Mulberry, Christian

600'W, 1000'N, SE Cor Sec 4, T5S, R2E

6'7" of coal sampled

1' coal left on top

Top of section - bedding plane with pyrite

Coal NBB, calcite and minor pyrite on vertical fractures, soft fissain ½" at 4 3/4" — Bottom

thin pyrite stringer < 1/8" thick at base. — 9"

Coal NBB, calcite minor pyrite on vertical fractures soft thin fissain at 1'4" and 1'8" ½" bony band at base. — 22"

Coal NBB calcite on vertical fractures,	3'8"
fusain, soft 1/8" thick	
Coal NBB, calcite and minor pyrite on vertical fractures,	4'6"
Coal B right banded but not as bright as above; becomes duller downward to base.	5'5"
Coal NBB - calcite on vertical fractures.	5'10"
Coal, bony.	5'10½
Shale, grey "blue band"	6'
Coal NBB	6'7"

(blue band omitted from sample)

Strata	Thickness	Top	Bottom
Old Ben Coal Co. - Mine #21 Sample #1 - Gluskoter & Eyman Location: 25th N off 7 NW, 210'N in Room #6, 625'E, 1600'S NWc, Section 5-5S-2E. Approximately 7'8" Coal; 1' left at top.			
		From	To
Coal - normally bright banded, pyrite and calcite on vertical fracture; zone of thin mineralized fusain bands		5"	1'6"
Fusain hard, mineralized		1'6"	2'
Coal - normally bright banded, calcite on vertical fracture, (possibly some kaolonite at 4'5", coal predominantly dull with some thin vitrain bands (Durain?)		4'5"	4'11½"
Coal - normally bright banded, calcite on vertical fracture		4'11½"	5'6"
Gray shale (Blue Band) (Omitted from sample)		5'6½"	5'7½"
Coal - normally bright banded, calcite on vertical fracture		5'7½"	6'6"
Coal highly sheared, fractured, fracture filled with mineral matter, predominantly calcite coal dirtier downward		6'6"	Bottom

1-14-64

COUNTY

Page

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Old Ben Coal Co. - Mine #21; Sample #2			
Location: 25th S off 7NW, 200'W, 1625' N, Section 6-5S-2E			
6'9" Coal sampled; 1' top coal left (back 20' from face - top 9" sampled and included) C 13216			
Gray shale roof, very fossiliferous - approximately 1' at bottom not sampled.			
Description of top 9" - coal normally bright banded - much calcite and pyrite on vertical fractures.		1"	9"
Description of main sample -			
Coal normally bright banded, calcite and pyrite on vertical fractures, thin (1/16" or less) pyrite pods and stringers.		9"	1'½"
Fusain, soft		1'½"	1'1"
Coal, normally bright banded, calcite and pyrite on vertical fractures.			
1/4" fusain band at		2'9½"	2'9¾"
very thin (1/16" or less) pyrite bands at 3'½" and 3'1"		3'½"	4'
Coal becoming dirtier downward, predominately dull bands, calcite on vertical fractures.		4'	5'10"
Gray shale (Blue band) omitted from sample.		5'10"	6'
Coal - normally bright banded, calcite on vertical fractures.		6'	bottom

1-14-1964

COUNTY

Page ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Old Ben Coal Co. - Mine #21, Sample #3			
Location: Face 4 west, entry off main N. 1550'E, 2050'N, SWc, Sec. 6-5S-2E			
7' Coal; approximately 1'-18" left at bottom; 6" - 8" left on top.			
Face wet.			
Coal - normally bright banded, 1/8" fusain band, calcite and pyrite on vertical fracture.		1"	1 1/8"
Thin (1/16" or less) pyrite stringers at 4½", 5", 5½", 6" hard fusain.		2'4¾"	2'5"
Coal - normally bright banded (as above) less pyrite and calcite on vertical fractures.		2'5"	4'1½"
Thin pyrite stringer at 4'1½"		4'1½"	4'5"
Coal with predominance of dull bands, vitrain not as abundant as above.		4'5"	6'1"
Gray shale (blue band) omitted from sample - 1¼"		6'1"	6'2¼"
Coal - normally bright banded, harder than above the blue band		6'2¼"	bottom (7')

COUNTY

Page ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Old Ben Coal Co. Sample # 1 Mine # 21 4-18-63 sampled by Smith & Sluskoter			
Location: +4515 5th west north 33'E, 2200'S, NW/c Sec. 5, T.5S., R.2E.			
86½" of coal exposed - at least 8" top coal left and at least a few inches at bottom.			
		From top in inches	down
Coal, normally bright banded, calcite and small amount of pyrite on cleat faces.		0	14
Fusain, mineralized, varies in thickness from 1/8-¼"		14	14¼
Coal, normally bright banded, calcite on cleat faces.		14¼	57½
Fusain, soft		57½	58
Coal, normally bright banded		58	75
Blue Band - hard gray shale		75	76
Coal, normally bright banded		76	86½
(Blue Band excluded from sample)			

COUNTY Franklin County Old Ben C. C.

Page ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Old Ben Coal Co. Sample # 2 Mine # 21 4-18-63 Sampled by Smith & Gluskoter			
Location: +815 19th N, 5th West South 300'E, 1000'S, NW/c, Sec. 8, T.5S.,R.2E.			
84" of coal exposed - probably 1 foot or more left at top and also some at bottom.			
		From top down inches	
Coal, normally bright banded, with moderate amounts of calcite and pyrite on cleat faces		0	14½
Dull band		14½	15
Coal, normally bright banded		15	18½
Dull Band		18½	19½
Coal, Normally bright banded, calcite and pyrite on cleats		19½	41½
Fusain, soft		41½	42½
Coal, normally bright banded		42½	49 3/4
Fusain, soft		49 3/4	50½
Coal, normally bright banded		50½	72
Blue band, gray, hard, with thin vitrain bands, extremely carbonaceous		72	73
Coal, normally bright banded (Blue band excluded from sample)		73	84

COUNTY Franklin \Counyty Old Ben C. C.

Page ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Old Ben Coal Co. Sample # 3 Mine # 21 4-18-63 Sampled by Smith & Gluskoter			
Location: +970, 28th south 5th west south 3300'S, 100' W, NE/c, Sec 7. T.5S.,R.2E., 85" of coal exposed - some left at top and bottom.			
		From top down inches	
Coal, normally bright banded, calcite and pyrite on cleats, occasional dull bands up to ½" thick		0	42½
fusain, discontinuous		42½	43
Coal, normally bright banded		43	52 3/4
Fusain band - up to 3/4" in places		52 3/4	53
Coal, with abundant durain, much duller than above		53	76
Blue Band - shale hard, more typical shall blue band than at Sample # 2.		76	77½
Coal, normally bright banded		77½	85
(Blue Band excluded from sample)			

COUNTY Franklin County Old Ben C. C.

John C. Moore Corporation, Rochester, N.Y. 14604
FORM 180 W

Notes of visit by M.E. Hopkins and Fred N. Murray to northwestern part of Old Ben Mine No. 21, to observe split coal, channels, and related features; March 1, 1966.

Maps of the area in question are filed in the Confidential Room, cabinet 9, tube 5. Stations plotted on Map 9-5C. Locations of several stations were incorrectly stated in the notes. The following are corrected locations:

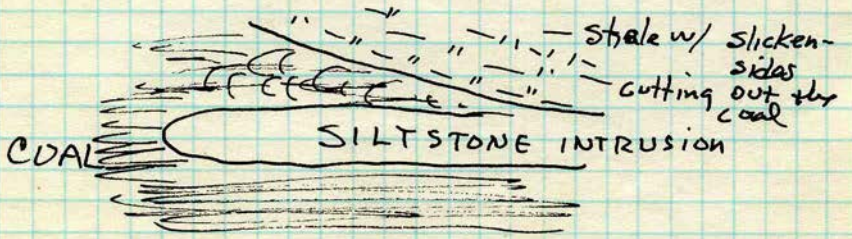
Station A- SW¼ NW¼ Section 1, not SW¼ NE¼.
Station B- SW¼ NW¼ Section 1, not SW¼ NE¼.
Station C- Legal description is correct, but this is not the 85th North as plotted on Old Ben's more recent mine maps.
Station D- Correct.
Station E- This is not the 81st North. Legal description should read 510 feet from west line, not 510 feet from east line.
Station F- Not 82nd North; 450 feet from west line.
Station G- Not 83rd North; 340 feet from west line.
Station H- Legal description should read 590 feet from south line, not 50 feet from south line.
Stations I through M- Correct.
Station N- Legal description should read 290 feet from south line, 1300 feet from west line (not 1300 feet from north line).
Station O- 1030 feet from west line, not from north line.

John Nelson
March 18, 1981.

Station A - west end of 6th West North
230' from S. line, 60' from W. line SW¼ NW¼
Sec. 1-5S-1E, Franklin County.

Fairly homogeneous siltstone with much finely disseminated carbonaceous detritus and also several relatively large plant fragments intrudes into coal on south side of entry, this intrusion is up to 2 feet thick and extends back about 20' from west terminus of entry (see picture).

At terminus of entry and on north wall, shale can be seen cutting down into coal removing at least 4' of coal. This appears to be a channel. The contact with the coal is fairly smooth and planar. It dips as high as 31° and obviously cuts out much of the coal. Much slickensides.



Sketch of South Face

Directions and amount of dip of lineation on slickensided surfaces:

N 66 W - 31°
N 67 W - 25°
N 69 W - 20°

(numerous more with this orientation)

Strike of contact of cut-out material with coal - 2 taken (1) S 24 W and (2) S 32 W.

M. E. Hopkins Fred Murray
MEH - FNM - March 1, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station A - west end of 6th West North
Old Ben Mine 21

North Wall (right) and west terminus (left) of entry showing shale cut-out extending into coal.

mn_3a_005.tif

MEH - FNM - March 1, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station A - west end of 6th West North
Old Ben Mine 21

Looking south into S. wall of entry. Intrusion of siltstone extending laterally back into coal. A cut-out is found just to the right of the picture.

mn_3a_006.tif

MEH - FNM - March 1, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station B - Old Ben Coal Company Mine 21
MEH - FNM - March 1, 1966
Section 1-5S-1E Franklin County

At end of 45° cross-cut which extends northwest off of 5th West North

SW-NW
SW NE

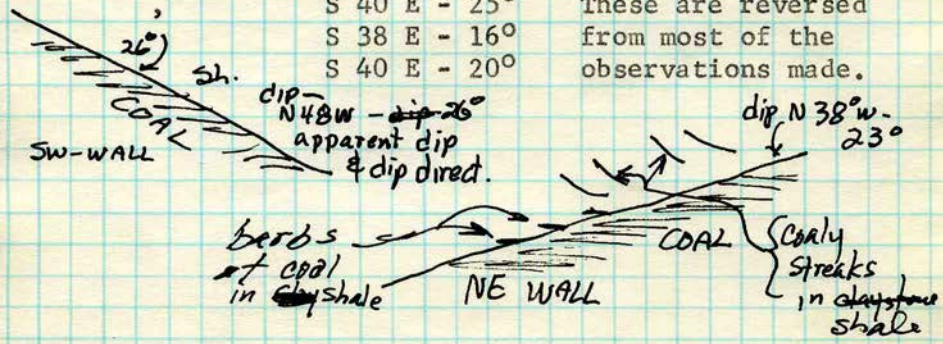
200' from S. line, 15' from West line
Sec. 1, 5S-1E, Franklin County

This cross-cut was stopped because of the cut-out. The "cut-out rock" is fairly homogeneous, micaceous siltstone with finely disseminated carbonaceous material, several coal stringers up to 1/4" thick along which may be slickensides. The lower 3'± of the siltstone is fairly homogenous and is lacking in slickensides and coal stringers. This homogenous portion wedges out laterally and appears to occupy the deeper part of the cut-out.

The cut-out is well exposed on the northeast and southwest wall. Lateral contact dips 23° on northeast side and 26° on southwest side. The trend of the cut-out is N 47° E with the contact dipping northwest.

The slickensides on the ceiling have their striations oriented:

S 40 E - 25°	These are reversed
S 38 E - 16°	from most of the
S 40 E - 20°	observations made.



MEH - FNM - March 1, 1966
Old Ben Coal Company, Mine 21
Franklin County 1-5S-1E

Station B cont'd

At this point at least 5' of underclay is exposed, below top 1½' there are numerous layers of nodular siderite, numerous rootlets in upper part.

Looking into northeast wall of 45° cross-cut. Shows close-up of margin of cut-out. Note small "barbs" of coal extending into siltstone. Knife at right center for scale.

mn-34-007.tif

MEH - FNM - March 1, 1966
Old Ben Coal Company, Mine 21
Franklin County 1-5S-1E

Station C (cross-cut) 85th North off of 5th West North (about 20 feet north of 5th W.N.) 185' from S. line, 80' from E. line SE NE, Sec. 2-5S-1E, Franklin County

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At face (north end of cross-cut) 25" of coal is under lain by underclay and overlain by fairly homogenerous siltstone with finely disseminated carbonaceous material. Some thin, slightly irregular light gray coarse siltstone lenses and laminae (about 20%) are horizontal, indicating very little deformation.

Contact of siltstone with coal is sharp, fairly planar, but with some gentle irregularities.

These holes were drilled horizontally into face, one 28' back. All of these were in siltstone all the way.

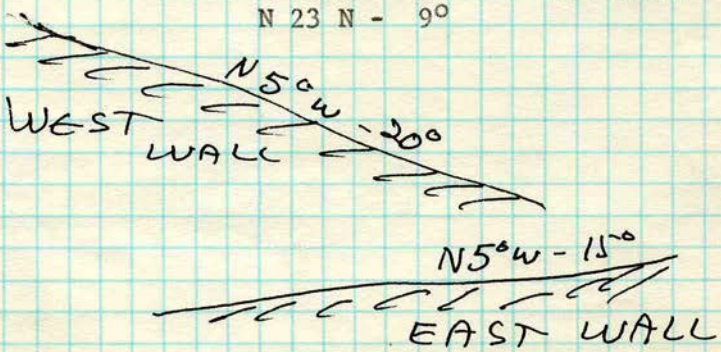
Trend of cut-out:

N 63 E
N 60E dip 17° N

Striations on slickenside dip:

N 30 W - 14°
N 25 W - 13°
N 26 W - 11°
N 23 N - 9°

these are all in siltstone in the roof.



MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 2-5S-1E

Station C (cross-cut) 85th North off of 5th West North (about 20 feet north of 5th W.N.) 185' from S. line, 80' from E. line SE NE, Sec. 2-5S-1E, Franklin County

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Photo of east wall showing sharp contact of coal and cut-out material. Pencil at right center gives scale.

mn_3a_006.tif

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County

2-5S-1E

Station C (cross-Cut) 85th North off of 5th West North (about 20 feet north of 5th W.N.) 185' from S. line, 80' from E. line, SE NE, Sec. 2-5S-1E, Franklin County

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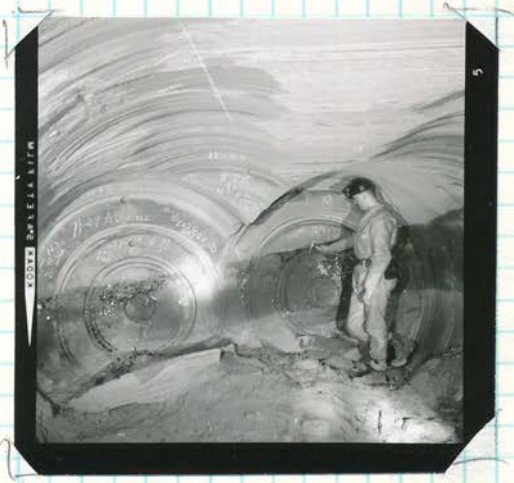

Station C - end of 85th north (off of 5th W.N.) showing only 25" of coal remaining.

mn-3a-009.tif

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 2-5S-1E

Station D
At west terminus of 4th West North, 110' from S line, 180' from E. line of SE NE, Sec. 2, 5S-1E, Franklin County

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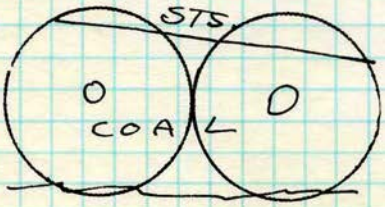
Water prevents close examination of face. Roof is siltstone with lenses and laminae of light gray coarse siltstone. Some deformation, few slickensides, few coal stringers.

Trend of cut-out - S 54 N, dip 13° N (poor measurement)

Striations on slickensided SW faces on roof dip:

N 48 W - 22°
N 47 W - 31°
N 74 W - 16°
N 48 W - 9°



WEST TERMINUS OF ENTRY

MEH - FNM - March 1, 1966
Old Ben Coal Company - Mine 21
Franklin County 2-5S-1E

Station D
At west terminus of 4th West North, 110' from S. line, 180' from E. line of SE NE, Sec. 2, 5S-1E, Franklin County

Station D - Western terminus of 4th W.N. showing siltstone cutting down into coal.

mn_39_010.67

MEH - FNM - March 1, 1966
Old Ben Coal Company - Mine 21
Franklin County 2-5S-1E

Station E
North face of 81st north off of 8th W.N., 450' from S. line, 510' from E. line, SW NW, Sec. 1-5S-1E, Franklin County

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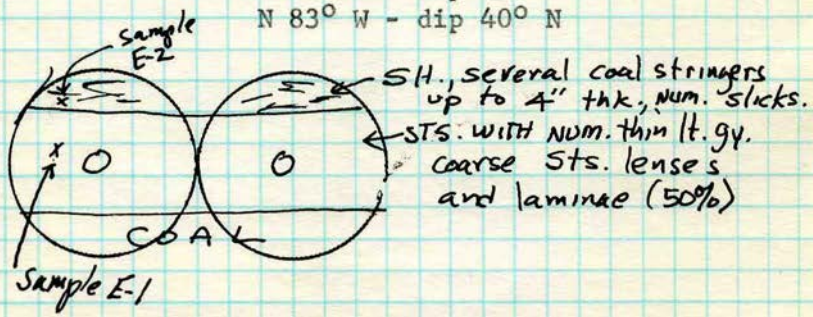
Coal is almost completely cut-out and replaced by shale and siltstone, base of channel-fill varies from planar to slightly irregular.

Trend of cut-out:

N 70° W - dip 34° N
N 83° W - dip 40° N

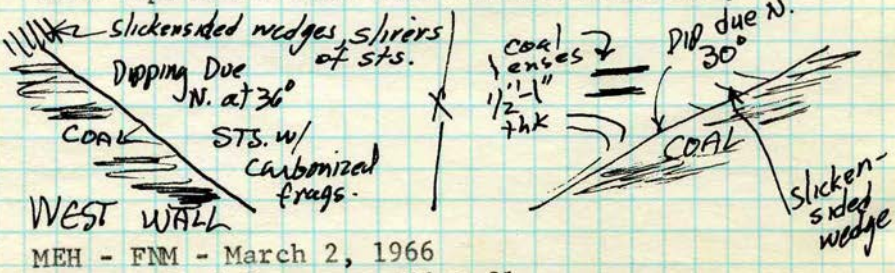


LOOKING N. INTO END OF ENTRY

Striations on slickensides dip:

N 17 E - 28°
N 4 E - 24°
N 12 E - 17°
N 1 E - 4°

Coal dips north down into cut-out about 15°.



MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County

1-5S-1E

Station E
North face of 81st north off of 8th W.N., 450' from S. line, 510' from E. line, SW NW, Sec. 1-5S-1E, Franklin County

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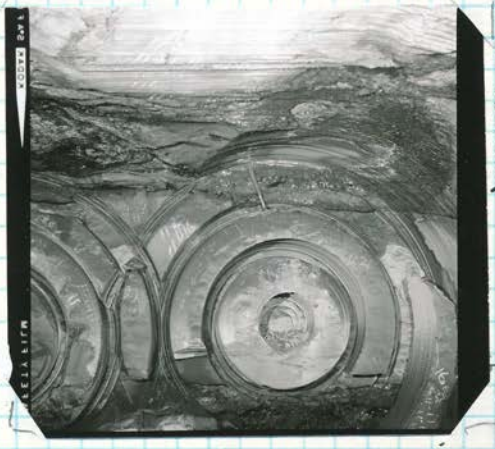
mn-39-010.6.5

SILTSTONE IN BOTTOM PART OF CUT-OUT

Station E - 81st N. off of 8th W.N. looking NW into end of entry and west wall showing cut-out margin.



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SHALE WITH COAL STRINGERS

SILTSTONE

COAL

Station E - terminus of 81st N. looking north into cut-out

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station F
82nd N. off of 8th W.N., 460' from S. line, 450' from E. line of SW NW, Sec. 1-5S-1E, Franklin County

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No rock in terminus of entry except for numerous shale stringers in top few inches of coal, some slickensides in roof shale, blue band 2½" about 2' above floor.

Striations on slickensides dip:

N 9 W - 50°	
N 14 E - 38°	in roof
N 19 W - 18°	
N 23 E - 53°	in coal

Coal dips north down into cut-out.

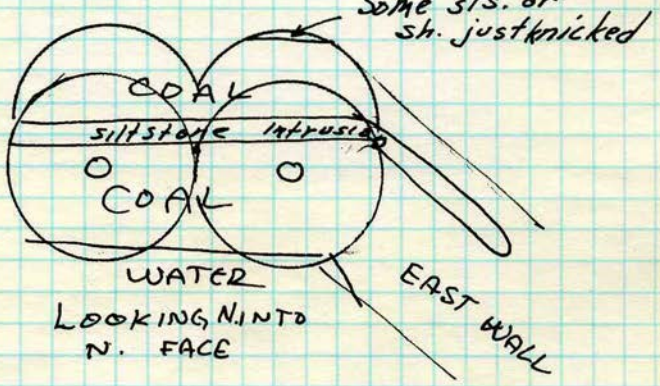
MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station G
At N. terminus of 83rd N. off of 8th W.N., 475' from S. line, 340' from E. line, SW NW, Sec. 1-5S-1E
Franklin County

Coal is dipping north as in 81st and 82nd, N. at 17° - dip increases northward from 15° to 18°.

On east wall is siltstone intrusion, relatively blunt ends about 6' from terminus of entry (picture).

There is no obvious cut-out in this entry but it is quire probable that the intrusion is some cut-out material squeezed back a few feet from the cut-out. Some rock at very top of the end of the entry, slightly nicked by the machine. This could be the cut-out.



Striations on slickensides dip:
N 21 E - 38°
N 15 E - 18°

Trend of siltstone intrusion edge:
N 69° W - dip 18° N
N 71° W - dip 17° N

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station G
At N. terminus of 83rd N. off of 8th W.N., 475' from S. line, 340' from E. line, SW NW, Sec. 1-5S-1E
Franklin County

End of 83rd N. off of 8th W.N. Shows terminus of the siltstone intrusion. mn-035-013.tif

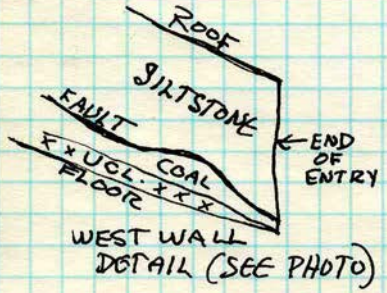
MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station H - at N. end of 74th N. off of 8th W.N. (this is part of 74th which was never holed through - about 20' separates this from the portion holed in from the north.) 50' from S. line, 1560' from W. line, SW NW, Sec. 1-5S-1E, Franklin County.

This is normal fault with downthrown side on north. Coal is dipping north for at least 100' to south - dip generally increases towards fault - from 6° to about 15°.

Hanging wall is fairly uniform siltstone which contains fairly evenly spaced horizontal, continuous light gray, very fine sandstone, laminae (about 10%) up to 1/4" thick.

End of entry is this siltstone with just a slight amount of coal at base.



Striations on slickensides dip:

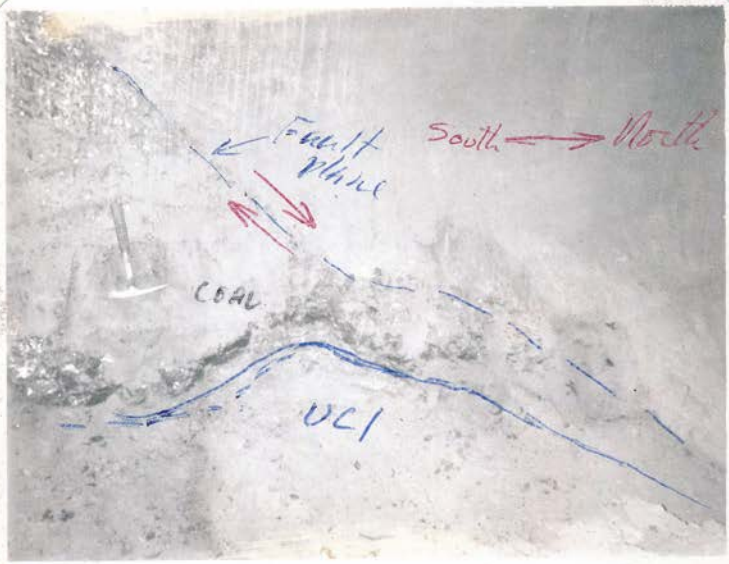
N 12 W - 32°
N 2 W - 35°
N 4 W - 25°
N 10 W - 35°

Fault plane strike N 89 W - dip 39° N

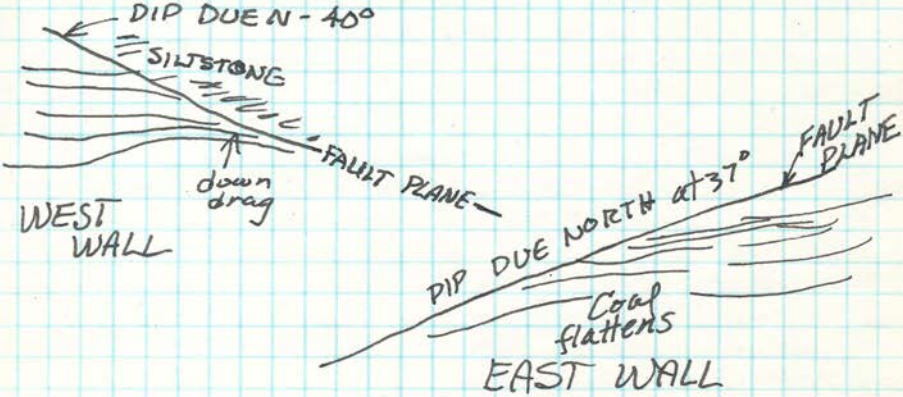
MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County

1-5S-1E

Station H - at N. end of 74th N. off of 8th W.N. 50' from S. line, 1560' from W. line, SW NW, Sec. 1-5S-1E, Franklin County.



