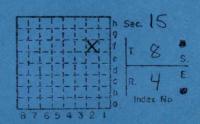
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MALONE MINE Mine Index No. 939



MOORE'S MODERN COAL PRODUCTION MINE Sheets) Period Tons Mo. Day Year Mo. Day Year 334 1976 1977 398 611 344 1980 0 Mine sold to E. + B. Loal company, Corinth Mine. see Nelvon's note relative to this, the Milee Malone #1 line! SUMMARIES No. No. to Railroad, Wagon Strip, Idle, Abandoned Sec. IDENTIFICATION Coal No. County No .. Coal Report No. L- 261 Quad. Index No. County COAL MINE—PRODUCTION ILLINOIS GEOLOGICAL SURVEY, URBANA

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(2732-2M-7-41)

MALONE MINE Visit by John Nelson, John Popp and

Roger Nance, April 20, 1977. Notes by J.N.

Very small family-run strip mine located approx. NE-NE Sect. 15, 8S-4E in Williamson County. The mine is worked by Donald Malone and his brother with occasional help from his nephews. Equipment includes 2 very small and old draglines, 2 bulldozers, a drill for shot holes, and dump trucks for hauling coal. The total mined area is about one acre and the open pit is much less than an acre in size.

The coal seam runs 24-30" thick and its correlation is uncertain. Apparently the seam is the same as one described by H.R. Wanless in 1932 and assigned to the "Dillingham" cyclothem. This name, taken from a nearby church, never appeared in print. It seems to be a coal between No. 7 and No. 8, possibly one of the "Cutler Riders" (Lake Creek or Pond Creek). It may also be a "stray" coal seam. Hopefully spore analysis will help clear up the correlation

According to Donald Malone this coal has been analyzed by Inland Steel and others, who found as low as 0.62% sulfur and up to 12,000 B.T.U.'s. Inland also reported the coal was of metallurgical grade.

Local people have known of this coal for some time and several have attempted to mine it. Malone encountered old underground workings, complete with timber, in his pit, and reported a partially filled shaft just west of his pit and another on the hill NE of the pit. Malone also reported he has done some drilling and determined that the coal is fairly continuous on his property and on neighboring land. The rolling topography, however, means that much of this is too deep to be stripped by a small operator. The coal seam is said to dip to the south, against the regional northward dip.

Malone's mine is located along a small stream.

Presently he is dealing with 20-25 feet of over-burden. Future mining will have to be upstream, to the northwest, as cover is too great beneath the hills flanking the stream. Malone will have to divert the stream to continue his operations. This is sure to mean a lot of paperwork and red tape with the government. According to Donald Malone, this red tape and the dealings of lawyers have been the greatest obstacle to his mining plans.

The pit is L-shaped, with the arms of the "L" extending about 100 feet southeast and southwest. The top of the coal seam is exposed along the SE arm of the pit (parallel with the stream) and is overlain by 10-15' of gray shale with 5-8' of drift above. Water in the pit prevents access for sampling here.

We expose the coal by digging at the SW end of the pit. Here the overburden is thickest. Measured section:

5' Drift, yellow-brown, soft, with large pebbles in a silt-clay matrix.

20' Shale, medium to medium-dark gray, smooth, finely silty in places; poorly bedded, carbonaceous, with large well-preserved plant remains near base. Abundant ovoid sideritic nodules throughout. Pecten fossils noted. Approx. upper half of highwall is weathered, with brownish iron staining. The shale slakes readily.

2.4' (Base under water) Coal, N.B.B., blocky, no significant bands or partings, contains no visible pyrite. Cleat trends 066° and 155° with a lesser 120° set.

At least 0.3' of coal under water, Base not found.

We took a channel sample, a spore sample, and a bag of shale with plant fossils.

MORE NOTES ON "DILLINGHAM COAL"

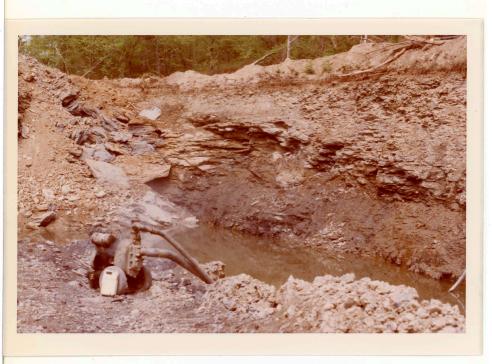
Several Survey field notes refer to a coal seam in the vicinity of the Dillingham Church, in Sections 14 and 15, 8S-4E. In 1932 H.R. Wan-less measured and described a section including a coal seam in the stream that runs past the Malone Mine. He refers to this as the "type section of the Dillingham Cyclothem." This name, however, never appeared in print. There is no indication whether this cyclothem name was changed or dropped or correlated to an existing cyclothem.

