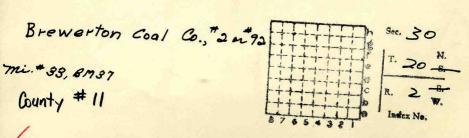
John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented.



Form 180



Mine originally Hear Id Review 3-3-87

Maps detail sites

By NANCY ROLLINGS SAUL

LINCOLN — & new report by Michael D. Sublett, associate professor of geography at Illinois State University, includes maps and information on the long underground tunnels where miners once toiled.

More than half a century ago, the last coal mine operating beneath what is now the city of Lincoln closed its doors. But the extensive mammade caverns remain about 300 feet beneath the earth's surface. These create the possibility of subsidence caused by underground cavern collapse.

The South Shaft, in operation from 1869 to 1919, sat along the Chicago to St. Louis railroad near the old Armour plant. It was owned at various times by Lincoln Mining Company and Harts and Frorer.

Frorer.
The East Shaft, worked from 1883 to 1926, was owned by Citizen's Mining Company and later Brewerton Coal Company. It was in the southeastern quadrant of Lincoln near the rail junction just

south of Lincoln Christian College and Illinois 10.

The northeastern corner of Lincoln and adjacent rural residences lie above the North Shaft, which was mined between 1903 and 1935. Located on North Kickapoo Street near Wichita Avenue, it was owned by Latham Coal Company, Latham-Lincoln, Sangamon County Mining and finally Brewerton Chel Company.

Coal Company.

Sablett says homeowners can contact Patrick Glithere, director of the Logan County Regional Planning Commission, to find out whether or not their residences are above undermined areas.

The study did not involve the area south of Lincoln along Illinois 121 that was undermined until 1968 by miners working at Bennis Mine.

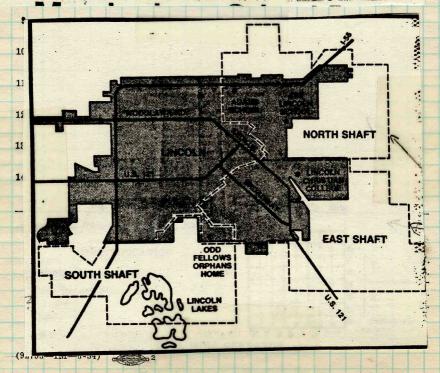
On Nov. 18, 1966, Sublett's students interviewed 255 residents of the undermined areas. Seveneen percent thought they might have noted evidence of subsidence, but most believed that swelling and shrinking of soils, poor construction or nearby road or rail traffic were more likely at fault.

Just over 69 percent of those interviewed said they were aware of the undermining. Homeowners were more aware of the situation than renters, who for the most part had lived in their current residences for shorter lengths of time. However, the renters showed slightly more concern over the situation.

Of 226 residents aware of undermining before the survey, only 33 expressed any concern about possible subsidence damage to their homes. Twenty of these people lived in the area of the South Shaft.

A report prepared by Sublett indicated that a second survey may be undertaken to determine why these people show more concern than those living over the old east or north shafts.

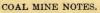
According to Sublett, an "excelent and inexpensive publication" available to the public is "Mine Subsidence in Illinois: Facts for the Homeowner Considering Insurance." The publication is available from Illinois Mines Subsidence Insurance Fund, 175 W. Jackson St., Chicago, Ill. 6004.



