

STATE GEOLOGICAL SURVEY OF KANSAS

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BULLETIN 128

OIL AND GAS DEVELOPMENTS IN KANSAS DURING 1956

By

E. D. GOEBEL, A. L. HORNRAKER, P. L. HILPMAN,
AND D. L. BEENE



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By

E. D. GOEBEL, A. L. HORNBAKER, P. L. HILPMAN,
AND D. L. BEENE

ABSTRACT

Kansas oil production in 1956 totaled 124,467,713 barrels, a new high in annual production. In value the 1956 output of crude oil increased to \$350,-998,951 from \$341,674,680 in the preceding year, entirely because of increased production.

Natural gas production in Kansas totaled 525.9 billion cubic feet (14.65 psia); the Hugoton Gas Area produced 381.9 billion cubic feet, about 74 percent of the total.

During the year 135 new oil fields, 35 new gas fields, and 3 that were both oil and gas fields were discovered; 6 previously abandoned fields, 5 oil and 1 gas, were revived.

Discovery of additional Mississippian and Morrowan reservoirs in the Kansas portion of the Sedgwick basin and the Hugoton embayment of the Anadarko basin during 1956 was significant.

In 1956, a total of 5,321 wells was recorded as drilled in Kansas counties in connection with the petroleum industry. Of the recorded completions, 2,408 were oil wells, 403 were gas wells, 33 were both oil and gas, 2,349 were dry holes, and 128 were salt-water disposal wells or wells used as input wells in secondary recovery operations. Of the 2,349 dry holes, 778 were wildcats. Estimates of wells not specifically reported bring the total number of wells drilled in the state during the year to 8,006.

As in 1955, Barton County, which produced 14,913,934 barrels, was the leading oil producing county. Ellis and Russell Counties, ranked second and third, produced 11,618,360 barrels, and 9,883,069 barrels respectively. The El Dorado field of Butler County replaced the Trapp field of Russell and Barton Counties as the top-ranking field in the state. The 6 leading oil fields—El Dorado, Trapp, Kraft-Prusa, Hall-Gurney, Chase-Silica, and Bemis-Shutts—accounted for about 18 percent of the total annual production.

In 1956, Kansas fields produced 199.4 million gallons of natural gas liquids valued at more than 11.8 million dollars. Proved reserves of natural gas liquids are more than 171 million barrels.

The proved reserves of Kansas crude oil at the end of the year were 992.2 million barrels, or 1.0 percent less than the previous year's estimated reserves. Proved reserves of natural gas are almost 17.6 trillion cubic feet.

Production from secondary recovery projects in Kansas accounted for 11,619,573 barrels of oil during 1956. A total of 6,990 oil wells and 4,302 injection wells was reported during the year. Greenwood County, which yielded 5,365,499 barrels, led all other counties in the amount of oil produced by secondary recovery methods.

INTRODUCTION

During 1956 several new records were established in the Kansas petroleum industry. New highs were established in crude oil and natural gas value and production. Because of an increase in production of crude oil and natural gas, the dollar value of these resources exceeded all previous records.

Eighty-two Kansas counties have produced or are producing oil or gas, 2 more than in 1955. Rawlins County was added with the finding of oil in the Lansing-Kansas City group, and Wallace County with new gas reserves in Morrowan strata.

Stimulating the development in western Kansas was the completion of a large number of Mississippian wells in the **Spivey-Grabs** field of Harper and Kingman Counties, in various new Kiowa County fields, and in new and old fields in Barber County. Of special significance is the development of additional Lansing-Kansas City production (**Warner fields**) on the flanks of the Cambridge arch in Decatur County. The discovery of the **South Side** field (Morrowan) gave Kearny County its second oil field. The **Panoma** field discovery gave Stevens County a new gas zone, the Council Grove group. New Meade County Morrowan gas discoveries were important 1956 developments. Activity continued at a rapid pace in the **Greenwood Gas Area** and **Interstate** fields of Morton County.

Of importance to eastern Kansas during 1956 was the continued search for Arbuckle and Mississippian production in Montgomery, Chautauqua, Labette, and Elk Counties. The completion of several additional Viola wells in the **John Creek** and **Comisky Northeast** fields of Morris County during the year has made that area attractive for exploration. Development of a large number of "Hunton" field wells in the **Unger** and **Unger Southwest** fields and Mississippian wells in the **Beauty** and **Lost Springs** fields raised Marion County to the ranks of those counties having more than 200 completions during 1956. Cowley County exploration for additional "Bartlesville" and Mississippian production (367 new wells) led the state in that phase of the industry.

The **El Dorado** field of Butler County was the leading oil producing field in the state during 1956, replacing the Trapp field of Russell and Barton Counties.

Ellis County led all other counties in the number of new fields discovered with 16 new oil fields. Other counties with a large

number of new field discoveries are: Barber 12 gas, 2 oil; Stafford 12 oil, 1 gas; and Cowley 10 oil, 1 oil and gas.

Crude oil production reached a new high, but proved reserves of crude oil declined slightly.

Natural gas production increased 12.8 per cent from 1955, and the production of natural gas liquids declined 3.5 percent. Proved reserves of natural gas increased 7.8 percent, but proved reserves of natural gas liquids declined 0.9 percent.

Figure 1 shows in a general way areas in Kansas within which there is production of oil or gas or both. The map shows county relations and also gives an idea of how large a percentage of the state may be regarded as "oil and gas territory".

A condensed petroleum data table (Table 2) shows at a glance the trends of various phases of the industry in Kansas, as well as corresponding trends in the United States. Comparison of the two right-hand columns of Table 2 shows whether or not Kansas is holding its own in the nation's petroleum industry.

Production and value.—The 124,467,713 barrels of oil produced in Kansas during 1956 is 3,306,479 barrels more than the 1955 figure and represents a new high in total annual oil production. The 2.7 percent increase in value of crude oil, from 241.7 to 350.9 million dollars, is due entirely to the increase in oil production.

Natural gas production during 1956 increased 12.8 percent from the previous year to 525.9 billion cubic feet calculated at the base of 14.65 pounds per square inch absolute. The value of natural gas as estimated by the Kansas Corporation Commission rose from \$51,279,817 in 1955 to \$57,852,493 in 1956, a 12.8 percent rise in value accounted for entirely by an increase in gas production. Effective January 1, 1954, a new minimum price of 11 cents per thousand cubic feet measured at 14.65 pounds per square inch absolute was established by the Kansas Corporation Commission for the **Hugoton Gas Area**, which produces more than 74 percent of the state's total production. This minimum price has been applied to all Kansas gas production, including minor amounts of unprorated production, much of which probably brought a higher price.

In the general gas production table (Table 66), in which individual pool data are given, all the 1956 production and cumula-

TABLE 2.—*Petroleum data showing percentage changes for Kansas and the United States, 1955-1956*

	Kansas figures		Change from previous year, percent	
	1955	1956	Kansas	United States
Crude oil production (barrels)	121,161,234 ^a	124,467,713 ^a	+ 2.7	+ 5.5
Value of crude oil produced	\$341,674,680	\$350,998,951	+ 2.7	.....
Kansas oil production as percentage of U.S. total	5.1	4.9	— 3.9	.....
Average price of oil	\$2.82	\$2.82	.....	.....
Rank of Kansas among oil producing states	5th	5th	.....	.....
Proved reserves of liquid hydrocarbons (at year end), thousands of barrels	1,171,304 ^b	1,163,826 ^b	— 0.6	+ 2.5
Ratio of proved liquid hydrocarbon reserves to current annual production	9.3:1	9.3:1	.....	.....
Oil producing area of "western Kansas", acres	772,918 ^c	839,260 ^c	+ 8.6	.....
Natural gas production, M cu. ft.	466,180,157 ^d	525,931,757 ^d	+12.8	+ 7.8
Value of natural gas produced	\$51,279,817 ^e	\$57,852,493 ^e	+12.8	.....
Production of natural gasoline and LPG (natural gas liquids), gallons	206,621,110 ^f	199,384,374 ^f	— 3.5	.....
Value of natural gasoline and LPG	\$12,052,898 ^f	\$11,868,118 ^f	— 1.5	.....
Proved reserves of natural gas, millions of cubic feet	16,293,080 ^g	17,566,257 ^g	+ 7.8	+ 6.2
Ratio of proved natural gas reserves to current annual production	34.9:1	33.4:1	— 4.3	.....
Gas producing area of "western Kansas", acres	2,811,510	2,902,000	+ 3.2	.....
New oil and gas pools discovered	149 ^h	179 ^h	.....	.....
Recorded well completions in Kansas	2,432	2,408	.....	.....
Oil ^h	385	403	.....	.....
Gas ^h	33	33	.....	.....
Oil and gas ^h	2,052	2,349	.....	.....
Dry	267	128	.....	.....
Salt-water disposal ⁱ	2,689 ^j	2,685 ^j	.....	.....
Unrecorded, estimated	.....	.....	.....	.....
Total recorded and estimated	7,825	8,006	.....	.....
Wildcats and discovery wells (included in above total)	815	957	.....	.....

^a Figures supplied by Kansas Corporation Commission, Conservation Division.^b Figures from American Petroleum Institute and American Gas Association, 1956. Barrels have 42 U.S. gallons and gas is based at 14.65 psia. at 60°F.^c The petroleum area of "western Kansas" is taken to include all producing counties west of the Cowley-Butler-Marion-Dickinson County tier.^d Figures supplied by Kansas Corporation Commission, base 14.65 psia.^e The minimum value of 11 cents per M cubic feet of gas at 14.65 psia, at the well head established by order of the Kansas Corporation Commission for the Hugoton Gas Area effective January 1, 1954, has been applied to all Kansas Gas production.^f This aggregate figure is based on unit values of the several products that reflect wholesale prices at the plant.^g Omitting revived pools.^h Includes pool wells and new discoveries.ⁱ Includes salt-water disposal and recorded secondary recovery input wells.^j Counties for which number of wells drilled in 1956 is entirely or in part estimated include Allen, Anderson, Bourbon, Chautauqua, Coffey, Crawford, Elk, Franklin, Greenwood, Labette, Linn, Miami, Montgomery, Neosho, Wilson, and Woodson.

TABLE 3.—Leading oil producing counties in Kansas during 1956

Rank	County	Producing wells	Producing acreage	Total production, barrels
1	Barton	3,242	122,840	14,913,934
2	Ellis	2,063	68,840	11,618,360
3	Russell	2,969	83,090	9,883,069
4	Butler	3,322	72,430	8,138,153
5	Rooks	1,360	55,840	6,988,701
6	Stafford	1,400	53,360	6,231,825
7	Graham	895	34,410	6,040,225

tive figures for the entire state are calculated at the same pressure base, 14.65 pounds per square inch absolute.

Kansas production of natural gas liquids during 1956 was 199.4 million gallons, 7.2 million gallons less than 1955. The value of natural gas liquids produced during 1955 was \$11,868,118. These products (natural gasoline, propane, butane, and other liquefied petroleum gases) were valued at \$2.50 per barrel during 1956, compared to \$2.45 during 1955.

The total value of Kansas raw products of the petroleum industry (crude oil, natural gas, and natural gas liquids) produced in 1956 was 420.7 million dollars, which was a new record, exceeding 1955, the previous high year, by more than 15 million dollars.

Production of carbon black during 1956 was reported as 105,-680,834 pounds valued at \$6,590,663. The increase in production and value continues the trend of the previous year.

Barton County continued to be the leading oil producing county in the state. Table 3 shows the 7 leading producing counties during 1956. Rice County was dropped out of the top 7, moving Stafford County to sixth place and Graham County into seventh place. In individual field production (Table 4) the **Trapp** field of Russell and Barton Counties was replaced in the top position by the **El Dorado** field. The other leading fields remained in the same sequence as 1955. Annual oil and gas production since 1890 is shown graphically in Figure 2.

During 1956, almost 30 million barrels of oil was imported into Kansas, and a little less than 58 million barrels was exported. Approximately 93 million barrels of oil was refined and used in Kansas. A summary of oil produced, imported, used, and exported during 1955 and 1956 is given in Table 5.

Separate detailed production tables for oil and gas are given in this bulletin (Tables 65 and 66). Each includes in alphabetical

TABLE 4.—*Largest oil producing fields in Kansas during 1956*

Rank	Pool	Age, years	County	Total production, barrels
1	El Dorado	41	Butler	4,358,743
2	Trapp	21	Russell-Barton	4,241,489
3	Kraft-Prusa	20	Barton-Ellsworth	3,712,498
4	Hall-Gurney	26	Russell-Barton	3,598,344
5	Chase-Silica	26	Rice-Barton-Stafford	3,482,134
6	Bemis-Shutts	22	Ellis	3,055,079

order all counties in the state that produce oil or gas. In Table 65 the listing of each county shows both current and known cumulative oil production, producing area, names of pools (alphabetically arranged), discovery year, producing zones, average thickness of producing zones, average gravity, reported number of producing wells, and number of producing wells plugged during 1956. Similar gas data are given in Table 66. Where possible, production from zones has been differentiated. Totals for each county are given so that comparisons can be made. Where oil or gas pools extend across county lines every effort has been made to segregate accurately each county's production on the basis of the output of the leases themselves. All figures are compiled with reasonable diligence, but precise accuracy is not claimed.

Special attention has been given to dividing the natural gas production from the **Hugoton Gas Area** into county totals. Table 11 gives the 1956 gas production and cumulative production for each of the 9 Hugoton gas producing counties. The number of wells now producing and the year in which gas was first discovered are given in Table 66. Basic data on production from the Kansas portion of the **Hugoton Gas Area** have been made available through the cooperation of the Kansas Corporation Commission and Dwight's Oil and Gas Reports.

Reserves.—Kansas' proved reserves of liquid hydrocarbons (crude oil plus natural gas liquids) as of December 31, 1956, were

TABLE 5.—*Barrels of oil produced, imported, used, and exported, 1955-1956*
(From the Conservation Division, Kansas Corporation Commission)

	1955	1956
Produced	121,161,234	124,467,713
Imported	29,505,340	34,320,108
Total	150,666,574	158,787,821
Exported	57,527,501	58,713,375
Refined and used in Kansas	93,139,073	100,074,446
Total	150,666,574	158,787,821

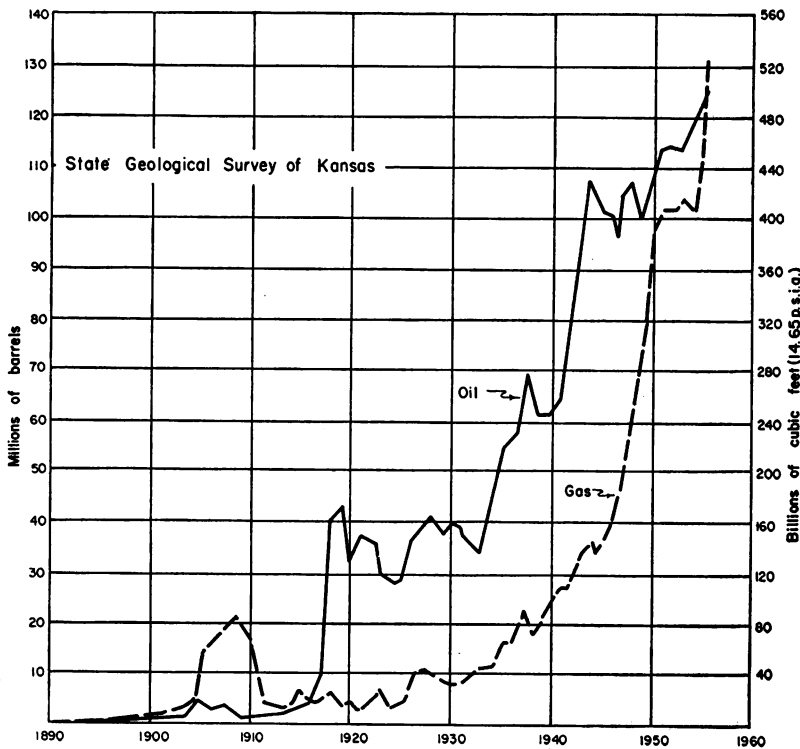


FIG. 2.—Annual oil and gas production in Kansas from 1890 to 1956.

1,163,826,000 barrels, a decrease of 0.6 percent; nationally, reserves increased 2.5 percent. Kansas' proved reserves of crude oil were 992,211,000 barrels (American Petroleum Institute—American Gas Association, 1956, p. 9) at the end of 1956, a decrease of 0.6 percent; national reserves increased 0.14 percent.

Proved reserves of natural gas in Kansas at the end of 1956 were estimated by the Reserves Committee of the American Gas Association to be more than 17,566 billion cubic feet, an increase of about 7.8 percent. Kansas' proved reserves of natural gas liquids, 171.6 million barrels, are 0.9 percent less than those of the previous year. All estimates of reserves are taken from the American Petroleum Institute and American Gas Association's annual report on reserves.

Area of production.—The producing area of Kansas oil and gas fields or the producing oil and gas area (the two overlap in

some cases) has been calculated and shown as accurately as reasonably possible. Field boundaries have been drawn a short distance outside the outermost producing wells. Where dry holes show the boundaries, the limits have been drawn between dry holes and the producing wells. Undoubtedly the drainage areas of many of the reservoirs extend considerably beyond the limits as indicated, but for practical purposes the areas have been calculated on the basis of lines drawn just outside the productive area demonstrated by present development.

For eastern Kansas counties, only areas that were producing oil during 1956 are shown on the map and assigned acre areas in Table 65. It is the custom of the State Geological Survey of Kansas to issue, about every 5 years, a bulletin on the oil and gas developments in eastern Kansas. Bulletin 104 (Jewett, 1954) is the latest. In such bulletins the old fields, most of the areas of which are now unproductive, are shown, and productive and abandoned areas are differentiated.

New pools.—During 1956, 135 new oil fields, 35 new gas fields, and 3 that were both oil and gas fields were discovered in Kansas. Six previously abandoned fields, 5 oil and 1 gas, were revived during the year. Of the 140 new and revived oil fields, the discovery wells of 8 were carried on the scout reports as dry and abandoned; 5 of the new oil and gas fields were combined with other fields. Four newly named fields, **Crandall** (Coffey County, gas), **Mignot** (Greenwood County, oil), **Gordon** (Woodson County, gas), and **Rose East** (Woodson County, oil), had production previous to 1956.

Ellis County had the most new discoveries, 16 oil; Barber County followed with 12 gas and 2 oil; Stafford County had 12 oil and 1 gas; and Cowley County had 10 oil and 1 oil and gas. The number of new oil and gas fields (173) discovered during 1956 is only 9 fewer than the high set in 1953. The total number of Kansas counties that have in the past or are at present producing commercial quantities of oil or gas or both is now 82 with the addition of Rawlins and Wallace Counties this year. Pertinent data on the new pool discoveries are given in Table 6.

Table 7 summarizes new oil and gas zones discovered in old producing fields during 1956; 59 new zones were named. Data similar to those presented for new pool discoveries are also given.

TABLE 6.—New oil and gas pools discovered in Kansas during 1956

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Barber County					
Aetna Northeast NE NE SE 9-34-14W	Perkins Bros. No. 1 Page	Mississippian	4,693-4,700	June	770,000 cu. ft. gas
Blunk SW SW NW 30-34-13W	E. H. Adair Oil Co. & Carter Oil Co. No. 1 Blunk	Mississippian	4,727-4,743	Jan.	5,200,000 cu. ft. gas
Blunk South NE NE SW 1-35-14W	Orville Parker & Cities Service Oil Co. No. 1 Sternberger	Mississippian	4,821-4,825	Aug.	6,000,000 cu. ft. gas
Canema NE NE NE 24-33-11W	W. L. Hartman No. 1 Burns "A"	Mississippian	4,553-4,583	July	1,500,000 cu. ft. gas
Driftwood SW SW SE 1-34-13W	Aylward Drlg. Co. No. 1 Donovan (Combined with Boggs SW)	Mississippian	4,635-4,672	Jan.	54,000,000 cu. ft. gas
Elsea SW SW SE 27-32-14W	Honaker-Davis Drlg. Co. No. 1 Elsea	Mississippian	4,662-4,680	Aug.	25,000,000 cu. ft. gas
Elwood NE NE SW 34-34-13W	Petroleum, Inc. No. 1 Roberts	"Elgin"	3,662-3,672	Aug.	7,340,000 cu. ft. gas
Farley Cen. NW NW 32-34-14W	W. Gruenerwald No. 1 E. A. Farley	Mississippian	4,742-4,760	Oct.	2,840,000
Highway SW SW SW 14-32-11W	Beardmore Drlg. Co. No. 1 Stewart "C"	Douglas	3,587-3,603	July	130
ILS NE NW SE 9-31-11W	Carl Todd Drlg. Co. No. 1 Smith*	Simpson	4,865	Feb.	3,270,000 cu. ft. gas
McGuire SE SE NW 24-32-11W	Mull Drlg. Co., Inc. No. 1 McGuire	Mississippian	4,403-4,423	Aug.	27,100,000
Medicine Lodge West SW SW NW 16-33-14W	Musgrove Petro. Corp. No. 1-A McGrath (Abandoned during 1956)	Mississippian	4,632-4,662	July	9,000,000 cu. ft. gas
Platt Cen. NW NW 28-33-15W	Republic Natural Gas Co. No. 1 Platt	Cherokee	4,791-4,795	Oct.	160
Sharon Northwest NW NW NW 11-32-10W	Pickrell Drlg. Co. No. 1 Slinker	Mississippian	4,347-4,357	June	8,800,000 cu. ft. gas
Barton County					
Bailey NW NE SW 30-18-11W	Thunderbird Drlg., Inc. et al. No. 1 Bailey	Arbuckle	3,396-3,417	Dec.	85
Bissel Point South SW NW SE 15-19-13W	Thunderbird Drlg., Inc. No. 1 Wood	Arbuckle	3,432-3,438	May	20
Hoisington North NE SW NW 16-17-13W	Thunderbird Drlg., Inc. No. 1 Russell	Arbuckle	3,412-3,415	Oct.	43
Klug West NE NW NW 33-17-13W	Petroleum, Inc. No. 1 Demel "D"	Lans.-K.C.	3,149-3,177	Oct.	200
Reimer NE SE NW 25-17-15W	Oil Capitol, Inc. No. 1 Reimer	Lans.-K.C.	3,357-3,361	May	53
St. Peter East NW SE SW 34-18-11W	Nadel & Gussman No. 1 Johanning	Lans.-K.C.	3,116-3,130	Aug.	256
Workman North NW SW SE 16-20-12W	Petroleum, Inc. No. 1 Hulme "I"	Lans.-K.C.	3,238-3,249	Aug.	1,696
Workman Northwest NW NW SE 21-20-12W	Roland Petl et al. No. 1 Phillips	Lans.-K.C.	3,167-3,173	April	37
Workman West SW NW NW 28-20-12W	C-G Drlg. Co. No. 1 Anderson	Arbuckle	3,434-3,450	Aug.	73
Butler County					
Pontiac Southwest SE SE SW 23-26-6E	Twin Drlg. Co. No. 1 Jones*	Mississippian	2,780-2,790	Aug.	8
Shinn Northeast SW NW NE 17-29-8E	Charles L. Carlock No. 1 Wehrman	Mississippian	2,680-2,715	March	25
Chautauqua County					
Hewins Northwest SW SW SW 27-34-9E	Glick No. 1 Harvey	Mississippian	2,072-2,078	July	196,000 cu. ft. gas
Rich NE NE NE 16-33-9E	Continental Oil Co. No. 1 Rich	Mississippian	2,285-2,315	April	20

INTRODUCTION

During 1956 several new records were established in the Kansas petroleum industry. New highs were established in crude oil and natural gas value and production. Because of an increase in production of crude oil and natural gas, the dollar value of these resources exceeded all previous records.

Eighty-two Kansas counties have produced or are producing oil or gas, 2 more than in 1955. Rawlins County was added with the finding of oil in the Lansing-Kansas City group, and Wallace County with new gas reserves in Morrowan strata.

Stimulating the development in western Kansas was the completion of a large number of Mississippian wells in the **Spivey-Grabs** field of Harper and Kingman Counties, in various new Kiowa County fields, and in new and old fields in Barber County. Of special significance is the development of additional Lansing-Kansas City production (**Warner fields**) on the flanks of the Cambridge arch in Decatur County. The discovery of the **South Side** field (Morrowan) gave Kearny County its second oil field. The **Panoma** field discovery gave Stevens County a new gas zone, the Council Grove group. New Meade County Morrowan gas discoveries were important 1956 developments. Activity continued at a rapid pace in the **Greenwood Gas Area** and **Interstate** fields of Morton County.

Of importance to eastern Kansas during 1956 was the continued search for Arbuckle and Mississippian production in Montgomery, Chautauqua, Labette, and Elk Counties. The completion of several additional Viola wells in the **John Creek** and **Comisky Northeast** fields of Morris County during the year has made that area attractive for exploration. Development of a large number of "Hunton" field wells in the **Unger** and **Unger Southwest** fields and Mississippian wells in the **Beauty** and **Lost Springs** fields raised Marion County to the ranks of those counties having more than 200 completions during 1956. Cowley County exploration for additional "Bartlesville" and Mississippian production (367 new wells) led the state in that phase of the industry.

The **El Dorado** field of Butler County was the leading oil producing field in the state during 1956, replacing the Trapp field of Russell and Barton Counties.

Ellis County led all other counties in the number of new fields discovered with 16 new oil fields. Other counties with a large

number of new field discoveries are: Barber 12 gas, 2 oil; Stafford 12 oil, 1 gas; and Cowley 10 oil, 1 oil and gas.

Crude oil production reached a new high, but proved reserves of crude oil declined slightly.

Natural gas production increased 12.8 per cent from 1955, and the production of natural gas liquids declined 3.5 percent. Proved reserves of natural gas increased 7.8 percent, but proved reserves of natural gas liquids declined 0.9 percent.

Figure 1 shows in a general way areas in Kansas within which there is production of oil or gas or both. The map shows county relations and also gives an idea of how large a percentage of the state may be regarded as "oil and gas territory".

A condensed petroleum data table (Table 2) shows at a glance the trends of various phases of the industry in Kansas, as well as corresponding trends in the United States. Comparison of the two right-hand columns of Table 2 shows whether or not Kansas is holding its own in the nation's petroleum industry.

Production and value.—The 124,467,713 barrels of oil produced in Kansas during 1956 is 3,306,479 barrels more than the 1955 figure and represents a new high in total annual oil production. The 2.7 percent increase in value of crude oil, from 241.7 to 350.9 million dollars, is due entirely to the increase in oil production.

Natural gas production during 1956 increased 12.8 percent from the previous year to 525.9 billion cubic feet calculated at the base of 14.65 pounds per square inch absolute. The value of natural gas as estimated by the Kansas Corporation Commission rose from \$51,279,817 in 1955 to \$57,852,493 in 1956, a 12.8 percent rise in value accounted for entirely by an increase in gas production. Effective January 1, 1954, a new minimum price of 11 cents per thousand cubic feet measured at 14.65 pounds per square inch absolute was established by the Kansas Corporation Commission for the **Hugoton Gas Area**, which produces more than 74 percent of the state's total production. This minimum price has been applied to all Kansas gas production, including minor amounts of unprorated production, much of which probably brought a higher price.

In the general gas production table (Table 66), in which individual pool data are given, all the 1956 production and cumula-

TABLE 2.—Petroleum data showing percentage changes for Kansas and the United States, 1955-1956

	Kansas figures		Change from previous year, percent	
	1955	1956	Kansas	United States
Crude oil production (barrels)	121,161,234 ^a	124,467,713 ^a	+ 2.7	+ 5.5
Value of crude oil produced	\$341,674,680	\$350,998,951	+ 2.7	+ 2.7
Kansas oil production as percentage of U.S. total	5.1	4.9	- 3.9	.....
Average price of oil	\$2.82	\$2.82	.....	.....
Rank of Kansas among oil producing states	5th	5th	.....	.....
Proved reserves of liquid hydrocarbons (at year end), thousands of barrels	1,171,304 ^b	1,163,826 ^b	- 0.6	+ 2.5
Ratio of proved liquid hydrocarbon reserves to current annual production	9.3:1	9.3:1	.....	.....
Oil producing area of "western Kansas", acres	772,918 ^c	839,260 ^c	+ 8.6	.....
Natural gas production, M cu. ft.	466,180,157 ^d	525,931,757 ^d	+ 12.8	+ 7.8
Value of natural gas produced	\$51,279,817 ^e	\$57,852,493 ^e	+ 12.8	.....
Production of natural gasoline and LPG	206,621,110 ^f	199,384,374 ^f	- 3.5	.....
Value of natural gasoline and LPG (natural gas liquids), gallons	\$12,052,898 ^g	\$11,868,118 ^g	- 1.5	.....
Proved reserves of natural gas, millions of cubic feet	16,293,080 ^h	17,566,257 ^h	+ 7.8	+ 6.2
Ratio of proved natural gas reserves to current annual production	34.9:1	33.4:1	- 4.3	.....
Gas producing area of "western Kansas", acres	2,811,510	2,902,000	+ 3.2	.....
New oil and gas pools discovered	149 ⁱ	179 ⁱ	.....	.....
Recorded well completions in Kansas	.....	.....	.....	.....
Oil ^h	2,432	2,408	.....	.....
Gas ^h	385	403	.....	.....
Oil and gas ^h	.....	33	.....	.....
Dry	2,052	2,349	.....	.....
Salt-water disposal ⁱ	267	128	.....	.....
Unrecorded, estimated	2,689 ^j	2,685 ^j	.....	.....
Total recorded and estimated	7,825	8,006	.....	.....
Wildcats and discovery wells (included in above total)	815	957	.....	.....

^a Figures supplied by Kansas Corporation Commission, Conservation Division.
^b Figures from American Petroleum Institute and American Gas Association, 1956. Barrels have 42 U.S. gallons and gas is based at 14.65 psia. at 60° F.
^c The petroleum area of "western Kansas" is taken to include all producing counties west of the Cowley-Butler-Marion-Dickinson County tier.
^d Figures supplied by Kansas Corporation Commission, base 14.65 psia.
^e The minimum value of 11 cents per M cubic feet of gas at 14.65 psia. at the well head established by order of the Kansas Corporation Commission for the Hugoton Gas Area effective January 1, 1954, has been applied to all Kansas Gas production.
^f This aggregate figure is based on unit values of the several products that reflect wholesale prices at the plant.
^g Omitting revived pools.
^h Includes pool wells and new discoveries.
ⁱ Includes salt-water disposal and recorded secondary recovery input wells.
^j Counties for which number of wells drilled in 1956 is entirely or in part estimated include Allen, Anderson, Bourbon, Chautauqua, Coffey, Crawford, Elk, Franklin, Greenwood, Labette, Linn, Miami, Montgomery, Neosho, Wilson, and Woodson.

TABLE 3.—Leading oil producing counties in Kansas during 1956

Rank	County	Producing wells	Producing acreage	Total production, barrels
1	Barton	3,242	122,840	14,913,934
2	Ellis	2,063	68,840	11,618,360
3	Russell	2,969	83,090	9,883,069
4	Butler	3,322	72,430	8,138,153
5	Rooks	1,360	55,840	6,988,701
6	Stafford	1,400	53,360	6,231,825
7	Graham	895	34,410	6,040,225

tive figures for the entire state are calculated at the same pressure base, 14.65 pounds per square inch absolute.

Kansas production of natural gas liquids during 1956 was 199.4 million gallons, 7.2 million gallons less than 1955. The value of natural gas liquids produced during 1955 was \$11,868,118. These products (natural gasoline, propane, butane, and other liquefied petroleum gases) were valued at \$2.50 per barrel during 1956, compared to \$2.45 during 1955.

The total value of Kansas raw products of the petroleum industry (crude oil, natural gas, and natural gas liquids) produced in 1956 was 420.7 million dollars, which was a new record, exceeding 1955, the previous high year, by more than 15 million dollars.

Production of carbon black during 1956 was reported as 105,680,834 pounds valued at \$6,590,663. The increase in production and value continues the trend of the previous year.

Barton County continued to be the leading oil producing county in the state. Table 3 shows the 7 leading producing counties during 1956. Rice County was dropped out of the top 7, moving Stafford County to sixth place and Graham County into seventh place. In individual field production (Table 4) the **Trapp** field of Russell and Barton Counties was replaced in the top position by the **El Dorado** field. The other leading fields remained in the same sequence as 1955. Annual oil and gas production since 1890 is shown graphically in Figure 2.

During 1956, almost 30 million barrels of oil was imported into Kansas, and a little less than 58 million barrels was exported. Approximately 93 million barrels of oil was refined and used in Kansas. A summary of oil produced, imported, used, and exported during 1955 and 1956 is given in Table 5.

Separate detailed production tables for oil and gas are given in this bulletin (Tables 65 and 66). Each includes in alphabetical

TABLE 4.—*Largest oil producing fields in Kansas during 1956*

Rank	Pool	Age, years	County	Total production, barrels
1	El Dorado	41	Butler	4,358,743
2	Trapp	21	Russell-Barton	4,241,489
3	Kraft-Prusa	20	Barton-Ellsworth	3,712,498
4	Hall-Gurney	26	Russell-Barton	3,598,344
5	Chase-Silica	26	Rice-Barton-Stafford	3,482,134
6	Bemis-Shutts	22	Ellis	3,055,079

order all counties in the state that produce oil or gas. In Table 65 the listing of each county shows both current and known cumulative oil production, producing area, names of pools (alphabetically arranged), discovery year, producing zones, average thickness of producing zones, average gravity, reported number of producing wells, and number of producing wells plugged during 1956. Similar gas data are given in Table 66. Where possible, production from zones has been differentiated. Totals for each county are given so that comparisons can be made. Where oil or gas pools extend across county lines every effort has been made to segregate accurately each county's production on the basis of the output of the leases themselves. All figures are compiled with reasonable diligence, but precise accuracy is not claimed.

Special attention has been given to dividing the natural gas production from the **Hugoton Gas Area** into county totals. Table 11 gives the 1956 gas production and cumulative production for each of the 9 Hugoton gas producing counties. The number of wells now producing and the year in which gas was first discovered are given in Table 66. Basic data on production from the Kansas portion of the **Hugoton Gas Area** have been made available through the cooperation of the Kansas Corporation Commission and Dwight's Oil and Gas Reports.

Reserves.—Kansas' proved reserves of liquid hydrocarbons (crude oil plus natural gas liquids) as of December 31, 1956, were

TABLE 5.—*Barrels of oil produced, imported, used, and exported, 1955-1956*
(From the Conservation Division, Kansas Corporation Commission)

	1955	1956
Produced	121,161,234	124,467,713
Imported	29,505,340	34,320,108
Total	150,666,574	158,787,821
Exported	57,527,501	58,713,375
Refined and used in Kansas	93,139,073	100,074,446
Total	150,666,574	158,787,821

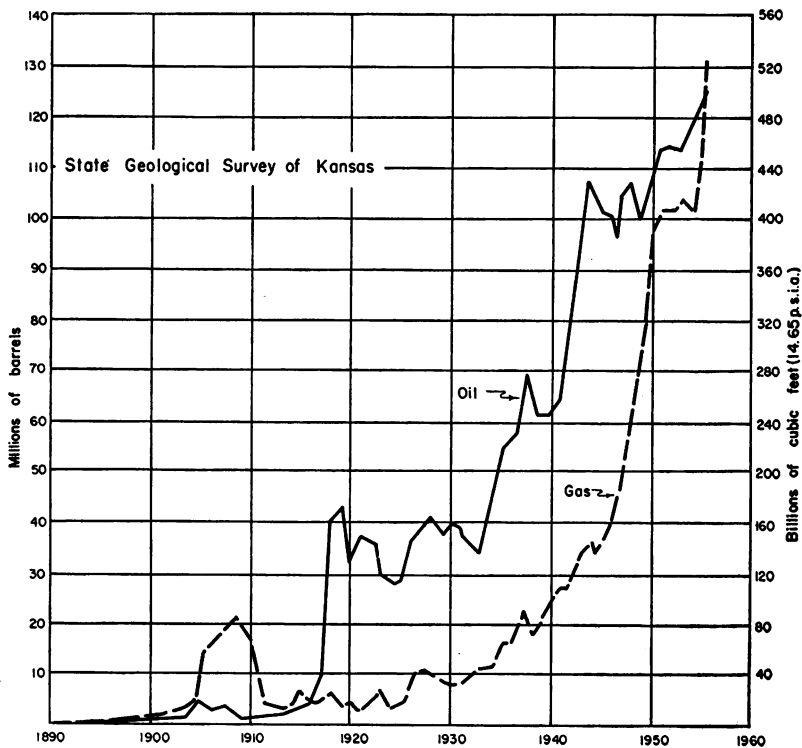


FIG. 2.—Annual oil and gas production in Kansas from 1890 to 1956.

1,163,826,000 barrels, a decrease of 0.6 percent; nationally, reserves increased 2.5 percent. Kansas' proved reserves of crude oil were 992,211,000 barrels (American Petroleum Institute—American Gas Association, 1956, p. 9) at the end of 1956, a decrease of 0.6 percent; national reserves increased 0.14 percent.

Proved reserves of natural gas in Kansas at the end of 1956 were estimated by the Reserves Committee of the American Gas Association to be more than 17,566 billion cubic feet, an increase of about 7.8 percent. Kansas' proved reserves of natural gas liquids, 171.6 million barrels, are 0.9 percent less than those of the previous year. All estimates of reserves are taken from the American Petroleum Institute and American Gas Association's annual report on reserves.

Area of production.—The producing area of Kansas oil and gas fields or the producing oil and gas area (the two overlap in

some cases) has been calculated and shown as accurately as reasonably possible. Field boundaries have been drawn a short distance outside the outermost producing wells. Where dry holes show the boundaries, the limits have been drawn between dry holes and the producing wells. Undoubtedly the drainage areas of many of the reservoirs extend considerably beyond the limits as indicated, but for practical purposes the areas have been calculated on the basis of lines drawn just outside the productive area demonstrated by present development.

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TABLE 6.—New oil and gas pools discovered in Kansas during 1956

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Canema NE NE NE 24-33-11W	W. L. Hartman No. 1 Burns "A"*	Mississippian	4,553-4,583	July	1,500,000 cu. ft. gas
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Medicine Lodge West SW SW NW 16-33-14W	Musgrove Petro. Corp. No. 1-A McGrath (Abandoned during 1956)	Mississippian	4,632-4,662	July	9,000,000 cu. ft. gas
Platt Cen. NW NW 28-33-15W	Republic Natural Gas Co. No. 1 Platt	Cherokee	4,791-4,795	Oct.	160
Sharon Northwest NW NW NW 11-32-10W	Pickrell Drlg. Co. No. 1 Slinker	Mississippian	4,347-4,357	June	8,800,000 cu. ft. gas
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Hoisington North NE SW NW 16-17-13W	Thunderbird Drlg., Inc. No. 1 Russell	Arbuckle	3,412-3,415	Oct.	43
Klug West NE NW NW 33-17-13W	Petroleum, Inc. No. 1 Demel "D"	Lans.-K.C.	3,149-3,177	Oct.	200
Reimer NE SE NW 25-17-15W	Oil Capitol, Inc. No. 1 Reimer	Lans.-K.C.	3,357-3,361	May	53
St. Peter East NW SE SW 34-18-11W	Nadel & Gussman No. 1 Johanning	Lans.-K.C.	3,116-3,130	Aug.	256
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Workman Northwest NW NW SE 21-20-12W	Roland Petl et al. No. 1 Phillips	Lans.-K.C.	3,167-3,173	April	37
Workman West SW NW NW 28-20-12W	C-G Drlg. Co. No. 1 Anderson	Arbuckle	3,434-3,450	Aug.	73
Butler County					
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Chautauqua County					
Hewins Northwest SW SW SW 27-34-9E	Glick No. 1 Harvey	Mississippian	2,072-2,078	July	196,000 cu. ft. gas
Rich NE NE NE 16-33-9E	Continental Oil Co. No. 1 Rich	Mississippian	2,285-2,315	April	20

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Clark County					
Snake Creek East Cen. SE NE 24-34-21W	The Pure Oil Co. No. 1 Harper "D"	Morrowan	5,480-5,496	Dec.	360
Coffey County					
Crandall NW SE SW 6-23-16E	Crooks & Waddell No. 1 Vielguth	Mississippian	1,022-1,027	June 1953	650,000 cu. ft. gas
Cowley County					
Albright SE SE NE 3-34-5E	H & M Drlg. Co. et al. No. 1 Albright	Mississippian	3,126-3,136	May	85
Albright North SE SE NE 34-33-5E	H & M Drlg. Co. & Coop. Ref. Ass'n. No. 1 G. E. Brown "A"	Mississippian	3,116-3,124	Aug.	60
Biddle Northwest NE NW SE 1-32-4E	O. A. Sutton No. 1 Morris	"Bartlesville"	2,878-2,892	June	25
Cambridge SE SE NW 33-31-7E	Avesh Oil Co., Inc. No. 1 Kraft & Kelso	"Layton"	2,041-2,044	March	D&A
Falls City Northwest NW NE SE 11-35-6E	McNeish & Gralapp No. 1 Evans	Mississippian	3,055-3,071	Oct.	5
Hackney SW SW NE 19-33-4E	Continental Oil Co. No. 1 Winfield Airport	Mississippian	3,246-3,258	April	45
Kanok Cen. S½ SW NW 15-35-5E	W. M. Pitts No. 1 Warren	Mississippian	3,172-3,176	March	40
Posey NE NE SW 21-33-4E	Robert L. Jones No. 1 Collinson*	Mississippian	3,164-3,178	Feb.	136
Rauckman NE NE SW 18-34-3E	F. W. Strait No. 1 Rauckman	"Bartlesville"	3,358-3,364	Jan.	1,000,000 cu. ft. gas & 25
Rippe SW SW SW 14-35-3E	L. C. Smitherman Drlg. Co. No. 1 Rippe	"Bartlesville"	3,418-3,424	Oct.	40
Walnut Bend North NE NW SW 36-33-4E	Richard King, Jr. No. 1 Mueller	Mississippian	3,188-3,196	July	5
Werner (revived) NW SW SE 31-32-6E	Richard King, Jr. No. 1 Werner (31-32-6E) **	"Layton"	2,460-2,473	Feb.	8
Decatur County					
Van Vleet NW NE NW 9-1-27W	Cities Service Oil Co. No. 1 Van Vleet	Lans.-K.C.	3,356-3,365	June	31
Warner NE NE SW 11-1-27W	Cities Service Oil Co. No. 1 Werner "E"	Lans.-K.C.	3,324-3,341	May	330
Warner North SE SE NE 2-1-27W	Sauvage & Dunn Drlg. Co., Inc. No. 1 Kilzer (Combined with Warner)	Lans.-K.C.	3,465-3,472	Dec.	57
Dickinson County					
Bonaccord Northeast SW SW NE 29-14-1E	Willis Waterman et al. No. 1 Emig "A"	"Burgess"	2,502-2,505	Nov.	35
Edwards County					
Fatzer SE SE SE 15-26-17W	Anschutz Drlg. Co., Inc. No. 1 Fatzer	Viola	4,676-4,678	Dec.	12
Salser SW SW NW 12-26-16W	F. Kirk Johnson No. 1 Salser	Mississippian	4,398-4,420	Jan.	40
Trousdale SE SE NW 21-26-16W	Aurora Gasoline Co. & L. C. Smitherman Drlg. Co. No. 1 Schultz	Cherokee	4,486-4,490	April	232
Trousdale South NE NE SW 33-26-16W	Sunray Mid-Continent Oil Co. No. 1 King	Cherokee	4,472-4,477	Dec.	5,304,000 cu. ft. gas
Wayne NE NE NE 28-24-17W	D. R. Lauck Oil Co., Inc. & Sunray Mid-Continent Oil Co. No. 1 Cross	Mississippian	4,368-4,384	Nov.	50

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Elk County					
Adams (revived) NE NE SW 29-29-13E	Cro Archer A.o. 1 Stohs Ranch	"Burgess"	1,680-1,683	June	1,133,000
Roby SW SW SW 20-28-9E	Phillips Petro. Co., et al. No. 1 Roby	Arbuckle	2,873-2,876	Aug.	32
Ellis County					
Boos NW SE SW 20-15-17W	Continental Oil Co. No. 1 Boos	Arbuckle	3,532-3,537	March	117
Dechant (revived) NE NE NW 7-15-18W	Thunderbird Drilg., Inc. No. 1 Urban	Arbuckle	3,627-3,633	Sept.	19
Engel NE SE NW 34-14-18W	Colorado Oil & Gas Corp. No. 1 Engel	Arbuckle	3,612-3,616	May	596
Engel West SW SW NW 33-14-18W	Tomilison & Kathol No. 1 Engel*	Lans.-K.C.	3,368-3,372	Nov.	14
Heyl NE NE NW 20-14-17W	Aledo Oil & Gas Co., Inc. No. 1 Heyl	Arbuckle	3,513-3,520	Feb.	31
Leiker North SW SE NW 2-15-18W	Don Pratt No. 1 Leiker "A"	Arbuckle	3,601-3,606	Nov.	100
Lieb NE NW SW 17-11-16W	Frontier Oil Co. No. 1 Lieb*	Arbuckle	3,356-3,363	March	83
North SE SW SW 20-15-20W	Don Pratt & Armer Drilg. Co., Inc. No. 1 North	Penn. basal congl.	3,862-3,867	Aug.	202
Pleasant North (revived) NW NE NW 36-13-20W	W. J. Coppinger No. 1 Engel	Arbuckle	3,842-3,854	July	700
Potter SW NW SE 20-11-16W	Franco Central Oil Co. No. 1 Potter	Arbuckle	3,309-3,316	Sept.	265
Richards (revived) Cen. NW 5-11-18W	N.C.R.A. No. 1 Cleve	Lans.-K.C.	3,466	Nov.	140
Riverview South SE SW SW 32-11-18W	Coop. Ref. Ass'n. & J. B. Hawley No. 1 Johnson "Z"	Lans.-K.C.	3,367-3,372	Dec.	oil
Schmeidler Southeast NW NE SW 34-12-17W	K & E Drilg., Inc. & Oil Trading Corp. No. 1 Schmidt "B"	Lans.-K.C.	3,330-3,352	Jan.	200
Schoenchen Townsite SW SW NE 28-15-18W	Osage Oil & Gas Co., Inc. No. 1 Herklatz	Lans.-K.C.	3,255-3,259	Jan.	123
Schoenchen West SW SW NW 21-15-18W	The El Dorado Refg. Co. No. 1 Roth	Penn. basal congl.	3,580-3,585	Aug.	30
Seitz SE SE SW 2-13-16W	Franco Central Oil Co. No. 1 Seitz	Lans.-K.C.	3,222-3,230	Sept.	18
Sweet William Northwest NW SE SW 4-12-20W	I. O. Miller No. 1 Hamburg	Lans.-K.C.	3,739-3,747	Dec.	243
Wagner NW NW SW 36-14-16W	Petro. Management, Inc. & L. B. Stableford No. 1 Wagner	Arbuckle	3,420-3,427	May	88
Walter Northwest SW SW NW 3-12-18W	Osage Oil & Gas Co., Inc. No. 1 Schumacher	Lans.-K.C.	3,491-3,503	Jan.	10
Ellsworth County					
Hoch SE NE NW 19-15-10W	Birmingham & Bartlett Drilg. Co. No. 1 Hoch (Abandoned during 1956)	Arbuckle	3,304-3,305	May	3
Finnery County					
Pleasant Prairie Northwest NE NE SW 30-26-34W	Helmerich & Payne, Inc. No. 1-30 U.S.A.	Mississippian	5,125-5,142 5,168-5,174	Dec.	200
Sequoyah Cen. SW NE 17-23-34W	Champlin Refg. Co. No. 2 Leavitt	Morrowan	4,694-4,704	Aug.	177

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Ford County					
Konda Cen. NW SW 11-27-22W	The Pure Oil Co. & Ohio Oil Co. No. 1 Anna Konda	Mississippian	5,010-5,042	Nov.	44
Graham County					
Brassfield NW NW NE 2-10-22W	Fortier & Brown & K & E Drlg., Inc. No. 1 Brassfield	Lans.-K.C.	3,688-3,733	Aug.	364
Evergreen NE NW NW 22-9-23W	Petroleum, Inc. No. 1 Goddard	Lans.-K.C.	3,711-3,713	Jan.	30
Hatcher NW NE NE 6-9-21W	Jones, Shelburne & Farmer, Inc. No. 1 Hatcher	Arbuckle	3,722-3,730	Aug.	160
Lacerte NW NE SW 32-10-22W	Petroleum, Inc. & Colorado Oil & Gas Corp. No. 1 Lacerte Unit	Lans.-K.C.	3,602-3,606	Feb.	61
Greenwood County					
Mignot NW NW NW 9-22-11E	Inland Oil, Inc. No. 1 Mignot	"Bartlesville"	1,921-1,931	May 1951	5
Harper County					
Banner South NW SW NE 4-33-7W	Roland L. Pelt et al. No. 1 Hennes	Misener	4,848-4,851	Feb.	1,408
Sunny View South SW SW SW 2-31-9W	Rupp-Ferguson Oil Co. No. 1 Miller (Combined with Spivey-Grabs)	Mississippian	4,460-4,465	Jan.	35
Wildcat Creek Cen. SW NE 30-34-6E	J. M. Huber Corp. & Continental Oil Co. No. 1 Denton-Fox	Simpson	5,217-5,219	March	D&A
Harvey County					
Burrton East SE SE NW 28-23-3W	Stelbar Oil Corp., Inc. No. 1 Becker	Mississippian	3,302-3,322	Nov.	5
Burrton North SE SE SE 32-22-3W	W. L. Hartman No. 1 Harrison	Mississippian	3,280-3,295	June	1,100,000 cu. ft. gas
Hodgeman County					
Hallet SW NE SE 15-22-25W	Kewanee Oil Co. No. 1 Larkin	Mississippian	4,598-4,638	Oct.	250
Wieland SE SE SW 16-21-22W	Mayfair Minerals, Inc. No. 1 Wieland	Mississippian	4,380-4,388 4,396-4,404	Dec.	100
Kearny County					
South Side NE SW NW 13-26-35W	Helmerich & Payne, Inc. No. 4 White "O"	Morrowan	4,966-4,974	June	108
Kingman County					
Georgia Spur NE NE NE 7-28-6W	Aurora Gasoline Co. No. 1 Greenleaf	Mississippian	3,836-3,846	Jan.	D&A
Goetz NW NW SW 29-29-9W	Pryor & Tracy & D & M Drlg. Co., Inc. No. 1 Goetz	Viola	4,408-4,414	June	24,000,000 cu. ft. gas
Settle SE SE SE 18-29-7W	George Siegrist No. 1 Settle	Mississippian	4,110-4,121	Sept.	2,400,000 cu. ft. gas
Kiowa County					
Greensburg NE NE NE 35-27-18W	Anschutz Drlg. Co., Inc. No. 1 Stewart	"Kinderhook"	4,742-4,754	Oct.	2,738,000 cu. ft. gas
Greensburg Northeast SE SE SW 17-27-17W	Aurora Gasoline Co. No. 1 Campbell	Mississippian	4,675-4,698	Oct.	4,150,000 cu. ft. gas
Hardy NE NW NE 23-28-18W	Kewanee Oil Co. No. 1 Hardy	Mississippian	4,804-4,840	May	540,000 cu. ft. gas
Kane NE NE NE 12-30-18W	Graham-Miller Oil Co. No. 1 Kane Ranch	Mississippian	4,908-4,916	Oct.	6,750,000 cu. ft. gas

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Logan County					
Oakley NW SE SW 3-11-32W	Buick Drlg., Inc. et al. No. 1 Bertrand	Marmaton	4,600-4,605	March	D&A
Marion County					
Antelope South SW NW SE 4-19-4E	Herndon Drlg. Co. No. 1 Schimpf	Mississippian	2,371-2,380	June	12
Antelope Southeast SE SE NE 2-19-4E	Hover & Hodson No. 1 Loveless	Mississippian	2,337-2,345	May	15
Beauty SE SE NW 34-18-4E	Sunflower Drlg. Co. & John Hannah No. 1 Utting	Mississippian	2,295-2,308	Feb.	15
Beauty South NW SW SE 3-19-4E	John Hannah No. 2 Batchelor	Mississippian	2,313-2,322	Dec.	D&A
Doyle Creek SW NE SW 31-21-3E	Anderson-Prichard Oil Corp. No. 2 Kent	"Hunton"	2,912-2,915	Nov.	11
Ratzlaff Cen. SW SE 7-19-2E	E. K. Carey Drlg. Co., Inc. Viola No. 1 Ratzlaff		3,135-3,140	Feb.	88
Unger Southwest SW SW SE 7-21-3E	E. K. Carey Drlg. Co., Inc. "Hunton" No. 1 Warkentin		2,812-2,819	Jan.	3,000
McPherson County					
Harmac East NW SE SE 36-21-3W	Time Petro. Co. No. 1 Waltner	"Hunton"	3,528-3,530	Aug.	10
Round Hill SW SW SW 28-18-1W	Greenland Drlg. Co. No. 1 Johnson	Cherokee	2,832-2,841	May	25
Meade County					
Angell Cen. SE SE 30-32-29W	Sinclair Oil & Gas Co. No. 1 Mamie E. Angell	Morrowan	5,608-5,664	Aug.	800,000 cu. ft. gas & 21
Fincham Cen. N½ SW NE 14-35-27W	Monsanto Chem. Co. & Rine Drlg. Co. No. 1 Marion	Mississippian (Chesteran)	6,275-6,307	Dec.	30,000,000 cu. ft. gas
Horace Cen. SE SE 9-34-29W	Monsanto Chem. Co. No. 1 Horace	Morrowan	5,815-5,826	Oct.	1,500,000 cu. ft. gas
Plains Cen. SW SW 17-32-30W	Coop. Ref. Ass'n. & Wakefield No. 1 Baty "A"	Morrowan	5,611-5,644	Dec.	7,900,000 cu. ft. gas
Sanders SE NW NE 13-32-29W	The Texas Co. No. 1 Sanders	Mississippian (Chesteran)	5,550-5,590	Oct.	9,153,000 cu. ft. gas
Singley South Cen. SE NE 32-33-29W	The Texas Co. No. 1 Fox	Morrowan	5,810-5,818 5,830-5,838	Dec.	31
Morris County					
Comiskey Northeast NW NW NW 24-16-9E	Kuper Oil Co. No. 1 Sam Teel	Viola	2,929-2,932	March	192
Ness County					
Brownell NW NW SE 23-16-22W	Welch & Olsson Drlg. Co., Inc. No. 1 Walker	Cherokee	4,341-4,345	May	11
Cruce SE SE SE 4-19-26W	Barnett Drlg., Inc. No. 1 Ward	Mississippian	4,556-4,561	May	78
Ryersee Cen. NW SE 35-18-21W	Stickle Drlg. Co. No. 1 Ryersee	Cherokee	4,100-4,122	June	197
Schoharie SE SE SE 22-19-23W	Anschutz Drlg. Co., Inc. & Kan-Tex Drillers, Inc. No. 1 Cooper	Marmaton	4,272-4,330	May	72
Wellmanville NW NW SW 34-19-21W	Welch & Olsson Drlg. Co., Inc. & N. Appleman Co. No. 1 Moore	Mississippian	4,419-4,423	Jan.	D&A

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Pawnee County					
Evers South NW NW NE 12-22-16W	Graham-Messman-Rinehart Oil Co. No. 1 Catherine Boyd	Arbuckle	3,920-3,929	March	4,151,000 cu. ft. gas
Godfrey NE NE SW 12-22-18W	Welch & Olsson Drlg. Co., Inc. No. 1 Godfrey	Penn. basal congl.	4,127-4,133	Sept.	D&A
Jay South NE NE SW 9-23-15W	Stickie Drlg. Co. No. 1 Jay T. Smith	Simpson	4,101-4,107	June	25
Larned Southwest SE SE SE 5-22-16W	A. F. Brann No. 1 Bahl	Arbuckle	3,850-3,855	March	127
Newsom NW NE NE 25-20-20W	Honaker-Davis Drlg. Co. No. 1 Newsom	Mississippian	4,270-4,278	Nov.	25
Pratt County					
Carver-Robbins Northeast NW NW SE 10-27-15W	Osage Oil & Gas Co., Inc. No. 1 Cochran	Penn. basal congl.	4,400-4,409	Nov.	131
Cullison NW NW SE 25-28-15W	Bankoff Oil Co. No. 1 Johnson	Mississippian	4,543-4,556	Jan.	800,000 cu. ft. gas & 120
Haskins NE NW NE 5-27-14W	K & E Drlg., Inc. No. 1 Haskins	Viola	4,418-4,426	June	227
Rawlins County					
Brumm NE SE SW 7-2-36W	Miami Oper. Co. No. 1 F. Brumm "A"	Lans.-K.C.	4,312-4,329	June	30
Rice County					
Bredfeldt Northwest NE NW NE 12-18-10W	Iron Drlg. Co. No. 1 Bredfeldt	Arbuckle	3,250-3,255	April	29
Humphreys SE SE SW 3-21-8W	Sterling Drlg. Co. No. 1 Humphreys*	Penn. basal congl.	3,272-3,288	Aug.	3,210,000 cu. ft. gas
Orth North SE NE NW 23-18-10W	Iron Drlg. Co. No. 1 Boldt	Arbuckle	3,262-3,270	May	27
Rooks County					
Annon South SE NE NW 34-10-20W	Oil Trading Assoc., Inc. No. 2 Briggs (Combined with Trico)	Lans.-K.C.	3,486-3,490	June	28
Cresson NW SW NE 11-9-20W	Jones, Shelburne & Farmer, Inc. No. 1 Baldwin	Arbuckle	3,618-3,626	Oct.	120
Gra-Rook North SW NW NE 18-9-20W	K & E Drlg., Inc. No. 2 Town Est.	Arbuckle	3,746-3,760	June	281
Trarbach NE SW NW 36-10-20W	Francis Oil & Gas, Inc. No. 1 Trarbach (Combined with Marcotte)	Arbuckle	3,680-3,687	Feb.	39
Williams North SE SE SW 32-9-18W	Osage Oil & Gas Co., Inc. No. 1 Stucky	Simpson	3,714-3,717	Nov.	95
Rush County					
Lohrey SW SW SW 35-17-17W	Aylward Drlg. Co. No. 1 Lohrey	Penn. basal congl.	3,563-3,570 3,574-3,598	Dec.	6,700,000 cu. ft. gas
Pechanec SE NW NE 2-19-17W	Skelly Oil Co. No. 1 H. Pechanec	Arbuckle	3,842-3,853	Oct.	15
Ryan West SW SW NE 32-19-16W	Ben F. Brack Oil Co., Inc. No. 1 Weber	Arbuckle	3,804-3,817	Jan.	15
Webs Southwest NW NW SW 16-19-20W	Natural Gas & Oil Corp. No. 1 O. J. Williams "B"	Cherokee	4,302-4,304	Aug.	59
Russell County					
Driscoll (revised) NE SE SW 30-15-11W	Jerry Driscoll No. 1 Fee (30-15-11W)**	Penn. basal congl.	3,303-3,305	Jan.	25
Kune NE SE SW 17-13-15W	A. F. Schmitt No. 1 McKune	Lans.-K.C.	3,004-3,009 3,013-3,018 3,189-3,194	Dec.	50

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone		Month of discovery	Initial production, bbl. per day
Worley NW NW NE 4-11-15W	Western Dev. Co. No. 1 Worley	Lans.-K.C.	3,204-3,209	March	5
Sedgwick County					
Brumley Northwest SE SE SW 12-29-1W	Beardmore Drlg. Co. No. 1 Smith	Mississippian	3,303-3,315	Aug.	25
Chambers Northeast NE NE SW 2-29-2W	Pickrell Drlg. Co. No. 1 Struthers "A"	Mississippian	3,570-3,575	Sept.	240
Gladys Southwest NE SE NW 7-29-1E	E. H. Adair Oil Co. No. 1 Deffner	Kansas City	2,828-2,829	Feb.	30
Greenwich Northeast NE NW SE 1-26-2E	James Tasheff & Sam Marcus No. 1 Edson	Mississippian	2,827-2,832	April	50
Latta North SE SE SW 33-29-2W	Beardmore Drlg. Co. No. 1 Lauterbach	Lans.-K.C.	3,117-3,122	Sept.	120
Seward County					
Plains West SW NE NE 16-32-31W	Southwestern Explor. Co. No. 1 Collins	Morrowan	5,600-5,614	Nov.	21,000,000 cu. ft. gas
Sheridan County					
Advance NW NW NW 26-8-27W	Heathman-Seeligson Drlg. Co. No. 1 Brown "A"	Lans.-K.C.	3,883-3,892	June	513
Hoxie NW NW NW 6-9-28W	Heathman-Seeligson Drlg. Co. No. 1 Decker "A"	Toronto	3,810-3,816	Sept.	581
Stafford County					
Dillwin SW SW SW 16-24-14W	D. R. Lauck Oil Co., Inc. & Sunray Mid-Cont. Oil Co. No. 1 Smith	Arbuckle	4,295-4,301	Jan.	265
Farmington North NW NW SW 23-24-15W	D. R. Lauck Oil Co., Inc. & "Kinderhook" Sunray Mid-Cont. Oil Co. No. 1 Fergus		4,120-4,205	Jan.	3,500,000 cu. ft. gas
Farmington Northwest NW NW SW 29-24-15W	Anschutz Drlg. Co., Inc. No. 1 Ackerman	Lans.-K.C.	3,904-3,912	Oct.	88
Gates North SE SE SE 22-21-13W	D. R. Lauck Oil Co., Inc. No. 1 Schulz "C"	Arbuckle	3,634-3,638	Sept.	25
Harter North NE SW SE 19-24-13W	Natural Gas & Oil Corp. No. 1 Dudrey	Lans.-K.C.	3,785-3,790	June	176
Knoche South NW NW SE 17-24-12W	Anschutz Drlg. Co., Inc. No. 1 A. Byer	Viola	3,884-3,886	Oct.	D&A
Krankenbergl SW SW SE 19-22-12W	Transit Corp. & Monsanto Chem. Co. No. 1 Krankenberg	Simpson	3,711-3,716	March	126
Leiss SW SW NE 23-25-13W	Welch & Olsson Drlg. Co., Inc. & Sunray Mid-Cont. Oil Co. No. 1 Leiss	Simpson	4,215-4,222	Feb.	235
Moody SE SE NE 7-25-14W	Apache Oil Corp. No. 1 Moody	Mississippian	4,168-4,182	April	115
Rattlesnake East NW NW SE 7-24-13W	Petroleum, Inc. No. 1 Henderson	Lans.-K.C.	3,694-3,700	Feb.	1,393
Seevers Northwest NE SE NW 6-25-13W	McKnab Drlg., Inc. No. 1 Goodman	Arbuckle	4,192-4,196	June	205
Shepherd Northwest NE SW SE 8-22-11W	Petroleum, Inc. No. 1 Erickson "B"	Simpson	3,528-3,536	Oct.	43
White Cloud NE SW NE 28-22-11W	Anschutz Drlg. Co., Inc. No. 1 Curtis	Arbuckle	3,636-3,638	April	70
Stevens County					
Hanke Cen. SE NW 6-35-36W	Republic Natural Gas Co. No. 1 Hanke	Morrowan	6,267-6,330	May	7,500,000 cu. ft. gas
Panoma NE NW SE 12-31-38W	Hugoton Prod. Co. No. 2-12 Panoma	Council Grove	2,843-2,963	Dec.	16,124,000 cu. ft. gas
Sumner County					
Beatie NE NE NE 21-31-2W	Gulf Oil Corp. No. 1 Beatie	Simpson	4,189-4,192	May	25

TABLE 6.—New oil and gas pools discovered in Kansas during 1956, concluded

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Latta Northwest	Ted Ferrier	Kansas City	3,172-3,176	April	116
SE SW SW 5-30-2W	No. 1 Van Allen				
Meek	The Pure Oil Co.	"Cleveland"	3,228-3,246	June	45
SE SE NW 10-35-1E	No. 1 G. C. Meek				
Portland South	Southwest Oil Corp.	"Layton"	3,040	July	15
NE SW NE 28-34-1E	No. 2 Unruh				
Thomas County					
Kindig	Bachus Oil Co. & The	Cherokee	4,595-4,626	May	401
NE NE SE 30-8-32W	Veeder Sup. & Develop. Co. No. 1 Kindig				
Trego County					
Adair Southwest	Davis Bros.	Marmaton	3,856-3,866	May	29
NW NW SW 28-12-21W	No. 1 Ridgeway				
Kroeger	Transit Corp.	Arbuckle	3,937-3,941	Feb.	25
SE NW SE 36-13-21W	No. 1 Kroeger				
Newcomer	Imperial Oil of Kansas, Inc. No. 1 Newcomer	Lans.-K.C.	3,733-3,736	March	3,000
NE NE SW 12-12-23W					
Newcomer Northwest	Imperial Petro. Co., Inc.	Lans.-K.C.	3,763-3,768	June	1,642
SW SW SE 2-12-23W	No. 1 Hixson				
Page Creek	Century Prod. Co. & K & E Drlg., Inc.	Cherokee	4,260-4,265	Aug.	128
SE SE SE 28-15-22W	No. 1 Tipton Est.				
Rhoden	Imperial Oil of Kansas, Inc.	Lans.-K.C.	3,764-3,770	May	37
SW SW NE 24-12-23W	No. 1 Rhoden "A"				
Wallace County					
Sexson	Skelly Oil Co.	Morrowan	5,008-5,014	Aug.	14,000,000 cu. ft. gas
NW NE SW 19-13-42W	No. 1 N. D. Sexson				
Woodson County					
Annabelle	Thunderbird Drlg., Inc.	"Squirrel"	1,173-1,178	Nov.	25
SW NE NE 32-25-15E	No. 1 Corkery				
Gordon	Joe Phillips et al.	"Squirrel"	1,080-1,096	Jan. 1954	1,500,000 cu. ft. gas
Cen. NW SE 13-24-15E	No. 1 Gordon				
Rose East	St. Croix Oil Co. & A. J. Brazil	"Bartlesville"	1,109-1,124	Aug. 1954	22
SE NW NW 16-26-16E	No. 2 McGregor				

*Old well worked over.