View of West wall at fault. mn_039_014.tif



MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station I
On 75th N. (Belt Entry) off of 8th W.N. (160 feet N. of center line of 8th W.N.) 600' from S. line, 1500' from W. line, SW NW Sec. 1-5S-1E, Franklin County.

At this point the fault which was encountered in the 74th N. (60' to the east) was found.

Siltstone is faulted against the coal.

Striations on slickensides dip:
N 5 W at 29°

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station J
On 74th N. off of 8th W.N. (on N. side of portion of entry that was never holed through, about 15 to 20 feet north of Station H), 610' from S. line, 1560' from N. line, SW NW, Sec. 1, 5S-1E, Franklin County

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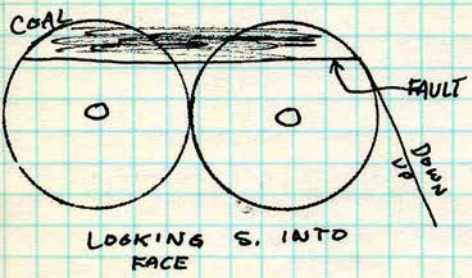
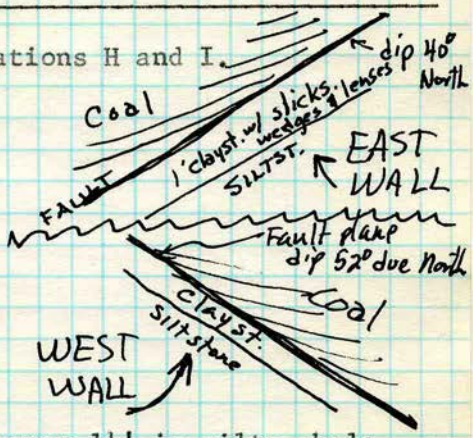
Same fault as seen at Stations H and I.





of rock below the coal, upper 1½' is silty shale with numerous slickensides (sample J-2)

Lower part is homogeneous gray siltstone (sample J-1)

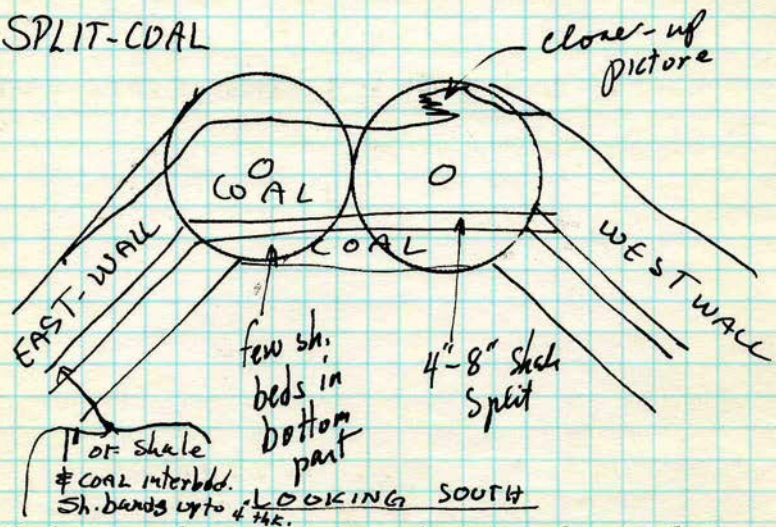
Striations on slickensides dip:
N 2 E - 61°
N 20 E - 72°
N 5 W - 50°
N 2 W - 60°

Fault Plant strikes:
S 87 W dip 51° N
S88 W dip 50° N

(on 76th N. entry, fault is found 160' N of center line of 8th W.N. indicating fault strikes essentially E-W)

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station K
South end of 73rd South off of 1st W.N., 430' from S. line, 1490' from W. line, SW SW, Sec. 1-5S-1E
Franklin County



Shale - coal contacts are in general not planar, there is much intertongueing.

Upper part of end of entry is silty, medium gray shale with generally horizontal but wavy coal beds, few discoid siderite nodules up to 8" across and 2½" thick, bedding in shale not well defined.

Striations on slickensides dip:

~~S 5 E - 48°~~
S 65 E - 48°
S 71 E - 36°
S 72 E - 39°
S 80 E - 34°

Trend on one of the shale tongues which feathers out into coal: N 42 E - dip 7° S

MEH - FNM - March 2, 1966
Odl Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station K
South end of 73rd South off of 1st W.N., 430' from S. line, 1490' from W. line, SW SW, Sec. 1-5S-1E
Franklin County

ma_03a-15.tif

Station K - south end of 73rd S. off of 1st W.N. - close up showing intimate intertonging of coal and shale (diameter of outside circular mark is 7')

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine #1
Franklin County 1-5S-1E

Station K
South end of 73rd South off of 1st W.N., 430' from S. line, 1490' from W. line, SW SW, Sec. 1-5S-1E
Franklin County

mn-03a_16.tif

Station K - showing shale splits in upper and lower parts of face.

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station L
S. end of 74th S. off of 1st. W.N., 400' from S. line, 1420' from W. line, SW SW, Sec. 1-5S-1E, Franklin County

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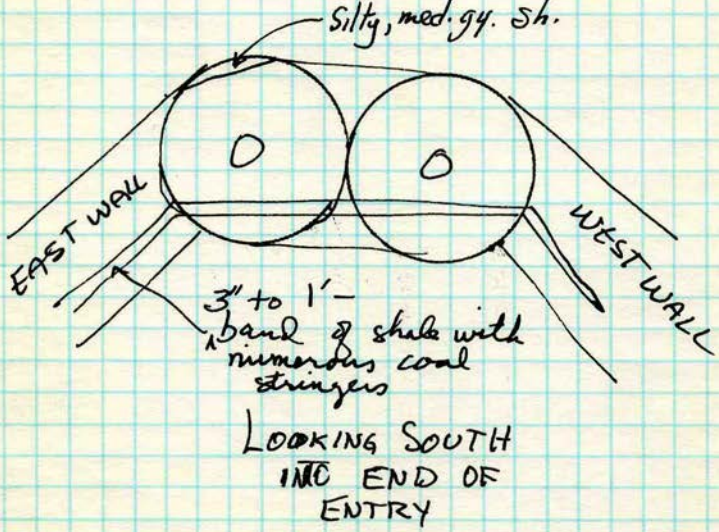
In split coal area

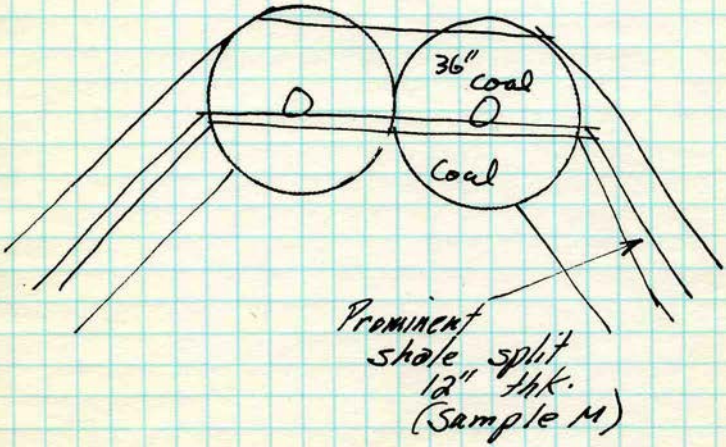


Striations on slickensides dip:
S 70 E at 11°
S 66 E at 18°
S 62 E at 21°
~~N 40 W - 20°~~ (this is reversed to most).

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station M
South end of 75th south off of 1st W.N., 315' from S. line, 1360' from W. line, SW SW, Sec. 1-5S-1E
Franklin County

Split coal area

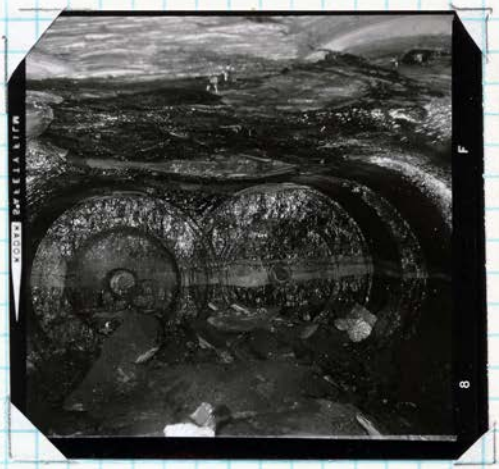


Roof has numerous slip fractures and stringers of coal.

Striations on slickensides dip:
S 32 E - 25°
S 33 E - 18°
S 89 W - 23°

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station M
South end of 75th south off of 1st W.N., 315' from S. line, 1360' from W. line, SW SW, Sec. 1-5S-1E
Franklin County



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S. end of 75th S. off of 1st W.N. - view of end of entry showing split in coal.

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station N
South end of 76th south off of 1st WN, 290' from S. line, 1300' from N. line, SW SW, Sec. 1-5S-1E, Franklin County

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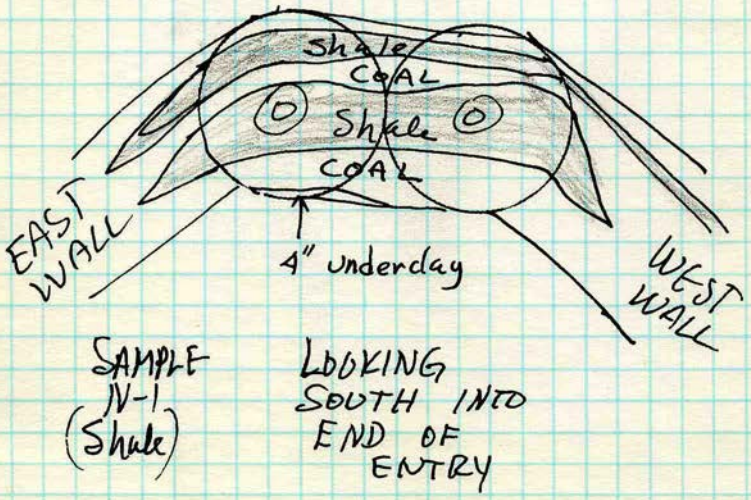
Face is badly split with several irregularities giving some impression of injection.



Apparent trend of the split is N 69 W (doubtful measurement)

MEH - FNM - March 2, 1966
Old Ben Coal Company - mine 21
Franklin County 1-5S-1E

Station N
South end of 76th south off of 1st WN, 290' from S. line, 1300' from N. line, SW SW, Sec. 1-5S-1E, Franklin County

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South end of 76th South - shows prominent shale split in coal.

MEH- FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station N
South end of 76 th south off of 1st WN, 290' from S. line, 1300' from W line, SW SW, Sec. 1-5S-1E, Franklin County

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South end of 76th South off of 1st W.N. - split coal area shows irregular interbedding of shale and coal.

MEH- FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station N
South end of 76th South off of 1st WN, 290' from S. line, 1300' from W. line, SW SW, Sec. 1-5S-1E, Franklin County

mh-39-020.tif

On West wall at South end of 76th South - Shale splits in coal, shale shows much interior deformation related to either injection or compaction.

MEH-FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station 0
West end of southernmost entry turned off of 76th South, 315' from S. line, 1030' from N. line, SW SW, Sec. 1-5S-1E Franklin County

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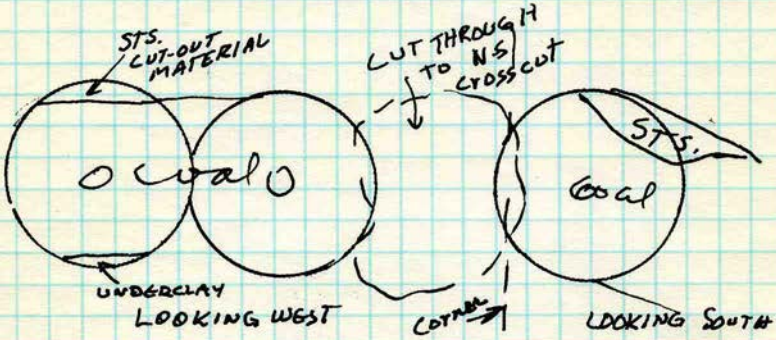

Coal dips west down into this face dip is about 10° for a distance 100 feet down to end (one place coal strikes S 55 E dip 10° S)

This does appear to be a cut-out just around corner on South end of N-S cross-cut more coal is cut-out.

On east wall of this N-S cross-cut there is 3'6" coal, 0'3" blue band, 2'4" coal below the siltstone.

Striations on slickensides dip:
S 50 W at 22°
S 46 W at 18°
S 50 W at 22°
S 45 W at 13°

Trend of cut-out - S 37 E dip 13° S

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station 0
West end of southernmost entry turned off of 76th South, 315' from S. line, 1030' from N. line, SW SW, Sec. 1-5S-1E, Franklin County

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mn-03a-coal-fs

Station 0 - west end of southernmost entry turned off of 76th S. Top part of coal is cut-out by siltstone.

MEH- FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

Station P
W. end of next to last east-west entry turned west off of the 76th S. 375' from S. line, 970' from W. line, SW SW, Sec. 1-5S-1E, Franklin County

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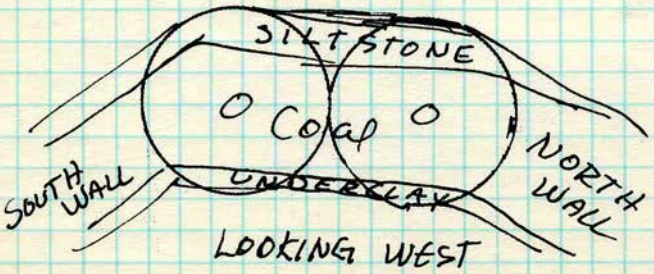
In siltstone cut-out area



In this entry coal is dipping to southwest - entry itself is inclined to the west at about 10° for 100' ±.

Trend of cut-out

N 55 W - dip 20° S

MEH - FNM - March 2, 1966
Old Ben Coal Company - Mine 21
Franklin County 1-5S-1E

CHICAGO, JULY 27, 1973--LAST NIGHT AT 6 35 P.M. 102 CARS ROLLED OUT OF CENTRALIA AS ICG BEGAN HAULING ITS FIRST EXPORT UNIT COAL TRAIN TO MEXICO. OLD BEN MINE NO. 21 SHIPPED 7,670 TONS OF COAL TO ALTOS HORNOS STEEL, MONCLOVA, IN THE MEXICAN STATE OF COAHUILA, VIA ICG-NEW ORLEANS-SP-EAGLE PASS-NDEM. ICG GENERAL MANAGER COAL JACK ANDREWS SAYS THERE IS MORE BUSINESS WHERE THIS CAME FROM IF ALL GOES WELL.

Old Ben Coal Company Mine # 21. Visit by Heinz Damberger 7/27/74. and H.-F. Krause

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mn-03A-022
Photo 1 4th North track 45° off 5th Main East off Main South.

Cleats in coal roof filled with pyrite, main trend is 70-75 and 25-30 subtrend (magn. N.)

mn-03A-023
Photo 2 Same location, same stuff, but more irregular main trend 65-70 (magn.) turning to 25-30 at edge of photo. 1 and 2 on map. Gray shale wedging out to appr. N, causing roof problems (slips, riders, etc.)

mn-03A-024
Photo 3 Roof fall, looking ESE, in 5th Main E. Main slip 90/30 N (to left of photo) other slip 110/62 S (to right in photo.) Bedding plane with plants: 035/18 SE (kind of rider taking off top of coal on S (left) side of photo

4) Faulty, mostly small faults with little or no displacement, some traceable over entry, others not, mostly dipping about west about 150 (true N) strike, normal displacement.

5) Shallow slips, causing small roof falls, before bolting, pinching out in coal more or less vertical.

6) Slip runs across entry.

7) 4' fault, connected with rider coal, possibly weakened spot sought out by fault. About ½' wide fault gouge.

mn-03A-025
8) Photo 4 Looking up into coal roof: pyrite filled cleats, main fault 115° bending to 150° (near pipes) (magn.)

9) Shallow slip crosses entry, but no fall, cutting down into coal (like "thunder bolt.")

10) 100-200' wide hill, up about 6-8', with a concentration of small slips, possibly producing hill, or at least related to it.

Toward east of this zone: several major slips in roof away from "hill". Don't show well in coal itself, but in small roof falls show major slips, about N-S.

11) Slips in roof, rather prominent in coal.

12) Several major slips cutting across entry, affecting roof and floor, one even predominantly floor. Western ? slip 130/69-75 NE (magn.) next about 15' east of above trends 130/65 NE. At least 3 to 4 more farther east within a 100-200' zone. No roof problems here. Several more same trend as we walk toward fault on map (see circled area.)

13) Rider taking off top of coal. Pinching out gray shale wedges causing roof falls at intersection (plus slips,) extending to next crosscut, where a fracture zone cuts across at approx. at right angle causing additional problems. Much split coal near top about 1-2' affected. Fault zone (up 2') and other faults about 20-30' wide, one one fault has actually (sic) displacement.

14) Almost circular roof fall with N-S fracturing (?) about 8' high, in gray shale. Several small slips in roof visible, but nothing major. Also a few thin "riders." Fall at top of small hill, drop of 3-4' to north.

15) Set of slips, trending about 115° (mag) across intersection; pretty rough roof.

16) Bunch of slips and faulty coal across room, roof a little rough. Trend 135/60 NE about over 10-20' wide. Another 150/75 NE and 160/80 SW.

17) Major slip in roof with reversed (?) 125/60 SW, shallow major: 105/20-25 NE, slip in roof causing fall.

18) Major slip, about 0.1' displacement to north, in coal (illegible) dipping to N. 125/70 NE generalized (?) small faults along fault line. Another fault about 11 ft. only 10' farther north.

19) Route intersection: many slips in roof, riders taking off, several cutting down in coal and causing rib rash trending 120 (magn.)

20) Underclay 65/30 NW and many slip planes, about 3' exposed (sic.) Slips trending 090/10 N, 010/20 E, 120/65 NE prominent, and 040/20 SE slickensided. Coal thins a little S of intersection, then thickens to N, also dipping S, much splitting and riders in top portion and lots of slips, even underclay seems affected and stringers of coal into underclay indicating slumping lots of irregular planes, contortions and (illegible; appears to be in German.)

21) Gray shale wedge, rider taking off coal to about 5' above coal, and irregular slips and roof falls. Top of coal drops to north about 3-5' over a distance of about 30 feet. Edge of wedge trends 65-70 .

22) Fault with little displacement, runs into bedding in roof to side of room. About 40' farther north normal fault about 1' displacement. North of 22 top is pretty good, only few slips.

23) Next split coal, going slow a little starting here but only rather small. (Heinz, you write English about as well as I can write Swahili.)

mn-03A-036

24) Much splitting and riders and slips, bad top again. Photo 5 wedge of gray shale with coal stringers, internal slumping indicated by chopped-up sideritic lenses and distorted bone coal looking west (sic.)

25) Coal thins to about 5'; riders above coal, but not too many slips.

mn-03A-037

26) Photo 6 Rider, slumped to left (north). Size of oval in left side about 10" by 4½" good slumping structures in shale.

27) Several major slips- fault about 1-2' displacement 040-050/55 NW major.

Photo 1 ↑ MN-039-0022

Photo 2 ↓ MN-039-0023

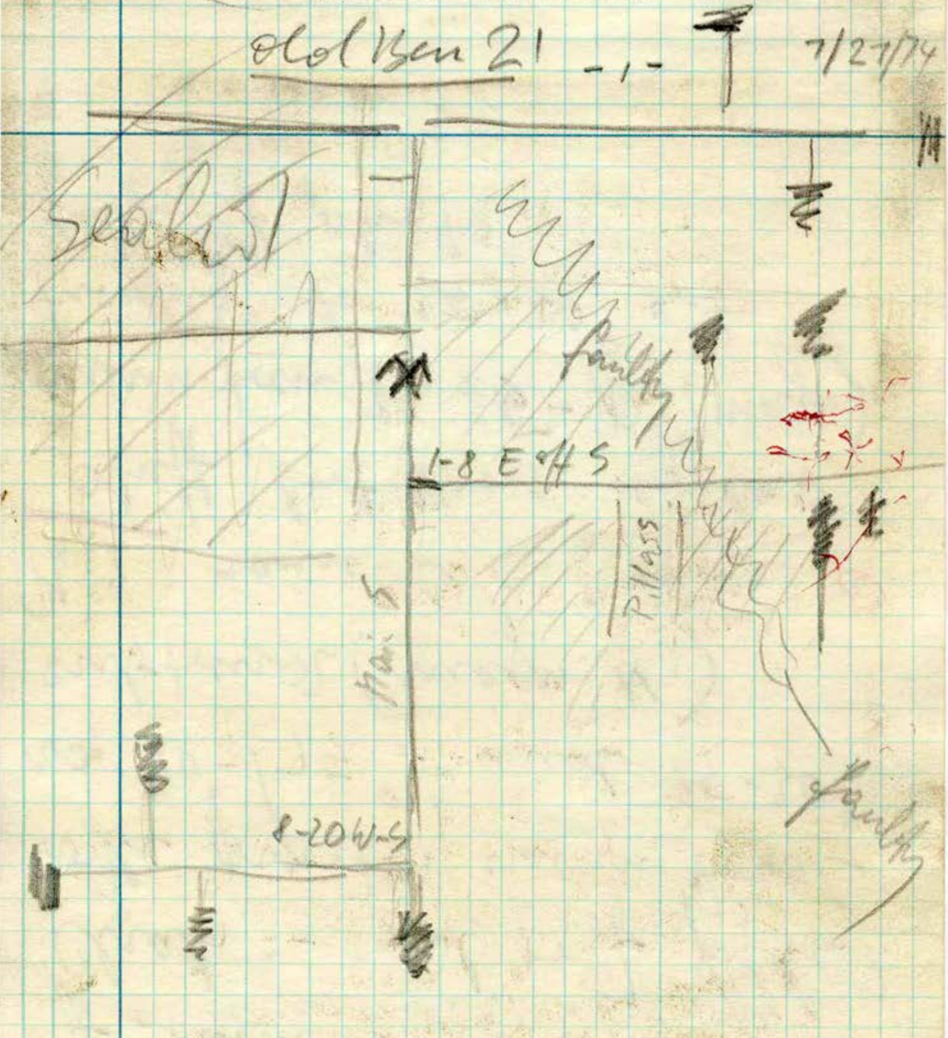
Photo 3 ↑ mn-038-02Y

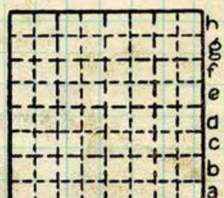
Photo 4 ↓ mn-03A-005

Photo 5 ↑ MA_039_036

Photo 6 ↓ MA_03A_027

Illinois State Geological Survey





By__________ Date__________

Quadrangle__________

County__________ Sec._____ T_____ R_____

Ph. 1 (= 17 of 18) (15) 4th North track 45° off 5th Main-E off Main S

Chats in coal roof filled with pyrite, main trend is 70-75° and 25-30° subtrend (magn. N.)

Ph. 2 same loc., same (16) stuff, but more regular main trend 65-70° (magn.) turning to 25-30° at edge of photo

① and ② in map: ~~[illegible]~~

gray shale wedging out to appr. N, causing roof problems (slips, riders etc)

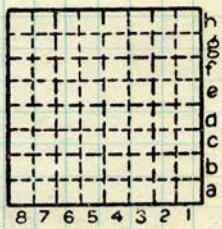
③ photo 3/ of roof fall, looking ESE, in 5th Main E (17)

Main Slip 30/1 90 (to left in photo)

offset 4 62°/1 110 (to right in 4)

bedding plane with plants: 35/18

(kind of rider taking off top of coal on S (left) side of photo



By _____ Date _____

Quadrangle _____

County _____ Sec. _____ T _____ R _____

(4) faulty, mostly small faults with little or no displacement some traceable over entry, others not worthy slipping ± W ~ 150° (true N) strike, normal displacement /

(5) shallow slips causing small roof falls, before bolting, pinching out in coal ± vertical

(6) slip  runs + across entry

(7) 4" fault, connected with richer coal → possibly weakest spot sought out by fault ~ 1/2' wide fault gouge

(18)

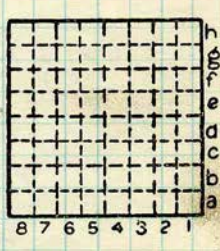
(8) photo 4: looking up onto coal roof: pyrite filled clats, maintains 115° (measurable) bending to 150° (near pipes) (magn)

(9) shallow slip across entry, but no fall, cutting down into coal (like "thunderbolt")

(10) 100-200' wide "hill", up about 6-8', with a concentration of small slips, possibly producing "hill", or at least related to it

By _____ Date _____

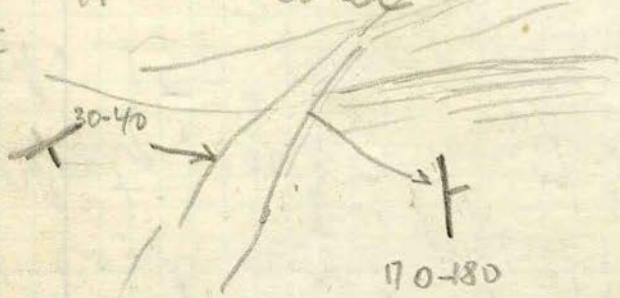
Quadrangle _____



County _____ Sec. _____ T _____ R _____

toward E of this zone several major slips in roof, away from "hill". Don't show well in coal itself, but in small roof falls show major slips, ± N-S

(II) slips in roof, rather prominent in coal



Illinois State Geological Survey

(12) Sevl major slips cutting across entry, affecting roof and floor, one even predominantly floor

Weller slip: 75°-69° 130 (magn.)

next about 15' E of above:

65 130

at least 3 to 4 more further east within a 100-200' ~~area~~ zone

no roof problems here

several more came toward as we walk toward fault on map (see circled area)

By ______ Date ______

Quadrangle ______

County ______ Sec. ______ T ______ R ______

(13) wedges taking off top of coal + 

coal

pinching out gray shale wedges

causing roof fall at inter-section (+ slips) extending to next cross cut, where a fracture zone cuts across (± ⊥) causing additional problems

much split coal near top about 1-2' affected

fault zone (up 2") + other faults about 20-30' wide, only one fault has actually displacement

(14) almost circular roof
fall with N-S trending
about 8' high, in gray
shale, several small
slips in roof visible, but
nothing major, also a few
"thin" sides
fall at top of small hill,
drop of 3-4' to N
(15) set of slips, trending about
115° (mag) across intersection,
pretty rough roof
(16) bunch of slips + faulty coal
between rows, roof a little rough
about over 10-20' wide ∠60°
135

not Ool Ben 21

Sec 22 - 9S - 7E
6 ½ mi E of Harrisburg
Rocky Branch Creek

Sec 11 - 10S - 7E
Eagle Valley

spectacular out-crops (says Conservation man)

Ool Ben 21

another: 75° / 150 · 1, and 80 / 160

(17) major slip in roof with reversal

60 / 125, shallow major: 20-25 / 105
slip in roof
causing fall

(18) major slip about 0.1' displacement to north in coal & planes

dipping to N
70°
125 generalized

small falls along fault line

another fault ± || only

10' further N

(14) roads intersect : many slips

in roof, sides falling off,

several cutting down in coal

and causing rib rash

trending ± 120° (map)

By________ Date________

Quadrangle________

County________ Sec.____ T____ R____

(2) in underclay 30 ⟋ 65 30 ⟋ 65
many slip planes, about
3' exposed

$\frac{10}{1}$ 90, $\vdash^{10}_{20}$, ⟍ 65 120 (prominent))

$\not{}^{40}_{20}$ slicks

coal thins a little S of
intersection, then thickens
to N, also slipping S, much
splitting + ridges in top
portion + lots of slips,
even underclay seems affected
+ stringers of coal into underclay
indicating <u>slumping</u> lots
of irregular planes, contortions +

Illinois State Geological Survey

~~einig~~ "ungewickelte Kohle".

