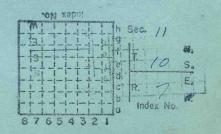
abandoned abandoned

ISGSMine Inday # 3330 J. W Coal Co. K and W Coal Co. No. 1

L-103

Saline



SET

Arme originally operated by: (1) Egyptian Mining Co., # 1 Date 1957 Original name or number: Illinois Coal Report 1957 LATER OPERATORS Date Operator Name or No. 2 Sept 1958 K+W COAL CO 3 Nov. 1959 J. W. Coal Co. 4 1965 J.W. Coal Co. Inc. 8 10 11 12 13 14 *Also owners #See ownership sheet Railroad, Wagon, Strip, Idle, Abandoned IDENTIFICATION County No .__ Coal No. Coal Report No. L-103 Quad. Index. No. County Saline COAL MINE OPERATOR (92753—1M—6-54) 2

(2732-2M-7-41)

and more 2

Sheets) COAL PRODUCTION (Sheet 1 Period Tons Mo. Day Year Year Opened in 1957 31 532 1957 42 479 1958 idle After Dec'58 363 35 1958 1959 691 120 1960 839 197 187 1961 122 249 1962 300 132 1963 1964 338 722 378 419 ABANDONED 1-4-66 Low later years offer to Davis & Delover searns. SUMMARIES No. to No. Railroad, Wagon, Strip, Idle, Abandoned Sec. // IDENTIFICATION County No ... Coal No. Coal Report No. L-103 Quad. Index No. County Saline COAL MINE—PRODUCTI

ILLINOIS GEOLOGICAL SURVEY, URBANA

Co. No.	County	Sec.	T.	R.	T.&R.
Company	gyptian 1	M (No.	Farm	,	No.
Elev.	of	T	otal epth		Year drld. 57
For	Method T	Result	Type log		Core desc.
Stripped	Analysis	Co	onfd.	F	Publ.
Location	SE				
Core logged			by		
Remarks: 4-103					
		KEY	BEDS		
Code	Name	Depth	Thk.	Elev.	
	5	25'	54"		
		-	***		
					Productive Control Con
		The second second second			
				-	
		-			
Correlations					
1		basis			h Sec. //
					T. N.
Date		Quad.	_	+	e / S.
County	Sel.	Co. No.	F	+- - - - +- - - -	C R.
(41289—5M—	-8-56)	CO. 140.		1-1-1-1-1	a

K. & W. Coal Company (Abandoned Strip Mine)

SE¹/₄ NE¹/₄ Sect. 11, 10S-7E Saline County.

Notes by John Nelson and John Popp on visit 11/18/77

This abandoned strip mine was Stop 8 on I.S.G.S. Field Guide Leaflet 1969 A & F, Equality Area. The field guide reports that about 160 feet of stratigraphic section were visible, from the No. 5 Coal through the Anvil Rock Sandstone.

The part of the mine we visited has a pit running slightly north of west, with a south-facing highwall. To the west the pit swings to a northerly heading, then curves eastward around the other side of the hill. We did not check this part of the pit because the woods were full of deer hunters.

The No. 5 and No. 5-A Coals were both mined here. From distribution of spoils it appears that No. 5-A overburden was removed by a shovel, then a dragline followed on the bench and removed overburden from the No. 5 Coal. The No. 5 pit is mostly filled with water and slumped over, with rock section exposed only along a short stretch west of the cemetary (see sketch map). The No. 5 Coal is nowhere exposed. The No. 5-A Coal is exposed at the base of the second highwall in a few places and the rocks above are fairly well accessible to study.

The No. 6 Coal was apparently mined in pit east of here which we did not examine in detail, but no longer appears to offer good exposures.

1.) Highwall with interval between No. 5 and No. 5-A Coal. Section not measured because it is given in the guide book. No. 5 Coal not exposed, and St. David Limestone and underlying black shale uncovered only in a small area. The Canton Shale has very prominent vertical joints extending nearly the full height of the wall, about 30 feet. One set trends 000 (due north) and the other trends 107.