**Location of original discovery well.

Abandoned and combined fields.—There were 10 fields officially abandoned in 1956. Data on the discovery wells and cumulative productions of the abandoned fields are included in the county write-ups. During 1956 also, 72 oil or gas fields were combined with other fields. As has been the custom of the Survey, the outline of an abandoned field is omitted from the maps in this bulletin.

TABLE 7.—New oil or gas zones in old producing fields, 1956

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Barber County					
Bloom	E. H. Adair Oil Co.	Mississippian	4,310-4,340	June	25
NE NE NW 23-32-12W	No. 1 Bloom**				

TABLE 7.—New oil or gas zones in old producing fields, 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Little Bear Creek SE SE NE 10-32-14W	Purcell & Mull No. 1 Barckley	Viola	4,670-4,680	Nov. 1954	12,400,000 cu. ft. gas
Salt Fork NW NW NW 3-35-15W	The Chicago Corp. No. 1 Davis Ranch*	Marmaton	4,780	March 1955	695,000 cu. ft. gas
Barton County					
Great Bend Northwest SE SW NW 19-19-13W	Honaker Drlg. Co. & Amerada Petro. Corp. No. 1 Wallace	Arbuckle	3,460-3,465	March	344
Kimpler SW NE NE 31-18-11W	Thunderbird Drlg., Inc. No. 1 Kimpler "C"	Lans.-K.C.	3,184-3,187	Jan.	300
Nuss NW NW SE 5-16-14W	Rudy Herman No. 1 Nuss	Arbuckle	3,387-3,395	May	25
Red Brick SW NE NW 26-19-13W	J. A. Terteling & Sons & Coop. Ref. Assn. No. 1 Nicholson	Penn. congl.	3,414-3,416	Aug.	25
Redwing East SE SE NE 32-17-12W	Bennett & Roberts Drlg., Inc. No. 1 Hoeffner	Lans.-K.C.	3,120-3,125	Jan.	25
Workman North SE NW NW 16-20-12W	Petroleum, Inc. No. 1 Hulme "D"	Arbuckle	3,442-3,448	Oct.	30
Coffey County					
Finnerty Cen. N $\frac{1}{2}$ SW NW 12-21-13E	F. E. Lockhart No. 3 Davis	"Peru"	1,382-1,392	July	7
Comanche County					
Beals SW SW SE 32-33-17W	Pure Oil Co. No. 1 Parks	Simpson	5,670-5,687	April	35,200,000 cu. ft. gas
Cowley County					
Frog Hollow East SE SW SE 12-32-5E	Beaumont Petro. Co. No. 2 J. H. Hawley	Mississippian	3,077-3,097	March	15
Rainbow Bend North-east NW SW SE 15-33-3E	W. L. Hartman No. 1 Smith "B"	Mississippian	3,284-3,300	Jan. 1955	25
Werner NE NE NW 6-33-6E	Petro. Management, Inc. No. 1 Craig	Mississippian	3,074-3,082	Nov.	675
Wilnot-Floral SW SW SW 30-31-5E	Renfro Drlg. Co. No. 1 Tanner*	"Cattleman sand"	2,880	Jan.	7,000,000 cu. ft. gas
Decatur County					
Warner North NE NE SE 2-1-27W	Cities Service Oil Co. No. 3 Sater (Combined with Warner)	Penn. sand	3,483-3,491	Sept.	41
Edwards County					
Embry NE NE NW 22-24-16W	Branine-Holl No. 1 Zuercher	"Kinderhook"	4,292-4,330	April	3,700,000 cu. ft. gas
Ellis County					
Engel SW NE NW 34-14-18W	Colorado Oil & Gas Corp. No. 2 Engel	Lans.-K.C.	3,350-3,356	Aug.	497
Engel SW SW NE 34-14-18W	Colorado Oil & Gas Corp. No. 2 Engel "A"	"Penn. basal sand"	3,621-3,636	Aug.	60
Irvin South NE NE NE 17-14-19W	Sterling Drlg. Co. & Fred Nixon No. 1 Kramer*	Lans.-K.C.	3,660-3,665	April	100 est.
Leiker Southeast NE NW NE 23-15-18W	Frontier Oil Co. No. 2 Gross "A"	Lans.-K.C.	3,292-3,311	Aug.	95
Solomon SE SW NE 28-11-19W	Skelly Oil Co. No. 2 G. R. Solomon*	Wabaunsee	3,013-3,017	Jan.	140
Ubert Northwest SW NW NW 1-13-18W	Alpine Oil & Gas Corp. No. 4 Crissman "A"	Lans.-K.C.	3,339	May 1953	30
Wheatland Southeast NW SE NE 29-15-17W	Coop. Ref. Assn. No. 2 Schiefelbein	Lans.-K.C.	3,335-3,349	Dec.	44

TABLE 7.—New oil or gas zones in old producing fields, 1956, continued

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Ellsworth County					
Stoltenberg Cen. SE SW 23-16-10W	D. T. Ingling et al. No. 1 Zitzman	Simpson	3,379-3,381	March 1954	15
Hodgeman County					
Saw Log Creek Cen. NE SE 36-23-22W	Atlantic Ref. Co. No. 2 Hall	Cherokee	4,478-4,486	April	83
Kearny County					
South Side NE SW NW 13-26-35W	Helmerich & Payne, Inc. No. 4 White "O"	Mississippian	4,982-4,990	Sept.	180
Kingman County					
Basil NW NW NE 22-29-7W	Coppinger Drilg., Inc. No. 1 Hanscome	Mississippian	4,150-4,154	Feb.	4,330,000 cu. ft. gas
Gilchrist SW NE NE 15-30-7W	Pure Oil Co. No. 1 J. X. Kinert	Mississippian	4,084-4,119	Jan.	1,260,000 cu. ft. gas
Kiowa County					
Well-ford NW SE 16-28-16W	The El Dorado Ref. Co. No. 1 Kinney	Mississippian	4,729-4,739	Jan.	6,160,000 cu. ft. gas
McPherson County					
Johnson South NW SW SE 11-20-3W	Bob Jones No. 1 Krehbiel	Simpson	3,514-3,520	May	25
Meade County					
Bond Cen. NW NW 4-34-30W	James Donoghue No. 1 Schell	Mississippian (Chesteran)	5,860-5,886	May	8,800,000 cu. ft. gas
Stevens Cen. SE SW 35-32-30W	Colorado Oil & Gas Corp. No. 9 Holmes	Mississippian (Chesteran)	5,713-5,754	Oct.	3,500,000 cu. ft. gas & 20
Morton County					
Taloga Cen. NW 34-34-42W	Panhandle Eastern Pipe Line Co. No. 1-34 Land Bank*	Cherokee Morrowan	3,894-3,902 4,442-4,450	April	18,900,000 & 19,391,000 cu. ft. gas
Ness County					
Aldrich Northeast SW SW SW 23-17-25W	Magnolia Petro. Co. No. 3 John C. Shearer	Marmaton	4,325-4,329	April	186
Aldrich Northeast NE NW NW 19-17-24W	Magnolia Petro. Co. No. 1 Schaben	Penn. congl.	4,334-4,344	Dec.	D&A
Ryersee SE NE SW 35-18-21W	Stickle Drilg. Co. No. 1 Lank	Mississippian	4,209-4,215	Sept.	125
Pawnee County					
Hearn SE SW SE 26-23-15W	Natural Gas & Oil Corp. No. 1 Walker	Arbuckle	4,130-4,135	May	25
Pratt County					
Haskins NE NW NE 5-27-14W	K & E Drilg., Inc. No. 1 Haskins	Lans.-K.C.	4,118-4,126	Sept.	227
Rice County					
Chase-Silica SE SW SW 3-20-10W	T. H. Mastin & Ben. C. W. Hyde, Jr. & Fern Drilg. Co. No. 1 Keesling	"Basal Penn. sand"	3,355-3,363	Feb.	50
Rooks County					
Webster SE SE NW 4-9-19W	Skelly Oil Co. No. 5 Rostocil	Shawnee (Toronto)	3,180-3,192	Jan.	26
Williams North NE NE NW 5-10-18W	Osage Oil & Gas Co., Inc. No. 1 Wise	Arbuckle	3,725-3,728	Nov.	81

TABLE 7.—New oil or gas zones in old producing fields, 1956, concluded

County, pool, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production, bbl. per day
Sedgwick County					
Brumley SE SE SW 18-29-1E	Shawver-Armour, Inc. No. 1 Huffman	Lans.-K.C.	2,863-2,865	April	20
Seward County					
Wide Awake Cen. NE SW 33-34-34W	Westhoma Oil Co. No. 1 Keeting	Mississippian (Chesteran)	6,168-6,215	Aug.	2,000,000 cu. ft. gas
Stafford County					
Bayer SE SE NW 21-21-14W	Gulf Oil Corp. No. 1 Russell	Viola	3,702-3,712	April	132
Bayer NW SW NE 21-21-14W	D. R. Lauck Oil Co., Inc. No. 1 Titus	Simpson	3,736-3,749	March	150
Farmington SW SE NW 34-24-15W	Skelly Oil Co. No. 1 Campbell*	Simpson	4,378-4,384	April	50
Farmington Northwest SE NE SE 30-24-15W	Carter Oil Co. No. 1 Seibert	"Kinderhook"	4,272-4,282	Nov.	887,000 cu. ft. gas & 50
Lincoln Northwest NE NW NE 29-21-14W	Phillips Petro. Co. No. 3 Lincoln "A"	Viola	3,705-3,743	April	25
Pundsack North S½ SW SE 18-21-13W	Stanolind Oil & Gas Co. No. 1 Fisher*	Lans.-K.C.	3,494-3,502	Oct.	351
Radium Townsite NW SW SW 33-21-14W	Hilton Drlg. Co., Inc. No. 1 Strobel	Viola	3,754-3,766	Dec.	222
Rattlesnake East NW SW SE 7-24-13W	Petroleum, Inc. No. 2 Henderson	Mississippian	3,880-3,884	Aug.	7,326,000 cu. ft. gas
Sand Hills NE NW SW 19-21-11W	Lee Phillips No. 1 Smith	Simpson	3,481-3,486	Nov.	25
Seevers Northwest NW SW NE 6-25-13W	Natural Gas & Oil Corp. No. 1 Seevers	Lans.-K.C.	3,826-3,829	Aug.	125
Taylor SW NE NE 10-21-14W	Lewis Drlg. Co. No. 1 Shepherd	Lans.-K.C.	3,482-3,487	Jan.	198
Sumner County					
Bitter Creek S½ SW SW 1-35-1E	Alpine Oil & Royalty Co., Inc. No. 4 Ramp	Stalnaker	2,364-2,381	Jan.	5,000,000 cu. ft. gas
Padgett Cen. SE SE 34-34 2E	A. W. Holiday Oil Co. No. 1 Olson	Marmaton	3,187-3,195	April	1,000,000 cu. ft. gas
Rutter NE NE SE 20-33-2E	Shawver-Armour, Inc. No. 1 Wright	"Bartlesville"	3,268-3,278	July	5
Woodson County					
Vernon NW NW NW 33-23-16E	Peters Drlg. Co., et al. No. 1 Glade	"Squirrel"	1,068-1,074	Sept.	25

* Old well worked over.

Wells drilled during 1956.—There were 5,321 wells recorded as being drilled in the state during 1956. It is certain that numerous shallow wells in several eastern Kansas counties were not recorded and thus are not included in this tabulation. It is estimated from reliable sources other than scout reports that at least 2,685 such unreported wells (including 196 input wells in Table 1) were drilled in 1956. Of the reported tests, 2,408 were oil wells, 403 were gas wells, 33 were oil and gas wells, 2,349 were dry and abandoned holes, and 128 were salt-water disposal or input wells drilled in connection with secondary recovery operations. New

field discoveries and revivals accounted for 179 of the oil and gas wells; 778 of the dry holes were dry wildcat tests.

In each of 7 Kansas counties more than 200 wells were recorded as drilled in 1956. For the first time in many years, Cowley County led all others with 367 new wells. Following in order were Ellis (332), Barton (273), Graham (273), Marion (270), Stafford (249), and Barber (217). These 7 counties accounted for 37 percent of the total number of recorded wells drilled in the state during 1956.

Test wells drilled within $1\frac{1}{2}$ miles of the outside boundaries of producing fields are called "extension wells" and are not shown on the maps in this bulletin. Test wells resulting in dry holes drilled outside this $1\frac{1}{2}$ mile limit are classed as "wildcat wells" and are shown by symbols on the maps. Tables of dry wildcat wells for counties having 4 or more such tests during 1956 are included in the county write-ups.

The tops of the various formations listed in the tables were determined through the use of electric logs if they were available. An asterisk in front of the well name in the tables indicates that no electric log is available for that well. In such cases various other sources of information have been used to determine the tops of the formations. These include the Kansas Sample Log Service, Independent Oil and Gas Service, drillers logs, and other sources within the Survey.

Because field boundaries are rarely exact, the classification of wildcat wells becomes somewhat arbitrary. Hence, the total number of wildcat wells the reader may obtain from different sources is likely to vary somewhat.

For the purposes of the tables, wells counted as 1956 completions are those that have been finished within the year and that have been drilled to completion in one operation. Old wells worked over, although completed as producing wells, are not counted as 1956 completions. The wells abandoned in 1956 as dry and then converted to salt-water disposal have been classed as dry holes, unless it was plain that they were drilled expressly for salt-water disposal.

Well elevations.—Elevations of many wildcat tests in the state are given in tables or in the text. Publication of elevations of many wildcat wells was made possible through the cooperation of Laughlin-Simmons and Company, Tulsa, Oklahoma.

Eastern Kansas counties.—Counties lying wholly east of Sixth Principal Meridian are regarded as being in eastern Kansas, an area that has been treated separately in some reports (Jewett, 1954) and is treated somewhat differently in this report. Plate 1 is a map of eastern Kansas showing locations of areas from which oil was produced during 1956 and locations of secondary recovery projects.

Developments in eastern Kansas in 1956 included the search for shallow reservoir rocks in which commercial wells can be completed by hydraulic fracturing methods, and increased drilling for Arbuckle and Mississippian production in Chautauqua, Elk, Labette, and Montgomery Counties. Exploration east of the Nemaha anticline in Morris County for additional Viola fields was significant. Some fields were opened, some joined, and some extended.

Much oil is produced in eastern Kansas by secondary recovery methods, especially water flooding. In 1956 the total oil production by secondary recovery methods, including an estimate of those projects not reporting specifically, exceeded 15.1 million barrels. Data on secondary recovery operations are listed in Table 1.

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It would have been impossible to assign much of the oil production in eastern Kansas to definite areas or even to counties without the cooperation of the several persons and organizations who are sending monthly oil purchase reports to the Survey and who have helped in other ways. Thanks are expressed to Anderson-Prichard Oil Corporation; Beaumont Petroleum Company; A. L. Becker; Bison Oil Company; Marvin E. Boyer; Carter Oil Company; Chanute Property Management Corporation, Inc.; Cities Service Oil Company; Mack C. Colt; Continental Oil Company; Cooperative Refinery Association; The Derby Refining Company; The El Dorado Refining Company; Virgil Gamble; Joplin Refining Company; Joe Maclaskey; W. L. Maclaskey; Mid-America Refining Company; Robert Page; Sinclair Oil and Gas Company; Sinclair Oil and Refining Company; Skelly Oil Com-

pany; Standard Oil Purchasing Company; Stekoll Petroleum Company; Lester Town; White Eagle Purchasing Company, Inc., (now Mobil Crude Oil Purchasing Company); and Vickers Petroleum Company.

Thanks are given to the various members of the Kansas Nomenclature Committee, Kansas-Oklahoma Division of the Mid-Continent Oil and Gas Association, for supplying their data on the new oil and gas pools discovered during the year and for their area descriptions of existing pools.

Thanks are extended to numerous companies and individuals who have contributed information on secondary recovery production and drilling activities connected with secondary recovery for the year. Numerous persons and companies also contributed gas production figures for the year.

Many persons engaged in various phases of the petroleum industry in Kansas have been generous in providing data that have been used in this report. Here should be listed John A. Edwards, Lee Garrett, Thomas W. Lee, J. H. Page, Carl L. Pate, W. L. Stryker, Charles W. Studt, and Harvel White.

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The Survey is pleased to acknowledge assistance from Vance E. Rowe of Petroleum Statistical Guide, Inc., in supplying a large part of the crude oil production figures, and from D. R. Dwight of Dwight's Oil and Gas Reports, who made available the production figures for the Hugoton Gas Area.

SECONDARY RECOVERY

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 official sanction and status were given the practice through the passage of a law in Kansas in 1935. Grandone (1944) reported that after passage of the law the first legal project was organized by the York State Oil Company in the Seeley pool (now Seeley-Wick) of northern Greenwood County in May 1935. Pointing up the significance of

TABLE 8.—Data on eight counties producing oil by secondary recovery in 1956

County	Number of projects, 1956	Total oil production, 1956, bbl.	Est. secondary recovery oil production 1956, bbl.
Allen	12	844,728	557,198
Anderson	7	658,605	567,688
Butler	29	8,138,153	4,080,185
Franklin	5	347,589	290,028
Greenwood	46	6,788,601	5,365,489
Miami	10	674,580	448,771
Montgomery	16	748,019	377,502
Neosho	13	638,149	490,261

the secondary recovery activities in the state, especially in the Cherokee basin and the southern part of the Forest City basin, is the fact that production has risen from an estimated 5 million barrels in 1942 to more than 15.1 million barrels in 1956, accounting for about 12.2 percent of the state's total production that year. The reported production for 1956 totaled 11,619,573 barrels, and the figure of 15.1 million barrels is reached by adding an estimate of those operations not reporting specifically.

Table 1 lists the secondary recovery operations in the state for which questionnaires were returned. The 217 projects listed reported a total of 6,999 wells producing oil by secondary recovery methods and 4,302 wells utilized as input wells for injection of a repressuring medium. Of the total projects reporting, 182 are located east of the Sixth Principal Meridian, which runs north and south through Wichita.

Greenwood County as in past years led all other counties in the number of projects operating as well as in production attributable to secondary recovery (Table 8). During 1956, the projects in Greenwood County produced more than 5.3 million barrels of oil. The projects in Butler County, the second largest producer of oil by secondary recovery methods, yielded more than 4.0 million barrels. These 2 counties accounted for more than half the oil produced through repressuring projects in Kansas.

The following zones listed in the order of their importance provided the bulk of the oil produced by secondary recovery methods: "Bartlesville sand", "Peru sand", and "Wayside sand". Salt water was used for repressuring in most of the Kansas projects. Of the many subsurface zones from which salt water is obtained for repressuring, the 3 main ones are sandstones of the Douglas group, Arbuckle dolomite, and the "Bartlesville sand".

Principal sources of fresh water are shallow ground-water reservoirs, lakes, streams, and municipal water supplies. Where combined fresh and salt water is used, the brine is obtained commonly from the local oil-producing formation. Treatment of salt water includes aeration, addition of chemicals, settling, and filtration, singly or in various combinations. Fresh water requires treatment more commonly than brines. Such treatment includes addition of lime, chlorine, or alum; and settling and filtering; or some combination of these. Most users of combined fresh and salt water use treating methods.

In general, ground water is the most satisfactory type for water flooding, because the quality of river water varies greatly with the seasons; hence the treatment necessary varies from time to time. Ground water usually remains uniform in chemical composition for long periods; therefore any treatment required before injection remains relatively constant.

NATURAL GAS

The shipping of natural gas through extensive pipe-line systems across state lines and the approval of new cross-country lines come under the jurisdiction of the Interstate Commerce Commission and the Federal Power Commission, respectively. The apportionment of new lines and approval of transmission of gas are based on the considerations of the greatest good to the greatest number of people and on economic investment values. Considering these bases, Kansas, ranking fifth among the gas-producing states, fourth in reserves, yet with a relatively small population, has only a minor voice in the eventual use of the gas. Among Kansans, the producers, of course, want to export excess gas for income, which returns to the state. On the other side of the question is the Kansas consumer, both domestic and industrial, who desires retention of the natural resource within the state's borders, arguing that exportation of our natural gas is depleting our reserves. A significant portion of our annual gas production is being exported; however, estimates of domestic and industrial use of natural gas within the state have risen over the past few years.

Production and use.—The amounts of natural gas produced from the principal Kansas fields during 1956 are shown by coun-

ty in Table 66. Production in the "eastern Kansas" fields, which reached their peak production about 50 years ago, was less than 1 percent, and production from the **Hugoton Gas Area** in southwestern Kansas was more than 74 percent of the state's total for 1956.

Marketed natural gas production for the West North Central district (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota) reported by the Bureau of Mines for 1956 totaled 455,000,000 thousand cubic feet. Consumption by residential use was estimated to be 272,200,000; by commercial use, 96,500,000; and by industrial use, 548,100,000 thousand cubic feet. No more detailed breakdown on the use within Kansas is available at this time.

The Conservation Division of the Kansas Corporation Commission reports that use of natural gas in the manufacture of carbon black in Kansas during 1956 was 8,286,680 thousand cubic feet.

New developments.—Table 6 shows that 38 new gas fields (35 gas and 3 oil and gas) were named in Kansas in 1956. Of the new fields 20 produce gas from the Mississippian rocks and 5 from Morrowan strata. Counties with significant new gas fields include Barber, Edwards, Kingman, Kiowa, Meade, Seward, Stevens, and Wallace Counties. The **Nichols** field in Kiowa County and the **Taloga** field in Morton County were placed under proration in 1956.

The Hugoton Gas Area.—The **Hugoton Gas Area**, with its extension across the Oklahoma "strip" and well into the Texas Panhandle, is regarded as containing one of the world's largest known gas reserves. Production from the Kansas portion of the field, more than 50 percent of the total, is shown by years in Table 9.

TABLE 9.—*Production from the Kansas part of Hugoton Gas Area, 1941-1956*

Year	M cu. ft. gas (14.65 psia)	Year	M cu. ft. gas (14.65 psia)
1941	40,759,482	1949	247,868,876
1942	46,365,484	1950	320,545,480
1943	70,921,532	1951	371,002,475
1944	92,922,821	1952	375,081,748
1945	90,345,203	1953	387,635,243
1946	119,637,983	1954	346,732,192
1947	157,663,036	1955	394,257,153
1948	185,872,594	1956	381,874,779

The Defenders and Traders Gas Company's successful gas well in 1922, in sec. 3, T. 35 S., R. 34 W., Seward County, has been accredited as the discovery well of the **Hugoton Gas Area** proper. The well opened the Liberal gas field, which has since been joined to the **Hugoton Gas Area**. Rapid development of the huge gas reservoir in southwestern Kansas came in the early 1940's. The number of producing gas wells in the field passed the 2,000 mark, and the area reached 2 million acres by the end of 1949. At the end of 1956 there were 3,673 producing gas wells, and the area of the Kansas part of the **Hugoton Gas Area** was about 2,655,940 acres. It includes 2 entire counties (Stevens and Grant) and parts of 7 others (Finney, Hamilton, Haskell, Kearny, Morton, Seward, and Stanton). Revised figures on the number of wells drilled each year since 1949 and the cumulative totals are given in Table 10.

Through the assistance of the Conservation Division of the Kansas Corporation Commission and Mr. D. R. Dwight of Dwight's Oil and Gas Reports, county production figures and county cumulative totals have been prepared for this bulletin. These data are given in Table 11.

The **Hugoton Gas Area** has been limited by definition by the Kansas Nomenclature Committee to gas producing formations in the Chase group of the Permian System. The lateral stratigraphic or structural features of the gas producing area are not clearly known, and the outline of the producing area changes with

TABLE 10.—Gas wells drilled in Hugoton Gas Area since 1949, by counties

	1948	1949	1950	1951	1952	1953	1954	1955	1956		
	Cumu- lative	Drilled	Drilled	Drilled	Drilled	Drilled	Drilled	Drilled	Cumu- lative	Drilled	Cumu- lative
Finney	86	76	47	19	49	73	72	49	471	49	520
Grant	334	89	36	68	29	6	5	3	570	2	572
Hamilton	4	2	1	8	8	10	4	0	37	2	39
Haskell	171	42	39	33	30	27	39	40	421	19	440
Kearny	204	71	51	56	75	72	44	27	600	26	626
Morton	86	6	52	62	27	31	14	9	287	20	307
Seward	48	41	91	51	10	19	42	21	323	18	341
Stanton	125	9	17	25	7	27	24	0	234	0	234
Stevens	545	77	63	16	17	4	20	5	747	10	757
Total	1,603	413	397	338	252	269	268	154	3,690	146	3,836

TABLE 11.—County production and cumulative total, Hugoton Gas Area*

County	Cumulative production to end of 1955, M cu. ft.	1956 production M cu. ft.	Cumulative production to end of 1956, M cu. ft.
Finney	213,810,531	38,048,847	251,859,378
Grant	697,226,348	77,166,752	774,393,100
Hamilton	17,982,317	4,297,064	22,279,381
Haskell	251,148,182	31,391,477	282,539,659
Kearny	467,553,533	63,479,195	511,032,728
Morton	215,085,601	25,320,554	240,406,155
Seward	151,946,961	24,894,277	176,841,238
Stanton	90,309,329	15,136,779	105,446,108
Stevens	1,376,626,786	102,139,834	1,478,766,620
Total	3,481,689,588	381,874,779	3,843,564,367

* Base 14.65 psia.

each new well drilled on the borders. Plate 3 shows the approximate boundaries of the **Hugoton Gas Area** as outlined at the end of 1956 by wells having reported initial daily capacity of 1 million cubic feet or more. Gas wells drilled previous to 1956 are not shown on Plate 3. The porosity of the rocks of the Chase group in the **Hugoton Gas Area** seems to control productivity.

Wells having initial capacity of less than 1 million cubic feet per day after acidization may not be saved by the larger companies; wells producing 5 to 15 million cubic feet per day are usual, and big wells produce more than 30 million cubic feet of gas per day. The average depth to the producing zone is about 2,500 feet.

The **Hugoton Gas Area** is under rigid proration by the Kansas Corporation Commission, Division of Conservation. Commonly, only 1 well may 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. There is little surface evidence of a huge gas reservoir because of this wide spacing.

Gas from the **Hugoton Gas Area** is of fairly good quality as indicated by Table 12. It yields about 0.5 gallon of natural gasoline condensate per thousand cubic feet and has a heating value of about 1,000 B.t.u. per cubic foot. Most of the natural gasoline plants are within the borders of the **Hugoton Gas Area**, as are the 2 operating carbon black plants.

Reserves of the Kansas part of the **Hugoton Gas Area** are discussed under reserves of natural gas and natural gas liquids.

TABLE 12.—Average natural gas analysis from Hugoton Gas Area
(From Keplinger, Wanenmacher, and Burns, 1948)

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

Natural gasoline and other liquefied petroleum gas production.—There were 15 natural gasoline plants reported operating in Kansas at the end of 1956, the same as for the previous year. The daily average production of natural gasoline and LPG in 1956, as reported by the Conservation Division of the Kansas Corporation Commission, was 12,971 barrels, compared to 13,478 for the previous year. A list of producing plants and types of production is given in Table 13. The state's output during 1956, broken down into 4 main products, together with estimated value at the plant, is shown in Table 14. Production from Kansas plants for the last 12 years is shown in Table 15.

The use of LPG with natural gas in the production of carbon black has increased from 211,794 barrels in 1955 to 352,594 during 1956.

Low-cost temporary storage is one of the major problems facing the expanding LPG industry. This problem, created by the seasonal demand for the product, has been partly solved as the result of experiments that have been in progress over the last few years. These consist of injecting LPG into wholly or partly depleted sand bodies, which may be salt-water, gas, or distillate. Recently, and especially in Kansas, LPG has been stored in underground cavities washed out of the salt beds.

Reserves of natural gas and natural gas liquids.—During 1955 proved reserves of natural gas in Kansas (as estimated by the Reserves Committee, American Petroleum Institute, and American Gas Association) increased 7.8 percent, and the natural gas reserves for the nation increased 6.2 percent. Kansas' reserves were estimated to be about 17.6 trillion cubic feet of natural gas as of January 1, 1957. Hydrocarbon liquids contained in the proved reserves of gas are slightly less than 172 million barrels, a decrease of 0.9 percent. Estimates are given in Table 16.

TABLE 13.—Natural gasoline and LPG processed in 1956*
(From the Conservation Division, Kansas Corporation Commission)

	Natural gasoline	Butane	Propane	LPG	Total
Cities Service Oil Company					
Burrton, Reno Co.	59,686		15,859	55,049	130,594
Wichita, Sedg. Co.	379,042		176,130	117,230	672,402
Colorado Interstate Gas Co.					
Lakin, Kearny Co.	95,218				95,218
Drillers Gas Company					
Cheney, Sedg. Co.	19,997			8,686	28,683
Dunn-Mar Oil & Gas Company					
Otis, Rush Co.	29,775	3,890			33,665
Hugoton Production Company					
Ulysses, Grant Co.	172,468	107,952	144,926		425,346
Kansas-Nebraska Nat. Gas Co.					
Deerfield, Kearny Co.	102,194		2,302	13,624	118,120
Kansas Power & Light Co.					
Medicine Lodge, Barber Co.	75,092				75,092
Magnolia Petroleum Co.					
Ulysses, Grant Co.	171,165	73,591	90,569		335,325
Northern Natural Gas Co.					
Holcomb, Finney Co.	114,259				114,259
Sublette, Haskell Co.	308,175				308,175
Panhandle East. Pipe Line Co.					
Liberal, Seward Co.	512,845	215,424	137,235		865,504
Skelly Oil Co.					
Cunningham, Kingman Co.	43,034			42,642	85,676
Stanolind Oil & Gas Co.					
Ulysses, Grant Co.	426,802	390,975	561,598		1,379,375
The Texas Company					
Atlanta, Cowley Co.	40,934			38,875	79,813
Total	2,550,686	791,832	1,128,619	276,110	4,747,247

DAILY AVERAGE FOR YEAR 1956—12,971 bbls.

DAILY AVERAGE FOR YEAR 1955—13,478 bbls.

* Figures in 42-gallon barrels.

**TABLE 14.—Production and estimated value of natural gas liquids
in Kansas, 1956***

	Barrels	Gallons	Price per barrel	Value
Natural gasoline	2,550,686	107,123,812	\$2.50	\$6,376,715
Propane	1,128,619	47,401,998	\$2.50	\$2,821,548
Butane	791,832	33,256,944	\$2.50	\$1,979,580
LPG	276,110	11,596,620	\$2.50	\$ 690,275
Total	4,747,247	199,384,374		\$11,868,118

* Production figures supplied by Kansas Corporation Commission.

TABLE 15.—*Kansas production of natural gasoline and allied products, 1945-1956**

Year	Production, M gals.	Year	Production, M gals.
1945	72,637	1951	182,932
1946	82,591	1952	196,462
1947	99,195	1953	211,657
1948	107,563	1954	193,783
1949	113,807	1955	206,621
1950	155,233	1956	199,384

* Figures from 1945 through 1948 from World Oil (1951, p. 154). Figures from 1949 through 1956 supplied by Kansas Corporation Commission.

Two important features of the reserve picture in Kansas at the end of 1956 are: (1) new discoveries and extensions of proved areas are being made more rapidly than the producing areas are being depleted, and (2) Kansas' proved reserves of natural gas liquids are more than 50 percent of the quantity of gasoline contained in the proved reserves of crude oil in the state.

The significance of Kansas' reserves of natural gas liquids is commonly overshadowed by our thinking in terms only of the value of crude oil and natural gas. Natural gas liquids, consisting of natural gasoline, condensate, and LPG (mainly propane and butane), supplement our supplies of gasoline for motor vehicles and fuel for industrial and domestic use. The energy contained in natural gas liquids also has a potential use in the manufacture of plastics.

Reserve figures may be misleading unless properly interpreted. It must be kept in mind that the published petroleum reserve figures are clearly stated to represent proved reserves. The

TABLE 16.—*Kansas proved reserves of natural gas and natural gas liquids, December 31, 1956*
(American Petroleum Institute and American Gas Association, 1956)

	Reserves* as of 12-31-55	Extensions and revisions 1956	New dis- coveries 1956	Production during 1956	Proved reserves 12-31-56	Nonassociated, associated, and dissolved	Changes in reserves during 1956	Percentage change 1955-1956
Natural gas liquids	173,236	2,111	1,944	5,676	171,615	.....	1,621	-0.9
Natural gas	16,293,080	1,652,569	195,316	577,750	17,566,257	17,509,624	1,273,177	+7.8

* 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.

figures in Table 16 and other reserve figures used in this bulletin conform to the policy on reserves of the Reserves Committee and "do not include (1) oil under the unproven 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; (6) oil that can be made from oil shale, coal or other substitute sources". The policy of the Reserves Committee applies also to natural gas and natural gas liquids.

In summary, the reserve figures represent areas of oil and gas that are essentially "drilled out" and do not include oil to be realized by secondary recovery (fluid injection) except in operating properties. They represent production we could depend on if the industry stopped developing and searching for new deposits. Actually, reserves in this country have been maintained and increased for many years by current new developments despite high annual consumption.

MAPS

Figure 1 is an index map of Kansas showing in a general way the oil and gas producing areas.

Three maps are presented on the same scale showing all the oil and gas producing areas in Kansas. Eastern Kansas, defined as that area east of the Sixth Principal Meridian (except Harvey, Sedgwick, and Sumner Counties), is shown on Plate 1. Plate 2 shows the area west of the Meridian to range 20 west. The large gas producing area and oil fields of western Kansas, west of range 20 west, are shown on Plate 3.

West of the Meridian the entire area designated as a field is shown on the map. In eastern Kansas, Plate 1, only those parts of the fields that produced oil during 1956 are shown on the map; this is deemed advisable because large areas in the older eastern Kansas fields are not producing oil at the present time. No gas producing areas are shown on Plate 1.

ALLEN COUNTY

(Map Pl. 1)

The 1956 production from 36 areas in 10 fields: oil 844,728 barrels including an estimated 557,198 barrels from secondary recovery operations, gas 135,665 thousand cubic feet. Wells drilled in 1956 (estimated): oil 227, dry 45, repressuring 61, total 333.

Developments during 1956.—Oil production in Allen County increased almost 5 percent over that reported in 1955. It is estimated that drilling activity was considerably more than it had been the year before. Production from secondary recovery projects accounted for most of the increase in the county's higher total oil recovery.

The **Neosho Falls** field was combined with **Leroy** field, now designated the **Neosho Falls-Leroy** field by action of the Kansas Nomenclature Committee.

Oil production in Allen County fields is listed in Table 65; gas in Table 66. Locations of areas from which oil was produced in 1956 are shown on Plate 1. Secondary recovery data are listed in Table 1.

ANDERSON COUNTY

(Map Pl. 1)

The 1956 production from 21 areas in 8 fields: oil 658,605 barrels including an estimated 567,688 barrels from secondary recovery operations. Wells drilled in 1956 (estimated): oil 57, dry 28, repressuring 31, total 116.

Developments during 1956.—Anderson County's oil production in 1956 was 658,605 barrels, somewhat less than the 732,416 barrels reported the previous year. It is estimated that 6 more wells were drilled in the county during 1956 than during 1955.

Oil production in Anderson County fields is listed in Table 65. Locations of areas that produced oil in 1956 are shown on Plate 1. Secondary recovery data are listed in Table 1.

BARBER COUNTY

(Map Pl. 2)

The 1956 production from 51 fields: oil 1,934,933 barrels, gas 50,-113,968 thousand cubic feet. Wells drilled in 1956: oil 34, gas 87, oil and gas 5, dry 90, repressuring or salt-water disposal 1, total 217 including 26 dry wildcats. Reworked wells: oil 2, gas 6, dry 3. Fields discovered 14, combined 2, abandoned 1.

Developments during 1956.—Oil production in Barber County increased more than 4 percent over that of 1955. Gas production increased more than 300 percent. Drilling activity, concentrated chiefly in the **Boggs Southwest**, **Hardtner**, and **Rhodes** fields, resulted in completion of 217 wells, 9 more than were completed during the previous year.

There were 14 new fields uncovered in the county during 1956. Ten new Mississippian gas fields were named during the year. These are the **Aetna Northeast**, **Blunk**, **Blunk South**, **Canema**, **Driftwood**, **Elsea**, **Farley**, **McGuire**, **Medicine Lodge West**, and **Sharon Northwest**. Of these, the **Driftwood** was combined with the old **Boggs Southwest**, and the **Medicine Lodge West** was abandoned in September with no reported production. Other combinations during the year include **Medicine Lodge** and **Boggs**, now called **Medicine Lodge-Boggs**.

The **Elwood** field was named as having "Elgin" gas production, and in the **ILS** field the Simpson was found to contain commercial quantities of gas. The new **Highway** and the **Platt** fields were designated as new Douglas and Cherokee oil production. Significant data on the discovery wells of these new fields are given in Table 6.

New producing zones in old producing fields, named during 1956, include **Bloom** (Mississippian, oil), **Little Bear Creek** (Viola, gas), and **Salt Fork** (Marmaton, gas). These are summarized in Table 7.

During the year, 25 Mississippian gas wells were completed in the new **Boggs Southwest** field, 18 gas and 2 oil wells in the **Hardtner**, and 21 gas and 4 oil wells in the large **Rhodes** field. Dominating gas production (in Barber County) during the year were the **Boggs Southwest** field with 9,601,182 thousand cubic feet from 24 wells, the **Hardtner** with 17,525,934 thousand cubic feet from 38 wells, and **Medicine Lodge-Boggs** with 12,439,437 thousand cubic feet from 70 wells.

Although much of the **Rhodes** field was shut-in during the early months of 1956 because of no market, 132 Mississippian wells were reported as producing 945,745 barrels of oil, and 1 Viola well reported 1,340 barrels. This amounts to a decline of only 72,843 barrels from the previous year's high.

Dry wildcat drilling activity declined to 26 wells during the year, and of these, 17 reported shows of oil or gas. Additional data

on the dry wildcats drilled in the county during the year are given in Table 17. The locations of these dry wildcats and of producing fields are shown on Plate 2. Oil production is given in Table 65 and gas production in Table 66. Data on the repressuring project operating in Barber County are given in Table 1.

BARTON COUNTY

(Map Pl. 2)

The 1956 production from 153 fields: oil 14,913,934 barrels, gas 626,609 thousand cubic feet. Wells drilled in 1956: oil 130, gas 3, dry 135, repressuring or salt-water disposal 5, total 273 including 19 dry wildcats. Reworked wells: oil 14, dry 4. Fields discovered 9, combined 1.

Developments during 1956.—Once again Barton County has maintained its position as the most prolific oil producer in Kansas, with the 1956 production exceeding that of the previous year by almost 4 percent. Gas production was about 37 percent less than in 1955. Drilling activity during 1956 resulted in a total of 273 new wells, 22 fewer than in the previous year.

Nine new oil fields were named in Barton County during 1956. These are the **Bailey, Bissell Point South, Hoisington North, and Workman West** fields which produce from the Arbuckle dolomite, and the **Klug West, Reimer, St. Peter East, Workman North, and Workman Northwest** fields which produce from the Lansing-Kansas City rocks. Data on the initial potential, thickness of the producing zone, and the location of the discovery well are given in Table 6.

New oil zones were discovered in 6 old producing fields (Table 7). The Arbuckle rocks were reported productive in the **Great Bend Northwest, Nuss, and the Workman North** fields. Lansing-Kansas City production was reported from the **Kimpler** field, and production from Pennsylvanian conglomerate rocks was reported from the **Red Brick** field.

During the year the **Buckbee South** field was declared to have the same reservoir as **Buckbee Southwest**, and the 2 were combined under the name **Buckbee Southwest**. Other action by the Nomenclature Committee resulted in the combining of the **Pritchard South, Pritchard Southeast, and Starr** fields with **Pritchard** in January.

TABLE 17.—Dry wildcat tests drilled in Barber County during 1956

Company and farm	Location	Depth to top of Mississippian, feet	Depth to top of Viola, feet	Depth to top of Simpson, feet	Depth to top of Arbuckle, feet	Total depth, feet
Musgrove Petro. Corp. No. 1 Hartley	SE SE SW 35-30-13W	4,322	4,512	4,628	4,728	4,761
*Petroleum, Inc. No. 1 Rankin	SE SE SE 2-31-10W	4,476	3,820**	.....	.....	4,549
K & E Drlg., Inc., et al. No. 1 Morrisse	NE NW NE 9-31-10W	4,501	4,732	4,810	4,924	4,950
Aurora Gasoline Co. No. 1 Rankin	C SW SW 13-31-10W	4,464	4,736	4,800	4,936	4,965
Aylward Drlg. Co. No. 1 Updegraff	C SE SE 22-31-12W	4,308	4,602	4,688	4,791	4,825
Anschutz Drlg. Co., Inc. No. 1 Frieden	SE NE SW 29-31-12W	4,225	3,705**	.....	.....	4,290
*Jones, Shelburne & Farmer, Inc. et al. No. 1 Stone "B"	NE SW NW 35-31-14W	4,415	4,514	4,625	4,722	4,772
Jones, Shelburne & Farmer, Inc., et al. No. 1 Moad	NE NE NW 5-31-15W	4,583	4,645	4,810	4,898	4,933
*Mull Drlg. Co., Inc. No. 1 Smith	SE SE SE 16-32-10W	4,375	3,680**	.....	.....	4,445
Mull Drlg. Co., Inc. No. 1 Pelton	NW NE SW 27-32-10W	4,347	3,638**	.....	.....	4,459
E. H. Adair Oil Co. No. 1 Gillespie	SW SW SE 22-32-12W	4,256	4,604	4,706	.....	4,751
Aylward Drlg. Co. No. 1 Brooks	SW SW NE 7-32-13W	4,468	4,740	4,856	4,965	5,012
Aurora Gasoline Co. No. 1 Baier "A"	SW SW SW 32-32-13W	4,506	4,813	4,929	.....	4,983
Aurora Gasoline Co. No. 1 Rinke	SE SE SE 25-32-14W	4,534	4,854	4,978	.....	5,019
Aylward Drlg. Co. No. 1 Welch "A"	NE NE NE 7-32-15W	4,788	5,074	5,226	5,318	5,352
Davidor & Davidor No. 1 Duncan	NE NE NW 14-33-10W	4,423	4,750	4,837	4,984	5,008
Ambassador Oil Corp. No. 1 Page	N½ NE SW 36-33-10W	4,545	4,904	4,996	5,168	5,215
Jones, Shelburne & Farmer, Inc. No. 1 Warwick	C SW SW 33-33-12W	4,766	5,191	5,276	.....	5,294
Pickrell Drlg. Co. No. 1 Hutchinson	SW SW SW 3-34-12W	4,670	3,971**	.....	.....	4,767
Jones, Shelburne & Farmer, Inc., et al. No. 1 Wright "B"	NE NE NE 15-34-12W	4,644	3,960**	.....	.....	4,702
Sinclair Oil & Gas Co. No. 1 Sam Good	SE SE NE 35-34-12W	4,766	5,175	5,266	5,476	5,501
E. H. Adair Oil Co. No. 1 Hull	SW SW SE 20-34-13W	4,789	4,161**	.....	.....	4,854

*Wm. Gruenerwald No. 1 Ballet	SW NE NW 27-34-15W	4,740	5,141	5,302	5,452	5,500
Graham-Messman-Rinehart Oil Co. No. 1 Ill. Wesleyan University	NW NW SW 8-35-11W	4,808	4,337**	.....	.....	4,842
Rupp-Ferguson Oil Co. No. 1 College	SW SW NW 12-35-12W	4,811	.....	.....	.....	4,865
*Wm. Gruenerwald No. 1 Molz	NW NW NW 8-35-14W	4,826	5,254	5,431	5,605	5,658

*No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

**Depth to top of the Lans.-K.C., feet.

Of the 19 dry wildcat tests drilled more than 1½ miles from current production, 2 reported shows of oil and 1 reported a small show of gas. Additional statistical data on these exploratory tests are given in Table 18, and their locations are shown on Plate 2.

Drilling programs resulted in the completion of 11 oil wells and 8 dry holes in the **Beaver South** field, 10 oil wells and 6 dry holes in the **Chase-Silica** field, and 12 oil wells and 4 dry holes in the **Great Bend Townsite** field.

The leading oil producing field in the county was the **Kraft-Prusa** field, which reported production of 3,665,740 barrels during the year. Gas production for 1956 was reported from the **Heizer Southwest**, **Krier** (within **Kraft-Prusa**), **Pawnee Rock**, and **Unruh** fields. Data on gas production are given in Table 66, and the locations of these producing areas are shown on Plate 2. Oil production from Barton County fields is given in Table 65, and the areas of production are shown on Plate 2.

BOURBON COUNTY

(Map Pl. 1)

The 1956 production from 8 areas in 3 fields: oil 35,080 barrels.

Wells drilled in 1956 (estimated): oil 11, dry 7, repressuring 14, total 32.

Developments during 1956.—Bourbon County's oil production in 1956 was 206 barrels more than the figure reported for 1955. It is estimated that 26,800 barrels of the oil reported produced are from secondary recovery projects in the county.

Oil production in Bourbon County is listed in Table 65. Locations of areas in which oil was produced are shown on Plate 1. Data on secondary recovery of oil in Bourbon County are given in Table 1.

TABLE 18.—Dry wildcat tests drilled in Barton County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Strata Drlg., Inc. No. 1 Stoskopf	NW NW SE 13-16-13W	1,918	3,155	3,427	3,462
Shelley-Miller Drlg., Inc. No. 1 Riemann	NE NE NW 10-16-14W	1,912	3,148	3,353	3,403
*Isern Drlg. Co., et al. No. 1 Birzer	SW SE SW 22-17-12W	1,879	3,125	3,416	3,445
*Nadel & Gussman No. 1 Huslig	SW SW SE 25-17-12W	1,817	3,038	3,344	3,365
*D. R. Lauck Oil Co., Inc. No. 1 Persons	SE SE NW 13-17-13W	1,876	3,124	3,366	3,405
Iron Drlg. Co. No. 1 Hester	SW NW NW 2-17-15W	1,968	3,256	3,550	3,580
*Shelley-Miller Drlg., Inc. No. 1 Kinzel	NW NW NE 2-18-12W	1,885	3,161	3,417	3,447
Jayhawk Drlg. Co. No. 1 Cook	NW NW SE 15-18-13W	1,812	3,090	3,344	3,365
Shelley-Miller Drlg., Inc. No. 1 Jilg	NW NW NE 30-18-13W	1,904	3,174	3,419	3,439
Rocket Drlg. Co., Inc. No. 1 Wondra	SW SW SE 15-18-14W	1,923	3,185	3,442	3,464
Honaker-Davis Drlg. Co. No. 1 Kent	SE SE NE 31-19-13W	1,863	3,190	3,463	3,465
Strata Drlg., Inc. No. 1 Bobeck	NW NE SW 32-19-13W	1,859	3,202	3,479	3,525
*Honaker-Davis Drlg. Co. No. 1 Nicholson	NW SW SE 32-19-13W	1,857	3,195	3,465	3,490
*Alpine Oil & Royalty Co., Inc. No. 1 Haven "B"	SE SW SW 27-20-11W	1,785	3,095	3,343	3,352
*Alpine Oil & Royalty Co., Inc. No. 1 Hagen	NW NENE 34-20-11W	1,780	3,062	3,391	3,400
*D. R. Lauck Oil Co., Inc., et al. No. 1 Dahm	SE SE NW 10-20-12W	1,858	3,215	3,492	3,519
Home-Stake Oil & Gas Co. No. 1 Woodmansee	NW SW SE 10-20-12W	1,824	3,144	3,504	3,540
Shelley-Miller Drlg., Inc. No. 1 Nicolet	SW SW NW 8-20-13W	1,877	3,222	3,496	3,542
Rupp-Ferguson Oil Co. No. 1 Bowman	SW SW NE 34-20-15W	1,944	3,382	3,704	3,725

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

BROWN COUNTY

(Map Pl. 1)

The 1956 production from 1 field: oil 1,434 barrels.

Developments during 1956.—Production of 1,434 barrels of oil was reported from 1 well in the **Livengood** field, which yielded

1,416 barrels in 1955. No wells were reported drilled in the county during the year.

The State Geological Survey has records of 22 wells drilled in the county. Most of these wells are listed in Jewett (1954).

The location of the Livengood field is shown on Plate 1. Additional data on the field are given in Table 65.

BUTLER COUNTY

(Map Pl. 1)

The 1956 production from 76 areas in 65 fields: oil 8,138,153 barrels including approximately 4,080,185 barrels from secondary recovery operations, gas 1,414 thousand cubic feet. Wells drilled in 1956 (recorded): oil 95, gas 1, dry 63, repressuring or salt-water disposal 40 (plus 70 estimated), total 269 including 24 dry wildcats. Re-worked wells: oil 5, salt-water disposal 3, total 8. Fields discovered 2.

Developments during 1956.—Two new Mississippian oil fields were named in Butler County during 1956. The **Pontiac Southwest** field was discovered in August by the Twin Drilling Company No. 1 Jones well in sec. 23, T. 26 S., R. 6 E. The producing zone lies at a depth of 2,780 to 2,790 feet. The discovery well, an old well worked over, was rated as having a daily production of 8 barrels of oil. The **Shinn Northeast** field was opened in March by the Charles L. Carlock No. 1 Wehrman well in sec. 17, T. 29 S., R. 8 E. Production is from a zone at a depth of 2,680 to 2,715 feet. An initial potential of 25 barrels of oil per day was assigned the discovery well. Two extension oil wells and 3 dry holes were completed in the latter field during the year.

Oil production in Butler County declined more than 330,000 barrels from the 1955 production of 8,469,378 barrels; however, production from the **El Dorado** field increased to 4,358,743 barrels of oil compared to 4,231,941 reported in 1955. Coupled with a decline in production from the **Trapp** field of Russell and Barton Counties, this increase made the 41 year old **El Dorado** field the leading oil producing field in the state. Much of the credit for the reinstatement of the **El Dorado** field to the leading position belongs to the successful secondary recovery operations in the field.

Tops to marker beds encountered in drilling the 24 rank wildcats completed in Butler County during 1956 (8 more than 1955)

are given in Table 19. No significant shows of oil or gas were reported in the scout reports on these wells. The locations of the wildcat holes are shown on Plate 1.

The **El Dorado** field led the county in the number of field wells attempted with 49 extension oil wells and 3 dry holes. The **Fox-Bush** field added 16 oil wells and 1 dry hole during the year.

Production in the various Butler County oil fields is listed in Table 65, and gas production statistics are listed in Table 66. Locations of areas from which oil was produced in 1956 are shown on Plate 1. Data on water flooding operations are listed in Table 1. Data on the new fields are given in Table 6.

TABLE 19.—Dry wildcat tests drilled in Butler County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Donald E. Dunne, Jr. No. 1 McNeill	NE NE SW 31-23-3E	1,401	2,090	2,734	3,115
Cities Service Oil Co. No. 1 Church	NW SW SE 13-23-5E	1,513	1,580	.....	2,572
White & Ellis Drlg. Co. No. 1 Classen	SE SE NW 5-23-6E	1,462	1,890	2,791	3,371
*Walker Oil Corp. No. 1 Unruh	SW SW SW 27-23-7E	1,489	1,785	2,750	3,318
K & E Drlg., Inc. No. 1 Oliver	C NL Lot 3 19-23-8E	1,545	1,762	2,771	2,790
K & E Drlg., Inc. No. 2 Oliver	NE Cor. of Lot 5 19-23-8E	.....	1,782	2,802	2,822
McNeish & Gralapp No. 1 Allen	C NE NW 23-24-3E	1,337	1,872	2,565	2,924
*Rex & Morris Drlg. Co. No. 1 Roth	NE SW NE 23-24-4E	1,425	2,110**	2,494	2,725
*Charles Lamar Carlock No. 1 Hinnen	NW NW SW 8-24-6E	1,430	1,759	2,624	2,665
*Cassaday Oil No. 1 Destring	C NE NE 25-24-7E	1,509	1,720	2,685	3,214
*Bennett & Gould No. 1 McGulloch	NE NE NW 34-25-4E	1,311	2,026**	2,503	2,612
*Dunn & Strait Drlg. Co. No. 1 Gray	SE SW SW 1-26-5E	1,279	1,770	2,725	2,745
*Time Petro. Co. No. 1 Wait	SE NW SE 36-26-6E	1,421	1,880	2,745	2,825
*Augusta Oil No. 1 Ralston	NE SE NW 34-27-3E	.....	2,282**	2,786	3,111
*Augusta Oil No. 1 Smith	NE NE NW 4-28-5E	1,337	1,834	2,781	2,832
*Leben Drlg. Co. No. 1 Wilson	NW NW NW 7-28-5E	1,294	1,871	.....	1,976

*Dunn & Strait Drlg. Co. No. 2 Winger	SW SW SW 21-28-5E	1,283	1,915	2,770	2,825
*Augusta Oil No. 1 Squier	SE SE NE 18-28-8E	1,567	2,004	2,763	2,810
*Time Petro. Co. No. 1 Pearson	NW SE NE 32-29-3E	1,281	2,437**	2,953	3,420
Earl F. Wakefield No. 1 Grabill	SE SE SE 35-29-3E	1,205	2,529**	3,250	3,640
*Prairie Oil & Gas No. 1 Blood	SW SE SW 23-29-4E	1,279	2,294**	2,893	2,927
*A. C. Lawson No. 1 Rash	SE SE SE 33-29-7E	1,514	2,148**	2,892	2,940
*Charles Lamer Carlock No. 1 Bonnell	NW NW SW 6-29-8E	1,526	1,716	2,852	2,882
Charles Lamer Carlock No. 1 Wehrman "B"	NW Cor. Lot 17 31-29-8E	1,439	1,970**	2,739	2,772

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Kansas City, feet.

CHASE COUNTY

(Map Pl. 1)

The 1956 production from 2 fields: oil 32,244 barrels including production from secondary recovery projects, gas 50,858 thousand cubic feet. Wells drilled in 1956 (estimated): oil 8, dry 9, total 17 including 8 dry wildcats.

Developments during 1956.—Oil production in Chase County in 1956 was slightly below that of 1955, when 32,741 barrels was reported.

Eight dry exploratory wells were drilled in the western half of the county during the year. Stanolind Oil and Gas Company tested several zones in their No. 1 Browning well in sec. 3, T. 19 S., R. 6 E., but no specific references to shows of oil or gas were noted on the scout reports. Surface elevations and depths to important marker beds in the wildcat wells are given in Table 20.

Stanolind Oil and Gas Company's No. 1 Lowe well in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 18 S., R. 6 E., located in the old Hymer gas field was taken down past the shallow gas zone into the Arbuckle dolomite before abandonment as a dry hole. The well was drilled from an elevation of 1,393 feet above sea level. Tops noted are: Lansing-Kansas City, 1,392; base of Kansas City, 1,736; and Arbuckle, 1,944 feet. No shows of oil or gas were reported.

During the year the **Atyeo** field (Chase and Greenwood Counties) and the **Pixlee** field (Greenwood County) were renamed

TABLE 20.—Dry wildcat tests drilled in Chase County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Stanolind Oil & Gas Co. No. 1 Lowe	NW NW SE 10-18-6E	1,399	1,449	2,085	2,145
Stanolind Oil & Gas Co. No. 1 Whitney	SE SE NW 21-18-7E	1,396	1,460	2,146	2,190
*Stanolind Oil & Gas Co. No. 1 Browning	NE NE SW 3-19-6E	1,398	1,444	2,032	2,068
Stanolind Oil & Gas Co. No. 1 Miller	NE NE SW 13-19-6E	1,245	1,246	1,802	1,862
*Branine-Holl No. 1 McLinden	SW SW NW 24-20-5E	1,377	1,631	2,206**	2,498
*Glickman Oil Co. No. 1 Harder	SW SW SW 9-21-6E	1,349	1,961	3,140**	3,153
White & Ellis Drlg. Co. No. 1 Chisholm	NW NW SW 15-22-6E	1,392	1,831	3,138	3,193
Cities Service Oil Co. No. 1 Gibson	NE NE NW 17-22-7E	1,491	1,855	2,804**	2,895

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Mississippian, feet.

the **Atyeo-Pixlee** field by action of the Kansas Nomenclature Committee.

Oil production statistics for 1956 in Chase County are listed in Table 65, gas in Table 66. Locations of areas that produced oil in 1956 and of the dry wildcat tests are shown on Plate 1. Secondary recovery data are given in Table 1.

CHAUTAUQUA COUNTY

(Map Pl. 1)

The 1956 production from 46 areas in 23 fields: oil 1,035, 370 barrels including an estimated 561,235 barrels from secondary recovery operation, gas 198,534 thousand cubic feet. Wells drilled in 1956 (estimated): oil 160, gas 7, dry 77, repressuring 24, total 268 including 8 dry wildcats. Fields discovered 2.

Developments during 1956.—Oil production from Chautauqua County amounted to 1,035,370 barrels in 1956, a considerable increase over the 947,428 barrels reported the previous year.

Two new fields in Chautauqua County were named in 1956. The Continental Oil Company, No. 1 Rich well in sec. 16, T. 33 S., R. 9 E., is the discovery well in the **Rich** field. Oil was found in the Mississippian strata at a depth of 2,285 to 2,315 feet. The well was completed in April with an initial potential of 20 barrels

of oil per day. An offset well by the same company in the same location was dry. The **Hewins Northwest** gas field was opened with the completion of the No. 1 Harvey well in sec. 27, T. 34 S., R. 9 E., in July. An initial potential of 196,000 thousand cubic feet per day was assigned the Mississippian rocks at a depth of 2,072 to 2,078 feet. The discovery wells of both fields were taken into Arbuckle rocks before being plugged back to the pay zone.

Eight rank wildcat tests, 6 of which were drilled into the Arbuckle rocks, were completed in Chautauqua County during the year. Data on the important marker beds encountered in drilling these exploratory holes are given in Table 21.

A minimum of 25 new oil wells and 6 dry holes were completed in the **Leniton** field development program during 1956. There were more than 28 oil wells, 3 gas wells, and 21 dry holes drilled in the **Peru-Sedan** field during the year.

A list of rank wildcat tests drilled in the county during 1956 does not give the true exploration picture. A very large number of the field wells were drilled into the deeper Arbuckle rocks before being plugged back to established pay zones. Data on oil production in Chautauqua County in 1956 are listed in Table 65.

TABLE 21.—Dry wildcat tests drilled in Chautauqua County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Butler County Drlg. Co. No. 1 Powell	NW NW SW 24-32-8E	1,047	2,306	2,670	2,680
Aladdin Petro. Corp. No. 1 French	SW SE NW 28-32-9E	1,092	2,214	2,570	2,672
Marts & Phillips No. 1 Sheel	NW NW NW 15-32-10E	1,066	1,996	2,330	2,378
*Bill Briggeman No. 2 Woodworth	NW NW NW 26-32-11E	926	1,741	1,060**	1,763
Marts Oil Co., Inc. No. 1 Moore	NW NW NW 25-32-9E	1,096	2,195	2,508	2,557
Phillips Petro. Co. No. 1 Woodworth "A"	NW NW NE 27-32-11E	969	1,809	2,102	2,150
*Petrotrust Co. No. 1 Reno	NW SE SE 6-33-11E	1,227	1,981	2,336	2,390
*Wrico Drlg. Co., et al. No. 1 Lemert	W½ E½ NE 3-34-8E	1,008	2,454	.....	2,484

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Kansas City, feet.

Gas production is given in Table 66. Locations of areas that produced oil in 1956 and of dry wildcat wells drilled in 1956 are shown on Plate 1. Information on the secondary recovery operations in the county is given in Table 1.

CHEROKEE COUNTY

(Map Pl. 1)

Wildcat wells have been drilled from time to time in Cherokee County, but as yet no commercial quantities of oil have been found. A few wells in this county have supplied small quantities of gas for a number of years. During 1956 reported gas production was 2,521 thousand cubic feet from 1 well.

CLARK COUNTY

(Map Pl. 3)

The 1956 production from 8 fields: oil 471,732 barrels, gas 757,-169 thousand cubic feet. Wells drilled in 1956: oil 3, gas 4, dry 14, repressuring or salt-water disposal 1, total 22 including 6 dry wildcats. Fields discovered 1.

Developments during 1956.—Oil production in Clark County increased by more than 14 percent over the previous year in spite of a decrease in the county's drilling activity. Gas production also showed an increase, owing to the development of the **Cavalry Creek** field. The field was named in November 1955 as a Mississippian gas producer, but no production was reported that year.

The **Snake Creek East** field was the only new field named in the county in 1956. The Pure Oil Company completed the discovery well on the Harper lease in sec. 24, T. 34 S., R. 21 W., in December. An initial potential of 360 barrels of oil per day was assigned to the Morrowan rocks at a depth of 5,480 to 5,496 feet (Table 6).

Once again **Harper Ranch** was the county's leading oil producer as production increased to 456,442 barrels of oil from 33 wells. Drilling programs within the field resulted in 1 new oil well and 5 dry holes.

Six dry wildcats were drilled during the year, 1 of which, the No. 1 Randall in sec. 6, T. 33 S., R. 21 W., reported a show of oil and gas. Further data on the county's dry wildcats are given in Table 22. The locations of these dry wildcats and of producing

TABLE 22.—*Dry wildcat tests drilled in Clark County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Wilcox Oil Co. No. 1 Harter	C SE SW 28-30-21W	2,289	4,508	5,203	5,273
Big X Drilling Co. No. 1 Taylor	SW SW NE 21-30-23W	2,390	4,499	5,271	6,611
Shamrock Oil & Gas Corp. No. 1 Harry Large et al.	C SE 1-33-21W	1,842	4,357	5,211	5,331
Stearns Petro., Inc., et al. No. 1 Randall	C SW 6-33-21W	1,955	4,440	5,280	5,500
E. H. Adair Oil Co., et al. No. 1 Berryman	C NW 18-33-22W	1,950	4,424	5,398	5,559
*Skelly Oil Co. No. 1 Hoffman	SW SW NE 27-34-23W	1,870	4,444	5,508	6,010

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

fields are shown on Plate 3. Oil production data are given in Table 65 and gas production data in Table 66.

