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OIL AND GAS DEVELOPMENTS IN KANSAS DURING 1961

By

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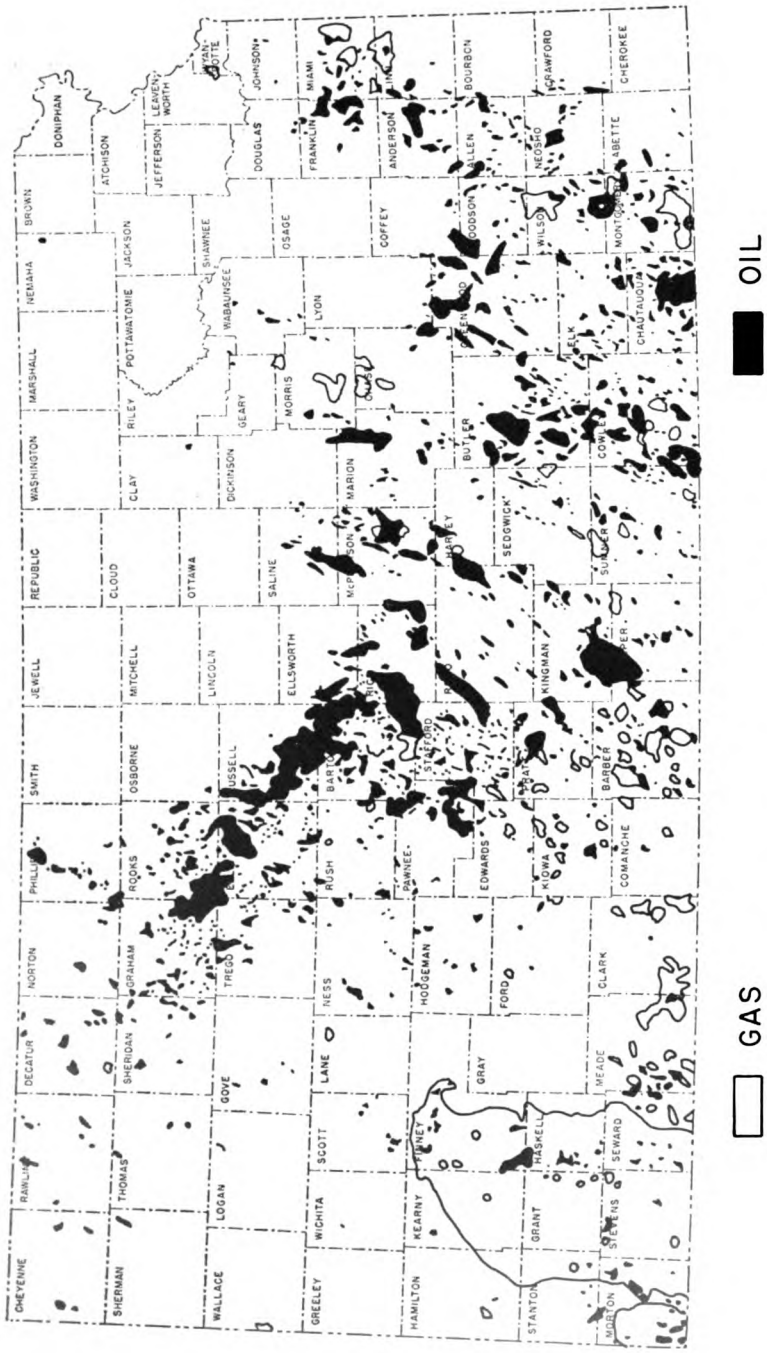

FIG. 1.—Index map of Kansas showing oil and gas producing areas.

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ABSTRACT

Kansas oil production in 1961 totaled 112,210,936 barrels, a 1.0 percent decrease from the previous year. The 1961 output of crude oil decreased in value to $333,266,480 from $336,633,308 in the preceding year, because of decreased production.

Natural gas production in Kansas totaled 676.2 billion cubic feet (14.65 p.s.i.a.), an increase of 6.9 percent; the Hugoton Gas Area produced 467.8 billion cubic feet, about 69 percent of the total.

During the year, 85 new oil fields, 15 new gas fields, and 4 that were both oil and gas fields were discovered; 14 previously abandoned fields were revived.

In 1961, 3,335 wells were recorded as drilled in Kansas in connection with the petroleum industry. Of the recorded completions, 1,315 were oil wells, 221 were gas wells, 87 were both oil and gas, 1,485 were dry holes, and 227 were saltwater disposal wells or wells used as input wells in secondary recovery operations. Of the 1,485 dry holes, 429 were wildcats. Estimates of wells not specifically reported, but for which drilling permits were issued, bring the total number of wells drilled in the state during the year to 4,239.

In 1961, Ellis County produced 10,281,756 barrels and was the leading oil-producing county. Barton and Russell Counties, ranked second and third, produced 10,022,065 barrels and 8,128,427 barrels respectively. The El Dorado field of Butler County was the top-ranking field in the state. The six leading oil fields—El Dorado, Bemis-Shutts, Spivey-Grabs-Basil, Hall-Gurney, Chase-Silica, and Trapp—accounted for more than 18 percent of the total annual production.

In 1961, Kansas fields produced 258.3 million gallons of natural gas liquids, valued at more than 13.5 million dollars. Proved reserves of Kansas crude oil at the end of the year were 878.0 million barrels, or .7 percent less than the previous year's reserves. Proved reserves of natural gas are about 19.2 trillion cubic feet, down 2.2 percent from 1960.

Production from recorded secondary recovery projects in Kansas amounted to 12,022,333 barrels of oil during 1961, but allowance for projects not reporting boosts the total to an estimated 20.2 million barrels. An estimated total of 17,662 oil wells and 3,688 injection wells were active during the year. Butler County, which yielded 5,248,023 barrels, led in the amount of oil produced by secondary recovery methods.

INTRODUCTION

During 1961, production of oil declined from that reported the previous year. Both the production of natural gas and the recovery of natural gas liquids increased. The total value of the crude oil produced during 1961 was less than that reported in 1960. Fluctuating prices averaged $2.97 a barrel. The value of natural gas was greater than in the previous year, although there was no change in estimated average price of 11 cents per thousand cubic feet. Prices for natural

gas liquids averaged near $2.21 a barrel, three cents more than the price estimated for the previous year.

During the year 85 new oil fields, 15 new gas fields, and 4 that were both oil and gas were discovered. Figure 1 is a generalized map of Kansas showing geographic distribution of areas producing oil and gas. There was a decrease in drilling and exploration activities as compared with 1960. Stafford County had the most new fields discovered during the year, 8. Other counties in which several new fields were discovered are Barton, Haskell, Decatur, Graham, and Stevens.

Reserves of crude oil and natural gas declined during the year, and reserves of natural gas liquids also decreased.

A condensed petroleum data table (Table 1) compares various phases of the industry in Kansas with those of the United States for 1960 and 1961. Production, value, and reserves of crude oil, natural gas, and liquified petroleum gases in Kansas from 1946-1961 are given in Table 2.

The total value of raw products of the petroleum industry (crude oil, natural gas, and natural gas liquids) produced in Kansas in 1961 was more than 421 million dollars, 3 million more than in the previous year. Figure 2 shows the relative values of 1961 oil and gas production by county. Of the 105 counties in Kansas, 80 reported oil and gas production during 1961. Because the price of crude oil decreases with decreasing gravity, and because different fields produce oils of different gravities, value by county is not proportional to production by county.

Ellis County in 1961 remained ahead of Barton County as the leading oil-producing county in the state. The **El Dorado** field of Butler County replaced **Bemis-Shutts** (Ellis and Rooks Counties) as the top oil producer in 1961.

Annual oil and gas production in Kansas since 1890 is shown graphically in Figure 3. Significant discoveries and developments by the petroleum industry in Kansas are also indicated.

Important developments in Kansas during 1961.—Butler County, considered by the industry as old established oil territory, led the state in the number of holes drilled in the search for new oil and gas production. Two new Mississippian fields were opened in the county during 1961 (**Ferrell South** and **Whitewater East**). The **Skaer** field (Simpson) was opened early in the year. Much of the drilling in Butler County was developmental; 45 oil wells, 13 dry holes, and 26 input wells were reported in the **El Dorado** field and 16 oil wells, 10 dry holes, and 1 saltwater disposal well in the **Paulson** field. Four offset oil wells and 2 dry holes were completed in the new **Ferrell South** field. Marion County, the leading county in number of holes drilled in search for new oil and gas production in 1960, was second in 1961 with a total of 241 exploratory and developmental wells. Two new

TABLE 1.—*Petroleum data and percentage changes for Kansas and United States, 1960-1961*

	Kansas figures		Change from previous year, percent	
	1960	1961	Kansas	United States
Crude oil production (barrels)	113,344,548[a]	112,210,936[a]	— 1.0	+1.65
Value of crude oil produced	$336,633,308	$333,266,480	— 1.0	.....
Kansas oil production as percentage of U.S. total	4.6	4.5	— 2.2	.....
Average price of oil	$2.97	$2.97	.....	.....
Rank of Kansas among oil-producing states	6th	6th	.....	.....
Proved reserves of liquid hydrocarbons (at year end), thousands of barrels	1,082,252[b]	1,061,606[b]	— 1.9	+0.98
Ratio of proved liquid hydrocarbon reserves to current annual production	9.0:1	8.9:1	— 1.1	.....
Oil-producing area of "western Kansas", acres	922,370[c]	908,880	— 1.5	.....
Natural gas production, M cu. ft.	632,609,850[d]	676,235,505	+ 6.9	+2.76
Value of natural gas produced	$69,587,083[e]	$74,385,906	+ 6.9	.....
Production of natural gasoline and LPG (natural gas liquids), gallons	250,789,014[f]	258,303,612	+ 3.0	+7.0
Value of natural gasoline and LPG	$13,196,279[g]	$13,591,690	+ 3.0	.....
Proved reserves of natural gas, millions of cubic feet	19,620,224[f]	19,190,005	— 2.2	+1.50
Ratio of proved natural gas reserves to current annual production	31.1:1	27.5:1	—11.6	.....
Gas-producing area of "western Kansas", acres	3,105,450	3,056,740	— 1.6	.....
New oil and gas pools discovered	99[h]	104		
Recorded well completions in Kansas				
Oil[h]	1,556	1,315		
Gas[h]	159	221		
Oil and gas[i]	68	87		
Dry	1,572	1,485		
Salt-water disposal[j]	181	227		
Unrecorded, estimated	953[k]	904		
Total recorded and estimated	4,489	4,239		
Wildcats and discovery wells (included in above total)	631	533		

[a] Figures supplied by State Corporation Commission, Conservation Division.
[b] Figures from American Petroleum Institute and American Gas Association, 1962. Barrels have 42 U.S. gallons and gas is based at 14.65 p.s.i.a. at 60° F.
[c] The petroleum area of "western Kansas" includes all producing counties west of the west line of Cowley, Butler, Marion, and Dickinson Counties.
[d] Figures supplied by State Corporation Commission, base 14.65 p.s.i.a.
[e] The minimum value of 11 cents per M cubic feet of gas at 14.65 p.s.i.a. has been applied to all Kansas gas production.
[f] Corrected figures.
[g] This aggregate figure is based on unit values of the several products that reflect wholesale prices at the plant.
[h] Omitting revived pools.
[i] Includes pool wells and new discoveries.
[j] Includes salt-water disposal and recorded secondary recovery input wells.
[k] Counties for which number of wells drilled in 1961 is entirely or in part estimated include Allen, Anderson, Bourbon, Chautauqua, Coffey, Crawford, Elk, Franklin, Greenwood, Labette, Linn, Miami, Montgomery, Neosho, Wilson, and Woodson. Estimates based on "intent-to-drill" records.

TABLE 2.—*Crude oil, natural gas, and LPG: production, value and reserves, Kansas, 1946-1961*

	Crude oil				Natural gas			Natural gasoline and LPG	
			Reserves, millions bbls.						
	Millions $	Millions bbls.	(crude oil)	Liquid Hydro.	Millions $	M cu.ft.	Reserves trillion cu.ft.	Millions $	Millions gals.
1946	138.8	97.2	545.3	.....	.....	.....	.....	....	82.5
1947	203.6	103.9	562.7	651.5	10.23	205.5	14.6	4.7	99.2
1948	280.0	108.0	674.4	776.4	12.84	240.2	14.4	9.5	107.5
1949	257.4	100.0	738.4	844.8	23.6	294.7	14.5	6.7	113.8
1950	275.4	107.3	732.2	895.8	25.9	361.8	13.8	9.6	155.3
1951	292.8	113.9	791.9	951.5	29.0	407.2	13.5	11.3	183.0
1952	294.0	114.4	917.0	1,085.3	32.7	408.7	14.2	12.0	196.5
1953	307.6	114.4	913.0	1,091.0	37.7	420.6	15.8	13.0	211.7
1954	333.6	118.3	978.5	1,153.6	44.6	405.8	15.8	11.8	193.8
1955	341.7	121.2	998.1	1,171.3	51.3	466.2	16.3	12.0	206.6
1956	351.0	124.5	992.2	1,163.8	57.8	525.9	17.6	11.7	199.4
1957	380.8	124.0	947.5	1,136.6	63.9	580.7	19.3	13.3	223.6
1958	362.2	119.9	922.4	1,122.9	59.0	535.7	20.2	10.3	225.2
1959	354.8	119.5	917.5	1,114.4	65.5	595.2	20.0	12.3	232.9
1960	336.6	113.4	883.9	1,082.3	69.6	632.6	19.6	13.2	250.8
1961	333.3	112.2	878.0	1,061.6	74.4	676.2	19.2	13.6	258.3

fields were named in Marion County—the **Bartell** and the **Stenzel**, both Mississippian production. The **Lost Springs** field in Marion County accounted for most of the well completions, 101 oil wells, 24 dry holes, and 15 gas wells. Activity was notable in the **Dobbs** field in Marion County also, where 20 oil wells, 3 oil and gas wells, and 6 dry holes were completed. It is significant that in the drilling in these two counties most of the development took place in or near existing fields, verified by the fact that only 10 wildcat wells were drilled in Butler County and 23 in Marion County.

As in the previous year, there was an intensified search for additional oil and gas reserves in the Hugoton Embayment in southwestern Kansas, specifically below the Permian rocks that contain the huge **Hugoton Gas Area**. Most of the new development in the Hugoton Embayment in Kansas was from the upper part of Mississippian and lower part of Pennsylvanian rocks. Because of higher drilling cost through the Mississippian carbonates in the embayment, exploratory wells usually penetrate only to the top of Mississippian rocks. As in previous years this economic factor discouraged deeper exploration in the basin.

During 1961, many new important oil and gas fields were opened in the Hugoton Embayment, including specifically the **Amazon Ditch** field and the **Cowgill** field in Finney County. The **Amazon Ditch** field produced oil from the Mississippian, and the **Cowgill** (about 3 miles southwest of Garden City) produced oil from Morrowan rocks (Pennsylvanian). An important offset of the **Nunn East** field in the northeast corner of the county was also completed in Mississippian rocks during the year. Two important deep developments took place in the Grant County portion of the Hugoton Embayment; the opening of the **DaVatz** and the **Ryus** fields. The **Ryus** produced both from the Marmaton and the Morrowan, and the **DaVatz** produced from the Mor-

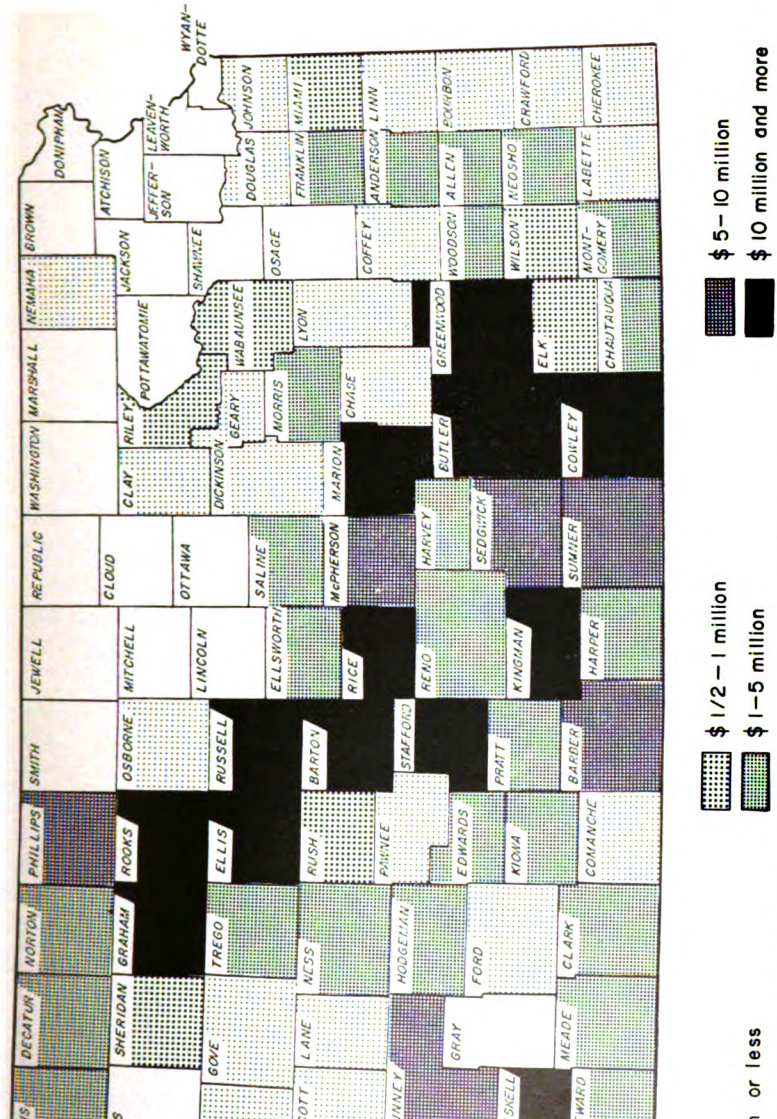

FIG. 2.—Map of Kansas showing relative value of 1961 oil and gas production by county.

rowan rocks. The **Ryus** field is an important development to the town of Ryus, which has as its namesake another field **(Ryus Townsite)** named earlier for Council Grove (Permian) gas production. In Haskell County, deep development beneath the Hugoton Gas Area was mostly in the Morrowan rocks except for the **Lemon North** and the **Lemon Northwest**, which were assigned multiple new producing horizons from Marmaton, Lansing-Kansas City, Cherokee, and Morrowan rocks. In Seward County, the **Ang** field was opened with new production from the Mississippian rocks. New Morrowan gas reserves **(Nich)** were opened in the Stanton County portion of the Basin, and in Stevens County the important **Cutter** and **Cutter South** fields were completed in Morrowan and Mississippian rocks, respectively. Subsequent development in the **Cutter** field uncovered oil in the Marmaton and Mississippian rocks.

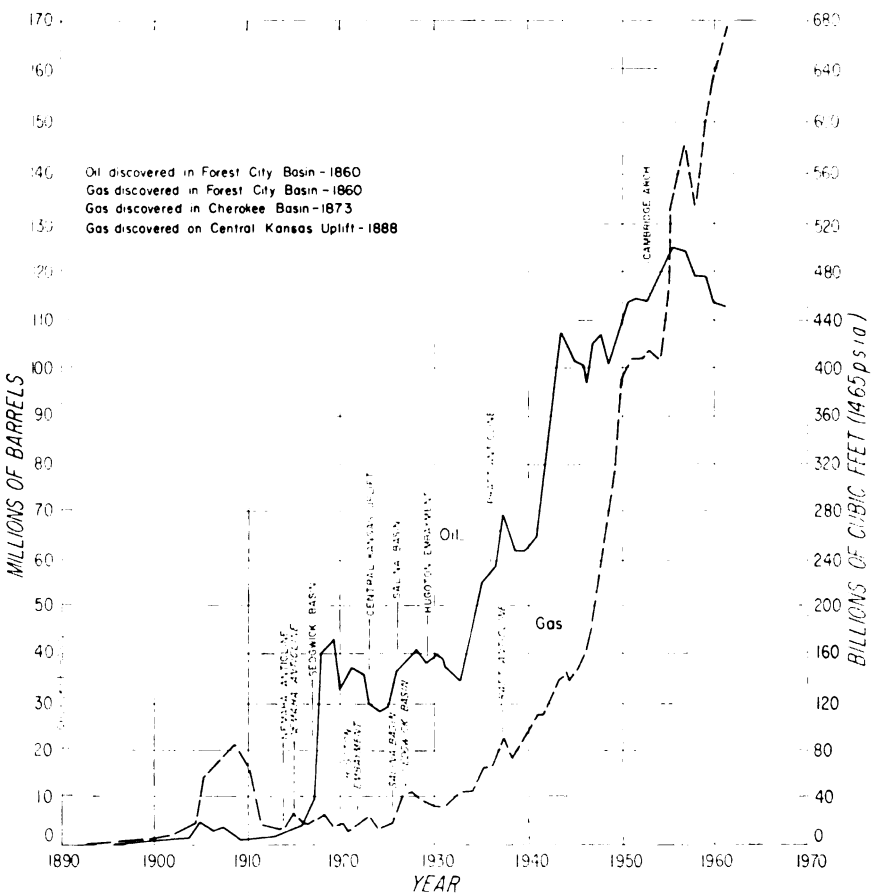

FIG. 3.—Annual oil and gas production in Kansas from 1890 to 1961 and year of discovery of oil or gas in different structural provinces.

There was continued developmental drilling in the larger fields in southwestern Kansas, including the **Pleasant Prairie** field in Finney, Haskell, and Kearney Counties and the **Eubank** field in Haskell County.

In old established fields a number of other zones below the **Hugoton Gas Area** were also opened during the year. In many instances these additional zones are more important than the original discovery zone.

Geographically outside the **Hugoton Gas Area** but within the Hugoton Embayment, operators were also very successful in locating additional important reserves of hydrocarbons during 1961. Important new fields in the area include the **Little Coon Creek** field in Ford County, with production from Cherokee rocks (offset drilling uncovered a second oil pay, the Mississippian); the **Richfield West** (Morrowan and Keyes sand) gas field in Morton County; and the **Wilburton South** (Topeka) gas field, also in Morton County, which is geographically overlapped by the **Hugoton Gas Area.**

Important new oil fields and gas fields opened during 1961 on the northeast flank of the Hugoton Embayment, paralleling the Central Kansas Uplift and Pratt Anticline, include the following fields: **Shimer** (Mississippian) gas field in Comanche County; **Hanston** and **Oppy** (Mississippian) oil fields in Hodgeman County; **Fralick West** (Mississippian) oil and gas and **Ursula** (Mississippian) gas fields in Kiowa County; **Pendennis** (Lansing-Kansas City) oil field in Lane County; **Arnold North** and **Arnold Southwest** (Mississippian) oil fields in Ness County (offset drilling opened Marmaton oil production in the **Arnold Southwest**); **Schwindt** (Reagan) oil field and **Shiley North** (Pennsylvanian conglomerate) oil field in Rush County. Considerable developmental drilling in the **Carver-Robbins** field in Pratt County found oil pays in the Lansing-Kansas City and Viola rocks.

Significant exploratory drilling in northwest Kansas includes the following developments during 1961. In Rawlins County a flurry of interest was created by the completion of the **Schmahl** field with reported new oil production from the Lansing-Kansas City rocks; however, offset wells drilled in the year were unsuccessful in adding reserves to the field. Developmental drilling in the **Sappa Creek** (Marmaton) field discovered Lansing-Kansas City oil. Four new fields were named in Decatur County during the year: **Jennings Northwest**, **Kathka**, and **Olive** (all Lansing-Kansas City production; **Kathka** was abandoned during the year); and **Lawson** ("Penn sand" production). No additional wells were reported in the **Cahoj** field in Rawlins County; however, 24 dry wildcats were completed in the county and 20 in neighboring Decatur County during the year. Little exploratory activity took place in the other northwestern Kansas counties during

1961. In the Salina Basin, just west of the Nemaha Anticline, the completion of a discovery well with low initial potential in Viola rocks, the **Koegeboehn North** in Chase County created some interest late in the year. Subsequent development north of the field, however, has been unsatisfactory.

Geographically within the Hugoton Embayment but outside of the **Hugoton Gas Area**, shallow gas developments during the year were significant. There was continued enlargement of the **Panoma Gas Area**, the apparently widespread Council Grove (Permian) gas field. Continued development brought a definition of the **Bradshaw Gas Area** in southwestern Kansas, and in Scott County north of the **Hugoton Gas Area** additional Chase Group production resulted in the naming of the **Hugoton North** field just outside of Scott City.

In south-central Kansas considerable developmental drilling took place during 1961; however, activity was highlighted by several oil finds through exploratory drilling. In Harper County the **Rex** field (Simpson) and the **Sullivan** field (Viola) were opened late in the year. Offset drilling in Reno County, from the **Abbeyville** field, revealed a new oil pool, **Abbeyville East** (Lansing-Kansas City), as did the southwest offset to the **Sterling**, the latter opening Pennsylvanian conglomerate oil in October. In December exploration in Sedgwick County led to the discovery of the **Gillian** oil field (Simpson). In the **Alameda** field, two new oil pays (Viola and Simpson) were developed during the year.

During 1961, the **Vassar** (Mississippian) oil field was named, opening oil production in Osage County, and several offset wells were completed. However, because of the low gravity crude oil, the field is considered temporarily abandoned while application of various recovery techniques is considered.

A startling discovery came in November with the opening of the **Brehm** field in Pratt County, where the discovery well penetrated an extraordinarily thick section of Arbuckle rocks. This development followed the opening in October, of an Arbuckle field (the **Tobias**) in Rice County, also in an unusually thick section of Arbuckle. On the basis of evidence provided by offset drilling, some operators believe that the abnormally thick section of Arbuckle in these fields is due to local faulting. The application of this concept of localized faulting has played an important part in the re-evaluation of other Arbuckle fields, with an eye toward exploration for new Arbuckle reservoirs in Kansas.

Marketing developments.—Marketing of Kansas natural gas liquids and natural gas has been assuming an increasing proportion of the national fuel market. However, although the national demand for crude oil has been growing with the national economy each year, Kansas' share of the domestic crude oil market (about 4.5 percent of

the nation's total) has decreased in the past few years. This decline is probably a result of increased crude oil imports as well as increased oil production in some non-prorated states. The pattern is also apparent in the other prorated states, while Colorado, Wyoming, Nebraska, North Dakota, and Utah, which are non-prorated, have shown steady increases in their share of the national market since 1952.

Since 1950 Kansas and other prorated states show similar production-gains curves, with highs between 1955 and 1957 and declines since then. The prorated states generally show only modest production gains over 1950, a reflection of the relatively high output in the base year.

In net addition to reserves or total petroleum hydrocarbons (including crude oil, natural gas liquids, and natural gas converted to equivalent crude barrels), Kansas has declined since 1958. In reserve life index (expressing the relation of current annual production to current reserves) in crude oil only, Kansas has been consistently below the national average for the last ten years.

The question of each state's fair share of the national market is, of course, pertinent to the health of the economy of Kansas (Oil and Gas Journal, February 26, 1962). It is also related to larger questions of national defense and foreign trade. For example, foreign crude oil can be produced cheaply and is sometimes thought to be priced according to political considerations in the cold war. And although the average Kansas well now produces less than 7½ barrels per day, these same low-yield wells would, in time of national emergency, be part of the lifeline of the nation's petroleum supply.

Tables.—Detailed production tables for oil and gas from all producing counties are given in this report (Tables 34, 35). In Table 34, the listing for each county shows both current and known cumulative oil production, producing area in acres, name of field (alphabetically arranged), discovery year, producing zone, estimated average thickness of producing zone, estimated average gravity of oil, reported number of producing wells, and number of producing wells plugged during 1961. Similar data for gas are given in Table 35. Where possible, production from different zones is differentiated, and totals for each county are given. Where oil or gas pools extend across county lines, each county's production has been computed on the basis of individual leases.

Test wells drilled within 1½ miles of producing limits of fields are called "extension wells" and are not shown on Plate 1. Dry test holes drilled more than 1½ miles from producing wells are classified as "wildcat wells" and are plotted on the map. Dry wildcat wells completed during 1961 are given by county in Table 33.

Tops of different stratigraphic units listed in Table 33 were deter-

mined from electric, radioactivity, and sonic logs. Holes penetrating Precambrian rocks are noted. If no electric, radioactivity, or sonic well log was available to the Survey, an asterisk appears in front of the well name to indicate that other sources of information were used to determine tops. These sources include logs of the Kansas Sample Log Service, drillers logs, and scout tops reported by Data, Inc., and by the Independent Oil and Gas Service.

Because the location of boundaries of producing areas is arbitrary, definition of wildcat wells may also be somewhat arbitrary; hence, the total number of wildcat wells reported by various sources is likely to differ.

Only wells drilled to completion within the year are counted as 1961 completions. Thus, wells worked over, although completed as producing wells, are not counted as 1961 completions. Unless an unproductive well was drilled expressly for the purpose of injection or for saltwater disposal it is classified as a dry hole.

Area of production.—Areas of oil and gas production are shown as accurately as possible on Plate 1. Where no dry holes limit the field, boundaries have been projected a short distance outside the outermost producing wells. Undoubtedly, many reservoirs extend beyond the limits indicated; however, future field developments have not been anticipated.

Maps.—Figure 1 is an index map of Kansas showing generalized areas of oil and gas production. A larger scale map of Kansas shows all presently producing oil and gas areas in the state (Pl. 1).

Abandoned and combined fields.—The Kansas Nomenclature Committee recognized 7 fields as abandoned in 1961. Data on discovery wells and cumulative production of abandoned fields are included in Table 30. Also during 1961, 36 oil or gas fields were combined with other fields (Table 31). As has been the custom of the State Geological Survey, outlines of abandoned fields except those fields discovered and abandoned in 1961 are not shown on Plate 1.

Well elevations.—Elevations of all wildcat tests in the state have been taken from scout reports of Data, Inc.

Acknowledgments.—Members of the Conservation Division of the State Corporation Commission (especially John Roberts, Assistant Director, and H. A. Beverlin) have long cooperated to the fullest extent with the State Geological Survey. Without their cooperation, this report would not be possible.

Thanks are expressed to American Petrofina Co. of Texas; Apco Oil Corp.; Beaumont Petroleum Co.; Becker-Brigham Oil Co.; Bison Oil Co.; Marvin E. Boyer; Cities Service Oil Co.; Clark Oil and Refining Corp.; Clear Creek, Inc.; Mack C. Colt; Continental Oil Co.; Cooperative Refinery Association; Deerfield Oil Corp.; Derby Refining

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TABLE 1.—*Petroleum data and percentage changes for Kansas and United States, 1960–1961*

	Kansas figures		Change from previous year, percent	
	1960	1961	Kansas	United States
Crude oil production (barrels)	113,344,548[a]	112,210,936[a]	— 1.0	+1.65
Value of crude oil produced	$336,633,308	$333,266,480	— 1.0	.....
Kansas oil production as percentage of U.S. total	4.6	4.5	— 2.2	.....
Average price of oil	$2.97	$2.97	.....	.....
Rank of Kansas among oil-producing states	6th	6th	.....	.....
Proved reserves of liquid hydrocarbons (at year end), thousands of barrels	1,082,252[b]	1,061,606[b]	— 1.9	+0.98
Ratio of proved liquid hydrocarbon reserves to current annual production	9.0:1	8.9:1	— 1.1	.....
Oil-producing area of "western Kansas", acres	922,370[c]	908,880	— 1.5	.....
Natural gas production, M cu. ft.	632,609,850[d]	676,235,505	+ 6.9	+2.76
Value of natural gas produced	$69,587,083[e]	$74,385,906	+ 6.9	.....
Production of natural gasoline and LPG (natural gas liquids), gallons	250,789,014[f]	258,303,612	+ 3.0	+7.0
Value of natural gasoline and LPG	$13,196,279[g]	$13,591,690	+ 3.0	.....
Proved reserves of natural gas, millions of cubic feet	19,620,224[f]	19,190,005	— 2.2	+1.50
Ratio of proved natural gas reserves to current annual production	31.1:1	27.5:1	—11.6	.....
Gas-producing area of "western Kansas", acres	3,105,450	3,056,740	— 1.6	.....
New oil and gas pools discovered	99[h]	104		
Recorded well completions in Kansas				
Oil[h]	1,556	1,315		
Gas[h]	159	221		
Oil and gas[i]	68	87		
Dry	1,572	1,485		
Salt-water disposal[j]	181	227		
Unrecorded, estimated	953[k]	904		
Total recorded and estimated	4,489	4,239		
Wildcats and discovery wells (included in above total)	631	533		

[a] Figures supplied by State Corporation Commission, Conservation Division.
[b] Figures from American Petroleum Institute and American Gas Association, 1962. Barrels have 42 U.S. gallons and gas is based at 14.65 p.s.i.a. at 60°F.
[c] The petroleum area of "western Kansas" includes all producing counties west of the west line of Cowley, Butler, Marion, and Dickinson Counties.
[d] Figures supplied by State Corporation Commission, base 14.65 p.s.i.a.
[e] The minimum value of 11 cents per M cubic feet of gas at 14.65 p.s.i.a. has been applied to all Kansas gas production.
[f] Corrected figures.
[g] This aggregate figure is based on unit values of the several products that reflect wholesale prices at the plant.
[h] Omitting revived pools.
[i] Includes pool wells and new discoveries.
[j] Includes salt-water disposal and recorded secondary recovery input wells.
[k] Counties for which number of wells drilled in 1961 is entirely or in part estimated include Allen, Anderson, Bourbon, Chautauqua, Coffey, Crawford, Elk, Franklin, Greenwood, Labette, Linn, Miami, Montgomery, Neosho, Wilson, and Woodson. Estimates based on "intent-to-drill" records.

TABLE 2.—*Crude oil, natural gas, and LPG: production, value and reserves, Kansas, 1946-1961*

	Crude oil				Natural gas			Natural gasoline and LPG	
			Reserves, millions bbls.						
	Millions $	Millions bbls.	(crude oil)	Liquid Hydro.	Millions $	M cu.ft.	Reserves trillion cu.ft.	Millions $	Millions gals.
1946	138.8	97.2	545.3	.....	.....	.....	.....	....	82.5
1947	203.6	103.9	562.7	651.5	10.23	205.5	14.6	4.7	99.2
1948	280.0	108.0	674.4	776.4	12.84	240.2	14.4	9.5	107.5
1949	257.4	100.0	738.4	844.8	23.6	294.7	14.5	6.7	113.8
1950	275.4	107.3	732.2	895.8	25.9	361.8	13.8	9.6	155.3
1951	292.8	113.9	791.9	951.5	29.0	407.2	13.5	11.3	183.0
1952	294.0	114.4	917.0	1,085.3	32.7	408.7	14.2	12.0	196.5
1953	307.6	114.4	913.0	1,091.0	37.7	420.6	15.8	13.0	211.7
1954	333.6	118.3	978.5	1,153.6	44.6	405.8	15.8	11.8	193.8
1955	341.7	121.2	998.1	1,171.3	51.3	466.2	16.3	12.0	206.6
1956	351.0	124.5	992.2	1,163.8	57.8	525.9	17.6	11.7	199.4
1957	380.8	124.0	947.5	1,136.6	63.9	580.7	19.3	13.3	223.6
1958	362.2	119.9	922.4	1,122.9	59.0	535.7	20.2	10.3	225.2
1959	354.8	119.5	917.5	1,114.4	65.5	595.2	20.0	12.3	232.9
1960	336.6	113.4	883.9	1,082.3	69.6	632.6	19.6	13.2	250.8
1961	333.3	112.2	878.0	1,061.6	74.4	676.2	19.2	13.6	258.3

fields were named in Marion County—the **Bartell** and the **Stenzel**, both Mississippian production. The **Lost Springs** field in Marion County accounted for most of the well completions, 101 oil wells, 24 dry holes, and 15 gas wells. Activity was notable in the **Dobbs** field in Marion County also, where 20 oil wells, 3 oil and gas wells, and 6 dry holes were completed. It is significant that in the drilling in these two counties most of the development took place in or near existing fields, verified by the fact that only 10 wildcat wells were drilled in Butler County and 23 in Marion County.

As in the previous year, there was an intensified search for additional oil and gas reserves in the Hugoton Embayment in southwestern Kansas, specifically below the Permian rocks that contain the huge **Hugoton Gas Area**. Most of the new development in the Hugoton Embayment in Kansas was from the upper part of Mississippian and lower part of Pennsylvanian rocks. Because of higher drilling cost through the Mississippian carbonates in the embayment, exploratory wells usually penetrate only to the top of Mississippian rocks. As in previous years this economic factor discouraged deeper exploration in the basin.

During 1961, many new important oil and gas fields were opened in the Hugoton Embayment, including specifically the **Amazon Ditch** field and the **Cowgill** field in Finney County. The **Amazon Ditch** field produced oil from the Mississippian, and the **Cowgill** (about 3 miles southwest of Garden City) produced oil from Morrowan rocks (Pennsylvanian). An important offset of the **Nunn East** field in the northeast corner of the county was also completed in Mississippian rocks during the year. Two important deep developments took place in the Grant County portion of the Hugoton Embayment; the opening of the **DaVatz** and the **Ryus** fields. The **Ryus** produced both from the Marmaton and the Morrowan, and the **DaVatz** produced from the Mor-

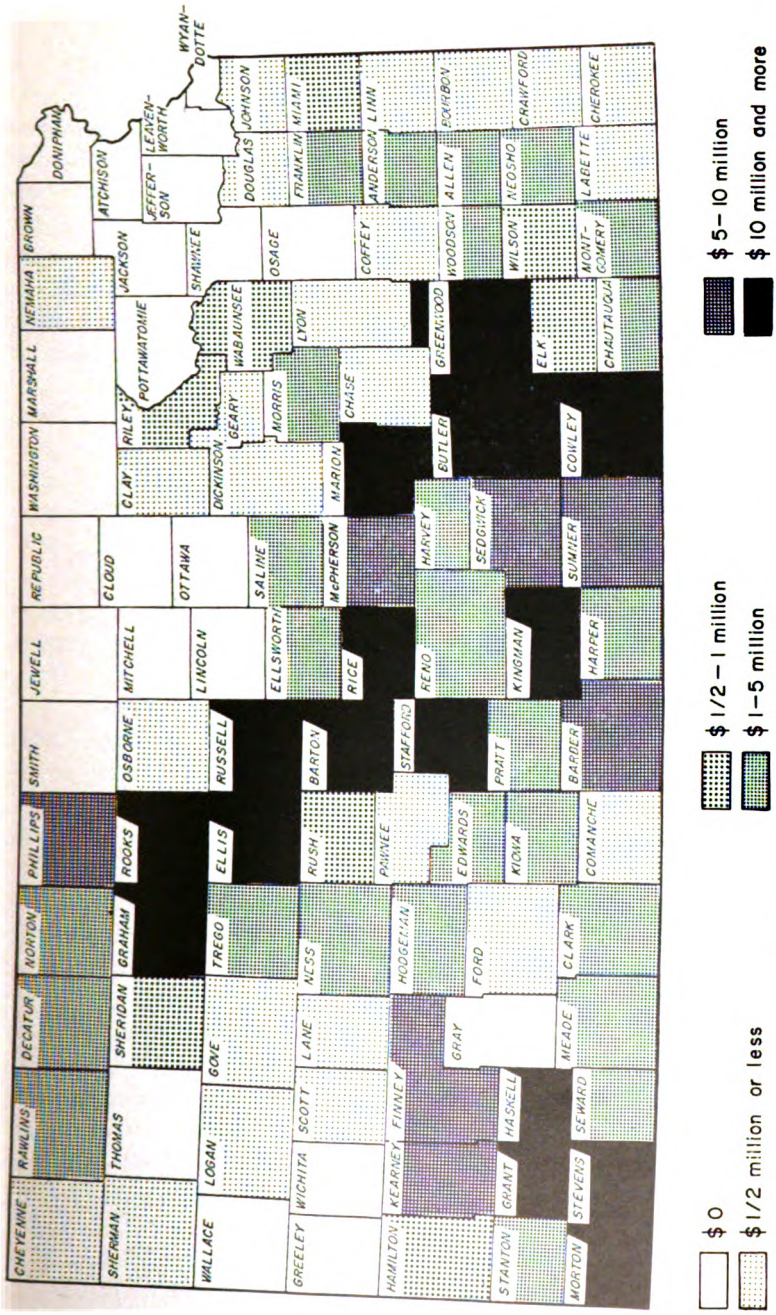

FIG. 2.—Map of Kansas showing relative value of 1961 oil and gas production by county.

rowan rocks. The **Ryus** field is an important development to the town of Ryus, which has as its namesake another field **(Ryus Townsite)** named earlier for Council Grove (Permian) gas production. In Haskell County, deep development beneath the Hugoton Gas Area was mostly in the Morrowan rocks except for the **Lemon North** and the **Lemon Northwest**, which were assigned multiple new producing horizons from Marmaton, Lansing-Kansas City, Cherokee, and Morrowan rocks. In Seward County, the **Ang** field was opened with new production from the Mississippian rocks. New Morrowan gas reserves **(Nich)** were opened in the Stanton County portion of the Basin, and in Stevens County the important **Cutter** and **Cutter South** fields were completed in Morrowan and Mississippian rocks, respectively. Subsequent development in the **Cutter** field uncovered oil in the Marmaton and Mississippian rocks.

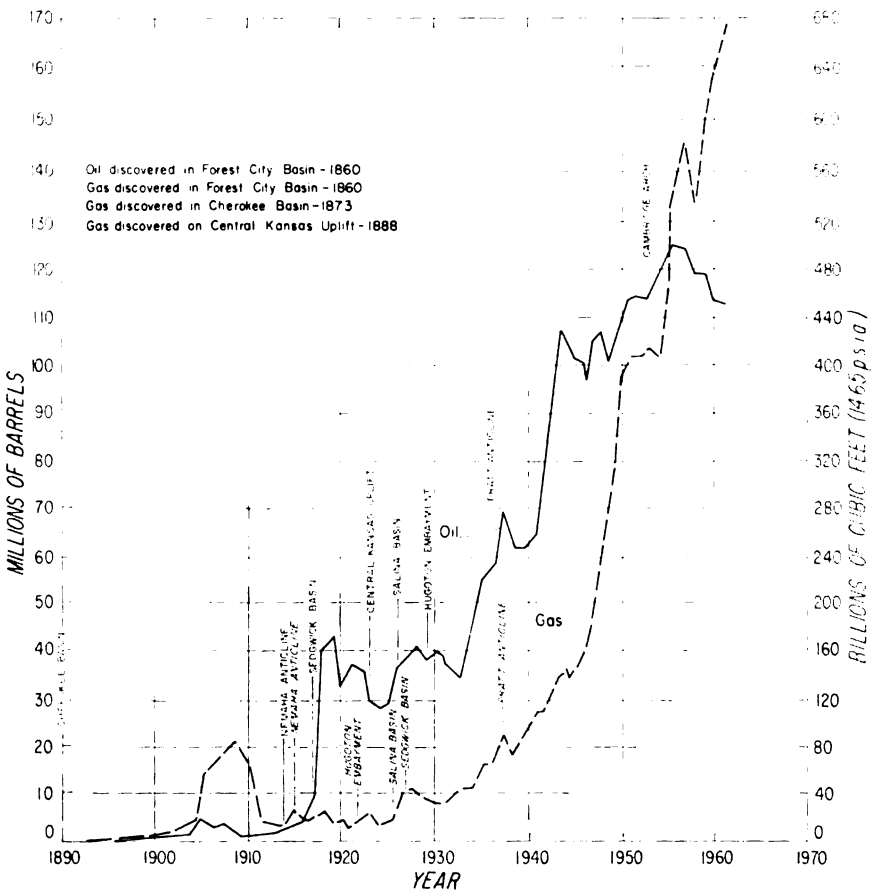

Fig. 3.—Annual oil and gas production in Kansas from 1890 to 1961 and year of discovery of oil or gas in different structural provinces.

There was continued developmental drilling in the larger fields in southwestern Kansas, including the **Pleasant Prairie** field in Finney, Haskell, and Kearney Counties and the **Eubank** field in Haskell County.

In old established fields a number of other zones below the **Hugoton Gas Area** were also opened during the year. In many instances these additional zones are more important than the original discovery zone.

Geographically outside the **Hugoton Gas Area** but within the Hugoton Embayment, operators were also very successful in locating additional important reserves of hydrocarbons during 1961. Important new fields in the area include the **Little Coon Creek** field in Ford County, with production from Cherokee rocks (offset drilling uncovered a second oil pay, the Mississippian); the **Richfield West** (Morrowan and Keyes sand) gas field in Morton County; and the **Wilburton South** (Topeka) gas field, also in Morton County, which is geographically overlapped by the **Hugoton Gas Area.**

Important new oil fields and gas fields opened during 1961 on the northeast flank of the Hugoton Embayment, paralleling the Central Kansas Uplift and Pratt Anticline, include the following fields: **Shimer** (Mississippian) gas field in Comanche County; **Hanston** and **Oppy** (Mississippian) oil fields in Hodgeman County; **Fralick West** (Mississippian) oil and gas and **Ursula** (Mississippian) gas fields in Kiowa County; **Pendennis** (Lansing-Kansas City) oil field in Lane County; **Arnold North** and **Arnold Southwest** (Mississippian) oil fields in Ness County (offset drilling opened Marmaton oil production in the **Arnold Southwest**); **Schwindt** (Reagan) oil field and **Shiley North** (Pennsylvanian conglomerate) oil field in Rush County. Considerable developmental drilling in the **Carver-Robbins** field in Pratt County found oil pays in the Lansing-Kansas City and Viola rocks.

Significant exploratory drilling in northwest Kansas includes the following developments during 1961. In Rawlins County a flurry of interest was created by the completion of the **Schmahl** field with reported new oil production from the Lansing-Kansas City rocks; however, offset wells drilled in the year were unsuccessful in adding reserves to the field. Developmental drilling in the **Sappa Creek** (Marmaton) field discovered Lansing-Kansas City oil. Four new fields were named in Decatur County during the year: **Jennings Northwest, Kathka,** and **Olive** (all Lansing-Kansas City production; **Kathka** was abandoned during the year); and **Lawson** ("Penn sand" production). No additional wells were reported in the **Cahoj** field in Rawlins County; however, 24 dry wildcats were completed in the county and 20 in neighboring Decatur County during the year. Little exploratory activity took place in the other northwestern Kansas counties during

1961. In the Salina Basin, just west of the Nemaha Anticline, the completion of a discovery well with low initial potential in Viola rocks, the **Koegeboehn North** in Chase County created some interest late in the year. Subsequent development north of the field, however, has been unsatisfactory.

Geographically within the Hugoton Embayment but outside of the **Hugoton Gas Area**, shallow gas developments during the year were significant. There was continued enlargement of the **Panoma Gas Area**, the apparently widespread Council Grove (Permian) gas field. Continued development brought a definition of the **Bradshaw Gas Area** in southwestern Kansas, and in Scott County north of the **Hugoton Gas Area** additional Chase Group production resulted in the naming of the **Hugoton North** field just outside of Scott City.

In south-central Kansas considerable developmental drilling took place during 1961; however, activity was highlighted by several oil finds through exploratory drilling. In Harper County the **Rex** field (Simpson) and the **Sullivan** field (Viola) were opened late in the year. Offset drilling in Reno County, from the **Abbeyville** field, revealed a new oil pool, **Abbeyville East** (Lansing-Kansas City), as did the southwest offset to the **Sterling**, the latter opening Pennsylvanian conglomerate oil in October. In December exploration in Sedgwick County led to the discovery of the **Gillian** oil field (Simpson). In the **Alameda** field, two new oil pays (Viola and Simpson) were developed during the year.

During 1961, the **Vassar** (Mississippian) oil field was named, opening oil production in Osage County, and several offset wells were completed. However, because of the low gravity crude oil, the field is considered temporarily abandoned while application of various recovery techniques is considered.

A startling discovery came in November with the opening of the **Brehm** field in Pratt County, where the discovery well penetrated an extraordinarily thick section of Arbuckle rocks. This development followed the opening in October, of an Arbuckle field (the **Tobias**) in Rice County, also in an unusually thick section of Arbuckle. On the basis of evidence provided by offset drilling, some operators believe that the abnormally thick section of Arbuckle in these fields is due to local faulting. The application of this concept of localized faulting has played an important part in the re-evaluation of other Arbuckle fields, with an eye toward exploration for new Arbuckle reservoirs in Kansas.

Marketing developments.—Marketing of Kansas natural gas liquids and natural gas has been assuming an increasing proportion of the national fuel market. However, although the national demand for crude oil has been growing with the national economy each year, Kansas' share of the domestic crude oil market (about 4.5 percent of

the nation's total) has decreased in the past few years. This decline is probably a result of increased crude oil imports as well as increased oil production in some non-prorated states. The pattern is also apparent in the other prorated states, while Colorado, Wyoming, Nebraska, North Dakota, and Utah, which are non-prorated, have shown steady increases in their share of the national market since 1952.

Since 1950 Kansas and other prorated states show similar production-gains curves, with highs between 1955 and 1957 and declines since then. The prorated states generally show only modest production gains over 1950, a reflection of the relatively high output in the base year.

In net addition to reserves or total petroleum hydrocarbons (including crude oil, natural gas liquids, and natural gas converted to equivalent crude barrels), Kansas has declined since 1958. In reserve life index (expressing the relation of current annual production to current reserves) in crude oil only, Kansas has been consistently below the national average for the last ten years.

The question of each state's fair share of the national market is, of course, pertinent to the health of the economy of Kansas (Oil and Gas Journal, February 26, 1962). It is also related to larger questions of national defense and foreign trade. For example, foreign crude oil can be produced cheaply and is sometimes thought to be priced according to political considerations in the cold war. And although the average Kansas well now produces less than 7½ barrels per day, these same low-yield wells would, in time of national emergency, be part of the lifeline of the nation's petroleum supply.

Tables.—Detailed production tables for oil and gas from all producing counties are given in this report (Tables 34, 35). In Table 34, the listing for each county shows both current and known cumulative oil production, producing area in acres, name of field (alphabetically arranged), discovery year, producing zone, estimated average thickness of producing zone, estimated average gravity of oil, reported number of producing wells, and number of producing wells plugged during 1961. Similar data for gas are given in Table 35. Where possible, production from different zones is differentiated, and totals for each county are given. Where oil or gas pools extend across county lines, each county's production has been computed on the basis of individual leases.

Test wells drilled within 1½ miles of producing limits of fields are called "extension wells" and are not shown on Plate 1. Dry test holes drilled more than 1½ miles from producing wells are classified as "wildcat wells" and are plotted on the map. Dry wildcat wells completed during 1961 are given by county in Table 33.

Tops of different stratigraphic units listed in Table 33 were deter-

mined from electric, radioactivity, and sonic logs. Holes penetrating Precambrian rocks are noted. If no electric, radioactivity, or sonic well log was available to the Survey, an asterisk appears in front of the well name to indicate that other sources of information were used to determine tops. These sources include logs of the Kansas Sample Log Service, drillers logs, and scout tops reported by Data, Inc., and by the Independent Oil and Gas Service.

Because the location of boundaries of producing areas is arbitrary, definition of wildcat wells may also be somewhat arbitrary; hence, the total number of wildcat wells reported by various sources is likely to differ.

Only wells drilled to completion within the year are counted as 1961 completions. Thus, wells worked over, although completed as producing wells, are not counted as 1961 completions. Unless an unproductive well was drilled expressly for the purpose of injection or for saltwater disposal it is classified as a dry hole.

Area of production.—Areas of oil and gas production are shown as accurately as possible on Plate 1. Where no dry holes limit the field, boundaries have been projected a short distance outside the outermost producing wells. Undoubtedly, many reservoirs extend beyond the limits indicated; however, future field developments have not been anticipated.

Maps.—Figure 1 is an index map of Kansas showing generalized areas of oil and gas production. A larger scale map of Kansas shows all presently producing oil and gas areas in the state (Pl. 1).

Abandoned and combined fields.—The Kansas Nomenclature Committee recognized 7 fields as abandoned in 1961. Data on discovery wells and cumulative production of abandoned fields are included in Table 30. Also during 1961, 36 oil or gas fields were combined with other fields (Table 31). As has been the custom of the State Geological Survey, outlines of abandoned fields except those fields discovered and abandoned in 1961 are not shown on Plate 1.

Well elevations.—Elevations of all wildcat tests in the state have been taken from scout reports of Data, Inc.

Acknowledgments.—Members of the Conservation Division of the State Corporation Commission (especially John Roberts, Assistant Director, and H. A. Beverlin) have long cooperated to the fullest extent with the State Geological Survey. Without their cooperation, this report would not be possible.

Thanks are expressed to American Petrofina Co. of Texas; Apco Oil Corp.; Beaumont Petroleum Co.; Becker-Brigham Oil Co.; Bison Oil Co.; Marvin E. Boyer; Cities Service Oil Co.; Clark Oil and Refining Corp.; Clear Creek, Inc.; Mack C. Colt; Continental Oil Co.; Cooperative Refinery Association; Deerfield Oil Corp.; Derby Refining

TABLE 27.—*Summary of 1961 operations, by county*

				Wells drilled in 1961						Reworked wells											
	[illegible]ds																		drilled*	drill issued**	oil wells
Rush	22	282,064	1,259,158	10	0		11	0	16					1	2	1	4		45	44	107
Russell	43	8,128,427	271,021	68	1	1	6	1	31	17			6	4	3	1			107	117	2,952
Saline	16	718,764		49			1	4	16	3			1	1	1		1		66	69	336
Scott	8	67,758		2	2			3	8						2				12	14	18
Sedgwick	42	2,163,368		23			3	12	35	2			1	2	1				61	55	661
Seward	25	420,564	30,146,771	17	7	8		1	9	1				2	1				41	53	72
Sheridan	15	293,685						3	4										4	5	76
Sherman	1	84,898						1	2										2	2	9
Smith																			0	2	
Stafford	177	6,002,552	2,552,470	103	8	9	1	3	113	24	2		1	5	8	3	2		234	254	1,483
Stanton	10	25,353	23,776,419		11			9	16						2				27	27	9
Stevens	11	64,722	129,939,907	2	6	5		1	3						4				16	20	11
Sumner	70	3,175,412	403,761	21	1	1	1	26	77	2	1	1	1	2	2		2		101	109	855
Thomas	3							9	9										9	9	1
Trego	30	1,537,088		12				5	13	5							1		25	30	293
Wabaunsee	7	270,432						3	4										4	3	35
Wallace	1							2	2										2	2	
Wichita	1																		0	2	1
Wilson	11	302,860	107,289	5			15												130	158	634
Woodson	22	781,758	386	2			2			1									99	114	1,126
Wyandotte	1																		0	1	

* Includes estimated wells.
**Based on intents-to-drill filed with Kansas Corporation Commission.

Co.; Dunne-Gardner; Virgil Gamble; Humble Oil and Refining Co.; Indiana Oil Purchasing Co.; Keas Drilling Co.; Joe Maclaskey; W. L. Maclaskey; Mid-America Refining Co., Inc.; Mobil Crude Oil Purchasing Co.; Mohawk Petroleum Co.; Robert Page; Phillips Petroleum Co.; Plains Oil Transportation, Inc.; Producers Pipe Line Co.; Rock Island Oil and Refining Co.; Sinclair Oil and Gas Co.; Sinclair Crude Oil Co.; Skelly Oil Co.; Stekoll Petroleum Co.; Lester Town; and Vickers Petroleum Co., who send monthly oil purchase reports to the Survey and who have helped in many other ways.

Appreciation is expressed to the Nomenclature Committee of the Kansas Geological Society for supplying their data on oil and gas pools discovered during the year and for their areal descriptions of existing pools.

Special thanks are due to J. E. Davies of the Kansas Sample Log Service for permission to use well-sample data on some rank wildcat tests drilled during the year, and to Data, Inc., for its assistance in supplying well information.

The Survey is pleased to acknowledge assistance from Vance E. Rowe of Petroleum Statistical Guide, Inc., who supplied a part of the crude oil production figures, and from Dwight's Oil and Gas Reports, which made available some gas production figures.

Many persons engaged in various phases of the petroleum industry in Kansas, including Charles W. Studt and Harvel White, have been generous in providing data used in this report. Thanks are extended to numerous companies and to individuals who have contributed information on secondary recovery production and drilling activities connected with secondary recovery.

EXPLORATION

A summary of the drilling activity in Kansas during 1961 is given in Table 27. Comparison of development by county is facilitated by inclusion of statewide data in this single table.

New fields.—During 1961, 85 oil fields, 15 gas fields, and 4 that were both oil and gas fields were discovered in Kansas (Table 28). On Plate 1 these new fields are emphasized by a heavier outline than that which indicates the older fields. Fourteen previously abandoned oil or gas fields were revived during the year (Table 29). Of the 118 new and revived fields, the discovery wells of 11 were carried by scout reports as dry and abandoned. Thirty-six fields were combined with other fields.

Stafford County has the most new fields named, 8, followed by Barton County with 7, Haskell County with 5, and Decatur, Graham and Stevens Counties each with 4. The number of oil and gas fields (104) discovered during 1961 is 5 more than the 1960 total. The total

number of Kansas counties that have produced or are producing commercial quantities of oil or gas or both remained at 85. Pertinent data on new pools are given in Table 28.

Table 32 summarizes oil and gas zones discovered in established producing fields during 1961; 73 new zones were named, as compared with 25 the previous year. Data similar to those presented for new pools are also given in this table. These new oil and gas zones are significant, because in many fields the new zone may be economically more important than the original discovery.

Wells drilled during 1961.—There were 3,335 wells recorded as drilled in the state during 1961. It is certain that numerous shallow wells in several eastern Kansas counties were not recorded and thus are not included in the above total. It is estimated from drilling permits on file with the Kansas Corporation Commission and from surveys of secondary recovery projects that at least 904 such unrecorded wells were drilled in 1961. Of the reported tests, 1,315 produced oil, 221 gas, and 87 oil and gas; 1,485 were dry and abandoned; and 227 were saltwater disposal wells or input wells drilled in connection with secondary recovery operations. New field discoveries and revived fields accounted for 118 of the oil and gas wells (11 wells were abandoned later in the year); 429 of the dry holes were wildcat tests. A list of Kansas dry wildcat tests is given by county in Table 33.

In each of four Kansas counties, more than 200 wells were recorded or estimated as drilled in 1961. Butler County led with 244 new wells, followed by Marion with 241, Stafford with 234 and Allen with 225. These four counties accounted for about 22 percent of the total number of wells drilled in the state during 1961.

A statute requiring drillers to file an intent-to-drill application with the State Corporation Commission has facilitated tabulation of new wells, especially in non-scouted eastern Kansas areas. Figure 4 shows, by county, the geographic distribution of wells tabulated on the basis of applications filed. Table 3 lists, by county, the number of permits issued during 1961.

Drilling rigs.—Rotary rigs active in Kansas reached a peak number of 143 for one month and averaged 105 per month during 1961 (Oil and Gas Journal, January 29, 1962). Cable-tool rigs were reported to have drilled 1,548 wells during the year. There were 225 rigs of all types active during 1961 in Kansas, about 5 percent fewer than in the previous year (World Oil, February 15, 1962[a]).

Geophysics.—Although geophysical work has been conducted for many years in Kansas, few results have been published, because the information has potential value to its owner. At present most geophysical exploration programs in Kansas are directed toward finding new oil and gas reserves. Because expenditures in connection with the

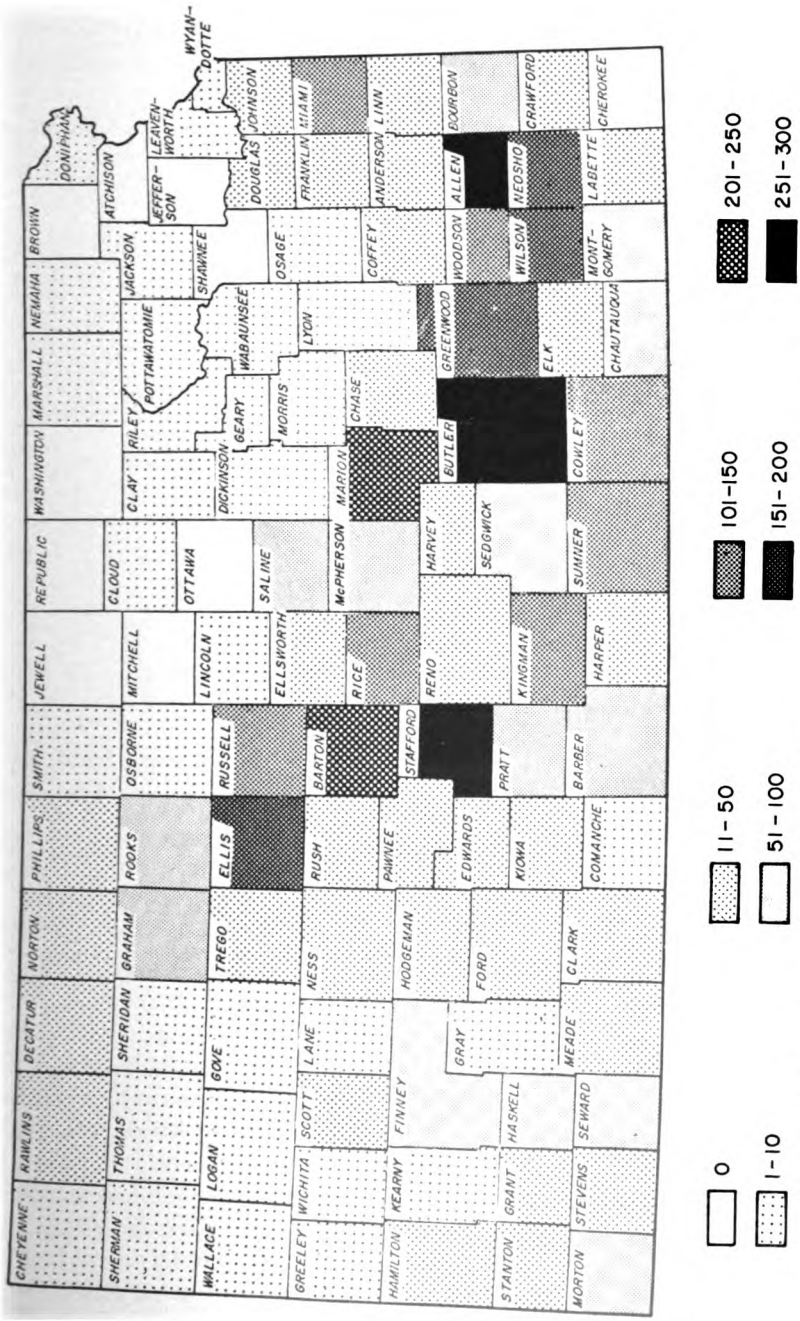

FIG. 4.—Distribution of intent-to-drill permits issued by State Corporation Commission, 1961.

TABLE 3.—*Number of intent-to-drill permits issued by State Corporation Commission in Kansas during 1961, by county*

Allen	266	Greeley	2	Osborne	1
Anderson	45	Greenwood	178	Pawnee	24
Barber	61	Hamilton	15	Phillips	23
Barton	203	Harper	40	Pottawatomie	3
Bourbon	93	Harvey	32	Pratt	59
Butler	259	Haskell	56	Rawlins	29
Chase	15	Hodgeman	40	Reno	31
Chautauqua	88	Jackson	1	Rice	128
Cheyenne	1	Johnson	45	Riley	6
Clark	36	Kearny	10	Rooks	59
Clay	2	Kingman	103	Rush	44
Cloud	1	Kiowa	24	Russell	117
Coffey	17	Labette	45	Saline	69
Comanche	8	Lane	9	Scott	14
Cowley	134	Leavenworth	4	Sedgwick	55
Crawford	43	Lincoln	1	Seward	53
Decatur	31	Linn	27	Sheridan	5
Dickinson	5	Logan	3	Sherman	2
Doniphan	1	Lyon	9	Smith	2
Douglas	32	McPherson	81	Stafford	254
Edwards	16	Marion	224	Stanton	27
Elk	24	Marshall	3	Stevens	20
Ellis	167	Meade	24	Sumner	109
Ellsworth	21	Miami	123	Thomas	9
Finney	75	Montgomery	84	Trego	30
Ford	20	Morris	9	Wabaunsee	3
Franklin	42	Morton	63	Wallace	2
Geary	4	Nemaha	1	Wichita	2
Gove	5	Neosho	129	Wilson	158
Graham	95	Ness	42	Woodson	114
Grant	13	Norton	20	Wyandotte	1
Gray	1	Osage	9		

exploration programs are an essential part of the petroleum industry economy, data concerning these programs in Kansas are pertinent here.

The total number of exploration crews in Kansas has increased since 1946 because of the increased number of seismic parties; however, the number of gravimeter and core-drill crews has decreased. During 1961, there were 85 seismic crew months reported in Kansas.

OIL

Production and value.—The 112,210,936 barrels of oil produced in Kansas during 1961 is 1,133,612 barrels less than the amount produced in 1960. The 1.0 percent decrease in total value of crude oil, from $336,633,308 to $333,266,480, is due to decreased production.

It may be observed that in Kansas each year more wells produce less oil. Average oil production per well has declined from 10 barrels per day in 1951 to less than 7.5 barrels per days in 1961.

Figure 5 is a graph showing daily average crude oil production, number of producing wells and daily average production per well in Kansas, from 1951 through 1961.

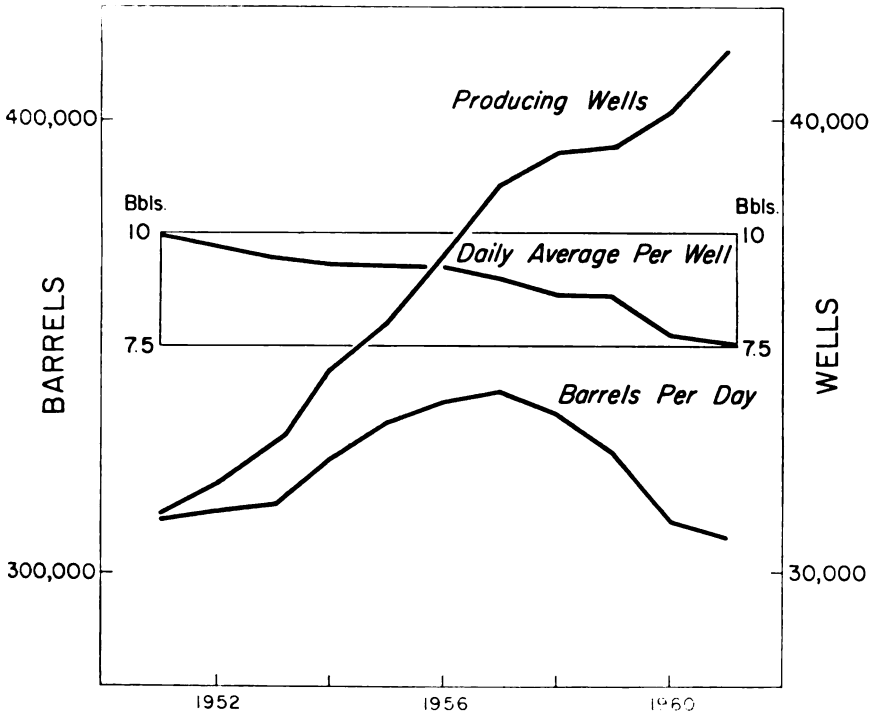

FIG. 5.—Graph showing Kansas daily average crude oil production, number of producing wells, and daily average production per well, 1951-1961.

The number of counties from which oil production was reported during 1961 is 80, two more (Geary and Lane Counties) than 1960. Among the 10 leading oil-producing counties, two changes were noted during 1961: Stafford County advanced to fifth, and Rice County advanced to eighth (Table 4). Of the ten leading oil-producing counties, only Stafford and Cowley Counties showed an increase in crude oil production during 1961 as compared with 1960.

Kansas has 17 counties (Table 5) that have each produced a cumulative quantity of more than 50,000,000 barrels of oil. Butler County, in eastern Kansas, ranks first, having produced 452,888,914 barrels, considerably more than the 352,222,928 barrels of second-place Barton County. In 1961, Graham County passed Reno County in cumulative production.

Distribution of cumulative oil production by producing zones is significant in exploration for additional reserves. About 45 percent of the cumulative oil production has come from Arbuckle-Reagan rocks and about 32 percent from Pennsylvanian rocks; other Paleozoic rocks contributed the remaining 23 percent of cumulative oil production.