(21)

rocks taking off coal to about 5' above coal, + irregular slips & roof falls

top of coal drops to N about 3-5' over a dist. of ~30'

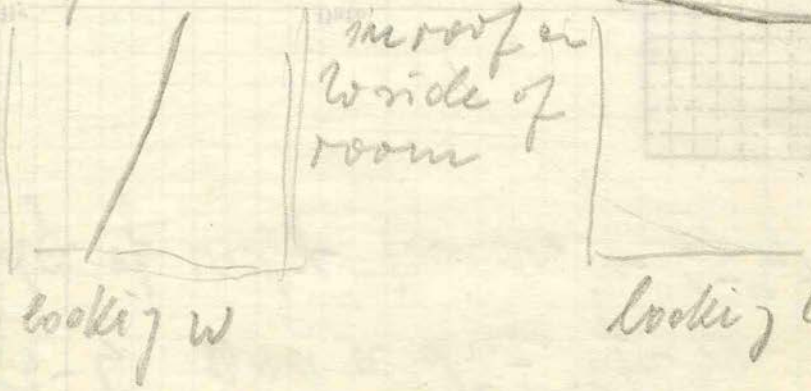
edge of wedge trends ~ 65°-70°

By ______ Date ______

Quadrangle ______

County ______ Sec. ______ T ______ R ______

(22) fault with little displacement, runs into bridge



about 40' faults N; normal fault

~~60-65~~
160-165 about 1' displ.

N of (22) top is pretty good, only few slips

(23) next split coal going down a little start here but only rather small

Illinois State Geological Survey

(24) much splitting + rolders & slips,
bad top again
photo (M) : wedge of gray
shale with coal stringers,
internal slumping indicated
by chopped up sideritic lenses
and distorted bone coal
looking west, I 1 inch in
photo
see sketch by HEK

(25) coal thin, to about 5', rolders
above coal, but not too
many slips

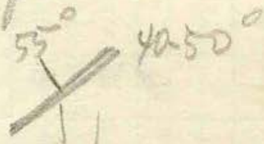
By ________ Date ________

Quadrangle ________

County ________ Sec. ____ T ____ R ____

(20)

(26) photo side, slumped to left (= N)
size of ⬭ in left side
about 10" by 4½"
good slumping structure
in shale

(27) several major slips - fault
about 1-2' displ. 

major

OLD BEN COAL CO. MINE NO. 21

Notes by Nick Keys

Field notes on July 28, 1976. Field trip to Old Ben # 21 with John Nelson. Location numbers to match ~~compilation map by John Nelson~~ FIELD MAP BY NICK KEYS OF JULY 28-29. of the 1st through 8th E. South. (MAP SET 10-3-7 IN CONFIDENTIAL ROOM)

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1) Six Faults. From west to east:

(A) 0.7' Normal fault with downthrow to west. Dip varies from 58° W at bottom to 78° W at top. Strike approx. north. No gouge, very little drag.

(B) (4' east of Fault A) 5.0' normal fault with downthrow to west. Dip 44° W and strike approx. north. 2" gouge zone present. No drag.

(C) (2' east of Fault B) 0.8' normal fault with downthrow to west. Dip 44° W and strike approx. north. ½" gouge, no drag.

(D) (2' east of Fault C) 0.5' normal fault with downthrow to west. Dip 45° W and strike approx. north. Fault peters out 2' below top of coal to a series of shears.

Faults E and F are to the west of Fault A.

(E) (5' west of Fault A) 0.5' normal fault with downthrow to west. Dip 60° W and strike approx. north. No gouge, no drag.

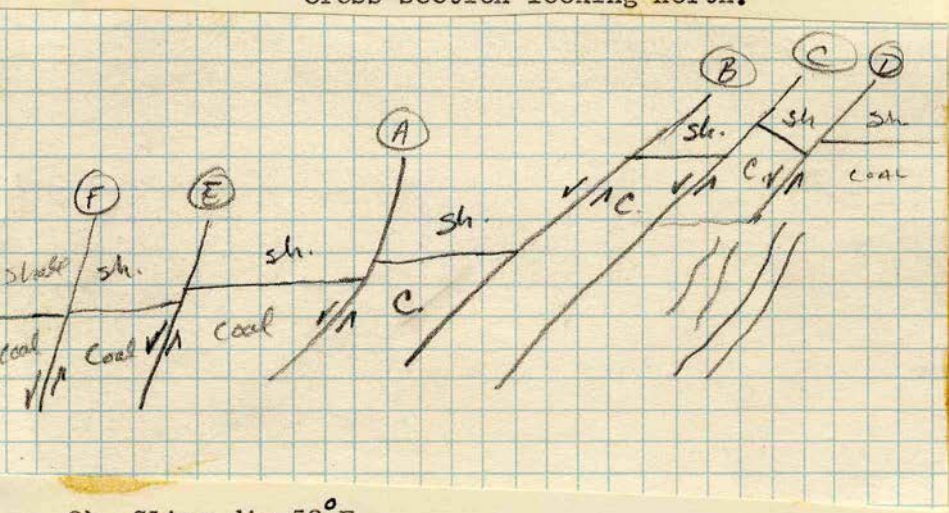
(F) (6' west of Fault E) 1" normal fault with downthrow to west. Dips 75° W and strikes approx. north.

All faults slickensided in roof and continue across entry. Roof is medium gray shale, finely silty and micaceous, finely laminated, and firm, with fine sideritic laminations and nodules. Near base is darker and

contains thin coaly streaks. 10' of roof exposed in fall falls near big fault (Fault B).

At east end of same pillar is a 1" normal fault with downthrow to west. Dips 64°W and strikes approx. north; no gouge, no drag.

Cross-section looking north:



2) Slip; dip 58°E.

3) 1' normal fault striking SW, vertical, down to east

4) 1' vertical fault down to east. 1" gouge zone (crushed coal). Minor drag on downthrown side within 4" of fault; dragged up 2".

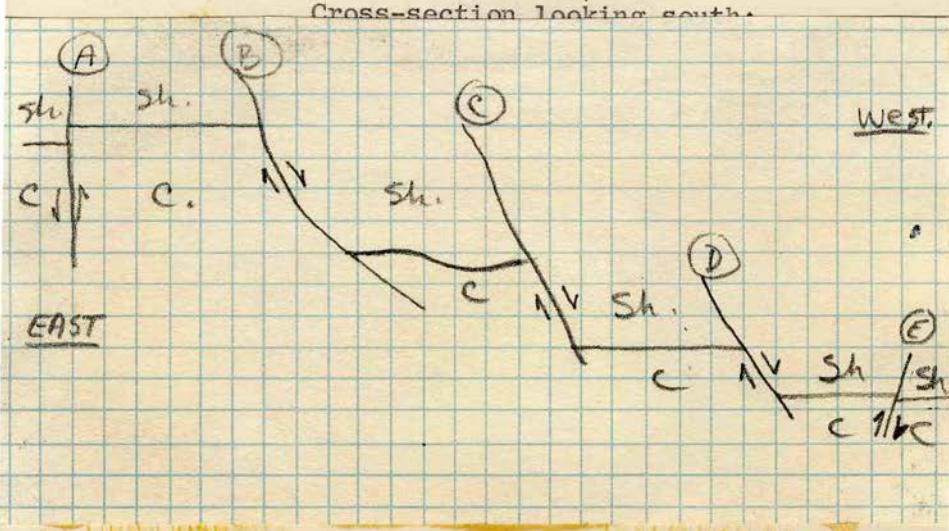
5) Fault zone. From east to west:

(A) 0.5' vertical fault with downthrow to east.
(B) (5' west of Fault A) 5' normal fault with downthrow to west. Dip varies from 44°W at bottom to 62°W at top. 3" of gouge (crushed coal). Strike 320°.
(C) (6' west of Fault B) 2.4' normal fault with downthrow on west. Dip 60°W. Appears to be converging towards Fault B on north side of entry.
(D) (5' west of fault C) Normal fault with down-

throw to west. Dips 50°W and strikes 330°.

(E) (4' west of Fault D) 1" slip to east.

Cross-section looking south.



6) Slip to East

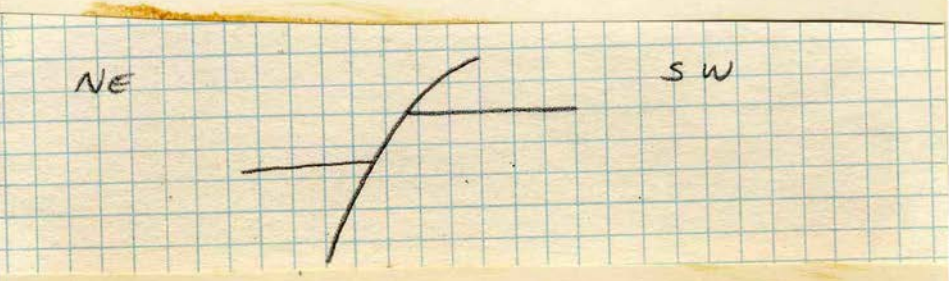
7) Roof fall partially blocking entry. Was not roof-bolted. Crossed timbers for support.

8) Slip to west.

9) 1' normal fault with downthrow to west. Strike 330°, dip 52°SW.

10) North-south 6" normal fault with downthrow to west. Dip 36°W.

11) 1.5' normal fault with downthrow to northeast. Stri Strike 288°, dip 62°NE. Slickensided, mylonitic, very little gouge. (Mylonite zone 1" on downthrown side).

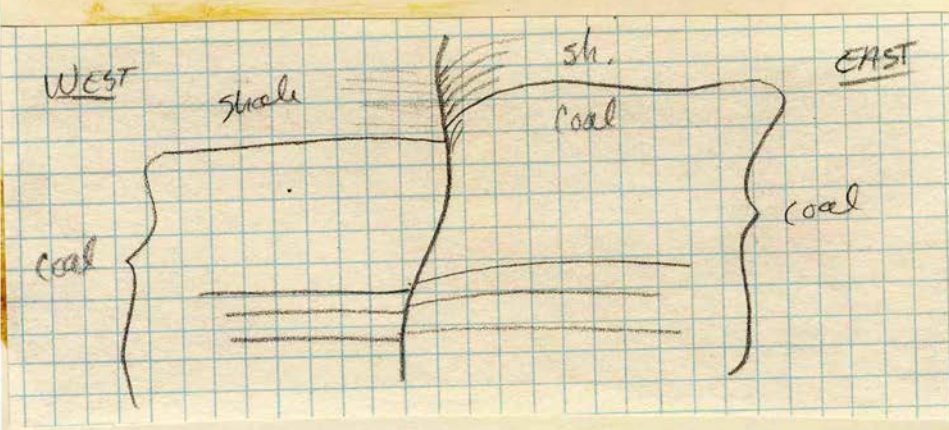


12) Normal fault downthrown to west. Throw varies from 2" on north side of entry to 3' an south side of entry. Strike 008°.

North side of entry:

Fault plane nearly vertical. Normal drag on up side. Shale on upthrown side (east) fragmented near fault (within 10") Drag intensity decreases downward into coal. .5" gouge zone of crushed coal.

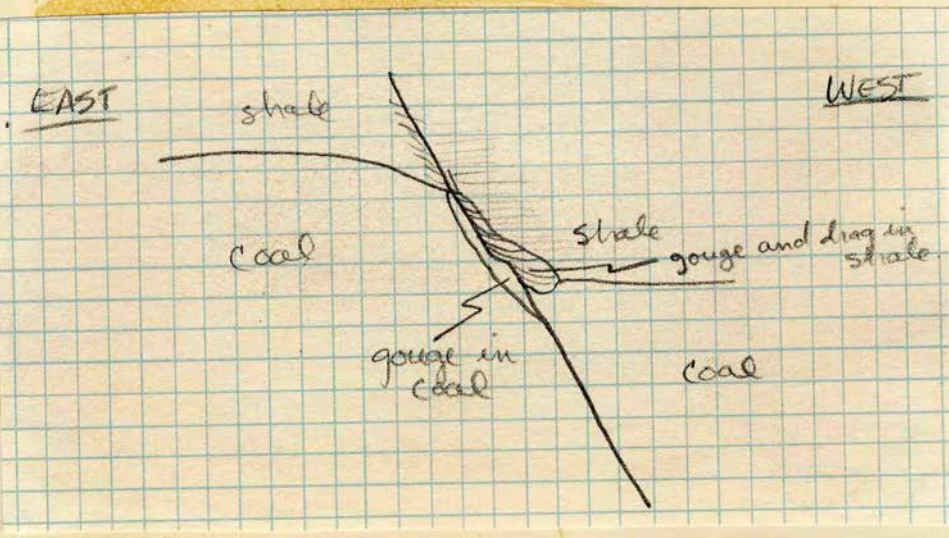
Cross-section looking north:



South side of entry:

Dips 64°W. Fault plane is wavy at coal-shale contact Straighter at coal-coal interface, As above, less drag in coal.

Cross-section looking south:

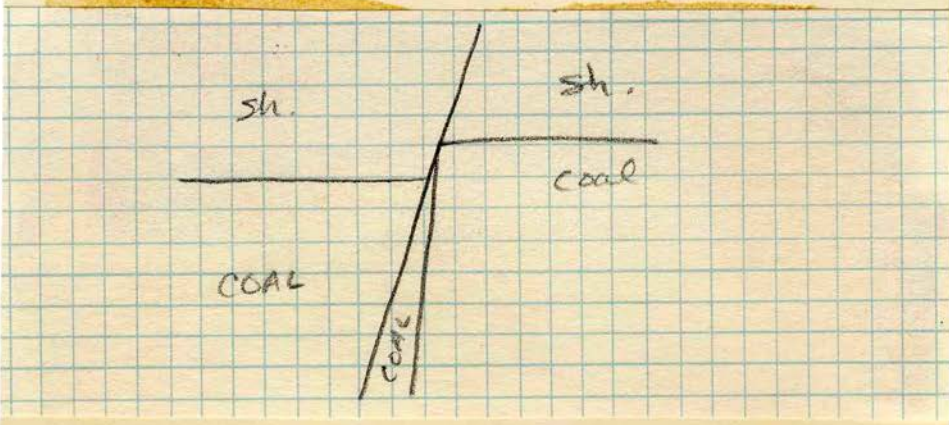


Gouge zone in coal-shale interface on coal side disappears when at coal-coal interface. As above, intensity of drag decreases from shale to coal. Most drag and gouge is in downthrown shale within 4" of fault plane.

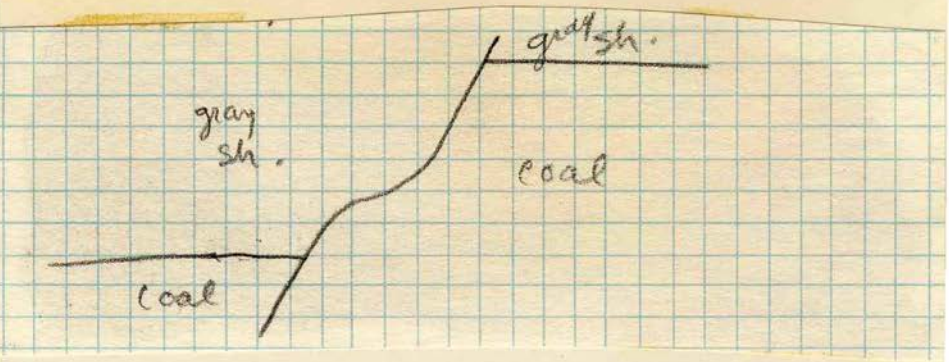
Apparently fault is dying out to north, or scissoring

1' normal fault, down dropped to west, on north side of entry 4' to west of Fault 12. Cannot be traced across entry, is either a bifurcation of fault just described, or is beginning where first fault died out. Strike 348°, dip 60° W. Fault bifurcates downward when it hits coal seam. Minor normal drag in shale.

Cross-section looking north:



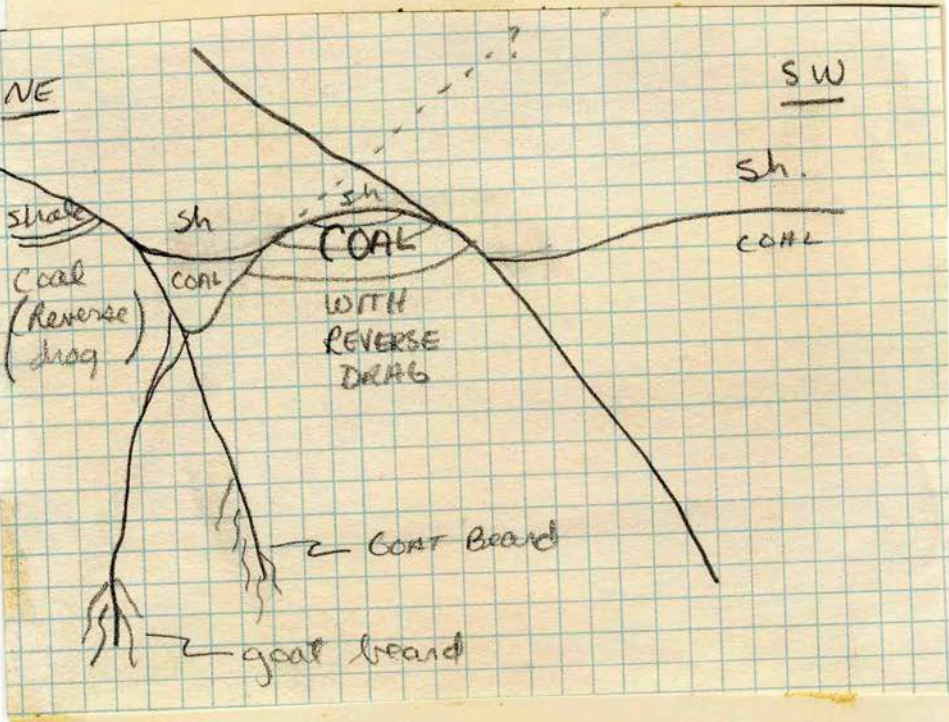
13) 6' normal fault downthrown to west. Strike 348°, dip 85°W. Drag in shale only.



14) 6' normal fault with downthrow to west. Strike 000°, dip 55°W. Wide (2-3') gouge zone. Shale has normal drag. Coal crushed in gouge zone (as in all the faults). On south side of entry fault bifurcates downward.

15) Soft-sediment faulting (slip) and deformation.

Cross-section looking southeast:



16) 2.3' normal fault with downthrow to the west. Stri
Strike 345°, dip 62°W. Straight fault plane trace in ent
entry wall. Very little gouge or drag (normal).

17)

(A) 1' normal fault with downthrow to west. Strike
352°, dip 52°W. Gouge of crushed coal.

(B) (10' east of A) 2.5' normal fault with downthr
to west. Strike 340°, dip 60°W.

Mine notes: Old Ben Coal Co. Mine #21

Visit of: John Nelson & Nick Keyes

Date: july 28, 1976

With: Roger Blaylock, Environ. Control Tech.
Tom McCormick, Supt.

Beginning mapping of fault zones in the 1st East South Mains. 12 working sections Goodman 405-11 and 405 -8 borers, Joy 10-CM and 12-CM rippers, Jeffrey 1, joy 108 & Joy 105 (one each of the last three). The East North mains now are being pillared on retreat. Other sections are in pannels off E.S., the E.S. mains, the 2nd E.S., and the 2nd W.S. mains and panels off it.

Old Ben on its mains uses 8 to 10 entries, of which the outside two on either side are return air, separated by barriers by the intake-air entries in the center. No neutral-air entries such as are used in many other mines. They leave about 12 inches top coal in all places.

Start mapping on track entry at fault about 6250' inby.(Nick Keyes Note 1) Note that faults are not always exactly where shown on co. map.

(1) Six faults in all; from the west - o.1, 0.5,0.7,5.0,0.8 and 0.5' displacement all down to west. See keyes Note 1. Ten (10) foot roof fall (cleared) just inby main fault.

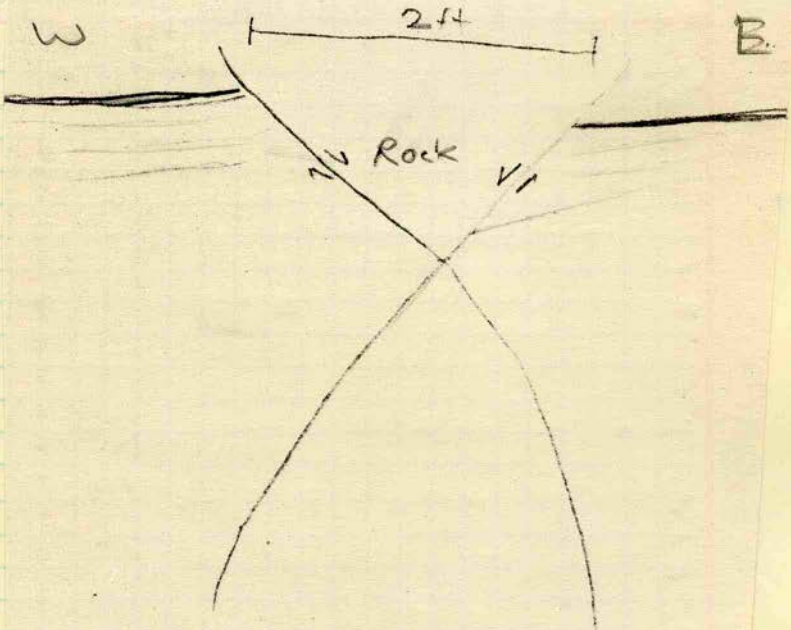
SYN.?

(2) Small fall about 3 ft. high on west side, shallower to east. No bolts in this crosscut - this was mined before the Federal law required bolts in all mined areas. The entry is bolted. Fall exposes grey shale as at (1).

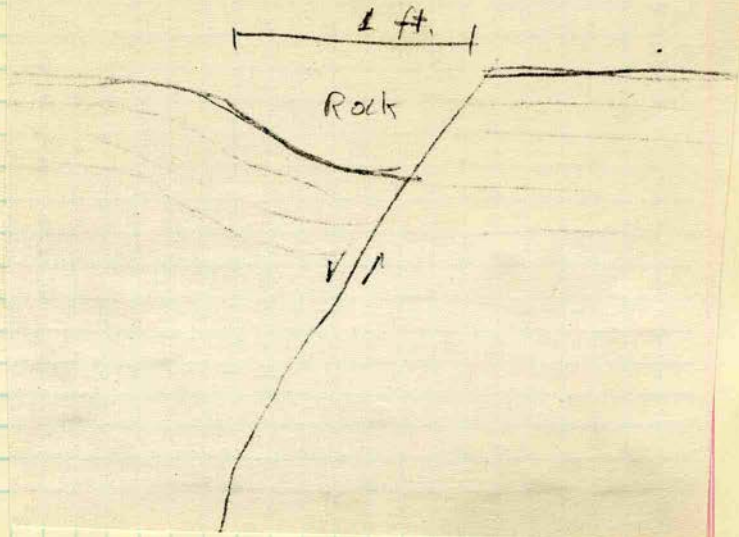
(3) Slip with about 0.3' displacement appears to be on west side of a small roll feature - grey shale exposed in entry, with thin coal "riders". Cannot judge extent of roll other than that it is no more than a foot deep.

4

View of N rib



View of S rib



Fault down about 1' to east, about N-S/45°E. Again associated with narrow (1-2 ft. wide) roll on east side. On north rib another slip intersects in X-fashion (see sketch) Both slips steepen downward. On south rib the west dipping slip is gone but the coal bends down at the top towards the slip. (see sketch)

(5) Fall about 4', crib at north end by track entry. Grey shale with abundant black carb. plant material on bedding planes, causing slabby breakage. Coal-roof contact is irregular, "rolly", with thin coal "riders" taking off into the coal. Area of coal does not appear to have been bolted.

Old Ben 21 never has used resin bolts. 60"bolts on about 4' centers used here.

