



FORM 180 W

AMAX Coal Company - Wabash Mine, Wabash County, IL.
 August 7, 1984. Notes by John Nelson with Wm.
 DiMichele, Don Eggert, Dana Meier and Larry Klobuka.

Indiana 85

AMAX

Company map shows areas of split coal to north and northeast. Numerous rolls are plotted; their trends vary but most run generally eastward. No rolls are found in the southern, western, or central parts of the mine.

Large areas in the northeastern part of the property are left unmined because of oil wells.

AMAX has mined across Mt. Carmel Fault West of the main shaft bottom. The coal is downthrown about 120 feet on the west. There are no plans to mine the Herrin Coal although it reaches minable thickness on the east side of the property.

Beall Woods North^{*}
(2nd North)

Along track line about 1/4 mile out by the face, the coal is about 8 feet thick and is not split. The ribs here, as in much of the mine, are rashing badly and must be bolted. The roof is generally quite stable. The immediate roof is bony coal or inter-laminated dark gray shale and coal, with numerous flat-lying lycopods and Sigillaria; and occasional upright stumps (kettlebottoms). No joints are evident. There are rolls, or linear bodies of silty mudstone, mostly trending east-west and interfingering with the upper layers of the coal.

* Reviewing original notes and mine map, I believe the heading should read Beall Woods East.
 W.J.N. 2/16/11

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According to Dana Meier, the preferred direction for roof falls is north-south except in fault zones. He says there are no kink zones, but occasional cutters in thinly laminated rock. Cutters show no preferred orientation. Joints are strongly developed in some parts of the mine but do not pose a roof-control problem.

The cleat is not conspicuous and I cannot define face cleat vs. butt cleat. Fractures in top coal strike approximately N. 60° E.

Good exposures of immediate roof where track bends from N. 15° E. to N. 75° W. About a foot of thinly laminated brittle carbonaceous dark gray shale, bone coal, and vitrain are seen. The main roof is dark gray silty shale with abundant flat-lying logs and stems, and some well-preserved tree-fern fronds (Neuropteris).

Along the track entry of Beall Woods East, near crosscut 44, a thick siltstone parting appears in the coal. Within 20 feet it thickens from 0 to 4 feet; the coal above is about $4\frac{1}{2}$ feet thick. The siltstone, or very fine sandstone, is medium gray and nearly massive, with very uniform texture. It contains many fragments of coal and splayed stringer or mats of coal. The coal above inter-fingers with the siltstone, showing no indication of rooting. This suggests that the silt was, at least partially, injected between the layers of the peat.

Two crosscuts southwest is the Mt. Carmel Fault, striking N. 20° E, the northwest side downthrown about 6 feet. Displacement increases rapidly to the northeast. The split is not present at the fault.



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The roof in the fault zone is medium gray poorly bedded silty shale or mudstone, with numerous sideritic nodules and bands. Coalified logs and stumps are abundant, especially in the basal coaly "rash". The latter is only a few inches thick; the finely laminated bony shale seen to the east is not present.

Floor is greenish-gray silty slickensided claystone, with sideritic nodules, grading downward to inter-laminated silty shale and siltstone.

Main West
(Crossing New Harmony Fault)

AMAX is driving a set of entries across the fault, which strikes slightly east of north and has the west site downthrown about 120 feet.

East of the main fault, noted several very small high-angle normal faults parallel with the main fault. One of these I noted trends N. 15° E/67° E and has 0.3' of throw. Striations on the fault plane are essentially vertical. Another small fault trends N. 23° E/74° E. Fault planes show slight curvature, both in strike and dip; and they branch at shallow angles.

The roof is medium-dark gray to dark gray, well-laminated finely silty shale with plenty of plant debris on the bedding planes. This is finer shale than in Beall Woods East, and is farther from the Galatia Channel. Widely-spaced joints trend approximately east-west. Occasional pectenoid pelecypods are present.



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The main fault is hidden by steel arches and concrete. One fault, not the main one, is visible at the mouth of the entry left of the track, but the entry has fallen in so very little can be seen. This entry has been abandoned after the roof fell 40-50 feet above the coal.

Our observations also are hindered by dense acrid smoke from a buggy cable that caught fire just before we arrived.

In the intake-air entry the arches are not complete, so we can see some of the strata. Minor oil seepage noted along fractures in the rock, just east of main fault. The Briar Hill (No. 5-A) coal is about one foot thick as seen through the arches. It has a thin underclay, below which is inter-laminated sandstone and shale. Downward is flaser-bedded sandstone and shale, grading to parallel-laminated gray siltstone, above the No. 5 coal.

