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STATE OF ILLINOIS

DEPARTMENT OF REGISTRATION AND EDUCATION

SIZE, DEVELOPMENT, AND  
PROPERTIES OF  
ILLINOIS OIL FIELDS

R. F. Mast

ILLINOIS STATE GEOLOGICAL SURVEY  
1970

ILLINOIS PETROLEUM 93

URBANA, ILLINOIS 61801

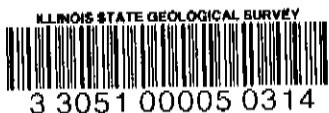
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STATE GEOLOGICAL SURVEY

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# SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS

R. F. MAST

## ABSTRACT

Estimates were made of the areal size in acres of pay zones in each oil field in the state as of January 1, 1968. Pay acreage under flood and the status (active or abandoned) of the flood acreage and the remaining primary acreage were also determined. In addition, average properties (depth and thickness, porosity and permeability, and oil gravity and viscosity) were given for each pay zone in each oil field.

The data show that 48 percent of the 734,400 pay acres in the state were developed for waterflood and that an estimated 59.2 percent of the remaining primary wells were still active. Distributions for the different properties based on percent of total reservoir pore volume in the state are presented for each of the 4 major producing lithologies.

## INTRODUCTION

The purpose of this paper is to bring together in a convenient form much of the data on file at the Illinois Geological Survey concerning the size, properties, and development of Illinois oil fields.

In the past 15 years, many methods have been developed to recover additional quantities of oil from petroleum reservoirs. As a result, there has been an increased demand for information regarding reservoir size and reservoir rock and fluid properties. Both the oil industry and governmental agencies seek this information to determine the effect of improving technology on the future development of known oil accumulations.

The gas storage industry in the state has also requested information for evaluation of petroleum reservoirs as potential gas storage sites.

The majority of the underground gas storage capacity now developed in the state is in aquifers. Future developments of this type may be concentrated in depleted oil fields (Buschbach and Bond, 1967, p. 18 and fig. 5).

In the past 4 years there has been increasing interest, especially by regulatory governmental agencies, in the underground disposal of wastes (Bergstrom, 1968). In the future, oil fields may also be utilized as waste-disposal sites.

It is intended, therefore, that this collection of information will serve as a useful reference to people interested in the future development of the Illinois oil industry and also to those engaged in the underground disposal and storage of liquids and gases.

## REVIEW OF THE DEVELOPMENT HISTORY OF THE ILLINOIS OIL FIELDS

Size

The first major oil fields were discovered in eastern Illinois in shallow Pennsylvanian rocks along the LaSalle Anticline and were principally developed between 1903 and 1913. A peak in annual production of 33.1 million barrels from these "old fields" was reached in 1910. During the 1920's and 1930's, some areas of the "old fields" were subjected to gas or air repressuring, and in the 30's some small experimental or accidental waterfloods were active. However, these operations did not have any significant effect on the state's annual oil production during this period. In 1937, new drilling found production in the Mississippian rocks in the deep Illinois Basin area, and exploratory drilling in the state since 1937 has found oil in rocks ranging in age from Ordovician to Pennsylvanian.

A peak in annual oil production of 146.8 million barrels, resulting from the post-1937 discoveries, was reached in 1940. However, from 1942 to 1946, wartime restrictions curtailed new drilling and waterflood developments. In the early 1950's, the employment of both modern waterflood techniques and the hydrofracing of wells began, and the state's annual oil production rose from 59 million barrels in 1953 to over 80 million barrels in 1955. This "technological boom" stabilized the state's annual oil production at around 80 million barrels until 1963.

During the 1960's, several small experimental projects were developed in Illinois reservoirs to evaluate some new recovery methods. These projects have met with varying degrees of success. In the future, technological developments and economics will undoubtedly have a great influence on the ultimate recovery of oil already discovered in the state.

### COLLECTION OF THE DATA

All of the information presented in this report was available or was developed from data found in the files and publications of the Illinois Geological Survey. Data were collected for each pay zone in each oil field. Figure 1 illustrates the geologic column, showing the various pay zones in the state. Table 1 gives the locations of the oil fields. Howard (1967) has published oil and gas pay maps of the Illinois oil fields.

### Total Productive Area

Estimates of the total productive area for each pay zone in each oil field were made from oil and gas maps showing the pay zone completed in each well (Howard, 1967). The productive area estimates were made by dividing each legal section into 10-acre units. Each of these units which contained a completed oil well in a given pay zone was counted as 10 acres of productive area in that pay. Any undrilled 10-acre units offset on at least two sides by production in a pay zone were also counted as 10 acres of productive area in that pay. In practice, this method of defining productive area for each pay zone could easily be applied in areas drilled on both 10- and 20-acre spacing. But in a few areas of the state (e.g., Johnsonville C.), wells were drilled on 40-acre spacing. In these areas the same technique was used, except that each well completion was considered to represent 40 acres instead of 10.

For some of the "old field" areas, well-completion data and development maps were incomplete; for these fields, maps showing productive limits for each pay were found in the literature (e.g., Squires and Bell, 1943) or in the Survey files. These maps were updated by adding the new wells drilled in the field (usually from waterflood operations). The maps were then planimetered to determine the productive areas.

### Total Areal Acres

Estimates of the total areal or surface acres covered by each oil field were made by planimetry of the maximum productive area from a map on which the productive areas of all pay zones in the field had been superimposed. These data are given in table 2. The total areal acres are given in the first column opposite the field name, the total productive area in acres in each pay zone is given in the first column opposite the pay zone name, and the sum of the pay acres in each field is given in the same column in the last line.

### Development

#### Waterfloods

To determine the development and production status of the acreage under flood in each pay zone, all pay acreage within known waterflood unit boundaries was classified as flood acreage.

GENERALIZED GEOLOGIC COLUMN OF SOUTHERN ILLINOIS

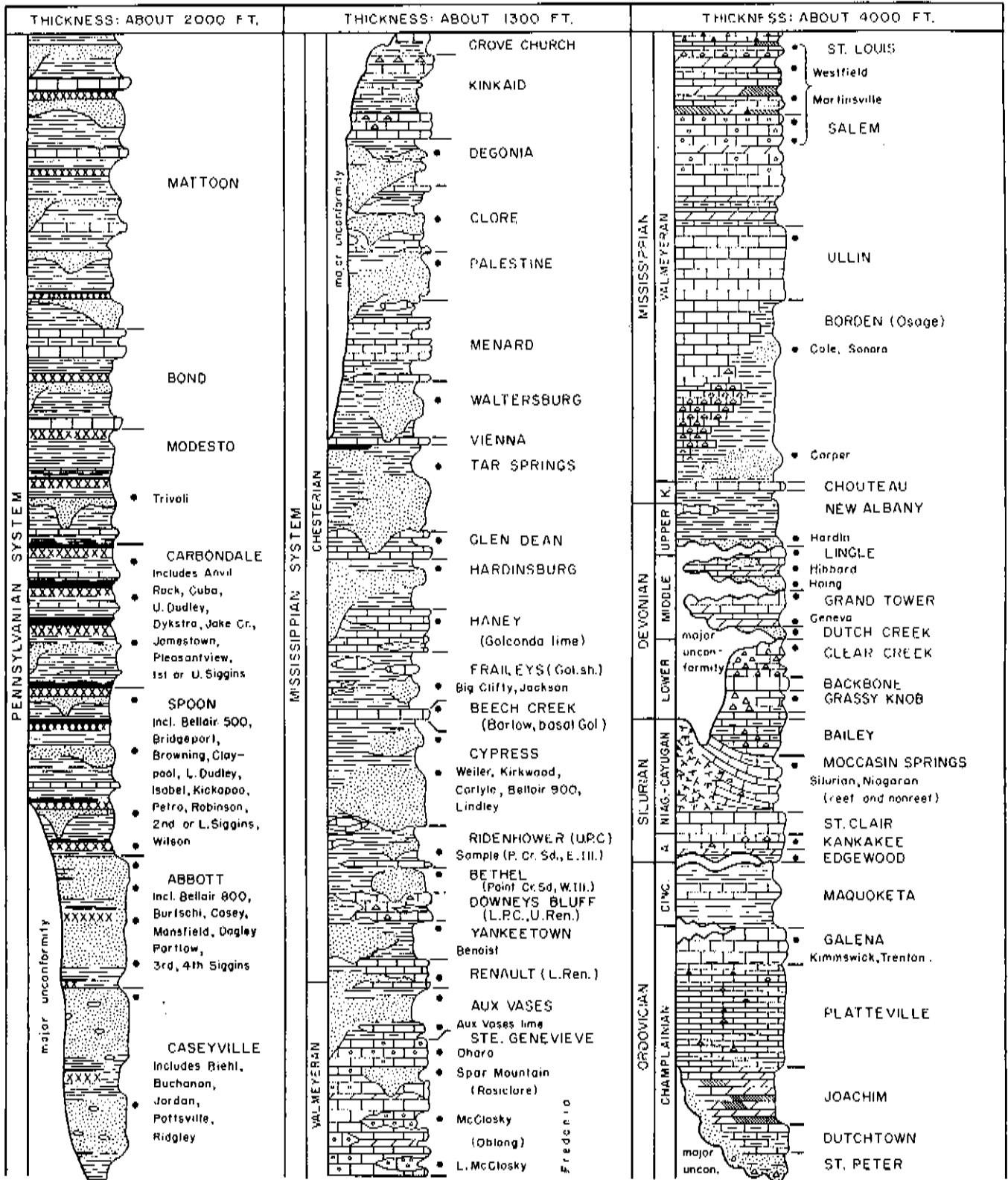


Fig. 1 - Generalized geologic column of southern Illinois. Black dots indicate oil and gas pay zones. Formation names are in capitals; other pay zones are not. About 4000 feet of the lower part of Ordovician and the upper sandstone Cambrian rocks under the St. Peter are not shown. Kinderhookian (K), Niagaran (Niag.), Alexandrian (A), and Cincinnati (Cinc.) Series are abbreviated. Variable vertical scale. (Prepared by David H. Swann)

TABLE 1 - LOCATIONS OF ILLINOIS OIL FIELDS

Name, County, Township and Range	Name, County, Township and Range	Name, County, Township and Range
Ab Lake, Gallatin, 8S, 10E	Browns, Edwards, Wabash, 1-2S, 14W	Elba, Gallatin, 8S, 8E
Ab Lake South, Gallatin, 9S, 10E	Browns E, Wabash, 1-2S, 14W	Elbridge, Edgar, 12-13N, 11W
Ab Lake West, Gallatin, 8-9S, 9-10E	Browns S, Edwards, 2S, 14W	Eldorado C, Saline, 8S, 6-7E
Aden C. Wayne, Hamilton, 2-3S, 7E	Browns S, Edwards, 2S, 14W	Eldorado C, Saline, 8S, 6-7E
Aden East, Wayne, 2S, 7E	Buckhorn, Brown, 1S, 4W	Eldorado E, Saline, 8S, 7E
Aden South, Hamilton, 3S, 7E	Buckner, Franklin, 6S, 2E	Eldorado W, Saline, 8S, 6E
Akin, Franklin, 6S, 4E	Bulpitt S, Christian, 13N, 3W	Elk Prairie, Jefferson, 4S, 2E
Akin West, Franklin, 6S, 4E	Bungay C, Hamilton, 4S, 7E	Elkton, Washington, 2S, 4W
Albion Cen, Edwards, 5, 2S, 10E	Burnt Prairie S, White, 4S, 9E	Elkville, Jackson, 7S, 1W
Albion C, Edwards, White, 1-3S, 10-11E, 14W	Calhoun Cen, Richland, 2N, 10E	Elley E, Edwards, 2S, 10E
Albion C, Edwards, White, 1-3S, 10-11E, 14W	Calhoun C, Richland, Wayne 2-3N, 9-10E	Elley N, Edwards, Wayne, 2S, 9-10E
Albion Northwest, Edwards, 1S, 10E	Calhoun E, Richland, 2N, 10-11E	Elley S, Edwards, 2-3S, 10E
Albion West, Edwards, 3S, 10E	Calhoun M, Richland, 3S, 10E	Elliotstown, Effingham, 7N, 7E
Altondale, Wabash, Lawrence, 1-2N, 11-13W	Calhoun S, Wayne, Richland, Edwards, 1-2N, 9E	Elliotstown E, Effingham, 7N, 7E
Alma, Marion, 4N, 2E	Carlinville, Macoupin, 9N, 7W	Elliotstown N, Effingham, 7N, 7E
Amity, Richland, 4N, 14W	Carlinville N, Macoupin, 10N, 7W	Energy, Williamson, 9S, 2E
Amity S, Richland, 4N, 14W	Carlinville S, Macoupin, 9N, 7W	Enfield, White, 5S, 8E
Amity W, Richland, 4N, 14W	Carlyle, Clinton, 2N, 3W	Enfield S, White, 6S, 8E
Ashley, Washington, 2S, 1W	Carlyle E, Clinton, 2N, 2W	Evers, Effingham, 8N, 7E
Ashmore E, Coles, 13N, 14W	Carlyle N, Clinton, 3N, 3W	Ewing, Franklin, 5S, 3E
Ashmore S, Coles, Clark, 12N, 10-11E, 14W	Carlyle S, Clinton, 1N, 3W	Ewing E, Franklin, 5S, 3E
Assumption Cen, Christian, 13N, 1E	Carmi, White, 5S, 9E	Exchange, Marion, 1N, 3E
Assumption C, Christian, 13-14N, 1E	Carmi N, White, 5S, 9E	Exchange S, Marion, 1N, 4E
Assumption S, Christian, 12N, 1E	Cassey, Clark, 10-11N, 14W	Exchange N C, Marion, 1N, 3-4E
Ava-Campbell Hill, Jackson, 7S, 3-4W	Centerville, White, 4S, 9E	Exchange W, Marion, 1N, 3E
Baldwin, Randolph, 4S, 6W	Centerville E, White, 3-4S, 9-10E	Fairman, Marion, Clinton, 3N, 1E, 1W
Barnhill, Wayne, White, 2-3S, 8E	Centerville N, White, 3S, 10E	Fancer, Shelby, 10N, 4E
Bartels, Clinton, 1-2N, 3W	Centerville N E, White, 3S, 10E	Fehrer Lake, Gallatin, 9S, 10E
Bartels E, Clinton, 1N, 3W	Central City, Marion, 1N, 1E	Fitzgerald, Jefferson, 4S, 1E
Bartels S, Clinton, 1N, 3W	Centraia, Clinton, Marion, 1-2N, 1E, 1W	Fitzgerald, Jefferson, 4S, 1E
Bartels W, Clinton, 1N, 3-4W	Centraia W, Clinton, 1N, 1W	Flora S, Clay, 2N, 6E
Beaucoup, Washington, 2S, 2W	Chesterfield, Douglas, 15N, 7E	Forayth, Macon, 17N, 2E
Beaucoup S, Washington, 2S, 2W	Chesterfield E, Douglas, 14-15N, 7-8E	Francis Mills, Saline, 7S, 7E
Beaver Creek, Bond, Clinton, 3-4N, 2-3W	Christopher S, Franklin, 7S, 1E	Francis Mills S, Saline, 7S, 7E
Beaver Creek N, Bond, 4N, 3W	Clarkaburg, Shelby, 10N, 4E	Freeburg, St. Clair, 1-2S, 7W
Beaver Creek S, Clinton, Bond, 3-4N, 2-3W	Clay City C, Clay, Wayne, Richland, Jasper, 1-7N, 1-2S, 6-11E	Freeport, Williamson, 8S, 2E
Beckmeyer Gas, Clinton, 2N, 3W	Clifford, Williamson, 8S, 1E	Friendsville Cen, Wabash, 1N, 13W
Bellaire, Crawford, Jasper, 8N, 14W	Coil, Wayne, 1S, 5E	Friendsville N, Wabash, 1N, 12-13W
Belle Prairie, Hamilton, 4S, 6-7E	Coil N, Wayne, 1N-1S, 5E	Frogmow, Clinton, 2N, 3-4W
Belle Prairie, W. Hamilton, 4S, 5E	Coil W, Jefferson, 1S, 4E	Frogmow N, Clinton, 2-3N, 3-4W
Belle Rive, Jefferson, 3S, 4E	Collinsville, Madison, 3N, 8W	Garde Point C, Wabash, 1N, 14W
Bellmont, Wabash, 1S, 13-14W	Colmar-Plymouth, Hancock-McDonough, 4-5N, 4-5W	Gays, Moultrie, 12N, 6E
Beman, Lawrence, 3N, 11W	Concord C, White, 6S, 10E	Germantown E, Clinton, 1-2N, 4W
Beman E, Lawrence, 3N, 10W	Concord E C, White, 6-7S, 10E	Gila, Jasper, 7-8N, 9E
Bennington S, Edwards, 1N, 10E	Cooks Mills C, Coles, Douglas 13-14N, 7-8E	Gillespie-Wyen, Macoupin, 8N, 6W
Benton, Franklin, 6S, 2-3E	Cordae, Washington, 3S, 3W	Glenora, Sangamon, 14N, 5W
Benton N, Franklin, 3-6S, 2E	Corinth, Williamson, 8S, 4E	Goldengate C, Wayne, White, Edwards, 2-4S, 9-10E
Berry, Sangamon, 15N, 3W	Corinth E, Williamson, 8S, 4E	Goldengate C, Wayne, White, Edwards, 2-4S, 9-10E
Berryville C, Wabash, Edwards, Richland, 1-2N, 14W	Corinth N, Williamson, 8S, 4E	Goldengate E, Wayne, 3S, 9E
Beasia, Franklin, 6S, 3E	Cottage Grove, Saline, 9S, 7E	Goldengate N C, Wayne, 1-2S, 8-9E
Bible Grove N, Effingham, 6N, 7E	Coulterville N, Washington, 3S, 3W	Grandview, Edgar, 12-13N, 13W
Bible Grove S, Clay, 5N, 7E	Covington S, Wayne, 2S, 6E	Grayson, Saline, 8S, 7E
Black Branch, Sangamon, 15N, 4W	Craig, Perry, 4S, 4W	Greenville Gas, Bond, 5N, 5W
Blackland, Macon, Christian, 15N, 1E-1W	Cravat, Jefferson, 1S, 1E	Half Moon, Wayne, 1S, 9E
Blackland N, Macon, 16N, 1E	Cravat W, Jefferson, 1S, 1E	Harco, Saline, 8S, 5E
Black River, White, 4S, 13W	Crossville, White, 4S, 10E	Harco E, Saline, 8S, 5E
Blairsville W, Hamilton, 4S, 7E	Crossville W, White, 4S, 10E	Harrisburg, Salina, 8S, 6E
Bluford, Jefferson, 2S, 4E	Dahlgren, Hamilton, 3S, 5E	Harrisburg S, Saline, 9S, 6E
Bogota, Jasper, 6N, 9E	Dahlgren W, Jefferson, 4S, 4E	Harrisburg, Macon, 16N, 1E
Bogota N, Jasper, 6N, 9E	Dale C, Franklin, Hamilton, Saline, 5-7S, 4-7E	Hayes, Douglas, Champaign, 16N, 8E
Bogota S, Jasper, 5-6N, 9E	Decatur, Macon, 16-17N, 2E	Herald C, White, Gallatin, 6-8S, 9-10E
Bogota W, Jasper, 6N, 9E	Decatur N, Macon, 17N, 3E	Herrin, Williamson, 8S, 2E
Bone Gap C, Edwards, 1S, 10-11E, 14W	Deering City, Franklin, 7S, 3E	Hickory Hill, Marion, 1N, 4E
Bone Gap C, Edwards, 1S, 10-11E, 14W	Divide S, Jefferson, 1S, 3-4E	Hidalgo, Jasper, 8N, 10E
Bone Gap E, Edwards, 1S, 14W	Dix S, Jefferson, 1S, 2E	Hidalgo E, Jasper, 8N, 10E
Bone Gap W, Edwards, 1S, 10E	Dollville, Shelby, 12N, 2E	Hidalgo N, Cumberland, 9N, 9E
Boulder, Clinton, 2-3N, 2W	Dubois Cen, Washington, 3S, 1-2W	Hidalgo S, Jasper, 8N, 10E
Boulder E, Clinton, 3N, 1W	Dubois C, Washington, 3S, 1-2W	Highland, Madison, 4N, 5W
Bourbon C, Douglas, 15N, 7E	Dudley, Edgar, 13-14N, 13W	Hill, Effingham, 6N, 6E
Bourbon S, Douglas, 15N, 7E	Dudleyville E, Bond, 4-5N, 2-3W	Hill E, Effingham, 6N, 6E
Bowyer, Richland, 5N, 14W	Dupo, St. Clair, 1N, 1S, 10W	Hillsboro, Montgomery, 9N, 3W
Boyd, Jefferson, 1S, 1-2E	Eberle, Effingham, 6N, 6E	Hoffman, Clinton, 1N, 2W
Broughton, Hamilton, 6S, 7E	Edinburg, Christian, 14N, 3W	Hoodville E, Hamilton, 5S, 7E
Broughton S, Saline, 7S, 7E	Edinburg S, Christian, 14N, 3W	Hord, Clay, 5N, 6E
Brown, Marion, 1N, 1E	Edinburg W, Christian, Sangamon, 14N, 3-4W	Hord N, Effingham, 6N, 6E
		Hord S C, Clay, 5N, 6E
		Hornaby S, Macoupin, 8N, 6W
		Boyleton W, Washington, 1S, 2W
		Huey, Clinton, 2N, 2W
		Huey S, Clinton, 1-2N, 2-3W
		Hunt City, Jasper, 7N, 10E
		Hunt City E, Jasper, 7N, 14W