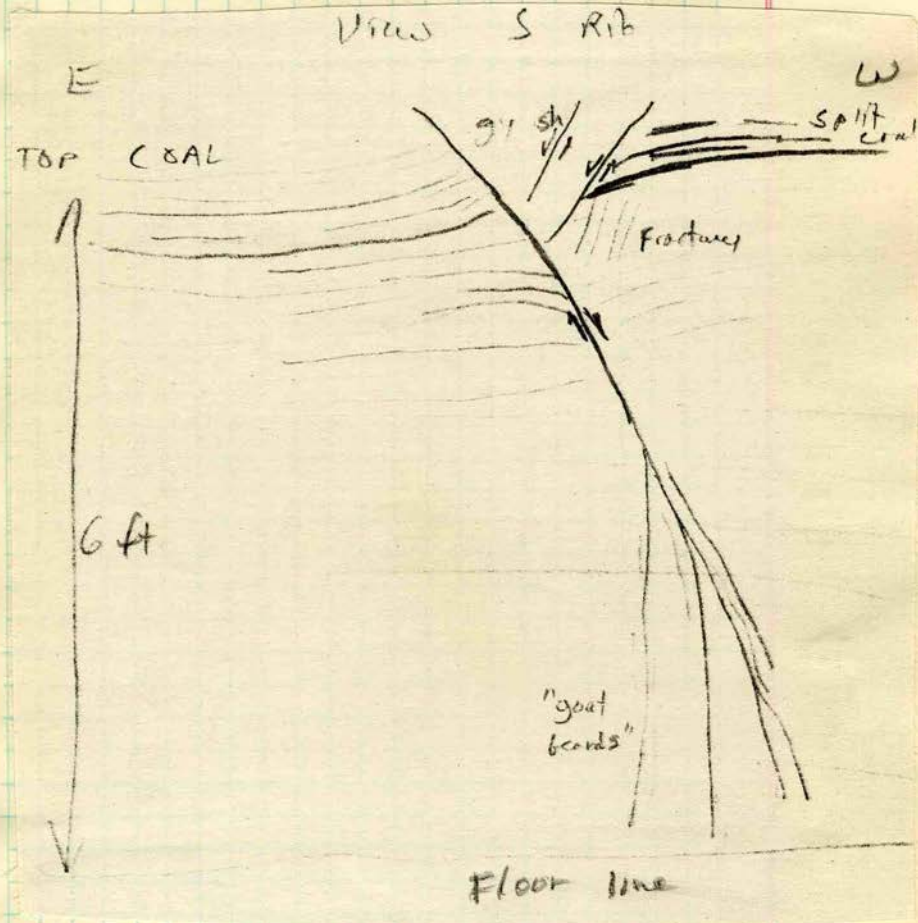
(6) Fault trending about 150°, down maybe a foot to west. The fault diverges downward into many branches, dying out downward in a complex set of mineralized "goat beards" about about 2-3- ft. above the base of the coal.

But each of the main branches is filled with gouged or pulverized coal in zones up to 0.1"(ft.) wide. It combines features of tectonic and solf-sediment faults.

In the roof the fault zone is about half a foot wide but in the coal seam it widens to as much as 4 ft. The rock in the roof is much fractured and slickensided and this zone traces easily across the entry.

(7) Fault similar to that at (6) but zone is narrower. Trend about 145° with about a foot downthrown to the west. Fault steepens downward into the coal and branches out in "goat beards" as at stop (6). The top of the fault, at roof level, appears to be a small graben with the main fault to the west and a complimentary slip to the east. The grey shale roof exposed has numerous thin coal "riders"

Apparent "reverse drag" in the coal in upper part of seam both sides of main fault. This appears to be another compactional or soft-sediment feature, not a tectonic fault.



(8) Two parallel, facing slips about a foot apart causing roof trouble in center of entry. They appear to die out westward into a small gentle roll at the top of the coal.

(9) Fault 110/55-60° from about 1-1.5 ft. to northeast. Sinple plane, less than 0.1' of gouged coal along the fault plane. Steepens slightly downward; cannot trace to floor. Appears to have slight reverse drag - coal bent up on footwall and down (in places) on hanging wall.

July 29, 1976 Tim Adkins, dust control man, goes with us.

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(10) Scattered joints in grey shale 070°. Angled cross-cut to south; not on company map.

(11) Fault 160/80 W. down about 1 foot, with parallel slips about 1-2 ft. to west; in crosscut. Hard to see in pillars.

(12) Two faults and many smaller fractures in coal seam. The easterly fault trends 173/75W down about 2.0 ft. at the floor - cannot measure displacement at roof. Virtually no drag visible, but coal is powdered along fault plane and is cut by numerous steeply dipping to vertical fractures, also with gouged or powdered coal. Floor is about 1 foot of grey claystone underlain by hard, brownish nodular limestone (Higginsville Ls.). The westerly fault trends about 161/65°W with about 1.5' throw at roof (floor not visible). Features of this fault similar to that of the easterly one. The two faults are about 10' apart and the coal block between them is much fractured.

(13) Two parallel opposite dipping slips making "X" at top of coal - displacement 0.3-0.7' at north pillar decreasing to less than 0.1 at South pillar.

(14) Entry cut by borer mainly leaving top coal. The slips shown on map penetrate entire visible

coal seam, with thin zone of gouge and numerous mineralized "goat beards". Cannot judge displacement due to lack of markers in coal.

(15) Fall, max. 3 ft. high, in area that was not bolted. Roof rock is med. grey, poorly bedded, firm sideritic shale, carb. with plant debris and coal streaks near base. No visible slips in fall though coal-roof contact is "rolly". Fall probably would not have occured had bolts been installed.

(16) Falls in unbolted area of entry. "X" slips in westerly fall as shown.

(17) Thin splits of grey shale to 0.05' thick in top coal about a foot below the roof.. Lateral persistance about 10' on south rib of belt entry.

(18) Thicker shale split (at least o.5') or broad low roll on north rib.

(19) Large roll visible in rib - may be associated with the fault shown on map. Trend of roll not visible. Rider lies up to 2½' above top of main

seam. Roll is filled with grey sideritic shale; bedding distorted slightly. Not a good exposure.

(20) Upper foot of coal seam finely split with with grey shale. Individual splits 0.01-0.10', about half shale, half coal. Coal seam is level, no sign of a roll.

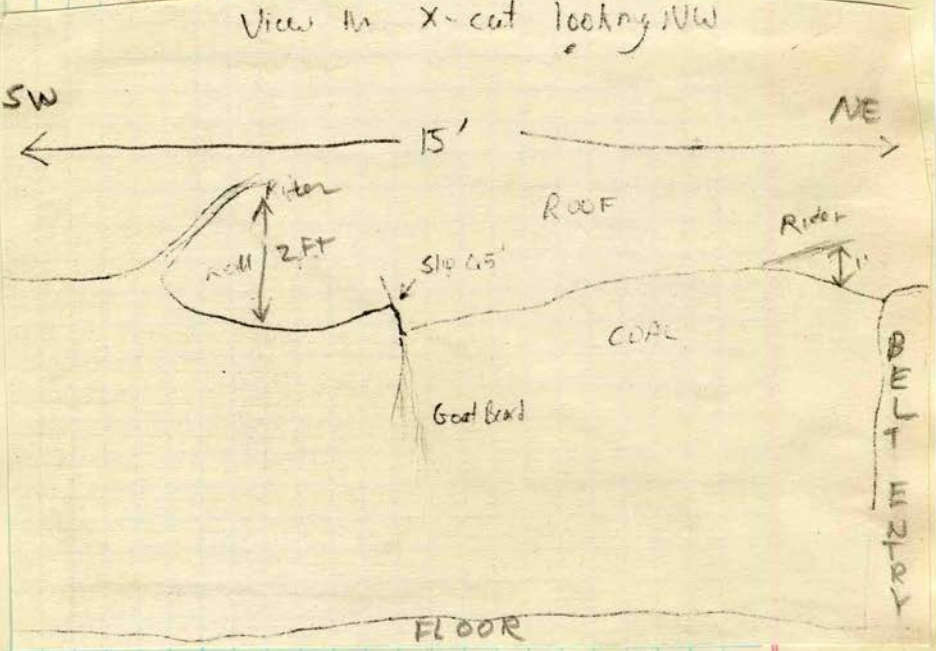
(21) Fault 165°/72°W., displacement about 5.0' on south rib. Zone up to a foot wide of crushed and rock. Small (a few inches displ.) step-faults to west about 4 feet from the main fault. No visible step faults to east.

(22) 3-4 ft. of roof taken down for panel belt. Roof is shale; med. grey, firm, finely silty, faintly laminated, containing numerous siderite laminae & lenses. No different from roof observed elsewhere except it lacks carb. plant debris at base. Contact to coal is sharp with about ½" weathered pyrite.

(23) "X"-type slip set causing about 0.5' displacement of rock at top of coal. Poorly exposed

roof shale in graben is nearly slickensided and broken.

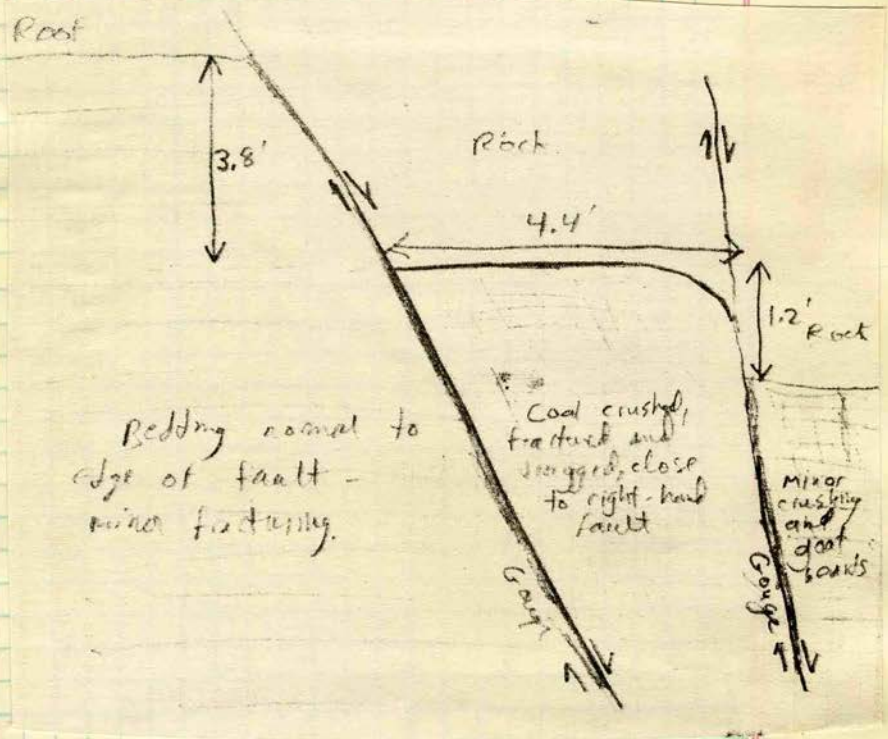
(24) Feature marked as roll on company map is a series of small rolls with associated slip. Very hard to see in belt entry, but visible in crosscut.



Top is irregular in this region, but this is a rather minor irregularity in the coal.

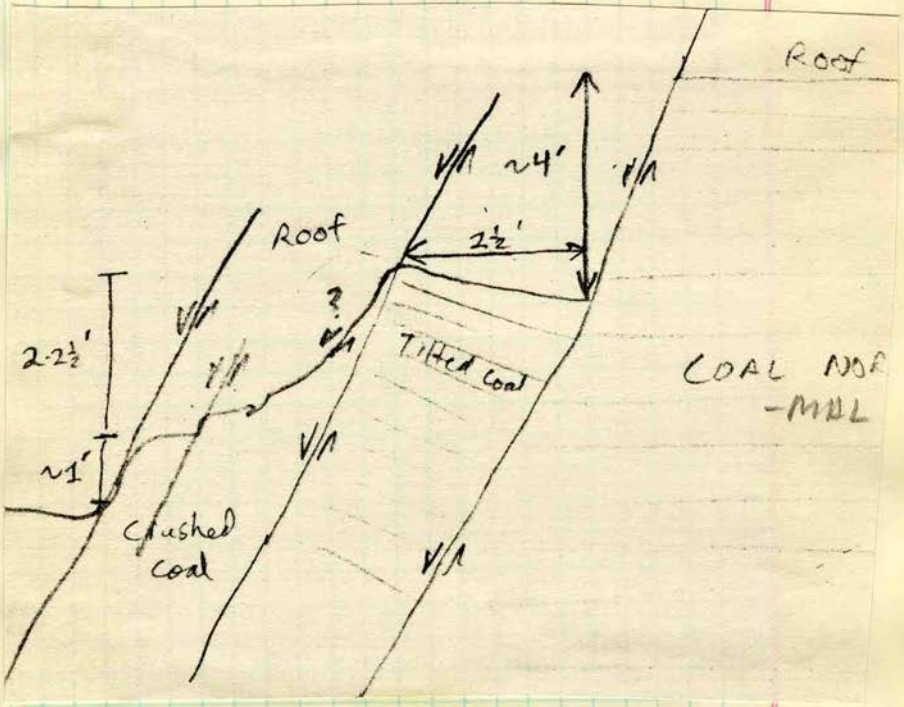
(25) Fault system on belt entry. Two main faults with smaller ones to either side (east and west). Aspect is different on N. and S. ribs.

E. SOUTH RIB W.



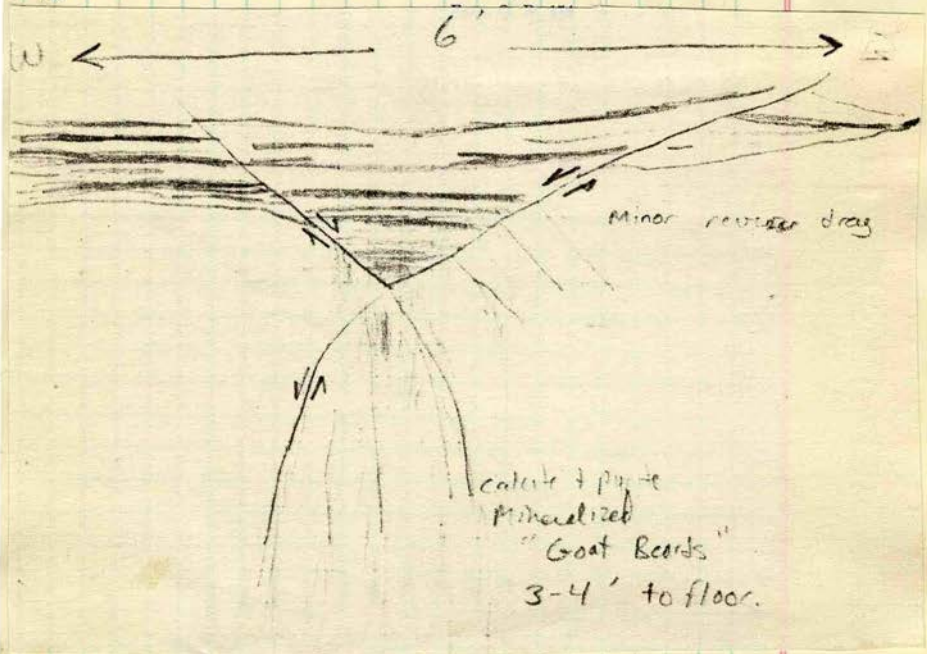
13

W. NORTH RIB E



Coal is normal and even-bedded east of main fault but heavily crushed, fractured and broken between faults. Strong normal drag is shown on west side of center block of coal.

(26) Sketch of feature on north rib mapped by Nick Keyes, his stop (15).



Top foot or so of coal is split; interlayered with grey shale as shown. Complex "goat beard" system reaches to gob on floor. Slips die out in coal and no displacement shown there.

(27) Belt entry area cramped quarters for mapping. The fault is tracable as mapped, trending about 160°/55° W. with about 2.3' displacement (down to west). Two parallel faults of very small displacement to east. Main fault has a zone of crushed, brecciated coal and rock about half

a foot wide. This is partially mineralized with calcite and pyrite. No drag in coal outside fault zone.

(28) Two major faults and some minor slips. The ~~westerly~~ EASTERLY fault 160°/steep W., with 0.4' displacement at south rib extends downward into coal seam. It has a thin mineralized breccia zone and numerous vertical to steeply dipping fractures with branching "goat beards". The ~~easterly~~ WESTERLY fault trends 168°/65° W. with 1.1' displ. north rib and 0.7' displ. south rib. Narrow fracture zone (0.1 - 0.4' wide) with finely powered mineralized breccia. Company map in this area is not right - should be checked with tape on our next visit.

General Notes:

Several types of structural features are common here.

(A) Large high-angle normal faults apparently of tectonic origin (Rend Lake Fault System).

These have from 1 to 6 or more ft. of displacement, cut the entire coal seam from roof to floor, and branch complexly within short distances. Crushed coal is common along fault planes, as are small high angled fractures in the adjoining coal. Drag, if present, is normal. Usually no drag is visible, and if it is visible it commonly affects only certain layers of coal or rock on one side or the other.

(B) Steep high-angle fractures or slips in coal or roof; no drag, little nor no fault zone breccia, may have mineralized "goat beards". Probably related to tectonic faulting.

(C) Minor slips in roof shale only; soft-sediment compaction features.

(D) "X" - pattern faults - usually two faults intersecting at top of coal. Steepen downward and branch into large complex systems of "goat beards". Reverse drag common in roof and top coal. Slips may become very shallow and follow

bedding planes. Much mineralization. These also appear to be soft-sedimentary features.

Notes by John Nelson
Typed pjd-10/4/76

OLD BEN COAL CO. MINE NO. 21 AUGUST 17, 1976

JOHN NELSON AND NICK KEYS - NOTES BY JOHN NELSON.

Phil Long from Old Ben Safety Dept. goes with us underground. Continue mapping of faulted area along East South Mains.

Six women are working underground at this mine. One is a bottom laborer, one a buggy runner, and four are trainees with less than 90 days on the job. All women hired by Old Ben work here because they have to have a separate wash house from the men and this is a big expense for the company.

1) Three faults. From east to west:
   A. 13" down to west.
   B. On corner of crosscut. 8" down to west on north side of entry, 4" throw on south side. Maybe dying out.
   C. In middle of crosscut. On south side of entry about 0.2' down to west; vertical. Dies out to north, perhaps taking up where B leaves off.
   D. 5' to east of A. 4" displacement to west. Dies out south.

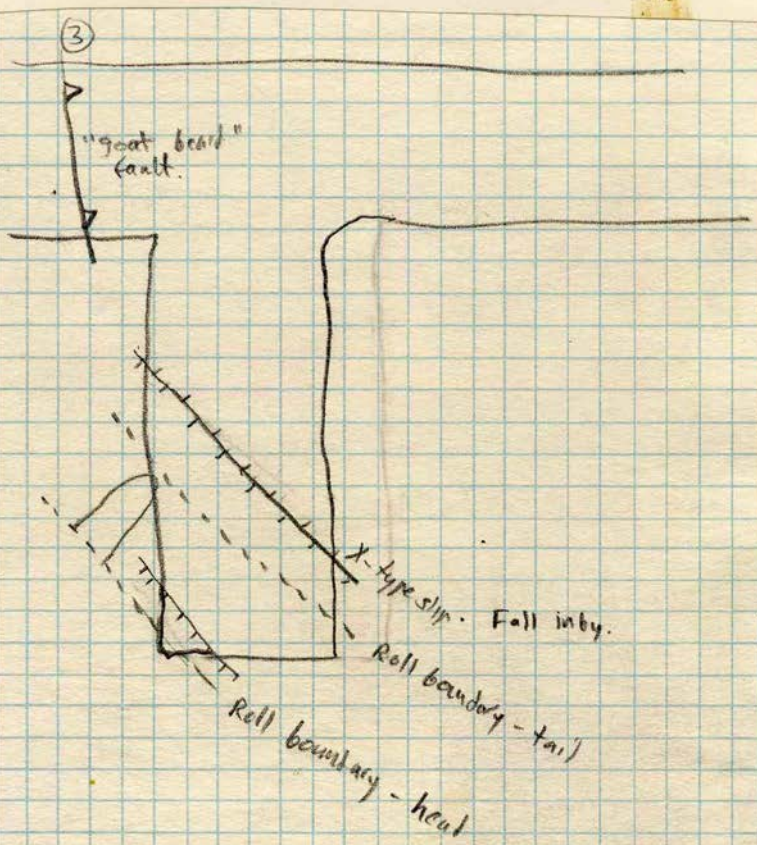
2) The 1.5' fault in the entry to the north dies out to the south to become fracture zone with .5' down to west and a .5' fault down to east, forming a small horst about 2' wide. 4' to the west a .2' fault begins north in the 45° crosscut and becomes .5' to west on south side of entry. Roof fall in 45° entry.

3) Soft-sediment slip, .2' down to east. Normal and reverse drag. Becomes "goat beard" in coal.

4) Stub crosscut with fall. Large "X"-type fault set trending NW-SE about halfway into crosscut; shallow slip at face. Cannot definitely trace the soft-sediment slip from Stop 3.

Roof fall about 4' high with irregular top. Top of coal is very irregular, "rolly", with thick coal riders angling into the roof shale. Roof shale lamination is inclined, irregular. Main rider appears to "take off" from SW corner of face.

Sketch Map of Area of Stops 3 and 4.

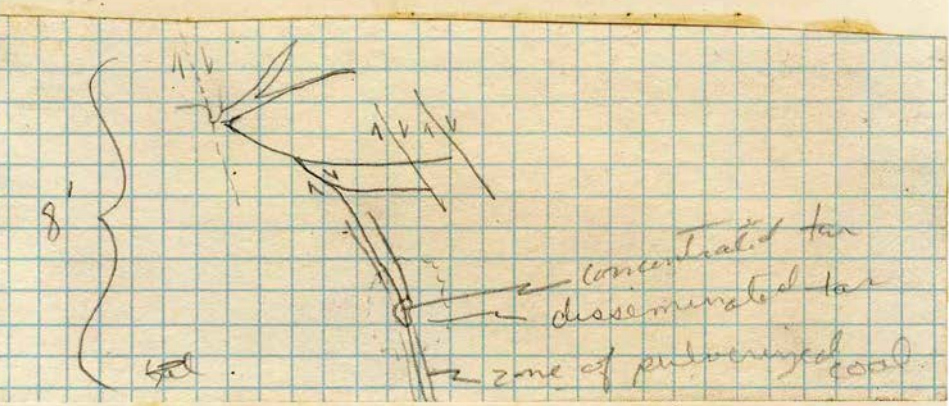


5) Slip begins 1.5' below roof and extends into floor, slickensided but no displacement discernable.

6) Soft-sediment shallow-dip fault becoming horizontal in roof as exposed in roof cut. Reverse drag. Down 1' to NW. Does not die out in coal.

7) Fault trending 348/60 W, bifurcates to south, from a 1.8' to west fault on the north to 0.9' and 0.5' faults on south side of entry.

8) Roll with rider taking off from west side. 3' across and 1' deep. Shallow slip on east side 0.3' down to east. 4' below the roll is "asphalt" area; pulverized coal or fusain penetrated by tar-type substance. Area appears related to slip planes coming down from roll. Perhaps related to nearby fault. Cross-section looking north:



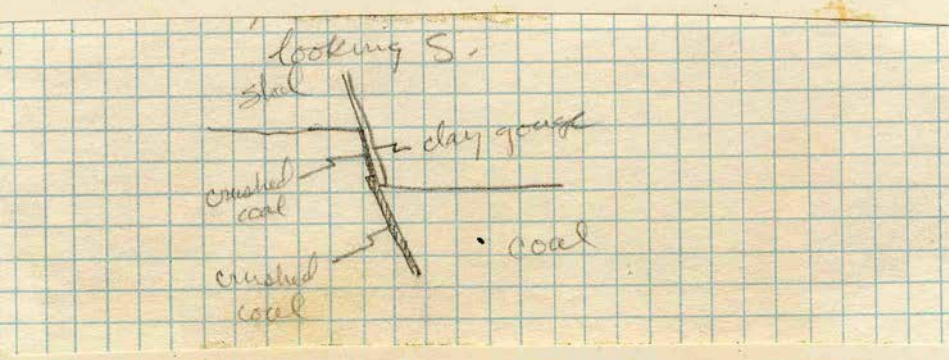
9) Description of fault plane:

Coal-coal interface: pulverized coal (like fusain in texture) but with bits of coal not as much pulverized contained therein. 2-4" thick.

Coal-shale interface: pulverized coal extends upward 4" before thinning to 1". Clay gouge picks up immediately.

Shale-shale interface: clay gouge only.

Sketch looking south:



10) Fall about 8' high, two intersecting slips; "coffin cover".

11) 39-41 N. Many small rolls and bad top. Roof about 11-12' to falls.

12) Displacements vary. Block between two faults is about 4' wide and is sharply tilted to north. About 4' lower on north side of entry. See field map.

August 18, 1976.

13) Fault 165/70° W, 4' down to west. 0.9' fault down to west about 10' west of major fault. Middle block flexed downward.

14) Prominent slip plane in cut-out roof and roof fall area dies out when it reaches coal, to form "goat beard".

Fall reaches 10' above top of coal.

15) Two major faults dipping west with the easternmost dropping 3' to west and the westernmost dropping 7' to west. Faults are 15' apart. In between these two faults are a series of east-dipping and west-dipping faults at different levels in the coal and roof forming a complicated system of grabens and horsts.

16) This complicated horst and graben system is exposed by a 10' roof fall. Slickensides in the coal and roof indicate primarily dip-slip movement with perhaps a small horizontal component in some of the middle b blocks. Calcite veins in the coal gouge. Some of the faults cross each other with no apparent displacement while others don't cross at all or if they do were displaced enough not to be visible. No smaller faults appear to cross the major fault. Appears that fault "B" (in sketch-over) may continue across "A" as Fault "C", which is exposed brecciated zone along strike of proposed Fault C. But not exposed in cross-section. Many slip planes and area between boundary faults is heavily brecciated.

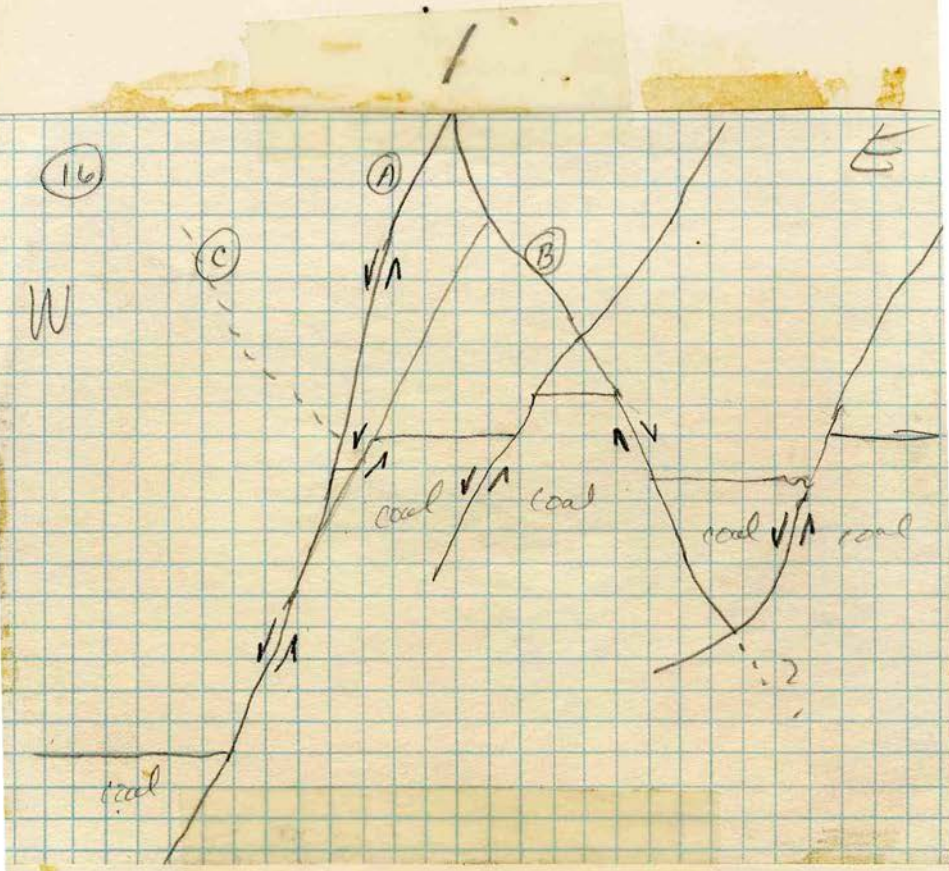
17) "En echelon" faults. The more northerly and easterly fault dies out to south. The more westerly fault begins as soft-sediment "X"-type fault in the first entry north of the belt entry. Perhaps the tectonic fault is following a previously-established line of weakness.