John C. Moore Corporation, Rochester, N. Y. Bi	nder and holes in leaves, each Patented 1906. 370534
MOOR	S MOGRN S METHODS
	The same of the sa
Location: Exact	Elevation Data
	e or record of original exists)
Date 5-/-3/ Note	. Roe. book No. 602 Page 31-278
Map files No. 8-54-2a	
	of location
Position in sec.	1/4 sec., 40 acres
feet from North line	
	Sec. 30 T. 20 N.
feet from East line	J. 20 N.
feet from South line	1.00
	R. 2
feet from West line	W. W.
	Farm
Other description:	
1914	B
	mumou coac ~
	Prewerton Coal Co
	No. 92
	02
	No. 92 County No.
Elevation 6	No. 92 County No.
Ву 27. В	No. 92 County No. 1t.
an a	No
Method: Level, transit, alidade, hand le	No. 92 County No. ft.
By 27. 10 Method: Level, transit, alidade, hand le	No. 92 County No. ft.
By	No. 92 County No. 92 Oo. 9 ft. Vel Clicale
By 27. 10 Method: Level, transit, alidade, hand le Elevation of Ca Height of point above ground O Date 5-7-3/ Notebo	No. 92 County No. 92 Oo. 9 ft. Vel Ciclade
By	No. 92 County No. 92 Oo. 9 ft. Vel Clicale
By 2.0 Method: Level, transit, alidade, hand le Elevation of Height of point above ground O Date 5 -/ - 3 Notebe Looseleaf ref.	No. 92 County No. 92 Oo. 9 ft. Vel Clicale
By 7. 0 Method: Level, transit, alidade, hand le Elevation of 6 Height of point above ground 7 Date 5-1-3/ Notebook Looseleaf ref.	No. 92 County No. 92 Oo. 9 ft. Vel Clicale
By 27. 10 Method: Level, transit, alidade, hand le Elevation of 20 Height of point above ground 0 Date 5 7 - 3 / Notebe Looseleaf ref. 8 - 5 # 2 a	No. 92 County No
Method: Level, transit, alidade, hand le Elevation of Height of point above ground Date Date Notebo Looseleaf ref. Map files No. Description of item: (drill hole, mine, etc.)	No. 92 County No. 92 County No. 92 Oo. 9 ft. Pale Vel Chilarle Ook 602 P3/-278 SHUPPING MINE
By 27. 10 Method: Level, transit, alidade, hand le Elevation of 20 Height of point above ground 0 Date 5 7 - 3 / Notebe Looseleaf ref. 8 - 5 # 2 a	No. 92 County No

(24217_1M_2-20)





CAGE

TOWN

MAP No. 0730

S. 30, SE-NE

COUNTY Logan

OPERATOR Lathan Coal Co. OFFICE Lincoln MINE Lincoln North Shaft.

TIPPLE

ENGINES

BOILERS DRUM

SHAFT

HAULAGE

CARS

VENTILATION

DRAINAGE

SPRINKLING

WORKING SYSTEM

MINING METHODS

SIZE OF ENTRIES-MAIN

CROSS

ROOM

NECK

SIZE OF PILLARS-MAIN

CROSS

ROOM

BARRIER

AMOUNT OF TIMBERING

CHAIN

SIZE

PROPORTION OF COAL UTILIZED

AMOUNT AND CHARACTER OF WASTE

SHAFT

ACREAGE OF COAL MINED

ACREAGE OF COAL REMAINING

PROPORTION OF MINE RUN AND SCREENED COAL

METHOD OF SIZING

RESCREENED

SIZES

PER CENT

PROPORTION AND SIZE OF WASHED COAL

DAILY OUTPUT

UTILIZATION

MARKETS

FREIGHT RATES

SELLING PRICES AT MINE

COAL LAND OWNED

LEASED LEASED HELD IN FEE HELD IN FEE

0730

COST OF LAND OWNED ADDITIONAL NOTES





OPERATOR Lathan Coal Co. ENTRANCE Shaff. NAME OF COAL BED

0730

THICKNESS OF COAL

DEPTH TO FLOOR

ELEVATION

MAX.

MIN.

AV.

SECTION Feet

ALTITUDE OF COAL

LOCATION OF SECTION

No.	SECTION	N		
			In.	
1	Coal Sulphur Coal Sulphur Coal		32	SAMPLE No.
2	Sulphur		1/4	
3	Coal		13	CAN No.
4	Sulphur	1/4 to	13 3/4 13	
5	'Coal		13	CONDITION
0				
7				GROSS WEIGHT
8				
9				TIME EXPOSED
10				
11				NOT SHIPPED
12	Tara	Total	58	
	Tape	10(2)	30	NOT INCLUDED

LE No. No. ITION S WEIGHT EXPOSED SHIPPED

PHYSICAL PROPERTIES BY NUMBERS

ROOF

FLOOR

DIP

FAULTS, ETC.

GAS

COLLECTOR Wheeler.