PROPERTIES OF ILLINOIS OIL FIELDS

TABLE 1 - LOCATIONS OF ILLINOIS OIL FIELDS, Continued

Name, County, Township and Range	Name, County, Township and Range	Name, County, Township and Range
Hunt City S, Jasper, 7N, 14W	Maple Grove S, Edwards, 1N, 10E	Oskaloosa E, Clay, 3N, 5-6E
Hutton, Coles, 11N, 10E	Maycos, Jefferson, 3S, 2E	Oskaloosa S, Clay, 3N, 5E
Ina, Jefferson, 4S, 2-3E	Marine, Madison, 4N, 6W	Pana, Christian, 11-12N, 1E
Ina N, Jefferson, 4S, 3E	Marine W, Madison, 5N, 7W	Panama, Bond, Montgomery, 7N, 3-4W
Inclose, Edgar, Clark	Marion, Williamson, 9S, 3E	Pankeyville, Saline, 9S, 6E
12N, 13-14W	Marion E, Williamson, 9S, 3E	Pankeyville E, Saline, 9S, 7E
Ingraham, Clay, 4N, 8E	Marissa W, St. Clair, 3-4S, 7W	Parkersburg C, Richland, Edwards,
Inman E C, Gallatin, 7-8S, 10E	Markham City, Jefferson,	1-3N, 10-11E, 14W
Inman W C, Gallatin, 7-8S, 9-10E	2S, 4-5E	Parkersburg S, Edwards, 1N, 14W
Iola Cen, Clay, 5N, 5E	Markham City N, Jefferson,	Parkersburg W, Richland, Edwards, 2N, 10E
Iola C, Clay, Effingham, 3-6N, 5-6E	Wayne, 2S, 4-5E	Parnall, DeWitt, 21N, 4E
Iola S, Clay, 4N, 5E	Markham City W, Jefferson, 2-3S, 4E	Passport, Clay, 4-5N, 8E
Iola W, Clay, 5N, 3E	Martinsville, Clark, 9-10N, 13-14W	Passport N, Richland, 3N, 9E
Irvington, Washington, 1S, 1W	Mason N, Effingham, 6N, 5E	Passport S, Richland, Clay, 4N, 8-9E
Irvington E, Jefferson, 1S, 1E	Massion, Wayne, Edwards, 1S, 9-10E	Passport W, Clay, 4N, 8E
Irvington N, Washington, 1N, 1S, 1W	Massion S, Edwards, 1S, 10E	Patoka, Marion, Clinton, 3-4N, 1E, 1W
Irvington W, Washington, 1S, 1W	Mattoon, Coles, 11-12N, 7-8E	Patoka E, Marion, 4N, 1E
Iuka, Marion, 2N, 4E	Mattoon N, Coles, 13N, 7E	Patoka S, Marion, 3N, 1E
Iuka W, Marion, 2N, 3-4E	Mattoon S, Cumberland, 11N, 7E	Patoka W, Fayette, 4N, 1W
Jacksonville Gas, Morgan,	Maunie E, White, 6S, 11E	Phillipstown C, White, Edwards, 3-5S,
15N, 9W	Maunie N C, White, 5-6S, 10-11E, 14W	10-11E, 14W
Johnson N, Clark, 9-10N, 14W	Maunie N C, White, 3-6S, 10-11E, 14W	Phillipstown S, White, 5S, 10E
Johnson S, Clark, 9N, 14W	Maunie South C, White, 6S, 10-11E	Pinkstaff, Lawrence, 4N, 11W
Johnsonville C, Wayne, 1N, 1S, 6-7E	Mayberry, Wayne, 2-3S, 6E	Pinkstaff E, Lawrence, 4N, 11W
Johnsonville N, Wayne, 1N, 6E	Mayberry N, Wayne, 2S, 6E	Pittsburg N, Williamson, 8S, 3E
Johnsonville S, Wayne, 1S, 5-7	Melrose, Clark, 9N, 13W	Pixley, Clay, 4N, 8E
Johnsonville W, Wayne, 1N, 1S, 5-6E	Melrose S, Clark, 9N, 13W	Plainview, Macoupin, 9N, 8W
Johnsonville W, Wayne, 1N, 1S, 5-6E	Miletus, Marion, 4N, 4E	Plainview S, Macoupin, 8N, 8W
Johnston City E, Williamson, 8S, 3E	Millersburg, Bond, 4N, 4W	Posen, Washington, 3S, 2W
Junction, Gallatin, 9S, 9E	Hill Shoals, White, Hamilton,	Posen N, Washington, 3S, 2W
Junction R, Gallatin, 8-9S, 9E	Wayne, 2-4S, 7-8E	Posen S, Washington, 3S, 2W
Junction N, Gallatin, 8-9S, 9E	Mills Prairie, Edwards, 1N, 14W	Posy, Clinton, 1N, 2W
Junction City C, Ma...	Mills Prairie N, Edwards, 1N, 14W	Posy E, Clinton, 1N, 2W
1E	Mitchellville, Saline, 10S, 6E	Posy W, Clinton, 1N, 3W
Keansburg E, Wabash, 2S, 13W	Mode, Shelby, 10N, 4E	Practice, Morgan, 16N, 8W
Keansburg S, Wabash, 2-3S, 13W	Montrose, Effingham, 8N, 7E	Pyramid, Washington, 2S, 1W
Keansville, Wayne, 1S, 5E	Mt. Auburn C, Christian, 15N, 1-2W	Raccoon Lake, Marion, 1N, 1E
Keansville E, Wayne, 1S, 5E	Mt. Carmel, Wabash, 1N, 1S, 12W	Raleigh, Saline, 7-8S, 6E
Kell, Jefferson, 1R, 3E	Mt. Erie N, Wayne, 1N, 9E	Raleigh S, Saline, 8S, 3-6E
Kell W, Marion, 1N, 2E	Mt. Olive, Montgomery, 8N, 5W	Raymond, Montgomery, 10N, 4-5W
Kellerville, Adams, Brown,	Mt. Vernon, Jefferson, 3S, 3E	Raymond E, Montgomery, 10N, 4W
1-2S, 5W	Mt. Vernon N, Jefferson, 2S, 3E	Raymond S, Montgomery, 10N, 4W
Kenner, Clay, 3N, 5-6E	Murdock, Douglas, 16N, 10E	Reservoir, Jefferson, 1S, 3E
Kenner N, Clay, 3N, 6E	Nason, Jefferson, 3-4S, 2E	Richview, Washington, 2S, 1W
Kenner S, Clay, 2N, 5E	New Baden E, Clinton, 1N, 5W	Ridgeway, Gallatin, 8S, 8E
Kenner W, Clay, 3N, 5E	New Bellair, Crawford, 8N, 13W	Riffle, Clay, 4N, 6E
Keysport, Clinton, 3N, 2W	New City, Sangamon, 14N, 4W	Rinard, Wayne, 2N, 7E
Kingsid C, Christian, 13-14N, 3W	New City S, Christian, 14N, 4W	Rinard N, Wayne, 2N, 7E
King, Jefferson, 3-4S, 3E	New Douglas S, Bond, 6N, 5W	Rinard S, Wayne, 1N, 6E
Kimmudy, Marion, 4N, 2-3E	New Harmony C, White, Wabash,	Ritter, Richland, 3N, 10-11E
Kimmudy N, Marion, 4N, 3E	Edwards, 1N, 1-5S, 13-14W	Ritter N, Richland, 3N, 11E
Lacide, Fayette, 3N, 4E	New Harmony S (11), White, 5S, 14W	Riverton S, Sangamon, 15N, 4W
Lakewood, Shelby, 10N, 2-3E	New Harmony S (Ind), White, 5S, 14W	Roaches, Jefferson, 2S, 1E
Lancaster, Wabash, Lawrence, 1-2N, 13W	New Haven C, White, 7S, 10-11E	Roaches N, Jefferson, 2S, 1E
Lancaster Cen, Wabash, 1N, 13W	New Hebron E, Crawford, 6N, 12W	Roby, Sangamon, 15N, 3W
Lancaster E, Wabash, 2N, 13W	New Memphis, Clinton, 1N, 1S, 5W	Roby N, Sangamon, 15N, 3W
Lancaster S, Wabash, 1N, 13W	New Memphis E, Washington, 1S, 4W	Roby W, Sangamon, 15N, 3W
Langewisch-Kuester, Marion, 1N, 1E	New Memphis N, Clinton, 1N, 5W	Rochester, Wabash, 2S, 13W
Lawrence, Lawrence, Crawford,	New Memphis S, Clinton, Washington, 1S, 5W	Roland C, White, Gallatin, 3-7S, 8-9E
2-5N, 11-13W	Newton, Jasper, 6N, 9E	Roland W, Saline, 7S, 7E
Lawrence W, Lawrence, 3N, 13W	Newton N, Jasper, 7N, 10E	Rose Hill, Jasper, 8N, 9E
Lexington, Wabash, 1S, 14W	Newton W, Jasper, 6-7N, 9E	Ruark, Lawrence, 2N, 12-13W
Lexington N, Wabash, 1S, 14W	Noble W, Clay, 3N, 8E	Ruark W C, Lawrence, 2N, 13W
Lillyville, Cumberland, Effingham,	Oakdale, Jefferson, 2S, 4E	Rural Hill N, Hamilton, 5S, 5E
8-9N, 6-7E	Oakdale N, Jefferson, 2S, 4E	Rushville, Schuyler, 2N, 1W
Lis, Jasper, 7N, 9E	Oakley, Macon, 16N, 3E	Rushville N W, Schuyler, 2N, 2W
Litchfield, Montgomery, 8-9N, 5W	Oak Point, Clark, Jasper, 8-9N, 14W	Russellville Gas, Lawrence, 4-5N, 10-11W
Litchfield S, Montgomery, 8N, 5W	Oak Point W, Clark, Cumberland, 9N, 11E, 14W	Russellville W, Lawrence, 2N, 11W
Livingston, Madison, 6N, 6W	Odin, Marion, 2N, 1-2E	St. Francisville, Lawrence, 2N, 11W
Livingston S, Madison, 5-6N, 6W	Okawville, Washington, 1S, 4W	St. Francisville E, Lawrence, 2N, 11W
Locust Grove, Wayne, 1N, 9E	Okawville N, Washington, 1S, 4W	St. Jacob, Madison, 3N, 6W
Locust Grove S, Wayne, 1S, 9E	Old Ripley, Bond, 5N, 4W	St. Jacob E, Madison, 3N, 6W
Logan, Franklin, 7S, 3E	Old Ripley N, Bond, 5N, 4W	St. James, Fayette, 5-6N, 2-3E
Long Branch, Saline, Hamilton,	Olney C, Richland, Jasper, 4-5N, 10	St. Paul, Fayette, 5N, 3E
7S, 6E	Olney S, Richland, 3N, 10E	Sts. Marie, Jasper, 5N, 10-11E, 14W
Long Branch S, Saline, 8S, 6E	Omaha, Gallatin, 7-8S, 8E	Sts. Marie E, Jasper, 6N, 14W
Louden N, Fayette, Effingham,	Omaha E, Gallatin, 8S, 8E	Sts. Marie W, Jasper, 5-6N, 10E
6-9N, 2-4E	Omaha S, Gallatin, Saline, 8S, 7-8E	Sailor Springs Cen, Clay, 3-4N, 7-8E
Louisville N, Clay, 4N, 6E	Omaha W, Saline, Gallatin, 7-8S, 7-8E	Sailor Springs C, Clay,
Louisville S, Clay, 3N, 6E	Omaha, Marion, 3N, 4E	Effingham, Jasper, 3-6N, 6-8E
Lynchburg, Jefferson, 3S, 4E	Opdyke, Jefferson, 3S, 6E	Sailor Springs E, Clay, 4N, 8E
McKinley, Washington, 3S, 4W	Orchardville, Wayne, 1N, 5E	Sailor Springs N, Clay, 4N, 8E
Macedonia, Franklin, 3S, 4E	Orchardville N, Wayne, 1N, 5E	Salem C, Marion, Jefferson, 1-2N, 1S, 1-2E
Main C, Crawford, Lawrence	Orient, Franklin, 7S, 2E	Samsville, Edwards, 1N, 11E
Jasper, 5-8N, 10-14W	Orient N, Franklin, 7S, 2E	Samsville N, Edwards, 1N, 14W
Maple Grove C, Edwards, Wayne,	Oskaloosa, Clay, 3-4N, 5E	Samsville N W, Edwards, 1N, 10E
1-2N, 9-10E	Oskaloosa E, Clay, 3N, 5-6E	

TABLE 1 - LOCATIONS OF ILLINOIS OIL FIELDS, Continued

Name, County, Township and Range	Name, County, Township and Range	Name, County, Township and Range
Sandoval, Marion, 2N, 1E	Sumpter E, White, 4-5S, 10E	13-14N, 13-14W
Sandoval W, Clinton, 2N, 1W	Sumpter N, White, 4S, 9E	Waterloo, Monroe, 1-2S, 10W
Santa Fe, Clinton, 1N, 3W	Sumpter S, White, 4-5S, 9E	Waroon, Effingham, 7N, 5-6E
Schnell, Richland, 2N, 9E	Sumpter W, White, 4S, 9E	Watson W, Effingham, 7N, 5E
Schnell E, Richland, 2N, 9E	Tamaroa, Perry, 4S, 1W	Waverly, Morgan, 13N, 8W
Sciota, McDonough, 7N, 3W	Tamaroa S, Perry, 4S, 1W	Weaver, Clark, 11N, 10W
Seminary, Richland, 2N, 10E	Tamaroa W, Perry, 4S, 2W	West Frankfort C, Franklin
Sesser C, Franklin, 5-6S, 1-2E	Taylor Hill, Franklin, 5S, 4E	7S, 2-3E
Shattuc, Clinton, 2N, 1W	Teutopolis, Effingham, 8N, 6E	West Frankfort C, Franklin,
Shattuc, Clinton, 2N, 1W	Teutopolis S, Effingham, 8N, 6E	7S, 2-3E
Shattuc N, Clinton, 2N, 1W	Thackercy, Hamilton, 5S, 7E	West Seminary, Clay, 2N, 7E
Shawneetown, Gallatin, 9S, 9E	Thompsonville, Franklin, 7S, 4S	Woodfield, Clark, Coles,
Shawneetown E, Gallatin, 9S, 10E	Thompsonville E, Franklin, 7S, 4E	11-12N, 11E-14W
Shawneetown N, Gallatin, 9S, 10E	Thompsonville N, Franklin, 7S, 4E	Westfield E, Clark,
Shelbyville C, Shelby, 11N, 4E	Tilden, Randolph, 4S, 5W	11-12N, 14W
Shumway, Effingham, 9N, 5E	Tilden N, St. Clair, 3S, 6W	Woodfield N, Coles, 12N, 14W
Sicily, Christian, 13N, 4W	Toliver E, Clay, 5N, 6-7E	Whittington, Franklin, 3S, 3E
Siggins, Cumberland, Clark,	Toliver S, Clay, 4N, 6E	Whittington S, Franklin,
10-11N, 10-11E, 14W	Tooti, Marion, 2-3N, 2E	5-6S, 3E
Siloam, Brown, 2S, 4W	Tovey, Christian, 13N, 3W	Whittington W, Franklin,
Sorento C, Bond, 6N, 4W	Trumbull C, White, 5S, 8-9E	5S, 2-3E
Sorento W, Bond, 6N, 4W	Trumbull N, White, 4S, 8E	Wilberton, Fayette, 5N, 2-3E
Sparta, Randolph, 4-5S, 5-6W	Turkey Bend, Perry, 4S, 2W	Williams C, Jefferson, 2-3S, 2E
Sparta S, Randolph, 5S, 5W	Valier, Franklin, 6S, 2E	Willow Hill E, Jasper,
Springfield E, Sangamon, 15N, 4W	Virgen W, Macoupin, 12N, 7W	6-7N, 10-11E
Stanton, Macoupin, 7N, 7W	Waggoner, Montgomery, 11N, 5W	Witt W, Montgomery, 10N, 3W
Stanton W, Macoupin, 7N, 7W	Wakefield, Jasper, 5N, 9E	Moburn C, Bond, 6-7N, 2W
Stewardson, Shelby, 9N, 6E	Wakefield N, Jasper, 5N, 9E	Woodlawn, Jefferson, 2-3S, 1-2E
Stewardson E, Shelby, 9N, 6E	Wakefield S, Richland, 5N, 9E	Xenia, Clay, 2N, 5E
Storms C, White, 5-6S, 9-10E	Walpole, Hamilton, 6-7S, 6E	Xenia E, Clay, 2N, 5E
Strington, Richland, 4-5N, 11E, 14W	Walpole S, Hamilton, 7S, 6E	Yale, Jasper, 8N, 11E
Stringtown E, Richland, 4N, 14W	Waltonville, Jefferson, 3S, 2E	York, Cumberland, Clark,
Stubblefield S, Bond, 4N, 3W	Wamac, Marion, Clinton,	9-10N, 10-11E, 14W
Summer, Lawrence, 4N, 13W	Washington, 1N, 1E, 1W	Zeigler, Franklin, 7S, 2E
Summer Cen, Lawrence, 4N, 13W	Wamac E, Marion, 1N, 1E	Zenith, Wayne, 2N, 5E
Summer S, Lawrence, 3N, 13W	Wamac W, Clinton, 1N, 1W	Zenith E, Wayne, 1N, 6E
Sumpter, White, 4S, 9E	Wapella E, DeWitt, 21N, 3E	Zenith N, Wayne, 2N, 6E
Sumpter E, White, 4-5S, 10E	Warren-Borton, Edgar, Coles,	Zenith S, Wayne, 1N, 5E

All acreage in a given pay inside an active flood unit in which there was at least one active injection well was considered to be active flood acreage. If the flood unit was abandoned, all acreage which had been subjected to injection was classified as abandoned flood acreage. Any acreage beneath flood units which was not being flooded was classified as undeveloped flood acreage. All these data are given in table 2 in columns entitled "Waterflood acres." The totals for all pays in each field are also given.