CLAY COUNTY

(Map Pl. 1)

Wildcat wells have been drilled from time to time in Clay County, and 2 fields were named in 1951. No production has ever been reported from the inactive fields.

Exploration during 1956.—The State Geological Survey now has record of 29 wells drilled in Clay County. Early in 1956, E. F. Wakefield completed two exploratory tests south of Clay Center. The test on the Woellhoff farm in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 8 S., R. 3 E., was drilled from an elevation of 1,225 feet above sea level, with the top of the Mississippian strata at 2,126 feet. Total depth was reported as 2,150 feet. The other test in the county was on the E. H. Swenson farm in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 9 S., R. 2 E. The top of the Mississippian rocks was encountered at 1,990 feet; the well was drilled from an elevation of 1,342 feet above sea level. No additional information was released.

The locations of the dry wildcat tests are shown on Plate 1.

CLOUD COUNTY

(Map Pl. 2)

Wildcat tests have been drilled in Cloud County several times in the past, but as yet no oil or gas pools have been discovered.

Exploration during 1956.—Drilling activity in Cloud County, the first since 1952, has resulted in 4 dry wildcats which penetrate the Arbuckle dolomite. No shows of oil or gas were reported, although many porous zones were encountered. Additional data on these dry wildcat wells are given in Table 23, and the locations are shown on Plate 2.

TABLE 23.—Dry wildcat tests drilled in Cloud County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Shawver-Armour, Inc. No. 1 Blosser	SW SW NW 8-6-3W	1,433	2,220	2,798	3,654	3,706
Shawver-Armour, Inc. No. 1 Odette	SE SE SE 5-6-4W	1,494	2,342	2,959	3,780	3,826
Shawver-Armour, Inc. No. 1 Daniels	NE NE NE 32-6-5W	1,590	2,490	3,154	3,996	4,046
Shawver-Armour, Inc. No. 1 Hall	NW NW SW 18-7-3W	1,577	2,400	2,020	3,858	3,898

COFFEY COUNTY

(Map Pl. 1)

The 1956 production from 13 areas in 13 fields: oil 161,837 barrels, gas 7,152 thousand cubic feet. Wells drilled in 1956 (estimated): oil 15, dry 13, total 28 including 3 recorded dry wildcats. Fields discovered 1, combined 5.

Developments during 1956.—Oil production in Coffey County was considerably less in 1956 than in 1955, when 189,599 barrels was reported. Although active since 1953, the **Crandall** field was officially recognized in 1956 by action of the Kansas Nomenclature Committee. Crooks and Waddell completed the discovery well of the **Crandall** field on the Vielguth farm in sec. 6, T. 23 S., R. 16 E., in June 1953. Initial production was recorded as 650,000 cubic feet of gas per day from Mississippian strata topped at 1,027 feet. Data on the discovery are given in Table 6.

The "Peru" sandstone was named a new producing zone in an old field (**Finnerty**) in 1956. Accredited as the discovery well was the F. E. Lockhart No. 3 Davis in sec. 12, T. 21 S., R. 13 E. An initial potential of 7 barrels of oil per day was assigned the pay zone found at 1,382 to 1,392 feet. Additional information on the development is given in Table 7.

All three wildcat tests drilled by the Rex and Morris Drilling Company in the county during the year were drilled into Mississippian rocks. The No. 1 Bingham was drilled in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 20 S., R. 13 E., in February. No elevation was recorded; however, tops given in the scout information include "Bartlesville" 1,536 feet and Mississippian 1,710 feet. Total depth reported was 1,747 feet. No shows were observed. The No. 1 Ewing well in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 20 S., R. 13 E., was also drilled in February. The top of the "Bartlesville" was reported at 1,524 feet and the top of the Mississippian rocks at 1,672 feet. Total depth was 1,690 feet. The No. 2 Ewing well was completed early in March in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ of the same section. The top of the Kansas City was found at 495 feet, the base of the Kansas City at 1,025, "Cattleman" sand at 1,460 feet, the "Bartlesville" sand at 1,525 feet, and Mississippian rocks at 1,675 feet. Total depth was reported at 1,685 feet. No testing was reported from the Ewing wells.

During the year the Neosho Falls and Leroy fields were re-named the Neosho Falls-Leroy field. The Hoagland, Van Noy, and Wiede fields were combined with the Winterscheid field.

Locations of areas in Coffey County that produced oil in 1956 and of the dry wildcat wells that were reported are shown on Plate 1. Oil production statistics are given in Table 65, gas in Table 66.

COMANCHE COUNTY

(Map Pl. 2)

The 1956 production from 3 fields: oil 5,619 barrels, gas 183,113 thousand cubic feet. Wells drilled in 1956: gas 1, dry 7, total 8 including 6 dry wildcats. Fields discovered 1, abandoned 1.

Developments during 1956.—Since oil and gas were first discovered in Comanche County in 1953, production has steadily increased, reaching a new high in 1956. Oil production from 3 wells more than doubled the previous year's figure, and gas production increased by more than 29 percent.

Developmental drilling by the Pure Oil Company in April in the Beals gas field resulted in the completion of the No. 1 R. D. Parks well. The well was drilled to a total depth of 5,816 feet and was assigned an initial potential of 35 200,000 cubic feet of gas per

day from both Simpson and Lansing-Kansas City rocks. This was the first time that Simpson production was reported in the county.

Exploratory drilling in the county resulted in 6 dry wildcats, of which 5 reported shows of gas and 1 reported shows of oil and gas. Additional data on the dry wildcats are given in Table 24. The locations of these dry wildcats and of the areas of oil and gas production are shown on Plate 2. Oil production figures are given in Table 65 and gas production figures in Table 66.

TABLE 24.—Dry Wildcat tests drilled in Comanche County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Gramehart-Miller Oil Co. No. 1 Kennedy "A"	Cen. NENE 2-31-17W	2,110	4,363	4,969	.....	5,134
Natl. Coop. Ref. Assn., et al. No. 1 Boisseau	NW NW NW 22-31-18W	2,201	4,503	5,136	.....	5,265
Ruop-Ferguson Oil Co. No. 1 Schuette	SW SW NE 9-32-16W	1,926	4,244	4,828	5,393	5,449
Parker Petro. Co., Inc. No. 1 Cary	C SE SW 30-32-17W	2,002	4,450	5,135	5,866*	5,920
J. M. Huber Corp. No. 1 Einsel	SW NW NW 11-33-17W	1,960	4,404	5,097	5,896	5,970
Union Oil Co. of Calif. No. 1 Alexander	Cen. NENE NW 3-35-20W	1,720	4,407	5,278	.....	5,404

* Depth to top of the Simpson, feet.

COWLEY COUNTY

(Map Pl. 1)

The 1956 production from 101 areas in 98 fields: oil 4,595,418 barrels, including approximately 917,799 barrels from secondary recovery projects, gas 493,136 thousand cubic feet. Wells drilled in 1956: oil 202, gas 5, oil and gas 1, dry 145, input or salt-water disposal 14, total 367 including 31 dry wildcats. Reworked wells: oil 8, gas 2, dry 4. Fields discovered 11, revived 1, combined 4.

Developments during 1956.—Oil production in Cowley County was somewhat less in 1956 than in 1955, when 4,712,727 barrels was reported. Drilling activity increased from 331 wells drilled during 1955 to 367 during 1956, placing Cowley County at the top of the list in number of wells drilled in any one county in Kansas during 1956.

Ten oil fields and 1 oil and gas field were named in Cowley County in 1956. One field, the **Werner**, was revived during the year. New producing zones were found in 4 previously established fields. The new oil discoveries are the **Albright**, **Albright North**, **Biddle Northwest**, **Cambridge**, **Falls City Northwest**, **Hackney**, **Kanok**, **Posey**, **Rippe**, and **Walnut Bend North**. All but the **Biddle Northwest** ("Bartlesville"), the **Cambridge** ("Layton"), and the **Rippe** ("Bartlesville") produce from Mississippian strata. The new oil and gas field, the **Rauckman**, produces from the "Bartlesville". The revived **Werner** field, which was discovered in 1928 with gas production from Douglas rocks, now produces oil from the "Layton" sandstone. Data on the locations of the discovery wells, thicknesses of the producing zones, and initial potentials of the discovery wells are given in Table 6.

Oil was found in Mississippian rocks in 3 of the 4 fields that were reported as having new zones in established fields, the **Frog Hollow East**, **Rainbow Bend Northeast**, and the newly revived **Werner**. Gas from the "Cattleman" sand was reported from the **Wilmot-Floral** field for the first time. Significant data on the discovery wells of these new zones are given in Table 7.

The Kansas Nomenclature Committee determined that the **Burden East** and **Wiebe** had a common reservoir with the **Burden** field and therefore declared them combined. The **Silver Creek** field was combined with the **Frog Hollow East**, and **Rainbow Bend West** was combined with **Rainbow Bend**.

There were 31 dry wildcat holes drilled in Cowley County during the year, and 3 of these reported shows of oil or gas. Data on the elevations and the top of the Kansas City and Mississippian rocks are given in Table 25. Eleven of the holes were taken into Arbuckle rocks before abandonment.

Field development programs resulted in the completion of 12 additional oil wells and 2 dry holes to the new **Albright** field, 14 extension oil wells and 4 dry holes to the **Biddle Northwest** field, 19 oil wells and 11 dry holes to the **David** field, and 31 oil wells, 5 dry holes, and 4 gas wells in the **Estes** field.

Locations of areas from which oil production was reported during 1956 and locations of the dry wildcat tests are given on Plate 1. Oil production in the various Cowley County fields is listed in Table 65, gas in Table 66. Secondary recovery data are listed in Table 1.

TABLE 25.—Dry wildcat tests drilled in Cowley County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of K. C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Wrico Drlg. Co., et al. No. 1 Donley	SE SE NW 17-30-5E	1,312	2,256	2,929	2,966
*Lucian Walker No. 1 Snell	NE SE NW 28-30-5E	1,313	2,256	2,927	2,936
McNeish, Gralapp & Wakefield No. 1 Powell	NE NE NW 31-30-5E	1,294	2,270	2,930	2,957
E. F. Wakefield No. 1 Deichman	SW SW NW 34-30-5E	1,290	2,269	2,945	3,430
*R. H. Suhr, et al. No. 1 W. P. Smith	NE NW NW 23-30-6E	1,426	2,160	2,865	2,902
Kriswell Drlg. Co., et al. No. 1 Rash	NW NW SE 5-30-7E	1,443	2,148	2,881	2,940
*Shawver-Armour, Inc., & Clifton L. McCown	SW SW NE 23-30-7E	1,357	2,020	2,789	2,840
No. 1 Hensley					
Renfro Drlg. Co. No. 1 H. H. Smith	SW SW SW 32-30-7E	1,458	2,188	2,964	3,064
Leben Drlg. Co. No. 1 Smith	SE SE SE 33-30-7E	1,351	2,042	2,791	2,891
Laura Jane Oil Co., Inc. No. 1 Johnson	SW SW SE 23-31-3E	1,202	2,452	3,008	3,415
Prairie Oil & Gas Co., Inc. No. 1 Smith	App. NENE 26-31-3E	1,198	2,460	2,973**	3,000
Time Petro. Co. No. 1 Schwintz	SW NW SE 36-31-3E	1,136	2,493	3,012	3,388
W. L. Hartman No. 1 Crowley	SE SE NW 3-31-6E	1,395	2,193	2,913	3,365
*Renfro Drlg. Co. No. 1 Stout	SE SE NE 4-31-6E	1,318	2,110	2,837	2,930
W. L. Hartman No. 1 Day	Cen. W½ SW NE 9-31-6E	1,395	2,180	2,888	3,370
Petroleum, Inc. No. 1 Pierce	NE NE SE 3-32-3E	1,191	2,574	3,084	3,445
McNeish & Gralapp No. 1 Nixon	NW NW NW 8-32-3E	1,159	2,630	3,140	3,150
*J. Razook No. 1 O'Neil	SE SE SE 16-32-3E	1,176	2,617	3,129	3,159
E. F. Wakefield, et al. No. 1 Phillips	NW NW SE 34-32-3E	1,171	2,760	3,200	3,577
McNeish & Gralapp No. 1 Bolack	SE SE NE 15-32-6E	1,363	2,413	3,037	3,067
P. B. Wittman No. 2 Bolack	SW SE NE 21-32-6E	1,345	2,442	3,055	3,074
The Texas Co. No. 1 C. A. Walton	NW NW NW 31-33-4E	1,172	2,737	3,268	3,760
E. F. Wakefield No. 1 Hill	NW NW NW 15-33-5E	1,268	2,519	3,140	3,180

*Time Petro. Co. No. 1 Powell	SE SE NE 19-33-5E	1,228	2,650	3,185	3,640
*Time Petro. Co. No. 1 Lamb	SW NW SE 17-33-6E	1,295	2,492	3,081	3,158
*Renfro Drlg. Co. No. 1 Lorton	SE SE SE 33-33-7E	1,321	2,341	2,922	3,012
Glick & Martz No. 1 Alley	SE SE SW 32-33-8E	1,018	.....	2,512	2,945
*McNeish & Gralapp No. 1 Lad-	NE SE NW 35-34-6E	1,354	2,430	3,016	3,032
McNeish & Gralapp No. 1 Rush	SW SW NW 36-34-6E	1,327	2,485	2,980	3,005
*H & M Drlg. Co. No. 1 Dunn	SE SE NE 2-35-5E	1,246	.....	3,217	3,230
Don Jones No. 1 Warren	NE NW NE 8-35-6E	1,282	2,602	3,150	3,604

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to top of "Bartlesville", feet.

CRAWFORD COUNTY

(Map Pl. 1)

The 1956 production from 9 areas in 6 fields: oil 49,324 barrels including an estimated 40,261 barrels from secondary recovery projects, gas 40,647 thousand cubic feet. Wells drilled in 1956 (estimated): oil 20, dry 17, repressuring 13, total 50 including 4 dry wildcats. Fields combined 2.

Developments during 1956.—Crawford County's oil production in 1956 was considerably less than in 1955, when 53,638 barrels was reported. It was estimated that 50 wells were drilled in the county during the year.

By action of the Kansas Nomenclature Committee the **Fair Oak** and **Brazilton** fields were combined with the **Walnut Southeast**. Production is from the "Bartlesville" at a depth of about 400 feet.

The Ark City Oil Company drilled dry wildcat tests in T. 28 S., R. 23 E., during 1956. The No. 1 Beaver well in the SW¼ NE¼ sec. 22 was taken to a total depth of 602 feet. The Mississippian rocks were reported topped at 566 feet, but no shows of oil were recorded. The No. 1 Torenden well in the SE¼ NW¼ sec. 22 drilled from an elevation of 995 feet above sea level topped the Mississippian at 552 feet. According to the electric log of the well, the top of the Chattanooga shale was found at 872 feet and the

top of the Arbuckle dolomite at 911 feet. The test was taken to a total depth of 1,401 feet before abandonment. The third well was drilled on the Peterson farm in the E $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 27 to a total depth of 578 feet. The top of the Mississippian was logged at 538 feet.

A fourth dry wildcat test in the county during 1956 was drilled by the Kidd Williams Drilling Company on the Val Beaver lease in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 28 S., R. 23 E. The hole was drilled in April from an elevation of 997 feet above sea level and was taken to a total depth of 588 feet. The top of the Mississippian on the electric log is indicated at 550 feet. No shows of oil or gas were reported.

Oil production in Crawford County fields is listed in Table 65 and gas in Table 66. Locations of areas that produced oil in 1956 are shown on Plate 1. Secondary recovery data are given in Table 1.

DECATUR COUNTY

(Map Pl. 3)

The 1956 production from 10 fields: oil 394,389 barrels. Wells drilled in 1956: oil 12, dry 18, total 30 including 6 dry wildcats. Fields discovered 3, combined 1.

Developments during 1956.—Oil production in Decatur County increased more than 600 percent primarily owing to a successful exploration program which resulted in the discovery of 3 new pools. The Cities Service Oil Company's No. 1 Warner "E" well in sec. 11, T. 1 S., R. 27 W., was the discovery well of the Warner field, and the Sauvage and Dunn Drilling Company's No. 1 Kilzer well in sec. 2, T. 1 S., R. 27 W., was the discovery well of the Warner North field. These fields were later combined as the Warner field, which contains 9 of the 12 new oil wells drilled during the year. A third new field, the Van Vleet, was named upon the completion of the Cities Service Company's No. 1 Van Vleet well in sec. 9, T. 1 S., R. 27 W. More information on the discovery wells of these fields is given in Table 6.

In September, the Pennsylvanian sand was designated as a new producing zone in the Warner North field, prior to its combination with the Warner field. Complete data on the discovery well of this new zone are given in Table 7.

Dry wildcat drilling activity declined from the previous year to 6 wells during 1956. No shows of oil or gas were reported from any of these tests, although 4 of the wells penetrated Precambrian rocks. Additional data on wildcat wells drilled in the county during the year are given in Table 26. The locations of these wells and of the producing areas of oil fields are shown on Plate 3. Oil production statistics for the county are given in Table 65.

TABLE 26.—Dry wildcat tests drilled in Decatur County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Depth to top of Precambrian, feet	Total depth, feet
Sauvage & Dunn Drlg. Co., Inc. No. 1 Wooley	NW NW SW 25-1-27W	2,546	3,282	.....	3,704	3,707
Ayesh Oil Co. No. 1 R. J. Stapp	NW NW SW 16-2-26W	2,586	3,463	.....	3,832	3,835
Jones, Shelburne & Farmer, Inc. No. 1 Holben	NW NW NW 30-2-26W	2,669	3,566	3,951	4,032	4,040
*Sauvage & Dunn Drlg. Co., Inc. No. 1 Dowdall	SE SE NE 27-2-29W	2,694	3,719	4,171	.....	4,225
*Imperial Oil of Kansas, Inc. No. 1 Krizek	SE SE SE 28-3-27W	2,628	3,544	4,004	.....	4,081
*Sauvage & Dunn Drlg. Co., Inc. No. 1 Noone	NENE NW 31-5-26W	2,574	3,675	3,880**	.....	4,107

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top the Base of the Kansas City.

DICKINSON COUNTY

(Map Pl. 1)

The 1956 production from 7 areas in 7 fields: oil 127,645 barrels. Wells drilled in 1956: oil 6, dry 17, total 23 including 9 dry wildcats. Fields discovered 1.

Developments during 1956.—Oil production from 7 fields in Dickinson County during 1956 showed a marked decrease over that of 1955, when 142,720 barrels was reported.

The **Bonaccord Northeast**, a "Burgess" sandstone field, was found in November by Willis Waterman and others in their No. 1 Emig "A" well in sec. 29, T. 14 S., R. 1 E. An initial potential of 35 barrels of oil per day was given the discovery well at a depth of 2,502 to 2,505 feet. This important development is listed in Table 6.

Nine rank wildcat tests were drilled in Dickinson County during 1956. No shows of oil or gas were reported. Two of the holes

were taken to the Arbuckle dolomite and 1 to the Viola limestone before abandonment. Surface elevations and tops to significant marker beds are given in Table 27 on these exploratory holes.

Oil production in the Dickinson County fields is listed in Table 65. Locations of the areas that produced oil in 1956 and of the dry wildcat wells drilled in the county are shown on Plate 1.

DOUGLAS COUNTY

(Map Pl. 1)

The 1956 production from 4 areas in 2 fields: oil 10,202 barrels including production from secondary recovery projects. Wells drilled in 1956 (estimated): oil 3, dry 2, total 5 including 2 dry wildcats.

Developments during 1956.—In 1956 oil production in Douglas County was slightly less than in 1955, when 10,853 barrels was reported.

One deep and 1 shallow dry wildcat tests were drilled in Douglas County during 1956. The Schermerhorn Oil Corporation drilled the first test on the Johanning lease in the SW¼ NW¼

TABLE 27.—Dry wildcat tests drilled in Dickinson County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Crisswell Drlg. Co. No. 1 Kuntz	SW SW SW 13-12-2E	1,309	3,104**	2,310	3,159
*Donald T. Ingling No. 1 Crawford	SE SW NE 21-12-3E	1,267	1,718	2,308	3,151
*Donald T. Ingling No. 1 Bolliger	SE SW SE 24-14-1E	1,232	1,823	2,445	2,470
*Donald T. Ingling No. 1 Mark	SE SE NE 35-14-1E	1,219	1,799	2,433	2,467
*Donald T. Ingling No. 1 Rock	SE SE SE 19-14-3E	1,318	.....	2,336	2,360
*Donald T. Ingling No. 1 Wolfe	NE NE NE 28-14-3E	1,322	.....	2,319	2,369
*F. W. Vishnepske, et al. No. 2 E. Robson	NE SE NW 11-15-1E	1,214	1,802	2,428	2,444
*F. W. Vishnepske No. 1 Foelber	W½ NW SW 36-15-1E	1,273	1,915	2,565	2,590
*Augusta Oil Co. No. 1 Hoffman	SW NENE 25-16-4E	1,407	1,685	2,254	2,723

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Arbuckle, feet.

NE $\frac{1}{4}$ sec. 17, T. 15 S., R. 19 E., in March. From an elevation of 1,059 feet above sea level the following tops were found: Lansing-Kansas City, 270; base of Kansas City, 470; Marmaton, 810; Cherokee, 910; Mississippian, 1,402; Chattanooga, 1,642; Viola, 1,678; Simpson, 1,822; and Arbuckle, 1,878 feet. Total reported depth was 1,902 feet. No shows of oil or gas were carried by the scouting data on the well. The No. 2 Johanning by Schermerhorn was located in the E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ of the same location as the No. 1 Johanning well. From an elevation of 1,067 feet, the following marker beds were encountered: Lansing-Kansas City, 272; base of Kansas City, 667; Marmaton, 822; Cherokee, 914; and "Bartlesville", 1,108 feet. The total depth was 1,299 feet. No shows were reported.

Locations of areas in Douglas County from which oil was produced during 1956 and locations of the dry wildcat tests are shown on Plate 1. Oil production statistics are listed in Table 65.

EDWARDS COUNTY

(Map Pl. 2)

The 1956 production from 14 fields: oil 86,225 barrels, gas 727,058 thousand cubic feet. Wells drilled in 1953: oil 5, gas 5, oil and gas 1, dry 24, total 35 including 15 dry wildcats. Reworked wells: gas 1. Fields discovered 5.

Developments during 1956. —Oil production from Edwards County decreased by more than 2 percent, but gas production increased by more than 85 percent as drilling activity in the county almost doubled the previous year's program.

Explorational drilling resulted in the discovery of 4 new oil pools and 1 gas pool. The Anschutz Drilling Company, Inc., No. 1 Fatzer well in sec. 15, T. 26 S., R. 17 W., was the discovery well for the **Fatzer** field (Viola production), and Kirk Johnson brought in the discovery well of the **Sa'ser** field (Mississippian production) in sec. 12, T. 26 S., R. 16 W. The Aurora Gasoline Co. and L. C. Smitherman Drilling Company No. 1 Schultz well in sec. 21, T. 26 S., R. 16 W., was the discovery well for the **Trousdale** field (Cherokee production), and the D. R. Lauck Oil Company and Sunray Mid-Continent Oil Company well, drilled on the Cross lease in sec. 28, T. 24 S., R. 17 W., was the discovery well of the **Wayne** field (Mississippian production). The **Trousdale**

South gas field (Cherokee production) was named when the No. 1 King well in sec. 33, T. 26 S., R. 16 W., was brought in by the Sunray Mid-Continent Oil Company in December. More information on these discovery wells is given in Table 6.

Developmental drilling programs resulted in the establishment of "Kinderhook" production as a new zone in the **Embry** field when the Branine-Holl No. 1 Zuercher well was completed in sec. 22, T. 24 S., R. 16 W. Further data on this well are given in Table 7.

Although no wells were drilled in the **Enlow** field in 1956, it continued to be the county's major oil producer. A total of 51,913 barrels was reported during the year from 8 wells, which is more than half the production reported for the entire county. Data on Natural Gas and Oil Company's repressuring project in the **Enlow** field are given in Table 1.

Of the 15 dry wildcat tests drilled in the county, 2 reported shows of oil and 3 reported shows of gas. The tops of some important marker beds encountered in drilling these tests are given in Table 28. Data on oil production are given in Table 65, and gas production statistics are given in Table 66. The locations of the areas of oil and gas production and of dry wildcat wells are shown on Plate 2.

ELK COUNTY

(Map Pl. 1)

The 1956 production from 37 areas in 30 fields: oil 300,983 barrels, gas 225,135 thousand cubic feet. Wells drilled in 1956 (estimated): oil 55, gas 5, dry 31, total 91 including 5 dry wildcats. Fields discovered 1, revived 1, abandoned 1.

Developments during 1956.—Oil production from Elk County was slightly less than during 1955, when 304,877 barrels was reported. It is estimated that 91 wells were attempted in the county during the year, considerably fewer than the 121 estimated for 1955.

The Phillips Petroleum Company found the new **Arbuckle Roby** field in August 1956. The discovery well, the No. 1 Roby, is located in sec. 20, T. 28 S., R. 9 E. An initial potential of 32 barrels of oil per day from a depth of 2,873 to 2,876 feet was assigned by state test. The old **Adams** gas field was revived with the com-

TABLE 28.—Dry wildcat tests drilled in Edwards County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Viola, feet	Depth to top of Arbuckle, feet	Total depth, feet
Graham-Messman-Rinehart Oil Co. No. 1 Davis "B"	NE NE NW 35-23-19W	2,217	3,986	4,687	.....	4,750
Natl. Coop. Ref. Assn. No. 1 Lovette	SE SE NW 17-24-17W	2,123	3,888	4,437	4,724	4,760
Bennett & Roberts Drlg. Co. No. 1 Huff	NE NE NW 19-24-18W	2,148	3,950	4,636	4,930	4,987
Home-Stake Oil & Gas Co. No. 1 Brill	SE SE SW 28-24-18W	2,163	3,979	4,626	4,906	4,950
Kewanee Oil Co. No. 1 Shin	SE SW SW 16-24-19W	2,165	3,985	4,690	4,964	5,015
Kewanee Oil Co. No. 1 Samuel	SW NW NE 29-24-19W	2,177	4,014	4,741	5,008	5,058
*Harms-Burt Drlg. Co., et al. No. 1 Breitenbach	NE NE NW 10-25-16W	2,075	3,830	4,396	4,658	4,690
L. C. Smitherman Drlg. Co. No. 1 Wilson	NW NW SE 26-25-16W	2,061	3,868	4,375	4,700	4,735
*Aurora Gasoline Co. No. 1 Hupp	SW SW SE 17-25-17W	2,143	3,972	4,554	.....	4,650
*E. A. Smith No. 1 Moletoer	SW SW SW 22-25-19W	2,203	4,110	.....	5,177	5,210
*E. A. Smith No. 1 Charlet	NW SE SW 32-25-19W	2,230	Tight Hole			4,747
D. R. Lauck Oil Co., Inc., et al. No. 1 Tam	NE NE SE 31-26-16W	2,104	4,044	4,669	.....	4,728
Ambassador Oil Corp. No. 1 Chadd	SE SE SE 25-26-18W	2,153	4,104	4,772	5,026	5,051
Virginia Drlg. Co., Inc. No. 1 Millheiser	NE NE NE 17-26-20W	2,247	4,126	4,948	5,286	5,340

*No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

pletion of the Cro-Archer No. 1 Stohs Ranch well in sec. 29, T. 29 S., R. 13 E., in June. An initial potential of 1,133 thousand cubic feet of gas per day was assigned the "Burgess" sandstone at a depth of 1,680 to 1,683 feet. These developments are listed in Table 6.

The **Logsdan Northeast** field, named in December 1955, was officially abandoned this year. There had been no production recorded from the field.

There were 2 gas, 1 oil, and 3 dry recorded wells drilled in the **Adams** field in 1956. Other fields with significant numbers of new recorded wells are: **Arbuckle**, 2 oil and 6 dry; **Longton**, 7 oil, 1 gas, and 2 dry; and **Porter**, 2 oil wells.

Five rank wildcat tests were drilled in Elk County during 1956. Two of the 5 reported shows of oil. All of the wildcat tests were drilled into Arbuckle dolomite. Table 29 gives the surface elevations and tops to the Kansas City group, the Mississippian strata, and the Arbuckle dolomite for these significant exploratory holes.

Oil production in the various Elk County fields is listed in Table 65, gas in Table 66. Locations of areas that produced oil in 1956 and of the dry wildcat tests are shown on Plate 1. There was no specific report on secondary recovery operations in Elk County; however, it is estimated that approximately 60,000 barrels of oil was produced by water-flooding projects in the county in 1956.

TABLE 29.—Dry wildcat tests drilled in Elk County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of K. C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Aladdin Petro. Corp. No. 1 Lorton	SESESW 2-29-9E	1,190	1,482	2,297	2,646	2,695
The Veeder Supply & Dev. Co., et al. No. 1 Zenishek	NW SW NW 4-29-9E	1,222	1,548	2,354	2,698	2,702
Aladdin Petro. Corp. No. 1 M K & O	SW NW SW 21-30-9E	1,290	1,676	2,437	2,791	2,831
*C. A. Black, Jr. No. 1 Axtell	SW SW SW 31-31-10E	1,145	1,416	2,200	2,519	2,546
Marts, Glick & Phillips No. 1 Leibau	SW SW NW 8-31-9E	1,155	1,572	2,327	2,645	2,693

*No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

ELLIS COUNTY

(Map Pl. 2)

The 1956 production from 112 fields: oil 11,618,360 barrels. Wells drilled in 1956: oil 167, dry 160, repressuring or salt-water disposal 5, total 332 including 33 dry wildcats. Reworked wells: oil 14, dry 3. Fields discovered 16, revived 3, combined 2.

Developments during 1956.—With an increase in oil production of more than 4 percent, Ellis County maintained its position as the second largest producer in the state (Table 3). An extensive drilling program resulted in 332 new wells, 52 more than reported during the previous year.

Seven new Arbuckle oil fields were named in the county during the year: the **Boos**, **Engel**, **Heyl**, **Leiker North**, **Lieb**, **Potter**, and **Wagner** fields. The **Lieb** field was the result of the reworking of

the No. 1 Lieb well in sec. 17, T. 11 S., R. 16 W., by the Frontier Oil Company. The **Engel West**, **Riverview South**, **Schmeidler Southeast**, **Schoenchen Townsite**, **Seitz**, **Sweet William Northwest**, and **Walter Northwest** field were all named new Lansing-Kansas City producers. The **Engel West** field was the result of the reworking of the No. 1 Engel well in sec. 33, T. 14 S., R. 18 W., by the Tomilson & Kathol Drilling Company. The **North** field and **Schoenchen West** field were named new Pennsylvanian basal conglomerate producers. Additional data on the discovery wells of these new fields are given in Table 6.

Of the 167 new oil wells drilled in the county during the year, 3 resulted in the revival of abandoned fields. The No. 1 Urban well in sec. 7, T. 15 S., R. 18 W., was completed in September by Thunderbird Drilling, Inc., and revived the **Dechant** field. The **Pleasant North** field was revived when W. J. Coppinger brought in the No. 1 Engel well in sec. 36, T. 13 S., R. 20 W., in July. Both of these fields reported production from the Arbuckle dolomite. A third field, the **Richards**, was revived with the completion of the National Cooperative Refinery Association No. 1 Cleve well in sec. 5, T. 11 S., R. 18 W., which is reported producing from the Lansing-Kansas City rocks. Further data on these revival wells are given in Table 6.

Developmental drilling programs resulted in the discovery of new producing zones in 7 fields. The "Pennsylvanian basal sand" and the Lansing-Kansas City rocks were found productive in the **Engel** field. The **Irvin South**, **Leiker Southeast**, **Ubert Northwest**, and **Wheatland Southeast** fields also reported Lansing-Kansas City production. Wabaunsee rocks were found productive in the county for the first time when the Skelly Oil Company No. 2 G. R. Solomon well (**Solomon** field) in sec. 24, T. 11 S., R. 19 W., was reworked. More information on these new zone discovery wells is given in Table 7.

Action by the Nomenclature Committee during the year resulted in the combination of the **Walter Southeast** with the **Walter** fields, the **Karlin** and **Dinkel** fields with the **Catharine South**, and **Ellis South** and **Ellis Northeast** with **Ellis**.

With the completion of 15 new oil wells and the reworking of 2 old wells within its limits, the **Bemis-Shutts** field maintained its position as the sixth largest producer in the state. Only 3 dry holes were drilled in the field during the year.

A total of 33 dry wildcats was drilled within the county during 1956, and specific data from the wells are given in Table 30. The locations of these tests and of oil producing areas are shown on Plate 2. Oil production statistics are given by fields in Table 65. Data on secondary recovery are given in Table 1.

TABLE 30.—Dry wildcat tests drilled in Ellis County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Osage Oil & Gas Co., Inc., No. 1 Allbert	SW NE NE 30-11-19W	2,112	3,381	3,639***	3,760
*Carl Todd Drlg. Co. No. 1 Walz	NE NE SW 7-11-20W	2,109	3,406	3,715	3,726
Anschutz Drlg. Co., Inc., et al. No. 1 Thayer	SE SE NE 20-11-20W	2,135	3,472	3,857	3,895
Chas. Hulme Drlg. Contractor, et al. No. 1 Thayer	NE SW SW 20-11-20W	2,262	3,594	3,884***	3,937
Herndon Drlg. Co. No. 1 Davis "C"	NW NW SW 24-11-20W	2,013	3,314	3,653	3,675
*Alpine Oil & Royalty Co., Inc. No. 1 Hoff	SE NW NE 19-12-16W	2,118	3,352	3,629	3,659
*Greenland Drlg. Co. No. 1 Miller	NW NE SE 15-12-17W	2,145	3,391	3,684	3,699
*Strata Drlg., Inc. No. 1 Furthmeyer	NW NW SE 19-12-18W	2,173	3,469	3,790	3,835
Anschutz Drlg. Co., Inc., et al. No. 1 Younker	SE SE NE 9-12-19W	2,226	3,493	3,854	3,870
Transit Corp. No. 1 Schoenthaler "E"	NW NW NE 8-12-20W	2,271	3,590	3,966	3,994
Jones, Shelburne & Farmer, Inc. No. 1 Nicholson	NW NW SW 21-12-20W	2,214	3,515	3,877	3,924
*C-G Drlg. Co., et al. No. 1 Rome	NE NE SW 17-13-16W	1,983	3,249	3,540	3,565
*Nadel & Gussman No. 1 Leikam	NW NE NW 2-13-17W	2,065	3,324	3,596	3,630
*Shelly-Miller Drlg., Inc. No. 1 Kuhn	SE SE SE 12-13-17W	2,015	3,278	3,566	3,585
Frontier Oil Co. No. 1 Farmers State Bank	NW SW NE 7-13-18W	2,173	3,509	3,785	3,835
*Alpine Oil & Royalty Co., Inc. No. 1 Dreiling	SE SE SW 9-13-18W	2,170	3,482	3,805	3,850
*Altman Petroleum No. 1 Witt	SW SW SW 23-13-18W	2,065	3,355	3,700	3,738
*Frontier Oil Co. No. 1 Gatschet	SW SW NW 13-13-19W	2,079	3,381	3,675	3,700
Coppinger Drlg., Inc. No. 1 Augustine	NW NW SE 19-13-20W	2,257	3,564	3,965	4,016

Fred J. Havnes	SW SW SE	1,867	3,152	3,431	3,460
No. 1 Shulte	33-14-16W				
W. J. Coppinger	SW SW NE	1,986	3,278	3,545	3,572
No. 1 Stecklein	18-14-17W				
*Petroleum, Inc.	SW NENE	1,958	3,254	3,584	3,600
No. 1 Binder "B"	23-14-18W				
Osage Oil & Gas Co., Inc.,	NENE NE	2,008	3,296	3,654	3,690
et al. No. 1 Leiker	27-14-18W				
Brunson Production &	NENE SW	2,135	3,435	3,773	3,810
Exoloration, Inc.	28-14-19W				
No. 1 Weber					
*Shields Oil Producers	SE SW NW	2,234	3,515	3,885**	3,886
No. 1 Solomon "B"	22-14-20W				
M & L Oil Co., et al.	NENE NE	2,122	3,409	3,752	3,802
No. 1 Hazelhorst	23-14-20W				
W. J. Coppinger	NW NW SE	1,915	3,204	3,476	3,518
No. 1 Doran	14-15-16W				
Bankoff Oil Co.	NW NW NW	1,890	3,189	3,508	3,523
No. 1 Schmidthberger	22-15-16W				
*Shelley-Miller Drlg., Inc.	NW NW NE	1,903	3,189	3,447***	3,503
No. 1 Philip	10-15-17W				
Anschutz Drlg. Co., Inc.,	SW SW SE	1,931	3,222	3,547	3,600
et al. No. 1 Philip	11-15-17W				
Anschutz Drlg. Co., Inc.	NENE SE	1,894	3,205	3,485	3,520
No. 1 Jacobs	34-15-17W				
Continental Oil Co., et al.	NENE SE	1,998	3,300	3,638	3,654
No. 1 Unrein	16-15-19W				
*Armer Drlg. Co., Inc., et al.	SE SE NE	2,055	3,353	3,663****	3,690
No. 1 Zimmerman	32-15-19W				

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to top of the Precambrian, feet.

*** Depth to top of the Penn. congl., feet.

**** Depth to top of the Reagan, feet.

ELLSWORTH COUNTY

(Map Pl. 2)

The 1956 production from 18 fields: oil 2,990,054 barrels. Wells drilled in 1956: oil 30, dry 29, repressuring or salt-water disposal 1, total 60 including 5 dry wildcats. Reworked wells: oil 1, dry 2. Fields discovered 1, abandoned 1.

Developments during 1956.—Although reported oil production from Ellsworth County was about 2 percent less than during 1955, drilling activity continued at a high rate, resulting in the completion of 60 test and developmental wells including 30 new oil wells. No gas production was reported from the county during the year.

Exploratory drilling resulted in the completion of the No. 1 Hoch well in sec. 19, T. 15 S., R. 10 W., by the Birmingham &

Bartlett Drilling Company, and the **Hoch** field was subsequently named in May. However, when the field failed to produce commercial quantities, it was abandoned by the Nomenclature Committee in September. More information on the discovery well of this field is given in Table 6.

The most drilling activity reported in the county was from the **Progress Northwest** field, which recorded a total of 8 new oil wells and 6 dry holes. Crude production for the field increased to 146,693 barrels in 1956, more than 4 times the figure recorded for the previous year.

The discovery of Simpson rocks, as a new oil producer in the **Stoltenberg** field, was reported with the completion of the No. 1 Zitzman well in sec. 23, T. 16 S., R. 10 W., by D. T. Ingling and others. Further information on this well is given in Table 7.

Five dry wildcat tests were completed in the county during the year, and pertinent data from the wells are given in Table 31. The locations of these tests and of oil producing areas are shown on Plate 2. Production statistics for the county are listed in Table 65.

TABLE 31.—Dry wildcat tests drilled in Ellsworth County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Divanco Oil Co. No. 1 Dolezal	SW SW SE 8-15-7W	1,686	2,728	.....	2,940
*Eugene O. Huebner No. 1 Mehl	SE SE SW 16-16-9W	1,770	2,909	3,514	3,547
*Derbv Drig. Co. No. 1 Kollman	SE NE SW 13-17-8W	1,663	2,725	3,377	3,380
Greenland Drig. Co. No. 1 Rolfs	SW SW NW 16-17-9W	1,790	2,898	3,318	3,325
*Brown & Fortier & Duke No. 1 Frevert	NW NW NW 15-17-10W	1,835	2,982	3,318	3,337

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

FINNEY COUNTY

(Map Pl. 3)

The 1956 production from 10 fields: oil 371,170 barrels, gas 38,-048,847 thousand cubic feet. Wells drilled in 1956: oil 11, gas 49, dry 9, total 69 including 8 dry wildcats. Reworked wells: gas 1. Fields discovered 2, combined 1.

Developments during 1956.—Gas production in Finney County

increased by more than 11 percent to a new record high of over 38 billion cubic feet. Oil production increased about 20 percent over the previous year.

In the Finney County portion of the **Hugoton Gas Area** (Table 10), 49 new Chase group gas wells were completed, and 1 old well was successfully worked over, bringing the total number of gas wells completed in the county to 520. The Texas Company No. 1 Gould Gas Unit in sec. 5, T. 23 S., R. 32 W., was rated at more than 27 million cubic feet per day, the largest initial potential assigned that year. Four other **Hugoton** gas wells were also assigned initial potentials of over 25 million cubic feet per day. A total of 456 wells reported production in the field during the year. The locations of all gas wells drilled in the county during the year are shown on Plate 3.

Developmental drilling in the **Damme** field resulted in the completion of 9 new oil wells, which was a major factor in doubling the production from that field. The initial potential of these new wells exceeded 200 barrels of oil per day from Mississippian strata.

Exploratory drilling programs in the county resulted in the naming of two new oil fields. The Champlin Refining Company No. 2 Leavitt well in sec. 17, T. 23 S., R. 34 W., was the discovery well of the **Sequoyah** field, and the **Pleasant Prairie Northwest** field was named when the No. 1-30 U.S.A. well in sec. 30, T. 26 S., R. 34 W., was brought in by Helmerich & Payne, Inc. The **Sequoyah** field reported production from the Morrowan rocks, and production from the **Pleasant Prairie Northwest** field was assigned to the Mississippian strata. More information on the discovery wells of these fields is given in Table 6.

A single combination was made in the county when the **Damme South** field was combined with the **Damme** field in December. Both of these fields were reported producing from Mississippian rocks.

In contrast to the previous year, when no wildcats were attempted, 1956 drilling programs resulted in the completion of 8 wildcat tests. Although nearly all of the wells were drilled to the depth of the Mississippian rocks, no shows of oil or gas were reported. Further data on the test wells are given in Table 32. The locations of these wells and of oil and gas producing areas are shown on Plate 3. Oil production statistics are given in Table 65, and gas production statistics in Table 66.

TABLE 32.—Dry wildcat tests drilled in Finney County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Dutch George Drlg. No. 1 Doll	SW SW NE 16-21-30W	2,801	2,690**	.....	3,225
Alfred McKelvy No. 1 Deal	C NE SE 23-21-30W	2,797	3,967	4,635	4,783
Bennett & Roberts Drlg. Co. No. 1 Drees	NW NW SE 31-21-30W	2,877	4,027	4,685	4,855
Bennett & Roberts Drlg. Co. No. 1 Rayl	C E½ W½ NW 27-21-31W	2,898	2,722**	.....	2,780
Bennett & Roberts Drlg. Co. No. 1 Oatcum	SW SW SW 30-22-30W	2,874	4,027	4,711	4,900
Champlin Ref. Co. No. 4 Garden City	C NW SE 18-23-34W	2,981	3,807	4,780	5,650
F. Kirk Johnson No. 1 Kisner	SW SW SW 21-24-31W	2,912	4,044	4,817	5,120
Northern Natural Gas Co. No. 1 Brown "EE"	C SW NW 21-25-34W	2,978	3,922	4,972	5,300

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Krider, feet.

FORD COUNTY

(Map Pl. 3)

The 1956 production from 3 fields: oil 1,863 barrels, gas 429,619 thousand cubic feet. Wells drilled in 1956: oil 1, gas 1, dry wildcats 5, total 7. Fields discovered 1, combined 1.

Developments during 1956.—Although oil production from Ford County decreased by more than 40 percent, gas production continued to increase to such an extent that a new high of over 429 million cubic feet was reached in 1956.

Exploratory drilling resulted in the discovery of the county's second oil field when The Pure Oil Company and The Ohio Oil Company brought in a Mississippian producer on the Anna Konda lease in sec. 11, T. 27 S., R. 22 W. The well was tested and given an initial potential of 44 barrels of oil per day, and the **Konda** field was subsequently named in November by the Nomenclature Committee. More information on the discovery well of this field is given in Table 6.

Other action by the Nomenclature Committee during the year combined the **Pleasant Valley South** field with **Pleasant Valley** in April.

Five rank dry wildcat wells were drilled in the county during 1956, and specific information on each of the tests is given in Table 33. The locations of these wildcat wells and of oil and gas producing areas are shown on Plate 3. Oil production figures are listed in Table 65, and gas data are listed in Table 66.

TABLE 33.—Dry wildcat tests drilled in Ford County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Kewanee Oil Co. No. 1 Keller	SW SE SE 16-25-23W	2,432	4,098	4,768	5,485	5,535
Kewanee Oil Co. No. 1 Converth	SW SW SW 10-26-25W	2,626	4,346	5,077	5,879	5,923
Jack L. Worley, et al. No. 1 Rundell	SE SE NW 15-27-21W	2,308	4,238	4,910	.....	5,025
Kewanee Oil Co. No. 1 Polson	SW SE SE 26-28-23W	2,516	4,481	5,188	6,141	6,200
Kewanee Oil Co. No. 1 Burnett	SW SE SW 22-28-25W	2,623	4,452	5,188	6,238	6,278

FRANKLIN COUNTY

(Map Pl. 1)

The 1956 production from 13 areas in 5 fields: oil 347,569 barrels including an estimated 290,028 barrels from secondary recovery operations. Wells drilled in 1956 (estimated): oil 92, dry 17, representing 44, total 153 including 1 dry wildcat.

Developments during 1956.—Oil production in Franklin County was considerably less in 1956 than in 1955, when 376,674 barrels was reported. It is estimated that 153 wells were drilled in the county during 1956, which number compares favorably with an estimated 130 drilled the previous year.

One rank wildcat was reported drilled in Franklin County during 1956. It is the Snofer No. 1 Hutchinson in the NW¼ SW¼ sec. 10, T. 18 S., R. 18 E. From an elevation of 1,104 feet above sea level the hole was drilled to a total depth of 1,076 feet. No tops to marker beds or shows of oil were reported. The location of this wildcat well is shown on Plate 1.

Data on water-flooding projects in Franklin County are listed in Table 1. Oil production in the various areas is listed in Table 65. Locations of areas from which oil was produced in 1956 are shown on Plate 1.

GEARY COUNTY

(Map Pl. 1)

Wildcat wells have been drilled in Geary County from time to time, but no producing pool has been found. According to State Geological Survey records, 18 tests had been drilled in the county previously. One test was drilled in 1956.

Exploration during 1956.—The William H. Pine No. 1 Fechner well, in the NW¼ NW¼ SE¼ sec. 19, T. 12 S., R. 8 E., was drilled to a total depth of 2,025 feet in December 1956. From an elevation of 1,324 feet above sea level the following tops were reported: base of Kansas City, 1,680; "conglomerate", 1,895; and base of Mississippian rocks, 1,992 feet. No shows of oil or gas were reported. The location of the rank wildcat test is shown on Plate 1.

GOVE COUNTY

(Map Pl. 3)

The 1956 production from 7 fields: oil 25,319 barrels. Wells drilled in 1956: oil 1, dry wildcats 2, total 3. Reworked wells: oil 1.

Developments during 1956.—Oil production in Gove County decreased by more than 16 percent during the year, and drilling activity also declined. Exploratory drilling failed to discover any new pools, although developmental drilling did meet with some success.

The O. A. Sutton Drilling Company brought in the No. 1 Steckel well in sec. 23, T. 13 S., R. 30 W. (Gove field), which reported an initial potential of 100 barrels a day from Lansing-Kansas City rocks. Reworking of the No. 1 Lundgren well in sec. 31, T. 14 S., R. 29 W., by the Wycoff & Williams Drilling Company proved successful in adding to the production of the **Lundgren** field.

Exploratory drilling programs were restricted to the drilling of 2 rank dry wildcat tests. The Imperial Oil Company No. 1 Long well in the NE¼ NE¼ NW¼ sec. 36, T. 11 S., R. 26 W., was drilled from a rotary bushing elevation of 2,614 feet above sea level to a total depth of 4,737 feet. The top of the Lansing group was picked on the electric log at a depth of 3,909 feet, the top of the Cherokee at 4,408 feet, and the top of the Arbuckle at 4,702 feet. Drill-stem tests were run in both the Lansing and Cherokee strata, but no shows of oil or gas were reported. The well was

abandoned in September. The second dry wildcat test was the Cities Service Oil Company No. 1 Lundgren well in the NW¼ NW¼ sec. 27, T. 14 S., R. 29 W. Drilled from a rotary bushing elevation of 2,602 feet above sea level to a total depth of 4,415 feet, the well penetrated the top of Lansing rocks at a depth of 3,696 feet and the top of the Mississippian rocks at a depth of 4,321 feet. Numerous drill-stem tests failed to detect a show of gas or oil, and the well was abandoned in August. The locations of these dry wildcat tests and of oil producing areas are shown on Plate 1. Oil production statistics are listed in Table 65.

GRAHAM COUNTY

(Map Pl. 3)

The 1956 production from 48 fields: oil 6,040,225 barrels. Wells drilled in 1956: oil 143, dry 130, total 273 including 40 dry wildcats. Reworked wells: oil 4. Fields discovered 4, combined 4.

Developments during 1956.—Although drilling activity in Graham County decreased by more than 20 percent, oil production continued to increase as 143 new oil wells were completed in 22 fields. No gas production was reported during the year.

Before the end of the year 4 new oil fields were named in the county by the Nomenclature Committee. The **Brassfield**, **Evergreen**, and **Lacerte** fields were designated as new Lansing-Kansas City producers, and the **Hatcher** field was named as a new Arbuckle producer. Complete information on the discovery wells of these fields is given in Table 6.

Other action by the Nomenclature Committee in 1956 resulted in the combining of the **Holley West** field with **Holley** (Lansing-Kansas City production) in April, and the **Morel East** field with **Morel** (Arbuckle production) in November. Two additional combinations which extended into adjacent counties were also made. The **Cooper North**, **Laura**, **Morlan**, **Mulenburg**, and **Smith-Denning** fields in Graham County and the **Palco Southwest** field and portions of the **Palco** field in Rooks County were all combined with the **Cooper** field. The **Noah**, **Spaulding**, and **White Southwest** fields in Graham County and the **Al'phin**, **A'l'phin Northwest**, **Annon**, **Annon South**, **Bassett**, **Laura Southeast**, and **Marcotte South** fields in Rooks County were all combined under the new name of **Trico**.

Developmental drilling during the year was concentrated in 2 fields. The **Cooper** field reported the completion of 23 new oil wells, 2 reworked wells, and 17 dry holes. The **Holley** field reported the completion of 47 new oil wells, 1 reworked well, and 12 dry holes. The production from the **Holley** field increased about 300 percent, clearly reflecting the highly active drilling program within the field.

Exploratory drilling in the county resulted in the completion of 40 rank dry wildcat wells, 7 of which reported slight shows of oil and 1 reported a show of gas. The tops of some important marker beds encountered in drilling the tests are given in Table 34. The locations of these wildcats and of oil producing areas are shown on Plate 3. Production statistics are listed in Table 65.

TABLE 34.—Dry wildcat tests drilled in Graham County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Jones, Shelburne & Farmer, Inc., et al. No. 1 Boys	App. SW SW NE 6-6-21W	2,228	3,507	3,803	3,823
*Jones, Shelburne & Farmer, Inc. No. 1 Frasca	C S½ SW NW 31-6-21W	2,226	3,474	3,798	3,805
*Jones, Shelburne & Farmer, Inc. No. 1 Jenkins	SW SW SW 33-6-21W	2,185	3,427	3,721	3,746
The Veeder Supply & Development Co., et al. No. 1 Rush	NW NW NW 15-6-22W	2,333	3,583	3,870	3,900
Bankoff Oil Co., et al. No. 1 Broomfield	NW NW SE 16-6-22W	2,375	3,619	3,893	3,934
Musgrove Petro. Corp. No. 1 Logue	NW NW NE 8-6-24W	2,474	3,632	4,099	4,140
Jones, Shelburne & Farmer, Inc. No. 1 Organ	NE NE NE 17-6-25W	2,584	3,680	3,867**	3,883
Osage Oil & Gas Co., Inc. No. 1 Worcester	SW SE NE 23-7-22W	2,219	3,458	3,799	3,800
*J. A. Terteling & Sons No. 1 Hale	NE NE NW 11-7-23W	2,387	3,650	4,040	4,062
Anschutz Drlg. Co., Inc., et al. No. 1 Kobler	NE NE SW 17-7-23W	2,426	3,692	3,903**	3,930
K & E Drlg., Inc., et al. No. 1 Hyde	SE SE SE 19-7-24W	2,498	3,773	3,982**	4,000
C-G Drlg. Co., et al. No. 1 Lindeman	SW SW SE 23-7-25W	2,542	3,764	3,972**	3,994
*Artnell Co. No. 1 Emery	SW SW SW 29-8-21W	2,204	3,430	3,642**	3,766
Harms-Burt Drlg. Co., et al. No. 1 Newell	NE NE SW 30-8-21W	2,166	3,406	3,756	3,800
Leben Drlg. Co. No. 1 Kirkpatrick	NW NW NE 24-8-22W	2,112	3,346	3,675	3,705

The Veeder Sup. & Develop- ment Co. No. 1 Buzz	NW NW SE 35-8-22W	2,147	3,396	3,791	3,840
*The Veeder Sup. & Develop. Co., et al. No. 1 Ellsworth	NW NW SW 1-8-23W	2,203	3,476	3,847	3,885
*Leben Drlg. Co., et al. No. 1 Kopper	SE SE SE 5-8-23W	2,312	3,587	3,991	4,018
Carl Todd Drlg. Co. No. 1 McVey	SW SW NW 11-8-23W	2,235	3,511	3,901	3,936
*Bennett & Roberts Drlg. Co. No. 1 St. John	SE SE NW 27-8-25W	2,408	3,728	.....	3,980
Honaker-Davis Drlg. Co., et al. No. 1 Scott	SE SE NW 6-9-23W	2,366	3,726	3,946**	3,960
*Jones, Shelburne & Farmer, Inc. No. 1 Jones	SE SE NW 14-9-23W	2,303	3,635	3,865**	3,880
K & E Drlg., Inc., et al. No. 1 Underhill	NE NE NW 16-9-23W	2,378	3,702	.....	3,921
Heathman-Seeligson Drlg. Co. No. 2 Edwards Estate	NW NW NW 21-9-23W	2,445	3,769	3,991**	4,000
Transit Corp., et al. No. 1 Ninemire "B"	NW NW NE 24-9-23W	2,384	3,679	4,161	4,168
Copinger Drlg. Inc., et al. No. 1 Radke	SW SW NW 27-9-23W	2,395	3,713	3,930**	4,164
K & E Drlg., Inc. No. 1 Hildebrand	SW SW NW 13-9-24W	2,430	3,792	4,011**	4,030
Honaker-Davis Drlg. Co., et al. No. 1 Keith	SE SE NE 18-9-24W	2,488	3,828	4,053**	4,063
Honaker-Davis Drlg. Co., et al. No. 1 Drury	NW NW SE 26-9-24W	2,511	3,865	4,086**	4,100
*Imperial Oil of Kansas, Inc. No. 1 Kohart	SW NE SE 28-9-24W	2,543	3,874	.....	4,087
*Nadel & Gussman No. 1 Hills	SE SE SW 19-10-21W	2,233	3,530	3,931	3,947
*Chas. Hulme Drlg. Con- tractor, et al. No. 1 Mullaney	NW NW SE 4-10-22W	2,351	3,605	4,007	4,065
K & E Drlg., Inc., et al. No. 1 Dreiling	NW NW NE 20-10-22W	2,348	3,622	4,080	4,107
Theodore Gore, et al. No. 1 Griffith	NW NW SE 21-10-22W	2,307	3,572	4,057	4,082
*Nadel & Gussman No. 1 H. R. Sutor	SE SE SW 24-10-22W	2,187	3,480	3,865	3,885
Francis Oil & Gas, Inc. No. 1 Conness "B"	NE NE NW 23-10-23W	2,357	3,661	3,893**	3,925
Simon Lebow, et al. No. 1 Berschauer	NE NE SE 10-10-24W	2,450	3,795	4,027**	4,040
Honaker-Davis Drlg. Co., et al. No. 1 Schamberger	NW NW NW 16-10-24W	2,478	3,818	4,058**	4,070
Empire Drlg. Co., et al. No. 1 David Rush	SE SE SE 8-10-25W	2,547	3,831	4,061**	4,090
Mammoth Oil Prod. No. 1 Weiser	NE NE SE 28-10-25W	2,509	3,876	4,090**	4,105

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the base of the Kansas City group, feet.

GRANT COUNTY

(Map Pl. 3)

The 1956 production from the Grant County portion of the Hugoton Gas Area: gas 77,166,752 thousand cubic feet. Wells drilled in 1956: gas 2, storage 2, total 4.

Developments during 1956.—Once again Grant County has maintained its position as the second largest gas producing county in the state with a reported production of 77,166,752 thousand feet of gas from 572 wells. Only 2 new gas wells were drilled in the county during the year.

The No. 1 Thorpe "C" well in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 27 S., R. 37 W., was brought in by the Northern Natural Gas Producing Company in September with an initial potential of 16,400,000 cubic feet of gas per day. The well was drilled from a rotary bushing elevation of 3,079 feet above sea level to a total depth of 2,700 feet. The second well, the No. 1 Waechter "A" in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 27 S., R. 37 W., was also drilled by the Northern Natural Gas Producing Company. The well was completed in October with an initial potential of 17,900,000 cubic feet of gas per day. Drilling started at a rotary bushing elevation of 3,077 feet above sea level and ceased at a total depth of 2,630 feet. Production from both of these wells was assigned to the Chase group.

Two more storage wells were completed by the Stanolind Oil and Gas Company in June bringing the total of such wells to 8. Both wells were drilled to a total depth of 1,726 feet.

The locations of the 2 new gas wells are shown on Plate 3, and the gas production figures for Grant County are given in Table 66. The early history of the **Hugoton Gas Area** is discussed in the chapter on natural gas.

GREELEY COUNTY

(Map Pl. 3)

Wildcat wells have been drilled in Greeley County from time to time, but as yet no commercial oil or gas pool has been discovered.

Exploration during 1956.—A total of 4 rank dry wildcat wells was reported from the county during the year. All the test wells penetrated the Mississippian strata, 3 of which reported shows of

gas cut mud. Specific data on these wells are listed in Table 35, and the locations of the wells are shown on Plate 3.

TABLE 35.—*Dry wildcat tests drilled in Greeley County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Geo. Caulkins Oil Co. No. 1 Brunswig	C NW SW 6-18-39W	3,566	4,330	5,216	5,925
Geo. Caulkins Oil Co. No. 1 Fankhauser	C NW SE 21-18-39W	3,468	4,270	5,062	5,205
Van-Grisso Oil Co. No. 1 Clift	C SW SW 9-19-40W	3,616	4,338	5,258	5,395
Van-Grisso Oil Co. No. 1 Watson	C SE SE 8-20-39W	3,527	4,312	5,205	5,388

GREENWOOD COUNTY

(Map Pl. 1)

The 1956 production from 60 areas in 50 fields: oil 6,788,601 barrels including an estimated 5,365,499 barrels from secondary recovery projects. Wells drilled in 1956 (reported): oil 115, dry 45, repressuring (estimated) 86, total 246 including 4 dry wildcats. Reworked wells: oil 3. Fields discovered 1, combined 2.

Developments during 1956.—Greenwood County's oil production was increased over that of 1955, when 6,485,392 barrels was reported. An estimate of the number of new wells drilled in 1956 totals 246, substantially fewer than were estimated drilled the previous year (372). Approximately the same amount of oil was produced by secondary recovery methods during 1955 and 1956.

The **Mignot** field, found in 1951 by the Inland Oil, Inc., No. 1 Mignot well in sec. 9, T. 22 S., R. 11 E., was officially recognized by the Kansas Nomenclature Committee during 1956. Production in the discovery well is from the "Bartlesville" sand at a depth of 1,921 to 1,931 feet. The initial potential assigned the discovery well was 5 barrels of oil per day. This development is listed in Table 6.

During the year, the **Atyeo** field of Chase, Greenwood, and Lyon Counties was combined with the **Pixlee** field of Butler County and is now designated the **Atyeo-Pixlee** field.

Production of an estimated 5,365,499 barrels of oil by secondary recovery methods from a recorded and estimated 49 projects in Greenwood County oil fields during 1956 places the county

first in secondary recovery oil production. Data on these important projects are given in Table 1.

Four dry wildcat wells were drilled in the county during the year. No shows of oil or gas were reported on these holes. Data on the marker beds encountered in the drilling of these holes are given in Table 36.

Oil production statistics in the various fields are listed in Table 65. Plate 1 shows the locations of areas from which oil was produced and of dry wildcat wells in 1956.

TABLE 36.—Dry wildcat tests drilled in Greenwood County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of K. C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Shira Drilg., Inc., et al. No. 1 Schwintz	NE SE NW 3-24-11E	1,157	1,239	2,039	.....	2,075
*Beaumont Petro. Co. No. 1 Gould	SW SW SW 9-27-9E	1,292	1,575	2,373	2,735	2,788
*Ventures, Inc. No. 1 Peacock	SW NE SW 15-27-12E	1,080	.....	1,735	.....	1,806
*Wm. Glasco No. 1 F. Glasco	App. SW NE SW 11-28-10E	.....	.....	2,045	2,509	2,517

*No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

HAMILTON COUNTY

(Map Pl. 3)

The 1956 production from 2 fields: oil 5,922 barrels, gas 4,297,064 thousand cubic feet. Wells drilled in 1956: gas 2, dry 5, total 7 including 5 dry wildcats.

Developments during 1956.—The **Helfrich** field, Hamilton County's only oil field, reported production of 5,922 barrels during the year, about 35 percent less than the previous year. Gas production, all from the Chase group of rocks in the **Hugoton Gas Area**, declined more than 17 percent.

Developmental drilling in the county resulted in the completion of 2 new gas wells within the **Hugoton Gas Area**. The Southwestern Exploration Company No. 1 Unruh well in the cen. SE $\frac{1}{4}$ sec. 18, T. 26 S., R. 39 W., was brought in during November with an initial potential of 7,980,000 cubic feet of gas per day. The second Hugoton well was completed by Walter Kuhn on the Kritzmire lease in the cen. SE $\frac{1}{4}$ sec. 24, T. 26 S., R. 40 W., in

November. It was assigned an initial potential of 700,000 cubic feet of gas per day. The locations of both of these new gas wells are shown on Plate 3.

The Musgrove Petroleum Corporation No. 1 Scholz well in the cen. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 25 S., R. 42 W., was the only well drilled within the **Helfrich** during the year. It was drilled from a rotary bushing elevation of 3,638 feet above sea level to a total depth of 5,427 feet. A drill-stem test at a depth of 5,360 to 5,375 feet reported 60 feet of oil cut mud, but no production resulted and the well was abandoned in July.

Exploratory drilling in the county resulted in the completion of 4 wildcat tests, of which 3 recorded shows of gas. Additional data on these wells are given in Table 37. The locations of the wildcat wells and of the areas of oil and gas production are shown on Plate 3. Oil production statistics are listed in Table 65, and gas statistics are given in Table 66.

TABLE 37.—Dry wildcat tests drilled in Hamilton County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Jones, Shelburne & Farmer, Inc., et al. No. 1 Grilliot	SW SW SW 17-21-40W	3,577	4,020	5,286	5,536
Time Petro. Co. No. 1 Burnett	SE SE SE 29-23-39W	3,355	3,855	5,193	5,293
Kansas-Nebraska Natural Gas Co., Inc. No. 1 Wilcox	C SE 36-23-39W	3,341	3,866	5,151	5,351
J. M. Huber Corp. No. 1 Storey	SW SW SW 21-26-41W	3,312	3,715	5,231	5,387

HARPER COUNTY

(Map Pl. 2)

The 1956 production from 7 fields: oil 773,817 barrels, gas 2,590,-594 thousand cubic feet. Wells drilled in 1956: oil 24, gas 2, oil and gas 7, dry 24, repressuring or salt-water disposal 2, total 59 including 14 dry wildcats. Reworked wells: dry 1. Fields discovered 3, combined 3, abandoned 1.