The Canton Shale is dark gray, well bedded, silty, coarsely micaceous and carbonaceous, and grades upward into thin-to-medium-bedded sandstone. The joints are

HORE H cemetary Highwall FILL WITH 5-A NO. G No. 5 cont Blump berda Water 5 Acits 0 0

less obvious in the sandstone than in the shale.

In the shale the spacing of the joints is uneven; generally they are 5 to 20 feet apart but locally there are sets much more closely-spaced. Some have weathered to wider zones resembling feather fractures.

2.) Bench where Briar Hill (No. 5-A) Coal was mined. Coal exposed at base of highwall in a few places; ranges from 1.6-1.9' thick, and rests on medium-dark gray silty underclay. Above the coal is up to 20 feet of gray, silty shale, grading upward to sandstone. The same two joint sets continue in this highwall. The one again measures 000 and the other slightly different at 107-115. The north-south fractures commonly appear as well-developed "feather fractures." This is not shown by the east-west joints, but large sections of the highwall break away along these.

The eastward dip of the strata is quite noticeable. The guidebook reports about a 4 dip toward the axis of the Eagle Valley Syncline.

3.) Set of low-angle slips or faults displacing the No. 5-A Coal by about two feet. These appear to show "false drag" and probably are soft-sediment features.

J.W. COAL CO. (?) Abandoned Strip Mine in Sects. 14. 22,23,26 and 27, 10S-7E, Saline County. Notes by John Nelson on visit with John Popp (I.S.G. S.) and George Fraunfelter (S.I.U. at Carbondale) 9/15-16/77.

This is an abandoned contour-stripping operation around the south and west sides of an elliptical hill west of Eagle Creek. Mining along the east side of the hill was also conducted but we did not visit that part of the pit. The Davis and DeKoven Coal Seams were mined.

The Survey's mined-out-area map shows this only as the "J.W.C.C." with no date of abandonment given. The U.S.G.S. topt map shows no mining here as of 1959 However, the operation looks old, with 20-30' trees growing on the spoil banks. The pit is filled with deep water all along the west side of the hill. The highwall is directly accessible only in a small area around the south end of the hill.

> Measured Section of Highwall Approx. SW corner Sect. 23, 10S-7E.

This part of section natural exposure on hill slope.

- 40' Sandstone, gray to buff, weathers buff to brownish; fine-grained, thick-bedded, hard, iron-stained, well-jointed. Mostly covered interval. Lower part interbeds with shale, but apparent sharp contact:
- 10' Siltstone, gray-brown, stained reddish, thinbedded, carbonaceous streaks and partings. Mostly covered interval. May interbed with sandstone. Appears to grade into:
- 0.5' Sandstone, red-brown, deeply weathered, finegrained. Grades into:
- 12-15' Siltstone, similar to above. Grades into:

This part of section excavated during mining.

- 61-7' Shale, medium-dark gray, fissile, well-jointed, deeply weathered. Zone of iron-stained concretions (siderite?) about 3 feet from top. Darkens downward, grades into:
- 3' Shale, black, smooth, fissile, carbonaceous at base, moderately jointed at base. Grades into:
- 0.7' Coal (Colchester No. 2 ?) Dull, soft, dirty.
 Sharp contact:
- 2.5' Claystone, gray, soft, rooted with plant fragments and carbonaceous streaks. Becomes lighter toward base, grades into:
- 15' Claystone or shale, poorly bedded, light gray to buff, iron stained, fairly soft, lower part fairly well bedded. Scattered siltstone interlams and nodules or bands of siderite, increasing in size and abundance downward.