#### Remaining Primary

The productive acreage in each pay not in a waterflood unit was classified as remaining primary acreage and was broken into two categories — edge acres and interior acres — using the 10-acre production units described previously. Any unit offset on all four sides by production in a given pay zone was classified as 10 interior acres of production in that pay. Acreage in all other production units was classified as edge acres.

To determine the producing status of both the interior and the edge acreage, the acreage in each drilled production unit which contained at least one active producing well was classified as active. The acreage in each drilled production

unit in which all wells were abandoned was classified as abandoned. For each pay zone in each category (interior and edge), the ratio of the active acreage to the active plus the abandoned acreage times 100 was taken as the percentage of the acreage which was still active. These percentage figures were applied to the total edge and interior acreage figures for each pay to estimate the percentage of the total edge and interior acreage which was active in the entire field.

These data are in table 2 under the column "Remaining primary." The last line in these columns gives the totals of both the edge and interior acreage for all pay zones and the percentage of these totals which are still active in the entire field.

#### Salt Water Disposal Wells

In Illinois, salt water disposal wells are commonly found completed in pay zones in and around productive areas. Since it was impractical to relate these wells to specific production units, only the total number in each pay in each field was determined. These data are in table 2 under the column headed "No. of SWD wells." (Text is continued on page 37.)





TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of 8WD+ wells	Average properties						
					Acres		% Active			Depth (ft)	Thickness (ft)	Porosity (%)	Permeability (md)	Gravity ("API)	Viscosity (cp)	
Pay name	Pay acres	Active	Abandoned	Undeveloped	Edge	Interior	Edge	Interior								
ALMA	60															
CYPRESS	10	0	0	0	10	0	100.0	0.0	0	1800	7	17	190	35	7	
BENOIST	50	0	0	0	50	0	75.0	0.0	0	1950	8	19	100	36	6	
SPAR MTN	40	0	0	0	40	0	0.0	0.0	0	2085	10	17	50	36	7	
TOTALS & AVE	100	0	0	0	100	0	27.5	0.0	0	2000	9	18	81	36	7	
AMITY	60															
MCCLOSKEY	60	0	0	0	60	0	25.0	0.0	0	2960	5	17	200	36	7	
TOTALS & AVE	60	0	0	0	60	0	25.0	0.0	0	2960	5	17	200	36	7	
AMITY S	10															
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	2890	4	17	200	38	5	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2890	4	17	200	38	5	
AMITY W	10															
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2925	12	16	70	38	6	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2925	12	16	70	38	6	
ASHLEY	210															
BENOIST	210	0	0	0	170	40	71.4	100.0	3	1430	7	17	100	30	16	
TOTALS & AVE	210	0	0	0	170	40	71.4	100.0	3	1430	7	17	100	30	16	
ASHMORE E	30															
PENNSYLVANIA	30	0	0	0	30	0	100.0	0.0	1	415	14	19	200	30	21	
TOTALS & AVE	30	0	0	0	30	0	100.0	0.0	1	415	14	19	200	30	21	
ASHMORE S	290															
PENNSYLVANIA	790	0	0	0	250	40	100.0	100.0	0	420	8	20	200	24	99	
MISSISSIPPI	20	0	0	0	10	10	0.0	100.0	0	475	17	15	30	38	5	
TOTALS & AVE	310	0	0	0	260	50	96.2	100.0	0	427	9	19	178	26	87	
ASSUMPTION CENTR	10															
DEVONIAN	10	0	0	0	10	0	0.0	0.0	0	2430	24	12	50	38	5	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2430	24	12	50	38	5	
ASSUMPTION C	2400															
BENOIST	590	490	0	0	100	0	83.3	0.0	0	1050	13	19	100	36	6	
SPAR MTN	220	220	0	0	0	0	0.0	0.0	0	1170	8	27	500	40	4	
LINGLE	2240	1720	0	0	460	60	60.0	100.0	1	230	20	12	50	38	5	
TOTALS & AVE	3050	2430	0	0	560	60	64.7	100.0	1	376	18	13	72	38	5	
ASSUMPTION S	50															
LINGLE	50	0	0	0	50	0	33.3	0.0	0	2630	15	12	50	39	5	
TOTALS & AVE	50	0	0	0	50	0	33.3	0.0	0	2630	15	12	50	39	5	
AVA-CAMPBELL HIL	140															
CYPRESS	140	0	0	0	130	10	0.0	0.0	0	780	18	18	50	36	7	
TOTALS & AVE	140	0	0	0	130	10	0.0	0.0	0	780	18	18	50	36	7	
BALDWIN	30															
SILURIAN	30	0	0	0	30	0	33.3	0.0	0	1535	65	12	10	32	11	
TOTALS & AVE	30	0	0	0	30	0	33.3	0.0	0	1535	65	12	10	32	11	
BARNHILL	1890															
AUX VASES	450	370	230	0	300	40	44.0	100.0	0	3270	15	19	50	39	5	
STE GEN	1140	0	560	140	350	90	55.2	55.6	1	3370	16	17	80	38	5	
ST LOUIS	10	0	0	0	10	0	0.0	0.0	0	3520	7	14	20	38	5	
SALEM	30	0	0	30	0	0	0.0	0.0	0	3800	8	15	60	39	4	
TOTALS & AVE	2130	370	790	170	660	130	49.3	69.2	1	3330	15	18	67	38	5	
BARTELSON	570															
CYPRESS	370	90	190	0	90	0	85.7	0.0	0	985	15	21	210	36	7	
SILURIAN	380	0	0	300	80	0	100.0	0.0	0	2450	17	12	50	42	3	
TOTALS & AVE	750	90	190	300	170	0	92.4	0.0	0	1646	13	17	138	39	5	
BARTELSON E	210															
SILURIAN	210	0	0	0	180	30	92.3	100.0	2	2550	7	13	50	42	3	
TOTALS & AVE	210	0	0	0	180	30	92.3	100.0	2	2550	7	13	50	42	3	
BARTELSON S	60															
DEVONIAN	60	0	0	0	50	10	0.0	0.0	0	2475	3	15	50	40	3	
TOTALS & AVE	60	0	0	0	50	10	0.0	0.0	0	2475	3	15	50	40	3	
BARTELSON W	260															
CYPRESS	260	0	0	0	240	20	62.5	100.0	1	970	15	20	200	36	9	
SILURIAN	10	0	0	0	10	0	100.0	0.0	0	2450	7	15	75	40	3	
TOTALS & AVE	270	0	0	0	250	20	64.0	100.0	1	996	15	20	198	36	9	
BEAUCOURP	280															
CLEAR CREEK	280	0	0	0	160	120	100.0	100.0	1	3070	10	13	30	39	6	
TRENTON	10	0	0	0	10	0	100.0	0.0	0	4100	5	14	30	39	6	
TOTALS & AVE	290	0	0	0	170	120	100.0	100.0	1	3088	10	13	30	39	6	
BEAUCOURP S	260															
BENOIST	260	250	0	0	10	0	100.0	0.0	0	1430	10	18	110	36	7	
TOTALS & AVE	260	250	0	0	10	0	100.0	0.0	0	1430	10	18	110	36	7	
BEAVER CREEK	180															
BENOIST	180	0	50	0	90	40	57.1	100.0	1	1130	4	21	208	34	10	
TOTALS & AVE	180	0	50	0	90	40	57.1	100.0	1	1130	4	21	208	34	10	
BEAVER CREEK N	80															
BENOIST	80	0	0	0	80	0	16.7	0.0	0	1115	5	20	200	24	99	
TOTALS & AVE	80	0	0	0	80	0	16.7	0.0	0	1115	5	20	200	24	99	
BEAVER CREEK S	540															
CYPRESS	10	0	0	0	10	0	100.0	0.0	0	1000	20	17	150	36	7	
BENOIST	540	60	40	0	400	40	66.7	100.0	4	1200	7	18	100	34	10	
TOTALS & AVE	550	60	40	0	410	40	67.5	100.0	4	1190	7	18	103	34	10	

TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SWD* wells	Average properties						
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity ("API)	Vis-cosity (cp)	
		Act-ive	Aban-doned	Unde-veloped	Edge	Inter-ior	Edge	Inter-ior								
BECKEMEYER GAS	10															
CYPRESS	10	0	0	0	10	0	0.0	0.0	0	1070	23	20	200	36	7	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	1070	23	20	200	36	7	
BELLAIR	2220															
PENNSYLVNIN	2110	930	80	0	910	210	3.3	0.0	0	500	30	19	150	32	15	
CYPRESS	40	0	0	0	40	0	50.0	0.0	0	1000	15	18	100	36	7	
BENNETT	40	0	0	0	40	0	100.0	0.0	0	1100	17	16	80	36	7	
RENAULT	30	0	0	0	30	0	100.0	0.0	0	830	6	15	70	37	6	
AUX VASES	220	0	0	0	210	10	50.0	100.0	0	1200	10	14	10	39	5	
OHARA	30	0	0	0	30	0	100.0	0.0	0	860	4	16	150	37	6	
TOTALS & AVE	2470	930	80	0	1260	220	20.2	4.5	0	533	27	19	144	32	15	
BELLE PRAIRIE	290															
AUX VASES	30	0	0	0	30	0	33.3	0.0	0	3250	10	18	100	37	6	
MCCLOSKEY	260	0	0	0	230	30	50.0	0.0	1	3420	6	19	100	38	6	
TOTALS & AVE	290	0	0	0	260	30	48.1	0.0	1	3393	6	19	100	38	6	
BELLE PRAIRIE W	10															
ULLIN	10	0	0	0	10	0	0.0	0.0	0	4200	6	12	30	37	6	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	4200	6	12	30	37	6	
BELLE RIVE	110															
MCCLOSKEY	110	0	0	0	110	0	66.7	0.0	0	3085	6	17	100	37	8	
TOTALS & AVE	110	0	0	0	110	0	66.7	0.0	0	3085	6	17	100	37	8	
BELLMONT	30															
BETHEL	10	0	0	0	10	0	0.0	0.0	0	2650	7	18	50	38	5	
OHARA	20	0	0	0	20	0	50.0	0.0	0	2850	7	17	100	40	4	
TOTALS & AVE	30	0	0	0	30	0	33.3	0.0	0	2783	7	17	83	39	4	
REMAN	530															
AUX VASES	100	0	0	0	100	0	88.9	0.0	0	1800	20	18	50	38	6	
STE GEN	440	0	0	0	370	70	52.2	100.0	4	1750	7	16	70	38	5	
TOTALS & AVE	540	0	0	0	470	70	60.0	100.0	4	1770	9	17	62	38	5	
REMAN E	120															
AUX VASES	40	0	0	0	40	0	0.0	0.0	0	1800	20	18	50	38	6	
STE GEN	120	0	0	0	120	0	33.3	0.0	0	1860	7	14	70	38	5	
TOTALS & AVE	160	0	0	0	160	0	25.0	0.0	0	1831	10	16	60	38	5	
BENNINGTON S	10															
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3240	8	16	100	37	6	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3240	8	16	100	37	6	
BENTON	2360															
PENNSYLVNIN	20	0	0	0	20	0	100.0	0.0	0	1700	9	18	150	33	13	
TAR SPRINGS	2360	2270	0	0	90	0	66.7	0.0	0	2100	35	19	30	38	5	
AUX VASES	300	250	0	0	50	0	100.0	0.0	0	2750	15	18	197	38	5	
STE GEN	190	180	0	0	10	0	100.0	0.0	0	2800	8	15	100	37	6	
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	2990	6	12	10	38	5	
ULLIN	10	0	0	0	10	0	100.0	0.0	0	3700	5	12	25	38	5	
TOTALS & AVE	2890	2700	0	0	190	0	84.2	0.0	0	2146	31	19	40	38	5	
BENTON N	630															
CYPRESS	100	0	0	0	90	10	100.0	100.0	0	2450	17	18	150	38	5	
PT CK GROUP	180	180	0	0	0	0	0.0	0.0	0	2550	16	16	20	38	5	
AUX VASES	140	130	0	0	10	0	0.0	0.0	0	2700	10	18	100	39	4	
STE GEN	460	370	0	0	70	0	100.0	0.0	0	2730	13	15	50	36	6	
TOTALS & AVE	880	680	0	0	170	10	74.1	100.0	0	2643	14	16	63	37	5	
BERRY	570															
DEVONIAN	60	0	0	0	60	0	50.0	0.0	0	1750	4	12	30	38	6	
SILURIAN	510	0	0	0	460	50	69.4	100.0	0	1730	35	11	15	38	5	
TOTALS & AVE	570	0	0	0	520	50	67.2	100.0	0	1730	32	11	15	38	5	
BERRYVILLE C	340															
STE GEN	340	0	120	0	220	10	0.0	100.0	2	2850	14	16	100	38	6	
TOTALS & AVE	340	0	120	0	220	10	0.0	100.0	2	2850	14	16	100	38	6	
BESSIE	10															
OHARA	10	0	0	0	10	0	100.0	0.0	0	2900	10	14	30	39	4	
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	2900	10	14	30	39	4	
BIBLE GROVE N	200															
CYPRESS	130	0	0	0	130	0	80.0	0.0	0	2535	10	17	45	39	6	
STE GEN	120	0	0	0	110	10	0.0	0.0	0	2835	6	16	233	37	6	
TOTALS & AVE	250	0	0	0	240	10	43.3	0.0	0	2642	8	17	112	38	6	
BIBLE GROVE S	50															
CYPRESS	20	0	0	0	20	0	100.0	0.0	0	2500	10	17	40	36	7	
AUX VASES	40	0	0	0	40	0	50.0	0.0	0	2740	10	17	50	38	6	
TOTALS & AVE	60	0	0	0	60	0	66.7	0.0	0	2660	10	17	47	37	6	
BLACK BRANCH	30															
SILURIAN	30	0	0	0	30	0	100.0	0.0	0	1600	10	12	70	38	4	
TOTALS & AVE	30	0	0	0	30	0	100.0	0.0	0	1600	10	12	70	38	4	
BLACKLAND	380															
SILURIAN	380	0	50	0	290	30	31.6	66.7	0	1950	25	10	11	39	4	
TOTALS & AVE	380	0	50	0	290	30	31.6	66.7	0	1950	25	10	11	39	4	
BLACKLAND N	230															
SILURIAN	230	0	0	0	230	0	45.0	0.0	0	1950	11	13	30	39	4	
TOTALS & AVE	230	0	0	0	230	0	45.0	0.0	0	1950	11	13	30	39	4	
BLACK RIVER	10															
CLORE	10	0	0	0	10	0	100.0	0.0	0	1865	6	16	50	36	6	
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	1865	6	16	50	36	6	

TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SMD* wells	Average properties					
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity (*API)	Vis-cosity (cp)
					Edge	Inter-ior	Edge	Inter-ior							
BLAIRSVILLE W	160														
STE GEN	160	0	0	0	120	40	16.7	0.0	0	3350	10	18	100	37	6
TOTALS & AVE	160	0	0	0	120	40	16.7	0.0	0	3350	10	18	100	37	6
BLUFORD	30														
MCCLOSKEY	30	0	0	0	30	0	100.0	0.0	0	3060	6	17	40	38	5
TOTALS & AVE	30	0	0	0	30	0	100.0	0.0	0	3060	6	17	40	38	5
BOGOTA	190														
STE GEN	190	0	0	0	150	40	25.0	50.0	0	3100	6	16	150	39	4
TOTALS & AVE	190	0	0	0	150	40	25.0	50.0	0	3100	6	16	150	39	4
BOGOTA N	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3080	3	15	150	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3080	3	15	150	37	6
BOGOTA S	300														
MCCLOSKEY	300	0	0	0	240	60	76.5	50.0	0	3075	8	16	200	37	6
TOTALS & AVE	300	0	0	0	240	60	76.5	50.0	0	3075	8	16	200	37	6
BOGOTA W	10														
MCCLOSKEY	10	0	0	0	10	0	100.0	0.0	0	3080	6	16	200	37	6
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	3080	6	16	200	37	6
BONE GAP C	1170														
PENNSYLVNIN	10	0	0	0	10	0	100.0	0.0	0	2100	8	18	100	37	15
WALTERSBURG	170	0	110	0	60	0	50.0	0.0	0	2300	20	17	75	35	8
CYPRESS	100	90	0	0	10	0	0.0	0.0	0	2700	10	17	50	37	5
BETHEL	40	0	0	40	0	0	0.0	0.0	0	2880	15	18	25	39	6
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	3020	10	18	50	36	7
STE GEN	820	0	0	20	550	250	20.8	12.5	0	3040	6	16	200	36	7
TOTALS & AVE	1150	90	110	60	640	250	24.2	12.5	0	2740	9	17	130	36	7
BONE GAP E	20														
STE GEN	20	0	0	0	20	0	0.0	0.0	0	2980	15	17	50	36	7
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	2980	15	17	50	36	7
BONE GAP W	90														
STE GEN	90	0	0	0	80	10	50.0	100.0	0	3290	5	17	50	36	7
TOTALS & AVE	90	0	0	0	80	10	50.0	100.0	0	3290	5	17	50	36	7
BOULDER	580														
BENOIST	500	0	450	0	50	0	0.0	0.0	0	1200	25	18	100	37	6
GENEVA	470	0	0	0	280	190	0.0	0.0	0	2850	7	18	200	35	9
SILURIAN	40	0	0	0	40	0	0.0	0.0	0	2850	5	14	50	40	3
TOTALS & AVE	1010	0	450	0	370	190	0.0	0.0	0	1560	16	18	120	37	7
BOULDER E	50														
DEVONIAN	50	0	0	0	50	0	0.0	0.0	0	2850	5	12	20	39	5
TOTALS & AVE	50	0	0	0	50	0	0.0	0.0	0	2850	5	12	20	39	5
BOURBON C	930														
SPAR MTN	930	280	440	0	210	0	25.0	0.0	0	1600	12	17	200	34	8
TOTALS & AVE	930	280	440	0	210	0	25.0	0.0	0	1600	12	17	200	34	8
BOURBON S	10														
SPAR MTN	10	0	0	0	10	0	0.0	0.0	0	1690	4	17	200	34	8
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	1690	4	17	200	34	8
BOWYER	10														
SPAR MTN	10	0	0	0	10	0	0.0	0.0	0	2880	4	16	100	36	10
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2880	4	16	100	36	10
BOYD	1460														
BENOIST	1450	1450	0	0	0	0	0.0	0.0	0	2050	17	18	175	35	7
AUX VASES	620	580	40	0	0	0	0.0	0.0	0	2130	12	21	24	37	6
OHARA	30	0	0	30	0	0	0.0	0.0	0	2230	5	14	50	39	4
TRENTON	10	0	0	0	10	0	100.0	0.0	0	5000	20	10	70	40	4
TOTALS & AVE	2110	2030	40	30	10	0	100.0	0.0	0	2087	15	19	139	36	7
BROUGHTON	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3275	5	18	100	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3275	5	18	100	37	6
BROUGHTON S	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3215	4	14	200	38	5
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3215	4	14	200	38	5
BROWN	100														
CYPRESS	100	50	0	0	50	0	80.0	0.0	0	1670	10	18	100	36	7
TOTALS & AVE	100	50	0	0	50	0	80.0	0.0	0	1670	10	18	100	36	7
BROWNS	1060														
PENNSYLVNIN	10	0	0	0	10	0	100.0	0.0	0	1970	8	18	100	32	13
TAR SPRINGS	40	40	0	0	0	0	0.0	0.0	0	2350	14	18	100	36	7
CYPRESS	380	210	0	0	160	10	56.3	100.0	0	2650	13	18	10	36	8
BETHEL	80	80	0	0	0	0	0.0	0.0	0	2780	12	18	5	39	6
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2965	7	18	50	36	7
STE GEN	770	350	0	0	290	130	9.5	53.8	0	2700	5	17	150	36	7
TOTALS & AVE	1290	680	0	0	470	140	27.2	57.1	0	2660	8	18	67	36	7
BROWNS E	780														
PENNSYLVNIN	10	0	0	0	10	0	0.0	0.0	0	1850	8	18	100	32	13
CYPRESS	770	170	450	0	150	0	83.3	0.0	0	2570	13	18	30	36	8
TOTALS & AVE	780	170	450	0	160	0	78.1	0.0	0	2544	13	18	31	36	8
BROWNS S	40														
BETHEL	20	0	0	0	20	0	50.0	0.0	0	2850	15	18	25	38	5
AUX VASES	30	0	0	0	30	0	33.3	0.0	0	2950	8	18	50	36	7
TOTALS & AVE	50	0	0	0	50	0	40.0	0.0	0	2894	11	18	36	37	6

TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SMD* wells	Average properties					
		Act-ive	Aban-doned	Unde-veloped	Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Ferne-ability (md)	Grav-ity (*API)	Vis-co-sity (cp)
Pay name	Pay acres				Edge	Inte-rior	Edge	Inte-rior							
BUCKHORN	10														
SILURIAN	10	0	0	0	10	0	0.0	0.0	0	680	2	15	50	37	7
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	680	2	15	50	37	7
BUCKNER	40														
AUX VASES	40	0	0	0	40	0	100.0	0.0	0	2600	12	18	80	38	5
TOTALS & AVE	40	0	0	0	40	0	100.0	0.0	0	2600	12	18	80	38	5
BULLPIT S	60														
DEV-SIL	60	0	0	0	60	0	25.0	0.0	0	1910	15	12	40	38	6
TOTALS & AVE	60	0	0	0	60	0	25.0	0.0	0	1910	15	12	40	38	6
BUNGAY C	3250														
RENAULT	550	340	0	60	150	0	54.5	0.0	1	3280	5	18	325	39	5
AUX VASES	2730	960	450	0	1130	190	62.9	52.6	4	3300	17	20	180	39	5
STE GEN	320	0	0	160	160	0	33.3	0.0	0	3335	9	18	300	36	6
ULLIN	10	0	0	0	10	0	100.0	0.0	0	4190	10	13	20	38	5
TOTALS & AVE	3610	1300	450	220	1450	190	59.0	52.6	5	3303	14	20	194	39	5
BURNY PRAIRIE S	30														
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	3330	24	18	100	37	6
STE GEN	30	0	0	0	30	0	33.3	0.0	0	3400	10	15	40	38	5
TOTALS & AVE	40	0	0	0	40	0	25.0	0.0	0	3369	14	16	67	38	5
CALHOUN CENTRAL	30														
STE GEN	30	0	0	0	30	0	0.0	0.0	0	3245	9	17	150	37	6
TOTALS & AVE	30	0	0	0	30	0	0.0	0.0	0	3245	9	17	150	37	6
CALHOUN C	1910														
STE GEN	1910	0	930	0	730	250	63.7	33.3	1	3140	12	15	67	38	5
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	3370	8	10	20	39	5
SALEM	10	0	0	0	10	0	100.0	0.0	0	3330	10	12	30	39	5
TOTALS & AVE	1930	0	930	0	750	250	64.7	33.3	1	3142	12	15	67	38	5
CALHOUN E	90														
MCCLOSKY	90	70	0	0	20	0	0.0	0.0	0	3265	5	16	100	39	5
TOTALS & AVE	90	70	0	0	20	0	0.0	0.0	0	3265	5	16	100	39	5
CALHOUN N	60														
STE GEN	60	0	0	0	60	0	50.0	0.0	0	3150	15	16	100	37	6
TOTALS & AVE	60	0	0	0	60	0	50.0	0.0	0	3150	15	16	100	37	6
CALHOUN S	490														
AUX VASES	20	0	0	0	20	0	50.0	0.0	0	3175	5	18	100	38	6
STE GEN	470	20	0	0	390	60	90.0	100.0	0	3200	7	16	100	37	6
TOTALS & AVE	490	20	0	0	410	60	88.0	100.0	0	3199	7	16	100	37	6
CARLINVILLE	40														
PENNSYLVNIN	40	0	0	0	40	0	75.0	0.0	0	380	15	18	100	28	37
TOTALS & AVE	40	0	0	0	40	0	75.0	0.0	0	380	15	18	100	28	37
CARLINVILLE N	100														
PENNSYLVNIN	100	0	0	0	100	0	0.0	0.0	0	440	10	18	100	20	99
TOTALS & AVE	100	0	0	0	100	0	0.0	0.0	0	440	10	18	100	20	99
CARLINVILLE S	10														
PENNSYLVNIN	10	0	0	0	10	0	0.0	0.0	0	539	11	20	100	26	56
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	539	11	20	100	26	56
CARLYLE	1220														
GOLCONDA	100	0	0	90	10	0	0.0	0.0	0	900	10	14	50	35	8
CYPRESS	1220	80	1100	0	40	0	0.0	0.0	0	1035	20	20	200	35	8
TOTALS & AVE	1320	80	1100	90	50	0	0.0	0.0	0	1030	19	20	194	35	8
CARLYLE E	10														
BENOIST	10	0	0	0	10	0	100.0	0.0	0	1200	4	14	70	34	11
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	1200	4	14	70	34	11
CARLYLE N	530														
BENOIST	530	50	0	0	320	160	85.2	92.9	2	1150	8	17	50	34	11
TOTALS & AVE	530	50	0	0	320	160	85.2	92.9	2	1150	8	17	50	34	11
CARLYLE S	20														
CYPRESS	20	0	0	0	20	0	0.0	0.0	0	1075	4	15	100	35	8
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	1075	4	15	100	35	8
CARMI	240														
PENNSYLVNIN	10	0	0	0	10	0	100.0	0.0	0	1210	10	18	100	32	15
CYPRESS	90	0	0	20	70	0	0.0	0.0	0	2800	15	18	75	38	6
AUX VASES	40	0	0	0	40	0	25.0	0.0	0	3150	8	17	50	37	7
MCCLOSKY	100	80	0	0	20	0	50.0	0.0	0	3130	17	17	50	35	8
TOTALS & AVE	240	80	0	20	140	0	21.4	0.0	0	2918	12	17	63	36	7
CARMI N	80														
CYPRESS	20	0	0	0	20	0	50.0	0.0	0	2940	15	18	100	38	6
SAMPLE	10	0	0	0	10	0	100.0	0.0	1	3080	12	15	18	37	6
AUX VASES	60	0	0	0	60	0	75.0	0.0	0	3150	10	17	50	36	7
TOTALS & AVE	90	0	0	0	90	0	72.2	0.0	1	3080	11	17	61	37	7
CASEY	3030														
PENNSYLVNIN	2720	210	480	80	1550	400	0.0	0.0	0	400	10	18	175	32	16
CARPER	250	100	0	0	140	10	62.5	100.0	1	1300	50	16	5	38	5
TOTALS & AVE	2970	310	480	80	1690	410	5.2	2.4	1	683	13	17	121	34	13
CENTERVILLE	190														
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	3080	15	20	150	37	6
STE GEN	190	30	40	0	120	0	11.1	0.0	0	3300	16	15	100	37	5
TOTALS & AVE	200	30	40	0	130	0	10.3	0.0	0	3290	16	15	102	37	5









TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Acreal acres	Waterflood acres			Remaining primary				No. of SUD# wells	Average properties					
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity (°API)	Vis-cosity (cp)
		Act-ive	Aban-doned	Unde-veloped	Edge	Inter-ior	Edge	Inter-ior							
ELK PRAIRIE	20														
MCCLOSKEY	20	0	0	0	20	0	50.0	0.0	0	2735	7	15	50	37	6
SALFM	10	0	0	0	10	0	100.0	0.0	0	3075	8	13	100	37	6
TOTALS & AVE	30	0	0	0	30	0	66.7	0.0	0	2859	7	14	68	37	6
ELKTON	40														
BAILEY	40	0	0	0	40	0	0.0	0.0	0	2350	30	12	15	40	4
TOTALS & AVE	40	0	0	0	40	0	0.0	0.0	0	2350	30	12	15	40	4
ELKVILLE	10														
BENOIST	10	0	0	0	10	0	0.0	0.0	0	2000	10	17	50	36	7
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2000	10	17	50	36	7
ELLERY E	310														
AUX VASES	180	0	170	0	10	0	100.0	0.0	0	3180	10	18	50	36	7
STE GEN	190	0	170	0	20	0	0.0	0.0	0	3250	6	17	150	37	5
TOTALS & AVE	370	0	340	0	30	0	33.3	0.0	0	3207	8	18	89	36	6
ELLERY N	90														
RFTHEL	20	0	0	0	20	0	50.0	0.0	0	3100	30	18	30	38	6
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	3100	15	18	50	36	7
STE GEN	70	0	0	0	70	0	33.3	0.0	0	3350	15	17	150	37	6
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	3520	6	12	15	37	6
TOTALS & AVE	110	0	0	0	110	0	48.5	0.0	0	3255	17	17	99	37	6
ELLERY S	90														
AUX VASES	30	0	0	0	30	0	0.0	0.0	0	3200	15	18	60	36	7
MCCLOSKEY	60	0	0	0	60	0	0.0	0.0	0	3300	9	17	100	38	5
TOTALS & AVE	90	0	0	0	90	0	0.0	0.0	0	3255	11	17	82	37	6
ELLIOTTSTOWN	10														
SPAR MTN	10	0	0	0	10	0	0.0	0.0	0	2730	8	17	100	39	4
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2730	8	17	100	39	4
ELLIOTTSTOWN F	80														
CYPRESS	10	0	0	0	10	0	0.0	0.0	0	2485	5	19	100	35	7
STE GEN	70	0	0	0	70	0	40.0	0.0	1	2761	10	16	121	37	6
TOTALS & AVE	80	0	0	0	80	0	35.0	0.0	1	2743	9	16	120	37	6
ELLIOTTSTOWN N	240														
CYPRESS	20	0	0	0	20	0	0.0	0.0	1	2430	8	18	80	36	7
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	2710	2	18	50	37	6
STE GEN	240	100	0	0	140	0	100.0	0.0	1	2727	15	17	264	37	6
TOTALS & AVE	270	100	0	0	170	0	88.2	0.0	2	2714	14	17	255	37	6
ENFIELD	380														
AUX VASES	220	150	0	0	70	0	60.0	0.0	0	3250	10	18	100	39	5
STE GEN	160	70	60	0	30	0	0.0	0.0	0	3300	12	16	40	38	5
TOTALS & AVE	380	220	60	0	100	0	42.0	0.0	0	3273	11	17	72	39	5
ENFIELD S	30														
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	3175	10	18	100	39	5
MCCLOSKEY	30	0	0	0	30	0	0.0	0.0	0	3275	6	16	40	38	5
TOTALS & AVE	40	0	0	0	40	0	0.0	0.0	0	3239	7	17	61	38	5
EVERS	70														
STE GEN	70	0	0	0	70	0	40.0	0.0	0	2624	6	17	229	38	5
TOTALS & AVE	70	0	0	0	70	0	40.0	0.0	0	2624	6	17	229	38	5
EVERS S	10														
SPAR MTN	10	0	0	0	10	0	0.0	0.0	0	2650	8	16	200	38	5
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2650	8	16	200	38	5
EWING	170														
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2850	10	18	50	38	5
MCCLOSKEY	160	0	0	0	110	50	50.0	0.0	0	2970	7	17	125	36	4
TOTALS & AVE	170	0	0	0	120	50	45.8	0.0	0	2960	7	17	119	36	4
EWING E	10														
SPAR MTN	10	0	0	0	10	0	0.0	0.0	0	3010	10	16	100	38	5
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3010	10	16	100	38	5
EXCHANGE	30														
STE GEN	30	0	0	0	30	0	0.0	0.0	0	2700	12	16	100	38	5
TOTALS & AVE	30	0	0	0	30	0	0.0	0.0	0	2700	12	16	100	38	5
EXCHANGE E	230														
STE GEN	220	150	0	0	70	0	66.7	0.0	1	2775	10	17	150	37	6
ST LOUIS	10	0	0	0	10	0	0.0	0.0	0	2940	8	17	20	38	5
TOTALS & AVE	230	150	0	0	80	0	58.3	0.0	1	2781	10	17	145	37	6
EXCHANGE N C	700														
STE GEN	190	0	0	0	140	50	76.9	100.0	1	2715	6	17	150	37	6
SALEM	10	0	0	0	10	0	100.0	0.0	0	3056	11	14	60	37	6
TOTALS & AVE	200	0	0	0	150	50	78.5	100.0	1	2745	6	17	142	37	6
EXCHANGE W	300														
STE GEN	240	120	0	0	110	10	100.0	100.0	0	2690	6	15	60	37	6
ST LOUIS	70	0	0	0	70	0	100.0	0.0	0	2721	8	12	20	38	5
TOTALS & AVE	310	120	0	0	180	10	100.0	100.0	0	2670	6	14	49	37	6
FAIRMAN	610														
BENOIST	480	130	0	0	290	60	55.6	33.3	2	1465	8	21	350	38	5
TRENTON	290	0	0	0	230	0	81.3	0.0	0	3990	20	12	20	40	5
TOTALS & AVE	710	130	0	0	520	60	66.9	33.3	2	2819	12	16	170	39	5
FANCHER	10														
BENOIST	10	0	0	0	10	0	0.0	0.0	0	1750	3	18	50	34	9
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	1750	3	18	50	34	9

TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Acreal acres	Waterflood acres			Remaining primary				No. of SWD <sup>w</sup> wells	Average properties					
		Act-ive	Aban-doned	Unde-veloped	Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity (°API)	Vis-cosity (cp)
Pay name	Pay acres				Edge	Inter-ior	Edge	Inter-ior							
FEMMER LAKE	10														
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2650	8	16	50	36	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2650	8	16	50	36	6
FITZGERRELL	10														
BENOIST	10	0	0	0	10	0	0.0	0.0	0	2760	11	17	50	37	6
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2800	10	16	50	37	6
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	2779	11	17	50	37	6
FLORA S	60														
MCCLOSKEY	60	0	40	0	20	0	0.0	0.0	0	2985	6	16	100	39	4
TOTALS & AVE	60	0	40	0	20	0	0.0	0.0	0	2985	6	16	100	39	4
FORSYTH	30														
SILURIAN	30	0	0	0	30	0	100.0	0.0	0	2120	14	12	20	38	5
TOTALS & AVE	30	0	0	0	30	0	100.0	0.0	0	2120	14	12	20	38	5
FRANCIS MILLS	10														
CYPRESS	10	0	0	0	10	0	100.0	0.0	0	2675	5	18	80	36	7
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	2675	5	18	80	36	7
FRANCIS MILLS S	20														
STF GEN	20	0	0	0	20	0	0.0	0.0	0	3010	8	16	150	37	6
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	3010	8	16	150	37	6
FREERBURG	20														
CYPRESS	20	0	0	0	20	0	0.0	0.0	0	380	30	18	80	30	18
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	380	30	18	80	30	18
FRIENDSVILLE GEN	50														
RETHEL	50	0	0	0	50	0	0.0	0.0	0	2330	15	20	100	35	7
TOTALS & AVE	50	0	0	0	50	0	0.0	0.0	0	2330	15	20	100	35	7
FRIENDSVILLE N	220														
PENNSYLVNIN	220	40	100	0	80	0	100.0	0.0	0	1650	10	15	40	34	10
RETHEL	10	0	0	10	0	0	0.0	0.0	0	2300	11	20	100	35	7
TOTALS & AVE	230	40	100	10	80	0	100.0	0.0	0	1681	10	15	43	34	10
FROGTOWN	90														
CYPRESS	90	0	0	0	90	0	0.0	0.0	0	950	7	20	200	32	13
TOTALS & AVE	90	0	0	0	90	0	0.0	0.0	0	950	7	20	200	32	13
FROGTOWN N	410														
ST LOUIS	60	0	0	0	60	0	60.0	0.0	0	1200	10	14	100	35	9
DEV-SIL	350	0	0	0	330	20	69.2	100.0	0	2225	20	18	200	35	9
TOTALS & AVE	410	0	0	0	390	20	67.8	100.0	0	2191	44	18	197	35	9
GARDSPONT C	650														
OHARA	650	0	0	0	450	200	60.9	100.0	0	2870	6	16	80	40	6
TOTALS & AVE	650	0	0	0	450	200	60.9	100.0	0	2870	6	16	80	40	6
GAYS	90														
AUX VASES	80	0	0	0	80	0	20.0	0.0	0	1970	5	17	50	36	7
CARPER	10	0	0	0	10	0	100.0	0.0	0	2950	16	12	10	37	6
DEVONTIAN	10	0	0	0	10	0	0.0	0.0	0	3200	3	11	10	38	6
TOTALS & AVE	100	0	0	0	100	0	26.0	0.0	0	2298	6	15	37	36	7
GERMANTOWN E	380														
SILURIAN	380	220	0	0	120	40	90.0	100.0	1	2350	30	12	100	40	5
TOTALS & AVE	380	220	0	0	120	40	90.0	100.0	1	2350	30	12	100	40	5
GILA	430														
MCCLOSKEY	430	370	0	0	60	0	50.0	0.0	0	2850	7	13	275	39	4
TOTALS & AVE	430	370	0	0	60	0	50.0	0.0	0	2850	7	13	275	39	4
GILLESPIE-WYEN	70														
PENNSYLVNIN	70	0	0	0	70	0	28.6	0.0	0	630	12	18	100	28	30
TOTALS & AVE	70	0	0	0	70	0	28.6	0.0	0	630	12	18	100	28	30
GLENARN	130														
SILURIAN	130	0	0	0	130	0	40.0	0.0	0	1680	9	14	20	40	5
TOTALS & AVE	130	0	0	0	130	0	40.0	0.0	0	1680	9	14	20	40	5
GOLDENGATE C	6700														
CYPRESS	90	0	0	90	0	0	0.0	0.0	0	2950	10	17	50	36	7
BETHFL	350	130	20	60	140	0	72.7	0.0	0	3100	11	18	30	37	5
AUX VASES	3390	1010	590	420	1260	110	64.1	72.7	0	3200	15	18	100	40	5
STF GEN	4070	1210	410	320	1920	210	52.4	42.9	4	3250	10	16	102	37	7
ST LOUIS	20	0	0	10	10	0	100.0	0.0	0	3430	10	10	5	40	5
ULLIN	30	0	0	0	30	0	66.7	0.0	0	4115	4	12	20	39	5
DUTCH CREEK	350	0	0	100	170	80	100.0	100.0	0	5350	10	12	120	39	5
TOTALS & AVE	8300	2390	1020	1000	3530	400	60.0	62.5	4	3291	12	17	98	39	6
GOLDENGATE E	10														
OHARA	10	0	0	0	10	0	0.0	0.0	0	3290	3	16	100	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3290	3	16	100	37	6
GOLDENGATE N C	530														
BETHFL	10	0	0	0	10	0	100.0	0.0	0	3100	10	18	30	38	5
AUX VASES	360	0	0	0	350	10	79.3	100.0	1	3230	20	18	100	39	5
STF GEN	280	0	0	0	270	10	66.7	100.0	0	3300	7	16	143	37	6
TOTALS & AVE	650	0	0	0	630	20	74.2	100.0	1	3243	14	18	108	39	5
GRANDVIEW	70														
PENNSYLVNIN	70	0	0	0	70	0	66.7	0.0	0	550	8	19	200	30	19
TOTALS & AVE	70	0	0	0	70	0	66.7	0.0	0	550	8	19	200	30	19
GRAYSON	30														
CYPRESS	10	0	0	0	10	0	100.0	0.0	0	2910	6	18	70	37	6
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2870	14	18	50	38	5
MCCLOSKEY	20	0	0	0	20	0	50.0	0.0	0	2920	6	15	150	37	6
TOTALS & AVE	40	0	0	0	40	0	50.0	0.0	0	2821	8	17	91	37	6





TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SWD# wells	Average properties					
					Acres		% Active			Depth (ft)	Thickness (ft)	Porosity (%)	Permeability (md)	Gravity (°API)	Viscosity (cp)
	Pay name	Pay acres	Active	Abandoned	Undeveloped	Edge	Interior	Edge							
IOLA CENTRAL	20														
BENOIST	20	0	0	0	20	0	50.0	0.0	0	2420	5	16	80	36	7
TOTALS & AVE	20	0	0	0	20	0	50.0	0.0	0	2420	5	16	80	36	7
IOLA C	3240														
TAR SPRINGS	20	20	0	0	0	0	0.0	0.0	0	1890	9	17	50	35	8
CYPRESS	700	0	0	410	200	90	81.3	88.9	2	2125	15	18	100	35	7
BETHEL	60	60	0	0	0	0	0.0	0.0	0	2250	10	16	50	16	7
BENOIST	1230	820	0	100	140	170	81.8	88.2	2	2300	12	16	80	36	7
RENAULT	10	0	0	0	10	0	100.0	0.0	0	2320	6	15	50	37	6
AUX VASES	2270	830	800	0	540	300	59.5	86.2	0	2350	14	16	80	36	7
STE GEN	1360	260	0	110	870	120	50.8	83.3	0	2400	13	16	100	37	6
TOTALS & AVE	5650	1990	600	620	1760	680	59.7	86.6	4	2319	13	16	87	36	7
IOLA S	240														
BENOIST	160	0	0	0	150	10	41.7	100.0	0	2490	10	16	80	36	7
STE GEN	130	0	0	0	130	0	45.5	0.0	0	2600	5	17	150	37	6
CARPER	10	0	0	0	10	0	100.0	0.0	0	3900	7	16	30	38	5
TOTALS & AVE	300	0	0	0	290	10	45.4	100.0	0	2563	8	16	98	36	7
IOLA W	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	2500	11	15	100	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2500	11	15	100	37	6
IRVINGTON	1390														
GLCONDRA	10	0	0	0	10	0	0.0	0.0	0	1550	3	14	30	38	5
CYPRESS	410	230	0	0	150	30	75.0	100.0	1	1380	17	18	100	36	6
BENOIST	1020	170	0	0	460	390	77.1	100.0	7	1530	12	18	100	37	5
CLEAR CREEK	280	0	0	70	170	40	87.5	100.0	0	3090	20	10	15	39	5
TRENTON	110	0	0	0	110	0	100.0	0.0	0	4250	90	6	3	39	6
TOTALS & AVE	1830	400	0	70	900	460	80.7	100.0	8	2598	18	13	56	38	5
IRVINGTON E	340														
PENNSYLVNIN	40	0	0	0	40	0	75.0	0.0	1	1030	15	20	100	32	15
CYPRESS	120	0	0	0	90	30	75.0	100.0	0	1750	15	18	100	37	6
BENOIST	260	40	0	0	180	40	100.0	100.0	0	1950	8	18	100	37	6
TOTALS & AVE	420	40	0	0	310	70	89.5	100.0	1	1746	11	18	100	36	7
IRVINGTON N	290														
CYPRESS	40	0	0	0	40	0	100.0	0.0	0	1350	16	18	100	37	5
BENOIST	250	0	0	0	140	110	100.0	100.0	0	1470	6	18	100	39	4
TOTALS & AVE	290	0	0	0	180	110	100.0	100.0	0	1434	7	18	100	38	4
IRVINGTON W	50														
CYPRESS	50	0	0	0	50	0	75.0	0.0	0	1460	20	18	100	36	5
TOTALS & AVE	50	0	0	0	50	0	75.0	0.0	0	1460	20	18	100	36	5
IUKA	710														
AUX VASES	40	0	0	0	40	0	0.0	0.0	0	2525	11	17	80	37	5
STE GEN	580	190	0	0	290	100	76.2	50.0	1	2650	10	17	150	38	5
ST LOUIS	200	0	0	40	160	0	100.0	0.0	0	2775	5	14	25	37	6
TOTALS & AVE	820	190	0	40	490	100	77.7	50.0	1	2660	9	17	128	38	5
IUKA W	50														
MCCLOSKEY	50	0	0	0	50	0	50.0	0.0	0	2700	5	17	150	37	5
TOTALS & AVE	50	0	0	0	50	0	50.0	0.0	0	2700	5	17	150	37	5
JACKSONVILLE GAS	80														
PENNSYLVNIN	80	0	0	0	80	0	12.5	0.0	0	1390	5	20	400	37	4
TOTALS & AVE	80	0	0	0	80	0	12.5	0.0	0	1390	5	20	400	37	4
JOHNSON N	2360														
PENNSYLVNIN	2360	620	700	0	780	260	35.5	62.5	0	414	34	20	344	33	11
MCCLOSKEY	50	0	0	0	50	0	90.0	0.0	0	590	8	16	100	35	7
CARPER	290	0	0	0	160	130	77.8	100.0	0	1325	30	15	5	37	11
TOTALS & AVE	2700	620	700	0	990	390	43.1	75.0	0	503	33	19	310	33	11
JOHNSON S	2050														
PENNSYLVNIN	2040	1510	0	0	360	170	0.0	0.0	0	420	46	19	250	30	24
AUX VASES	50	0	0	20	20	0	0.0	0.0	0	720	70	14	15	35	7
TOTALS & AVE	2080	1510	0	20	380	170	0.0	0.0	0	423	46	19	248	30	24
JOHNSONVILLE C	8680														
BETHEL	30	0	0	0	30	0	100.0	0.0	0	2950	12	17	50	36	7
AUX VASES	2640	2640	0	0	0	0	0.0	0.0	1	3010	17	19	95	38	5
STE GEN	8000	5870	0	30	1060	1040	34.0	72.1	2	3110	10	15	139	38	5
ST LOUIS	90	0	0	0	90	0	75.0	0.0	0	3250	14	12	30	38	5
SALEM	40	0	0	0	40	0	100.0	0.0	0	3880	8	13	30	39	4
TOTALS & AVE	10800	8510	0	30	1220	1040	40.8	72.1	3	3077	12	16	122	38	5
JOHNSONVILLE N	100														
STE GEN	100	0	0	0	100	0	0.0	0.0	0	3190	7	15	150	38	5
TOTALS & AVE	100	0	0	0	100	0	0.0	0.0	0	3190	7	15	150	38	5
JOHNSONVILLE S	420														
AUX VASES	340	290	0	0	50	0	33.3	0.0	0	3050	18	20	80	38	7
STE GEN	120	0	0	50	70	0	0.0	0.0	0	3160	5	15	70	38	5
TOTALS & AVE	460	290	0	50	120	0	13.9	0.0	0	3060	15	20	79	38	7
JOHNSONVILLE W	750														
BETHEL	10	0	0	0	10	0	100.0	0.0	0	2900	6	16	50	37	6
AUX VASES	370	140	0	0	220	10	88.2	100.0	0	2900	6	19	100	37	5
STE GEN	370	120	20	0	230	0	50.0	0.0	0	2930	7	16	118	40	4
TOTALS & AVE	750	260	20	0	460	10	69.4	100.0	0	2916	6	17	109	39	4
JOHNSTON CITY E	140														
CYPRESS	130	70	0	0	60	0	100.0	0.0	0	2290	20	19	100	37	6
AUX VASES	140	70	0	0	70	0	100.0	0.0	0	2620	10	18	100	36	7
STE GEN	10	0	0	0	10	0	100.0	0.0	0	2680	10	15	40	38	5
TOTALS & AVE	280	140	0	0	140	0	100.0	0.0	0	2412	15	19	99	37	6

TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of GWD* wells	Average properties						
					Acres		% Active			Depth (ft)	Thick- ness (ft)	Poros- ity (%)	Perme- ability (md)	Grav- ity ("API)	Vis- cosity (cp)	
		Act- ive	Aban- doned	Unde- veloped	Edge	Ince- rior	Edge	Ince- rior								
JUNCTION	360															
PENNSYLVNIN	30	0	0	0	30	0	33.3	0.0	0	1150	7	16	50	35	8	
WALTERSBURG	290	220	0	0	70	0	80.0	0.0	0	1750	14	19	100	37	5	
HARDINSBURG	10	0	0	0	10	0	0.0	0.0	0	2120	10	17	50	34	8	
CYPRESS	20	0	0	10	10	0	100.0	0.0	0	2275	12	18	150	37	5	
MCCLOSKEY	10	0	0	0	10	0	100.0	0.0	0	2730	9	15	30	37	6	
TOTALS & AVE	360	220	0	10	130	0	66.2	0.0	0	1777	13	19	98	37	5	
JUNCTION E	20															
WALTERSBURG	20	0	0	0	20	0	100.0	0.0	0	1750	14	19	100	37	5	
TOTALS & AVE	20	0	0	0	20	0	100.0	0.0	0	1750	14	19	100	37	5	
JUNCTION N	190															
PENNSYLVNIN	100	0	0	0	100	0	50.0	0.0	0	1550	16	16	50	36	7	
CYPRESS	30	0	0	0	30	0	33.3	0.0	0	2450	10	18	100	37	6	
AUX VASES	40	0	0	0	40	0	100.0	0.0	0	2725	5	16	30	36	6	
SPAR MTN	40	0	0	0	40	0	50.0	0.0	0	2860	6	15	40	37	6	
TOTALS & AVE	210	0	0	0	210	0	57.1	0.0	0	1900	11	16	54	36	7	
JUNCTION CITY C	160															
PENNSYLVNIN	160	0	0	0	160	0	0.0	0.0	1	600	8	18	100	32	20	
TOTALS & AVE	160	0	0	0	160	0	0.0	0.0	1	600	8	18	100	32	20	
KEENSBURG E	40															
STE GEN	40	0	0	0	40	0	0.0	0.0	0	2700	16	17	150	38	5	
TOTALS & AVE	40	0	0	0	40	0	0.0	0.0	0	2700	16	17	150	38	5	
KEENSBURG S	280															
PENNSYLVNIN	130	70	0	0	60	0	66.7	0.0	0	1200	10	15	50	33	13	
CYPRESS	130	100	10	0	20	0	0.0	0.0	0	2400	9	18	100	36	10	
OHARA	20	0	0	10	10	0	100.0	0.0	0	2715	10	17	150	38	5	
TOTALS & AVE	280	170	10	10	90	0	55.6	0.0	0	1839	10	16	79	35	11	
KEENVILLE	710															
AUX VASES	340	0	180	30	130	0	9.1	0.0	0	2960	20	20	155	37	6	
STE GEN	440	0	240	10	190	0	42.9	0.0	0	3050	11	17	100	37	5	
TOTALS & AVE	780	0	420	40	320	0	29.1	0.0	0	2997	15	19	132	37	6	
KEENVILLE E	90															
STE GEN	80	0	0	0	80	0	80.0	0.0	0	3140	10	17	150	37	6	
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	3190	10	12	20	39	4	
TOTALS & AVE	90	0	0	0	90	0	82.2	0.0	0	3146	10	16	136	37	6	
KELL	50															
MCCLOSKEY	50	0	0	0	50	0	0.0	0.0	1	2350	6	17	200	37	6	
TOTALS & AVE	50	0	0	0	50	0	0.0	0.0	1	2350	6	17	200	37	6	
KELL W	10															
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	2350	6	17	400	38	5	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2350	6	17	400	38	5	
KELLERVILLE	550															
SILURIAN	550	0	0	0	450	100	67.6	100.0	0	623	5	13	40	37	6	
TOTALS & AVE	550	0	0	0	450	100	67.6	100.0	0	623	5	13	40	37	6	
KENNER	1190															
TAR SPRINGS	10	0	0	10	0	0	0.0	0.0	0	2200	7	15	100	37	6	
BENOIST	690	450	180	30	30	0	100.0	0.0	0	2700	13	15	57	37	6	
RENAULT	210	20	0	60	120	10	90.9	100.0	0	2760	10	16	51	37	6	
AUX VASES	820	50	560	0	160	50	91.7	100.0	1	2822	22	17	75	38	6	
STE GEN	80	0	0	30	50	0	60.0	0.0	0	2875	9	16	100	37	6	
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	2980	4	12	20	38	5	
CARPER	10	0	0	0	10	0	0.0	0.0	0	4220	10	11	20	39	4	
DEVONIAN	10	0	0	10	0	0	0.0	0.0	0	4425	55	10	10	39	5	
TOTALS & AVE	1840	520	740	140	380	60	85.7	100.0	1	2815	17	16	67	38	6	
KENNER N	390															
BENOIST	390	0	50	0	230	110	6.3	0.0	1	2750	10	17	40	37	6	
MCCLOSKEY	80	0	0	20	50	10	0.0	0.0	0	2970	6	17	100	37	6	
TOTALS & AVE	470	0	50	20	280	120	5.1	0.0	1	2774	9	17	47	37	6	
KENNER S	30															
BENOIST	20	0	0	0	20	0	100.0	0.0	0	2730	5	17	50	37	6	
MCCLOSKEY	30	0	0	0	10	0	50.0	0.0	0	2870	10	17	100	37	6	
TOTALS & AVE	50	0	0	0	30	0	83.3	0.0	0	2835	8	17	88	37	6	
KENNER W	410															
CYPRESS	350	350	0	0	0	0	0.0	0.0	0	2600	20	18	125	37	6	
BENOIST	230	230	0	0	0	0	0.0	0.0	0	2700	10	17	50	38	6	
RENAULT	10	0	0	0	10	0	0.0	0.0	0	2800	10	16	60	37	6	
AUX VASES	110	80	0	0	30	0	50.0	0.0	0	2800	16	17	70	38	6	
MCCLOSKEY	20	0	0	0	20	0	50.0	0.0	0	2870	4	16	100	38	5	
TOTALS & AVE	720	660	0	0	60	0	41.7	0.0	0	2655	16	18	100	37	6	
KEYESPORT	180															
BENOIST	180	0	0	0	140	40	92.3	100.0	2	1180	8	17	50	35	8	
TOTALS & AVE	180	0	0	0	140	40	92.3	100.0	2	1180	8	17	50	35	8	
KINGAID C	2620															
HIBBARD	2620	0	0	0	1090	1570	93.0	98.1	0	1800	19	12	10	38	6	
SILURIAN	10	0	0	0	10	0	100.0	0.0	0	1875	7	10	20	38	5	
TOTALS & AVE	2630	0	0	0	1060	1570	93.1	98.1	0	1800	19	12	10	38	6	
KING	1430															
RENAULT	10	0	0	0	10	0	100.0	0.0	0	2720	10	17	50	39	5	
AUX VASES	1380	340	0	400	510	150	5.7	92.3	0	2725	15	18	99	39	5	
STE GEN	320	0	0	120	200	0	75.0	0.0	0	2768	9	16	69	38	5	
TOTALS & AVE	1710	340	0	520	720	150	26.3	92.3	0	2730	14	18	95	39	5	



TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SWD* wells	Average* properties						
		Active	Abandoned	Undeveloped	Acres		% Active			Depth (ft)	Thickness (ft)	Porosity (%)	Permeability (md)	Gravity (°API)	Viscosity (cp)	
					Edge	Interior	Edge	Interior								
Pay name	Pay acres															
LOCUST GROVE S	160															
STE GEN	160	0	0	0	160	0	11.1	0.0	0	3250	7	16	100	38	5	
TOTALS & AVE	160	0	0	0	160	0	11.1	0.0	0	3250	7	16	100	38	5	
LOGAN	20															
STE GEN	20	0	0	0	20	0	100.0	0.0	0	3028	12	17	100	34	10	
TOTALS & AVE	20	0	0	0	20	0	100.0	0.0	0	3028	12	17	100	34	10	
LONG BRANCH	70															
PALESTINE	20	0	0	0	20	0	100.0	0.0	0	2075	9	18	200	9	7	
CYPRESS	20	0	0	0	20	0	50.0	0.0	0	2745	14	18	70	37	7	
AUX VASES	40	0	0	0	40	0	25.0	0.0	0	3090	10	19	75	37	5	
MCCLOSKEY	20	0	0	0	20	0	50.0	0.0	0	3190	4	15	100	37	6	
TOTALS & AVE	100	0	0	0	100	0	50.0	0.0	0	2801	9	18	100	32	6	
LONG BRANCH S	10															
CYPRESS	10	0	0	0	10	0	100.0	0.0	0	2660	6	18	70	37	7	
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	2660	6	18	70	37	7	
LOUDEN	24470															
CYPRESS	21380	19120	440	0	1470	350	79.0	88.6	1	1501	20	20	99	36	7	
BETHEL	8660	8500	0	80	80	0	87.5	0.0	0	1540	20	18	100	38	5	
RENOIST	6790	6730	0	50	10	0	100.0	0.0	0	1550	10	18	100	38	5	
AUX VASES	540	540	0	0	0	0	0.0	0.0	0	1660	15	18	100	37	6	
MCCLOSKEY	10	0	0	0	10	0	100.0	0.0	0	1785	4	17	150	37	6	
CARPER	20	0	0	20	0	0	0.0	0.0	0	2830	9	12	20	36	8	
GENEVA	2600	0	2600	0	0	0	0.0	0.0	0	3100	18	14	40	28	37	
TRENTON	20	0	0	20	0	0	0.0	0.0	0	3900	12	12	10	29	30	
TOTALS & AVE	40020	34890	3040	170	1570	350	79.7	88.6	1	1621	18	19	95	36	8	
LOUISVILLE N	90															
AUX VASES	40	0	0	0	40	0	0.0	0.0	0	2750	10	17	50	37	8	
SPAR MTN	90	0	0	0	90	0	33.3	0.0	0	2805	7	15	200	37	6	
TOTALS & AVE	130	0	0	0	130	0	23.1	0.0	0	2784	8	16	142	37	7	
LOUISVILLE S	20															
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2825	7	17	75	38	6	
OHARA	10	0	0	0	10	0	0.0	0.0	0	2890	2	17	100	36	7	
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	2839	5	17	81	38	6	
LYNCHBURG	60															
MCCLOSKEY	60	0	0	0	60	0	66.7	0.0	0	3045	8	17	100	38	6	
TOTALS & AVE	60	0	0	0	60	0	66.7	0.0	0	3045	8	17	100	38	6	
MCKINLEY	750															
RENOIST	180	40	0	0	120	20	66.7	100.0	1	1050	5	18	200	41	3	
SILURIAN	190	0	0	40	120	30	70.0	100.0	1	2240	4	12	50	40	3	
TOTALS & AVE	370	40	0	40	240	50	68.3	100.0	2	1595	4	15	131	41	3	
MACEDONIA	10															
ULLIN	10	0	0	0	10	0	0.0	0.0	0	4100	12	10	10	37	7	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	4100	12	10	10	37	7	
MAIN C	61450															
PENNSYLVANIAN	59120	21050	6000	200	12170	19570	37.5	56.7	19	879	25	19	100	36	6	
CYPRESS	650	250	0	0	320	80	68.2	85.7	0	1498	15	18	60	34	9	
PT CK GROUP	4330	740	70	2070	860	590	61.9	38.6	0	1330	10	15	30	36	7	
AUX VASES	1430	0	0	90	1200	140	84.1	84.6	0	1430	14	12	18	35	8	
STE GEN	140	0	0	60	80	0	75.0	0.0	0	1508	8	16	232	35	8	
SALEM	290	0	0	50	210	30	100.0	100.0	0	1790	5	16	40	37	5	
DEVONIAN	50	0	0	0	50	0	100.0	0.0	0	2800	11	12	20	37	7	
TOTALS & AVE	66010	22040	6160	2470	14890	20410	44.6	56.6	19	905	24	19	97	36	6	
MAPLE GROVE C	2030															
AUX VASES	400	0	100	50	240	10	46.7	0.0	0	3150	15	20	50	38	5	
STE GEN	1650	270	860	60	380	80	10.0	0.0	1	3230	7	14	100	37	6	
SALEM	10	0	0	0	10	0	100.0	0.0	0	3660	4	12	30	39	4	
TOTALS & AVE	2060	270	960	110	630	90	25.4	0.0	1	3204	9	16	83	37	6	
MAPLE GROVE S	10															
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3250	10	15	50	38	5	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3250	10	15	50	38	5	
MARCOE	20															
MCCLOSKEY	20	0	0	0	20	0	0.0	0.0	0	2750	15	17	100	25	30	
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	2750	15	17	100	25	30	
MARINE	2440															
DEV-SIL	2440	0	0	0	1070	1370	63.1	100.0	1	1700	20	18	100	35	8	
TOTALS & AVE	2440	0	0	0	1070	1370	63.1	100.0	1	1700	20	18	100	35	8	
MARINE W	10															
DEVONIAN	10	0	0	0	10	0	100.0	0.0	0	1700	20	15	160	35	10	
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	1700	20	15	160	35	10	
MARION	10															
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2385	5	15	45	40	4	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2385	5	15	45	40	4	
MARION E	10															
BETHEL	10	0	0	0	10	0	0.0	0.0	0	2300	8	16	50	37	6	
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2300	8	16	50	37	6	
MARISSA W	30															
CYPRESS	30	0	0	0	30	0	33.3	0.0	0	215	34	15	50	25	81	
TOTALS & AVE	30	0	0	0	30	0	33.3	0.0	0	215	34	15	50	25	81	
MARKHAM CITY	340															
STE GEN	340	0	60	0	270	10	21.4	100.0	1	3070	10	17	100	38	5	
TOTALS & AVE	340	0	60	0	270	10	21.4	100.0	1	3070	10	17	100	38	5	





TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SMD* wells	Average properties					
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity ("API)	Vis-cosity (cp)
		Act-ive	Aban-doned	Unde-veloped	Edge	Inter-rior	Edge	Inter-rior							
MILL SHOALS	3210														
AUX VASES	2700	1730	40	0	790	140	61.7	63.6	4	3250	11	18	100	36	7
STE GEN	1000	0	0	460	530	10	63.4	100.0	0	3320	9	17	192	38	5
ST LOUIS	10	0	0	10	0	0	0.0	0.0	0	3550	10	13	35	39	5
SALEM	10	0	0	0	10	0	100.0	0.0	0	3970	4	14	70	38	5
ULLIN	10	0	0	10	0	0	0.0	0.0	0	4110	10	14	60	38	5
TOTALS & AVE	3730	1730	40	480	1330	150	62.7	66.1	4	3270	10	18	121	36	7
HILLS PRAIRIE	10														
OHARA	10	0	0	0	10	0	0.0	0.0	0	2925	5	15	60	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2925	5	15	60	37	6
HILLS PRAIRIE N	30														
OHARA	30	0	0	0	30	0	0.0	0.0	0	2925	5	16	75	37	6
TOTALS & AVE	30	0	0	0	30	0	0.0	0.0	0	2925	5	16	75	37	6
MITCHELLSVILLE	20														
DEGONIA	10	0	0	0	10	0	0.0	0.0	0	1330	6	16	50	35	6
WALTERSBURG	10	0	0	0	10	0	100.0	0.0	0	1500	6	17	50	38	6
TOTALS & AVE	20	0	0	0	20	0	50.0	0.0	0	1415	6	17	50	37	6
MODE	360														
BETHEL	120	120	0	0	0	0	0.0	0.0	0	1680	12	17	50	35	8
BENDIST	360	360	0	0	0	0	0.0	0.0	0	1750	8	17	50	34	9
AUX VASES	10	10	0	0	0	0	0.0	0.0	0	1770	8	17	50	37	7
TOTALS & AVE	490	490	0	0	0	0	0.0	0.0	0	1727	9	17	50	34	9
MT AUBURN C	7050														
SILURIAN	7050	0	0	0	5640	1410	53.8	68.7	11	1890	15	12	20	37	6
TOTALS & AVE	7050	0	0	0	5640	1410	53.8	68.7	11	1890	15	12	20	37	6
MT CARMEL	4370														
PENNSYLVNIN	1050	280	90	310	370	0	83.3	0.0	1	1500	15	18	200	36	9
PALESTINE	40	0	0	30	10	0	100.0	0.0	0	1580	10	17	50	35	8
WALTERSBURG	30	0	0	30	0	0	0.0	0.0	0	1700	10	18	100	36	9
TAR SPRINGS	410	120	60	170	60	0	100.0	0.0	0	1700	12	19	200	36	6
GOLCONDA	10	0	0	10	0	0	0.0	0.0	0	2020	25	17	50	36	7
CYPRESS	3550	1730	530	40	760	490	82.8	65.3	1	2001	13	18	51	38	5
PT CK GROUP	130	0	0	90	40	0	100.0	0.0	0	2100	16	16	50	35	6
STE GEN	1260	50	0	670	580	10	59.6	0.0	0	2323	6	17	210	37	7
SALEM	10	0	0	0	10	0	100.0	0.0	0	2496	14	10	40	39	5
TOTALS & AVE	6490	2180	680	1300	1830	500	76.7	64.0	2	1931	13	18	105	37	6
MT ERIE N	200														
AUX VASES	110	0	0	0	110	0	0.0	0.0	0	3120	15	18	100	40	4
STE GEN	130	0	0	0	130	0	0.0	0.0	0	3170	6	16	70	39	4
TOTALS & AVE	240	0	0	0	240	0	0.0	0.0	0	3136	10	17	90	40	4
MT OLIVE	80														
PENNSYLVNIN	80	0	0	0	80	0	0.0	0.0	0	605	6	18	100	33	13
TOTALS & AVE	80	0	0	0	80	0	0.0	0.0	0	605	6	18	100	33	13
MT VERNON	220														
AUX VASES	70	0	0	0	70	0	20.0	0.0	0	2670	10	18	100	36	6
STE GEN	150	0	0	0	120	30	71.4	0.0	0	2750	11	17	100	39	4
TOTALS & AVE	220	0	0	0	190	30	52.5	0.0	0	2726	11	17	100	38	5
MT VERNON N	20														
MCCLOSKEY	20	0	0	0	20	0	50.0	0.0	0	2675	6	17	100	38	5
TOTALS & AVE	20	0	0	0	20	0	50.0	0.0	0	2675	6	17	100	38	5
MURDOCK	10														
PENNSYLVNIN	10	0	0	0	10	0	100.0	0.0	0	370	16	18	100	36	7
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	370	16	18	100	36	7
NASON	30														
STE GEN	30	0	0	0	30	0	33.3	0.0	0	2760	16	14	50	37	5
TOTALS & AVE	30	0	0	0	30	0	33.3	0.0	0	2760	16	14	50	37	5
NEW BADEN E	280														
SILURIAN	280	0	0	0	200	80	45.5	100.0	2	1935	15	13	10	39	6
TOTALS & AVE	280	0	0	0	200	80	45.5	100.0	2	1935	15	13	10	39	6
NEW REPAIR	150														
PENNSYLVNIN	130	0	0	0	100	30	33.3	100.0	0	1100	10	18	200	29	14
AUX VASES	40	0	0	0	40	0	50.0	0.0	0	1310	9	15	30	37	6
TOTALS & AVE	170	0	0	0	140	30	38.1	100.0	0	1146	10	17	163	31	12
NEW CITY	290														
SILURIAN	290	0	0	0	290	0	26.9	0.0	0	1750	17	14	40	39	4
TOTALS & AVE	290	0	0	0	290	0	26.9	0.0	0	1750	17	14	40	39	4
NEW CITY S	20														
SILURIAN	20	0	0	0	20	0	100.0	0.0	0	2000	17	15	40	39	4
TOTALS & AVE	20	0	0	0	20	0	100.0	0.0	0	2000	17	15	40	39	4
NEW DOUGLAS S	20														
PENNSYLVNIN	20	0	0	0	20	0	0.0	0.0	0	640	8	18	100	32	15
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	640	8	18	100	32	15





TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Acreal acres	Waterflood acres			Remaining primary				No. of SMD* wells	Average properties					
					Acres		% Active			Depth (ft)	Thickness (ft)	Porosity (%)	Permeability (md)	Gravity (°API)	Viscosity (cp)
		Act-ive	Aban-doned	Unde-veloped	Edge	Inter-ior	Edge	Inter-ior							
OSKALOOSA S	110														
MCCLOSKEY	110	0	0	0	110	0	77.8	0.0	0	2770	4	15	100	35	8
TOTALS & AVE	110	0	0	0	110	0	77.8	0.0	0	2770	4	15	100	35	8
PANA	60														
BENOIST	60	0	0	0	60	0	60.0	0.0	0	1475	10	18	50	37	5
TOTALS & AVE	60	0	0	0	60	0	60.0	0.0	0	1475	10	18	50	37	5
PANANA	60														
GOLCONDA	40	0	0	0	40	0	50.0	0.0	0	705	12	15	50	31	15
BENOIST	20	0	0	0	20	0	0.0	0.0	0	865	12	16	50	28	25
TOTALS & AVE	60	0	0	0	60	0	33.3	0.0	0	758	12	15	50	30	18
PANKEYVILLE	30														
CYPRESS	20	0	0	0	20	0	50.0	0.0	0	2250	6	18	70	37	6
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	2510	22	18	50	38	5
TOTALS & AVE	30	0	0	0	30	0	66.7	0.0	0	2418	11	18	57	38	5
PANKEYVILLE E	10														
CYPRESS	10	0	0	0	10	0	0.0	0.0	0	2250	10	18	70	37	7
PT CK GROUP	10	0	0	0	10	0	0.0	0.0	0	2360	13	16	50	36	7
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	2312	12	17	59	36	7
PARKERSBURG C	5120														
PENNSYLVNIN	10	0	0	0	10	0	100.0	0.0	0	2100	18	18	100	36	7
WALTERSBURG	110	0	0	0	110	0	44.4	0.0	1	2400	10	17	100	39	8
TAR SPRINGS	10	0	0	0	10	0	100.0	0.0	0	2440	7	18	120	36	6
CYPRESS	170	110	0	0	60	0	50.0	0.0	1	2770	12	17	100	36	7
BETHEL	300	0	20	50	230	0	57.9	0.0	0	2930	12	17	50	35	6
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	3070	20	16	50	37	6
STE GEN	4540	170	320	160	2390	1510	17.2	18.8	9	3100	15	16	100	38	5
TOTALS & AVE	5150	280	340	210	2810	1510	23.2	18.8	11	3070	15	16	97	38	5
PARKERSBURG S	100														
PENNSYLVNIN	70	0	0	0	70	0	50.0	0.0	0	1400	10	18	100	35	10
CYPRESS	10	0	0	0	10	0	100.0	0.0	0	2700	10	17	100	36	7
BETHEL	20	0	0	0	20	0	0.0	0.0	0	2815	5	17	50	35	6
TOTALS & AVE	100	0	0	0	100	0	45.0	0.0	0	1702	9	18	94	35	9
PARKERSBURG W	390														
STE GEN	390	0	0	0	320	70	4.5	0.0	1	3200	6	16	150	38	5
TOTALS & AVE	390	0	0	0	320	70	4.5	0.0	1	3200	6	16	150	38	5
PARNELL	330														
SONORA	330	0	0	0	330	0	91.3	0.0	0	670	12	13	10	32	13
DEVONIAN	40	0	0	0	40	0	100.0	0.0	0	1100	10	12	15	37	6
TOTALS & AVE	370	0	0	0	370	0	92.2	0.0	0	709	12	13	10	32	12
PASSPORT	980														
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	2960	15	18	50	36	10
STE GEN	970	690	0	0	260	20	29.4	0.0	0	3000	10	17	300	38	5
TOTALS & AVE	980	690	0	0	270	20	32.0	0.0	0	2999	10	17	296	38	5
PASSPORT N	60														
AUX VASES	60	0	0	0	60	0	60.0	0.0	0	2950	10	17	40	36	10
TOTALS & AVE	60	0	0	0	60	0	60.0	0.0	0	2950	10	17	40	36	10
PASSPORT S	130														
TAR SPRINGS	10	0	0	0	10	0	100.0	0.0	0	2370	9	17	100	37	6
CYPRESS	60	60	0	0	20	0	0.0	0.0	0	2665	15	19	100	38	6
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2950	8	17	50	36	10
STE GEN	40	0	0	0	40	0	25.0	0.0	0	3025	7	16	180	38	7
TOTALS & AVE	140	60	0	0	80	0	25.0	0.0	0	2724	12	18	111	38	6
PASSPORT W	150														
STE GEN	150	0	0	0	140	10	0.0	0.0	0	3030	5	17	300	37	7
TOTALS & AVE	150	0	0	0	140	10	0.0	0.0	0	3030	5	17	300	37	7
PATOKA	1560														
CYPRESS	60	60	0	0	0	0	0.0	0.0	0	1280	10	21	32	39	5
BENOIST	1000	640	0	0	240	120	100.0	100.0	1	1400	27	19	110	37	7
SPAR MTN	510	450	0	40	20	0	100.0	0.0	0	1950	9	19	200	39	4
GENEVA	30	0	0	30	0	0	0.0	0.0	0	2850	10	12	25	40	4
TRENTON	630	630	0	0	0	0	0.0	0.0	0	3935	19	8	3	42	4
TOTALS & AVE	2230	1780	0	70	260	120	100.0	100.0	1	2106	20	16	89	39	6
PATOKA E	560														
CYPRESS	560	250	0	0	160	150	88.9	100.0	0	1350	16	19	100	36	6
BENOIST	50	40	0	0	10	0	100.0	0.0	0	1465	10	19	100	36	6
MCCLOSKEY	40	0	0	40	0	0	0.0	0.0	0	1635	8	18	100	34	10
GENEVA	20	0	0	20	0	0	0.0	0.0	0	2950	10	14	20	35	9
TOTALS & AVE	670	290	0	60	170	150	89.5	100.0	0	1397	15	19	98	36	6
PATOKA S	910														
CYPRESS	730	580	0	10	110	30	100.0	100.0	0	1350	10	20	50	36	6
BENOIST	200	140	0	40	20	0	50.0	0.0	0	1400	15	18	100	37	6
SPAR MTN	40	0	0	40	0	0	0.0	0.0	0	1625	5	19	200	41	3
TOTALS & AVE	970	720	0	90	130	30	92.3	100.0	0	1370	11	19	67	36	6
PATOKA W	200														
BENOIST	200	0	0	0	150	50	0.0	0.0	1	1380	6	19	100	32	13
TOTALS & AVE	200	0	0	0	150	50	0.0	0.0	1	1380	6	19	100	32	13



TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Acreal acres	Waterflood acres			Remaining primary				No. of SWD wells	Average properties					
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity (*API)	Vis-cosity (cp)
		Act-ive	Aban-doned	Unde-veloped	Edge	Inter-rior	Edge	Inter-rior							
RAYMOND E PENNSYLVNIN	60														
TOTALS & AVE	60	30	20	0	10	0	0.0	0.0	0	595	10	18	100	34	10
RAYMOND S PENNSYLVNIN	10														
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	600	6	18	100	34	10
RESERVOIR STE GEN SALEM	250														
TOTALS & AVE	250	40	0	0	200	0	40.0	0.0	0	2450	13	17	100	37	6
RICHVIEW CYPRESS	730														
TOTALS & AVE	730	100	0	0	470	160	88.1	100.0	1	1500	12	18	100	39	4
RIDGWAY PALESTINE MCCLOSKEY	20														
TOTALS & AVE	20	0	0	0	10	0	0.0	0.0	0	1730	18	18	200	30	18
RIFLE SPAR MTN	80														
TOTALS & AVE	80	0	0	0	80	0	0.0	0.0	0	2735	7	15	100	36	7
RINARD MCCLOSKEY	10														
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3145	5	16	100	39	5
RINARD N STE GEN	240														
TOTALS & AVE	240	0	0	0	220	20	43.8	100.0	1	3145	5	17	150	39	4
RINARD S SPAR MTN	10														
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3268	4	16	125	39	4
RITTER STE GEN	110														
TOTALS & AVE	110	0	0	0	110	0	0.0	0.0	0	3215	5	17	150	38	5
RITTER N STE GEN	180														
TOTALS & AVE	180	0	130	0	50	0	0.0	0.0	0	3200	6	16	50	39	6
RIVERTON S SILURIAN	40														
TOTALS & AVE	40	0	0	0	40	0	75.0	0.0	0	1590	8	11	20	38	5
ROADCHES BENDIST STE GEN	180														
TOTALS & AVE	180	0	0	0	150	20	10.0	50.0	0	2170	14	17	100	37	6
ROADCHES N BENDIST SPAR MTN TRENTON	420														
TOTALS & AVE	490	400	0	60	20	0	0.0	0.0	0	1910	8	16	150	37	6
ROBY SILURIAN	210														
TOTALS & AVE	210	0	0	0	180	30	40.0	66.7	2	1775	5	14	50	38	5
ROBY N SILURIAN	40														
TOTALS & AVE	40	0	0	0	40	0	0.0	0.0	0	1700	5	15	20	38	5
ROBY W HIBBARD	20														
TOTALS & AVE	20	0	0	0	20	0	50.0	0.0	0	1655	5	13	30	37	7
ROCHESTER PENNSYLVNIN WALTERSBURG	370														
TOTALS & AVE	440	150	0	0	80	0	16.7	0.0	0	1300	12	19	120	32	13
ROLAND C PENNSYLVNIN DEGONIA CLORE PALESTINE WALTERSBURG TAR SPRINGS HARDINSBURG GOLCONDA CYPRESS PT CK GROUP AUX VASES STE GEN ST LOUIS SALEM ULLIN	10290														
TOTALS & AVE	15050	3510	2500	800	6400	2530	73.8	90.4	6	2704	14	17	95	37	6
ROLAND W AUX VASES	10														
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	2930	15	15	40	40	5





TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SWD* wells	Average properties					
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Ferne-ability (md)	Grav-ity ("API)	Vis-cosity (cp)
					Edge	Ince-rior	Edge	Ince-rior							
Pay name	Pay acres	Acc-live	Aban-doned	Unde-veloped	Edge	Ince-rior	Edge	Ince-rior							
SAILOR SPRINGS E	170														
CYPRESS	110	0	0	0	100	10	22.2	0.0	0	2700	8	18	50	36	7
MCCLOSKEY	40	0	0	0	40	0	25.0	0.0	0	3020	7	17	300	37	6
SALEM	20	0	0	0	20	0	100.0	0.0	0	3552	6	12	30	38	5
TOTALS & AVE	170	0	0	0	160	10	32.6	0.0	0	2850	8	17	103	36	7
SAILOR SPRINGS N	60														
STE GEN	60	0	0	0	60	0	0.0	0.0	0	2980	4	17	300	37	6
TOTALS & AVE	60	0	0	0	60	0	0.0	0.0	0	2980	4	17	300	37	6
SALEM C	13580														
BENOIST	10830	9940	0	30	800	60	84.0	83.3	0	1794	27	18	147	37	5
AUX VASES	7590	7400	0	0	190	0	91.7	0.0	1	1849	25	16	27	37	5
STE GEN	10540	7930	110	200	1400	900	74.4	79.2	18	2100	16	14	245	37	6
ST LOUIS	180	0	0	180	0	0	0.0	0.0	0	2100	6	13	30	37	6
SALEM	1350	0	0	1330	20	0	100.0	0.0	0	2150	17	16	100	37	6
DEVONIAN	5680	5680	0	0	0	0	0.0	0.0	0	3450	40	15	40	42	3
TRENTON	1920	0	0	1920	0	0	0.0	0.0	0	4600	50	12	5	37	8
TOTALS & AVE	38090	30950	110	3600	2410	960	79.2	79.5	19	2507	26	16	107	38	5
SAMSVILLE	40														
WALTERSBURG	40	0	0	0	40	0	0.0	0.0	0	2420	7	16	75	38	5
TOTALS & AVE	40	0	0	0	40	0	0.0	0.0	0	2420	7	16	75	38	5
SAMSVILLE N	200														
BETHEL	200	0	60	0	140	0	16.7	0.0	0	2900	6	17	30	38	7
TOTALS & AVE	200	0	60	0	140	0	16.7	0.0	0	2900	6	17	30	38	7
SAMSVILLE NW	10														
DHARA	10	0	0	0	10	0	0.0	0.0	0	3190	4	17	150	38	4
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3190	4	17	150	38	4
SAMSVILLE W	80														
STE GEN	80	0	0	0	80	0	20.0	0.0	0	3260	10	15	50	38	5
TOTALS & AVE	80	0	0	0	80	0	20.0	0.0	0	3260	10	15	50	38	5
SANDOVAL	500														
CYPRESS	20	0	0	0	20	0	50.0	0.0	0	1400	10	18	100	37	6
BENOIST	480	0	0	0	260	220	100.0	100.0	1	1540	20	18	100	35	7
GENEVA	240	0	0	0	240	0	100.0	0.0	4	2920	9	14	30	38	6
TOTALS & AVE	740	0	0	0	520	220	98.1	100.0	5	1787	16	17	87	36	7
SANDOVAL W	10														
CYPRESS	10	0	0	0	10	0	0.0	0.0	1	1420	4	18	100	37	6
BENOIST	10	0	0	0	10	0	0.0	0.0	0	1550	15	17	100	36	7
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	1	1523	10	17	100	36	7
SANTA FE	10														
CYPRESS	10	0	0	0	10	0	0.0	0.0	0	950	10	18	100	34	9
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	950	10	18	100	34	9
SCHNELL	50														
MCCLOSKEY	50	0	0	0	50	0	40.0	0.0	0	3000	5	16	100	39	6
TOTALS & AVE	50	0	0	0	50	0	40.0	0.0	0	3000	5	16	100	39	6
SCHNELL E	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3115	4	16	100	38	5
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3115	4	16	100	38	5
SCIOTA	10														
DEVONIAN	10	0	0	0	10	0	0.0	0.0	0	519	16	17	200	35	8
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	519	16	17	200	35	8
SEMINARY	120														
MCCLOSKEY	120	0	90	0	30	0	0.0	0.0	0	3200	8	17	100	38	5
TOTALS & AVE	120	0	90	0	30	0	0.0	0.0	0	3200	8	17	100	38	5
SESSER C	1590														
CYPRESS	40	0	0	0	40	0	33.3	0.0	0	2450	10	18	100	38	6
RENAULT	340	140	0	0	190	10	80.0	100.0	0	2700	10	16	75	37	4
AUX VASES	1210	720	0	40	400	50	83.3	100.0	0	2650	15	18	50	38	5
STE GEN	100	0	0	50	50	0	0.0	0.0	0	2675	13	16	50	39	4
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	3000	20	13	30	37	7
CLEAR CREEK	120	90	0	0	30	0	100.0	0.0	0	4450	20	15	30	40	3
TOTALS & AVE	1820	950	0	90	720	60	74.8	100.0	0	2825	14	17	52	38	5
SHATTUC	280														
CYPRESS	190	110	0	0	40	0	66.7	0.0	0	1300	7	18	100	36	7
BENOIST	80	50	0	30	0	0	0.0	0.0	0	1470	13	18	100	35	8
TRENTON	180	0	0	100	80	0	100.0	0.0	0	4020	13	12	20	40	5
TOTALS & AVE	410	160	0	130	120	0	88.9	0.0	0	2765	11	15	58	38	6
SHATTUC N	10														
BENOIST	10	0	0	0	10	0	0.0	0.0	0	1450	7	18	100	36	7
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	1450	7	18	100	36	7
SHANNEETOWN	70														
PALESTINE	40	0	0	0	40	0	0.0	0.0	0	1720	25	18	200	35	8
WALTERSBURG	10	0	0	0	10	0	0.0	0.0	0	1900	12	20	100	37	5
TAR SPRINGS	60	0	0	0	60	0	0.0	0.0	0	1950	12	18	75	37	6
CYPRESS	10	0	0	0	10	0	0.0	0.0	0	2375	10	18	150	38	6
AUX VASES	10	0	0	0	10	0	0.0	0.0	0	2750	10	16	40	38	6
TOTALS & AVE	130	0	0	0	130	0	0.0	0.0	0	1894	16	18	140	36	7
SHANNEETOWN E	30														
WALTERSBURG	10	0	0	0	10	0	0.0	0.0	0	1855	12	20	100	37	5
BETHEL	10	0	0	0	10	0	100.0	0.0	0	2480	8	17	50	37	6
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	2750	10	16	40	38	6
TOTALS & AVE	30	0	0	0	30	0	66.7	0.0	0	2320	10	18	87	37	6





TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Areal acres	Waterflood acres			Remaining primary				No. of SWD* wells	Average properties					
					Acres		% Active			Depth (ft)	Thick-ness (ft)	Poros-ity (%)	Perme-ability (md)	Grav-ity (%API)	Vis-cosity (cp)
		Act-ive	Aban-doned	Unde-veloped	Edge	Inter-ior	Edge	Inter-ior							
Pay name	Pay acres														
TOVEY	10														
SILURIAN	10	0	0	0	10	0	100.0	0.0	0	1850	10	10	10	38	5
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	1850	10	10	10	38	5
TRUMBULL C	1490														
TAR SPRINGS	30	0	0	0	30	0	100.0	0.0	0	2530	5	18	200	35	7
CYPRESS	420	190	0	20	210	0	66.7	0.0	1	2850	10	17	45	36	6
BETHEL	50	0	0	0	50	0	100.0	0.0	0	3300	9	17	50	37	6
AUX VASES	520	40	0	20	410	50	83.8	100.0	1	3170	10	18	63	36	7
STE GEN	660	120	0	0	500	40	75.7	66.7	0	3230	9	16	66	37	6
TOTALS & AVE	1680	350	0	40	1200	90	78.5	85.2	2	3106	9	17	60	36	6
TRUMBULL N	40														
AUX VASES	20	0	20	0	0	0	0.0	0.0	0	3325	7	18	50	36	7
MCCLOSKEY	20	0	10	0	10	0	100.0	0.0	0	3460	16	17	100	37	6
TOTALS & AVE	40	0	30	0	10	0	100.0	0.0	0	3419	12	17	85	37	6
TURKEY BEND	10														
TRENTON	10	0	0	0	10	0	100.0	0.0	0	3940	42	10	10	39	6
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	3940	42	10	10	39	6
VALIER	110														
AUX VASES	100	40	0	0	60	0	66.7	0.0	0	2685	8	18	100	39	4
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	2715	12	17	80	39	4
TOTALS & AVE	110	40	0	0	70	0	57.1	0.0	0	2689	8	18	97	39	4
VIRGEN W	30														
DEVONIAN	30	0	0	0	30	0	100.0	0.0	0	1360	20	12	20	38	6
TOTALS & AVE	30	0	0	0	30	0	100.0	0.0	0	1360	20	12	20	38	6
WAGGONER	30														
PENNSYLVNIN	30	0	0	0	30	0	0.0	0.0	0	610	10	18	100	28	37
TOTALS & AVE	30	0	0	0	30	0	0.0	0.0	0	610	10	18	100	28	37
WAKEFIELD	40														
SPAR MTN	40	0	0	0	40	0	0.0	0.0	0	3100	5	16	100	38	5
TOTALS & AVE	40	0	0	0	40	0	0.0	0.0	0	3100	5	16	100	38	5
WAKEFIELD N	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3000	6	16	200	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3000	6	16	200	37	6
WAKEFIELD S	10														
MCCLOSKEY	10	0	0	0	10	0	0.0	0.0	0	3040	4	16	200	37	6
TOTALS & AVE	10	0	0	0	10	0	0.0	0.0	0	3040	4	16	200	37	6
WALPOLE	2140														
TAR SPRINGS	110	0	0	40	70	0	85.7	0.0	0	2450	15	20	100	37	7
AUX VASES	2020	1630	90	0	260	40	59.1	100.0	0	3193	18	18	100	37	6
STE GEN	100	0	0	90	10	0	0.0	0.0	0	3200	7	16	50	37	6
ST LOUIS	10	0	0	0	10	0	100.0	0.0	0	3544	8	12	20	38	5
TOTALS & AVE	2240	1630	90	130	350	40	63.9	100.0	0	3162	17	18	99	37	6
WALPOLE S	40														
AUX VASES	40	0	0	0	40	0	100.0	0.0	0	3124	8	18	100	37	6
TOTALS & AVE	40	0	0	0	40	0	100.0	0.0	0	3124	8	18	100	37	6
WALTONVILLE	60														
BENOIST	50	0	0	0	50	0	75.0	0.0	0	2450	9	18	100	38	5
ST LOUIS	10	0	0	0	10	0	0.0	0.0	0	2770	14	14	50	37	6
TOTALS & AVE	60	0	0	0	60	0	62.5	0.0	0	2526	10	17	88	38	5
WAMAC	310														
PENNSYLVNIN	300	170	0	0	130	0	66.7	0.0	0	750	18	21	200	36	7
DEVONIAN	10	0	0	0	10	0	100.0	0.0	0	3000	9	14	30	38	6
TOTALS & AVE	310	170	0	0	140	0	69.0	0.0	0	787	18	21	197	36	7
WAMAC E	140														
PENNSYLVNIN	140	0	0	0	140	0	60.0	0.0	1	850	15	20	180	30	25
TOTALS & AVE	140	0	0	0	140	0	60.0	0.0	1	850	15	20	180	30	25
WAMAC W	290														
CYPRESS	170	50	0	0	120	0	100.0	0.0	0	1310	8	16	50	35	8
BENOIST	110	110	0	0	0	0	0.0	0.0	0	1450	12	18	100	36	6
TOTALS & AVE	280	160	0	0	120	0	100.0	0.0	0	1379	10	17	75	35	7
WAPELLA E	350														
DEVONIAN	30	0	0	0	30	0	100.0	0.0	0	1108	5	20	400	31	13
SILURIAN	350	0	0	0	190	160	100.0	100.0	0	1110	6	20	400	31	13
TOTALS & AVE	380	0	0	0	220	160	100.0	100.0	0	1110	6	20	400	31	13
WARRINGTON-BORTON	460														
PENNSYLVNIN	460	0	60	0	380	20	25.0	50.0	1	250	24	19	198	31	20
TOTALS & AVE	460	0	60	0	380	20	25.0	50.0	1	250	24	19	198	31	20
WATERLOO	160														
TRENTON	160	0	0	0	80	80	0.0	0.0	0	400	50	11	10	30	25
TOTALS & AVE	160	0	0	0	80	80	0.0	0.0	0	400	50	11	10	30	25
WATSON	30														
STE GEN	30	0	0	0	30	0	33.3	0.0	0	2420	8	17	100	39	5
TOTALS & AVE	30	0	0	0	30	0	33.3	0.0	0	2420	8	17	100	39	5
WATSON W	10														
AUX VASES	10	0	0	0	10	0	100.0	0.0	0	2208	12	17	100	39	5
TOTALS & AVE	10	0	0	0	10	0	100.0	0.0	0	2208	12	17	100	39	5
MAVERLY	20														
DEV-SIL	20	0	0	0	20	0	0.0	0.0	0	1020	10	13	30	34	12
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	1020	10	13	30	34	12



TABLE 2 - SIZE, DEVELOPMENT, AND PROPERTIES OF ILLINOIS OIL FIELDS - Continued

Field name	Acreal acres	Waterflood acres			Remaining primary				No. of SWD* wells	Average properties					
					Acres		% Active			Depth (ft)	Thick- ness (ft)	Poros- ity (%)	Perme- ability (md)	Crav- ity ("API)	Vis- cosity (cp)
		Act- ive	Aban- doned	Unde- veloped	Edge	Inte- rior	Edge	Inte- rior							
YORK	410														
PENNSYLVANIA	410	0	130	0	150	130	0.0	0.0	0	598	18	19	94	31	19
TOTALS & AVE	410	0	130	0	150	130	0.0	0.0	0	598	18	19	94	31	19
ZEIGLER	330														
AUX VASES	330	330	0	0	0	0	0.0	0.0	0	2670	15	21	75	37	6
TOTALS & AVE	330	330	0	0	0	0	0.0	0.0	0	2670	15	21	75	37	6
ZENITH	20														
MCCLOSKEY	20	0	0	0	20	0	0.0	0.0	0	2970	7	16	75	38	5
TOTALS & AVE	20	0	0	0	20	0	0.0	0.0	0	2970	7	16	75	38	5
ZENITH E	210														
SPAR MTN	210	40	0	0	170	0	100.0	0.0	0	2950	10	14	50	37	6
TOTALS & AVE	210	40	0	0	170	0	100.0	0.0	0	2950	10	14	50	37	6
ZENITH N	280														
STE GEN	280	150	0	0	110	20	66.7	100.0	1	3080	7	14	50	38	4
TOTALS & AVE	280	150	0	0	110	20	66.7	100.0	1	3080	7	14	50	38	4
ZENITH S	260														
STE GEN	260	0	0	0	190	70	11.1	0.0	0	2920	7	15	80	37	6
TOTALS & AVE	260	0	0	0	190	70	11.1	0.0	0	2920	7	15	80	37	6

### Properties

Average depth and thickness, porosity and permeability, and oil gravity and viscosity were also estimated for each pay zone in each oil field. In general, these data were gathered together from core analysis reports and from Survey publications, well logs, and reports.

#### Depth and Thickness

In almost all fields, some data were available to estimate values for depth and thickness. Depth estimates, where published data (e.g. Van Den Berg, Lawry, and Mast, 1969) were not already available, were made from well logs. In general, the depth given represents an average depth at which a pay was found over its entire productive area in each field. In some large fields in the state, this figure may differ significantly from the depth at which a pay zone is encountered in a given location in the field.

The pay thickness was defined as the average oil saturated thickness over the productive area and was not generally equal to the net pay thickness. Where more than one production break was encountered in a pay zone, the pay thickness was estimated as the average oil saturated thickness of the pay zone over the productive area in the field.

These data are in table 2 under the heading of "Average properties." Average depth and thickness for the entire field are also given in the last line for each field. The average depth for the field was computed by weighting and averaging the individual pay zone depths, using the total acre feet of pay in each zone as the weighting factor. The average thickness for each field was determined in the same way as the average depth, except that for thickness, only the total pay acres were used as weighting factors.

#### Porosity and Permeability

The porosity and permeability of the oil pays were more difficult to determine because much of these data had to be taken directly from Survey publications on waterflood operations. In addition, a number of commercial core analysis reports were available in our files. In fields where no data could be found for the porosity and permeability of a pay, these values were estimated, using information from other fields in the same area. These data are in table 2, as are average porosity and permeability figures for the entire field. The field averages were determined by weighting and averaging

the individual pay zone values, using the total acre feet of pay in each zone as the weighting factor.