18) 10' east of major faults- east-dipping plane of discontinuity, slickensided near top of coal, but apparently no displacement at bottom coal.

Floor of coal- 2½' of medium-dark gray claystone grading into light buff or cream-colored nodular limestone. Much fractured near fault zone.

Roof- usual medium gray, smooth finely laminated to finely silty shale with thin sideritic lenses and laminae. Lower portion weaker and more carbonaceous with riders of coal and contact with coal is somewhat "rolly" in this area. Extensive "goat beards" in top coal near rolls.

Sketch of Situation at Stop 16.



Old Ben Coal Company Mine No. 21 Franklin County
November 3, 1976

Photographs taken by H.-F. Krausse on a visit with Nick Keys. Nick also took photos which are not included here because they are very similar to Krausse's photos. These photos were compiled and entered into the mine notes by John Nelson, after Krausse had quit the Survey. The captions are paraphrased from a sheet which Krausse left behind. A few photos which were duplicates or which turned out badly are not included here.

OLD BEN 21 FIELD TRIP

November 3, 1976 - Nick Keys and Fred Krausse to photo the fault zone in the South EAST MAIN. Met by Phil Long in the Supt. office.

*Loc. 2:

Nick: 2 photos of fault

Fred: Nikonos - 2 L.D.**photos

Exacta - 1 long shot, 2 close ups

Loc. 28 N: Nick: 2 L.D. shots ; 1 close-up of steps.
Fred: Nikonos - 2 L.D. shots.

Loc. 9 [redacted]: Exacta - 1 close-up of step fault.

Nick: 3 shots, same as below

Fred: Exacta - 3 close ups, 2 of sed. type folding (or reverse drag) and 1 of S. side of entry of offset crushed coal.

This fault (Loc. 9) extends to Loc. 8 and has soft sed. features.

Loc. 16:

Nick: 2 L.D. of Horst & Graben
1 close up of Horst underclay and blue band
1 L.D. of Horst over Graben
1 L.D. or Horst to left and Graben to right
1 close up of deformed coal
1 close up of sheared area.

Fred: 2 Nikonos - L.D.
1 fault plane
1 blue band
1 L.D. of Horst over Graben
1 L.D. of Horst next to Graben
1 close up of folded area
1 close up of sheared area

*Location with number only matched Keys-Nelson August 17 Mine Notes. Location followed by "N" matched Nelson July 28, 1976 Mine Notes.

**L.D. - Long distance.

Photo 5- Krausse. Normal fault striking about 160, throw 1.5 feet at top of coal, east side downthrown. Crushed coal and fragments of various sizes are in fault zone. Location: stop 2 of Nelson's notes from 8/17/76.

MN-038-028

Photo 8- Krausse. Normal fault in coal, strike 168, throw 1.1 feet down to west. Several smaller normal faults also are visible in coal. Note that main fault does not continue directly upward from coal into gray shale. Rather, the movement was apparently transferred to the left into a series of closely-spaced, low-angle fractures in the shale (upper left).

Location: stop 28 from Nelson's notes, 7/28/76.

W E

mn-03A-029

Photo 9- Krausse. Lower view of same fault in Photo 8. Main fault is just left of ruler. To the right of ruler several small parallel normal faults are barely visible; they offset partings in the coal.

W

E

mn_03A_030

Photo 10- Krausse. Complex fault zone with large normal fault to the left, a small horst to the right, and numerous parallel fractures having little or no displacement. Location: stop 16 from Nelson's notes, 8/17/76.

W E

mn-3A-031

Photo 12- Krausse. View just to the right of Photo 10, showing small horst in Herrin Coal. The two faults intersect in the shale above the coal, and form an "X"; they apparently do not offset one another. Shale above coal is intensely sheared and so has been weakened, inducing roof failure.

MA-03A.032

Photo 13A- Krausse. View below Photo 12, showing faults near base of coal. Just below center of photo a small horst is present; the underclay is squeezed upward. Note the abundance of faults in the coal.

W E

MN-03A-033

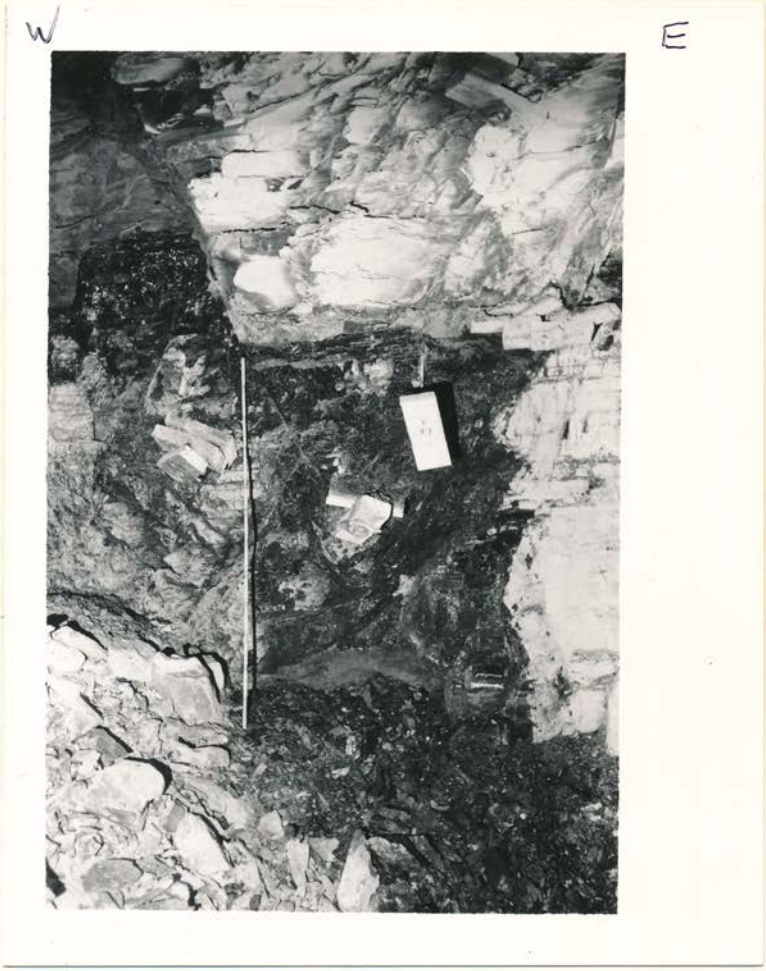
John C. Moore Corporation, Rochester, N.Y. 14604
FORM 180 W

Photo 14A- Krausse. View to the right of Photo 12. The coal is sloughing badly; roof bolts were installed in the rib, but some did not hold.

W E

MA-03A-034

Photo 16- Krausse. Another view of the same, from farther away.



mn_03A_035

Photo 18- Krausse. Yet another view of the same.

W E

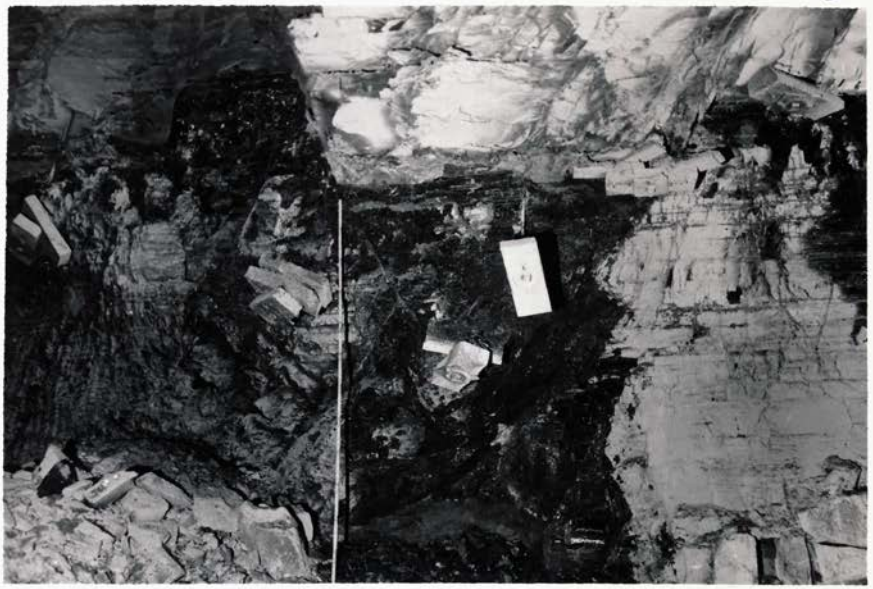


Photo 19- Krausse. A close-up view of part of the right side of Photo 18. Some layers of coal exhibit ductile deformation; they are slightly folded or crinkled. Ductile deformation is not common in the Rend Lake Fault System.

W E

mn-03A-037

Fire closes Old Ben 21 mine

Mining operations at the Old Ben 21 coal mine in Sesser have been shut down because of a fire burning somewhere in the mine, Old Ben Coal Co. Vice President of Operations Wayne Haynie said today.

Haynie said air samples taken Thursday revealed traces of carbon monoxide in the mine, indicating a fire in the old gob area. The mine was closed Friday.

The mine has been sealed and workers now are pumping carbon monoxide into the mine to reduce the oxygen level and smother the fire, Haynie said.

Haynie said it is impossible to say how long it will take to smother the fire and resume mining operations. The shutdown idles about 525 workers.

Mine fire still burning

Mining operations still are shut down at the Old Ben No. 21 coal mine in Sesser because of a smoldering fire somewhere in the old gob area, according to A.J. Webster, general superintendent of Old Ben Coal Co. mines in Southern Illinois.

The mine was closed after traces of carbon monoxide were found in routine air samples taken at the mine last Thursday night.

About 500 miners have been idle since last Friday, while workers have been pumping liquid carbon monoxide into the sealed mine to reduce the oxygen level and smother the smoldering fire.

Webster said 100 tons of the liquid carbon monoxide have been pumped into the mine through a 600-foot hole and a second hole was drilled Thursday so the liquid carbon monoxide can be pumped in faster.

Webster also said it is impossible to predict how long it will take to smother the fire and to resume mining operations.

However, he said the mine would not reopen until federal and state regulatory agencies have determined that the source of the carbon monoxide has been eliminated. The fire is believed to have been started by spontaneous combustion.

These two articles were published in the Southern Illinoisian on October 10 and 13, 1978. The articles were sent to me by George Fraunfelter of the Department of Geology, SIU-Carbondale.

John Popp

MINE NOTES

OLD BEN # 21 MINE, October 1978

I spoke to Bill Hake (of Old Ben Coal) about the matter of a "fire" in the gob area of #21 (See clippings, next page). He indicated that there had at no time been a fire; only an odd smell confined to a small area under a roof fall at a crosscut. It was discovered in routine inspection and was monitored routinely; the area gave off slightly increased CO levels. When it became public knowledge, however, the area was ordered sealed by Federal inspectors. Two (2) holes were drilled from the surface to dump liquid CO_2 (not CO) on the site. As of the October, I.M.I. meeting, the area was still sealed and the CO level was down; the methane was "up", however, and Hake was wondering when the seals could come off.

Phil ip DeMaris

OLD BEN NO. 21 MINE, OLD BEN COAL COMPANY
FRANKLIN COUNTY
February 1, 1979

The following is a portion of two well plugging affidavits that Connie Maske showed me today. The information from the affidavits helps to locate the "mine fire" reported earlier.

Well Plugging Affidavit for "Carbon Dioxide Enjection (sic Hole - Mine Fire # 21" Old Ben Coal Co.

D. H. 342:
Location - 238' south, 383' west of the NEc, NE¼, NE¼, SE¼, Section 7, T5S, R2E, Franklin Co.

T.D.- 701' (into the mine)
Drilling began - 10/8/78
Drilling completed - 10/9/78
Plugged - 1/5/79
Coal Depth - 677'

D. H. 343:
Location - 380' south, 122' west of the NEc, NE¼, SE¼, SE¼, Section 7, T5S, R2E, Franklin Co.

T.D. - 683'
Drilling began - 10/12/78
Drilling completed - 10/13/78
Plugged - 1/6/79
Coal Depth - 683'

The locations plotted on the mine map show these holes to have been drilled in the 26th South Panel of the 1-7th South West Mains. The panel was pillared and is long abandoned.

Popp

Old Ben Coal Co. - Mine No. 21, April 14, 1982.
Notes by John Nelson on visit with Phil DeMaris,
with Jim Minton of Old Ben.

We are here to examine splitting of the Herrin (No. 6) Coal in the 8th-20th West South Mains. This is on the west side of the mine approaching the Walshville channel. The splitting is described to us as a thickening of the "blue band" from its normal 2-3" up to 24". The plan, as shown on Old Ben's map, is to turn a set of entries northward and drive all the way to the northwestern corner of the property where severely split and eroded coal was encountered many years ago.

All locations refer to Phil's map.

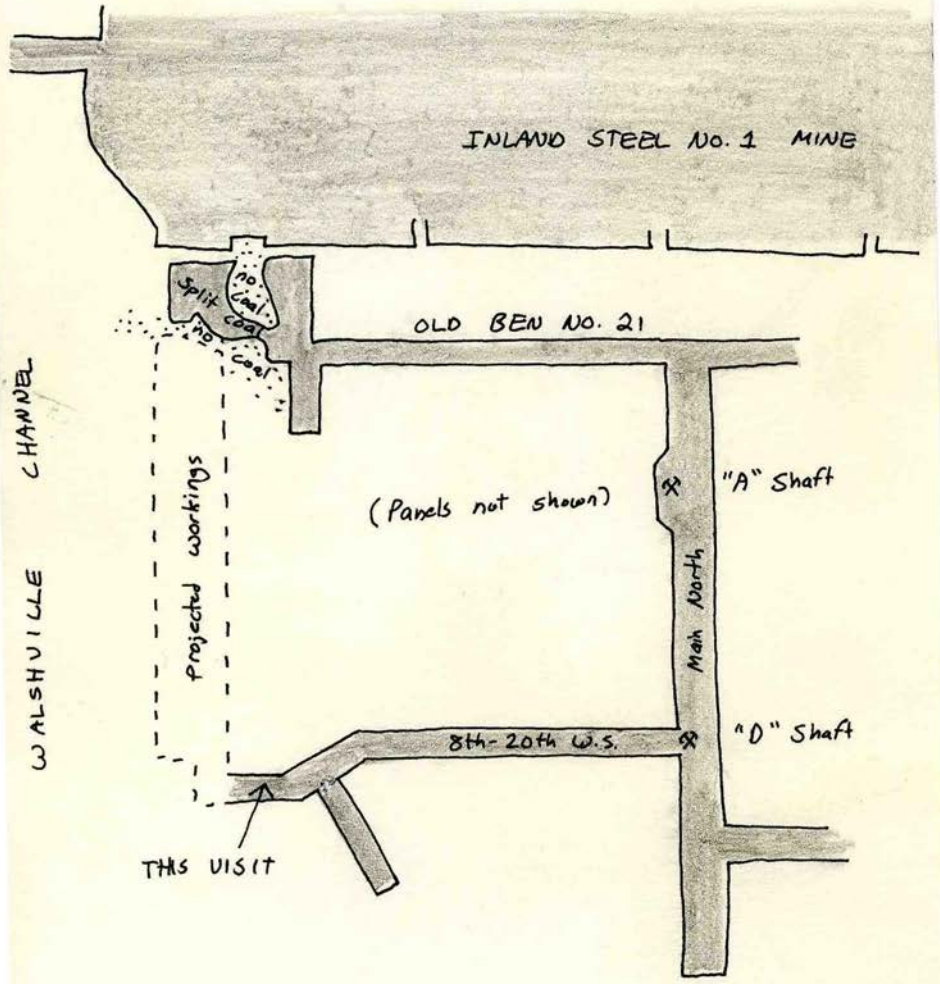
A) East of the split area. The "blue band" has unusual texture - it is a grayish-black firm, thinly laminated, very carbonaceous shale containing numerous small (1-3 mm) angular fragments of grayish-brown shale. There are numerous very thin streaks of coal and coalified stems and pieces of plant debris. The band appears to vary in thickness quite a bit, from less than 1" to about 3". Jim says it is about 18" above the base of the seam - this we cannot confirm because of debris along the rib.

The roof as exposed in a 3-foot fall is a medium-dark gray non-silty shale in beds 1" to 4" thick. It has faint parallel sideritic laminations and numerous small lenses of siderite. There is almost no plant debris but scattered very fine pyritized fragments are present. The shale grades to black at the base and grades into bone coal, with stringers of vitrain.

John C. Moore Corporation, Rochester, N.Y. 14604
MOORE'S MODERN METHODS
FORM 180 W

SKETCH MAP
GIVING OVERVIEW

~ 1 MILE



The seam itself is normally bright-banded with plenty of calcite, and a trace of pyrite, on the cleat. See Phil's note for detailed description.

The main entries were driven with a boring machine that left about 2 feet of top coal and several inches of bottom coal - the underclay is not exposed. Roof support is with 5-foot and 9-foot mechanical bolts.

B) Place cut out for belt underpass exposes underclay. It is a typical medium-dark olive-gray claystone, becoming lighter gray downard, non-silty and non-calcareous; slickensided fractures are common. The "blue band" is 1.8 feet above the underclay and similar to that at Stop A (see Phil's notes).

C&D) See Phil's notes.

E) About 4 feet of underclay exposed at undercast. The lower 1½ feet or so is slightly calcareous and contains irregular brownish limy nodules. This lower, lighter gray underclay has a lumpy appearance. The upper 2½ feet of the unit resembles that at location B.

Phil described the shale bands in the coal. The main shale apparently is the "blue band" and averages about 3" thick. About half a foot above it the coal contains discontinuous bands of grayish-black shale. This was also seen at locations C and D.

F-L) See Phil's notes.

M) Two photos (different exposures) of Blue Band 0.56' thick. Whisk broom and hammer in picture.

N) See Phil's notes.

O) Two photos - one showing lower half of seam with underclay and 1.2 feet of "blue band," the other a close-up of the shaly banded coal above the "blue band." The uppermost 0.5 feet or so of the underclay is very hard and silty, almost a massive siltstone, full of carbonaceous debris, and not calcareous. Below this is softer claystone. The "blue band," or split, is olive-gray, soft crumbly claystone.

P) In this area the "blue band" split is well over a foot thick, and consists of olive claystone with many inclined coal stringers. Above this the coal is thinly interlaminated with up to 50% dark brownish-gray to black, hard carbonaceous shale, in bands up to 0.15' thick, laminated with dull coal. This shaly zone is nearly a foot thick. The coal in the shaly zone is largely vitrain in bands up to 0.02' thick, with lesser amounts of durain or bony coal. Below the "blue band" the coal is normally bright banded and contains very little shale.

Q) See Phil's notes.

R) Place cut out for undercast shows about 4 feet of underclay; olive-gray, firm, silty, not calcareous; with stringers of coal. Unit is fairly uniform from top to bottom. "Blue band" is 1.3 feet thick. The roof shale is exposed but cannot be reached because the place is so high. It appears to be a dark gray, poorly bedded shale; it is full of slickensided fractures and coal stringers or partings. This area was mined with a ripper so the shale is exposed in more places than in entries mined with the Goodman borer.

As before, the coal above the "blue band" is full of thin interlaminations of grayish-black shale and durain (hard dull coal).

The area has good roof and shale is exposed only where the miner cut into it. What little shale is visible resembles that at location A: medium-dark gray, smooth, faintly laminated and sideritic. Slickensided fractures and coal stringers are common but have not caused any significant problems.

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MOORE'S MODERN METHODS
FORM 180 W

MM-03A-03B

Phil DeMaris and a Marietta boring-type continuous miner. This machine cuts an arched entry the height of which is determined by the height of the machine. This machine is parked in an entry mined with a ripper-type machine-note rectangular profile of entry.

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MOORE'S MODERN METHODS
FORM 180 W

mn-03A-039

View of the "blue band" at Location M. Hammer and broom resting on a parting in the lower part of the seam. The underclay is not exposed. "Blue band" is 0.56' thick here. Note black shale partings in the coal above the "blue band"

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MOORE'S MODERN METHODS
FORM 180 W

mn-03A-40

Lower part of coal seam at Location O. The Blue Band, behind top of ruler, is 1.2 feet thick. Base of ruler rests on underclay.

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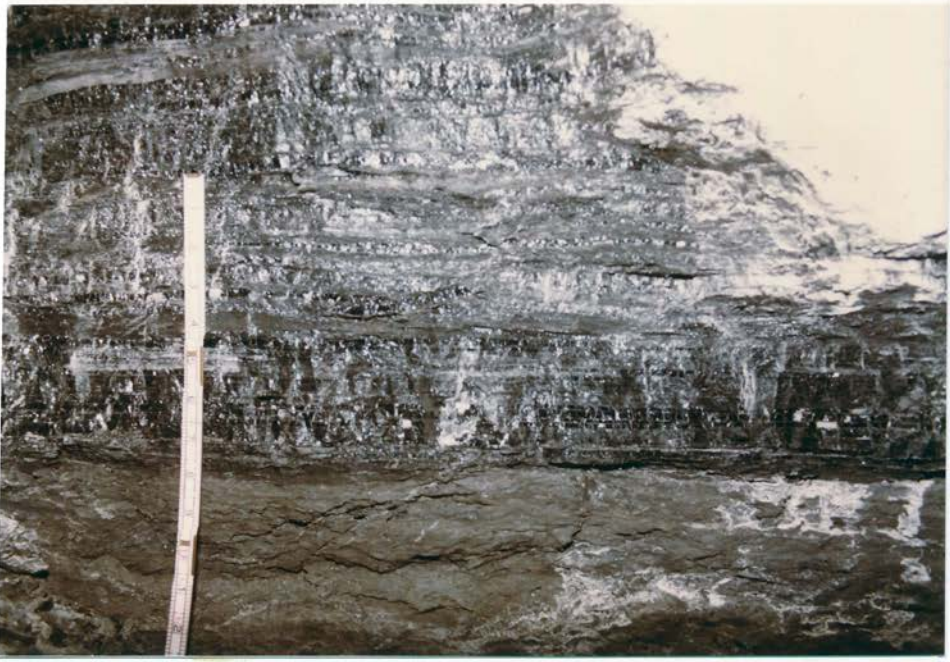
MOORE'S MODERN METHODS
FORM 180 W



mm-03R-041

Closer view at Location O, showing the upper part of the "blue band" and also the lenticular bands of black shale in the coal above the "blue band".

"Steel band" position is 3.4' above B.B. and is a carb. shale here. PJD.

Mine Notes - Old Ben #21, Franklin Co. -Longwall proj.

Trip: April 14, 1982 by Phil DeMaris and John Nelson. Guide was Jim Minton, Chief Surveyor for Old Ben C.C.

Coverage: Introduction
8th-20th W.S. Mains
Samples: Set "A" complete (to-15)

Introduction

We have heard "rumors" in the past that the "blue band" thickens toward the Walshville channel from face bosses, miners, etc. Nelson collected some evidence in Inland Steel #1 that tended to support the idea, also. Donald O. Johnson reported the same thing in his Ph. D. thesis; however, examination of coal description that he used showed that he overrode the picks (for the B.B.) of a number of much more experienced geologists than himself in order to find the thick partings he was looking for. The nature of the blue band was a research concern on the longwall project, and since we had recieved an informed opinion that the B.B. was not a tonstein (from Kurt Burger) and Peter R. Johnson had expresses some opinions in his Ms. thesis on its origin, I felt it was time to check it out. Our opportunity came when the subject came up between Jim Minton and myself at O.B. 26 in Feb., and Jim offered to escort us to the W. side of #21 where a split (believed to be the B.B.) thickened toward the channel.

While at the Benton Office I said hello to Mark Cavinder; he mentioned that they had hit dense C.B.'s at the recovery end of the 2nd N-S longwall at Old Ben #27, apparently on the longwall face.

all "Duran" bands in descriptions are "bond" bands, PJD

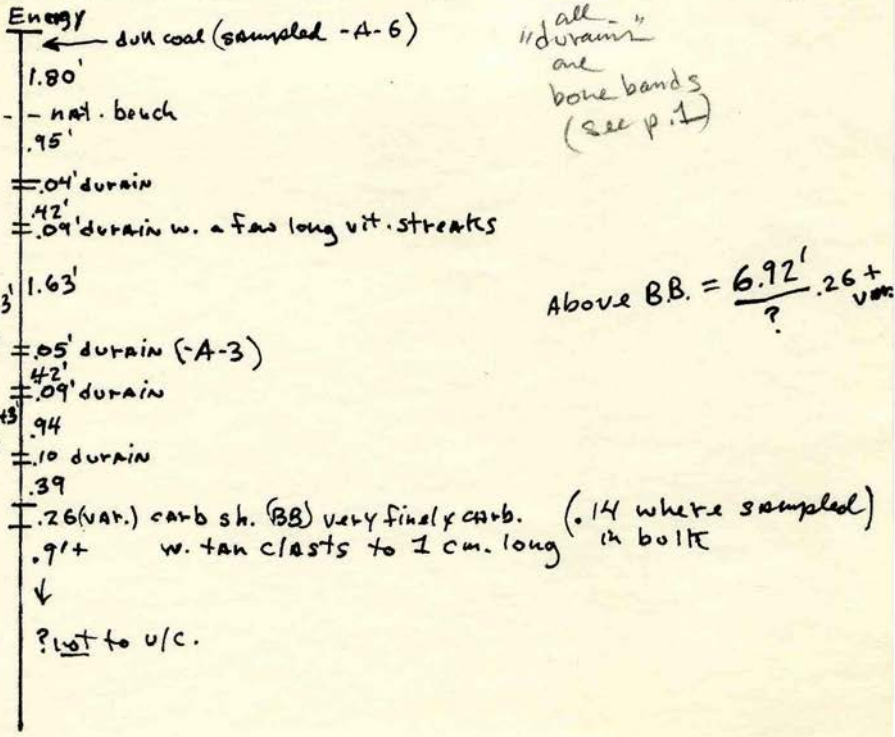

C.B.&Q. R.R.
Field Map 08
4/14/82
13
N
0.8.21
Range Line

We met Orval A. Murray, Supt. and went in the "D" shaft. We had 1" to 400' maps which were ideal (See map A)

A. Spot checks prior to here showed fairly normal blue band thickness. Here it was on the high side of "normal", so I did a rough seam desc. and we took samples (some on way out). This site became the "control" for Map B, which was derived from the set of measures near the travelway.