 Lower part well jointed. Grades into:
- Shale, med. gray, grading to dark gray, siltier than above and contains purplish sandy
 lenses and laminae. Siderite nodules throughout, and very thin sideritic laminae near
 base. Irregular curving vertical fractures
 resembling "feather fractures." Grades into:
- 1.3' Shale, dark brown to black, soft, fissile, carbonaceous near base, pyritic. Grades into:
- 3.2' Coal (DeKoven) N.B.B. with well-developed cleat trending 058-072° (face) and 148-172° (butt) the butt cleat poorly developed and less regular. Lower 0.5' of seam soft, dirty, pyritic. Sharp contact:
- 3.4' Claystone, gray, fairly hard, soft near top,

(3)

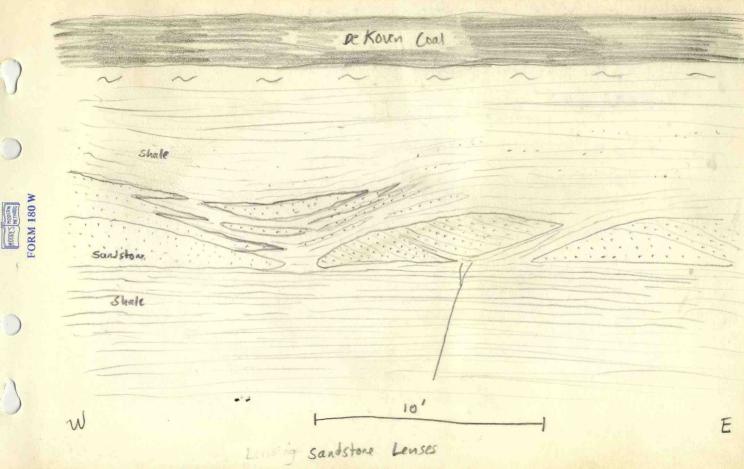
rooted with carbonaceous streaks, pyritic, silty near base. Lower foot or so iron-stained and nodular. Sharp contact:

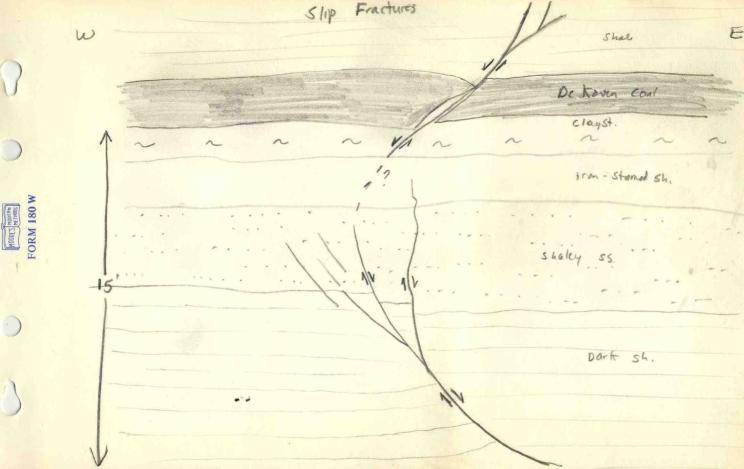
7.0' Sandstone, light gray, weathers buff to brown fine grained, hard, slightly porous, micaceous, finely and sparsely carbonaceous, upper half thinly bedded, lower half thick bedded with abundant silty carbonaceous laminae. Cross-laminated near base.

This unit is lenticular and pinches out in places. It may represent distributary channels. Basal contact very sharp:

- Shale, dark brown to dark gray, thinly laminated, moderately hard, highly carbonaceous, very silty, with siltstone interlams. In places thin coaly interlams. Abundant siderite lenses and bands in lower half. Grades into:
- 2' Shale, black, smooth, brittle, fissile, with distinct 025° jointing. Sharp contact:
- exp. Coal (Davis) N.B.B., blocky, prominent 131exp. 140° face and 41-42° butt cleat. Lower part covered. This is only exposure of Davis Coal

A short distance west of where we measured the section are seen two interesting features (sketches, over.) The sandstone between the Davis and DeKoven Coals piches out in a series of internally cross-bedded lenses, as shown in the first sketch. Just east of this a set of slip fractures is seen in the DeKoven Coal and associated strata. In the coal is a clay-filled fracture dipping westward. The fracture splits upward and appears to die out in the underclay. Near the lower end of this fracture a set of east-dipping fractures appears, displacing the sandstone







Part of highwall at the J.W. Coal Co. The DeKoven Coal is about 5 feet above John Popp's head. John is examining the lenticular, cross-bedded sandstone that lies between the Davis and DeKoven Coals.