TABLE 4.—*Ten leading oil-producing counties in Kansas, 1960 and 1961*

County	Production, bbl. 1960	Production, bbl. 1961	Rank 1960	Rank 1961
Ellis	11,231,495	10,281,756	1	1
Barton	10,245,807	10,022,065	2	2
Russell	8,336,647	8,128,427	3	3
Butler	7,799,582	7,572,965	4	4
Stafford	5,737,031	6,002,552	6	5
Graham	6,116,015	5,852,349	5	6
Rooks	5,634,607	5,558,741	7	7
Rice	4,474,824	4,144,726	9	8
Greenwood	4,758,538	4,116,334	8	9
Cowley	3,672,337	4,020,750	10	10

At the end of 1961 cumulative oil production in Kansas exceeded the 3⅜ billion barrel mark. Annual production has exceeded 100 million barrels in 16 of the last 19 years, including every year since 1947. The state has produced more crude oil since the end of World War II than before. Statistics on oil production are given by county in Tables 27 and 34.

The **El Dorado** field in Butler County, the state's largest producer, is the only one of the six major oil fields listed in Table 6 that lies east of the Sixth Principal Meridian. The **Spivey-Grabs-Basil** field in Harper and Kingman Counties, unlisted in previous years, was third in annual oil production in 1961. **Kraft-Prusa** (Barton and Ellsworth Counties), one of the states' larger fields, dropped to seventh place in annual crude oil production in 1961. With the exception of the **Hall-Gurney** field in Barton and Russell Counties, all of the state's leading oil fields showed decreases in annual production as compared with 1960.

TABLE 5.—*Leading oil-producing counties in Kansas, based on reported, estimated, and recorded cumulative production (50 million barrels or more) to end of 1961*

County	Cumulative production, bbl. 1960	Cumulative production, bbl. 1961	Rank 1960	Rank 1961
Butler	445,315,949	452,888,914	1	1
Barton	342,462,571*	352,222,928*	2	2
Russell	314,790,802	322,913,745*	3	3
Ellis	238,121,434*	248,402,190	4	4
Greenwood	233,645,449	237,761,783	5	5
Rice	230,330,893	234,622,794	6	6
McPherson	151,772,104	154,789,560*	7	7
Stafford	144,205,806*	150,259,574	8	8
Cowley	104,018,919	108,042,226	9	9
Rooks	92,172,250	97,730,991	11	10
Ellsworth	95,679,582	97,347,658	10	11
Sumner	75,964,022	79,132,600	12	12
Sedgwick	72,760,931	74,928,756*	13	13
Graham	63,560,726	69,413,075	15	14
Reno	64,674,301	65,546,400	14	15
Chautauqua	50,582,892	51,439,971	16	16
Marion	.....	50,168,406	....	17

*Corrected cumulative.

Refining.—The names and locations of 13 refineries operating in Kansas during 1961 are listed in Table 7 as well as crude capacity, throughput, and products per stream day (Oil and Gas Journal, March 19, 1962).

Figure 6 shows by month, allocations of crude oil as compared with crude oil reported received by Kansas refineries and pipeline runs in Kansas during 1961. The considerably lower pipeline runs to refineries in April and October probably reflect biannual refinery shutdowns. Figure 7 compares by month during 1961 the crude oil demand forecast by the U.S. Bureau of Mines, the amount nominated by purchasers, the amount allocated by the State Corporation Commission, and the amount actually run by pipeline companies. Purchasers' nominations were considerably below daily average runs and state allocations during most of the year.

TABLE 6.—*Leading oil fields in Kansas, 1960 and 1961*

Rank, 1961	Field	Age, years	County	Annual production, bbl. 1960	1961
1	El Dorado	46	Butler	4,291,069	4,239,423
2	Bemis-Shutts	27	Ellis-Rooks	4,471,955	4,115,878
3	Spivey-Grabs-Basil	12	Harper-Kingman	.....	3,725,917
4	Hall-Gurney	31	Barton-Russell	3,228,587	3,290,644
5	Chase-Silica	31	Barton-Rice-Stafford	3,219,167	2,919,425
6	Trapp	26	Barton-Russell	2,752,269	2,541,958

The U.S. Bureau of Mines reported the 1961 nationwide average value of crude oil at the wellhead as $2.88 a barrel, the same as in 1960. The estimated value of crude oil per barrel (36.0° to 36.9°) in Kansas during 1961 was $2.97. Table 8 shows crude oil price changes in the Midcontinent since 1947 (World Oil, February 15, 1962[b]).

During 1961, oil refined in Kansas refineries amounted to 110,761,907 barrels. The total production was 112,210,936 barrels. Imports of oil in 1961 increased to 45,755,155 barrels from 43,697,343 barrels the previous year. Exports of oil during 1961 decreased by 151,782 barrels. Total quantity of oil accounted for in 1961 was 157,966,091 barrels as compared with 157,041,891 barrels in 1960. Data on production, imports, exports, and crude oil refined in 1960 and in 1961 are listed in Table 9.

Oil and Gas Conservation Division.—The Oil and Gas Conservation Division is the regulatory arm of the Kansas Corporation Commission and is charged with responsibility for preventing waste of all mineral fuels (liquid and gaseous hydrocarbons) and for protecting the correlative rights of individuals. Until proration was inaugurated ownership of mineral wealth in Kansas depended on "law of capture". The Commission determines Kansas' fair share of the monthly demand

TABLE 7.—*Capacities of Kansas refineries*

Company and location	Crude capacity		Charge, bbl. per stream day							Production, bbl. per stream day				
					Catalytic cracking			Hydrogen treating						
	BPCD	BPSD	Vacuum distillate	Thermal operations	Fresh feed	Recycle	Catalytic reforming	Unit	Feed	Alkylation	Polymerization	Lubes	Coke (tons)	Asphalt
American Oil Co., Neodesha	30,600	32,000	.....	.....	10,000	1,000	7,200	7,200	SR naph.	1,300	.....	.....	.....	.....
American Petrofina Co. of Texas, El Dorado	19,000	20,000	6,000	.....	6,000	4,000	2,500	.....	.....	.....	450	.....	.....	1,900
Apco Oil Corp., Arkansas City	25,000	26,000	5,000	3,500	7,500	4,800	5,000	.....	.....	2,200	.....	.....	.....	1,300
Century Refining Co., Shallow Water	5,700	6,000	2,000	.....	3,000	3,000	.....	.....	.....	800	.....	.....	.....	900
Cooperative Refinery Assoc., Coffeyville	24,500	25,500	6,000	8,000	10,000	8,500	4,200	2,300	Mid. dist.	1,200	500	1,500	150	1,200
Phillipsburg	13,000	14,000	4,500	.....	5,000	4,500	2,500	3,500	SR naph.	.....	750	.....	.....	1,600
Derby Refining Co., Wichita	19,250	20,500	6,800	*3,000	7,500	4,500	2,700	4,000	SR naph.	1,800	*600	.....	.....	2,000
Mid-America Refining Co., Inc. Chanute	2,850	3,000	1,600	1,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	500
Mobil Oil Co., Augusta	45,000	47,000	16,000	4,100	18,800	5,200	10,500	.....	.....	2,400	.....	.....	.....	7,000
National Coop. Refinery Assoc., McPherson	31,000	33,000	.....	2,000 12,000	13,500	6,000	5,000	8,000	SR naph.	2,300	1,000	.....	400	.....
Phillips Petroleum Co., Kansas City	70,000	NR	15,000	.....	29,000	19,000	16,000	.....	.....	6,600	.....	2,500	.....	2,400
Skelly Oil Co., El Dorado	45,000	48,000	24,000	6,500 8,500	20,000	2,500	15,000	10,000	SR naph.	3,500	.....	.....	500	3,000
Vickers Petroleum Co., Inc., Potwin	16,000	17,200	3,000	3,400 1,500	8,200	2,000	3,100	3,100	SR naph.	.....	800	.....	.....	.....
Total**	346,900	365,885	89,900	53,700	138,500	65,000	73,700	38,100		22,100	4,100	4,000	1,050	21,800

*Shut down.
**State crude-capacity totals include calendar-day figures converted to stream-day basis.
Oil and Gas Journal, March 19, 1962.

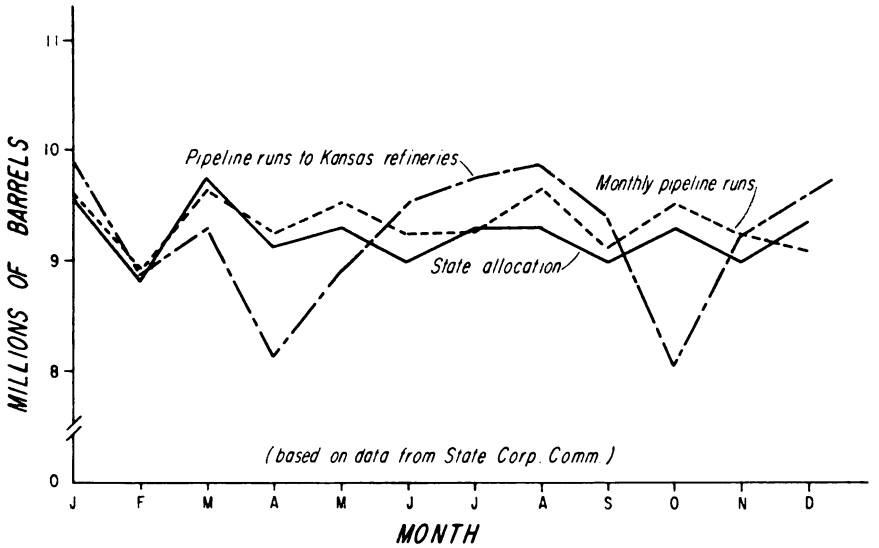

FIG. 6.—Monthly comparison of crude oil allocated, pipeline runs to Kansas refineries, and pipeline runs in Kansas during 1961.

for fossil fuels and allocates that demand among pools and wells. Within individual pools the fair share of the fuel is also allocated among owners. The Conservation Division also issues monthly oil proration reports for many of the state's oil fields; makes productivity tests of new wells; supervises dual completions and installation of packers in wells; prohibits the co-mingling of water or oil from different zones; supervises the plugging of wells and the subsurface disposal of pro-

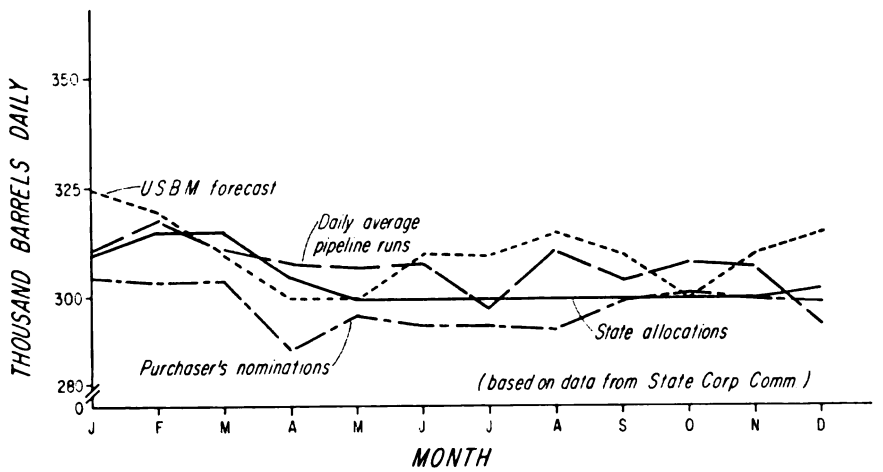

FIG. 7.—Comparison of daily average crude oil forecast, nominated, allotted, and actual pipeline runs by months in Kansas during 1961.

TABLE 8.—*Crude oil price changes in Midcontinent, by year (dollars per bbl.)*

Date		Okla.-Kansas 36-36.9° gravity
1947:	March 10	$1.87
	October 15	2.07
	December 6	2.57
1951:	Frozen at Jan. 25 level	2.57
1953:	June 15	2.82
1957:	January 3	3.07
1958:	October 3	2.93
	October 3	3.00
1959:	February 20	2.97
1960:	No changes	.....
1961:	No changes	.....

World Oil, February 15, 1962b.

duced saltwater. The cost of regulating the petroleum industry in Kansas is paid by the industry itself. A fee of one cent per foot, or a minimum of $10.00 per hole, is charged for supervision of plugging. Oil production is assessed at the rate of 0.001 cent per barrel.

Pipeline and refinery construction.—The refining of crude oil in Kansas refineries, the production of natural gas liquids in Kansas natural gasoline plants, and the interstate and intrastate movement of crude oil products and natural gas through transmission lines are an integral part of the petroleum industry in Kansas.

By January of 1961, construction of the Rock Island Oil Refinery Co., Inc., crude oil pipeline was well underway (Oil and Gas Journal, January 30, 1961). The project of laying sixty miles of 6- and 7-inch line from fields in Red Willow County, Nebraska, to the Arapahoe Pipeline Co. line at Colby, Kansas, was completed during the year.

In November the Apco Oil Corp. started construction of a 2,950-barrel Lomax catalytic hydrocracking unit and a stream-reforming hydrogen plant at the Apco Refinery at Arkansas City (Bizal, November 6, 1961).

TABLE 9.—*Barrels of oil produced, imported, refined, and exported in Kansas, 1960-1961**

	1960	1961
Produced	113,344,548	112,210,936
Imported	43,697,343	45,755,155
Total	157,041,891	157,966,091
Exported	47,355,966	47,204,184
Crude oil refined	109,685,925	110,761,907
Total	157,041,891	157,966,091

*From the Conservation Division, State Corporation Commission.

SECONDARY RECOVERY

Oil occurs in the minute pore spaces of discontinuous rock reservoirs, not unlike water in a sponge. Where gas is present under pressure the recovery of the hydrocarbons from the reservoir is somewhat like opening an agitated or warm bottle of soda pop. Unfortunately, most of the oil occurring in the Kansas reservoirs is not gas-capped, nor do the reservoirs generally have sufficient gas in solution to cause flowing wells. Because oil has little self-expulsion energy, either gravity or some other pressure must be relied upon for movement into the bore hole. As the natural energy of the system (oil or gas reservoir) declines, a process called secondary recovery is used to replenish the energy of the system by injection of additional fluids or gases under pressure.

Repressuring of oil-bearing rocks by injection of water, air, gas, or a combination of these agents has become a principal method of oil production in Kansas since this practice was sanctioned by state law in 1935. Grandone (1944) reported that the first legal repressuring was done by the York State Oil Co. in the **Seeley** pool (now **Seeley-Wick**) of northern Greenwood County in May, 1935. The significance of secondary recovery activities in the state is shown by the fact that such production has risen from an estimated 7 million barrels in 1949 to 20.2 million barrels in 1961, or about 18 percent of the total production (Table 10). The reported production for 1961 totaled 12,022,333 barrels; the figure of 20.2 million barrels is obtained by adding an estimate of those operations not reporting specifically, but for which reasonably accurate production data are known. Figure 8 shows graphically the amount of oil produced by secondary recovery methods in Kansas from 1949 to 1961. Each succeeding year has found a larger number of new applications for repressuring and for extensions of secondary recovery projects, and each year has found a larger share

TABLE 10.—*Secondary recovery of crude oil in Kansas, 1949-1961 (bbl.)*

Year	Total	Secondary
1961	112,210,936	20,245,000
1960	113,344,548	19,300,000
1959	119,473,875	17,900,000
1958	119,942,094	17,100,000
1957	124,054,043	16,900,000
1956	124,467,713	15,100,000
1955	121,161,234	15,100,000
1954	118,309,260	11,200,000
1953	114,390,176	10,900,000
1952	114,399,556	10,000,000
1951	113,912,366	8,000,000
1950	107,339,000	7,000,000
1949	100,164,092	7,000,000

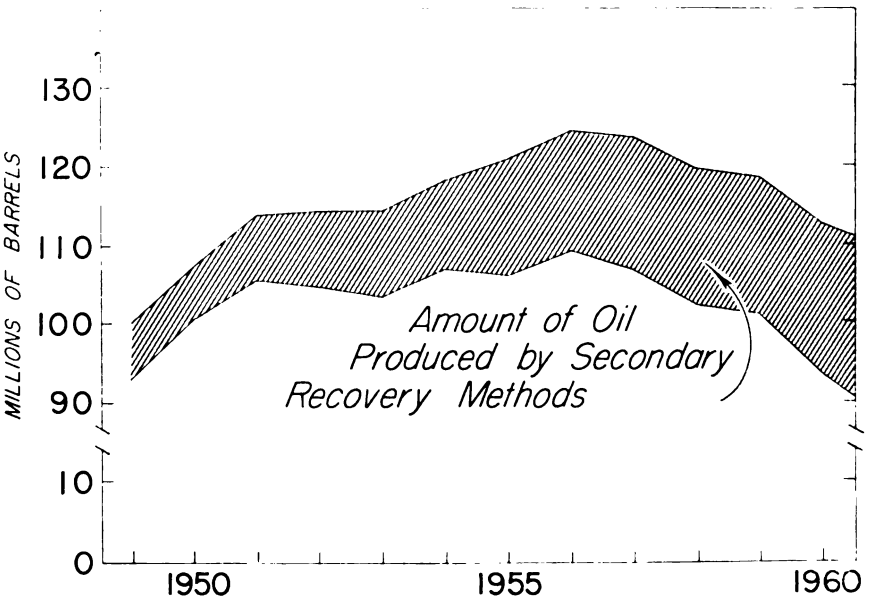

FIG. 8.—Amount of oil produced by secondary recovery methods in Kansas, 1949-1961.

of the annual crude oil production credited to secondary recovery projects. This trend will no doubt continue.

During 1961, the Conservation Division of the State Corporation Commission issued 146 permits for secondary recovery operations. The areal distribution of these operations is shown in Figure 9. The names

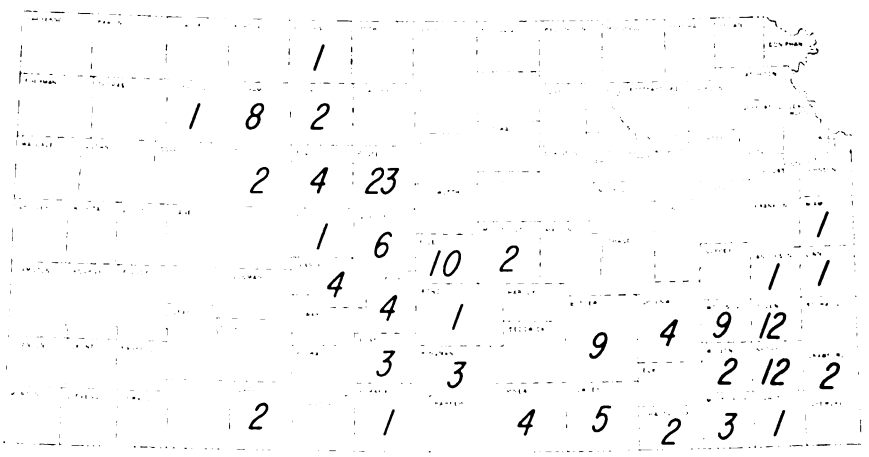

FIG. 9.—Distribution of permits issued by State Corporation Commission for secondary recovery projects in Kansas, 1961.

of the operators and locations of the projects are given in Table 11. The fact that many of the secondary recovery projects started in 1961 were in western Kansas, especially in Barton, Russell, and Rice Counties, emphasizes the significance of the use of secondary recovery methods in the larger and older fields on the Central Kansas Uplift.

In 1961 Butler County moved from second to first place in the number of reported secondary recovery projects operating, as well as in production attributable to this method (Table 12). The 88 reported projects in Butler County produced at least 5.2 million barrels of oil during the year. Projects in Greenwood County (85), the second largest producer of oil by secondary recovery methods, yielded at least

TABLE 11.—*Repressuring applications approved in Kansas during 1961*

County	Name of Company	Location
Allen	Aylward and Willis	9-26-18E
do	Beardmore Drilling Company	3-26-21E
do	Mack C. Colt, Inc.	3-24-18E
do	Great Western Drilling Company	7-26-19E
do	Jones and Campbell, Inc.	36-26-18E
do	B. W. Klippel, Jr.	29-26-20E[a]
do	Layton Oil Company	10-24-18E[b]
do	Ben Steiner	3-26-21E
do	Ute Oil Company, Inc.	8-25-20E
Anderson	Russell Operating Company	5-23-18E
Barber	Barbara Oil Company	22-33-11W
Barton	American Petrofina Company of Texas	28-19-11W
do	Colorado Oil & Gas Corporation	29-18-14W
do	Cooperative Refinery Association	35-18-12W
do	Martin Oil Company	31-18-11W
do	Monsanto Chemical Company	29-19-12W
do	Skelly Oil Company	36-17-11W
Butler	Cities Service Petroleum Company	8-25-5E
do	Morris Sitrin, Inc.	27-25-5E
do	Murray Oil Company	24-25-4E
do	O. A. Sutton Oil Properties & Investments	19-28-6E
do	R. R. Thayer	25-25-4E
do	R. J. Wixson Drilling Company	7-25-5E
Chautauqua	Patteson Brothers	14-32-10E
do	Salmon Corporation	23-33-10E
Clark	Walter Duncan	4-34-21W
do	United Producing Company, Inc.	4-34-21W
Coffey	Sunray DX Oil Company	14-23-13E
Cowley	H. H. Blair	25-32-4E
do	James A. Lewis Engineering, Inc.	26-31-5E
do	Shawver-Armour, Inc.	5-33-4E
do	Texaco, Inc.	29-34-3E
do	Earl F. Wakefield	11-33-3E
Crawford	Clifford R. Holeman	29-30-22E
do	Waldo Huning	30-27-22E
Ellis	Don E. Pratt Oil Operations	12-15-18W
do	Rock Island Oil & Refining Company, Inc.	14-15-18W
do	Solar Oil Company	12-13-16W
do	Texaco, Inc.	15-11-18W
Graham	Birmingham-Bartlett Drilling Company	14-9-24W
do	Leo J. Dreiling Oil Company	20-8-23W[1]
do	Fell-Wolfe Oil Company	10-9-24W
do	Kaiser-Francis	22-10-23W

TABLE 11.—*Repressuring applications approved in Kansas during 1961 (continued)*

County	Name of Company	Location
do	Okmar Oil Company	4-10-21W
do	Sunray DX Oil Company	28-10-23W
do	Texaco, Inc.	17-8-25W
Greenwood	E. H. Adair Oil Company	19-22-10E
do	Eureka Drilling Company	30-22-11E
do	Houston Oklahoma Oil Company	14-24-12E
do	R. J. Wixson Drilling Company	8-22-10E
Kingman	Skelly Oil Company	29-27-10W[e]
Labette	Davis and Ballinger	13-34-18E
Linn	Kent T. Kimball, et al.	34-21-23E
McPherson	Colorado Oil & Gas Corporation	20-19-1W
do	Tenneco Oil Company	8-17-3W
Miami	Meridian Petroleum Company	29-18-23E
Montgomery	Brady Oil Company	7-34-14E
do	R. G. Goodbar	30-34-17E[f]
Neosho	A. H. Alcock	15-28-20E
do	Burk Royalty Company	18-30-18E[g]
do	Caddo Oil Company, Inc.	33-27-18E
do	Everett S. Faulkner	17-29-21E
do	G. W. Jesse	33-27-18E
do	Joey Drilling & Exploration Company	25-27-17E
do	McDermed Oil Company	22-28-20E
do	Ranabarger & Hanson	33-27-18E
do	Gordon J. Willis	19-28-18E
Pawnee	Cities Service Petroleum Company	14-20-20W
do	Colorado Oil & Gas Corporation	36-22-17W[h]
do	Musgrove Drilling Company	5-23-17W
Phillips	Petroleum Management, Inc.	7-2-18W
Pratt	Cooperative Refinery Association	1-27-13W
do	Skelly Oil Company	35-27-11W
do	Sterling Drilling Company	6-28-13W
Reno	Partners Oil Company	19-24-7W
Rice	Colorado Oil & Gas Corporation	19-19-9W
do	Isern-Wells	12-19-10W
do	Kewanee Oil Company	25-20-6W
do	Partners Oil Company	29-19-10W
do	Plains Exploration Company	4-21-6W
do	Sohio Petroleum Company	20-19-9W[i]
do	Sterling Drilling Company	4-21-6W
do	Chester Williams	19-19-9W[j]
Rooks	Musgrove Drilling Company	33-9-17W
do	Tenneco Oil Company	26-9-19W
Rush	Skelly Oil Company	21-18-16W
Russell	Burtin and Murphy, et al.	25-14-14W
do	Cities Service Petroleum Company	7-15-13W
do	Cooperative Refinery Association	15-14-13W[k]
do	Duke Drilling Company	21-14-14W[l]
do	John O. Farmer, Inc.	4-15-12W
do	Theodore Gore	36-14-14W
do	Home-Stake Production Company	32-13-15W
do	Louis M. Mai Operations	22-14-13W
do	National Cooperative Refinery Association	11-15-14W[m]
do	Pan American Petroleum Corporation	25-14-14W
do	Lee Phillips Oil Company	34-14-13W[n]
do	H. B. Shumaker	16-14-14W[o]
do	Sidey Drilling Company	25-14-13W[p]
do	Sunray DX Oil Company	11-14-15W
Saline	Republic National Gas Company	25-15-4W
Sheridan	Continental Oil Company	12-6-27W
Stafford	Cooperative Refinery Association	27-24-12W
do	Kaiser-Francis	4-21-13W
do	Lotus Oil Company	32-23-13W
do	Phillips Petroleum Company	13-21-12W

TABLE 11.—*Representing applications approved in Kansas during 1961 (concluded)*

County	Name of Company	Location
Sumner	Aladdin Petroleum Corporation	21-33-2E
do	Cooperative Refinery Association	16-35-2E
do	Jones-Gebert Oil, Inc.	12-31-2W
do	Stelbar Oil Corporation, Inc.	18-32-1W
Trego	General American Oil Company of Texas	21-14-21W
do	Imperial Oil of Kansas, Inc.	24-12-23W
Wilson	A. W. Bailey	29-30-16E
do	E. Buddrus	31-28-17E
Woodson	John Haas	3-24-15E[q]
do	Burton E. Phillips	4-24-16E
do	Shira Drilling Contractors	27-23-16E
do	Union Texas Natural Gas Corporation	17-26-17E
do	Williams Oil Company, Inc.	12-26-14E[r]
do	Gordan J. Willis	27-25-17E

[a] Application also approved in sec. 32, T. 26 S., R. 20 E.
[b] Three applications approved for this location.
[c] Applications also approved in sec. 32, T. 24 S., R. 4 E., sec. 10, T. 25 S., R. 3 E., and sec. 3, T. 25 S., R. 3 E.
[d] Application also approved in sec 19, T. 8 S., R. 23 W.
[e] Applications also approved in sec. 20, T. 27 S., R. 10 W., and sec. 19, T. 27 S., R. 10 W.
[f] Application also approved in sec. 20, T. 34 S., R. 17 E.
[g] Three applications approved for this location and one in sec. 19, T. 30 S., R. 18 E.
[h] Application also approved in sec. 9, T. 23 S., R. 17 W.
[i] Two applications approved for this location.
[j] Two applications approved for this location.
[k] Two applications approved for this location and one in sec. 20, T. 14 S., R. 14 W.
[l] Application also approved in sec. 32, T. 15 S., R. 14 W.
[m] Applications also approved in sec. 2, T. 15 S., R. 14 W., and sec. 3, T. 15 S., R. 14 W.
[n] Two applications approved for this location and one in sec. 16, T. 14 S., R. 13 W.
[o] Application also approved in sec. 21, T. 14 S., R. 14 W.
[p] Two applications approved for this location.
[q] Application also approved in sec. 30, T. 23 S., R. 15 E.
[r] Two applications approved for this location.

3.4 million barrels. These two counties accounted for more than 42 percent of the oil produced by repressuring projects in Kansas.

The following zones, listed in the order of their importance, provided most of the oil produced by secondary recovery methods: "Bartlesville sand," "Peru sand," and "Wayside sand" (Pennsylvanian). Saltwater is used for repressuring in most of the Kansas projects. Of the many zones from which salt water is obtained for repressuring, the three main ones are sandstones of the Douglas Group,

TABLE 12.—*Data on ten selected eastern Kansas counties producing oil by secondary recovery in 1961*

County	Number of projects	Oil production, bbl. Total	Oil production, bbl. By secondary recovery[a]
Allen	39	967,282	598,486
Anderson	19	391,409	328,731
Butler	88	7,572,965	5,248,023
Chautauqua	43	857,079	605,656
Cowley	74	4,020,750	1,754,839
Greenwood	85	4,116,334	3,421,523
Miami	17	332,057	324,074
Montgomery	26	458,319	288,872
Neosho	33	477,038	382,411
Woodson	17	781,758	447,150

[a] In part estimated.

Arbuckle dolomite, and "Bartlesville sand". Principal sources of fresh water for repressuring are shallow ground-water reservoirs, lakes, streams, and municipal water supplies. Where combined fresh and saltwater is used, the brine is usually obtained from the local oil-producing formation. Treatment of saltwater includes aeration, addition of chemicals, settling, and filtration; these methods are used either singly or in various combinations. Fresh water requires more treatment than brines do. Such treatment, likewise, includes addition of lime, chlorine, or alum, settling, filtering, or some combination of these methods . Most of the combined fresh and saltwater used for repressuring is treated.

NATURAL GAS

The shipping of natural gas through extensive pipeline systems across state lines and the authorization of new cross-country lines come under the jurisdiction of the Interstate Commerce Commission and the Federal Power Commission, respectively. Under the Natural Gas Act of 1938 interstate gas transportation takes on aspects of a public utility. The apportionment of new lines and approval of transmission of gas are based on national considerations of the greatest good to the greatest number of people, as well as on economic investment values. Natural gas is "end-use" controlled. Thus Kansas, ranking fifth among the gas-producing states, third in reserves, yet having a relatively small population, has only a minor voice in the eventual use of the gas. Gas entering interstate systems is dedicated; little non-dedicated gas is available for intrastate use. The producers want to export excess gas for income, which returns to the state; the Kansas consumer, both domestic and industrial, desires retention of the natural resource within the state's borders, arguing that exportation of natural gas is depleting reserves. A significant portion of Kansas' annual gas production is being exported, but it is estimated that an amount equal to about half of the quantity produced is used within the state.

Production and value.—Natural gas production during 1961 totaled 676,235,505 thousand cubic feet, calculated at the base of 14.65 p.s.i.a., an increase of 6.9 percent over the preceding year. The estimated value of natural gas increased to $74,385,906, compared to $69,587,083 in 1960, a 6.9 percent increase in value due entirely to an increase in gas production. A minimum price of 11 cents per thousand cubic feet, measured at 14.65 p.s.i.a., has been applied to all Kansas gas production including minor amounts of unprorated production, much of which probably brought a higher price.

TABLE 13.—*Kansas counties producing 3 billion cubic feet or more of natural gas annually, 1960 and 1961*

County	Production M. cu. ft. (14.65 psia) 1960	1961	Rank 1960	1961
Stevens	122,005,132	129,939,907	1	1
Grant	91,748,893	101,626,984	2	2
Morton	76,950,127	83,702,648	3	3
Kearny	69,931,846	69,582,324	4	4
Finney	53,961,070	53,172,005	5	5
Barber	53,315,224	49,037,264	6	6
Haskell	35,945,374	39,822,241	7	7
Seward	33,009,597	30,146,771	8	8
Stanton	21,848,436	23,776,419	9	9
Kingman	18,982,088	21,949,770	10	10
Meade	14,312,613	16,296,726	11	11
Kiowa	3,384,213	9,698,782	16	12
Clark	6,811,276	7,997,403	12	13
Harper	4,860,913	4,776,666	13	14
Hamilton	4,548,756	4,571,588	14	15
Marion	.....	3,398,306	....	16
Comanche	.....	3,274,167	....	17

Natural gas was produced in 47 counties in 1961, with 17 counties (Table 13) producing 3 billion cubic feet or more. Among these 17 counties, Stevens County maintained its lead, producing 129,939,907 thousand cubic feet. Kiowa County moved to twelfth place ahead of Clark County, and Marion and Comanche Counties appeared on the list for the first time.

Nineteen counties in Kansas had cumulative production of 20 billion cubic feet or more of natural gas by the end of 1961. Although complete production records for most eastern counties are either not available or non-existent, it is certain that Allen, Cowley, Montgomery, and Wilson have each produced 10 billion cubic feet or more of gas. The ranking for 1960 and 1961 is shown in Table 14. No change in rank occurred in 1961, but Harper and Kiowa Counties appeared for the first time.

Cumulative gas production for the state exceeds 9.2 trillion cubic feet. The Permian gas production (mostly from the **Hugoton Gas Area**) represents about 61 percent of the total. Other important gas zones are the Pennsylvanian, which accounts for 32 percent, and the Mississippian and Cambrian-Ordovician, which together account for about 7 percent of the cumulative gas production.

Since 1956, annual gas production has exceeded 500 billion cubic feet, and since 1943 it has been more than 100 billion cubic feet.

In the gas production table (Table 35), 1961 production and cumulative figures for the entire state are calculated at the same pressure base, 14.65 p.s.i.a. Production in the eastern Kansas fields, which reached their peak about 57 years ago, was slightly more than 1 per-

TABLE 14.—*Counties in Kansas having cumulative production of 20 billion cubic feet or more of gas to end of 1961. (Based on estimated and recorded production.)*

County	Cumulative production M cu. ft. (14.65 psia)	Rank 1960	Rank 1961
Stevens	2,030,296,017	1	1
Grant	1,214,317,728	2	2
Kearny	865,573,606	3	3
Morton	770,409,665	4	4
Barber	554,337,565	5	5
Finney	484,213,403	6	6
Haskell	442,768,886	7	7
Seward	356,823,152	8	8
Stanton	216,784,657	9	9
Kingman	91,707,820	10	10
Meade	82,153,559	11	11
Pawnee	45,824,158	12	12
Hamilton	43,906,104	13	13
Rice	36,334,493	14	14
Clark	34,582,369	15	15
Barton	25,883,943	16	16
Pratt	25,036,968	17	17
Harper	23,624,666	....	18
Kiowa	23,524,035	....	19

cent, whereas production from the **Hugoton Gas Area** in southwestern Kansas was about 69 percent of the state total for 1961.

Consumption of marketed natural gas in Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota is reported as a unit quarterly by the U.S. Bureau of Mines. Therefore, a detailed breakdown of use within Kansas during 1961 is unavailable at this time. During 1960, the U.S. Bureau of Mines reported that 73,490,000 thousand cubic feet, valued at an average of 56.1 cents per thousand, were consumed in residential use. A total of 41,175,000 thousand cubic feet, valued at an average of 53.9 cents per thousand, was consumed commercially. Industrial consumption was 257,637,000 thousand cubic feet, valued at an average of 19.8 cents per thousand cubic feet.

At the end of the year, monthly proration schedules were issued for 30 fields. These are the **Aetna Gas Area, Medicine Lodge-Boggs** ("Bartholow"), **Boggs Southwest** ("Driftwood"), **Elsea, Elwood, Glick, Goetz, Greenwood Gas Area, Hardtner, Snake Creek** ("Harper Ranch"), **Harper Ranch** ("Harper Ranch North"), **Hopewell** ("Hopewell South"), **Hugoton Gas Area, McGuire-Goemann, McKinney, Mohler Northeast, Nichols, Panoma Gas Area, Rhodes** ("Rhodes North"), **Rhodes Northeast, Rhodes South, Richfield, Sharon Northwest, Sparks, Spivey-Grabs-Basil, Taloga** ("Keyes," Taloga "C", and Taloga "G"), and **Wil.** Unprorated gas fields in Kansas are limited by statute to 25 percent of the open-flow capacity. Purchasing companies are required each month to file a record of the amount of gas purchased from wells in Kansas. Gas deliverability tests are made an-

nually. During 1961, gas was assessed at 0.00025 cents per thousand cubic feet to provide income for regulatory purposes.

New developments.—During 1961, 19 gas fields (15 gas and 4 oil and gas) were named in Kansas (Table 28). Of the new fields, 8 produce from Morrowan rocks and 6 from Mississippian rocks. In Haskell County, the discovery well of the **Lemon North** field was credited with production from the Marmaton (oil and gas) and Morrowan (gas) zones. Similarly the discovery well of the **Lemon Northwest** field was a multiple gas producer with pays in the Lansing-Kansas City (oil), Cherokee (gas) and Morrowan (gas) rocks.

New gas zones were discovered in 16 old fields during 1961. Complete data on the discovery wells of these zones are given in Table 32.

The Hugoton Gas Area.—The **Hugoton Gas Area**, including its extension across the Oklahoma "strip" and into the Texas Panhandle, is regarded as one of the world's largest known gas reserves. As of the beginning of 1961 the estimated reserves in the entire field were 36 trillion cubic feet. Production by year since 1946 from the Kansas portion of the field is shown in Table 15.

The Defenders and Traders Gas Co. gas well in sec. 3, T. 35 S., R. 34 W., Seward County, has been accredited as the discovery well of the **Hugoton Gas Area** in 1922. Rapid development of the huge gas reservoir in southwestern Kansas came in the early 1940s. By the end of 1949, the number of producing wells passed the 2,000 mark, and the area encompassed 2 million acres. By the end of 1961, there were 4,015 producing gas wells, and the Kansas part of the Hugoton field included about 2,569,600 acres. It is 60 miles wide and 85 miles long (north-south), taking in two entire counties (Stevens and Grant) and parts of 7 others (Finney, Hamilton, Haskell, Kearny, Morton, Seward, and Stanton). Fifty wells were completed during 1961, compared with 13 the previous year.

With the assistance of the Conservation Division of the State Corporation Commission and Dwight's Oil and Gas Reports, county gas production figures and county cumulative totals for the **Hugoton Gas Area** have been prepared for this report. These data are given in

Table 15.—*Production from Kansas part of Hugoton Gas Area, 1946-1961*

Year	M cu. ft. gas (14.65 psia)	Year	M cu. ft. gas (14.65 psia)
1946	119,637,983	1954	346,732,192
1947	157,663,036	1955	394,257,153
1948	185,872,594	1956	381,874,779
1949	247,868,876	1957	396,889,199
1950	320,545,480	1958	349,263,723
1951	371,002,475	1959	404,764,021
1952	375,081,748	1960	451,820,153
1953	387,635,243	1961	467,842,078

Table 16. Stevens and Grant Counties each produced more than 100 billion cubic feet of gas during 1961. Cumulative production from these two counties accounts for more than half of all the gas produced from the field in Kansas.

TABLE 16.—*County production and cumulative total, Hugoton Gas Area**

County	Cumulative production to end of 1960, M cu. ft.	1961 production, M cu. ft.	Cumulative production to end of 1961, M cu. ft.
Finney	430,895,323	53,172,005	484,067,328
Grant	1,112,690,744	101,626,984	1,214,317,728
Hamilton	39,334,516	4,571,588	43,906,104
Haskell	401,306,343	36,479,559	437,785,902
Kearny	795,991,282	69,582,324	865,573,606
Morton	348,725,913	30,264,210	378,990,123
Seward	267,837,108	25,362,382	293,199,490
Stanton	171,606,282	20,794,575	192,400,857
Stevens	1,897,914,084	125,988,451	2,023,902,535
Total	5,466,301,595	467,842,078	5,934,143,673

* Base 14.65 psia.

The **Hugoton Gas Area**, as defined by the Nomenclature Committee of the Kansas Geological Society, is limited to wells producing gas from the Chase Group of the Permian System. Pay zones are in the Fort Riley, Towanda, Winfield, Krider, and Herington Limestones. Distribution of porosity seems to control productivity and porosity in these zones ranges from 13 to 18 percent; the permeability is low and irregular. Plate 1 shows the approximate boundary of the area as outlined at the end of 1961; gas wells drilled before 1961 are not shown.

Wells having an initial potential of less than 1 million cubic feet per day after acidization are regarded as small, and those producing more than 30 million cubic feet of gas per day are big. The average depth to the top of the producing zones is about 2,500 feet. The field has a water drive, and shut-in pressure from selected wells averages 350 pounds per square inch.

Because the **Hugoton Gas Area** is prorated, only one well may ordinarily be drilled in each 640 acres, and allowable production for wells or groups of wells is established on a monthly basis in a manner designed to conserve the gas supply. Because of wide well-spacing, there is little surface evidence of this huge gas reservoir.

Gas from the **Hugoton Gas Area** is of fairly good quality (Table 17), having a heating value ranging from less than 750 to more than 1,000 B.t.u. per cubic foot, and it yields about 0.5 gallon of natural gasoline condensate per thousand cubic feet. There are many natural gasoline plants in the area, as well as two carbon black plants.

Helium.—Helium, an inert gas occurring in minute quantities in some Kansas gas fields, is important to our defense program. Such

TABLE 17.—*Average natural gas analysis from Hugoton Gas Area**

Gas	Percent
Methane	74.26
Nitrogen	14.27
Ethane	5.81
Propane	3.52
Butane	1.48
Pentane plus	0.65
Total	99.99

* From Keplinger, Wanenmacher, and Burns, 1948.

factors as depletion through transportation to natural gas fuel markets, and tenfold increase in consumption led to the development in 1961 of an intense, government-supported helium conservation program. The greatest quantity of the nation's reserves of helium are located in the **Hugoton Gas Area.**

Early in 1961, the U.S. Government authorized the establishment of five privately owned helium extraction plants, two of which would be in Kansas, at Bushton and Ulysses. A third plant, at Liberal, was announced in October. The Bushton plant contract was awarded to Helex Co. (Northern Natural Gas Co.), not to exceed 9.5 million dollars a year in value. Cities Service Helex, Inc., was awarded the Ulysses plant contract, its guaranteed production not to exceed 9.1 million dollars a year in value and the Liberal plant contract went to National Helium Corp. (Panhandle Eastern Pipeline Co. and National Distillers and Chemical Corp.), with a purchase promise of 15.2 million dollars a year in value.

Construction was begun at the Bushton plant early in November. The plant will be capable of recovering up to 700 million cubic feet of helium per year. The Ulysses plant will have a daily capacity of 507 million cubic feet of gas, and a delivery of 2 million cubic feet of helium per day. It will be on stream by early 1963.

During 1961 Kansas helium was processed in the U.S. Bureau of Mines plant at Otis, in Rush County. The gas is extracted from helium-bearing natural gas obtained from wells in Barton, Pawnee, and Rush Counties. Helium-contributing gas fields include **Otis-Albert** field in Rush and Barton Counties, **Ryan** field in Rush and Pawnee Counties, **Pawnee Rock** field in Pawnee County, **Reichel** field in Rush County, and **Behrens** and **Unruh** fields in Barton County.

During the year, Helium Inc. (Kansas Nebraska Natural Gas Co. and Linde Co.) filed an application for construction of a helium extraction plant in the area of Scott City, Kansas.

Price and production of helium are controlled by the federal government. Helium production in Kansas increased from 21,930,600 cubic feet in 1960 to 23,049,600 cubic feet in 1961. Shipments of helium to federal agencies were 16,403,200 cubic feet; other shipments

amounted to 6,847,700 cubic feet; total shipments were 23,250,900 cubic feet. Revenue from helium shipments amount to $433,682.

Helium production and value in Kansas, 1937-1961, is given in Table 18.

TABLE 18.—*Helium and carbon black production and value in Kansas, 1937-1961*

Year	Helium			Carbon Black	
	Production cu. ft.	Shipments cu. ft.	Value of shipments, dollars	Production lbs.	Value, dollars
1937-1948				415,000,000	17,620,000
1949				78,833,470	3,515,827
1950				82,508,506	3,992,268
1951	26,280,000	26,280,000	327,000	112,205,669	5,334,126
1952	38,509,000	38,509,000	491,000	82,000,000	3,900,000
1953	42,782,800	42,782,800	563,923	69,985,475	3,207,600
1954	37,530,000	37,530,000	593,162	54,328,515	3,014,316
1955	42,749,600	42,749,600	662,619	97,496,155	5,553,883
1956	45,035,200	45,035,200	698,000	105,680,834	6,590,663
1957	37,249,000	36,743,000	569,517	76,419,500	5,131,569
1958	25,858,000	27,888,000	432,264	75,443,750	5,261,142
1959	24,004,300	21,642,500	342,619	91,644,160	6,387,598
1960	21,930,600	21,696,300	349,750	87,302,185	5,621,236
1961	23,049,600	23,250,900	433,682	89,936,075	6,243,192
Totals	364,978,100	364,107,300	5,463,536	1,518,784,294	81,373,420

Gas pipelining.—The Anadarko Production Co., a subsidiary of Panhandle Eastern Pipeline Co., completed an 83-mile intrastate natural-gas line from the **Spivey-Grabs-Basil** field in Harper and Kingman Counties to the Skelly Oil Refinery at El Dorado. The line, which was opened in August, has a maximum capacity of 23 million cubic feet per day.

Panhandle Eastern Pipeline Co. also proposed (Oil and Gas Journal, March 27, 1961) a fourth main transmission line from the **Hugoton Gas Area** to markets in eastern Kansas, Illinois, Ohio, and Michigan, as well as numerous small gathering line projects. Pending Federal Power Commission approval, Panhandle Eastern Pipeline plans 1.87 miles of 4-inch and 1.01 miles of 6-inch gathering lines in Kansas.

In May, Northern Natural Gas Co. asked the Federal Power Commission to approve the installation of a 4,800-horsepower compressor unit at Bushton, Kansas, and the upgrading of 87 miles of 26-inch line between the Mullinville station and Bushton (Oil and Gas Journal, May 15, 1961). During the year, the Federal Power Commission approved the construction of 97 miles of 16- and 20-inch gas line from Woodward, Oklahoma, to the Greensburg, Kansas, compressor station by the Michigan-Wisconsin Pipeline Co. (Oil and Gas Journal, November 27, 1961). Also approved was an application by the Kansas-Nebraska Natural Gas Co., Inc., for construction of 13 miles of 2-inch and 4 miles of 1¼-inch line from Almena to Long Island, Kansas (Oil

and Gas Journal, June 26, 1961). The two projects combined are estimated to cost more than $1,500,000. Cities Service Gas Co. submitted to the Federal Power Commission a plan for the construction of 10½ miles of 8-inch line to connect the Rounds and Porter LPG plant with its main line in Marion County, Kansas. Cities Service scheduled for 1961 completion new compressor stations at Americus, Marion, and Hugoton and also proposed the modernization of other stations.

In September, Pipeline Technologists, Inc., announced completion of 50 miles of gas gathering lines of various sizes in Marion County, Kansas. Other developments included the beginning of a 138-mile expansion program by Natural Gas Pipeline Co. of America, which included over 42 miles of 36-inch line laid in Kansas. Also planned during 1961, by Oklahoma-Illinois Gas Pipeline Co., was a 550-mile, large-diameter gas line from Woodward, Oklahoma, across southeastern Kansas, to St. Louis, Missouri.

Late in the year the Department of the Interior announced plans for the construction of 430 miles of 4- to 10-inch helium pipeline from Bushton, Kansas, to Amarillo, Texas. The line will handle helium from plants at pressures of 1,800 p.s.i., and the gas will be injected into the Cliffside storage reservoir near Amarillo at approximately 1,000 p.s.i. Bids for construction were let early in 1962 and will include tellermetering and monitoring equipment to be operated from Amarillo over leased wires (Oil and Gas Journal, January 1, 1962).

Because the demand for natural gas is seasonal, storage of gas during the slack season has been developed. Table 19 gives the locations and capacities of various Kansas storage projects.

TABLE 19.—*Underground gas storage**

Company (field or area—County)	Capacity, M cu. ft.			Zone
	Working gas	Cushion gas	Total reservoir	
Arkansas Louisiana Gas Corp.				
Collinson—Cowley	674,270	425,730	1,100,000	
Cities Service Gas Co.				
Alden—Rice	5,000,000	9,773,582	14,773,582	"Misener"
Boyer—Butler	392,279	627,588	1,019,867	Wabaunsee
Colony—Anderson	4,148,104	5,055,561	9,203,665	"Colony"
Craig—Johnson	1,557,945	4,517,875	6,075,820	"Bush City"
Elk City—Montgomery and Elk	10,000,000	10,000,000	20,000,000	"Burgess"
McLouth—Jefferson and Leavenworth	5,212,337	7,701,420	12,913,757	"Bartlesville"
Piqua—Allen and Woodson	1,551,042	1,679,430	3,230,472	"Colony"
Welda North—Anderson	4,521,646	5,500,000	10,021,646	"Colony"
Welda South—Anderson	5,313,617	6,475,569	11,789,186	"Colony"
Union Gas System, Inc.				
Buffalo—Wilson				Iola
Fredonia—Wilson				"Layton"
Liberty South—Montgomery	2,913,592**	3,817,286	8,250,000	"Squirrel"
Liberty North—Montgomery				"Squirrel"
Longton—Chautauqua				"Layton"
Total	41,284,832	55,574,041	98,377,995	

* In part from Bizal, May 14, 1962.
** Plus unused capacity of 1,428,214 M cu. ft.

TABLE 20.—*Natural gasoline and LPG processed in 1961**
(From the Conservation Division, Kansas Corporation Commission)

Operator and plant location	Natural gasoline	Butane	Propane	LPG	Total
Cities Service Oil Company					
Wichita, Sedgwick County	325,855	383,153	335,774		1,044,782
Colorado Interstate Gas Company					
Lakin, Kearny County	88,137				88,137
Kansas Hydrocarbon Company					
Cheney, Sedgwick County	62,059	19,075	52,005		133,139
Independent Lease Management Company					
Otis, Rush County	0				0
Hugoton Production Company					
Ulysses, Grant County	143,085	164,810	159,959		467,854
Kansas-Nebraska Nat'l Gas Company					
Deerfield, Kearny County	139,418		27,697	21,458	188,573
Northern Natural Gas Company					
Holcomb, Finney County	110,257				110,257
Sublette, Haskell County	343,657				343,657
Pan American Petroleum Corporation					
Ulysses, Grant County	524,529	613,057	399,568	130,201	1,667,355
Panhandle Eastern Pipe Line Company					
Liberal, Seward County	514,274	253,912	147,886		916,072
Skelly Oil Company					
Medicine Lodge, Barber County	91,999		85,450		177,449
Minneola, Clark County	82,505		55,465		137,970
Socony Mobil Oil Company, Inc.					
Ulysses, Grant County	220,800	55,744	97,257		373,801
Spivey, Kingman County	211,404	103,196	186,440		501,040
Total	2,857,979	1,592,947	1,547,501	151,659	6,150,086
Daily average for year 1961—16,850 bbl.					
Daily average for year 1960—16,315 bbl.**					

* 42-gallon barrels.
** Corrected figure.

NATURAL GAS LIQUIDS

Production and value.—Kansas production of natural gas liquids during 1961 from 14 natural gasoline plants was 258.3 million gallons, 7.5 million gallons more than during 1960. The value of natural gas liquids (natural gasoline, propane, butane, and other liquefied petroleum gases) produced during 1961 was $13,591,690. The 3.0 percent increase in production and value represents an increase in production.

The average daily production of natural gasoline and LPG in 1961 from all Kansas plants was 16,850 barrels, compared to 16,315 for the previous year (Table 20). The Cities Service Oil Co., Burrton plant was not reported in 1961. Skelly Oil Co. placed in operation it's new gas processing plant at Minneola and production was reported for the first time in 1961. The output of natural gas liquids during 1961 and estimated value at the plant are shown in Table 21. The estimated

TABLE 21.—*Production and estimated value of natural gas liquids in Kansas, 1961**

	Gallons	Barrels**	Price per bbl.	Value
Natural gasoline	120,035,118	2,857,979	$2.34	6,687,670
Propane	64,995,042	1,547,501	2.21	3,419,977
Butane	66,903,774	1,592,947	2.02+	3,229,256
LPG	6,369,678	151,659	1.68	254,787
Total	258,303,612	6,150,086		13,591,690

* Production figures supplied by State Corporation Commission.
** 42-gallon barrels.

value averaged $2.21 per barrel, as compared with $2.18 per barrel during the previous year. Production from Kansas plants for the last 12 years is shown in Table 22; plant capacity is given in Table 23.

The use of natural gas liquids with natural gas in the production of carbon black decreased from 398,415 barrels in 1960 to 361,005 barrels in 1961.

Natural gas liquids pipelining.—Much of the activity during the year centered about a proposal by Northern Natural Gas Co. and Northern Gas Products Co. to build a 353-mile, 8-inch LPG line from the new propane extracting plant near Bushton, Kansas, to Des Moines, Iowa. The proposed line would have an initial capacity of 22,000 barrels per day and will be handled by a control center located at Des Moines. In connection with this project, the Great Lakes Pipeline Co. plans a conversion of its 6-inch products line from Des Moines, to Minneapolis and Chicago to tie in with the LPG line of Northern Gas Products in order to facilitate transport of products from Bushton, Kansas, to the Chicago area.

Mid-America Pipeline Co. has taken Northern Gas Products Co. to United States Circuit Court of Appeals, District of Columbia, to force a show of cause why they should not be required to obtain certificates (Federal Power Commission) for their Bushton plant, claiming that Northern is in competition with Mid-America's common carrier status.

Rounds and Stewarts natural gasoline plant in the **Lost Springs** field in Marion County was under construction in 1961. Skelly Oil Co.'s new plant at Minneola in Clark County went on stream with a capacity of 25,000,000 cubic feet per day.

The need for low-cost temporary storage is one of the major problems facing the expanding LPG industry. This problem, created by the seasonal nature of the demand for the product, has been partly solved in the last few years by injecting natural gas liquids into wholly or partly depleted reservoirs, which may have contained salt-water, gas or distillate. Recently, and especially in Kansas, natural gas liquids have been stored in artificially formed underground cavities in salt beds. Locations and capacities of these storage projects are given in Table 24.

Table 22.—*Kansas production of natural gasoline and allied products, 1950-1961*

Year	Production, thousand gal.	Year	Production, thousand gal.
1950	155,233	1956	199,384
1951	182,932	1957	223,618*
1952	196,462	1958	225,176
1953	211,657	1959	232,847
1954	193,783	1960	250,789*
1955	206,621	1961	258,304

* Revised figure.

TABLE 23.—*Natural gasoline plant survey**

Location (county, and nearest town)	Capacity, million cu. ft. per day	Throughput, million cu.ft. per day	Products (gal. per day)				
			Propane	Isobutane	Normal butane	LPG mix	Natural gasoline
Cities Service Petroleum Co.							
Sedgwick County (transmission line) (Wichita)	125.0	125.0	39,000	13,600	32,700	.....	33,500
Colorado Interstate Gas Co.							
Hugoton field, Kearny County (Lakin)	215.0	65.0	.....	.....	.....	.....	.....
Hugoton Production Co.							
Hugoton Field, Grant County (Ulysses)	90.0	70.0	18,547	18,909	.....	.....	.....
Kansas-Nebraska Natural Gas Co., Inc.							
Kearny County (Deerfield)	125.0	75.0	3,150	.....	.....	3,370	15,400
Mobil Oil Co.							
Hugoton field, Stevens County (Ulysses)	134.0	100.0	11,000	.....	7,000	.....	30,000
Spivey plant, Spivey-Grabs field, Harper County (Attica)	70.0	65.0	20,000	.....	12,000	.....	29,000
Northern Natural Gas Co.							
Hugoton field, Finney County (Holcomb)	185.0	159.0	.....	.....	.....	.....	.....
Sublette plant, Hugoton field, Seward County (Sublette)	325.0	206.0	.....	.....	.....	.....	.....
Pan American Petroleum Corp.							
Hugoton field, Grant County (Ulysses)	325.0	210.0	49,000	17,400	53,200	9,500	60,000
Kinsler plant, Hugoton (Deep) field,							
Panhandle Eastern Pipe Line Co.							
Morton County (Elkhart)	6.0	6.0	.....	.....	.....	.....	.....
Seward County (Liberal)	240.0	232.0	16,300	.....	28,800	.....	.....
Skelly Oil Co.							
Medicine Lodge Plant, Barber County (Medicine Lodge)	60.0	NR	11,000	.....	.....	.....	.....
Minneola plant, Ford County (Dodge City)	25.0	NR	10,000	.....	.....	.....	.....
U.S. Bureau of Mines							
Otis Plant		(One of five government helium plants in U.S.)					
Total	1,925.0	1,313.0	177,997	49,909	133,700	12,870	167,900

* From Robert B. Bizal, April 30, 1962.
** Under construction.

TABLE 24.—*Underground LPG storage**

Company, county, and type of storage	Capacity, bbl.	Product
Cities Service Oil Co.		
Reno—Salt layer (4 caverns)	239,000	Butane
Reno—Salt layer (10 caverns)	694,000	Propane
Mid-America Pipe Line Co.		
McPherson—Salt layer (3 caverns)	210,000	Propane
**McPherson—Salt layer (under construction)	50,000	Propane
**McPherson—Salt layer (under construction)	50,000	Isobutane
**McPherson—Salt layer (under construction)	50,000	Butane
National Cooperative Refinery Assoc.		
McPherson—Salt layer (8 caverns)	400,000	Propane
McPherson—Salt layer (10 caverns)	500,000	Butane
**McPherson—Salt layer (12 newly completed caverns)	600,000	Propane
Northern Gas Products Co. (subsidiary of Northern Natural Gas Co.)		
**Ellsworth—Salt formation (under construction)	1,500,000	Propane, butane
Pan American Petroleum Corp.		
Grant—Salt layer (7 caverns)	175,000	LPG
Phillips Petroleum Co.		
Kingman—Salt layer (6 caverns)	417,000	Butane, propane
Security Underground Storage Co.		
McPherson—Salt bed	1,200,000	Propane
**McPherson—Salt bed (newly completed)	150,000	Propane
Sinclair Oil & Gas Co.		
**Reno—Salt layer (3 newly completed caverns)	160,000	Propane
Skelly Oil Co.		
McPherson—Salt layer	500,000	Propane
Tuloma Gas Products Co.		
Reno—Salt bed	350,000	Propane, butane
**Reno—Salt bed (newly completed)	125,000	Propane, butane

* By Robert B. Bizal, October 16, 1961.
** Projects completed, under way, or planned recently.

CARBON BLACK

Production of carbon black during 1961 was reported as 89,936,075 pounds, valued at $6,243,191. This represents an increase in production of 2,633,890 pounds and in value of $621,955 from the previous year (Table 25). Carbon black was produced by the Columbian Carbon Co. at Hickok and by the United Carbon Co. at Ryus in Grant County; both plants use the furnace process.

The Conservation Division of the State Corporation Commission reports that use of natural gas in the manufacture of carbon black in Kansas was 3,645,118 thousand cubic feet, a decrease of 269,326 thousand cubic feet from 1960.

RESERVES

Although the value of Kansas reserves of natural gas liquids is commonly overshadowed by the value of crude oil and natural gas, natural gas liquids, consisting of natural gasoline, condensate, and LPG (mainly propane and butane), supplement supplies of gasoline

TABLE 25.—*Quantity and value of carbon black produced in Kansas in 1960 and 1961**

Year	Carbon black produced		Estimated fuel consumed	
	Quantity, lb.	Value	Gas, billion cu. ft.	Natural gasoline, million bbl.
1960	87,302,185	$5,621,236.	3.91	0.40
1961	89,936,075	$6,243,191.71	3.65	0.36

* Figures supplied by State Corporation Commission.

for motor vehicles and fuel for industrial and domestic use. Natural gas liquids also have great potential use in the manufacture of plastics.

Conservative estimates of proved reserves of crude oil and gas, should no more wells be drilled and presently known reservoirs be depleted, give Kansas a 9 to 1 reserve-life index ratio for oil, and about a 30 to 1 for gas. Reserves are not the same as availability, however, because rate of production determines producing capacity. In an emergency, Kansas' producing capacity could be increased by 10 to 15 percent for a short time. Oil reserves in a 9 to 1 ratio suggest probably a 35-year recovery period, because in depleting a reservoir the producing rate declines rapidly with time. Future supplies of liquid and gaseous hydrocarbons must come from additional exploration. In Kansas there are geologically favorable areas still unexplored.

Kansas' proved reserves of liquid hydrocarbons (crude oil and natural gas liquids) as of December 31, 1961, were 1,061,606,000 barrels, a decrease of 1.9 percent from the previous year; nationally, reserves increased more than .98 percent. The state's proved reserves of crude oil were 878,027,000 barrels at the end of 1961, a decrease of 5,822,000 barrels or .66 percent; national reserves increased .46 percent.

Proved reserves of natural gas in Kansas at the end of 1961 were estimated to be 19,190,005 million cubic feet, a decrease of about 2.2 percent. Proved reserves of natural gas liquids, 183,579,000 barrels, are 7.5 percent less than in the previous year (Table 26). All estimates of reserves are taken from the American Petroleum Institute and American Gas Association's annual report on reserves. It should be emphasized that the figures in this report represent proved reserves of crude oil, natural gas, and natural gas liquids.

The reserve figures used in this report do not include: (1) oil under the unproved portions of partly developed fields; (2) oil in untested prospects; (3) oil that may be present in unknown prospects in regions believed to be generally favorable; (4) oil that may become available by fluid injection methods from fields where such methods have not yet been applied; (5) oil that may become available through chemical processing of natural gas; and (6) oil that can be made from oil shale, coal, or other substitute sources.

TABLE 26.—*Kansas proved reserves of natural gas and natural gas liquids, December 31, 1961*

	Reserves* as of 12-31-60	Extensions and revisions, 1961	Discoveries, 1961	Production during 1961	Proved reserves, 12-31-61	Net change in underground storage	Difference in reserves, 1960-1961	Percentage change, 1960-1961
Natural Gas	19,620,224	164,534	103,759	696,830	19,190,005	1,682	—430,219	2.2
Natural gas liquids	198,403	—8,728	596	6,692	183,579	.....	— 14,824	—7.5

From the American Petroleum Institute and American Gas Association, 1961.
*Reserves of natural gas liquids are thousands of barrels of 42 U.S. gallons; reserves of natural gas are millions of cubic feet calculated at 14.65 psia. at 60°F.

STATISTICAL TABLES

The following tables give statistical data on oil and gas developments in Kansas during 1961. Because the Eastern Kansas producing areas are less continuous than those elsewhere in the state, they have been subdivided into lesser producing areas labeled a, b, c, etc., in Table 34 as well as on the map, Plate 1. No attempt has been made to list production by producing zone within these subdivisions. Elsewhere in Table 34, prorated field production is differentiated by producing zone wherever possible.