Here there is Energy roof, med. dk. gray, bedded on 1" -4" intervals with small sideritic lenses; only faintly laminated. The top of the coal is canneloid; the contact is clearly gradational (-A-6) The blue band is very finely carbonaceous and variable in thickness.

Desc. (fair exposure only, due to rock dust)



B. Partial desc. only:

	(feet)
Clarain	not measured
Durain	.07
Clarain	.90
Durain	.10
Clarain	.42
Blue band*	.15 (laterally .24')
Clarain underclay	1.80

*Blue band has up to .03' thick compressions in it, some at noticable angle to coal bedding.

C. Partial desc. only:

		(feet)
	(coal above not measured)	
	Blue band	.10
B.B. to u/c is 1.8'	Clarain	.42
	Shale	.18 (.12-.3 locally)*
	Clarain	.14
	Fusain lens	.15
	Clarain	.91
		u/c

* Apparently a local occurrence only; no shale or durain was seen elsewhere near this position.

D. Partial Desc. only:

	(feet)	
(coal above not measured)		
Durain w. vit. streaks	.04	
Clarain	.65	
Carb. sh (BB?)*	.07	
Clarain	.42	
Shale, very carb. (B.B.)	.27	(Sampled)
Clarain	1.62	
	u/c	

*This band (determined to be at "steel" band position) was hard to distinguish from the blue band on lithologic diffs. alone; it is generally a durain in Franklin Co.

E. Partial desc. only:

	Feet
(coal to t.c.)	not measured
Durain	.03
coal (predom. clar.)	.58
Durain	.09
coal (predom.clar.)	.90 artibrary cut off
Durain	.06
coal (predom.clar.)	.42
carb. sh.(B.B.)	.25
coal (predom. clar.)	1.68
	u/c

F. 1.78' from u/c to 0.26' carb. shale believed to be the blue band.

G. 1.76' from u/c to 0.24' carb. shale band believed to be the blue band.

H. 1.68' from u/c to .30' carb. shale (ble band), which still has brown pellets in med. gray matrix. Durain/ dull coal zone present from .5 to 1.0'

I.- Partial desc. only: (G. roof) above B

	(feet) B
(coal)	not measured
Carb. shale (B.B.)	.38
coal (Predom.clar.)	.60
fusain lens	.05
coal (predom.clar.)	1.13
	u/c

No prominent shale bands/lenses seen below the blue band; durains may be present.

J. 1.72' from underclay to .36' carb. sh. (blue band), including some interlam. at top contact.

K. Partial desc. only:

	(feet)
(coal)	not measured
Shale (Blue Band)	.50' & variable
coal (predom.clar.)	1.45'
fusain	.08'
coal (predom.clar.)	.27'
	u/c

L. Coal thickness: $\frac{7.10'}{1.85'}$.52' B.B.

B.B. has somewhat interlaminated contacts. The "steel band" here is 0.30' above the B.B. and is a 0.10' thick durain band. There are other marker durains, but no shale bands. The durains seem more diffuse; they have long vitrain streaks (compressions?) in them; picks are difficult.

M. Blue band pictures taken here:

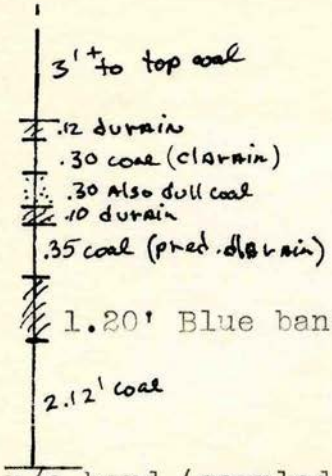
$\frac{5' \text{ to T.C.}}{1.88'}$.56' B.B. B.B. sampled: -A-11 & -A-12

N. Blue band is 0.99' thick:

	.69'	Olive-brown claystone; coal stringers in upper 0.2'
B.B.	.25	Coal/claystone interbedded irregularily
	.05	Dk. gray shale (lenticular?)

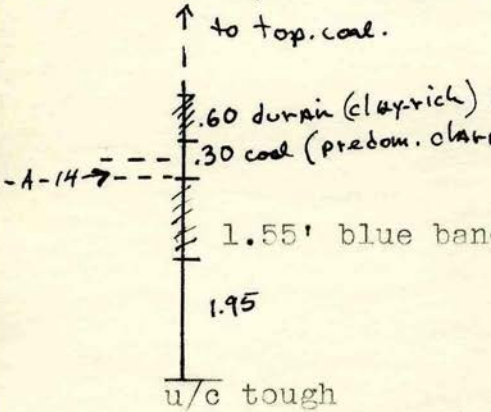
1.4' coal below B.B., but not to u/c: coal seen is NBB with calcite on cleats. The "steel band" is .35' above the b.b. and is a .06' thick durain with carb. shale lenses.

O. At 14,620' of 14th W.S. made partial desc.:



Pictures taken here with folded out rule as scale.

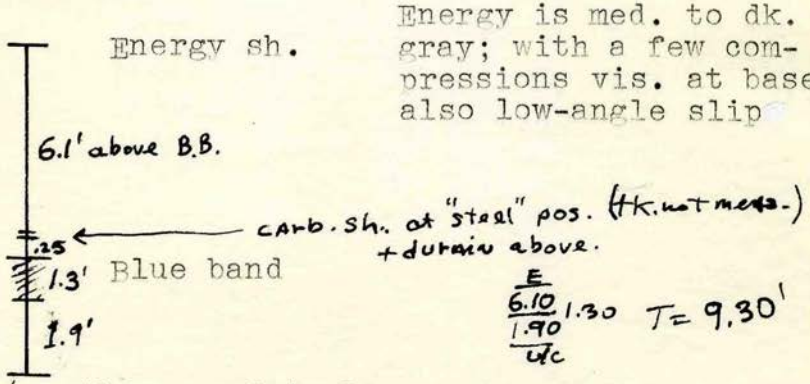
P. At 14,903' tagged on 14th W.S. made partial desc:



At P(south) which is 20' to the south on pillar corner, band had 45° slip (internal) where John was checking. I sampled the coal at 0.15' above B.B. for palynology here; there is clearly a total re-establishment of the swamp out over the B.B., prob. from the east (-A-14)

Q. Blue band here is 1.70' ; nodule from within b.b. sampled (-A-15) Q' to the south at 15,366'(at the 17th W.S.) has a B.B. thickness of 1.78'. Small vitrain stringers are presnet in the body of the blue band- most are at angle to plane of stratification; bedding is gone due to deformation (at least in part). A few stringers are horizontal. u/c was not reached here either.

R. On the S. side of mains(South of P.) at 14,915 cc at 20th W.S. I got a full seam measure:



u/c, 4' exposed (Nelson made notes here also)

Because of the thickness of the B.B., really a split not a "parting" anymore, they would like to mine on top of it. If the coal above the split were 7' they would have already; as it is they are not always mining the full lower bench anymore; this site was cut deep on purpose.

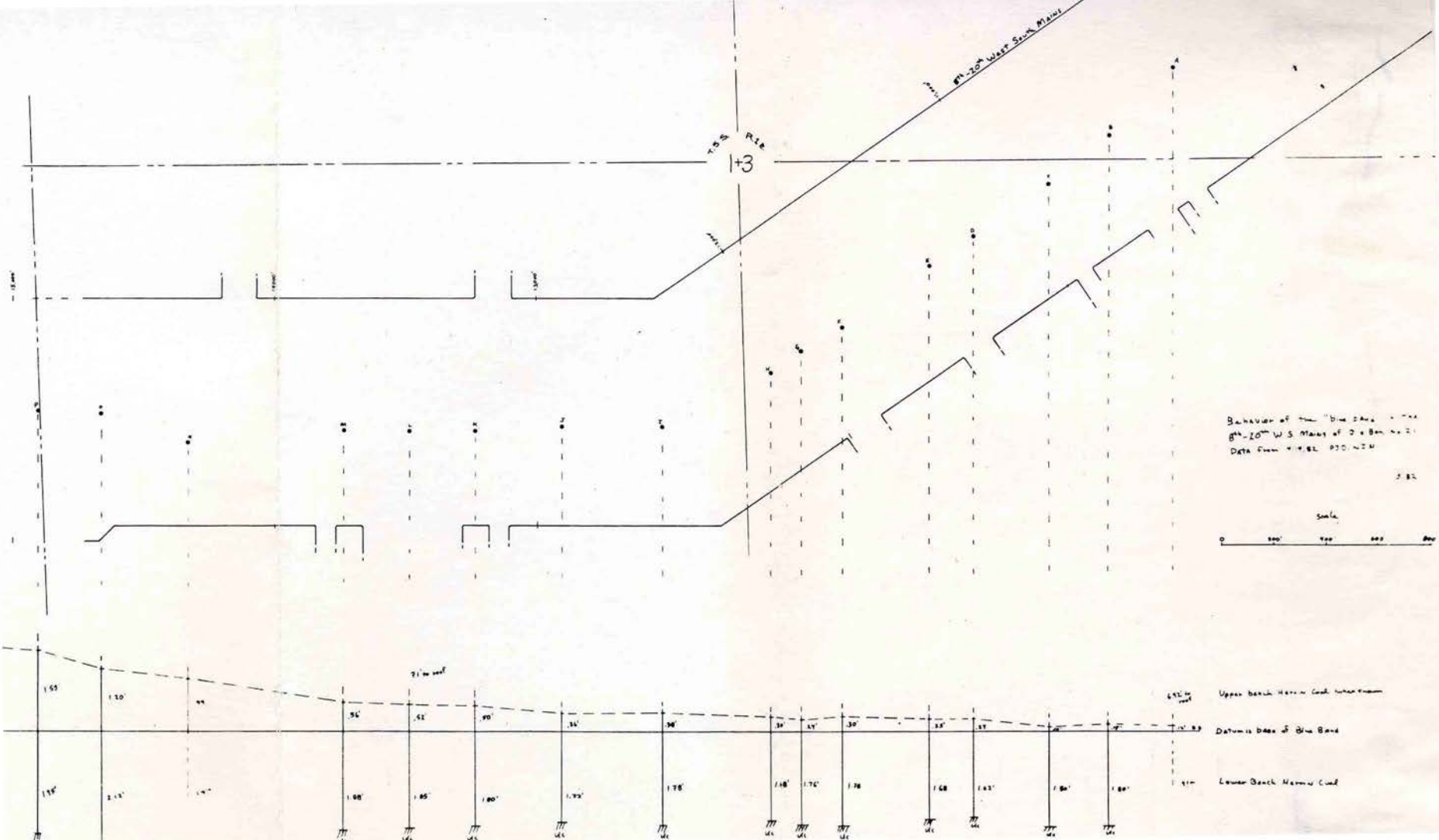
S. Two crosscuts into panel stub (same plus) the blue band is 1.30'; "steel band" position is now clearly a carb. shale. At 3 crosscuts in and one east, blue band is 1.20' thick. Spot of roof seen here was med gray with inter-

laminations at the contact. On way out at 14828' on 19th, a roof fall shows finely lamin. shale roof, w. one med.-angle slip. Contact has compressions (incl. Lepidodendron sp.); roof is considered good ("Minton") in this area and falls are not very common.

Samples: Set "A" complete

O.B.21-A-1	Site A	Blue band; oriented block where .14 thick
-A-2	Site A	Blue band with stigmaria compression
-A-3	Site A	Persistant upper seam durain band "band 3"(block)
-A-4	Site A	B.B. oriented blocks; w. light brn clasts.
-A-5	Site A	Blue band; bulk sample for clay min., L.T.A., etc. where it is .12' thick.
-A-6	Site A	Block of dull coal at Energy shale contact, orient.(DOM)
-A-7	Site A	Energy shale, tough (silty?)
-A-8	Site D	Blue band, finely carb.
-A-9	Site E	Blue band; top 2/3rds for block mount
-A-10	Site E	Blue band; bulk for clay min., etc.
-A-11	Site M	Blue band where .56' thick bulk for clay min, etc.
-A-12	Site M	Blue band; unoriented block
-A-13	Site O	Underclay, tough
-A-14	P(south)	Coal right above B.B.(.15')
-A-15	Site Q	Brn. nodules from B.B.

Mac. 2761


8th-20th West South Mains
T 5 S R 2 E
1+3
Datum is base of Blue Band
Upper Bench Narrow Coal
Lower Bench Narrow Coal

Thickness	Top	Bottom

Old Ben threatens shutdown

to Illinois Dan 5-22 P-7 1985

By Cathy A. Monroe
Of The Southern Illinoisan

Old Ben Coal Co. couldn't mine coal in Southern Illinois if a Sesser family's lawsuit halts longwall mining under many Franklin County homes, a top company official said Tuesday.

"We won't be able to mine in this area," Syd Robertson, the company's vice president for administration, said flatly following a media tour of the company's "golden hole," underground Mine No. 26 near Sesser.

Robertson, responding to a reporter's question, said Old Ben's economic health depends on longwall mining, a highly efficient process that has made the company "probably the lowest-cost producer in Illinois."

If the courts say Old Ben can't longwall mine under homes and businesses in Franklin County, Robertson said, Old Ben will be gone — and so will 2,000 direct jobs, 10 percent of Illinois' annual coal production and a mining technology many believe could be the salvation of the underground mining industry.

Old Ben's mining practices have been challenged by Jack and Stacie Phillips of Sesser, who are asking Circuit Court in Franklin County to stop a Mine No. 21 longwall scheduled to undermine their 4-year-old, $350,000 house near Sesser.

Circuit Judge Loren P. Lewis has said he plans to rule on the Phillipses' request for a preliminary injunction by next week. If granted, the Phillipses plan to pursue a permanent injunction.

The Phillipses claim Old Ben's plans to undermine their house will cause irreparable damage to the two-story wooden structure, which contains more than 12,000 square feet of living space.

"Certainly Old Ben has substantial property in Southern Illinois that does not have a house — a fine house — right on top of it," the Phillipses' attorney, Ivan Elliot of Carmi, responded today.

"It would seem to me if they can't mine under one house, that wouldn't necessarily affect their entire Southern Illinois operation," Elliott said. "I think that's an unwarranted and unreasonable threat."

However, Old Ben officials say longwall mining wouldn't be feasible if the courts ban the company from mining within 300 feet of any residential structure on the surface.

"It's not a flexible system where you can just pick it up and move it," said Mark Cavender, general superintendent of Mine No. 26.

Longwall mining is set up to extract coal from large tracts, up to one-eighth mile wide and one or two miles long. Setting up a single longwall normally takes about a month, and disassembling can take even longer — up to three months depending on roof conditions, Cavender said.

Moreover, planning for each tract consumes several months, said Kim Burke, the company's manager of engineering services. A single planning change — consideration of undermining a spur line to Old Ben's preparation plant — consumed nine months, he said.

"It would be pretty difficult to set up a longwall panel that would not come within 300 feet of an occupied dwelling somewhere," agreed Doug Downing, supervisor of land reclamation for the Illinois Department of Mines and Minerals.

Downing said he believed the likely result of a Phillips victory would be a directive forcing Old Ben to re-acquire mining waivers from property owners whose mineral rights were sold decades ago.

The Phillipses are arguing that the people who sold the mining rights to their property in 1912 had no idea the coal seam would be longwall mined and therefore did not make a "knowing waiver," as required by law.

The Phillipses argue their predecessors on the land would have assumed their land would be mined using the "room-and-pillar" method, which leaves blocks of coal to support surface land, not by longwall mining, which results in subsidence.

If the Phillipses' argument is successful, it would have far-reaching consequences because mineral rights to much of Old Ben's holdings were sold in the same era.

Old Ben officials confirmed they have submitted a plan to the Phillipses to protect their house from subsidence damage. Old Ben is bound by state law to repair 100 percent of any damage resulting from mine subsidence.

Old Ben, the only company longwall mining in Illinois, has been experimenting with longwalls since 1982.

The company has invested approximately $60 million since 1975 in equipping its four Franklin County mines with longwalls — two each in Mine No. 26 and No. 25 near West Frankfort and one each at No. 24 near Benton and No. 21 near Sesser.

The company also is preparing to open a $30 million state-of-the-art coal preparation plant at No. 26 within the next month.

But unless the company is able to longwall, "the economics just aren't there," said company spokesman Mike Musulin. "You can physically do it. You can't economically do it."

"Settled in favor of old Ben CC"

Danner

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John C. Moore Corporation, Rochester, N.Y. 14604
MOORE'S MODERN METHODS
FORM 180 W

Mine Notes - Old Ben #21, Franklin Co.

Trip: May 16, 1985 by Steve Danner and Phil DeMaris (ISGS), Bob Matthias (Evansville Office) and Mike Pritchard of Old Ben Coal Co. Notes by P. J. D.

Coverage: Introduction
Coal Sampled at Site A
Observations from 55th-57th N. entries

Sampling on W.S. Mains
Samples: Set "B", complete.

Introduction

The primary purpose of this trip was to collect a fresh run-of-mine coal sample for the Fine Coal Cleaning project, representing lower sulfur than before, but still fairly high ash. Coal mined on the west side of the mine near the Walshville Channel meets this requirement; operations were in the process of closing on the higher sulfur east side of the mine. The secondary purpose was to see and sample more exposures of the "blueband" where it thickens to become a split of several feet. Bob Matthias briefed us at the Benton Office that this split was seen 5 ft. thick in a drill core before the lower bench of the Herrin was lost and the thickness became indeterminable. Sampling of the "thick" Blueband will complete a set of clay mineralogy samples begun in '82, which thicken from a "normal" Blueband thickness about 3/4 mile to the east.

Coal sampled at site A.

A. We decided to get the coal sample from an area where a longwall panel is being laid out north of

the mains. We entered "F" shaft and went north on 55th-57th entries ("12CM-9's section) 4000 feet. We sampled fresh coal off the belt head (O.B.21-B-1) at the 4002' crosscut of 55th N., the coal being mined 2-3 crosscuts to the north. Coal mined here and in vicinity is all above the "Blueband", leaving the lower bench below the 2-3½' split found in this panel. The pillar corner of the SW quadrant of the intersection became site A, where additional data and samples were taken. Coal thickness is 6.65' ± .05' and top coal is not left. Energy Shale roof was sampled in two benches, the thin, carbonaceous shale in bottom 2cm (-B-2) and med. gray shale 2-6 cm up (B-3). Top 10 cm of "Blueband" (B-4) appeared slickensided, just like an underclay.

Observation on 55th-57th N. entries

Between A and B we went to the Face (about 4300' N) on the 57th and walked south, soon switching to the travelway (56th). Bob Matthias made notes about the level of visible clastics/bone coal in the Herrin as exposed and got split thicknesses whenever the entry was cut deep enough.

4300' face of 57th - 70 cm. wide decorticated lycopod trunk seen in immediate roof. A zone of probably bioturbation (roots?), some appearing as little concretions at about 50 cm. above contact. Energy/coal contact is generally "rolly", with some coal riders irregularly distributed.

ca. 4200' Saw trunk in roof with ¼" wide (side-to-side) leaf cushions appearing to be Lepidodendron, but on a fairly large diameter trunk-estimated at 50 cm wide.

ca. 3800' on travelway Large decorticated lycopod trunk 0.9 feet into roof with diameter exceeding 60 cm.

ca 3700' Several possible large upright stumps seen, severly distorted during collapse. Evidence of rerooting above this level found in probable Stigmaria impressions.

ca. 3600' - Area has at least 8 distinct layers of plant hash-medium sized material up to 10 cm. long, locally in range 30-45 cm above top of Herrin (single or pair of layers about a foot up seen previously a couple times). These zones overlie plant compression-poor zones in medium gray silty shale above Herrin; however, there is still the finely carbonaceous 2 cm. zone of Energy right above the contact.

ca. 3400' Top 10 cm. of blueband/split sampled (-B-5).

3245' Samples of blueband/split taken where quite carbonaceous (-B-6, -B-7), and bottom 10 cm. of Herrin above split (-B-8) for palynology and XRD of L.T.A. Back across-cut (ca. 3300') roof appeared to have Stigmaria, although Danner argued one case as being decorticated lycopod with identations at cushions (not root scars). I sampled nearby what I thought was a small Stigmaria axis (-B-9), but it proved to be (via W.A.D.) part of a Lepidostrobus cone.

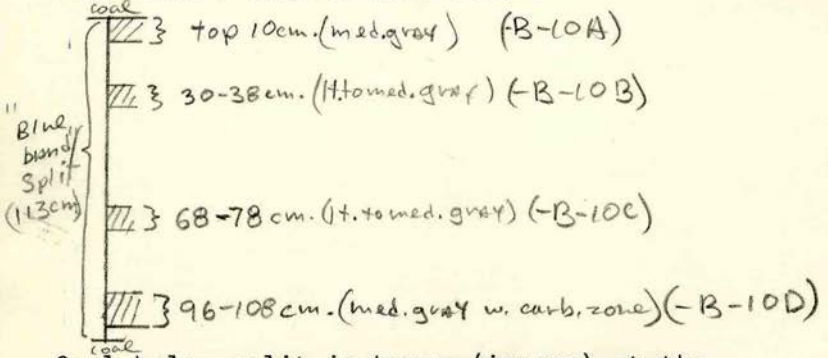
3000'-2760' I saw 130 cm. wide fusain lens in the Herrin (prob. fusainized lycopod trunk) about 20 cm above the blueband; reached max thickness of 16 cm. and had some internal vitrain streaks. Lens caused compactional deformation to coal below, less so above. Immediate roof has small-scale Lepidodendron leaf cushions on tree trunks of a

minimum of 1 foot in diam., and stigmaria roots(?) in immediate 10 cm. of roof. Most of macrofossil material is decorticated lycopod.

2700'N. Small coal rider sharply up 3' above seam over 6' lateral distance.

Sampling on W.S. Mains

B. At 1950' crosscut on 56th N. the full thickness of the "blueband"/split was seen. Here it is 3.70' thick and 4 samples were taken:

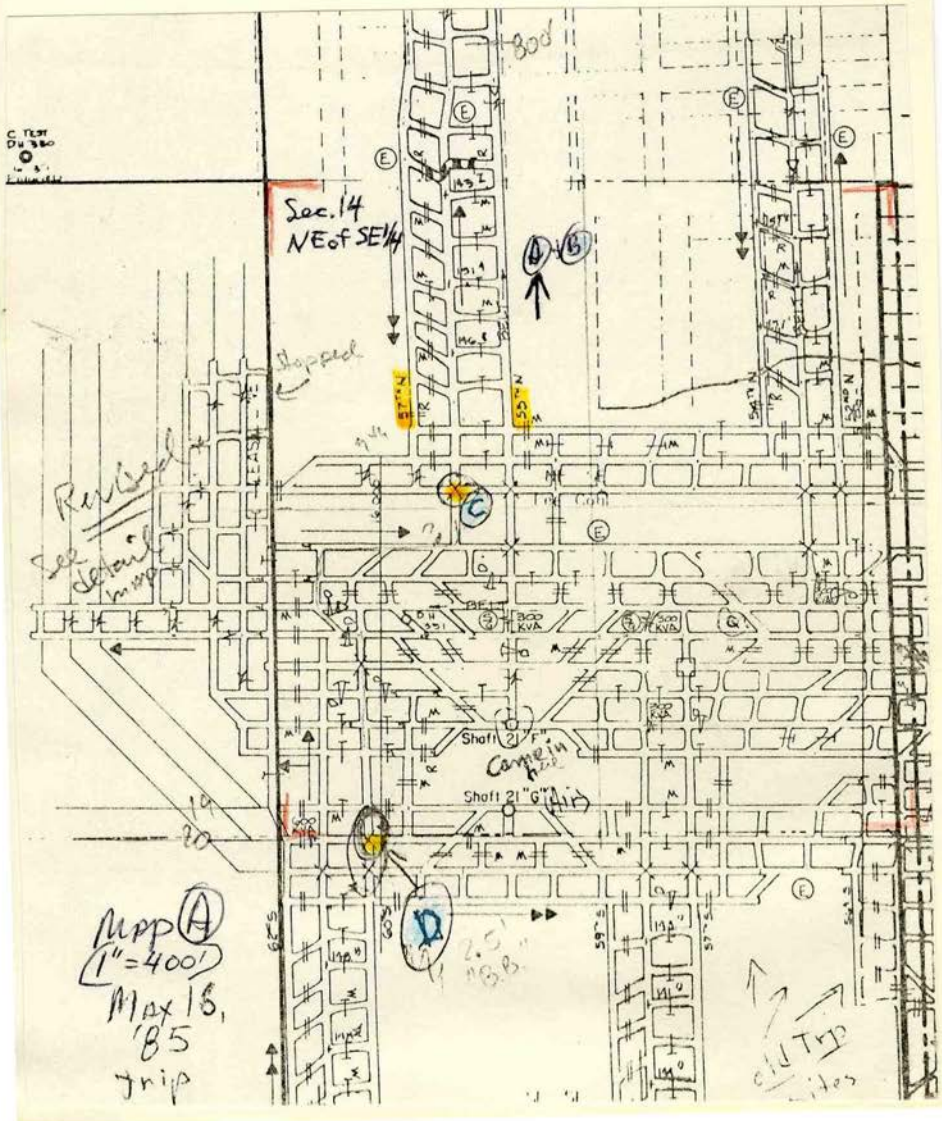


Coal below split is boney (impure) at the contact. Exposure was poor for a desc.; in general the split was med.-lt. gray claystone throughout. There was some slickensides throughout the section, but it was most prominent near the base. Large samples taken here; I had to pick up the pace hereafter to catch up with Steve and Bob, which happened where the panel meets the mains. [See map A]

C. I needed samples in line with those taken on earlier trip, i.e., on Mains. First site was about 15,900' W. on the 10th W.S. Main. About two feet of "blueband"/split was seen but since the full unit was not clearly exposed I took only two samples from the top (-B-11, -B-12). Site could be dug out.

D. Overcast on 20th W.S. at 16,050'W. gave exposure of full 2.5' (76 cm) thickness of "blueband"/split. A set of 3 samples were taken, 0-10cm down (-B-13), 20-30 cm. (-B-14) down and 45-50 cm down (-B-15).