View of slip in highwall of J.W. Coal Co. Just right of ruler the slip dips eastward (right in photo) becoming shallower downward and branching upward. Above top of this slip is a west-dipping slip that displaces the DeKoven Coal (top of photo). Compare with sketch.

(4)

and shale below the coal.

Other similar clay-filled fractures are seen in the DeKoven Coal along this stretch of highwall. They resemble typical clay dikes or "horsebacks" with the coal showing convergence of bedding and "wrong way" drag. The fractures die out above and below the coal. They definitely are soft-sediment or compactional features not related to tectonic activity.

As noted before, the highwall along the westfacing side of the hill is inaccessible because the pit is full of water. However, the highwall can be seen from the spoils across the pit and changes can be noted. In the southern part of this west-facing highwall most of the rock sequence consists of shale, with the sandstones very thin or absent. The No. 2 and DeKoven Coals are very uniform, and no faults or other structural features can be seen.

Near the northwest end of the mine a fault is present in the highwall. The attitude is difficult to judge but it appears to be a nearly vertical normal fault trending NW-SE. The rocks SW of the fault are downthrown about 6 feet relative to the rocks NE of the break. The displacement appears to be maintained the full height of the wall, from the No. 2 Coal to the water line. No drag or folding can be seen, but the rock layers appear to be slightly tilted NE of the fault and so smaller faults may be present.

In this area stratigraphic changes also occur with a slabby, thin to medium-bedded sandstone appearing in the interval 6 to 20 feet below the No. 2 Coal. The sandstone between Davis and DeKoven Coals again is well developed, but its lower surface is under water.

The highwall appears to continue around the north side of the mountain, but we did not check this out as time was running short. Another visit should be made to check the north and east sides of the hill.

John C. Moore Corporation, Rochester, N.Y 14604



FORM 180 W

J.W. COAL COMPANY Surface Mine- Davis and DeKoven Coals - Saline County - Sections 14,22, and 23, T. 108 R. 7E. October 5 and 6, 1981. Notes by John Nelson and D. K. Lumm.

Highwalls of this abandoned surface mine were examined as part of our mapping project for this region. We are mapping the geology of the Shawneetown Fault and vicinity on a grant from the U.S. Nuclear Regulatory Commission. Our chief interest is exposures of faults; we also are delineating outcrops of coal beds.

Numbers refer to locations marked on field maps. For convenience, the section coordinates of each location are given here. All in Rudement $7\frac{1}{2}$ -minute quad.

16-36) O'SL, 1800'WL, Sect. 23. South-facing highway exposing DeKoven Coal with clastic dike 6 to 12" wide. No vertical offset of seam. Dike penetrates entire seam and terminates just below it in the underclay. Above the coal the dike is traceable as a zone of disturbed shale extending at least 4 feet above the coal.

The strata appear to have a gentle northward dip. The DeKovem Coal is 34" thick. Several other clay dike in vicinity, all with features similar to above. Below the coal is about 4 feet of underclay, then 4 to 8 feet of sandstone, locally cross-bedded, and with interbeds of shale. Below the sandstone is shale, dark gray, micaceous, with thin lenses and laminae of sandstone. The Davis Coal and its immediate roof are not exposed. No evidence of faulting.

DeKoven Coal is about 20 feet above water level. The water in the pit is clear, with no red color; I can see about 15 feet to bottom.

16-37) 1450' SL, 2650' WL of Sevition 23. Gully intersects top of east-facing highwall. DeKoven Coal dips to north or northeast and gradually drops almost to water level just north of gully. No faults observed on this clean, continuous highwall. The No. 2 Coal is about 30 feet above the DeKoven, with mainly shale between the two coals.

(2)

16-38) 2000' SL, 2550' WL, Section 23. End of highwall on southeast side of big ravine. DeKoven Coalis at or just above the water line (thus about 20 feet lower in elevation than at 16-36). Highwall resumes southwaestward in the ravine but there is a gap where no mining took place.