Illinois State Plane Coordinates

Ball Woods East, turn in track near where
plant fossils were observed

617, 600' N

647, 200' E

Mt. Carmel Fault exposure

614, 700 N

644, 700 E

New Harmony Fault exposure

612, 000 N

638, 000 E.



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Near slope bottom, roof is medium-dark gray poorly laminated silty mudstone or siltstone, with joints trending east-west.



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See article in Coal Age, January, 1985, "AMAX Mines
Through 121-Foot Fault," p. 73-78.



Mine originally owned by: (1)

Date

Authority

LATER OWNERS

Date

Owner

3/29/86

Company closes state's third-largest coal mine

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KEENSBURG (AP) — AMAX Coal Co. has closed the state's third-largest mine until further notice, idling an estimated 870 workers at the Wabash mine near here, a United Mine Workers union official said Friday.

The Indianapolis-based company gave no reason for the indefinite closing, but it may have stemmed from a labor dispute, said UMW District 12 President Jerry Jones of Sesser.

"There was a labor dispute, but it was settled," Jones said. He did not elaborate on the dispute.

"The company chose to idle the mine for a period of time," he said. "It was a management decision."

AMAX was moving its headquar-

ters from one building to another, and its offices were closed Friday, said a man answering the company's telephone. A woman who answered a call to the Keensburg mine would not comment about either the closing or the mining operation.

According to the Illinois Coal Association, the 871 Wabash miners brought up more than 2.6 million tons of coal in 1983, the most recent year for which statistics were available.

The AMAX mine, located about a mile west of Keensburg along the Illinois-Indiana border, ranked third in the state for 1983 coal production, the association said.

00320

Railroad, Wagon, Idle, Abandoned

IDENTIFICATION

County No.

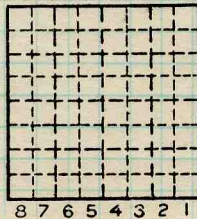
Coal No.



Quad.

Part

County



Sec.

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

Index No.

COAL MINE OWNER NOT OPERATOR



FORM 180 W

AMAX Coal Co. - Wabash Mine - Keensburg, IL (Wabash County). May 12-13, 1986. Notes by John Nelson - mapping with Dave Ingram and Greg Molinda from U.S. Bureau of Mines, and Larry Klobuka, AMAX.

The area to be mapped is a short distance west of the main slope bottom, and includes the New Harmony fault zone, which AMAX has mined across. The USBM has conducted in-situ stress measurements in three boreholes in the mine roof - two east of fault zone, one west.

A. No. 6 Entry, west of main fault, survey station 16729. Normal fault, trend N.45°W/55°SW, throw 3.1 ft. on north rib, cuts entire coal seam. Striations plunge approx. 70°SE. Little or no gouge, but fault plane splits upward.

Roof consists of hard medium gray silty mudstone or fine siltstone with fine parallel laminations. Abundant plant debris (stems, bark) on basal surface.

Numerous small high-angle normal faults in vicinity strike N.20°E to N-S, dip very steeply to vertical, penetrate entire coal seam, throw less than 0.5 ft. (most barely measurable throw).

B. No. 5 Entry, about 30 ft. east of survey point 16698. Fault, continuation of fault at Location A; now strikes N-S, with the west side downthrown 3.0 feet on north rib. Fault is compound with zone of fractured coal and shale about 2 feet wide. All fractures dip steeply. Minor reverse faulting within the zone; suggests two opposite movements, or possibly a component of strike-slip-striations are indefinite.

Note occasional upright tree stumps (kettlebottoms) and one flat-lying tree trunk about 3 ft. wide and 15 ft. long as exposed.