TABLE 28.—*Oil and gas pools discovered in Kansas during 1961*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month named	Initial production, bbl. per day
Barber County					
Aetna Northwest NE SE SW 4-34-15W	Champlin Oil & Ref. Co. No. 1 Davis-Ranch "N"	Cherokee	4761-4774	Dec.	1,200,000 cu. ft. gas
Glick East NE SW SW 18-31-15W	Rupp, Kenneth, No. 1 Robbins-Gallup Unit	"Penn sand"	4706-4727	Nov.	75
McR C NW SW 16-33-10W	Arvel C. Smith No. 1 McReynolds (Abandoned during 1961)	Lans.-K.C. Mississippian	3912-3918 4546-4566	Sept.	D & A
Barton County					
Bend SE SE SE 11-20-13W	Leo J. Dreiling Oil Co. No. 1 Welch	Lans.-K.C.	3268-3274	April	52
Erna NW SE NW 30-18-14W	Peel-Hardman Oil Operators, No. 1 Dyer	Arbuckle	3522-3530	Feb.	108
Erna Southeast NE SE SW 29-18-14W	Colo. Oil & Gas Corp. No. 1 Russell "B"	Lans.-K.C.	3388-3392	Feb.	90
Fort Zarah West NW NW NW 25-19-13W	Nadel & Gussman No. 1 Wood	Arbuckle	3413-3415	Nov.	239
Galatia North NW NW SE 2-16-15W	Thunderbird Drlg., Inc. No. 1 Steinert	Lans.-K.C.	3200-3205	Dec.	90
Knop NE NE SW 9-19-12W	Raymond Oil Co., Inc. No. 1 Knop	Lans.-K.C.	3326-3331	July	156
Laud SW NE NW 23-18-14W	Wilkinson Drlg., Inc. No. 1 Laudick (Abandoned during 1961)	Arbuckle	3410-3413	April	D & A
Butler County					
Ferrell South SW SE SW 33-28-8E	Morris-Adair-Phillips No. 1 Ferrell	Mississippian	2755-2779	July	76
Skaer SE SE SW 21-27-3E	Shawver-Armour, Inc. No. 1 Skaer	Simpson	3037-3042	May	42
Whitewater East SW NE SW 33-25-4E	Kimray No. 1 Edminston**	Mississippian	2462-2495	Nov.	25
Chase County					
Koegeboehn North C E½ E½ W½ 8-19-6E	Daetwiler Oil Co. No. 2 Koegeboehn	Viola	1962-1971	Nov.	15
Chautauqua County					
Cedarvale South NE NW NW 22-34-8E	Augusta Oil Co., Inc. No. 1 Brown (Combined with Cedarvale)	Mississippian	2510	Nov.	D & A
Comanche County					
McMoran NE NE SW 25-34-16W	Aladdin Petr. Corp. No. 1 McMoran**	Lans.-K.C.	4797-4809	April	3/4
Shimer C NE NE 13-33-17W	Continental Oil Co. No. 1 Biddle	Mississippian	5014-5046	Nov.	2,500,000 cu. ft. gas
Cowley County					
Bolack SE NW NW 21-32-6E	Gralapp & Everly No. 1 Bolack	"Cattleman"	2838-2844	June	65
Larcom NE NW NE 9-34-4E	Hammer & Maclean, et al., No. 1 Larcom	"Layton"	2418-2422	May	21
Decatur County					
Jennings Northwest C SW NE 10-4-27W	Time Petroleum Co. No. 1 Crandell	Lansing	3593-3597	Mar.	12
Kathka C SE NE 7-1-28W	Empire Drilling Co. No. 1 Kathka (Abandoned during 1961)	Lans.-K.C.	3560-3566 3606-3618	June	D & A
Lawson C NE SW 11-1-26W	Sauvage Drlg. Co., Inc. No. 1 Lawson	"Penn sand"	3562-3565	May	85
Olive C NE SW 12-2-28W	Murfin Drlg. Co. & G. A. Donnelly, Jr. No. 1 Miller	Lansing	3466-3470	Dec.	40
Ellis County					
Pleasant West NE SW NE 4-14-20W	Mack Oil Co. No. 2 Gottschalk	Arbuckle	3937-3945	April	10
Spring Hill SE SE NW 23-14-20W	Don E. Pratt Oil Opers. No. 1 Keller	Lans.-K.C.	3448-3452	June	32
Victoria South NW NW NW 19-14-16W	E. R. K. No. 1 Linenberger	Lans.-K.C.	3240-3392½	May	104

TABLE 28.—*Oil and gas pools discovered in Kansas during 1961, continued*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month named	Initial production, bbl. per day
Finney County					
Amazon Ditch C NW SW 20-22-34W	Horizon Oil & Gas No. 1 Barrett	Mississippian	4768-4774	July	336
Cowgill C NW SE 27-24-33W	Cities Serv. Petro. Co. No. 1 Cowgill "A"	Morrowan	4815-4826	May	120
Kisner C NW SE 36-26-33W	Pan-Am Petr. Corp. No. 1 Kisner GU "C"	Morrowan	4995-4997	Oct.	6½
Nunn East C NW NW 31-21-33W	N. Appleman Co. No. 2 Maune	Mississippian	4654-4673	Feb.	100
Ford County					
Conrardy C SW NE 22-26-24W	Raymond Oil Co., Inc. No. 1 Conrardy	Cherokee	4990-5022	Dec.	D & A
Little Coon Creek C SE NE 33-25-21W	Mack Oil Co. No. 1 Butler	Cherokee	4715-4736	July	25
Graham County					
Bryan Northeast SE SE SE 4-10-24W	C-G Drlg. Co. & Houston Petro. No. 1 Bell	Lans.-K.C.	3972-3996½	Sept.	145
Culp C NW NE 21-10-24W	Empire Drlg. Co. No. 1 Culp "A"	Lans.-K.C.	3839-3845	June	166
Red Line Northwest C SW SE 19-9-22W	John O. Farmer, Inc. No. 1 Farrell	Lans.-K.C.	3834-3838	Oct.	90
Richmeier C NW SE 30-9-25W	Imper. Oil of Kan., Inc. No. 1 Richmeier	Lans.-K.C.	4038-4046	Aug.	124
Grant County					
DaVatz C SE NW 13-28-36W	Columbian Fuel Corp. No. 2 DaVatz "B"	Morrowan	5231-5232	June	144
Ryus C SE NE 3-30-35W	United Prod. Co., Inc. No. 2 McCabe Unit	Marmaton Morrowan	4699-4701 5312-5317	June	120 190
Greenwood County					
Harris NW NE SE 10-25-12E	Edd Ashlock No. 1 Harris	"Peru"	1449-1457	April	5
Huffine SW SE NW 10-28-13E	Triple "A" Drlg. Co. No. 1 Huffine	"Burgess" Mississippian	1299-1302 1302-1306	Dec.	1,000,000 cu. ft. gas
Harper County					
Alfalfa SW NW NE 12-34-6W	Cities Serv. Petro. Co. No. 1 Mattingly	Kansas City	3761-3769	May	32
Rex C SE SW 1-32-5W	Tenneco Oil Co. No. 1 King	Simpson	4633-4639	Nov.	166
Sullivan C SE NW 31-32-8W	Ferguson Oil Co. No. 1 Sullivan Unit	Viola	4670-4676	Dec.	62
Haskell County					
Koenig East C SW SW 9-29-33W	Admiral Oil, Inc. No. 1 Lemon**	Morrowan	5400	Sept.	90
Lemon C SW SW 22-30-33W	Pan Amer. Petro. Corp. No. 1 Lemon GU "F"	Morrowan	5349-5358	Sept.	577,000 cu. ft. gas
Lemon North C NW SE 33-29-33W	Pan Amer. Petro. Corp. No. 1 Miller GU "I"	Marmaton	4885-4887	Sept.	13 & 8,400,000 cu. ft. gas
		Morrowan	5309-5311		4,500,000 cu. ft. gas
Lemon Northwest C SW NE 17-30-33W	Pan Amer. Petro. Corp. No. 1 Black GU "C"	Lans.-K.C. Cherokee	4220-4222 4990-4995	Sept.	159 1,900,000 cu. ft. gas
		Morrowan	5270-5318		1,280,000 cu. ft. gas
Santa Fe C SW SW 30-28-32W	Walter Kuhn Drlg. Co. No. 1 Masoner (Abandoned during 1961)	Morrowan	5325-5347 5347-5353	June	D & A
Hodgeman County					
Hanston C SW NE 8-22-22W	Sunray Mid-Cont. Oil Co. No. 1 Miller Est.	Mississippian	4486-4513	Oct.	188
Oppy C SW NE 19-22-22W	Sunray Mid-Cont. Oil Co. No. 1 Oppy	Mississippian	4538-4545	Dec.	71

TABLE 28.—*Oil and gas pools discovered in Kansas during 1961, continued*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month named	Initial production, bbl. per day
Kingman County					
Negro Creek NE NE NE 13-28-7W	Messman-Rinehart Oil Co., No. 1 Greenleaf	Toronto	2908-2912	Dec.	5,300,000 cu. ft. gas
Kiowa County					
Eaton SW SW SW 35-27-17W	D. R. Lauck Oil Co., Inc. No. 1 Thompson**	"Kinderhookian"	4733-4740	April	43
Fralick West C SE SE 16-27-20W	Falcon-Seaboard Drlg. Co., No. 1 Brensing	Mississippian	4868-4878	June	35 & 4,333,000 cu. ft. gas
Ursula NE SW NE 9-29-18W	Aylward Drlg. Co. & Rupp, No. 1 Graves	Mississippian	4922-4950	Aug.	3,000,000 cu. ft. gas
Lane County					
Amy C NW NW 33-18-30W	Pet-Ex Co. No. 1 Edmundson (Abandoned during 1961)	Marmaton	4361-4378	April	D & A
Pendennis C SW NE 28-16-27W	Pet-Ex Co. No. 1 Leighton	Lans.-K.C.	4200-4204	Feb.	42
McPherson County					
Graber East NW NW NE 15-21-1W	Charles Johnson No. 1 Unruh**	"Hunton"	3404-3410	Oct.	25
Marion County					
Bartell NE NW SE 36-19-2E	B. O. A. No. 1 Bartell	Mississippian	2512-2514	Aug.	D & A
Stenzel NE NW NW 12-20-3E	Crowe Drilling, Inc. No. 1 C. Stenzel	Mississippian	2340-2347 ½	Aug.	2,200,000 cu. ft. gas
Morton County					
Richfield West C SE 2-32-42W	Hamilton Bros., Ltd. No. 1-2 E. C. Dean	Morrowan "G"	4974-4994	Dec.	1,850,000 cu. ft. gas
		"Keyes"	5051-5054		2,220,000 cu. ft. gas
Wilburton South C SE NW 17-35-41W	Cities Serv. Petro. Co. No. 2 Hayward "D"	Topeka	3184-3335	Dec.	22,500,000 cu. ft. gas
Ness County					
Arnold North C SW NW 10-16-25W	Birmingham-Bartlett Drlg. Co., No. 1 Geiss "B"	Mississippian	4504-4510	May	201
Arnold Southwest NE SE SE 29-16-25W	Kern Drilling Co. No. 1 Burgess	Mississippian	4464-4472	May	109
Osage County					
Vassar NW NE NW 23-16-16E	Messman-Rinehart Oil Co., No. 1 Woodward	Mississippian	1524-1551	June	D & A
Pawnee County					
Oro Southeast NW SE NW 23-20-19W	Mull Drlg. Co., Inc. No. 1 Harms	Cherokee	4218-4223	June	42
Phillips County					
Mont-Sol South NW NW NE 18-4-18W	Sam P. Wallingford, Inc. No. 1 Bredemeier	Lansing	3171-3288	Dec.	Oil
Pratt County					
Brehm SW SE SW 23-28-13W	Continental Oil Co. No. 1 Brehm	Arbuckle	4422-4433	Nov.	205
Cullison West NW NW SW 12-28-15W	Joseph E. Newman No. 1 Rezeau**	Cherokee		April	Gas
Gereke North NW SE SE 1-26-15W	Strata Drilling, Inc. No. 1 Parks	Simpson	4394-4405	Dec.	140
Rawlins County					
Schmahl NW NW NW 9-5-31W	Empire Drlg. Co. No. 1 Schmahl	Lans.-K.C.	4156-4162	April	162
Reno County					
Abbyville East NW NW SW 21-24-7W	Beverly Oil No. 1 Evelyn**	Lansing	3478-3482	May	25
Sterling Southwest C NE SW 17-22-8W	Mull Drlg. Co., Inc. No. 1 Morgan	Penn. Congl.	3544-3554	Oct.	141

TABLE 28.—*Oil and gas pools discovered in Kansas during 1961, continued*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month named	Initial production, bbl. per day
Rice County					
Faler SE NW NE 2-21-9W	Thunderbird Drlg., Inc. No. 1 Faler	Simpson	3322-3337	Nov.	76
Frederick East C SW SW 12-18-9W	Bear & Goodin No. 1 Bronleewe	Simpson	3288-3295	June	55
Tobias NE NW SW 25-20-9W	Thunderbird Drlg., Inc. No. 1 Tobias	Arbuckle	3362-3372	Oct.	108
Rooks County					
Hrabe NW SE SE 36-8-17W	Rosencrantz-Bemis Drlg. Co., No. 1 Hrabe**	Lans.-K.C.	3060-3299	Sept.	26
Hrabe West SE SE SW 35-8-17W	B. & R. No. 1 Hindman	Lansing	3103-3110	Dec.	60
Natoma NW SW SW 14-10-16W	Russell Cobb, Jr. No. 1 Phelps	Lans.-K.C.	3318-3410	Sept.	44
Rush County					
Schwindt SE SE SE 11-17-19W	Shields Oil Prod., Inc. No. 1 Schwindt "B"	Reagan	3849-3856	Sept.	77
Shiley North NE NW NW 31-19-19W	Mull Drlg. Co., Inc. & Walters Drlg. Co. No. 1 West	Penn Congl.	4190-4211	Nov.	146
Russell County					
Elsasser SE NE NW 23-12-15W	Fred J. Haynes No. 1 Elsasser	Lans.-K.C.	2882-3012	April	40
Elsasser Southwest SE SE SW 22-12-15W	Terrell Drilling Co. No. 1 Schmeidler	Arbuckle	3266-3270	Dec.	43
Salt Creek C S½ SE SW 6-13-14W	M. P. Springer No. 1 McCully**	Lans.-K.C.	2956-3141	July	85
Saline County					
Mentor South C W½ NW SW 25-15-3W	Mutual Oil Co. No. 1 Collins	Maquoketa	3290-3296	Aug.	15
Scott County					
Durrant C SE NW 30-17-31W	Bell Oil & Gas Co. No. 1 Durrant	Mississippian	4653-4658	Feb.	60
Hugoton North C SW NW 25-19-33W	Republic Nat. Gas. Co. No. 1 Smith "A"	Chase Group	2655-2670	Dec.	7,536,000 cu. ft. gas
Sedgwick County					
Gillian NE NW SE 33-29-1W	Shawver-Armour, Inc. & Lario Oil & Gas Co. No. 1 Gillian	Simpson	3725-3732	Dec.	165
Seward County					
Ang C NW SE 3-32-33W	Pan Amer. Petro. Corp. No. 1 Angell	Mississippian	5813-5815	Nov.	95
Stafford County					
Cline South NW NW SE 36-24-13W	D. R. Lauck Oil Co., Inc. No. 1 Winchester	"Kinderhookian"	3913-3922	Dec.	7
Foley SE NE SE 18-25-14W	Petroleum, Inc. No. 1 Foley	Lans.-K.C. Viola	3868-3927 4215-4227	April	47 94
Hudson South SW SW NE 4-23-12W	Ferguson Oil Co. No. 1 Spangenberg	Viola	3614-3637	Nov.	19
Leiss Southeast NW SW NW 25-25-13W	Dunne-Gardner Drlg. Co., Inc., No. 1 Russell	Lans.-K.C.	3860½-3866	Oct.	183
Macksville Townsite NE NE SW 15-24-15W	Arizona Oil Dev. No. 1 Thurow	Simpson	4152-4162	Sept.	27
Max East SE NW SE 6-22-11W	Western Petr. Co., Inc. No. 1 Mellies "B"	Arbuckle	3552-3569	Feb.	13
Rugan NW SW NE 2-21-11W	F. G. Holl No. 1 Rugan "D"	Arbuckle	3374-3378	Dec.	52
Slade South SW NW SW 35-25-12W	Musgrove Drlg. Co. No. 1 Slade	Viola	4050-4077	Dec.	85
Stanton County					
Nich C NE SW 15-30-39W	Pan Amer. Petro. Corp. No. 1 Nicholas GU "C"	Morrowan	5630-5634 5556-5558 5572-5574	Sept.	9,230,000 cu. ft. gas
Sand Arroyo C SE NW 17-29-39W	Pan Amer. Petro. Corp. No. 1 Welch GU "D"	Morrowan	5520-5522 5476-5478	Sept.	522,000 cu. ft. gas

TABLE 28.—*Oil and gas pools discovered in Kansas during 1961, concluded*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month named	Initial production, bbl. per day
Stevens County					
Cutter* C SW SE 1-31-35W	Mobil Co. & United Prod. Co., Inc. No. 1 Cutter	Morrowan	5313-5315	Jan.	71½ & 1,448,000 cu. ft. gas
Cutter South C SW NE 27-31-35W	Mobil Oil Co. No. 1 Anderson Trust	Mississippian	6003-6034	Sept.	244
Perrill West C SE NW 6-31-38W	Pan Amer. Petro. Corp. No. 1 Hahn GU "C"	Morrowan	5655-5657	Oct.	975,000 cu. ft. gas
Ski C SW NE 16-34-35W	Cities Serv. Petro. Co. No. 1 Skinner "C"	Mississippian	6180-6195	Sept.	2,150,000 cu. ft. gas
Sumner County					
Reynolds SE NE SE 9-30-2E	Raymond Oil Co., Inc. No. 1 Reynolds	Mississippian	3161-3170	Dec.	Oil
Sparr SW SW SE 14-30-2W	Beardmore Drlg. Co. No. 1 Sparr "A"	Mississippian	3774-3787	Feb.	35

*Field extends into adjacent county.
**Old wells worked over.

TABLE 29.—*Fields revived during 1961*

County, pool, and location of revival well	Revival well	Producing zone	Production depth, ft.	Month revived	Initial production, bbl. per day
Barton County					
Pendergast C N½ SW NE 27-19-15W	R. P. Nixon No. 1 Pendergast	Arbuckle	3624-3637	July	D & A
Rusco NE SW SE 8-19-12W	Raymond Oil Co., Inc. No. 1 Rusco	Arbuckle	3400(top)	July	D & A
Cowley County					
Turner North SW SW SE 7-32-6E	Hammer & Maclean, et al., No. 1 Powers	"Bartlesville"	2991-3002	July	48
Ellis County					
Herman SE SE SE 21-13-20W	John O. Farmer, Inc. No. 1 P. Herman** (Combined with Pleasant)	Shawnee	3494-3496	Oct.	47
Harvey County					
Burrton East N½ N½ NE 28-23-3W	Stelbar Oil Corp., Inc. No. 1 Ted Jones	Mississippian	3294-3345	April	10
Kiowa County					
Quaker C NW NE 10-27-19W	Western Petro. Co., Inc. No. 1 Davis	Mississippian	4804-4806	June	28 & 1,450,000 cu. ft. gas
Pratt County					
Jem SW SW SE 28-29-13W	Kenwood Oil Co. No. 1 Moore	Viola	4474-4488	Mar.	31 & 1,100,000 cu. ft. gas
Reno County					
Albion North C NW SW 12-26-6W	Wiggins Drlg. Co. No. 1 Ruth	Mississippian	3599-3606	Nov.	6
Rice County					
Dymond C SE NE 13-21-8W	The Pure Oil Co. No. 1 Smisor	Mississippian	3362-3369	Nov.	1,930,000 cu. ft. gas
Rush County					
Big Timber SW SW SW 5-16-18W	Frontier Oil Co. No. 1 Leiker	Lans.-K.C.	3352-3358	June	80
Russell County					
Fay SE SE NW 2-12-15W	Terrell Prod. No. 1 Shaffer	Lans.-K.C.	2978-3158	June	50
Stafford County					
German Valley NW NE SW 4-22-12W	Western Petro. Co., Inc. No. 1 Sittner	Arbuckle	3638-3640	July	60
Max North C W½ NW SW 26-21-12W	Coop. Refg. Assn. & Thomas H. Allan No. 1 Drach	Arbuckle		Sept.	25
Salt Marsh NE NW SE 32-21-11W	Conoco No. 1 J. F. Wolf (Revived with new zone)	Lans.-K.C.	3140-3360	Sept.	97

**Old wells worked over.

TABLE 30.—*Fields abandoned in Kansas during 1961*

County, pool, and location of discovery well		Discovery well	Producing zone					Year of discovery	Month of abandonment
			Name	Depth, feet	Thickness, feet	Aver. grav.	Cumulative production, bbl.		
Barber County									
McR	16-33-10W	No. 1 McReynolds	Lans.-K.C.	3,903	6	....	1,251	1961	December
			Mississippian	4,544	20				
Barton County									
Laud	23-18-14W	No. 1 Laudick	Arbuckle	3,401	3	....	0	1961	October
Decatur County									
Kathka	7-1-28W	No. 1 Kathka	Lans.-K.C.	3,560	18	30	276	1961	August
Ellis County									
Sauer	29-13-20W	No. 1 Sauer	Lansing	3,561	6	....	0	1960	February
Haskell County									
Santa Fe	30-28-32W	No. 1 Masoner	Morrowan	5,252	28	....	0	1961	August
Kiowa County									
GRW	36-30-16W	No. 1 Walker	Viola	4,734	10	38	1,190	1958	February
Lane County									
Amy	33-18-30W	No. 1 Edmundson	Marmaton	4,314	17	....	0	1961	June

TABLE 31.—*Fields combined in Kansas during 1961*

County and name of field combined	Discovery well location	Area, acres	Producing zone: Name	Producing zone: Depth, feet	Producing zone: Thickness, feet	Producing zone: Year of discovery	Cumulative production, bbl.	Month of combination	Combined as part of
Barton County									
Sandrock SE	34-20-13W		Lans.-K.C.	3,262	18	1954	2,043	September	Shaeffer Northeast*
Sieker	5-21-12W		Arbuckle	3,458	7	1960	0	April	Rolling Green East*
Chautauqua County									
Cedarvale South	22-34-8E		Mississippian	2,510	....	1961	0	December	Cedarvale*
Clark County									
Harper Ranch	9-34-21W		Certain acreage deleted—now in Snake Creek					September	
Snake Creek Southwest	32-34-21W		Morrowan	5,516	28	1959	0	September	Snake Creek
Ellis County									
Herbert Southeast	19-13-20W		Arbuckle	3,874	6	1960	.....	August	Herbert
Herman	28-13-20W		Toronto	3,492	2	1954	6,732	October	Pleasant
			Arbuckle	3,865	6				
Finney County									
Damme Northeast	16-22-33W	40	Mississippian	4,639	10	1953	61,345	October	Damme
Finnup	34-22-33W	320	Mississippian	4,756	6	1953	520,732	October	Damme
Graham County									
Elrick East	14-10-25W	280	Lansing	3,774	3	1959	23,673	February	Elrick
Hamilton County									
Bradshaw	36-22-41W		Chase Group	2,546	....	1957	0	May	Bradshaw Gas Area
Medway	16-24-41W		Winfield	2,305	....	1959	0	May	Bradshaw Gas Area
Wedel	1-22-41W		Winfield	2,746	....	1958	0	May	Bradshaw Gas Area
Haskell County									
Eubank South	21-29-34W	100	Chesteran	5,314	82	1960	11,983	September	Eubank
Satanta North	4-30-34W	80	Morrowan	5,208	18	1960	36,731	September	Eubank
Kingman County									
Basil	16-29-7W	3,900	Lans.-K.C.	3,727	....	1953	1,977,937[a]	April	Spivey-Grabs-Basil*
			Mississippian	4,150	4				
Spivey-Grabs	13-31-9W	12,640	Mississippian	4,205	....	1949	8,386,154[b]	April	Spivey-Grabs-Basil*
McPherson County									
Burk	7-18-1W	140	Mississippian	2,781	3	1948	146,389	October	Georob

Marion County									
Hillsboro East	17-19-3E	920	Mississippian	2,444	....	1959	95,555[c]	June	Lost Springs*
			Viola	2,757	20				
Klenda	12-19-3E	340	Mississippian	2,346	27	1959	70,334[d]	June	Lost Springs*
Klenda Northwest	2-19-3E	1,160	Mississippian	2,345	54	1959	94,423[e]	June	Lost Springs*
Klenda Southwest	14-19-3E	160	Mississippian	2,414	39	1960	10,554[f]	June	Lost Springs*
Tajchman	21-19-5E		Mississippian	2,231	....	1960	0	June	Lost Springs*
Meade County									
Thiessen	8-33-27W	540	Morrowan	5,690	....	1959	5,337	October	McKinney*
Rice County									
Mooney Southeast	8-19-10W	160	Arbuckle	3,322	6	1959	11,231	July	Mary Ida South
Rick	1-19-11W		Certain acreage deleted—now in Mary Ida South					July	
Rush County									
Bison (Abd.)	27-17-17W		Certain acreage deleted—now in Reichel Gas Area					November	
Lohrey	35-17-17W	80	Penn. Congl.	3,563	....	1956	3,279,877[g] M cu. ft.	November	Reichel Gas Area
			"Gran. Wash"	3,578	7				
Reichel	23-17-17W		Topeka	3,006	....	1953	3,385,123[h] M cu. ft.	November	Reichel Gas Area
			Lans.-K.C.	3,330	....				
Rothe	31-17-16W	60	Lans.-K.C.	3,446	....	1955	104,190 M cu. ft.	November	Reichel Gas Area
Saline County									
Dieter	7-15-2W	40	Maquoketa	3,218	6	1960	1,803	July	Salina South
Stafford County									
Grunder Southwest	15-25-15W	120	Lansing	3,784	3	1959	16,543	August	Haynes
			Mississippian	4,200	7				
Nagel	10-24-15W	160	Lans.-K.C.	3,735	6	1958	27,455	October	Macksville
Sumner County									
Belsley	13-31-2W	40	Mississippian	3,757	9	1960	9,736	September	Anson Southeast
Wusk	18-31-1W	340	Mississippian	3,711	4	1958	145,136	September	Anson Southeast
Trego County									
Spaulding South	1-11-21W	40	Lans.-K.C.	3,538	4	1954	152,416	December	Trico*

* Field extends into adjacent county.
[a] 4,599,414 M cu. ft.
[b] 54,717,103 M cu. ft.
[c] 348,858 M cu. ft.
[d] 11,563 M cu. ft.
[e] 93,612 M cu. ft.
[f] 1,680 M cu. ft.
[g] 3,229 bbls.
[h] 491 bbls.

TABLE 32.—*New oil or gas zones in old producing fields, 1961*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, ft.	Month of discovery	Initial production, bbl. per day
Barber County					
Nurse SE SE SW 13-31-13W	Continental Oil Co. No. 1 Smith "A"	Mississippian	4194-4200	Dec.	64 & 173,000 cu. ft. gas
Barton County					
Batchman SE SE NW 19-20-12W	Inger Oil Co. No. 1 Strothman**	Lans.-K.C.	3367-3369 3372-3376	May	D & A
Bend SE SE SE 11-20-13W	Leo J. Dreiling Oil Co. No. 1 Welch	Arbuckle	3454-3466	Oct.	52
Cheyenne SW NE NW 2-19-12W	Inger Oil Co. No. 6 Weikert	Congl.	3386-3392	Oct.	161
Erna NW SE NW 30-18-14W	Peel-Hardman Oil Operators No. 1 Dyer**	Lans.-K.C.	3253-3263	July	83
Erna Southeast SW NW SE 29-18-14W	Colorado Oil & Gas Corp. No. 2 Russell "B"	Congl.	3497-3501	April	102
Lake Barton SW NW NE 29-18-13W	Triangle Drlg., Inc. No. 1 Haberman	Lans.-K.C.	3293-3305	July	60
Lake Barton West SE NE NW 29-18-13W	Alpine Oil & Royalty Co., Inc., No. 6 Stoss	Lans.-K.C.	3299-3356	Nov.	165
Redwing Southwest SW NE SW 1-18-13W	Nadel & Gussman No. 3 Evaleigh "A"**	Lans.-K.C.	3133-3145	July	107
Chautauqua County					
Cedarvale* SW SW SW 10-34-8E	Mendenhall Drlg. Co. No. 1 Leedy	Marmaton	2028-2032	Aug.	30
Cowley County					
Enterprise Southwest NW SW NE 3-34-3E	Hammer & Maclean, et al. No. 1 Gilbert	Kansas City	2621-2627	Sept.	4,000,000 cu. ft. gas
Ellis County					
Air Base SW SW NE 27-13-16W	Don E. Pratt Oil Operations No. 11 Air Base**	Lans.-K.C.	3239-3244	Oct.	30
Antonino NW SE NE 27-14-19W	Frontier Oil Co. No. 2 Kraus "I"	Lans.-K.C.	3541-3545	Dec.	80
Emmeram Northeast NE SW SE 22-12-16W	Cities Serv. Petro. Co. No. 2 Ginther "A"**	Shawnee	3124-3132	Oct.	26
Leinmiller NW NE SW 2-12-19W	Alpine Oil & Roy. Co., Inc. No. 1 Leinmiller "B"**	Lans.-K.C.	3435-3441	Feb.	62
Schoenchen SE SE NW 16-15-18W	Okmar Oil Co. No. 4 Wolf	Lans.-K.C.	3349-3355	Sept.	25
Ford County					
Little Coon Creek C NE SE 33-25-21W	Imperial Oil of Kansas, Inc. No. 1 Torline	Mississippian	4781-4785	Sept.	290
Gove County					
Lundgren South SW NW NE 31-14-29W	Wycoff Bros. Oil Co. & Lundgren, No. 2 Lundgren "B"	Pawnee Ft. Scott Cherokee	4101-4119 4157-4158 4168-4182	Dec.	30
Harper County					
Grant NW SW SW 21-31-7W	Conoco No. 2 J. Titus	Mississippian	4343-4346	May	9,000,000 cu. ft. gas
Harper C W½ SW SW 12-32-7W	Walters Drilling Co. No. 1 Unruh**	"Elgin"	3059-3063	July	110
Muir NE NE NW 4-32-7W	Imperial Oil of Kansas, Inc. No. 1 Muir "B"	Mississippian	4382-4384	July	42
Haskell County					
Pleasant Prairie* C NE NE 16-27-34W	Panhandle Dev. Co., Inc. No. 1-16 Jones	Council Grove	2814-2819	Oct.	1,300,000 cu. ft. gas
Satanta North C NW NE 33-29-34W	United Prod. Co., Inc. No. 5 Kirkpatrick (Combined with Eubank)	Lans.-K.C.	4084-4087	May	4,450,000 cu. ft. gas
Hodgeman County					
Wieland North C SE SW 8-21-22W	Colorado Oil & Gas Corp. No. 1 Klinge	Cherokee	4298 4307	Mar.	91

TABLE 32.—*New oil or gas zones in old producing fields, 1961, continued*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, ft.	Month of discovery	Initial production, bbl. per day
Kingman County					
Alameda C NW NW 26-28-7W	Stelbar Oil Corp., Inc. No. 1 Nunnemaker	Viola	4357-4362	July	257
Alameda C NE NE 27-28-7W	Texaco, Inc. No. 1 Krehbiel	Simpson	4350-4355	Sept.	76
Reida SW NE SE 18-30-6W	Texaco, Inc. No. 1 Reida**	Lans.-K.C.	3680-3685	June	165
Settle C SW SW 17-29-7W	Mack Oil Co. No. 1 Castle	Viola	4515-4518	Oct.	39
Kiowa County					
Fruit C SE SW 33-27-16W	Coop. Refg. Assn. No. 1 Davies "R"	Cherokee	4650-4657	Oct.	180
Quaker C SW SE 3-27-19W	Sunray Mid-Cont. Oil Co. No. 1 Parton "A"	Lans.-K.C.	4364-4371	Oct.	75
McPherson County					
Jenday NE NE NE 1-19-2W	Finkle No. 1 Jackson**	Tarkio	1438-1447	Oct.	3
Marion County					
Covert Sellers W½ NE NW 28-21-4E	Messman-Rinehart Oil Co. No. 1 Covert	Kansas City	1684-1688	Feb.	25
Meade County					
Plains* C SE SE 16-32-30W	Joseph E. Newman No. 1 Plains Townsite	Marmaton	5150-5163	Mar.	Gas
Morton County					
Sparks* C SE NE 19-31-41W	Thomas & Brewer No. 1 Rosson	Wabaunsee	2853-2892	Aug.	5,650,000 cu. ft. gas
Ness County					
Arnold Southwest C NW SE 29-16-25W	Kern Drilling Co. No. 2 Burgess	Marmaton	4380-4384	Oct.	107
Hair C NW NW 9-20-24W	Pickrell Drilling Co. No. 1 McCreight	Ft. Scott	4322-4327	Sept.	30
Pratt County					
Carver Robbins SE SE NW 36-27-15W	Braden Drilling, Inc. No. 1 Miller	Viola	4581-4585	July	D & A
Carver Robbins NE SW NE 23-27-15W	Braden Drilling, Inc. No. 1 Wilson-Kell**	Lans.-K.C.	4167-4171	July	125
Cullison SW SW SE 25-28-15W	Joseph E. Newman No. 1 E. M. Johnson**	Cherokee	4522-4535	Mar.	203
Iuka-Carmi SW SW SW 21-26-12W	R. W. Rine Drlg. Co. No. 1 Knop**	Council Grove	2388-2415	Sept.	5,750,000 cu. ft. gas
Sawyer S½ SW SW 26-29-13W	Natural Gas & Oil Corp. No. 3 Larrison	Viola	4376-4388	Feb.	6,978,000 cu. ft. gas
Rawlins County					
Sappa Creek C SE SE 23-4-34W	Phillips Petro. Co. No. 1 Reeves "A"**	Lans.-K.C.	4204-4212	Nov.	50
Rice County					
Rino* NW SW SE 33-21-9W	Thunderbird Drilling, Inc. No. 2 Wellman "G"	Simpson	3518-3530	Nov.	39
Rooks County					
Locust Grove NW SE NE 8-7-19W	Texaco, Inc. No. 1 Dryden "B"	Lans.-K.C.	3340-3365	April	30
Lynd West SE NE SW 32-9-19W	Tomlinson-Kathol, Inc. No. 4 Lynd	Lans.-K.C.	3565-3624	Sept.	61
Rush County					
Otis-Albert* C NW NW 13-18-16W	Kansas Petro., Inc. No. 1 Mohr	Lans.-K.C.	3385-3389	Aug.	64

TABLE 32.—*New oil or gas zones in old producing fields, 1961, concluded*

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, ft.	Month of discovery	Initial production, bbl. per day
Russell County					
Driscoll NW SE SW 19-15-11W	Birmingham-Bartlett Drlg. Co., No. 1 Driscoll "A"	Lans.-K.C.	3059-3062 3131-3156	Oct.	2,500,000 cu. ft. gas 30
Eulert NW NW SE 35-11-15W	Natl. Coop. Refg. Assn. No. 1 Eulert "A"**	Lans.-K.C.	3035-3116	Oct.	8
Eulert NE NW SE 35-11-15W	Natl. Coop. Refg. Assn. No. 9 Eulert "A"**	Topeka	2749-2753	Oct.	20
Janne NE NW SE 24-15-12W	Leo J. Dreiling Oil Co. No. 1 Heinze	Shawnee	2902-2906	Nov.	3,250,000 cu. ft. gas
Scott County					
Newby C NE SW 23-18-32W	Imperial Oil of Kansas, Inc. No. 2 Newby	Mississippian	4577-4583	Feb.	100
Sedgwick County					
Minneha North NW NE NW 11-27-2E	H. H. Blair No. 1 Reed	Simpson	3260-3285	July	170
Seward County					
Blue Bell Northwest C SE NW 12-34-32W	Falcon-Seaboard Drlg. Co. No. 1 Davies	Morrowan	5858-5888	Oct.	8,300,000 cu. ft. gas
Evalyn C NW SE 9-33-33W	Anadarko Prod. Co. No. 1 Browne "A"	Mississippian	6038-6048	Mar.	81
Kismet* C NE SW 23-33-31W	Panhandle Dev. Co., Inc. No. 2 Wheatley	Toronto	4313-4318	Sept.	13,200,000 cu. ft. gas
Kismet* SE NW 23-33-31W	Thomas & Brewer No. 1 Simonson	Council Grove	3063-3150	April	1,820,000 cu. ft. gas
Kneeland C NE SE 14-34-31W	Panhandle Dev. Co., Inc. No. 1 Keating**	Mississippian	5722-5728	Sept.	D & A
Massoni C NE NW 3-33-31W	Edwin Cox No. 1 Light	Council Grove	3156-3170	April	1,730,000 cu. ft. gas
Stafford County					
Dillwin West C NE NE 19-24-14W	Tomlinson-Kathol, Inc. No. 1 Sewing	Penn. Congl.	4118-4124	Aug.	4,500,000 cu. ft. gas
Farmington North SE SE SE 23-24-15W	D. R. Lauck Oil Co., Inc. No. 1 Suiter "D"	Viola	4239-4251	Nov.	D & A
German Valley NE NW SE 4-22-12W	Western Petro. Co., Inc. No. 1 Schrader	Viola	3541-3543	Dec.	103
Kowalsky Southwest SW SW SE 6-21-11W	The Veeder Supply & Dev. Co., No. 7 Dietz	Penn. Congl.	3405-3411	Dec.	40
Lincoln SW NW SW 28-21-14W	Petroleum, Inc. No. 1 Smith A-F	Simpson	3765-3769	Nov.	57
McCandless Northeast SW SE NE 20-25-13W	Chief Drilling Co., Inc. No. 2 Kipp	Simpson	4263-4273	Feb.	36
Morning Star NE NW NW 1-25-14W	Artnell Co. No. 1 Sanders**	Lans-K.C.	3904-3907	Feb.	41
Sand Hills NW NE SE 19-21-11W	Bergman Drlg., Inc. No. 1 Smith "B"	Viola	3442-3450	Nov.	94
Snider NW SE SW 4-21-11W	F. G. Holl No. 1 Rugan "A"	Penn. Congl.		Mar.	50
Stevens County					
Cutter* C SW SW 1-31-35W	Mobil Oil Co. No. 1 H. F. Brown	Marmaton	4779-4806	Aug.	8 & 546,000 cu. ft. gas
Cutter* C SW SE 1-31-35W	Mobil Oil Co. & United Prod. Co., Inc. No. 1 Cutter	Mississippian	5584-5600	April	80
Sumner County					
Fall Creek SW SE SW 3-35-3W	Texaco, Inc. No. 6 Hobbisiefken**	Lans.-K.C. Mississippian	3657-3670 4370-4380	Oct.	Oil

*Field extends into adjacent county.
**Old well worked over.

TABLE 33

DRY WILDCAT TESTS DRILLED IN 1961

FOOTNOTES

a Anhydrite
b Base of the Kansas City
c Cherokee
f Fort Riley
g Granite basement
h "Hunton"
k Kansas City Group
l "Layton"
p Penn. basal congl.
r Reagan
s "Stalnaker"
t Topeka
† Well penetrated Precambrian
* No electric or radioactivity logs available.

TABLE 33.—*Dry wildcat tests drilled in 1961*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	Total depth, feet
BARBER COUNTY										
Mack Oil Co. No. 1 Kumberg	C SE NW 14-30-12W	1,809	3,656	3,851	4,318	4,382	4,530	4,615	-----	4,635
Aylward Drlg. Co., et al. No. 1 Rankin	C NE SW 1-31-10W	1,719	3,579	3,774	4,455	4,622	-----	-----	-----	4,641
Aylward Drlg. Co., et al. No. 1 Hoss	C SE SW 14-31-12W	1,656	3,601	3,805	4,351	4,494	-----	-----	-----	4,537
Aylward Drlg. Co., et al. No. 1 Wright	NE NE SW 32-31-12W	1,550	3,506	3,698	4,226	4,350	-----	-----	-----	4,385
Walter W. Clements, et al. No. 1 Maddix	C NE NE 9-31-13W	1,699	3,648	3,811	4,306	4,385	4,464	-----	-----	4,505
William Broadhurst, et al. No. 1 McGuire	NE NE NE 27-31-13W	1,569	3,525	3,712	4,202	4,370	4,455	-----	-----	4,500
Colorado Oil & Gas Corp. No. 1 Hartley	C SE NW 28-31-13W	1,557	3,542	3,738	4,232	4,397	4,476	4,566	4,664	4,713
Stelbar Oil Corp., Inc. No. 1 Conkling	C SW NE 8-32-11W	1,533	3,567	3,746	4,355	4,491	4,610	4,692	-----	4,770
Walters Drlg. Co. No. 1 Clark "C"	C NW SW 5-33-14W	1,902	4,039	4,230	4,794	-----	-----	-----	-----	4,880
Gralapp & Everly No. 2 Gentry Ranch	C SE SE 23-33-15W	1,809	4,026	4,226	4,865	-----	-----	-----	-----	4,943
BARTON COUNTY										
*John O. Farmer, Inc. No. 1 Ochs	C SW SE 20-16-14W	1,989	3,151	3,216	-----	971[a]	3,443[b]	-----	-----	3,505

Bennett & Roberts Oil Opers. No. 1 Funk	SE SE NW 15-16-15W	1,981	3,168	3,226	-----	995[a]	-----	-----	3,523	3,572
*Bennett & Roberts Oil Opers. No. 1 Bortz	SE SE SW 32-17-11W	1,823	2,934	3,055	-----	2,628[t]	-----	-----	3,388	3,414
*Thunderbird Drlg., Inc. No. 1 Schiller	NW SW NE 18-17-12W	1,908	3,045	3,156	-----	-----	-----	-----	3,405	3,435
*Hudson Petroleum Co. No. 1 Huslig	SE NW SE 25-17-12W	1,826	2,938	3,055	-----	2,710[t]	-----	-----	3,356	3,378
*Woodman & Iannitti, et al. No. 1 Schmidt	SE SE NE 7-17-15W	2,016	3,250	3,312	-----	1,080[a]	-----	-----	3,609	3,628
*Leo J. Dreiling Oil Co. No. 1 Ohnmocht	NW NE SW 33-17-15W	1,984	3,218	3,280	-----	1,016[a]	-----	-----	3,536	3,563
Republic Natural Gas Co. No. 1 Proksch	NE SW SE 10-18-13W	1,810	2,983	3,081	-----	718[a]	-----	-----	3,324	3,380
*John O. Farmer, Inc. No. 1 Morrison	NW NW SE 36-18-14W	1,889	3,081	3,185	-----	824[a]	-----	-----	3,438	3,496
Colorado Oil & Gas Corp. No. 1 Bortonek	SE SE SW 12-18-15W	1,958	3,193	3,270	-----	987[a]	-----	-----	3,541	3,581
*Spencer Drlg. Co., Inc. No. 1 W. F. Schon	NE NE NW 12-19-14W	1,892	3,141	3,244	-----	3,464[b]	-----	-----	3,494	3,515
BUTLER COUNTY										
Clark & Clark & Catt Drlg. Co. No. 1 Klingenberg	NW SE NW 10-23-3E	1,430	1,753	2,015	2,661	2,933[h]	2,999	-----	-----	3,044
*John P. Gaty No. 1 Heyman	SE NE SE 13-23-4E	1,414	-----	2,050	2,420	2,204[b]	-----	-----	-----	2,440
*George P. Vye No. 1 Stucky	SW SW SE 11-23-7E	1,465	1,431	1,735	2,688	2,174[b]	3,084	?	3,208	3,240
*C. H. Lane No. 1 Zebold	NW NW NW 21-23-8E	1,554	-----	1,708	2,745	2,160[b]	-----	-----	-----	2,789

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans-KC	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	Total depth, feet
*John P. Gaty No. 1 Harder	SE SW SW 16-24-3E	1,395	-----	-----	2,760	2,474[b]	-----	-----	-----	2,840
*John P. Gaty No. 1 Reimer	NW SW SW 21-24-3E	1,391	-----	-----	2,783	2,522[b]	-----	-----	-----	2,830
*O. A. Sutton No. 1 Bell	NE NE NW 12-25-7E	1,498	-----	1,750	2,751	2,217[b]	-----	-----	-----	2,793
O. A. Sutton No. 1 Gish	NW NW SE 12-25-7E	1,515	-----	1,766	-----	2,225[b]	-----	-----	-----	2,571
*David B. Hanley No. 1 Bill R. Bolan	NW NW NE 33-28-7E	1,537	-----	2,118[k]	2,837	2,310[b]	-----	-----	-----	2,855
Clark & Clark & Catt Drlg. Co. No. 1 Poston	NW SE NW 5-29-3E	1,330	1,691	2,082	2,959	2,647[b]	-----	3,170	3,222	3,249
CHASE COUNTY										
Shawver-Armour, Inc., et al. No. 1 Finley	NW NW SE 2-18-9E	1,315	1,129	1,438	2,428	2,752	2,887	3,052	3,114	3,140
E. H. Adair Oil Co. No. 1 Magathan	SE SW NE 11-20-6E	1,295	1,088	1,342	-----	1,683[b]	1,896	1,940	1,992	2,019
CHAUTAUQUA COUNTY										
Time Petroleum Co. No. 1 Hobart	NE SE SW 33-32-9E	1,130	-----	1,385[l]	2,293	1,730[b]	-----	-----	-----	2,338
*Time Petroleum Co. No. 1 Cable	SW SW NW 4-33-9E	1,065	-----	1,312[l]	-----	-----	-----	-----	-----	1,600
CHEYENNE COUNTY										
K & E Drlg., Inc. No. 1 A. L. Hendricks	C SW SW 28-5-38W	3,508	4,286	4,338	5,052	4,627[b]	-----	-----	-----	5,165

CLARK COUNTY										
Musgrove Drlg. Co. No. 1 Pyle	C NW NW 24-30-23W	2,454	4,394	4,572	5,341	1,423[a]	6,280	6,435	6,541	6,600
Barbara Oil Co. No. 1 Young Bros. Cattle Co.	C SE SE 5-31-22W	2,327	4,370	4,570	5,336	1,304[a]	-----	-----	-----	5,422
Musgrove Drlg. Co. No. 1 Denton	C NE NE 33-31-24W	2,369	4,353	4,556	5,394	-----	6,508	6,656	6,819	6,881
Gulf Interstate Co. No. 1 Houser	C SW SW 6-31-25W	2,593	4,394	4,550	5,378	-----	6,480	6,670	6,708	6,822
Pet-Ex Co. No. 1 Dakin	C NE SW 16-32-22W	2,262	4,458	4,665	5,468	1,280[a]	-----	-----	-----	5,600
Sunray Mid-Continent Oil Co. No. 1 E. R. Martin	C SW SW 25-32-22W	2,029	4,272	4,470	5,288	4,964[b]	-----	-----	-----	5,443
Sunray Mid-Continent Oil Co. No. 1 Abel	S½ NW SE 17-32-23W	2,162	4,314	4,512	4,359	-----	-----	-----	-----	5,490
CLOUD COUNTY										
Five Nations Drlg. Co., Inc. No. 1 Ransopher	C NW SW 3-6-1W	1,360	1,718	1,824	2,334	2,140[b]	-----	-----	-----	2,387
COFFEY COUNTY										
*Ute Oil Co., et al. No. 1 A. E. Williamson	SW NW SW 29-20-14E	-----	-----	-----	1,623	1,010[b]	-----	-----	-----	1,695
*R. P. Baker No. 1 True Love	CW½ NW SE 13-21-13E	-----	-----	760	1,741	965[k]	-----	-----	-----	1,785
*R. P. Baker No. 1 Burke	S½ SW NE 35-21-13E	-----	-----	770	1,820	1,145[k]	-----	-----	-----	1,850
COMANCHE COUNTY										
J. M. Huber Corp. No. 1 Warren	C SE¼ 25-33-17W	1,767	4,090	4,284	4,981	-----	5,498	5,647	-----	5,715

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans-KC	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	Total depth, feet
Sunray Mid-Continent Oil Co. No. 1 Charles Jackson Unit	SE W	1,846	4,360	4,564	5,314	-----	6,026	6,188	-----	6,195
COWLEY COUNTY										
D. G. Hamilton, et al. No. 1 Worden	SE SE SW 34-30-5E	1,271	-----	-----	2,953	2,490[b]	2,254[k]	1,887[s]	2,706[c]	3,028
Hudson Petroleum Co. No. 1 Snodgrass	SW SW NE 34-30-6E	1,341	-----	-----	2,865	2,364[b]	2,135[k]	-----	2,610[c]	2,904
*Associated Co., Inc. No. 1 Lanier	NE NE NE 7-30-7E	1,749	-----	1,796	2,887	2,383[b]	2,150[k]	1,799[s]	-----	2,922
*McNeish Oil Operations No. 1 Bonnel	SE SW SW 11-30-7E	1,477	-----	-----	2,805	-----	2,046[k]	-----	2,536[c]	2,875
*E. H. Adair Oil Co., et al. No. 1 Grant	NE NW SE 8-31-3E	1,231	1,871	-----	3,087	2,761[b]	2,526[k]	-----	3,468	3,495
*Hammer & Maclean, et al. No. 1 Girod	NE SE SW 20-32-7E	1,335	-----	-----	-----	-----	-----	1,732[s]	-----	2,219
Gralapp & Everly No. 1 Best	NW NE NW 16-33-5E	1,278	-----	-----	3,171	-----	2,560[k]	1,994[s]	-----	3,207
Gralapp & Everly No. 1 Hower	SW SW NE 29-33-5E	1,189	-----	-----	3,133	-----	2,561[k]	2,000[s]	2,884[c]	3,151
*Gralapp & Everly No. 1 Johnson	SW SW SE 11-33-7E	1,390	-----	-----	2,918	-----	2,334[k]	-----	-----	2,926
*A. C. Lawson No. 1 Rouch	SE NW SW 20-34-4E	1,070	-----	-----	3,249	2,793[b]	2,706[k]	-----	2,998[c]	3,293
H. H. Blair No. 1 Sleeth	C NW NE 12-35-5E	1,254	-----	-----	3,224	-----	2,950[c]	2,104[s]	3,664	3,713

*H. H. Blair No. 1 Olsen	CE½ SW NE 14-35-6E	1,336	-----	-----	3,061	-----	-----	1,690[s]	-----	3,102
DECATUR COUNTY										
Empire Drlg. Co. No. 1 Kelley	C SW SW 21-1-26W	2,506	3,238	3,282	1,953[a]	3,483[b]	3,578[g]	-----	-----	3,583+
Woodman & Iannitti No. 1 Van Gundy	C SE SW 36-1-26W	2,514	3,369	3,406	2,036[a]	-----	3,770[g]	-----	3,741	3,773+
Gower Oil Co. No. 1 Osburn	C SE SE 6-1-27W	2,662	3,342	3,386	2,103[a]	-----	3,773[g]	-----	-----	3,778+
Sauvage Drlg. Co. No. 1 Kilzer	SW SW SW 16-1-27W	2,504	3,183	3,228	1,922[a]	3,439[b]	3,622[g]	-----	-----	3,640+
*John O. Farmer, et al. No. 1 Southwick	SE SE SE 17-1-28W	2,693	-----	3,560	2,280[a]	3,785[b]	4,147[g]	-----	-----	4,152+
Empire Drlg. Co. No. 1 Plotts	C SE SE 32-1-28W	2,704	3,601	3,650	2,362[a]	3,862[b]	-----	-----	4,111	4,145
Murfin Drlg. Co., et al. No. 1 Forest Carter	C SW SW 21-2-26W	2,614	3,452	3,495	2,122[a]	3,693[b]	3,913[g]	-----	3,880	3,928+
*Sauvage Drlg. Co. No. 1 Addelman	C SE NW 1-2-29W	2,748	3,699	3,745	4,200	3,944[b]	4,245[g]	2,462[a]	-----	4,250
Amerada Petroleum Corp. No. 1 Henry May	C NW SW 32-2-30W	2,892	3,871	3,916	2,690[a]	4,141[b]	-----	-----	4,466	4,471
Empire Drlg. Co., et al. No. 1 Brooks	NE NE NE 24-3-26W	2,537	3,482	3,526	2,111[a]	3,714[b]	3,954[g]	-----	3,885	3,956+
John O. Farmer, Inc. No. 1 Johnson	C NE NW 27-3-27W	2,623	3,546	3,587	2,208[a]	3,796[b]	4,213[g]	-----	4,008	4,220+
*Empire Drlg. Co. No. 1 Armstrong	SE SE NW 7-3-28W	2,561	3,541	3,584	2,279[a]	3,785[b]	-----	-----	-----	3,790
Empire Drlg. Co. No. 1 Zodrow	C NW NW 8-3-28W	2,661	3,621	3,661	2,353[a]	3,862[b]	-----	-----	-----	3,875

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Empire Drlg. Co. No. 1 Ruzicka	C NW SE 17-3-28W	2,642	3,606	3,645	2,336[a]	3,849[b]	-----	-----	-----	3,860
Cities Service Petroleum Co. No. 1 Jennings "B"	C NE SW 36-3-28W	2,687	3,737	3,778	2,403[a]	3,971[b]	-----	-----	4,307	4,360
K & E Drlg., Inc. No. 1 Tongish	CS½ NE SW 24-3-30W	2,663	3,745	3,787	2,498[a]	3,995[b]	-----	-----	-----	4,032
Empire Drlg. Co. No. 1 Muirhead	C SW SE 28-4-28W	2,697	3,822	3,867	2,493[a]	4,066[b]	-----	-----	-----	4,076
K & E Drlg., Inc. No. 1 Ritter	C SW NE 12-4-30W	2,752	3,832	3,881	2,576[a]	4,090[b]	-----	-----	-----	4,130
Murfin Drlg. Co., et al. No. 1 Brada Wolf	NE NE SW 21-5-26W	2,615	3,641	3,682	2,222[a]	3,873[b]	-----	-----	-----	3,893
K & E Drlg. Co. No. 1 McKay	C NW SE 2-5-29W	2,717	3,823	3,870	2,499[a]	4,069[b]	-----	-----	-----	4,120
DICKINSON COUNTY										
*Donald T. Ingling No. 1 Kohman	NE NE SE 7-14-2E	1,223	-----	1,794	2,413	2,162[b]	-----	-----	-----	2,437
National Associated Pet. Co. No. 1 Schmidt	SW SW SE 25-14-4E	1,261	-----	1,590	2,088	1,938[b]	-----	-----	-----	2,111
*Donald T. Ingling No. 1 Bell	NE NE NE 12-15-1E	1,285	-----	1,860	2,492	2,860[h]	3,131	-----	-----	3,138
*Eureka Drlg. Co. No. 1 Glahn	NW NW NW 33-15-1E	1,325	1,765	1,960	2,619	2,302[b]	-----	-----	-----	2,670
*Rex & Morris Drlg. Co., et al. No. 1 Fry	NE SW SE 16-16-3E	1,400	1,653	1,824	2,401	2,220[b]	-----	-----	-----	2,422

DOUGLAS COUNTY										
Waco Oil Co. No. 1 Volgastf	C NW NE 17-15-18E	1,110	1,868[h]	766[b]	1,548	1,806	1,904	1,992	2,074	2,123
EDWARDS COUNTY										
Imperial Oil of Kansas, Inc. No. 1 Groner	C SE SW 33-25-20W	2,235	3,971	4,093	4,726	4,485[b]	-----	-----	-----	4,770
Imperial Oil of Kansas, Inc. No. 1 Froetschner	C NE SE 5-26-20W	2,236	3,979	4,100	4,712	4,485[b]	-----	-----	-----	4,791
ELK COUNTY										
*Jones-Gebert Oil, Inc. No. 1 Hancock	NW NW SW 13-29-10E	1,079	1,165[k]	1,449[b]	2,018	1,728[c]	-----	-----	------	2,078
ELLIS COUNTY										
Woodman-Iannitti No. 1 Bemis	NW NW NE 20-13-19W	2,071	3,345	3,396	1,391[a]	-----	3,640[b]	-----	3,779	3,817
*Don E. Pratt Oil Opers. No. 1 Gesenhues	NE NE SW 2-14-16W	1,937	3,140	3,186	1,035[a]	3,425[b]	-----	-----	-----	3,555
Leo J. Dreiling Oil Co. No. 1 Rome "B"	NW NW SE 13-14-16W	1,901	3,085	3,131	982[a]	-----	-----	-----	3,440	3,446
Shields Oil Producers, Inc. No. 1 Catholic Church	SE SE SE 21-14-20W	2,170	3,409	3,449	1,432[a]	-----	-----	-----	3,808	3,823
*Woodman & Iannitti No. 1 Simmons	NW NW SE 1-15-20W	2,047	3,304	3,350	1,289[a]	-----	3,722[g]	-----	-----	3,723+
ELLSWORTH COUNTY										
Kansas Petroleum, Inc. No. 1 Soukup	NE NE NE 22-15-8W	1,623	2,486	-----	978[a]	2,227[t]	1,162[f]	-----	-----	2,580
Kansas Petroleum, Inc. No. 1 Kootz	SE SE SE 1-16-8W	1,524	-----	-----	-----	-----	1,036[f]	-----	-----	1,810

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Missis-sippian	"Kinder-hook"	Viola	Simp-son	Ar-buckle	
Kansas Petroleum, Inc. No. 1 Westerman	SE SE NE 9-16-8W	1,587	-----	-----	748[a]	-----	1,122[f]	-----	-----	1,845
Halliburton Oil Producing Co. No. 1 Lindahl	NW NW SW 9-17-7W	1,637	2,633	2,789	3,234	3,265	1,240[f]	3,108[b]	-----	3,273
FINNEY COUNTY										
*A. D. McKelvy No. 1-A Doll	C SW SW NE 16-21-30W	2,811	-----	-----	2,032[a]	2,798[f]	-----	-----	-----	3,203
Pet-Ex Co. No. 1 Breyfogle	C NE NE 5-21-31W	2,905	3,936	3,983	4,660	2,103[a]	2,827[f]	4,400[b]	-----	4,820
*S. A. Murphy No. 1 Rohrbaugh	C NW SW 20-22-27W	2,552	3,818	3,862	4,520	-----	4,248[b]	2,620[f]	-----	4,636
Horizon Oil & Gas Co. No. 1 Cook	C SE SE 33-22-34W	2,962	-----	-----	4,669	-----	-----	-----	-----	5,100
Johnny Grimm No. 1 Smith	C SE SE 5-23-28W	2,746	-----	-----	-----	1,900[a]	2,848[f]	-----	-----	3,307
Johnny Grimm No. 1 Longwood	C SW SW 28-23-28W	2,747	-----	-----	-----	1,880[a]	2,870[f]	-----	-----	3,315
*James Ely No. 1 Fee "D"	C SW 36-23-28W	2,745	4,045	-----	4,795	-----	-----	-----	-----	4,993
Horizon Oil & Gas Co. No. 1 Small	C NE NE 36-23-34W	2,931	3,763	3,818	4,666	-----	2,578[f]	-----	-----	5,075
Mobil Oil Co. No. 1 State Tract 12	C SE NW 1-25-33W	2,903	3,902	4,002	4,825	4,455[b]	2,670[f]	-----	-----	5,241

Oil of Kansas, Inc. Herrmann	C NE SW 25-25-21W	2,276	3,989	4,105	4,730	1,370[a]	2,590[f]	3,580[t]	4,495[b]	4,824
*Imperial Oil of Kansas, Inc. No. 1 Israel	C NE SE 35-25-21W	2,282	3,997	4,115	4,743	-----	-----	-----	-----	4,821
Mack Oil Co. No. 1 Cobb	C NE SE 27-25-24W	2,500	4,085	4,187	4,882	1,585[a]	2,722[f]	3,662[t]	-----	5,000
Sun Oil Co. No. 1 A. J. Koechner	C NW NW 30-26-23W	2,527	4,188	4,302	4,987	1,580[a]	5,620	5,720	5,752	5,826
Toto Gas Co. No. 1 Wagler	C SW SW 32-27-21W	2,329	4,128	4,260	4,955	1,336[a]	2,676[f]	3,620[t]	-----	5,041
Aikman Bros. No. 1 Campbell-English	C SE NW 13-27-23W	2,436	4,191	4,320	5,017	1,483[a]	2,758[f]	3,742[t]	-----	5,220
Russell Cobb, Jr. No. 1 Turley	C NW SE 6-27-25W	2,557	-----	-----	-----	1,585[a]	2,766[f]	-----	-----	2,900
*Ashland Oil & Refining Co. No. 1 Taylor	C NE SW 6-28-23W	2,508	4,266	4,403	5,094	-----	2,818[f]	3,749[t]	-----	5,168
Herndon Drlg. Co. No. 1 F. I. Lutz	C NW¼ 23-28-26W	2,683	-----	-----	-----	1,689[a]	2,918[f]	-----	-----	3,033
Russell Cobb, Jr. No. 1 Stempert	NW NW SE 8-29-22W	2,513	-----	-----	-----	-----	2,918[f]	-----	-----	3,118
*Herndon Drlg. Co. No. 1 L. E. Lutz	C SE SE 10-29-26W	2,591	-----	-----	-----	1,512[a]	2,820[f]	-----	-----	2,937
GEARY COUNTY										
Cities Service Petroleum Co. No. 1 Poole	NW NE NE 29-11-8E	1,463	1,234	1,401	-----	1,847	2,458	2,568	2,007[h]	2,618
*F. G. Holl No. 1 Glessner	SE SE NE 7-13-8E	1,490	1,311	1,516	-----	1,825[b]	2,255[h]	-----	-----	2,341

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County: company and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	Total depth, feet
GOVE COUNTY										
Kimbark Exploration Co. No. 1 Ellithorpe	C SE NE 1-11-27W	2,638	3,857	3,897	-----	2,250[a]	-----	4,142[b]	-----	4,170
GRAHAM COUNTY										
Petroleum, Inc. No. 1 Moore	C NW NE 20-7-24W	2,498	3,728	3,770	-----	2,192[a]	3,968[b]	-----	-----	3,980
Wilson Exploration Co. No. 1 Mary Sayers	NW SE NW 14-8-21W	1,987	3,201	3,241	-----	1,552[a]	-----	-----	3,544	3,590
*Empire Drlg. Co. No. 1 Gano	NE NE NE 14-10-24W	2,443	3,757	3,796	-----	2,079[a]	-----	-----	-----	4,005
GRANT COUNTY										
Columbian Fuel Corp. No. 2 Hampton "A"	C SE NW 15-28-36W	3,081	3,962	4,065	-----	3,570[t]	2,641[f]	-----	-----	4,290
Pan American Petroleum Co. No. 1 Schartz Gas Unit	C NW SE 23-28-38W	3,077	3,775	3,870	5,504	3,407[t]	2,475[f]	-----	-----	5,700
Saturn Oil & Gas No. 1 Joyce "A"	C NE¼ 32-30-37W	3,077	-----	-----	-----	-----	2,586[f]	-----	-----	3,101
GRAY COUNTY										
Horizon Oil & Gas Co., et al. No. 1-9 Voth	C NE SW 9-28-29W	2,812	4,193	4,290	5,126	1,773[a]	3,831[t]	2,811[f]	-----	5,500
GREELEY COUNTY										
Mack Oil Co. No. 1 Gano Unit	C SW NE 9-19-42W	3,826	-----	-----	-----	2,463[a]	-----	2,906[f]	-----	3,126

Kansas-Nebraska Natural Gas Co. No. 1 Watson	NE NE SW 24-20-40W	3,560	-----	-----	-----	2,365[a]	-----	-----	-----	2,895
Mack Oil Co. No. 1 Goering	C SW NE 10-20-41W	3,660	-----	-----	-----	2,368[a]	-----	-----	-----	3,007
GREENWOOD COUNTY										
*Triple "A" Drlg. Co. No. 1 Dosbaugh	NE NW SW 9-28-13E	846	-----	-----	1,291	-----	-----	-----	-----	1,306
HAMILTON COUNTY										
*Hamilton Bros. No. 1-1 A. H. O'Brate	C NE¼ 1-21-40W	-----	-----	-----	"Tight Hole"			-----	-----	-----
Mack Oil Co. No. 1 Dikeman Unit	C NE SW 22-21-40W	3,550	-----	-----	-----	2,265[a]	-----	-----	-----	3,251
*Hamilton Bros. No. 1-35 Martin	C SE NW 35-21-41W	3,623	-----	-----	"Tight Hole"			-----	-----	-----
Mack Oil Co. No. 1 Eubank Unit	C SW NE 20-21-42W	3,768	-----	-----	-----	2,290[a]	-----	-----	-----	3,010
Hamilton Bros. No. 1-32 Rosson	C NW¼ 32-22-40W	-----	-----	-----	"Tight Hole"			-----	-----	-----
Mack Oil Co. No. 1 Trussell Unit	C NW SE 11-23-42	3,395	-----	-----	-----	1,865[a]	-----	-----	-----	2,850
*Hamilton Bros. No. 1-9 C. A. Tate "D"	C SE NW 9-24-41W	3,263	-----	-----	"Tight Hole"			-----	-----	5,280
Panhandle Dev. Co., Inc. No. 1 White	C SE NW 14-26-42W	3,385	3,618	3,731	5,286	-----	3,368[t]	-----	-----	5,475
HARPER COUNTY										
Arvel C. Smith, et al. No. 1 Seyb	C SE NE 36-31-7W	1,423	3,162	3,726[k]	4,312	4,555	-----	4,678	-----	4,711

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans-KC	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	Total depth, feet
Dorset Co. No. 1 J. L. Robinson	NW NW NE 36-32-6W	1,353	3,122	3,740[k]	4,384	4,728	-----	4,837	-----	4,855
Krumme Oil Co. No. 1 Schwamborn	C SE NE 7-33-5W	1,327	3,075	3,702[k]	4,379	4,755	-----	-----	-----	4,861
Arvel C. Smith No. 1 Armstrong	NE NE SW 14-33-5W	1,300	3,094	3,724[k]	4,440	4,825	-----	4,919	-----	4,958
Norbla Oil Co. No. 1 Mattimore	C SE NW 28-33-6W	1,332	3,200	3,842[k]	4,477	4,831	4,931	4,941	-----	4,980
Skelly Oil Co., et al. No. 1 M. M. Burnett	SE SW NE 32-34-6W	1,367	3,364	4,045[k]	4,726	5,090	5,242	5,264	-----	5,349
Texaco, Inc. No. 1 Cink	C NW NE 18-35-5W	1,244	3,214	3,938[k]	4,647	5,142	5,220	5,350	5,484	5,538
Natl. Coop. Refg. Assn. No. 1 Kathryn Meyer	C SW SW 12-35-7W	1,359	3,466	4,141[k]	4,808	5,238	5,324	-----	-----	5,397
HARVEY COUNTY										
*John P. Gaty No. 1 Ulmer	NW SW SW 11-24-2E	1,421	-----	2,375[k]	2,854	2,567[b]	-----	-----	-----	2,885
*John P. Gaty No. 2 Howard Ulmer	NE SW NW 11-24-2E	1,402	-----	2,354[k]	2,814	2,543[b]	-----	-----	-----	2,827
HASKELL COUNTY										
Graham-Michaelis Drlg. Co. No. 1-22 Barbee	C NE NE 22-28-33W	2,974	4,097	4,185	5,388	4,651[b]	-----	-----	-----	6,003
Cities Service Petroleum Co. No. 1 Brennen	C NW SE 15-29-33W	2,955	4,122	4,220	5,470	-----	-----	-----	-----	5,802

HODGEMAN COUNTY

Colorado Oil & Gas Corp. No. 1 Foreman	C NE SE 5-21-21W	2,215	3,708	3,761	4,347	1,368[a]	3,350[t]	4,113[b]	-----	4,419
Herman George Kaiser No. 1 Eakin	C SE NE 28-21-21W	2,134	3,663	3,720	4,317	1,275[a]	3,301[t]	4,085[b]	-----	4,357
Sunray Mid-Continent Oil Co. No. 1 Beulah Hogland	C NE NE 10-21-22W	2,189	3,670	3,725	4,336	1,351[a]	4,482	4,719[g]	4,626	4,730+
Tenneco Oil Co. No. 1 Thomas G. Frusher	C SW SW 8-21-23W	2,332	3,795	3,845	4,464	1,540[a]	3,445[t]	-----	-----	4,677
Franco Central Oil Co. No. 1 Salmons	C SW SE 34-21-23W	2,284	3,858	3,911	4,559	1,508[a]	3,487[t]	-----	-----	4,640
Herman George Kaiser, et al. No. 1 Drout	C NW NE 34-22-21W	2,271	3,842	3,931	4,494	1,380[a]	3,467[t]	-----	-----	4,526
*Ferguson Oil Co. No. 1 Schmitt	C NE NW 18-22-24W	2,495	3,921	3,970	4,617	1,669[a]	-----	-----	-----	4,660
Stelbar Oil Corp., Inc. No. 1 Hendrickson	C SE SE 6-22-25W	2,519	3,855	3,900	4,550	1,681[a]	3,508[t]	-----	-----	4.619
Pickrell Drlg. Co. No. 1 Hogan "A"	C NE NE 18-23-21W	2,313	3,912	4,007	4,589	1,433[a]	3,538[t]	-----	-----	4,741
Arvel C. Smith No. 1 Gleason	C NW NW 27-23-21W	2,349	3,975	4,067	4,680	1,460[a]	3,580[t]	-----	-----	4,780
W. J. Coppinger No. 1 Gleason	C SE NE 32-23-21W	2,374	3,988	4,084	4,702	1,470[a]	3,598[t]	2,620[f]	-----	4,770
Tennessee Gas Transmission Co. No. 1 Osborne	C NW NE 14-23-22W	2,205	3,773	3,865	4,444	1,324[a]	3,398[t]	2,448[f]	4,934	4,970
Kenneth Rupp, et al. No. 1 Ziesch	C SW NW 20-23-22W	2,280	3,856	3,944	4,537	1,408[a]	3,485[t]	2,528[f]	-----	4,641
Kenneth Rupp, et al. No. 1 Sebes	C NW NW 29-23-22W	2,363	3,911	4,003	4,588	1,480[a]	3,540[t]	2,570[f]	-----	4,821

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Mack Oil Co. No. 1 Bristow	C NE NW 3-23-23W	2,239	3,817	3,878	4,516	1,420[a]	3,435[t]	2,490[f]	-----	4,810
Pickrell Drlg. Co. No. 1 Sinclair "A"	C SW SE 3-23-24W	2,323	3,848	3,898	4,579	1,511[a]	3,463[t]	2,550[f]	-----	4,630
Birmingham-Bartlett Drlg. Co. No. 1 Glunt "A"	C NW SW 25-23-26W	2,581	4,034	4,099	4,757	1,753[a]	3,678[t]	-----	-----	4,810
Mack Oil Co. No. 1 Harms	C NW NW 27-24-25W	2,550	4,096	4,190	4,854	1,680[a]	3,765[t]	2,763[f]	-----	4,942
JACKSON COUNTY										
*Kaiser-Francis No. 1 Godfrey	C SW NE 14-5-15E	1,100	1,387[b]	1,059[k]	2,311	2,481	3,264	2,703[h]	-----	3,300
JEFFERSON COUNTY										
Brunson-Spines No. 1 Miller	SW SW SE 32-8-20E	1,000	119	372	1,427	1,798	1,880[h]	-----	-----	1,947
KEARNY COUNTY										
*James Ely No. 1 Fee "B"	C N½ SW 21-21-35W	3,177	-----	3,960	4,911	2,221[a]	2,797[f]	-----	-----	5,161
Kaiser-Francis No. 1 Plummer "A"	C NW SW 35-21-38W	3,365	3,814	3,844	4,891	-----	-----	-----	-----	5,150
Pan American Petroleum Corp. No. 1 Durham Gas Unit	C SW NE 14-24-37W	3,252	3,733	-----	4,852	-----	-----	-----	-----	5,200
Sunray Mid-Continent Oil Co. No. 1 Dodge	SW SW NW 34-24-38W	3,208	3,755	3,817	5,177	-----	-----	-----	-----	5,284
Braden Drlg. Co. No. 1 Campbell	C NE SE 18-25-35W	3,028	3,782	3,829	4,968	-----	4,345[b]	-----	-----	5,130

Pan American Petroleum Corp. No. 1 Spencer Gas Unit "B"	C SW NE 4-26-38W	3.235	3.815	-----	5.332	-----	-----	-----	-----	5.600
KINGMAN COUNTY										
D. R. Lauck Oil Co., Inc. No. 1 Tiemeyer	SE SE SE 8-27-5W	1.505	2.727	3.007	3.759	4.034	4.140	4.210	4.289	4.320
Ferguson Oil Co. No. 1 Sears	C SE SE 33-27-9W	1.639	3.230	3.424	4.021	4.106	4.316	4.390	-----	4.426
Graybol Oil Corp. No. 1 Huffman "A"	NW NW SE 33-27-10W	1.692	3.317	3.505	4.005	4.087	4.298	4.377	-----	4.398
Musgrove Drlg. Co. No. 1 Schuman	C NW NW 9-29-8W	1.691	3.274	3.515	4.199	-----	4.510	4.555	-----	4.615
Time Petroleum Co. No. 1 Twyman	SE SE SE 20-29-10W	1.744	3.502	3.750	4.288	4.338	4.550	4.618	-----	4.668
Aylward Drlg. Co., et al. No. 1 Pagenkopf	C SW SW 36-30-10W	1.721	3.542	3.760	4.432	4.596	-----	-----	-----	4.621
KIOWA COUNTY										
Arvel C. Smith No. 1 Ralstin	SE SE NW 7-28-19W	2.284	4.125	4.291	4.903	1.280[a]	2.704[f]	4.651[b]	-----	4.918
Kaiser-Francis No. 1 Schwarm	C SE SW 32-29-17W	2.026	4.013	4.180	4.774	-----	3.532[t]	4.530[b]	-----	4.864
LANE COUNTY										
Pet-Ex Co. No. 1 Anderson	C NE SW 14-16-27W	2.665	3.928	3.967	4.595	2.075[a]	4.278[b]	-----	-----	4.718
Target Drlg. Corp. No. 1 Wilkins	C SW NW 11-17-30W	2.856	3.914	3.948	4.561	2.242[a]	4.298[b]	-----	-----	4.650
Pet-Ex Co. No. 1 Mumma	C SE SE 2-19-29W	2.800	3.966	4.011	4.626	2.145[a]	4.370[b]	-----	-----	4.735