I checked all available field notes and drill hole records in the area, and found none including both definite "Dillingham Coal" and other recognizable markers. Judging by the elevation of the coal at the Malone Mine (480-500') and the driller's log of a nearby Corinth Coal Co. test hole, the "Dillingham" lies about 320' above the Danville (No. 7) Coal. This definitely rules out any of the "Cutler Rider" coals and places the Dillingham at or above the Chapel (No. 8) Coal position. Roger Nance suggests that it may be the Womac Coal. The Wanless field notes put the "Dillingham" below the Trivoli Sandstone, but these were not based on any complete observed section and this does not fit the drill hole data.

At this time, based on the physical evidence, the best I can say is that the coal mined by Malone is either the Chapel (No. 8), the Womac Coal, or something in between.



Malone Mine stripping operation. Coal seam is visible at back of water-filled pit.



Another view of Malone Mine pit with coal seam and fractured overburden in highwall.



John Popp and Roger Nance examining coal and overburden in west end of L-shaped pit. This is the only place the coal was accessible for study.



Coal seam at Malone Mine, west end of pit. We dug this out for sampling. Base of coal under water.



MALONE MINE (Strip) WILLIAMSON COUNTY

Visit by John Nelson 8/24/77

The mine has been idle about six weeks waiting on a government permit. The pit has become filled with water and the highwall has advanced only a short distance (about 100 feet) since previous visit to this mine with John Popp and Roger Nance.

The coal seam is entirely under water. The high-wall includes 15-20 feet of gray silty shale, like that seen on previous visit, with about 5 feet of glacial drift overlying.

I saw a collapsed area on the east limb of the highwall and thought it was possibly a caved-in opening of an old underground mine. Several old and very small underground mines were operated in this coal, and Malone has mined into some of their workings in the past. However, I was told that this slump area was not an old mine.

According to Donald Malone, the owner and operator, one old shaft was located very close to his present pit. This apparently was dug down to the coal and abandoned; it is now filled with dirt. A second shaft was located near the point where Malone began mining, and this one connected to a set of entries and rooms in the coal. The entries ran to the NW and were said to be well-timbered with the roof still intact. The rooms were circular in outline. An area was dug out and timbered at the shaft bottom, probably as a dumping place for the coal mined in the rooms. Malone believes the mine operated 70-80 years ago and may have used a horse-powered windlass for hoisting in the shaft.

There obviously are a large number of small, local abandoned coal mines of which no records ever appeared in the Geological Survey or Dept. of Mines and Minerals.

MEMORANDUM

To: From: J. W. Nelson R. A. Peppers

Date:

October 12, 1978

Re:

Spore analysis of coal from Malone Mine, Williamson County

Maceration 2390 of the coal from the Malone Mine (SE NE, Sec. 15, T. 8S., R. 4E., Williamson Co.) is probably equivalent to the Chapel (No. 8) Coal. Maceration 2390 was compared with Macerations 573, 575 and 1128-G of the No. 8 Coal in Macoupin County and Maceration 1121-K of the No. 8 Coal in Gallatin County. Punctatisporites minutus followed by Cyclogranisporites orbicularis and Apiculatisporites saetiger are the most abundant spores in all the macerations.

MALONE MINE NO. 1 WILLIAMSON COUNTY February 27, 1980 Notes by John Nelson on visit with Steve Danner.

Mine is idle due to water in pits. They have been working northward from the original pit visited about two years ago. In the northernmost pit the coal is barely visible above water level, but the hole has very steep and muddy sides so we did no go down to look at the coal.

In another pit just to the south the coal is under water. About 30 feet of shale is exposed on the highwall. It is medium to medium-dark gray and generally coarsens upward. The lower potion comprises silty mudstonewith sideritic nodules and no visible mica or plant debris. This grades upward to well-laminated silty shale with thin parallel interlaminations of siltstone. This shale has abundant coarse plant debris and flakes of mica along bedding planes, and it splits easily into thin slabs. Some poorly preserve fragments of stems or leaves can be recognized, but most of the plant debris is macerated. Upward the shall becomes deeply weathered and has large iron-stained joint surfaces which trend 035. The shale weathers to thin platy fragments.

It is interesting to compare the stratigraphic setting of this coal with that of the No. 5 and No. 6 Coals. In most of the state the Chapel (No. 8) Coal is less than a foot thick and is overlain by black shale with thin limestone (Cramer) above. Here the No. 8 Coal is $2\frac{1}{2}$ feet thick, very low in sulfur, and overlain by thick gray silty shale. The same association of thick, low-sulfur coal with thick gray shale has been documented for the other coals. The thick gray shale at Malone Mine may be a crevasse-splay deposit associated with a channel contemporaneous with the No. 8 Coal.