DATE

0730



COAL MINING INVESTIGATIONS COOPERATIVE AGREEMENT

Mine Name or No., North Shaff	R.2W
/ mile Horthfrom Court House Lincoln	
Operator, 1912 Latham Coal Co.	20 / T. C ≠ Sec. 3
	SE
Operator, 191	LA VINE
	R. R. I.C. + C+A
Entrance, Shoff Elev., Go about table, below,	
Depth to bottom coal, 600 ft. Alt.	Thick - 5'2"
See USBM 271 Tope SURFACE DATA.	
A. Topography	See .
B. Surficial materials, (1) Character	
(2) Thickness, (3) Effect on :	mining and shaft-sinking, of former
drainage lines, underground water strata, e	tc.
217	
Bed of guick sand 50' from so very wet still makes a lot	urtace 12' to 14' thick
very wet still makes a lot	of Water
	See
C. Outcrops, (1) Character,	See
(2) Structure,	See
(3) Fossil horizons	See
Collection No.,	
(4) Evidences of subsidence,	See
D Note collection of mine maps, drill records and	snart logs.
	See duit uses and shoot
E. Notes on surrounding area.	See drill record sheet.
Dump Fires	
	Part of the second
	See
Cool had name. Legal	
Coal bed name: Local, 5	Survey 5 State No. 0730
Collector, KDWhite	
Mine, North Shaff Co. Logan	Co-op. No. 33

	John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves, each Patented 1906. 162392	
	MODELS WOODEN	
	Underground Data	
₹.	Thickness of rock above bed worked,	
	(1) Important variations,	
	See	
ì.	Note presence of strata having important effect on mining.	
	See See	
	(1) Position, Between coal and black slate	
	(2) Character, Black Slate	
	(3) Persistence, Over mine	
	(4) Other workable coal beds,	
	See #/	
H.	Cap rock. SECTION	-
	(1) Thickness, 1 to 18 av 8 to 10 Ft. In. Name Index Sym.	The state of
		esent.
	(2) Height above coal, ar 3'	San Print
		and the same
[Immediate roof Black State	-
	(1) Thickness, 3'av. (2) Contact with coal,	-
		and the same
		to de la la
	(3) Horizontal variation,	and the same
	Constant fairly. See */	-
ſ.	Draw slate. (1) Thickness, (2) Contacts	and and
	No.	-
	(3) Persistence	Milan
	(3) 1 classicate	diam's
		denna
<.	Coal bed: Max. 1-3 Min. 4-8' Av. 5-0" inches	Hearte
	(1) Benches, /	Trans.
	(a) Position,	west.
	(a) 1 controll,	and in the
		A.
	(b) Persistence,	Section 10
	See	Second.
	(2) Bedded impurities, kind, position in benches, persist-	Stant's
	ence, ease of separation.	Charge .
		Ch abu
		ALCOHOL:
	Little or no sulphur in bands.	Separate Separate
		-
		-
	See See	-
	(3) Irregularities in continuity of bed (due to deposition,	Manage
		-
	erosion, or movement).	Aw Sine
6	Slau Vems. See *2 *3	-
	(a) Effect on mining,	The same of
	Slight	DESIGNATION OF THE PERSON
7	Moston Cool - Cool - O730	STATE OF THE PARTY OF
	ine, North Shaft (Lincoln) Co. Logan Co-op. No. 33	
VI.	.—UNDERGROUND SHEET (Geol'.)	

John C. Moore Corporation, Rochester, N. Y. Binder	and holes in leaves, each Patented 1906. 162392
MODEZ WELL	ERN OOS
Underground	DATA (cont'd.)
C. (5) Physical character of coal in bench	es,
(a) Relative hardness, Hard,	
(b) Lustre, Bright	
(c) Fracture, Hackly	网络西西亚多马多 亚亚亚马马克
(d) Texture, Massive	See */, *2
(6) Impurities in coal, other than bedd	
(a) Kind, A few sulphur	Ba115
(b) Position and persistence, Irregular.	
(c) Rejected,	Ease of separation,
(e) Rejected,	See See
Floor: (1) Material Fire Glay	
(2) Thickness /2'	
(3) Variation Constant.	
(A) Note character condition tenden	ny to heave valation to undersetting com
mercial value.	ey to heave, relation to undercutting com-
Fire clay slacks in air, and	
clay on south side does not .	heave much under ordinary grayish blue clay with contains polant remains.
conditions. It is a compact	grayish blue clay with
very little sand, up part of	contains plant remains.
	See
(5) Clay sample No.	Location,
Well to sample.	
M. Stratigraphy	
(1) Fossiliferous horizons underground	
Collection No.	Location,
N. Notes on effect of deep drilling in coal	mine areas.
	See
Collector, KOW Coal	State No. 0730
Mine, North Shaff (Lincoln) Co. Logan	Co-op. No. 33
N.—UNDERGROUND SHEET (Geol.)	