Samples see next page



Samples; Set "B"

OB21-B-1 A (T5s, R1E, SENWSESE Sec.11) Herrin Coal "run of section" representing seam above "blue band" which is here a 2-3' split. 100 lbs. taken for Fine Coal Cleaning Pr.(C23603)

-B-2 A Energy Shale roof, very dk. gray, basal 2 cm. which is more carb. than -B-3. Some plant. compr., occassional slickensides. Non-fissile.

-B-3 A Energy Sh., med. gray, 2-6 cm. above Herrin; scattered vitrain fragments and layer of plant frag. hash at top. 2 diffuse siderite bands. Gradational to -B-2. Non-fissile.

-B-4 A Top 10 cm. of 'blue band', highly slickensided; med. gray, weak, with rootlet traces present.

-B-5 3400' on 56th. (SWSESE Sec.11) Top 10 cm. of 'blue band'/split top 3-5 cm. more carb. very dk. gray; curvilinear vitrain streaks give evidence of rooting; mod. slickensided., less carb. lower 3 cm.

-B-6 3245' on 56th. (SESWSESE Sec.11) Top 10 cm. of B.B./split; very dk. gray in 3 cm. below Herrin; grad. contact to less carb. zone below.

-B-7 (as above) Blue band/split at 30-35cm. down; med. gray claystone, highly slickensided, w. contorted carbonized rootlet traces.

-B-8(as above) Base of Herrin upper bench-

6 cm. just above 'blue band'; appears to be SBB coal; splits for Paly.(Mac. 2961A) & LTA.

-B-9 3300' Compression of Lepidostrobus on 56th (cf. Oldhamius), id. by W.A.D.; D. Willard will sample spores.

-B-10 B (SWNENE Sec.14) Set of 4 samples of the 'blue band'/split from top to near bot.
A. Top 10 cm. med. gray, slicken.
B. 30-38 cm. lighter gray, " .
C. 68-78 cm. likeB.,less slickn.
D. 96-108 cm. like A.,but with zone of dk. gray clayst. with plant compressions, incl. pteridosperm petiole(prob.);Mac.2971B.

-B-11 C (SENWNESE Sec.14) Top 10 cm. of blue band; med. gray w. carbonized rootlets.

-B-12 C B.B./split; tough zone (calc.?) around 30 cm. down; lt-med gray w. promin. rootlet compressions, some 2 cm. wide.

-B-13 D (NWNWSESE Sec.14) Set of 3 samples of blue band/split where 2.5' thick(76 cm.):
Top 10 cm. of blue band/split; med. gray w. darker zones; Stig. and slickensides present.

-B-14 D 20-30 cm. beolw top; med. gray no dk. zones, few rootlets, but slickensided.

-B-15 D 45-50 cm. below top; some u/i plant material, med. gray; only slightly slickensided.

All samples except -B-9 received XRD analysis.

notes typed 8/85

John C. Moore Corporation, Rochester, N.Y. 14604
FORM 180 W

Mine Notes - O.B. 21 Mine - Franklin Co.

Trip: November 6, 1985 by Phil DeMaris and Dave Rapp (ISGS), Debbie Willard and Joan Esterle (U. of I), and Mike Pritchard (Old Ben Coal Co.)

Coverage: Introduction
Visit to Longwall panel
ROM coal sample
Samples: OB21-C-1 to 6

Introduction

The primary purpose of this trip was to get a large sample for use on the fine coal cleaning project. Secondary purposes included getting a seam description near the longwall face, examining roof-shale plant compressions, and sampling the floor west of the "F" shaft where we entered.

Since my last visit the first longwall panel north of the S.W. Mains has begun operation. The last of three south panels was finished over the late summer, and was stopped early because the interval mined included the "blueband"/split (which was well over a foot) which was causing serious problems for the prep. plant. Plans for a fourth southside panel (which would have been on top of the split) were abandoned when geologic input from Bob Matthias indicated that too much impure coal was found in the bottom third of the seam above the split. Layout of the panels north of the Mains is entirely on top of the "blueband"/split. The head gate entries to the next panel to the west (58th-60thN.)

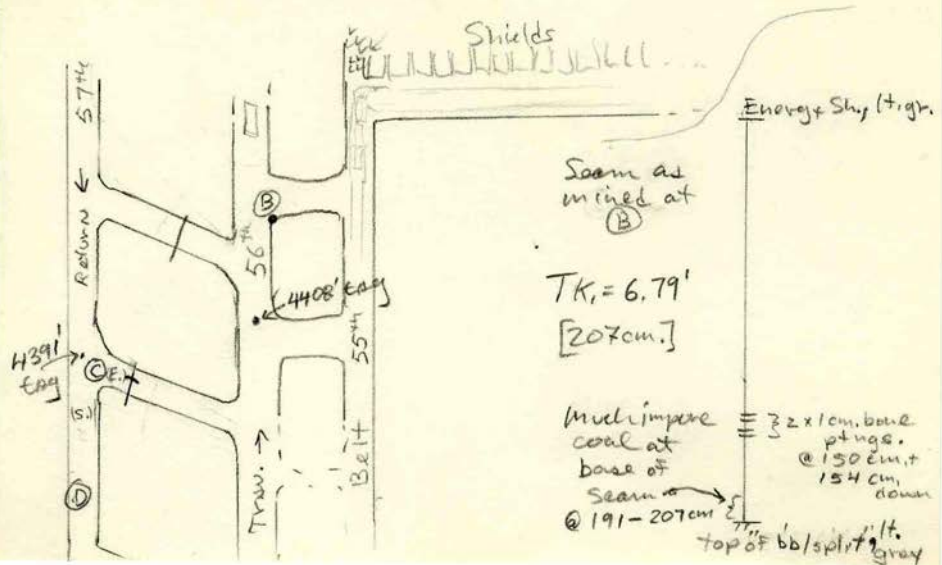
of the one visited were advanced over a thousand feet when we visited; it will be 754' wide, while the first north panel is on 545' centers.

Visit to Longwall panel

Total time underground was only 2¼ hours, so seam description and compression watching were shortened somewhat and floor sampling shelved. We walked into the panel, stopping occasionally to look at plant compressions.

A. At 3435' CC on 56th N. (travelway) we collected 2 Lepidodendron compressions (-C-1 and -C-2) from immediate roof. Roof is Energy Shale which is generally light gray, with occasional plant fragments on bedding; specific facies unclear.

B. (See map). We got to the Longwall face where I did a quick description and the women got the tour of the Longwall headgate area while it was not running. Longwall face was at about 4530'N. (estimated).



At B. the Herrin Coal above the "blueband"/split is 207 cm. (6.79') and has 1 cm. impure coal partings/bands at 150 cm down (not very persistant laterally) and 154 cm (fairly persistant laterally). From 191 cm. to 207 cm. the coal ranges from dull banded to impure over short interval; this type of material is very difficult to describe just using Stopes-Heerlen because of the prevalence of high-ash components which are undoubtedly present but cannot be identified with certainty in the field. The interval has some prominent vitrain sheets, so it cannot be considered unbanded. In the interval 150 cm. to 191 cm. down there were several thin fusain lenses (maximum 1½ cm.); little fusain was seen in the top 1/3 of the seam and the middle section was poorly exposed so no judgment could be made. No samples were taken.

C. Just through the door in the stopping were some nice compressions. We sampled a large coalified Lepidodendron compression (-C-3) and an internal (?) impression (about 3-5 inches into roof) of a Lepidophloios (-C-4) which was tracked for 8 feet and exceeded 35 cm. in diameter. Picture near possible base taken by Debbie. This was the type of material with small, squarish leaf cushions (¼" or slightly more, side to side) which I incorrectly called Lepidodendron in May 16 notes (e.g. at 4200' N.). This area was called "East" while area at and south of crosscut tag (4391'N.) was called "South".

In the "South" sub-area Joan found another cone for Debbie's thesis work, a Lepidostrobus Oldhamius (same as -B-9). In getting it down to manageable size, it split into two parts. Cone (-C-5) was about 6 inches into roof shale by best estimate.

D. A little further south on 57th at about 4350'N. a probably Lepidophloios (-C-6) was collected in immediate roof.

On future trips, more attention should be paid to estimating stratigraphic position of compressions. Most of compression seen (and collected?) were at debris-rich zones above Herrin contact. They either represent post-mud deposition regrowth or (less likely) trees which lived through initial mud deposition. The latter is less likely because no good "kettle bottoms" (infilled upright stumps) were seen, only a few probable stumps which collapsed before much infilling took place.

Rom coal sample

Dave Rapp took the ROM coal sample at O.B. 21 and also toured the new prep. plant at O.B. 26 and the old plant at O.B. 21. This sample was taken in 2 barrels and will be called "Herrin-South", replacing C23603 which was not large enough to meet needs.

Dave toured both the O.B. 21 and O.B. 26 prep. plants. The O.B. 21 plant was an older plant which was built with a flotation circuit, which is not used. The O.B. 26 plant was new (still in shake down) and uses a flotation circuit; natural -325 M material is not recovered.

Samples: O.B. 21 - C - 1 to 6

No.	Site	Description
-C-1	A	Lepidodendron compression
-C-2	A	Lepidodendron compression
-C-3	C East	Large coalified Lepidodendron compression
-C-4	C East	Lepidophloios impression (internal?) into roof shale a few inches
-C-5	C South	Lepidostrobus Oldhamius well into roof shale
-C-6	D	Probable Lepidophloios compression

Note: Material will be shown to Bill DiMichele for further identification of species, and notes will be updated. All 6 samples will be held by Debbie Willard until she is done using them, at which time they will be returned to I.S.G.S. collections.

MARKETS

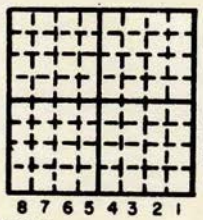
RESERVES DOWN IN OLD BEN COAL CO. MINE; UNION PREDICTS MINE MAY CLOSE

Its reserves nearly depleted, Old Ben Coal Co.'s No. 21 underground mine near Sesser in southern Illinois is expected to close within six months, according to United Mine Workers officials. "I'll be surprised if the mine makes it until Christmas," one union official told ÆMDRVØCoal WeekÆMDNMØ.

Some union members say Old Ben is preparing to send written notices advising miners of the expected shutdown, although Bill Hake, vice president of the company's Illinois operations, said he knew of no such plans. Hake acknowledged that No. 21, which opened in 1960 and is located about five miles northeast of Sesser, is running out of coal. The company is considering several options, he said, though he declined to say what they are.

No. 21 is among the mining properties offered for sale this year by British Petroleum Co., Old Ben's parent. As rumors run rampant about possible buyers, union officials say they're concerned not only about the future of No. 21, but also about the company's other three operating underground mines in southern Illinois: Nos. 24 near Benton, 25 near West Frankfort and 26 near Sesser. Union officials say none of those mines has a lifespan of more than 10 years. The company dismisses such concerns, pointing out that the mines all are low-cost producers that utilize longwall mining systems.

Locatio
Correla
Date
Basis
County Co. no.



Sec.
T. N. S.
R. E. W.

Data sheet by
Date

Top Bottom

Keystone Jan 1990

LONGWALL CLOSED

In a controversial move, Old Ben Coal Co. shut down the longwall at its No. 21 mine near Sesser, Ill., in late 1989. The action came as BP Coal Inc. neared final negotiations for the sale of its U.S. coal properties, including Old Ben's four active mines in southern Illinois. A company official said the longwall was idled to consolidate mining on the mine's eastern reserves. Seventy-five union miners were laid off in December as a result of the longwall's demise. The company planned to complete mining at No. 21 with continuous miners.

The longwall shutdown was criticized by the United Mine Workers, which represents No. 21 miners. The 445-ton capacity longwall was installed in 1978 to mine the No. 6 seam, which is about 660 ft deep. The seam's height is 70 in. and the longwall panel's width is 900 ft.

COUNTY

O.B. 21

Coal Week Feb 12, 1990 p.7

Old Ben Coal Co., striving for greater savings as it steers a more independent course from British Petroleum, has announced it will close its No. 21 underground mine and set a voluntary early retirement program for salaried personnel in the Illinois Division. Shutting No. 21 was not entirely unexpected. Even so, union officials criticized the announcement last week that No. 21 would close by the end of March. UMWA thought Old Ben had made a renewed commitment to keeping the mine open.

Old Ben's 288 UMW miners and 49 salaried personnel will be affected by the shutdown. But No. 21 had run out of 1.2-1.3 percent sulfur coal, though it still has some reserves of about 2 percent sulfur coal, Hake said. The mine is the company's highest cost operation, and Old Ben was forced to shut down its longwall last fall. UMWA workers will have panel rights. Old Ben will use an voluntary early retirement program with a severance to absorb the salaried workers.

Operator, Date

Mine, Sec. T. R.

Location in mine,

GRAPHIC SECTION | DESCRIPTION OF SECTION (AT POINT SAMPLED)

nches

INDUSTRY

OLD BEN SALE SET AT $115 MILLION; ZEIGLER TO ASSUME OLD BEN LIABILITIES

BP America announced last Friday that it has put the finishing touches on its agreement with Zeigler Coal to buy BP's US holding for about $115 million plus the assumption of liabilities.

BP spokesperson John Andes told *Coal Week* that the agreement includes Franklin Coal, a holding and sales company; Old Ben Coal and Pike Land Co, including the B Canyon reserve in Utah. Zeigler will pay $105 million at closing and will make to later contingency payments of $5 million each, he said.

Earlier, Zeigler president Michael K. Reilly put to rest speculation about the Illinois coal producer's plans for two Old Ben Coal Co. surface mines in Indiana, once Zeigler completes its purchase of Old Ben from BP America. "Our intention is to keep those mines and operate them," Reilly told *Coal Week*. Zeigler, he added, has absolutely no plans to sell Old Ben Nos. 1 and 2 in Pike County.

(Note character and thickness of floor)

Total thickness of coal

May 28, 1990 • COAL WEEK

hr. min.

Wt. Gross, lbs. Net, lbs.

What Nos. shipped by Co.?

Excluded from sample: No.

Sample represents in. tons.

Impurities? How do they occur?

(1 division = 3 in.)

Sample No. Can No. Lab. No.

Collector, Coal: Survey No.

Mine, Co. Index No.

R.—COAL SAMPLE SHEET.

COAL WEEK, Vol. 16 No. 31 July 30, 1990

ZEIGLER CONCLUDES OLD BEN PURCHASE; B CANYON DROPPED, PRICE AT $95 MILLION

Zeigler Coal, became Illinois's largest coal producer last week by acquiring nearly all of British Petroleum's remaining coal operations in the US.

The previously announced purchase price for BP properties Old Ben and Franklin Coal, a holding and sales company, was $115 million, but it was reduced just before the sale closing (see related story page 2). Sources said the final base price was $95 million with an additional $10 million to be paid by Zeigler if it reaches undisclosed production levels.

Zeigler president Michael Reilly predicted his privately-held company's leaner managerial approach would boost operations at Old Ben mines in Illinois, Indiana and West Virginia. "In a year, you're going to see a big difference in Old Ben," Reilly told *Coal Week*. "It will be a lot more efficiently run." Old Ben's office in Cleveland will be closed within a few months and layers of management are being trimmed up and down the corporate hierarchy.

Combined Illinois offices at Benton

Zeigler plans to combine the current operations office for its three southern Illinois mines with Old Ben's Benton IL office, which had responsibility for four mines. The two former Old Ben mines in Indiana and Mine 20 will be grouped together.

Despite last week's announcement by a southern Illinois politician, Reilly insisted that no decision has been made to reopen the Old Ben No. 21 mine, closed since the end of March. No. 21 coal is "several dollars a ton" higher than what Zeigler can sell it for a profit, he said. "We have to find a way to get that cost down." Sources told *Coal Week* the BP-Zeigler sale agreement contains an option that could serve as a disincentive for the reopening of No. 21. "If Zeigler doesn't operate 21, they don't pick up some of the liabilities associated with the closing of 21," a source said.

Most Old Ben employees to stay on at Zeigler

Reilly said the "vast majority" of Old Ben and Franklin Coal personnel would stay on with Zeigler, but he didn't provide any numbers. According to sources, about 15 people at Old Ben's 80-person office in Cleveland were offered positions with Zeigler. At Old Ben's Benton office, 17 or 18 people were terminated, including high-ranking officials. The fewest cuts came in the coal sales group.

Reilly said his immediate goal is to "mine everything we can sell." He hopes the combined operations produce about 18 million tons a year. Zeigler has produced about 4 million tons a year and Old Ben about 14 million tons. Long range, Zeigler wants to continue growing. Said Reilly: "I'd like to expand in the West and expand in the East, but not this month."

PRODUCTION WOES, STRIKES HIT BP COAL; 1989 PROFITS OFF $33 MILLION FROM 1988

Mining problems in Illinois and United Mine Workers wildcat strikes combined to deal BP America's coal operations a heavy financial blow last year. After recording a $33 million profit in 1988, BP says in its annual report that its coal division only "broke even" in 1989.

BP said production losses at Franklin County, Ill., underground mines operated by its subsidiary, Old Ben Coal Co., negated gains at company mines in Indiana and West Virginia. Overall company production remained unchanged from 1988, at 13.2 million tons. The 1989 figure, however, included 1 million tons from its low-sulfur Mingo Logan operation, which started up in late 1988 in West Virginia and since has been sold to Ashland Coal Inc.

A slight increase in sales volume did not translate into increased profit because higher revenues were more than offset by higher costs and effects of the UMW work stoppages, BP said.

Production in the Illinois Division was hurt by machinery failures and geological problems, the company said. Illinois UMW officials told *Coal Week*, however, that some of the machinery failures were the result of aging equipment that should have been replaced long ago.

"They've just got junk to work with at (Old Ben) 21 ... I don't see how the men have been able to get as much production out as they have," said a UMW official. No. 21 ceased production at the end of March and more than 300 miners were laid off.

BP revealed in the annual report that last summer's UMW work stoppages, which stemmed from miners showing solidarity with fellow union employees on strike against the Pittston Coal Group, cost the company about $12 million and "between eight and fourteen workdays per mine." The report also made mention of the bombshell BP dropped last year when it placed most of its U.S. coal holdings on the market; it later decided not to sell some of them, including Old Ben.

"After bidders failed to make satisfactory offers for Old Ben and the remaining U.S. coal assets, these assets were withdrawn from the sale," the company said. BP noted that its U.S. holdings are being consolidated into an independent, wholly owned subsidiary, with its own management and board of directors (4-2-90 *Coal Week*), in an attempt to make the operations more competitive.

Coal Week April 16 1990

Mine, Co. Index No.

R.—COAL SAMPLE SHEET.

Mine Name or No.,
mile from
Operator, 19

Operator, 19

Entrance, Elev., ft. {above, below,
Depth to bottom coal, ft. Alt.

A.

B.

ZEIGLER TO KEEP OLD BEN'S INDIANA MINES; REILLY PLANS TO CLOSE ON COAL FIRM IN JUNE

Zeigler Coal Co. President Michael K. Reilly has put to rest speculation about the Illinois coal producer's plans for two Old Ben Coal Co. surface mines in Indiana, once Zeigler completes its purchase of Old Ben from BP America. "Our intention is to keep those mines and operate them," Reilly told *Coal Week*. Zeigler, he added, has absolutely no plans to sell Old Ben Nos. 1 and 2 in Pike County.

Reports have persisted since last year, when Zeigler expressed strong interest in Old Ben after BP placed its US coal holdings on the market, that Zeigler probably would not want to operate the two

C. surface mines. According to some sources, Zeigler would sell the mines to AMAX Coal Co., which operates several mines in Indiana.

But Reilly said those reports are untrue. Zeigler hopes to close the Old Ben transaction by the end of June. Reilly said no major hitches have developed since Zeigler disclosed the proposed purchase sev-

D eral weeks ago. He said no final decision has been made on the possible reopening of Old Ben No. 21.

The sale would include Old Ben mines in Illinois, Indiana and West Virginia. Also included would be BP America subsidiary Pike Land Corp., which owns the B Canyon reserves in Utah.

I ...on surrounding area,

Railroad, Wagon, Idle, Abandoned

IDENTIFICATION

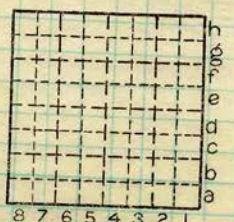
County No. Coal No.

Part

Quad.

County

L.—SURFACE SHEET (Geol.)



Sec.

T. N. S.

R. E. W.

Index No.

Mine Name or No.,
mile from
Operator, 19

Ope

Ent
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A.

B.

mer

OB21

LABOR

WILDCATS HIT OLD BEN MINES; PAYDAY CHANGE GIVEN AS REASON

The "honeymoon" ended last week for Zeigler Coal Co. and union employees at its newly-acquired Old Ben Coal Co. mines in southern Illinois when more than 500 miners staged a wildcat strike that shut two mines.

Members of the United Mine Workers of America said they were angry Zeigler changed their bimonthly payday from Tuesday to Friday, so they walked off the job at Old Ben No. 24 on Sept. 26 and Old Ben 26 on Sept. 27. Miners told *Coal Week* they expected the work stoppage to last for several days and warned it could spread to the other operating Old Ben mine, No. 25. A fourth Old Ben mine, X No. 21, has been idle since March and Zeigler is reconditioning it to return to production next March. Zeigler bought Old Ben earlier this year for $95 million. Until the wildcat, relations between the independent coal producer and the UMWA generally had been good. The union had praised Zeigler's decision to reopen No. 21, a move that will mean an additional 200 jobs for UMWA miners by mid-1991.

C.

Zeigler President Mike Reilly confirmed the reason for the wildcat. "We changed the payday. We had several different paydays between our other mines and the Old Ben mines, so we decided to consolidate all our mines on the same payday," he said. Zeigler now operates nine mines in Illinois, Indiana and West Virginia. Reilly predicted the strike would be short-lived, adding he doubted it would spread to other mines. coalweek - Oct 1 1990

D.

E.

Railroad, Wagon, Idle, Abandoned

IDENTIFICATION

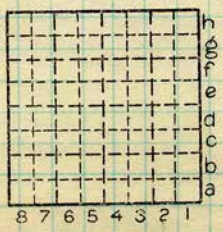
County No. Coal No.

Part

Quad.

County

L.—SURFACE SHEET (Geol.)



Sec.

T. N. S.

R. E. W.

Index No.

MONDAY AUGUST 5, 1991

Mining Plan Sparks Debate

'Planned Subsidence' Concerns Residents, Environmentalists

By Kathleen Best
Illinois Political Correspondent

A coal company's plan to mine under one of the most popular state parks in southern Illinois may undermine the state's multimillion-dollar investment there, threatening tourism, conservation efforts and perhaps one endangered species.

Zeigler Coal Co. of Fairview Heights has asked the state for permission to mine below Wayne Fitzgerrell State Park, using a technique called "planned subsidence," which would leave sunken swaths through park lands and the Rend Lake shoreline after coal is extracted.

The company's own assessment says that the mining could threaten boat ramps, camping areas, a horse stable, picnic shelters, miles of shoreline along Rend Lake, dozens of dwellings and Interstate 57, according to documents on file with the state.

Zeigler owns the mineral rights under the park but needs permits from the Illinois Department of Mines and Minerals before it can work a coal seam about 600 feet below the surface.

The company's own assessment says that the mining could threaten dozens of dwellings.

In permit applications filed with the state, Zeigler officials say they plan to use planned-subsidence mining techniques, rather than mining methods that could leave the surface undisturbed.

The permits would cover about 9,000 acres, including roughly 80 percent of Fitzgerrell Park, parts of Rend Lake and two nearby lakes and natural areas controlled by the U.S. Army Corps of Engineers.

The state mining department will hold an informal hearing today in Springfield to discuss the company's proposal and has scheduled a formal public hearing Aug. 15 at Rend Lake College in Ina, Ill.

No one disputes the company's right to mine coal beneath the park. But the means for doing it are expected to be the subject of hot debate.

"Right now, they're asking essentially for carte blanche to do whatever they want," said Steve Pittman, a coal specialist with the Illinois Stewardship Alliance, a public-interest group. "We're shocked they would propose to totally disrupt this park for 20 years."

Zeigler has pledged to pay for any damage to land or buildings caused by the mining. But Pittman said the company had failed to provide details on how it would restore natural areas — such as woodlands and creeks — and how it would minimize damage to park improvements. If the company cannot justify the options it has chosen, it should be barred from using planned-subsidence mining methods, Pittman said.

"Who's going to want to set up a

See PARK, Page 8

County
T.—DRILL RECORD
Index No.
TOWN
COMPANY
FARM
AUTHORITY
ELEVATION
COLLECTOR
TOWNSHIP
No.
No.
DATE DRILLED
Map No.
T
R.
Sec.

Park

From page one

trailer in a campground that's subsiding every day?" Pittman asked. "What will happen when the shoreline and beaches subside?"

Carol Knowles, spokeswoman for the Illinois Department of Conservation, said the agency recently opened a 10-unit "boatel" and two duplex cabins on Rend Lake as part of nearly $12 million in improvements the state has made at the park. An additional $2 million worth of projects are on the drawing board.

Subsidence could threaten the new lodge, as well as the park's growing popularity as a sailing, camping, hiking and recreation center, she said.

"It's hard to sell a site as a great tourism site if people know there's mining going on underneath them," Knowles said. None of the state's other parks are being undermined.

Knowles said that Fitzgerrell Park attracts nearly 1 million visitors a year and is considered a premier site for national Field Trial competitions for dogs — contests that bring in up to $2 million annually for the region.

But natives, as well as visitors, could be affected by subsidence.

Patrick Malone, a Conservation Department planner, said in a letter to mine regulators that subsidence could:

- Threaten hardwood-forest habitats and wetlands that have been included in the National Wetlands Inventory.
- Affect the Hieroglyphic turtle, a state endangered species that lives in the proposed mining area.
- Change the ecological balance between upland and marsh habitats by changing drainage patterns as the ground's surface sinks.

Moreover, the Illinois Historic Preservation Agency said subsidence could destroy some of the hundreds of prehistoric Indian sites that dot the shore of Rend Lake.

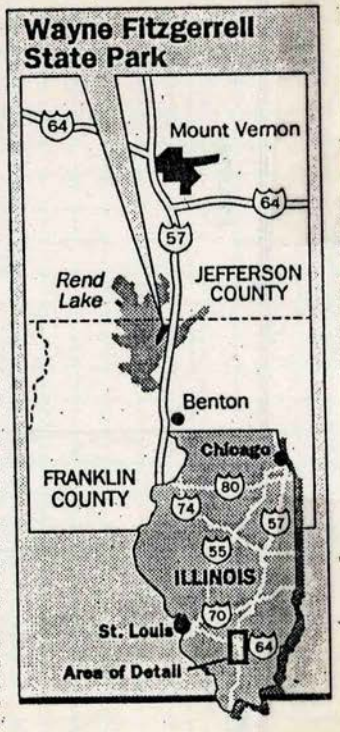
Deborah Herndon, spokeswoman for Zeigler, said Friday that the company has made no final decisions on how it will proceed. But she said Zeigler will "probably use the most cost-effective method" for extracting coal.