16-39) 1700' SL, 2300' WL, Section 23. Large fault exposed along highwall in ravine. This fault was large enough to disrupt the mining process and is the cause of the interruption in the highwall. The fault, as exposed, runs nearly parallel with the highwall so it acted as a barrier to further mining. The exposure is not very good, with much talus covering the fault surface. The trend of the fault is N 25 E, as measured along a 100-foot line of sight, and the dip is nearly vertical. The southeast side is downthrown. Both Davis and DeKoven Coals were mined northwest of the fault, but no mining took place immediately southeast of the fault.

The strata on the downthrown side consist of interbedded shale and sandstone, probably from well above the No. 2 Coal. The shale is medium-dark gray, weathering purplish; firm, thinly laminated, very silty, finely micaceous, and contains abundant carbonaceous debris. The sandstone weathers brownish, it is fine-grained, appears poorly sorted, shaly, and contains coarse mica and carbonaceous debris; plant fragments. It occurs in beds and lenses ranging from less than an inch to about a foot thick. Some beds appear to have ripple marks, and evidence of slumping and small-scale load structures is present. Up to 20 feet of the interbedded shale/sandstone is exposed, but most exposures are inaccessible, or covered with debris.

See Don's notes on strata exposed northwest of fault.

MOORES MODERN METHODS

FORM 180 W

(3)

I was able to dig out the actual fault plane in one place to take my sight to the fault along an inaccessible part of the highwall. I consider the sighting accurate within one degree. On the fault plan is a little DeKoven Coal and underclay, steeply tilted (drag) downward toward the fault plane.

At another place along the highwall faint striations are visible in sandstone along the fault on the downthrown side. These striations are nearly vertical and so they indicate dip-slip movement.

This fault is nearly parallel with a fault mapped by Baxter et al. (Circular 413) the extension of which would follow the valley of Eagle Creek immediately southeast of the J.W. Mine. We have found no surface evidence of Baxter's fault, but the presence of the fault is clearly indicated by a northward shift of the outcrops of Davis and DeKoven Coals east of the valley

16-40) Immediately northeast of 16-39. Same fault exposed in two places; trend along line-of-sight is N 22 E. The southwesterly exposure is in a small ditche where pulverized DeKoven Coal on the upthrown side is opposite shale (stratigraphic position unknown) on the downthrown side of the fault. The northeasterly exposure of the fault is along a small highwall. Gray shal about 10 feet above the DeKoven Coal has been faulted opposite the No. 2 Coal on the downthrown (southeast) side. Thus, the throw at the latter place is approximately 40 feet. The throw at Stop 16-39 probably is greater, 50 to 60 feet, with the DeKoven Coal opposite the interbedded sandstone and shale above the No. 2 Coal.

The fault has a gouge zone up to a foot wide filled with soft gray clay. The No. 2 Coal and overlying black Merca Quarry Shale are thoroughly fractured and dragged against the fault plane. The fault plane dips steeply to the southeast; thus this is a normal fault.

(4)

16-41) Approx. 300 feet from S.L., 1600 feet from W.L., Section 23. Same fault exposed on south side of hill. The fault crosses an unmined area between here and Stop 16-39. The fault has offset the outcrops of the coal seams and was left in the highwall of the pinorthwest of the fault, on the upthrown side.

The overall trend of the fault, along a 300-foot line of sight, is N 27 E. The main fault plane is visible in several places and has nearly vertical slickensides. The dip is steep to the southeast. More than one fault surface is present, but the overall width of the zone is difficult to determine. There are no places where one can see any significant part of the fault in cross-section.