Collector KDW Mine North Shaff. (Lincoln) Co. Logan Co-op No. 33 X.—EXTRA SHEET No./

Coal 5

State No. 0730

X.—EXTRA SHEET No. 3

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, Latham CoalCo.

Mine, North Shaft Located Limites* 15 from 1 Lincoln Location in mine. Room #/ (Working) 2nd Lintoff Straight East Total (vertical) depth from surface at point of sampling, 270 ft.

In describing the beds and character of the members, note any member that is rejected by the miner. Note all clay and sulphur partings, whatever their thickness. Exclude from sample all clay and sulphur partings \(\frac{3}{2} \) inch thick or over (and even those of less thickness if they are rejected at mine or tipple).

SECTION OF BED AT POINT SAMPLED

No.	DESCRIPTION	FEET	Inches
X 1	Roof Black Shale		
2	Coal-clean-bright -hard		3
3	Mother of Coal		14
4	Coal-fairly clean	2	45.
5	Mother of Coal	1	4
6	Coal-dirty		5 4
7	Pyrite 1.		4
8	Coal-very dirty	1	9
9		245	
10 11	Floor-fireclay	ATU	
12			
13			
14	Cleat very poorly eleve	laped.	
15		//	
16			
17			124
	TOTAL,	4	102
Is coal wet o	r dry? - Dry		
Time expose	d, hours, 35		minutes.
Weight,	35 # gross,		net.
What are the	e impurities, and how do they occur? Pyrite.	mother	of coal
turt in	norizontal streaks		0000)
What are sh	ipped? 2, 3, 4, 5, 6, 7, 8		
What are exc	cluded from the sample? /	10	
		ed, Na.	5
		railway stati	
Town, Z	ncoln Mine, Nort Shaft	Co.Latha	migallo
	33B Can No. 15.G # 39		
I.—COAL S	AMPLE SHEET. Sampler. Nebel 4) mith	

#5263

MOORE'S MODERN METHODS

COAL MINING INVESTIGATION

COOPERATIVE AGREEMENT

Operator, Latham Coal Co. Date, August 3 1912

Mine, North Shaft Located & miles* N. E from 12 10 0/10

Location in mine, Room & off 2 10 Stub off 2 10 Right off N.

Total (vertical) depth from surface at point of sampling, 2 70 ft.

In describing the beds and character of the members, note any member that is rejected by the miner. Note all clay and sulphur partings, whatever their thickness. Exclude from sample all clay and sulphur partings \(\frac{3}{2} \) inch thick or over (and even those of less thickness if they are rejected at mine or tipple).

SECTION OF BED AT POINT SAMPLED

	SECTION OF BED AT POINT SAMPLED	++-	
No.	DESCRIPTION	FEET	Inches
X1	Roof-Black Shale	-	
X 2	Punite		71
3	Cloal - fairly clean-hard	2-	12,
4	Mother of Coal		文文
5	Coal-dirty		R,
X 6	Pyrite,	-,	31
0	Coal-dirty	1	22
× 8	Bonecoal-pyrite-black jack Coal-very dinty		22,
10	coal-very anty		2
11	Floor fire clay.		
12	From the oral In		
13			
14		" V	
15			
16	246	61	
17		05	5
	Total,		
Is coal wet or			
Time exposed	- # P		minutes.
Weight,	30" gross,	* /-	net.
What are the	impurities, and how do they occur? - bone, py	rite-n	10 the Aut
What are shi	rtets in honizontal streaks		
What are exc	luded from the sample? / 2 6 8		
	Coal bed,	Vols	
	*Direction (N., NE., etc.). †Nearest rail		n.
Town, Liv	mine, North Shaft Co	o.Latha	n Coal Co.
Sample No.	3 5 C Can No. 5+ 1 #3 N	o. 33	0730
ICOAL SA	AMPLE SHEET. Sampler. Nebel & Sm	ixh.	

#5264

COOPERATIVE AGREEMENT

Operator, Latham Coali o. Date, Hug, 3 Mine, North Shaft Located & miles* N. E from Lincoln Location in mine, Room 3-15+ Stuber & Straight South Total (vertical) depth from surface at point of sampling, 270

In describing the beds and character of the members, note any member that is rejected by the miner. Note all clay and sulphur partings, whatever their thickness. Exclude from sample all clay and sulphur partings & inch thick or over (and even those of less thickness if they are rejected at mine or tipple).