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Target Drlg. Corp. No. 1 Moomaw	C NW NE 15-19-30W	2,879	3,918	3,964	4,580	2,163[a]	4,948	5,105	5,120	5,139
LEAVENWORTH COUNTY										
Brunson-Spines No. 1 Fevurly	NW NW NE 25-8-20E	1,065	129	405	1,487	730[b]	-----	-----	-----	1,690
LINCOLN COUNTY										
National Drlg. Co., Inc. No. 1 Peckham	C NE SE 14-10-9W	1,562	2,608	2,712	3,300	3,512[h]	3,613	3,846	3,907	4,306
LOGAN COUNTY										
Target Drlg. Corp. No. 1 Bertrand	C NW SW 9-11-34W	3,215	4,080	4,120	4,740	2,682[a]	4,406[b]	-----	-----	4,806
Peel-Hardman No. 1 James	C NE NE 11-11-35W	3,294	4,165	4,207	4,913	2,770[a]	4,521[b]	-----	-----	4,945
Peel-Hardman No. 1 Plummer	C SW NE 11-13-36W	2,976	3,759	3,801	4,556	2,370[a]	4,175[b]	-----	-----	4,605
Peel-Hardman No. 1 Ware-Haverfield	C NW NE 34-14-35W	3,036	3,822	-----	4,605	2,374[a]	4,230[b]	-----	-----	4,669
LYON COUNTY										
Emil B. Kucera No. 1 Lewis "A"	NE NE SW 29-15-12E	1,260	1,551[b]	1,190	2,224	2,576	2,815	2,898	2,718[h]	2,956
*Phillips Petroleum Co. No. 1 Osage City #1 ST	C NW SE 8-16-13E	-----	-----	-----	"Tight Hole"			-----	-----	2,132
*Phillips Petroleum Co. No. 1 Osage City #2 ST	NW NW NE 10-16-13E	-----	-----	-----	"Tight Hole"			-----	-----	2,148

Continental Oil Co. No. 1 Rush	NW NW NW 10-17-10E	1,273	1,076	1,368	2,386	2,780	3,006	2,924[h]	-----	3,063
*S. A. Yarnell No. 1 Ewers	NW SW SE 4-21-10E	1,352	-----	1,740[b]	-----	-----	-----	-----	-----	2,221
MCPHERSON COUNTY										
Aladdin Petroleum Corp. No. 1 Strom	SE SE SE 28-18-3W	1,526	2,214	2,490[k]	3,157	3,348	3,651	3,703	3,760	3,801
*Ferguson Oil Co. No. 1 Smith	SW SW SW 3-18-4W	1,438	-----	2,437	3,066	3,300	3,600	3,649	-----	3,659
Herndon Drlg. Co. No. 1 Nelson	SE SE SE 15-18-4W	1,484	2,263	2,470	3,128	3,340	3,625	3,671	-----	3,684
Aladdin Petroleum Corp. No. 1 Schrag	NE NE NW 8-20-3W	1,496	2,185	2,492	3,174	3,448	3,713	3,746	-----	3,770
White & Ellis Drlg. Co. No. 1 Wedell	NE SE NW 25-21-1W	1,501	-----	2,343	2,968	3,265	3,365[h]	-----	-----	3,405
MARION COUNTY										
E. H. Adair Oil Co. No. 1 Carpenter-Simmons	NE NE NW 25-17-1E	1,463	1,874	2,100	2,695	3,061[h]	3,180	3,280	3,337	3,397
*Capitol Petroleum Corp. No. 1 May	SW NW SE 18-17-3E	1,463	2,349[b]	1.968	2,554	2,733	2,889[h]	-----	-----	2,943
Rex & Morris Drlg. Co., et al. No. 1 Bartel	SE SE SW 2-18-1E	1,405	2,450[b]	2,072	2,663	-----	-----	-----	-----	2,765
*Melland Drlg. Co. No. 1 Scully	NE NE SW 6-18-2E	1,436	-----	2,074	2,680	-----	-----	-----	-----	2,705
*Glickman Oil Co. No. 1 Scully	SW SW SW 25-18-2E	1,352	1,710	1,912	2,492	2,646	2,903	2,269[b]	-----	2,917
*White & Ellis Drlg. Co., Inc. No. 1 Novak	NE NE NE 7-18-3E	1,404	1,708	1,911	2,499	2,817[h]	2,981	2,300[b]	-----	2,997

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Vern Bottoms, et al. No. 1 Scully	NW NW NW 19-18-3E	1,423	1,734	1,949	2,538	2,678	2,989	2,834[h]	-----	3,022
*Robinowitz Oil Co. No. 1 Klein	C E½ NE NW 22-18-3E	1,357	-----	1,862[k]	2,423	-----	-----	-----	-----	2,464
*Lee Phillips, et al. No. 1 Stenzel	SW SW NE 31-18-3E	1,386	-----	1,917	2,492	2,616	2,902	2,786[h]	2,280[b]	2,911
*White & Ellis Drlg. Co., et al. No. 1 Stenzel	SE SE NE 31-18-3E	1,372	-----	1,889	2,465	2,592	2,874	2,731[h]	2,264[b]	2,883
*Francis O. Hawn No. 1 Wiebe	C NE SW 4-19-1E	1,560	-----	2,271[k]	2,850	-----	-----	-----	2,624[b]	2,875
Cimarron Petroleum Co. No. 1 Christensen	NE NE SE 7-19-1E	1,541	-----	2,264	2,852	3,076	3,320	-----	-----	3,349
*Midwest Drlg. Co. No. 1 Menne Duerksen	NW NW SE 11-19-1E	1,460	-----	2,338[k]	2,728	2,484[b]	2,561[c]	-----	-----	2,812
*Brunson-Spines No. 1 Scully	NW NW SW 32-19-2E	1,476	-----	2,105	2,719	-----	-----	-----	-----	2,750
Cimarron Petroleum Co. No. 1 Hilsenberk	C NW NW 36-19-4E	1,444	1,525	1,770	2,275	2,339	2,559	-----	-----	2,591
*Capitol Petroleum Co. No. 1 Meierhoff	C SW NE 34-19-5E	1,443	-----	1,675	2,165	2,204	2,383	2,019[b]	-----	2,395
Gralapp & Everly No. 1 Duerksen	NW SW NW 19-20-2E	1,413	-----	2,086	2,684	2,839	3,056	-----	-----	3,080
*Crowe Drlg. Co., Inc. No. 1 Anderson	C SW SE 17-20-4E	1,298	-----	1,699	2,215	-----	2,485	1,994[b]	-----	2,500
*Raymond Oil Co., Inc. No. 1 Walker	SE SE NW 8-21-2E	1,490	1,906	2,166	2,818	2,982	-----	2,582[b]	-----	3,200

*Gravos Drlg. Co., Inc. No. 1 Friday	SW SW NE 16-21-2E	1,524	-----	2,190	2,834	3,015	3,202	-----	3,159[h]	3,212
*Hammer-Maclean No. 1 Stephens	SW SW NE 1-21-3E	1,370	-----	1,840	2,402	2,470	2,694	2,201[b]	-----	2,737
*Hammer-Maclean No. 1 Elliott	NE NE NW 26-22-3E	1,434	-----	1,968	2,577	2,703	2,878	2,904	2,808[h]	2,907
*E. H. Adair Oil Co. No. 1 Swanson	SE SE SE 32-22-5E	1,491	1,518	1,789	2,416	-----	-----	2,175[b]	-----	2,500
MARSHALL COUNTY										
Five Nations Drlg. Co. No. 1 Seemaster	C NW NW 24-3-8E	1,239	1,122[b]	904	-----	-----	1,349	1,382	1,168[h]	1,628+
Five Nations Drlg. Co. No. 1 Sandman	C SE SE 8-3-9E	1,280	-----	920	-----	-----	1,218	1,334	1,160[h]	1,478+
MEADE COUNTY										
*Pet-Ex Co. No. 1 Norman	C SW NE 6-31-27W	2,490	4,215	4,324	-----	-----	-----	-----	-----	4,855
Pet-Ex Co. No. A-1 Norman	App. SW NE 6-31-27W	2,490	4,214	4,324	5,248	1,452[a]	-----	-----	-----	5,505
Apache Corp. No. 1 Angell	C SW NE 17-32-29W	2,718	4,675	-----	5,659	-----	-----	-----	-----	5,805
MITCHELL COUNTY										
National Drlg. Co., Inc. No. 1 Schneider	C SW NW 20-9-9W	1,662	2,720	2,800	3,412	3,670[h]	3,794	-----	4,067	4,126
National Drlg. Co., Inc. No. 1 Zemke	C NE NE 11-9-10W	1,827	2,920	2,998	3,647	3,866[h]	3,973	4,162	4,261	4,298
MORRIS COUNTY										
Cecil G. Lalicker No. 1 Holm	C SW NE 3-14-6E	1,373	1,330	1,544[k]	2,037	-----	-----	-----	-----	2,135

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans.-K.C.	Missis-sippian	"Kinder-hook"	Viola	Simp-son	Ar-buckle	Total depth, feet
*Tom Allan, et al. No. 1 Henning	C Lot 19 18-15-8E	1,400	1,322	1,544	2,226	2,330	2,752	-----	2,510[h]	2,770
*Tom Allan, et al. No. 1 Picolet	NW Lot 5 30-15-8E	1,335	1,158	1,390	1,712[b]	2,034	2,254	-----	2,048[h]	2,274
National Associated Pet. Co. No. 1 Herpich	NE SW SE 2-16-5E	1,442	-----	1,684	2,193	-----	-----	2,010[b]	-----	2,217
MORTON COUNTY										
Pan American Petroleum Corp. No. 1 Richardson Gas Unit	C NE SW 5-31-41W	3,420	3,030	-----	5,448	-----	-----	-----	-----	5,600
Panhandle Eastern Pipe Line Co. No. 1 U.S.A.	C SW¼ 20-33-41W	3,440	3,172[t]	-----	-----	-----	-----	-----	-----	3,510
Cities Service Petroleum Co. No. 1 Price "B"	C SW NE 31-34-40W	3,400	3,983	4,094	6,290	-----	-----	-----	-----	6,477
Horizon Oil & Gas Co. No. 1 Mathews	C SE 36-34-43W	3,582	3,482	3,690	4,688	2,958[t]	-----	-----	-----	4,800
Hamilton Bros. No. 1-18 J. E. Goddard	C NW SE 18-35-40W	3,446	4,104	4,216	6,444	3,588[t]	-----	-----	-----	6,503
NEMAHA COUNTY										
*Kaufman & Heim No. 1 Paul Smith	S½ S½ SW 22-1-11E	1,250	510	602	-----	-----	-----	-----	710[g]	913+
NESS COUNTY										
R. W. Shields No. 1 Grumbein	C NW NW 24-16-21W	2,237	3,641	3,685	4,179	1,520[a]	3,350[t]	3,948[b]	4,345	4,445
Tomlinson-Kathol, Inc. No. 1 Clyne	C NW NE 1-16-25W	2,533	3,872	3,914	4,520	1,940[a]	3,608[t]	-----	-----	4,585

Mack Oil Co. No. 1 Sekavec	C SW SW 5-17-22W	2.400	3.785	3.824	4.409	1.695[a]	3.497[t]	-----	-----	4.468
Sunray Mid-Continent Oil Co. No. 1 Murdock	C SW NW 36-18-23W	2.244	3.706	3.754	4.337	1.560[a]	3.390[t]	4.021[b]	-----	4.490
Pickrell Drlg. Co. No. 1 Reeves	W½ NW NE 29-18-26W	2.588	3.908	3.952	4.575	1.952[a]	3.630[t]	-----	-----	4.625
Republic Natural Gas Co. No. 1 Waknitz	C NW NW 5-19-21W	2.199	3.658	3.706	4.320	1.418[a]	3.340[t]	-----	-----	4.370
Sunray Mid-Continent Oil Co. No. 1 Knotts	C NE NW 7-19-22W	2.187	3.651	3.700	4.304	1.470[a]	3.380[t]	-----	-----	4.450
Colorado Oil & Gas Corp. No. 1 Nuss	C NE SE 20-19-22W	2,245	3.728	3.774	4.382	1.528[a]	3.410[t]	-----	-----	4.484
*Apache Corp. No. 1 Mertin	C SW SE 24-19-23W	2,234	3.694	3.740	4.379	1.500[a]	-----	-----	-----	4.423
Hellar Drlg. Co., Inc. No. 1 Pfaff	SE SE SE 2-19-24W	2.279	3.663	3,706	4.345	1.521[a]	3.350[t]	-----	-----	4.392
Colorado Oil & Gas Corp. No. 1 Wittman	C NW SE 30-20-21W	2.195	3.685	3.730	4.313	1.366[a]	3.330[t]	-----	-----	4.415
Sun Oil Co. No. 1 H. Humburg	C SW NE 36-20-24W	2.249	3.693	3.742	4.369	1.480[a]	3.360[t]	-----	-----	4.394
Hellar Drlg. Co., Inc. No. 1 Gibson	C SE SE 7-20-25W	2.483	3.846	3.892	4.508	-----	-----	4.250[b]	-----	4.565
Ferguson Oil Co. No. 1 Slagle	C NW SE 29-20-25W	2,408	3.742	3.786	4.398	1.622[a]	-----	-----	-----	4.460
Beardmore Drlg. Co. No. 1 Foulks "A"	C SW NE 8-20-26W	2.613	3.928	3.971	4.638	1.890[a]	3.618[t]	-----	-----	4.695
NORTON COUNTY										
Sinclair Oil & Gas Co. No. 1 Ralph Rorabaugh, Jr.	C SE NE 20-1-22W	2.417	3.438	3.482	-----	-----	-----	-----	3,746	3.800

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Empire Drlg. Co., et al. No. 1 Browne	SW SW SE 34-1-24W	2,441	3,368	3,416	-----	3,598[b]	3,685[g]	-----	-----	3,688+
British American Oil Prod. Co. No. 1 Wilburn Ervin	C NE NE 13-1-25W	2,401	3,240	3,277	-----	3,496[b]	3,549[g]	-----	-----	3,556+
British American Oil Prod. Co. No. 1 Meyers "C"	C SE NE 24-1-25W	2,417	3,260	3,300	-----	3,518[b]	3,609[g]	-----	-----	3,617+
Woodman & Iannitti No. 1 Goss	C NW NW 35-1-25W	2,513	3,305	3,410	-----	3,616[b]	3,734[g]	-----	-----	3,751+
Sinclair Oil & Gas Co. No. 1 Nina Melroy	NW SE SE 3-2-23W	2,396	3,382	3,430	-----	3,615[b]	3,694[g]	-----	-----	3,773+
Empire Drlg. Co., et al. No. 1 Meier "A"	SE SE SE 1-2-24W	2,467	3,414	3,460	-----	3,648[b]	3,741[g]	-----	3,709	3,747+
Sinclair Oil & Gas Co. No. 1 E. E. Thiele	NE NW NE 20-2-24W	2,474	3,391	3,439	-----	3,625[b]	3,746[g]	-----	-----	3,775+
Raymond Oil Co., et al. No. 1 Schulze	C SW SE 24-2-24W	2,431	3,406	3,452	-----	3,640[b]	3,713[g]	-----	-----	3,725+
Empire Drlg. Co. No. 1 LeBeau	C NE SW 27-3-23W	2,423	3,462	3,506	-----	3,687[b]	3,776[g]	-----	-----	3,780+
Ferguson Oil Co., et al. No. 1 Ankenman	C NE NW 29-3-24W	2,344	3,328	3,371	-----	3,554[b]	3,699[g]	-----	-----	3,725+
Sinclair Oil & Gas Co. No. 1 Effie M. Robbins	SW NE NW 14-3-25W	2,460	3,398	3,440	-----	3,628[b]	3,790[g]	-----	-----	3,848+
Union Texas Natural Gas No. 1 George E. Wiltfong	NW NW SW 15-3-25W	2,447	3,391	3,435	-----	3,624[b]	3,820[g]	-----	-----	3,830+
Bennett & Roberts Oil Opers. No. 1 Archer	NW NE NW 8-5-21W	2,061	3,218	3,260	-----	3,446[b]	-----	-----	3,510	3,577

D. G. Hanson No. 1 Hemphill	NW NE NW 4-5-22W	2.216	3.355	3.399	-----	3.592[b]	3.712[g]	-----	3.672	3.729
OSAGE COUNTY										
*Five Nations Drlg. Co. No. 1 Keller	C NE NE 8-14-17E	1.036	-----	452	1.617	1.866	-----	842[b]	1.942[h]	1.970
*Phillips Petroleum Co. No. 1 Osage # 3 ST	NW NW NE 12-16-13E	-----	-----	-----	"Tight Hole"			-----	-----	2.105
*A. Ainsworth No. 1 Crable	SW NE SW 15-16-17E	1.045	-----	-----	1.455	-----	-----	-----	-----	1.500
Waco Oil Co. No. 1 Criqui	C NW NW 24-17-16E	1.108	-----	480	1.557	-----	-----	875[b]	-----	1.610
OSBORNE COUNTY										
*Forrest Applegate No. 1 Applegate	C SE NE 10-10-12W	1.741	2.920	2.976	-----	2.682[t]	-----	-----	-----	3.245
PAWNEE COUNTY										
Thunderbird Drlg., Inc. No. 1 Delhotal	NE NE SE 20-20-19W	2.185	3.644	3.692	4.274	1.321[a]	-----	-----	-----	4.304
R. W. Shields No. 1 Brannon	NE NW NW 29-20-19W	2.201	3.666	3.716	4.290	1.340[a]	-----	-----	-----	4.300
Thunderbird Drlg., Inc. No. 1 Schadel	NW NW SE 6-20-20W	2.233	3.744	3.794	4.358	1.420[a]	-----	-----	-----	4.395
Kenneth Rupp, et al. No. 1 Scott	C SW NW 23-21-19W	2.078	3.612	3.678	4.226	1.185[a]	4.324	4.422	4.467	4.475
PHILLIPS COUNTY										
National Associated Pet. Co. No. 1 Van Diest	C NW NE 28-2-20W	2.238	3.476	3.524	3.726[b]	1.924[a]	-----	-----	3.853	4.051

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans-KC	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
POTTAWATOMIE COUNTY										
Five Nations Drlg. Co. No. 1 Orsborn	C NE NE 28-7-10E	1,317	764	897	1,299[h]	-----	1,474	1,521	1,571[g]	1,602
K & E Drlg., Inc. No. 1 Kolterman "A"	SE SE NW 13-8-10E	1,119	591	750	1,158[h]	-----	1,486	1,610	-----	1,700
K & E Drlg., Inc. No. 1 Edwards	SE SE SW 15-8-10E	1,154	577	729	1,041[b]	-----	-----	-----	1,153[g]	1,157
PRATT COUNTY										
D. R. Lauck Oil Co., Inc. No. 1 Studer	C SW SW 23-27-12W	1,807	3,458	3,658	4,111	4,259	4,304	4,386	4,496	4,550
Braden Drlg. Co. No. 1 Krusemark	C SE NW 23-27-14W	1,986	3,734	3,912	4,374	-----	4,452	4,546	4,631	4,690
*San Rogue Oil & Expl. No. 1 Harold Leak	C SE NW 11-28-14W	2,004	3,771	3,953	4,407	-----	4,467	4,544	4,649	4,670
D. R. Lauck Oil Co., Inc. No. 1 Foster	SW NW NE 13-28-14W	1,931	3,682	3,870	4,311	-----	4,375	4,436	4,554	4,615
Kern Drlg. Co. No. 1 Murry	C NW SW 11-29-11W	1,805	3,602	3,775	4,303	4,345	4,532	4,617	4,697	4,739
Arvel C. Smith No. 1 Pitzer	NE NE NW 22-29-13W	1,868	3,706	3,898	4,389	4,417	4,456	4,570	-----	4,614
RAWLINS COUNTY										
Edwin Foster Blair, et al. No. 1 Niemeth	C SE NE 20-1-31W	2,896	3,843	3,869	-----	2,680[a]	-----	-----	4,447	4,501
Kirkman Trust Estates, et al. No. 1 Albert Kompus	C SW NW 2-1-32W	2,984	3,900	3,934	-----	2,797[a]	-----	-----	-----	4,225

Leben Drlg., Inc. No. 1 Peterson	C NW NE 8-1-33W	3,028	3,885	3,944	4,588	2,865[a]	4,220[b]	-----	4,631	4,680
Murfin Drlg. Co., et al. No. 1 Arendt	C SE NE 12-1-33W	2,939	3,825	3,864	-----	2,750[a]	4,152[b]	-----	4,492	4,513
Sunray Mid-Continent Oil Co. No. 1 L. Sramek	C NE SE 30-1-34W	3,202	4,082	4,136	-----	3,060[a]	4,404[b]	-----	-----	4,410
Edwin Foster Blair, et al. No. 1 Vap "B"	C SW SE 33-1-34W	3.091	4,000	4,046	4,658	2,952[a]	4,310[b]	-----	-----	4.708
Edwin Foster Blair, et al. No. 1 Niemeth "B"	C SW NW 1-2-32W	2,866	3,770	3,810	-----	2,628[a]	4,068[b]	-----	4,416	4,450
Leben Drlg., Inc. No. 1 Heyen	C NW NW 13-2-32W	2,724	3,617	3,652	-----	2,470[a]	3,914[b]	-----	4,202	4,280
Edwin Foster Blair, et al. No. 1 Samson "A"	C NW NE 17-2-32W	2,866	3,781	3,821	4,381	2,642[a]	4,081[b]	-----	4,434	4,460
Edwin Foster Blair, et al. No. 1 Samson "B"	C SW NW 21-2-33W	3,017	3,926	3,970	4,548	2,804[a]	4,218[b]	-----	-----	4,585
Edwin Foster Blair, et al. No. 1 Horinek	C NW SW 29-2-33W	2,942	3,871	3,914	4,508	2,740[a]	4,157[b]	-----	-----	4,536
Burch Drlg. Co. No. 1 Lintner	C SW NW 13-2-34W	3,103	4,002	4,042	4,540[p]	2,918[a]	4,304[b]	-----	-----	4,680
Edwin Foster Blair, et al. No. 1 Steele	C SE SE 28-2-34W	2,936	3,810	3,858	4,487	2,704[a]	4,130[b]	-----	-----	4,545
Edwin Foster Blair, et al. No. 1 Vrbas	C NE SE 13-2-35W	3,166	4,054	4,096	4,751	2,995[a]	4,357[b]	-----	-----	4,779
Edwin Foster Blair, et al. No. 1 Prentice	C SE NW 29-2-35W	3,255	4,130	4,178	4,845	3,100[a]	4,450[b]	-----	-----	4,876
Empire Drlg. Co. No. 1 Falconer	C SE SW 5-3-31W	2,995	3,970	4,018	-----	2,808[a]	4,251[b]	-----	-----	4,270

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Empire Drlg. Co. No. 1 Holmdahl	C NE NW 20-3-31W	3,035	4,001	4,044	-----	2,825[a]	4,255[b]	-----	-----	4,292
K & E Drlg., Inc. No. 1 Solko	C NW SW 24-3-31W	2,832	3,850	3,898	4,471	2,650[a]	4,123[b]	-----	-----	4,484
*Empire Drlg. Co., et al. No. 1 Holle	C SW SE 7-3-32W	3,049	3,979	4,025	-----	2,821[a]	4,265[b]	-----	-----	4,285
Amerada Petroleum Corp. No. 1 Wigner	C SW SE 9-3-32W	3,000	3,912	3,956	4,595	2,756[a]	4,200[b]	-----	-----	4,640
Empire Drlg. Co. No. 1 Dewey "A"	C SE NE 29-4-31W	2,964	3,961	4,010	4,551	2,725[a]	4,239[b]	-----	-----	4,559
Empire Drlg. Co. No. 1 Horinek	C SW SW 4-5-33W	3,131	4,025	4,060	-----	2,823[a]	4,324[b]	-----	-----	4,330
Empire Drlg. Co. No. 1 Dewey	C SW NW 3-5-35W	3,183	4,032	4,081	4,704	2,876[a]	4,342[b]	-----	-----	4,758
Empire Drlg. Co. No. 1 Brewster	C NW SW 14-5-35W	3,228	4,078	4,128	4,800	2,890[a]	4,392[b]	-----	-----	4,835
RENO COUNTY										
*Mull Drlg. Co., Inc. No. 1 Morgan "B"	C SE NW 30-22-8W	1,708	2,960	3,113	3,566	3,616	3,490[b]	-----	-----	3,630
*Mull Drlg. Co., Inc. No. 1 Rupp	C NE SE 31-22-8W	1,685	2,990	3,183	3,652	3,702	-----	-----	-----	3,720
*Wofford Oil Co. No. 1 Bacon	SE SE SE 17-23-4W	1,500	-----	2,646	3,400	-----	3,079[b]	-----	-----	3,438
Wofford Oil Co., et al. No. 1 Hale	NE NW NW 21-23-4W	1,492	2,382	2,592	3,358	3,612	3,851	3,866	3,956	3,979

Thunderbird Drlg. Co., Inc. No. 1 Trembley	SE SE NE 18-25-7W	1,573	2,915	3,165	3,782	3,923	4,150	4,164	4,250	4,275
*Wilkinson Drlg. Co. No. 1 Morris	C SE NW 12-25-10W	1,743	3,218	3,423	3,895	3,959	-----	-----	-----	3,960
Rex & Morris Drlg. Co., et al. No. 1 Bogner	C NW SE 14-26-4W	1,546	2,670	2,908	3,697	-----	3,584[b]	-----	-----	3,800
Messman-Rinehart Oil Co. No. 1 Larson	SE SE SE 8-26-7W	1,607	2,958	3,256	3,906	4,044	4,254	4,276	-----	4,295
RICE COUNTY										
Glickman Oil Co. No. 1 Thiessen	SW SW NE 15-19-8W	1,754	2,692	2,855	-----	-----	-----	3,214	3,242	3,272
*Wayne Walcher No. 1 Deem	NW NW SE 5-21-8W	1,658	2,738	2,901	-----	-----	3,437	3,488	3,550	3,564
Wilkinson Drlg. Co. No. 1 Smisor	NW NW SE 18-21-8W	1,658	2,743	2,899	-----	-----	3,391	3,439	3,498	3,572
*Leo J. Dreiling Oil Co. No. 1 Mulhauser	NE SW SW 5-21-10W	1,745	2,865	3,021	-----	-----	447[a]	-----	3,430	3,430
*Leo J. Dreiling Oil Co. No. 1 G. Heckel	SE NE SW 23-21-10W	1,716	2,863	3,036	-----	-----	355[a]	3,422	3,463	3,494
*Leo J. Dreiling Oil Co. No. 1 Jordan	NW SE NW 30-21-10W	1,747	2,926	3,084	-----	-----	444[a]	-----	3,479	3,492
RILEY COUNTY										
Five Nations Drlg. Co. No. 1 McDermand	NE Lot 4 19-11-8E	1,325	1,104	1,275	-----	1,674	-----	-----	1,836[h]	1,900
White & Ellis Drlg. Co. No. 1 Kimbell	NW NW SE 5-11-9E	1,056	581	706	990[b]	-----	-----	-----	-----	1,031+
George F. Johnston, Jr. No. 1 Allendorph	SE NE SW 22-11-9E	1,457	1,022	1,205	-----	-----	1,773	-----	1,667[h]	1,795

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
ROOKS COUNTY										
*Woodman-Iannitti No. 1 Johnson	C NE NW 4-6-19W	1,965	3,144	3,183	-----	-----	3,398[b]	-----	3,457	3,527
Cities Service Oil Co. No. 1 Oliva	SE SE NW 9-7-17W	1,915	3,003	3,048	-----	-----	3,283[b]	-----	3,387	3,401
RUSH COUNTY										
John O. Farmer, Inc. No. 1 Herrman "B"	SE SE SW 35-16-19W	2,084	3,382	3,428	-----	1,263[a]	3,788[r]	-----	-----	3,809
*Kerbs Oil Co. No. 1 Kerbs	NW NW SE 11-17-16W	2,024	3,260	3,318	-----	1,119[a]	-----	-----	-----	3,477
John O. Farmer No. 1 Strecker	SW SW SE 28-17-18W	2,081	3,434	3,484	-----	1,241[a]	4,008[g]	-----	3,927	4,014+
John O. Farmer, Inc. No. 1 Sueser	NW NW NW 5-18-17W	2,030	3,305	3,363	-----	1,122[a]	3,681[r]	-----	-----	3,711
Western Petroleum Co. No. 1 Serpan	NE SE SW 28-18-17W	2,001	3,336	3,390	-----	1,114[a]	-----	-----	3,781	3,815
*Kenneth Rupp, et al. No. 1 McKay	C NW SE 2-19-18W	2,121	3,461	3,513	-----	1,230[a]	-----	-----	3,894	3,917
RUSSELL COUNTY										
*Robert W. Tesch No. 1 Best	SE SE NW 1-14-13W	1,829	2,928	2,996	-----	778[a]	-----	-----	3,366	3,385
SALINE COUNTY										
*Don McKellar Exploration Co. No. 1 Burt	C SW NW 26-14-1W	1,214	2,208[b]	1,870	2,555	-----	-----	-----	-----	2,562

*N. A. Oil Survey No. 1 McCormick	SE NE SE 32-15-2W	1.295	2.608[b]	2.160	2.812	3.093	3.421	-----	3.225[h]	3.445
*Saline Basin Petroleum Co. No. 1 Miller-Springer	N 2 NW NE 16-15-3W	1.288	-----	-----	2.775	3.052	3.375	-----	3.204[h]	3.407
*E. H. Adair Oil Co., et al. No. 1 Ott	SW SW NE 26-16-1W	1.333	1.837	2.032	2.685	2.369[b]	-----	-----	-----	2.697
SCOTT COUNTY										
Pickrell Drlg. Co. No. 1 Christy "A"	C SW SW 32-18-31W	2.976	3.902	3.947	4.564	2.240[a]	4.333[b]	-----	-----	4.666
Jones-Campbell No. 1 Kruse	C SE SE 16-18-32W	2.981	3.905	3.950	4.622	2.230[a]	4.342[b]	-----	-----	4.801
Glen Eldon Oil Co. No. 1 Fee Seeber	C SE¼ 31-20-32W	2.920	-----	-----	-----	2.080[a]	-----	-----	-----	2.738
SEDGWICK COUNTY										
*Solar Oil Co. No. 1 Grother	NW NW SW 34-29-1E	1.236	-----	2.739[k]	3.314	3.670	-----	3.729	3.773	3.780
White & Ellis Drlg. Co., Inc. No. 1 Charles Humbolt	NW NW NE 25-29-2E	1.313	1.909	2.515[k]	3.016	3.307	-----	3.373	3.414	3.430
Kewanee Oil Co. No. 1-A Weninger	C SW NW 33-25-2W	1.385	-----	2.555[k]	3.419	3.820	3.904	3.926	4.024	4.050
Kenneth Rupp, et al. No. 1 Jorgeson	NW NE NE 10-25-3W	1.430	-----	2.612[k]	3.438	3.867	3.954	3.983	-----	4.026
Shawver-Armour, Inc. No. 1 Hitt	NW NW NW 32-26-1W	1.358	-----	2.794[k]	3.399	3.792	3.881	3.903	3.975	4.012
*Shawver-Armour, Inc. No. 1 Farmer	NW NW NW 18-27-1W	1.348	-----	2.825[k]	3.448	3.839	3.920	3.940	4.014	4.030
*Shawver-Armour, Inc. No. 1 Betzen	NW NW SW 24-27-2W	1.342	-----	2.883[k]	3.499	3.088[b]	-----	-----	-----	3.545

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company and farm	Location	Surface elevation, feet	Depth to top of formation, feet: Heebner	Lans.-K.C	Missis-sippian	"Kinder-hook"	Viola	Simp-son	Ar-buckle	Total depth, feet
Shawver-Armour, Inc. No. 1 McCoin	SE SE NE 35-27-2W	1,375	-----	2,902[k]	3,490	3,857	-----	3,935	4,011	4,052
Kewanee Oil Co. No. 1 Lampe	SW SW SE 5-27-4W	1,393	-----	2,810[k]	3,635	3,910	4,038	4,056	4,162	4,195
*Morris Garvin No. 1 Spurrier	C NE SW 16-27-4W	1,393	2,589	2,831[k]	3,672	-----	-----	-----	-----	3,790
Frontier Chemical Co. No. 2 Plant Site Disposal	SE NW SW 27-28-1W	1,311	2,230	2,804[k]	3,426	-----	-----	3,837	3,927	4,125
*Mull Drlg. Co. No. 1 Jacob Tjaden	NE NE SW 31-29-1W	1,258	-----	2,960[k]	3,604	-----	-----	-----	-----	3,651
SEWARD COUNTY										
Peter Davis, et al. No. 1 Thompson	C SW¼ 13-31-33W	2,883	4,160	4,276	5,601	3,774[t]	-----	-----	-----	5,897
SHERIDAN COUNTY										
*Ozark Mahoning Co. No. 1-4 Nigel Walden	SW NW SE 4-7-27W	2,706	3,866	3,906	-----	2,430[a]	3,684[t]	4,122[b]	-----	4,130
Texaco, Inc. No. 1 Albers	C NE SW 5-8-26W	2,551	3,716	3,756	4,320	-----	4,496	3,974[b]	4,604	4,657
Bell Oil & Gas Co. No. 1 Younger	SW SE NE 25-10-27W	2,547	3,740	3,779	-----	2,143[a]	-----	4,019[b]	-----	4,045
SHERMAN COUNTY										
K & E Drlg., Inc. No. 1 James	C NW SW 20-10-40W	3,774	4,319	4,368	5,296	3,119[a]	-----	-----	-----	5,357

STAFFORD COUNTY										
Thunderbird Drlg., Inc. No. 1 Giedinghagen	SE NE NW 13-23-11W	1,792	3,095	3,274	-----	-----	3,655	3,682	3,750	3,765
Strata Drlg. Co. No. 1 Freymiller	SW SW SW 31-25-11W	1,867	3,390	3,591	-----	-----	-----	-----	-----	3,887
*Petroleum, Inc. No. 1 C. B. Smith "AD"	C SW NE 36-25-15W	2,014	3,661	3,835	4,272	4,299	4,362	4,510	4,565	4,590
STANTON COUNTY										
Pan American Petroleum Corp. No. 1 Mayhew Gas Unit "B"	C SE NW 28-27-39W	3,181	3,690	3,770	5,372	-----	-----	-----	-----	5,500
Musgrove Drlg. Co. No. 1 J. B. Cockrum	C SE¼ 18-27-41W	3,397	3,660	3,722	5,396	3,388[t]	4,258[b]	-----	-----	5,605
Musgrove Drlg. Co. No. 1 Merrill	C NW¼ 27-27-42W	3,462	3,659	3,724	5,402	3,391[t]	-----	-----	-----	5,602
Pan American Petroleum Corp. No. 1 Glenn Gas Unit "B"	C NE SW 8-28-39W	3,201	3,716	3,792	5,414	-----	-----	-----	-----	5,850
Musgrove Drlg. Co. No. 1 Craig	C SW¼ 10-28-41W	3,368	3,648	3,704	5,363	3,363[t]	4,294[b]	-----	-----	5,565
Musgrove Drlg. Co. No. 1 Schrivner	C SE¼ 10-28-42W	3,505	3,686	3,802	5,466	3,416[t]	4,282[b]	-----	-----	5,670
Sunray Mid-Continent Oil Co. No. 1 Craig	C NE NE 1-29-43W	3,572	3,660	3,790	5,572	-----	-----	-----	-----	5,701
Pan American Petroleum Corp. No. 1 Hunt Gas Unit	C NE SW 12-30-40W	3,250	3,732	3,822	5,547	-----	-----	-----	-----	5,850
Musgrove Drlg. Co. No. 1 Dickey	C SW¼ 15-30-41W	3,395	3,608	3,680	5,330	3,332[t]	-----	-----	-----	5,585

TABLE 33.—*Dry wildcat tests drilled in 1961, continued*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
STEVENS COUNTY										
*Cities Service Oil Co. No. 2 Taylor "C"	C SE NW 23-34-35W	2,985	4,321	4,462	6,184	2,844[f]	-----	-----	-----	6,591
SUMNER COUNTY										
Stelbar Oil Corp., Inc., et al. No. 1 Bowers	SE SW SW 35-30-1E	1,211	2,352[s]	2,697[k]	3,275	3,582	-----	-----	-----	3,716
*Beardmore Drlg. Co. No. 1 Stewart Trust	NE NE NE 20-31-1E	1,290	2,536[s]	2,892[k]	3,543	-----	-----	-----	-----	3,593
Shawver-Armour, Inc. No. 1 White	SE SE SE 11-32-1E	1,230	2,572[s]	2,884[k]	3,484	-----	-----	-----	-----	3,525
Wildcats, Inc. No. 1 Morton	C SE SE 22-32-1E	1,181	2,535[s]	2,908[k]	3,511	3,905	-----	3,920	3,984	4,001
Stelbar Oil Corp., Inc. No. 1 Rusk	C NE SE 7-33-1E	1,220	2,742[s]	3,117[k]	3,768	4,112	-----	4,185	4,264	4,288
Donald C. Slawson No. 1 Harris	C SE SE 24-33-1E	1,190	2,475[s]	2,981[k]	3,473	-----	-----	-----	-----	3,510
*Rex & Morris, et al. No. 1 Kurt	C NE NW 27-30-4W	1,456	3,239[s]	3,495[k]	4,127	4,480	-----	4,568	-----	4,574
*Shawver-Armour, Inc. No. 1 Corsaut	SE SE NW 2-31-1W	1,324	2,702	3,009[k]	3,643	3,975	-----	4,028	-----	4,062
Shawver-Armour, Inc. No. 1 Chitwood "A"	C SW NE 5-31-2W	1,324	2,884[s]	3,162[k]	3,838	4,203	-----	4,265	-----	4,295
*Ted Ferrier No. 1 Thompson	SE SW NW 15-31-2W	1,262	2,794[s]	3,105[k]	-----	-----	-----	-----	-----	3,360

*Shawver-Armour, Inc. No. 1 Botkin	SW SW NE 35-31-2W	1,232	2,797[S]	3,120[k]	3,785	-----	-----	-----	-----	3,805
Walter W. Clements, Jr. No. 1 Myers	SE SE SW 7-31-4W	1,365	3,220[S]	3,501[k]	4,159	4,495	-----	4,573	-----	4,616
Shawver-Armour, Inc. No. 1 Busch	SW SE SE 9-32-3W	1,257	3,005[S]	3,286[k]	3,960	4,332	-----	4,420	4,506	4,529
Pickrell Drlg. Co. No. 1 Wood	C NE NW 14-32-3W	1,245	2,950[S]	3,246[k]	3,927	4,254	-----	4,329	-----	4,346
*Walter W. Clements, Jr. No. 1 Segebart	C NW NE 11-32-4W	1,268	3,086[S]	3,350[k]	4,016	4,407	-----	4,494	-----	4,502
Herndon Drlg. Co. No. 1 Wilson	C SE NW 9-33-1W	1,231	2,842[S]	3,242[k]	3,914	-----	-----	4,363	-----	4,389
*Dorset Co. No. 1 Crisler	SE SE SW 26-33-2W	1,179	-----	3,384[k]	4,008	-----	-----	-----	-----	4,031
Shawver-Armour, Inc. No. 1 Rohrer	SE SW SW 23-33-3W	1,162	3,039[S]	3,354[k]	4,046	4,404	-----	4,471	-----	4,480
Ferguson Oil Co. No. 1 Gallon	C SW NE 4-33-4W	1,279	3,290[S]	3,559[k]	4,254	4,596	-----	4,680	-----	4,700
Dorset Co. No. 1 Brownback	SW NW NW 17-34-2W	1,118	2,975[S]	3,466[k]	4,098	4,450	4,509	4,535	-----	4,560
*Herndon Drlg. Co. No. 1 Allen Estate	NE SE NW 22-34-2W	1,108	2,964[S]	3,430[k]	4,088	4,448	-----	4,518	-----	4,532
*Aylward Drlg. Co. No. 1 Allen	SE NE SW 24-34-2W	1,098	-----	3,443[k]	4,081	-----	-----	4,504	-----	4,514
*Dorset Co. No. 1 Builta Heirs	SE SW SE 6-34-3W	1,183	-----	3,523[k]	4,235	4,606	-----	4,685	-----	4,730
*National Drlg. Co., Inc. No. 1 Baker	C NE NE 33-34-4W	1,223	-----	3,784[k]	4,502	4,826	-----	4,904	-----	4,931

TABLE 33.—*Dry wildcat tests drilled in 1961, concluded*

County, company, and farm	Location	Surface elevation, feet	Depth to top of formation, feet							Total depth, feet
			Heebner	Lans.-K.C.	Mississippian	"Kinderhook"	Viola	Simpson	Arbuckle	
Pentagon Corp. No. 1 Kolarik	SW NW NW 9-35-4W	1,177	3,400[s]	3,823[k]	4,599	4,960	-----	5,019	-----	5,038
Dorset Co. No. 1 Hudson	NE SE NW 13-35-4W	1,146	3,358[s]	3,832[k]	4,490	-----	-----	-----	-----	4,503
THOMAS COUNTY										
Target Drlg. Co. No. 1 Preston	C SE SW 34-6-31W	2,978	3,960	4,005	4,580	2,650[a]	3,802[t]	4,247[b]	-----	4,647
Target Drlg. Co. No. 1 Akers	C SE SE 23-6-32W	3,040	3,985	4,032	4,654	2,688[a]	3,802[t]	4,276[b]	-----	4,704
Target Drlg. Co. No. 1 Foster	C SE NE 34-6-32W	3,034	3,970	4,020	4,573	2,670[a]	3,790[t]	4,262[b]	-----	4,675
Empire Drlg. Co. No. 1 Spielman	C NW SW 34-6-33W	3,152	4,055	4,102	-----	2,785[a]	3,865[t]	4,355[b]	-----	4,392
Target Drlg. Co. No. 1 Dible	C NW SE 8-7-31W	3,030	3,994	4,038	4,588	2,700[a]	3,858[t]	4,286[b]	-----	4,700
Aladdin Petroleum Corp. No. 1 Koch	SE SE SW 4-8-32W	3,055	4,081	4,131	4,717	2,750[a]	-----	-----	4,910	5,232
Target Drlg. Co. No. 1 Hanson	C NE NW 27-8-36W	3,338	4,106	4,154	4,796	2,846[a]	-----	4,462[b]	-----	4,876
Target Drlg. Co. No. 1 Kaiser	C SW SE 31,10-33W	3,190	4,087	4,129	4,746	2,670[a]	-----	4,430[b]	-----	4,807
Empire Drlg. Co. No. 1 Harper	C NW NE 2-10-34W	3,227	4,122	4,166	-----	2,740[a]	-----	4,461[b]	-----	4,475
TREGO COUNTY										
Chief Drlg. Co., Inc. No. 1 Zeman	NW NW NW 28-12-24W	2,455	3,782	3,821	-----	2,015[a]	3,547[t]	4,075[b]	-----	4,087

Amerada Petroleum Corp. No. 1 William Lutz	C SE SW 30-13-21W	2,350	3,673	3,708	-----	-----	3,548[t]	3,958[b]	4,214	4,229
*I. O. Miller No. 1 Allman	NW NW SW 30-14-21W	2,136	3,527	3,564	4,088	1,515[a]	3,264[t]	3,814[b]	-----	4,115
Woodman & Iannitti No. 1 DeWald	C NE NE 15-14-23W	2,298	3,657	3,697	4,242	1,756[a]	3,405[t]	3,960[b]	-----	4,333
Arvel C. Smith No. 1 Flax	SE SE NW 34-15-23W	2,426	3,798	3,836	4,405	1,795[a]	3,528[t]	4,112[b]	-----	4,506
WABAUNSEE COUNTY										
*Phillips Petroleum Co. No. 1 Newbury	W½ SW NW 16-11-11E	-----	-----	-----	"Tight Hole"			-----	-----	3,219
*Phillips Petroleum Co. No. 1 East Alta Vista	C SW SW 4-14-9E	-----	-----	-----	"Tight Hole"			-----	-----	2,674
*Phillips Petroleum Co. No. 4 Osage City ST	SW SW SE 4-15-13E	-----	-----	-----	"Tight Hole"			-----	-----	2,732
WALLACE COUNTY										
Target Drlg. Co. No. 1 Fankhauser	C NE NE 31-13-39W	3,389	3,900	3,952	4,820	2,580[a]	5,228	5,254	5,270	5,357
Texaco, Inc. No. 1 C. F. Pierce	C NE NE 18-14-38W	3,559	4,099	4,154	5,032	6,019[g]	5,504	5,544	5,564	6,059

a - Anhydrite
b - Base of the Kansas City
c - Cherokee
f - Fort Riley
g - Granite Basement
h - "Hunton"
k - Kansas City Group
l - "Layton"
p - Penn. Basal Congl.
r - Reagan
s - "Stalnaker"
t - Topeka
+ - Well penetrated Precambrian
* - No electric or radioactivity logs available

TABLE 34

OIL PRODUCTION IN KANSAS DURING 1961

FOOTNOTES

*Field extends into adjacent county or counties.
**Corrected cumulative.

TABLE 34.—*Oil production in Kansas during 1961*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
ALLEN COUNTY										
Bronson-Xenia*	17-25-21E				202	1	"Bartlesville"	700	18	
a		1,960	100,473							
b		140	1,787							
Colony West* ('22)	15-23-18E				31		"Squirrel"	820		
a		420	716							
b		40	85							
c		40	199							
Davis-Bronson*	24-21E				123	7	"Bartlesville"	720	45	
a		160	773							
b		920	31,161							
Elsmore Shoestring ('08)	5-26-21E				50		"Bartlesville"	650	24	
a		80	13,742							
b		180	3,583							
c		40	294							
Elsmore West ('11)	12-26-20E				15		"Bartlesville"	775	20	
a		100	4,644							
b		40	209							
Humboldt-Chanute*	26-18E				1,056	9	"Bartlesville"	850		
a		40	212							
b		140	1,968							
c		100	2,525							
d		9,110	329,560							
e		900	45,665							
f		220	9,816							
g		60	179							
h		960	10,328							
i		40	60							
Iola ('37)	24-18E				379	3	"Bartlesville"	850		
a		2,760	303,689							
b		50	187							
c		40	116							
d		160	2,591							
e		60	119							
f		80	208							

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
g		60	548							
h		80	230							
i		120	487							
j		440	18,987							
Moran ('03)	25-20E				101	2	"Bartlesville"	820		
a		1,600	46,117							
b		480	16,069							
c		340	11,280							
Neosho Falls-Leroy* ('05)	35-22-16E				10		"Squirrel"	965		
a		120	2,982				Mississippian	1,200		
b		30	235							
c		30	348							
Seibert	5-26-20E				10		"Bartlesville"	680		
a		20	2,264							
b		60	2,696							
Miscellaneous		40	150		2+					
Total Allen County		22,260	967,282	23,398,698 recorded	1,979	22				
ANDERSON COUNTY										
Bush City Shoestring('21)	28-20-21E				739	4	"Squirrel"	620	20	34
a		2,840	222,294				"Bartlesville"			
b		30	391							
Centerville* ('20)	10-21-22E				57	1	"Bartlesville"	480	15	
a		90	2,285							
b		120	1,210							
Colony-Welda ('16)	4-23-19E				193	5	"Weiser"	600	15	
a		40	451				"Squirrel"	780		
b		200	18,692							
c		430	9,248							
d		260	4,837							
e		800	50,411							
f		80	135							
g		90	667							
Colony West* ('22)	15-23-18E				93		"Squirrel"	825		
a		200	716							
b		620	38,803							

Garnett Shoestring ('04)	32-20-20E				47	8	"Squirrel"	700	35	36
a		100	11,393				"Garnett"	800		33
b		110	883							
c		40	2,596							
d		50	5,696							
e		90	1,648							
f		100	5,001							
Greeley	29-21E		no report				Cherokee	800		
Kincaid ('21)	10-23-21E				75		"Bartlesville"	750	12	
a		400	4,695							
b		40	5,703							
Selma ('29)	9-22-21E	300	3,654		33		"Bartlesville"	700	25	
Total Anderson County		7,030	391,409	20,122,869 recorded	1,237	18				

BARBER COUNTY

Aetna Gas Area ('35)	13-34-15W	16,000	18,225	137,288	41		Mississippian	4,850	7	
							Viola	5,215		
Amber Creek ('52)	36-30-12W		no report	19,178			Mississippian	4,296		30
Bloom ('55)	23-32-12W	40	4,192	35,466	2		Mississippian	4,310	30	
							Simpson	4,672	3	37
Bloom North ('59)	14-32-12W	80	20,405	38,524	3		Mississippian	4,230	20	
Boggs Southwest ('55)	30-33-12W	1,700	2,695	61,619	18		Mississippian	4,456		
Brooks-Younger ('55)	23-32-13W	80	1,066	33,633	2		Mississippian	4,423	5	29
Clara* ('48)	36-29-14W	80	10,113	98,274	2		Simpson	4,472		40
Deerhead ('43)	22-32-15W	640	33,391	1,158,677	10		Viola	4,950	9	26
DeGeer ('48)	2-33-15W		no report	755,590		1	Viola	5,176	10	40
							Simpson	5,356	2	
Donald ('46)	33-31-15W	840	141,452	522,059	16		Mississippian	4,697		
Eads* ('58)	4-30-14W	80	14,312	50,347	3		Simpson	4,561	9	
Elsea ('56)	27-32-14W	160	168	10,266	4		Marmaton	4,625	20	
							Mississippian	4,662	18	31
Elwood ('56)	34-34-13W	1,040	391	9,903	9	1	"Elgin"	3,662	10	
Glick East ('61)	18-31-15W		no report	none			"Penn sand"	4,703		41
Gudeman ('54)	10-35-10W	40	no runs	12,949	1		Viola	5,152	10	47
Hardtner ('54)	31-34-12W	2,380	75,989	550,877	53		Mississippian	4,782	6	15
Highway ('56)	14-32-11W	200	18,630	132,021	5		Douglas	3,587	16	26
ILS Southwest ('59)	17-31-11W	40	82	82	1		Douglas	3,766		
Lake ('59)	26-31-14W	40	no runs	6,664	1	1	Arbuckle	4,747	5	30
Lake City ('37)	7-31-13W		no report	307,865			Viola	4,435		43
							Simpson	4,530		
							Arbuckle	4,607		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft	Producing zone: Aver. grav.
Landis ('55)	21-34-11W	40	no runs	5,252	1		Mississippian	4,630	10	25
Little Bear Creek ('54)	12-32-14W		no report	1,801			Douglas	3,808	16	25
							Viola	4,670	10	
McGuire-Goemann ('55)	29-32-10W	500	3,752	31,949	10	1	Mississippian	4,433	20	
McR ('61)	16-33-10W		1,251	1,251	1	1	Lans.-K.C.	3,903	6	
			Abandoned during 1961				Mississippian	4,544	20	
McReynolds ('59)	19-31-10W	20	no runs	1,520	1		Mississippian	4,520	2	35
Medicine Lodge-Boggs ('37)	13-33-13W	4,000	226,402	4,797,733	50	1	Marmaton	4,664	18	37
							Mississippian	4,495	6	
							"Misener"	4,845		
							Simpson	4,806		26
Medicine Lodge North ('54)	25-32-13W	1,240	74,113	705,061	30	2	Mississippian	4,480	13	37
Nippawalla ('51)	13-33-12W	80	245	1,956	2		Douglas	3,659		
Nurse ('53)	13-31-13W	40	140	140	1		Mississippian	4,190	6	28
Palmer ('58)	30-32-13W	1,280	135,848	224,674	27	2	Marmaton	4,477	11	26
							Mississippian	4,524	22	
							Viola	4,923	7	44
Perry Ranch* ('58)	12-32-16W	160	763	763	5		Mississippian	4,785		
Rhodes ('49)	15-33-11W	5,000	220,372	6,066,654	139	8	Mississippian	4,551		26
							Viola	4,803		
Rhodes Northeast ('56)	2-33-11W	500	3,671	19,653	13	1	Mississippian	4,400	10	
Rhodes South ('57)	6-34-11W	300	27,917	151,271	8	1	Mississippian	4,564	30	
Roundup South ('53)	33-33-11W	40	429	1,527	1		Mississippian	4,457		
Sharon* ('55)	13-32-10W	800	29,277	208,531	6	1	Mississippian	4,355	10	21
Sharon Northwest ('56)	11-32-10W	860	3,984	27,015	17		Mississippian	4,347	10	
Skinner ('43)	29-31-14W	640	33,469	2,165,531	7	1	Viola	4,626	38	30
							Simpson	4,422		
Stumph ('52)	7-32-14W	540	21,686	262,077	12		Mississippian	4,801	4	
							Simpson	4,963	7	
Sun City ('41)	35-30-15W	640	9,838	1,632,404	7	1	Lans.-K.C.	4,344		31
Turkey Creek East ('57)	21-30-15W	640	86,618	564,696	17		Viola	4,557	5	36
Wells ('57)	18-34-15W	40	no runs	2,570	1		Cherokee	4,768	10	
							Mississippian	4,768	24	
Whelan ('34)	32-31-11W	1,080	31,105	3,511,024	16		"Chat"	4,355	27	30
Whelan East ('54)	21-31-11W	40	no runs	61	1		Douglas	3,746		
Whelan Southwest ('54)	11-32-12W	40	1,329	17,941	1		Mississippian	4,229	11	
Whelan West ('55)	25-31-12W		no report	12,887			Mississippian	4,284	8	

Wolgamott ('57)	16-35-14W	40	429	2,100	1		Cherokee	4,865	4	
Pools or fields abandoned				77,150						
Total Barber County		42,000	1,253,749	24,436,474	546	23				

BARTON COUNTY

Ainsworth South ('37)	10-17-13W	3,260	226,603	5,579,995	72	1	Lans.-K.C.	3,170		
							Arbuckle	3,390		
Ameh ('51)	19-18-11W	80	15,634	73,807	2		Lans.-K.C.	3,103		50
Ames ('43)	22-18-11W	2,000	113,830	2,120,614	40	1	Lans.-K.C.	3,042	10	35
							Arbuckle	3,348		
Ames Northwest ('47)	9-18-11W	40	1,922	59,535	1	1	Lans.-K.C.	3,106	6	40
							Arbuckle	3,312		
Axman ('49)	19-17-14W	80	1,956	187,468	1		Lans.-K.C.	3,136	11	43
							Arbuckle	3,400		
Bailey ('56)	30-18-11W	180	27,337	217,505	5		Lans.-K.C.	3,270	5	
			12,140		1		Arbuckle	3,396	21	39
Barrett ('43)	36-16-14W	580	10,656	317,382	7		Lans.-K.C.	3,355	5	40
							Arbuckle	3,463		
Bart-Staff* ('51)	4-21-14W	600	49,325	979,633	13		Lans.-K.C.		5	40
							Arbuckle	3,572		
Batchman ('50)	19-20-12W	640	19,206	117,528	9	1	Lans.-K.C.	3,201	6	29
							Arbuckle	3,459	21	35
Beaver ('34)	16-16-12W	2,600	124,601	4,600,322	64	7	Oread	2,885	6	35
							Toronto	2,938		
							Arbuckle	3,348	5	
							Reagan	3,335		
Beaver North* ('37)	4-16-12W	300	11,704	765,114**	4	1	Topeka	2,702	10	
							Arbuckle	3,316	10	39
Beaver South ('45)	27-16-12W	2,000	166,996	1,807,589	42	3	Lans.-K.C.	3,154		42
							"Sooy"			
							Arbuckle	3,359		
Behrens ('44)	6-20-15W	580	5,296	659,785	5		Arbuckle	3,719	4	38
Behrens Northeast ('55)	29-19-15W		no report	275			Arbuckle	3,639		33
Bend ('61)	11-20-13W	80	10,374	10,374	3		Lans.-K.C.	3,201	6	37
							Arbuckle	3,447	12	37
Bernard ('50)	10-19-11W	320	16,109	440,575	11		Shawnee	2,866	6	38
							Lans.-K.C.	3,224		
							Arbuckle		10	
Bissell Point ('54)	10-19-13W		no report	4,549			Lans.-K.C.	3,276	5	38
Bloomer* ('36)	36-17-11W	1,180	161,396	12,324,294	54	2	Lans.-K.C.	3,044	8	43
							Arbuckle	3,257		43

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Bottoms ('58)	36-18-12W	80	29,771	86,111	4		Lansing	3,144	10	36
Boyd ('42)	4-18-14W	3,700	308,360	9,800,847	119	2	Lans.-K.C.	3,177		37
							Arbuckle	3,438	12	
							Precambrian	3,311		
Burmeister ('59)	33-19-11W		no report	244			Douglas	2,980	6	
Capitol View ('50)	9-17-14W	520	11,351	205,533	6		Lans.-K.C.	3,230		37
							Arbuckle	3,450		
Carroll ('44)	21-17-14W	2,400	161,528	4,239,491	63	1	Lans.-K.C.	3,109	4	39
							Arbuckle	3,356	16	
Carroll Southwest ('47)	32-17-14W	100	1,569	74,187	3		Lans.-K.C.	3,193	8	36
Chase-Silica* ('31)	32-19-9W	22,000	1,848,278	96,276,679**	532	11	Douglas	2,950		
							Lans.-K.C.	2,955		
							Arbuckle	3,328		48
Cheyenne ('59)	4-19-12W	640	151,107	234,851	17		Lansing	3,097	7	
							Penn. congl.	3,381	6	40
Cheyenne View ('49)	12-19-12W	2,640	309,480	4,727,364	114		Lans.-K.C.	3,152	6	40
							Penn. congl.	3,393		
							Arbuckle	3,390	17	
Cheyenne View East ('57)	13-19-12W	40	3,988	42,206	1		Lans.-K.C.	3,120	4	
Claflin ('54)	3-18-11W		no report	7,614			Lans.-K.C.	3,044	4	
							Arbuckle	3,320	4	
Claflin Northeast ('55)	3-18-11W		no report	27,596			Lans.-K.C.	3,040	21	
Clarence ('53)	35-19-15W	80	6,307	22,500	2		Lans.-K.C.	3,291	6	23
							Reagan	3,534		
Clarence Northwest ('54)	35-19-15W	80	26,986	93,938	4		Lansing	3,394	8	
							Precambrian	3,531	12	
Davidson* ('30)	4-16-11W	40	2,490	270,914	1		Lans.-K.C.	3,016		38
							"Sooy"	3,317	9	
							Arbuckle	3,314		
Deines ('59)	16-16-14W		no report	1,512			Lansing	3,190	4	34
Demel ('57)	6-17-11W	80	27,316	78,784	3		Lansing	3,053	10	
							Arbuckle	3,306	16	
Dist. 65 ('60)	24-18-14W	40	1,334	3,299	1		Lans.-K.C.	3,162	5	38
Eberhardt ('35)	14-19-11W	320	8,654	512,847	5		Lans.-K.C.	3,194	3	38
Ellinwood North ('37)	33-19-11W	840	58,498	1,229,082	27	1	Lans.-K.C.	3,090		
							Arbuckle	3,328	8	40
Erna ('61)	30-18-14W	40	8,901	8,901	1	2	Lans.-K.C.	3,253	10	43
							Arbuckle	3,512	8	37

Erna Southeast ('61)	29-18-14W	80	9,649	18,505	2		Lans.-K.C.	3,240	4	38
			8,856		1		Penn. congl.	3,495	4	37
Esfeld ('47)	15-16-11W		no report	14,584			Arbuckle	3,343		43
Ess ('53)	13-19-14W	40	2,389	46,484	1		Lans.-K.C.	3,326	9	38
Feist ('58)	29-18-11W	200	13,500	174,187	5		Lans.-K.C.			
							Penn. congl.			
Feist North ('59)	20-18-11W	60	6,930	20,120	2		Lansing	3,104	8	
							Arbuckle	3,410	4	30
Finn ('59)	31-17-13W	40	993	4,556	2		Lans.-K.C.	3,109	2	
							Arbuckle	3,332	4	35
Fleske ('53)	3-20-15W		no report	6,459			Lans.-K.C.	3,470	4	37
Fort Zarah ('50)	30-19-12W	3,200	183,549	5,421,512	92	5	Lans.-K.C.	3,157	6	37
							Arbuckle	3,384		
Fort Zarah North ('51)	19-19-12W	120	3,855	131,652	2	5	Lans.-K.C.	3,208	6	37
							Arbuckle	3,436		
Fort Zarah West ('61)	25-19-13W	40	1,940	1,940	1		Arbuckle	3,395	2	37
Frees ('60)	23-16-11W	40	248	1,311	1		Arbuckle	3,366	9	41
Galatia ('58)	11-16-15W	40	6,081	30,868	2		Lansing	3,193	3	40
Galatia East ('59)	12-16-15W	40	1,246	9,534	1		Lansing	3,152	8	42
Galatia North ('61)	2-16-15W	40	1,213	1,213	1		Lans.-K.C.	3,180	5	39
Great Bend Airport ('52)	26-19-14W	640	49,082	620,652	14	1	Lans.-K.C.	3,320	4	40
							Arbuckle	3,473		
Great Bend Southeast ('60)	1-20-13W		no report	629			Lans.-K.C.	3,192	7	39
Great Bend Southwest ('52)	25-19-14W	100	3,351	105,411	2		Lans.-K.C.	3,322	4	
Great Bend Townsite ('53)	21-19-13W	1,200	81,358	969,294	31		Lans.-K.C.	3,196	30	32
							Arbuckle	3,441	4	
Great Bend West ('51)	23-19-14W	40	1,434	76,332	1		Lans.-K.C.	3,332	5	36
Haberman ('59)	32-18-13W	160	26,816	37,018	7		Arbuckle	3,400	2	43
Hall-Gurney* ('31)	30-14-13W	600	117,380	2,597,140	33		Shawnee	3,066		
							Lans.-K.C.			
							"Sooy"			
							Arbuckle			
Hammeke ('50)	17-19-11W	160	4,620	136,986	4	1	Lans.-K.C.	3,065	32	40
Hammeke Southeast ('50)	17-19-11W	80	4,576	106,388	2		Lans.-K.C.	3,089	7	40
Hammeke West ('59)	18-19-11W	180	12,708	73,852	5		Lansing	3,078	3	41
							Arbuckle	3,345	6	
Hammer ('40)	35-19-12W	1,100	201,890	2,769,462	43	1	Lans.-K.C.	3,088		41
							Arbuckle	3,348	8	
Harrison ('42)	18-20-13W	180	3,828	42,243	3		Lans.-K.C.	3,403	6	
							Arbuckle	3,520		37
Hawkins ('52)	3-19-13W	320	4,889	129,950	5	2	Lans.-K.C.	3,158	16	40
							Arbuckle	3,393		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Producing zone Depth ft	Producing zone Thickness, ft	Producing zone Aver grav
Heizer ('35)	16-19-14W	40	1,046	61,756	1		Lans.-K.C.	3,228	2	
Heizer Southwest ('52)	21-19-14W	300	5,661	99,371	3		Lans.-K.C.	3,379		39
							Arbuckle	3,552		
Heizer West ('55)	17-19-14W	80	3,300	93,605	3	2	Lans.-K.C.	3,237	11	
							Arbuckle	3,546		38
Herres ('55)	33-17-13W	260	15,488	229,828	10		Lans.-K.C.	3,128	4	
							Arbuckle	3,343	10	39
Hiss ('36)	31-20-13W	1,000	33,670	1,050,508	14	1	Lans.-K.C.	3,270	5	40
Hiss East ('52)	33-20-13W		no report	61,811		1	Lans.-K.C.	3,383	18	
							Arbuckle	3,549		
Hiss South ('50)	31-20-13W	80	7,895	129,567	3	1	Arbuckle	3,542		31
Hiss Southeast ('48)	32-20-13W	160	12,843	225,797	5	1	Lans.-K.C.	3,414	16	36
							Arbuckle	3,545		
Hlavaty ('59)	31-17-14W	20	6,038	18,453	1	1	Lans.-K.C.	3,172	3	41
Hoisington ('38)	21-17-13W	640	59,838	1,867,747	31		Lans.-K.C.	3,222	4	37
							Arbuckle	3,440		
Hoisington East ('54)	23-17-13W	160	9,088	127,935	4	1	Lans.-K.C.	3,140	5	37
							Arbuckle	3,338		
Hoisington Southwest ('54)	20-17-13W	80	3,809	44,987	2		Lans.-K.C.	3,282		
							Arbuckle	3,363	21	38
Homestead West ('55)	21-18-13W		no report	2,511			Arbuckle	3,300	10	
Hood ('59)	3-20-12W	80	2,458	8,379	2		Lansing	3,108	2	38
Jettie ('54)	27-20-14W	40	8,960	85,173	2		Simpson	3,534	6	
Kath ('60)	1-19-13W	40	1,287	1,287	1		Arbuckle	3,364	6	
Kimpler ('55)	31-18-11W	140	11,191	140,051	4		Lans.-K.C.	3,184	3	
							Arbuckle	3,413	6	40
Klepper ('51)	2-19-11W	300	16,087	219,649	6		Lans.-K.C.	3,220		38
Klepper North ('59)	2-19-11W	40	1,707	5,494	1		Lans.-K.C.	3,019	3	
Klug ('46)	28-17-13W	40	1,731	62,292	1		Arbuckle	3,414	7	28
Klug North ('48)	27-17-13W	120	7,579	198,644	3		Arbuckle	3,377	10	37
Klug Northwest ('57)	28-17-13W	80	18,729	54,817	2		Arbuckle	3,423	4	
Klug West ('56)	33-17-13W	60	12,857	81,590	3		Lans.-K.C.	3,149	28	37
							Arbuckle	3,394	5	
Knop ('61)	9-19-12W	40	7,491	7,491	2		Lans.-K.C.	3,131	5	37
Koopman ('53)	23-19-13W	40	2,091	37,450	1		Lans.-K.C.	3,220	3	37
							Arbuckle	3,398	11	
Kowalsky* ('41)	32-20-11W	1,400	100,709	2,429,440	41		Lans.-K.C.	3,185	4	49
							Arbuckle	3,378		

Kraft-Prusa* ('37)	10-17-11W	20,000	2,274,686	97,502,220	699	19	Shawnee	2,885		42
							Douglas	2,997		
							Lans.-K.C.	3,160		
							"Gorham"	3,335		
							Arbuckle	3,281		
							Reagan	3,310		43
							Precambrian			
Kraft-Prusa Northeast ('41)	36-16-11W	240	12,644	469,134	6		Lans.-K.C.	3,250	8	38
							Arbuckle	3,351		
Kruckenberg ('58)	13-19-15W	40	1,643	26,545	1		Arbuckle	3,562	6	
Lake Barton ('48)	21-18-13W	80	6,652	28,913	2	1	Lans.-K.C.	3,143	12	39
							Arbuckle	3,372		30
Lake Barton West ('60)	29-18-13W	160	44,474	48,519	8		Lans.-K.C.	3,152	57	36
							Arbuckle	3,402	14	34
Lanterman ('34)	15-19-11W	900	31,461	1,061,512	10		Lans.-K.C.	3,109	3	35
							Arbuckle	3,235		
Larkin ('51)	10-17-14W	40	3,513	131,231	1		Lans.-K.C.	3,280	6	37
Laud ('61)	23-18-14W	Abandoned during 1961					Arbuckle	3,401	3	
Leoville ('50)	7-17-14W	700	108,105	1,542,562	22	1	Lans.-K.C.	3,267		38
							Penn. congl.	3,439	2	
							Arbuckle	3,464		
Liberty ('52)	23-20-14W	40	7,437	21,854	1	1	Lans.-K.C.	3,341	5	
McCauley ('49)	34-17-13W	40	1,194	23,966	1		Lans.-K.C.	3,276	4	35
							Arbuckle	3,366		
Marquis ('60)	4-17-14W	40	3,132	8,148	1		Lans.-K.C.	3,198	4	41
Mary Ida* ('50)	31-18-10W	400	29,976	611,460	9		Lans.-K.C.	3,033		
							Arbuckle	3,272	5	36
Mary Ida North ('52)	25-18-11W	80	15,550	59,901	4		Arbuckle	3,304	7	
Meadowside ('49)	24-18-11W	280	34,908	570,980	7	1	Lans.-K.C.	3,079	12	38
							Arbuckle	3,284		
Meadowside Northwest ('59)	23-18-11W	20	2,501	10,416	1		Arbuckle	3,299	4	31
Merten Northeast ('46)	36-18-15W	300	29,950	279,193	8		Lansing	3,214	4	
							Arbuckle	3,494		35
Moses ('58)	14-20-14W	40	no runs	7,065	2	1	Arbuckle	3,540	14	
Ney South ('58)	1-16-13W	140	22,530	170,558	7		Topeka	2,940	10	
							Lansing	3,120	3	41
Ney Southwest ('59)	2-16-13W	40	4,183	31,082	1		Lansing	3,093	10	41
Nuss* ('55)	5-16-14W	420	26,390	143,682	8	1	Lans.-K.C.	3,183	4	36
							Arbuckle	3,387	8	
Odin ('48)	3-17-12W	320	10,363	345,522	3		Arbuckle	3,321	2	31
Olmitz ('58)	1-18-15W		no report	9,348		1	Lans.-K.C.	3,295		
							Arbuckle	3,540	4	36