Developments during 1956.—Although drilling activity in Harper County declined during 1956, both oil and gas production showed a marked increase. All of the gas reported was produced from the **Spivey-Grabs** field.

Two new producing fields were named in the county during

the year by the Nomenclature Committee. The **Banner South** field was named in February when Roland L. Pelt et al. brought in the No. 1 Hennes well in sec. 4, T. 33 S., R. 7 W. Production was assigned to the Misener rocks. The Mississippian rocks were designated the source of oil in the **Sunny View South** field, which was discovered in January when the Rupp-Ferguson Oil Company completed the No. 1 Miller well in sec. 2, T. 31 S., R. 9 W. A third field, **Wildcat Creek**, was named in March with the completion of the No. 1 Denton-Fox well by the J. M. Huber Corporation and The Continental Oil Company. However, when the well failed to produce commercial quantities of oil, it was abandoned by the Nomenclature Committee in May. More information on the discovery wells of these new fields is given in Table 6.

Other action by the Nomenclature Committee resulted in the combining of **Grabs South** with the **Grabs** field in January and **Sunny View South** with **Sunny View** field in April. Later action in August combined both these fields and the **Grabs Northwest** field under the new name of **Spivey-Grabs**. This combination extends into Kingman County and is more fully discussed in the Kingman County section of this report.

The newly formed **Spivey-Grabs** field became the county's leading producer, recording 697,241 barrels of oil and 2,590,594 cubic feet of gas produced during the year. Drilling activity within the field resulted in the following new completions: 16 oil wells, 2 gas wells, 6 oil and gas wells, and 4 dry holes.

Exploratory drilling programs in the county resulted in the completion of 14 dry wildcat wells penetrating the Mississippian strata. Eight of these wells reported shows of gas, and 4 reported shows of oil. The tops of some important marker beds encountered by the tests are listed in Table 38. The locations of these wildcat wells and of oil and gas producing areas are shown on Plate 2. Oil production data are given in Table 65, and gas production data are given in Table 66.

HARVEY COUNTY

(Map Pl. 2)

The 1956 production from 10 fields: oil 226,931 barrels, gas 401,-153 thousand cubic feet. Wells drilled in 1956: oil 12, gas 2, dry 25, total 39 including 12 dry wildcats. Fields discovered 2.

TABLE 38.—*Dry wildcat tests drilled in Harper County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Gene Goff No. 1 Moritz	NE NE NE 30-31-5W	1,366	4,214	4,808	4,856
Gene Goff No. 1 Prouse	SE SE NW 30-31-6W	1,452	4,329	4,850	4,893
Aurora Gasoline Co. No. 1 Meyer	NE NE NW 9-31-7W	1,596	4,381	4,939	4,961
Jones, Shelburne & Farmer, Inc., et al. No. 1 Joslin	NE NE NE 22-31-7W	1,545	4,393	4,928	4,978
Herndon Drlg. Co. No. 1 Watt	NW NW SW 29-32-6W	1,408	4,425	4,829*	4,839
The Pure Oil Co. No. 1 P. E. Wedman	NW NW SE 35-32-6W	1,336	4,349	4,915	4,980
Aurora Gasoline Co. No. 1 Garber	SW SW NE 17-32-7W	1,418	4,401	4,923	4,976
Mull Drlg. Co., Inc. No. 1 Coryell	C SW NW 9-32-9W	1,457	4,312	.....	4,355
Musgrove Petro. Corp., et al. No. 1 Archibald	SW SW SE 11-32-9W	1,527	4,412	.....	4,485
Falcon Seaboard Drlg. Co. No. 1 Hranicka	SW SW SW 15-34-5W	1,220	4,535	5,033*	5,074
J. M. Huber Corp. No. 1 Kather	NE SE NE 16-34-7W	1,404	4,696	5,393	5,457
Jones, Shelburne & Farmer, Inc. No. 1 Livengood	SW SW SW 14-35-6W	1,259	4,750	5,602	5,652
Provincial Oil Co. No. 1 Burchfield	NE NE SE 3-35-7W	1,336	4,788	5,554	5,610
J. M. Huber Corp. No. 1 Jones	NW NW SE 6-35-8W	1,258	4,736	.....	4,892

* Depth to the top of the Simpson, feet.

Developments during 1956.—Both oil and gas production from Harvey County increased about 20 percent over the previous year's figures as drilling programs resulted in the completion of 12 new oil wells and 2 gas wells.

Two new Mississippian fields were named in the county during the year. The **Burrton East** field was discovered when the Stellar Oil Corporation, Inc., brought in an oil well on the Becker lease in sec. 28, T. 23 S., R. 3 W., in November. The well was drilled from a rotary bushing elevation of 1,449 feet above sea level to a total depth of 3,322 feet. Several drill-stem tests were run, and an initial potential of 5 barrels of oil per day was assigned. A second field, the **Burrton North** gas field, was named upon the completion of the W. L. Hartman No. 1 Harrison well in sec. 32, T. 22 S., R. 3 W. Drilled from a rotary bushing elevation

TABLE 39.—Dry wildcat tests drilled in Harvey County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of "Hunton", feet	Total depth, feet
*Bedell-Catt Drlg. Co., Inc., et al. No. 1 Dyck	NW NE NW 2-22-1W	1,492	2,339	2,959	3,370	3,410
*Brunson Produc. & Explor., Inc. No. 1 Rilling	NE NE SW 18-22-1W	1,444	2,323	2,936	3,317	3,486
Jocelyn-Varn Oil Co., et al. No. 1 Linn	SE SE SE 27-23-2W	1,393	2,341	3,043	3,388	3,427
Herndon Drlg. Co. No. 1 Orpin	SE SE NW 26-22-2E	1,466	2,133	2,815	3,130	3,340
*E. H. Adair Oil Co. No. 1 Unruh	SE SE SE 32-23-2E	1,435	2,231	2,879	3,241	3,374
*O. A. Sutton Oil Prop. & Invest. No. 1 Fluke	SE SE SW 1-24-1E	1,499	2,358	3,048	3,413	3,641
*E. H. Adair Oil Co., et al. No. 1 Kurr	SW SW SW 23-24-1E	1,455	2,325	3,034	3,435	3,569
Ayesh Oil Co. No. 1 Woulfe	NW NW NW 28-24-1E	1,426	2,351	3,036	3,464	3,674
Shawver-Armour, Inc. No. 1 Yinger	SE SE SE 10-24-2E	1,427	2,198	2,860	3,199	3,285
*Chas. Lamer Carlock, et al. No. 1 Harder	NE NE SE 19-24-2E	1,438	2,270	2,989	.....	3,012
*Shawver-Armour, Inc. No. 1 Nickels	SE SE NW 22-24-2E	1,405	2,174	2,895	3,277	3,355
*E. H. Adair Oil Co. No. 1 Higg	NW NW SE 24-24-2E	1,387	2,155	2,851	3,264	3,388

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

of 1,462 feet above sea level to a total depth of 3,917 feet, the well was assigned an initial potential of 1,100,000 cubic feet of gas per day from the Mississippian strata. Additional data on these discovery wells are given in Table 6.

Exploratory drilling within the county resulted in the completion of 12 rank dry wildcats which penetrated the Mississippian rocks. Eight of the tests were concentrated in the southeast part of the county, reflecting high interest in that area. More complete data on these wildcat wells are listed in Table 39. The locations of these test wells and of oil and gas producing areas are shown on Plate 2. Oil production statistics are listed in Table 65, and gas statistics are given in Table 66.

HASKELL COUNTY

(Map Pl. 3)

The 1956 production: oil from 1 field 121,074 barrels, gas (all from

the Hugoton Gas Area) 31,391,477 thousand cubic feet. Wells drilled in 1956: oil 4, gas 19, dry 4, total 27 including 3 dry wildcats.

Developments during 1956.—Haskell County's only oil field, **Pleasant Prairie**, increased its production by more than 85 percent as the total number of producing wells in the field reached 11. Gas production from the part of the county in the **Hugoton Gas Area** showed a slight reduction from the previous year's total, although 19 new gas wells were completed during the year.

Developmental drilling in the **Pleasant Prairie** field by Helmerich and Payne, Inc., resulted in the completion of 4 new Mississippian oil producers in the Jones lease in secs. 4 and 5, T. 27 S., R. 34 W. All were assigned initial potentials in excess of 120 barrels of oil per day. Routine development of the productive Chase group rocks in the Hugoton Gas Area added 19 new gas wells and 1 dry hole, as Haskell County maintained its position as the fourth largest producer in the field. The locations of these new wells are shown on Plate 3.

Exploratory drilling resulted in the completion of 3 deep dry wildcat tests. J. M. Huber, Inc., drilled the No. 1 Audrey well in the cen. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 27 S., R. 31 W., from a rotary bushing elevation of 2,816 feet above sea level to a total depth of 5,249 feet. The No. 1 Thompson well in the cen. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 27 S., R. 32 W., was drilled by the Champlin Refining Company from a rotary bushing elevation of 2,899 feet above sea level to a total depth of 5,420 feet. A third wildcat test was completed by J. M. Huber, Inc., on the Weirauch lease in the cen. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 28 S., R. 31 W. The well was drilled from a rotary bushing elevation of 2,878 feet above sea level, and it penetrated the Arbuckle dolomite before reaching a total depth of 6,530 feet. The locations of these rank dry wildcat wells and of the oil and gas producing areas are shown on Plate 3. Oil production figures are listed in Table 65, and gas figures are listed in Table 66.

HODGEMAN COUNTY

(Map Pl. 3)

The 1956 production from 5 fields: oil 120,853 barrels. Wells drilled in 1956: oil 4, dry wildcats 5, total 9. Fields discovered 2.

Developments during 1956.—For the first time in several years, oil production has increased in Hodgeman County pri-

marily because of successful exploration programs which resulted in the discovery of 2 new pools. A total of 5 widely distributed dry wildcat tests were drilled in the county during the year.

The discovery well of the **Hallet** field was brought in by the Kewanee Oil Company in August on the Larkin lease in sec. 15, T. 22 S., R. 25 W. The well was drilled to a total depth of 4,693 feet and was assigned an initial potential of 250 barrels of oil per day from the Mississippian rocks. The **Wieland** field was named upon the completion of the Mayfair Minerals, Inc., No. 1 Wieland well in sec. 16, T. 21 S., R. 22 W. Drilled from a rotary bushing elevation of 2,287 feet above sea level, the well penetrated 2 pay zones in Mississippian strata before reaching a total depth of 4,550 feet. An initial potential of 64 barrels of oil per day was assigned to the well in September. More information on these discovery wells is given in Table 6.

Developmental drilling in the **Saw Log Creek** field was successful in discovering a producing zone in the Cherokee rocks. The discovery well was drilled on the Hall lease by the Atlantic Refining Company in sec. 36, T. 23 S., R. 22 W., and the producing zone was encountered at a depth of 4,478 feet to 4,486 feet. Additional data on this well are listed in Table 7.

Exploratory drilling in the county resulted in the completion of 5 dry wildcat tests, 1 of which recorded a show of oil. The tops of some important marker beds encountered by these wells are given in Table 40. The locations of the wildcat wells and of the oil and gas producing areas are shown on Plate 3. Oil production statistics are listed in Table 65.

JEFFERSON COUNTY

(Map Pl. 1)

No production reported from the established fields. Miscellaneous oil production estimated at 2,000 barrels. One dry wildcat test drilled during the year.

Developments during 1956.—The **McLouth** field is being utilized for the storage of natural gas. No gas or oil production was reported from the county during 1956.

One dry wildcat was drilled in the county during 1956. W. S. Fees, Jr., and Garfield Richards drilled the rank test on the Jones

TABLE 40.—Dry wildcat tests drilled in Hodgeman County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
H & H Drlg. Co. No. 1 Goebel	C NW SE 14-21-24W	2,395	3,904	4,526	5,025
Jones, Shelburne & Farmer, Inc., et al. No. 1 Dumler	SW SW SW 16-21-26W	2,533	3,917	4,496	4,573
Aurora Gasoline Co. No. 1 Tubbs "A"	NW NW SW 26-23-21W	2,369	4,110	4,709	4,820
Petroleum, Inc. No. 1 Thresher	SW SW SE 30-23-23W	2,440	4,040	4,701	4,732
*Earl F. Wakefield No. 1 Reed	NENE SE 16-23-24W	2,347	3,963	4,698	4,713

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

farm in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 10 S., R. 20 E., in August. Tops reported from an elevation of 1,157 feet above sea level are: base of Oread limestone, 275; Kansas City group, 540; base of Kansas City, 880; "McLouth sand", 1,560; and Mississippian lime, 1,610 feet. Total depth reported was 1,760 feet. No shows of oil or gas were mentioned in the report on the test.

The location of the rank wildcat test is shown on Plate 1. Oil production is given in Table 65.

JEWELL COUNTY

(Map Pl. 2)

Wildcat wells have been drilled in Jewell County from time to time, but as yet no producing pool has been discovered.

Exploration during 1956.—For the first time since 1953, a wildcat test well has been drilled in Jewell County. Harry Mann drilled the well on the Beard lease in sec. 10, T. 5 S., R. 10 W., from a rotary bushing elevation of 1,649 feet above sea level to a total depth of 2,715 feet. The well was completed in September and abandoned as a dry hole. No other information on this well has been reported. The location of the wildcat test is shown on Plate 2.

In 1952 Harry Mann drilled another well in the same section as the 1956 wildcat. This earlier test is located about 2 $\frac{1}{2}$ miles from the new well, and it was drilled from a rotary bushing elevation of 1,636 feet above sea level to a total depth of 4,052 feet.

The tops of the following marker horizons were encountered: Topeka limestone at a depth of 2,380 feet; Lansing strata, 2,691; Mississippian rocks, 3,368; Viola dolomite, 3,690; Simpson group, 3,900; and Arbuckle dolomite, 3,990. Two drill-stem tests proved unsuccessful in finding commercial quantities of oil or gas.

JOHNSON COUNTY

(Map Pl. 1)

The 1956 production from 3 areas in 3 fields: oil 8,113 barrels, gas, 51,253 thousand cubic feet. Wells drilled in 1956: oil 7, dry 1, total 8.

Developments during 1956.—The reported oil production in Johnson County in 1956 was almost double that in 1955, when 4,328 barrels was reported.

Oil production statistics are listed in Table 65, gas in Table 66. Most of the oil production in Johnson County comes from the **Gardner** field in the southeastern part of the county. Locations of areas from which oil was produced in 1956 are shown on Plate 1.

KEARNY COUNTY

(Map Pl. 3)

The 1956 production from 2 fields: oil 45,616 barrels, gas (all from the Hugoton Gas Area) 63,479,195 thousand cubic feet. Wells drilled in 1956: oil 1, gas 26, dry 6, total 33 including 1 dry wildcat. Fields discovered 1.

Developments during 1956.—Drilling activity in the Kearny County portion of the **Hugoton Gas Area** resulted in the completion of 26 new gas wells concentrated in the west central part of the county. Gas production increased by more than 6 percent over the previous year's total. Oil production increased by more than 15 percent.

South Side, the county's second oil field, was named with the successful completion of the Helmerich & Payne No. 4 White "O" well in sec. 13, T. 26 S., R. 35 W. The well was given an initial potential of 108 barrels of oil per day from the Morrowan strata in June. Further development of the well in September revealed the first producing zone in the Mississippian rocks ever reported in the county. Additional data on this discovery well are given in

Table 6, and data on the new producing horizon are given in Table 7.

Other exploratory drilling in the county was restricted to the completion of a single wildcat test on the Johnson lease in the cen. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 25 S., R. 36 W. The well was drilled by W. B. Osborn in August from a rotary bushing elevation of 3,045 feet above sea level to a total depth of 6,092 feet. Some important tops picked were from the following depths: Heebner shale, 3,440; Lansing group, 3,625; Morrowan rocks, 4,620; eroded Mississippian strata, 4,780; Viola limestone, 5,490; and Arbuckle dolomite, 5,594 feet. No shows of oil or gas were reported. The location of this wildcat test is shown on Plate 3.

Of the 26 new gas wells drilled in the county during the year, the Graham-Michaelis Drilling Company No. 1 Weber "A" well was assigned the highest initial potential, being rated at more than 13 million cubic feet of gas per day. The locations of all the new gas wells in Kearny County are shown on Plate 3 along with the areas of oil and gas production. Oil production statistics are listed in Table 65, and gas statistics are listed in Table 66.

KINGMAN COUNTY

(Map Pl. 2)

The 1956 production from 25 fields: oil 1,987,775 barrels, gas 6,860,788 thousand cubic feet. Wells drilled in 1956: oil 59, gas 22, oil and gas 8, dry 51, repressuring or salt-water disposal 2, total 142 including 20 dry wildcats. Reworked wells: oil 1, dry 2. Fields discovered 3, combined 2, abandoned 1.

Developments during 1956.—An increase in the drilling activity within Kingman County was clearly reflected in the production reported during the year, as both oil and gas recorded an increase of more than 28 percent.

Exploratory drilling programs resulted in the naming of three new fields. The Pryor & Tracy and D & M Drilling Company, Inc., No. 1 Goetz well in sec. 29, T. 29 S., R. 9 W., was completed as a Viola gas producer in June and designated as the discovery well for the Goetz field. The Settle field, named in October upon the completion of the George Siegrist No. 1 Settle well in sec. 18, T. 29 S., R. 7 W., was assigned an initial potential of 2,400,000 cubic feet of gas per day from the Mississippian strata. A third field, *Georgia Spur*, was named when the Aurora Gasoline Company completed the No. 1 Greenleaf well in sec. 7, T. 28 S., R.

6 W., but because the well failed to produce commercial quantities of oil or gas, the field was abandoned. More information on these discovery wells is given in Table 6.

Developmental drilling within the **Basil** and **Gilchrist** fields resulted in the discovery of producing zones in the Mississippian rocks. Complete data on the discovery wells of these new zones are given in Table 7.

Action by the Nomenclature Committee in January combined the **Grabs South** field with **Grabs**. A second combination was made in August when the **Bertholf**, **Rago**, **Rochester**, **Spivey**, **Spivey Northwest**, **Spivey West**, **Sunnyview**, and **Zenda** fields in Kingman County were combined with the **Grabs**, **Grabs Northwest**, and **Spivey Southeast** fields in Harper County. The combination was designated as the **Spivey-Grabs** oil and gas field. This new field includes more than 11,000 acres, and drilling activity within the field during the year resulted in 29 new oil wells, 13 new gas wells, 7 new oil and gas wells, and 15 dry holes.

Nearly all of the 20 dry wildcats drilled in the county during 1956 penetrated the Arbuckle dolomite, and 14 reported shows of oil or gas. The tops of some important marker beds encountered in drilling these exploratory holes are given in Table 41. The locations of the dry wildcat wells and of the oil and gas producing areas are shown on Plate 2. Oil production data are listed in Table 65, and gas statistics are given in Table 66. Data on secondary recovery are given in Table 1.

KIOWA COUNTY

(Map Pl. 2)

The 1956 production from 14 fields: oil 163,466 barrels, gas 2,397,523 thousand cubic feet. Wells drilled in 1956: oil 18, gas 9, dry 27, total 54 including 17 dry wildcats. Fields discovered 4.

Developments during 1956.—Oil production in Kiowa County more than doubled in 1956, and gas production increased to a record high of 2,397,523 thousand cubic feet of gas.

Exploratory drilling resulted in the discovery of 4 new pools. The **Greensburg** field was named upon the completion of the Anschutz Drilling Company, Inc., No. 1 Steward well in sec. 35, T. 27 S., R. 18 W., and the **Greenburg Northeast** field was named when the Aurora Gasoline Company brought in the No.

TABLE 41.—Dry wildcat tests drilled in Kingman County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississ'pian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Anschutz Drlg. Co., Inc., et al. No. 1 Dondelinger	SE SE SW 35-27-7W	1,526	3,144	3,869	4,363	4,395
*Coop. Ref. Assn., et al. No. 1 Valdois	SE SE SW 9-27-9W	1,724	3,425	3,981	4,416	4,440
The El Dorado Ref. Co. No. 1 Scheuman	SW NE SW 10-28-6W	1,491	3,074	3,852	4,384	4,409
Youngblood, et al. No. 1 McKenna	NE NE SE 4-28-8W	1,578	3,325	3,974	4,472	4,497
Petroleum, Inc. No. 1 McKenna "A"	NW NW NE 28-28-8W	1,634	3,417	4,094	4,567	4,600
Bachus Oil Co., et al. No. 1 Hay	E½ NE NW 11-28-9W	1,624	3,406	4,014	4,490	4,520
Barbara Oil Co. No. 1 Doane	NW NW NW 23-28-10W	1,695	3,570	4,108	4,557	4,581
Barbara Oil Co. No. 2 Doane	NE NE NE 23-28-10W	1,702	3,561	4,100	4,560	4,581
Aurora Gasoline Co. No. 1 Bolinger	SE SE SW 3-29-5W	1,383	3,138	3,906	4,467	4,500
Armer Drlg. Co., Inc. No. 1 Maple	NE NE NE 30-29-6W	1,551	3,312	4,145	4,646	4,684
Rupp-Ferguson Oil Co. No. 1 Cambell	SW SE SE 33-29-7W	1,488	3,320	4,109	.....	4,227
Graham-Michaelis Drlg. Co., et al. No. 1 Oeding	C SE SW 7-29-8W	1,685	3,524	4,195	4,496**	4,526
*Petroleum, Inc. No. 1 Duckworth	SW SW SW 26-29-8W	1,612	3,461	4,207	.....	4,302
Wilcox Oil Co. No. 1 DeWeese	C NE NW 36-29-7W	1,485	3,265	4,087	.....	4,245
*Rupp-Ferguson Oil Co. No. 1 Cline	NE NE NE 35-29-8W	1,561	3,402	4,154	4,527**	4,575
The Ben F. Brack Oil Co. No. 1 Goetz	NE NE SW 27-29-9W	1,595	3,495	4,148	4,653	4,682
Aylward Drlg. Co. No. 1 Spade	SE SE NE 27-29-10W	1,735	3,707	4,307	4,754	4,774
Gulf Oil Corp. No. 1 Kath. Piel	NW SW NE 19-30-9W	1,740	3,715	4,412	4,870	4,900
*Welch & O'sson Drlg. Co., Inc. No. 1 Liebl	NE NE SW 3-30-10W	1,698	3,722	4,287	4,587**	4,685

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Viola, feet.

1 Campbell well in sec. 17, T. 27 S., R. 17 W. The **Greensburg** field reported gas production from "Kinderhook" strata, and the **Greensburg Northeast** field reported gas from Mississippian rocks. The Kewanee Oil Company drilled the discovery well for the **Hardy** field in sec. 23, T. 28 S., R. 18 W., and the Gramehart-

Miller Oil Company completed the discovery well of the **Kane** field in sec. 12, T. 30 S., R. 18 W. Both the **Hardy** field and the **Kane** field reported gas production from Mississippian rocks. Additional information on the discovery wells of these new fields is given in Table 6.

A second producing zone was discovered in the **Wellsford** field when the El Dorado Refining Company completed the No. 1 Kinney well in sec. 16, T. 20 S., R. 16 W. The well was designated as a Mississippian producer and assigned an initial potential of 6,160,000 cubic feet of gas per day. More information on this zone discovery well is given in Table 7.

A total of 17 dry wildcat tests was drilled in the county during the year, 4 of which penetrated the Arbuckle dolomite. Only 2 of the tests failed to report shows of oil or gas. Complete data on the dry wildcat wells are given in Table 42. The locations of these test wells and of oil and gas producing areas are shown on Plate 2. Oil production statistics are listed in Table 65, and gas statistics are listed in Table 66.

LABETTE COUNTY

(Map Pl. 1)

The 1956 production from 22 areas in 10 fields: oil 100,145 barrels, including an estimated 35,600 barrels from secondary recovery projects, gas 90,632 thousand cubic feet. Wells drilled in 1956 (estimated): oil 22, dry 19, repressuring 16, total 57.

Developments during 1956.—Oil production in Labette County in 1956 was somewhat more than in 1955, when 98,077 barrels was reported. It is estimated that 57 wells were drilled during 1956, which number is to be compared to an estimated 61 during the previous year.

Data on oil production in the various fields are listed in Table 65, gas in Table 66. Water-flooding statistics are listed in Table 1. Locations of areas from which oil was produced in 1956 are shown on Plate 1.

LANE COUNTY

(Map Pl. 3)

The 1956 production from 1 pool: No production reported. Wells drilled during 1956: 1 dry wildcat.

TABLE 42.—Dry wildcat tests drilled in Kiowa County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Jones, Shelburne & Farmer, Inc., et al. No. 1 Fruit	SW SW SW 28-27-16W	2,113	4,113	4,621	5,005
Murfin Drlg. Co., et al. No. 1 W. P. Thompson	SW SW SW 35-27-17W	2,144	4,145	4,670	4,815
Mull Drlg. Co., Inc. No. 1 Miller	NE NE SE 11-27-19W	2,243	4,213	4,796	4,932
Mull Drlg. Co., Inc. No. 1 Barnes	NE SE SE 16-27-19W	2,258	4,190	4,784	4,869
Graham-Michaelis Drlg. Co. No. 1 Woods	C SW NW 27-27-19W	2,264	4,207	4,805	4,905
Schafer Drlg. Co. No. 1 Bank	SE SE SE 12-28-16W	2,114	4,144	4,633	4,996
E. H. Adair Oil Co. No. 1 Lemon	NW NE SW 28-28-19W	2,318	4,344	4,950	4,970
Davidor & Davidor No. 1 Sherer	NE NE NE 23-28-20W	2,298	4,304	4,934	5,026
Aurora Gasoline Co. No. 1 Millar	NW NW SE 19-29-16W	2,044	4,152	4,707	4,802
Rupp-Ferguson Oil Co. No. 1 Millar	SW SW SE 29-29-16W	1,897	4,023	4,568	4,758
Gramehart-Miller Oil Co. No. 1 Douglas	NE NE NE 36-29-16W	1,978	4,098	4,600	4,755
Rupp-Ferguson Oil Co. No. 1 Morford	SW NW SW 5-29-17W	2,176	4,256	4,840	5,280
Barbara Oil Co. No. 1 Robbins	SW SW NE 23-29-17W	1,944	4,057	4,614	4,767
Aurora Gasoline Co. No. 1 Jenkins	NW NW SW 30-29-17W	2,068	4,225	4,838	4,940
Rupp-Ferguson Oil Co. No. 1 Klug	NE NE SW 11-29-18W	2,264	4,334	4,950	5,017
E. H. Adair Oil Co. No. 1 Collingwood	NW NW NW 1-29-19W	2,319	4,359	4,974	5,570
Bachus Oil Co., et al. No. 1 Wykle	SW SW SE 33-29-19W	2,320	4,487	5,120	5,225

The county's only oil field, **North Fork**, failed to report any production during 1956. The cumulative production for this field and location data are given in Table 65.

Exploratory drilling in the county resulted in the drilling of a single wildcat test. Earl F. Wakefield completed the well on the Hartman lease in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 17 S., R. 28 W., in October. It was drilled from a rotary bushing elevation of 2,743 feet above sea level to a total depth of 4,775 feet. The top of the Kansas City rocks was penetrated at a depth of 4,017 feet, and the Mississippian strata were penetrated at a depth of 4,625

feet. No tests were run, and no shows of oil or gas were reported. The location of this wildcat test is shown on Plate 3.

LEAVENWORTH COUNTY

(Map Pl. 1)

The 1956 production from 7 wells in the Banker's Life field: oil 4,504 barrels; gas from the Roberts-Maywood field, 16,355 thousand cubic feet. Two wildcat tests drilled in 1956.

Developments during 1956.—No oil production was reported from Leavenworth County in 1955, but in 1956 the **Banker's Life** field reported 4,504 barrels. Gas production was reported from the **Roberts-Maywood** field in eastern Leavenworth County.

One of the rank wildcat tests, the Milton McGreevy No. 1 McGreevy well, was drilled in June in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 10 S., R. 22 E. The well was drilled from an elevation of 961 feet above sea level, and the following tops were reported by Wallace Lee: Mississippian strata, 1,129; Chattanooga shale, 1,493; Devonian, 1,529; Viola limestone, 1,660; St. Peter sandstone, 1,774; Arbuckle dolomite, 1,828; Reagan sandstone, 2,615; "granite wash", 2,663; and Precambrian, 2,692 feet. No shows of oil or gas were reported, and the test was taken to a total depth of 2,698 feet before abandonment.

In August W. S. Fees, Jr., and Garfield Richards drilled the second rank wildcat in the county in 1956. Their No. 1 Hurlburt well is located in the cen. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 10 S., R. 20 E. Reported elevation was 1,092 feet above sea level. Significant marker beds encountered in drilling the test were: base of Oread limestone, 110; Kansas City group, 378; base of Kansas City, 715; McLouth sand, 1,405; and Mississippian rocks, 1,434 feet. No testing or shows were reported.

The location of the oil field and the 2 rank wildcat tests are shown on Plate 1. Oil production is given in Table 65, gas in Table 66.

LINCOLN COUNTY

(Map Pl. 2)

Exploratory wells have been drilled in Lincoln County from time to time, but to date no commercial oil or gas pool has been found.

Exploration during 1956.—Drilling activity resulted in the completion of 2 rank dry wildcat wells in the northeast corner

of the county. The Graham Development Syndicate No. 1 Rathbun well was drilled in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 10 S., R. 7 W., from a rotary bushing elevation of 1,451 feet above sea level to a total depth of 3,919 feet. The tops of some important marker beds were encountered at these depths: Heebner shale, 2,399; Lansing group, 2,502; Marmaton rocks, 2,862; Mississippian rocks, 3,170; Viola limestone, 3,613; and Arbuckle dolomite, 3,872 feet. The second wildcat test was drilled by the Oil Capital Corporation and the Frankfort Oil Company on the Shilling lease in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 10 S., R. 6 W. The following tops and their depths were reported: Heebner shale, 2,410; Lansing group, 2,569; Mississippian rocks, 3,215; Viola limestone, 3,735; and Arbuckle dolomite, 4,011 feet. The well was drilled from a rotary bushing elevation of 1,533 feet above sea level to a total depth of 4,053 feet. A single drill-stem test was run at a depth of 3,222 feet to 3,234 feet, but no shows of oil or gas were reported. The locations of these dry wildcat wells are shown on Plate 2.

LINN COUNTY

(Map Pl. 1)

The 1956 production from 18 areas in 6 fields: oil 89,286 barrels, including an estimated 63,663 barrels from secondary recovery projects, gas (estimated) 12,874 thousand cubic feet. Wells drilled in 1956 (estimated): oil 29, dry 25, repressuring 19, total 73.

Developments during 1956.—Linn County oil production decreased in 1956 over that of 1955, when 94,367 barrels was reported. An estimated 1,874 thousand cubic feet of gas was reported from the **LaCygne-Cadmus** field. Estimated drilling activity was somewhat more than in the previous year, when a total of 43 wells was reported.

Oil production in the several Linn County areas is listed in Table 65, gas in Table 66. Water-flooding data are listed in Table 1. Locations of areas from which oil was produced in 1956 are shown on Plate 1.

LOGAN COUNTY

(Map Pl. 3)

Exploratory test holes have been drilled in Logan County in the past, but as yet no commercially productive pool has been discovered.

Exploration during 1956.—In April the Buick Drilling Company et al. completed a well on the Bertrand lease in sec. 3, T. 11 S., R. 32 W. Perforating the Marmaton rocks resulted in a rated potential of 4 barrels of oil per day, and the Nomenclature Committee subsequently named it as the discovery well of the **Oakley** field. However, no commercial production has been reported from this well. Data on the discovery well are given in Table 6.

Other exploratory drilling within the county resulted in the completion of 3 rank dry wildcat wells. The No. 1 Swart well in the NW¼ NW¼ NW¼ sec. 12, T. 11 S., R. 32 W., was drilled by William Gruenerwald from a rotary bushing elevation of 3,048 feet above sea level to a total depth of 4,765 feet. The top of the Lansing group was penetrated at a depth of 4,060 feet, and the top of the Mississippian rocks was reached at a depth of 4,653 feet. William Gruenerwald et al. drilled a test hole on the Muehlenkamp lease in the SW¼ SW¼ NW¼ sec. 26, T. 11 S., R. 32 W., in January. The tops of some important marker beds were encountered at these depths: Heebner shale, 4,021; Lansing group, 4,066; Pennsylvanian basal conglomerate, 4,630; and the Mississippian rocks, 4,670 feet. The well was drilled from a rotary bushing elevation of 3,026 feet above sea level to a total depth of 4,772 feet. A third dry wildcat was completed by the Wycoff Brothers Oil Company on the Uhland lease in the cen. NE¼ NE¼ SE¼ sec. 8, T. 14 S., R. 35 W. Drilled from a rotary bushing elevation of 3,223 feet above sea level to a total depth of 4,935 feet, the well penetrated the top of the Lansing group at a depth of 4,066 feet and reached the Mississippian strata at a depth of 4,908 feet. Drill-stem tests were run on all 3 of these test wells, but no shows of oil or gas were reported. The locations of these wildcat wells are shown on Plate 3.

LYON COUNTY

(Map Pl. 1)

The 1956 production from 8 areas in 8 fields: oil 349,279 barrels, including an estimated 126,957 barrels from secondary recovery projects. Wells drilled in 1956 (reported): oil 12, dry 12, total 24 including 7 dry wildcats. Fields combined 1.

Developments during 1956.—Oil production in Lyon County during 1956 decreased from the previous year, when 415,762 bar-

rels was reported. Reported number of wells drilled in the county declined to 24 from 51 reported in 1955. Estimated production from secondary recovery projects accounts for more than one-third of the oil production from Lyon County.

Seven rank wildcat tests were drilled in Lyon County during 1956. No significant shows of oil were reported from the testing in these holes. Data on the surface elevations of the holes and tops of marker beds encountered in drilling are given in Table 43.

During the year the **Atyeo** field (Chase, Greenwood, and Lyon Counties) was combined with the **Pixlee** field (Greenwood County) and is now designated **Atyeo-Pixlee**.

Two oil wells were drilled in the **Bradfield** field, 9 oil wells and 5 dry holes in the **Fankhouser** field, and 1 oil well in the **Ly-Green** field during 1956.

Oil production statistics for the Lyon County fields are listed in Table 65. Locations of fields from which oil was produced in 1956 and of dry wildcat wells drilled are shown on Plate 1. Secondary recovery data are listed in Table 1. Estimated secondary recovery in Lyon County includes oil production from the Ohio Oil Company's communitized flood in both Chase and Lyon Counties.

TABLE 43.—Dry wildcat tests drilled in Lyon County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lansing, feet	Depth to top of Mississippian, feet	Depth to top of Viola, feet	Total depth, feet
*George F. Johnston, Jr. No. 1 Vemming	SW SW SE 32-15-10E	1,395	1,518	2,566	3,166	3,360
*R. J. Wixson Drlg. Co. No. 1 Taylor	SE SE NE 12-17-11E	1,244	1,135	2,160	2,755	2,948
*R. J. Wixson Drlg. Co. No. 1 Downing	NENW NW 10-18-10E	1,150	1,195	2,230	2,742	2,940
Cities Service Oil Co. No. 1 Baldwin	SE SE SE 11-19-10E	1,125	1,106	2,155	2,598	2,801
*Saturn Oil & Gas No. 1 Swigert	NENE SE 31-19-10E	1,240	1,288	2,314	2,775	2,925
Bird-Hanley-Sheedy, et al. No. 1 Rees	Cen. SE SE 8-20-10E	1,364	1,384	2,406	.....	2,467
*F. E. Lockhart-Geo. W. Waite No. 1 Wagner	NW SW NE 35-20-10E	1,348	1,270	2,307	2,710	2,916

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

McPHERSON COUNTY

(Map Pl. 2)

The 1956 production from 38 fields: oil 3,967,525 barrels, gas 375,-280 thousand cubic feet. Wells drilled in 1956: oil 78, gas 1, oil and gas 1, dry 64, repressuring or salt-water disposal 3, total 147 including 22 dry wildcats. Reworked wells: oil 2, dry wildcats 1. Fields discovered 2, combined 2.

Developments during 1956.—Although oil production in McPherson County declined about 10 percent, gas production reached a new high of 375,280 cubic feet. The number of new wells and dry holes completed decreased by only 2 in 1956. Exploratory programs resulted in the discovery of 2 new oil pools.

The Time Petroleum Company No. 1 Waltner well in sec. 36, T. 21 S., R. 3 W., was named the discovery well of the **Harmac East** field upon its completion in August. The "Hunton" rocks were reported as the producing zone. The Greenland Drilling Company brought in the No. 1 Johnson well in sec. 28, T. 18 S., R. 1 W., and when production was reported in May, it was designated as the discovery well of the **Round Hill** field. Additional data on these discovery wells are given in Table 6.

Developmental drilling in the **Johnson South** field discovered a producing zone in the Simpson rocks. The Bob Jones No. 1 Krehbiel well in sec. 11, T. 20 S., R. 3 W., reported Simpson production with a daily potential of 25 barrels of oil. More information on this zone discovery well is listed in Table 7.

Action by the Nomenclature Committee during the year resulted in two combinations within the county. The **Paden South** field was combined with **Paden**, and the **Roxbury Southeast** field was combined with **Roxbury South**.

All the gas produced in McPherson County during the year was produced from the **Ritz-Canton** field, which also reported the most active drilling program. A total of 36 oil wells, 1 gas well, 1 oil and gas well, 1 reworked well, and 5 dry holes was drilled within the field. Oil production amounted to 1,470,112 barrels.

Of the 22 dry wildcats drilled during the year 2 reported shows of oil, and 1 reported a show of gas. Specific data on the elevations and total depths of the wells are given in Table 44. The locations of these wildcat tests and of the areas of oil and gas produc-

tion are shown on Plate 2. Oil production statistics are listed in Table 65, and gas statistics are listed in Table 66. Data on secondary recovery are given in Table 1.

MARION COUNTY

(Map Pl. 1)

The 1956 production from 34 areas in 32 fields: oil 1,398,229 barrels, gas 134,289 thousand cubic feet. Wells drilled in 1956: oil 168, dry 93, salt-water disposal 9, total 270 including 41 dry wildcats. Fields discovered 7, combined 1.

Developments during 1956.—Oil production from the various Marion County fields was considerably greater in 1956 than in 1955, when 909,605 barrels was reported. Oil production from the old **Lost Springs** field, which increased by more than 50,000 barrels, production from the **Unger** field (1955 discovery), and production from the new **Unger Southwest** field accounted for most of the increase in the county total over that reported the previous year.

Seven new oil fields were found in Marion County during 1956. They are the **Antelope South**, **Antelope Southeast**, **Beauty**, **Beauty South**, **Doyle Creek**, **Ratzlaff**, and **Unger Southwest**. Oil production is from the "Hunton" limestone in the **Doyle Creek** and **Unger Southwest** fields, and from the Viola limestone in the **Ratzlaff** field. The Mississippian strata constitute the producing zone in the other new fields. The discovery well of the **Beauty South** field was carried on the scout reports as dry and abandoned. Data on the drilling companies, tops to producing zones, thicknesses of producing zones, completion zones, completion dates, and initial production potentials on the discovery wells of the new fields are given in Table 6.

Reported drilling activity in Marion County in 1956 was double that of 1955. The largest amount of drilling was done in the new **Unger Southwest** field, where 67 oil wells and 17 dry holes were completed. The new field has produced 273,518 barrels of oil since its discovery in January 1956. Forty-three extension oil wells, 6 dry holes, and 4 salt-water disposal wells were completed in the **Lost Springs** (Mississippian) field. The **Beauty** field, new in 1956, had 17 oil wells, 1 dry hole, and 1 salt-water disposal well drilled within its boundary in 1956. The **Unger** field drilling program added 15 oil wells, 7 dry holes, and 4 salt-water disposal wells.

TABLE 44.—Dry wildcat tests drilled in McPherson County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Anschutz Drlg. Co., Inc. No. 1 Malm	NE NE SE 36-17-3W	1,461	2,364	3,046	3,722	3,772
Oil Capitol Corp. No. 1 Minns	NE NE NE 31-18-4W	1,439	2,532	3,172	3,809	3,863
Home-Stake Oil & Gas Co. No. 1 Sellberg	NE NE NE 35-18-4W	1,510	2,475	3,115	3,737	3,768
K & E Drlg., Inc. No. 1 Smith	NE NE NW 8-18-5W	1,641	2,771	3,418	3,927	3,971
*Rex & Morris Drlg. Co., et al. No. 1 Reikowsky	NE NE NW 34-19-1W	1,573	2,350	2,911	3,442**	3,472
Natural Gas & Oil Corp. No. 1 Quantius	NE NE SW 31-19-3W	1,500	2,506	3,167	3,844	3,870
*Anschutz Drlg. Co., Inc. No. 1 Haberlein	NE NE SE 23-19-4W	1,495	2,528	3,179	3,847	3,877
Roach & Lichty Drlg. Co., Inc., et al. No. 1 Durland	NE NE SE 5-19-5W	1,577	2,739	3,398	3,767**	3,845
*Donald T. Ingling, et al. No. 1 Nickell	NE NE NE 27-20-1W	1,536	2,342	2,935	.....	2,980
*Glickman Oil Co. No. 1 Otte	SW SW NW 32-20-1W	1,531	2,353	2,982	.....	3,055
Sierra Petro., et al. No. 1 Anderson	NW NW SW 9-20-5W	1,557	2,754	3,407	.....	3,450
*Osage Oil & Gas Co., Inc. No. 1 Koelsch	NW NW NE 18-19-5W	1,676	2,872	3,475	.....	3,500
Bedell-Catt Drlg. Co., Inc., et al. No. 1 Hiebert	NE NE NE 25-21-1W	1,507	2,325	2,948	3,463**	3,549
*Geo. F. Johnston, Jr. No. 1 Rodgers	NW SE SE 26-21-1W	1,508	2,353	2,974	3,470**	3,535
*E. K. Carey Drlg. Co., Inc. No. 1 Stuckey	SW SE SW 26-21-1W	1,501	2,346	2,961	3,473**	3,525
*Geo. F. Johnston, Jr. No. 1 Rodgers "A"	SE NW NE 36-21-1W	1,501	2,324	2,951	.....	3,385
*J. P. Gaty No. 1 Scott	NW NW SW 2-21-2W	1,506	2,307	2,956	3,416**	3,475
*Glen Schroff, et al. No. 1 Galle	SW NW SW 11-21-2W	1,499	2,307	2,965	3,525	3,541
*Donald T. Ingling, et al. No. 1 Regier	NE NE SE 11-21-2W	1,506	2,319	2,958	.....	3,022
Barbara Oil Co. No. 1 Young	NE NE NE 26-21-2W	1,491	2,347	2,993	3,463**	3,510
*Brunson Prod. & Exp., Inc. No. 1 Pauls	NE NE SE 7-21-3W	1,470	2,560	3,253	3,772**	3,790
Anschutz Drlg. Co., Inc. No. 1 Flickner	NW NW SW 13-21-3W	1,470	2,433	3,134	3,727	3,752

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Viola, feet.

The success of the operators finding new fields during 1956 in Marion County initiated an expanded exploratory activity by the oil industry. Forty-one rank wildcat tests were drilled during 1956. Only 6 of the tests reported shows of oil. Data on the locations and tops to significant marker beds encountered in drilling these important holes are given in Table 45.

During the year the **Lost Springs East** field was combined with the **Lost Springs** field.

Oil production statistics for the various Marion County fields are listed in Table 65. Gas production is listed in Table 66. Locations of areas from which oil was produced and of the dry wildcat wells drilled in 1956 are shown on Plate 1.

TABLE 45.—Dry wildcat tests drilled in Marion County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Viola, feet	Total depth, feet
*H. B. Ratzlaff No. 1 Dienes	App. NW SE NW 1-17-3E	1,439	1,863	2,400	.....	2,428
*Lance C. Hill No. 1 Fike	NE NE SW 2-17-3E	1,416	1,852	2,395	.....	2,466
*Lance C. Hill No. 1 Bruns	SE SE SE 10-17-3E	1,463	1,922	2,492	2,947	2,988
*Donald T. Ingling No. 1 Heiser	SW SW NE 15-17-3E	1,466	1,855	2,482	.....	2,522
*Donald T. Ingling No. 1 Riffel	SE SENE 16-17-3E	1,498	1,888	2,520	.....	2,560
*Harold E. Kramer No. 1 Skully	NW NW SE 30-17-3E	1,416	1,882	2,488	3,050	3,200
*L. C. Smitherman Drlg. Co. No. 1 Christianson	SE SE SW 3-18-1E	1,428	.....	2,661	3,119	3,300
*Anderson-Prichard Oil Corp. No. 1 Scully "F"	NE NE SW 11-18-1E	1,428	2,087	2,660	3,116	3,227
L. C. Smitherman Drlg. Co. No. 1 Oborny	SW SW NW 12-18-2E	1,436	3,156**	2,549	3,012	3,199
*L. C. Smitherman Drlg. Co. No. 1 Schlehuber	NW NW SW 13-18-1E	1,435	.....	2,665	3,116	3,300
*Anderson-Prichard Oil Corp. No. 1 Scully "H"	NE NW SE 30-18-3E	1,388	1,920	2,492	2,899	2,980
*Augusta Oil Co. No. 1 Kaiser	NE NE SW 12-18-4E	1,446	.....	2,324	.....	2,350
*Beaumont Petro. Co. No. 1 Czarnowsky	SE SW NW 8-18-5E	1,479	1,732	2,107	2,556	2,577
*Augusta Oil Co. No. 1 Lindau	NW NE SW 19-18-5E	1,443	1,742	2,236	.....	2,292
*Casebeer and Litan No. 1 E. Eitzen	SE NE SW 19-19-2E	1,471	3,106	2,699	3,151	3,322
*Charles Lamer Carlock No. 1 Propt-Stenzel	SE SE SW 10-19-3E	1,395	1,880	2,442	2,795	2,883

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*Rex & Morris Drlg. Co., et al. No. 1 Kreutziger	SE SW NE 33-19-3E	1,366	1,840	2,398	2,715	2,818
*Allen Oldham No. 1 Crary	SW SW SE 34-19-3E	1,328	1,799	2,348	2,648	2,806
*Slusser Drlg. Co. No. 1 Phillips	NENE NW 23-19-4E	.....	.....	2,325	.....	2,385
*Augusta Oil Co. No. 1 Jewett	SW NE NW 9-19-5E	.....	.....	.....	2,535	2,555
*Branine-Holl No. 1 Stika	SE SW NW 32-19-5E	1,452	1,752	2,250	2,531	2,536
*Anderson-Prichard Oil Corp. No. 1 Toews	SE NW NW 1-20-2E	1,397	1,955	2,539	2,899	3,056
*Mull Drlg. Co., Inc. No. 1 Hiebert	SE SE NW 33-20-2E	1,443	2,066	2,632	2,966	3,125
Cities Service Oil Co. No. 1 Loewen "D"	SW SW SW 36-20-2E	1,429	2,029	2,599	2,911	2,994
*Stelbar Oil Corp., Inc. No. 1 Ehrlich	SW NE SE 2-20-3E	1,360	1,809	2,354	2,642	2,668
*Beaumont Petro. Co. No. 1 Lohrenz	SE NE SW 27-20-3E	1,412	1,916	2,467	2,799	2,836
*Sunflower Drlg. Co. No. 1 Flunk	NENE NW 30-20-3E	1,375	1,959	2,506	2,873	3,030
E. H. Adair Oil Co. No. 1 Ely	NENE NW 36-20-3E	1,372	1,851	2,404	2,655	2,729
Herndon Drlg. Co. No. 1 Skinner	NW SW SW 4-20-4E	1,360	1,753	2,272	2,540	2,715
*Daetwiler, et al. No. 1 Conyers	NE SW SW 18-20-4E	1,331	1,776	2,324	.....	2,583
Herndon Drlg. Co. No. 1 Elizabeth Hett	NW NW SW 23-20-4E	1,329	1,703	2,218	2,517	2,716
White & Ellis Drlg. Co. No. 1 Lalouette	SE SE NE 3-20-5E	1,401	1,635	.....	2,332	2,355
*Beaumont Petro. Co. No. 1 Tibbens	SE NE NE 30-20-5E	1,326	1,645	2,165	2,457	2,459
*Dunne & Strait Drlg. Co. No. 1 Thiesen	SE SE NW 23-21-1E	1,541	2,290	2,926	3,362	3,486
Time Petro. Co. No. 1 Voth	NW NW NE 24-21-1E	1,558	2,295	2,920	3,354	3,418
Bedell-Catt Drlg. Co., Inc. No. 1 Buller	NW NW SW 10-21-2E	1,460	2,122	2,768	3,136	3,292
*Anderson-Prichard Oil Corp. No. 1 T. Schmidt	SE SW NE 20-21-2E	1,512	3,332**	2,816	3,207	3,362
*A. D. Allison & Co., Inc. No. 1 Isaacs	NW NW NW 35-21-2E	1,467	2,097	2,799	3,126	3,135
*Francis M. Raymond No. 1 Davis "A"	SE SE NW 21-21-3E	1,433	1,972	2,593	2,948	2,983
*Beaumont Petro. Co. No. 1 McDonald	SE SE SE 23-21-3E	1,398	1,912	2,485	.....	2,770
*Beaumont Petro. Co. No. 1 Gregory	SE SE SW 24-22-3E	1,435	1,931	2,537	.....	2,575

*No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Arbuckle, feet.

MARSHALL COUNTY

(Map Pl. 1)

Test wells have been drilled in Marshall County from time to time, but no commercial oil or gas pool has been found. One test was drilled in 1956.

Exploration during 1956.—Late in 1956 the H & L Oil Company No. 1 Ringen well in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 1 S., R. 9 E., was abandoned at a total depth of 2,116 feet. Sample tops are as follows: Topeka limestone, 700; Heebner shale, 860; Lansing group, 1,015; base of Kansas City, 1,460; Maquoketa shale, 1,620; Viola limestone, 1,685; Simpson group, 1,970; St. Peter, 2,040; "weathered granite", 2,110; and Precambrian, 2,115 feet. No shows of oil were reported. The location of the rank wildcat test is shown on Plate 1.

MEADE COUNTY

(Map Pl. 3)

The 1956 production from 17 fields: oil 489,114 barrels, gas 7,386,-699 thousand cubic feet. Wells drilled in 1956: oil 18, gas 25, oil and gas 4, dry 15, total 62 including 5 dry wildcats. Reworked wells: oil 1, gas 1, dry 1. Fields discovered 6, combined 1.

Developments during 1956.—Oil production in Meade County increased by more than 5 percent during 1956, and gas production more than doubled the previous year's figure. Correspondingly, drilling activity showed an increase of more than 40 wells of all types.

The search for new oil and gas pools within the county resulted in the naming of 6 new fields, **Angell, Fincham, Horace, Plains, Sanders, and Singley South**. The **Singley South** field reported oil from Morrowan rocks. Complete data on the locations and names of the discovery wells, the tops of producing zones, the thicknesses of producing zones, and the amounts of the initial potentials are given in Table 6.

The Colorado Oil and Gas Corporation reported a new gas producing zone (Mississippian) in the **Stevens** field when the No. 9 Holmes well in sec. 35, T. 32 S., R. 30 W., was completed in October. A new zone (Mississippian) was discovered in the **Bond** field by the No. 1 Schell well in sec. 4, T. 34 S., R. 30 W., drilled by James Donoghue in May. Additional information on these new zone discovery wells is given in Table 7.

Action by the Nomenclature Committee in November combined the **Leslie** field with the **Stevens** field. Production from both of the fields involved was designated as being from the Morrowan strata.

Drilling activity within the **Stevens** field, the leading gas producer in the county, resulted in the completion of 10 oil wells, 8 gas wells of which 1 was a reworked well, and 1 dry hole. The 1956 gas production from the field raised the total cumulative production to more than 3 million cubic feet.

A total of 5 dry wildcat wells was drilled in the county during the year, and 3 of the tests reported shows of gas. The total depths, elevations, and tops of important marker beds encountered in drilling these wells are listed in Table 46. The locations of the wildcat tests and of the areas of oil and gas production are shown on Plate 3. Oil production statistics are given in Table 65 and gas production statistics in Table 66. Data on Columbian Fuel Company's repressuring project in the **Novinger** field are given in Table 1.

TABLE 46.—Dry wildcat tests drilled in Meade County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Aladdin Petro. Corp., et al. No. 1 Gano	C NW NW 10-31-30W	2,764	4,360	5,436	5,580
Colorado Oil & Gas Corp. No. 1 Bartel	NW SE NW 29-32-27W	2,492	4,578	5,626	5,940
James Donoghue No. 1 Fox	C SE SW 10-34-30W	2,681	4,608	5,980	6,100
Tennessee Gas Trans. Co. No. 1 Gowens	C NE NE 16-34-30W	2,699	4,608	5,931	6,100
L. H. Smith No. 1 Meyers	C NW NW 18-35-27W	2,354	.....	6,018*	6,553

* Depth to the top of the Morrowan, feet.

MIAMI COUNTY

(Map Pl. 1)

The 1956 production from 35 areas in 5 fields: oil 674,580 barrels, including an estimated 448,771 barrels from secondary recovery projects, gas 30,528 thousand cubic feet. Wells drilled in 1956 (estimated): oil 148, gas 2, dry 60, repressuring 75, total 285.

Developments during 1956.—Reported oil production in Miami County was somewhat more than that of 1955, when 676,726

barrels was reported. It was estimated that 285 wells were drilled in the county during 1956, compared to an estimated 255 the previous year.

Water-flooding activity in Miami County was somewhat curtailed during 1956 by the shortage of water for repressuring. Nevertheless, about two-thirds of the oil production in the county is attributable to secondary recovery projects. Data on secondary recovery in Miami County are given in Table 1.

Oil production in the various Miami County areas is listed in Table 65, gas in Table 66. Plate 1 shows the locations of areas from which oil was produced in 1956.

MONTGOMERY COUNTY

(Map Pl. 1)

The 1956 production from 55 areas in 10 fields: oil 748,019 barrels, including approximately 377,502 barrels from secondary recovery projects, gas 460,627 thousand cubic feet. Wells drilled in 1956 (estimated): oil 128, gas 3, dry 97, repressuring 92, total 320, including 3 dry wildcats.

Developments during 1956.—Montgomery County's reported oil production during 1956 was 748,019 barrels. In the previous annual oil and gas development report (Kansas Geological Survey Bulletin 122), the 1955 oil production from Montgomery County was erroneously reported as 1,097,661 barrels. Corrected total oil production from Montgomery County during 1955 is 833,449 barrels. Estimated drilling activity during 1956 in Montgomery County was 320 wells, compared to an estimated 497 the previous year.

Three rank wildcat tests were drilled during the year. Fru-Lichty drilled their No. 1 Buckhanan in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 31 S., R. 14 E., in May to a total depth of 1,421 feet. Tops recorded are: "Oswego" lime (Fort Scott), 969; and Mississippian chat, 1,381 feet. The No. 1 O. S. Schwatkin, also drilled by Fru-Lichty, in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 31 S., R. 14 E., was completed in June as a dry hole at a total depth of 1,473 feet. Marker beds found in drilling are: "Oswego" lime, 989; and Mississippian rocks, 1,399 feet. The Fru-Lichty No. 1 O. S. Schwatkin in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 31 S., R. 14 E., found the top of the "Oswego" lime at 909 feet and the top of the Mississippian

strata at 1,413 feet. Total depth was reported as 1,469 feet. No shows of oil or gas were reported from the 3 test holes.

Oil production in the various Montgomery County fields in 1956 is listed in Table 65, gas in Table 66. Data on secondary recovery operations are listed in Table 1. Plate 1 shows the locations of the areas from which oil was produced in 1956 and the locations of the dry wildcat tests.

MORRIS COUNTY

(Map Pl. 1)

The 1956 production from 6 fields: oil 268,689 barrels, gas 30,862 thousand cubic feet. Wells drilled in 1956 (reported): oil 26, dry 22, salt-water disposal 1, total 49 including 15 dry wildcats. Fields discovered 1, abandoned 1.

Developments during 1956.—The increase in oil production from 70,143 barrels in 1955 to 268,689 barrels in 1956 from Morris County is attributable to the successful extension wells in the **John Creek** field and the discovery of the new **Comiskey Northeast** field. Reported oil production from 31 wells in the **John Creek** field (discovered in 1953) was 229,123 barrels in 1956. Twenty-one of the **John Creek** field's producing wells were completed during 1956. The **Comiskey Northeast** (Viola limestone) field was opened in March by the Kuper Oil Company No. 1 Sam Teel well in the NW¼ NW¼ NW¼ sec. 24, T. 16 S., R. 9 E. An initial potential of 192 barrels of oil per day was assigned the producing zone found at a depth of 2,929 to 2,932 feet. To the end of 1956, 3 wells in the field had produced 15,539 barrels of oil. Additional data on the new field discovery well are found in Table 6.

Although 2 offset test wells were drilled near the discovery well of the **Comiskey** field (discovered in 1955), none were successful in finding commercial quantities of oil, and the field therefore was officially abandoned during 1956. No oil production had been reported from the field prior to abandonment. Reflecting the increased interest of oil operators in Morris County, the number of exploratory holes drilled increased from 4 in 1955 to 15 in 1956. Only 3 of the tests specifically reported shows of oil. Most of the tests in western Morris County were taken to the top of the Mississippian rocks in keeping with the known reservoir rocks in that area. The Viola limestone was the key zone tested in east-

ern Morris County. Data on the locations of the exploratory holes and the tops to important marker beds encountered in drilling are given in Table 47.

Oil production statistics for Morris County are listed in Table 65, gas in Table 66. Locations of areas from which oil was reported in 1956 and of dry wildcat tests are shown on Plate 1.

TABLE 47.—*Dry wildcat tests drilled in Morris County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Jess Cling, et al. No. 1 Tobaben	NW NW SW 14-14-5E	1,389	1,580	2,125	2,409
Skelly Oil Co. No. 1 Olson	App. C SE SW 19-14-8E	1,471	1,510	.....	1,560
*Augusta Oil No. 1 Shoemaker	NW NW SE 17-15-5E	1,373	1,670**	2,209	2,235
*Earl F. Wakefield No. 1 Garzrow	SE SE NE 20-15-5E	1,380	.....	2,130	2,140
Skelly Oil Co. No. 1 Blythe	C NE NE 27-15-7E	1,424	1,409	.....	1,459
White & Ellis Drlg. Co. No. 1 Cogsgrove	NE NE SW 19-15-9E	1,451	1,667	2,570	3,402
Stanolind Oil & Gas Co. No. 1 Richardson	NW NW SE 21-16-7E	1,503	1,496	2,228***	2,265
E. H. Adair Oil Co. No. 1 White	SE SE SW 25-16-8E	1,274	1,484	2,430	3,150
*Wm. Gruenerwald No. 1 Bosch	SE SW NE 3-16-9E	1,410	1,605	2,519	3,201
*Ellet & Seaney No. 1 Furney	NE NE NE 18-16-9E	1,310	1,516	2,445	3,082
*A. B. Johnston No. 1 Ecklund	SE SE SW 3-17-5E	1,465	.....	2,214	2,269
*Dunn & Strait Drlg. Co. No. 1 Carlson	SW SW NE 33-17-5E	1,480	.....	2,225	2,280
Stanolind Oil & Gas Co. No. 1 M. Barr	SW SW NE 35-17-6E	1,318	1,360	2,036***	2,070
Stanolind Oil & Gas Co. No. 1 Cobb	App. NW NW SE 18-17-7E	1,512	1,488	2,072***	2,125
Drolte & Kuper Oil Co. No. 1 Loy	C NW SW 28-17-9E	1,305	1,454	2,466	3,230

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Kansas City, feet.

*** Depth to the top of the Arbuckle, feet.

MORTON COUNTY

(Map Pl. 3)

The 1956 production from 8 fields: oil 345, 989 barrels, gas 73,484,-

852 thousand cubic feet. Wells drilled in 1956: oil 29, gas 65, oil and gas 4, dry 16, total 114 including 1 dry wildcat.

Developments during 1956.—Although drilling activity in Morton County declined from the previous year, oil production more than doubled, and gas production increased about 22 percent. No new oil or gas pools were discovered during the year.

Reported production from the county's portion of the **Hugoton Gas Area** declined to 25,320,554 thousand cubic feet during the year. Drilling programs within the field resulted in the completion of 20 new gas wells and 4 dry holes. A more detailed discussion of the **Hugoton Gas Area**, including notes on the early history of the field, is given in the section on natural gas in the introduction. The locations of new gas wells within the **Hugoton Gas Area** and the **Greenwood Gas Area** are shown on Plate 3.

A single wildcat test was drilled in the county by the Panhandle Eastern Pipe Line Company on the Barker lease in the cen. NW¼ SE¼ sec. 15, T. 33 S., R. 41 W. Drilled from a rotary bushing elevation of 3,184 feet above sea level to a total depth of 5,460 feet, the well was completed in October as a dry hole, although several shows of gas were reported. The tops of some important marker beds encountered and their depths were: Lansing group, 3,626 feet; Cherokee rocks, 4,455 feet; Morrowan rocks, 4,835 feet; and Mississippian strata, 5,356 feet. The location of this wildcat well is shown on Plate 3.

Oil production data are listed in Table 65, and gas production data are listed in Table 66. The locations of oil and gas producing areas are shown on Plate 3.

NEMAHA COUNTY

(Map Pl. 1)

The 1956 production from 3 fields: 24,823 barrels. No new wells were reported.

Developments during 1956.—The 1956 oil production in Nemaha County was less than that of 1955, when 26,979 barrels was reported from 3 fields. Oil production in the **Strahm, Strahm East**, and **Sabetha** fields is given in Table 65. Locations of the field areas are shown on Plate 1.

NEOSHO COUNTY

(Map Pl. 1)

The 1956 production from 34 areas in 8 fields: oil 638,149 barrels including an estimated 490,261 barrels from secondary recovery projects, gas (estimated) 236,964 thousand cubic feet. Wells drilled in 1956 (estimated): oil 163, gas 6, dry 46, repressuring 120, total 335 including 1 dry wildcat.

Developments during 1956.—Neosho County's oil production in 1956 was somewhat higher than in 1955, when 634,699 barrels was reported. Estimated gas production was slightly more during 1956.

Much of the new development was in the **Erie, Trent, and St. Paul-Walnut** fields. It is estimated that more than 120 new input wells for repressuring projects were drilled in Neosho County fields in 1956.

One shallow hole was reported on wildcat location, the Allen Van No. 1 Means in the SE $\frac{1}{4}$ sec. 10, T. 28 S., R. 20 E. The hole was drilled in December to a total depth of 515 feet. No shows were reported.

Data on secondary recovery operations in Neosho County are listed in Table 1. Oil production statistics are listed in Table 65, gas in Table 66. Locations of areas from which oil was produced in 1956 and of the 1 dry wildcat are shown on Plate 1.

NESS COUNTY

(Map Pl. 3)

The 1956 production from 12 fields: oil 485,642 barrels. Wells drilled in 1956: oil 27, dry 40, total 67 including 25 dry wildcats. Fields discovered 5.

Developments during 1956.—Production from Ness County increased by more than 35 percent during the year reflecting the discovery of 5 new oil fields. Developmental drilling within existing fields resulted in the completion of 21 new oil wells.