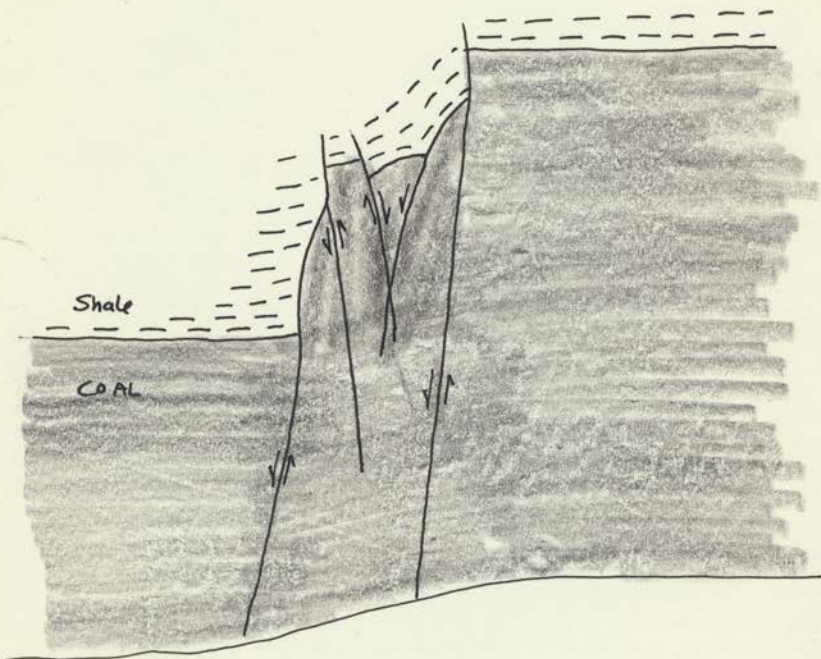
①



LOCATION B

N

S



Wabash Mine

C. General note, No. 5 Entry near Survey point 16941. Coal seam horizontal, roof uniform gray silty mudstone as before. Flat-lying decorticated trees and upright or tilted fossil stumps are fairly common. No foliage noted.

North-striking high-angle to vertical fractures with little or no displacement still are common. They are tectonic fractures, which penetrate the full seam.

D. Overcasts on No. 5 Entry, crossing belt and track of North Submains Roof exposed 8-9 ft. above top of coal in overcasts. Roof is very uniform, firm medium gray silty mudstone, with fine parallel laminations. It is faintly sideritic. No plant debris above the basal layers. No systematic joints or fractures.

E. North-south overcasts (intake air) adjacent to No. 5 Entry. Roof strata same as above.

North-south faults no longer noticeable. Excellent roof conditons.

F. No. "0" Entry, base of incline. Fault from notes A and B visible through gaps in archway on inclined entry. No details are visible. Fault trends slightly east of north and has west side downthrown approximately 10 feet. Fault also is visible through or behind arches on Entries 1, 2, 3, and 4. Its displacement increases southward and it dips very steeply, almost vertical.

West of large fault, small faults are rare and discontinuous. Noted several high-angle fractures cutting coal but dying out in the overlying shale. Little or no displacement on these faults.



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Wabash Mine

F. (Continued)

Roof as before - hard gray silty mudstone with coarse plant debris, upright and fallen fossil trees at coal/roof contact.

The coal dips gently to the south in this area. North of the belt entry it is nearly horizontal.

Fault in Main West Right

Approximately 2500 feet west of the bottom of the incline along the Main West Right is a normal fault trending $N.20^{\circ}E/80^{\circ}E$. with the throw about 8 feet down to the east (on the main haulage road). It is a very clean break, with less than an inch of gouge. There is well developed normal drag on the hanging wall, in a zone only a few inches wide.

In the belt entry (north of haul road) the fault is vertical. Shale on the downthrown block is severely crushed in a zone 0.3 to 0.7 ft. wide. The coal on the upthrown side has a gentle drag-flexure about 2 feet wide, and is cut by steeply dipping antithetic fractures.

Next entry north of the belt the fault trends $N.15^{\circ}E/90^{\circ}$, throw about 8 ft. down to east. The coal is cut off on a knife-edge with no drag. The downthrown shale shows beautiful drag, with beds rotated as steeply as 60° adjacent to the fault plane. Gouge ranges from a hairline to about an inch wide. Antithetic fractures on downthrown side dip about 45° north.

It is a classic simple normal fault.



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Wabash Mine

Fault in Main West Right (Cont)

On the next entry to the north the fault trends N.15°E/75°E. The fault plane is exposed at the brow of the entry - it has beautiful vertical slickensides and grooves. Here the drag fold is subtle and broad, mainly in the coal.

G. No. 1 Entry (return air) east of main fault zone (upthrown side), one to two crosscuts out by fault zone - Numerous small high-angle normal faults with less than an inch to about 1.0 ft. of displacement, all striking NNE and dipping to east. They dip 60° or steeper and have little or no gouge; slight drag on a few of them is consistent with normal movement. They are antithetic to main fault.

Roof is medium gray silty mudstone with abundant coalified stems and bark, some large (1 to 2 ft. wide) lycopod trunks recognized; occasional upright stumps.

The small faults are discontinuous - commonly one dies out halfway across the entry and another comes in parallel with it a few feet away.

H. No. 1 Entry about 5 crosscuts out by main fault (near Survey point 13607). Two sets of fractures weakly developed. One set consists of normal faults, as above, with an inch or less throw, spaced 10 ft. apart or more.

Second set consists of vertical joints with no offset or slickensides - they strike approximately N.80°E and are spaced locally a few inches to a couple feet apart, but they are not found everywhere and they are irregular. They are seen on the base of the shale only; their vertical extent cannot be determined here.

Roof conditions good to excellent - only minor slabbing of basal carbonaceous shale.