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Otis-Albert* ('35)	30-18-15W	7,500	122,381	6,724,611	88	15	Lans.-K.C.	3,236	4	34
							Reagan	3,601		
Pawnee Rock* ('36)	13-20-16W	40	956	247,396	1		Arbuckle	3,832	16	
Pendergast (revived) ('61)	27-19-15W	40	7,254	7,254	1	1	Arbuckle	3,594	13	
Phillips ('57)	12-16-13W	240	37,190	160,397	7		Arbuckle	3,366	4	38
Popp ('58)	3-16-14W		no report	1,453			Arbuckle	3,352	5	
Prairie View ('50)	20-19-11W	360	25,081	414,730	8		Lans.-K.C.	3,080	36	40
Pritchard* ('44)	34-20-14W	1,500	109,135	3,501,770	36		Lans.-K.C.	3,253	8	35
							Marmaton	3,625		
							Simpson			
							Arbuckle	3,455	3	
Putnam ('51)	7-17-13W	40	1,908	77,547	1	1	Lans.-K.C.	3,286	7	39
Putnam East ('60)	7-17-13W	40	4,305	4,305	1		Lans.-K.C.	3,203	22	42
Putnam West ('51)	1-17-14W	80	13,516	85,035	4		Lans.-K.C.	3,225	8	38
Red Brick ('53)	23-19-13W	200	4,857	58,002	3		Lans.-K.C.	3,240	7	
							Penn. congl.	3,414	2	
							Arbuckle	3,448		33
Redwing ('50)	31-17-12W	320	9,438	278,068	5		Lans.-K.C.	3,083	7	40
							Arbuckle	3,335		
Redwing East ('55)	33-17-12W	380	60,894	460,003	13	1	Lans.-K.C.	3,120	5	
							Arbuckle	3,352	2	
Redwing Southeast ('60)	8-18-12W	160	30,304	31,274	5		Arbuckle	3,350	4	40
Redwing Southwest ('59)	1-18-13W	180	2,627	61,665	1		Lans.-K.C.	3,080	12	39
			17,490		3		Arbuckle	3,327	3	39
Reif South ('50)	31-16-12W	100	1,914	56,208	3		Lans.-K.C.	3,172	5	38
Reimer ('56)	25-17-15W	40	972	14,764	1		Lans.-K.C.	3,357	4	36
Rick* ('36)	1-19-11W	640	34,982	1,323,653	15		Lans.-K.C.	3,106		41
							Arbuckle	3,355		
Roesler* ('43)	14-18-11W	1,300	92,873	1,877,873	28	3	Lans.-K.C.	3,208		
							Arbuckle	3,291	7	
Rolling Green* ('60)	36-20-13W	40	4,797	21,130	1		Lansing	3,238	8	39
Rolling Green East* ('49)	30-20-12W	640	152,258	328,474	27	1	Arbuckle	3,491	6	35
Rusco (revived) ('61)	8-19-12W		no report	7,582		1	Arbuckle	3,400		
St. Peter ('44)	5-19-11W	1,280	236,117	2,503,582	46	1	Shawnee	2,910	7	
							Lans.-K.C.	3,121	3	39
							Penn. congl.	3,391	4	
							Arbuckle	3,387		

St. Peter East ('56)	34-18-11W	520	153,794	876,206	26		Topeka	2,870	3	
							Lans.-K.C.	3,116	14	
							Arbuckle	3,374	3	
Sandford ('51)	25-17-14W	80	2,430	59,681	1		Arbuckle	3,375	19	26
Sandrock ('51)	21-20-13W	640	19,572	507,306	11		Lans.-K.C.	3,412	8	35
Sandrock North ('59)	21-20-13W	40	1,345	11,236	1		Lansing	3,262	11	30
Sandrock Southeast ('54)	34-20-13W	Combined with Shaeffer Northeast					Lans.-K.C.	3,262	18	
Shaeffer Northeast* ('60)	35-20-13W	200	51,342	65,283	8		Lans.-K.C.	3,259	5	28
							Arbuckle	3,525	18	40
Sieker* ('60)	5-21-12W	Combined with Rolling Green East					Arbuckle	3,458	7	
South Bend ('54)	9-20-13W	100	2,860	118,782	3	1	Lans.-K.C.	3,317	8	48
Stiles ('58)	7-16-12W	60	3,651	18,710	2		Arbuckle	3,353	4	
Sunny Valley ('49)	7-20-12W	160	6,465	360,961	5		Lans.-K.C.	3,230	9	34
Sunny Valley Northeast ('54)	6-20-12W	220	16,350	212,292	6		Arbuckle	3,422	12	35
Templing ('55)	23-16-14W	180	11,342	151,149	4		Lans.-K.C.	3,332	8	39
							Arbuckle	3,402		
Trapp* ('36)	23-15-14W	11,000	671,436	55,699,818	302	19	Shawnee	2,889		
							Douglas	2,966		
							Lans.-K.C.	3,062		
							Arbuckle	3,252		39
Unruh ('45)	24-20-15W	640	3,539	231,044	8		Arbuckle	3,641	3	
Unruh South ('59)	25-20-15W	20	5,986	19,196	1		Arbuckle	3,628	1	37
Weikert ('53)	36-18-12W	120	3,696	79,456	3		Lans.-K.C.	3,169	7	42
Werner-Robl ('51)	30-19-11W	920	45,131	414,394	8		Lans.-K.C.	3,106	16	37
							Arbuckle	3,364		
Wondra North ('59)	10-17-12W	100	28,038	44,398	3		Arbuckle	3,305	13	39
Workman Northwest ('56)	21-20-12W	1,840	283,771	1,972,738	58	5	Lans.-K.C.	3,167	6	44
							Arbuckle	3,438	10	
Workman West ('56)	28-20-12W	180	23,839	142,334	5		Arbuckle	3,434	16	39
Pools or fields abandoned				790,180						
Total Barton County		118,560	10,022,065	352,222,928**	3,200	132				

BOURBON COUNTY

Bronson-Xenia*	17-25-21E				34	2	"Bartlesville"	665		
a		420	1,573							
b		100	137							
c		80	53							
d		410	8,032							

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Depth ft.	Thickness, ft.	Aver. grav.
Davis-Bronson*	23-21E				40		"Bartlesville"	560		
a		150	4,689							
b		30	78							
c		280	5,841							
d		60	126							
Hepler* ('17)	27-22E				50	1	"Bartlesville"			
a		360	36,983							
b		30	194							
Lost Creek			no report							
Savonburg			no report							
Miscellaneous		40	213		2+					
Total Bourbon County		1,960	57,919	1,043,187 recorded	126	3				
BROWN COUNTY										
Livengood ('44)	3-1-15E		no report	90,394			"Hunton"	2,580		
BUTLER COUNTY										
Allen Robison ('43)	1-26-3E	720	10,509		23		Mississippian	2,700		
Asmusson ('57)	16-29-4E	560	21,291	1,032,321	11	2	Lansing	1,840	6	
							"Misener"	2,856	3	
			173,471		24		Arbuckle	2,695	5	
Augusta ('14)	21-28-4E	5,160	231,912	40,260,106	161	7	Lansing	1,700		34
							Kansas City	2,000		
							Marmaton	2,200		
							Ordovician	2,445		34
							Arbuckle	2,600		33
Augusta North ('14)	28-27-4E	960	59,483	15,431,265	62	3	Lansing	1,650		
							Kansas City	1,950		
							Ordovician	2,380		
							Arbuckle	2,410		
Ballard ('60)	6-25-3E	100	12,614	17,771	4		Mississippian	2,726	1	40
Bausinger ('29)	24-27-3E	40	1,632		2		Simpson	3,050		

Benton ('25)	26-3E	40	1,534		1		"Chat"	2,965		
Berndsen ('58)	15-26-4E	200	170,636	548,659	21		Simpson	2,423	17	
Blankenship* ('21)	26-8E			4,088,264	64	17	"Bartlesville"	2,650	50	
a		980	46,913							
b		30	568							
c		50	5,605							
Blood ('58)	29-29-4E	100	27,983	122,419	4		Mississippian	2,716		
Brandt-Sensenbaugh ('25)	22-28-7E			2,130,291	32		"Chat"	2,692		
a		180	11,857							
b		30	2,850							
c		890	16,624							
d		50	1,128							
Brickley ('51)	2-27-7E	90	2,548	111,127	6		"Chat"	2,692	19	40
Brickley East ('60)	1-27-7E	40	1,211	1,211	1		Mississippian	2,748	5	38
Brickley Southwest ('52)	3-27-7E	70	740	12,300	1		"Bartlesville"	2,699	33	39
Butwick* ('49)	7-26-3E		no report	556			Mississippian			
							"Hunton"	3,192	2	
Butwick Northeast ('49)	7-26-3E	30	656	1,235	1		Mississippian			
Clay ('60)	32-29-6E	170	20,207	20,650	6		Mississippian	2,825	14	38
Combs* ('47)	5-30-5E	100	7,900		6		"Bartlesville"	2,820		
							Mississippian	2,850		
Combs Northeast ('48)	27-29-5E	70	5,403	51,612	3		"Bartlesville"	2,810		42
DeGraff ('55)	8-24-5E		no report	1,376			"Burgess"	2,440		
Dixon ('46)	12-27-6E	40	1,307	19,891	1		Kansas City	2,160		
							Mississippian			
Douglass ('16)	21-29-4E				5		Lans.-K.C.	1,790		36
a		50	1,769				Ordovician	3,000		
b		50	3,896							
Douglass Townsite ('58)	20-29-4E		no report	594			Lansing	1,880	10	
Eckel ('40)	7-27-7E	30	891	3,219	1		Kansas City			
Edgecomb ('51)	9-25-3E	50	1,458	31,096	1		Mississippian	2,759		
Edmonds* ('53)	31-22-4E	60	999	10,670	2		Mississippian	2,471		
Edmonds Southwest ('60)	1-23-3E	30	8,983	16,635	1		Mississippian	2,498	25	40
Elbing* ('18)	18-23-4E				73	1	Kansas City	2,120		37
a		210	29,667				Mississippian	2,400		35
b		1,380	191,062				"Hunton"			
							Viola	2,530		
Elbing East ('50)	27-23-4E	20	1,058	41,037	1		Lans.-K.C.	1,799		34
Elbing South ('58)	32-23-4E		no report	none			Kansas City	2,041	14	
El Dorado ('15)	29-25-5E	25,830	4,239,423	249,713,338	1,504	80	Admire	630		37
							Lansing	1,700		34
							Kansas City	2,000		36

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
							Viola	2,500		37
							Simpson	2,510		
							"Wilcox"	2,600		37
							Arbuckle	2,550		38
Entz ('59)	23-26-4E	120	43,614	114,659	5		Simpson	2,515	4	37
Ferrell ('39)	28-28-8E	610	39,307	1,685,384	29		Mississippian	2,647		40
Ferrell South ('61)	33-28-8E	60	20,204	20,204	10		Mississippian	2,750	24	38
Flint ('57)	6-24-6E	30	1,016	9,656	1		Mississippian	2,443	17	
Four Mile Creek ('51)	5-28-3E	100	7,928	273,584	2		Simpson	3,069	3	
Fox-Bush ('17)	24-29-5E	5,460	264,155	6,953,335	129	13	"Bartlesville"	2,730	25	40
Fox-Bush West ('53)	15-29-5E		no report	29,260		1	"Bartlesville"	2,837	11	
Garden ('25)	32-26-6E	230	5,473		6	4	"Bartlesville"	2,760		
Gelwick ('29)	27-4E	70	6,079		1		Viola	2,924		
Hannah ('36)	29-8E	120	7,149	74,211	8		Kansas City	2,120		
Haverhill ('27)	34-27-5E	1,120	84,003	4,966,091	58		"Bartlesville"	2,700		
Hazlett ('49)	24-5E	1,710	85,072	2,105,261	74	3	Mississippian	2,480		
Hickory Creek ('46)	11-28-5E	600	55,580	1,224,873	15		"Bartlesville"	2,685		
							Mississippian	2,700		
Keighley ('25)	22-27-7E				59	2	"Bartlesville"	2,650		
a		1,280	45,228				Simpson	3,148		
b		170	13,079							
Kramer-Stern ('26)	3-28-6E				61		Lans.-K.C.			
a		1,480	152,245				Simpson	3,000		
b		180	7,441				Arbuckle	3,040		
Latham ('59)	14-29-7E	60	22,304	55,366	6	1	Mississippian	2,788	14	37
Leon ('22)	19-27-6E	620	21,819	3,721,077	27		"Bartlesville"			
							"Chat"	2,660		
							Viola	3,050		
Long ('49)	15-26-7E	30	1,292	28,660	1		Mississippian	2,780		33
Long Northeast ('53)	11-26-7E	30	1,393	15,815	1		Mississippian	2,753	5	35
McCaig ('59)	13-28-6E	30	3,068	13,175	2	1	"Bartlesville"	2,700	2	40
							Mississippian	2,780	29	
McCann ('33)	7-25-3E		no report	2,890			"Burgess"	2,765		
Mann ('60)	29-26-4E		no report	none			Kansas City	2,114	5	30
Mellor ('57)	1-24-3E	140	13,030	130,737	11		Mississippian	2,442	6	
Mellor East ('58)	7-24-4E	120	4,622	57,920	4	1	Mississippian	2,492		
Mellor Northeast ('58)	6-24-4E		no report	none			Mississippian	2,441	10	

Mt. Tabor ('53)	36-29-4E	340	13,028	165,489	10		"Bartlesville"	2,757	8	
Muddy Creek ('50)	13-29-4E	580	33,053	671,915	32	1	"Bartlesville"	2,813		40
Murdock ('52)	23-25-3E	60	907	11,551	1		Mississippian	2,709	10	43
Parsley ('49)	3-26-3E	100	3,077	129,206	6		Mississippian	2,700		48
Paul ('59)	26-25-3E	40	1,880	4,962	1	4	Mississippian	2,730	3	31
Paulson ('58)	35-23-3E	1,500	401,980	1,134,506	85	4	Mississippian	2,519	10	
Phares ('57)	5-26-3E		no report	3,545		1	Mississippian	2,756	2	
Pierce ('26)	28-25-4E	1,440	124,131		51		"Chat"	2,550		43
Plum Grove ('58)	24-24-4E	100	111	111	2		Mississippian			
Pontiac Southwest ('56)	23-26-6E		no report	1,886						
Potwin ('17)	31-24-4E	3,640	87,617	8,866,149	104	1	Kansas City	2,550		
							Mississippian	2,660		
Powell ('25)	12-24-3E		no report	3,294			Mississippian			
Reynolds-Schaffer ('22)	9-27-6E	2,740	108,625		67	1	Kansas City	2,375		
							Mississippian	2,780		
							Viola	3,141		
Rombold ('49)	4-26-3E	40	801	57,769	1		Mississippian	2,770		39
Salter ('46)	23-28-3E	360	41,753	1,634,789	20		Simpson	3,000		
Shinn ('46)	19-29-8E	210	63,935	1,116,991	21		Mississippian	2,766		
Shinn Northeast ('56)	17-29-8E	180	23,207	115,033	7					
Skaer ('61)	21-27-3E	60	7,776	7,776	2		Simpson	3,036	5	32
Smock-Sluss ('17)	2-27-5E				56		"Bartlesville"	2,700	35	
a		800	78,636				Viola	3,000		
b		40	701							
c		200	22,952							
d		60	2,595							
Snowden-McSweeney ('30)	34-28-6E	1,410	38,755		56	1	Lans.-K.C.	2,060	35	
							"Peru"	2,404		
							"Bartlesville"	2,810		
							Mississippian	2,833		
Steinhoff ('26)	28-29-6E	70	8,511		3		Mississippian	2,803		
Steinhoff East ('60)	26-29-6E	30	673	2,014	1	1	Kansas City	2,118	8	35
Towanda ('48)	5-26-4E	250	133,461	3,097,579	33		Mississippian	2,400		
							Viola	2,460		
Whitewater ('49)	32-25-4E	90	19,413	491,768	8		Viola	2,625		37
Whitewater East ('61)	33-25-4E	30	867	867	1		Mississippian	2,461	33	40
Wiebe ('59)	30-23-6E	30	1,017	3,017	1		Lansing	1,592	6	34
Young ('20)	27-26-7E				46		Mississippian	2,650		
a		340	23,350							
b		700	77,239							
Miscellaneous		200	32,025		30+					
Total Butler County		68,420	7,572,965	452,888,914 recorded	3,177	150				

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Producing zone Depth ft.	Producing zone Thickness, ft.	Producing zone Aver. grav.
CHASE COUNTY										
Atyeo-Pixlee* ('23)	7-22-10E				11		"Bartlesville"	2,250		
a		80	7,011							
b		60	4,865							
c		340	13,085							
Koegeboehn ('59)	19-19-6E	80	4,995	13,718	2		Viola	2,052	21	29
Koegeboehn North ('61)	8-19-6E	40	443	443	1		Viola	1,960	9	29
Teeter* ('20)	16-23-9E	720	69,657		37	1	"Bartlesville"	2,500		
Total Chase County		1,320	100,056	758,900 recorded	51	1				
CHAUTAUQUA COUNTY										
Berlin ('30)	32-11E	40	2,386		2					
Borroum ('26)	20-34-9E	220	2,978		6		Marmaton	1,780		
Cedarvale* ('53)	9-34-8E	160	8,037	8,037	3	2	Marmaton	1,924	4	40
							Mississippian	2,365	10	
Cedarvale South ('61)	22-34-8E	Combined with Cedarvale					Mississippian	2,510		
Elgin ('17)	34-10E				159		"Peru"	1,520		
a		360	1,156							
b		1,520	19,307							
c		160	1,004							
d		240	262							
e		360	5,716							
f		520	14,637							
g		200	4,365							
Elk City*	32-13E	60	163		1		"Burgess"	1,360		
Frazier ('27)	33-13E	120	1,172		3		"Peru"	1,520		
Hale-Inge* ('07)	32-12E				58	2	"Peru"	1,160		
a		60	288							
b		340	4,693							
c		1,400	8,308							
d		40	535							
Hewins	34-10E		no report							
Kingston ('26)	18-32-11E	40	373		1		"Chat"	1,850		
							Arbuckle	2,176		

Knowles ('60)	22-32-9E		no report	none			"Bartlesville"	2,130	6
Landon-Floyd ('36)	23-32-10E	800	78,377		29	1	Mississippian	2,000	
Leniton	33-10E	6,420	68,427		68	4	"Peru"		
Leonard	34-9E		no report				"Peru"		
Lowe	34-10E		no report				"Peru"		
McAllister ('25)	28-32-10E	60	4,382		2		Arbuckle	2,280	
McGlasson ('47)	11-33-9E		no report						
McGlasson West ('59)	10-33-9E		no report	83			Mississippian	2,284	3
McNown ('26)	31-32-10E	60	880		1		Mississippian		
Malone ('28)	18-32-10E		no report				Arbuckle	2,340	
Niotaze	34-13E	1,340	9,675		62		"Redd"	690	
							"Peru"	825	
Ogle ('57)	29-34-11E		no report	539			"Peru"	1,270	10
Oliver ('35)	32-11E	680	7,685		11		Marmaton		
							Arbuckle		
Peru-Sedan ('00)	34-11E				1,605	20	"Peru"	1,200	25
a		820	2,550				Mississippian	2,000	
b		1,220	11,816						
c		280	88						
d		17,880	483,427						
e		3,480	66,172						
f		320	932						
g		680	17,324						
h		1,260	11,443						
i		100	256						
j		40	155						
k		60	288						
l		220	1,983						
m		60	2,654						
n		40	3,797						
Ramsey ('55)	33-9E		no report	817			Mississippian		
Rich ('56)	16-33-9E		no report	2,118			Mississippian	2,285	30
Wauneta ('24)	34-9E		no report				"Peru"	1,670	
							Mississippian	2,100	
Wayside-Havana* ('04)	34-13E	460	2,952		28		"Wayside"	575	
							"Weiser"	700	
							"Bartlesville"	1,200	
Wiggam	34-32-10E	120	973		3		"Weiser"	1,600	
Miscellaneous		20	5,463		1+				
Total Chautauqua County		42,260	857,079	51,439,971 recorded	2,043	29			

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
			CHEYENNE COUNTY							
Alexander ('59)	13-4-38W	40	no runs	2,347	1		Marmaton	4,669	5	38
Ken ('59)	16-2-37W	20	864	4,668	1		Cherokee	4,762	28	25
Rueb ('58)	13-3-42W	40	6,259	25,340	1	1	Lansing	4,537	5	
Rueb South ('59)	36-3-42W		no report	5,031			Lansing	4,445	7	23
Total Cheyenne County		100	7,123	37,386	3	1				
			CLARK COUNTY							
Ashland ('51)	35-32-23W	160	8,456	116,074	4	1	Lans.-K.C.	4,673		42
							Viola	6,526		
Cavalry Creek ('55)	3-31-21W		no report	5,656			Mississippian	5,195		34
Clark Creek ('59)	8-35-22W	40	714	714	1		Morrowan	5,630		
Harper Ranch ('53)	9-34-21W	2,500	99,185	1,963,607**	25		Morrowan	5,437		39
			A portion combined with Snake Creek							
McKinney* ('50)	2-34-26W	640	6,876	35,973	18	1	Mississippian	5,762		
Morrison Northeast ('54)	10-32-21W	80	1,627	8,773	3		Morrowan	5,193	14	
Snake Creek ('52)	21-34-21W	2,500	51,632	56,966**	25	1	Morrowan	5,452		38
Snake Creek East ('56)	24-34-21W		no report	5,883			Morrowan	5,480	4	39
Snake Creek Southwest ('59)	32-34-21W		Combined with Snake Creek				Morrowan	5,516	28	
Tuttle West ('57)	10-35-21W	40	1,700	5,312	1		Morrowan	5,625		
Total Clark County		5,960	170,190	2,198,958	77	3				
			CLAY COUNTY							
Griffith ('57)	3-9-4E	60	10,252	68,054	3		Mississippian	1,908	30	
			COFFEY COUNTY							
Crandall ('53)	6-23-16E	140	516		4	2	Mississippian	1,022	5	
Dunaway* ('22)	23-22-13E	620	5,292		20		"Burgess"	1,850		
Evans* ('38)	23-15E		no report				Mississippian	1,878		
							Arbuckle	2,200		

Finnerty ('53)	12-21-13E	320	7,257		6	1	"Peru"	1,382	10	
							"Burgess"	1,728	11	
Hatch ('35)		60	242		1		"Burgess"	1,825		
Leroy North	22-16E				11		"Squirrel"			
a		280	3,497							
b		60	689							
Neosho Falls-Leroy* ('05)	35-22-16E				88	2	"Squirrel"	965		
a		2,200	23,488							
b		20	1,536							
c		60	391							
"Parmely"	29-22-17E		no report				"Squirrel"			
Virgil North* ('20)	22-23-13E	1,440	36,319		59		"Bartlesville"	1,585		
							Mississippian	1,838		
Winterscheid*	23-14E				34	3	"Peru"	1,170		
a		1,600	12,549				"Bartlesville"	1,630		
b		40	1,571				Mississippian	1,750		
Miscellaneous		10	36		1+					
Total Coffey County		6,850	93,383	2,517,192 recorded	224	8				
COMANCHE COUNTY										
Glick* ('57)	31-30-16W	320	7,481	7,481	9		Mississippian	4,880		
McMoran ('61)	25-34-16W	40	155	155	1	1	Lans.-K.C.	4,399	12	36
Mule Creek ('55)	5-31-18W	100	14,547	86,103	3	1	Mississippian	5,066	5	
Nescatunga ('60)	22-32-18W	40	no runs	2,109	1		Mississippian	5,106	36	42
							Viola	5,600	17	
Perry Ranch* ('58)	12-32-16W	40	1,802	7,335	2		Mississippian	4,785		
Robbins Ranch ('53)	23-31-16W		no report	5,723			Mississippian	4,915		41
Total Comanche County		540	23,985	108,906	16	2				
COWLEY COUNTY										
Albright ('56)	3-34-5E	1,800	74,724	583,737	37		Mississippian	3,126	10	
Atlanta ('58)	11-30-6E	400	52,063	256,298	17		Shawnee	1,631	7	
							"Stalnaker"	1,816	4	
							Kansas City	2,174	6	
							Mississippian	2,869	28	
							Arbuckle	3,274		
Bernstorf ('58)	33-31-4E	200	35,166	111,399	7		"Bartlesville"	3,043	18	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Biddle ('22)	7-32-5E	1,280	69,706		57		Kansas City	2,000	20	
							"Layton"	2,300		
							"Bartlesville"	2,878	14	
Bolack ('61)	21-32-6E	60	24,207	24,207	5		"Cattleman"	2,828	6	40
Box ('48)	28-30-7E	600	11,835	286,022	13		Mississippian	2,840	15	
Brandenburg ('55)	3-35-3E	60	7,496	33,003	1		Simpson	3,664	7	
Brown ('44)	13-31-7E				3		Kansas City	2,100		
a		80	11,610							
b		40	3,753							
Bruce ('50)	9-30-4E	200	10,932	95,130	4		Arbuckle	3,306		25
Burden ('26)	31-31-6E	1,560	37,397		51	1	"Layton"			
							"Peru"			40
							"Bartlesville"	2,900	35	39
Burden Townsite ('58)	3-32-6E		no report	3,099			"Layton"	2,205		
Cabin Valley ('52)	31-33-6E	660	97,146	1,452,938	38	2	"Layton"	2,188	9	40
Canfield ('52)	13-34-3E			301,101	10	1	"Layton"	2,651	4	42
a		120	4,137				Lans.-K.C.	2,839		
b		100	12,954				"Bartlesville"	3,375		
Cedarvale* ('53)	9-34-8E	100	11,801	13,969	4		Marmaton	1,924	4	40
							Mississippian	2,365	10	
Centennial North ('53)	1-33-3E		no report	30,751			"Bartlesville"	3,256	4	
Church ('54)	13-31-6E	80	1,425	21,129	1		Mississippian	2,935	12	34
Churchill Northeast ('55)	18-31-3E	40	1,669	15,831	1		Kansas City	2,420		
Combs* ('47)	5-30-5E	480	33,284	730,877	18		"Bartlesville"	2,823	20	40
							Mississippian	2,850		
Copeland ('52)	5-35-4E		no report	2,008			Mississippian	3,211	13	
Couch ('37)	13-30-5E	1,520	93,795	2,719,384	50	2	"Bartlesville"	2,800	15	41
Countryman ('25)	4-33-7E	800	24,928		16		"Layton"	1,950	12	34
							Mississippian	2,870		
David ('35)	35-30-4E	2,660	512,022	4,331,360	152	3	"Bartlesville"	2,900	40	
							Arbuckle	3,463		
Deichman ('41)	24-31-4E	640	71,522	539,041	20	5	"Bartlesville"	2,900	35	
							Mississippian	3,000		
Denton ('21)	4-35-4E		no report	746						
Dexter ('14)	33-6E	40	396		1		Mississippian	2,750		
Donelson ('55)	21-34-7E	40	1,038	3,113	1		Kansas City			
Dunbar ('38)	30-5E		no report	8,923			Lans.-K.C.			

Eastman ('24)	5-31-6E	1,100	34,796		29		"Bartlesville"	2,890	20	36
Elrod ('26)	4-32-5E	240	9,756		3		"Layton"	2,411		
Elrod East ('59)	3-32-5E		no report	1,170			"Layton"	2,340	3	
Enterprise Northeast ('52)	35-33-3E		no report	45,072			"Bartlesville"	3,335	12	
							Mississippian	3,321	12	
Enterprise Southwest ('53)	3-34-3E	30	1,768	9,026	1		"Bartlesville"	3,360	10	39
Estep ('58)	21-34-6E	40	9,140	28,800	1		"Stalnaker"	1,803	4	
Estep West ('59)	29-34-6E	40	1,339	2,993	1		Mississippian	3,130	8	38
Estes ('54)	12-32-6E	1,420	44,631	659,249	44		"Layton"	2,190	13	36
Falls City ('60)	17-35-7E	260	12,913	23,988	4		"Bartlesville"	2,694	19	
Ferguson Northwest ('50)	16-30-8E		no report	41,710			Kansas City	2,200		
Ferguson West ('34)	21-30-8E		no report				Kansas City	2,180		
Frog Hollow ('37)	20-32-5E	800	92,620	5,231,156	38		"Bartlesville"	3,000	20	
Frog Hollow East ('41)	15-32-5E			442,796	11		"Bartlesville"	3,000	8	
a		300	11,221				Mississippian	3,077	20	
b		100	32,375							
c		80	1,774							
Geuda Springs ('25)	5-34-3E	2,480	90,302	1,933,999	63	11	"Cleveland"	2,984	2	
							"Bartlesville"	3,300	14	
							"Chat"	3,345	25	
Gibson ('41)	29-34-3E	1,360	194,950	3,267,207	88		"Bartlesville"	3,350		35
							Mississippian	3,400	12	
							Simpson	3,774	6	
							Arbuckle	3,780	11	
Graham ('24)	3-33-3E	2,320	200,441	3,984,759	72	1	"Layton"	2,550	15	39
							"Bartlesville"	3,213	50	
							Mississippian	3,284	16	
							Arbuckle	3,518	5	
Grand Summit* ('26)	4-31-8E	40	451		1		Kansas City	2,000	19	
Grouse Creek ('51)	16-30-7E	160	3,747	44,431	4		Mississippian	2,890		37
Hackney ('56)	19-33-4E		no report	2,454			Mississippian	3,246	12	
Hackney North ('59)	18-33-4E		no report	none			Mississippian	3,236	6	34
Harvey ('52)	23-34-3E			1,389,507	40		"Layton"	2,574	18	33
a		120	3,854				"Bartlesville"	3,278		
b		680	58,351							
Henderson ('42)	26-32-3E	80	571	137,267	1		Kansas City	2,690	9	
							Arbuckle	3,419		
Higby ('57)	31-34-6E	100	7,078	17,197	2		Mississippian	3,180	10	
Hittle ('26)	28-31-4E	680	47,334	9,854,059	25		Kansas City	2,400	20	
							Arbuckle	3,280		
Kanok ('56)	15-35-5E	60	7,022	70,669	3		Mississippian	3,172	4	
Kanok North ('57)	3-35-5E		no report	140			Mississippian	3,136	4	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Lady ('60)	35-34-6E	80	2,805	4,025	1		"Hoover"	1,421	4	
Larcom ('61)	9-34-4E	40	1,136	1,136	1		"Layton"	2,418	4	39
Lauppe ('59)	6-32-6E		no report	396			"Burgess"	3,079	8	
Lovell ('59)	9-35-3E	40	72	3,009	1		"Bartlesville"	3,458	4	40
McKay ('51)	17-35-4E	880	63,404	630,367	41		"Bartlesville"	3,314		
Maddix North ('57)	12-33-5E	460	85,429	254,564	15		Mississippian	3,014	13	
Mahannah ('59)	6-30-8E	80	11,324	48,900	3		Mississippian			
Mansur ('49)	25-31-6E	160	1,792	120,074	6	1	"Layton"	2,170	16	
Mansur Southwest ('59)	26-31-6E		no report	none			"Layton"	2,206	3	36
Maple ('58)	2-30-3E		no report	1,354			"Bartlesville"	3,067	6	
Murphy* ('33)	7-35-3E				40		"Bartlesville"	3,450	10	
a		60	1,322				"Chat"	3,500		
b		1,120	19,409							
Nigger Creek ('51)	22-34-3E	40	1,088	13,245	1		"Bartlesville"	3,281		
Olsen ('21)	1-35-7E	140	14,534	113,405	6		"Layton"			
							"Bartlesville"			
Otto ('27)	25-34-6E				2		"Stalnaker"	1,845	6	
a		40	349				"Chat"	3,017	50	
b		60	251							
Peck ('58)	9-35-4E		no report	935			"Bartlesville"			
Posey ('56)	21-33-4E	300	35,909	234,437	11		"Layton"	2,464	6	
							"Cleveland"	2,751	10	
							"Prue"	2,953	4	
							Mississippian	3,164	14	
Pudden ('55)	16-35-4E		no report	2,390			Lans.-K.C.	2,332		
Quarry ('54)	28-34-5E		no report	30,045			"Cleveland"	2,684	18	38
Rahn ('39)	13-34-5E	1,440	102,588	2,935,063	31		"Bartlesville"	2,900	30	
Rahn Northeast ('49)	27-33-6E		no report	71,193			"Bartlesville"	2,902		
Rainbow Bend* ('23)	20-33-3E	2,020	210,977	18,047,344	76		"Burgess"	3,200	50	
							Arbuckle	3,550		
Rainbow Bend Southwest ('54)	31-33-3E		no report	7,881			Mississippian	3,356	18	
Rauckman ('56)	18-34-3E	60	3,247	47,930	3		"Bartlesville"	3,358	6	
Rock ('23)	15-30-4E	3,960	547,357	7,366,920	114		"Bartlesville"	2,800	30	
Rock Southwest ('60)	26-31-3E	80	31,344	34,144	5		"Layton"	2,480	7	
Salem ('57)	2-31-5E	40	2,571	17,409	1		Mississippian	3,050	2	
School Creek North ('53)	10-32-7E	740	77,608	1,451,200	54		"Layton"	2,114	6	34
							"Bartlesville"	2,826	9	

Seacat ('44)	26-33-4E	480	11,264	145,965	9		"Layton"	2,385		
							Mississippian	3,100		43
Shannon ('59)	26-31-5E	920	438,670	802,413	53		"Layton"	2,314	3	
Slick-Carson* ('24)	19-32-3E	400	15,188	7,779,467	15		"Layton"	2,600		
							"Bartlesville"	3,150		
							Arbuckle	3,450		
Smith ('17)	31-3E	160	3,451		3		"Bartlesville"	3,050		
State ('26)	15-32-4E				11		"Layton"	2,400	12	
a		60	3,455				Arbuckle	3,300		
b		240	13,367							
Stayton ('49)	32-32-4E	100	1,211	150,196	2	2	"Bartlesville"	3,100	8	33
Stayton South ('53)	5-33-4E	120	2,830	64,030	5		"Bartlesville"	3,165	23	40
Thurlow ('27)	8-33-3E	120	210		2	2	Simpson	3,500	5	
Trees ('35)	19-30-4E	600	12,007		24		"Bartlesville"	2,875	25	
Turner ('37)	30-32-6E	120	3,331	306,888	2		"Layton"	2,232	15	
Turner North (revived) ('61)	7-32-6E	80	6,845	6,845	4		"Bartlesville"	2,988	11	39
Turner West ('52)	25-32-5E	60	750	12,647	1		Mississippian	3,054		38
Udall ('26)	28-30-3E	60	3,480		3		Shawnee			38
							Arbuckle	2,850		
Waldschmidt ('57)	8-34-6E	600	29,877	160,023	10		"Stalnaker"	1,821	2	
							Mississippian	3,080	12	
Walnut Bend ('40)	11-34-4E	440	15,894		6		Mississippian			
Walnut Bend North ('56)	36-33-4E		no report	187			Mississippian	3,188	8	
Weathered ('35)	28-31-3E	320	23,970	3,043,170	14		"Stalnaker"	2,080	15	
							Lans.-K.C.	2,480	12	
							"Bartlesville"	3,018	6	
							Mississippian	3,020	8	
							Arbuckle	3,250	5	
Werner ('56)	31-32-6E			145,407	9		"Layton"	2,460	13	
a		240	25,986				Mississippian	3,074	8	
b		160	3,174							
Wilmot-Floral ('25)	31-5E	340	9,191		5		"Cattleman"	2,880		
							"Bartlesville"	2,910		
Windsor ('57)	6-32-8E	320	6,072	143,391	14		"Layton"	1,935	10	
Windsor Southeast ('58)	7-32-8E	320	1,163	12,443	4		"Layton"	1,858	18	
Windsor Southwest ('58)	7-32-8E	200	11,153	109,945	13		"Layton"	1,894	10	
Winfield ('14)	32-5E	1,360	75,044		79	1	Admire	600		38
							"Peacock"	1,400	15	
							"Layton"	2,300	20	
							"Bartlesville"	3,050	12	
							Arbuckle	3,300	5	
Winfield South ('45)	1-33-4E			127,309	9		"Hoover"	1,400		38

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
a		180	7,121							
b		100	3,929							
Miscellaneous		10	6,161		1+					
Total Cowley County		46,000	4,020,750	108,042,226 recorded	1,644	32				
CRAWFORD COUNTY										
Hepler* ('17)	27-22E	80	3,541		7	3	"Bartlesville"			
"Houston" ('47)	3-31-22E	440	2,123		20		Cherokee			
McCune ('29)	30-22E				155	6	"Bartlesville"			
a		180	3,764							
b		40	572							
c		40	42							
d		80	64							
e		60	1,277							
f		330	2,545							
St. Paul-Walnut*	28-21E				29		"Bartlesville"	425		
a		240	1,367							
b		120	1,237							
c		50	345							
Walnut Southeast	28-22E				86	3	"Bartlesville"	400	15	
a		100	179							
b		1,230	14,846							
c		50	64							
d		240	687							
Miscellaneous		110	907		7+					
Total Crawford County		3,390	33,560	964,867 recorded	304	12				
DECATUR COUNTY										
Adell Northwest ('52)	34-5-27W	640	110,563	1,104,006	14		Lans.-K.C.	3,664	54	39
Feely ('52)	2-5-27W	180	7,724	245,247	7		Lans.-K.C.	3,590	14	39
Hardesty ('52)	22-5-27W	640	42,985	443,196	7		Lans.-K.C.	3,642	15	39

Jennings ('51)	25-4-27W	860	44,083	592,081	18		Wabaunsee	3,156	7	38
							Lans.-K.C.	3,478	4	35
Jennings Northwest ('61)	10-4-27W	40	570	570	1	1	Lansing	3,576	4	40
Jennings Southeast ('57)	6-5-26W	40	1,782	9,185	1		Lans.-K.C.	3,581	4	34
Jorn ('55)	29-2-28W	220	13,988	87,601	7		Lans.-K.C.	3,562	8	40
Kathka ('61)	7-1-28W	40	276	276	1		Lans.-K.C.	3,560	18	30
			Abandoned during 1961							
Lawson ('61)	11-1-26W	40	7,085	7,085	1	1	"Penn sand"	3,558	3	32
Monaghan ('52)	15-2-27W	80	4,539	85,688	2	2	Lans.-K.C.	3,514	55	32
Olive ('61)	12-2-28W		no report	none			Lansing	3,379	4	37
Pollnow ('53)	4-3-29W	700	85,319	504,586	16		Lans.-K.C.	3,734	7	37
Prairie Dog ('59)	29-5-29W	40	6,076	15,657	1		Lansing	3,863	5	35
Van Vleet ('56)	9-1-27W	40	no runs	2,861	1		Lans.-K.C.	3,356	11	28
Vavroch ('59)	4-4-28W	640	91,595	112,830	7		Lans.-K.C.	3,699	8	
Warner ('56)	11-1-27W	640	36,842	371,873	20		Lans.-K.C.	3,324	17	35
							"Penn sand"	3,483		
Pools or fields abandoned				507						
Total Decatur County		4,840	453,427	3,583,249	104	4				

DICKINSON COUNTY

Ash Grove ('54)	5-15-1E			172,892	5		Mississippian	2,569	3	
a		10	10,079							
b		120	5,190							
Bonaccord ('43)	30-14-1E		no report	44,108		1	"Burgess"	2,483	2	
Bonaccord Northeast ('56)	29-14-1E	60	4,906	35,896	3		"Burgess"	2,502	3	
Lost Springs* ('27)	16-4E				53	6	"Chat"	2,300		
a		70	1,444							
b		60	863							
c		100	3,607							
d		2,010	32,483							
Total Dickinson County		2,460	58,572	1,572,602 recorded	61	7				

DOUGLAS COUNTY

Baldwin* ('19)	12-15-20E				69		"Squirrel"	800		
a		1,390	55,629							
b		120	1,900							
Eudora South ('29)	13-21E		no report				"Squirrel"	700		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Total Douglas County		1,510	57,529	231,049 recorded	69					
EDWARDS COUNTY										
Belpre ('42)	8-25-16W	40	93	183	1		Lans.-K.C.	3,800		
							Mississippian	4,278		
Bradbridge ('48)	2-24-16W	120	3,882	129,604	3		Arbuckle	4,020		
Carpenter Southeast ('59)	31-23-16W	40	2,007	3,797	1		Mississippian	4,247	6	37
Edstaff ('55)	12-25-16W	140	474	2,159	4		Penn. congl.	4,230		
Embry ('53)	23-24-16W	240	4,258	32,672	9		Lans.-K.C.	3,789	4	32
							"Kinderhook"	4,292	38	
English ('59)	31-25-16W	40	5,046	13,443	1		Mississippian	4,479	7	35
Enlow ('53)	9-24-16W	240	14,354	264,849	7		Lans.-K.C.	3,736	7	29
Fatzer ('59)	14-26-17W	80	273	1,063	2		Mississippian	4,504	15	38
Hawley ('59)	7-24-16W	40	210	827	1		Mississippian	4,241	18	36
Kirk ('55)	26-26-16W	80	4,898	31,871	2		"Kinderhook"	4,481	20	
McClanahan ('58)	2-26-18W	140	7,161	50,982	3	1	Penn. congl.	4,612	4	
Sturgeon ('54)	33-26-18W	80	6,173	51,910	2		Lans.-K.C.	4,223		38
							Viola	4,721	5	38
Trousdale ('56)	21-26-16W	180	18,596	137,169	8	2	Cherokee	4,486	4	
							Mississippian	4,492	5	
Trousdale North ('58)	8-26-16W	120	3,678	11,145	3		Mississippian	4,458	10	
Trousdale Northeast ('58)	15-26-16W	80	1,998	5,375	3	1	"Kinderhook"	4,392		
Wayne ('56)	28-24-17W		no report	8,184			Mississippian	4,368	16	
Wil* ('57)	26-25-16W	1,600	585,411	2,006,293	64	4	"Kinderhook"	4,324		
Wil West ('60)	29-25-16W	40	no runs	879	1	1	Mississippian	4,365	10	38
Pools or fields abandoned				108,027						
Total Edwards County		3,300	658,512	2,860,432	115	9				
ELK COUNTY										
Adams ('56)	29-29-13E		no report	342			"Burgess"	1,680	3	
Arbuckle	31-9E	360	7,810		10		"Burgess"	2,250		
Bush-Denton ('20)	4-30-9E				69		"Stalnaker"	1,060	10	

a		220	3,551				"Peru"	2,135		
b		640	15,364				"Burgess"	2,300	5	
Clubine	30-10E	40	1,077		1		"Layton"			
Collyer ('24)	30-30-11E				11		Kansas City	1,286	10	
a		60	854				Fort Scott	1,518		
b		160	4,068							
Cummings ('60)	26-31-9E	40	626	944	1		Mississippian	2,226		27
Dory ('29)	18-30-9E	160	802		4		Mississippian	2,570		
Dunkleberger ('20)	34-29-10E	520	22,554		34		Kansas City	1,300	10	
							Mississippian	1,970		
Elk City*	31-13E	310	657		4		"Burgess"	1,360		
Ferguson East	23-30-8E		no report				Arbuckle	2,900		
Fleming ('50)	8-29-9E	40	1,170	11,279	1		Arbuckle	2,656		
Grand Summit* ('26)	3-31-8E	400	11,562		12		Kansas City	2,000		
Hale-Inge* ('07)	31-12E				51		"Peru"	1,160		
a		80	244							
b		40	80							
c		60	470							
d		540	4,285							
e		40	1,353							
Key ('30)	31-10E	40	1,216		2		Arbuckle	2,270		
Kipfer	29-13E	160	487		2		"New Albany"			
Liscoe ('26)	31-10E	40	2,191		1		"Burgess"			
Logsden ('25)	16-31-9E			53,803	6		"Burgess"			
a		180	14,927							
b		40	678							
Longton	31-12E				27		Mississippian		12	
a		480	4,569							
b		60	992							
Longton North ('27)	29-12E	100	621		5					
Love ('21)	30-9E				4		Mississippian	2,370		
a		160	1,229							
b		40	101							
Mills ('27)	14-30-10E		no report	685						
Moline ('28)	16-31-10E		no report				Mississippian			
New Albany	29-13E	800	2,685		9	5	"Wayside"	560	20	
Perkins ('54)	1-30-9E		no report	5,427			"Bartlesville"			
Porter	29-8E	120	6,898		10		Kansas City	2,050	10	
							Arbuckle	3,000	4	
Rettig	31-10E	60	2,373		2		Lans.-K.C.	1,550		
Roby ('56)	20-28-9E	40	12,541	84,536	4		Arbuckle	2,873	3	
Schrader ('28)	12-31-8E				13		Kansas City	1,520	22	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
a		360	16,838							
b		40	2,539							
Severy* ('22)	8-28-11E	20	128		1		Kansas City	1,200	13	
Starr ('37)	12-31-9E		no report				Mississippian	2,330		
Walker ('27)	5-31-10E				8		Kansas City	1,550		
a		60	843				Mississippian	2,225		
b		400	13,698							
Ware ('55)	5-31-9E	60	1,040	12,038	1		Kansas City	1,671		
Webb ('25)	23-31-10E	820	18,110		48		Kansas City	1,300		
							Fort Scott	1,650		
							Mississippian	1,975		
							Arbuckle	2,300		
Youngmeyer ('41)	25-28-8E	240	3,963	19,635	8		Arbuckle			
Miscellaneous		60	5,654		4+					
Total Elk County		8,090	190,848	16,176,815 recorded	353	5				
ELLIS COUNTY										
Air Base ('57)	27-13-16W	1,200	203,076	456,928	24		Lans.-K.C.	3,216	5	37
							"Gorham"	3,453	4	
Air Base East ('59)	25-13-16W	380	71,110	112,756	10		Lansing	3,088	8	
							Arbuckle	3,348	13	
Air Base West ('60)	28-13-16W	40	604	1,251	1	1	Lans.-K.C.	3,216	2	38
Air Braun ('58)	27-13-16W	40	no runs	3,687	1		Lans.-K.C.	3,502	2	
Antonino ('47)	27-14-19W	80	10,594	158,763	2		Lans.-K.C.	3,404	4	38
							Arbuckle	3,712	5	35
							Reagan	3,726		34
Beeching ('43)	34-15-16W	500	8,524	318,739	6		Lans.-K.C.	3,156	4	35
Bemis-Shutts* ('35)	16-11-17W	2,500	4,035,025	177,480,892	1,024	30	Shawnee	2,967		
							Lans.-K.C.	3,408	11	34
							Penn. congl.	3,416		
							Simpson	3,603	10	
							Arbuckle	3,380		36
Bielman ('52)	24-15-18W	140	15,201	146,576	3		Arbuckle	3,496	4	32

Blue Hill ('37)	14-12-16W	1,400	106,327	3,014,955	40	1	Topeka	3,030	5	33
							Lans.-K.C.	3,072	33	
							"Gorham"	3,348		
							Arbuckle	3,360	6	
Blue Hill Northeast ('59)	36-11-16W	40	1,267	3,332	1		Lansing	2,962	99	30
Blue Hill Northwest ('58)	3-12-16W	720	189,345	511,695	26		Lans.-K.C.	3,022	8	
							Penn. congl.	3,333	37	
							Arbuckle	3,300	6	
Blue Hill Southeast ('59)	24-12-16W	160	12,022	20,782	5		Arbuckle	3,338	7	28
Boos ('56)	20-15-17W	80	13,359	52,843	3		Arbuckle	3,532	5	37
Braun ('53)	34-13-16W	120	7,460	99,080	3		Penn. congl.	3,459	7	31
Brungardt* ('52)	35-10-17W	200	See Rooks Co.	86,638	7		Lans.-K.C.	3,194		
Burnham ('59)	11-14-18W	40	no runs	1,001		1	Arbuckle	3,542	12	
Catharine ('36)	3-13-17W	480	101,287	1,715,516	23		Lans.-K.C.	3,262	24	48
							Arbuckle	3,516	13	
Catharine Northwest ('44)	4-13-17W	420	73,612	1,000,590	14		Lans.-K.C.			
							Arbuckle	3,590	21	21
Catharine South ('46)	15-13-17W	1,480	261,192	3,566,036	56	2	Lans.-K.C.	3,292	12	32
							Penn. congl.	3,538	6	
							Arbuckle	3,555	8	
Catharine Townsite ('49)	9-13-17W	100	13,786	153,650	4		Lansing	3,418	13	
							Arbuckle	3,585	18	25
Chris ('58)	34-11-16W	80	27,860	63,227	3		Lans.-K.C.	3,042	3	19
							Arbuckle	3,395	3	
Chrisler ('49)	22-11-16W	40	6,913	67,560	2		Shawnee	3,038	4	
							Lans.-K.C.	3,100	35	39
Chrisler South ('58)	27-11-16W	120	32,081	93,826	4		Lans.-K.C.	3,158	3	37
Cochran ('53)	8-11-18W	100	7,124	103,350	3		Lans.-K.C.	3,328	10	18
							Arbuckle	3,565	3	
Cromb ('45)	15-11-20W	360	24,358	201,240	6		Lans.-K.C.	3,446	8	
Dechant ('56)	7-15-18W	80	11,933	56,422	2		Lansing	3,468	6	
							Arbuckle	3,627	6	38
Degenhart ('53)	15-15-17W	320	22,871	217,284	5		Lans.-K.C.	3,417	8	38
							Arbuckle	3,521	10	
Degenhart Southeast ('57)	23-15-17W	140	3,748	43,123	4		Lans.-K.C.	3,445	5	
							Arbuckle	3,520	5	
Dinges ('54)	9-15-18W	80	15,890	100,518	2		Arbuckle	3,624	12	34
Dreiling ('49)	21-14-16W	580	50,063	1,090,874	22		Lans.-K.C.	3,120	16	31
							Arbuckle	3,367		32
Dreiling Southeast ('53)	27-14-16W	540	26,392	436,758	13		Lans.-K.C.	3.072	6	32
							Arbuckle	3,327		
Eagle Creek ('54)	11-11-20W	640	42,392	570,551	13		Lans.-K.C.	3,368	12	33

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Eagle Creek East ('58)	2-11-20W	40	5,772	24,778	1		Lansing	3,348	5	
Ellis* ('42)	31-12-20W	1,800	100,751	1,720,638	28		Arb.-Reagan	3,832	8	40
Emmeram ('37)	4-13-16W	320	25,432	386,553	10		Lans.-K.C.	3,262	7	39
Emmeram Northeast ('49)	27-12-16W	1,100	51,623	1,176,059	26		Shawnee	3,124	8	
							Lans.-K.C.	3,272		
							Arbuckle	3,541	3	39
Emmeram Townsite ('52)	6-13-16W		no report	35,410			Lans.-K.C.	3,291		32
							Arbuckle	3,520	10	
Engel ('56)	34-14-18W	140	27,717	183,993	6		Lans.-K.C.	3,350	6	
							"Penn sand"	3,621	5	
							Arbuckle	3,612	4	34
Engel West ('56)	33-14-18W		no report	1,980		1	Lans.-K.C.	3,368	4	40
Erbert ('53)	20-12-20W	40	2,189	33,967	1		Lans.-K.C.	3,527		34
							Arbuckle	3,906		
Fairport* ('23)	8-12-15W	1,800	119,085	4,372,032	46		Lans.-K.C.	2,950	12	32
							"Gorham"	3,211		
							Arbuckle	3,312	5	
							Reagan	3,350		
Fort Hays State College ('50)	1-14-19W	180	18,840	104,640	3		Lans.-K.C.	3,458	19	
							Arbuckle	3,806	20	28
Gasaway ('58)	2-11-19W		no report	2,327			Topeka	3,079	8	
Ger ('60)	15-13-20W	40	2,704	4,072	1		Arbuckle	3,807	6	32
Giinther ('52)	17-11-19W	80	4,844	87,415	2		Lans.-K.C.	3,439	9	
							Arbuckle	3,554	4	
Gottschalk ('57)	36-15-18W		no report	4,204			Lans.-K.C.	3,251	7	
Herbert ('58)	18-13-20W	180	56,340	130,665	10		Lansing	3,521	4	
							Marmaton	3,870	96	
							Arbuckle	3,907	19	40
Herbert North ('60)	18-13-20W		no report	1,651			Lans.-K.C.	3,470	7	36
Herbert Southeast ('60)	19-13-20W		Combined with Herbert				Arbuckle	3,874	6	
Herl ('51)	28-14-17W	200	4,128	181,745	4	1	Lans.-K.C.	3,382		28
							Penn. congl.	3,453	8	
							Arbuckle	3,476		28
Herman (revived) ('61)	21-13-20W		Combined with Pleasant				Toronto	3,492	2	39
Hertel Southwest ('52)	17-14-16W		no report	16,501			Lans.-K.C.	3,215	4	38
Herzog ('40)	30-13-16W	1,300	105,155	2,113,987	25		Lans.-K.C.	3,232		
							Arbuckle	3,450	8	

Herzog South ('59)	5-14-16W	20	1,728	8,422	1		Lansing	3,207	6	27
Heyl ('56)	20-14-17W		no report	17,305			Arbuckle	3,513	7	29
Heyl Southeast ('59)	21-14-17W	80	29,444	40,293	4		Arbuckle	3,509	9	
Holy Cross ('53)	26-12-18W	40	1,631	83,164	1		Lans.-K.C.	3,423	4	34
Holz ('59)	18-13-16W	20	2,300	6,702	1		Lansing	3,276	5	35
Irvin ('46)	6-14-19W	3,500	516,862	4,583,393	86		Lans.-K.C.	3,553		
							Arbuckle	3,860		39
Irvin East ('55)	4-14-19W	40	2,252	28,282	2		Lans.-K.C.	3,628	18	35
							Arbuckle	3,835	30	
Jacob ('51)	6-11-19W		no report	16,946			Lans.-K.C.	3,542	4	23
Kaiser ('59)	30-13-20W	100	34,822	82,296	4	1	Lansing	3,565	5	41
Koblitz West ('59)	21-12-18W	20	348	7,151	1		Lansing	3,406	7	32
Kraus ('36)	22-14-19W	2,540	342,709	1,304,487	60	5	Lans.-K.C.	3,660	5	
							Marmaton	3,834	4	
							"Sooy"	3,735	5	
							Arbuckle	3,732		39
Krueger* ('48)	35-10-16W	960	67,548	2,032,400	29		Toronto	3,235	25	
							Lans.-K.C.	3,552		
Leiker ('43)	14-15-18W	1,000	205,845	1,443,480	24		Lans.-K.C.	3,292		40
							Penn. congl.	3,582		
							Arbuckle	3,591	5	
Leiker East ('53)	12-15-18W	1,280	324,961	2,795,255	49		Lans.-K.C.	3,321	8	
							Arbuckle	3,576	13	45
Leiker North ('56)	2-15-18W	160	32,502	187,602	4	1	Arbuckle	3,601	5	34
Leiker Southeast ('54)	14-15-18W	320	66,831	298,263	10		Lans.-K.C.	3,292	19	
							Arbuckle	3,547	4	36
Leinmiller ('59)	2-12-19W	80	19,219	32,706	3	2	Lans.-K.C.	3,401	6	22
							Arbuckle	3,695	13	
Lieb ('56)	17-11-16W	160	18,181	191,427	7		Arbuckle	3,356	7	28
Lieb East ('57)	16-11-16W	180	60,549	123,100	7		Lansing	2,982	8	
							Arbuckle	3,346		26
Meistrell Southwest ('59)	9-11-18W	80	21,394	35,881	3		Lansing	3,289	4	32
Mendota ('51)	5-11-20W	140	6,131	114,970	3		Lans.-K.C.	3,530	10	35
							Arbuckle	3,668		
Neddam ('57)	16-11-18W	60	7,397	32,832	2		Lans.-K.C.	3,162	8	
Nellie Belle ('55)	15-13-17W	80	9,425	83,899	3		Arbuckle	3,521	1	27
Nicholson* ('45)	30-11-20W	1,300	151,085	1,480,337	31		Arbuckle	3,842	12	34
North ('56)	20-15-20W	80	6,250	64,810	2	1	Lans.-K.C.	3,562	8	
							Penn. congl.	3,862	5	38
Penny-Wann ('36)	13-15-20W	80	5,677	229,225	2		"Sooy"	3,653	3	30
Pleasant ('44)	2-14-20W	2,000	208,598	3,185,573	49	1	Shawnee			
							Lans.-K.C.	3,569		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
							Marmaton	3,805		
							Penn. congl.			
							Arb.-Reagan	3,833		38
Pleasant Southeast ('60)	12-14-20W		no report	none			Arbuckle	3,771	6	
Pleasant West ('61)	4-14-20W	40	933	933	1		Arbuckle	3,937	8	37
Polifka ('48)	7-13-17W	480	72,079	509,449	14		Arbuckle	3,640	33	31
Potter ('56)	20-11-16W	640	144,487	558,829	20		Pleasanton			
							Arbuckle	3,309	7	32
Raynesford ('52)	17-13-20W	120	6,100	86,305	3		Lans.-K.C.	3,535	5	30
							Penn. congl.	3,870		
Raynesford East ('52)	16-13-20W	340	29,569	273,818	6		Arbuckle	3,861	9	39
Reed ('49)	5-13-17W	40	2,564	47,175	1		Lans.-K.C.	3,424	12	
							Arbuckle	3,596		
Reichert ('60)	4-15-19W	80	294	2,531	2	1	Lans.-K.C.	3,360	10	32
Richards ('56)	5-11-18W	40	3,297	133,866	1		Toronto	3,295	2	
							Lans.-K.C.	3,466		37
Riverview ('43)	19-11-18W	1,020	77,208	2,613,702	21		Arbuckle	3,610	18	
Riverview South ('56)	32-11-18W	120	9,695	85,032	3		Lans.-K.C.	3,367	5	33
Ruder ('35)	17-15-18W	640	39,047	1,521,190	9		Lans.-K.C.	3,422		35
							Arbuckle	3,572	10	
Ruder North ('57)	4-15-18W	120	4,511	43,091	2	1	Arbuckle	3,619	9	30
Ruder Southwest ('59)	18-15-18W		no report	513			Arbuckle	3,634	4	
Sauer ('60)	29-13-20W		Abandoned during 1961				Lansing	3,561	6	
Schmeidler ('44)	28-12-17W	1,300	67,521	1,163,396	21		Lans.-K.C.	3,389	6	
							Arbuckle	3,625	10	26
Schmeidler Northwest ('53)	20-12-17W	300	33,815	179,567	8		Lans.-K.C.	3,540		
							Arbuckle	3,696	6	
Schoenchen ('46)	21-15-18W	1,020	82,059	1,520,942	23		Lans.-K.C.	3,324	6	
							Arbuckle	3,569	9	31
Schoenchen Townsite ('56)	28-15-18W	40	1,944	39,835	1		Lans.-K.C.	3,255	4	39
Scurlock ('57)	20-15-16W		no report	6,418			Penn. congl.	3,431	5	33
Sessin ('52)	15-11-19W	920	115,122	1,353,477	23	1	Shawnee	2,969		
							Lans.-K.C.	3,291	7	23
							Arbuckle	3,499	3	
Solomon ('36)	28-11-19W	3,500	252,008	5,024,074	86	1	Wabaunsee	3,013	4	
							Topeka	2,990		19
							Lans.-K.C.	3,229		
							Arbuckle	3,629	3	19

Solomon South ('57)	33-11-19W	80	12,793	77,202	2		Arbuckle	3,652	3	
Solomon Southeast ('57)	35-11-19W	160	16,649	136,165	4	1	Arbuckle	3,682	4	18
Spring Hill ('61)	23-14-20W	40	720	720	1		Lans.-K.C.	3,414	4	32
Stockrange ('57)	21-15-20W	40	1,146	23,514	1		Penn. congl.	3,864	6	38
Sugarloaf ('41)	17-13-17W	640	34,752	1,002,510	9		Lans.-K.C.	3,391		30
							Arbuckle	3,645	9	
Sugarloaf Southeast ('41)	28-13-17W	2,300	434,987	3,749,534	63		Lans.-K.C.	3,312	8	30
							Arbuckle	3,520		
Sunnydale ('52)	1-14-20W		no report	5,570			Arbuckle	3,850		
Sweet William ('50)	10-12-20W	40	1,526	27,993	1	1	Lans.-K.C.	3,700		35
							Arbuckle	3,908		
Sweet William Northwest ('56)	4-12-20W	40	1,398	17,235	1		Lans.-K.C.	3,739	8	36
							Marmaton	3,910	8	
Toulon ('35)	3-14-17W	1,080	105,029	1,437,398	28		Lans.-K.C.	3,298	5	34
							Arbuckle	3,512	45	
Toulon South ('58)	14-14-17W	240	35,676	219,503	5		Lans.-K.C.	3,302	10	
			21,662				Arbuckle	3,523	10	32
Toulon Southeast ('58)	11-14-17W		no report	43			Lansing	3,348	4	36
Toulon Southwest ('55)	16-14-17W	260	42,006	154,722	9		Lansing	3,272	8	
							Arbuckle	3,504	4	
Trico* ('51)	30-10-20W	300	46,794	262,398	6		Arbuckle	3,610	10	
Turkville ('53)	11-11-17W	160	6,742	106,445	4		Lans.-K.C.	3,165	24	24
							Arbuckle	3,359		34
Turkville West ('59)	10-11-17W	40	6,592	23,280	2		Arbuckle	3,378	6	27
Ubert ('36)	12-13-18W	180	38,234	431,007	7		Lans.-K.C.			
							Arbuckle	3,707		32
Ubert North ('51)	31-12-17W	240	57,014	433,550	6		Arbuckle	3,600		31
Ubert Northwest ('52)	1-13-18W	540	90,087	1,089,970	18		Lans.-K.C.	3,339		33
							Arbuckle	3,592		33
Upper Turkville ('60)	9-11-17W	80	25,038	36,570	3		Arbuckle	3,356	5	25
Victoria North ('53)	6-14-16W	160	42,471	79,351	6		Toronto	3,182	1	
							Lans.-K.C.	3,208	6	
							Arbuckle	3,471		35
Victoria South ('61)	19-14-16W	40	1,963	1,963	1		Lans.-K.C.	3,215	52	39
Wagner ('56)	36-14-16W	40	1,775	17,709	1		Arbuckle	3,420	7	33
Warren ('49)	12-11-20W	40	2,955	69,645	1		Lans.-K.C.	3,458		31
Werth ('58)	2-13-20W	60	10,044	45,745	2		Arbuckle	3,833	6	33
Wheatland ('49)	18-15-17W	500	22,215	488,414	11		Lans.-K.C.	3,307	14	
							Arbuckle	3,571		32
Wheatland Northwest ('53)	12-15-18W	180	8,770	79,525	5	1	Arbuckle	3,566	6	37
Wheatland Southeast ('55)	28-15-17W	140	8,902	121,696	2	1	Lans.-K.C.	3,335	14	
							Penn. congl.	3,526		
							Arbuckle	3,516	5	39

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Wheatland Southwest ('53)	19-15-17W	580	135,135	1,101,993	24	1	Lans.-K.C.	3,252		32
							Arbuckle	3,554	9	
Windholz ('57)	32-12-16W		no report	3,835		1	Lans.-K.C.	3,348	5	37
Younger ('44)	6-14-17W	560	49,693	697,349	15		Lans.-K.C.	3,331	8	
							Arbuckle	3,574	18	33
Younger South ('54)	8-14-17W	80	8,123	74,482	2		Arbuckle	3,546	7	37
Younger Southwest ('59)	7-14-17W	40	no runs	2,136	1		Arbuckle	3,550	12	26
Younker ('59)	9-12-19W	40	4,927	16,315	1		Lansing	3,493	10	34
Zimm ('59)	23-13-20W	40	no runs	7,048	1		Lansing	3,477	4	38
Pools or fields abandoned				152,251						
Total Ellis County		54,460	10,281,756	248,402,190	2,375	58				
ELLSWORTH COUNTY										
Andrews ('52)	4-17-8W	180	3,921	150,593	4		Arbuckle	3,302	3	
Bloomer* ('36)	36-17-11W	2,480	230,482	15,772,147	81	4	Lans.-K.C.	3,044		43
							Arbuckle	3,257	8	43
Geneseo-Edwards* ('34)	25-18-8W	3,480	505,839	21,414,511	121	5	Simpson	3,157		39
							Arbuckle	3,278		41
Green Garden ('54)	1-17-9W	80	5,657	45,471	4		Lans.-K.C.	3,046	4	40
Heiken ('30)	25-17-10W	640	61,252	833,552	17		Lans.-K.C.	2,974		
							Penn. congl.	3,226		
							Arbuckle	3,269		
Heiken North ('42)	24-17-10W	80	5,172	234,766	2		Arbuckle	3,212	2	40
Kraft-Prusa* ('37)	10-17-11W	800	42,131	1,379,878	12		Shawnee	2,885		
							Lans.-K.C.	3,160		
							"Gorham"	3,335		
							Arbuckle	3,281		
							Reagan	3,310		
Lorraine ('34)	13-17-9W	1,700	42,291	11,147,370	26	1	Lans.-K.C.	3,060	5	34
							Arbuckle	3,200	120	
Lorraine North ('53)	12-17-9W	120	14,088	174,645	4		Lans.-K.C.	3,066	5	
Maes ('52)	26-17-8W	460	30,488	1,308,252	16		Arbuckle	3,341	16	36
Progress ('55)	10-16-10W	140	26,190	352,816	4		Arbuckle	3,402	8	
Progress Northwest ('55)	4-16-10W	280	57,999	746,775	16		Arbuckle	3,303	8	40
Stoltenberg ('31)	22-16-10W	8,500	637,506	43,190,485	265	8	Lans.-K.C.	3,260		42

							Simpson	3,379	2	
							Arbuckle	3,333	14	39
West ('51)	20-17-10W	40	2,892	51,477	1		Arbuckle	3,287		
Wilkens Southeast ('42)	32-17-9W	160	2,168	509,323	3	2	Arbuckle	3,220	9	42
Pools or fields abandoned				35,597						
Total Ellsworth County		19,140	1,668,076	97,347,658	576	20				

FINNEY COUNTY

Amazon Ditch ('61)	20-22-34W	40	13,334	13,334	1		Mississippian	4,674	6	31
Beyer ('52)	24-26-33W		no report	23,340			Lans.-K.C.	4,398	8	36
Cowgill ('61)	27-24-33W	80	9,399	9,399	2		Morrowan	4,809	11	27
Damme ('51)	21-22-33W	2,500	283,219	1,797,053	42		Marmaton	4,417	5	
							Morrowan	4,700		
							Mississippian	4,626	10	32
Damme Northeast ('53)	16-22-33W		Combined with Damme				Mississippian	4,639	10	27
Finnup ('53)	34-22-33W		Combined with Damme				Mississippian	4,756	6	10
Finnup East ('53)	25-22-33W	40	520	13,624	1		Marmaton	4,442	16	30
Ivanhoe ('59)	17-26-33W	60	9,090	25,886	2		Morrowan	4,922	5	27
Kisner ('61)	36-26-33W	40	235	235	1		Morrowan	4,972	2	26
Nunn ('38)	27-21-34W	1,340	95,905	2,742,058	29		Kansas City		13	31
							Marmaton			34
							Cherokee	4,550		
							Mississippian	4,654	10	27
Nunn East ('61)	31-21-33W	40	9,574	9,574	1		Mississippian	4,651	19	26
Nunn North ('57)	22-21-34W		Included with Nunn				Marmaton	4,382	12	
Pleasant Prairie* ('54)	4-27-34W		Included with Haskell County	981,044			Marmaton	4,460	10	
							Morrowan	4,959	9	
							Mississippian	5,041		34
Sequoyah ('56)	17-23-34W	160	15,865	91,779	3		Morrowan	4,694	10	34
Sonderegger ('52)	21-22-31W		no report	6,543			Mississippian	4,737		29
Stewart ('52)	6-23-30W	40	3,621	36,055	1		Mississippian	4,710		28
Wampler ('59)	17-21-33W	280	20,888	84,462	3		Marmaton	4,252	12	34
			25,163		2		Morrowan	4,573	4	31
Total Finney County		4,620	486,813	5,834,386	88					

FORD COUNTY

Konda ('56)	11-27-22W		no report	6,010			Mississippian	5,010	32	36
Little Coon Creek ('61)	33-25-21W	40	2,049	7,672	1		Cherokee	4,683	21	36
			5,623		1		Mississippian	4,779	4	37