SECTION OF BED AT POINT SAMPLED

No.	DESCRIPTION	FEET	Inches
X1	Roof-Black Shale		
2	Coal-clean-hard		5
3	Mother of Coal-Soft		2
4	Coal-dirty	2	4,
5	Purite		र्ष
• 6	Coal-clean bright		3
X7	Prite lense		70
8	Coal-dirty-bright	1	10 30
9			
10	Floor-fire clay		
11			
12			
13			
14	619		
15	243		
16			
17		* ,_	
	TOTAL,	3	0
Is coal wet or	dry? Dry		
Time exposed			minutes.
Weight,	30# gross,		net.
	impurities, and how do they occur? pyrite	inhons	vertica
streaks-	mother of coal + dirtinherizon+	al stre	aks
	pped? 2, 3, 4, 5, 6, 8		1 10 10 10 10
	luded from the sample?		
		ed, Now	
		ailway stati	on.
Town, Liv	Mine, North Shaft	NAME OF TAXABLE PARTY.	the state of the s
			0730
L-COAL S	AMPLE SHEET. Sampler. Nebel 45	mith	
·	Campier.		

Collector, J. S. Burraus
Mine, J. von Barron
R.—COAL SAMPLE SHEET.

Coal: Survey No.

Index No. 273



Symbol

USBNUBULE 2/p497

Inches

LINCOLN. LATHAM MINE.

Sample.—Bituminous coal; Illinois field; (Illinois No. 26) analyses Nos. 2881, 2882 (p. 85).

Mine.—Latham, a shaft mine 1 mile north of Lincoln, on the Chicago & Alton Railroad.

Coal bed.—No. 5 (Springfield coal of the United States Geological Survey). Carboniferous age, Carbondale formation. Thickness, variable, in this mine 4 to 6 feet, averaging 4 feet, 8 inches; dip \(\frac{2}{3} \) inch in 160 inches to northwest, or \(\frac{2}{3} \) of a degree; roof, mostly hard laminated black shale, containing in places many concretions; in places the roof is sandy shale; floor, hard gray shale, called fire clay. The mine shaft is 276 feet deep.

The bed was measured and sampled at two points by J. S. Burrows and W. J.

von Borries on February 7, 1906, as described below:

Section of coal bed in Latham mine, 1 mile north of Lincoln.

Scetion.	A 101	В
Laboratory No.	2881	2882
Roof, shale.	$\dots \qquad \begin{array}{c c} Ft. & in. \\ 0 & 4\frac{1}{2} \end{array}$	Ft. in.
Shale 4	0 1	1 0 ·· 3
Coal	0 9	3 6
Coal	3 8	0 6
Fior, shale. Thickness of bed. Thickness of coal sampled.	4 10 3 4 98	4 10 § 4 10 §

a Not included in sample.

Section A (sample 2881) was measured 1,500 feet southeast of the shaft in room 11 off the third south stub entry.

Section B (sample 2882) was measured 1,600 feet northeast of the shaft in room 1,

main entry 3, off the main cross entry, northwest side.

Notes.—The coal from this mine, like that from many others in this field, is hard tough and firm. The bed has no regular partings but contains some lenticular

streaks and layers of pyrite and shale.

For results of tests of this coal, see mention of specific tests as follows—steaming tests: U. S. Geol. Survey Bull. 332, p. 103; Bureau of Mines Bull. 23, pp. 61, 157; producer-gas tests: U. S. Geol. Survey Bull. 332, p. 104; Bureau of Mines Bull. 13, p. 121, 273; washing tests: U. S. Geol. Survey Bull. 332, p. 104; Bull. 336, p. 14; coking tests: U. S. Geol. Survey Bull. 332, p. 104; Bull. 336, pp. 22, 28, 38.

For chemical analyses see part I of this bulletin, p. 85; also U. S. Geol. Survey

Bull. 332, p. 103.

(Scale: 1 division = 3 inches).

Sample No.	Can No.	Lab. No.
Collector,	0	Coal: Survey No. 5
Collector, Mine, Latham	Co. Logan	Index No. 0730.96
Q.—COAL SECTION SHE	ET.	