The **Brownell** field (Cherokee production) was named in May when the Welch & Olsson Drilling Company completed the No. 1 Walker well in sec. 23, T. 16 S., R. 22 W., and the Barnett Drilling Company, Inc., No. 1 Ward well in sec. 4, T. 19 S., R. 26 W., was designated as the discovery well of the **Cruce** field (Mississippian production) in May. The Stickle Drilling Company No. 1 Ryersee

well in sec. 35, T. 18 S., R. 21 W., was named the discovery well of the **Ryersee** field (Cherokee production) in June, and the **Schoharie** field (Marmaton production) was named in May upon the completion of the Anschutz Drilling Company, Inc., No. 1 Cooper well in sec. 22, T. 19 S., R. 23 W. The **Wellmanville** field was named in January when the Welch & Olsson Drilling Company No. 1 Moore well in sec. 34, T. 19 S., R. 21 W., was completed. Several barrels of oil were recovered through perforations in the Mississippian strata at a depth of 4,419 feet to 4,423 feet, but no commercial quantities have been reported. More data on the discovery wells of the county's new fields are listed in Table 6.

Developmental programs resulted in the discovery of new zones in 3 old producing fields. Wells drilled by the Magnolia Petroleum Company in the **Aldrich Northeast** field reported Marmaton production and shows of oil in the Pennsylvanian conglomerate. A Stickle Drilling Company well discovered Mississippian production in the **Ryersee** field. The locations and initial potentials of these new zone discovery wells are given in Table 7.

Exploratory drilling within the county resulted in the completion of 25 dry wildcat wells. Eight of the test wells penetrated the Arbuckle dolomite, 2 of which reported shows of gas and 1 reported a show of oil. More information on the wildcat tests is given in Table 48. The locations of these wells and of the areas of oil production are shown on Plate 3. Oil production statistics are listed in Table 65.

TABLE 48.—Dry wildcat tests drilled in Ness County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Welch & Olsson Drlg. Co. Inc., et al. No. 1 Elmore	NW NW SE 9-16-21W	2,311	3,735	4,280	4,307
Harms-Burt Drlg. Co., et al. No. 1 Kendall	NW NW NE 10-16-21W	2,337	3,756	4,267	4,301
*Harms-Burt Drlg. Co., et al. No. 2 Kendall	SW SE NW 10-16-21W	2,301	3,709	4,234	4,263
K & E Drlg., Inc., et al. No. 1 Snodgrass	NW NW NW 18-16-22W	2,445	3,848	4,450	4,466
Barnett Drlg., Inc. No. 1 Klitzke	NE NE NE 11-16-24W	2,451	3,852	4,461	4,554
The Ohio Oil Co. No. 1 Miller	Cen. SE NE 16-16-24W	2,533	3,917	4,526	4,626
Rooney-Siegfried-Thomas No. 1 Michaelis	SW SW SE 20-16-25W	2,587	3,901	4,491	4,575

Manhart, Millison & Beebe, et al. No. 1 Higgins	NE NE SE 14-17-21W	2,174	3,620	4,262**	4,291
Wm. Gruenerwald	SW SW NE	2,406	3,842	4,405	4,464
No. 1 Weeks	10-17-22W				
Bankoff Oil Co.	NE NE SE	2,257	3,747	4,305	4,355
No. 1 Brenner	24-17-22W				
*Hilton Drlg. Co., Inc.	NE NE NW	2,534	3,880	4,479	4,865
No. 1 Stutz	7-17-25W				
Gulf Oil Corp.	SW SE NW	2,195	3,704	4,260	4,639
No. 1 Keough	4-18-21W				
Sunray Mid-Cont. Oil Co.	SW SW SE	2,196	3,685	4,238	4,620
No. 1 Janke	11-18-21W				
Leben Drlg. Co.	SE SE SW	2,194	3,704	4,307	4,357
No. 1 Gaedv	17-18-21W				
Armer Drlg. Co., Inc.	NE NE NE	2,141	3,624	4,191	4,599
No. 1 Marshall	22-18-21W				
Welch & Olsson Drlg. Co., Inc. No. 1 Krug	NE NE SE 30-13-22W	2,224	3,747	4,333	4,385
Welch & Olsson Drlg. Co., No. 1 Leikam	SE SE NW 23-18-24W	2,289	3,712	4,315	4,375
Aylward Drlg. Co.	SE SE NW	2,517	3,848	4,467	4,575
No. 1 Ward	8-18-26W				
Leben Drlg. Co., et al.	NE NE NW	2,195	3,745	4,321	4,371
No. 1 Antenen	24-19-21W				
Parker Petro. Co., Inc.	NE NE SE	2,263	3,804	4,368	4,423
No. 1 Petersillie	31-19-21W				
*Hilton Drlg. Co., Inc.	NE NE NE	2,300	3,737	4,346	4,430
No. 1 Schaben	9-19-24W				
*Hilton Drlg. Co., Inc.	SE SE NW	2,556	3,945	4,578	5,000
No. 1 S & S Ranch	17-19-25W				
Bennett & Roberts Drlg. Co. No. 1 Cline	SE SE NE 14-19-26W	2,590	3,943	4,547	4,649
*Francis Oil & Gas, Inc.	NE NE NE	2,576	3,895	4,521	4,575
No. 1 Brenner	17-19-26W				
Sun Oil Co.	NE NE NE	2,248	3,728	4,359	4,800
No. 1 J. E. Ficken	31-20-23W				

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Arbuckle, feet.

NORTON COUNTY

(Map Pl. 3)

The 1956 production from 5 fields: oil 919,707 barrels. Wells drilled in 1956: oil 2, dry 19, total 21 including 15 dry wildcats.

Developments during 1956.—Oil production in Norton County decreased by more than 10 percent during the year, and drilling activity declined by more than 50 percent. Only 2 new oil wells were completed, and no new pools were discovered.

Developmental drilling within the **Norton** field resulted in the completion of 3 dry holes, of which 2 reported shows of oil in the

Arbuckle dolomite. The Phillips Petroleum Company brought in an Arbuckle producer within the **Ray Northwest** field, and the well was assigned an initial potential of 25 barrels of oil per day. A second well was drilled within the field by the Jocelyn-Varn Oil Company, but an Arbuckle drill-stem test reported only a slight show of oil; therefore, the well was abandoned. Activity within the **Ray West** field consisted solely in the completion of the Jocelyn-Varn Oil Company No. 1 Wiltrout well in sec. 27, T. 5 S., R. 21 W., which was assigned an initial potential of 25 barrels of oil per day.

A total of 15 dry wildcat wells was drilled in the county during the year, and most of the wells penetrated the "granite wash" before they were abandoned. The tops of some important marker beds encountered in drilling these test wells are given in Table 49. The locations of the wells and of the oil producing areas are shown on Plate 3. Production statistics for the county are listed in Table 65.

OSBORNE COUNTY

(Map Pl. 2)

The 1956 production from 1 field: oil 84,894 barrels.

Developments during 1956.—Oil production from **Ruggles**, the county's only field, increased by more than 3 percent over the previous year's figure. Although 5 dry wildcat wells were drilled in the county in 1955, no drilling activity of any type was reported during 1956, and the total of 12 producing wells in the **Ruggles** field remains unchanged. Statistics on the county's production are listed in Table 65.

PAWNEE COUNTY

(Map Pl. 2)

The 1956 production from 39 fields: oil 3,411,011 barrels, gas 4,608-215 thousand cubic feet. Wells drilled in 1956: oil 96, gas 5, dry 72, repressuring or salt-water disposal 2, total 175 including 23 dry wildcats. Reworked wells: oil 1. Fields discovered 5, abandoned 1.

Developments during 1956.—With the completion of 96 new oil wells and the discovery of 3 new oil fields, oil production from Pawnee County increased by more than 41 percent over the

TABLE 49.—Dry wildcat tests drilled in Norton County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Depth to top of Granite Wash, feet	Total depth, feet
C-G Drlg. Co. No. 1 Sanders	SE SE SE 25-2-23W	2,242	3,329	3,557	3,625	3,632
Jones, Shelburne & Farmer, Inc. No. 1 Chase	SE SE NW 2-2-24W	2,453	3,441	3,687	3,713	3,720
D. G. Hansen No. 1 Duensing	NENE SE 20-2-24W	2,500	3,472	3,730**	3,748	3,775
*Barnett Oil Co. No. 1 Sebaugh	NW NW NW 4-2-25W	2,427	3,336	.....	3,672	3,693
*Francis Oil & Gas, Inc., et al. No. 1 Strayer	SE SE SW 12-2-25W	2,506	3,442	3,734**	3,744	3,769
*Jones, Shelburne & Farmer, Inc. No. 1 Horesky	NW NW SE 10-3-23W	2,333	3,413	3,636	3,649	3,682
Jones, Shelburne & Farmer, Inc. No. 1 Lebeau	SE SE NE 33-3-23W	2,420	3,496	3,744**	3,752	3,784
Sauvage & Dunn Drlg. Co., Inc. No. 1 Collins	NW NW SW 6-3-24W	2,467	3,439	.....	3,721	3,740
*Jones, Shelburne & Farmer, Inc. No. 1 Ankernman "B"	NENE SW 4-4-24W	2,458	3,507	.....	3,774	3,813
*D. G. Hansen No. 1 Holman	NW NW NE 24-4-24W	2,382	3,486	3,780	3,797	3,831
Aurora Gasoline Co. No. 1 Zimmerman	SW SW NE 11-4-25W	2,465	3,528	3,860	3,960	3,980
*D. G. Hansen, et al. No. 1 Walters	SE NE SW 2-5-22W	2,101	3,273	3,514	3,576	3,596
Leben Drlg. Co. No. 1 Delr	NW NW SE 14-5-23W	2,158	3,356	3,712	.....	3,760
Jones, Shelburne & Farmer, Inc. No. 1 Moore "B"	SE SE NE 13-5-24W	2,309	3,464	3,842	.....	3,880
Bell Oil & Gas Co. No. 1 Gilleeze	SE SE SE 28-5-25W	2,452	3,561	3,965	.....	4,005

previous year. The total gas production for the county declined slightly to 4,608,215 cubic feet. Drilling activity also showed a reduction.

The Welch & Olsson Drilling Company brought in a well in sec. 12, T. 22 S., R. 18 W., in September, and when production was reported from the Pennsylvanian basal conglomerate, it was designated as the discovery well of the **Godrey** field. However, the well failed to yield commercial quantities of oil, and the field was subsequently abandoned in October. Additional information on this abandoned discovery well is listed in Table 6.

The 3 new oil fields named during the year were: **Jay South** (Simpson production), **Larned Southwest** (Arbuckle production), and **Newsom** (Mississippian production). The **Evers South**

field was named in March as an Arbuckle gas producer. Complete data on the discovery wells of these new fields are given in Table 6.

Developmental drilling within the **Hearn** field resulted in the discovery of a new producing zone in the Arbuckle dolomite. The Natural Gas and Oil Corporation completed the discovery well on the Walker lease in sec. 26, T. 23 S., R. 15 W. More information on the well is given in Table 7.

During the year, 62 new oil wells were drilled within the **Garfield** field, and the annual oil production from the field increased by nearly 1 million barrels. Other drilling within the field resulted in the completion of 2 gas wells, 1 reworked well, and 12 dry holes.

Of the 23 rank dry wildcats drilled in the county during 1956, 7 reported shows of oil and 6 reported shows of gas. The tops of some important marker beds encountered while drilling these test wells are given in Table 50. The locations of the wildcat wells and of the areas of oil and gas production are shown on Plate 2. Oil production statistics are given in Table 65, and gas production data are listed in Table 66.

PHILLIPS COUNTY

(Map Pl. 2)

The 1956 production from 17 fields: oil 1,842,060 barrels. Wells drilled in 1956: oil 7, dry 7, total 14 including 2 dry wildcats. Reworked wells: oil 2.

Developments during 1956.—Oil production from Phillips County declined about 6 percent from that reported the previous year. Drilling activity increased slightly, but no new pools were discovered.

Developmental drilling within the **Glenwood** field resulted in the completion of 3 dry holes and 1 oil well drilled by the National Associated Petroleum Company on the Booker lease in the NW¼ NW¼ NW¼ sec. 28, T. 1 S., R. 17 W. The well was drilled from a rotary bushing elevation of 2,188 feet above sea level to a total depth of 3,640 feet and was assigned an initial potential of 27 barrels of oil per day.

Other drilling programs resulted in the completion of 1 dry hole and 1 oil well in the **Hansen** field, 5 oil wells and 2 reworked oil wells in the **Huffstutter** field, and 1 dry hole in the **Ray** field.

TABLE 50.—Dry wildcat tests drilled in Pawnee County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Iron Drlg. Co. No. 1 Wildgen	NW NW SE 19-23-16W	2,044	3,498	3,865	3,903
Leben Drlg. Co. No. 1 Seeman	SW SW NE 23-20-17W	2,054	3,510	3,919	3,970
Frontier Oil Co. No. 1 Schneider	NE NE NW 6-20-19W	2,253	3,789	4,627	4,680
Aurora Gasoline Co. No. 1 Alexander	NE NE NE 31-20-19W	2,204	3,801	4,536**	4,753
*L. C. Smitherman Drlg. Co., et al. No. 1 Steffen	SW SW NE 18-23-20W	2,227	3,782	4,640	4,665
*Welch & Olsson Drlg. Co., Inc. No. 1 Deckert	SW SW SW 36-20-23W	2,194	3,768	4,448**	4,480
*K & E Drlg., Inc. No. 1 Kreutziger	NE NE NW 24-21-15W	1,948	3,420	3,797	3,847
Sunray Mid-Cont. Oil Co. No. 1 Yeager	SE SE SW 34-21-15W	1,976	3,503	3,936	3,970
Aurora Gasoline Co., et al. No. 1 Glaze	SE SE NE 15-21-16W	1,983	3,468	3,875	3,905
John Jennings, et al. No. 1 Hewson	NW NW SE 13-21-17W	2,037	3,510	3,874	3,880
Anschutz Drlg. Co., Inc. No. 1 Browne	NW NW SE 10-21-18W	2,092	3,576	.....	4,026
Anschutz Drlg. Co., Inc. No. 1 Lucas	SW SW NW 13-21-18W	2,081	3,556	3,963	4,086
*Rooney-Siegfried-Thom- as, et al. No. 1 Wagner	NENE SW 19-21-18W	2,079	3,700	4,341**	4,365
Bennett & Roberts Drlg. Co. No. 1 Fox	NW NW NE 31-21-18W	2,066	3,728	4,428	4,539
Welch & Olsson Drlg. Co., Inc., et al. No. 1 Riederer	NW NW NE 29-21-19W	2,084	3,685	4,351**	4,393
Murfin Drlg. Co., et al. No. 1 Malin-Smith	SE SE NE 17-22-15W	1,994	3,531	3,989	4,022
The El Dorado Ref. Co. No. 1 Bowman	SE NE SE 31-22-15W	2,018	3,543	3,971	3,980
Aurora Gasoline Co. et al. No. 1 Sherzer	NE NE NE 1-22-18W	2,045	3,628	4,172	4,203
*Rooney-Siegfried- Thomas, et al. No. 1 Meckfessel "C"	SE SE SW 9-22-18W	2,058	3,690	4,295**	4,319
Welch & Olsson Drlg. Co., Inc., et al. No. 1 Barger	SE SE NW 36-22-18W	2,107	3,807	4,456**	4,500
*Hilton Drlg. Co., Inc. No. 1 McCambridge	NW NW NW 20-22-19W	2,138	3,831	4,756	4,811
*Bell Oil & Gas Co. No. 1 Berscheidt	SW SW NW 32-23-16W	2,085	3,753	4,453	4,500
Colo. Oil & Gas Corp. No. 1 Paramore	SE SE NE 13-23-17W	2,083	3,707	4,337	4,452

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Viola, feet.

Only 2 dry wildcat tests were attempted in the county during the year, and no oil or gas shows were reported from either well. The first wildcat was drilled in June by the Sauvage & Dunn Drilling Company on the Reese lease in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 5 S., R. 19 W. The National Associated Petroleum Company drilled a second well in November on the Morgan lease in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 2 S., R. 17 W. The locations of these 2 test holes and of the county's oil producing areas are shown on Plate 2.

Statistics on the annual oil production from the county are listed in Table 65. Water-flooding data on the repressuring project in the **Stuttgart** field are given in Table 1.

PRATT COUNTY

(Map Pl. 2)

The 1956 production from 40 fields: oil 2,762,605 barrels, gas 1,358,236 thousand cubic feet. Wells drilled in 1956: oil 12, dry 27, total 39 including 13 dry wildcats. Reworked wells: oil 4. Fields discovered 3.

Developments during 1956.—Production from Pratt County fluctuated slightly from the previous year with oil declining about 3 percent and gas increasing about the same amount. Drilling activity within the county declined by more than 50 percent.

Exploration programs resulted in the discovery of 3 new pools. The Osage Oil & Gas Company, Inc., drilled the discovery well of the **Carver-Robbins** oil field on the Cochran lease in sec. 10, T. 27 S., R. 15 W.; and the No. 1 Haskins well in sec. 5, T. 27 S., R. 14 W., was brought in by the K. & E. Drilling Company, Inc., as the discovery well of the **Haskins** oil field. The **Cullison** gas field was discovered when the Bankoff Oil Company drilled the No. 1 Johnson well in sec. 25, T. 28 S., R. 15 W. More information on the discovery wells of these new fields is given in Table 6.

Original production from the **Haskins** discovery well was assigned to the Viola strata, but additional perforations proved successful in locating a producing zone in the Lansing-Kansas City rocks as well. Data on this second producing zone are listed in Table 7.

The **Iuka-Carmi** field, the county's largest oil and gas producer, reported 6 oil wells, 3 reworked wells, and 2 dry holes drilled during the year. The oil production from the field increased to

1,472,290 barrels, and gas production increased to 429,051 thousand cubic feet.

A total of 13 dry wildcat wells was drilled during 1956, and 10 of these tests reported shows of oil or gas. More complete data on the wells are given in Table 51. The locations of the wildcats and of the oil and gas producing areas are shown on Plate 2. Oil production statistics are listed in Table 65, and gas statistics are listed in Table 66. Data on the **Cunningham** pressure maintenance project are given in Table 1.

TABLE 51.—Dry wildcat tests drilled in Pratt County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Viola, feet	Depth to top of Arbuckle, feet	Total depth, feet
Musgrove Petro. Corp. No. 1 Swinger	SW NE NW 6-26-12W	1,900	3,659	4,168	4,315	4,350
Shelley-Miller Drlg., Inc. No. 1 Haas	SE SE NW 22-26-12W	1,908	3,699	4,248	4,400	4,420
Phillips Lee Oil Co. No. 1 Long	NW NW NE 26-26-12W	1,878	3,651	4,201	4,378	4,420
Basin Oil No. 1 Robbins	SE SE SE 26-26-15W	2,043	3,937	4,537	4,680	4,718
Bell Oil & Gas Co., et al. No. 1 Tatlock Ranch "A"	NE NE NW 32-26-15W	2,062	3,930	4,423	4,681	4,705
*McKnab Drlg., Inc. No. 1 Pauline Miller	NE SE NW 33-27-13W	1,916	.....	4,293**	4,510	4,527
The El Dorado Ref. Co. No. 1 Gibbons	NW NE SW 36-27-13W	1,873	3,752	4,253	4,415	4,463
Parker Petro. Co., Inc. No. 1 Ivan Adams	NW NW SE 29-27-14W	2,009	3,956	4,498	4,600	4,604
McKnab Drlg., Inc. No. 1 Barnes	SE SE SW 36-27-15W	2,046	4,008	4,580	4,738	4,780
Armer Drlg. Co., Inc. No. 1 Biddinger	NE NE NE 23-28-14W	1,934	3,879	4,399	4,488	4,625
Monsanto Chemical Co. No. 1 Mico	SE SE NW 30-29-11W	1,858	3,933	4,918	5,122	5,169
Monsanto Chemical Co. No. 1 Ocim	NE SW SE 30-29-11W	1,860	3,875	4,628	4,790	4,870
Rupn-Ferguson Oil Co. No. 1 Thompson	NE NE SW 13-29-12W	1,886	3,862	4,490	4,695	4,710

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Mississippian, feet.

RAWLINS COUNTY

(Map Pl. 3)

The 1956 production from 1 field: oil 904 barrels. Wells drilled in 1956: oil 1, dry wildcats 1, total 2. Fields discovered 1.

Developments during 1956.—Oil production was reported from Rawlins County for the first time when the **Brumm** field was discovered in June. Unsuccessful attempts to discover oil or gas in the county had been carried on for more than 25 years. The discovery was made by the Miami Operating Company in sec. 7, T. 2 S., R. 36 W., and production was assigned to the Lansing-Kansas City rocks. The well was drilled from a rotary bushing elevation of 3,325 feet above sea level to a total depth of 5,200 feet. The tops of some important marker beds encountered while drilling the well were: Dakota sand, at a depth of 1,280 feet; Topeka limestone, 4,170 feet; Lansing group, 4,306 feet; Mississippian rocks, 4,947 feet; and Arbuckle dolomite, 5,161 feet. Additional data on the discovery well of this field are given in Table 6.

A dry wildcat well was also drilled within the county during the year, but no shows of oil or gas were reported. The test well was drilled in January from a rotary bushing elevation of 3,013 feet above sea level to a total depth of 4,590 feet. Some important tops picked by the scout were: Topeka limestone, at a depth of 3,722 feet; Lansing group, 3,919 feet; Cherokee rocks, 4,344 feet; and Mississippian strata, 4,533 feet. The locations of this wildcat well and of the Brumm producing area are shown on Plate 3.

Oil production statistics for the county are listed in Table 65.

RENO COUNTY

(Map Pl. 2)

The 1956 production from 21 fields: oil 1,125,678 barrels, gas 475,-700 thousand cubic feet. Wells drilled in 1956: oil 3, dry 39, total 42 including 26 dry wildcats. Reworked wells: oil 1, dry 1.

Developments during 1956.—Oil production from Reno County declined slightly from that reported for 1955, gas production increased about 5 percent, and 8 fewer wells were drilled during 1956 than during the previous year. No new oil or gas pools were discovered within the county in 1956.

Drilling programs in old fields resulted in the completion of 2 dry holes in the **Beck** field, 1 reworked oil well and 2 dry holes in the **Burton** field, 1 reworked well and 1 dry hole in the **Hi'ger** field, and 3 oil wells and 3 dry holes in the **Hilger Southwest** field. The **Abbyville**, **Bacon**, **Castleton**, **Haven**, and **Morton** fields all reported the completion of 1 dry hole.

Of the 26 dry wildcat wells drilled in Reno County during the year, 15 reported shows of oil and 12 reported shows of gas. The tops of some important marker beds encountered during the drilling of these tests are given in Table 52. The locations of the dry wildcat wells and of the areas of oil and gas production are shown on Plate 2. Oil production statistics are listed in Table 65, and gas statistics are given in Table 66. Data on repressuring projects are given in Table 1.

TABLE 52.—Dry wildcat tests drilled in Reno County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Thos. H. Allan No. 1 Schardein	C NE SE 29-22-7W	1,615	3,010	3,526	.....	3,570
Beardmore Drlg. Co., et al. No. 1 Rice	NE NE SE 5-22-5W	1,534	2,799	3,470	4,030	4,061
*Leben Drlg. Co. No. 1 Schroeder	SW SW SE 6-22-4W	1,521	2,696	3,371	3,979	4,005
*The El Dorado Ref. Co. No. 1 Swanson "A"	NE NW SW 1-23-5W	1,602	2,801	3,462	3,950**	3,991
*The El Dorado Ref. Co. No. 1 Swanson "B"	NE SE NW 23-23-5W	1,506	2,719	3,372	3,960	3,970
Anschutz Drlg. Co., Inc. No. 1 Wiegel	SE SE SE 9-23-7W	1,596	3,017	3,590	4,043	4,075
Anschutz Drlg. Co., Inc. No. 1 Short	NE NE SE 3-23-8W	1,663	3,141	3,652	4,055	4,105
*Harms-Burt Drlg. Co., et al. No. 1 Trueheart	SE SE SE 5-23-8W	1,676	3,160	3,643	4,055	4,108
Bell Oil & Gas Co. No. 1 Schmucker	NE NE NW 32-23-8W	1,675	3,225	3,725	4,125	4,175
Monsanto Chemical Co., et al. No. 1 Bontrager	SE SW SE 8-24-5W	1,556	2,790	3,461	4,003	4,051
Leben Drlg. Co. No. 1 Gilmore	SE SE NW 36-24-5W	1,507	2,690	3,400	3,830**	3,867
T & M Oil Co. No. 1 Stewart	NE NE NE 16-24-6W	1,563	2,994	3,676	4,167	4,199
Anschutz Drlg. Co., Inc. No. 1 Waggener	SE SE NW 9-24-10W	1,772	3,340	3,708	4,050	4,090
Phillips Lee Oil Co. No. 1 McVey	SE SE SW 19-24-10W	1,773	3,378	3,913**	4,112	4,150
Demier Oil Co. No. 2 Brownlee	NE NW SW 31-24-10W	1,754	3,393	3,765	4,122	4,150
*Fleming & Woodman Drlg. Co., et al. No. 1 Blocker	S½ SE SW 19-25-4W	1,529	2,816	3,556	3,981**	4,012
Barbara Oil Co. No. 1 Cox	NE NE NW 9-25-5W	1,564	2,771	3,472	3,974	4,008
*Harold Kottwitz, et al. No. 1 Clayton	NE NE SE 23-25-7W	1,490	3,022	3,705	4,159	4,175

Aurora Gasoline Co. No. 1 Breidenstein	NENE NE 1-25-9W	1,671	3,321	3,820	4,261	4,293
The El Dorado Ref. Co. No. 1 Macatee	SE SE SE 26-25-9W	1,618	3,302	3,839	4,287	4,335
Rex & Morris Drlg. Co., et al. No. 1 Linder	NENE NW 23-25-10W	1,736	3,412	3,897	4,316	4,346
*L. C. Smitherman Drlg. Co. No. 1 Zink	NENE NE 31-25-10W	1,790	3,512	3,961	4,370	4,407
Skelly Oil Co. No. 1 Meyers	SE SW SE 21-26-4W	1,470	2,831	3,617	4,162	4,210
Osage Oil & Gas Co., Inc. No. 1 Ast	SW SENE 34-26-4W	1,503	2,874	3,688	4,259	4,285
Anschutz Drlg. Co., Inc. No. 1 Gardner	NENE SW 5-26-8W	1,639	3,292	3,879	4,337	4,372
Bennett & Roberts Drlg. Co. No. 1 Haynes	NW NW SW 21-26-10W	1,760	3,542	4,002	4,454	4,490

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Viola, feet.

RICE COUNTY

(Map Pl. 2)

The 1956 production from 60 fields: oil 5,369,801 barrels, gas 804,157 thousand cubic feet. Wells drilled in 1956: oil 83, gas 1, dry 60, repressuring or salt-water disposal 2, total 146 including 6 dry wildcats. Reworked wells: oil 9, gas 1, dry 1. Fields discovered 3, combined 2.

Developments during 1956.—Oil production from Rice County declined by more than 21 percent during the year, and gas production increased about 22 percent. Drilling activity during 1956 resulted in the completion of 25 more wells than during the previous year.

Exploratory drilling programs were responsible for the discovery of 3 new pools within the county. The Iron Drilling Company No. 1 Bredfeldt well in sec. 12, T. 18 S., R. 10 W., was completed in April as the discovery well of the **Bredfeldt** (Arbuckle production) oil field. The Iron Drilling Company also brought in a producer on the Boldt lease in sec. 23, T. 18 S., R. 10 W., which was designated by the Nomenclature Committee as the discovery well of the **Orth North** field (Arbuckle production). The **Humphreys** gas field was named in August when the No. 1 Humphreys well in sec. 3, T. 21 S., R. 8 W., was reworked by the Sterling Drilling Company. An initial potential of 3,210,000 cubic feet of gas per day was reported from the Pennsylvanian basal conglom-

erate. Additional information on the discovery wells of these new fields is given in Table 6.

Developmental drilling within the **Chase-Silica** field, the fifth largest oil producer in the state, resulted in the completion of 22 oil wells, 4 reworked wells, and 18 dry holes. The "basal Pennsylvanian sand" was reported as a new producing zone in the field when the Mastin & Hyde & Isern Drilling Company brought in the No. 1 Keesing well in sec. 3, T. 20 S., R. 10 W. More data on this zone discovery well are listed in Table 7.

Two new combinations were established by the Nomenclature Committee during the year. The **Wherry North** field was combined with the **Wherry** field, and the **Keller** field was combined with the **Chase-Silica** field; the "Sooy" conglomerate was the producing zone common to all of these fields.

A total of 6 dry wildcats was drilled in Rice County during the year. The tests were concentrated in the northeast part of the county, and 4 of the wells penetrated the Arbuckle dolomite. Only 2 of the wildcats reported shows of oil or gas. The tops of some important marker beds encountered while drilling the wells are listed in Table 53. The locations of these wildcat tests and of the areas of oil and gas production are shown on Plate 2. Significant oil production data are listed in Table 65, and gas data are given in Table 66. Data on water-flooding operations in the **Orth** field are given in Table 1.

TABLE 53.—Dry wildcat tests drilled in Rice County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Penn. basal cong., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Greenland Drlg. Co. No. 1 Root	NW NW NW 25-18-6W	1,678	2,861	3,410	3,494**	3,522
George Hess No. 1 O'Hara	NW NW NE 26-18-7W	1,666	.....	3,191	.....	3,229
Earl F. Wakefield No. 1 Buckbee	SE SE SW 21-18-8W	1,760	2,885	3,225	3,437	3,455
Brown Drlg., et al. No. 1 Cain	NE NW SW 27-19-7W	1,743	2,875	3,232	3,626	3,652
Sterling Drlg. Co. No. 1 Thiessen	NE NE NE 15-19-8W	1,762	2,852	.....	3,197	3,245
Bennett & Gould No. 1 Tobias	SE SE SE 9-20-7W	1,688	2,890	3,268	3,638	3,675

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Mississippian, feet.

ROOKS COUNTY

(Map Pl. 2)

The 1956 production from 79 fields: oil 6,988,701 barrels. Wells drilled in 1956: oil 73, dry 85, repressuring or salt-water disposal 1, total 159 including 12 dry wildcats. Reworked wells: oil 3, dry 2, salt-water disposal 1. Fields discovered 5, combined 19.

Developments during 1956.—Oil production from Rooks County declined slightly from the previous year to 6,988,701 barrels during 1956. Well completions dropped from 199 during 1955 to 159 during 1956, but the county maintained its position as the fifth largest oil producer in the state.

During the year, 5 new oil fields were named in the county by the Nomenclature Committee. The new fields are the **Annon South**, **Cresson**, **Gra-Rook North**, **Trarbach**, and **Williams North**. The discovery well for the **Annon South** field was drilled by the Oil Trading Association, Inc., on the Briggs lease in sec. 34, T. 10 S., R. 20 W.; and the No. 1 Baldwin well in sec. 11, T. 9 S., R. 20 W., was brought in by Jones, Shelburne & Farmer, Inc., as the discovery well of the **Cresson** field. The K & E Drilling Company, Inc., No. 2 Town Estate well in sec. 18, T. 9 S., R. 20 W., was the discovery well of the **Gra-Rook North** field. The **Trarbach** field was named when the Francis Oil & Gas, Inc., brought in the No. 1 Trarbach well in sec. 36, T. 10 S., R. 20 W.; and the No. 1 Stucky well, drilled by the Osage Oil & Gas Company, Inc., in sec. 32, T. 9 S., R. 18 W., was the discovery well of the **Williams North** field. More data on the discovery wells of these new fields are given in Table 6.

Three major combinations were made during the year in Rooks County and adjoining counties. The **Cooper North**, **Laura**, **Morlan**, **Muilenburg**, and **Smith-Denning** fields in Graham County and the **Palco Southwest** field and portions of the **Palco** field in Rooks County were all combined with the **Cooper** field (Graham County). The **Noah**, **Spaulding**, and **White Southwest** fields in Graham and Trego Counties and the **Allphin**, **Allphin Northwest**, **Annon**, **Annon South**, **Bassett**, **Laura Southeast**, and **Marcotte South** fields in Rooks County were all combined under the new name of **Trico**. A third combination in November brought together **Amboy Southwest**, **Berland South**, **Berland Southwest**, **Marcotte North**, **Marcotte Southwest**, **Nutsch**, **Palco Southeast**, **Trarbach**, and part of **Palco** with the **Marcotte** field.

Developmental drilling within the county resulted in the discovery of production from the Shawnee group of rocks in the **Webster** field and Arbuckle production in the **Williams North** field. Significant data on the discovery wells of these new zones are given in Table 7.

Drilling activity within the **Marcotte** field, the county's leading oil producer, resulted in the completion of 23 oil wells, 1 re-worked well, and 18 dry holes. The field's production increased to more than 1½ million barrels of oil, reflecting the field's combination with 9 other fields during the year.

Of the 12 dry wildcats drilled during 1956 half of the test wells reported shows of oil. The tops of some important marker beds encountered during the drilling of these wells are given in Table 54. The locations of the wildcats and of the areas of oil production are shown on Plate 2. Oil production statistics are listed in Table 65. Data on 3 secondary recovery projects are given in Table 1.

RUSH COUNTY

(Map Pl. 2)

The 1956 production from 16 fields: oil 702,720 barrels, gas 2,548,-288 thousand cubic feet. Wells drilled in 1956: oil 28, gas 2, dry 30, repressuring or salt-water disposal 1, total 61 including 18 dry wildcats. Fields discovered 4.

Developments during 1956.—During the year oil production from Rush County increased by more than 75 percent, but gas production declined by about 5 percent. The number of new wells drilled in the county increased to 61 as compared to the previous year's total of 56, and exploration programs resulted in the discovery of 3 oil pools and 1 gas pool.

The Aylward Drilling Company brought in the discovery well of the **Lohrey** gas field on a lease in sec. 35, T. 17 S., R. 17 W. Production was assigned to the Pennsylvanian basal conglomerate, and the initial potential was rated at 6,700,000 cubic feet of gas per day. The **Pechanec** oil field was named upon the completion of the Skelly Oil Company No. 1 Pechanec well in sec. 2, T. 19 S., R. 17 W.; and the No. 1 Weber well in sec. 32, T. 19 S., R. 16 W., was completed as the discovery well of the **Ryan West** field by the Ben F. Brack Oil Company, Inc. The **Webs Southwest** field was named when the Natural Gas & Oil Corporation

TABLE 54.—Dry wildcat tests drilled in Rooks County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Watson Drlg. Co., Inc. No. 1 Miller	NW SW SW 3-6-18W	1,852	3,102	3,464	3,475
*Jones, Shelburne & Farmer, Inc. No. 1 Sprick	NE SE SE 12-7-17W	1,749	2,885	3,290	3,325
Anschutz Drlg. Co., Inc., et al. No. 1 Loeffler	SW SW NW 8-7-20W	2,143	3,373	3,604	3,680
Osage Oil & Gas Co., Inc. No. 1 Bogart	SE SE SE 20-7-20W	2,070	3,303	3,556	3,610
Leben Drlg. Co., et al. No. 1 Mitchem	NE NE SW 29-8-18W	2,044	3,228	3,496	3,530
*I. O. Miller Oil Co. No. 1 Lecuyer	SW SW NW 29-8-20W	2,096	3,337	3,654	3,677
*Leo J. Dreiling Oil Co. No. 1 Schwaller	S½ NW SE 31-8-20W	2,070	3,329	.....	3,663
Leben Drlg. Co. No. 1 Search	SW SW NE 3-9-17W	2,009	3,159	3,468	3,525
Iron Drlg. Co. No. 1 Ross	SE SW NW 7-10-17W	2,107	3,306	3,656	3,680
Murfin Drlg. Co. No. 1 Stevenson	SW SW NE 13-10-17W	2,052	3,253	3,588**	3,623
Graham-Messman-Rinehart Oil Co. No. 1 Tipton	SE SE SW 22-10-19W	2,094	3,301	3,625	3,645

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Simpson, feet.

completed the No. 1 O. J. Williams "B" well in sec. 16, T. 19 S., R. 20 W. Further information on the discovery wells of these fields is given in Table 6.

Developmental drilling within the **Otis-Albert** field, the county's leading oil producer, resulted in the completion of 23 oil wells, 1 gas well, 6 dry holes, and 1 salt-water disposal well. Oil production from the field more than doubled during the year to a new high of 456,574 barrels. Production from the **Ryan** field, the county's leading gas producer, declined slightly during the year, and no new gas wells were completed within its boundaries.

Exploratory drilling resulted in the completion of 18 dry wildcats, but only 3 of these test wells reported shows of oil or gas. The tops of some significant marker beds encountered in drilling these wells are given in Table 55. The locations of the wildcat tests and of the areas of oil and gas production are shown on Plate 2.

Oil production statistics are listed in Table 65, and gas statistics for the county are given in Table 66. Data on secondary recovery in the **Otis-Albert** field are given in Table 1.

TABLE 55.—*Dry wildcat tests drilled in Rush County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Anhydrite, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Woodman & Iannitti No. 1 Maier	SE SE NW 27-16-16W	1,923	1,032	3,225	3,526	3,566
Iron Drlg. Co. No. 1 Stegman	NW NW NW 11-16-17W	1,984	.....	3,286	3,546	3,594
Aurora Gasoline Co. No. 1 Burgardt	SW SW NE 15-16-17W	2,006	1,155	3,297	3,552	3,619
Leben Drlg. Co., et al. No. 1 Ljnpert	NE NE SW 29-16-17W	2,032	.....	3,291	3,583**	3,607
Anschutz Drlg. Co., Inc. No. 1 Seelye	NW SW SE 3-16-19W	2,043	.....	3,327	3,622**	3,655
Solar Oil Co. No. 1 Schmidt	SW SW SW 28-16-19W	2,054	1,290	3,446	3,836	3,890
Nadel & Gussman No. 1 Curtis	SW SW SW 10-16-20W	2,169	1,640	3,582	3,990	4,050
Honaker-Davis Drlg. Co. No. 1 Becker	NW NW SW 20-17-18W	2,107	1,250	3,422	.....	3,813
Honaker-Davis Drlg. Co. No. 1 Greenway	SW SW SW 13-17-19W	2,160	1,330	3,512	3,902	3,946
Honaker-Davis Drlg. Co. No. 1 Axman	NE NE NE 27-17-19W	2,174	1,345	3,538	3,912	3,935
Helmerich & Payne, Inc. No. 1 Noble	NW NE SE 6-17-20W	2,159	.....	3,556	4,111	4,126
*Natural Gas & Oil Corp. No. 1 Morrow	SE SW NE 31-17-20W	2,177	1,404	3,620	4,154***	4,195
Skelly Oil Co. No. 1 Rodie	NW NW SE 25-18-17W	2,057	1,118	3,394	3,729**	3,768
Leben Drlg. Co. No. 1 Gogleman	SE SE SE 34-18-19W	2,104	1,262	3,536	3,932	3,988
*Woodman & Iannitti No. 1 Hagerman	SE NW SE SE 7-19-16W	2,105	1,180	3,508	3,852	3,890
*Petroleum, Inc. No. 1 Schroter "B"	SW NW SW 21-19-17W	2,141	.....	3,530	3,899	4,000
Leben Drlg. Co. No. 1 Button	NW NW SW 5-19-18W	2,098	1,220	3,514	3,916	3,945
Parker Petro. Co., Inc. No. 1 Pfenninger	SE SE SW 27-19-19W	2,279	.....	3,753	4,200	4,265

RUSSELL COUNTY

(Map Pl. 2)

The 1956 production from 36 fields: oil 9,883,069 barrels, gas 22,768 thousand cubic feet. Wells drilled in 1956: oil 99, dry 55, re-

pressuring or salt-water disposal 4, total 158 including 6 dry wildcats. Reworked wells: oil 16, dry 4, salt-water disposal 4. Fields discovered 2, revived 1.

Developments during 1956.—Oil and gas production from Russell County declined slightly during the year, although drilling activity showed an increase over that of the previous year. A decline in the total number of producing wells to 2,969 from the 1955 total of 2,999 did not, however, remove the county from its position of the third largest oil producer in the state.

Two new oil fields were named during the year, and both reported production from the Lansing-Kansas City strata. The No. 1 McKune well, drilled by A. F. Schmitt in sec. 17, T. 13 S., R. 15 W., was the discovery well of the **Kune** field. The **Worley** field was named upon the completion of the Western Development Company No. 1 Worley well in sec. 4, T. 11 S., R. 15 W. Additional information on the discovery wells of these new fields is given in Table 6.

With the completion of the No. 1 Fee well, oil production was reported from the abandoned **Driscoll** field for the first time since 1951, and the Nomenclature Committee subsequently revived the field. The revival well was drilled by Jerry Driscoll in sec. 30, T. 15 S., R. 11 W., and the following tops were reported: Heebner shale, at 2,890 feet; Kansas City group, 2,995 feet; and conglomerate, 3,300 feet. Further data on this revival well are listed in Table 6.

Developmental drilling in Russell County's portion of the **Trapp** field, the second largest oil producer in the state, resulted in the completion of 23 oil wells, of which 13 were reworked wells, 7 dry holes, and 1 salt-water disposal well. Oil production from the field declined from 3,406,531 barrels during 1955 to 3,045,151 barrels during 1956.

Of the 6 dry wildcat wells drilled, 2 reported shows of oil. The tops of several significant marker beds encountered while drilling these wells are given in Table 56. The locations of the wildcat tests and of the areas of oil production are shown on Plate 2.

Oil production statistics are listed in Table 65, and gas production figures are given in Table 66. Data on 12 secondary recovery projects are given in Table 1.

TABLE 56.—*Dry wildcat tests drilled in Russell County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Anschutz Drlg. Co., Inc. No. 2 Steinert "A"	SE SE SE 22-12-15W	1,805	2,988	.....	3,345
*Frontier Oil Co. No. 1 Beisel	NW SE SE 6-14-11W	1,792	2,911	3,253	3,310
*Coppinger Drlg., Inc. No. 1 Wikle	SE NE SE 16-14-11W	1,706	2,836	3,215	3,245
*Fleming & Woodman Drlg. Co., et al. No. 1 Kapp	Cen. N½ NE NE 17-14-12W	1,797	2,937	.....	3,075
*The Henderson Oil Co. No. 1 Charvat	SW SE SW 24-15-11W	1,828	2,983	3,358	3,372
*W. T. Frazier No. 1 Casey	SW SW NE 36-15-12W	1,859	3,049	3,377	3,400

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

SALINE COUNTY

(Map Pl. 2)

The 1956 production from 11 fields: oil 811,834 barrels. Wells drilled in 1956: oil 2, dry 6, total 8 including 5 dry wildcats. Re-worked wells: oil 1.

Developments during 1956.—Oil production from Saline County declined about 27 percent from the previous year as drilling activity dropped to a total of 8 wells during 1956. No new oil pools were discovered within the county.

Developmental drilling during the year was restricted to activity in 3 fields. The Gypsum Creek field reported the drilling of the Natural Gas & Oil Company No. 4 Van Meter well in sec. 32, T. 16 S., R. 1 W., which was abandoned after a drill-stem test recorded only a slight show of oil cut mud. The F. S. Williams No. 2 James well in sec. 8, T. 16 S., R. 1 W., was completed in September within the **Hunter North** field, and it was assigned an initial potential of 15 barrels of oil per day. A second well was drilled in the field by the same company on the Johnson lease in sec. 8, T. 16 S., R. 1 W., and it was rated at 25 barrels a day from the Mississippian strata. The Swenson field reported the completion of the Glickman Oil Company No. 1 Flemming well in sec. 34, T. 15 S., R. 3 W., which was assigned an initial potential of 20 barrels of oil per day.

Exploratory drilling within the county resulted in the completion of 6 wildcat test wells, of which 2 reported shows of oil. The

tops of some important marker beds encountered while drilling the wells are given in Table 57. The locations of these wildcat wells and of the oil producing areas are shown on Plate 2. Oil production statistics are listed in Table 65.

TABLE 57.—*Dry wildcat tests drilled in Saline County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Mississippian, feet	Depth to top of Viola, feet	Depth to top of Arbuckle, feet	Total depth, feet
Rupp-Ferguson Oil Co. No. 1 Craig	SE SE SE 20-13-3W	1,233	2,877	3,526	3,732	3,769
*Donald T. Ingling, et al. No. 1 Price	SE NE SE 3-14-2W	1,200	2,578	3,147	1,906**	3,176
*Earl F. Wakefield, et al. No. 1 Thelander	SW SW NW 22-14-2W	1,279	2,598	3,180	3,378	3,399
Natl. Coop. Ref. Assn., et al. No. 1 Schultz	SW SW SE 16-15-3W	1,275	2,746	3,350	3,522	3,553
Rupp-Ferguson Oil Co. No. 1 Blomberg	SW SW SE 32-16-5W	1,593	3,317	3,718	3,844	3,884

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Lansing, feet.

SCOTT COUNTY

(Map Pl. 3)

The 1956 production from 3 fields: oil 59,957 barrels. Wells drilled in 1956: dry wildcats 3.

Developments during 1956.—Oil production from Scott County's 13 producing wells declined about 30 percent from the previous year. No new pools were discovered in the county during the year.

Exploratory drilling programs resulted in the completion of 3 dry wildcat wells in the southern part of the county. The Atkinson & Ostrander No. 1 Eitel well in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 18 S., R. 31 W., was completed in July as a dry hole. Drilled from a rotary bushing elevation of 2,925 feet above sea level to a total depth of 4,760 feet, the well encountered the tops of the following beds: Heebner shale, at a depth of 3,890 feet; Lansing group, 3,932 feet; Cherokee rocks, 4,470 feet; and the Mississippian strata, 4,554 feet. The Imperial Oil Company of Kansas, Inc., No. 1 Strickert well in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 19 S., R. 32 W., encountered the following tops: Heebner shale, at a depth of 3,933 feet; Lansing group, 3,976 feet; Cherokee rocks,

4,512 feet; and the Mississippian strata, 4,625 feet. The No. 1 Corn well in the cen. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 20 S., R. 33 W., was drilled by the Imperial Oil Company of Kansas from a rotary bushing elevation of 2,951 feet above sea level to a total depth of 4,850 feet. The following tops were reported: Lansing group, at 3,925 feet; Marmaton rocks, 4,294 feet; and the Mississippian strata, 4,699 feet. The locations of these dry wildcat wells are shown on Plate 3.

Statistics on the oil production during the year from the county are listed in Table 65.

SEDGWICK COUNTY

(Map Pl. 2)

The 1956 production from 43 fields: oil 2,723,564 barrels, gas 177,-829 thousand cubic feet. Wells drilled in 1956: oil 53, gas 2, dry 54, repressuring or salt-water disposal 2, total 111 including 24 dry wildcats. Reworked wells: oil 1. Fields discovered 5.

Developments during 1956.—Oil production from Sedgwick County increased by more than 27 percent during the year, and 5 new oil pools were discovered. Gas production declined by more than 10 percent.

Of the 5 new oil fields named in the county during the year, 3 reported production from the Mississippian strata and 2 reported production from the Lansing-Kansas City rocks. The Pickrell Drilling Company completed the No. 1 Struthers "A" well in sec. 2, T. 29 S., R. 2 W., as the discovery well of the **Chambers Northeast** field. The No. 1 Deffner well in sec. 7, T. 29 S., R. 1 E., was brought in by the E. H. Adair Oil Company as the discovery well of the **Gladys Southwest** field. The Beardmore Drilling Company completed the No. 1 Smith well in sec. 12, T. 29 S., R. 1 W., as the discovery well of the **Brumley Northwest** field. The same company completed the No. 1 Lauterbach well in sec. 33, T. 29 S., R. 2 W., as the discovery well of the **Latta North** field. The James Tasheff and Sam Marcus No. 1 Edson well in sec. 1, T. 26 S., R. 2 E., was brought in as the discovery well of the **Greenwich Northeast** field. Additional information on these discovery wells is given in Table 6.

Developmental drilling within the **Brumley** field resulted in the discovery of the first producing zone in the Lansing-Kansas City rocks. The zone discovery well was drilled by the Shawver-

Armour, Inc., on the Huffman lease in sec. 18, T. 29 S., R. 1 E., in April. Further information on this well is listed in Table 7.

The highest rate of drilling activity during the year was reported by the **Gladys** field, the county's leading oil producer. A total of 41 oil wells, 1 reworked well, 9 dry holes, and 2 salt-water disposal wells was drilled within the field. Production during 1956 rose to 1,810,105 barrels of oil, which represented more than a 60 percent increase over the previous year's figure.

Exploratory drilling resulted in the completion of 24 dry wildcats, of which 5 reported shows of oil and 4 reported shows of gas. The tops of some significant marker beds encountered while drilling these test wells are given in Table 58. The locations of the wildcats and of the areas of oil and gas production are shown on Plate 2. Oil production data are given in Table 65, and gas production data are listed in Table 66. Data on secondary recovery in the **Robbins** field are given in Table 1.

TABLE 58.—Dry wildcat tests drilled in Sedgwick County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Murfin Drlg. Co., et al. No. 1 Moriarty	SW SW NE 32-25-1E	1,391	2,315	3,094	3,608	3,629
*A. D. Allison & Co., Inc. No. 1 Ulmer	NE NE SE 10-25-2E	1,352	2,125	2,826	.....	3,310
*J. P. Gaty No. 1 Shepherd	SW NW NE 13-25-2E	1,350	.....	2,794	3,348	3,356
Bachus Oil Co. No. 1 Ulmer	SW SW NW 27-25-2E	1,378	.....	2,896	3,406	3,445
*E. H. Adair Oil Co. No. 1 Pearson	SW SW SW 19-26-1E	1,332	.....	3,056	3,430**	3,469
*Rex & Morris Drlg. Co., et al. No. 1 Shorey	SW SW NE 23-28-2E	1,336	2,206	3,056	3,431	3,447
*Beech Aircraft Corp. No. 1 Kennedy	SW NW NW 29-28-2E	1,367	2,220	.....	.....	2,281
*Beech Aircraft Corp. No. 2 Scott	NE SE NE 30-28-2E	1,363	2,220	.....	.....	2,256
*J. P. Gaty, et al. No. 1 Ainsworth	NW SE SE 7-29-2E	1,303	2,255	3,088	3,501	3,503
*N. Ambleman Co. No. 1 Deweese	SE SE NW 1-25-1W	1,394	2,323	3,105	.....	3,608
*E. H. Adair Oil Co. No. 1 Childers	NW NW NW 14-25-1W	1,366	2,374	3,208	.....	3,714
*Siegel Oil Co. No. 1 Ven John	SE SE NW 2-26-3W	1,418	2,644	3,489	4,070	4,105
*Francis M. Raymond No. 1 Kruckenber	SW SE SW 32-27-1W	1,313	2,546	3,335	.....	3,415

Sierra Petro. No. 1 Koster	SE SW NW 6-27-4W	1,384	2,796	3,593	4,004**	4,062
Amerada Petro. Corp. No. 1 Becker	SE NE SE 18-27-3W	1,485	2,876	3,739	4,310	4,332
E. K. Carey Drlg. Co., Inc. No. 1 Zongker	NW NW NE 20-28-2W	1,404	3,056	3,675	4,274	4,290
*E. K. Carey Drlg. Co., Inc. No. 1 Pauley	NE NE SW 31-28-2W	1,394	.....	3,736	.....	3,812
Barbara Oil Co. No. 1 Becker	NW NW SW 13-28-3W	1,414	2,914	3,722	4,308	4,331
Earl F. Wakefield No. 1 Broadway "C"	NW NW SE 17-28-3W	1,434	.....	3,773	4,331	4,365
*Shawver-Armour, Inc. No. 1 Parker	NW NW NE 20-29-1W	1,295	.....	3,555	.....	3,595
Shawver-Armour, Inc. No. 1 Poehner	NE NE NE 22-29-1W	1,293	.....	3,347	3,718***	3,760
*Renfro Drlg. Co. No. 1 Tourbier	NW NW SE 28-29-1W	1,268	2,891	3,405	.....	3,478
Natural Gas & Oil Corp. No. 1 Strunk	SW SW NW 5-29-2W	1,340	.....	3,609	.....	3,680
*McNeish & Gralapp No. 1 Pauly	SE SE NE 2-29-3W	1,345	.....	3,734	.....	3,825
Seaboard Oil Co. No. 1 Olthoff	NW NW NW 11-29-4W	1,338	4,250***	3,830	4,330	4,394

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Viola, feet.

*** Depth to the top of the Simpson, feet.

SEWARD COUNTY

(Map Pl. 3)

The 1956 production from 16 fields: oil 36,011 barrels, gas 29,925,-323 thousand cubic feet. Wells drilled in 1956: gas 21, dry 2, total 23 including 1 dry wildcat. Reworked wells: gas 1, dry wildcats 1. Fields discovered 1.

Developments during 1956.—Oil production from Seward County declined about 45 percent, but gas production remained about the same as the previous year's figure. Drilling activity within the county declined from 34 wells during 1955 to 23 wells during 1956.

A single new pool was discovered during the year. The **Plains West** gas field was named in November when the Southwestern Exploration Company brought in the No. 1 Collins well in sec. 16, T. 32 S., R. 31 W. Drilled from a rotary bushing elevation of 2,810 feet above sea level to a total depth of 5,750 feet, the well encountered the following tops: Fort Riley limestone at a depth of 2,894 feet; Heebner shale, 4,286 feet; Lansing group, 4,386 feet;

Morrowan sand, 5,549 feet; and Chesteran rocks, 5,610 feet. Additional information on this discovery well is given in Table 6.

Developmental drilling within the **Wide Awake** field resulted in the discovery of the first Mississippian producing zone in that field. The discovery was made by the No. 1 Keeting well in sec. 33, T. 34 S., R. 34 W., drilled by the Westhoma Oil Company. More information on this zone discovery well is listed in Table 7.

Developmental drilling within the Seward County portion of the **Hugoton Gas Area** resulted in the completion of 18 new gas wells, and gas production increased to 24,894,277 cubic feet during the year. Additional data on the field and some notes on the early history of the **Hugoton Gas Area** are given in the introductory section of this report.

Only 1 dry wildcat well was drilled in the county during the year. It was drilled by the McKnab & Lindsay Drilling Company on the Alexander lease in the cen. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 33 S., R. 32 W., in December. Some important tops encountered while drilling the well were as follows: Lansing group at a depth of 4,482 feet; Marmaton rocks, 5,134 feet; Cherokee strata, 5,295 feet; Morrowan rocks, 5,668 feet; and Chesteran strata, 5,824 feet. The locations of this wildcat test well and of the areas of oil and gas production are shown on Plate 3.

Oil production statistics are given in Table 65, and gas data are listed in Table 66.

SHAWNEE COUNTY

(Map Pl. 1)

Test wells have been drilled from time to time in Shawnee County, but no commercial oil or gas pool has been found. The State Geological Survey has records of 30 test wells in Shawnee County previous to 1955.

Exploration during 1956.—In November 1956 George F. Johnston, Jr., drilled the No. 1 Viergever well in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 11 S., R. 13 E., to a total depth of 2,798 feet before abandonment. The following tops were reported from an elevation of 1,017 feet above sea level: Heebner shale, 630; "Douglas sand", 650; Lansing group, 918; Kansas City group, 1,047; base of Kansas City, 1,065; "Bartlesville" sand, 1,988; "Burgess" sand, 1,994; Mississippian rocks, 2,004; "Kinderhook", 2,258; "Hunton" lime-

stone, 2,420; Viola limestone, 2,665; and Simpson group, 2,791 feet. A drill-stem test at 2,788 to 2,798 feet recovered 1,245 feet of salt water. No shows of oil were reported.

The location of this rank wildcat test is shown on Plate 1.

SHERIDAN COUNTY

(Map Pl. 3)

The 1956 production from 12 fields: oil 491,997 barrels. Wells drilled in 1956: oil 6, dry 25, total 31 including 18 dry wildcats. Fields discovered 2, abandoned 1.

Developments during 1956.—Although drilling activity in the county during the year declined about 25 percent, oil production increased by more than 13 percent, and 2 new pools were discovered.

The **Advance** oil field was named in June when the Heathman-Seeligson Drilling Company brought in a well on the Brown lease in sec. 26, T. 8 S., R. 27 W., and the same company completed the No. 1 Decker "A" well in sec. 6, T. 9 S., R. 28 W., as the discovery well of the **Hoxie** oil field. The **Advance** field reported production from the Lansing-Kansas City strata, and the **Hoxie** field reported production from the Toronto limestone. Additional information on these discovery wells is given in Table 6.

No production was reported from the **Chicago** field since its discovery in 1955; hence, the Nomenclature Committee abandoned the field in May.

Oil production from the **Adell** field, the county's leading producer, increased to 297,318 barrels during the year as compared to the previous year's production of 269,197 barrels. Developmental drilling within the field resulted in the completion of 1 oil well and 1 dry hole. The tops of the following marker beds were encountered while drilling the dry hole: Heebner shale at a depth of 3,530 feet; Toronto limestone, 3,555 feet; and the Lansing group, 3,572 feet.

Of the 18 dry wildcat wells drilled in the county during the year, 9 reported shows of oil, and 1 reported a slight show of gas. Further data on these wildcat tests are listed in Table 59. The locations of the wildcat wells and of the oil producing areas are shown on Plate 3.

Oil production statistics are given in Table 65.

TABLE 59.—Dry wildcat tests drilled in Sheridan County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
The Veeder Sup. & Dev. Co., et al. No. 1 Seeberger	SW SW SW 34-6-30W	2,917	3,993	4,526	4,602
R. W. Shields. et al. No. 1 Heskett	SE SE SW 1-7-26W	2,560	3,630	4,150	4,281
Osage Oil & Gas Co., Inc. No. 1 Bangle	NW SE NE 5-7-26W	2,622	3,806	4,300	4,349
*Empire Drlg. Co. No. 1 Davis	NE NE NE 1-8-26W	2,454	3,675	.....	3,900
Empire Drlg. Co. No. 1 Niblock	NE NE SE 3-8-26W	2,497	3,673	.....	3,900
Leben Drlg. Co. No. 1 Toothaker	SE SE SW 7-8-27W	2,664	3,870	4,427	4,480
Natl. Coop. Ref. Assn., et al. No. 1 Davis	SE NE SW 11-8-27W	2,570	3,759	.....	3,999
Heathman-Seeligson Drlg. Co. No. 1 Brown "D"	NW SE SW 36-8-27W	2,659	3,832	.....	4,111
*Heathman-Seeligson Drlg. Co. No. 1 Clark "A"	NE NE SE 32-8-28W	2,737	3,860	4,415	4,430
Theodore Gore No. 1 Epler	SW SW SE 23-9-26W	2,634	3,884	4,440	4,490
Natl. Coop. Ref. Assn. No. 1 Haffner	SE NE NW 19-9-27W	2,755	3,887	.....	4,140
Heathman-Seeligson Drlg. Co. No. 1 Albert	SW SW NW 22-9-27W	2,721	3,884	4,424	4,460
Heathman-Seeligson Drlg. Co. No. 1 Kaiser	C SE SE 7-10-26W	2,650	3,893	4,451	4,513
Heathman-Seeligson Drlg. Co. No. 1 Goetz "A"	NW NW SW 3-10-27W	2,649	3,827	4,391	4,463
Anschutz Drlg. Co., Inc. No. 1 Park College	SW SW SE 14-10-27W	2,586	3,780	.....	4,050
Heathman-Seeligson Drlg. Co. No. 1 Hein	NW NW NW 16-10-28W	2,741	3,862	.....	4,379
Empire Drlg. Co. No. 1 Koerber	SE SE SE 24-10-29W	2,771	3,894	4,463	4,539

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

SHERMAN COUNTY

(Map Pl. 3)

Wildcat tests have been drilled in Sherman County from time to time, but as yet no oil or gas pool has been found.

Exploration during 1956.—One dry wildcat test was drilled within the county during the year. It was completed by the Van Grisso Oil Company on the Golden lease in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$

sec. 24, T. 10 S., R. 42 W., in July. Drilled from a rotary bushing elevation of 3,863 feet above sea level to a total depth of 5,471 feet, the well encountered the tops of the following marker beds: Topeka limestone at a depth of 3,981 feet; Heebner shale, 4,183 feet; Lansing group, 4,232 feet; Marmaton rocks, 4,640 feet; and Mississippian strata, 5,268 feet. A drill-stem test at a depth of 2,934 to 2,965 feet recorded a slight show of gas cut mud. The location of this test well is shown on Plate 3.

STAFFORD COUNTY

(Map Pl. 2)

The 1956 production from 158 fields: oil 6,231,835 barrels, gas 1,091,145 thousand cubic feet. Wells drilled in 1956: oil 118, gas 2, dry 128, repressuring or salt-water disposal 1, total 249 including 18 dry wildcats. Reworked wells: oil 8, dry 4. Fields discovered 13, combined 3, abandoned 1.

Developments during 1956.—Although oil production from the county declined by more than 5 percent from the previous year's figure, gas production increased by more than 27 percent. On the basis of its 1956 production figures Stafford County moved up into the position of the sixth leading oil producing county in the state. A total of 249 wells of all types was completed during 1956 as compared to 167 wells during 1955. Exploratory programs resulted in the discovery of 13 new pools.

Of the 13 new fields named within the county during the year, the **Dillwin**, **Gates North**, **Seevers Northwest**, and the **White Cloud** fields reported production from the Arbuckle dolomite; the **Krankenbergl**, **Leiss**, and **Shepherd Northwest** fields reported production from the Simpson sand; the **Farmington Northwest**, **Harter North**, and **Rattlesnake East** fields reported production from the Lansing-Kansas City rocks; and the **Farmington North** and **Moody** fields reported production from the Mississippian strata. The **Knoche South** field was named in September when the Anschutz Drilling Company No. 1 Byer well in sec. 17, T. 24 S., R. 12 W., reported a small amount of Viola oil production, but the field had to be abandoned in October because commercial quantities could not be produced. Additional information on the discovery wells of these new fields is given in Table 6.

Action by the Nomenclature Committee during the year resulted in combining the **Lincoln Northwest** field with the **Bayer**

field (Simpson production), **Fisher** and **Fisher Northwest** fields with **Gates** (Lansing and Arbuckle production), and **Pritchard South**, **Pritchard Southeast**, and **Starr** fields in Stafford County with the **Pritchard** field (Lansing and Arbuckle production) in Barton County.

Developmental drilling within the county resulted in the discovery of new producing zones in 10 fields. Simpson production was reported from the **Bayer**, **Farmington**, and **Sand Hills** fields; Viola production from the **Bayer**, **Lincoln Northwest**, and **Radium Townsite** fields; Mississippian production from the **Farmington Northwest** and **Rattlesnake East** fields; and Lansing-Kansas City production from the **Pundsack North**, **Seevers Northwest**, and **Taylor** fields. Data on the initial potentials and thicknesses of these new zones are given in Table 7.

Of the 18 dry wildcat wells drilled in the county during the year, 4 reported shows of oil and 2 reported shows of gas. The tops of important marker beds encountered while drilling the wells are given in Table 60. The locations of the wildcat tests and of the areas of oil and gas production are shown on Plate 2.

Oil production statistics are listed in Table 65, and gas production statistics are given in Table 66. Data on repressuring in the **Jordan** field are given in Table 1.

STANTON COUNTY

(Map Pl. 3)

The 1956 production from 2 fields: oil 786 barrels, gas 16,916,185 thousand cubic feet. Wells drilled in 1956: gas 4, dry 3, total 7 including 2 dry wildcats.

Developments during 1956.—Although gas production from the Stanton County portion of the **Hugoton Gas Area** increased by more than 9 percent, the county remained the smallest producer in the field. Oil production was reported from the county for the first time, when 786 barrels (distillate) was reported from the **Sparks** gas field. Developmental drilling within the field resulted in the completion of 3 gas wells and 1 dry hole. No drilling was reported from the **Hugoton Gas Area**.