The following is a description of the strata on the downthrown (southeast) side of the fault, as exposed along the highwall of the pit southeast of the fault and in the highwall of the northwest pit:

(Composite section)

TOP

contains lenses and laminae of sitlstone. Thickly laminated to medium-bedded; contains small siderite nodules, occasional large rounded nodules or lenses of silty micaceous sandstone. Sharp contact 2.5' Sandstone, light gray to tan, weathers rusty,

Shale, light gray, weathers rusty, very silty,

- very fine-grained, micaceous, upper and lower bed about 0.7 feet thick each separated by thinly bed ded, shaly middle portion. Faint cross-lamination in the thick beds. Sharp contact:

 9' Shale, light gray thinly laminated silty rather
- 9' Shale, light gray, thinly laminated, silty, rather soft, contains small (0.1') siderite lenses or nodules and bands. Occasional plant fragments. fairly sharp contact:
- 12' Sandstone, light gray, weathers rusty, wellsorted, very fine to fine-grained, quartzose,
 micaceous, very well cemented, possibly recrystal
 ized near fault. Bedding variable; less than an



(5)

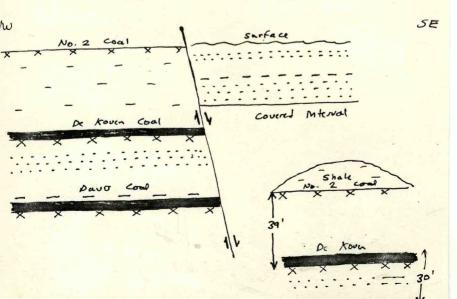
inch to about 2 feet thick, and irregular or lenticular. Locally cross-bedded, with discontinuous silty laminations.

Actual thickness of unit may be as much as 30 feet but only 12 feet could be measured with certainty, as the unit is much faulted, and lower part of section may consist of downfaulted slices. Base covered.

The above section was measured along the highwall of the northwest pit, adjacent to the fault. The base of the sandstone is approximately 10 to 15 feet above the DeKoven Coal on the opposite side of the fault.

Dark gray carbonaceous siltstone was seen along the highwall in the fault zone, apparently below the sandstone, but in uncertain stratigraphic position.

On the highwall southeast of the fault we measured the interval from the No. 2 Coal to the base of the DeKoven Coal at 39 feet. There is shale above the No. 2 Coal and no sandstone is seen here. The throw on the fault is probably 60 to 70 feet.





(6)

October 6, 1981 Continue mapping J.W. Coal Company

16-42) 1500 feet east of SW corner, Section 23: Strata below Davis Coal partially exposed in gully running out of the pit northwest of the fault. Section measured with rod and hand level:

- 2' Claystone (floor of Davis Coal): light gray, soft smooth, becoming sandy near base. Grades into:
- 5' Shale, medium-light gray, silty, irregularly laminated, soft, contains numerous iron-rimmed nodules and concretions, and intersecting fractures lined with siderite. Grades into:
- 10' Sandstone, medium-light gray, weathers rusty, quartzose, fine-grained, thinly bedded upper portion has beds less than an inch to about ½ foot thick interlayered with shale, as above; lower portion less shaly and in more regular beds about an inch thick.

Base covered.

This section was immediately northwest of the fault, but the actual line of the fault was covered by talus.

- 15-3) Approx. 200 feet north, 200 feet east of SW corner, Section 23: Measured section on highwall. This appears to be same section measured by John Popp and me in 1977:
- 2.7' DeKoven Coal
- 4.5' Underclay
- 6.5' Sandstone; sharp contact:
- 16' Shale, gray. Lower portion mainly covered. 1 foo of black shale immediately above coal.

Top of Davis Coal.

Total interval (top to top) is 29.7 feet as measured with rod and level.



16-43) 1500 feet from S.L., 1800 feet from W.L., Section 23. Exposure on highwall on north side of valley, northwest of the fault. DeKoven Coal is expose and the No. 2 Coal is visible locally near the top of the highwall. The Davis Coal is covered or under wate: Near the east end of the fault we can see a small fault offsetting the DeKoven Coal on the highwall. The fault is not directly accessible. The fault appears to trend NE-SW, with the SE side downthrown 2 to 3 feet. The fault plane is nearly vertical. The strata dip gently to the east or northeast in this pit.