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Pleasant Valley ('50)	34-27-21W		no report	18,341		2	Mississippian	4,954	145	
Willroads ('60)	26-27-24W	40	11,111	19,555	1		Marmaton	4,663	9	38
Total Ford County		80	18,783	51,578	3	2				
FRANKLIN COUNTY										
Baldwin* ('19)	15-20E				5		"Squirrel"	800		
a		60	1,838							
b		40	297							
LeLoup	15-20E				8		"Squirrel"	750		
a		60	174							
b		160	837							
Norwood	15-20E	80	4,745		8					
Ottawa ('27)	17-19E		no report							
Paola-Rantoul* (1860)	17-21E				794	14	"Knobtown"	300		
a		340	7,994				Hepler	400		
b		5,100	271,808				"Prue"	500		
c		400	8,440				"Squirrel"	600		
d		2,500	40,954				"Bartlesville"	700		
e		240	1,817							
f		1,890	36,088							
g		80	2,764							
h		40	70							
i		120	688							
Miscellaneous		90	1,160		7+					
Total Franklin County		11,200	379,674	11,831,842 recorded	822	14				
GEARY COUNTY										
Ge-See* ('59)	27-11-8E	20	2,289	4,247	2		Cherokee	1,749	12	
Wingfield ('59)	35-11-7E		no report	none			Mississippian	1,793	7	
GOVE COUNTY										

Coberly ('51)	15-14-29W	40	150	71,322	1	1	Lans.-K.C.	4,122	10	35
							Marmaton	4,287	9	36
Gove ('51)	26-13-30W	120	no runs	32,605	3		Lans.-K.C.	4,122	3	30
							Mississippian	4,547		33
Grinnell ('59)	16-12-30W		no report	1,439			Mississippian	4,489	6	35
Lundgren South ('52)	31-14-29W	200	16,601	129,416	5		Pawnee	4,076	18	
							Fort Scott	4,139	1	
							Cherokee	4,164	14	
							Mississippian	4,277	6	40
Pools or fields abandoned				10,534						
Total Gove County		360	16,751	245,316	9	1				

GRAHAM COUNTY

Alda ('44)	15-7-22W	40	no runs	87,065	1	1	Lans.-K.C.	3,518	3	37
Allodium ('55)	19-6-25W	80	2,509	52,058	2		Lans.-K.C.	3,740	5	36
Blazier ('55)	21-7-25W	480	97,675	590,574	11		Lans.-K.C.	3,785	8	
Blazier Northwest ('57)	20-7-25W	80	7,487	52,821	2		Lans.-K.C.	3,844	6	40
Brassfield ('56)	2-10-22W	600	32,323	289,446	13		Lans.-K.C.	3,688	45	39
Brassfield South ('58)	2-10-22W		no report	880			Lans.-K.C.	3,764	5	39
Brush Creek ('55)	4-9-23W	720	96,580	649,724	19	1	Lans.-K.C.	3,768	4	40
Brush Creek Northwest ('57)	32-8-23W	160	22,510	105,402	4		Lans.-K.C.	3,818	3	38
Bryan ('59)	9-10-24W	80	3,639	7,783	2		Lansing	3,838	6	36
Bryan Northeast ('61)	4-10-24W	40	7,237	7,237	1	1	Lans.-K.C.	3,780	24	33
Conness ('58)	23-10-23W	160	9,779	87,675	5		Lans.-K.C.	3,712	4	
Cooper* ('43)	5-10-20W	9,300	728,220	12,595,219	195	3	Lans.-K.C.	3,619	6	
							Arbuckle	3,778	2	31
Culp ('61)	21-10-24W	80	9,847	9,847	2		Lans.-K.C.	3,796	6	41
Diebolt* ('53)	33-10-23W	1,460	126,093	2,973,697	83		Lans.-K.C.	3,779	6	35
Elrick ('55)	15-10-25W	2,500	511,958	1,750,854	69		Toronto	3,770	8	
							Lans.-K.C.	3,931	5	
							Cherokee	4,212	10	
Elrick East ('59)	14-10-25W		Combined with Elrick				Lansing	3,774	3	38
Elrick Southeast ('59)	23-10-25W	180	21,693	45,908	3		Lansing	3,751	6	41
Emor ('57)	34-9-25W	580	200,139	508,451	19		Lansing	4,016	12	40
Emor North ('60)	27-9-25W	40	7,589	13,697	1		Lans.-K.C.	3,867	5	39
Evergreen ('56)	22-9-23W	40	388	12,903	1	1	Lans.-K.C.	3,711	2	29
Evergreen Northwest ('57)	17-9-23W	640	47,214	410,298	17		Lans.-K.C.	3,826	4	38
Fabricius ('58)	25-7-23W	640	142,609	565,609	18	1	Lansing	3,637	3	40
Fabricius South ('58)	36-7-23W	200	26,425	90,089	5		Lansing	3,669	3	38
Fargo West ('51)	34-9-22W		no report	4,540			Lans.-K.C.	3,755		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Faul ('58)	22-10-22W	100	8,566	55,501	3		Lansing	3,760	4	36
Faulkner ('45)	27-10-22W	40	4,669	243,215	1		Lans.-K.C.	3,629	2	37
							Marmaton	3,844		
Gettysburg ('41)	7-8-23W	80	4,682	103,303	2		Lans.-K.C.	3,725	30	39
Glen Dale Southeast ('58)	24-9-24W	120	33,280	69,996	5		Lansing	3,932	3	38
Glen Dale Southwest ('57)	28-9-24W	80	10,539	61,633	2		Lans.-K.C.	4,026	8	40
Gra-Sher ('59)	6-10-25W	280	86,957	215,016	8		Lansing	3,815	4	33
Gurk ('58)	18-10-25W	120	27,567	83,708	4		Lansing	3,824		34
Harmony ('51)	32-7-22W	360	22,072	336,773	6		Lans.-K.C.	3,597		37
							Arbuckle	3,776		
Harmony South ('58)	7-8-22W	180	60,717	168,109	5		Lansing	3,578	8	37
Harrold ('57)	29-9-21W	40	3,240	31,557	1		Arbuckle	3,885	5	
Hatcher ('56)	6-9-21W	80	1,545	32,153	2		Arbuckle	3,722	8	
Higer ('57)	20-8-23W	200	16,906	91,965	5		Lans.-K.C.	3,710	4	40
Higer Northeast ('57)	17-8-23W	500	55,000	269,775	11		Lans.-K.C.	3,644	5	39
Highland ('51)	20-8-22W	40	1,295	21,769	1		Lans.-K.C.	3,616		37
Highland Southwest ('58)	29-8-22W	100	14,524	68,952	3		Lansing	3,584	3	
Hill City ('58)	24-8-23W		no report	8,276			Lansing	3,601	3	34
Holley ('54)	3-9-24W	4,600	200,415	2,932,545	115	1	Lans.-K.C.	3,900	6	47
Holley North ('55)	29-8-24W	180	25,250	285,371	6		Lans.-K.C.	3,897	9	45
Holley Northwest ('57)	25-8-25W	80	6,367	41,939	2		Lans.-K.C.	3,831	5	
Holley Southeast ('57)	10-9-24W	200	57,774	235,499	8		Lans.-K.C.	3,960	5	41
Hoof ('54)	9-10-23W	640	224,924	1,557,840	29		Lans.-K.C.	3,865	4	32
Hoof East ('59)	14-10-23W	140	41,910	100,139	5		Lansing	3,674	10	34
Hoof Northwest ('57)	6-10-23W	640	119,115	207,929	23		Lans.-K.C.	3,934	11	43
Hoof West ('55)	8-10-23W	240	28,436	164,021	6		Lans.-K.C.	3,903	5	
Huntington ('55)	7-7-25W	200	44,392	245,817	4		Lans.-K.C.	3,832	8	40
Hutton ('58)	1-8-24W	40	2,813	20,379	1		Lans.-K.C.	3,764	3	
Ironclad ('50)	23-9-22W	780	50,119	770,900	14		Lans.-K.C.	3,756	6	37
Kenyon ('57)	5-8-21W	80	1,339	9,468	2		Lans.-K.C.	3,360	5	38
Knoll ('57)	4-9-25W		no report	none			Lans.-K.C.	3,875	4	
Knoll Northwest ('58)	5-9-25W	80	1,637	15,225	2	1	Lansing	3,981	5	33
Kobler ('58)	27-8-24W	160	24,193	93,625	4		Lans.-K.C.	3,841	15	36
Lacerte ('56)	32-10-22W	40	2,897	29,110	1		Lans.-K.C.	3,602	4	36
Law ('51)	34-9-23W	900	47,078	1,147,230	14		Lans.-K.C.	3,922	10	38
							Penn. congl.	4,126		
Law Northwest ('57)	28-9-23W	320	69,937	372,807	12		Lans.-K.C.	3,826	6	38
Law Southeast ('55)	12-10-23W	440	60,537	440,269	13		Lans.-K.C.	3,869		29

							Penn. congl.	4,088	11	40
Lindenman ('59)	31-6-25W	80	16,776	35,669	2		Lansing	3,672	36	38
McVey ('58)	7-10-22W	40	no runs	7,103	1		Lans.-K.C.	3,853	2	40
Mickleson ('52)	27-8-22W	140	11,452	129,364	4		Lans.-K.C.	3,502		34
							Arbuckle	3,759	16	24
Mildrexter ('55)	12-9-23W		no report	75,259		4	Lans.-K.C.	3,814	2	38
Mildrexter Southeast ('58)	12-9-23W		no report	none			Lansing	3,854	4	36
Mitchell ('58)	20-9-24W		no report	1,212			Lansing	4,053	3	
Montgomery ('58)	8-8-23W	100	14,681	71,815	3		Lans.-K.C.	3,511	33	
Montgomery East ('58)	4-8-23W	40	1,712	12,370	1		Lans.-K.C.	3,706	4	
Morel ('38)	15-9-21W	8,640	1,238,948	28,578,795	224	3	Lans.-K.C.	3,676	3	
							"Sooy"	3,712		26
							Arbuckle	3,718	12	27
Morel North ('55)	3-9-21W	40	1,295	15,152	1		Penn. congl.	3,667	5	38
Mt. Etna ('59)	11-7-23W		no report	2,036			Lansing	3,651	5	38
Mount Vernon ('58)	6-7-22W	160	49,813	166,162	4		Lansing	3,759	5	38
Nana ('53)	4-8-24W	580	71,067	1,060,174	22	1	Lans.-K.C.	3,738	8	
Nana Northwest ('58)	33-7-24W	220	50,550	169,300	7		Lansing	3,873	4	41
Penokee ('40)	11-8-24W	130	16,675	317,872	5		Lans.-K.C.	3,750	16	43
Prairie Glen ('54)	25-10-23W	100	6,079	70,517	3		Lans.-K.C.	3,596	4	33
Prairie Glen Southeast ('55)	31-10-22W	100	7,276	87,851	3		Lans.-K.C.	3,594	8	
Prairie Glen Southwest ('58)	35-10-23W	40	3,079	13,115	1		Lansing	3,734	5	
Ray* ('49)	32-5-20W		no report	1,240			Lans.-K.C.	3,297		
							Arbuckle	3,575		
							Reagan	3,540		32
Red Line ('55)	32-9-22W	420	19,550	210,872	7		Lans.-K.C.	3,776	3	
Red Line North ('55)	20-9-22W	40	2,552	28,230	1		Lans.-K.C.	3,676	4	35
Red Line Northwest ('61)	19-9-22W	40	1,332	1,332	1		Lans.-K.C.	3,675	4	35
Richmeier ('61)	30-9-25W	40	580	580	1	1	Lans.-K.C.	3,876	8	38
Robin ('59)	18-10-22W	40	1,758	11,693	1	1	Penn. congl.	4,031	4	29
Sand Creek ('54)	27-8-21W		no report	10,647			Lans.-K.C.	3,387	6	30
							Arbuckle	3,578		
Schmied ('52)	21-8-25W	1,280	146,526	1,721,643	27		Lans.-K.C.	3,740	4	30
Schmied Northeast ('54)	10-8-25W	160	6,966	90,504	4		Lans.-K.C.	3,867	25	46
Schmied Northwest ('57)	5-8-25W	160	3,084	55,612	3	2	Lans.-K.C.	3,952	5	41
Schmied South ('57)	28-8-25W		no report	none			Lansing	3,931	5	
Schnebly ('52)	8-8-22W	40	615	66,556	1	1	Lans.-K.C.	3,507	5	
Shiloh ('51)	1-9-25W	200	59,219	151,770	8		Lans.-K.C.	4,013		42
Swank ('58)	4-9-22W		no report	8,780			Lans.-K.C.	3,611	4	
							Arbuckle	3,903	10	22

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Trico* ('51)	30-10-20W	1,800	365,217	2,930,200	55	1	Lans.-K.C.	3,651	7	
							Arbuckle	3,786		
Van ('54)	14-9-22W	480	103,727	677,492	16		Lans.-K.C.	3,580	5	22
							Arbuckle	3,871		
Vesper ('57)	36-9-23W	1,260	176,715	985,555	29		Lans.-K.C.	3,849	2	41
Vesper North ('59)	23-9-23W	40	no runs	2,582	1		Lansing	3,699	2	34
Wheeler ('57)	8-10-21W	200	12,499	71,988	6		Lans.-K.C.	3,702	8	28
							Marmaton	3,783	9	
Pools or fields abandoned				128,442						
Total, Graham County		46,790	5,852,349	69,413,075	1,235	24				
GRANT COUNTY										
DaVatz ('61)	13-28-36W	40	5,919	5,919	1		Morrowan	5,220	1	38
Hick ('59)	23-30-35W	40	1,723	5,501	1		Mississippian	5,392	20	41
Pollyana ('59)	36-27-35W	40	4,581	13,675	1		Lansing	4,090	13	32
Ryus ('61)	3-30-35W	40	2,753	2,753	1		Marmaton	4,700	2	36
							Morrowan	5,234	5	38
Total Grant County		160	14,976	27,848	4					
GREENWOOD COUNTY										
Atyeo-Pixlee* ('23)	7-22-10E	1,680	125,304		61	11	"Bartlesville"	2,350	20	
							Mississippian	2,400		
Beaumont ('20)	27-8E	700	21,596		31		"Peru"	1,830		
							Mississippian	2,445		
							Arbuckle	2,740		
Beaumont North ('19)	27-9E		no report				Mississippian	2,477		
							Arbuckle	2,800		
Beaumont South ('35)	2-28-8E	120	5,196		5		Mississippian	2,500		
Blackwell ('25)	16-24-13E	480	5,645		12		Mississippian	1,650		
Blankenship* ('21)	26-8E	160	2,454		11		"Bartlesville"	2,650		
Brinegar	26-13E	240	5,244		4		"New Albany"	427	11	
Browning ('24)	22-10E	1,800	226,385		124	7	"Bartlesville"	2,314	51	41
Burkett ('23)	24-23-10E	1,960	148,968		79	2	"Bartlesville"	2,000	38	38

Burt ('49)	8-26-11E	40	1,778		2		Mississippian	1,945		
Climax ('25)	27-11E	60	2,178		1		Mississippian	1,900	15	
DeMalorie-Souder ('24)	22-10E	2,840	232,539		145	9	"Bartlesville"	2,150	55	41
Dunaway* ('22)	34-22-13E	1,360	55,229		53	2	Mississippian	1,800	12	38
Eureka ('27)	31-25-11E	1,100	42,559		43	2	Fort Scott	1,750	10	35
							Mississippian	2,000		
Fancy ('56)	25-26-12E	120	5,713	63,301	7		Mississippian	1,643	5	
Fankhouser* ('26)	4-22-12E	1,160	32,482		21	6	"Bartlesville"	1,850	24	41
Ferrell North ('44)	15-28-8E		no report				Mississippian			
Gaffney ('26)	18-24-11E	420	22,523		11		"Bartlesville"	1,850		
Harris ('61)	10-25-12E		no report	none			"Peru"	1,446	8	37
Hinchman ('27)	17-24-13E	240	4,636		8		Mississippian	1,615		
Hollis ('27)	16-23-10E	80	2,369		3	1	"Bartlesville"	2,150		
Hubbard	22-13E	40	948		2		Cherokee	1,500		
Jackson	25-8E	160	3,450		4		"Bartlesville"			
Jackson Southwest ('57)	34-25-8E	120	33,836	76,990	8		"Bartlesville"	2,608	16	
Jobes	24-13E		no report				Mississippian	1,700		39
Lamont ('26)	29-22-13E	1,560	55,880		43	11	"Bartlesville"	1,700	42	40
Lane ('58)	5-26-12E	60	696	4,531	4		Mississippian	1,853	7	
Ly-Green* ('54)	5-22-11E		no report	11,420			"Bartlesville"	1,858	13	
Mignot ('51)	9-22-11E	40	890		1	1	"Bartlesville"	1,921	10	
Ott	7-22-13E	40	605		1		Simpson	2,236		
Polhamus ('22)	25-9E	1,020	88,288		43	4	"Bartlesville"	2,180	34	38
Quincy* ('26)	11-25-13E				36		"Bartlesville"	1,500	20	
a		660	17,386				Mississippian	1,720		
b		400	12,340							
c		40	936							
Reece ('25)	24-26-9E				17		Kansas City	1,380	12	
a		1,220	15,539				Mississippian	2,100		
b		80	1,162							
Ritchey-Moore* ('25)	34-21-10E	40	568	568	2		Mississippian	2,170		36
Sallyards	25-8E	3,120	337,953		194	1	"Bartlesville"	2,350	40	
Salt Springs Northwest ('58)	15-26-12E		no report	none			Mississippian	1,847	4	
Scott ('25)	24-23-8E	1,000	43,376		40		"Bartlesville"	2,525	40	
Seeley-Wick ('22)	28-23-11E	11,080	970,022		467	27	"Bartlesville"	1,930	45	
Severy* ('22)	28-11E				12		Kansas City	1,200		
a		220	4,244							
b		120	1,487							
Severy North	27-11E	160	406		5		Kansas City	830		
Spencer ('59)	23-23-9E		no report	none			Mississippian	2,401	11	32
Stanhope	15-26-8E	200	21,169		15		Mississippian	2,450	11	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Depth ft.	Thickness, ft.	Aver. grav.
Teeter* ('20)	16-23-9E				156	2	"Bartlesville"	2,400	40	
a		3,160	412,212							
b		120	2,342							
Teichgraber ('39)	25-8E				38		"Bartlesville"	2,750	50	
a		120	3,957							
b		300	61,095							
c		40	476							
Thrall-Aagard ('21)	14-24-9E				252	5	"Bartlesville"	2,170	45	
a		5,400	486,089							
b		120	4,112							
Tonovay ('17)	25-11E				4		Mississippian	1,830	29	34
a		40	620							
b		120	1,417							
Toronto* ('13)	16-26-13E	160	655		5		"Peru"	1,000		
							"Bartlesville"	1,700		
Tucker ('27)	14-26-11E		no report			1				
Virgil ('16)	14-24-12E	4,840	212,246		154	7	"Bartlesville"	1,550	40	38
							Mississippian	1,700	12	
Virgil North* ('20)	22-23-13E	6,240	212,754		284	3	"Bartlesville"	1,585	52	38
							Mississippian	1,840	12	
Wiggins ('25)	30-24-11E	1,220	127,318		50		"Bartlesville"	1,860	15	
Wilkerson ('26)	6-25-9E	500	11,929		10		"Bartlesville"	2,200	48	
Willard ('27)	7-27-11E	160	5,525		9		Mississippian	1,900	10	
Winterscheid*	23-14E	20	2,213		1		Mississippian	1,750		
Zebold ('57)	27-23-9E	160	6,845	48,634	5		Mississippian	2,424	8	
Zimmermann ('53)	19-23-10E	60	1,293	18,811	3		"Bartlesville"	2,296		
Miscellaneous		80	9,257		8+					
Total Greenwood County		58,800	4,116,334	237,761,783 recorded	2,494	102				
HAMILTON COUNTY										
Gould ('59)	30-25-41W	40	8,110	26,941	1	1	Morrowan	5,119	8	40
Helfrich ('55)	6-25-42W	40	3,839	40,150	1		Morrowan	5,040	10	39
Total Hamilton County		80	11,949	67,091	2	1				

HARPER COUNTY

Alfalfa ('61)	12-34-6W	40	2,676	2,676	1		Kansas City	3,751	8	44
Banner ('54)	27-32-7W	80	5,325	138,624	2		Viola-Simpson	4,833	6	43
Crystal Springs ('59)	18-32-7W	40	455	455	2		Mississippian	4,420		
Gerber ('57)	28-31-5W	80	7,157	70,163	2		Lans.-K.C.	3,570	6	
							Simpson	4,642	2	45
Gish ('57)	17-31-6W	680	32,203	620,618	17		Mississippian	4,349	7	
							Simpson	4,700	6	46
Goheen ('58)	12-31-7W		no report	3,571			Mississippian	4,310	24	
Grant ('57)	20-31-7W	260	188,879	458,999	13		Simpson	4,696	13	46
Harper ('58)	11-32-7W	40	5,669	25,666	1	1	"Elgin sand"	3,058	4	35
							Viola	4,711		
							Simpson	4,714		40
Hibbord ('57)	23-34-9W	120	4,383	13,376	4	2	Mississippian	4,586	14	
Miller ('55)	11-33-8W	40	478	19,210	1		"Misener"	4,895	5	45
Muir ('60)	4-32-7W	40	13,343	13,343	2		Mississippian	4,367	2	38
							Simpson	4,734	1	43
Rex ('61)	1-32-5W	40	3,743	3,743	1		Simpson	4,628	6	44
Runnymede ('53)	23-31-6W	160	30,796	171,643	4		Simpson	4,648		47
Sharon* ('55)	13-32-10W	1,200	90,815	531,300	23	3	Mississippian	4,355	10	
Spivey-Grabs* ('49)	13-31-9W	Combined with Basil and				5	Mississippian	4,400	14	29
		designate Spivey Grabs-Basil								
Spivey-Grabs-Basil* ('49)	13-31-9W	9,000	805,487	4,628,827	158		Lans.-K.C.	3,727		
							Mississippian	4,400	14	29
							Viola	4,511	3	
Stohrville ('57)	36-33-6W	300	19,852	111,125	7		Mississippian	4,461	7	36
Sullivan ('61)	31-32-8W	40	1,023	1,023	1		Viola	4,670	6	38
Zuercher ('59)	9-32-7W	220	70,694	135,801	6	1	Simpson	4,723	13	36
Pools or fields abandoned				46,426						
Total Harper County		12,380	1,282,978	6,996,589	245	12				

HARVEY COUNTY

Alta Mills ('58)	29-22-2W	160	13,301	56,326	5		Simpson	3,677	5	
Burrton* ('31)	1-23-4W	Included with Reno County					Mississippian	3,266		
							"Hunton"	3,583		
Burrton East ('60)	28-23-3W	40	1,119	2,164	1		Mississippian	3,288	51	
Burrton Northeast ('42)	3-23-3W	120	5,287	24,632	4	2	"Chat"	3,224		
DuBois* ('57)	3-25-2E	800	157,412	427,991	17		"Burgess"	3,830	8	
DuBois East ('59)	36-24-2E	40	3,082	8,790	2		"Burgess"	2,835	10	41

TABLE 34.—*Oil production in Kansas during 1961, continued*

Gingrass ('57)	17-24-2E	220	23,697	113,477	9	1	"Burgess"	2,831	2	
							"Hunton"	3,226	2	
Graber* ('34)	32-21-1W	40	1,361	167,612	1		"Misener"	3,323		41
							"Hunton"	3,274	24	
Halstead ('29)	36-22-2W	1,380	36,313	2,234,088	17		Lans.-K.C.	2,665	3	
							"Chat"	3,005	30	
Halstead West ('60)	10-23-2W	480	126,715	209,632	11		"Hunton"	3,160	6	26
							Viola	3,292	20	29
							Simpson	3,299	10	
Harmac*	35-21-3W	Included with McPherson County		106,482			"Hunton"	3,521		
Hollow-Nikkel* ('31)	30-22-3W	2,200	174,345	21,932,983	53	1	"Chat"	3,195	13	40
		Includes McPherson County Production					"Hunton"	3,507	14	
							Simpson	3,500		
Sperling ('35)	23-22-2W	320	31,425	900,536	7		"Hunton"	3,279	16	
Sperling South ('57)	23-22-2W		no report	341			Mississippian	2,954	13	
							Viola	3,386	6	
West Branch ('58)	23-23-2E	160	3,350	32,393	4		"Burgess"	2,773	2	
Pools or fields abandoned				124,440						
Total Harvey County		5,960	577,407	26,547,736	131	4				
			HASKELL COUNTY							
Eubank ('58)	28-28-34W	1,600	72,060	1,647,567	8	2	Lansing	4,112		34
			91,614		10		Marmaton	4,692	17	46
							Cherokee	4,843		36
			123,688		17		Morrowan	5,171	22	37
			507,931		28		Mississippian	5,439	6	37
Eubank North ('59)	4-28-34W	60	21,456	50,346	2		Morrowan	5,195	7	37
Eubank South ('60)	21-29-34W	Combined with Eubank					Chesteran	5,314	82	40
Hopkins* ('60)	34-30-33W	40	6,472	16,509	1		Mississippian	5,378	7	30
Koenig ('58)	12-29-34W	80	9,013	27,678	2		Morrowan	5,294	8	29
Koenig East ('61)	9-29-33W	40	10,336	10,336	1		Morrowan	5,272		28
Lemon North ('61)	33-29-33W	40	120	120	1		Marmaton	4,754	2	47
Lemon Northwest ('61)	17-30-33W	100	4,640	4,640	4		Lans.-K.C.	4,084	2	
Pleasant Prairie* ('54)	4-27-34W	3,800	1,699,962	5,527,532	85		Morrowan	4,959	9	
		Includes Finney County Production					Mississippian	5,041		34
Santa Fe ('61)	30-28-32W	Abandoned during 1961					Morrowan	5,252	28	
Satanta ('57)	21-30-34W	80	10,054	95,950	2		Morrowan	5,370	10	38
Satanta North ('60)	4-30-34W	Combined with Eubank					Morrowan	5,208	18	38
							Chesteran	5,380	7	

Victory ('60)	32-30-33W	160	60,682	61,923	4		Lansing	4,126	10	39
Total Haskell County		6,000	2,618,028	7,442,601	151	2				

HODGEMAN COUNTY

Cam ('60)	30-22-24W		no report	545			Mississippian	4,620	4	
Goebel ('59)	14-21-24W		no report	5,591		1	Mississippian	4,420	5	37
Hallet ('56)	15-22-25W	680	180,343	769,994	20		Mississippian	4,598	40	38
Hanston ('61)	8-22-22W	80	6,135	6,135	3		Mississippian	4,477	27	35
Jetmore ('50)	24-22-24W	40	no runs	87,790	1		Mississippian	4,580	12	37
Jetmore East ('59)	30-22-23W	80	38,797	60,512	4		Cherokee	4,534	3	
Jetmore West ('57)	23-22-24W	40	4,312	23,278	1		Mississippian	4,558	8	30
Nova ('59)	17-22-23W	80	15,207	46,342	2	1	Mississippian	4,622	20	32
Nova North ('60)	8-22-23W	80	25,632	40,344	2	1	Mississippian	4,625	7	37
Oppy ('61)	19-22-22W		no report	none			Mississippian	4,516	7	34
Ploger ('57)	10-21-25W		no report	none			Cherokee	4,280		
Purdyville ('51)	3-24-24W	240	42,784	855,909	6		Penn. congl.	4,651		36
							Mississippian	4,663	18	
Saw Log Creek ('53)	36-23-22W	160	12,602	180,458	4	1	Marmaton	4,284	11	21
							Cherokee	4,478	8	
Valley ('58)	7-21-24W	40	1,390	6,904	1		Mississippian	4,391	3	
Wieland ('56)	16-21-22W	80	8,770	21,738	2		Mississippian	4,380	16	38
Wieland North ('59)	9-21-22W	680	138,409	197,490	10		Cherokee	4,275		38
							Mississippian	4,346	10	38
Wieland West ('60)	18-21-22W	160	76,603	110,938	4		Mississippian	4,364	16	36
Total Hodgeman County		2,440	550,984	2,413,968	60	4				

JOHNSON COUNTY

Dallas ('38)	8-13-25E				4					
a		40	70							
b		40	27							
Gardner ('39)	14-22E	480	5,255		12		Marmaton			
Prairie Center ('39)	4-14-22E		no report				Marmaton			
							"Squirrel"			
Miscellaneous		10	70		1+					
Total Johnson County		570	5,422		17					

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft	Producing zone: Thickness, ft.	Producing zone: Aver grav.
KEARNY COUNTY										
Lakin ('57)	34-25-36W	80	37,074	124,770	2		Mississippian	4,984	16	28
Patterson ('41)	23-22-38W	160	33,813	697,941	3		"Patterson"	4,748		34
Pleasant Prairie* ('54)	4-27-34W	80	19,511	91,828	2		Morrowan	4,959	9	
							Mississippian	5,041		
Total Kearny County		320	90,398	914,539	7					
KINGMAN COUNTY										
Alameda ('58)	23-28-7W	640	35,491	59,857	11		Lansing	3,599	8	38
							Viola	4,356	5	43
							Simpson	4,353	5	44
Bartholomew* ('48)	30-27-4W	Included with Sedgwick County		65,175			Mississippian	3,732	25	
Basil ('53)	16-29-7W	Combined with Spivey-Grabs and designated Spivey-Grabs-Basil					Lans.-K.C.	3,727		
							Mississippian	4,150	4	
							Viola	4,511	3	
Basil Northeast ('60)	14-29-7W	80	18,216	26,300	2		Lans.-K.C.	3,310	5	
Bolinger ('57)	29-28-5W	240	50,398	177,866	7		Mississippian	3,897	2	40
Broadway ('50)	21-28-5W	980	86,800	1,566,947	31	1	Mississippian	3,833	6	32
Broadway West ('54)	19-28-5W	380	51,960	104,679	8		Mississippian	3,884	6	36
Casley ('52)	11-28-5W	340	19,361	304,664	9	1	Mississippian	3,794	7	38
Cunningham* ('31)	7-28-11W	840	44,366	3,490,119	20		Lans.-K.C.	3,600	33	41
Dale ('59)	35-28-6W		no report	365			Mississippian	3,928		
Dewey ('50)	9-28-5W	600	24,403	538,242	6		Mississippian	3,801		37
Dresden ('51)	13-27-10W	80	3,658	1,051,100	1		Lans.-K.C.	3,806		37
							Mississippian	4,002	8	
							Viola	4,270	2	41
Gilchrist ('55)	15-30-7W	700	57,368	347,013	8		Lans.-K.C.	3,726	5	
			19,410		5		Mississippian	4,084	35	
Goetz ('56)	29-29-9W	600	44,189	559,249	15		Mississippian			
							Viola	4,408	6	
Hurn ('60)	28-27-5W	40	4,316	7,079	1	1	Mississippian	3,777	12	
Klaver ('60)	9-29-6W	80	5,735	5,865	2	3	Mississippian	4,074	7	37
Kostner ('60)	1-29-6W	40	980	2,035	1		Mississippian	3,894	6	40

Lansdowne North ('51)	4-28-5W	40	508	28,188	1		Mississippian	3,814	3	40
Lock ('59)	13-30-7W	40	2,039	7,017	1	1	Mississippian	4,110	9	33
Orsemus ('53)	30-29-5W	140	44,665	325,532	4		Viola	4,455	12	43
							Simpson	4,468		
Orsemus South ('54)	31-29-5W		no report	450			Viola	4,483		
Pat Creek ('46)	20-28-9W	120	8,380	305,721	3		Mississippian	4,129	5	
							Viola	4,406	6	41
							Simpson	4,475	18	
Reida ('55)	18-30-6W	80	5,052	25,064	2		Lans.-K.C.	3,254	5	42
							Simpson	4,502	4	43
Reida South ('57)	19-30-6W	80	17,842	78,518	3		Mississippian	4,170	8	33
Reida West ('55)	23-30-7W		no report	12,762			Mississippian	4,143	3	37
Rosedale ('54)	32-29-6W	480	62,626	458,614	14	2	Lans.-K.C.	3,691	5	43
Rosedale Northeast ('60)	28-29-6W	180	11,617	47,267	2		Lans.-K.C.	3,555	5	
			10,839		1		Mississippian	4,149	7	40
			17,041		1		"Misener"	4,495	3	
Settle ('56)	18-29-7W	80	1,665	1,665	2		Viola	4,509	3	47
Smoots Creek ('59)	1-27-8W	40	8,817	27,456	1	1	Kansas City	3,350	3	40
Spivey-Grabs* ('49)	13-31-9W		Combined with Basil and designated Spivey-Grabs-Basil				Mississippian	4,205		29
Spivey-Grabs-Basil* ('49)	13-31-9W	15,000	2,920,430	13,284,521	434	5	Lans.-K.C.	3,727		
							Mississippian	4,400	14	29
							Viola	4,511	3	
Willowdale ('54)	11-29-9W	640	28,918	1,108,199	11	4	Viola	4,502	4	41
Pools or fields abandoned				63,189						
Total Kingman County		22,560	3,607,090	24,080,718	607	19				

KIOWA COUNTY

Alford ('44)	14-30-19W	40	2,847	22,284	1		Mississippian	5,040		
Eaton ('61)	35-27-17W	40	2,843	2,843	1		"Kinderhook"	4,712	7	32
Fralick ('60)	14-27-20W	80	13,216	18,319	2	1	Mississippian	4,790	5	32
Fralick West ('61)	16-27-20W		no report	none			Mississippian	4,831	10	37
Fruit ('60)	28-27-16W	40	4,439	4,439	2	1	Cherokee	4,649	7	37
							Mississippian	4,621	6	33
Glick* ('57)	31-30-16W	11,520	17,154	17,154	18		Mississippian	4,880		
Greensburg ('56)	35-27-18W	40	248	4,985	1		"Kinderhook"	4,742		
G R W ('58)	36-30-16W		Abandoned during 1961				Viola	4,734	10	38
Haviland ('55)	17-28-16W	160	3,402	35,262	3		"Kinderhook"	4,761	9	36
Johannsen ('54)	24-28-19W	40	2,275	28,557	1		Lans.-K.C.	4,284	4	
Mullinville ('55)	11-28-20W		no report	32,040			Mississippian	4,890	8	38

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Nichols ('55)	20-29-18W	2,340	675,474	3,863,028	78		Mississippian	4,997		
Pyle ('55)	16-29-16W	40	4,354	76,201	1		Mississippian	4,666	14	38
Quaker (revived) ('61)	10-27-19W	80	7,039	7,039	2		Lans.-K.C.	4,204	7	38
							Mississippian	4,800	2	36
Soldier Creek ('55)	24-29-16W		no report	42,954		1	Cherokee	4,599		
							Mississippian	4,598	10	42
Trousdale South ('56)	4-27-16W	40	1,241	9,635	1		"Kinderhook"	4,525	33	
Wellsford ('55)	15-28-16W	180	7,800	86,888	4		Marmaton	4,680		
							Cherokee	4,723	10	36
Pools or fields abandoned				55,727						
Total Kiowa County		14,640	742,332	4,307,355	115	3				
LABETTE COUNTY										
Altamont	33-19E		no report				"Bartlesville"	540		
Banzet	35-19E		no report							
Chetopa	36-34-20E	200	3,836		3		Arbuckle	850		23
Coffeyville-Cherryvale*	32-17E				78		"Wayside"	400		
a		580	545				Fort Scott	600		
b		530	45,758				"Bartlesville"	1,000		
c		240	1,232							
d		300	7,472							
e		370	2,944							
f		240	1,793							
g		60	63							
Dartnell	31-17E				7		"Bartlesville"			
a		240	1,357							
b		280	671							
Edna ('25)	34-18E	240	1,307		5		"Bartlesville"	580		
							Arbuckle	1,191		24
Indenbro	31-19E		no report							
Lake Creek	1-35-19E	40	1,386		2		Arbuckle			
Mound Valley	32-18E				27		"U. Bart."	630		
a		180	9,133				"L. Bart."	700		
b		200	4,138				Mississippian	900		
Price ('17)	33-18E	720	26,368		39		"Bartlesville"	600	30	

Valeda			no report						
Miscellaneous		60	365		3+				
Total Labette County		4,480	108,368	1,253,530 recorded	164				
LANE COUNTY									
Amy ('61)	33-18-30W	Abandoned during 1961					Marmaton	4,314	17
Pendennis ('61)	28-16-27W	80	14,290	14,290	2		Lans.-K.C.	3,969	4 39
Pools or fields abandoned				10,974					
Total Lane County		80	14,290	25,264	2				
LEAVENWORTH COUNTY									
Banker's Life ('41)	3-10-20E		no report				"McLouth"	1,450	
LINN COUNTY									
Beagle*	19-22E		no report						
Blue Mound			no report						
Centerville* ('20)	10-21-22E				125	6	"Squirrel"	480	
a		40	64				"Bartlesville"	720	
b		360	5,460						
c		40	156						
d		90	7,341						
e		200	991						
Critzer	22-22E		no report				Cherokee		
Goodrich-Parker ('22)	25-20-21E				143		"Squirrel"	600	20
a		490	2,148				"Bartlesville"	700	
b		40	85						
c		300	1,962						
d		240	798						
e		500	18,422						
LaCygne-Cadmus	20-24E				93	1	Bandera	150	20
a		80	6,865				Labette	200	
b		180	230						
c		260	12,074						
Miscellaneous		40	149		4+				
Total Linn County		2,860	56,745	1,380,818 recorded	365	7			

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Depth ft.	Thickness, ft.	Aver. grav.
LOGAN COUNTY										
Monument ('59)	18-11-33W	40	1,496	6,050	1	1	Lansing	4,154	4	
LYON COUNTY										
Atyeo-Pixlee* ('23)	7-22-10E	900	28,365		32	3	"Bartlesville"	2,200	32	
Bradfield ('21)	24-21-10E	660	60,695		36	6	Viola	2,500		
Fankhouser* ('26)	4-22-12E				37	9	"Bartlesville"	1,850		41
a		480	19,388							
b		440	3,712		3		"Bartlesville"	1,858		
Ly-Green* ('54)	5-22-11E	80	941	27,029	1	1	Mississippian	2,170		36
Ritchey-Moore* ('25)	34-21-10E	20	1,651		6		"Bartlesville"	1,900	12	38
Rock Creek ('47)	32-21-11E	220	11,043				"Bartlesville"	2,293	22	
Welch-Mohr ('53)	30-20-10E		no report	5,383						
Total Lyon County		2,800	125,795	8,499,262 recorded	115	19				
McPHERSON COUNTY										
Battle Hill ('45)	24-18-1W		no report	52,854			"Chat"	2,825	10	36
Battle Hill North ('48)	13-18-1W	40	5,262	130,933	1		Mississippian	2,811	17	36
Burch ('59)	32-17-1W	40	15,483	31,180	1		Mississippian	2,655	10	
Burk ('48)	7-18-1W		Combined with Georob				Mississippian	2,781	3	31
Canton North ('36)	26-18-1W	580	24,610	836,518	13	1	"Chat"	2,803	29	34
Chindberg ('29)	18-19-2W	640	38,281	1,949,713	20		Lans.-K.C.	2,363	19	37
Coons ('40)	13-19-1W	40	2,317	23,989	1		"Chat"	3,007		
Crowther ('42)	26-17-1W	1,240	76,971	3,682,623	29	6	"Chat"	2,778		34
Elyria ('58)	22-20-3W	580	42,380	152,414	16	3	"Chat"	3,068		
Fanska South* ('60)	18-17-1E		no report	none		1	Mississippian	2,819	80	36
Georob ('47)	31-17-1W	1,600	129,648	3,561,813	49	1	Mississippian	2,665	3	34
Goessel ('58)	12-21-1W	340	29,105	196,773	17		"Chat"	3,407	3	33
Gottland ('59)	3-18-3W		no report	463			"Hunton"	3,634	10	29
Graber* ('34)	32-21-1W	3,180	133,116	14,342,173	104	1	Simpson	3,323		41
							"Misener"	3,274	24	
							"Hunton"			

Graber East ('61)	15-21-1W		no report	none		1	"Hunton"	3,403	6	38
Graber North ('51)	4-21-1W	40	372	5,832	1		Mississippian	2,955		
Groveland ('53)	10-20-4W		no report	17,473			Viola	3,725	8	38
Groveland Northeast ('58)	2-20-4W	100	8,085	43,484	4		"Misener"	3,715	6	
Groveland South ('53)	14-20-4W	480	60,460	663,001	20	2	Viola	3,719	6	
Gypsum Creek* ('44)	4-17-1W	380	16,085	528,557	9		"Chat"	2,619	14	36
Harmac* ('55)	35-21-3W	600	77,719	588,336	17	1	"Hunton"	3,521	4	40
		Includes Harvey County portion								
Henne ('40)	21-17-1W	840	39,780	1,725,734	16		"Chat"	2,658	5	36
Hollow-Nikkel* ('31)	30-22-3W	Included with Harvey County				1	"Chat"	3,195	13	40
Jenday ('44)	1-19-2W	800	23,659	1,085,281	21		Tarkio	1,438	9	
							"Chat"	2,984	15	37
Johnson ('32)	35-19-3W	1,000	45,991	3,735,465	13		"Chat"	3,032	14	36
Johnson South ('50)	11-20-3W	40	12,443	39,658	1	1	Mississippian	3,043		36
							Simpson	3,514	6	
Larson ('58)	33-18-2W	1,200	122,168	259,228	22	3	Mississippian	2,965	15	37
Larson North ('60)	27-18-2W	40	1,382	2,960	2	1	Mississippian	2,919	12	35
Lindsborg* ('38)	8-17-3W	5,000	191,248	9,369,629	90	1	Viola	3,352	21	35
							Simpson	3,360	10	
Lindsborg South ('55)	6-18-3W	200	17,078	121,702	4	1	Simpson	3,523	4	
McMurtry ('60)	13-18-4W	80	12,357	15,170	2		Maquoketa	3,476	6	35
McPherson ('26)	29-18-2W	1,920	112,392	2,292,225	64	1	Lans.-K.C.	2,340		38
							"Chat"	2,967	11	
							Viola	3,140	6	
Maxwell ('48)	17-18-1W	180	2,622	60,084	4		Mississippian	2,846	11	36
Paden ('43)	10-18-1W	1,880	267,278	5,282,503	90		"Chat"	2,752	18	42
							Viola	3,153		
Ritz-Canton ('29)	1-20-2W	17,000	1,120,273	54,701,285	390	10	Lans.-K.C.	2,324		41
							"Chat"	2,935	31	
							Maquoketa	3,395	3	
							Viola	3,412	4	
Round Hill ('56)	28-18-1W	160	9,930	105,956	4		Cherokee	2,832	9	38
							Mississippian	2,853	10	
Roxbury ('38)	18-17-1W	940	46,231	3,534,408	22	1	"Chat"	2,684	5	35
							Simpson	3,278		
Roxbury South ('42)	30-17-1W	640	21,651	547,260	10		"Chat"	2,658	7	35
Voshell ('29)	9-21-3W	3,320	168,669	30,256,327	58	2	"Chat"	3,095	15	41
							Viola	3,301	3	
Welch-Bornholdt* ('24)	35-20-6W	3,200	173,905	14,549,179**	103	8	"Chat"	3,370		34
Pools or fields abandoned				297,377						
Total McPherson County		48,320	3,055,386	154,789,560**	1,218	47				

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Producing zone Depth ft	Producing zone Thickness, ft.	Producing zone Aver. grav.
MARION COUNTY										
Bartell ('61)	36-19-2E		no report	none			Mississippian	2,495	2	
Covert-Sellers ('20)	28-21-4E				29	1	Kansas City	1,674	4	38
a		840	35,503				Viola	2,400		
b		180	3,887							
Dobbs ('60)	22-19-3E	1,410	79,781	81,590	19		Mississippian	2,367	6	37
Doyle Creek ('58)	6-22-3E	80	3,293	36,924	2	2	"Hunton"	2,891	8	
Durham ('53)	34-18-2E	320	13,777	239,414	6		Viola	2,899	2	
Edmonds* ('53)	31-22-4E	560	35,113	619,212	16		Mississippian	2,471	3	
Elbing* ('18)	18-23-4E	160	6,288		6		Kansas City	2,120		
							Mississippian	2,400		35
							Viola	2,530		
Elbing North ('47)	27-22-4E	320	19,255	111,524	8		"Chat"	2,439		
Fairplay ('57)	25-21-4E	200	99,185	384,391	11		"Hunton"	2,458		
							Viola	2,429	2	
Fanska ('43)	6-17-1E	60	2,618		3		"Chat"	2,680		
Fanska South* ('60)	18-17-1E	100	17,110	22,926	3		Mississippian	2,819	80	36
Florence ('20)	18-21-5E	560	12,489		6	1	Viola	2,300		32
French Creek ('55)	22-19-2E		no report	10,194			Simpson	3,020		
Hillsboro ('28)	7-19-3E	40	3,347		4	1	Mississippian	2,470		33
							Viola	2,820		
Hillsboro East ('59)	17-19-3E		Combined with Lost Springs				Mississippian	2,444		
							Viola	2,757	20	
Klenda ('59)	12-19-3E		Combined with Lost Springs				Mississippian	2,346	27	
Klenda Northwest ('59)	2-19-3E		Combined with Lost Springs				Mississippian	2,345	54	
Klenda Southwest ('60)	14-19-3E		Combined with Lost Springs				Mississippian	2,414	39	37
LaLouette ('57)	10-21-5E	40	2,427	27,513	1		"Hunton"	2,231	6	
Lehigh ('46)	27-19-1E	220	4,270	132,099	4	1	Mississippian	2,800		
Lehigh North ('53)	23-19-1E		no report	9,668			Viola	3,225	4	30
Lost Springs* ('26)	22-17-4E				730	27	Mississippian	2,365		
a		36,450	2,306,664				Viola	2,757	20	
b		60	218							
c		40	1,574							
d		40	411							
e		60	1,804							
f		40	1,379							

Nonken ('59)	28-22-4E	20	933	1,624	1		Mississippian	2,439	13	31
Peabody ('20)	9-22-4E				25	1	Viola	2,500		
a		460	31,491							
b		780	34,769							
Ratzlaff ('56)	7-19-2E	160	1,614	52,840	3	1	Viola	3,135	5	
Shank ('52)	12-22-3E		no report	94,995			Mississippian	2,474	27	39
Shank South ('59)	13-22-3E	20	5,558	13,814	1		Mississippian	2,510	6	39
Unger ('55)	8-21-3E	3,200	637,552	4,902,244	130	2	"Hunton"	2,809		
Wenger ('47)	11-21-3E	360	10,267	986,641	9		"Hunton"	2,770		37
Youk ('54)	20-18-2E	100	5,485	52,847	2		Viola	3,017	3	21
Total Marion County		46,880	3,378,062	50,168,406 recorded	1,019	37				

MEADE COUNTY

Adams Ranch ('48)	8-35-30W	6,800	47,731	213,669**	22	1	Marmaton	5,346	40	40
							Chesteran	5,930	32	39
Angell ('56)	30-32-29W	80	1,507	5,997	3		Morrowan	5,608	56	
Bond ('54)	32-33-30W	120	450	12,309	3		Atokan	5,619	12	38
							Mississippian	5,860	26	
Borchers North ('59)	5-33-28W	240	20,045	39,508	8		Morrowan	5,521	56	
Borchers Northwest ('59)	1-33-29W	120	3,965	23,793	3		Morrowan	5,607	8	
Bromwell ('52)	7-34-29W	40	no runs	3,958	1		Morrowan	5,901		37
Bruno ('53)	20-33-30W	40	8,216	101,609	1	1	Morrowan	5,656	18	37
Bruno Northeast ('53)	16-33-30W	40	5,560	73,082	1		Morrowan	5,721	10	39
Cimarron Bend ('59)	12-35-29W	120	12,262	43,675**	4		Morrowan	5,810	17	
Fincham ('56)	14-35-27W	80	1,349	7,750	2		Mississippian	6,275		
Hockett ('57)	8-31-29W	160	1,588	6,843	5		Morrowan	5,390	4	23
							Mississippian			29
Horace ('56)	9-34-29W	40	1,163	1,163	1		Morrowan	5,815		
Kismet* ('48)	23-33-31W	100	655	7,253	2		Marmaton	5,095		
McKinney* ('50)	2-34-26W	1,500	39,132	274,866	53	2	Morrowan	5,690		
							Mississippian	5,762	66	65
Mohler ('57)	35-33-29W	140	24,031	101,499	7		Marmaton	5,259	8	42
							Morrowan	5,769	15	
Mohler Northeast ('58)	36-33-29W	320	5,444	30,724	11		Morrowan	5,690	8	
Novinger ('51)	26-33-30W	2,400	409,347	3,247,468	34		Marmaton	5,270	20	41
							Morrowan	5,765	21	
							Mississippian	5,803		
Novinger East ('57)	36-33-30W	100	4,808	6,067	3		Morrowan	5,780	86	
Novinger Northwest ('55)	15-33-30W	80	10,148	100,692	2		Lans.-K.C.	4,553	5	37

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Plains ('56)	17-32-30W	120	429	2,466	4		Morrowan	5,611	33	
							Mississippian	3,695	15	
Sanders ('56)	13-32-29W	40	no runs	689	2		Mississippian	5,550		
Singley ('55)	20-33-29W	660	74,045	628,404	25	1	Morrowan	5,803	16	40
							Mississippian	5,889	5	
Stevens ('52)	32-32-30W	2,200	308,580	2,034,450	36	2	Morrowan	5,560		38
							Mississippian	5,713		
Thiessen ('59)	8-33-27W	Combined with McKinney					Morrowan	5,690		
Total Meade County		15,540	980,455	6,967,934	233	7				
			MIAMI COUNTY							
Beagle	19-22E		no report							
Black	18-24E	60	409		2					
Block	18-24E				17		"Squirrel"	500	16	
a		320	1,262							
b		60	208							
Louisburg ('27)	17-25E				106		"Knobtown"	270		
a		480	77,099				"Peru"	430		
b		100	1,641				"Squirrel"	600		
c		440	7,475							
d		40	1,005							
Paola-Rantoul* (1860)	17-23E				1,213	75	"Knobtown"	300	25	
a		6,610	175,344				Hepler	400	15	
b		360	1,009				"Peru"	500	35	
c		1,320	29,618				"Squirrel"	600		
d		40	1,240				"Bartlesville"	700		
e		40	295							
f		60	1,499							
g		80	279							
h		80	140							
i		60	2,667							
j		400	3,063							
k		300	5,788							
l		20	53							
m		440	4,536							

n		40	211						
o		140	1,173						
p		100	350						
q		300	11,642						
r		80	560						
s		60	1,820						
t		80	329						
Miscellaneous		160	1,342		18+				
Total Miami County		12,270	332,057	18,909,852 recorded	1,356	75			

MONTGOMERY COUNTY

Brewster	32-16E				34		"Bartlesville"	900	
a		280	1,336				Arbuckle		
b		40	80						
c		60	461						
d		300	10,331						
e		40	366						
Caney	35-14E				36		"Bartlesville"	1,320	21
a		760	3,356						
b		40	451						
c		80	1,836						
Coffeyville-Cherryvale* ('02)	33-17E				304	9	"Wayside"	400	
a		5,460	63,213				Fort Scott	600	
b		400	3,316				"Bartlesville"	1,000	
c		60	545				Arbuckle	1,300	
d		80	180						
e		440	17,196						
f		40	118						
g		120	622						
h		320	5,981						
i		320	1,091						
j		280	2,299						
k		200	1,505						
l		540	6,680						
m		140	158						
n		40	353						
o		40	664						
p		40	70						
q		40	519						

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Coleman ('21)	28-32-14E	100	242		4	1	Arbuckle	1,700		
Elk City*	31-13E		no report				Marmaton			
Jefferson-Sycamore ('03)	18-33-15E				256	58	"Weiser"	800	15	
a		80	2,929				"Bartlesville"	1,200		
b		120	5,597							
c		360	5,313							
d		600	4,299							
e		220	421							
f		40	60							
g		1,100	29,478							
h		40	1,655							
i		760	5,470							
j		320	3,444							
k		400	2,430							
l		60	555							
m		60	149							
n		20	426							
o		100	509							
p		60	206							
q		80	917							
r		140	10,121							
s		40	1,509							
t		300	2,136							
u		300	37,426							
v		100	4,899							
w		140	737							
x		100	1,992							
Neodesha*	31-16E				76	7	"Bartlesville"	950		
a		820	5,518							
b		400	4,527							
c		80	1,059							
d		200	3,198							
e		40	1,468							
Sorghum Hollow	32-14E	2,020	28,004		122	1	"Weiser"	800		
Tyro ('04)	13-35-14E				59	1	"Bartlesville"	1,250		
a		1,480	18,904							
b		80	2,920							

c		160	227							
d		80	1,626							
e		60	225							
f		40	42							
Wayside-Havana* ('04)	34-14E				747		"Wayside"	575	22	
a		60	64				"Weiser"	700		
b		10,020	144,733				"Bartlesville"	1,200		
Miscellaneous		60	157		5+					
Total Montgomery County		31,400	458,319	47,173,857 recorded	1,642	77				
MORRIS COUNTY										
Burdick ('49)	15-17-5E	40	1,386	39,385	4		Mississippian	2,220	45	
Comiskey Northeast ('56)	24-16-9E	360	17,209	147,616	6		Viola	2,929	3	
John Creek ('53)	26-15-9E	2,040	423,123	2,072,991	56		Viola	3,090	6	
Latimer ('59)	14-15-5E		no report	721			Mississippian	2,157	24	33
Three Mile Creek ('50)	25-16-5E	80	1,675	104,100	2	1	Mississippian	2,208	50	36
Three Mile Creek South ('50)	35-16-5E	180	5,478	169,686	10		Mississippian	2,183	24	35
Total Morris County		2,700	448,871	2,535,187 recorded	73	1				
MORTON COUNTY										
Boehm ('51)	14-33-42W	320	36,745	131,246	9		Morrowan			
Elkhart West ('57)	17-35-43W	80	6,391	17,145	2		Morrowan			
Interstate ('54)	29-34-43W	2,900	979,025	4,486,205	79		Morrowan	4,210		38
Kinsler ('59)	33-31-40W	40	6,616	6,616	1		Des Moinesan	4,336		
							Morrowan	5,176		
							St. Louis	5,464		
Kinsler Southeast ('60)	12-32-40W	40	686	829	1		Morrowan	5,504		
Richfield ('48)	17-32-40W	300	10,922	131,419	11		Atokan	4,990		
Shrauner ('60)	18-35-42W	40	264	663	1		Morrowan	4,312	4	38
Sparks* ('54)	34-30-42W	100	1,974	5,860	3		Morrowan	5,245		
Taloga ('55)	34-34-42W	2,000	296,008	1,095,437	33		Morrowan	4,428		42
Taloga Northeast ('57)	19-34-41W	120	18,868	116,064	3	1	Cherokee	4,397	11	
							Morrowan	4,674	10	38
Wilburton ('59)	32-34-41W	700	138,967	140,704	14		Morrowan	4,808		
Total Morton County		6,640	1,496,466	6,132,188	157	1				

TABLE 34.—Oil production in Kansas during 1961, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
			NEMAHA COUNTY							
Sabetha ('50)	13-2-14E		no report	68,857			"Hunton"	2,826	8	
Strahm ('48)	27-2-14E	120	7,166	217,569	1		"Hunton"	2,879	2	
Strahm East ('53)	26-2-14E		no report	7,744			Viola	3,559		
Total Nemaha County		120	7,166	294,170	1		"Hunton"	2,826	11	
			NEOSHO COUNTY							
Erie ('03)	28-20E				320		"Bartlesville"	650	25	
a		540	1,776							
b		1,840	37,516							
c		340	1,057							
d		40	472							
e		660	17,423		1,171	11	"Bartlesville"	700	23	
Humboldt-Chanute*	27-18E									
a		120	4,323							
b		10,720	215,479							
c		20	240							
d		280	11,835							
e		40	1,173							
f		200	2,854							
g		310	7,229							
h		120	1,588							
i		140	414							
j		40	252							
k		60	2,357							
l		640	10,241							
m		160	240							
n		200	3,305							
o		40	807							
p		100	597							
q		140	1,583							
Kimball ('28)	32-27-21E		no report			1				
Ladore		20	131							

Morehead ('38)	30-30-18E				43		"Bartlesville"	850		
a		640	9,952							
b		100	613							
St. Paul-Walnut*	29-21E				201	1	"Bartlesville"	550		
a		1,360	57,151							
b		40	60							
c		20	59							
d		100	987							
e		140	149							
f		260	1,215							
g		20	30							
Thayer	29-17E				13	1	"Bartlesville"			
a		340	9,952							
b		20	249							
Trent	28-21E				133		"Bartlesville"	530		
a		80	862							
b		160	4,200							
c		1,290	57,121							
Urbana	28-18E	480	10,055		35		"Bartlesville"	750		
Miscellaneous		30	1,491		3+					
Total Neosho County		21,850	477,038	26,902,649 recorded	1,920	13				

NESS COUNTY

Aldrich ('29)	7-18-25W	5,100	166,747	4,610,946	50	4	Warsaw	4,428	2	34
Aldrich Northeast ('54)	23-17-25W	800	163,082	1,014,020	20	1	Marmaton	4,325	4	
							Penn. congl.	4,334	10	
							Mississippian	4,398	7	34
Arnold ('43)	22-16-25W	300	22,467	546,269	5	1	Fort Scott	4,436	21	36
							Warsaw	4,528		
Arnold North ('61)	10-16-25W	40	7,983	7,983	1	1	Mississippian	4,502	6	38
Arnold Southwest ('61)	29-16-25W	200	7,772	25,612	2		Marmaton	4,380	4	43
			17,840		5		Mississippian	4,463	8	38
Cruce ('56)	4-19-26W	40	3,458	34,359	1		Mississippian	4,556	5	38
Davenport ('55)	36-16-21W	320	70,141	432,812	8	1	Cherokee	4,045	2	41
Elmore* ('58)	12-18-21W	80	4,759	32,673	2		Cherokee	4,116	12	42
Franklin ('59)	25-19-24W	40	3,320	11,067	1		Fort Scott	4,269	12	40
Guzzlers Gulch ('59)	24-20-25W	140	35,862	95,376	5		Mississippian	4,410	10	39
Hair ('60)	4-20-24W	80	16,559	16,559	2	2	Fort Scott	4,301	5	42
							Mississippian	4,374	1	35

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Producing zone Depth ft.	Producing zone Thickness, ft	Producing zone Aver. grav.
Margheim ('58)	17-19-21W	40	no runs	9,410	1		Mississippian	4,339	8	40
Pabst ('58)	24-18-21W	180	15,179	112,589	6	2	Cherokee	4,054	5	42
Petersilie ('57)	14-20-24W	280	54,113	187,098	10		Mississippian	4,386		38
Ryersee ('56)	35-18-21W	80	11,055	83,152	3	2	Cherokee	4,100	22	41
							Mississippian	4,209	6	
Ryersee Southwest ('57)	3-19-21W		no report	3,779		1	Mississippian	4,270	5	40
Schoharie ('56)	22-19-23W	40	1,037	9,843	1		Marmaton	4,272	58	39
Vermilion ('55)	6-17-24W	40	2,229	25,540	1		Marmaton	4,385	11	36
Pools or fields abandoned				65,686						
Total Ness County		7,800	603,603	7,324,773	124	15				
NORTON COUNTY										
Densmore ('57)	12-5-22W	120	12,928	55,074	3		Lansing	3,314	8	
							Reagan	3,543	5	24
Norton ('53)	36-3-24W	2,140	506,849	5,636,678	116		Arbuckle	3,778	12	31
							Reagan			
Ray* ('40)	32-5-20W	540	106,494	854,086	15		Lans.-K.C.	3,297		
							Arbuckle	3,575		
							Reagan	3,540	13	32
Ray North ('54)	13-5-21W		no report	none			Arbuckle	3,544		
Ray West ('45)	26-5-21W	1,280	220,365	1,024,052	39	1	Arbuckle	3,650	9	31
Spiess ('58)	35-5-25W	40	3,235	13,442	1		Lansing	3,645	3	35
Pools or fields abandoned				32,505						
Total Norton County		4,120	849,871	7,615,837	171	1				
OSAGE COUNTY										
Vassar ('61)	23-16-16E		no report	none			Mississippian	1,524	7	
OSBORNE COUNTY										
Ruggles ('52)	23-10-15W	640	56,284	747,142	13		Shawnee	2,986		30
							Lans.-K.C.	3,024		

							Penn. congl.	3,394	16	
Ruggles South ('57)	27-10-15W	40	1,971	15,920	1		Lans.-K.C.	3,038	4	28
Worley ('59)	33-10-15W		no report	1,643			Penn. congl.	3,408	5	36
Total Osborne County		680	58,255	764,705	14					

PAWNEE COUNTY

Benson ('45)	30-23-15W	1,600	41,433	1,221,002	19		Lans.-K.C.	3,853	68	27
Bow ('58)	31-22-15W	80	10,055	46,146	2		Lansing	3,625	7	
							Arbuckle	3,966	2	
Browns Grove ('57)	17-20-20W	40	2,734	45,837	1	3	Mississippian	4,325	3	
Carpenter ('55)	25-23-17W	40	1,702	33,600	1		Marmaton	4,123		
							Penn.-Miss.	4,158	10	
							"Kinderhook"	4,270	6	
Dunes ('53)	22-22-15W	680	41,797	546,683	8		Arbuckle	3,956	24	36
Dunes Southwest ('53)	33-22-15W		no report	36,653			Lans.-K.C.	3,728	8	20
Dunes West ('58)	21-22-15W		no report	1,541			Arbuckle	3,974	6	31
Evers ('51)	1-22-16W	400	15,337	390,792	5	1	Lans.-K.C.	3,525	6	34
							Penn. congl.	3,814		
							Simpson	3,861	4	
							Arbuckle	3,908	11	
Garfield ('47)	17-23-17W	7,500	383,291	7,301,902	222	16	Penn.-Miss.	4,279		
							"Kinderhook"	4,276	5	
Hearn ('53)	35-23-15W	40	no runs	32,191	3		Lans.-K.C.	3,833		
							Arbuckle	4,130	5	
Jac ('58)	30-21-15W	40	202	339	1	1	Arbuckle	3,871		
Jay ('54)	3-23-15W	360	20,828	312,464	10		Lans.-K.C.	3,668		
							Simpson	4,025	14	
Jay South ('56)	9-23-15W	40	1,578	39,155	1		Simpson	4,101	6	40
Jessie ('58)	36-21-15W	40	2,883	15,968	1		Lans.-K.C.	3,601	7	31
Larned ('49)	28-21-16W	2,000	363,156	4,464,471	53	7	Arbuckle	3,877	5	38
Lovett ('54)	35-22-15W	80	5,245	58,600	2		Lans.-K.C.	3,682	8	37
Merritt ('57)	35-21-20W		no report	none			Cherokee	4,208	4	
Newsom ('56)	25-20-20W		no report	2,483			Mississippian	4,270	8	37
Oro ('53)	9-20-19W	640	95,289	938,455	15		Penn. congl.	4,204	5	39
Oro Southeast ('61)	23-20-19W	160	25,634	25,634	5		Cherokee	4,179	5	40
Pawnee Rock* ('36)	13-20-16W	2,560	88,850	4,774,272	40	3	Arbuckle	3,832	16	39
Rice ('59)	12-23-15W	40	388	7,807	1	1	Arbuckle	4,028	6	40
Rutherford ('46)	8-20-16W	300	8,738	367,673	4		Arbuckle	3,815	9	42
Ryan* ('45)	35-19-16W	80	3,154	578,300	2		Arbuckle	3,656	5	32
Ryan Southeast ('45)	12-20-16W	40	no runs	342,644	2		Arbuckle	3,688	3	37

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Shady ('48)	35-22-16W		no report	6,038			Arbuckle	4,067		50
Shady Southwest ('53)	3-23-16W		no report	80,167			Lans.-K.C.	3,705	5	
							Arbuckle	4,094	6	
Shiley ('54)	14-20-20W	200	11,241	225,627	4		Penn. congl.	4,173	7	38
Shiley East ('54)	18-20-19W	120	23,116	281,427	5		Cherokee	4,223	2	37
Sweeney ('53)	8-21-15W	100	2,306	63,807	2	1	Arbuckle	3,831		
Sweeney Southwest ('55)	25-21-16W		no report	6,833			Arbuckle	3,901	3	
Sweeney West ('57)	14-21-16W	100	2,558	47,822	4		Simpson	3,781	13	
							Arbuckle	3,833	3	
Zook ('42)	16-23-16W		no report	7,016			Arbuckle	4,066		
Pools or fields abandoned				382,196						
Total Pawnee County		17,280	1,151,515	22,685,545	413	33				
PHILLIPS COUNTY										
Beckman ('51)	3-4-19W	40	1,706	19,880	1		Lans.-K.C.	3,201	4	
Bow Creek ('39)	25-5-18W		no report	85,736			Lans.-K.C.	3,111	53	40
Dayton ('41)	36-2-19W	1,640	38,998	1,362,961	25		Lans.-K.C.	3,430	8	36
Fredericksburg ('52)	4-1-18W	320	25,782	71,353	11		Lans.-K.C.	3,457	3	
Glenwood ('51)	21-1-17W		no report	31,705			Lans.-K.C.	3,597	21	37
Hansen ('43)	14-5-20W	1,300	161,600	3,627,397	38		Lans.-K.C.	3,363		40
							Arbuckle	3,530	6	
Hansen West ('52)	15-5-20W	40	2,490	45,307	1		Arbuckle	3,543	11	
Huffstutter ('49)	6-2-18W	6,400	413,929	5,239,003	165		Lans.-K.C.	3,444	36	35
Huffstutter Southwest ('51)	23-2-19W	200	16,351	214,456	5		Lans.-K.C.	3,458	4	36
Logan ('45)	3-5-20W	480	45,711	652,098	14		Lans.-K.C.	3,149		37
							Arbuckle	3,381		
Mont-Sol ('54)	1-4-19W	200	18,221	168,416	6		Lans.-K.C.	3,255	10	
Mont Sol South ('61)	18-4-18W		no report	none			Lansing	3,132	17	
Ray* ('40)	32-5-20W	4,000	1,199,229	25,542,790	139		Lans.-K.C.	3,297		30
							Arbuckle	3,575		
							Reagan	3,540	13	32
Slinker ('51)	25-4-20W	640	113,687	384,766	12		Lans.-K.C.	3,215	8	36
Stony Point ('59)	18-5-20W	40	93	5,045	1	1	Lansing	3,265	9	33
Stuttgart ('50)	14-3-19W	540	23,638	471,697	10	1	Lans.-K.C.	3,146	3	37
Stuttgart South ('51)	23-3-19W	80	4,297	39,500	2		Lans.-K.C.	3,291	3	

Van Dyke ('59)	1-2-19W	40	1,086	2,592	1		Lansing	3,428	3	36
Pools or fields abandoned				10,576						
Total Phillips County		15,960	2,066,818	37,975,278	431	2				
PRATT COUNTY										
Blowout ('52)	8-27-14W	40	1,988	19,257	1		Lans.-K.C.	3,929	7	34
Brehm ('61)	23-28-13W	80	2,099	2,099	2		Arbuckle	4,246	11	35
Cairo North ('54)	6-28-11W	40	2,982	66,578	1		Viola	4,314	4	38
Carver-Robbins ('55)	21-27-15W	400	9,768	16,173	10	1	Lans.-K.C.	3,980	4	34
							Penn. congl.	4,472		38
							Mississippian	4,509	5	
							Viola	4,534	4	
Carver-Robbins Northeast ('56)	10-27-15W	80	450	13,914	2		Penn. congl.	4,400	9	
Chance ('46)	4-27-13W	1,250	78,529	3,875,621	62	6	Marmaton	4,137		34
							Mississippian	4,254		34
							Viola	4,250	10	
							Simpson	4,380		
							Arbuckle	4,432	25	
Chance Northwest ('54)	29-26-13W	80	3,840	89,043	2		Simpson	4,422	8	35
Chitwood ('43)	23-28-12W	2,000	285,832	11,321,716	67		Lans.-K.C.			40
							Viola			
							Simpson	4,396	14	
							Arbuckle			
Clara* ('48)	36-29-14W	140	2,485	216,782	4		Simpson	4,472	4	40
Coats ('44)	24-29-14W	120	884	458,348	3		Simpson	4,402	12	
							Arbuckle			
Coats North ('54)	12-29-14W		no report	108,314			Marmaton	4,342	10	28
							Simpson	4,584	16	
Cullison ('56)	25-28-15W	40	3,832	9,368	1		Cherokee	4,521	13	43
							Mississippian	4,543	13	39
Cunningham* ('31)	7-28-11W	3,400	89,585	5,303,582	70		Lans.-K.C.	3,390	7	41
							Viola	4,330		
Eads* ('59)	33-29-14W	120	10,878	62,215	3		Viola	4,501	10	35
Earl ('54)	36-28-14W	100	762	111,859	2	2	Lans.-K.C.	4,223		
							Simpson	4,520	14	
Earl North ('55)	36-28-14W	40	10,505	58,428	1		Simpson	4,493	17	38
Fitzsimmons ('53)	30-27-13W	120	6,182	154,317	3		Lans.-K.C.	4,056	3	36
Fitzsimmons South ('54)	31-27-13W	320	17,046	251,837	8		Lans.-K.C.	4,124		38
							Simpson	4,435	10	38