Exploratory drilling within the county resulted in the completion of 2 dry wildcats which penetrated Mississippian strata. One of the test wells, the No. 1 Rorick Unit, completed by the

TABLE 60.—*Dry wildcat tests drilled in Stafford County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Monsanto Chemical Co. No. 1 Andress	SE SE NE 1-21-13W	1,858	3,236	3,499	3,525
*Phillips Lee Oil Co. No. 1 Taylor	NE NE SE 8-21-14W	1,942	3,345	3,677	3,709
Rex & Morris Drlg. Co., et al. No. 1 Phillips	SW SW SW 30-21-14W	1,959	3,419	3,798	3,815
Beardmore Drlg. Co. No. 1 Durham	SW SW NE 27-22-13W	1,897	3,427	3,837	3,870
D. R. Lauck Oil Co., Inc., et al. No. 1 McAllister	SW SE NW 32-22-14W	1,965	3,537	4,030	4,057
Rocket Drlg. Co., Inc. No. 1 Hickman	NW NW SW 30-23-11W	1,829	3,372	3,819	3,832
Russell Cobb, Jr., Inc. No. 1 Lydia Thole	NW NE NW 23-23-12W	1,851	3,376	3,816	3,850
*Thunderbird Drlg., Inc. No. 1 Fritzmeier	SE NW NW 25-23-12W	1,847	3,388	3,842	3,862
Stickle Drlg. Co. No. 1 R. G. Dunn	SE SE SE 1-23-13W	1,860	3,386	3,826	3,860
*D. R. Lauck Oil Co., Inc. No. 1 Mawhirter	NW NW NW 2-23-13W	1,866	3,415	3,833	3,840
*Stickle Drlg. Co. No. 1 Green	SE SE SE 4-23-13W	1,874	3,433	3,848	3,855
*Shields Oil Producers No. 1 Shotton	NW SW NE 4-23-13W	1,898	3,448	3,867	3,882
Stickle Drlg. Co., et al. No. 1 Smolik	NE NE NW 24-23-13W	1,874	3,440	3,908	3,927
Armer Drlg. Co., Inc. No. 1 Kendall	NE NE SE 36-23-14W	1,906	3,560	4,069	4,120
D. R. Lauck Oil Co., Inc. No. 1 Wright	NW NW SE 32-24-12W	1,903	3,572	4,176	4,210
Sunray Mid-Cont. Oil Co. No. 1 Sutton	NW NE NW 9-24-13W	1,916	3,541	4,061	4,092
Phillips Lee Oil Co. No. 1 Gobin	NE NE SW 27-25-13W	1,926	3,695	4,292	4,344

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

Killam & Hurd Drilling Company in sec. 18, T. 30 S., R. 42 W., was drilled from a rotary bushing elevation of 3,561 feet above sea level to a total depth of 5,475 feet. The bit encountered the tops of the following marker beds: Topeka limestone at a depth of 3,160 feet; Lansing group, 3,690 feet; Morrowan sand, 5,246 feet; and the Chesteran rocks, 5,410 feet. The second wildcat was completed by the Superior Oil Company on the Burnett lease in the cen. NE¼ sec. 16, T. 29 S., R. 43 W., and the following tops were encountered: Topeka limestone at a depth of 3,274 feet;

Lansing group, 3,682 feet; Morrowan sand, 5,204 feet; and the Mississippian strata, 5,540 feet. Several drill-stem tests were taken, but no shows of oil or gas were reported. The locations of these wildcat wells are shown on Plate 3.

Oil production statistics are given in Table 65, and gas statistics are listed in Table 66. The locations of the areas of oil and gas production are shown on Plate 3.

STEVENS COUNTY

(Map Pl. 3)

The 1956 production from 3 fields: gas 102,139,834 thousand cubic feet. Wells drilled in 1956: gas 12, dry wildcats 2, total 14. Fields discovered 2.

Developments during 1956.—Although 2 new gas fields were discovered within the county, production during the year declined by more than 6 percent. Wildcat drilling programs resulted in the completion of 2 dry test wells.

The **Hanke** field was named in May when the Republic Natural Gas Company brought in a well on the Hanke lease in sec. 6, T. 35 S., R. 36 W., and the **Panoma** field was named upon the completion of the Hugoton Production Company No. 2-12 Panoma well in sec. 12, T. 31 S., R. 38 W. The **Hanke** field reported production from the Morrowan strata, and the **Panoma** field reported production from the Council Grove group. Additional information on the discovery wells of these fields is given in Table 6.

Developmental drilling within the Stevens County part of the **Hugoton Gas Area** resulted in the completion of 10 new gas wells. The locations of these wells are shown on Plate 3.

Two deep dry wildcats were drilled within the county during the year. They were both completed by the Northern Natural Gas Company in the northeast part of the county. The No. 1 Boles "G" well in the cen. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 32 S., R. 35 W., encountered the tops of the following marker beds: Fort Riley limestone at a depth of 2,772 feet; Heebner shale, 4,196 feet; Lansing group, 4,318 feet; and the Morrowan strata, 5,609 feet. The well was drilled from a rotary bushing elevation of 2,980 feet above sea level to a total depth of 6,265 feet. The No. 1 Stout "A" well in the cen. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 32 S., R. 36 W., was drilled from a rotary bushing elevation of 3,069 feet above sea level to a total depth of 6,302 feet. The tops of some significant

marker beds encountered while drilling the well were: Fort Riley limestone at a depth of 2,745 feet; Heebner shale, 4,138 feet; Lansing group, 4,255 feet; and the Morrowan strata, 5,493 feet. The locations of these 2 test wells are shown on Plate 3.

Gas production statistics for the county are listed in Table 66, and the locations of the gas producing areas are shown on Plate 3.

SUMNER COUNTY

(Map Pl. 2)

The 1956 production from 44 fields: oil 3,044,872 barrels, gas 2,690,841 thousand cubic feet. Wells drilled in 1956: oil 87, gas 2, gas and oil 1, dry 81, repressuring or salt-water disposal 4, total 175 including 30 dry wildcats. Reworked wells: oil 6, salt-water disposal 1. Fields discovered 4, revived 1, combined 1, abandoned 1.

Developments during 1956.—Oil production from Sumner County increased about 6 percent during the year, and gas production declined about 3 percent. Although drilling activity within the county resulted in the completion of 47 fewer wells during 1956 than during the previous year, 4 new oil pools were discovered.

The **Beatie** field was named upon the completion of the Gulf Oil Company No. 1 Beatie well in sec. 21, T. 31 S., R. 2 W., and the No. 1 Van Allen well in sec. 5, T. 30 S., R. 2 W., was the discovery well of the **Latta Northwest** field. Production from the **Beatie** field was reported from the Simpson strata, and the **Latta Northwest** field reported production from the Kansas City group. The **Meek** field was named upon the completion of The Pure Oil Company No. 1 G. C. Meek well in sec. 10, T. 35 S., R. 1 E., and the No. 2 Unruh well drilled by the Southwest Oil Corporation in sec. 28, T. 34 S., R. 1 E., was named the discovery well of the **Portland South** field. Production from the **Meek** field was assigned to the "Cleveland" sand, and production from the **Portland South** field was reported from the "Layton" sand. Additional information on the discovery wells of these fields is given in Table 6.

Developmental drilling within the county resulted in the discovery of new producing zones in 3 old fields. These discoveries were: "Stalnaker" production in the **Bitter Creek** field, Marmaton production in the **Padgett** field, and "Bartlesville" production in the **Rutter** field. Complete data on the discovery wells of these new zones are given in Table 7.

The **Ashton East** field was revived in April when oil was recovered from the Cherokee rocks by the No. 1 Webster well in sec. 17, T. 34 S., R. 2 E. However, the well failed to produce commercial quantities, and the field was abandoned in September by the Nomenclature Committee. Other action during the year by the committee resulted in the combining of the **Rainbow Bend West** field in Sumner County with **Rainbow Bend** field ("Burgess" and Arbuckle production) in Cowley County.

Of the 30 dry wildcat tests drilled within the county during 1956, 10 reported shows of oil and 7 reported shows of gas. The tops of some important marker beds encountered while drilling the wells are listed in Table 61. The locations of these wildcat tests and of the oil and gas producing areas are shown on Plate 2. Oil production statistics are given in Table 65, and gas production statistics are listed in Table 66. Data on 2 secondary recovery projects are given in Table 1.

TABLE 61.—*Dry wildcat tests drilled in Sumner County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of "Stalnaker", feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
White & Ellis Drlg. Co., et al. No. 1 Orrell	NW NW NE 3-30-1E	1,235	2,370	3,300	3,764	3,825
Falcon-Seaboard Drlg. Co. No. 1 Crum	SE SW SE 30-30-1E	1,244	2,542	3,482	.....	3,530
*J. P. Gaty No. 1 Kersey "B"	SW SE SW 5-30-2E	1,229	2,280	3,135	3,585	3,886
*J. P. Gaty No. 2 Kersey "B"	SE NE SW 5-30-2E	1,246	2,289	3,144	.....	3,176
Aurora Gasoline Co., et al. No. 1 Nord in	SE SE NE 14-30-2E	1,277	2,226	3,105	3,506	3,561
*Beaumont Petro. Co. No. 1 Kelley	SW SE NE 3-31-1E	1,204	2,741**	3,348	.....	3,425
J. P. Gaty, et al. No. 1 Lawless	SW SW SE 14-31-1E	1,231	2,437	3,428	3,917	3,944
Crowe Drlg. Co., Inc. No. 1 Dick	NW NW NW 19-31-1E	1,311	2,614	3,630	4,152	4,158
L. C. Smitherman Drlg. Co. No. 1 Foltz	NE NE SW 6-31-2E	1,198	2,348	3,297	3,757	3,810
Aurora Gasoline Co., et al. No. 1 Dalley	NW NW NE 15-31-2E	1,182	2,256	3,196	3,636	3,692
Parker Petro. Co., Inc. No. 1 Matzon	SE SE SW 1-33-1E	1,130	2,464	3,467	3,904	3,925
Earl F. Wakefield No. 1 Riggs	NW NW NE 18-33-2E	1,152	2,425	3,383	3,808	3,834

Time Petro. Co. No. 1 Creekmore	NENE SW 19-33-2E	1,172	2,445	3,441	3,860	3,875
Stelbar Oil Corp., Inc. No. 1 Robbins	NW NW NW 4-34-2E	1,155	2,955**	3,414	.....	3,430
Laura Jane Oil Co., Inc. No. 1 Reusser	NENE SW 20-30-1W	1,278	2,672	3,601	.....	3,702
*Franco Central Oil Co. No. 1 Parker	NW NW SW 24-30-1W	1,240	2,528	3,470	3,885***	3,900
*Shawver-Armour, Inc. No. 1 Wightman	SE SE SE 2-30-2W	1,301	2,764	3,714	.....	3,742
Renfro Drlg. Co. No. 1 Castholm	NW NW SE 24-30-2W	1,306	3,067**	3,727	4,128***	4,136
McKnab Drlg., Inc. No. 1 J. R. Little	SE SE SE 3-30-3W	1,359	2,883	3,782	4,365	4,400
Aurora Gasoline Co. No. 1 Lange	SE SE NW 15-30-3W	1,345	2,901	3,818	.....	3,960
Franco Central Oil Co., et al. No. 1 Bonjour	SW SW NW 13-31-1W	1,337	2,685	3,661	4,139	4,142
Western Oil & Gas Co. No. 1 Ast	SE SE NE 9-31-3W	1,360	3,006	3,940	4,446	4,600
Tennessee Gas Trans. Co. No. 1 Altman	NW NW NW 34-31-3W	1,312	2,987**	3,958	4,494	4,524
Musgrove Petro. Corp. No. 1 Holiday	NENE SE 1-32-1W	1,259	2,997**	3,664	4,220	4,248
*Shawver-Armour, Inc. No. 1 Felt	SE SE NE 33-32-1W	1,264	2,839	3,877	.....	4,342
Falcon-Seaboard Drlg. Co. No. 1 Pearce	SW SW NE 28-32-4W	1,242	.....	4,125	4,716	4,780
Anschutz Drlg. Co., Inc. No. 1 Priddy	SW SW NW 35-33-1W	1,199	2,830	3,890	4,445	4,473
Carl B. Anderson No. 1 Myrtle Bacon	SW SW SW 13-34-1W	1,162	2,775	3,903	.....	3,997
Herndon Drlg. Co. No. 1 Subera	NW SE SW 22-34-3W	1,194	3,187	4,323	4,794***	4,812
*Herndon Drlg. Co., et al. No. 2 Pratt	W½ NW NW 17-35-2W	1,101	.....	4,324	4,770***	4,782

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Lans.-K.C., feet.

*** Depth to the top of the Simpson, feet.

THOMAS COUNTY

(Map Pl. 3)

The 1956 production from 2 fields: oil 10,759 barrels. Wells drilled in 1956: oil 1, dry wildcats 6, total 7. Fields discovered 1.

Developments during 1956.—Oil production from Thomas County increased by more than 75 percent primarily because of the discovery of the county's second oil pool. A total of 7 wells were drilled within the county during the year, as compared with 2 during 1955.

The **Kindig** field was named in May when the Bachus Oil Company and the Veeder Cherokee Supply and Development Company brought in the No. 1 Kindig well in sec. 30, T. 8 S., R. 32 W. The well was assigned an initial potential of 401 barrels of oil per day from the Cherokee rocks, and the following tops were encountered while drilling the well: Topeka limestone at a depth of 3,909 feet; Heebner shale, 4,074 feet; Kansas City group, 4,114 feet; Cherokee rocks, 4,557 feet; and Mississippian strata, 4,679 feet. More information on this discovery well is given in Table 6.

A total of 6 rank dry wildcats was drilled in the county during the year, but only 1 reported a show of oil. Complete information on these test wells is given in Table 62. The locations of the wildcat wells and of the oil producing areas are shown on Plate 3. Oil production statistics are listed in Table 65.

TABLE 62.—Dry wildcat tests drilled in Thomas County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
Virginia Drlg. Co., Inc. No. 1 Barnett	NW NW SE 8-6-31W	2,965	3,975	4,546	4,715
*Virginia Drlg. Co., Inc. No. 1 Cooper	Cen. NENE 12-7-33W	3,092	4,046	4,645	4,695
Natl. Coop. Ref. Assn. No. 1 Wright	SW SW SE 34-7-36W	3,364	4,198	4,871	5,070
Jones, Shelburne & Farmer, Inc. No. 1 Baker	NENE NW 21-8-33W	3,173	4,135	4,735	4,848
Van-Grisso Oil Co. No. 1 Tousler	NENE NE 11-9-35W	3,312	4,166	4,829	5,026
George F. Johnston, Jr., No. 1 Flipse	NENE SE 18-10-32W	3,087	4,035	4,637	4,680

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

TREGO COUNTY

(Map Pl. 3)

The 1956 production from 29 fields: oil 1,469,972 barrels. Wells drilled in 1956: oil 62, dry 70, repressuring or salt-water disposal 1, total 133 including 38 dry wildcats. Reworked wells: oil 1, dry 1. Fields discovered 6, combined 2.

Developments during 1956.—Oil production from Trego County increased by more than 35 percent during the year. In all, 133 well completions were reported during 1956 as compared to 69 during the previous year, and 6 new oil pools were discovered.

The **Adair Southwest** field (Marmaton production) was named upon the completion of the No. 1 Ridgeway well in sec. 28, T. 12 S., R. 21 W., and the Transit Corporation No. 1 Kroeger well in sec. 36, T. 13 S., R. 21 W., was the discovery well of the **Kroeger** field (Arbuckle production). The Imperial Oil of Kansas, Inc., drilled the discovery well of the **Newcomer** field (Lansing-Kansas City production) in sec. 12, T. 12 S., R. 23 W., and the **Newcomer Northwest** field (Lansing-Kansas City production) was named upon the completion of the No. 1 Hixson well in sec. 2, T. 12 S., R. 23 W. The Century Production Company and K & E Drilling, Inc., brought in the discovery well of the **Page Creek** field (Cherokee production) on the Tipton lease in sec. 28, T. 15 S., R. 2 W., and the **Rhoden** field (Lansing-Kansas City production) was named upon the completion of the No. 1 Rhoden "A" well in sec. 24, T. 12 S., R. 23 W. Additional information on these discovery wells is given in Table 6.

Action by the Nomenclature Committee resulted in 2 combinations during the year. The **El's Northeast** field (Ellis County) and the **Ellis South** field were combined with the **Ellis** field (Arbuckle and Reagan production) in December. A second combination joined **Groff Southeast** with the **Groff** field in August.

Of the 38 dry wildcats drilled within the county during the year, 10 reported shows of oil and 1 reported a show of gas. Specific data on the wildcat wells are given in Table 63. The locations of these wells and of the oil producing areas are shown on Plate 3. Oil production statistics for the county are listed in Table 65.

TABLE 63.—Dry wildcat tests drilled in Trego County during 1956

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Petroleum, Inc. No. 1 Armbrister	SE SE NW 6-11-21W	2,149	3,449	3,830	3,850
*Bell Oil & Gas Co. No. 1 Osborn	NE NE SW 7-11-21W	2,129	3,424	.....	3,859
K & E Drlg., Inc., et al. No. 1 Madden	SW SW NE 15-11-21W	2,160	3,486	3,799	3,833
Jones, Shelburne & Farmer, Inc., et al. No. 1 Miller	NE NE SE 34-11-21W	2,301	3,605	3,976	4,005
Bachus Oil Co., et al. No. 1 Pyne	NE NE NW 13-11-22W	2,186	3,472	3,865	3,910

Aurora Gasoline Co. No. 1 Walker	SE SE SE 8-11-24W	2,403	3,760	4,320**	4,339
Aurora Gasoline Co., et al. No. 1 Owens	SW SW SW 15-11-24W	2,455	3,826	4,375**	4,425
Theodore Gore No. 1 Schwanbeck	SE SE NE 32-11-24W	2,533	3,904	4,460**	4,510
*K & E Drlg., Inc., et al. No. 1 Baldwin	NE NE NE 35-11-24W	2,472	3,845	.....	4,105
Theodore Gore No. 1 Barnes	SE SE NE 10-11-25W	2,382	3,735	4,270**	4,352
Amerada Petro. Corp. No. 1 M. A. Bellairs	SE SE NE 18-12-22W	2,395	3,681	4,118	4,175
*Imperial Oil of Kansas, Inc. No. 1 Hille	NW NW NE 20-12-22W	2,424	3,694	4,155	4,187
Anschutz Drlg. Co., Inc. No. 1 Staab	SE SE NW 20-12-22W	2,413	3,684	4,096	4,148
*Imperial Oil of Kansas, Inc. No. 1 Dewald	NE NE SE 31-12-22W	2,339	3,733	4,465	4,481
Mai Drlg. No. 1 Surmeier	SE SW NW 8-12-23W	2,446	3,809	4,531	4,585
Imperial Oil of Kansas, Inc. No. 1 Deines	NW NW SE 22-12-23W	2,402	3,700	4,337	4,380
Jones, Shelburne & Farm- er, Inc. No. 1 Heyl	NE NE SW 30-12-23W	2,381	3,753	4,430	4,470
*Imperial Oil of Kansas, Inc. No. 1 Satran	SE NE SE 36-12-23W	2,358	3,744	4,468	4,495
Imperial Oil of Kansas, Inc. No. 1 Osborne "B"	NW NW NE 1-12-24W	2,438	3,798	4,546	4,593
Theodore Gore No. 1 Struss	SE SE SW 2-12-24W	2,475	3,852	4,419**	4,443
Bell Oil & Gas Co. No. 1 Glass	SW SE NE 9-13-21W	2,197	3,496	3,917	3,960
Strata Drlg., Inc. No. 1 Bollig	SE SE NE 21-13-21W	2,281	3,604	3,996	4,015
Imperial Oil of Kansas, Inc. No. 1 Lang	SE SE SE 24-13-21W	2,273	3,570	3,935	3,998
Anschutz Drlg. Co., Inc. No. 1 Mulheim	SE SE SE 32-13-22W	2,375	3,795	4,534	4,550
Theodore Gore No. 1 Delaney	NW NW NE 7-13-23W	2,474	3,810	4,370	4,415
Coop. Ref. Assn., et al. No. 1 Madden "A"	SW SW NW 17-14-21W	2,210	3,547	4,041	4,060
Rex & Morris Drlg. Co., et al. No. 1 Saleen	NE NE NE 3-14-22W	2,321	3,731	4,413	4,455
Aurora Gasoline Co., et al. No. 1 Wasinger	C NW SW 24-14-22W	2,179	3,595	4,115**	4,165
Bennett & Roberts Drlg. Co. No. 1 Kline	N½ NW SE 19-14-24W	2,348	3,605	4,454	4,515
Welch & Olsson Drlg. Co., Inc. No. 1 Schuster	NE NE SE 8-15-21W	2,252	3,658	4,175**	4,211
Welch & Olsson Drlg. Co., Inc. No. 1 North	SW SW SW 24-15-21W	2,291	3,729	4,294	4,320
Anschutz Drlg. Co., Inc. No. 1 Kranz	SW SW NW 33-15-21W	2,395	3,803	4,446	4,502

Don E. Pratt, et al. No. 1 D. K. North A-1	NENE NE 36-15-21W	2,317	3,764	4,350	4,427
Don E. Pratt No. 1 D. K. North	NW NW SW 36-15-21W	2,290	3,749	4,358	4,395
*Welch & Olsson Drlg. Co., Inc. No. 1 Lecuyer	NW SE SW 11-15-22W	2,199	3,590	4,255	4,275
Parker Petro. Co., Inc. No. 1 Beason	NW NW SE 35-15-22W	2,425	3,854	4,388	4,446
*Jones, Shelburne & Farm- er, Inc. No. 1 Kraft	NW NW NW 8-15-23W	2,288	3,673	4,521	4,555
Imperial Oil of Kansas, Inc. No. 1 Plath	NE NE NE 36-15-24W	2,383	3,779	4,686	4,735

* No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Mississippian, feet.

WABAUNSEE COUNTY

(Map Pl. 1)

The 1956 production from 5 fields: oil 323,838 barrels. Wells drilled in 1956: oil 1, dry 4, total 5 including 3 dry wildcats.

Developments during 1956.—Reported oil production in Wabaunsee County in 1956 was more than double that of 1955, when 153,321 barrels was reported. With the development of a steady market for oil from the **Davis Ranch** field, production from 18 wells rose to 254,228 barrels during 1956.

Three dry wildcat tests were reported in 1956. The Carter Oil Company No. 1 Ida M. Stitt in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 15 S., R. 9 E., was abandoned as a dry hole in September at a total depth of 3,210 feet. Scout-report tops recorded from an elevation of 1,418 feet above sea level are: Lansing group, 1,568; Kansas City group, 1,724; base of Kansas City, 1,936; Mississippian rocks, 2,522; "Kinderhookian" strata, 2,818; "Hunton" limestone, 2,962; and Viola limestone, 3,163 feet. No shows of oil or gas were reported. Anschutz Drilling Company, Inc., drilled the No. 1 Wingfield in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 15 S., R. 10 E., to a total depth of 3,428 feet in September. Reported elevation was 1,480 feet above sea level. Important marker beds encountered in drilling are: Lansing group, 1,756; base of Kansas City group, 1,966; Mississippian chert, 2,627; Mississippian limestone, 2,640; "Hunton" limestone, 3,129; Viola limestone, 3,273; and Simpson group, 3,359 feet. No shows were reported. The third rank wildcat test, also drilled by the Anschutz Drilling Company, Inc., was located on the Jones lease in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.

16, T. 15 S., R. 11 E. The hole was drilled in September from an elevation of 1,387 feet above sea level to a total depth of 3,260 feet. Tops reported are: Lansing group, 1,592; Mississippian chert, 2,458; Mississippian limestone, 2,472; "Hunton" limestone, 2,976; Viloa limestone, 3,106; Simpson group (dolomite), 3,183; Simpson group (sand), 3,202; and Arbuckle dolomite, 3,236 feet. A show of oil was reported at the base of the Viola limestone.

One oil well was completed in the **Davis Ranch** field during 1956, the Carter Oil Company No. 13 Davis "A" in sec. 33, T. 13 S., R. 10 E. A dry hole was drilled in the **Woodbury** field by the Adkins Drilling Company.

Oil production statistics are listed in Table 65. Locations of areas from which oil was produced in Wabaunsee County in 1956 and of dry wildcat tests are shown on Plate 1.

WALLACE COUNTY

(Map Pl. 3)

Wildcat wells have been drilled in Wallace County from time to time, but as yet production of oil or gas in commercial quantities has not been reported.

Exploration during 1956.—In August, the Skelly Oil Company completed a well on the Sexson lease in sec. 19, T. 13 S., R. 42 W., and after it was assigned an initial potential of over 14 million cubic feet of gas per day, the well was named the discovery well of the **Sexson fie'd**. Because no pipe-line connections were available, the well was shut-in, and hence, no production has been reported from the field as yet. Additional information on this discovery well is given in Table 6.

Other exploratory drilling resulted in the completion of 2 dry wildcat tests. The Van Grisso Oil Company completed a test well on the Frazier lease in the cen. NW¼ NE¼ sec. 15, T. 15 S., R. 39 W. Drilled from a rotary bushing elevation of 3,591 feet above sea level to a total depth of 5,260 feet, the well penetrated the tops of the following marker beds: Heebner shale at a depth of 4,092 feet; Lansing group, 4,150 feet; Cherokee rocks, 4,782 feet; Morrowan sand, 4,952 feet; and the Mississippian strata, 5,137 feet. A drill-stem test at a depth of 4,951 feet to 5,000 feet recorded a show of gas cut mud. A second test well was completed by the Sierra Petroleum Company and the Ambassador Company on

the Meyer-Peterman lease in the cen. NW $\frac{1}{4}$ sec. 15, T. 14 S., R. 42 W. Drilled from a rotary bushing elevation of 3,886 feet above sea level, the well encountered the tops of the following marker beds: Lansing group at a depth of 4,222 feet; Morrowan rocks, 5,078; and the Mississippian strata, 5,140 feet. A drill-stem test failed to produce a show of oil or gas.

The locations of the county's 2 wildcat test wells are shown on Plate 3.

WICHITA COUNTY

(Map Pl. 3)

Wildcat wells have been drilled within Wichita County from time to time, but as yet no producing oil or gas pool has been discovered.

Exploration during 1956.—Two dry wildcats were completed within the county during 1956; both were drilled by the Musgrove Petroleum Company. The No. 1 Langley well in the cen. NW $\frac{1}{2}$ sec. 12, T. 17 S., R. 38 W., was drilled from a rotary bushing elevation of 3,331 feet above sea level to a total depth of 5,164 feet. The tops of some significant marker beds encountered while drilling the well were: Topeka limestone at a depth of 3,774 feet; Heebner shale, 3,971 feet; Lansing group, 4,065 feet; Marmaton rocks, 4,436 feet; and Mississippian strata, 4,956 feet. No shows of oil or gas were reported.

The No. 1 Mantel well was completed in the cen. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 18 S., R. 36 W. Drilled from a rotary bushing elevation of 3,266 feet above sea level to a total depth of 5,040 feet, the well penetrated the tops of the following marker beds: Topeka limestone at a depth of 3,733 feet; Heebner shale, 3,927 feet; Lansing group, 3,995 feet; Marmaton rocks, 4,525 feet; and the Mississippian strata, 4,940 feet. A drill-stem test reported a show of gas cut mud between the depths of 2,757 feet to 2,787 feet.

The locations of these new wildcat wells are shown on Plate 3.

WILSON COUNTY

(Map Pl. 1)

The 1956 production from 39 areas in 12 fields: oil 172,836 barrels including approximately 39,648 barrels from secondary recovery projects, gas 280,135 thousand cubic feet. Wells drilled in 1956 (estimated): oil 54, dry 32, repressuring 40, total 126 including 7 dry wildcats.

Developments during 1956.—Oil production from Wilson County fields during 1956 was slightly less than in 1955, when 187,047 barrels was reported.

There was considerable wildcat activity in western Wilson County during 1956. Most of the tests were taken into the Arbuckle dolomite. No specific shows of oil were reported. Additional data on this development are given in Table 64. Two other wells which should be mentioned in considering deep drilling are the Ventures, Inc., No. 1 Ridlon in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 27 S., R. 14 E., in the **Coyville** field, which topped the Arbuckle dolomite at 1,766 feet; and the Walter F. McGinnis No. 1 Blinn test in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 28 S., R. 13 E., which topped the Arbuckle dolomite at 1,534 feet, in the **Fall River** field.

Oil production statistics for Wilson County are listed in Table 65, gas in Table 66. Locations of areas from which oil was produced in 1956 and of dry wildcats are shown on Plate 1. Data on secondary recovery are given in Table 1.

TABLE 64.—*Dry wildcat tests drilled in Wilson County during 1956*

Company and farm	Location	Surface elevation, feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Ventures, Inc., et al. No. 1 Jeffery	NW NW NE 8-27-14E	879	1,316	1,644	1,650
*Ventures, Inc., et al. No. 1 Lyon	SW NW NW 3-28-14E	979	1,359	1,661	1,674
*L. D. Sargent, et al. No. 1 G. Ingstrom	SE SE NW 12-23-14E	1,884	1,197	1,480	1,492
* (Unknown) No. 1 Nixon	NENE NE 24-29-13E	1,165	1,670	2,000	2,090
Nix, Inc. No. 1 Frey	NW NW SE 14-30-14E	933	1,232	282**	1,274
*Aladdin Petro. Corp. No. 1 Stryker	SW SW SE 16-30-14E	.....	1,396	1,672	1,695
Aladdin Petro. Corp. No. 1 Schultz	NW NW NE 24-30-14E	923	1,335	1,640	1,644

*No electric or radioactivity logs available. Kansas Sample Log Service, Independent Oil & Gas Service, and other available data sources have been used.

** Depth to the top of the Lansing, feet.

WOODSON COUNTY

(Map Pl. 1)

The 1956 production from 35 areas in 23 fields: oil 998,680 barrels including approximately 295,996 barrels from secondary re-

covery projects, gas 203,192 thousand cubic feet. Wells drilled in 1956 (estimated): oil 128, gas 1, dry 63, repressuring 46, total 238 including 4 dry wildcats. Fields discovered 3, combined 3.

Developments during 1956.—Woodson County oil production in 1956 was appreciably greater than in 1955, when 861,764 barrels was reported. Estimated gas production for 1956 was double that of 1955.

The **Annabelle** field was opened when Thunderbird Drilling, Inc., found oil in the No. 1 Corkery well in sec. 32, T. 25 S., R. 15 E., in November. An initial potential of 25 barrels per day was assigned the "Squirrel" sand at a depth of 1,173 to 1,178 feet in the discovery well. The **Gordon** and **Rose East** fields were officially named in 1956, but have been active since 1954. The Joe Phillips and others No. 1 Gordon well in sec. 13, T. 34 S., R. 15 E., is listed as the discovery well of the **Gordon** field. In January 1954, an initial potential of 1,500,000 cubic feet of gas per day was assigned the "Squirrel" sand at a depth of 1,080 to 1,096 feet. In August 1954, the St. Croix Oil Company and others found 22 barrels of oil per day from the "Bartlesville" sand at a depth of 1,109 to 1,124 feet in their No. 2 McGregor well, the discovery well of the **Rose East** field, in sec. 16, T. 26 S., R. 16 E. Additional data on the discovery wells of these new fields are given in Table 6.

The "Squirrel" sand at a depth of 1,068 to 1,074 feet in the Peters Drilling Company and others No. 1 Glade well in sec. 33, T. 23 S., R. 16 E., was named a new producing zone in the old **Vernon** field. The well, completed in September, was given an initial potential of 25 barrels per day. Data on this development are given in Table 7.

During 1956 the **Hoagland** and **Weide** fields were combined with the **Winterscheid** field, now designated the **Winterscheid** field. The **Neosho Falls** field was combined with the **Leroy** field (Coffey County), now called the **Neosho Falls-Leroy** field.

Four dry wildcat tests were drilled in Woodson County during 1956. The C. A. Black No. 1 Pemberton was located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 25 S., R. 15 E. It was drilled from an elevation of 999 feet above sea level, and the following tops were called: base of Kansas City, 711; Fort Scott limestone, 1,032; reworked Mississippian limestone, 1,408; and Mississippian limestone, 1,422 feet. Total depth was recorded as 1,472 feet. The John Hanna wildcat test on the Barnes lease in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$

sec. 30, T. 25 S., R. 16 E., reached the total depth of 1,370 feet before abandonment. The top of the Mississippian strata was called at 1,335 feet. The T.E.C. Drilling Company No. 1 Clauers well was located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 25 S., R. 16 E. The Mississippian rocks were encountered at 1,320 feet, and abandonment was at a total depth of 1,362 feet. The Sennett Oil Company No. 1 Allen test in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 26 S., R. 14 E., reached the top of the Mississippian rocks at 1,515 feet, and the total depth recorded was 1,532 feet.

Data on secondary recovery operations in the county are listed in Table 1. Oil production is listed in Table 65, gas in Table 66. Locations of areas from which oil was produced in 1956 and of dry wildcat tests are shown on Plate 1.

WYANDOTTE COUNTY

(Map Pl. 1)

The 1956 production: gas 1,688 thousand cubic feet. Two wells drilled in 1956 (estimated).

Developments during 1956.—It is estimated that 2 gas wells were completed in Wyandotte County during 1956. The reported gas production is from the **Roberts-Maywood** field, which extends into Leavenworth County. The county's gas production is listed in Table 66.

TABLE 65.—Oil production in Kansas during 1956

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.			
			during 1956	to end, 1956		Name	Depth	Thick- ness	Aver. grav.
ALLEN COUNTY									
Bronson-Xenia*	17-25-21E	2,560	224,730		236	2	"Bartlesville"	700	18
a		480	3,068						
Colony West* ('22)	15-23-18E	640	1,861		34		"Squirrel"	820	
a		340	1,487		7				
Davis-Bronson*	24-21E	80	640		5		"Bartlesville"	720	45
a		1,540	13,867		92				
b		1,630	40,743		97		"Bartlesville"	650	24
Elsmore Shoestring ('08)	5-26-21E				22		"Bartlesville"	775	20
Elsmore West ('11)	12-26-20E	160	2,936						
a		160	294						
b		320	498						
c									
Humboldt-Chanute*	26-18E				891	12	"Bartlesville"	850	
a		80	5,968						
b		12,200	257,618						
c		1,800	79,514						
d		400	6,084						
e		200	719						
f		200	266						
g		1,200	21,776						
Iola	24-18E				278	3	"Bartlesville"	850	
a		2,400	142,981						
b		240	5,641						
c		40	301						
d		40	785						
e		40	682						
f		40	163						
g		40	2,162						
h		120	828						
i		10	2,678						

Moran ('03)	25-20E	51	1	"Bartlesville"	820
a		80			17,618
b		40			509
c		40			260
d		160			1,801
Neosho Falls* ('28)	29-23-17E	Now called Neosho Falls-Leroy			
Neosho Falls-Leroy* ('05)	35-22-16E	13		"Squirrel" Mississippian	965 1,200
a		100			3,022
b		40			156
c		40			535
d		40			194
Seibert	5-26-20E	7		"Bartlesville"	680
a		400			1,367
b		80			804
Miscellaneous		40			142
Total Allen County		27,990			844,728
			18,507,201 recorded		1,736 18
			3+		
ANDERSON COUNTY					
Bush City Shoestring ('21)	28-20-21E	775	2	"Squirrel" "Bartlesville"	620 20 34
a		2,700			420,297
b		50			986
Centerville* ('20)	10-21-22E	900		"Bartlesville"	480 15
Colony-Welda ('16)	4-23-19E	120	79	"Weiser"	600
a		100	184 11	"Squirrel"	780
b		3,349			13,192
c		140			3,216
d		600			45,743
e		40			2,428
f		10			69
g		40			1,912
h		210			26,060
Colony West* ('22)	15-23-18E	1,100			54,677
Garnett Shoestring ('04)	32-20-20E	113	1	"Squirrel"	825
a		160			2,831
b		160		"Squirrel"	700 35 36
c		640	183 10	"Garnett"	800 33
d		320			2,971
e		40			2,520
					397

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducing abst., wells	Producing zone, ft.			Aver. grav.
		Area, acres	during 1956 to end, 1956		Name	Depth	Thick- ness	
Kincaid ('21) a b	10-23-21E	640 320	11,697 4,925	78	"Bartlesville"	750	12	
Selma ('29)	9-22-21E	320	12,501	28	"Bartlesville"	700	25	
Miscellaneous		200	751	6				
Total Anderson County		8,810	658,605	1,446				
BARBER COUNTY								
Amber Creek ('52)	36-30-12W	80	4,858	2	Mississippian	4,296		30
Amber Mills ('51)	15-30-12W		no report		Viola	4,480		
Bloom ('55)	23-32-12W	80	8,625	2	Mississippian	4,310	30	
					Simpson	4,372	3	
Now called Medicine Lodge-Boggs								
Boggs ('46)	17-33-12W							
Boggs Southwest ('55)	30-33-12W	1,000	10,146	14	Mississippian	4,456		
Brooks-Younger ('55)	23-32-13W	80	15,503	2	Mississippian	4,423	5	
Clara* ('48)	36-29-14W	40	2,900	1	Simpson	4,472		
Deerhead ('43)	22-32-15W	640	63,671	10	Viola	4,950	9	26
DeGeer ('48)	2-33-15W	640	246	16	Viola	5,176	10	40.18
Donald ('46)	33-31-15W	80	2,914	3	Mississippian	4,697		
Driftwood ('56)	1-34-13W							
Forsyth ('55)	17-32-12W	320	44,023	7	Mississippian	4,436	10	
Goemann ('55)	29-32-10W	80	1,949	2	Mississippian	4,433	7	
Gudeman ('54)	10-35-10W	40	2,288	1	Viola	5,152	10	
Hardtner ('54)	31-34-12W	700	54,774	31	Mississippian	4,782	6	
Highway ('56)	14-32-11W	40	5,591	1	Douglas	3,587	16	
Lake City ('37)	7-31-13W		no report		Viola	4,435		
					Simpson	4,530		
Landis ('55)	21-34-11W	40	1,117	1	Arbuckle	4,607	10	25
Little Bear Creek ('54)	12-32-14W	80	122	3	Mississippian	4,630	16	
					Douglas	3,808	16	
McGuire ('56)	24-32-11W	40	212	1	Viola	4,670	10	
					Mississippian	4,403	20	

Medicine Lodge-Boggs ('37)	13-33-13W	4,200	485,351	3,313,874	58	Marmaton Mississippian	4,664	18	37
Medicine Lodge North ('54)	25-32-13W	320	52,559	90,532	9	Misener	4,495	6	
Medicine Lodge Southwest ('54)	6-34-13W	80	115	115	2	Simpson	4,845		
Nippawalla ('51)	13-33-12W	80	93	246	2	Mississippian	4,806	13	
Platt ('56)	28-33-15W	40	803	803	1	Mississippian	4,480		
Rhodes ('49)	15-33-11W	5,700	945,745	3,393,951	132	Mississippian	4,889		
Salt Fork ('54)	11-35-15W	40	no runs	1,577	1	Mississippian	3,659	4	26.3
Sharon* ('55)	13-32-10W	320	21,928	28,659	4	Viola	4,791	21	25
Sharon Northwest ('56)	11-33-10W	40	350	350	1	Marmaton	4,803	10	
Skinner ('43)	29-31-14W	4,000	68,975	1,958,561	19	Mississippian	4,551	10	
Stumph ('52)	7-32-14W	120	9,427	60,628	3	Viola	4,982	38	30
Sun City ('41)	35-30-15W	640	14,304	1,573,305	7	Simpson	4,422	7	
Turkey Creek ('43)	20-30-15W	40	426	56,078	1	Simpson	4,963	26	
Turkey Creek North ('52)	17-30-15W	40	3,104	13,389	1	Lans.-K.C.	4,345	12	
Whelan ('34)	32-31-11W	8,000	102,439	3,270,085	27	Penn. congl.	4,438	27	
Whelan East ('54)	21-31-11W	40	31	31	1	"Chat"	4,541		
Whelan Southwest ('54)	11-32-12W	40	2,500	10,764	1	Douglas	4,355	11	
Whelan West ('55)	25-31-12W	120	6,504	12,241	4	Mississippian	3,746	8	
Pools or fields abandoned				3,270		Mississippian	4,229		
Total Barber County		27,840	1,934,933	16,054,738	372		4,284		
BARTON COUNTY									
Ainsworth South ('37)	10-17-13W	2,000	173,995	4,376,500	60	Lans.-K.C.	3,170		
Alefs ('52)	14-19-14W	80	1,222	47,050	2	Arbuckle	3,390	8	
Ameh ('51)	19-18-11W	80	2,198	41,646	2	Lans.-K.C.	3,334	8	
Ames ('43)	22-18-11W	1,000	78,886	1,696,786	29	Arbuckle	3,474	10	50
Ames Northwest ('47)	9-18-11W	40	3,429	45,770	1	Lans.-K.C.	3,103	6	40
Ash Creek* ('47)	31-20-15W		no report	471,716		Arbuckle	3,348		
						Lans.-K.C.	3,106		
						Arbuckle	3,312		
						Arbuckle	3,787		

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.		Aver. grav.	
		Area, acres	during 1956 to end, 1956		Name	Depth		
Axman ('49)	19-17-14W	160	16,102	160,197	6 1	Lans.-K.C. Arbuckle	3,136 3,400	11 43
Bailey ('56)	30-18-11W	40	767	767	1	Arbuckle	3,396	21
Barrett ('43)	36-16-14W	800	13,370	231,531	7	Lans.-K.C. Arbuckle	3,355 3,463	5 40
Bart-Staff* ('51)	4-21-14W	600	109,705	587,585	13	Lans.-K.C. Arbuckle	3,572 3,459	21 35
Batchman ('50)	19-20-12W	640	11,343	70,397	5 2	Arbuckle	2,885	6
Beaver ('34)	16-16-12W	2,400	70,625	3,915,500	48 1	Oread Toronto	2,938 3,348	5
Beaver North* ('37)	4-16-12W	400	15,162	709,805	9	Reagan	3,335	10.5
Beaver South ('45)	27-16-12W	1,800	171,834	959,596	34 5	Arbuckle Lans.-K.C. "Sooy"	3,316 3,154	39 42
Behrens ('44)	6-20-15W	640	14,714	620,201	10 6	Arbuckle	3,359	4
Behrens Northeast ('55)	29-19-15W	40	155	155	1	Arbuckle	3,719	39
Bergtal ('41)	22-20-15W		no report	2,664		Arbuckle	3,639	
Bergtal South ('51)	27-20-15W		no report	108		Arbuckle	3,675	6
Bernard ('50)	10-19-11W	320	24,749	283,364	11	Shawnee Lans.-K.C. Arbuckle	2,866 3,224	38 10
Bissel Point ('54)	10-19-13W	40	1,039	4,487	1	Lans.-K.C.	3,276	5
Bissel Point South ('56)	15-19-13W	40	1,685	1,685	1	Arbuckle	3,432	5
Blood Creek ('50)	9-18-13W		no report	2,077		Lans.-K.C.	3,078	8
Bloomer* ('36)	36-17-11W	1,200	211,243	11,469,461	58 1	Lans.-K.C. Arbuckle	3,044 3,257	43 43
Boyd ('42)	4-18-14W	3,900	637,824	7,767,382	134 6	Lans.-K.C. Arbuckle	3,177 3,438	12
Buckbee ('49)	14-20-12W	160	18,972	41,520	4	Precambrian	3,311	8
Buckbee South ('53)	23-20-12W	Combined with Buckbee Southwest	65,091	237,811	13	Arbuckle	3,352	12
Buckbee Southwest ('52)	15-20-12W	500	65,091	237,811	13	Arbuckle	3,373	40

Capitol View ('50)	9-17-14W	640	46,590	103,676	7	1	Lans.-K.C. Arbuckle	3,230 3,450	37
Carroll ('44)	21-17-14W	1,500	358,868	3,165,050	76	1	Lans.-K.C. Arbuckle	3,109 3,356	4 16
Carroll Southwest ('47)	32-17-14W	80	3,353	62,581	3		Lans.-K.C.	3,193	8
Chase-Silica* ('31)	32-19-9W	20,000	2,644,477	60,114,473	359	36	Lans.-K.C. Arbuckle	2,955 3,328	48
Cheyenne View ('49)	12-19-12W	2,600	315,917	3,238,981	111		Lans.-K.C. Penn. congl. Arbuckle	3,152 3,393 3,390	6 17
Clafin ('54)	3-18-11W	40	1,893	6,284	1		Lans.-K.C.	3,044	4
Clafin Northeast ('55)	3-18-11W	60	3,294	14,535	3		Lans.-K.C.	3,040	21
Clarence ('53)	35-19-15W	40	1,434	5,661	1		Lans.-K.C.	3,291	6
Clarence Northwest ('54)	35-19-15W	40	9,566	28,353	1		Reagan	3,534	12
Davidson* ('30)	4-16-11W	40	3,256	256,632	1	1	Precambrian Lans.-K.C. "Sooy"	3,531 3,016 3,317	9
Dundee ('45)	29-20-14W		no report	13,745			Arbuckle	3,314	
Eberhardt ('35)	14-19-11W	320	10,074	471,523	6	1	Arbuckle	3,507	3
Ellinwood North ('37)	33-19-11W	800	190,014	838,079	32	1	Lans.-K.C. Arbuckle	3,194 3,090	8
Esfeld ('47)	15-16-11W		no report	7,875		1	Arbuckle	3,328	
Ess ('53)	13-19-14W	80	5,273	30,226	2		Lans.-K.C.	3,343	38
Fleske ('53)	3-20-15W	40	760	4,494	1		Lans.-K.C.	3,326	9
Fort Zarah ('50)	30-19-12W	3,200	538,219	3,938,225	106	4	Lans.-K.C. Arbuckle	3,470 3,157	37 6
Fort Zarah North ('51)	19-19-12W	200	8,054	106,607	4		Lans.-K.C. Arbuckle	3,384 3,208	37
Frank ('52)	7-19-12W	80	no runs	14,523	2		Lans.-K.C.	3,436	6
Fransen ('49)	6-20-12W		no report	295		1	Lans.-K.C.	3,322	
Great Bend Airport ('52)	26-19-14W	640	38,133	366,324	15	1	Lans.-K.C. Arbuckle	3,320 3,473	4
Great Bend East ('51)	34-19-13W		no report	1,153			Lans.-K.C.	3,234	
Great Bend Northwest ('55)	24-19-14W	120	12,026	13,123	3	1	Lans.-K.C.	3,315	13
Great Bend Southwest ('52)	25-19-14W	180	6,251	82,503	3	1	Arbuckle	3,460	5
Great Bend Townsite ('53)	21-19-13W	900	106,645	454,236	20	3	Lans.-K.C.	3,322	30
Great Bend West ('51)	23-19-14W	40	99,464	67,703	16		Lans.-K.C. Arbuckle	3,196 3,441	4
Hagan ('38)	20-20-11W	340	1,982	470,209	1	8	Lans.-K.C. Arbuckle	3,332 3,323	5 4

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.		Aver. grav.
			during 1956	to end, 1956		Name	Depth	
Hall-Gurney* ('31)	30-14-13W	600	173,817	1,972,234	34	Shawnee Lans.-K.C. "Sooy" Arbuckle	3,066	
Hammeke ('50)	17-19-11W	160	8,629	106,612	4	1 Lans.-K.C.	3,065	32
Hammeke Southeast ('50)	17-19-11W	80	3,933	74,575	2	Lans.-K.C.	3,089	7
Hammer ('40)	35-19-12W	1,000	222,542	1,541,328	38	1 Lans.-K.C.	3,088	8
Hampel ('53)	34-17-15W		no report	none		Arbuckle	3,348	
Harrison ('42)	18-20-13W		no report	4,160	1	Arbuckle	3,544	
Hawkins ('52)	3-19-13W	320	13,632	83,120	6	1 Lans.-K.C.	3,520	16
						Arbuckle	3,158	40
						Arbuckle	3,393	
Hawkins Northwest ('53)	33-18-13W	40	no runs	4,615	1	Arbuckle	3,428	6
Heizer ('35)	16-19-14W	40	1,820	54,140	1	Lans.-K.C.	3,228	2
Heizer North ('55)	9-19-14W	40	771	981	1	Arbuckle	3,555	8
Heizer Northeast ('52)	15-19-14W	40	no runs	7,178	1	Lans.-K.C.	3,353	14
Heizer Northwest ('55)	5-19-14W	80	3,491	4,755	2	1 Lans.-K.C.	3,366	4
Heizer Southwest ('52)	21-19-14W	320	12,991	67,502	4	Lans.-K.C.	3,379	39
						Arbuckle	3,552	
Heizer West ('55)	17-19-14W	160	35,333	53,299	7	Lans.-K.C.	3,237	11
						Arbuckle	3,546	
Herras ('55)	33-17-13W	280	75,165	99,993	13	Arbuckle	3,343	10
Hiss ('36)	31-20-13W	1,000	84,282	865,868	15	2 Lans.-K.C.	3,270	5
Hiss East ('52)	33-20-13W	80	4,013	46,330	2	Lans.-K.C.	3,383	18
						Arbuckle	3,549	
Hiss South ('50)	31-20-13W	80	7,679	102,178	3	Arbuckle	3,542	31
Hiss Southeast ('48)	32-20-13W	160	10,516	173,654	6	1 Lans.-K.C.	3,414	36
						Arbuckle	3,545	
Hoisington ('38)	21-17-13W	640	54,087	1,518,909	34	1 Lans.-K.C.	3,222	4
						Arbuckle	3,440	37
Hoisington East ('54)	23-17-13W	160	9,205	68,744	1	Lans.-K.C.	3,140	5
						Arbuckle	3,338	
Hoisington North ('56)	16-17-13W	40	19,072	4,200	4	Arbuckle	3,412	3
Hoisington Southwest ('54)	20-17-13W	80	4,200	16,307	1	Lans.-K.C.	3,282	
					2	Arbuckle	3,363	21

Homestead ('48)	22-18-13W	no report	12,720	Arbuckle	3,310	
Homestead West ('55)	21-18-13W	40 614	2,511	Arbuckle	3,300	10
Jettie ('54)	27-20-14W	40 16,275	34,691	Simpson	3,534	6
Kimpler ('55)	31-18-11W	160 9,907	49,594	Lans.-K.C.	3,184	3
		20,173		Arbuckle	3,413	6
Klepper ('51)	2-19-11W	320 16,271	163,348	Lans.-K.C.	3,220	38
Klug ('46)	28-17-13W	40 3,377	50,313	Arbuckle	3,414	7
Klug North ('48)	27-17-13W	120 14,838	152,162	Arbuckle	3,377	10
Klug West ('56)	33-17-13W	80 1,737	1,737	Lans.-K.C.	3,149	28
Koopman ('53)	23-19-13W	80 3,626	24,095	Lans.-K.C.	3,220	3
Kowalsky* ('41)	32-20-11W	1,400 258,160	1,624,255	Arbuckle	3,398	11
				Lans.-K.C.	3,185	4
Kraft-Prusa* ('37)	10-17-11W	26,100 3,665,740	83,424,075	Arbuckle	3,378	49
				Shawnee	2,885	
				Douglas	2,997	
				Lans.-K.C.	3,160	
				Gorham	3,335	
				Arbuckle	3,231	
				Reagan	3,310	43
				Precambrian		
Kraft-Prusa Northeast ('41)	36-16-11W	240 17,807	396,518	Lans.-K.C.	3,250	8
				Arbuckle	3,351	
Lake Barton ('48)	21-18-13W	no report	6,861	Arbuckle	3,372	
Lanternman ('34)	15-19-11W	900 12,567	965,142	Lans.-K.C.	3,109	3
				Arbuckle	3,235	35
Larkin ('51)	10-17-14W	160 7,815	107,084	Lans.-K.C.	3,280	6
Leoville ('50)	7-17-14W	700 119,186	890,609	Lans.-K.C.	3,267	38
Liberty ('52)	23-20-14W	40 969	9,414	Arbuckle	3,464	
McCauley ('49)	34-17-13W	40 1,371	18,532	Lans.-K.C.	3,341	5
				Lans.-K.C.	3,276	4
Mary Ida* ('50)	31-18-10W	400 37,558	416,085	Arbuckle	3,366	
				Lans.-K.C.	3,033	
Mary Ida North ('52)	25-18-11W	40 2,779	12,086	Arbuckle	3,272	5
Meadowside* ('49)	24-18-11W	640 9,442	369,850	Arbuckle	3,304	7
				Lans.-K.C.	3,079	12
Merten Northeast ('46)	36-18-15W	no report	17,637	Arbuckle	3,234	
Merten Southeast ('49)	12-19-15W	no report	26,438	Reagan	3,494	
Moses ('53)	13-20-14W	40 723	5,444	Lans.-K.C.	3,322	12
Nuss* ('55)	5-16-14W	300 15,046	20,953	Lans.-K.C.	3,183	4
				Arbuckle	3,387	8

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abds., wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Odin ('48)	3-17-12W	700	49,445	245,017	9	Arbuckle	3,321	2	31
Otis-Albert* ('35)	30-18-15W	11,000	240,465	5,722,188	121	Reagan	3,601		
Pawnee Rock* ('36)	13-20-16W	40	3,383	231,486	1	Arbuckle	3,832	16	
Pawnee Rock East ('41)	17-20-15W		no report	26,408		Arbuckle	3,814		
Peach ('52)	25-16-14W		no report	1,810		Lans.-K.C.	3,373		
Pendergast ('53)	27-19-15W	40	737	6,394	1	Lans.-K.C.	3,397	5	38
						Arbuckle	3,596		
Prairie View ('50)	20-19-11W	360	23,182	306,298	8	Lans.-K.C.	3,080	36	40
Pritchard* ('44)	34-20-14W		233,257	2,806,681	42	Lans.-K.C.	3,253	8	35
						Marmaton	3,625		
						Simpson			
						Arbuckle	3,455	3	
Pritchard Southeast* ('53)	2-21-14W		Combined with Pritchard						
Putnam ('51)	7-17-13W	160	3,842	67,734	4	Lans.-K.C.	3,286	7	39
Putnam West ('51)	1-17-14W	80	8,047	48,522	3	Lans.-K.C.	3,225	8	38
Red Brick ('53)	23-19-13W	600	13,742	23,234	5	Lans.-K.C.	3,240	7	
						Penn. congl.	3,414	2	
						Arbuckle	3,448		
Redwing ('50)	31-17-12W	320	20,785	193,430	9	Lans.-K.C.	3,083	7	40
						Arbuckle	3,335		
Redwing East ('55)	33-17-12W	360	5,602	88,013	2	Lans.-K.C.	3,120	5	
			77,896		10	Arbuckle	3,352	2	
Redwing South ('52)	6-18-12W	40	93	10,575	1	Arbuckle	3,325	8	40
Reif South ('50)	31-16-12W	120	6,486	42,341	4	Lans.-K.C.	3,172	5	38
Reimer ('56)	25-17-15W	40	4,871	4,871	1	Lans.-K.C.	3,357	4	
Rick* ('36)	1-19-11W	640	35,497	1,166,519	16	Lans.-K.C.	3,106		41
						Arbuckle	3,355		
Roesler* ('43)	14-18-11W	1,400	207,770	1,258,478	32	Lans.-K.C.	3,208		
						Arbuckle	3,291	7	
Rolling Green ('48)	36-20-13W		no report	16,333		Lans.-K.C.	3,257		
Rolling Green East ('49)	30-20-12W	320	19,888	40,434	7	Arbuckle	3,491	6	
Rowland ('49)	32-17-13W		no report	10,560		Arbuckle	3,323		
Rusco ('50)	8-19-12W		no report	7,582		Arbuckle	3,417		

St. Peter ('44)	5-19-11W	1,280	334,238	1,256,263	47	2	Lans.-K.C. Arbuckle	3,121 3,387	3
St. Peter East ('56)	34-18-11W	160	8,773	8,773	4		Lans.-K.C.	3,116	14
Sandford ('51)	25-17-14W	120	4,621	44,327	2		Arbuckle	3,375	19
Sandrock ('51)	21-20-13W	640	72,454	340,402	12		Lans.-K.C.	3,412	8
Sandrock Southeast ('54)	34-20-13W	40	no report	2,043	1		Lans.-K.C.	3,262	18
Silica South* ('35)	24-20-11W	2,500	926,014	25,500,471	140	2	Douglas	2,950	
							Lans.-K.C.	3,035	
South Bend ('54)	9-20-13W	160	37,263	71,922	8	3	Arbuckle	3,268	
Sunflower ('49)	8-17-12W		no report	1,969			Lans.-K.C.	3,317	8
Sunnyside ('53)	33-20-11W		no report	none			Arbuckle	3,376	48
Sunny Valley ('49)	7-20-12W	160	11,059	321,790	5		Lans.-K.C.	3,116	
Sunny Valley Northeast ('54)	6-20-12W	200	37,083	104,152	7	1	Lans.-K.C.	3,230	9
Sunny Valley Southwest ('54)	23-20-13W	40	4,858	11,710	1		Arbuckle	3,422	12
							Lans.-K.C.	3,336	5
Templing ('55)	23-16-14W	320	25,147	23,306	4		Lans.-K.C.	3,332	8
Trapp* ('36)	23-15-14W	12,860	1,196,338	51,555,669	361	16	Arbuckle	3,402	
							Shawnee	2,889	
							Douglas	2,966	
Underwood ('50)	15-17-13W		no report	9,904			Lans.-K.C.	3,062	39
							Arbuckle	3,252	
							Lans.-K.C.	3,173	
Unruh ('45)	24-20-15W	640	8,135	205,630	9		Arbuckle	3,342	
Walnut Creek ('52)	8-19-13W		no report	6,271			Lans.-K.C.	3,641	3
Wearne ('51)	4-20-12W		no report	6,126		1	Arbuckle	3,347	7
Weikert ('53)	36-18-12W	120	7,705	46,978	3		Lans.-K.C.	3,384	
Werner-Robl ('51)	30-19-11W	640	29,863	245,902	8		Lans.-K.C.	3,169	7
							Arbuckle	3,106	16
							Lans.-K.C.	3,364	38
Workman ('44)	33-20-12W	200	98,901	293,340	8		Arbuckle	3,407	3
Workman North ('56)	16-20-12W	320	12,509	12,509	5		Lans.-K.C.	3,238	11
Workman Northwest ('56)	21-20-12W	40	3,867	3,867	1		Arbuckle	3,442	6
Workman West ('56)	28-20-12W	40	4,336	4,336	1		Lans.-K.C.	3,167	6
Zimmer ('53)	28-19-15W		no report	none			Arbuckle	3,434	16
Pools or fields abandoned				160,852				3,631	
Total Barton County		122,840	14,913,934	285,916,039	3,242	180			

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abds., wells 1956	Producing zone, ft.		Thick- ness	Aver. grav.
			during 1956	to end, 1956		Name	Depth		
BOURBON COUNTY									
Bronson-Xenia*	17-25-21E				56	"Bartlesville"	665		
a		640	2,967						
b		40	271						
c		640	5,586						
Davis-Bronson*	23-21E				50	"Bartlesville"	560		
a		320	3,283						
b		10	306						
c		640	5,929						
Hepler* ('17)	27-22E				35	"Bartlesville"			
a		440	16,305						
b		40	433						
Total Bourbon County		2,770	35,080	868,308 recorded	141			0	
BROWN COUNTY									
Livengood ('44)	3-1-15E	40	1,434	89,170 recorded	1	"Hunton"	2,580		
BUTLER COUNTY									
Allen-Robinson ('43)	1-26-3E	600	14,898		28	Mississippian	2,700		
Augusta ('14)	21-28-4E			38,895,522	182	Lansing	1,700		
a		40	1,440			Kansas City	2,000		
b		6,200	356,820			Marmaton	2,200		
						Ordovician	2,445		
						Arbuckle	2,600		
Augusta North ('14)	28-27-4E	1,280	107,427	15,044,312	68	Lansing	1,650		34
						Kansas City	1,950		33
						Ordovician	2,380		
						Arbuckle	2,410		
Bare ('52)	31-28-5E	40	144	3,110	1	"Bartlesville"	2,778		11
Bausinger ('29)	24-27-3E	200	5,205		3	Simpson	3,050		

Benton ('25)	26-3E	40	1,622	2	"Chat"	2,965	
a		40	1,740				
b							
Blankenship* ('21)	26-8E	1,200	237,679	98	"Bartlesville"	2,650	50
a		40	660				
b		160	6,865				
c							
Brandt-Sensenbaugh ('25)	22-28-7E	1,280	33,505	37	"Chat"	2,692	
a		120	3,050				
b							
Brickley ('51)	2-27-7E	320	4,830	6	"Chat"	2,692	19
Brickley Southwest ('52)	3-27-7E	160	867	1	"Bartlesville"	2,699	33
Butwick* ('49)	7-26-3E	160	2,846	1	Mississippian	2,860	
Butwick Northeast ('49)	7-26-3E		no report		"Chat"	2,820	
Combs* ('47)	5-30-5E	320	22,522	6	"Bartlesville"	2,820	
					Mississippian	2,850	
Combs Northeast ('48)	27-29-5E	160	3,457	3	"Bartlesville"	2,810	
DeGraff ('55)	8-24-5E	10	765	1	"Burgess"	2,440	
DeMoss	8-28-7E	500	17,703	22	"Bartlesville"	2,650	
				1	"Burgess"	2,680	
Dixon ('46)	12-27-6E	40	1,477	1	Kansas City	2,160	
					Mississippian		
Douglass ('16)	21-29-4E	80	2,270	8	Lans.-K.C.	1,790	41
a		60	1,308		Ordovician	3,000	
b		110	4,589				
c							
Eckel ('40)	7-27-7E	40	2,041	1	Lans.-K.C.	2,190	
Edgecomb ('51)	9-25-3E	160	4,075	2	Mississippian	2,759	
Edmonds	31-22-4E	20	1,221	1	Mississippian	2,471	
Elbing* ('18)	18-23-4E			73	Kansas City	2,120	
a		600	36,289		Mississippian	2,400	35
b		1,100	269,886		Viola	2,530	
					Lans.-K.C.	1,799	
Elbing East ('50)	27-23-4E	80	1,772	1	Penn. sand	630	37
El Dorado ('15)	29-25-5E	23,000	4,358,743	1,746	Lansing	1,700	37
					Kansas City	2,000	36
					Viola	2,500	37
					Simpson	2,510	37
					Wilcox	2,600	37
					Arbuckle	2,550	38

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.			Pro- ducing wells 1956	Producing zone, ft.			Thick- ness
		Area, acres	during 1956	to end, 1956		Name	Depth	Aver. grav.	
Ferrell ('39)	28-28-8E	700	47,050	1,462,748	34	Mississippian	2,647		
Four Mile Creek ('51)	5-28-3E	180	24,857	204,377	6	Simpson	3,069		3
Fox-Bush ('17)	24-29-5E	4,800	718,521	4,928,793	124	"Bartlesville"	2,730		40
Fox-Bush West ('53)	15-29-5E	200	3,307	22,837	3	"Bartlesville"	2,837		11
Garden ('25)	32-26-6E	300	7,728		9	"Bartlesville"	2,760		
Guyot ('48)	5-29-5E		no report	11,890		"Bartlesville"	2,800		
Hannah ('36)	29-8E	160	3,961	29,173	3	Kansas City	2,120		
Haverhill ('27)	34-27-5E	860	93,781	4,590,118	66	"Bartlesville"	2,700		
Hazlett	24-5E	1,600	141,015	1,516,697	80	Mississippian	2,480		
Hickory Creek ('46)	11-28-5E	320	22,034	562,203	25	"Bartlesville"	2,685		
						Mississippian	2,700		
Joseph ('47)	18-24-5E		no report	4,364		"Chat"	2,491		
Keighley ('25)	22-27-7E	820	22,260		18	"Bartlesville"	2,650		
						Simpson	3,148		
Kramer-Stern ('26)	3-28-6E	5,150	189,659		69	Lans.-K.C.			
						Simpson	3,000		
						Arbuckle	3,040		
Leon ('22)	19-27-6E	640	29,857	3,577,995	22	"Chat"	2,660		
					2	"Bartlesville"			
Long ('49)	15-26-7E	80	1,844	21,063	1	Viola	3,050		
Long Northeast ('53)	11-26-7E	100	2,052	7,950	1	Mississippian	2,780		
Lucas ('46)	6-27-8E	480	9,484		7	Mississippian	2,753		5
McCann ('33)	7-25-3E	20	1,286	2,060	1	"Burgess"	2,680		
McCullough ('29)	1-28-6E		no report	491,566		Simpson	2,765		
Mt. Tabor ('53)	36-29-4E	440	10,392	102,151	10	"Bartlesville"	3,169		8
Muddy Creek ('50)	13-29-4E	1,280	39,021	572,159	33	"Bartlesville"	2,757		
Murdoch ('52)	23-25-3E	40	1,915	5,907	1	Mississippian	2,813		10
Parsley ('49)	3-26-3E	160	5,023	114,864	5	Mississippian	2,709		
Pierce ('26)	28-25-4E	840	62,637		32	"Chat"	2,550		
Pierce Northwest ('54)	21-25-4E	320	13,265	48,716	8	Mississippian	2,569		14
Pierce West ('51)	20-25-4E	80	2,395	26,248	2	Mississippian	2,515		29
Pontiac Southwest ('56)	23-26-6E	40	161		1				