- 15-1) Approx. 1300 feet from S.L., 300 feet from W.L of Section 23. West-facing highwall immediately north of gully. Estimated section above No. 2 Coal:
- 25' Shale and sandstone, interbedded; sandstone weathers brownish, beds up to 1 foot thick, shal medium-dark gray and silty, with discontinuous bedding. Unit becomes shalier downward, grading into:
- 10' Shale, dark gray, smooth, platy, appears black from a distance. Regular bands of siderite.
- 2' Shale, black, becomes fissile near base.
- 0.5' No. 2 Coal.
- 3' Underclay
 Shale, light gray, not measured.

15-2) 700 feet from N.L., 1200 feet from W.L., Sect. 23: Near middle of long west-facing highwall. Pit is filled with water within 5 feet of base of DeKoven Coal. The beds appear horizontal, thus if they have any dip, the pit runs along strike. No faults visible with nearly continuous (although inaccessible) exposure.

16-45) 1700 feet from S.L., 2150 feet from W.L., Section 14. Fault exposed along west-facing highwall;

John C. Moore Corporation, Acchester, N.Y. 14604

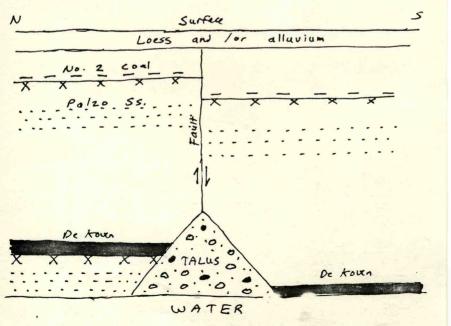
MOORES MODE 9.

FORM 180 W

(8)

same fault John Popp and I saw in 1977. The highwall is vertical and the pit filled with water, so we cannot get to the fault. The strike is not determinable; the fault appears to be vertical with the south side downthrown. The No. 2 Coal is offset about 4 fee and the throw increases downward to about 8 feet in the DeKoven Coal. There is no visible drag. Most of the actual fault plane is hidden by fallen debris. The beds on both sides of the fault have no apparent dip (they probably dip eastward). The fault does not visibly offset any of the surficial materials.

The Palso Sandstone (below No. 2 Coal) is here present and about 6 feet thick at the fault. It is thin-bedded and shaly, and its top is about 5 feet below the No. 2 Coal. The sandstone thickens markedly north of the fault, and becomes more thickly bedded. Southward it becomes thinner and grades into shale. This is the only place in the mine where we have seen the sandstone.



John C. Moore Corporation, Rochester, N.Y. 14604

MOORE'S MODERN METHODS

FORM 180 W

(9)

16-46) 2100 feet from W.L., 2550 feet from N.L., Section 14: Northernmost end of this pit. Pit curves northeastward around the end of the hill, and the DeKo en Coal shows a dip of about 3 degrees eastward; this is an apparent dip obtained by sighting over the Brunton. The Palzo Sandstone is about 10 feet thick ar is shaly; sandstone beds up to 2 feet thick. No faults visible.

John C. Moore Corporation, Rochester, N.Y. 14604



Rudement Quadrangle - Notes by John Nelson and D.K. Lumm, October 6, 1981.

12-19) Abandoned strip mine - part of J.W. Coal Company. NW_{4}^{1} SW_{4}^{1} SW_{4}^{1} Section 12, T. 10S, R. 7E, Saline County.

The highwall trends roughly east-west, facing south, with a small sidewall adjacent to the county road at the west end of the pit. The pit is full of water and the bedrock exposures on the highwall are very, poor. In most places they are covered by slumped surficial materials. The small sidewall has the best outcropping, but even that is not directly accessible for study. There is a few feet of gray shale above water line, overlain by 5 to 8 feet of sandy alluvium The shale shows a definite northward dip. No coal is exposed.

This pit represents a continuation of mining west of the county road, where we lnow the No. 5 Coal was mined (see notes 12-9 through 12-15). Presumably the No. 5 Coal was mined here also.

Scattered small exposures of gray shale along main highwall to eastward, similar to shale in side-wall, and showing little or no apparent dip, except far to eastward, where a slight eastward dip is apparent.