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Frisbie ('43)	5-26-13W	400	22,106	591,525	8		Lans.-K.C.	3,947	8	33
Frisbie Northeast ('48)	4-26-13W	400	15,298	433,105	10		Lans.-K.C.	3,788	19	27
							Viola	4,170	17	
							Simpson	4,274		
Gereke North ('61)	1-26-15W		no report	none			Simpson	4,390	11	38
Haskins ('56)	5-27-14W	80	3,736	40,744	2		Lans.-K.C.	4,118	8	31
							Viola	4,418	8	
Hopewell ('58)	17-26-15W	40	732	1,740	1		Lans.-K.C.	3,887		
Iuka-Carmi ('37)	11-27-13W	8,500	617,718	22,782,667	242	3	Lans.-K.C.	4,104	31	37
							Marmaton	4,012	7	
							Mississippian	4,112	24	
							Viola	4,195		
							Simpson	4,292		
							Arbuckle	4,354		
Iuka-Carmi Northwest ('53)	26-26-13W	160	11,316	188,200	5		Viola	4,217	16	37
							Simpson	4,276		
							Arbuckle	4,358	18	37
Jem (revived) ('61)	28-29-13W	80	12,093	13,568	2		Viola	4,466	14	35
Lion Northeast ('54)	21-27-11W	80	4,751	65,901	2		Lans.-K.C.	3,796	3	38
Ludwick ('44)	4-29-13W		no report	39,310			Simpson	4,490	27	39
Ludwick Northeast ('60)	28-28-13W	40	5,686	9,036	1		Simpson	4,418	5	36
Moore ('49)	1-26-14W	300	16,030	383,640	6		Lans.-K.C.	3,906		
							Viola	4,234		37
							Simpson	4,348		
Moore Southwest ('53)	11-26-14W	600	30,975	252,264	7	1	Lans.-K.C.	3,846		38
							"Kinderhook"	4,246		
							Simpson	4,364	2	
Moore West ('59)	4-26-14W	80	13,490	33,543	2		Lansing	3,810	2	32
Park ('59)	14-27-11W	80	11,593	28,122	2		Lansing	3,620	4	34
Randle ('55)	5-26-14W	80	11,636	81,395	2		Lans.-K.C.	3,946	8	35
Rell ('57)	10-29-14W	40	1,079	8,819	1		Marmaton	4,439	5	
Rollingson ('58)	30-27-12W	240	116,557	296,193	11		Simpson	4,306	6	38
Sawyer ('57)	26-29-13W	580	105,415	226,469	13		Lans.-K.C.	4,096	4	
							Simpson	4,607	4	
							Arbuckle	4,678	5	
Sawyer North ('60)	24-29-13W	40	4,110	7,392	1	1	Lans.-K.C.	3,926	13	
School Teacher ('57)	27-28-11W	40	1,088	6,208	1		Viola	4,331	16	40

Shriver ('44)	33-29-14W	300	10,703	848,734	6		Simpson	4,557	7	39
Tatlock ('54)	28-26-15W	40	3,084	83,143	2	1	Lans.-K.C.	3,925	4	39
Tatlock Southwest ('58)	30-26-15W	80	1,009	1,656	3		Congl. sand	4,376		
							"Kinderhook"			
Pools or fields abandoned				1,014,672						
Total Pratt County		20,650	1,547,852	49,577,497	572	15				

RAWLINS COUNTY

Arbor ('59)	17-4-33W	40	3,848	13,515	1		Lansing	4,023	21	31
Brumm ('56)	7-2-36W	80	2,235	23,143	2	3	Topeka	4,168	31	
							Lans.-K.C.	4,312	17	
Cahoj ('59)	17-1-34W	1,360	627,273	1,130,797	46	1	Lansing	4,030	9	32
Kompus ('59)	33-1-32W	40	no runs	493	1		Lansing	3,890	3	30
Sappa Creek ('58)	24-4-34W	80	16,399	41,380	2		Lans.-K.C.	4,030	8	33
							Marmaton	4,430	6	
Schmahl ('61)	9-5-31W	40	7,768	7,768	1		Lans.-K.C.	3,966	6	36
Waterman ('58)	15-4-33W	80	4,074	15,519	2		Lansing	3,913	14	
							Marmaton	4,280	8	
Wilhelm ('59)	20-1-32W	480	91,973	162,153	10		Lansing	3,880	9	33
Wilhelm East ('60)	15-1-32W	40	8,251	8,251	1		Lansing	3,896	3	34
Total Rawlins County		2,240	761,821	1,403,019	66	4				

RENO COUNTY

Abbyville ('27)	24-24-8W	800	16,535	1,110,182	9		Lans.-K.C.	3,540	9	38
Abbyville East ('61)	21-24-7W	40	687	687	1		Lansing	3,125	4	38
Abbyville Southwest ('60)	26-24-8W	40	787	2,196	1		Mississippian	3,758	4	36
Albion ('48)	14-26-6W	140	4,738	71,124	4		Lans.-K.C.	3,342		31
							"Chat"	3,654		
Albion North (revived) ('61)	12-26-6W		no report	767			Mississippian	3,598	7	39
Bacon ('53)	36-23-5W	40	10,688	67,047	1		Mississippian	3,382	28	38
Beck ('55)	24-23-9W	120	7,490	97,721	3		Penn. congl.	3,711	4	34
Buhler ('38)	25-22-5W	1,000	27,332	1,505,794	13	1	Viola	3,890	5	
							Simpson	3,897	42	
Burrton* ('31)	1-23-4W	11,200	578,728	53,405,013	323	1	Mississippian	3,266		33
			Includes Harvey County Production				"Hunton"	3,583		42
Castleton ('55)	29-25-6W	80	9,169	35,866	2		"Misener"	3,992	6	36
Hilger ('34)	16-26-4W	200	22,047	4,899,553	3	1	Viola	4,062	5	38
Hilger Southwest ('55)	29-26-4W	200	25,067	326,908	9		"Misener"	3,955		
							Viola	4,012	4	40

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Lerado ('37)	10-26-9W	880	6,938	192,578	30		Mississippian	3,857		
Morton ('42)	17-24-8W	40	1,598	57,882	1		Lans.-K.C.	3,180	12	38
Morton Southeast ('51)	16-24-8W	40	1,542	20,813	1		Lans.-K.C.	3,423	12	38
Nicklaus ('52)	3-26-4W	120	17,580	218,744	3		Lans.-K.C.	3,249	3	38
Prettyman ('57)	11-23-9W	40	474	7,987	1		Lansing	3,244	6	
Rino* ('60)	33-21-9W	80	17,590	18,117	2		Simpson	3,517	12	41
							Arbuckle	3,524	7	
Sterling* ('51)	4-22-8W	400	14,736	246,264	7		Mississippian	3,385	12	34
Sterling Southwest ('61)	17-22-8W	160	8,511	8,511	4		Penn. congl.	3,535	10	37
Stroud ('58)	34-23-5W	40	2,949	19,635	1		Simpson	3,850	3	38
Stroud South ('59)	33-23-5W	40	688	6,583	1		"Hunton"	3,724	4	20
Wisby ('57)	18-22-9W	640	49,850	313,586	22		Simpson	3,614	4	32
Wisby North ('57)	6-22-9W	180	9,980	43,696	5	2	Simpson	3,610	10	40
Wisby South ('59)	19-22-9W	120	36,395	110,546	4		Simpson	3,630	13	43
Yoder ('35)	34-24-5W		no report	93,285			"Chat"	3,450	51	35
Zenith-Peace Creek* ('41)	21-23-10W		Included with Stafford County			14	Viola	3,773		
Pools or fields abandoned				2,665,315						
Total Reno County		16,640	872,099	65,546,400	451	19				
RICE COUNTY										
Bell ('53)	9-21-10W	140	12,729	196,121	4		Arbuckle	3,391	4	39
Bloomer* ('36)	36-17-11W	1,300	260,101	17,003,152	67	1	Lans.-K.C.	3,044		43
							Arbuckle	3,257	8	43
Bredfeldt ('48)	7-18-9W	120	4,745	133,063	3		Arbuckle	3,226	8	31
Bredfeldt Northwest ('56)	12-18-10W		no report	11,107			Arbuckle	3,250	5	43
Bull Creek ('60)	26-21-8W	780	91,437	91,697	21	1	Mississippian	3,354	5	34
Calf Creek ('50)	28-18-10W	320	18,507	349,581	12		Lans.-K.C.	3,006	12	
							Penn. congl.	3,270	10	
							Precambrian	3,143	10	40
Calf Creek North ('52)	28-18-10W	80	4,794	20,287	2		Arbuckle	3,248	13	
Chase-Silica* ('31)	32-19-9W	30,000	1,049,654	124,592,224**	686	26	Wabaunsee	2,285		
							Lans.-K.C.	2,942	10	40
							"Penn. sand"	3,355	8	
							Simpson	3,242		
							Arbuckle	3,252	10	48

Click Southeast ('47)	11-18-7W	120	6,786	101,411	3		Lans.-K.C.	3,065	5	26
							Penn. congl.	3[illegible]	4	
Cow Creek ('46)	28-18-9W	80	4,638	27,401	2	1	Lans.-K.C.	2[illegible]	5	
Crawford ('53)	12-18-7W	280	14,109	297,150	9		Penn. congl.	3[illegible]	7	40
Crawford Southeast ('54)	20-18-6W	40	971	26,517	1		Penn. congl.	3,2[illegible]	6	40
Faler ('61)	2-21-9W	80	3,680	3,680	3		Simpson	3,327	15	42
Farmer ('52)	24-18-10W	500	17,720	493,408	14	2	Arbuckle	3,222	6	40
Farmer North ('57)	18-18-9W	80	2,632	26,725	2		Arbuckle	3,326	6	32
Frederick ('51)	10-18-9W	700	27,684	1,007,573	3		Penn. congl.	3,213	26	37
			122,304		19		Simpson	3,280	10	
Frederick East ('61)	12-18-9W	40	3,901	3,901	1		Simpson	3,286	7	47
Galt ('52)	8-18-7W		no report	92,814			Arbuckle	3,193	4	
Geneseo-Edwards* ('34)	25-18-8W	5,600	1,023,507	46,070,509	244	4	Lans.-K.C.	2,787		39
							Penn. congl.	3,222		
							Simpson	3,180		39
							Arbuckle	3,132		41
Heinz ('38)	8-18-10W	300	5,062	370,810	7		Lans.-K.C.	3,000		41
							Arbuckle	3,254	14	
Ixl ('50)	4-19-10W	900	67,312	573,727	22		Lans.-K.C.	3,068		44
							Arbuckle	3,308	22	
Mary Ida* ('50)	31-18-10W	640	35,504	861,036	15	1	Lans.-K.C.	3,033		36
							Arbuckle	3,272	5	36
Mary Ida South ('57)	6-19-10W	480	166,631	356,920	21	1	Lansing	3,038	4	
							Arbuckle	3,342	5	40
Mooney Southeast ('59)	8-19-10W	Combined with Mary Ida South					Arbuckle	3,322	6	39
Munyon ('50)	34-18-10W	120	5,168	123,695	3		"Sooy"	3,270		43
							Arbuckle	3,275		
Munyon South ('51)	3-19-10W	80	1,308	154,247	2	3	Arbuckle	3,300	13	43
Odessa ('49)	32-18-6W	640	135,236	724,435	16		Lans.-K.C.	3,092	6	29
Odessa South ('49)	9-19-6W	Included with Odessa					Lans.-K.C.	3,069	6	38
Orth ('32)	27-18-10W	1,180	66,944	3,562,152	28		Shawnee			40
							Lans.-K.C.	2,915	10	
							"Sooy"	3,187	21	
							Precambrian	3,240	27	40
Orth West ('44)	21-18-10W	500	22,390	813,169	15	1	Shawnee	2,688	37	41
							Arbuckle	3,235		
Ponce ('36)	28-21-7W	160	6,932	145,114	4		"Sooy"	3,388	40	34
Ponce Southeast ('59)	27-21-7W		no report	1,365			Mississippian	3,414	18	37
Prosper East ('50)	5-18-9W	160	5,153	228,290	4		Arbuckle	3,222	16	46
Rellim ('57)	3-19-6W	640	58,631	341,795	18		Penn.-Miss.	3,295	18	35
Rick* ('36)	1-19-11W	80	3,866	72,624	2		Lans.-K.C.	3,106		41
		A portion of Rice County combined with Mary Ida South					Arbuckle	3,355		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Rickard ('35)	22-18-9W	40	1,022	212,552	1		Arbuckle	3,324	7	
Rick Southeast ('47)	18-19-10W	120	15,192	191,296	5		Lans.-K.C.	3,026		36
							Arbuckle	3,334	5	
Ringwald ('49)	32-18-10W	500	46,899	963,511	12		Lans.-K.C.	2,947	5	37
							Precambrian	3,072		
Rino* ('60)	33-21-9W	160	36,665	40,255	5		Simpson	3,517	12	41
							Arbuckle	3,524	7	
Roesler* ('43)	14-18-11W	220	14,619	332,017	5		Arbuckle	3,291	7	
Smyres North ('57)	23-19-6W	40	no runs	1,219	1		Mississippian	3,360	8	38
Sterling* ('51)	4-22-8W	200	5,511	55,707	3		Mississippian	3,385	12	
Tobias ('61)	25-20-9W	40	2,767	2,767	1		Arbuckle	3,218	10	43
Union East ('50)	27-20-8W	140	2,154	79,901	2		"Sooy"	3,305	9	36
Volkland ('43)	27-18-9W	240	9,247	807,135	4		Arbuckle	3,221	30	38
Welch-Bornholdt* ('24)	35-20-6W	9,200	609,920	18,721,646**	309	9	"Chat"	3,370		34
Wherry ('33)	11-21-7W	7,500	132,728	13,861,388	106	6	"Sooy"	3,358	22	
Wisby Northeast ('58)	32-21-9W	140	21,832	51,569	5	1	Simpson	3,553	6	
Pools or fields abandoned				496,755						
Total Rice County		64,600	4,144,726	234,622,794	1,710	57				
RILEY COUNTY										
Ge-See* ('59)	27-11-8E	20	1,316	3,346	1		Cherokee	1,749	12	
Yaege ('59)	25-11-8E	660	17,907	511,218	2		Penn. congl.	1,578	10	
			225,855		28		"Hunton"	1,682	8	33
Total Riley County		680	245,078	514,564	31					
ROOKS COUNTY										
Arpin ('57)	5-9-20W	40	1,757	13,160	1		Arbuckle	3,655	5	24
Arpin East ('58)	4-9-20W	40	2,517	10,381	1		Arbuckle	3,751	21	29
Arpin South ('57)	8-9-20W	80	6,270	36,910	2		Arbuckle	3,714	12	49
Barry ('42)	11-9-19W	2,200	90,515	10,789,368	18		Lans.-K.C.		35	32
			351,158		51		Arbuckle	3,435	5	
Barry East ('47)	6-9-18W	560	22,333	876,929	9	1	Lans.-K.C.	3,280	9	22
							Arbuckle	3,489	6	

Barry Southeast ('46)	13-9-19W	640	73,607	2,326,154	22		Lans.-K.C.	3,228		26
							Arbuckle	3,479	7	
Baum ('42)	10-10-16W	40	1,602	33,090	1		Lans.-K.C.	3,057	15	30
Baumgarten ('50)	25-9-19W	1,300	105,570	1,195,044	25		Lans.-K.C.	3,401		24
							Arbuckle	3,621	7	
Bemis-Shutts* ('35)	16-11-17W	700	80,853	2,615,410	29		Lans.-K.C.	3,093	4	38
							Arbuckle	3,570	8	32
Berland Southeast ('53)	29-10-19W		no report	87,367			Arbuckle	3,755	5	26
Bray ('60)	20-8-19W	40	6,544	6,684	1		Arbuckle	3,460	4	17
Brungardt* ('52)	35-10-17W	500	31,816	497,764	13		Lans.-K.C.	3,194	16	37
							Penn. congl.	3,449		
							Arbuckle	3,644		
Brungardt Northwest ('53)	34-10-17W		no report	15,693			Penn. congl.	3,441	2	
							Arbuckle	3,477	7	30
Carmichael ('55)	33-8-18W	120	8,912	122,218	3		Lans.-K.C.	3,210	8	37
Chesney ('59)	12-8-17W	160	21,954	92,520	6	1	Lansing	3,066	195	34
Colby ('53)	27-10-17W		no report	1,462			Lans.-K.C.	3,384		
Collins ('60)	34-9-18W	40	4,344	5,093	1		Simpson	3,640	3	24
Cooper* ('43)	5-10-20W	1,600	168,800	2,382,589	39	1	Lans.-K.C.	3,619	6	
							Arbuckle	3,824	19	
Cresson ('56)	11-9-20W	80	3,603	40,095	2		Arbuckle	3,618	8	
Dancer ('52)	4-8-17W		no report	9,671			Lans.-K.C.	3,140	12	26
Dopita ('34)	31-8-17W	4,000	330,113	3,824,481	87		Lans.-K.C.	3,212	5	33
							Arbuckle	3,409	10	
Dopita East ('52)	29-8-17W	380	39,108	402,950	8		Lans.-K.C.	3,304	6	25
							Arbuckle	3,421		
Dorr ('42)	20-9-16W	1,000	81,312	1,868,467	45		Toronto	3,178	10	
							Lans.-K.C.	3,230	21	36
Eilers ('59)	22-10-18W	320	99,887	205,377	12		Lansing	3,322	56	30
							Simpson	3,647		
							Arbuckle	3,667		
Faubion ('36)	12-6-18W	40	2,277	71,797	1		Lans.-K.C.	3,162	3	35
Fehnel ('52)	16-10-19W	80	5,029	82,947	2		Lans.-K.C.	3,480	14	36
Finnesy ('47)	14-10-18W	80	5,489	65,583	3		Lans.-K.C.	3,419		35
Finnesy South ('58)	24-10-18W	320	36,451	94,441	9		Lansing	3,447	48	33
Flagler ('55)	15-10-18W	40	4,798	39,509	1		Lans.-K.C.	3,445	6	
Ganoung ('53)	31-9-17W	40	1,457	43,343	1	1	Lans.-K.C.	3,281		
							Penn. congl.	3,524	7	
Gick ('47)	30-9-19W	260	19,401	401,493	7		Arbuckle	3,578	12	34
Gra-Rook ('48)	30-9-20W	760	138,271	2,129,789	18	1	Penn. congl.	3,810		
							Arbuckle	3,869	4	
Gra-Rook North ('56)	18-9-20W	280	8,376	76,845	4		Arbuckle	3,746	14	32

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Gra-Rook Northeast ('59)	17-9-20W	40	3,659	13,822	1		Arbuckle	3,767	5	30
Grover ('50)	22-7-19W	400	20,370	241,065	10		Lans.-K.C.	3,272	40	32
							Arbuckle	3,408	13	
Hayden ('49)	31-8-19W	400	24,688	782,095	14		Lans.-K.C.	3,289		32
							Arbuckle	3,513	4	
Hrabe ('61)	36-8-17W	80	5,054	5,054	2		Lans.-K.C.	3,089	239	35
Hrabe West ('61)	35-8-17W	40	416	416	1		Lans.-K.C.	3,105	7	34
Jelinek ('47)	23-9-19W	2,250	334,503	6,650,149	72	4	Lans.-K.C.	3,220		23
							Arbuckle	3,537	15	
Kern ('50)	28-9-20W	200	20,223	502,444	6		Arbuckle	3,855	5	
Kern West ('58)	29-9-20W	40	3,272	12,862	1		Arbuckle	3,859	7	28
Krueger* ('48)	35-10-16W	Included with Ellis County		624,975			Lans.-K.C.	3,552	59	36
							Arbuckle			
Kruse ('51)	3-10-16W	440	13,607	380,514	11	1	Lans.-K.C.	3,094	26	38
Kruse Northwest ('53)	34-9-16W	120	4,055	60,348	3		Lans.-K.C.	3,200	6	
Laton ('27)	11-9-16W	4,100	279,119	6,041,989	104	1	Lans.-K.C.	3,228	33	30
LeSage ('60)	18-7-20W	120	29,570	37,225	4		Lans.-K.C.	3,308	44	37
Locust Grove ('49)	8-7-19W	100	30,710	81,001	4	1	Shawnee	3,130	4	
							Lans.-K.C.	3,188	25	36
							Arbuckle	3,450	14	25
Lone Star ('48)	4-8-17W	900	48,661	711,311	20	2	Lans.-K.C.	3,259		
							Arbuckle	3,382	17	25
Lynd ('51)	32-9-19W	1,040	27,119	582,908	15		Arbuckle	3,750	7	27
Lynd Southwest ('52)	5-10-19W	40	1,492	27,982	1		Arbuckle	3,759	4	29
Lynd West ('60)	32-9-19W	320	3,883	39,989	1		Lans.-K.C.	3,430	59	37
			31,732		7		Arbuckle	3,754	6	27
McClellan ('45)	9-9-19W		no report	73,742			Lans.-K.C.	3,343	5	34
McHale ('48)	8-9-18W	580	12,800	539,492	5		Lans.-K.C.	3,436		26
							Arbuckle	3,494	2	
McMullen ('52)	33-8-17W	40	3,197	7,747	1		Lansing	3,166		
Marc ('48)	18-9-19W		no report	22,339		1	Lans.-K.C.	3,370	8	37
Marcotte ('43)	15-10-20W	12,480	1,258,455	23,397,733	338	7	Lans.-K.C.	3,596	6	
							Arbuckle	3,752		27
Mayhew ('51)	24-9-19W	440	28,483	215,309	7	2	Arbuckle	3,613		25
Medicine Creek ('52)	18-8-16W	120	3,745	38,231	3		Lans.-K.C.	3,054	17	36
Mt. Ayr ('52)	13-10-18W	120	10,493	37,733	2		Lans.-K.C.	3,554	12	
							Penn. congl.	3,648		

Natoma ('61)	14-10-16W	40	977	977	1		Lans.-K.C.	3,216	92	40
Nettie ('48)	34-9-17W	740	84,498	1,513,166	35		Topeka	3,024	8	36
							Lans.-K.C.	3,243		36
							Simpson	3,499		
							Arbuckle	3,513	32	
Nettie Southeast ('55)	2-10-17W	40	3,158	21,763	1		Lans.-K.C.	3,268	3	38
Newlin ('58)	29-9-16W	40	3,562	24,674	1		Lansing	3,305	4	41
Northampton ('48)	26-9-20W	1,200	335,454	5,490,653	52	1	Lans.-K.C.	3,596	4	27
							Arbuckle	3,803	11	
Nyra ('46)	16-9-17W	520	35,069	381,489	16		Lans.-K.C.	3,429		34
							Arbuckle	3,501		
O'Brien ('60)	14-9-18W	40	327	327	1	1	Arbuckle	3,499	5	
Ordway ('58)	20-10-18W	40	1,308	9,050	1		Lansing	3,604	2	31
Ordway East ('59)	21-10-18W	40	3,697	10,987	1		Toronto	3,328	5	32
							Lansing	3,354	27	
Palco Townsite ('45)	20-9-20W		no report	47,826		1	Arbuckle	3,847	15	29
Paradise Creek ('47)	21-9-18W	1,100	76,923	2,834,927	35		Lans.-K.C.	3,400		26
							Arbuckle	3,576	13	
Paradise Creek West ('53)	20-9-18W	200	22,151	295,023	5		Arbuckle	3,594	13	23
Plainville ('48)	31-9-17W	40	4,006	53,426	2		Lans.-K.C.	3,477	38	38
							Arbuckle	3,613	2	
Pywell ('58)	31-9-18W	40	1,790	15,540	1		Penn. congl.	3,708	3	
Ray Southeast ('42)	9-6-20W		no report	87,180			Reagan	3,600	6	38
Riffe ('51)	4-7-19W	240	76,714	272,208	11		Lans.-K.C.	3,230		36
Schindler ('59)	17-8-17W	40	2,430	8,039	1		Arbuckle	3,325	11	26
Simons ('60)	11-7-17W	60	7,755	12,482	2		Lans.-K.C.	2,922	29	41
Slate ('51)	31-6-19W	120	7,426	62,595	3		Lans.-K.C.	3,291		26
							Arbuckle	3,545	15	
Stockton ('37)	35-7-17W	400	15,302	281,732	9		Shawnee	2,692		
							Lans.-K.C.	3,180	62	39
Trico* ('51)	30-10-20W	3,840	486,507	2,892,102	54	1	Lans.-K.C.	3,543		
							Arbuckle	3,749	18	
Vohs ('45)	14-10-19W	960	108,906	2,998,648	26		Lans.-K.C.	3,365	7	29
Vohs Northwest ('47)	9-10-19W	40	1,246	145,332	1	2	Lans.-K.C.	3,446	8	34
							Arbuckle	3,738		
Vohs Southeast ('59)	24-10-19W		no report	1,703			Lansing	3,200		
Webster ('46)	27-8-19W	1,920	80,970	3,234,297	39	6	Shawnee	3,180	12	
							Arbuckle	3,403	5	23
Westhusin ('36)	11-9-17W	1,380	70,361	2,806,083	34		Lans.-K.C.	3,231	11	37
							Arbuckle	3,408		
Whisman ('50)	9-9-20W	40	2,157	23,503	1	3	Lans.-K.C.	3,427		29
							Arbuckle	3,650	21	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Williams ('53)	9-10-18W	600	31,361	498,344	8	1	Toronto	3,386		19
							Lans.-K.C.	3,459		
							Simpson	3,717		
							Arbuckle	3,733	6	19
Williams North ('56)	32-9-18W	200	15,807	122,418	7		Penn. congl.	3,714	3	
							Simpson	3,714	3	29
							Arbuckle	3,725	3	
Williams Northwest ('53)	6-10-18W	40	11,660	63,864	2		Lans.-K.C.	3,409	46	26
							Simpson	3,725	5	
Williams Southeast ('53)	16-10-18W	640	64,088	422,265	14	1	Lans.-K.C.	3,444	3	36
							Simpson	3,660		
							Arbuckle			
Windy Ridge ('58)	25-10-18W	40	575	1,742	1	1	Lans.-K.C.	3,426	19	
Yohe ('49)	4-9-18W	40	2,416	62,774	1		Lans.-K.C.	3,266	24	37
Zurich ('35)	26-10-19W	800	15,273	535,409	9		Shawnee	3,087		37
							Lans.-K.C.	3,340	9	
Zurich Southwest ('52)	34-10-19W	40	1,269	32,460	1		Lans.-K.C.	3,385	9	28
Zurich Townsite ('44)	27-9-19W	360	30,168	718,763	9		Lans.-K.C.	3,462		
							Arbuckle	3,647	6	28
Pools or fields abandoned				154,121						
Total Rooks County		56,030	5,558,741	97,730,991	1,440	42				
			RUSH COUNTY							
Basgall ('60)	5-16-17W	40	546	887**	1		Arbuckle	3,520	10	29
Big Timber (revived) ('61)	5-16-18W	40	6,726	6,726	1		Lans.-K.C.	3,326	6	
Elmore* ('58)	12-18-21W	80	13,186	31,689	2		Cherokee	4,116	12	
Herr North ('58)	12-16-18W	80	7,235	16,931	2		Lans.-K.C.	3,267	2	36
							Arbuckle	3,527	2	
Kober ('59)	18-19-20W	80	12,073	25,835	2		Cherokee	4,323	14	37
Lohrey ('56)	35-17-17W	Combined with Reichel, Rothe and a portion of Bison and designated Reichel Gas Area					Penn. congl.	3,563		
							Granite Wash	3,578		
Loretto Northeast ('57)	14-16-17W	80	2,429	23,906	2		Lans.-K.C.	3,452	7	
McCracken ('57)	19-17-20W	40	1,846	20,981	1	1	Cherokee	4,090	3	
Old Maids Fork ('60)	20-19-20W	80	15,821	19,666	2		Cherokee	4,300	4	41

Otis-Albert* ('34)	10-18-16W	2,800	77,937	6,482,833	59	8	Lans.-K.C.	3,236	4	34
							Reagan	3,527	9	34
Pechanec ('56)	2-19-17W	40	306	6,495	1	1	Arbuckle	3,842	11	44
Reichel ('53)	23-17-17W	Combined with Lohrey, Rothe and a portion of Bison and designated Reichel Gas Area					Lans.-K.C.	3,330		
Reichel Gas Area ('53)	23-17-17W	40	2,696	6,416	1		Lans.-K.C.	3,330		
							Penn. congl.	3,563		
							Granite Wash	3,578		
Rush Center ('47)	16-18-18W	940	46,101	619,688	10		Arbuckle	3,836	15	37
Rush Center Northeast ('54)	10-18-18W	40	no runs	59,057	1		Arbuckle	3,783	5	
Ryan* ('45)	35-19-16W	640	3,973	2,130,733	6	9	Arbuckle	3,656	5	32
Schwindt ('61)	11-17-19W	80	5,897	5,897	3		Reagan	3,846	7	41
Shiley North ('61)	31-19-19W	40	1,906	1,906	1		Penn. congl.	4,190	21	37
Webs ('54)	16-19-20W	200	64,025	492,064	8		Penn. congl.	4,202	10	31
Webs Northwest ('55)	8-19-20W	40	3,187	42,975	1		Penn. congl.	4,240		
Webs Southwest ('56)	16-19-20W	140	16,174	171,590	3		Cherokee	4,302	2	35
							"Penn sand"			
							Mississippian	4,400	4	
Weitzel ('47)	1-16-20W		no report	46,773			"Gorham"	3,674		35
Pools or fields abandoned				64,316						
Total Rush County		5,520	282,064	10,277,364**	107	19				

RUSSELL COUNTY

Beaver North* ('37)	4-16-12W	40	2,103	88,424**	1		Arbuckle	3,316	10	39
Beisel ('44)	15-14-12W	40	7,903	49,759	1		Penn. congl.	3,249	4	
							Arbuckle	3,272	7	29
Boxberger ('35)	36-15-15W	40	1,698	252,105	1		Lans.-K.C.	3,147	4	41
Boxberger West ('57)	34-15-15W	120	34,796	67,290	6	2	Lans.-K.C.	3,195	5	40
Brundage ('57)	9-12-15W	120	55,802	467,492	11		Lans.-K.C.	2,852	4	39
			78,133		10		Arbuckle	3,136	4	
Brundage South ('58)	16-12-15W	120	10,489	78,410	3		Lansing	2,971	5	
			7,889		2		Arbuckle	3,240	6	30
Claussen ('44)	27-12-14W	200	4,412	130,493	5		Lans.-K.C.	2,855		39
Coal Creek ('51)	22-15-11W	80	3,264	22,766	2		Penn. congl.	3,178		38
Davidson* ('30)	4-16-11W	160	22,976	301,368	4	1	Lans.-K.C.	3,016		
							"Sooy"	3,317	9	
							Arbuckle	3,314		
Donovan ('35)	10-15-15W	120	2,245	279,985	3		Lans.-K.C.	3,193	7	39
Dreher ('59)	23-11-15W	80	4,953	10,946	2		Arbuckle	3,313	10	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Driscoll ('56)	30-15-11W	240	9,416	120,009	6		Lans.-K.C.	2,969	25	36
							Penn. congl.	3,303	2	37
Driscoll West ('60)	25-15-12W	80	6,416	7,176	2	2	Arbuckle	3,306	10	36
Dubuque ('35)	34-15-12W	720	43,894	1,376,270	13		Lans.-K.C.	3,275	3	41
							Arbuckle	3,330	5	
Elsasser ('61)	23-12-15W	80	6,672	6,672	2		Lans.-K.C.	2,853	130	39
Elsasser Southwest ('61)	22-12-15W		no report	none			Arbuckle	3,250	4	27
Eulert ('49)	35-11-15W	540	108,660	1,362,242	18		Topeka	2,712	4	
							Lans.-K.C.	3,009	81	
							Arbuckle	3,316	13	22
Eulert West ('54)	34-11-15W	40	7,456	42,663	1		Lans.-K.C.	2,984	6	42
Fairport* ('23)	8-12-15W	6,280	783,747	28,455,314	217	4	Lans.-K.C.	2,950	12	32
							"Sooy"	3,137	5	
							"Gorham"	3,211		
							Simpson	3,316		
							Arbuckle	3,312		
							Reagan	3,350		
Fay (revived) ('61)	2-12-15W	40	17,881	31,144	1		Lans.-K.C.	2,953	180	40
Gorham ('26)	32-13-15W	17,000	1,237,771	70,605,971	484	14	Shawnee	2,765		
							Lans -K.C.	2,908	48	37
							"Gorham"	3,152	5	
							Arbuckle	3,289		32
							Reagan	3,299	5	
Hagerman ('59)	28-11-15W	40	9,330	23,429	1		Arbuckle	3,273	6	28
Hall-Gurney* ('31)	30-14-13W	29,000	3,173,264	86,749,676	1,211	10	Tarkio	1,985		39
							Wabaunsee	2,400		
							Topeka	2,675		
							Oread	2,813		
							Lans.-K.C.	2,985	28	
							"Gorham"	3,165		
							Arbuckle	3,192		
							Precambrian	3,156		
Heim ('53)	21-14-12W	340	36,842	315,929	9		Lans.-K.C.	2,897		37
							Penn. congl.	3,189	11	37
							Arbuckle	3,238		
Janne ('43)	24-15-12W	300	9,825	345,081	6		Lans.-K.C.		5	
							Arbuckle	3,319		22

Jerry ('42)	4-15-14W	40	2,518	79,953	1		Wabaunsee			38
							Lans.-K.C.	2,985		
							Arbuckle			
Kune ('56)	17-13-15W	140	16,018	92,223	6		Lans.-K.C.	3,004	15	28
Lang ('57)	30-15-12W	120	39,871	167,671**	4		Arbuckle	3,334	16	
Machin ('58)	4-13-14W	40	2,741	15,216	1		Lansing	2,994	5	37
Meier ('48)	30-15-12W	80	6,430	247,916**	2		Arbuckle	3,325	6	37
Ney ('48)	31-15-12W	160	28,225	457,294**	7		Lans.-K.C.	3,240		37
							Arbuckle	3,350	6	
Nuss* ('55)	5-16-14W	200	28,757	177,292	6		Lans.-K.C.	3,183		
Parker ('48)	18-15-12W	320	23,832	465,862	8	1	Shawnee	2,957	7	
							Lans.-K.C.	3,086	16	
							Arbuckle	3,259		36
Reich ('58)	28-12-15W	240	71,923	285,660	17		Toronto	2,939	4	
							Lans.-K.C.	3,018	3	
							Arbuckle			
Reich South ('59)	32-12-15W	40	1,109	7,750	1		Lansing	3,031	6	42
Russell ('34)	22-13-14W	4,800	278,925	14,862,186	112	9	Lans.-K.C.	3,195	9	33
							Arbuckle	3,280	6	
Russell East ('49)	25-13-14W	80	6,722	57,597	3	1	Arbuckle	3,273	11	33
S & S ('57)	36-12-15W	320	54,128	378,004	15		Lans.-K.C.			
							Arbuckle	3,139	9	32
Salt Creek ('61)	6-13-14W	80	8,001	8,001	2		Lans.-K.C.	2,954	185	38
Strecker ('43)	21-15-14W	80	868	64,985	2		Arbuckle	3,342	3	48
Trapp* ('36)	23-15-14W	21,000	1,870,522	114,055,737	743	28	Tarkio	2,359		39
							Shawnee	2,889	32	
							"Dodge"	2,966		
							Lans.-K.C.	3,062		40
							Arbuckle	3,252	3	39
Pools or fields abandoned				299,784						
Total Russell County		83,520	8,128,427	322,913,745**	2,952	73				

SALINE COUNTY

Ash Grove West ('59)	12-15-1W		no report	none			"Burgess"	2,618	8	
Bachofer ('51)	15-15-2W	160	10,452	117,231	4		Mississippian	2,799	6	
Dieter ('60)	7-15-2W		Combined with Salina South				Maquoketa	3,218	6	35
Gillberg ('59)	28-14-2W	220	16,010	43,091	6		Maquoketa	3,223	8	33
Gypsum Creek* ('44)	4-17-1W	680	59,184	888,965	19		Lans.-K.C.	2,072	8	
							Mississippian	2,619	14	36
Hunter ('43)	20-16-1W	960	44,358	1,455,097	24		Douglas	1,841		
							"Chat"	2,681	2	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft	Producing zone: Thickness, ft.	Producing zone: Aver. grav
Hunter North (18)	8-16-1W	320	14,534	363,300	7		Mississippian	2,674	21	36
Jackman ('60)	10-15-1W	40	1,571	2,370	1	1	Mississippian	2,547	4	
Lindsborg* ('38)	8-17-3W	2,500	136,456	1,655,857	69	1	Viola	3,381	54	35
Mentor ('44)	13-15-3W	380	47,781	105,377	12		Viola	3,258	15	35
Mentor South ('61)	25-15-3W	80	1,766	1,766	2		Maquoketa	3,290	6	37
Mortimer ('58)	5-16-1W	40	5,590	9,580	1		Mississippian	2,639	14	
Olsson ('29)	10-16-3W	960	110,114	940,947	34	3	Viola	3,303	12	35
Salina ('43)	30-14-2W	1,480	35,241	1,245,186	17	1	Viola	3,223	8	34
Salina South ('46)	32-14-2W	1,280	109,669	463,125	34		Maquoketa	3,218	6	35
							Viola	3,246	8	34
Smolan ('50)	19-15-3W	3,200	119,361	4,547,585	100	2	Viola	3,386	6	27
Swenson ('50)	34-15-3W	160	6,677	68,787	6		Viola	3,353		35
Pools or fields abandoned				11,285						
Total Saline County		12,460	718,764	11,919,549	336	8				
SCOTT COUNTY										
Durrant ('61)	30-17-31W	40	431	431	1	3	Mississippian	4,647	5	31
Grigston ('54)	10-19-31W	120	no runs	32,803	3		Mississippian	4,577		
							Arbuckle	5,050	4	
Keystone ('50)	25-18-32W	120	18,163	293,856	3	2	Lans.-K.C.	4,001	6	25
Newby ('60)	23-18-32W	40	9,182	22,309	1	2	Lans.-K.C.	3,923	2	
							Marmaton	4,335	2	23
			9,677		1		Mississippian	4,576	6	31
Rothfelder ('57)	7-20-33W	80	8,615	40,527	2		Morrowan	4,672	23	
Shallow Water ('35)	15-20-33W	900	17,105	1,971,848	6	1	Marmaton	4,286		25
							Mississippian	4,660		
							Ste. Gen.	4,670	16	
Shallow Water Northeast ('59)	12-20-33W	40	4,585	11,050	1		Cherokee	4,432	5	
Total Scott County		1,340	67,758	2,372,824	18	8				
SEDGWICK COUNTY										

Bartholomew* ('48)	30-27-4W	2,000	87,853	2,982,963	66		Kansas City	3,270	10	
			Includes Kingman County Production				Mississippian	3,732	25	
Bentley ('29)	24-25-2W		no report	22,250			Kansas City	2,866	24	
Brumley ('55)	19-29-1E	220	12,504	100,997	3		Lans.-K.C.	2,863	2	
							Mississippian	3,352	8	
							Simpson	3,754	1	
Butwick* ('49)	7-26-3E		no report	955			Mississippian			
							"Hunton"	3,192	2	
Buzzi ('58)	32-25-1E	320	55,626	96,314	8		"Hunton"	3,436	1	
Chambers ('48)	10-29-2W	100	5,297	123,067	2		Kansas City	2,916	5	
							Mississippian	3,540	4	44
Chambers Northeast ('56)	2-29-2W	200	16,134	136,789	5		Mississippian	3,570	5	
Clearwater ('44)	22-29-2W	200	10,747	212,455	5		Lans.-K.C.	2,913	11	
Cross ('29)	27-25-1W	40	6,789	122,337	1		Lans.-K.C.	2,690	40	36
							"Hunton"	3,574	5	
Curry ('47)	11-27-1W	460	33,098	782,758	17		Lans.-K.C.	2,715		
							Viola	3,400		
DuBois* ('57)	3-25-2E	1,200	261,341	931,774	40	1	"Burgess"	3,830	8	
Eastborough ('29)	19-27-2E	940	31,536	9,251,939	14		"Chat"	2,956		
							Viola	3,238		
Eastborough North ('52)	8-27-2E	40	1,459	42,289	1		Arbuckle	3,376	25	
Fairview ('48)	8-26-2E	280	9,325	434,712	5		Lans.-K.C.	2,500		44
							"Burgess"	2,960	2	
							Mississippian	2,991	4	
Fairview North ('48)	5-26-2E	60	4,005	162,024**	2		"Burgess"			
Fairview Northeast ('59)	4-26-2E	520	32,536	50,854	9		"Burgess"	2,904	7	42
			5,418		1		Mississippian	2,860	3	
Furley ('58)	10-25-2E	340	31,932	141,090	15	1	"Burgess"	2,857	13	40
Gehring-Rick ('52)	16-28-2E	80	2,023	26,847	2		Mississippian	2,950		40
Gillian ('61)	33-29-1W	40	1,087	1,087	1		Simpson	3,724	7	43
Gladys ('54)	30-28-1E	37,200	689,502	8,983,977	231		Lans.-K.C.	2,773	9	40
							Mississippian	3,176		
Gladys South ('55)	5-29-1E		no report	10,131			Mississippian	3,194	16	
Gladys Southeast ('55)	4-29-1E	80	910	18,801	2		Mississippian	3,150	15	
Goodrich ('28)	16-25-1E	900	114,732	5,383,040	31	3	Lans.-K.C.	2,614	2	
							"Chat"	3,010	16	
							"Kinderhook"	3,334		
							Arbuckle	3,339	3	
Greenwich ('29)	14-26-2E	1,600	156,155	13,068,330	43	1	"Chat"	2,885	3	
							Viola	3,321	5	
Hohn ('45)	22-27-1W	40	2,203	152,941	1		Lans.-K.C.	2,779	5	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Kechi ('29)	13-26-1E		no report	34,321			"Burgess"	3,009	2	
Kuske ('29)	24-25-1E	720	26,753	1,029,400	17	1	"Burgess"	3,016	1	41
Latta North ('56)	33-29-2W	40	3,002	22,864	1		Lans.-K.C.	3,117	5	
Luening ('51)	33-26-2E	40	2,241	28,067	1		Simpson	3,338	8	37
Minneha ('51)	11-27-2E	80	3,383	77,899	2		Arbuckle	3,247	4	34
Minneha North ('60)	2-27-2E	40	5,897	11,760	1	1	Simpson	3,258	25	
			4,383		1		Arbuckle	3,285	7	40
Neuman ('57)	11-25-2E	140	16,963	78,928	6	1	"Burgess"	2,785	5	
							Mississippian	2,784	2	
Petrie ('45)	36-26-1W	40	9,161	175,708	1		Viola	3,387	1	
Petrie Northwest ('51)	35-26-1W		no report	42,135			Viola	3,445	2	
Robbins ('29)	20-28-1E	860	124,467	5,285,464	45		Mississippian	3,090	12	39
Schulte ('47)	7-28-1W		no report	199,626**			Mississippian	3,349		45
							Simpson	3,658		
Schulte South ('55)	18-28-1W	40	2,579	27,240**	1		Mississippian	3,390	11	
Ulmer ('59)	28-25-2E		no report	none			"Burgess"	2,908	10	
Ulmer South ('59)	33-25-2E	240	48,619	90,933	6		"Burgess"	2,917	4	38
Valley Center ('28)	1-26-1W	1,000	57,991	22,423,371**	20		Lans.-K.C.	2,860		
							"Kinderhook"	3,380		
							Viola	3,366	2	
White Cotton ('48)	30-26-2E	560	16,437	643,542	10		"Burgess"	2,957	2	
Wichita ('57)	4-27-1E	1,000	269,280	1,456,914	44	4	Viola	3,325	4	
							Simpson			
Pools or fields abandoned				59,863						
Total Sedgwick County		51,660	2,163,368	74,928,756**	661	13				
SEWARD COUNTY										
Adamson ('58)	11-34-34W	600	1,028	2,885	3		Chesteran	6,064		
Ang ('61)	3-32-33W	80	2,525	2,525	1		Mississippian	5,650	2	35
Arkalon ('60)	36-33-32W	80	295	295	1		Chesteran	5,710		
Blue Bell Northwest ('54)	20-34-31W	80	124	124	1		Mississippian	5,947		
Evalyn ('60)	15-33-33W	300	37,958	37,958	4		Mississippian	5,822	10	37
Hawks ('52)	18-35-31W		no report	2,467			Morrowan	5,927		
Holt ('54)	28-32-34W	40	155	842	1		Shawnee			
Hopkins* ('60)	34-30-33W		no report	none			Mississippian	5,378	7	30

Kismet* ('48)	23-33-31W	1,200	342,293	418,527	29		Marmaton	5,095		38
							Morrowan	5,576	5	34
Kismet Northwest ('53)	10-33-31W	40	372	2,452	1		Morrowan	5,584		
Kneeland ('51)	23-34-31W	40	713	12,726	1	2	Marmaton	5,332	14	41
							Mississippian	5,691	6	
Liberal-Light ('51)	11-35-32W	1,700	4,604	239,229	12		Lans.-K.C.	5,103		40
							Morrowan	6,005		
Liberal Southeast ('47)	15-35-33W	200	2,701	107,327	5		Morrowan	6,202		
Massoni ('58)	4-33-31W	100	275	8,299	3		Marmaton	5,031	10	38
Plains West ('56)	16-32-31W	40	no runs	1,710	1		Morrowan	5,600	14	
Shuck ('55)	20-33-34W	80	460	4,443	2		Morrowan	5,987		
							Mississippian	6,038	13	
Thirty-One ('53)	18-31-31W	40	no runs	2,847	1		Morrowan	5,448		
Thirty-Three ('60)	33-33-33W	40	22,678	37,230	1		Chesteran	5,898	13	40
Thirty-Two ('60)	1-32-32W	80	1,098	1,098	1		Morrowan	5,499		
Three Star ('58)	17-35-32W	80	1,323	5,808	2		Lans.-K.C.	4,546		
							Morrowan	5,866		
							Chesteran	6,089		
Wide Awake ('54)	4-35-34W	80	1,962	11,957	2		Toronto			
							Mississippian			
Total Seward County		4,900	420,564	900,749	72	2				

SHERIDAN COUNTY

Adell ('44)	11-6-27W	1,900	170,540	5,246,830	50	Lans.-K.C.	3,755	4	42
Advance ('56)	26-8-27W	40	4,828	64,444	1	Lans.-K.C.	3,883	9	41
Custer ('55)	12-10-26W	100	10,468	74,719	3	Lans.-K.C.	4,024	5	39
Custer Northwest ('59)	2-10-26W	40	7,525	15,640	1	Lansing	3,849	3	42
George ('52)	17-9-26W	100	7,251	100,263	3	Lans.-K.C.	4,023	11	31
George Southwest ('58)	18-9-26W	40	4,856	25,252	1	Lansing	3,860	10	
Hortonville ('53)	20-6-26W	80	8,841	82,989	2	Lans.-K.C.	3,789	23	29
Hoxie ('56)	6-9-28W	140	33,749	168,583	4	Toronto	3,810	6	
			8,678		1	Lansing	3,901	3	
Parnell ('59)	30-7-29W	40	no runs	1,060	1	Lansing	3,972	6	28
Studley ('43)	23-8-26W	320	29,568	607,049	6	Lans.-K.C.	3,810	9	47
Studley South ('59)	27-8-26W		no report	2,087		Lansing	3,746	2	27
Studley Southeast ('55)	26-8-26W	80	2,486	31,301	1	Lans.-K.C.	3,872	8	37
Studley Southwest ('45)	32-8-26W		no report	120,491		Lans.-K.C.	3,758	26	37
Wessel ('53)	27-6-29W		no report	115,562		Lans.-K.C.	3,985	4	38
Wessel North ('53)	16-6-29W	100	4,895	57,920	2	Lans.-K.C.	4,081	4	
Pools or fields abandoned				954					
Total Sheridan County		2,980	293,685	6,715,144	76				

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Producing zone Depth ft	Producing zone Thickness, ft	Producing zone Aver. grav.
SHERMAN COUNTY										
Llanos ('58)	10-6-37W	160	84,898	357,184	9		Kansas City	4,439	12	36
							Marmaton	4,504	5	37
							Cherokee	4,804	8	22
STAFFORD COUNTY										
Albano ('57)	12-25-14W	80	12,670	82,359	2		Lans.-K.C.	3,812	6	
							Mississippian		10	
							Viola	4,099	16	
							Arbuckle	4,270		
Bart-Staff* ('51)	4-21-14W	160	14,785	307,766	4		Lans.-K.C.			
							Arbuckle	3,572		40
Bayer ('51)	16-21-14W	640	5,755	564,739	1	1	Lans.-K.C.	3,543	4	31
			2,741		1		Viola	3,702	10	
			65,073		8		Simpson	3,736	13	
							Arbuckle	3,778		
Bedford ('40)	21-23-12W	640	15,027	1,849,748	9		Simpson	3,832	16	
							Arbuckle	3,859	9	36
Besthorn ('56)	9-22-13W		no report	none			Lansing	3,574	8	
Brenn ('54)	19-23-13W	620	27,055	348,158	9		Lans.-K.C.	3,651	6	33
Brock ('44)	12-23-12W		no report	437,146			Lans.-K.C.	3,366	14	
							Arbuckle	3,680	4	20
Byron East ('54)	3-21-12W		no report	none			Arbuckle	3,478	5	
Byron Southeast ('51)	10-21-12W	40	no runs	59,862	1		Arbuckle	3,500	3	
Centerview ('54)	28-24-13W	360	33,476	332,746	11	1	Lans.-K.C.	3,834	6	
							Arbuckle	4,188	5	
Cephas ('53)	10-25-14W	360	41,303	383,166	10	1	Lans.-K.C.	3,701	5	
							Viola	4,114	8	38
Cephas North ('54)	35-24-14W	80	1,268	38,417	2		Lans.-K.C.	3,794	9	35
Chase-Silica* ('31)	32-19-9W	680	21,493	582,291	14	2	Arbuckle	3,383	10	40
Cleveland ('53)	21-23-14W	80	1,086	39,824	2		Lans.-K.C.	3,690	7	
Cline ('58)	25-24-13W	40	8,417	29,099	1		Lans.-K.C.	3,594	3	
Cline South ('61)	36-24-13W		no report	none			"Kinderhook"	3,913	9	
Crissman ('52)	16-23-14W	400	20,387	323,182	10		Lans.-K.C.	3,664	8	34

							Simpson	3,984	16	
							Arbuckle	4,006	6	
Curtis ('42)	6-22-13W	700	53,249	1,562,593	23		Lans.-K.C.	3,514	7	30
							Arbuckle	3,693		
Dell ('50)	7-21-13W	100	2,642	124,548	2		Lans.-K.C.	3,446	13	30
Dell East ('51)	5-21-13W	280	28,859	669,542	12	1	Lans.-K.C.	3,471	8	36
							Arbuckle			
Dell Northeast ('51)	5-21-13W	80	2,681	37,103	2		Lans.-K.C.	3,438		36
							Arbuckle	3,612	3	
Dillwin ('56)	16-24-14W	780	114,532	945,074	19	1	Arbuckle	4,295	6	31
Drach ('37)	12-22-13W	1,400	188,405	7,259,422	39	2	Simpson	3,642	5	
							Arbuckle	3,690	12	35
Emerson ('57)	29-25-14W	80	3,912	27,446	2		Lans.-K.C.	3,905	10	32
Farmington ('43)	34-24-15W	380	11,074	1,256,739	8	2	Lans.-K.C.	3,769		
							"Kinderhook"			39
							Simpson	4,378	6	
							Arbuckle	4,417	16	
Farmington North ('56)	23-24-15W		no report	none			Viola	4,227	12	21
Farmington Northeast ('55)	26-24-15W	260	39,590	119,892	6		Arbuckle	4,416	12	34
Farmington Northwest ('56)	29-24-15W	40	3,747	37,434	1		Lans.-K.C.	3,904	8	25
							"Kinderhook"	4,272	10	
Foley ('61)	18-25-14W	160	23,165	39,162	4		Lans.-K.C.	3,727	59	32
			15,997		2		Viola	4,214	12	21
Frey ('50)	7-21-14W	340	39,527	969,260	9	3	Arbuckle	3,717	7	40
Gates ('33)	27-21-13W	6,000	668,079	12,506,319	151	2	Lans.-K.C.	3,530		38
							Penn. congl.	3,643		
							Viola	3,635		
							Arbuckle	3,679	37	39
German Valley (revived) ('61)	4-22-12W	120	52,706	95,061	3		Viola	3,541	2	38
							Arbuckle	3,635	2	40
Glasscock ('59)	32-24-13W	200	39,583	91,782	6		Lansing	3,642	10	
			13,428		2		Arbuckle	4,233	3	
Glen ('54)	14-23-14W	60	16,493	70,274	2		Lans.-K.C.	3,651	6	
Gray ('46)	11-24-13W	80	2,007	64,441	2		Lans.-K.C.	3,672		30
Green Ridge ('53)	30-23-14W	40	2,638	29,115	1		Lans.-K.C.	3,788	22	31
Green Valley ('53)	2-23-14W	40	no runs	28,221	1		Lans.-K.C.	3,640	10	40
Grow ('49)	16-21-13W	400	26,512	605,263	10		Lans.-K.C.	3,463	7	35
							Arbuckle	3,705		
Grunder ('58)	11-25-15W	400	2,177	162,526	1	2	Lans.-K.C.	3,945	15	
			70,366		10		Mississippian	4,173		
			1,904		1		Arbuckle	4,424	4	32
Grunder Southwest ('59)	15-25-15W		Combined with Haynes				Lansing	3,784	3	
							Mississippian	4,200	7	36

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
H A H ('58)	17-24-13W	40	2,636	21,854	1		Lans.-K.C.	3,658	8	
Hahn East ('57)	22-22-13W		no report	6,558			Arbuckle	3,828	5	22
Hammond ('57)	9-25-14W	160	10,357	96,419	4		Lans.-K.C.	3,924	15	36
Happy Valley ('52)	15-23-13W	80	6,383	54,238	2		Lans.-K.C.	3,430	60	
							Arbuckle	3,810	9	35
Happy Valley Northeast ('55)	11-23-13W		no report	59,018			Arbuckle	3,857	10	31
Harter ('50)	30-24-13W	160	3,369	124,774	4		Lans.-K.C.	3,767		39
							Simpson	4,167		
							Arbuckle	4,181		34
Harter North ('56)	19-24-13W	80	5,617	53,017	2	1	Lans.-K.C.	3,785	5	32
Haynes ('59)	22-25-15W	500	58,585	85,054	12		Lansing	3,784	3	
							Mississippian	4,232	9	35
Haynes East ('60)	23-25-15W	40	2,039	3,649	1		Mississippian	4,254	16	38
Haynes Southwest ('59)	27-25-15W	40	31	31	1		Cherokee	4,254		
Hazel ('42)	21-21-13W	640	22,716	1,058,629	20		Lans.-K.C.	3,380		
							Arbuckle	3,692	9	37
Hazel West ('50)	20-21-13W	640	55,231	1,421,160	24	1	Lans.-K.C.	3,488	6	
							Arbuckle	3,673	5	35
Helene ('59)	17-22-12W	40	613	30,946	1	1	Arbuckle	3,691	4	35
Heyen ('43)	24-22-12W	400	44,524	947,792	12	2	Lans.-K.C.	3,321	12	
							Arbuckle	3,652	2	39
Hickman ('51)	27-21-14W	640	33,899	1,095,286	21		Lans.-K.C.	3,522	10	24
							Simpson		6	
Hickman South ('52)	34-21-14W	40	no runs	45,875	1	1	Lans.-K.C.	3,567	8	37
Hickman West ('59)	33-21-14W	160	46,041	98,841	5		Lansing	3,419	5	34
Hudson South ('61)	4-23-12W	40	1,271	1,271	1		Viola	3,602	23	40
Hufford ('48)	33-21-13W	440	50,554	1,238,011	15		Lans.-K.C.	3,499		30
							Arbuckle	3,755	7	
Jordan ('36)	15-25-14W	420	37,624	1,152,327	12		Lans.-K.C.	3,722	5	34
Kachelman ('50)	7-25-13W	120	14,680	108,276	4	2	Lans.-K.C.	3,946		
							Viola	4,075		33
							Arbuckle	4,294		
Keeley ('59)	5-21-14W	60	3,716	20,070	2		Lansing	3,322	5	26
Keenan ('57)	20-22-13W	100	8,893	28,810	3		Lans.-K.C.	3,572	6	30
Kelly West ('59)	34-23-12W	40	3,882	12,741	1		Lansing	3,396	6	34

Kenilworth ('47)	15-22-13W	400	27,763	618,378	10		Lans.-K.C.	3,505		34
							Arbuckle	3,808		
Kipp ('37)	27-25-14W	200	9,586	724,520	4		Lans.-K.C.	3,827	79	32
							Simpson	4,213	6	
Kipp North ('54)	23-25-14W	80	5,838	84,406	2		Lans.-K.C.	3,748	10	32
Kipp Northeast ('46)	23-25-14W	120	8,909	295,939	3		Lans.-K.C.	3,844		32
Kipp Southwest ('57)	28-25-14W	140	12,363	80,012	5		Lans.-K.C.	3,850	8	34
Knoche South ('57)	17-24-12W	180	36,823	95,020	6		Viola	3,872	5	
Koelsch ('52)	24-24-14W	360	14,946	359,151	9		Lans.-K.C.	3,750	8	35
Koelsch Southeast ('52)	25-24-14W	100	8,201	515,055	2		Simpson	4,181	4	41
							Arbuckle	4,187		
Koelsch West ('59)	23-24-14W	40	5,965	18,920	1		Lansing	3,612	4	34
Kowalsky* ('41)	32-20-11W	200	55,198	390,042	6		Lans.-K.C.	3,279		50
Kowalsky Southwest ('50)	6-21-11W	440	33,348	346,941	12		Penn. congl.	3,404	6	
							Simpson	3,398	23	
							Arbuckle	3,424		46
Krankenberg ('56)	19-22-12W		no report	6,158			Simpson	3,711	5	38
Leesburgh ('38)	12-25-13W	700	113,195	3,102,916	13		Lans.-K.C.	3,837	30	
							Simpson	4,060	24	38
			5,627		1		Arbuckle	4,153	10	
Leiss ('56)	23-25-13W	80	4,220	50,966	2		Simpson	4,215	7	40
Leiss Southeast ('61)	25-25-13W	40	1,771	1,771	1		Lans.-K.C.	3,646	6	32
Leo ('50)	7-21-13W	120	3,863	109,682	3		Lans.-K.C.	3,475		26
							Arbuckle	3,636	4	
Lincoln ('51)	29-21-14W	180	14,072	263,890	5		Lans.-K.C.	3,543	8	33
							Simpson	3,739	4	31
McCandless ('44)	30-25-13W	800	100,628	1,666,534	16		Lans.-K.C.	3,863		
			67,663		8		Simpson	4,251	16	37
McCandless Northeast ('60)	20-25-13W	100	10,779	31,556	2		Simpson	4,250	10	35
			16,497		3		Arbuckle	4,322	5	35
McGinty Northwest ('51)	14-21-14W		no report	33,444			Lans.-K.C.	3,483	5	31
Macksville ('60)	3-24-15W	580	63,336	121,542	11		Lans.-K.C.	3,735	6	
Macksville East ('54)	14-24-15W	80	2,970	79,469	2		Viola	4,126	20	37
			17,942		3		Arbuckle	4,091	4	
Macksville Townsite ('61)	15-24-15W		no report	none			Simpson	4,153	10	35
Max ('38)	35-21-12W	5,000	288,234	8,732,035	90	1	Lans.-K.C.	3,356	16	35
							Simpson	3,615	2	
							Arbuckle	3,570	7	
Max East ('61)	6-22-11W	40	758	758	1		Arbuckle	3,551	17	30
Max North ('58)	26-21-12W	80	10,240	55,654	2		Arbuckle	3,590		
Merle ('49)	32-23-13W	400	3,445	342,717	10		Lans.-K.C.	3,669	10	34
Moody ('56)	7-25-14W	580	140,096	513,910	20		Mississippian	4,168	14	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Mopac ('54)	30-24-11W	200	22,200	211,681	7	1	Viola	3,908	5	
Morning Star ('58)	1-25-14W	320	6,709	208,252	1		Lans.-K.C.	3,664	3	
			70,378		10		Mississippian	4,025	18	
			9,667		2		Arbuckle	4,280		
Mt. View ('52)	29-22-13W	120	21,584	163,442	3		Lans.-K.C.	3,641	8	36
							Arbuckle	3,858		
Mueller ('38)	29-21-12W	4,500	301,470	8,473,177	87	2	Lans.-K.C.	3,356		
							Arbuckle	3,594	8	36
Nagel ('58)	10-24-15W	Combined with Macksville					Lans.-K.C.	3,735	6	
Nellie East ('60)	27-22-14W	40	8,896	15,725	1		Lans.-K.C.	3,503	7	30
Neola ('48)	15-25-11W	80	2,122	46,124	2		Viola	3,921	4	40
Newell ('53)	7-25-11W	160	8,052	95,932	3		Lans.-K.C.	3,537	3	36
							Viola	3,913	3	
North Star ('52)	27-24-12W	80	3,171	358,992	2	3	Viola	3,915	16	40
							Simpson	4,063	9	
O'Connor ('48)	8-24-15W	40	1,292	33,159	1		Lans.-K.C.	3,768	11	29
							Simpson	4,022	23	31
Omlor ('57)	10-22-14W	120	18,744	78,416	3		Lans.-K.C.	3,550	9	35
Oscar ('49)	24-22-14W	100	2,800	210,773	2		Lans.-K.C.	3,503		35
							Viola	3,777	7	
							Arbuckle	3,798	9	
Oscar North ('51)	14-22-14W	400	50,849	858,345	11	1	Arbuckle	3,780	3	35
Oscar South ('53)	26-22-14W	440	10,743	200,775	5		Lans.-K.C.	3,580		
							Arbuckle	3,817	2	
Oscar West ('52)	22-22-14W	900	104,333	1,035,812	23		Lans.-K.C.	3,593	8	35
Pleasant Grove ('52)	26-22-12W	300	19,246	202,335	7		Lans.-K.C.	3,462	8	37
Praeger ('59)	36-24-15W	400	44,990	146,218	10		Mississippian	4,209	5	
							Arbuckle	4,392	6	35
Prairie Home South ('53)	11-21-13W	40	491	25,496	1		Lans.-K.C.	3,395	3	35
Pritchard* ('44)	34-20-14W	340	21,805	395,383	6		Lans.-K.C.	3,483		
							Arbuckle	3,579	4	
Pundsack ('47)	19-21-13W	1,600	96,580	2,022,904	35	1	Lans.-K.C.	3,575	8	27
							Arbuckle	3,735	8	
Pundsack North ('50)	18-21-13W	100	6,265	164,718	3		Lans.-K.C.	3,494	8	
							Arbuckle	3,674	7	26
Radium Townsite ('53)	5-22-14W	640	110,887	759,025	17	1	Lans.-K.C.	3,584	6	28
							Viola	3,754	12	

							Simpson	3,820	6	
							Arbuckle	3,852	20	28
Radke ('53)	25-23-14W	40	no runs	19,392	1		Lans.-K.C.	3,688	12	35
Radke East ('54)	24-23-14W	40	1,285	18,666	1		Lans.-K.C.	3,676	4	28
Rattlesnake ('38)	13-24-14W	120	3,512	229,842	3		Lans.-K.C.	3,608	48	32
Rattlesnake East ('56)	7-24-13W	160	12,587	147,812	3	2	Lans.-K.C.	3,694	6	35
							Mississippian	3,880	4	
Rattlesnake North ('59)	2-24-14W	40	no runs	8,563	1		Penn. congl.	3,964	18	35
Rattlesnake Southeast ('54)	13-24-14W	340	14,610	203,726	2		Lans.-K.C.	3,758	6	35
			66,570		8		Mississippian	3,936	6	
Rattlesnake Southwest ('50)	14-24-14W	40	5,777	136,156	1		Lans.-K.C.	3,760		35
Rattlesnake West ('44)	11-24-14W	120	6,301	202,850	3		Lans.-K.C.	3,759	7	37
							Mississippian	4,025		•
Richardson ('30)	36-22-12W	1,500	280,057	15,031,090	61		Lans.-K.C.	3,264		42
							Arbuckle	3,537	62	
Riley ('40)	28-23-11W		no report	147,193			Lans.-K.C.	3,323	15	30
Rolling Green* ('60)	36-20-13W		no report	none			Lansing	3,238	55	
Rolling Green East* ('49)	30-20-12W	40	4,569	5,946	1		Arbuckle	3,491	6	35
Rose Valley ('52)	36-25-13W	40	1,979	49,012	1		Lans.-K.C.	3,824	6	
							Viola	4,137	13	
Rothgarn ('43)	10-21-13W	700	41,454	458,301	11		Lans.-K.C.	3,369		37
							Arbuckle	3,569	5	
Rothgarn Southeast ('50)	14-21-13W	160	15,456	279,239	4		Lans.-K.C.	3,378		37
							Arbuckle	3,544	7	
Rugan ('61)	2-21-11W	40	589	589	1		Arbuckle	3,374	4	47
St. John ('35)	23-24-13W	840	66,947	2,994,763	15	1	Lans.-K.C.	3,588	32	38
							Arbuckle	4,075	12	
St. John East ('59)	24-24-13W		no report	3,625			Lansing	3,543	6	
St. John North ('52)	20-23-13W		no report	26,537			Lans.-K.C.	3,603	4	38
St. John Northwest ('52)	20-23-13W	200	23,337	142,851	8		Lans.-K.C.	3,644	6	33
							Arbuckle	3,956		
St. John Townsite ('44)	33-23-13W	260	8,288	484,486	5	1	Lans.-K.C.		5	
							Arbuckle	3,919	5	
Salt Marsh (revived) ('61)	32-21-11W	40	1,851	1,851	1		Lans.-K.C.	3,132	220	26
Sandago ('47)	12-21-12W	240	12,089	213,960	6	1	Arbuckle	3,480	9	32
Sand Hills ('44)	19-21-11W	700	82,006	397,614	13		Lans.-K.C.	3,189	6	
							Viola	3,434	8	50
							Simpson	3,481	5	
							Arbuckle	3,548	10	36
Saterlee ('54)	31-24-14W	180	9,546	107,188	4	3	Penn. congl.	4,166	13	36
							Mississippian	4,172	6	35
							Arbuckle	4,385	4	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
[illegible] ('16)	11-21-12W	700	33,269	423,381	11	1	Lans.-K.C.	3,282		37
							Arbuckle	3,546	18	
Seevers ('54)	6-25-13W	160	19,695	134,529	4		Lans.-K.C.	3,893	49	30
Seevers Northwest ('56)	6-25-13W	700	243,871	882,013	28		Lans.-K.C.	3,826	3	
							Mississippian	4,042	8	
							Arbuckle	4,192	4	30
Shaeffer ('41)	3-21-13W	680	74,529	1,055,655	17	1	Lans.-K.C.	3,404		40
							Penn. congl.	3,519		
							Simpson	3,536		
							Arbuckle	3,546	4	
Shaeffer Northeast* ('60)	35-20-13W	120	15,669	20,048	3		Lans.-K.C.	3,259	5	28
							Arbuckle	3,525	18	40
Shepherd ('51)	16-22-11W	300	10,215	365,926	7		Arbuckle	3,548	35	40
Shepherd North ('54)	9-22-11W	140	11,047	90,124	3		Lans.-K.C.	3,297	5	40
							Penn. congl.	3,446	8	
Shepherd Northwest ('56)	8-22-11W	40	4,602	40,057	1	1	Simpson	3,528	8	40
							Arbuckle	3,516	12	
Sieker* ('60)	5-21-12W	Combined with Rolling Green East					Arbuckle	3,458	7	
Silver Bell ('49)	10-22-13W	120	24,558	226,546	3		Lans.-K.C.	3,498		30
							Arbuckle	3,774	11	
Sittner ('37)	33-21-12W	300	13,823	860,162	5	1	Lans.-K.C.	3,278	36	38
							Arbuckle	3,600	9	
Slade South ('61)	35-25-12W		no report	none			Viola	4,048	27	39
Smallwood ('51)	2-22-14W	800	39,709	1,041,012	17	1	Lans.-K.C.	3,474	29	32
							Arbuckle	3,576	11	
Snider ('36)	3-21-11W	1,200	114,038	782,446	18	2	Penn. congl.			
							Simpson	3,362	26	
							Arbuckle			43
Snider South ('38)	16-21-11W	540	81,748	1,919,702	11	2	Simpson	3,402	6	34
			4,055		1		Arbuckle			
Spangenberg ('43)	21-22-12W		no report	84,508			Arbuckle	3,691	6	37
Stafford ('40)	15-24-12W	380	8,914	3,722,290	4		Viola	3,836	14	41
							Arbuckle	3,945	10	
Steve ('60)	24-21-12W	40	1,335	1,335	1		Arbuckle	3,556	23	35
Strobel ('52)	9-22-14W	240	19,154	163,874	8		Lans.-K.C.	3,659	4	37
							Simpson			
							Arbuckle	3,864	8	