#### Oil Gravity and Viscosity

Oil gravity and viscosity data were available from Survey reports and publications (Armon, Coburn, Mast, and Sherman, 1964, and Armon, Lawry, and Mast, 1966) for most of the pay zones in the state. In general, the gravity and viscosity given in this report represent stock tank values. The viscosity is given at a temperature of 77° F.

Because a large amount of oil gravity and viscosity data were available, regression curves were constructed which related API gravity to depth. Also, regression curves were fitted to cross plots of API gravity and viscosity. The regression lines were then used to determine the values for these properties in pays where no other data were available. The gravity and viscosity data are in table 2. The field averages were determined by weighting and averaging the individual pay zone values, using the acre feet of pay in each zone as the weighting factor.

## ANALYSIS OF DATA

### Properties of Illinois Oil Fields

The frequency distributions for each property shown in figures 2, 3, and 4 were constructed using the data in table 2. Based on the total oil found (Bond, et al., in preparation), these data represent approximately 82 percent of all the oil reservoirs in the Illinois Basin. Therefore, the distributions shown should closely approximate the distributions for the entire basin.

The distribution for each property has been broken into four subdistributions representing the data from each of the four major lithologic types which produced oil in Illinois. Fine sandstone reservoirs are predominantly found in the Chesterian (Mississippian) and Pennsylvanian rocks. The very fine sandstones are mostly in the Aux Vases Sandstone Formation (Mississippian), but also include some Valmeyeran (Mississippian) siltstones. The very fine sandstone reservoirs, in general, required fracture stimulation to make oil production economically feasible. Oolitic limestones which produce oil in Illinois are mainly found in the Ste. Genevieve Limestone Formation (Mississippian). The other oil producing carbonate rocks include a wide variety of Mississippian, Devonian, Silurian, and Ordovician limestones and dolomites.

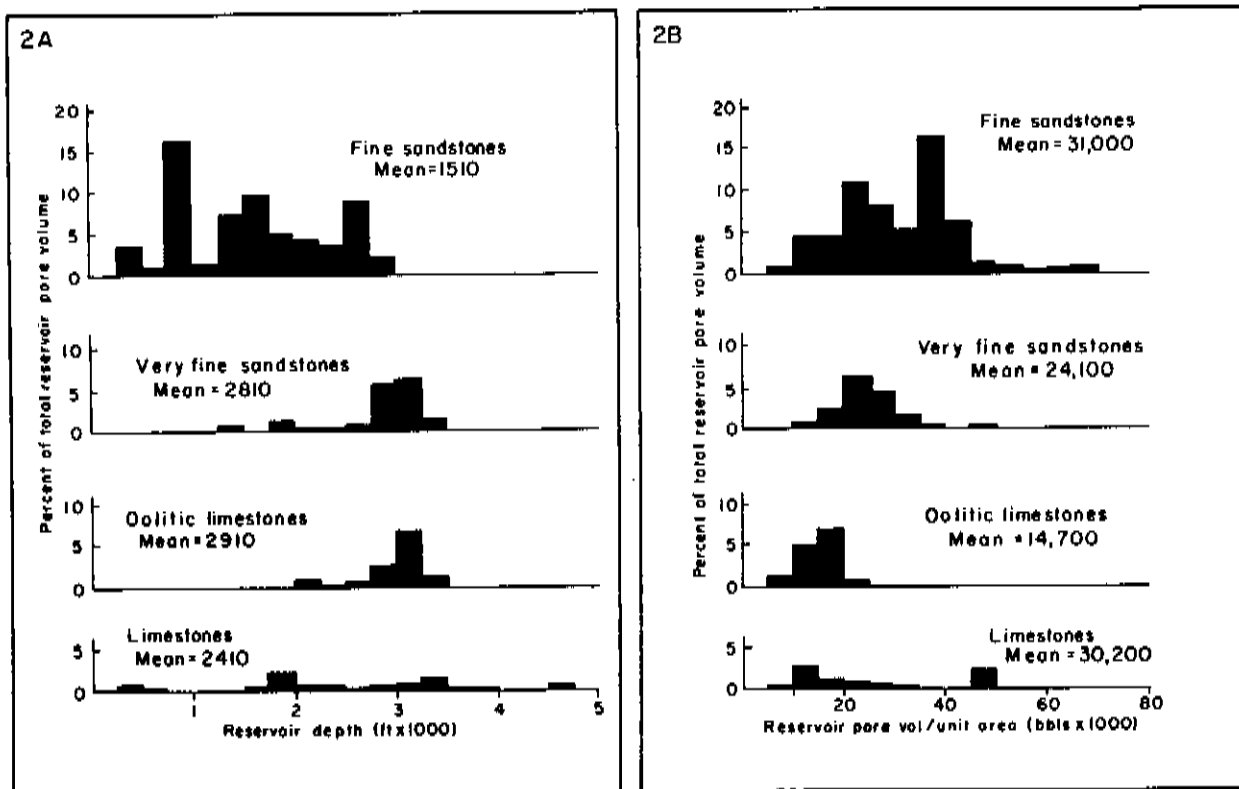


Fig. 2 - Depth and pore volume per unit area of Illinois oil fields.

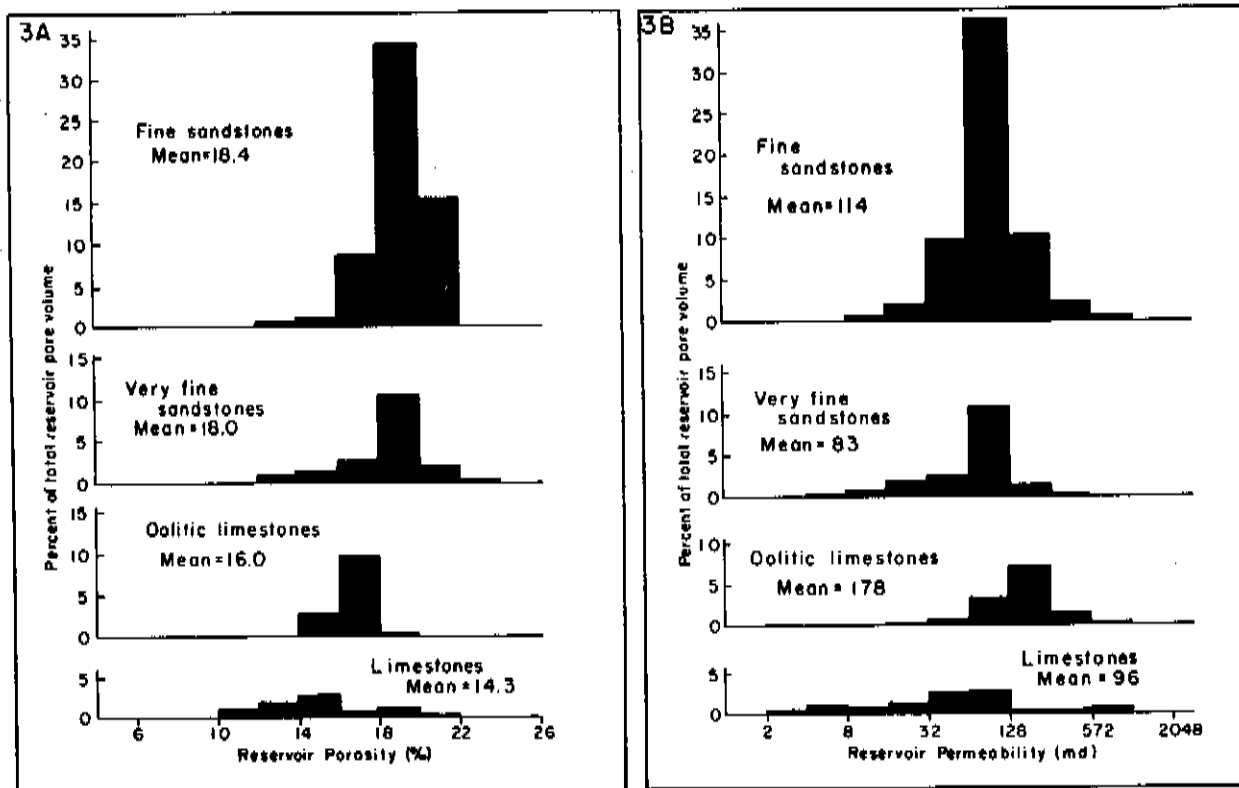


Fig. 3 - Porosity and permeability of Illinois oil reserves.



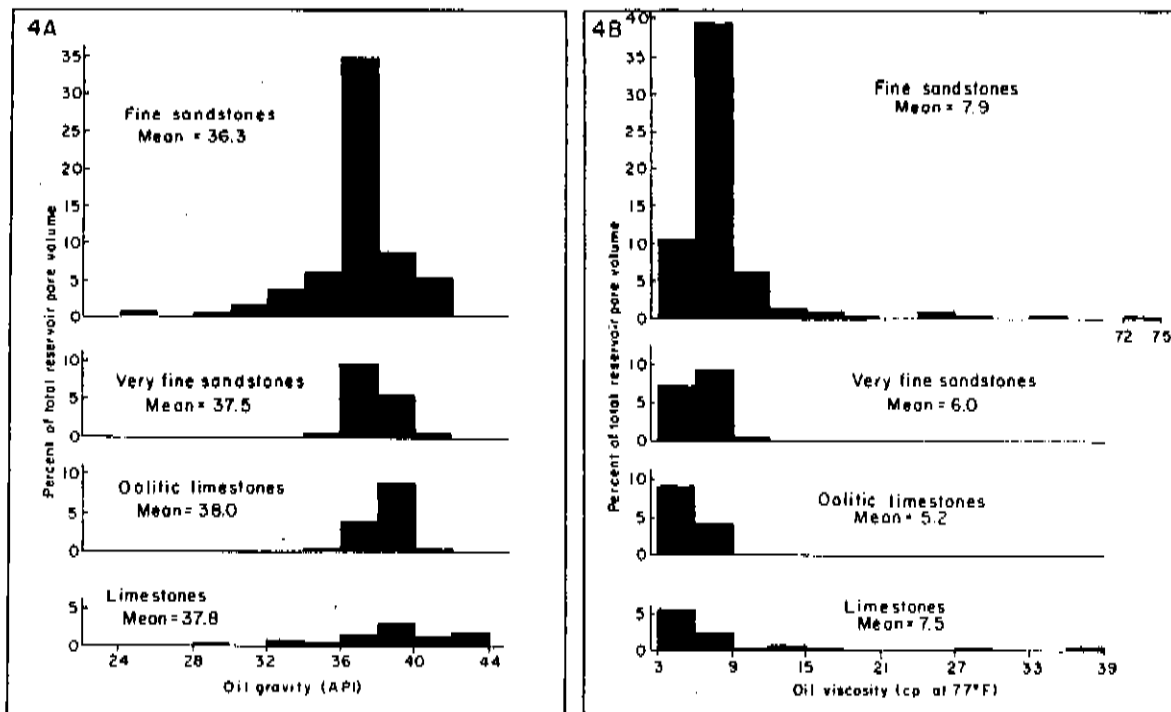


Fig. 4 - Gravity and viscosity of Illinois crude oils.

Depth and Pore Volume

The average depth at which oil is found in Illinois is 2000 feet. The depth distributions in figure 2A show several distinct peaks or modes that reflect the different stratigraphic intervals where large quantities of oil have been found (see table 3). In general, there is an abrupt cutoff in the depth distributions (fig. 2A) between 3000 and 3500 feet. This is probably due to the fact that a very small percentage of the total wells drilled in Illinois have been drilled to depths which exceed 3500 feet.

Pore volume per unit area distributions are given in figure 2B. Pore volume per unit area is the product of gross saturated thickness and porosity.

The two distinct maximums (modal classes) in the fine sandstone distribution reflect the fact that many of the oil pays represented are in geologic units which exhibit thick channel or deltaic sands associated with thin sands from a variety of origins (Swann, 1964).

Available closure must also be considered in interpreting the graphs in figure 2B. For thin sands, gross saturated thickness is primar-

ily limited by total sand thickness. For thick sands, gross saturated thickness depends more on the amount of closure available. The correspondence between the modal class for the very fine sandstones and the left-hand modal class for the fine sandstones supports the idea that in the case of thin sandstones, saturated thickness is primarily a function of sand thickness.

Using the average porosities given in figure 3A, the average saturated thickness for the different lithologies was computed. Fine sandstones have an average saturated thickness of 22 feet, very fine sandstones average 17 feet, and oolitic limestone reservoirs average only 12 feet.

Porosity and Permeability

The porosity distributions for Illinois reservoirs are shown in figure 3A. The porosity distribution for each lithologic unit is essentially a normal distribution. The sandstone and very fine sandstone distributions are very similar, reflecting the similarities of those two lithologies. Oolitic limestone reservoirs are limited to a somewhat narrow range of porosity and are considerably less porous than are the sandstone reser-

TABLE 3 - SIZE AND DEVELOPMENT STATISTICS FOR ILLINOIS  
OIL RESERVOIRS AS OF JANUARY 1, 1968

Stratigraphic interval	State's total reservoir pore volume (%)	Pay acres	Pay acres under flood (%)	Flood acres active (%)	Remaining primary active (%)	Active acreage not under flood*
Pennsylvanian	22.9	107,400	46.3	81.2	46.1	26,500
Mississippian						
Chesterian						
Kinkaid-Barlow	5.5	38,900	59.7	81.7	70.1	11,000
Cypress	17.5	112,000	65.4	91.6	72.0	27,900
Paint Creek-Renault	12.8	91,400	60.8	92.7	70.4	25,200
Valmeyeran						
Aux Vases	16.6	121,000	57.1	85.1	66.0	34,200
Ste. Genevieve	15.3	189,800	37.4	83.8	52.7	62,600
St. Louis-Carper	2.3	21,900	7.7	95.3	44.0	8,900
Devonian	3.4	23,900	43.9	74.0	75.6	10,200
Silurian	2.1	19,100	3.2	91.9	65.5	12,100
Ordovician	1.6	9,000	28.8	0.0	61.7	4,000
State	100.0	734,400	48.9	84.4	59.2	222,600

\*Includes undeveloped waterflood acreage.

voirs. On the average, the limestones have the lowest porosity (14.3 percent) of all the lithologic units investigated.

The permeability distributions in figure 3B have been constructed using equal intervals based on the  $\log_2$  of permeability, which has effectively normalized these distributions so that they closely resemble the porosity distributions. The computed permeability means given on the figure are the geometric means. A comparison of the porosities and permeabilities of the different lithologies in figure 4 shows that the very fine sandstones are on the average 27 percent less permeable, but only 2 percent less porous than the fine sandstones. These variations can be interpreted in terms of differences in primary textural parameters, such as grain size and sorting. Oolitic limestones, on the other hand, are on the average 56 percent more permeable and 13 percent less porous than the fine sandstones.

These average differences in porosity and permeability between all the sandstones (fine and very fine) and the oolitic limestones cannot be easily explained. Graf and Lamar (1950) outline a complex history for the development of porosity in oolitic rocks in a petrographic study of the Fredonia Limestone Member of the Ste. Genevieve Formation. They conclude that porosity in these rocks has been influenced by several post-depositional events including the deposition cements and solution of both cements and matrix materials. The low porosity and the high permeability of the oolitic limestones reflect the strong influence of secondary porosity on the permeability of these rocks.

#### Oil Gravity and Viscosity

The gravity of the crude oil in Illinois averages 36.8° API. In general, the gravity distribution in figure 4A reflects the depth range through which crude oil is found in each lithologic group; low gravity crudes are more prevalent in lithologies that are oil productive at shallow depths. The crude gravity distribution for the entire state (all lithologies) is skewed to the left and strongly peaked. A greater proportion of the crude oils found in Indiana and Kentucky parts of the Illinois Basin have lower gravities than those found in Illinois. It is probable that the addition of the Indiana and Kentucky data would increase the skewness of these distributions, but it is unlikely that a secondary mode would develop.

The viscosity distributions shown in figure 4B essentially mirror the gravity distributions.

The mean viscosity for all the crude in the state is 7.1 centipoise at 77° F.

#### Size and Development of Illinois Oil Fields

The number of surface acres in Illinois underlain by oil totals 573,390 acres. In comparison, the sum of the pay acreage in the state is 734,400 acres. On the average, then, each oil producing well produces from 1.3 pays.

Table 3 summarizes the data in table 2 for selected stratigraphic intervals and for all the oil fields in the state. Based on acreage, an estimated 48.9 percent of the oil-producing zones are included in active and abandoned waterfloods. Of the total of 350,000 pay acres which have been subject to injection, 15.6 percent have been abandoned. An estimated 59.2 percent, or a total of 222,600 acres, of the state's remaining primary acreage was still active as of January 1, 1968. The 222,600 acres include the pay acreage in existing flood areas which have not been developed for waterflood.

Table 3 also gives the total pay acres discovered in various stratigraphic intervals. Oil production in the state is most widespread in the Ste. Genevieve Limestone, the Aux Vases Sandstone, and the Cypress Sandstone Formations. Based on the percentage of the pay acres under flood, Chesterian sandstones have been the most widely developed for waterflood. In comparison, the occurrence of low-gravity, high-viscosity oils in the shallow Pennsylvanian oil sands has somewhat limited the development of these sands for waterflood.

Of the total reservoir pore volume, 22.9 percent of the oil-producing reservoirs in the state is in Pennsylvanian rocks (table 3), and 70.0 percent is in Mississippian rocks. Only 7.1 percent is found in Devonian, Silurian, and Ordovician rocks.

#### Future Development

It has been estimated by Mast (1969) that an average of 5000 acres per year will be developed for waterflood during 1970-1979. This would amount to approximately 25 percent of the remaining primary acreage and undeveloped flood acreage still active as of January 1, 1968. Future production from the Illinois oil fields will depend to a large extent on technological development of more efficient recovery processes.

Of total reservoir pore volume, 60 percent of Illinois oil reservoirs are in fine sandstone rocks which have an average porosity of 18.4 percent and an average permeability of 114 md. Average stock tank oil gravity is 36.8° API and the average viscosity of these crudes is 7.9 centipoise at 77° F. Very fine sands and siltstones make up approximately 17 percent of the Illinois oil reservoirs. These reservoirs are very similar to the sandstone reservoirs except that they have a lower average permeability of 83 millidarcys. Oolitic limestone reservoirs make up approximately 13 percent of the state total. These reservoirs are somewhat thinner and less porous (16 percent) but considerably more permeable (178 millidarcys) than the sandstone reservoirs.

These data make it possible to evaluate the susceptibility of the Illinois oil reservoirs to

the various types of oil recovery processes. Thermal processes have been most successful in reservoirs which contain low-gravity, high-viscosity crudes, but only a small percentage of the Illinois reservoirs fit this requirement.

Chemical processes in which fluid mobility is controlled should have the widest application for Illinois' future. This type of process is expensive to apply, however, because of high cost and large amounts of chemicals used. Based on permeability, porosity, thickness, and oil viscosity considerations, fine sandstone reservoirs in Illinois seem to be the most likely candidates for the application of these new recovery processes.

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