Potwin ('17)	31-24-4E	3,200	131,416	8,341,061	111	3	Kansas City	2,550
Reynolds-Schaffer ('22)	9-27-6E	3,200	140,142		71	1	Mississippi	2,660
Rombold ('49)	4-26-3E	40	4,301	44,289	1		Kansas City	2,375
Salter ('46)	23-28-3E	500	65,976	1,408,660	26		Mississippi	2,780
Seward ('26)	27-27-7E	400	51,391	1,177,107	16		Viola	3,141
Shinn ('46)	19-29-8E	320	83,516	764,811	15	1	Simpson	2,770
Shinn Northeast ('56)	17-29-8E	120	9,639		2		"Bartlesville"	3,000
Smock-Sluss ('17)	2-27-5E	1,800	95,365		44	2	Mississippi	2,650
a		80	1,361				Mississippi	2,766
b		480	23,623				"Bartlesville"	2,700
c		1,900	150,976				Viola	3,000
Snowden-McSweeney ('30)	34-28-6E				90		Lans.-K.C.	2,060
Steinhoff ('26)	28-29-6E	160	7,091				"Peru"	2,404
Towanda ('48)	5-26-4E	400	276,825		2		"Bartlesville"	2,810
Whitewater ('49)	32-25-4E	320	32,345	2,225,694	33		Mississippi	2,833
Whitewater North ('51)	29-23-4E		no report		12	1	Mississippi	2,903
Young ('20)	27-26-7E	1,100	68,104	365,008	46		Mississippi	2,400
a		640	14,148	6,135			Viola	2,460
b			20,713				Viola	2,625
Miscellaneous							Viola	2,700
Total Butler County		72,430	8,138,153	413,813,291	3,322	93	Mississippi	2,650
				recorded				
CHASE COUNTY								
Atyeo* ('25)	30-21-10E			Now called Atyeo-Pixlee				
Atyeo-Pixlee* ('23)	7-22-10E	180	8,344		3		"Bartlesville"	2,250
Teeter* ('20)	16-23-9E	640	23,900		19		"Bartlesville"	2,500
Total Chase County		820	32,244	302,808	22			
				recorded				
CHAUTAUQUA COUNTY								
Berlin	32-11E	40	7,754		1		Marmaton	1,780
Borroum ('26)	20-34-9E	200	6,250		7			

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.		Aver. grav.
		Area, acres	during 1956 to end, 1956		Name	Depth	
Elgin	34-10E	900	5,406	204	"Peru"	1,520	
a		1,000	26,291				
b		100	2,205				
c		100	305				
d		100	760				
e		600	9,051				
f		100	953				
Elk City	32-13E	100	953	3	Burgess	1,360	
Frazier	33-13E	480	3,196	7	"Peru"	1,520	
Hale-Inge* ('07)	32-12E			67	"Peru"	1,160	
a		100	145				
b		200	1,454				
c		2,000	31,273				
Hewins	34-10E	100	14,310				
Kingston ('26)	18-32-11E	80	50	3	"Chat"	1,850	
				2	Arbuckle	2,176	
					Mississippian	2,000	
Landon-Floyd ('36)	23-32-10E	700	32,954	26			
Leniton	33-10E	3,000	112,379	64	1	Peru	
Leonard	34-9E	40	914	2			
Lowe	34-10E	10	612	1	Peru		
McAllister ('25)	28-32-10E	80	6,370	2	Arbuckle	2,280	
McGlasson ('47)	11-33-9E	10	72	1			
Malone	18-32-10E	600	20,108	8	Arbuckle	2,340	
Niotaze	34-13E			56	"Redd"	690	
a		180	1,244		"Peru"	825	
b		1,500	18,328				
Oliver ('35)	32-11E	900	14,196	13	Arbuckle		
				2	Marmaton		
Peru-Sedan ('00)	34-11E			1,677	"Peru"	1,200	25
a		600	9,863		Mississippian	2,000	
b		600	19,478				
c		180	4,177				
d		4,500	75,624				
e		14,000	399,072				
f		640	2,142				
g		800	13,376				
h		700	18,220				

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TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducting wells 1956	Producing zone, ft.		
		Area, acres	during 1956 to end, 1956		Name	Depth	Thick- ness Aver. grav.
Leroy ('05) - Leroy North a	35-22-16E 22-16E	320	Now called Neosho Falls-Leroy 7,493	17	"Squirrel" "Squirrel"	965	
b		160	868				
Neosho Falls-Leroy* ('05)	35-22-16E	3,000	64,734	152	"Squirrel"	965	
a		10	521				
b		40	4,681				
c		80	762	2	"Squirrel"		
"Parmely" Van Noy ('17)	7-23-15E		Combined with Winterscheid		"Peru" Mississippian	1,170	12
				71	"Bartlesville"	1,540	16
Virgil North* ('20)	22-23-13E	1,200	38,997		Mississippian	1,585	
Winterscheid*	23-14E	1,280	18,409	35	Mississippian	1,838	
					"Peru"	1,170	
					"Bartlesville"	1,630	
					Mississippian	1,750	
Miscellaneous		20	69	1+			
Total Coffey County		7,230	161,837	311			
			1,948,137	16+			
COMANCHE COUNTY							
Mule Creek ('55)	5-31-18W	40	3,229	1	Mississippian	5,066	5
Robbins Ranch ('53)	23-31-16W	80	2,390	2	Mississippian	4,915	
Total Comanche County		120	5,619	3			
COWLEY COUNTY							
Albright ('56)	3-34-5E	600	30,877	13	Mississippian	3,126	10
Albright North ('56)	34-33-5E		4,422	3	Mississippian	3,116	8
a		10	49				
b		100	4,373				
Arkansas City Southwest ('54)	35-34-3E		no report	402	"Hoover"	1,981	6
Bergkamp ('52)	6-35-4E	620	54,206	24	"Bartlesville"	3,202	23

Bergkamp Northwest ('52)	6-35-4E	no report	619	11	4	"Bartlesville"	3,208	3
Biddle ('22)	7-32-5E	300	10,525			Kansas City	2,000	20
Biddle Northwest ('56)	1-32-4E	400	47,013	15		Layton	2,300	
Bogner ('52)	24-31-5E		47,013			"Bartlesville"	2,878	14
Box ('48)	28-30-7E	240	1,450			Mississippian	2,999	54
Brandenburg ('55)	3-35-3E	40	215,000	11		Mississippian	2,840	15
Brown ('22)	13-31-7E		9,984	1		Simpson	3,664	7
Bruce ('50)	9-30-4E	40	246,000			Kansas City	2,100	
Burden ('26)	31-31-6E	1,500	43,307	2		Arbuckle	3,306	
			71,680	60		"Layton"		40
Burden East ('53)	33-31-6E		Combined with Burden			"Bartlesville"	2,900	35
Burden Township ('54)	34-31-6E		no report			"Layton"	2,134	39
Cabin Valley ('52)	31-33-6E	600	2,898			"Layton"	2,212	10
Cambridge ('56)	33-31-7E		660,631	40	1	"Layton"	2,188	9
Canfield ('52)	13-34-3E	900	none			"Layton"	2,041	3
			19,848	17	2	"Layton"	2,651	4
			200,574			"Bartlesville"	3,375	
Cedarvale ('53)	9-34-8E	20				Lans.-K.C.	2,839	
Centennial ('53)	12-33-3E		2,168	1	1	Mississippian	2,365	10
Centennial North ('53)	1-33-3E	20	102			"Bartlesville"	3,267	4
Church ('54)	13-31-6E	160	no report	1	1	"Bartlesville"	3,256	4
Churchill Northeast ('55)	18-31-3E	30	550	2	1	Mississippian	2,935	12
Clark ('14)	6-31-4E	380	2,752	2	1	Kansas City	2,420	
Clover	31-7E		5,621	21		"Bartlesville"	2,840	39
			102,807			Kansas City	2,200	
			no report			Mississippian	2,800	
Combs* ('47)	5-30-5E	400	20,574			"Bartlesville"	2,823	20
			80,183	16		Mississippian	2,850	
Copeland ('52)	5-35-4E	20	3,841			Mississippian	3,211	13
Couch ('37)	13-30-5E	1,500	7,316	1	1	"Bartlesville"	2,800	15
Countryman ('25)	4-33-7E	900	11,758	2	1	"Layton"	1,950	12
			6,375	2		Mississippian	2,870	
David ('35)	35-30-4E	2,100	6,375	21		"Bartlesville"	2,900	40
			20,574			Arbuckle	3,463	
Deichman ('41)	24-31-4E	600	499,896			"Bartlesville"	2,900	35
				30	1	Mississippian	3,000	
Dexter ('14)	33-6E	20	685	1		Mississippian	2,750	
Doane ('47)	36-33-6E		2,297,453	75	1	Mississippian	2,878	
			85,499	22	1	Arbuckle	3,140	
Donelson ('55)	21-34-7E	20	3,373,009	165	3	Kansas City	2,610	
Dunbar	30-5E	20	496,539			Lans.-K.C.		
			11,573	30	1			
			1,712	1				
			no report					
			1,401	1				
			2,032	1				

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abd., wells 1956	Producing zone, ft.		Aver. grav.
			during 1956	to end, 1956		Depth	Thick- ness	
Dutch Creek ('52)	35-31-4E		no report	486		2,924	14	
Eastman ('24)	5-31-6E	800	60,321		34	2,890	20	37
Elrod	4-32-5E	20	4,717		1	2,411		
Enterprise Northeast ('52)	35-33-3E	160	4,332	38,851	3	3,335	12	
Enterprise Southwest ('53)	3-34-3E	20	998	5,121	1	3,360	10	
Estes ('54)	12-32-6E	800	137,432	150,479	39	2,190	13	
Falls City ('16)	35-7E		no report	1,272,687	1	2,000	112	
Falls City Northwest ('56)	11-35-6E		no report	none		3,055	16	
Falls City West ('55)	13-35-6E	20	166	480	1	2,906		
Ferguson Northwest ('50)	16-30-8E	160	4,392	35,195	3	2,200		
Ferguson West ('34)	21-30-8E	80	669		3	2,180		
Frog Hollow ('37)	20-32-5E	640	104,160	4,730,336	45	3,000	20	
Frog Hollow East ('41)	15-32-5E	700	29,040	316,066	15	3,000	8	
Geuda Springs	5-34-3E	640	139,422	1,305,929	68	3,077	20	
Gibson ('41)	29-34-3E	1,400	393,323	2,477,331	84	3,300	14	
						3,345	25	
						2,984	2	
						3,350		
						3,400	6	
						3,774		
Graham ('24)	3-33-3E	300	9,086	2,816,563	3	3,780	11	
						2,550	15	
						3,518	5	
Grand Summit* ('26)	4-31-8E	20	436		6	2,000	19	
Grouse Creek ('51)	16-30-7E	160	9,601	22,861	4	2,890		
Hackney ('56)	19-33-4E	20	2,027	2,027	1	3,246	12	
Harvey ('52)	23-34-3E	1,500	76,081	1,044,818	61	2,574	18	
						3,278		
Henderson ('42)	26-32-3E	80	599	134,484	2	2,600	9	
Hittie ('26)	28-31-4E	900	90,207	9,523,428	28	3,419	20	
						2,400		
						3,280		
Kanok ('56)	15-35-5E	120	17,955	17,955	3	3,172	4	
McKay ('51)	17-35-4E	640	41,549	381,290	19	3,314		
Mansur ('49)	25-31-6E	360	6,585	94,888	8	2,170	16	

Murphy* ('33)	7-35-3E	1,000	147,425	40	"Bartlesville"	3,450	10
Nigger Creek ('51)	22-34-3E	20	1,077	1	"Chat"	3,500	
Otto ('27)	25-34-6E	40	1,216	5	"Bartlesville"	3,281	50
a		80	1,753		"Chat"	3,017	
Posey ('56)	21-33-4E	120	13,085	3	Mississippian	3,164	14
"Priest"	7-33-6E	no report	98				
Pudden	16-35-4E	20	854	1	Lans.-K.C.	2,332	
Quarry ('54)	28-34-5E	320	5,445	3	"Cleveland"	2,684	18
Rahn ('39)	13-34-5E	900	264,989	43	"Bartlesville"	2,900	30
a		10	129				
b		80	1,880	4	"Bartlesville"	2,902	
Rahn Northeast ('49)	27-33-6E	no report	70,320	3	"Bartlesville"	3,019	
Rahn Southwest ('43)	28-34-5E	no report	4,591	1	"Burgess"	3,200	50
Rainbow Bend* ('23)	20-33-3E	2,200	291,019	41	Arbuckle	3,550	
Rainbow Bend Northeast ('45)	15-33-3E	180	23,148	6	"Bartlesville"	3,213	50
Rainbow Bend Southwest ('54)	31-33-3E	40	1,559	1	Mississippian	3,284	16
Rainbow Bend West*	19-33-3E	Combined with Rainbow Bend	5,857		Mississippian	3,356	18
Rauckman ('56)	18-34-3E	160	16,331	4	"Burgess"	3,200	50
Rippe ('56)	14-35-3E	20	1,153		Arbuckle	3,550	
Rock ('23)	15-30-4E	2,500	320,182	1	"Bartlesville"	3,358	6
Rock North ('37)	3-30-4E	240	19,704	67	"Bartlesville"	3,418	6
School Creek ('47)	15-32-7E	no report	27,677	5	"Bartlesville"	2,800	30
School Creek North ('53)	10-32-7E	640	307,727	37	"Bartlesville"	2,800	
Seacat ('44)	26-33-4E	300	8,207	5	"Layton"	2,114	6
Silver Creek ('53)	12-32-5E	Combined with Frog Hollow East	56,293		Mississippian	3,100	
Slick-Carson ('24)	19-32-3E	240	29,726	15	"Bartlesville"	3,050	8
Smith ('17)	31-3E	160	12,201	4	"Layton"	2,600	
State ('26)	15-32-4E	750	31,033	13	Arbuckle	3,150	
Stayton ('49)	32-32-4E	640	8,527	8	"Bartlesville"	3,450	12
Stayton South ('53)	5-33-4E	40	3,488	1	"Bartlesville"	3,050	
Thurlow ('27)	8-33-3E	310	4,970	2	"Layton"	2,400	
Trees ('35)	19-30-4E	700	18,371	7	Arbuckle	3,300	
Turner ('37)	30-32-6E	40	2,324	1	"Bartlesville"	3,100	8
Turner North ('48)	18-32-6E	no report	292,774	25	"Bartlesville"	3,165	23
			469	2	Simpson	3,500	5
					"Bartlesville"	2,875	25
					"Layton"	2,232	15
					"Layton"		

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Area, acres	Pro- Wells		Producing zone, ft.		Aver. grav.
		during 1956	to end, 1956		during abd., 1956	1956	Name	Depth	
Turner West ('52)	25-32-5E	20	1,115	8,234	1	1	Mississippian	3,054	
Udall	30-3E	160	8,586		3	3	Arbuckle	2,850	
Walnut Bend	11-34-4E	120	3,044		2	2			
Walnut Bend North ('56)	36-33-4E	20	157	157	1	1	Mississippian	3,188	8
Weathered ('35)	28-31-3E	640	49,523	2,870,767	24	1	"Stalnaker"	2,080	15
							Lans.-K.C.	2,480	12
							Mississippian	3,020	8
							Arbuckle	3,250	5
							"Layton"	2,460	13
							Mississippian	3,074	8
							"Bartlesville"	2,910	
							"Cattelman"	2,880	
							Mississippian	3,072	
							Admire	600	
							"Peacock"	1,400	15
							"Layton"	2,300	20
							"Bartlesville"	3,050	12
							Arbuckle	3,300	5
							"Hoover"	1,400	
Winfield South ('45)	1-33-4E	320	9,843	77,947	8	1			
Miscellaneous		20	27,985		1+				
Total Cowley County		36,230	4,595,418	88,134,198	1,446+	65			
CRAWFORD COUNTY									
Fair Oak	33-28-22E	Combined with Walnut Southeast					"Bartlesville"	400	
Hepler* ('17)	27-22E	280	3,631	9			"Bartlesville"		
"Houston"	3-31-22E	60	2,447	21					
McCune ('29)	30-22E			199			"Bartlesville"		
a		300	7,152						
b		1,700	18,356						
St. Paul-Walnut*	28-21E	480	4,170	18			"Bartlesville"	425	
"Steimel"	35-29-21E		no report						
Walnut Southeast	28-22E	1,400	11,721	89	3		"Bartlesville"	400	15
a		80	694						
b		40	1,032						
c									

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
EDWARDS COUNTY									
Bradbridge ('48)	2-24-16W	120	6,816	109,687	3	Arbuckle	4,020		
Embry ('53)	23-24-16W	80	3,259	16,050	2	Lans.-K.C. "Kinderhook"	3,789 4,292	4 38	32
Enlow ('53)	9-24-16W	280	51,913	177,873	8	Lans.-K.C.	3,736	7	27
Fatzer ('56)	15-26-17W	40	635	635	1	Viola	4,676	2	
Kirk ('55)	26-26-16W	40	5,117	5,117	1	"Kinderhook"	4,481	20	
Salsar ('56)	12-26-16W	40	2,408	2,408	1	Mississippian	4,398	22	
Sturgeon ('54)	33-26-18W	80	7,871	19,851	2	Lans.-K.C.	4,223		
						Viola	4,721	5	38
Trousdale ('56)	21-26-16W	40	6,471	6,471	1	Cherokee	4,486	4	
Wayne ('56)	28-24-17W	40	1,735	1,735	1	Mississippian	4,368	16	
Total Edwards County		760	86,225	442,323	20				
ELK COUNTY									
Adams (revived) ('56)	29-29-13E	20	342		2	"Burgess"	1,680	3	
Arbuckle	31-9E	660	34,088		8	"Burgess"	2,250		
Bush-Denton ('20)	4-30-9E				29	"Stalnaker"	1,060	10	
a		180	2,433			"Peru"	2,135		
b		600	15,933			"Burgess"	2,300	5	
Clubine	30-10E	40	1,510		1				
Collyer ('24)	30-30-11E	160	7,785		9	Kansas City	1,286	10	
					3	Fort Scott	1,518		
Dory	18-30-9E	140	1,839		32	Mississippian	2,570		
Dunkleberger ('20)	34-29-10E	560	83,553			Kansas City	1,300	10	
						Mississippian	1,970		
Elk City*	31-13E	240	1,305		5	"Burgess"	1,360		
Ferguson East	23-30-8E	10	350		1	Arbuckle	2,900		
Fleming ('50)	8-29-9E	10	490		1	Arbuckle	2,656		
Grand Summit*	3-31-8E	240	12,078		11	Kansas City	2,000		

Hale-Inge* ('07)	31-12E	40	616	50	1	"Peru"	1,160	
a		40						
b		600	3,742					
c		40	256					
d		100	4,445					
Key		40	4,458	2		Arbuckle	2,270	
Kipter	31-10E	40	3,123	2		New Albany		
Liscoe	29-13E	40	1,684	2				
Logsdon	31-10E	10	274	1		"Burgess"	2,272	
Logsdon Northeast	31-9E	40	Abandoned during 1956	12	1	Mississippian		12
Longton	31-12E	300	9,969					
a		40	1,866					
b		40	2,423					
Longton North	29-12E	40	1,597	5		Mississippian	2,370	
Love	30-9E	160		3		"Wayside"	560	20
New Albany	29-13E	160	150	1				
a		40	no report					
b		120	480	2	1			
Perkins	1-30-9E	280	31,729	11		Kansas City	2,050	10
Porter	29-8E	40		2		Arbuckle	3,000	4
Rettig	31-10E	40	2,441	2	2	Lans.-K.C.	1,550	
Roby ('56)	20-28-9E	40	3,783	2		Arbuckle	2,873	3
Schrader ('28)	12-31-8E	300	20,979	8		Kansas City	1,520	22
Severy* ('22)	8-28-11E	10	154	1		Kansas City	1,200	13
Starr ('37)	12-31-9E	120	2,087	3		Mississippian	2,330	
Walker ('27)	5-31-10E	40	1,119	8		Kansas City	1,550	
a		80	5,057			Mississippian	2,225	
b		40	2,224			Kansas City	1,671	
Ware ('55)	5-31-9E	640	33,810	1		Kansas City	1,300	
Webb ('25)	23-31-10E			54		Fort Scott	1,650	
						Mississippian	1,975	
						Arbuckle	2,300	
Miscellaneous		40	711	2				
Total Elk County		6,260	300,983	273	13			
			14,952,662					
			recorded					
ELLIS COUNTY								
Antonino ('47)	27-14-19W	160	9,686	4		Arbuckle	3,712	5
			128,868			Reagan	3,726	34

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.			Producing zone, ft.			Thick-ness	Aver. grav.
		Area, acres	during 1956	to end, 1956	Pro- ducing abds., wells 1956	Name	Depth		
Antonino Townsite ('49)	2-15-19W		no report	32,470		Arbuckle	3,687		
Beeching ('43)	34-15-16W	500	8,554	269,905	6	Lans.-K.C.	3,156	4	35
Bemis-Shutts ('35)	16-11-17W	15,600	3,055,079	85,422,605	577	Lans.-K.C.	3,408	11	35
						Penn. congl.	3,416		
						Arbuckle	3,380		36
Bielman ('52)	24-15-18W	200	10,964	61,251	3	Arbuckle	3,496	4	32.1
Blue Hill ('37)	14-12-16W	1,280	106,320	2,453,417	33	Topeka	3,030	5	
						Lans.-K.C.	3,072	33	
						Gorham	3,348		
						Arbuckle	3,360	6	
Boos ('56)	20-15-17W	80	12,240	12,240	2	Arbuckle	3,532	5	
Braun ('53)	34-13-16W	120	12,693	53,201	3	Penn. congl.	3,459	7	32
Brungardt* ('52)	35-10-17W	120	See Rooks Co.	£6,638	6	Lans.-K.C.	3,194		
Burnett* ('37)	1-11-18W	7,000	1,974,174	49,870,347	266	Shawnee	2,937		
						Lans.-K.C.	3,093	4	38
						Penn. congl.	3,427		
						Simpson	3,603	10	
						Arbuckle	3,570	8	32
Burnett Northwest* ('46)	3-11-18W	800	211,338	3,108,863	28	Lans.-K.C.	3,450	4	32.5
						Arbuckle	3,617	7	
Burnett Southwest ('46)	22-11-18W	1,600	426,547	5,190,894	83	Shawnee	3,074		
					1	Lans.-K.C.	3,207	50	
						Simpson	3,582	4	
						Arbuckle	3,533	4	
Canyons ('48)	11-12-17W		no runs	8,566	1	Lans.-K.C.	3,361	47	
Catharine ('36)	3-13-17W	400	27,000	1,061,970	5	Lans.-K.C.	3,262	24	48
			51,297		8	Arbuckle	3,516	13	
Catharine Northwest ('44)	4-13-17W	380	68,730	714,154	13	Lans.-K.C.			
						Arbuckle	3,590	21	
Catharine South ('46)	15-13-17W	1,200	110,887	1,964,262**	44	Lans.-K.C.	3,292	12	32
						Arbuckle	3,555	8	
Catharine Townsite ('49)	9-13-17W	120	26,037	57,250	6	Arbuckle	3,575	18	25
Chrisher ('49)	22-11-16W	40	4,059	40,620	1	Lans.-K.C.	3,100	35	
Cochran ('53)	8-11-18W	40	15,193	43,303	1	Lans.-K.C.	3,328	10	

Cromb ('45)	15-11-20W	320	28,759	32,821	5	Lans.-K.C.	3,446	8
Dechant (revived) ('56)	7-15-18W	40	2,630	4,568	1	Arbuckle	3,627	6
Degenhart ('53)	15-15-17W	320	37,957	108,476	5	Lans.-K.C.	3,417	8
Dinges ('54)	9-15-18W	80	6,979	16,586	2	Arbuckle	3,521	10
Dinkel ('53)	23-13-17W	Combined with Catharine South				Arbuckle	3,524	12
Dreiling ('49)	21-14-16W	720	100,684	762,607	29	Lans.-K.C.	3,430	4
Dreiling Southeast ('53)	27-14-16W	500	51,357	238,692	12	Lans.-K.C.	3,367	16
Eagle Creek ('54)	11-11-20W	640	116,339	182,339	13	Arbuckle	3,072	6
Ellis* ('42)	31-12-20W	1,600	71,048	1,222,064	20	Arbuckle	3,327	32
Ellis Northeast ('53)	32-12-20W	Combined with Ellis			1	Lans.-K.C.	3,368	12
Ellis South* ('52)	12-13-21W	Combined with Ellis				Arbuckle	3,832	8
Emmeram ('37)	4-13-16W	160	20,432	312,254	5	Arbuckle	3,853	6
Emmeram Northeast ('49)	27-12-16W	1,200	144,599	779,491	30	Lans.-K.C.	3,822	15
Emmeram Townsite ('52)	6-13-16W	80	2,952	32,796	2	Lans.-K.C.	3,262	7
Engel ('56)	34-14-18W	120	20,181	20,181	4	Arbuckle	3,272	3
Engel West ('56)	33-14-18W	40	1,061	1,061	1	Lans.-K.C.	3,541	3
Erbert ('53)	20-12-20W	40	2,956	17,448	1	Arbuckle	3,291	32
Erbert Southeast ('54)	28-12-20W	no report		1,215		Lans.-K.C.	3,291	10
Fairport* ('23)	8-12-15W	1,000	174,625	3,670,983	43	Arbuckle	3,520	6
Fort Hays State Col. ('50)	1-14-19W	no report		1,203		"Penn sand"	3,621	5
Ginther ('52)	17-11-19W	80	8,018	53,545	2	Arbuckle	3,312	4
Herl ('51)	28-14-17W	320	15,004	141,541	6	Lans.-K.C.	3,368	4
Herman ('54)	28-13 -20W	no report		6,732		Arbuckle	3,906	
Hertel ('52)	16-14-16W	40	671	16,032	1	Penn. congl.	3,857	12
Hertel Southwest ('52)	17-14-16W	120	5,557	13,675	3	Lans.-K.C.	2,950	5
Herzog ('40)	30-13-16W	1,200	55,790	1,530,945	8	Gorham	3,211	32
			74,701		12	Arbuckle	3,211	5
						Reagan	3,312	5
						Arbuckle	3,350	20
						Lans.-K.C.	3,806	28
						Arbuckle	3,439	9
						Lans.-K.C.	3,554	4
						Penn. congl.	3,332	28
						Arbuckle	3,453	8
						Arbuckle	3,476	6
						Lans.-K.C.	3,865	42
						Lans.-K.C.	3,134	38
						Lans.-K.C.	3,215	38
						Lans.-K.C.	3,232	4
						Arbuckle	3,450	8

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducting wells 1956	Name	Producing zone, ft.		Thick- ness	Aver. grav.
			during 1956	to end, 1956			Depth			
Heyl ('56)	20-14-17W	80	7,659	7,659	2	Arbuckle	3,513	7		
Holy Cross ('53)	26-12-18W	120	9,700	65,985	4	Lans.-K.C.	3,423	4	34	
Irvin ('46)	6-14-19W	2,080	591	1,788,616	1	Lans.-K.C.	3,553			
			337,974		45	Arbuckle	3,860			
Irvin East ('55)	4-14-19W	40	4,718	15,287	2	Lans.-K.C.	3,628	18		
Irvin South ('51)	7-14-19W	320	16,387	57,303	5	Lans.-K.C.	3,660	5	38.5	
Jacob ('51)	6-11-19W	40	1,462	14,394	1	Arbuckle	3,837	12	23	
Karlin ('51)	14-13-17W	Combined with Catharine South				Lans.-K.C.	3,542	4	37	
Koblitz Northwest ('54)	15-12-18W	120	23,600	51,992	4	Arbuckle	3,348			
Kraus ('36)	22-14-19W		no report	130,486		Arbuckle	3,477	5		
						"Sooy"	3,730	5		
						Arbuckle	3,735			
Kraus North ('53)	16-14-19W		noreport	none		Arbuckle	3,732			
Kraus West ('55)	20-14-19W	120	8,395	27,031	1	Marmaton	3,801	4		
			7,462		3	Arbuckle	3,834			
Krueger* ('48)	35-10-16W	640	106,026	1,097,792	19	Lans.-K.C.	3,819			
Leiker ('43)	14-15-18W	800	3,359	439,452	2	Lans.-K.C.	3,552			
						Lans.-K.C.	3,292			
						Penn. congl.	3,582			
Leiker East ('53)	12-15-18W	1,200	106,027		13	Arbuckle	3,591	5		
			144,515	585,135	20	Lans.-K.C.	3,321	8		
Leiker North ('56)	2-15-18W	120	184,500		27	Arbuckle	3,576	13		
Leiker Southeast ('54)	14-15-18W	300	5,247	5,247	2	Arbuckle	3,601	5		
			57,847	92,223	9	Lans.-K.C.	3,292	19		
Lieb ('56)	17-11-16W	120	22,760	22,760	6	Arbuckle	3,547	4	36	
Lookout Hollow ('50)	31-14-18W		no report	1,080		Arbuckle	3,356	7		
						Lans.-K.C.				
Mendota ('51)	5-11-20W	640	11,743	76,903	5	Arbuckle	3,629	10	35	
						Lans.-K.C.	3,530			
Nellie Belle ('55)	15-13-17W	80	13,374	13,374	3	Arbuckle	3,668	1		
Nicholson ('45)	30-11-20W	1,160	146,823	746,023	22	Arbuckle	3,521	12	34	
Nicholson North ('52)	19-11-20W	40	2,507	20,806	1	Arbuckle	3,842	4	34	
North ('56)	20-15-20W	40	3,355	3,355	1	Lans.-K.C.	3,610	4	34	
						Penn. congl.	3,862	5		

Penny-Wann ('36)	13-15-20W	80	7,168	197,154	2	"Sooy"	3,653	3
Pleasant ('44)	2-14-20W	1,600	4,697	2,043,719	2	Lans.-K.C.	3,569	
			7,790		1	Marmaton	3,805	
			4,331		2	Penn. congl.		
			194,072		31	Arbuckle	3,833	4
Pleasant North (revived) ('56)	36-13-20W	480	9,800	11,938	4	Reagan	3,877	
Pleasant Ridge	19-12-17W	160	11,889	56,161	2	Arbuckle	3,842	12
Southwest ('51)						Arbuckle	3,673	
Polifka ('48)	7-13-17W	360	49,702	192,590	7	1 Arbuckle	3,640	33
Potter ('56)	20-11-16W	40	3,605	3,605	1	Arbuckle	3,309	7
Raynesford ('52)	17-13-20W	40	4,723	31,768	1	Lans.-K.C.	3,535	5
						Penn. congl.	3,870	39
Raynesford East ('52)	16-13-20W	320	40,701	91,539	5	Arbuckle	3,861	9
Reed ('49)	5-13-17W	40	4,083	29,836	1	Lans.-K.C.	3,424	12
						Arbuckle	3,596	
Reichert ('53)	9-15-19W		no report	492		Lans.-K.C.	3,423	7
Richards (revived) ('56)	5-11-18W	40	1,964	108,749	1	Lans.-K.C.	3,466	
Riverview ('43)	19-11-18W	1,020	102,577	2,179,973	20	1 Arbuckle	3,610	18
Riverview South ('56)	32-11-18W	40	835	835	1	Lans.-K.C.	3,367	5
Ruder ('35)	17-15-18W	640	28,670	1,334,656	9	Lans.-K.C.	3,422	10
						Arbuckle	3,572	
Schmeidler ('44)	28-12-17W	1,280	74,497	804,231	18	2 Lans.-K.C.	3,383	6
						Arbuckle	3,625	10
Schmeidler Northwest ('53)	20-12-17W	160	5,250	57,760	2	Lans.-K.C.	3,540	
			12,814		2	Arbuckle	3,696	6
Schmeidler Southeast ('56)	34-12-17W	40	7,177	7,177	1	Lans.-K.C.	3,330	22
Schoenchen ('46)	21-15-18W	1,000	61,677	1,149,877	18	Arbuckle	3,569	9
Schoenchen Townsite ('56)	28-15-18W	80	14,000	14,000	2	Lans.-K.C.	3,255	4
Schoenchen West ('56)	21-15-18W	40	1,294	1,294	1	Penn congl.	3,580	5
Seitz ('56)	2-13-16W	40	677	677	1	Lans.-K.C.	3,222	8
Sessin ('52)	15-11-19W	720	2,682	605,985	1	1 Shawnee	2,663	
			12,425		2	Lans.-K.C.	3,291	7
			146,702		22	Arbuckle	3,499	3
Solomon ('36)	28-11-19W	3,500	1,953	3,362,611	1	1 Wabaunsee	3,013	4
			12,509		4	Topeka	2,950	
			7,427		1	Lans.-K.C.	3,229	
Sugarloaf ('41)	17-13-17W	700	526,755		91	Arbuckle	3,629	3
			55,069	752,284	11	Lans.-K.C.	3,391	19.5
						Arbuckle	3,645	30
Sugarloaf Southeast ('41)	28-13-17W	1,900	72,306	1,475,200	12	Lans.-K.C.	3,312	8
			325,539		42	Arbuckle	3,520	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abd., wells 1956	Producing zone, ft.		Thick- ness	Aver. grav.
			during 1956	to end, 1956		Name	Depth		
Sunnydale ('52)	1-14-20W		no report	1,030		Arbuckle	3,850		
Sweet William ('50)	10-12-20W	40	2,024	19,086	1	Lans.-K.C.	3,700		35.5
Sweet William Northwest ('56)	4-12-20W					Arbuckle	3,908	8	
Toulon ('35)	3-14-17W	680	196	683,181	1	Lans.-K.C.	3,739	5	
			123,224		20	Lans.-K.C.	3,298	45	
Toulon Southwest ('55)	16-14-17W	120	12,714	25,510	4	Arbuckle	3,512	4	
Trico* ('51)	30-10-20W	40	1,927	1,927	1	Arbuckle	3,504	10	
Turkville ('53)	11-11-17W	160	13,577	65,061	4	Arbuckle	3,610	24	
						Lans.-K.C.	3,165		
Ubert ('36)	12-13-18W	80	7,038	322,736	2	Arbuckle	3,359		
						Lans.-K.C.	3,707		
Ubert North ('51)	31-12-17W	320	44,154	211,973	8	Arbuckle	3,600		31
Ubert Northwest ('52)	1-13-18W	320	96,102	489,555	13	Arbuckle	3,339		
			90,479		12	Lans.-K.C.	3,592		33
Victoria North ('53)	6-14-16W	80	2,412	13,709	2	Arbuckle	3,471		35
Wagner ('56)	36-14-16W	40	4,201	4,201	1	Arbuckle	3,420	7	
Walter ('36)	2-12-18W	4,200	810,584	9,829,740	125	Arbuckle	3,160		
					5	Toneka	3,434	8	
						Lans.-K.C.	3,619	8	
Walter Northwest ('56)	3-12-18W	40	1,491	1,491	1	Arbuckle	3,491	12	
Walter Southeast ('54)	13-12-18W		Combined with Walter			Lans.-K.C.	3,653	4	
Warren ('49)	12-11-20W	40	4,209	52,022	1	Arbuckle	3,458		
Weisner ('52)	36-12-20W		no report	1,509		Lans.-K.C.	3,863	7	
Wheatland ('49)	18-15-17W	500	53,506	301,332	11	Penn. congl.	3,307	14	
					1	Lans.-K.C.	3,571		
Wheatland Northwest ('53)	12-15-18W	120	9,040	28,871	4	Arbuckle	3,586	6	37
Wheatland Southeast ('55)	28-15-17W	300	1,463	27,651	1	Arbuckle	3,335	14	
			9,552		1	Lans.-K.C.	3,526		
			4,784		1	Penn. congl.	3,516	5	32
Wheatland Southwest ('53)	19-15-17W	500	8,895	414,740	1	Arbuckle	3,252	9	32
					1	Lans.-K.C.	3,554		
Younger ('44)	6-14-17W	500	142,863	450,009	18	Arbuckle	3,574	18	33
Younger South ('54)	8-14-17W	80	45,195	450,009	12	Arbuckle	3,546	7	37
			11,701	29,250	3	Arbuckle			

Pools or fields abandoned									
Total Ellis County									
		68,840	11,618,360	192,577,302**2,063	44	76,859			
ELLSWORTH COUNTY									
Andrews ('52)	4-17-8W	320	21,587	108,624	5	Arbuckle	3,302	3	43
Bloomer* ('36)	36-17-11W	2,900	367,818	14,465,230	93	Lans.-K.C. Arbuckle	3,044 3,257	8	43
Geneseo-Edwards* ('34)	25-18-8W	3,680	959,529	18,295,290	147	Simpson Arbuckle	3,157 3,278	39	41
Green Garden ('54)	1-17-9W	40	6,762	18,098	2	Lans.-K.C.	3,046	4	40
Heiken ('30)	25-17-10W	640	90,794	498,457	16	Lans.-K.C. Penn. congl. Arbuckle	2,974 3,226 3,269		
Heiken North ('42)	24-17-10W	80	6,076	202,233	2	Arbuckle	3,212	2	
Hoch ('56)	19-15-10W		Abandoned during 1956			Arbuckle	3,304	1	
Kraft-Prusa* ('37)	10-17-11W	800	46,758	1,179,225	13	Shawnee Lans.-K.C. Gorham	2,885 3,160 3,335		
						Arbuckle	3,231		
						Reagan	3,310		
Kraft-Prusa East ('44)	18-17-10W	40	1,186	16,912	1	Arbuckle	3,309	5	34
Lorraine ('34)	13-17-9W	2,000	77,923	10,890,956	33	Lans.-K.C. Arbuckle	3,060 3,200	120	
Lorraine North ('53)	12-17-9W	120	24,297	81,314	4	Lans.-K.C.	3,066	5	
Maes ('52)	26-17-8W	500	188,454	936,451	18	Arbuckle	3,341	16	36
Palacky ('49)	31-16-10W	40	1,337	34,829	1	Lans.-K.C. Arbuckle	3,148 3,350	8	46
Progress ('55)	10-16-10W	320	82,381	110,329	8	Arbuckle	3,402	8	
Progress Northwest ('55)	4-16-10W	320	146,693	176,757	19	Arbuckle	3,303	8	
Stoltenberg ('31)	22-16-10W	13,200	921,420	39,184,140	313	Lans.-K.C. Simpson	3,260 3,379	2	42
Vacek ('44)	32-15-10W	640	31,382	352,248	8	Arbuckle	3,333	14	39
West ('51)	20-17-10W	80	5,371	35,608	2	Arbuckle	3,315	4	44
Wilkins Southeast ('42)	32-17-9W	320	10,286	475,633	6	Arbuckle	3,287		
Total Ellsworth County		26,040	2,990,054	87,062,334	691	Arbuckle	3,220	9	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
FINNEY COUNTY									
Beyer ('52)	24-26-33W	40	953	23,340	1	Lans.-K.C.	4,398	8	36
Damme ('51)	21-22-33W	1,000	151,657	414,525	17	Mississippian	4,626	10	32
Damme Northeast ('53)	16-22-33W	40	8,558	29,563	1	Mississippian	4,639	10	27
Finnup ('53)	34-22-33W	320	111,419	255,146	8	Mississippian	4,756	6	30
Finnup East ('53)	25-22-33W	40	972	9,335	1	Marmaton	4,442	16	30
Nunn ('38)	27-21-34W	1,300	86,831	2,284,111	26	Kansas City Marmaton		13	31
						"Cherokee"	4,550		
Pleasant Prairie Northwest ('56)	30-26-34W	40	728	728	1	Mississippian	4,654	10	
Sequoyah ('56)	17-23-34W	320	5,461	5,461	2	Morrowan	4,694	10	
Sonderegger ('52)	21-22-31W	40	403	6,329	1	Mississippian	4,737		29
Stewart ('52)	6-23-30W	40	4,188	19,992	1	Mississippian	4,710		28
Total Finney County		3,180	371,170	3,048,930	59				
FORD COUNTY									
Konda ('56)	11-27-22W	40	1,392	1,392	1	Mississippian	5,010	32	
Pleasant Valley ('50)	34-27-21W	80	471	17,148	2	Mississippian	4,954	145	
Total Ford County		120	1,863	18,540	3				
FRANKLIN COUNTY									
Baldwin* ('19)	15-20E	80	1,142		2	"Squirrel"	800		
LeLoup a	15-20E		294		6	"Squirrel"	750		
Norwood b			2,115						
Norwood	15-20E	10	280		1				
Ottawa	17-19E	20	375		2				
Paola-Rantoul* ('60)	17-21E				734	Knobtown	300		
a		120	3,171		9	Hepler	400		

	b	c	d	e	f	g	h	Miscellaneous	1	746	9	"Prue"	"Squirrel"	"Bartlesville"
	6,000	191,897	800	15,782	84,263	100	525	3,440						500
	2,600	84,263	100	525	3,440	2,000	44,160	70						600
	10	70	10	55										700
Total Franklin County	11,920	347,569		10,242,708	recorded									
GOVE COUNTY														
Beougher ('52)		no report	80	652								Lans.-K.C.		4,079
Coberly ('51)		3,489		62,333					2			Lans.-K.C.		4,122
Gove ('51)		9,411	120	22,467					3			Marmaton		4,287
Jasper ('51)		no report		740								Lans.-K.C.	10	4,079
Lundgren ('52)		no report		4,755								Mississippi	9	4,122
Lundgren South ('52)		12,419	300	69,713					2			Lans.-K.C.	35	4,287
Pyramids ('52)		no report		4,387								Mississippi	35	4,122
Total Gove County	500	25,319		165,047					7			Marmaton	10	4,547
												Lans.-K.C.	10	3,670
												Mississippi	6	4,306
												Mississippi	40	4,277
												Marmaton		4,280
GRAHAM COUNTY														
Alda ('44)		4,139	600	77,168					2			Lans.-K.C.	3	3,518
Allodium ('55)		15,028	120	22,015					2			Lans.-K.C.	5	3,740
Blazier ('55)		96,035	480	103,837					11			Lans.-K.C.	8	3,785
Brassfield ('56)		7,388	120	7,388					3			Lans.-K.C.	45	3,688
Brush Creek ('55)		37,120	160	55,212					6			Lans.-K.C.	4	3,788
Cooper* ('43)		1,336,702	9,520	7,564,608					202	1		Lans.-K.C.	6	3,619
Cooper North ('53)		Combined with Cooper										Arbuckle	2	3,778
Crocker ('51)		no report		20,421								Arbuckle	9	3,905
Diebolt* ('53)		634,138	1,460	1,337,454					86	1		Lans.-K.C.	4	3,916
Dorman ('52)		2,645	40	17,800					1			Lans.-K.C.	6	3,779
Dorman West ('55)		2,551	40	6,345					1			Lans.-K.C.	7	3,921
Erick ('55)		10,505	160	12,711					3			Lans.-K.C.	6	3,954
Evergreen ('56)		5,096	40	5,096					1			Lans.-K.C.	5	3,931
Fargo West ('51)		806	40	4,540					1	1		Lans.-K.C.	2	3,711
												Lans.-K.C.		3,755

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing ebd., wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Faulkner ('45)	27-10-22W	80	9,628	216,017	2	Lans.-K.C.	3,629	2	37
Gettysburg ('41)	7-8-23W	80	3,908	74,617	2	Marmaton	3,844	30	
Glen Dale ('55)	23-9-24W		no report	2,474		Lans.-K.C.	3,725	6	
Harmony ('51)	32-7-22W	700	23,775	218,555	9	Lans.-K.C.	3,993		37
						Arbuckle	3,597		
Hatcher ('56)	6-9-21W	80	6,761	6,761	2	Arbuckle	3,776	8	
Highland ('51)	20-8-22W	40	1,887	14,129	1	Lans.-K.C.	3,722		37
Holley ('54)	3-9- 24W	4,430	649,341	893,050	99	Lans.-K.C.	3,616	6	47
Holley North ('55)	29-8 -24W	200	47,599	48,247	7	Lans.-K.C.	3,900	9	
Holley West ('55)	36-8-25W		Combined with Holley			Lans.-K.C.	3,897	6	
Hoof ('54)	9-10-23W	640	232,599	407,523	30	Lans.-K.C.	3,924	4	32
Hoof West ('55)	8-10-23W	80	10,326	28,107	3	Lans.-K.C.	3,865	5	
Houston ('47)	9 -6-22W		no report	19,516		Lans.-K.C.	3,903		
Huntington ('55)	7-7-25W	160	30,962	36,914	3	Lans.-K.C.	3,506	8	40.4
Ironclad ('50)	23-9-22W	1,000	55,632	437,995	16	Lans.-K.C.	3,832	6	38
Lacerte ('56)	32-10-22W	40	8,055	8,055	1	Lans.-K.C.	3,756	4	
Laura* ('50)	30-10-20W		Combined with Cooper			Arbuckle	3,602	2	30
Law ('51)	34-9-23W	900	98,877	761,111	13	Lans.-K.C.	3,703	10	38
			6,005		2	Penn. cong.	3,922		
Law Southeast ('55)	12-10-23W	500	76,137	139,379	9	Lans.-K.C.	4,126		29.6
			24,445		4	Penn. cong.	3,869	11	
Mickleston ('52)	27-8-22W	120	14,242	63,831	3	Lans.-K.C.	4,083	16	34
						Arbuckle	3,502		
Mildrextex ('55)	12-9-23W	80	3,465	5,683	1	Lans.-K.C.	3,759	2	26.5
Morel ('38)	15-9-21W	7,300	1,481,637	21,593,076	220	"Sooy"	3,814	12	27
						Arbuckle	3,712	3	22
Morel East ('49)	13-9-21W		Combined with Morel			Arbuckle	3,718	5	
Morel North ('55)	3-9-21W	80	3,447	6,247	1	Penn. cong.	3,729	2	30
Morlan ('49)	23-10-21W		Combined with Cooper			Arbuckle	3,637	3	29
Mullenburg* ('49)	1-10-21W		Combined with Cooper			Arbuckle	3,778	8	
Nana ('53)	4-8-24W	700	207,416	504,219	27	Lans.-K.C.	3,839	7	38
Noah ('52)	27-10-21W		Now called Trico			Lans.-K.C.	3,738	7	
						Arbuckle	3,651	7	
						Arbuckle	3,786		

Noah Southwest ('54)	33-10-21W	40	341	2,550	1	1	Marmaton	3,756	8	38
Penokee ('40)	11-8-24W	130	12,778	262,760	5		Lans.-K.C.	3,750	16	43
Prairie Glen ('54)	25-10-23W	40	12,691	34,463	3		Lans.-K.C.	3,596	4	33
Prairie Glen Southeast ('55)	31-10-22W	80	28,616	38,590	4		Lans.-K.C.	3,594	8	
Ray* ('49)	32-5-20W	no report	no report	1,240			Lans.-K.C.	3,297		
							Arbuckle	3,575		
							Reagan	3,540		32
Red Line ('55)	32-9-22W	640	43,935	51,936	8	1	Lans.-K.C.	3,776	3	
Red Line North ('55)	20-9-22W	40	7,201	9,559	1		Lans.-K.C.	3,676	4	
Sand Creek ('54)	27-8-21W	320	3,745	9,083	2		Lans.-K.C.	3,387	6	30
Schmied ('52)	21-8-25W	1,280	230,929	694,354	28		Arbuckle	3,578		
Schmied Northeast ('54)	10-8-25W	80	19,216	48,612	6	1	Lans.-K.C.	3,740	4	30
Schnebley ('52)	8-8-22W	80	13,149	49,150	5		Lans.-K.C.	3,867	25	46
Shiloh ('51)	1-9-25W	40	9,293	49,417	2		Lans.-K.C.	3,537	5	42
Smith-Denning ('50)	5-10-21W		Combined with Cooper				Lans.-K.C.	4,013		26
							Lans.-K.C.	3,530		
Spaulding* ('53)	1-11-21W		Now called Trico				Arbuckle	3,818	16	
Trico* ('51)	30-10-20W	1,000	368,990	926,941	46		Lans.-K.C.	3,573	7	
							Lans.-K.C.	3,351	7	
Van ('54)	14-9-22W	600	56,511	71,010	10		Arbuckle	3,786	5	22
							Lans.-K.C.	3,530		
White Southwest* ('53)	35-10-21W		Now called Trico				Arbuckle	3,871		
Wild Horse Creek ('50)	16-9-22W		no report	10,095			Lans.-K.C.	3,539	7	
Pools or fields abandoned				40,578			Arbuckle	3,688		
Total Graham County		34,410	6,040,225	37,023,819	895	12		3,944		
GRAY COUNTY										
Jumbo ('53)	29-29-27W		no report	none			Cherokee	5,103	8	
GREENWOOD COUNTY										
Atyeo* ('25)	30-21-10E		now called Atyeo-Pixlee				"Bartlesville"	2,250		
Atyeo-Pixlee* ('25)	7-22-10E	1,000	205,417	52	4		"Bartlesville"	2,350	20	
							Mississippian	2,400		
Beaumont ('20)	27-8E	640	61,250	44	1		"Peru"	1,830		
							Mississippian	2,445		
Beaumont North	27-9E	10	339	1			Arbuckle	2,740		
							Mississippian	2,477		
Beaumont South ('35)	2-28-8E	160	7,275	5			Arbuckle	2,800		
							Mississippian	2,500		

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abds., wells 1956	Producing zone, ft.		Thick- ness	Aver. grav.
			during 1956	to end, 1956		Name	Depth		
Blackwell ('25)	16-24-13E	320	11,983		7	Mississippian	1,650		
Blankenship* ('21)	26-8E	160	38,726		11	"Bartlesville"	2,650		
Brinegar	26-13E	320	5,147		11	"New Albany"	427	11	
Browning ('24)	22-10E	1,600	400,341		94	"Bartlesville"	2,314	51	41
Burkett ('23)	24-23-10E	1,600	179,474		85	"Bartlesville"	2,000	38	38
Burt ('49)	8-26-11E	40	2,397		3	Mississippian	1,945		
Climax ('25)	27-11E	80	4,468		2	Mississippian	1,900	15	
DeMalorie-Souder ('24)	22-10E	2,200	681,820		102	"Bartlesville"	2,150	55	41
Dunaway* ('22)	34-22-13E	1,600	59,845		49	Mississippian	1,800	12	
Eureka	31-25-11E	1,450	47,614		52	Fort Scott	1,750	10	
Fankhouser* ('26)	4-22-12E	900	84,827		44	Mississippian	2,000		41
Ferrel North	28-8E	10	449		1	"Bartlesville"	1,850		
Gaffney ('26)	18-24-11E	300	47,842		9	"Bartlesville"	1,650	25	
Hamilton ('25)	7-24-12E				85	Mississippian	1,800		
a		2,000	220,452						
b		320	9,289						
Hinchman ('27)	17-24-13E	480	8,312		10	Mississippian	1,615		
Hollis ('27)	16-23-10E	40	1,727		2	"Bartlesville"	2,150		
Hubbard	22-13E	40	919		1	Cherokee	1,500		
Jackson	25-8E	160	8,371		3	"Bartlesville"			
Jobs	24-13E	160	2,451		5	Mississippian	1,700		
Lamont ('26)	29-22-13E	2,200	143,784		96	"Bartlesville"	1,700	42	
Ly-Green* ('54)	5-22-11E	100	2,270		2	"Bartlesville"	1,858	13	
Madison	14-22-11E				86	"Bartlesville"	1,800	38	
a		320	3,199						
b		1,500	702,163						
Mignot ('51)	9-22-11E	60	5,760		2	"Bartlesville"	1,921	10	
Neal			no report			Mississippian	1,525		
Ott	7-22-13E	40	1,214		1	Simpson	2,236		
Pixlee ('23)	7-22-10E		Now called Atyeo-Pixlee			"Bartlesville"	2,350	20	
Polhamus ('22)	25-9E	1,100	190,575		52	"Bartlesville"	2,180	34	
Quincy* ('26)	11-25-13E	1,280	49,375		40	"Bartlesville"	1,500	20	
					5	Mississippian	1,720		

	24-26-9E	980	20,016	38	Kansas City Mississippian	1,380 2,100	12
Reece							
a		80	1,745				
b		2,600	620,759				
Sallyards	25-8E	900	95,007	169	1	2,350	40
Scott ('25)	24-23-8E	4,600	1,307,443	40	"Bartlesville"	2,525	40
Sealey-Wick ('22)	28-23-11E			279	13	1,930	45
Severy*	28-11E			17	Kansas City	1,200	
a		180	6,960				
b		100	2,351				
Severy North	27-11E	40	2,017	2	Kansas City	830	
Stanhope	15-26-8E	240	22,520	11	Mississippian	2,450	11
Teeter* ('20)	16-23-9E			129	2	2,400	40
a		2,000	280,225				
b		320	7,458				
Teichgraber ('39)	25-8E	700	16,596	27	1	2,750	50
a		230	4,149				
b		10	468				
c							
Thrall-Asgard ('21)	14-24-9E	3,700	722,675	292	21	2,170	45
a		200	8,867				
b		240	4,944				
Tonovay	25-11E			7	1	1,830	29
Toronto* ('13)	16-26-13E	40	454	10	Mississippian "Peru"	1,000	
a		160	2,412		"Bartlesville"	1,700	
b							
Virgil ('16)	14-24-12E	3,500	133,780	156	7	1,550	40
a		40	737		Mississippian	1,700	12
b		5,500	243,758				
Virgil North* ('20)	22-23-13E			288	4	1,585	52
Wiggins ('25)	30-24-11E	1,280	42,815		"Bartlesville"	1,840	12
Wilkinson ('26)	6-25-9E	400	19,039	55	Mississippian	1,860	15
Willard	7-27-11E	240	18,754	19	"Bartlesville"	2,200	48
Winterscheid*	23-14E	10	5,863	13	Mississippian	1,900	10
Zimmermann ('53)	19-23-10E	20	1,382	1	Mississippian	1,750	
Miscellaneous		60	6,297	2	"Bartlesville"	2,296	
				3			
Total Greenwood County		50,530	6,788,601	2,515	103		
				209,597,693			
HAMILTON COUNTY							
Helfrich ('55)	6-25-42W	40	5,922	1	Morrowan	5,040	10

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abds. wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
HARPER COUNTY									
Banner ('54)	27-32-7W	80	28,359	57,210	2	Viola-Simpson	4,833	6	43.5
Banner South ('56)	4-33-7W	80	17,625	17,625	2	Misener	4,848	3	
Berg ('54)	29-32-7W		no report	1,909		Viola	4,758	6	43
Bluff Creek ('52)	24-34-5W	40	no runs	1,284	1	Lans.-K.C.	3,938	5	26
Grabs ('49)	13-31-9W		Now called Spivey-Grabs			Mississippian	4,400	14	29
Grabs South ('54)	25-31-9W		Combined with Spivey-Grabs			Mississippian	4,397		
Miller ('55)	11-33-8W	40	6,023	7,698	1	Misener	4,895	5	
Sharon* ('55)	13-32-10W	400	24,569	28,659	4	Mississippian	4,355	10	
Spivey-Grabs* ('49)	13-31-9W	7,000	697,241	1,425,560	129	Mississippian	4,400	14	29
Spivey-Southeast ('55)	1-31-8W		Combined with Spivey-Grabs			Mississippian	4,380	7	
Sunny View South ('56)	2-31-9W		Combined with Spivey-Grabs			Mississippian	4,460	5	
Wildcat Creek ('56)	30-34-6W		Abandoned during 1956			Simpson	5,217	2	
Total Harper County		7,640	773,817	1,539,945	139				
HARVEY COUNTY									
Burrton* ('31)	1-23-4W		Included with Reno County			Mississippian	3,266		
Burrton East ('56)	28-23-3W		no report	none		"Hunton"	3,583	20	
Burrton Northeast ('42)	3-23-3W		no report	7,917		Mississippian	3,302		
Graber* ('34)	32-21-1W	40	2,135	158,934	1	"Chat"	3,224		41.1
						Misener	3,323	24	
Halstead ('29)	36-22-2W	1,500	47,168	2,036,606	15	"Hunton"	3,274	30	
Harnac*	35-21-3W	160	17,565	17,565	3	"Chat"	3,005	13	40
Hollow-Nikkel* ('31)	30-22-3W	2,800	105,756	21,279,313	35	"Hunton"	3,521	13	
		Includes McPherson County production				"Chat"	3,195	14	
						"Hunton"	3,507		
Jester Creek ('49)	3-24-1E		no report	1,202		Simpson	3,500		
Sperling ('35)	23-22-2W	400	54,307	744,068	8	Lans.-K.C.	2,637	16	
Pools or fields abandoned				123,238		"Hunton"	3,279		
Total Harvey County		4,900	226,931	24,368,843	62				

HASKELL COUNTY					
Pleasant Prairie ('54)	4-27-34W	720	121,074	187,100	11
					Mississippi
					5,041
HODGEMAN COUNTY					
Hallet ('56)	15-22-25W	40	1,909	1,909	1
Jetmore ('50)	24-22-24W	80	5,067	76,257	2
Purdyville ('51)	3-24-24W	600	87,335	595,566	7
					Mississippi
					4,598
					40
Saw Log Creek ('53)	36-23-22W	80	18,318	49,711	3
			8,094		1
Wieland ('56)	16-21-22W	40	130	130	1
					Cherokee
					4,478
					8
Total Hodgeman County		840	120,853	723,573	15
					Mississippi
					4,380
					16
JEFFERSON COUNTY					
Miscellaneous		10	2,000		1+
JOHNSON COUNTY					
Gardner	14-22E	480	7,996		7
"Mignot"			no report		Marmaton
Prairie Center		10	117		1
					Marmaton
					"Squirrel"
Total Johnson County		490	8,113		8
KEARNY COUNTY					
Patterson ('41)	23-22-38W	160	40,532	526,051	3
South Side ('56)	13-26-35W	40	5,084	5,084	1
					"Patterson"
					Morrowan
					Mississippi
					4,748
					4,566
					8
Total Kearny County		200	45,616	531,135	4
KINGMAN COUNTY					
Bartholomew* ('48)	30-27-4W	240	425	65,175	6
Basil ('53)	16-29-7W	300	25,131	118,231	4
					Mississippi
					Lans.-K.C.
					4,150
					4
					Mississippi
					4,511
					3
Broadway ('50)	21-28-5W	900	116,397	1,061,659	27
Broadway West ('54)	19-28-5W	120	7,497	26,415	3
Casley ('52)	11-28-5W	360	41,879	181,749	10
					Mississippi
					3,884
					6
					32.5
					36
					38

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.			Pro- ducing abd., wells	Producing zone, ft.			Aver. grav.
		Area, acres	during 1956	to end, 1956		Name	Depth	Thick- ness	
Cunningham* ('31)	7-28-11W	1,300	59,661	3,286,225	37	Lans.-K.C.	3,600	33	41
Dewey ('50)	9-28-5W	600	43,518	383,340	9	Mississippian	3,801		37
Dewey North ('55)	5-28-5W	40	no report	1,251	1	Lans.-K.C.	3,248	3	
Dresden ('51)	13-27-10W	1,120	132,660	959,551	34	Lans.-K.C.	3,806	8	37.9
						Mississippian	4,002		
						Viola	4,270	2	
Evan Mound ('51)	22-27-5W	40	2,381	25,456	1	Mississippian	3,800	16	37
Georgia Spur ('56)	7-28-6W		Abandoned during 1956			Mississippian	3,836	10	
Gilchrist ('55)	15-30-7W	640	43,036	43,574	7	Lans.-K.C.	3,726	5	
Goetz ('56)	29-29-9W	500	15,094	15,094	9	Mississippian	4,084	35	
Kingman ('27)	16-27-7W		no report	30,000		Viola	4,408	6	
Lansdowne North ('51)	4-28-5W	4040	1,400	24,047	1	Mississippian	3,824		
McCutcheon ('55)	10-27-7W	40	434	2,750	1	Mississippian	3,814	3	35
Orsernus ('53)	30-29-5W	120	42,760	105,547	4	Viola	4,103	4	40
						Viola	4,455	12	43
						Simpson	4,468		
Orsernus South ('54)	31-29-5W		no report	450		Viola	4,483		
Pat Creek ('46)	20-28-9W	120	25,116	221,734	3	Viola	4,496	6	42
						Simpson	4,475	18	
Rago ('55)	17-30-7W		Combined with Spivey-Grabs			Mississippian	4,147	6	
Reida ('55)	18-30-6W	80	5,744	7,806	2	Simpson	4,502	4	
Reida West ('55)	23-30-7W	80	8,956	10,848	3	Mississippian	4,143	3	
Rosedale ('54)	32-29-6W	200	46,249	102,059	8	Lans.-K.C.	3,691	5	43
Spivey ('51)	23-30-8W		Now called Spivey-Grabs			Mississippian	4,205		29
Spivey-Grabs* ('49)	13-31-9W	11,000	1,060,636	1,930,189	134	Mississippian	4,205		29
Spivey Northwest ('54)	9-30-8W		Combined with Spivey-Grabs			Mississippian	4,156		
Spivey West ('55)	17-30-8W		Combined with Spivey-Grabs			Mississippian	4,172	12	
Sunny View ('55)	26-30-9W		Combined with Spivey-Grabs			Mississippian	4,350	20	
Trenton ('54)	27-29-7W	300	11,623	11,859	5	Mississippian	4,117	6	
Willowdale ('54)	11-29-9W	1,200	297,178	685,605	32	Viola	4,502	4	
Zenda ('54)	36-29-9W		Combined with Spivey-Grabs			Mississippian	4,161	9	
Total Kingman County		19,340	1,987,775	9,300,614	341				
					7				
KIOWA COUNTY									
Alford ('44)	14-30-19W	40	1,943	1,943	1	Mississippian			5,040

Betzer ('55)	34-29-16W	40	2,277	6,135	1	1	Mississippi	4,632	15
Brenham ('47)	29-23-17W		no report	179			Mississippi	4,821	
Exel ('48)	20-30-20W		no report	48,223			Mississippi	5,126	
Haviland ('55)	17-28-16W	160	7,528	13,907	3		"Kinderhook"	4,761	9
Mullinville ('55)	11-28-20W	80	8,049	17,435	2		Mississippi	4,890	8
Nichols ('55)	20-29-18W	900	105,820	105,820	23		Mississippi	4,997	
Pyle ('55)	16-29-16W	160	23,719	48,472	3	1	Mississippi	4,666	14
Soldier Creek ('55)	24-29-16W	80	13,656	27,002	2		Cherokee	4,599	10
Wellsford ('55)	15-28-16W	40	474	474	1		Mississippi	4,538	
							Marmaton	4,680	
Total Kiowa County		1,500	163,466	269,590	36	2			
LABETTE COUNTY									
Altamont	33-19E		no report				Bartlesville	540	
Banzet	35-19E	10	79		1				
Chetopa	36-34-20E	20	2,110		6		Arbuckle	850	23
Coffeyville-Cherryvale*	32-17E				72	1	"Wayside"	400	
a		200	798				Fort Scott	600	
b		10	434				"Bartlesville"	1,000	
c		300	7,467						
d		10	102						
e		400	40,401						
f		10	286						
g		10	359						
h		40	1,476						
i		60	3,514						
j		40	424						
Dartnell	31-17E				13		Bartlesville		
a		160	1,104						
b		20	616						
Edna	34-18E	160	4,584		13		Bartlesville	530	
							Arbuckle	1,191	24
Indenbro	31-19E	10	80		1				
Mound Valley	32-18E				28	2	"J. Bartlesville"	630	
a		300	8,054				"L. Bartlesville"	700	
b		100	19,590				Mississippi	900	30
Price ('17)	33-18E				37		"Bartlesville"	600	
a		400	7,778						
b		40	109						
Valeda			no report						