Strobel Northwest ('52)	8-22-14W	40	5,121	52,199	1		Simpson	3,852	2	
							Arbuckle	3,874		
Sutton ('54)	21-22-14W	120	8,267	70,617	3		Lans.-K.C.	3,638	3	34
Syms Southeast ('52)	27-21-12W	120	12,325	99,473	3		Arbuckle	3,565	5	
Taylor ('52)	15-21-14W	140	19,709	129,814	4	1	Lans.-K.C.	3,482	5	
							Viola	3,690	10	
							Simpson	3,688	4	36
Taylor Northeast ('57)	11-21-14W	340	115,740	297,918	12		Lans.-K.C.	3,462	6	
Taylorville ('53)	29-25-12W		no report	28,763		1	Viola	4,006	15	37
Taylor West ('59)	16-21-14W		no report	4,400			Simpson	3,704	4	32
Van Lieu East ('60)	21-24-13W	40	2,584	6,422	1	1	Arbuckle	4,072	2	37
Van Winkle Southeast ('50)	26-21-14W	80	5,059	107,276	2	1	Lans.-K.C.	3,569	8	31
Vogel ('60)	10-25-11W	40	8,716	11,994	1		Lans.-K.C.	3,442	7	35
Waters ('58)	33-24-14W		no report	2,296			"Kinderhook"	4,153	4	37
Waters East ('59)	33-24-14W		no report	952		1	Lansing	3,683	4	36
Wendelburg ('51)	19-23-11W		no report	19,381			Arbuckle	3,729	4	37
White Cloud ('56)	28-22-11W	40	341	34,268	1	1	Simpson	3,575	5	
							Arbuckle	3,636	2	39
Widener ('54)	26-21-12W	280	27,026	199,166	11		Arbuckle	3,574	7	41
Wil* ('57)	26-25-16W	200	34,042	67,047	6		"Kinderhook"	4,324		
Wood ('53)	33-22-14W	120	4,758	78,708	3		Lans.-K.C.	3,693	12	28
							Simpson	3,932	50	28
							Arbuckle	3,965		
Zenith-Peace Creek* ('37)	23-24-11W	5,300	266,268	40,932,158	91		Lans.-K.C.	3,481		
							Viola	3,860		41
Pools or fields abandoned				769,995						
Total Stafford County		62,120	6,002,552	150,259,574	1,483	59				

STANTON COUNTY

Beauchamp ('59)	23-30-41W	40	3,041	10,954	1		Mississippian	5,337	6	39
Shore ('59)	22-30-40W	40	14,315	32,802	1		Mississippian	5,316	49	45
Sparks* ('54)	34-30-42W	220	7,997	41,905	7		Morrowan	5,254		
Total Stanton County		300	25,353	85,661	9					

STEVENS COUNTY

Cutter ('61)	1-31-35W	820	45,971	45,971	5		Marmaton	4,778	27	37
							Morrowan	5,200	2	41
							Mississippian	5,454	16	

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Cutler South ('61)	27-31-35W	100	8,985	8,985	2		Mississippian	5,780	31	41
Perrill ('59)	7-31-37W	120	9,035	18,205	3		Morrowan	5,326		
Walkemeyer ('59)	35-33-36W	40	731	731	1		Morrowan	6,145		
Total Stevens County		1,080	64,722	73,892	11					
SUMNER COUNTY										
Anson ('48)	35-30-2W	740	87,715	857,154	30	1	Lans.-K.C.	3,264		
							Mississippian	3,742	13	
Anson Southeast ('58)	12-31-2W	1,280	200,400	438,314	22		Lans.-K.C.			
							Mississippian	3,738	14	
Ashton ('54)	19-34-2E	120	3,344	52,873	3	1	"Cleveland"	3,210	22	34
Ashton Northwest ('59)	13-34-1E	120	24,243	42,707	3		Mississippian	3,584	12	
Attebery ('59)	20-33-1W	120	21,287	40,508	3		Simpson	4,282	4	45
Badger Creek ('58)	1-34-1E	80	8,225	42,958	2		Simpson	3,966	6	
Beatie ('56)	21-31-2W		no report	18,381			Simpson	4,189	3	
Bellman ('45)	15-30-1E	80	18,249	372,445	2		Simpson	3,798	5	
Bellman West ('57)	16-30-1E		no report	19,874			Simpson	3,801	9	
Belsley ('60)	13-31-2W		Combined with	Anson Southeast			Mississippian	3,757	9	
Bitter Creek ('53)	1-35-1E	340	47,619	401,588	10		"Stalnaker"	2,353	13	
							Mississippian	3,500	15	37
Caldwell ('29)	17-35-3W	160	3,087	1,691,171	4	1	Mississippian	4,408	8	
							Simpson	4,765	19	
Caldwell Northwest ('52)	8-35-3W		no report	61,790			Simpson	4,835	20	39
Churchill ('26)	25-31-2E	1,000	33,735	20,026,336	18		"Stalnaker"	1,820	25	
							"Layton"	1,874	1	
							Arbuckle	2,632	24	
Cole ('60)	24-31-4W	240	53,136	79,537	6		Simpson	4,403	4	47
Conway Springs ('59)	5-31-3W	480	182,804	303,557	11		Simpson	4,370	6	42
Corbin ('48)	23-34-2W		no report	37,286			Simpson	4,475		
Crowe ('58)	10-35-1W	40	325	3,302	1		"Layton"	3,245	5	
Fall Creek ('50)	3-35-3W	640	78,821	2,670,225	25		Lans.-K.C.	3,608	13	39
							Mississippian	4,282	10	
							Simpson	4,746	50	46
Gerberding ('54)	6-34-4W	80	8,546	115,701	3		Simpson	4,710	5	35
Guelph ('51)	6-35-1E	540	55,316	2,059,642	10		Lans.-K.C.	3,028	45	45

			116,621		13		Simpson	3,854	10	
			5,662		1		Arbuckle	3,969		
Harrington ('60)	24-30-3W		no report	none			"Burgess"	3,797	2	
Holman ('60)	26-33-2E	80	17,989	24,793	2		Mississippian	3,304	6	
Horsch ('58)	4-31-1W	40	4,069	16,590	1		Mississippian	3,664	8	
Interchange ('59)	19-32-1E	100	34,370	68,183	3		Simpson	4,053	7	42
Kerley ('59)	1-30-1W	40	1,956	6,387	1	1	Simpson	3,828	6	
Kerschen ('55)	17-31-3W	580	73,285	700,000	17	1	Lans.-K.C.	3,267		
							Mississippian	3,912	10	
Latta ('27)	9-30-2W	620	56,155	1,681,200	18		Lans.-K.C.	3,042	14	
							Mississippian	3,656	12	
Latta Northwest ('56)	5-30-2W	380	87,372	254,870	12		Kansas City	3,172	4	
Lee ('51)	33-32-2E	240	13,292	153,426	6		Mississippian	3,349	8	
McIlhenny ('58)	1-31-4W	40	2,997	12,847	1		Kansas City	3,575	3	
Margaret ('46)	36-32-2E	80	6,658	121,524	2	1	Arbuckle	3,474		
Markley ('58)	22-30-1E	300	92,348	228,035	10		Simpson	3,809	5	
Mayfield ('57)	19-32-2W	80	3,015	30,507	2		Simpson	4,278	5	
Meils ('60)	5-34-2E	100	11,426	20,963	3		"Bartlesville"	3,435	8	
							Mississippian	3,459	9	
Metz ('51)	7-32-2E		no report	56,080			Simpson	3,735	6	37
							Arbuckle	3,773	4	
Milan ('60)	2-32-3W	40	148	148	1		Mississippian	3,909	12	
Moyer ('58)	12-31-3W	150	20,105	92,012	5		Kansas City	3,344	2	
Moyer Northwest ('59)	2-31-3W	140	19,690	53,998	5		Kansas City	3,173	2	38
Murphy* ('33)	7-35-3E	4,000	195,673	5,344,723	212	5	"Layton"	2,808		
							"Bartlesville"	3,472	10	
Norris ('55)	3-34-2E		no report	10,693			"Layton"	2,785	3	30
O'Hara ('55)	18-32-1W	420	29,379	274,992	14		Lans.-K.C.	3,256	8	
Olive Branch ('60)	11-33-3W	140	60,960	90,929	4	1	Simpson	4,444	4	45
Oxford ('27)	14-32-2E	740	37,364	16,756,904	19	5	"Hoover"	1,930		
							"Stalnaker"	2,020	16	
							"Layton"	2,510	20	
							Arbuckle	2,890	5	
Oxford West ('26)	17-32-2E	300	16,520	908,598	8		Simpson	3,681		
							Arbuckle		31	
Padgett ('25)	12-34-2E	5,400	109,977	3,528,228	69	1	"Cleveland"	3,095		
							Marmaton	3,187	8	
							"Bartlesville"	3,424		
							Mississippian	3,474	16	
							Simpson	3,744		
Padgett West ('54)	21-34-2E		no report	9,584			"Layton"	2,829	8	34
							Mississippian	3,519		

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Depth ft.	Thickness, ft.	Aver. grav.
Perth ('15)	12-33-2W	500	37,756	1,267,404	8		Simpson	4,264	14	41
Portland ('50)	16-34-1E	360	39,241	732,308	9		"Layton"	3,030		
							Simpson	4,002	4	
Portland South ('56)	28-34-1E	80	13,196	64,744	3		"Layton"	3,040		
Priddy ('57)	35-33-1W	180	7,698	93,110	5	2	Simpson	4,332	3	
Rainbow Bend* ('25)	24-33-2E	40	304	453,806	1		Arbuckle			
Reynolds ('61)	9-30-2E		no report	none			Mississippian	3,160	9	
Rusk ('59)	8-32-1E	120	34,396	62,336	3		Simpson	4,007	10	42
Rutter ('26)	21-33-2E	400	9,923	245,592	9	4	"Bartlesville"	3,268	10	
							Mississippian	3,283		
							Arbuckle	3,413	10	
Rutter Southwest ('57)	29-33-2E	140	20,772	75,903	5	4	Simpson	3,551	5	
							Arbuckle	3,544	9	
Seydell ('58)	17-30-1E	680	23,541	663,383	3		Kansas City	2,747	6	
			205,621		27		Simpson	3,826	10	
Slate Creek ('52)	9-33-2E	40	3,711	54,520	1		Lans.-K.C.	2,804	12	
Slick-Carson* ('24)	19-32-3E	80	3,135		2		"Bartlesville"	3,124		
South Haven ('54)	2-35-1W	240	53,612	420,427	5		Simpson	4,189	5	37
Sparr ('61)	14-30-2W	40	5,260	5,260	1		Mississippian	3,773	13	44
Subera ('57)	22-34-3W	300	25,192	297,118	8		Simpson	4,740	4	
Trekell ('59)	19-31-1W	260	8,843	69,991	4		Mississippian	3,715	9	42
Val Verde ('45)	23-33-2E	40	286	9,801	1		"Bartlesville"	3,280	15	40
Voils ('58)	17-30-1W	40	4,956	21,062	1		Mississippian	3,499	13	
Walta ('59)	25-33-4W	140	37,446	76,275	4		Simpson	4,502	5	48
Wellington ('29)	33-31-1W	3,000	651,457	11,653,240	139		"Chat"	3,655	11	
Wellington Northeast ('55)	27-31-1W	340	59,517	502,114	17		Mississippian	3,659	5	
Wusk ('58)	18-31-1W		Combined with	Anson Southeast		1	Mississippian	3,711	4	
Zyba ('37)	7-30-1E	560	25,039	630,686	8		Simpson	3,866	3	30
Zyba Southwest ('44)	22-30-1W	400	60,627	1,654,835	9		Simpson	3,918	12	
Pools or fields abandoned				297,122						
Total Sumner County		28,050	3,175,412	79,132,600	855	29				
THOMAS COUNTY										
Kindig ('56)	30-8-32W		no report	11,867			Cherokee	4,595	31	
Lanisia ('59)	12-6-35W		no report	390			Tarkio	3,728	4	27

Mingo ('52)	19-9-32W	40	no runs	22,892	1	1	Marmaton	4,414		
							Mississippian	4,680		
Total Thomas County		40		35,149	1	1				

TREGO COUNTY

Adair ('53)	21-12-21W		no report	23,162			Marmaton	3,879	5	37
Adair Southwest ('56)	28-12-21W	40	422	11,161	1	1	Marmaton	3,856	10	
Bin ('58)	31-11-22W		no report	2,920			Lansing	3,776	6	
Cotton ('45)	15-12-21W	40	2,797	54,946	1		Arbuckle	3,958	34	30
Cotton East ('47)	14-12-21W	40	2,817	71,819	1	1	Arbuckle	3,942	6	40
Diebolt* ('53)	33-10-23W	640	43,002	691,571	14		Lans.-K.C.	3,779	6	35
Egger ('58)	12-13-21W	120	8,018	82,779	1		Lans.-K.C.	3,450	6	
			16,854		2		Arbuckle	3,825	3	
Ellis* ('42)	31-12-20W	1,280	66,291	834,211	16		Lans.-K.C.	3,632	4	
							Arb.-Reagan	3,832	8	
Ellis Northwest ('44)	26-12-21W	160	6,383	261,056	3		Arbuckle	3,925	2	35
Ellis Southwest ('59)	2-13-21W	40	3,746	10,691	1		Arbuckle	3,797	8	40
Groff ('52)	26-14-21W	1,200	88,396	888,828	23		Lans.-K.C.	3,493	10	36
							Marmaton	3,755	17	
							Penn. congl.	3,822	10	
Hixson East ('60)	20-11-22W	40	no runs	1,555	1		Marmaton	3,873	3	34
Homburg ('55)	11-13-21W	40	1,317	17,932	1	1	Marmaton	3,800	10	32
Kutina ('53)	29-15-21W	200	30,802	241,700	5		Mississippian	4,151		
Newcomer ('56)	12-12-23W	640	76,521	614,736	20		Lans.-K.C.	3,733	3	37
Newcomer Northwest ('56)	2-12-23W	520	93,262	518,072	15		Lans.-K.C.	3,763	5	38
Nicholson* ('45)	30-11-20W	40	1,037	19,095	1	1	Arbuckle	3,842	12	34
Ogallah ('51)	26-12-22W	3,700	613,618	6,236,996	75	4	Arbuckle	3,961	24	38
Ogallah Northwest ('57)	21-12-22W		no report	15,893			Lans.-K.C.	3,724	3	38
Rhoden ('56)	24-12-23W	200	9,732	115,824	6		Lans.-K.C.	3,764	6	32
Ridgeway ('52)	26-12-21W	400	17,203	328,350	7		Lans.-K.C.	3,693	13	36
							Arbuckle	3,896		
Riga Northeast ('57)	9-13-21W	100	8,249	38,795	3		Lansing	3,503	28	
							Arbuckle	3,915	2	39
Spaulding South ('54)	1-11-21W		Combined with Trico				Lans.-K.C.	3,538	4	35
Sunny Slope ('52)	21-14-21W	640	34,504	504,489	11		Marmaton	3,848	14	39
Sunny Slope Northwest ('58)	21-14-21W		no report	2,052			Penn. congl.	3,944	5	
Trico* ('51)	30-10-20W	1,000	247,244	1,973,883	47		Lans.-K.C.	3,573	7	
							Arbuckle	3,688	7	
Voda ('57)	28-11-24W	360	53,329	121,738	9	1	Lans.-K.C.	4,008	4	36
Wakeeney ('34)	14-11-23W	180	12,594	949,370	3	1	Lans.-K.C.	3,619	8	38

TABLE 34.—*Oil production in Kansas during 1961, continued*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl. during 1961	Oil production, bbl. to end, 1961	Producing wells	Wells abd., 1961	Producing zone: Name	Producing zone: Depth ft.	Producing zone: Thickness, ft.	Producing zone: Aver. grav.
Wakeeney East ('49)	24-11-23W	40	7,142	38,858	1		Lans.-K.C.	3,624	4	38
Walz ('50)	12-11-21W	1,200	73,424	856,758	21	1	Lans.-K.C.	3,428	9	35
							Arbuckle	3,666	11	
Walz Northwest ('57)	12-11-21W	160	18,384	119,722	4		Arbuckle	3,693	2	
Pools or fields abandoned				97,136						
Total Trego County		12,840	1,537,088	15,746,098	293	11				
WABAUNSEE COUNTY										
Ashburn ('58)	29-14-10E	120	34,076	80,638	4		Viola	3,255	7	
Davis Ranch ('49)	33-13-10E	880	20,790	2,819,017	3		Lans.-K.C.	1,850	4	
							"Hunton"	2,929	15	29
			164,426		18		Viola	3,201		
Mill Creek ('50)	2-13-10E	100	14,021	301,808	3		Viola	2,923	4	27
Newbury ('50)	11-11-11E	240	12,978	318,889	6	1	Viola	2,901	4	27
Wheat ('51)	10-15-11E		no report	18,690			Simpson	3,230	4	
Wilmington ('59)	29-14-12E	40	14,923	39,730	1		Viola	2,996	6	
							Simpson	3,099	3	23
Woodbury ('51)	11-15-10E	120	9,218	124,690	2		Viola	3,328	5	
Total Wabaunsee County		1,500	270,432	3,710,061 recorded	35	1				
WICHITA COUNTY										
Carwood ('57)	16-17-37W	40	no runs	1,369	1		Marmaton	4,528	4	
WILSON COUNTY										
Altoona ('03)	10-29-16E				115		"Squirrel"	650		
a		320	729				"Bartlesville"	900		
b		240	2,246							
c		480	3,366							
d		700	118,297							
e		40	1,967							

f		80	1,530					
g		160	1,925					
h		160	6,653					
i		60	229					
Altoona East ('35)	29-17E	300	7,040		23	3	"Bartlesville"	900
Benedict	28-15E				34	7	"Bartlesville"	1,000
a		40	153					
b		220	12,992					
c		40	602					
d		160	8,955					
Buffalo* ('24)	27-16E				128		"Bartlesville"	1,025
a		40	117				Cherokee	1,150
b		300	5,060					
c		660	27,622					
d		500	4,198					
e		40	106					
f		160	395					
g		60	293					
h		40	2,421					
Coyville West ('54)	27-13E	180	994	6,685	6		Cherokee	
Fredonia ('90)	29-15E				32	2	"Burgess"	1,050
a		20	524					
b		20	287					
c		320	4,611					
d		20	691					
e		40	259					
Humboldt-Chanute*	28-17E	120	1,306		11		"Bartlesville"	850
Neodesha*	30-16E				264		"Bartlesville"	950
a		140	528					
b		60	3,095					
c		40	40					
d		340	16,201					
e		60	583					
f		40	473					
g		380	1,473					
h		2,940	44,638					
i		60	89					
j		40	269					
k		40	30					
l		180	13,491					
Neodesha East	30-17E	220	3,092		4		Cherokee	
"Stryker"	28-13E		no report					

TABLE 34.—*Oil production in Kansas during 1961, concluded*

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbl during 1961	Oil production, bbl to end, 1961	Producing wells	Wells abd., 1961	Producing zone Name	Producing zone Depth, ft	Producing zone Thickness, ft	Producing zone Aver grav
Vilas ('05)	27-17E	320	3,081		15		"Bartlesville"	1,000		
Miscellaneous		20	209		2+					
Total Wilson County		10,400	302,860	7,049,941 recorded	634	12				
WOODSON COUNTY										
Annabelle ('56)	32-25-15E		no report	572			"Squirrel"	1,173	5	
Big Sandy ('23)	23-26-14E	1,280	53,243		71		"Bartlesville"	1,230	50	
Buffalo* ('24)	26-16E				83	1	"Bartlesville"	950		
a		40	198				Cherokee	1,150		
b		520	19,054							
Evans ('38)	21-23-15E	80	2,155		4		Mississippian	1,540		
"Gordon" ('54)	13-24-15E	320	15,616	127,609	21		"Squirrel"	1,080	16	
Humboldt-Chanute*	25-17E				47		"Bartlesville"	900		
a		1,040	32,551							
b		60	477							
c		60	889							
McWherter ('55)	35-26-13E	20	719	6,615	1		Mississippian	1,417		
Neosho Falls-Leroy* ('05)	35-22-16E				85	12	"Squirrel"	965		
a		190	14,132				Mississippian	1,200		
b		1,120	9,500							
c		520	7,197							
Perry-Halligan	26-17E	1,580	21,997		135	2				
Piqua ('38)	22-24-17E				6		Mississippian	1,190		
a		200	1,699							
b		40	161							
Quincy* ('32)	14-25-13E	1,620	139,932		92		"Bartlesville"	1,500		
Rose East ('54)	16-26-16E	840	23,478	305,035	36		"Bartlesville"	1,109	15	
Silver City ('46)	19-23-15E	640	8,385		18		"Bartlesville"			
Stange ('38)	20-24-16E		no report				Cherokee			
Steele ('52)	20-23-15E	20	638	8,220	1		Mississippian	1,525	17	
Stephenson ('26)	9-25-14E		no report							
Toronto*	16-26-13E		no report				"Peru"	1,000		
							"Bartlesville"	1,700		
Vernon	23-16E	3,840	83,116		105	2	"Squirrel"	1,068	6	

							Mississippian	1,420
					34		"Bartlesville"	1,585
Virgil North* ('20)	22-23-13E	1,260	39,222				Mississippian	1,840
					340	5	"Bartlesville"	1,630 15
Winterscheid*	23-14E	13,330	282,278				Mississippian	1,750
					7		Mississippian	1,520
Wissman ('36)	3-24-15E							
a		260	1,126					
b		80	1,824		35	1	Mississippian	1,480
Yates Center	28-25-15E							
a		40	857					
b		20	104					
c		1,360	13,666		5+			
Miscellaneous		90	7,544					
Total Woodson County		30,470	781,758	12,674,389 recorded	1,126	23		

* Field extends into adjacent county or counties.
** Corrected cumulative.

TABLE 35

GAS PRODUCTION IN KANSAS DURING 1961

FOOTNOTES

[1] Field extends into adjacent county or counties.
[2] All figures at base of 14.65 psia.
[3] Estimated.
[4] Prorated by Conservation Division, Kansas Corporation Commission.

TABLE 35.—*Gas production in Kansas during 1961*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu ft** During 1961	Gas production, M cu ft** To end of 1961	No wells	Producing zone Name	Producing zone Depth, ft
			ALLEN COUNTY				
Humboldt-Chanute* (Misc.)	26-18E	2,125+	180,754+		85+	"Squirrel"	740
						"Bartlesville"	850
			ANDERSON COUNTY				
Colony-Welda	No longer productive; used for gas storage only (Capacity 31,014,497)						
			BARBER COUNTY				
Aetna Gas Area ('35)[a]	13-34-15W	2,840	7,734,957	23,171,162	68	Mississippian	4,850
						Viola	5,215
Aetna Northwest ('61)	4-34-15W		no report	none		Cherokee	4,761
Boggs Southwest ('55)	30-33-12W	3,700	3,206,649	40,358,549 ("Driftwood")[a]	30	Mississippian	4,456
Cedar ('57)	25-33-10W		no report	none		Mississippian	4,543
Clara ('44)	2-30-14W		no report	803,532		Marmaton	4,381
						Simpson	4,435
						Viola	4,509
						Arbuckle	4,540
Cottonwood Creek ('48)	21-30-14W		no report	none		Simpson	4,582
Deerhead ('42)	26-32-15W		no report	1,896,083		Viola	4,931
DeGeer ('48)	2-33-15W		no report	140,442		Mississippian	4,902
						Viola	5,176
Donald ('46)	33-31-15W	405	2,560,855		9	"Miss. lime"	4,697
Elsea ('56)[a]	27-32-14W	200	312,739	2,657,912	4	Mississippian	4,662
Elwood ('56)[a]	34-34-13W	500	654,337	5,968,350	8	"Elgin"	3,662
Hardtner ('54)[a]	31-34-12W	5,080	6,339,838	64,796,049	49	Cherokee	4,791
						Mississippian	4,782
ILS ('56)	9-31-11W		Included with ILS Southwest			Simpson	4,865
ILS Southwest ('59)	17-31-11W	200	757,721	792,010	5	Douglas	3,766
Lake City ('45)	7-31-13W		Included with Skinner			Viola	4,435
Little Bear Creek ('54)	12-32-14W	80	36,242	1,382,439	2	"Douglas sand"	3,808
						Viola	4,670
McGuire-Goemann ('56)[a]	24-32-11W	860	705,259	7,356,807	12	Mississippian	4,403
McReynolds ('59)	19-31-10W		no report	none		Mississippian	4,530
Medicine Lodge-Boggs ('27)	13-33-13W	12,400	3,089,777	262,279,230	53	"Douglas sand"	3,812
			93,986	("Bartholow")[a]	2	Mississippian	4,480
			1,873,870	("Boggs")[a]	9	Simpson	4,860

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
Medicine Lodge North ('54)	25-32-13W	670	541,652	1,927,478	10	Mississippian	4,480
Nippawalla ('51)	13-33-12W	40	21,143		1	"Douglas sand"	3,659
						Mississippian	4,541
Nurse ('53)	23-31-13W	120	51,177	295,599	2	"Douglas sand"	3,599
						Mississippian	4,194
Palmer ('58)	30-32-13W	440	2,620,278	2,851,771	11	Mississippian	4,530
Perry Ranch* ('59)	12-32-16W	360	691,726	697,306	9	Mississippian	4,785
Rhodes ('54)	4-33-11W	8,130	5,925,531	64,440,947	23	"Douglas sand"	3,548
			3,906,020	("Rhodes N.")[a]	15	Mississippian	4,551
Rhodes Northeast ('56)[a]	2-33-11W	1,500	2,365,099	9,480,449	15	Mississippian	4,500
Rhodes South ('57)[a]	6-34-11W	830	1,047,904	3,979,131	10	Mississippian	4,564
Roundup South ('53)	33-33-11W	200	398,347		5	Mississippian	4,457
Sharon* ('55)	13-32-10W		no report	none		Mississippian	4,355
Sharon Northwest ('56)[a]	11-32-10W	1,890	2,504,784	12,745,519	18	Mississippian	4,347
Skinner ('43)	29-31-14W	470	129,276	28,890,406	7	"Douglas sand"	4,023
						Lans.-K.C.	4,109
						Marmaton	4,294
						Simpson	4,422
						Viola	4,630
Stumph ('52)	7-32-14W	700	728,056	4,629,289	8	Marmaton	4,718
Traffas ('55)	6-33-10W		no report	none		Mississippian	4,590
Turkey Creek East ('57)	21-30-15W	40	317		1	Viola	4,557
Wells ('58)	18-34-15W	40	20,513	20,513	1	Marmaton	4,694
Whelan ('34)	32-31-11W	120	650,703		3	Douglas	3,598
						"Chat"	4,355
Whelan East ('54)	21-31-11W		no report			"Douglas sand"	3,746
Wolgamott ('57)	16-35-14W	40	68,508	142,437	1	Cherokee	4,865
Pools or fields abandoned				153,981			
Total Barber County		41,855	49,037,264	554,337,565	391		
			BARTON COUNTY				
Adolph ('47)	16-20-15W	40	3,922		1	Arbuckle	3,734
Ash Creek* ('47)	31-20-15W	80	247,546		2	Arbuckle	
Behrens ('44)	6-20-15W	200	125,159		4	Arbuckle	
Behrens Northeast ('55)	29-19-15W		no report	none		Arbuckle	3,639

Bloomer* ('37)	36-17-11W	40	940		1		
Chase-Silica* ('36)	6-19-9W	Included with Rice County				Arbuckle	
Converse ('53)	20-20-15W	60	330,003		2	Arbuckle	3,783
"Dundee" ('45)	29-20-14W	40	424		1	Arbuckle	3,507
Eberhardt ('35)	14-19-11W			398,567		Arbuckle	
Fort Zarah ('51)	28-19-12W	40	16,940		1		
Heizer Southwest ('52)	21-19-14W	60	83,426	1,116,923	2	Penn. congl.	3,496
Krier ('44)	30-16-11W	110	29,128	913,306	4		
		Within Kraft-Prusa field					
Merten Southwest ('58)	7-19-15W		no report	none		Reagan	3,597
Otis-Albert* ('30)	11-18-16W	Included with Rush County				Neva	
						Reagan	3,507
Pawnee Rock* ('36)	13-20-16W		no report			Arbuckle	
Rick* ('41)	11-19-11W		no report	403,810		Arbuckle	3,355
Unruh ('45)	24-20-15W	120	7,570	14,728,489	3	Arbuckle	3,641
Pools or fields abandoned				2,917,696			
Total Barton County		790	845,058	25,883,943	21		
			BUTLER COUNTY				
Andover South* ('37)	31-27-3E		no report			"Stalnaker"	2,006
			CHASE COUNTY				
Altemus	26-18-8E		no report				
Davies ('29)	18-8E		no report			L. Permian	350-400
Elmdale ('21)	19-7E	300	12,760		8	L. Permian	500
						Wabaunsee	800
Hymer	18-7E		no report				
Lipps ('25)	32-18-7E	Included with Elmdale					
Neva	19-7E		no report				
Miscellaneous		800+	22,340+		28+		
Total Chase County		1,100+	35,100+		36+		
			CHAUTAUQUA COUNTY				
Coach Lines ('60)	10-32-8E		no report			"Layton"	1,725
Hewins Northwest ('56)	27-34-9E		no report			Mississippian	2,072
Miscellaneous		400+	124,072+		9+		

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
			CHEROKEE COUNTY				
Miscellaneous		40+	1,696+		1+		
			CLARK COUNTY				
Ashland ('51)	35-32-23W		no report	1,795,172			
Cavalry Creek ('55)	3-31-21W	100	12,404	322,174	1	Mississippian	5,195
Clark Creek ('59)	8-35-22W	170	139,260	242,333	1	Morrowan	5,630
Harper Ranch ('53)[a]	9-34-21W	6,600	3,626,875	18,476,767	37	Morrowan	5,437
			("Harper Ranch North")[a]				
McKinney* ('50)[a]	2-34-26W	7,500	1,787,948	9,393,952	17	Mississippian	5,762
Morrison Northeast ('54)	10-32-21W	1,200	345,651	2,266,705	3	Morrowan	5,193
Sitka ('59)[a]	13-33-22W		no report	none		Morrowan	5,266
Sitka Northeast ('60)[a]	5-33-21W		no report	none		Morrowan	5,243
Snake Creek ('52)	21-34-21W	1,100	1,770,335	("Harper Ranch")[a]	14	Morrowan	5,452
Snake Creek Northeast ('59)	13-24-21W		no report	none		Morrowan	5,444
Snake Creek Southwest ('59)	30-34-21W		Combined with Snake Creek			Morrowan	5,526
Tuttle West ('57)	10-35-21W	240	314,930	314,930	3	Morrowan	5,625
Total Clark County		16,910	7,997,403	34,582,369	76		
			COFFEY COUNTY				
Crandall ('53)	6-23-16E		no report			Mississippian	1,022
"Gridley"	22-14E		no report				
Miscellaneous		60+	97+		3+		
			COMANCHE COUNTY				
Beals ('55)	5-34-17W	160	13,270	13,270	2	Lans.-K.C.	4,393
						Simpson	5,670
Glick* ('57)[a]	31-30-16W	5,760	3,240,699	3,240,699	9	Mississippian	4,880
Nescatunga ('60)	22-32-18W	120	20,198	20,198	3	Mississippian	5,106
						Viola	5,600

		Included with Barber County			Mississippian	4,785
Perry Ranch* ('58)	12-32-16W		no report	538,864	Mississippian	4,915
Robbins Ranch ('53)	23-31-16W		no report	none	Mississippian	5,014
Shimer ('61)	13-33-17W		no report	none	Morrowan	5,538
Tuttle ('57)	6-35-20W					
Total Comanche County		6,040	3,274,167	3,813,031	14	

COWLEY COUNTY

					Admire	
Biddle ('21)	32-5E		no report		Douglas	1,568
Brown West ('51)	14-31-7E		no report		"Layton"	2,220
Burden ('26)	31-31-6E		no report		"Bartlesville"	2,900
					Douglas	
Denton ('21)	35-4E		no report		"Layton"	2,621
Enterprise Southwest ('53)	3-34-3E		no report	3	Douglas	1,568
Estes ('28)	32-6E	180	85,030		"Bartlesville"	3,000
Frog Hollow ('37)	32-5E		no report	2	"Bartlesville"	
Geuda Springs ('25)	17-34-3E	135	65,863	5	"Bartlesville"	3,300
Gibson ('41)	34-3E	420	421,045		"Severy sand"	
					"Stalnaker"	2,169
Gibson East ('59)	27-34-3E		no report	10	"Bartlesville"	
Graham ('24)	9-33-3E	440	328,742	1	"Layton"	2,170
Mansur ('49)	31-7E	40	54,494		"Bartlesville"	3,206
Peck ('58)	9-35-4E		no report	2		
Rainbow Bend ('23)	17-33-3E	80	42,159		"Bartlesville"	3,358
Rauckman ('56)	18-34-3E		no report	1	"Layton"	2,114
School Creek North ('53)	10-32-7E	50	601,185		"Cleveland"	2,443
				2		
Thurlow ('27)	6-33-4E	80	10,030			
Tisdale Gas Area	32-5E		no report		"Bartlesville"	2,975
Trees ('34)	30-4E		no report		Mississippian	
Turner West ('53)			no report		"Stalnaker"	1,821
Waldschmidt ('58)	17-34-6E		no report	2	Mississippian	
Walnut Bend ('40)	11-34-4E	80	419,844		Kansas City	2,460
Werner ('56)	31-32-6E		no report		"Cattleman"	2,880
Wilmot-Floral ('25)	31-5E		no report		"Peacock"	1,400
Winfield ('14)	32-4E		no report			
Total Cowley County		1,505	2,028,392	28		

CRAWFORD COUNTY

McCune ('29)	30-22E		no report		"Bartlesville"	300

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
St. Paul-Walnut (Misc.)	29-21E	800+	28,743+		28+	"Bartlesville"	
			EDWARDS COUNTY				
Belpre ('42)	8-25-16W	400	17,858	8,338,711	3	Lans.-K.C.	3,800
Bradbridge* ('48)	6-24-15W		("Edstaff Northwest")			Mississippian	4,278
Bradbridge Southwest ('59)	11-24-16W		no report	none		Lans.-K.C.	3,686
Edstaff ('55)	12-25-16W		no report	none		Arbuckle	4,020
Embry ('55)	23-24-16W	1,675	1,158,415	7,349,748	19	Arbuckle	4,120
Fatzer ('59)	14-26-17W	160	166,907	166,907	4	Penn. congl.	4,202
Fellsburg ('60)	35-25-17W	40	26,001	26,001	1	Mississippian	4,231
Kirk ('55)	26-26-16W	40	87,823	87,823	1	"Kinderhook"	4,292
McCarty ('54)	31-25-17W		(part of Wil)[a]			Cherokee	4,530
McCarty Northeast ('30)	22-25-17W		no report	312,798		"Kinderhook"	4,490
McClanahan ('58)	2-26-18W	100	no report	none		Penn. congl.	4,392
Trousdale North ('58)	8-26-16W	240	18,938	102,172	1	Penn. congl.	4,528
Trousdale Northeast ('58)	15-26-16W		114,289	114,289	3	Penn. congl.	4,452
Trousdale South ('56)	33-26-16W		(part of Wil)[a]			Mississippian	4,612
Wil* ('57)	26-25-16W	10,000	no report	none		"Kinderhook"	4,458
Wokaty ('54)	25-25-17W		628,762	1,487,259	95	Cherokee	4,392
Total Edwards County		12,655	122,353[a]		5	"Kinderhook"	4,472
			no report	47,864		"Kinderhook"	4,525
			2,341,346	18,187,489	132	"Kinderhook"	4,324
			ELK COUNTY				
Adams ('56)	29-29-13E		no report	79,504		Penn. congl.	4,390
Bush-Denton ('20)	4-30-9E		no report			"Burgess"	1,680
Longton ('02)	31-12E		no report			Kansas City	660

Schrader ('28)	31-8E	100	8,808		3	Kansas City	
Miscellaneous		500+	134,032+		10+		
Total Elk County		600+	142,840+		13+		
ELLSWORTH COUNTY							
Satran ('60)	5-14-9W		no report			Herington	1,276
Stoltenberg ('47)	18-17-9W	80	71,664	554,887	1	Shawnee	2,728
FINNEY COUNTY							
Hugoton Gas Area* ('32)[a]	16-25-34W	410,880	53,172,005	484,067,328	642	Chase Group	2,200
Nunn ('38)	27-21-34W		no report	146,075			
Total Finney County				484,213,403			
FORD COUNTY							
Conrardy ('61)	22-26-24W		no report	none		Cherokee	4,990
Pleasant Valley ('38)	34-27-21W	1,000	378,944		3	Mississippian	4,954
GRAHAM COUNTY							
Law ('51)	34-9-23W		no report	12,656			
GRANT COUNTY							
Hugoton Gas Area* ('30)[a]	12-29-38W	375,680	101,626,984	1,214,317,728	587	Chase Group	2,200
Panoma Gas Area* ('56)[a]	35-31-34W	Included with Stevens County				Council Grove	2,710
GREENWOOD COUNTY							
Huffine ('61)	10-28-13E		no report	none		"Burgess"	1,299
Lane ('58)	5-26-12E	40	26,004	26,004	1	Mississippian	

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
HAMILTON COUNTY							
Bradshaw ('57)	36-22-41W		Now called Bradshaw Gas Area			Chase Group	2,546
Bradshaw Gas Area ('57)	36-22-41W		no report	none		Chase Group	2,546
Hugoton Gas Area* ('46)[a]	12-26-39W	24,320	4,571,588	43,906,104	38	Chase Group	2,200
Medway ('59)	16-24-41W		Combined with Bradshaw			Winfield	2,305
Wedel ('58)	1-22-41W		Combined with Bradshaw			Winfield	2,746
HARPER COUNTY							
Crystal Springs ('59)[a]	18-32-7W	100	42,091	42,091	1	Mississippian	4,420
Grant ('57)	21-31-7W	100	51,376	51,376	1	Mississippian	4,343
Harper ('58)	11-32-7W	400	64,789	1,182,368	3	Viola-Simpson	4,714
Hibbord ('57)	23-34-9W	100	50,384	185,260	1	Mississippian	4,586
Runnymede ('53)	23-31-6W		no report	none		Simpson	4,648
Sharon* ('55)	13-32-10W	1,300	756,252	1,787,705	13	Mississippian	4,355
			("Sharon Northeast")				
Spivey-Grabs* ('49)	13-31-9W		Now called Spivey-Grabs-Basil			Mississippian	4,400
Spivey-Grabs-Basil* ('49)	13-31-9W	3,900	1,099,930+	20,375,866	23+	Mississippian	4,400
			2,711,844[a]		39		
Total Harper County		5,900	4,776,666+	23,624,666	81+		
HARVEY COUNTY							
Burrton* ('30)	23-23-4W	200	222,791		2	Mississippian	3,298
			Includes Reno County				
Burrton North ('56)	32-22-3W		Included with Burrton			Mississippian	3,280
Burrton Northeast ('42)	3-23-3W	1,400	419,905		14	Mississippian	3,226
Graber* ('55)	22-1W		no report	141,997		Mississippian	2,958
Hollow-Nikkel	22-3W		no report			"Chat"	
Sperling ('35)	23-22-2W		no report	7,513,363		"Chat"	2,955
Sperling South ('57)	22-2W	100	36,106	87,805	1	Mississippian	2,954
			("Sperling")[a]				
Wall ('51)	25-22-3W		no report	none		Mississippian	3,150
Total Harvey County		1,700	678,802	10,802,618	17		

HASKELL COUNTY

Eubank ('58)[a]	28-28-34W	15,680	3,111,417	4,388,048	29	Toronto	
						Lans.-K.C.	4,084
						Marmaton	4,699
						Cherokee	
						Morrowan	
						Mississippian	
Hugoton Gas Area* ('31)	29-30-34W	284,800	36,479,559	437,785,902	445	Chase Group	2,200
Koenig ('58)	12-29-34W	160	231,265	594,936	1	Morrowan	5,294
Lemon ('61)	22-30-33W		no report	none		Morrowan	5,349
Lemon North ('61)	33-29-33W		no report	none		Marmaton	4,885
						Morrowan	5,309
Lemon Northwest ('61)	17-30-33W		no report	none		Cherokee	4,990
						Morrowan	5,270
Pleasant Prairie ('54)	16-27-34W		no report	none		Council Grove	2,814
Satanta North ('60)	33-29-34W		Combined with Eubank			Lans.-K.C.	4,084
Total Haskell County		300,640	39,822,241	442,768,886	475		

JEFFERSON COUNTY

McLouth — No longer productive; used for gas storage only (Capacity 12,913,757)

JOHNSON COUNTY

Craig — No longer productive; used for gas storage only (Capacity 6,075,820)

Gardner ('39)	16-14-22E	40	85,733	("Bella Ilse")	1	Marmaton
Miscellaneous		700+	46,628+		23+	
Total Johnson County		740+	132,361+		24+	

KEARNY COUNTY

Hugoton Gas Area* ('37)[a]	32-25-35W	404,480	69,582,324	865,573,606	632	Chase Group	2,200
Panoma Gas Area* ('56)	12-31-38W		Included with Stevens County			Council Grove	2,843

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
			KINGMAN COUNTY				
Basil ('53)	16-29-7W		Now called Spivey-Grabs-Basil			Mississippian	4,150
Broadway ('48)	21-28-5W	500	155,126	3,493,268	8	Mississippian	3,833
Broadway West ('54)	19-28-5W	125	143,939	1,109,381	2	Mississippian	3,884
Cunningham* ('31)	7-28-11W		no report			Permian	1,993
						Wabaunsee	2,969
						Viola	4,278
						Arbuckle	4,094
Dale ('59)	35-28-6W	100	47,458	65,552	1	Mississippian	3,928
Dewey ('50)	9-28-5W	1,000	154,904	3,871,978	5	Mississippian	3,801
Dresden ('51)	13-27-10W		no report	3,870			
Freemyer ('60)	20-27-6W		no report	none		Mississippian	3,822
Gilchrist ('55)	15-30-7W		Included with Spivey-Grabs-Basil	25,905		Mississippian	4,084
Goetz ('56)[a]	29-29-9W	270	22,548	981,236	2	Mississippian	4,156
						Viola	4,408
Hurn('60)	28-27-5W	160	94,267	143,253	2	Mississippian	3,777
Klaver ('60)	9-29-6W	80	80,451	80,451	1	Mississippian	4,074
Negro Creek ('61)	13-28-7W		no report	none		Toronto	2,908
Settle ('56)	18-29-7W	300	109,599	335,886	3	Mississippian	4,110
Spivey-Grabs* ('49)	13-31-9W		Now called Spivey-Grabs-Basil			Lans.-K.C.	3,876
						Mississippian	4,205
Spivey-Grabs-Basil ('49)	13-31-9W	16,000	4,250,000+	75,858,581	300+	Lans.-K.C.	3,876
			12,209,834[a]		137	Mississippian	4,205
			4,681,644	("Basil")	60		
Total Kingman County		18,535	21,949,770	91,707,820	521		
			KIOWA COUNTY				
Alford ('44)	14-30-19W		no report			Spergen	5,040
Fralick West ('61)	16-27-20W		no report			Mississippian	4,868
Glick* ('57)[a]	31-30-16W	9,500	7,154,723	7,229,993	18	Mississippian	4,880
Greensburg ('56)	35-27-18W		no report	3,384		"Kinderhook"	4,742
Greensburg Northeast ('56)	17-27-17W	200	20,485	104,239	2	Mississippian	4,675
Hardy ('56)	23-28-18W	160	79,742	324,513	2	Mississippian	4,804

Haviland ('55)	17-28-16W	80	29,903	288,101	1	"Kinderhook"	4,761
Johannsen ('54)	13-28-19W		no report	46,214		Mississippian	4,864
Joy Station ('57)	20-28-19W	60	20,055	77,077	1	Mississippian	4,920
Kane ('56)	12-30-18W		no report	none		Mississippian	4,908
Nichols ('55)[a]	20-29-18W	5,300	1,058,501 1,243,360[a]	14,007,939	20	Mississippian	4,997
Nichols South ('59)	8-30-18W		no report	none		Mississippian	4,994
Quaker ('61) (revived)	10-27-19W		no report			Mississippian	4,804
Ursula ('61)	9-29-18W		no report	none		Mississippian	4,922
Wellsford ('55)	15-28-16W	200	92,013	1,362,054	1	Marmaton	4,680
						Mississippian	4,729
Total Kiowa County		15,500	9,698,782	23,524,035	53		

LABETTE COUNTY

Coffeyville-Cherryvale* ('02)	32-17E		no report				
Valeda	34-18E		no report				
Miscellaneous			65,023+		39+		

LEAVENWORTH COUNTY

Roberts-Maywood* ('30)	11-22E		no report			Knobtown	400

LINN COUNTY

LaCygne-Cadmus (Misc.)	20-24E		no report				

McPHERSON COUNTY

Coons ('40)	13-19-1W		no report			"Chat"	2,897
Elyria ('58)	22-20-3W	65	15,679	130,401	1	Mississippian	3,068
Graber North ('51)	4-21-1W		no report	none		Mississippian	2,955
McPherson ('26)	29-18-2W	100	44,422		1	Lans.-K.C.	2,340
						"Chat"	2,967
						Viola	3,140
Ritz-Canton ('29)	12-20-2W	670	87,079		5	"Chat"	2,935
Voshell ('29)	33-20-3W		no report				
Total McPherson County		835	147,180		7		

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	Gas production, M cu. ft.** No. wells	Producing zone Name	Producing zone Depth, ft.
			MARION COUNTY				
Dobbs ('60)	22-19-3E		no report	none		Mississippian	2,367
French Creek ('55)	22-19-2E	40	84,612	87,178	1	Simpson	
Hillsboro ('58)	7-19-3E	40	895	3,461	1	Mississippian	
Hillsboro East ('59)	17-19-3E		Combined with Lost Springs			Mississippian	2,440
Klenda ('59)	12-19-3E		Combined with Lost Springs			Mississippian	2,345
Klenda Northwest ('59)	2-19-3E		Combined with Lost Springs			Mississippian	2,355
Klenda Southwest ('60)	14-19-3E		Combined with Lost Springs			Mississippian	2,414
Lehigh North ('53)	23-19-1E	40	34,531		1	Mississippian	2,770
Lost Springs ('26)	22-17-4E	11,500	382,249	("Antelope East")	8	Mississippian	2,350
			2,888,628		114		
Ratzlaff ('60)	8-19-2E	40	7,391	11,955	1	Mississippian	2,691
Stenzel ('61)	12-20-3E		no report	none		Mississippian	2,340
Tajchman ('60)	21-19-5E		Combined with Lost Springs			Mississippian	2,231
Total Marion County		11,660	3,398,306		156		
			MEADE COUNTY				
Adams Ranch ('45)	8-35-30W	5,725	1,691,717	6,139,195	25	Toronto	4,402
						Morrowan	5,708
						Mississippian	5,850
Angell ('56)	30-32-29W	600	364,824	671,519	5	Morrowan	5,608
Baragree ('59)[a]	25-34-28W		no report	none		Council Grove	3,066
Bond ('54)	32-33-30W	360	99,999	661,117	2	Mississippian	5,860
Borchers ('59)	21-33-28W		no report	none		Morrowan	5,719
Borchers North ('59)	5-33-28W	3,600	2,710,538	5,380,490	10	Marmaton	5,082
						Morrowan	5,544
						Mississippian	5,484
Borchers Northwest ('59)	1-33-29W	1,350	277,072	428,661	3	Morrowan	5,612
Bruno Northeast ('53)	16-33-30W		no report	none		Morrowan	5,721
Cimarron Bend ('59)	1-35-29W	550	667,561	667,561	3	Mississippian	6,076
"Collingwood" ('60)[a]	22-32-30W		Within Stevens field			Morrowan	
Fincham ('56)[a]	14-35-27W	600	223,892	1,329,080	2	Mississippian	6,275
Hockett ('57)	8-31-29W	900	182,351	701,450	5	Morrowan	5,390
						Mississippian	5,430

Horace ('56)	9-34-29W	200	18,268	18,268	1	Morrowan	5,815
Horace South ('59)	26-34-29W	1,000	262,211	262,211	5	Council Grove	3,228
						Toronto	4,390
Kismet ('48)	23-33-31W	8,100	969,646	2,047,742	18	Morrowan	5,645
McKinney* ('50)[a]	2-34-26W	13,700	6,016,216	36,448,958	45	Mississippian	5,762
Mohler ('57)	35-33-29W	500	61,386	2,776,194	2	Morrowan	5,769
Mohler Northeast ('58)[a]	36-33-29W	1,620	691,972	1,751,584	9	Morrowan	5,690
Novinger East ('59)	36-33-30W	Included with Novinger Northwest				Morrowan	5,793
Novinger Northwest ('53)	15-33-30W	360	68,650	773,256	4	Morrowan	5,718
		Includes Novinger					
Plains ('56)	17-32-30W	300	139,580	430,751	3	Marmaton	5,150
						Morrowan	5,611
						Mississippian	5,692
Sanders ('56)	13-32-29W	200	48,174	481,182	2	Morrowan	5,533
						Mississippian	5,550
Singley ('55)	20-33-29W	3,450	894,991	7,528,279	11	Morrowan	5,803
Stevens ('52)	32-32-30W	2,940	907,678	13,718,991	14	Morrowan	5,560
						Mississippian	5,713
Stevens West ('57)	6-33-30W	no report		none		Morrowan	5,596
Thiessen ('59)	8-33-27W	Combined with McKinney				Morrowan	5,690
Total Meade County		46,055	16,296,726	82,153,559	169		
		MIAMI COUNTY					
Louisburg ('27)	17-25E	no report					
		MONTGOMERY COUNTY					
Coffeyville-Cherryvale* ('02)	33-17E	no report				"Bartlesville"	
Miscellaneous		1,600+	305,488+		48+		
		MORRIS COUNTY					
Veal ('55)	30-17-7E	360	388,114		10	Ireland	1,234
Miscellaneous		80+	19,096+		2+		
Total Morris County		440+	407,210+		12+		

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
			MORTON COUNTY				
Berryman ('59)	21-33-41W	500	44,437	44,437	1	Wabaunsee	2,892
						Morrowan	5,280
Boehm ('51)	14-33-42W	1,800	483,461	9,363,771	4	Morrowan	4,872
Elkhart ('55)	11-35-43W	1,920	249,400	661,791	3	Morrowan	4,558
Elkhart West ('57)	17-35-43W	1,050	942,771	1,461,997	2	Morrowan	4,299
Greenwood Gas Area ('51)[a]	14-33-42W	204,000	39,771,433	314,506,992	246	Wabaunsee	2,777
						Shawnee	3,069
						Lans.-K.C.	3,534
Hugoton Gas Area* ('30)[a]	24-34-40W	199,680	30,264,210	378,990,123	312	Chase Group	2,200
Interstate ('54)	29-34-43W	10,900	1,650,985	1,698,266	17	Morrowan	4,210
Kinsler ('59)	33-31-40W		no report	none		Marmaton	4,336
						Morrowan	5,176
						St. Louis	5,464
Kinsler Southeast ('60)	12-32-40W	1,280	219,154	267,921	2	Morrowan	5,504
Panoma Gas Area* ('56)[a]	12-31-38W		Included with Stevens County			Council Grove	2,843
Patsy ('57)	16-31-41W		no report	none		Morrowan	5,362
Reyer ('57)	17-32-43W		no report	45,553		Marmaton	3,993
Richfield ('48)[a]	17-32-40W	6,050	43,983	27,544,712	2	Topeka	4,990
			1,145,076[a]		9	Atokan-Morrowan	5,040
Richfield West ('61)	2-32-42W	640	124,704	124,704	1	Morrowan "G"	4,974
						"Keyes"	5,051
Rolla ('59)	22-34-40W	640	64,990	64,990	1	Lansing	4,249
Sparks*[a]	34-30-42W	6,400	3,568,141	6,986,503	10	Wabaunsee	2,853
						"Keyes"	5,254
Taloga ('55)	34-34-42W	3,000	1,878,265	26,758,243	13	Cherokee	3,894
"C"			313,332[a]		2	Morrowan	4,428
"G"			147,873[a]		1		
"Keyes"			856,788[a]		5		
Taloga Northeast ('57)	19-34-41W	640	341,651	341,651	1	Cherokee	4,397
						Morrowan	4,694
Wilburton ('59)[a]	32-34-41W	2,560	1,795,550	1,795,550	8	Topeka	3,080
						Morrowan	4,808
Wilburton South ('61)	17-35-41W	1,280	596,444	596,444	2	Topeka	3,184
Total Morton County		442,340	83,702,648	770,409,665	642		

NEOSHO COUNTY

Miscellaneous		600+	84,703+		51+		

PAWNEE COUNTY

Benson ('45)	30-23-15W	400	517,902		4	Arbuckle	4,048
Bow ('58)	32-22-15W	100	8,317	8,317	1	Arbuckle	
Carpenter Southeast ('59)	31-23-16W		no report	none		Mississippian	4,210
Evers ('51)	32-21-16W		no report	850,468		Arbuckle	3,908
Evers South ('56)	12-22-16W	100	15,446	15,446	1	Arbuckle	3,920
Garfield ('54)	35-22-17W	300	443,280	2,289,746	3	Penn. congl.	4,152
Hearn ('53)	35-23-15W	100	112,924		1	Lans.-K.C.	3,833
						Simpson	4,106
Hearn North ('55)	23-23-15W		no report			Simpson	4,084
Jac ('58)	30-21-15W		no report	none		Arbuckle	3,871
Larned ('49)	28-21-16W		no report			Arbuckle	3,877
Pawnee Rock* ('36)	19 & 20-15 & 16W		no report			Arbuckle	3,832
Ryan* ('45)	35-19-16W		no report			Reagan	3,507
Ryan Southeast ('45)	12-20-16W		no report			Arbuckle	
Shady ('45)	34-22-16W	160	223,235	4,745,296	2	Viola	3,920
						Arbuckle	4,063
Shady North ('55)	14-22-16W	80	12,726		1	Arbuckle	4,043
Shady Southwest ('53)	3-23-16W	180	171,253		2	Arbuckle	4,094
Snowberger ('57)	29-22-16W		no report			Penn. congl.	4,112
Sweeney ('53)	8-21-15W	3,250	903,721		12	Penn. congl.	3,727
						Arbuckle	3,792
Zook ('42)	16-23-16W		no report			Simpson	4,028
						Arbuckle	4,066
Total Pawnee County		4,670	2,408,804	45,824,158	27		

PRATT COUNTY

Carver-Robbins ('55)	21-27-15W	950	1,005,483		14	Penn. congl.	4,472
						Mississippian	4,509
Carver Robbins Northeast ('56)	10-27-15W	80	124,256	232,537	1	Penn. congl.	
Chance ('46)	4-27-13W		no report			Mississippian	
						Viola	
Chitwood ('43)	23-28-12W		no report	10,089,598		Viola	4,340
Cullison ('56)	25-28-15W		no report	none		Mississippian	4,543

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
Cullison West ('61)	12-28-15W		no report	none		Cherokee	
Cunningham* ('31)	7-28-11W		no report			Permian	1,993
						Wabaunsee	2,969
						Lans.-K.C.	
						Viola	4,278
						Arbuckle	4,094
Frisbie Northeast ('54)	4-26-13W		no report			Mississippian	
Hopewell ('58)	17-26-15W	100	74,633	329,123	1	Lans.-K.C.	3,887
			("Hopewell South")[a]				
Jem ('61) (revived)	28-29-13W		no report	none		Viola	4,478
Iuka-Carmi ('42)[a]	29-26-12W	100	112,841	4,430,322	1	Council Grove	2,388
						Viola	4,122
Sawyer ('57)	26-29-13W	400	569,996	1,229,470	4	Viola	4,376
						Simpson	4,608
Shriver ('49)	27-29-14W		no report	104,191			
Tatlock Southwest ('58)	30-26-15W	260	7,777	561,642	2	Congl. sand	4,376
			(part of Wil)[a]			"Kinderhook"	
Ward ('41)	11-26-12W		no report	none		Viola	4,129
Total Pratt County		1,890	1,894,986	25,036,968	23		
RENO COUNTY							
Burrton* ('30)	23-23-4W		Included with Harvey County			Mississippian	3,298
Lerado ('37)	10-26-9W	2,700	2,903,173	18,578,721	39	Mississippian	3,925
						Viola	4,128
Plevna ('59)	15-24-9W		no report	none		Mississippian	3,765
Yoder ('35)	34-24-5W		no report			"Chat"	3,402
Zenith-Peace Creek* ('37)	23-24-11W		no report			Viola	3,860
RICE COUNTY							
Bredfelt ('48)	7-18-9W		no report	165,890		Arbuckle	3,226
Calf Creek ('57)	33-18-10W	40	10,188	84,826	1	Lans.-K.C.	3,006
Chase-Silica* ('36)	6-19-9W	120	24,429	2,097,154	2	Arbuckle	3,192

Includes Barton County

Dymond ('61) (revived)	13-21-8W		no report	none		Mississippian	3,362
Humphreys ('56)	3-21-8W	160	66,025	667,533	4	Penn. congl.	3,272
						Mississippian	3,278
Lyons Southwest ('55)	22-20-8W	80	26,105		2	Penn. congl.	3,251
Orth ('33)	27-18-10W		no report			Lans.-K.C.	2,906
Sterling ('51)	4-22-8W	40	11,157	173,792	1	Mississippian	3,385
Union ('50)	28-20-8W	400	185,229		4	Penn. congl.	3,275
Pools or fields abandoned				29,794,228			
Total Rice County		840	323,133	36,334,493	14		

RUSH COUNTY

Lohrey ('56)	35-17-17W	Combined with Reichel Gas Area				Penn. congl.	3,563
						Granite Wash	3,578
Otis-Albert* ('30)	11-18-16W	550	234,160		3	Neva	
		Includes Barton County					
Reichel ('53)	23-17-17W	Now called Reichel Gas Area				Topeka	3,006
						Lans.-K.C.	3,330
Reichel Gas Area ('53)	23-17-17W	400	42,709	("Rothe")	1	Topeka	3,006
			962,869	7,774,768	9	Lans.-K.C.	3,330
Rothe ('55)	31-17-16W	Combined with Reichel Gas Area				Lans.-K.C.	3,446
Ryan* ('45)	35-19-16W		no report			Reagan	3,507
Ryan East ('54)	36-19-16W		no report			Arbuckle	3,648
Total Rush County		950	1,239,738		13		

RUSSELL COUNTY

Beisel ('58)	15-14-12W		no report				
Driscoll ('56)	19-15-11W	60	1,179	1,179	1	Lans.-K.C.	3,059
Gorham	20-14-14W	60	20,078		1		
Hall-Gurney	30-14-13W	800	182,272		15		
Heim Northeast ('57)	14-14-12W	60	10,248	18,938	1	Fort Riley	1,530
Janne ('54)	24-15-12W		no report	none		Toronto	2,906
Mahoney ('60)	8-14-12W	80	44,415		2	Tarkio	2,368
Russell ('46)	34-13-14W		no report			Wabaunsee	
Trapp	9-15-13W	40	12,829		1		
Total Russell County		1,100	271,021		21		

TABLE 35.—*Gas production in Kansas during 1961, continued*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft
			SCOTT COUNTY				
Hugoton North ('61)	25-19-33W		no report	none		Chase Group	2,600
Keystone ('50)	25-18-32W		no report	45,122		Chase Group	
			SEDGWICK COUNTY				
Bartholomew ('46)	30-27-4W		no report			Kansas City	3,270
						"Miss. lime"	3,732
Gladys South ('56)	5-29-1E		no report	74,499		Mississippian	3,194
Schulte ('49)	7-28-1W		no report	1,287,655		Mississippian	3,349
Total Sedgwick County				1,362,154			
			SEWARD COUNTY				
Adamson ('58)	11-34-34W	1,500	153,321	463,508	3	Chesteran	6,064
						Chesteran sand	6,318
Arkalon ('60)[a]	36-33-32W	600	154,488	163,603	1	Chesteran	5,710
Arkalon East ('60)	20-33-31W	600	52,713	52,713	1	Chesteran	5,750
Blue Bell ('53)	33-34-31W		no report	none		Mississippian	5,959
Blue Bell Northwest ('54)	20-34-31W		no report	none		Morrowan	5,858
						Mississippian (Chesteran)	5,947
Evalyn ('60)[a]	15-33-33W	200	506,613	506,613	3	Morrowan	5,636
						Mississippian	6,038
Hawks ('52)	18-35-31W		no report	none		Morrowan	5,927
Holt ('54)	28-32-34W	200	133,485	3,077,614	3	Topeka	3,820
Hugoton Gas Area* ('22)[a]	3-35-34W	230,400	25,362,382	293,199,490	360	Chase Group	2,200
Kismet* ('48)	23-33-31W		Included with Meade County			Council Grove	3,063
						Toronto	4,294
						Morrowan	5,645
Kismet Northwest ('53)	10-33-31W	200	75,471	337,019	1	Morrowan	5,584
Kneeland ('51)	14-34-31W		no report	none		Mississippian	5,722
Liberal-Light ('51)	11 35-32W	2,800	1,169,429	28,322,435	14	Morrowan	5,906
Liberal Southeast ('47)	15-35-33W	1,000	1,520,921	23,418,629	5	Penn. ss.	6,202

Massoni ('55)	5-33-31W	1,000	266,248	1,862,547	5	Council Grove	3,156
						Toronto	4,270
						Morrowan	5,590
Plains West ('56)	16-32-31W	280	21,275	151,201	2	Morrowan	5,600
Salley ('58)	16-34-33W	See "Hugoton Deep" (Stevens County)				Toronto	4,311
Shuck ('55)	20-33-34W	400	111,883	823,061	1	Morrowan	5,987
Thirty-One ('53)	18-31-31W	400	114,579	1,281,423	1	Morrowan	5,448
Thirty-Three ('60)	33-33-33W		no report	none		Chesteran	5,898
Thirty-Two ('60)	1-32-32W	400	24,680	24,680	1	Morrowan	5,499
Three Star ('58)	17-35-32W	2,325	390,486	938,595	7	Lans.-K.C.	4,546
						Morrowan	5,866
						Chesteran	6,089
Wide Awake ('54)	4-35-34W	300	88,797	2,200,021	2	Toronto	4,410
						Mississippian	6,168
Total Seward County		242,605	30,146,771	356,823,152	410		

STAFFORD COUNTY

Bradbridge* ('48)	6-24-15W		no report	none		Arbuckle	4,020
Childs ('59)	17-25-15W	100	33,054	84,892	1	Mississippian	4,231
Dillwin West ('60)	18-24-14W	300	353,776	353,776	3	Penn. congl.	4,118
						Mississippian	4,097
Farmington ('48)	27-24-15W	275	350,277		4	Mississippian	4,207
Farmington North ('56)	23-24-15W	100	105,864	439,031	1	"Kinderhook"	4,120
Farmington Northwest ('56)	30-24-15W	100	15,366	15,366	1	"Kinderhook"	4,272
Farmington West ('52)	6-25-15W	200	158,841		2	"Penn. sand"	4,164
Gates ('50)	26-21-13W	200	9,105	610,702	1	Lans.-K.C.	3,473
Grunder ('58)	11-25-15W	200	63,307	106,030	2	Mississippian	4,173
Grunder Southwest ('59)	15-25-15W		Combined with Haynes			Lansing	3,915
Haynes ('59)	27-25-15W	320	23,500	648,743	1	Lansing	3,915
			460,946 ("Haynes Southwest")		3	Cherokee	4,254
Haynes Southwest ('59)	27-25-15W		Included with Haynes			Cherokee	4,254
Macksville ('60)	3-24-15W	160	60,389	60,389	4	Viola	4,020
O'Connor ('47)	16-24-15W	80	19,020	19,020	2	Arbuckle	4,061
Rattlesnake ('38)	13-24-14W	40	223,133		1	Lans.-K.C.	
Rattlesnake East ('56)	7-24-13W	80	30,927		2	Mississippian	3,880
Rattlesnake Southeast ('54)	28-24-13W	160	374,241	426,835	4	Mississippian	3,908
Van Lieu ('43)	20-24-13W	60	56,188	694,966	1	Arbuckle	4,069
Wil* ('57)[a]	26-25-16W	180	214,536	236,629	3	"Kinderhook"	4,324
Zenith-Peace Creek* ('37)	23-24-11W		no report			Viola	3,860
Pools or fields abandoned				10,968,337			
Total Stafford County		2,555	2,552,470	17,293,060	36		

TABLE 35.—*Gas production in Kansas during 1961, concluded*

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu. ft.** During 1961	Gas production, M cu. ft.** To end of 1961	No. wells	Producing zone Name	Producing zone Depth, ft.
			STANTON COUNTY				
Beauchamp East ('59)	24-30-41W		no report	none		Morrowan	5,018
Hugoton Gas Area* ('44)[a]	32-30-39W	152,320	20,794,575	192,400,857	238	Chase Group	2,200
Nich ('61)	15-30-39W		no report	none		Morrowan	5,630
Panoma Gas Area* ('56)[a]	12-31-38W		Included with Stevens County			Council Grove	2,843
Sand Arroya ('61)	17-29-39W		no report	none		Morrowan	5,476
Sparks* ('54)[a]	34-30-42W	3,000	2,791,803	24,065,378	11	Morrowan	5,254
Sparks East ('57)	29-30-41W	1,600	190,041	318,422	4	Morrowan	5,152
Sparks West ('58)	26-30-43W		no report	none		Morrowan sand	5,260
Total Stanton County		156,920	23,776,419	216,784,657	253		
			STEVENS COUNTY				
Center ('60)	26-33-37W		no report	none		Morrowan	5,800
Cutter ('61)	1-31-35W	1,280	165,305	165,305	2	Marmaton	4,779
						Morrowan	5,313
Hanke ('56)	6-35-36W		no report	none		Morrowan	6,267
"Hugoton Deep" ('61)	15-34-38W	1,280	68,967	68,967	2		
			Includes Salley (Seward County)				
Hugoton Gas Area* ('27)[a]	31-33-37W	487,040	125,988,451	2,023,902,535	761	Chase Group	2,200
Panoma Gas Area* ('56)[a]	12-31-38W	24,275	2,519,546	3,921,940	34	Council Grove	2,843
			Includes Grant, Morton, and Stanton Counties				
Perrill ('59)	7-31-37W	1,800	1,059,807	2,099,439	3	Morrowan	5,326
			"Panoma Gas Area - Morrowan"[a]				
Perrill West ('61)	6-31-38W		no report	none		Morrowan	5,655
Ski ('61)	16-34-35W		no report	none		Mississippian	6,180
Walkemeyer ('59)	35-33-36W	640	137,831	137,831	1	Morrowan	6,145
Total Stevens County		516,315	129,939,907	2,030,296,017	803		
			SUMNER COUNTY				
Fall Creek ('50)	3-35-3W		no report			Simpson	4,746
Murphy	35-3E	2,250	272,717		18		

Padgett ('24)	23-31-2E	300	131,044		5	"Miss. lime"	3,474
						Marmaton	3,187
Pride ('58)	31-31-2E		no report			Elmont	1,738
Wellington ('29)	33-31-1W		no report			"Chat"	3,655
Total Sumner County		2,550	403,761		23		
WALLACE COUNTY							
Sexson ('56)	19-13-42W		no report	none		Morrowan	5,008
WILSON COUNTY							
Altoona ('03)	29-16E	40	13,980		1		
Neodesha*	30-16E		no report			"Bartlesville"	
Miscellaneous		400+	93,309+		38+		
Total Wilson County		440+	107,289+		39+		
WOODSON COUNTY							
Gordon ('54)	13-24-15E		no report			"Squirrel"	1,080
Piqua ('38)		No longer productive: used for gas storage only (Capacity 3,230,472)					
Vernon ('56)	33-23-16E		no report				
Winterscheid	3-24-15E		no report				
Miscellaneous		40+	386+		1+		
WYANDOTTE COUNTY							
Roberts-Maywood* ('30)	11-23E	Included with Leavenworth County				"Peru" "Squirrel"	

* Field extends into adjacent county or counties
** All figures at base of 14.65 psia
\+ Estimated
a Prorated and or spaced by Conservation Division, Kansas Corporation Commission

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