Coal industry sources said the most cost-effective mining method was longwall mining, which causes subsidence.

Herndon said Zeigler obtained the rights to mine coal in the area before Rend Lake was made and said the project would add 223 jobs — a $12 million annual payroll — once the mine was in full production.

"The rights to mine that coal were obtained and in existence before the man-made lake was created over an existing coal reserve that was expected to be mined in the future," she said.

"We have already mined, with conventional and longwall methods, many hundreds of acres under Rend Lake and remedied any effects created," she said. "As well, this property is an extension of our current mining operations."



Operator, Date

Mine, Sec. T. R.

Location in mine,

GRAPHIC SECTION			DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.		No.	No.	(Note character and thickness of roof)	Inches

CHANGES OF OPERATIONS

OLD BEN 21 REOPENED

Zeigler Coal Co. is reopening its newly acquired Old Ben No. 21 mine in southern Illinois as a continuous miner operation.

For years, longwall mining dominated at No. 21, which was part of Zeigler's acquisition of Old Ben from British Petroleum in July. Zeigler, a CM specialist based in Fairview Heights, Ill., is confident it can retain its new ranking as the largest coal producer in Illinois by eschewing longwalls at No. 21.

10-90

min.

Excluded from sample

Sample represents in. tons.

Impurities? How do they occur?

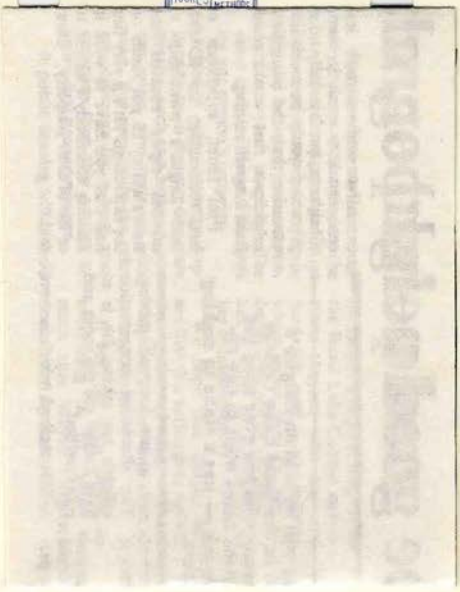
(1 division=3 in.)

Sample No. Can No. Lab. No.

Collector, Coal: Survey No.

Mine, Co. Index No.

R.—COAL SAMPLE SHEET. (12759—1000—2-29) 7



Mine may uproot campgrounds

By Harvey Berkman
QUAD-CITY TIMES
Springfield bureau 8-12-91
D.C. TIMES

SPRINGFIELD — A coal company's plan to mine under Wayne Fitzgerrell State Park could destroy one of Illinois' most popular tourist attractions by submerging campgrounds and turning park land into marsh, state conservation officials have warned.

"Based on the mining application submitted, there would not be one activity at the park that would not be affected," said Ralph Hamilton, a park superintendent.

The park is located in southern Illinois about 35 miles north of Carbondale.

The Illinois Department of Conservation, which runs the park, requested a meeting last week to discuss the potential impact of Zeigler Coal Co.'s request to mine under the park, possibly using a method called planned subsidence.

That work would be done with the intention of letting the land surface drop from inches to feet in long, wide paths in the mine's wake. Because Wayne Fitzgerrell is flat and essentially a peninsula — surrounded on three sides by water — such surface depressions could significantly alter drainage patterns, ultimately turning dry land to swamp.

Among the potential effects of planned subsidence, as outlined by conservation officials are:

- Rend Lake's shoreline campgrounds could be submerged.
- Deep water access to the lake for boats could be lost in a campground reconstruction process, if one is even possible.
- The area economy could suffer a $2.3 million annual loss if the nationally renowned field trial competitions for dogs were eliminated due to a change in the park's landscape.
- An endangered species of turtle could be threatened.

"I just want you to know that total extraction would destroy that park," said Larry Leitner of the conservation department.

Zeigler's ownership of mineral rights can constrict the state's ability to limit the company's coal extraction, said Paul Ehret, supervisor of land reclamation for the mining agency.

"It's a very fine line that you have to walk in limiting somebody's access to or use of their property," he said. "Obviously that coal has a tremendous value to it. If the state were to absolutely prohibit mining in the area, the state of Illinois could end up owing the mining company a substantial amount of money."

Patrick Malone, manager of the Conservation Department's mining program, said the agency opposes planned subsidence mining but not necessarily other types of mining under Wayne Fitzgerrell. Other methods, however, can be more expensive or extract less coal.

S. Illinoisan 8-11-91

Zeigler should be good neighbor, change park plans

Illinois has sunk a lot of money into Wayne Fitzgerrell State Park over the years.

Now Zeigler Coal Co. wants to sink the park.

Zeigler has applied for a permit to mine coal under the park using the longwall mining technique that results in immediate subsidence. Illinois Department of Conservation officials have warned that the subsidence could destroy the park, which is a flat peninsula.

Zeigler, technically, has the right to do this. The company owns the mineral rights to the area. The federal government owns the surface and leases it to the state..

But the state's Department of Mines and Minerals could — and should — deny the permit to use longwall mining. The alternative conservation officials are asking for is to have Zeigler use the room and pillar method.

This method, which is more expensive and extracts less coal, can also result in some subsidence, but it usually takes years and would be much less extensive than the immediate subsidence that would result from longwall mining.

Paul Ehret, supervisor of land reclamation for IDMM, said Zeigler's ownership of mineral rights restricts the state's ability to put limits on the extraction. "It's a very fine line that you have to walk in limiting somebody's access to or use of their property," Ehret said.

But governments limit property owners all the time in the use of their property. Cities have zoning regulations limiting the business you can conduct on your property. The state chopped down billboards on one person's property.

And if your property happens to be in the way of a state project, such as a highway, you can guess who ends up winning. But apparently the rules are different for a huge coal company than they are for an individual property owner.

A public hearing will be held on Zeigler's request Aug. 15 in the Rend Lake College auditorium. Anyone who has ever used the park — or anyone whose taxes went to pay for improvements to the park — has a stake in making his or her opinion known.

We hope that Zeigler will see that this action goes against the grain of their "Good Neighbor" policy and agree to a compromise.

If not, the state should do everything in its power to make sure Wayne Fitzgerrell doesn't end up under water.

Our Opinion

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Mine m

By Harvey Berkman
QUAD-CITY TIMES 8-12-91
Springfield bureau
Quad Cities

SPRINGFIELD — A company's plan to mine Wayne Fitzgerrell State could destroy one of Illinoi popular tourist attractions l merging campgrounds anc ing park land into marsh conservation officials warned.

"Based on the mining a tion submitted, there wou be one activity at the pa would not be affected,' Ralph Hamilton, a park s tendent.

The park is located in ern Illinois about 35 mile of Carbondale.

The Illinois Departm Conservation, which ru park, requested a meetii week to discuss the p impact of Zeigler Coal C quest to mine under the possibly using a method

Zeigler (O.B.) No 21

Coal Week

Coal Week July 29, '91, p. 2

ZEIGLER'S ILLINOIS MINE PLAN QUESTIONED; SUBSIDENCE A WORRY IN MINE UNDER LAKE, PARK

Zeigler Coal Co.'s plans to mine beneath a large recreational lake and state park in southern Illinois are generating some controversy at the state and federal levels.

The coal company recently asked the Illinois Department of Mines and Minerals for a permit to mine coal under Rend Lake and a portion of adjoining Wayne Fitzgerrell State Park. Mineral rights to the property were acquired by Zeigler when it purchased Old Ben Coal Co. last year.

While Zeigler's coal is more than 600 feet below the lake and park, the U.S. Army Corps of Engineers, which manages the 12,000-acre impoundment, and the Illinois Department of Conservation are concerned about the company's proposal to implement a planned subsidence mining program. They fear longwall mining could cause extensive subsidence damage to the park, perhaps submerging parts of it with three to five feet of water.

p.3 ?

Paul Ehret, supervisor of the land reclamation division in Mines and Minerals, said an Aug. 15 public hearing at Rend Lake Junior College has been scheduled on the permit application at the request of the Corps. In response to a request by the Department of Conservation, an informal conference will be held Aug. 5 in Springfield.

Because of the controversy surrounding the application, it may take a year for the state to decide on the permit, Ehret said.

Mining under State Parks in Jefferson Co. would presumably be extension from Franklin Co. workings of No 21 Mine. Check further. P.S.D.

Operator, Date

Mine, Sec. T. R.

Location in mine,

GRAPHIC SECTION			DESCRIPTION OF SECTION (AT POINT SAMPLED)		
In.		No.	No.	(Note character and thickness of roof)	Inches

s,

Zeigler Today. Oct 1991

Old Ben #21 *Sesser, Ill.* — Work is progressing on rehabilitation of the existing Main South entries.

▲ The third uni-train of coal has been washed and shipped.

▲ The cleaning plant has been disabled and turned over to the contractors to finish the rehabilitation.

(Note character and thickness of floor)

Total thickness of coal.

(1 division=3 in.)

Condition, Time, hr. min.

Wt. Gross, lbs. Net, lbs.

What Nos. shipped by Co.?

Excluded from sample: No.

Sample represents in. tons.

Impurities? How do they occur?

Sample No. Can No. Lab. No.

Collector, Coal: Survey No.

Mine, Co. Index No.

R.—COAL SAMPLE SHEET.

Old Ben mine 21 closure surprises state

HARRISBURG 10-28-91

By Del Rea
American News Service

Miners, union officials, and state agencies were taken by surprise Saturday when Zeigler Coal company closed operations at the company's Old Ben #21 mine. → 10/26

The closure of the mine, which was just reopened a year ago, idled 105 miners.

Company officials said they closed the mine because the mine is "useless without a permit to mine" under Wayne Fitzgerrell Park.

Ucigler Coal officials have stated that the company was stymied by the Department of Conservation in its efforts to obtain permission to mine under the park.

Department of Conservation officials said the move took them by surprise because they thought negotiations about the permit "were progressiang well."

During public hearings which were held concerning Zeigler's possible undermining of the park, strong public sentiment arose against allowing Zeigler to longwall under the mine. According to reports during the hearings, Zeigler proposed to use the longwall mining method under the entire park area.

Longwall mining results in substantial subsidence, and, according to opponents of Zeigler's plan, would result in the destruction of the park.

Carol Knowles, of the Illinois Department of Conservation, said, "It (the closure) caught us completely by surprise. We have been meeting with Old Ben on a regular basis. We met with them just last Wednesday and there was no hint of them closing the mine."

"We thought that we had been close to making some general agreements in some areas."

Zeigler officials blame the Department of Conservation and the Corps of Engineers for the mine idling.

Dave Young, Zeigler Coal vice president of Illinois operations, said the two government agencies have blocked Zeigler's permit application.

A spokesman from the Illinois Department of Mines and Minerals said that is not so.

Paul Ehret, supervisor of the Mines and Minerals land reclamation division, said, "Mines and Minerals makes the permit decisions. It would make things easier if all the parties involved were in consensus, but the decision lies here."

Ehret said the permit has not been denied "We are still reviewing the application. Portions of the application are vague and there are a number of areas which we need clarified or defined."

Knowles emphasized, "We (the DOC) have never said we are against allowing mining in the Rend Lake area. There are already two mining operations which have gone under the lake and lake property."

"All we want is to ensure minimal impact to the park. We thought we'd made a lot of progress."

Ralph Hamilton, Wayne Fitzgerrell Park Supervisor added, "We were trying to find a way to mine coal and save the park. We don't want miners out of work, but we also don't want to lose the park."

Knowles said Zeigler Coal has given no indication of when they might resume negotiations.

Young said Zeigler has every intention of minimizing the impact of mining under the park. According to Young, the subsidence would be a maximum of three feet.

Ehret said part of the clarification needed from Zeigler concerns the subsidence.

"The application requests "planned subsidence method" of mining. Zeigler Coal Company is aware that the permit is being reviewed and that we have further questions that need to be addressed."

Ehret said the two basic methods of mining that would fall under the "planned subsidence method" would be longwalling and "room and pillar with secondary extraction."

Longwalling would involve complete removal of coal and earth in the mining process and could result in subsidence of five to six feet.

The other method incorporates two "sweeps." First, coal would be mined under the tradition room and pillar method, with pillars left which would prevent subsidence. However, the company would then go back through the seams and remove the pillars.

Either way, the projected subsidence is more than three feet.

Zeigler "O.B. No 21"

120 miners to lose jobs

By Heidi Hildebrand
Of The Southern Illinoisan 11-27-91

More than 120 Southern Illinois coal miners are slated to lose their jobs by the end of the year.

AMAX Coal Co. announced that it has laid off 30 hourly employees involved in seasonal reclamation activities at the company's Delta Mine near Marion. Another 60 employees will lose their jobs by the end of the year because of a reduction in coal demand, company spokesman Kevin Feeney said.

Feeney said the 30 workers laid off last Friday were working on a creek relocation and doing seasonal reclamation work.

"These layoffs are normal for this time of year for all of our locations around the Midwest. Normally, we do recall some of these, but we will have to look at the employment situation next spring," he said.

The other layoffs were required because the company has reduced its production level from 2.4 million tons of coal this year to 1.6 million tons in 1992, he said.

"They are uncertain about the marketplace, so the company has chosen to produce just what it has under contract," he said.

Feeney said the reductions were required because of a soft coal market, reduced opportunities for spot sales, and lower demand for coal from existing customers.

"This industry is cyclical. You might have one good year, and the next year you'll pay for it. The utilities build up stock piles, and if you don't get the breaks in the weather, you don't get the demand. And we haven't had the demand," he said.

Utilities that have been buying the high-sulfur Illinois coal are not signing long-term contracts because they have not decided yet how to respond to new clean air regulations, he said.

"What we're seeing is that the utilities, while in the past favored signing long-term contracts, they have chosen at this time to deal more in the spot market or open market. The uncertainty is really hurting long-term contractual sales," he said.

Joe Angleton, spokesman for United Mine Workers of Illinois, said the union will be scheduling layoff meetings with the employment representatives for the workers who lose their jobs.

Angleton said Equality Mine also will close in mid-December, putting about 35 people out of work. Calls to the coal company, which is owned by Denny and Simpson Trucking Co. in Harrisburg, were not returned Tuesday.

Earlier this month, 105 miners at Old Ben Coal Mine No. 21 near Sesser were laid off because of a dispute over the company's right to mine under Wayne Fitzgerrell State Park.

Zeigler Coal Co., which bought Old Ben last year, closed the mine and laid off the workers last month after the company reported it had come to a standstill in talks with the U.S. Army Corps of Engineers and the Illinois Department of Conservation about the mining project. Zeigler has been working to reopen the mine.

Angleton said this holiday season will be rough for area coal miners and their families.

"A lot of people have lost their jobs, but even the people who are working just don't feel that there is any security. Problems at work and problems at home make for some rough holidays," he said.

over the state to camp and to use the park's many other facilities.

Zeigler officials say subsidence should be limited to about three feet. Unfortunately, because of the flatness of the park, three feet might be enough to turn the entire peninsula into a marsh.

The best solution would be a compromise that would allow Zeigler to extract as much coal as possible while minimizing the area affected by subsidence. If such a compromise is possible, it would allow miners to keep their jobs, the state to keep its park and Zeigler to make a profit.

120 miners ... jobs

State, Zeigler need compromise to save jobs, Fitzgerrell park

Our Opinion

Recently, Zeigler officials have indicated that talks have resumed and that Old Ben No. 21 may reopen soon. We hope this means Zeigler will not continue to use jobs as a bargaining chip in this process.

Zeigler Coal Co.'s idling of Old Ben No. 21, and the resulting layoff of 105 miners, was a blatant attempt to blackmail the state into approving the company's permit application to undermine Wayne Fitzgerrell State Park.

Recently, company officials — who originally blamed the U.S. Army Corps of Engineers and the Illinois Department of Conservation for the closing — have indicated that talks have resumed and the mine may reopen soon. We hope this means Zeigler will not continue to use jobs as a bargaining chip in this process.

The Illinois Department of Mines and Minerals, which will make the ultimate decision on the permit, should not let the threat of layoffs influence its decision.

It would be unfortunate if jobs were lost to protect the park, but the ramifications if the park is destroyed by subsidence are also serious.

Forget for the moment that the Illinois Department of Conservation has invested $11 million in the park. While that is an important consideration, the continuing contribution of the park to the area's economy, and the recreational benefits the park provides to area residents carry more weight.

The national field trial for dogs held at the park brings in $2.3 million annually. The park also attracts tourists from all over the state to camp and to use the park's many other facilities.

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12/12 PSD

Old Ben: 'Economically unfeasible' to reopen #21

11-27-91 HARRISBURG

By Del Rea
American News Service

Since the October 26 closure of Zeigler Coal Company's Old Ben #21 mine, questions, suppositions, and rumors have flown through the area like geese down the Mississippi Flyway.

In a press release which caught state officials completely off guard, Zeigler's Dave Young stated that the cost of the mine's operation "has increased dramatically as a result of unexpected governmental obstacles."

Young, Zeigler's vice-president for Illinois operations, put the brunt of the blame on the Department of Conservation and the U.S. Army Corps of Engineers.

Young stated, "The Illinois Department of Conservation and the U.S. Army Corps of Engineers oppose our full mining rights options and fail to consider our multi-million dollar coal reserve and development investment in their cost-benefit calculations."

The DOC and the Corps of Engineers claimed that they were negotiating in good faith, trying to resolve the question of undermining Wayne Fitzgerrell Park. Along with the Department of Mines and Minerals, the government agencies say that Zeigler wouldn't negotiate in good faith, while Zeigler claimed the opposite was true.

Whatever the truth is, one fact was inescapable — 105 miners were laid off from Old Ben #21.

Miners themselves apparently don't agree on the cause of the closure. While UMWA Local 1124 president Gary Bartoloni claimed the state was costing the miners their jobs, several local members who spoke to the *Benton Evening News* disagreed.

Jim Muir, of Benton, suggested that Zeigler was using the coal miners "as pawns." Muir said he thought Zeigler Coal was "using the miners to pressure the state into letting Zeigler do whatever they want to do."

Other miners, who asked to remain unidentified (for fear of job loss), called the move by Zeigler "economic blackmail," and said the company had "other things that made them close the mine.".

State Senator Jim Rea called the closure "political pressure."

Zeigler remains publicly adamant that the mine is closed because of uncertainty about undermining Wayne Fitzgerrell.

The *Benton Evening News* has been told by more than one miner that mining was stopped because of an accident which occurred over a week before the closure.

More than one source said that a skip, loaded with 20 tons of coal, had fallen back down the shaft when a hoist rope broke. The miners said the skip "tore up about 1,000 feet of dogs and timber" and smashed into the bottom of the shaft.

According to those sources, the shaft was in a total state of disrepair, could not used without extensive repairs, and thus prevented the company from being able to haul out any coal. Those sources claim that the condition of the shaft is what prompted Zeigler to close the mine.

"Hassles over the permit is just a smokescreen," one miner stated. "They can't mine coal, so they say the state is stopping them from mining and they close the mine."

Zeigler officials say the accident did occur, but that it had no bearing on the decision to close the mine.

Debra Herndon, of the company's Fairfield Heights office said, "It's my understanding that a hoist broke and dropped a skip. The skip was demolished, but we have already bought a new skip, and are in the process of repairing the shaft."

Herndon said there was approximately three tons of material on the skip, not 20 tons, and that the dropped material has been removed.

"It's a separate issue," Herndon stated. "We had removed all the material and started repairs before the idling. It was not a contributing factor."

In an interview this week, Young echoed Herndon's statement. "It (the accident) is not a factor. We had contractors on the site, performing repair work when the decision to close was made."

Young also said that the ability or inability to haul coal for a short period of time was not considered in idling the mine.

"Our mining work was mainly rehabilitative work," Young stated. "We were mining coal almost incidentally as we repaired the mine. The coal being produced did not begin to cover the costs we were undergoing in renovating the mine."

"Basically, we were making a new mine out of an old mine, getting ready to reach a profitable seam of coal (under Wayne Fitzgerrell. Until we reach that section of coal, we cannot make a profit. That's why we halted operations."

"I am not happy with having 105 miners out of work," Young stressed. "I am trying very hard to get them back to work."

Young said Zeigler and state officials have been meeting weekly to resolve the problems concerned with undermining the park. "We will continue meeting until we can come to a just conclusion — one that will satisfy all parties concerned."

"I feel comfortable saying that we can develop a mining plan that will preserve the park. The park will be different, but it will not be ruined. We are open to mitigating the changes to the park."

INDUSTRY Coal Week Dec. 23, 1991 p 2

ZEIGLER MOVES TO OPEN OLD BEN 21 SOLUTION TO PARK DISPUTE SEEN POSSIBLE

A lengthy dispute over Zeigler Coal's plans to longwall beneath a popular state park in southern Illinois appears to be moving toward a favorable resolution as the year ends.

Although environmental and conservation groups remain opposed to the planned longwalling, Zeigler's surprise decision this fall to idle its newly reopened Old Ben No. 21 underground mine near Sesser appears to have galvanized support for the company among various sectors.

At the time, Zeigler said No. 21 had no future unless the Illinois Department of Mines and Minerals awarded a permit for mining under Wayne Fitzgerrell State Park and portions of adjoining Rend Lake in Franklin and Jefferson counties. Zeigler President Chand Vyas told *Coal Week* the company was spending about $1 million a month to reopen No. 21, which had been closed in March 1990 by its former owner, Old Ben Coal.

"There has been progress," said Paul Ehret, supervisor of the land reclamation division in the Department of Mines and Minerals. Ehret, who described himself as "guardedly optimistic" a favorable resolution will be reached, said it "seems as though there's a better understanding of what the operator wants to do. I never thought it was an impossibility anyway," he said. "If you want to be a purist about it, you'll never get a solution."

Ehret said the Illinois Department of Conservation, which had expressed serious concern over Zeigler's plans, is "seeing the possibility of longwall mining in the area so long as there's a plan (by Zeigler) for mitigation of any damages."

Ehret stressed Zeigler does not need a "permit in hand" to reopen No. 21. "They're a year away from reaching the area that would be affected by the permit," he noted. "If they feel there's a good assurance of getting the permit, they'll probably open it back up."

To a degree, Vyas concurred with that statement. However, he said Zeigler would require "a good level of comfort" in assurances from the state before the mine could be reopened. He also said Zeigler must make certain reopening the mine "would be a good decision for our shareholders."

ZEIGLER NEARS OLD BEN 21 REOPENING; UTILITIES SHOW INTEREST IN LOWER SULFUR

X

Several utilities are interested in signing a coal contract that could prompt Zeigler Coal to reopen its Old Ben No. 21 mine in southern Illinois, but lingering confusion over Clean Air Act compliance plans is delaying a final decision.

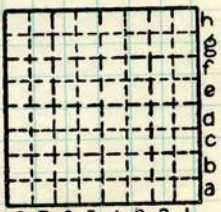
Dave Young, vice president of operations for Zeigler's Illinois Division, said the company is postponing a final decision on reopening No. 21 until it reaches a tentative agreement to sell coal from the underground mine near Sesser in Franklin County.

Although the mine was idled last fall, several months after it had been restarted following Zeigler's acquisition of Old Ben, Young said No. 21 has been maintained in good condition and could be reopened in several days.

All that's needed is a coal contract with prices that meet Zeigler's favor.

According to Young, "several" utilities are interested in No. 21's coal, although he declined to identify them. Among other things, the utilities are waiting to see how the U.S. Environmental Protection Agency distributes 3.5 million allowances for installing scrubbers early in the acid rain program.

Coal Week June 22, 1992 3



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Southern Illinoisan, Tuesday, September 29, 1992

Old Ben gets green light to mine under Rend Lake

By Heidi Hildebrand
Of The Southern Illinoisan

State mining officials have conditionally approved Old Ben Coal Co.'s permit application to mine under Wayne Fitzgerrell State Park.

Zeigler Coal, which owns Old Ben Coal Co., applied for a permit last year, but the application was delayed by the concerns of the U.S. Army Corps of Engineers, which owns the park, and the Illinois Department of Conservation, that the mining could significantly alter drainage patterns in the park, ultimately turning it into a swamp.

But mining and conservation officials said on Monday that those concerns have been addressed. Old Ben revised its mining plan to reduce coal extraction under the Rend Lake Resort Complex and other sensitive structures along the west side of the park through the use of room and pillar mining method.

IDMM director Ronald Morse said the permit revision approval "represents a win-win situation for all parties involved."

"The approval allows for development of the coal resource, while simultaneously protecting the integrity of Wayne Fitzgerrell State Park and making additional land available for park development," he said.

"The department recognizes the importance of both coal and recreation to state and local economies," he said. "The state has made a considerable investment at Wayne Fitzgerrell, and Old Ben's proposed mining and reclamation plan, the safeguards built into the permit, and the department's strong regulatory program will ensure that this investment is protected."

Conservation department spokeswoman Carol Knowles said Old Ben's mining plan meets with department approval as long as the conditions are followed.

"Assuming that the agreement is

See OLD BEN, 6A

Old Ben gets OK to mine

Continued from Page One

adhered to, the conditional permit is acceptable to the department because the department understands that recreation and tourism and the economy go hand in hand. Coal mining is important to Southern Illinois that we recognize that," she said.

But David Young, vice president of operations for Old Ben's Illinois division, said about two-thirds of the park will be affected by subsidence, but that will be in isolated areas in the eastern portion of the park away from shoreline areas frequented by the public. The company also will replace land affected by subsidence with more than 100 acres of adjacent land.

"We're protecting (the western portion) by removing less than 100 percent of the coal, which would restrict subsidence in the area. In the eastern part of the park, we will fully recover the coal seam. In doing so, the park will subside in the area. Part of the park will be under water, but it will be replaced by more than 100 acres in mitigation," he said.

Old Ben officials estimate that allowing the company to mine beneath the park could provide more than 200 new jobs with an annual payroll of $12 million. Last October, the company shut down its Old Ben No. 21 mine and laid off more than 100 miners because it did not have a permit to dig under the park.

Young said he doesn't know when those miners will be recalled because the company must first find a buyer for Old Ben No. 21's medium-sulfur coal.