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- Wells ducing ebd., wells 1956	Producing zone, ft.	
			during 1956	to end, 1956		Name	Depth Thick- ness Aver. grav.
Miscellaneous		30	380		3		
Total Labette County		2,330	100,145	690,861 recorded	174	3	
LANE COUNTY							
North Fork ('52)	19-17-29W		no report	10,974		Lans.-K.C. Marmaton	4,333 4,400
LEAVENWORTH COUNTY							
Banker's Life ('41)	3-10-23E	60	4,504		7	McLouth	1,450
LINN COUNTY							
Beagle		10	279		1		
Blue Mound			no report				
Centerville* ('20)					103	"Squirrel" "Bartlesville"	480 720
a		1,280	20,564				
b		10	119				
c		40	2,197				
Critzer	22-22E		no report		139	Cherokee "Squirrel" "Bartlesville"	600 700
Goodrich-Parker ('22)	25-20-21E						
a		200	1,361				
b		10	469				
c		300	4,112				
d		10	49				
e		1,200	29,117				
LaCygne-Cadmus	20-24E				126	Bandera Labette	150 200
a		40	655				
b		40	362		4		20
c		300	15,039				
d		20	222				
e		300	14,237				
f		10	106				
g		10	114				
Miscellaneous		20	224		2		

Total Linn County		3,800	89,286	1,029,907	371	5		
Oakley ('56)		LOGAN COUNTY		no report	none		Marmaton	4,376
		3-11-32W	LYON COUNTY					
		30-21-10E	Now called Atyeo-Pixlee					
Atyeo* ('25)		30-21-10E	110,781	38			"Bartlesville"	32
Atyeo-Pixlee ('23)		7-22-10E	900				"Bartlesville"	32
Bradfield		24-21-10E	500	27			Viola	5
Bradfield Northwest ('53)		13-21-10E	320	18	1		Viola	32
Fankouser* ('26)		4-22-12E	1,280	77,332	41		"Bartlesville"	5
Ly-Green* ('54)		5-22-11E	200	6,378	4	1	"Bartlesville"	1,850
Ritchey-Moore		34-21-10E	10	2,858	1	1	Mississippi	1,858
Rock Creek ('47)		32-21-11E	200	13,621	5	1	"Bartlesville"	2,170
Welch-Mohr ('53)		30-20-10E	20	40	1	2	"Bartlesville"	1,900
Total Lyon County			3,430	349,279	135	5		2,293
				7,537,643				
				recorded				
		McPHERSON COUNTY						
Battle Hill ('45)		24-18-1W	40	1,946	51,715	1	"Chat"	2,825
Battle Hill North ('48)		13-18-1W	40	8,635	89,331	1	Mississippi	2,811
Bitikofer ('40)		1-20-1W		no report	219,839	3	"Chat"	2,885
Bitikofer North ('46)		25-19-1W		no report	9,043		Mississippi	2,192
Bonaville ('49)		33-17-2W		no report	16,153		Simpson	3,557
Burk ('48)		7-18-1W	120	8,047	118,918	3	Mississippi	2,781
Canton North ('36)		26-18-1W	540	23,053	723,356	11	"Chat"	2,803
Chindberg ('29)		18-19-2W	500	16,851	1,821,706	12	Lans.-K.C.	2,363
Coons ('40)		13-19-1W	40	1,834	14,857	1	"Chat"	3,007
Crowther ('42)		26-17-1W	1,230	90,007	3,295,819	30	"Chat"	2,778
Georob ('47)		31-17-1W	1,460	256,555	2,652,901	43	"Chat"	2,665
Graber* ('34)		32-21-1W	3,600	423,893	12,874,129	110	Misener	3,323
Graber North ('51)		4-21-1W	40	849	3,558	1	"Hunton"	3,274
Groveland ('53)		10-20-4W	40	2,164	17,287	1	Mississippi	2,955
Groveland South ('53)		14-20-4W	300	71,944	205,778	9	Viola	3,728
Gypsum Creek* ('44)		4-17-1W	400	26,579	476,998	14	Viola	3,719
Gypsum Creek South ('53)		9-17-1W		no report	3,215	1	"Chat"	2,619
Harmac*		35-21-3W	320	40,569	41,302	7	Mississippi	2,627
							"Hunton"	3,521

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abn., wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Harmac East ('56)	36-21-3W		no report	none		"Hunton"	3,528	2	
Henne ('40)	21-17-1W	800	31,220	1,580,421	15	"Chat"	2,658	5	
Hollow-Nikkel* ('31)	30-22-3W		Included with Harvey County			"Chat"	3,195	13	40
Jenday ('44)	1-19-2W	840	27,796	941,020	23	"Chat"	2,984	15	37
Johnson ('32)	35-19-3W	960	57,283	3,520,103	10	"Chat"	3,032	14	36
Johnson South ('50)	11-20-3W	40	5,826	13,979	1	Mississippian	3,043		
						Simpson	3,514	6	
Lindsborg ('38)	8-17-3W	5,400	311,219	8,277,913	98	Viola	3,352	21	
						Simpson	3,360	10	
Lindsborg South ('55)	6-18-3W	220	18,649	36,183	4	Simpson	3,523	4	
McPherson ('26)	29-18-2W	1,700	82,152	1,860,915	50	Lens.-K.C.	2,340		38
						"Chat"	2,967	11	
Maxwell ('48)	17-18-1W	160	3,058	42,529	4	Viola	3,140	6	
Paden ('43)	10-18-1W	1,500	288,175	3,432,765	69	Mississippian	2,846	11	36
						"Chat"	2,752	18	42
Paden South ('50)	21-18-1W		Combined with Paden			Viola	3,153	12	
Reuben ('49)	17-18-2W	80	1,741	29,329	2	Mississippian	2,765		
Ritz-Canton ('29)	1-20-2W	14,640	1,470,112	47,956,990	334	Simpson	3,675	86	
						Lens.-K.C.	2,324		
						"Chat"	2,935	31	
Round Hill ('56)	28-18-1W	160	10,922	10,922	3	Viola	3,412	4	
Roxbury ('38)	18-17-1W	1,000	61,851	3,283,531	28	Cherokee	2,832	9	35
						"Chat"	2,684	5	
Roxbury South ('42)	30-17-1W	600	16,502	470,573	8	Simpson	3,278	7	
Roxbury Southeast ('43)	20-17-1W		Combined with Roxbury South			"Chat"	2,658		
Voshell ('29)	9-21-3W	3,200	238,990	29,270,108	61	"Chat"	2,665	9	
						"Chat"	3,095	15	41
Welch-Bornholdt* ('24)	35-20-6W	2,500	212,125	12,751,573	96	Viola	3,301	3	34
Windom* ('53)	30-19-5W	640	156,963	320,260	20	Penn. congl.	3,370		38
						Mississippian	3,412	9	
Total McPherson County		43,160	3,967,525	136,435,169	1,070		3,409		
					39				
MARION COUNTY									
Antelope ('47)	33-18-4E	10	1,517		1	"Chat"	2,380		
Antelope North ('48)	28-18-4E	300	25,099		9	Kansas City	1,840	12	

Antelope South ('56)	4-19-4E	10	152	152		Mississippi	2,401	6
Antelope Southeast ('56)	2-19-4E	10	900	900	1	Mississippi	2,371	9
Beauty South ('56)	34-18-4E	600	27,933	27,993	12	Mississippi	2,337	8
Cedar Creek ('50)	3-19-4E	no report	no report	none		Mississippi	2,295	13
Covert-Sellers ('20)	28-21-4E	900	67,231	2,182	30	Viola	2,313	9
Doyle Creek ('56)	31-21-3E	10	319	319	1	"Hunton"	2,400	3
Durham ('53)	34-18-2E	300	38,226	113,609	6	Viola	2,912	3
Durham South ('54)	3-19-2E	40	77	2,943	1	Simpson	2,899	2
Edmonds ('53)	31-22-4E	500	107,580	261,397	24	Mississippi	3,039	2
Elbing* ('18)	18-23-4E	160	4,927		5	Kansas City	2,471	3
Elbing North ('47)	27-22-4E	160	5,019	79,316	4	Mississippi	2,120	35
Fanska ('43)	6-17-1E	80	3,843		3	Viola	2,400	
Florence ('20)	18-21-5E	100	866		1	"Chat"	2,530	
French Creek ('55)	22-19-2E	20	1,750		1	Viola	2,439	
Hillsboro ('28)	7-19-3E	500	13,372		8	Simpson	2,680	
Lehigh ('46)	27-19-1E	320	3,660	102,071	3	Mississippi	2,300	
Lehigh North ('53)	23-19-1E	20	2,431	9,085	1	Viola	3,020	
Lost Springs* ('26)	22-17-4E	20	626		19	Mississippi	2,470	4
Lost Springs East ('42)		8,000	511,795		200	Viola	2,820	30
Lost Springs Southeast ('48)	10-18-4E	1,000	17,879	55,243	9	Mississippi	2,800	
Nelson West* ('53)	30-17-5E	20	2,533		2	Mississippi	3,225	4
Peabody ('20)	9-22-4E	640	16,141		12	Viola	2,365	
Propp	19-4E	300	12,201			"Chat"	2,350	
Quarry Siding ('53)	16-19-4E	700	9,179	55,619	8	Mississippi	2,345	42
Ratzlaff ('56)	7-19-2E	80	16,713	16,713	9	Viola	2,297	
Shank ('52)	12-22-3E	160	8,229	81,466	5	Mississippi	2,500	
Unger ('55)	8-21-3E	480	146,825	166,939	20	"Hunton"	2,302	42
Unger Southwest ('56)	7-21-3E	1,100	273,518	273,518	67	"Hunton"	3,135	5
Wenger ('47)	11-21-4E	480	51,177	890,193	18	"Hunton"	2,474	27
Youk ('54)	20-18-2E	80	13,689		3	Viola	2,809	7
Total Marion County		10,500	1,398,229	35,618,063	467		2,770	3
				recorded	35		3,017	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- duc- ing ab- d., wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
MEADE COUNTY									
Adams Ranch ('48)	8-35-30W	6,500	5,456	76,140	4	Marmaton	5,346	40	
Angell ('56)	30-32-29W	40	365	365	1	Morrowan	5,608	56	
Bond ('54)	32-33-30W	80	1,857	8,867	2	Atokan	5,619	12	38
						Chesteran	5,860	26	
Bromwell ('52)	7-34-29W	40	no runs	2,878	1	Morrowan	5,901		
Bruno ('53)	20-33-30W	40	7,687	38,118	1	Morrowan	5,656	18	37
Bruno Northeast ('53)	16-33-30W	40	10,950	35,078	1	Morrowan	5,721	10	39
Kismet East ('53)	30-33-30W	80	1,362	1,362	2	Morrowan	5,645		
Leslie ('55)	3-33-30W		Combined with Stevens			Morrowan	5,668	16	
McKinney* ('50)	2-34-26W	1,200	22,908	91,933	20	Mississippian	5,762	66	
Novinger ('51)	26-33-30W	2,420	183,194	1,665,270	32	Marmaton	5,270	20	41
			4,010		1	Morrowan	5,765	21	
			990		1	Mississippian	5,803		
Novinger Northwest ('55)	15-33-30W	80	17,293	22,400	2	Lans.-K.C.	4,553	5	
Plains ('56)	17-32-30W	40	249	249	1	Morrowan	5,611	33	
Singley ('55)	20-33-29W	300	45,247	45,247	7	Morrowan	5,803		
Singley South ('56)	32-33-29W	160	9,393	9,393	4	Morrowan	5,810	16	
Stevens ('52)	32-32-30W	1,960	178,180	203,000	16	Morrowan	5,560		
Total Meade County		12,980	489,144	2,200,300	96				
					1				
MIAMI COUNTY									
Beagle	19-22E	40	352		1				
Black	18-24E	100	469		3				
Block	18-24E				18				
		480	6,257			"Squirrel"	500	16	
		80	1,062						
		80	1,257						
Louisburg	17-25E				102				
		680	21,335			Knobtown	270		
		20	255			"Peru"	430		
		640	12,528			"Squirrel"	600		
		10	1,710						
Paola-Rantoul* ('60)	17-23E				1,104				
		3,700	414,787		44	Knobtown	300	25	
						Hepler	400	15	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.		Aver. grav.
			during 1956	to end, 1956		Name	Depth	
d		4,500	39,777					
e		400	49,370					
f		800	18,379					
g		10	140					
h		40	1,341					
i		40	2,130					
j		10	452					
k		10	298					
l		2,400	19,144					
m		100	5,167					
n		40	1,446					
Coleman ('21)	28-32-14E	600	2,420		9	Arbuckle	1,700	
Elk City*	31-13E	10	484		1	Marmaton		
Jefferson-Sycamore ('03)	18-33-15E				380	"Weiser"	800	15
						"Bartlesville"	1,200	
a		10	687					
b		40	2,675					
c		40	2,833					
d		1,000	25,830					
e		200	7,417					
f		10	562					
g		9,000	92,550					
h		600	11,719					
i		1,200	424					
j		40	1,074					
k		10	230					
l		100	4,480					
m		10	43					
n		700	14,092					
o		10	69					
p		600	5,815					
q		100	4,512					
r		1,000	14,748					
s		100	1,761					
t		40	693					
Neodesha*	31-16E				102	"Bartlesville"	950	
a		10	346					
b		640	10,628					

[illegible]

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abds., wells 1956	Producing zone, ft.		Aver. grav.
			during 1956	to end, 1956		Name	Depth	
Strahm East ('53)	26-2-14E	20	73	7,744	1	"Hunton"	2,826	11
Total Nemaha County		260	24,826	233,280	6	3		
NEOSHO COUNTY								
Erie ('03)	28-20E				241	"Bartlesville"	650	25
a		3,000	55,489					
b		100	2,197					
c		10	298					
d		1,200	24,892					
Humboldt-Chanute*	27-18E				1,234	"Bartlesville"	700	23
a		10	356					
b		140	2,606					
c		10,000	368,714					
d		40	1,072					
e		40	2,831					
f		10	89					
g		10	30					
h		1,100	13,390					
i		10	298					
j		40	1,087					
k		10	60					
l		60	3,209					
m		1,000	17,437					
n		200	5,745					
o		40	893					
p		10	536					
Kimball	27-21E				45	"Bartlesville"	850	
Morehead	30-30-18E							
a		40	6,302					
b		300	27,664					
c		10	89					
St. Paul-Walnut*	29-21E				115	"Bartlesville"	550	
a		1,500	53,922					
b		40	1,012					
c		10	118					
d		180	3,614					

e f "Thayer" Trent	29-17E 28-21E	10 10 200	238 60 4,930	20 33	1	"Bartlesville"	530			
		10 300 600 10	297 31,807 3,923 2,944	13 1		"Bartlesville"	750			
a b Urbana Miscellaneous	28-18E									
Total Neosho County		20,250	638,149	24,255,436 recorded	1,702	31				
NESS COUNTY										
Aldrich ('29)	7-18-25W	5,340	254,190	3,627,095	50	1	Warsaw	4,428	2	34
Aldrich Northeast ('54)	23-17-25W	820	110,377	214,756	20		Marmaton	4,325	4	
							Penn. congl.	4,334	10	
							Mississippian	4,398	7	34
Arnold ('43)	22-16-25W	300	25,298	424,972	5		Fort Scott	4,436	21	
							Warsaw	4,528		
Brownell ('56)	23-16-22W	40	1,446	1,446	1		Cherokee	4,341	4	
Cruce ('56)	4-19-26W	40	6,161	6,161	1		Mississippian	4,556	5	
Davenport ('55)	36-16-21W	320	69,992	76,258	8		Cherokee	4,045	2	
Kansas West ('50)	28-17-26W		no report	none			Mississippian	4,438		
Manteno ('45)	31-19-25W	80	no runs	56,158	2		Warsaw	4,549		
Ryersee ('56)	35-18-21W	80	8,411	8,411	2		Cherokee	4,100	22	
Schoharie ('56)	22-19-23W	40	2,238	2,238	1		Mississippian	4,209	6	
Vermilion ('55)	6-17-24W	40	7,529	10,277	1		Marmaton	4,272	58	
Wellmanville ('56)	34-19-21W		no report	none			Marmaton	4,385	11	
Pools or fields abandoned				7,581			Mississippian	4,419	4	
Total Ness County		7,100	485,642	4,435,353	91	1				
NORTON COUNTY										
Norton ('53)	36-3-24W	2,180	853,816	2,549,353	117		Arbuckle	3,778	12	31
Ray* ('40)	32-5-20W	340	34,907	391,050	5		Reagan	3,297		
							Lans.-K.C.	3,575		
							Arbuckle	3,540	13	32
Ray North ('54)	13-5-21W		no report	none			Reagan	3,544		
Ray Northwest ('53)	22-5-21W	80	6,775	21,254	2		Arbuckle	3,605	1	31
Ray West ('45)	26-5-21W	200	24,209	202,807	7		Arbuckle	3,650	9	31.2

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells	Producing zone, ft.		Ave grav.
			during 1956	to end, 1956		Name	Depth		Thick- ness
Pools or fields abandoned								
Total Norton County								
Ruggles ('52)	23-10-15W	2,800	919,707	3,196,518	131	Shawnee Lans.-K.C. Penn. congl.	2,986 3,024 3,394	30 16
OSBORNE COUNTY								
PAWNEE COUNTY								
Ash Creek* ('47)	31-20-15W	40	no report	240,495	1	Arbuckle	3,787	
Ash Creek Southwest ('47)	11-21-16W	40	3,820	121,124	1	Arbuckle	3,779	13
Benson ('45)	30-23-15W	1,800	166,540	876,064	24	Lans.-K.C.	3,853	68
Carpenter ('55)	25-23-17W	120	5,621	6,852	3	Marmaton	4,123	
						Penn.-Miss.	4,158	10
Carpenter West ('55)	26-23-17W		no report	573		Cherokee	4,240	4
Conkling ('53)	4-20-18W		no report	none		Arbuckle	4,020	
Dunes ('53)	22-22-15W	680	73,000	270,554	8	Arbuckle	3,956	24
Dunes Southwest ('53)	33-22-15W	40	4,912	27,596	1	Lans.-K.C.	3,728	8
Evers ('51)	1-22-16W	400	58,309	289,548	6	Lans.-K.C. Penn. congl.	3,525 3,814	6 34
						Simpson	3,861	4
Evers Northeast ('53)	31-21-15W	40	155	7,570	1	Arbuckle	3,908	11
Garfield ('47)	17-23-17W	8,000	1,885,915	2,971,316	232	Arbuckle	3,915	39
					3	Penn.-Miss. "Kinderhook"	4,279 4,276	5
Garfield Southwest ('54)	30-23-17W		no report	none		Mississippian	4,317	
						Misener	4,347	
Garfield West ('55)	3-23-18W	80	2,627	7,520	2	Penn. congl.	4,310	13
Godfrey ('56)	12-22-18W		Abandoned during 1956			Penn. congl.	4,127	6
Hearn ('53)	35-23-15W	80	9,825	22,298	2	Lans.-K.C.	3,833	
					1	Arbuckle	4,130	5
Jay ('54)	3-23-15W	480	20,770	123,995	3	Lans.-K.C.	3,668	
			47,563		8	Simpson	4,025	14
Jay South ('56)	9-23-15W	40	9,015	9,015	1	Simpson	4,101	6
Larned ('49)	28-21-16W	2,600	574,664	2,061,239	68	Arbuckle	3,877	5
Larned Southwest ('56)	5-22-16W	300	26,975	26,975	7	Arbuckle	3,850	5

Lovett ('54)	35-22-15W	120	10,439	25,212	2	Lans.-K.C.	3,682	8	37
Newsom ('56)	25-20-20W	40	972	972	1	Mississippi	4,270	8	
Oro ('53)	9-23-19W	640	121,880	306,420	13	Penn. congl.	4,204	5	39
Oro West ('53)	8-20-19W		no report	3,891		Penn. congl.	4,124		
Pawnee Rock* ('36)	13-20-16W	* 3,000	226,106	4,097,518	55	Arbuckle	3,832	16	
Rutherford ('46)	8-20-16W	300	14,506	313,718	5	Arbuckle	3,815	9	32
Ryan* ('45)	35-19-16W	320	15,784	551,476	4	Arbuckle	3,656	5	
Ryan Southeast ('45)	12-20-16W	300	6,398	332,042	9	Arbuckle	3,688	3	
Shady ('48)	35-22-16W		no report	6,038		Arbuckle	4,067		
Shady Southwest ('53)	3-23-16W	120	18,698	70,524	3	Lans.-K.C.	3,705	5	
Shiley ('54)	14-20-20W	200	40,044	108,787	7	Penn. congl.	4,173	7	
Shiley East ('54)	18-20-19W	120	53,452	112,592	8	Cherokee	4,223	2	38
Sweeney ('53)	8-21-15W	600	9,767	39,739	10	Arbuckle	3,831		
Sweeney Southwest ('55)	25-21-16W	40	3,254	6,554	2	Arbuckle	3,901	3	
Zook ('42)	16-23-16W		no report	7,016		Arbuckle	4,066		
Total Pawnee County		20,540	3,411,011	13,045,133	487			18	
PHILLIPS COUNTY									
Beckman ('51)	3-4-19W	40	1,683	11,152	1	Lans.-K.C.	3,201	4	
Bow Creek ('39)	25-5-18W	120	3,699	80,909	3	Lans.-K.C.	3,111	53	
Dayton ('41)	36-2-19W	1,540	40,153	1,193,787	17	Lans.-K.C.	3,430	8	
Fredericksburg ('52)	4-1-18W	40	2,646	14,362	1	Lans.-K.C.	3,457	3	
Glenwood ('51)	21-1-17W	80	4,843	24,869	2	Lans.-K.C.	3,597	21	37
Hansen ('43)	14-5-20W	1,280	184,161	2,757,070	37	Lans.-K.C.	3,363	6	
Hansen West ('52)	15-5-20W	40	5,428	27,263	1	Arbuckle	3,530	11	
Huffstutter ('49)	6-2-18W	5,640	265,288	3,546,937	127	Lans.-K.C.	3,543	36	
Huffstutter Southwest ('51)	23-2-19W	200	17,603	136,390	5	Lans.-K.C.	3,444	4	
Kent ('51)	22-1-18W		no report	1,472		Lans.-K.C.	3,453		
Logan ('45)	3-5-20W	420	27,147	472,504	11	Lans.-K.C.	3,432		
Mont-Sol ('54)	1-4-19W	200	27,054	94,819	5	Arbuckle	3,149	10	
Ray* ('40)	32-5-20W	4,000	1,190,149	19,380,503	147	Lans.-K.C.	3,255		
						Arbuckle	3,297		
						Reagan	3,575		
Slinker ('51)	25-4-20W	200	19,751	126,271	5	Lans.-K.C.	3,540	13	32
Stuttgart ('50)	14-3-19W	640	47,699	312,317	13	Lans.-K.C.	3,215	8	36
Stuttgart South ('51)	23-3-19W	40	2,677	22,917	1	Lans.-K.C.	3,146	3	37
Wolf Creek ('54)	16-4-19W	40	2,074	5,718	1	Lans.-K.C.	3,291	3	
Pools or fields abandoned				1,596		Lans.-K.C.	3,212	2	
Total Phillips County		14,520	1,842,060	23,210,856	377			3	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
PRATT COUNTY									
Blowout ('52)	8-27-14W	40	1,708	9,761	1	Lans.-K.C.	3,929	7	
Cairo North ('54)	6-28-11W	80	10,779	39,526	2	Viola	4,314	4	37
Carver-Robbins Northeast ('56)	10-27-15W	160	1,118	1,118	2	Penn. cong.	4,400	9	
Chance ('46)	4-27-13W	1,600	255,027	3,219,555	72	Marmaton	4,137		34.3
					1	Mississippian	4,254		34
						Viola	4,250	10	
						Simpson	4,380		
						Arbuckle	4,432	25	
Chance East ('52)	34-26-13W	320	8,730	261,982	1	Lans.-K.C.	3,984	8	37
			53,286		7	Mississippian	4,138		
			15,195		2	Viola	4,261	16	
			13,480		2	Simpson	4,296		
						Arbuckle	4,323		
Chance North ('54)	21-26-13W	80	1,962	11,839	2	Simpson	4,421	6	39
Chance Northwest ('54)	29-26-13W	120	13,026	67,754	3	Simpson	4,422	8	35
Chitwood ('43)	23-28-12W	2,000	419,060	8,481,898	69	Lans.-K.C.			
						Viola			
						Simpson	4,396	14	
						Arbuckle			
Clara* ('48)	36-29-14W	140	8,111	194,297	5	Simpson	4,472	4	40
Coats ('44)	24-29-14W	200	9,935	433,806	8	Simpson	4,402	12	
						Arbuckle			
Coats North ('54)	12-29-14W	80	18,216	89,483	2	Marmaton	4,342	10	29
						Simpson	4,584	16	
Cullison ('56)	25-28-15W	40	2,788	2,788	1	Mississippian	4,543	13	
Cunningham* ('31)	7-28-11W	4,800	84,017	4,898,646	67	Lans.-K.C.	3,390	7	41
						Viola	4,330		
Earl ('54)	36-28-14W	200	17,934	84,477	4	Lans.-K.C.	4,223		
						Simpson	4,520	14	
Earl North ('55)	36-28-14W	40	7,756	9,329	1	Simpson	4,493	17	
Fitzsimmons ('53)	30-27-13W	160	35,792	116,800	5	Lans.-K.C.	4,056	3	
Fitzsimmons South ('54)	31-27-13W	300	52,431	89,617	8	Lans.-K.C.	4,124		38
						Simpson	4,435	10	38

Frisbie ('43)	5-26-13W	400	54,091	460,904	9	Lans.-K.C.	3,947	8
Frisbie Northeast ('48)	4-26-13W	400	30,774	308,692	12	Lans.-K.C.	3,788	27
						Viola	4,170	17
						Simpson	4,274	
Gereke ('53)	12-26-15W		no report	28,021		Viola	4,376	21
Haskins ('56)	5-27-14W	80	4,598	4,598	2	Lans.-K.C.	4,118	8
						Viola	4,418	8
Hertlein ('53)	22-28-13W		no report	307		Lans.-K.C.	3,924	
Iuka-Carmi ('37)	11-27-13W	8,780	84,852	18,091,318	17	Lans.-K.C.	4,104	31
			1,219		1	Mississippian	4,112	24
			68,477		13	Viola	4,195	
			1,085,771		164	Simpson	4,292	
			231,971		43	Arbuckle	4,354	
Iuka-Carmi Northwest ('53)	26-26-13W	400	19,537	95,914	6	Viola	4,217	16
						Simpson	4,276	37
						Arbuckle	4,358	18
						Lans.-K.C.	3,834	
Jarboe ('52)	25-26-14W		no report	1,267		Viola	4,323	
Lion ('53)	29-27-11W		no report	none		Lans.-K.C.	3,796	38
Lion Northeast ('54)	21-27-11W	40	8,552	25,132	1	Simpson	4,490	27
Ludwick ('44)	4-29-13W	40	1,258	36,156	1	Viola	4,234	37
Moore ('49)	1-26-14W	400	18,115	220,038	2	Simpson	4,348	
			41,330		5	Lans.-K.C.	3,846	38
Moore Southwest ('53)	11-26-14W	640	21,071	121,227	10	Kinderhookian	4,246	
						Simpson	4,364	2
Randle ('55)	5-26-14W	100	13,961	19,813	2	Lans.-K.C.	3,946	8
Shriver ('44)	33-29-14W	300	25,475	768,223	6	Simpson	4,557	7
Stark ('41)	18-26-11W	40	240	859,316	1	Lans.-K.C.	3,601	
					6	Viola	4,121	2
Stoops ('46)	7-29-12W	80	1,910	93,910	2	Viola	4,446	
Stoops Southwest ('46)	24-29-13W	40	852	18,305	1	Viola	4,483	39
Tatlock ('54)	28-26-15W	40	18,200	35,497	2	Lans.-K.C.	3,925	4
Total Pratt County		22,140	2,762,605	39,201,314	564			23
RAWLINS COUNTY								
Brumm ('56)	7-2-36W	40	904	904		Lans.-K.C.	4,312	17
RENO COUNTY								
Abbyville ('27)	24-24-8W	1,040	55,518	965,727	15	Lans.-K.C.	3,540	38
Albion ('48)	14-26-6W	100	1,224	29,590	3	Lans.-K.C.	3,342	31
						"Chat"	3,654	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells	Producing zone, ft.		
			during 1956	to end, 1956	during 1956	Name	Depth	Aver. grav.
Albion North ('50)	14-26-6W		no report	767		Viola	3,997	
Bacon ('53)	36-23-5W	40	7,285	23,104	1	Mississippian	3,382	38
Beck ('55)	24-23-9W	40	10,074	12,062	1	Penn. congl.	3,711	4
Buhler ('38)	25-22-5W	1,200	74,752	1,301,465	15	Viola	3,890	5
						Simpson	3,197	42
Burrton* ('31)	1-23-4W	11,200	787,866	50,710,939	329	Mississippian	3,266	33
		Includes Harvey County production			4	"Hunton"	3,583	42
Castleton ('55)	29-25-6W	40	4,332	7,841	1	Misener	3,992	6
Grove ('54)	12-25-10W		no report	739		Mississippian	3,884	36.7
Haven ('51)	9-25-4W	80	3,537	28,173	2	Simpson	3,977	4
Hilger ('34)	16-26-4W	900	28,267	4,811,537	10	Viola	4,062	5
Hilger Southwest ('55)	29-26-4W	160	25,839	88,198	4	Misener	3,955	
			36,796		5	Viola	4,012	4
Lerado Southwest ('44)	21-26-9W	40	3,080	140,218	1	Viola	4,177	11
Morton ('42)	17-24-8W	40	2,058	49,168	1	Lans.-K.C.	3,180	12
Morton Southeast ('51)	16-24-8W	40	1,922	12,861	1	Lans.-K.C.	3,423	38
Nicklaus ('52)	3-26-4W	120	32,368	99,034	4	Lans.-K.C.	3,249	38
Sankey ('51)	22-22-10W	80	737	28,438	2	Lans.-K.C.	3,187	38
Sankey Southwest ('52)	21-22-10W	80	no runs	16,830	1	Viola	3,543	2
Sterling* ('51)	4-22-8W	400	50,023	127,153	9	Mississippian	3,385	40
Yoder ('35)	34-24-5W		no report	93,285		"Chat"	3,450	34
Zenith-Peace Creek ('41)	21-23-10W		Included with Stafford County	2,590,055	6	Viola	3,773	
Pools or fields abandoned								
Total Reno County		15,560	1,125,678	61,137,234	405			15

RICE COUNTY

Bell ('53)	9-21-10W	160	34,522	113,106	4	Arbuckle	3,391	39
Bingham ('52)	35-19-9W	80	2,502	24,983	2	Arbuckle	3,332	34
Bloomer* ('36)	36-17-11W	1,500	444,542	15,368,270	77	Lans.-K.C.	3,044	43
						Arbuckle	3,257	43
Bowman North ('48)	16-19-10W	40	no runs	13,629	1	Arbuckle	3,331	
Bredfeldt ('48)	7-18-9W	120	4,610	97,893	3	Arbuckle	3,226	8
Bredfeldt Northwest ('56)	12-18-10W	40	4,581	4,581	1	Arbuckle	3,250	5
Bredfeldt West ('39)	12-18-10W		no report	60,191	1	Arbuckle	3,260	
Bushton ('54)	11-18-10W		no report	392		Arbuckle	3,281	

Calf Creek ('50)	28-18-10W	200	21,453	166,540	6	Precambrian	3,143	10	40
Calf Creek North ('52)	28-18-10W	80	1,689	12,119	2	Arbuckle	3,248	13	
Chase-Silica* ('31)	32-18-9W	36,000	760,121	101,515,427	706	Lans.-K.C. Basal Penn. sand"	2,942	10	40
Click ('52)	3-18-7W		no report	5,938		Simpson	3,355	8	
Click Southeast ('47)	11-18-7W	80	5,823			Arbuckle	3,242	10	48
Crawford ('53)	12-18-7W	320	62,369	54,989	3	Lans.-K.C.	3,252		
Crawford Northwest ('55)	1-18-7W	40	no runs	832	1	Lans.-K.C.	3,050	5	
Crawford Southeast ('54)	20-18-6W	80	2,335	8,633	2	Penn. congl.	3,085	7	40
Dymond ('55)	18-21-7W	80	1,259	1,944	2	Penn. congl.	3,194	3	
Engelland ('49)	34-23-7W	40	no report	11,073	1	Penn. congl.	3,207	6	40
Fair ('52)	15-21-10W	40	676	5,972	1	Mississippian	3,276	10	
Farmer ('52)	24-18-10W	600	49,093	361,302	19	Penn. congl.	3,392	6	
Frederick ('51)	10-18-9W	160	2,006	152,322	1	Arbuckle	3,348	10	40
Galt ('52)	8-18-7W	200	100,954	82,241	15	Penn. congl.	3,222	26	
Geneseo-Edwards* ('34)	25-18-8W	6,900	1,824,370	40,367,241	293	Simpson	3,213	10	
					4	Arbuckle	3,280	4	39
					8	Lans.-K.C.	2,787		
						Penn. congl.	3,222	39	
						Simpson	3,180	41	
						Arbuckle	3,132	25	40
Glen Sharrald ('50)	20-18-10W	120	2,197	36,000	3	Lans.-K.C.	3,118		
Green ('53)	14-19-6W		no report	618		Mississippian	3,388		
Guldner ('55)	17-18-9W		no report	none		Arbuckle	3,250		
Heinz ('38)	8-18-10W	300	10,100	330,902	7	Lans.-K.C.	3,000	14	
						Arbuckle	3,254	22	40
Ixl ('50)	4-19-10W	700	23,500	228,129	9	Lans.-K.C.	3,068		
Keller ('43)	3-19-9W		Combined with Chase-Silica			Arbuckle	3,308		
Lyons ('49)	14-20-8W	40	877	74,559	1	Lans.-K.C.	3,226		
						Penn. congl.		16	
						Misener	3,315		
Mary Ida* ('50)	31-18-10W	640	52,944	615,709	15	Arbuckle	3,277		36
						Lans.-K.C.	3,033		
Meadowside* ('49)	24-18-11W	120	26,096	44,502	3	Arbuckle	3,272	12	38
Munyon ('50)	34-18-10W	120	20,345	78,607	3	Lans.-K.C.	3,079		
						Arbuckle	3,366		43
						"Sooy"	3,270		
Munyon East ('53)	34-18-10W		no report	5,234		Arbuckle	3,275		
						Arbuckle	3,274		

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Munyon South ('51)	3-19-10W	200	20,397	131,356	6	Arbuckle	3,300	13	43
Odessa ('49)	32-18-6W	400	30,244	336,218	12	Lans.-K.C.	3,092	6	30
Odessa South ('49)	9-19-6W	120	8,144	60,661	4	Lans.-K.C.	3,069	6	39
Orth ('32)	27-18-10W	1,600	142,892	3,138,645	50	Shawnee			40
						Lans.-K.C.	2,915	10	
						"Sooy"	3,187	21	
						Precambrian	3,240	27	
Orth North ('56)	23-18-10W	40	1,777	1,777	1	Arbuckle	3,262	8	
Orth West ('44)	21-18-10W	600	33,899	684,137	17	Shawnee	2,698	37	41
Ponce ('36)	28-21-7W	80	8,887	76,172	2	Arbuckle	3,235		
Prosper ('48)	6-18-9W	40	no runs	10,256	1	Arbuckle	3,232	40	
Prosper East ('50)	5-18-9W	160	10,797	197,060	4	Arbuckle	3,222	16	
Raymond ('29)	21-20-10W	2,800	171,616	14,211,210	69	Wabaunsee	2,285		
						Lans.-K.C.	3,130	10	
Rick* ('36)	1-19-11W	40	2,169	60,910	1	Arbuckle	3,330	41	41
						Lans.-K.C.	3,106		
						Arbuckle	3,355		
Rick Southeast ('47)	18-19-10W	100	8,725	110,001	3	Lans.-K.C.	3,026		36
						Arbuckle	3,334	5	
Rickard ('35)	22-18-9W	40	2,463	203,154	1	Arbuckle	3,324	7	
Ringwald ('49)	32-18-10W	500	62,807	666,357	8	Lans.-K.C.	2,947	5	38
			9,827		3	Precambrian	3,072		
Roesler* ('43)	14-18-11W	320	18,090	157,557	6	Arbuckle	3,291	7	
Silica South* ('35)	24-20-11W	460	77,221	1,510,515	15	Lans.-K.C.	3,035		
						Arbuckle	3,268		
Staatz ('53)	15-18-9W	80	13,076	43,082	2	Penn. congl.	3,247		37
Sterling* ('51)	4-22-8W	200	5,283	36,912	3	Mississippian	3,385	12	
Union East ('50)	27-20-8W	200	4,959	66,564	6	"Sooy"	3,305	9	
Volkland ('43)	27-18-9W	400	20,508	748,983	7	Arbuckle	3,221	30	
Welch-Bornholdt* ('24)	35-20-6W	6,300	893,528	14,956,648	271	"Chat"	3,370		34
Welch North ('37)	23-20-6W	160	5,947	130,156	3	"Chat"	3,334	32	
Wherry ('33)	11-21-7W	7,640	306,682	12,611,046	108	"Sooy"	3,358	22	
Wherry North ('47)	35-20-7W		Combined with Wherry		6				

Windom* ('53) Pools or fields abandoned	30-19-5W	120	43,569	60,383 287,427	6	Penn. cong.	3,412
Total Rice County		71,400	5,369,801	210,515,444	1,806	80	
ROOKS COUNTY							
Allphin ('53)	33-10-20W		Now called Trico				
Allphin Northwest ('54)	32-10-20W		Now called Trico				
Amboy Southwest ('55)	17-10-20W		Combined with Marcotte				
Annon ('51)	27-10-20W		Now called Trico				
Annon South ('56)	34-10-20W		Now called Trico				
Barry ('42)	11-9-19W	1,700	127,802	8,256,154	17	2	Lans.-K.C.
Barry East ('47)	6-9-18W	560	433,780	727,043	49		Arbuckle
Barry Southeast ('46)	13-9-19W	700	54,273	1,884,387	10		Lans.-K.C.
Bassett ('51)	20-10-20W		Now called Trico				Arbuckle
Baum ('42)	10-10-16W	40	1,355	25,700	1	15	Lans.-K.C.
Baumgarten ('50)	25-9-19W	1,300	16,453	616,287	4	25	Lans.-K.C.
Belmont ('49)	28-7-19W	40	137,900	16,765	20	7	Arbuckle
Berland South ('51)	31-10-19W		1,840	16,765	1	8	Lans.-K.C.
Berland Southeast ('53)	29-10-19W	160	Combined with Marcotte				
Berland Southwest ('49)	26-10-20W		16,144	74,060	3	5	Arbuckle
Brungardt* ('52)	35-10-17W	500	Combined with Marcotte				
Brungardt Northwest ('53)	34-10-17W	40	47,805	230,866	14	16	Lans.-K.C.
Burnett* ('37)	1-11-18W	700	no report				Penn. cong.
Burnett Northwest* ('46)	3-11-18W	280	99,326	1,634,834	25		Arbuckle
Carmichael ('55)	33-8-18W	120	32,361	474,447	5	7	Arbuckle
Colby ('53)	27-10-17W		27,646	55,958	3	30	Arbuckle
Cooper* ('43)	5-10-20W	1,600	no report				Lans.-K.C.
Cresson ('56)	11-9-20W	40	176,218	1,579,085	35	8	Arbuckle
Dancer ('52)	4-8-17W	40	2,939	2,939	1	6	Lans.-K.C.
Depita ('34)	31-8-17W	3,600	186	9,671	1	19	Arbuckle
			349,883	2,182,834	72	8	Arbuckle
					3	12	Lans.-K.C.
						5	Lans.-K.C.
						10	Arbuckle

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Dopita East ('52)	29-8-17W	380	49,841	206,501	9	Lans.-K.C.	3,304	6	
Dorr ('42)	20-9-16W	880	147,658	1,114,531	37	Arbuckle	3,421	21	
Dorr South ('53)	20-9-16W	80	18,250	52,664	5	Lans.-K.C.	3,230	10	35
Faubion ('36)	12-6-18W	40	4,450	56,579	1	Lans.-K.C.	3,233	10	
Fehnel ('52)	16-10-19W	80	7,263	49,994	2	Lans.-K.C.	3,162	3	36
Finnesy ('47)	10-14-18W	80	4,422	41,193	2	Lans.-K.C.	3,480	14	35
Flagler ('55)	15-10-18W	40	6,625	12,366	1	Lans.-K.C.	3,419	6	
Ganoung ('53)	31-9-17W	80	4,635	29,391	2	Lans.-K.C.	3,445	6	
Gick ('47)	30-9-19W	280	32,465	290,735	8	Penn. congl.	3,281	7	34
Gra-Rook ('48)	30-9-20W	800	160,793	1,357,463	20	Arbuckle	3,578	12	
Gra-Rook North ('56)	18-9-20W	280	10,931	10,931	4	Arbuckle	3,810	4	
Grover ('50)	22-7-19W	400	19,240	158,728	9	Lans.-K.C.	3,746	14	32
Hayden ('49)	31-8-19W	400	56,245	615,408	13	Arbuckle	3,272	40	
Hillside ('52)	12-8-20W	40	1,948	14,100	1	Arbuckle	3,408	13	33
Jelinek ('47)	23-9-19W	2,700	24,115	4,464,361	3	Lans.-K.C.	3,239	4	
Kern ('50)	28-9-20W	200	560,507	318,980	5	Arbuckle	3,513	8	28
Krueger* ('48)	35-10-16W	380	43,363	547,896	12	Lans.-K.C.	3,206	23	
Kruse ('51)	3-10-16W	440	20,125	278,657	11	Arbuckle	3,552	59	36
Kruse Northwest ('53)	34-9-16W	120	7,763	33,850	3	Lans.-K.C.	3,094	26	38
Laton ('27)	11-9-16W	4,100	203,778	4,563,448	102	Lans.-K.C.	3,200	6	
Laura* ('50)	30-10-20W		Combined with Cooper			Lans.-K.C.	3,228	33	30
Laura Southeast ('52)	30-10-20W		Now called Trico			Arbuckle			
Locust Grove ('49)	8-7-19W	40	2,209	26,520	1	Arbuckle	3,450	14	
Locust Grove Southeast ('51)	9-7-19W		no report	4,525		Arbuckle	3,400		
Lone Star ('48)	4-8-17W	860	67,523	384,258	19	Lans.-K.C.	3,259	17	
Lone Star Southwest ('51)	8-8-17W	40	2,549	26,265	1	Arbuckle	3,382	17	25
Lynd ('51)	32-9-19W	960	50,189	375,233	15	Arbuckle	3,299	20	27
Lynd Southwest ('52)	5-10-19W	40	8,334	13,359	1	Arbuckle	3,750	7	
						Arbuckle	3,759	4	29

McClellan ('45)	9-9-19W	40	2,208	68,434	1	Lans.-K.C.	3,343	5	34
McHale ('48)	8-9-18W	640	26,802	458,215	8	Lans.-K.C.	3,436	2	26
Marc ('48)	18-9-19W	80	843	19,618	2	Arbuckle	3,494	8	
Marcotte ('43)	15-10-20W	14,000	1,887,109	15,321,029	337	Lans.-K.C.	3,586	6	
					5	Arbuckle	3,752		
Marcotte North ('50)	31-9-19W		Combined with Marcotte						
Marcotte South ('51)	22-10-20W		Now called Trico						
Marcotte Southwest ('51)	21-10-20W		Combined with Marcotte						
Mayhew ('51)	24-9-19W	320	19,837	42,556	5	Arbuckle	3,613	25	
Medicine Creek ('52)	18-8-16W	120	2,927	26,335	3	Lans.-K.C.	3,054	17	36
Mt. Ayr ('52)	13-10-18W	40	579	11,507	1	Lans.-K.C.	3,554	12	
					1	Penn. congl.	3,648		
Muilenburg* ('49)	1-10-21W		Combined with Cooper						
Nettie ('48)	34-9-17W	700	136,375	1,027,840	34	Lans.-K.C.	3,243		
						Simpson	3,499		
Nettie Southeast ('55)	2-10-17W	40	3,677	6,489	1	Arbuckle	3,513	32	
Northampton ('48)	26-9-20W	1,200	16,558	3,570,018	2	Lans.-K.C.	3,268	3	
			414,798		55	Lans.-K.C.	3,596	4	27
Nutsch ('54)	3-10-20W		Combined with Marcotte			Arbuckle	3,803	11	
Nyra ('46)	16-9-17W	400	13,247	214,127	8	Lans.-K.C.	3,429		
						Arbuckle	3,501		
Palco ('43)	5-10-20W		Now called Cooper or Marcotte						
Palco Southeast ('49)	3-10-20W		Combined with Marcotte						
Palco Southwest ('51)	7-10-20W		Combined with Cooper						
Palco Townsite ('45)	20-9-20W	80	2,829	33,735	2	Arbuckle	3,847	15	29
Paradise Creek ('47)	21-9-18W	1,100	122,574	2,387,985	34	Lans.-K.C.	3,400	26	
						Arbuckle	3,576	13	
Paradise Creek West ('53)	20-9-18W	160	49,958	157,170	5	Arbuckle	3,594	13	23
Plainville ('48)	31-9-17W	40	2,928	32,871	1	Lans.-K.C.	3,477	38	
						Arbuckle	3,613	2	
Ray Southeast ('42)	9-6-20W	40	2,434	87,180	1	Reagan	3,600	6	38
Riffe ('51)	4-7-19W	120	7,961	49,532	2	Lans.-K.C.	3,230	36	36
Slate ('51)	31-6-19W	120	6,781	34,126	3	Lans.-K.C.	3,291	36	36
						Arbuckle	3,545	15	
Spaulding* ('53)	1-11-21W		Now called Trico						
Stamper ('50)	28-8-17W		no report	910		Marmaton	3,394		
Stockton ('37)	35-7-17W	400	18,563	202,491	8	Shawnee	2,692	62	
						Lans.-K.C.	3,180		
Sweet ('51)	18-8-18W		no report	4,738		Arbuckle	3,423		
Trarbach ('56)	36-10-20W		Combined with Marcotte						

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abn. wells 1956	Producing zone, ft.		Aver. grav.
			during 1956	to end, 1956		Name	Depth	
Trico* ('51)	30-10-20W	3,840	401,819	987,762	56	Lans.-K.C.	3,543	
						Arbuckle	3,749	18
Vohs ('45)	14-10-19W	940	196,658	2,325,806	24	Lans.-K.C.	3,365	7
Vohs Northwest ('47)	9-10-19W	40	2,806	126,686	1	Lans.-K.C.	3,446	8
						Arbuckle	3,738	
Vohs South ('47)	23-10-19W		no report	12,524		Lans.-K.C.	3,303	
Webster ('46)	27-8-19W	2,600	143,689	2,739,796	46	Shawnee	3,180	12
						Arbuckle	3,403	5
Westhusin ('36)	11-9-17W	1,500	98,729	2,430,929	37	Lans.-K.C.	3,231	11
						Arbuckle	3,408	
Whisman ('50)	9-9-20W		no report	none		Lans.-K.C.	3,427	
Williams ('53)	9-10-18W	600	64,564	284,821	9	Toronto	3,386	19
						Lans.-K.C.	3,459	
						Simpson	3,717	
Williams North ('56)	32-9-18W	40	2,729	2,729	1	Arbuckle	3,733	6
						Simpson	3,714	3
Williams Northwest ('53)	6-10-18W	40	3,761	17,564	1	Arbuckle	3,725	3
Williams Southeast ('53)	16-10-18W	200	44,631	102,638	6	Lans.-K.C.	3,409	26
Yohe ('49)	4-9-18W	40	3,565	48,236	1	Lans.-K.C.	3,444	3
Zurich ('35)	26-10-19W	800	21,970	432,987	9	Shawnee	3,266	24
						Lans.-K.C.	3,087	37
Zurich Southwest ('52)	34-10-19W	40	3,842	19,991	1	Lans.-K.C.	3,340	9
Zurich Townsite ('44)	27-9-19W	360	8,835	537,569	1	Lans.-K.C.	3,385	28
			40,665		7	Lans.-K.C.	3,462	
Pools or fields abandoned				96,885		Arbuckle	3,647	6
Total Rooks County		55,840	6,988,701	67,069,840	1,360			27
RUSH COUNTY								
Chilly Knob ('53)	18-19-17W		no report	none		Arbuckle	3,928	
Otis-Albert* ('34)	10-18-16W	2,840	456,574	5,509,490	62	Reagan	3,527	9
Pechanec ('56)	2-19-17W	40	786	786	1	Arbuckle	3,842	11
Reichel ('53)	23-17-17W	40	124	187	1	Lans.-K.C.	3,330	

Rush Center ('47)	16-18-18W	900	80,744	299,297	10	Arbuckle	3,836	15
Rush Center Northeast ('54)	10-18-18W	120	9,415	45,809	4	Arbuckle	3,783	5
Ryan* ('45)	35-19-16W	2,300	69,180	2,012,610	58	Arbuckle	3,656	32
Ryan West ('56)	32-19-16W		no report	none		Arbuckle	3,804	13
Timken ('52)	28-18-17W		no report	1,297		Arbuckle	3,729	
Webs ('54)	16-19-20W	160	75,001	136,687	7	Penn. congl.	4,202	10
Webs Northwest ('55)	8-19-20W	80	5,584	5,584	2	Penn. congl.	4,240	
Webs Southwest ('56)	16-19-20W	40	3,764	3,764	1	Cherokee	4,302	2
Weitzel ('47)	1-16-20W	40	1,548	43,658	1	"Gorham"	3,674	35
Pools or fields abandoned				63,019				
Total Rush County		6,560	702,720	8,122,188	147			11
RUSSELL COUNTY								
Atherton North ('45)	7-13-14W		no report	76,503	1	Arbuckle	3,195	5
Beaver North* ('37)	4-16-12W	40	3,405	75,141	1	Arbuckle	3,316	10
Beisel ('44)	15-14-12W		no report	18,617		Arbuckle	3,266	
Boxberger ('35)	36-15-15W	40	3,321	240,333	1	Lans.-K.C.	3,147	4
Claussen ('44)	27-12-14W	200	8,653	102,355	5	Lans.-K.C.	2,855	39
Claussen North ('49)	22-12-14W		no report	9,730		Lans.-K.C.	2,956	
Claussen West ('49)	29-12-14W		no report	1,217		Lans.-K.C.	2,841	
Coal Creek ('51)	22-15-11W	40	1,519	1,519	1	Penn. congl.	3,178	36
Cook ('50)	26-13-15W	220	15,117	100,359	5	Lans.-K.C.	3,051	23
Davidson* ('30)	4-16-11W	160	10,163	239,207	3	Arbuckle	3,314	
					2	Lans.-K.C.	3,016	
						"Sooy"	3,317	9
Dillner Northwest ('47)	27-13-15W		no report	9,640		Arbuckle	3,314	
Donovan ('35)	10-15-15W	120	6,820	251,431	1	Arbuckle	3,318	
Driscoll (revived) ('56)	30-15-11W	200	3,731	68,738	3	Lans.-K.C.	3,193	7
Dubuque ('35)	34-15-12W	750	43,697	1,199,528	4	Penn. congl.	3,303	2
					18	Lans.-K.C.	3,275	3
Eulert ('49)	35-11-15W	540	76,090	977,439		Arbuckle	3,330	5
Eulert West ('54)	34-11-15W	40	4,762	18,637	17	Arbuckle	3,316	13
Fairport* ('23)	8-12-15W	4,000	805,339	24,095,962	1	Lans.-K.C.	2,984	6
					180	Lans.-K.C.	2,950	42
						"Sooy"	3,137	32
						"Gorham"	3,211	5
						Simpson	3,316	
Fay ('52)	2-12-15W		1,395	13,263		Arbuckle	3,312	
Fossil Creek ('53)	11-14-14W	40	no report	none		Reagan	3,350	
					1	Arbuckle	3,238	12
						"Langdon"	2,341	36

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abds., wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Gorham ('26)	32-13-15W	15,800	1,515,453	60,609,939	430	Shawnee Lans.-K.C. "Gorham"	2,765 2,908 3,152	48 5	37
Hall-Gurney* ('31)	30-14-13W	29,000	3,424,527	70,763,814	1,210	Arbuckle Reagan Tarkio Wabaunsee Topeka Oread Lans.-K.C. "Gorham"	3,289 3,299 1,985 2,400 2,675 2,813 2,985 3,165	5	39
Heim ('53)	21-14-12W	320	47,279	127,285	7	Arbuckle Precambrian Lans.-K.C. Penn. congl.	3,192 3,156 2,897 3,189	28 11	37
Janne ('43)	24-15-12W	320	24,082	283,844	9	Arbuckle Lans.-K.C.	3,238 3,319	5	
Jerry ('42)	4-15-14W	40	2,284	67,397	1	Arbuckle Wabaunsee Lans.-K.C.	2,985		
Kune ('56)	17-13-15W	40	1,790	1,790	1	Arbuckle	3,004	15	
Meier ('48)	30-15-12W	60	15,833	199,889	2	Lans.-K.C.	3,325	6	
Ney ('48)	31-15-12W	120	28,113	311,590	4	Arbuckle Lans.-K.C.	3,240 3,350	6	
Nuss* ('55)	5-16-14W	160	25,009	25,009	5	Arbuckle	3,183	7	
Parker ('48)	18-15-12W	340	23,214	347,237	7	Lans.-K.C. Shawnee	2,957 3,259		
Russell ('34)	22-13-14W	5,300	738,662	15,911,574	189	Arbuckle Lans.-K.C.	3,195 3,280	9 6	
Russell East ('49)	25-13-14W	40	2,316	37,146	1	Arbuckle	3,273	11	33
Steinert ('54)	21-15-15W		no report	41,262		Arbuckle	3,141	3	
Strecker ('43)	21-15-14W	80	2,185	59,097	2	Lans.-K.C. Arbuckle	3,342	3	
Trapp* ('36)	23-15-14W	25,000	3,045,151	102,635,356	857	Tarkio Shawnee "Dodge"	2,359 2,889 2,966	32	
						Lans.-K.C.	3,062		

Trapp East ('49)	14-15-13W	80	3,159	56,627	2	Arbuckle	3,252	3
Worley ('46)	4-11-15W		no report	none		Lans.-K.C.	3,146	7
Pools or fields abandoned				247,575		Arbuckle	3,277	
						Lans.-K.C.	3,204	5
Total Russell County		83,090	9,883,069	279,226,050	2,969			132
SALINE COUNTY								
Bachofer ('51)	15-15-2W	160	12,428	62,888	4	Mississippian	2,799	6
Gypsum Creek* ('44)	4-17-1W	640	101,305	499,766	16	Mississippian	2,619	14
Hunter ('43)	20-16-1W	840	47,484	1,265,537	20	"Chat"	2,381	2
Hunter North ('48)	8-16-1W	300	24,682	267,214	8	Mississippian	2,674	21
Mentor ('44)	13-15-3W	80	4,328	45,850	3	Viola	3,258	15
Olsson ('29)	10-16-3W	860	31,824	576,885	14	Viola	3,303	12
Salemberg ('52)	5-16-3W	3,000	177,129	970,446	55	Viola	3,381	54
Salina ('43)	30-14-2W	1,400	46,919	1,055,563	20	Viola	3,223	8
Salina South ('46)	32-14-2W	300	14,903	207,635	7	Viola	3,246	8
Smolan ('50)	19-15-3W	3,400	343,495	3,693,139	115	Viola	3,353	37
Swenson ('50)	34-15-3W	80	7,337	37,036	2	Viola		
Pools or fields abandoned				11,285				
Total Saline County		11,060	811,534	8,699,694	264			10
SCOTT COUNTY								
Grigston ('54)	10-19-31W	80	10,016	31,868	3	Mississippian	4,577	4
Keystone ('50)	25-18-32W	120	33,653	203,318	3	Arbuckle	5,050	6
Shallow Water ('35)	15-20-33W	900	16,288	1,859,869	7	Lans.-K.C.	4,001	25
						Marmaton	4,286	25
						Mississippian	4,660	
Total Scott County		1,100	59,957	2,140,055	13	Ste. Genevieve	4,670	16
SEDGWICK COUNTY								
Bartholomew* ('48)	30-27-4W	1,700	161,193	2,372,117	60	Mississippian	3,732	25
Bentley (revived) ('29)	24-25-2W	40	4,831	19,637	1	Kansas City	2,866	24
Brumley ('55)	19-29-1E	320	4,868	5,981	4	Lans.-K.C.	2,863	2
						Mississippian	3,352	8
Brumley Northwest ('56)	12-29-1W	40	2,201	2,201	1	Mississippian	3,303	12
Butwick* ('49)	7-26-3E	See	Butler County	1,939				

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing wells 1956	Producing zone, ft.			Aver. grav.
			during 1956	to end, 1956		Name	Depth	Thick- ness	
Chambers ('48)	10-29-2W	120	8,287	81,540	3	Mississippian	3,540	4	44
Chambers Northeast ('56)	2-29-2W	160	5,037	5,037	3	Mississippian	3,570	5	
Clearwater ('44)	22-29-2W	200	9,589	147,831	4	Lans.-K.C.	2,913	11	
Cottage ('53)	19-25-2E		no report	559		"Burgess"	3,004		
Crestview ('52)	1-27-1E		no report	none		"Burgess"	2,982		
Cross ('29)	27-25-1W	40	1,962	91,060	1	Lans.-K.C.	2,650	40	36
Curry ('47)	11-27-1W	440	44,884	582,481	16	Lans.-K.C.	2,715		
Eastborough ('29)	19-27-2E	1,000	46,455	9,066,375	19	Simpson	3,400		
Eastborough North ('52)	8-27-2E	80	3,289	31,913	2	Viola	2,956		
Fairview ('48)	8-26-2E	560	19,073	374,670	8	Arbuckle	3,238	25	
Fairview North ('48)	5-26-2E	80	7,626	137,480	2	Lans.-K.C.	2,500		44
Fairview South ('50)	17-26-2E		no runs	10,553		"Burgess"	2,960	2	
Gehring-Rick ('52)	16-28-2E	80	3,321	14,359	2	"Burgess"	2,971	4	
Gladys ('54)	30-28-1E	37,200	25,336	2,832,123	5	Mississippian	2,945		
Gladys South ('55)	5-29-1E	80	1,784,769	9,565	219	Mississippian	2,950	9	40
Gladys Southeast ('55)	4-29-1E	80	5,346	10,551	2	Lans.-K.C.	2,773	16	
Gladys Southwest ('56)	7-29-1E	40	2,167	2,167	1	Mississippian	3,194	15	
Goodrich ('28)	16-25-1E	780	69,348	4,936,964	23	Kansas City	3,150	1	
Greenwich ('29)	14-26-2E	700	110,154	11,886,197	23	Lans.-K.C.	2,828	2	
Greenwich Northeast ('56)	1-26-2E	40	3,255	3,255	1	"Chat"	2,614	16	
Hinkle ('46)	1-27-1E		no report	10,153		"Kinderhook"	3,010		
Hohn ('45)	22-27-1W	80	3,972	141,905	4	Arbuckle	3,334	3	
Kechi ('29)	13-26-1E	40	310	33,777	1	"Chat"	3,339	3	
Kuske ('29)	24-25-1E	900	145,066	770,179	30	Viola	2,885	5	
Latta North ('56)	33-29-2W	40	3,671	3,671	1	Mississippian	3,321	5	
Luening ('51)	33-26-2E	80	2,579	17,195	2	"Burgess"	2,827	5	
						Lans.-K.C.	2,980	5	
						"Burgess"	2,779	2	
						"Burgess"	3,009	2	
						"Burgess"	3,016	1	41
						Lans.-K.C.	3,117	5	
						Simpson	3,338	8	37

Minneha ('51)	11-27-2E	160	10,988	60,275	6	Arbuckle	3,247	4	34
Minneha Northwest ('51)	10-27-2E		no report	2,798		Simpson	3,300		
Petrie ('45)	36-26-1W	40	9,148	128,337	1	Viola	3,387	1	
Prairie Creek ('51)	35-26-1W	40	2,467	40,705	1	Viola	3,445	2	
Prairie Creek ('52)	25-25-2E		no report	350		Mississippian	2,812		
Robbins ('29)	20-23-1E	860	171,026	4,515,211	46	Mississippian	3,090	12	40
Schulte ('47)	7-28-1W	40	4,413	206,027	1	Mississippian	3,349		45
Schulte South ('55)	18-28-1W	40	1,403	4,310	1	Simpson	3,658		
Valley Center ('28)	1-26-1W	1,500	18,229	22,175,842	24	Mississippian	3,390	11	
					2	Lans.-K.C.	2,860		
White Cotton ('48)	30-26-2E	600	23,168	560,985	13	"Kinderhook"	3,380	2	
Pools or fields abandoned				26,039		Viola	3,366	2	
						"Burgess"	2,957	2	
Total Sedgwick County		48,200	2,723,564	61,324,314	533				16
SEWARD COUNTY									
Hawks ('52)	18-35-31W	40	275	2,467	1	Morrowan	5,927		
Kismet ('48)	23-33-31W		no report	16,103		Marmaton	5,095		
Kismet Northwest ('53)	10-33-31W	40	375	375	1	Morrowan	5,584		
Kismet South ('52)	26-33-31W	40	4,737	27,257	1	Mississippian	5,770	90	39
Kneeland ('51)	24-34-31W	40	1,803	8,207	1	Marmaton	5,332	14	41
Liberal-Light ('51)	11-35-32W	2,000	20,654	206,322	9	Lans.-K.C.	5,103		40
Liberal Southeast ('47)	15-35-33W	120	6,608	86,473	4	Morrowan	6,005		
Plains West ('56)	16-32-31W		no report	none		Morrowan	6,202		
Shuck ('55)	30-33-34W	40	956	1,038	1	Morrowan	5,600	14	
Thirty-One ('53)	18-31-31W	40	603	1,608	1	Morrowan	5,987		
Total Seward County		2,360	36,011	349,850**	19		5,448		
SHERIDAN COUNTY									
Adell ('54)	11-6-27W	1,600	297,318	3,827,256	39	Lans.-K.C.	3,755	4	
Advance ('56)	26-8-27W	160	11,577	11,577	3	Lans.-K.C.	3,883	9	
Chicago ('55)	35-6-27W		Abandoned during 1956			Lans.-K.C.	3,902	6	
Custer ('55)	12-10-26W	40	9,223	15,851	2	Lans.-K.C.	4,024	5	
George ('52)	17-9-26W	40	10,739	39,188	1	Lans.-K.C.	4,023	11	41
Hortonville ('53)	20-6-26W	120	13,224	42,431	3	Lans.-K.C.	3,789	23	39
Hoxie ('56)	6-9-28W	40	3,079	3,079	1	Toronto	3,810	6	
Moss ('52)	2-8-30W	40	no runs	954	1	Lans.-K.C.	4,033	4	39
Studley ('43)	23-8-26W	340	12,344	439,152	6	Lans.-K.C.	3,810	9	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abd., wells 1956	Producing zone, ft.		
			during 1956	to end, 1956		Name	Depth	Thick- ness
Studley Southeast ('55)	26-8-26W	40	8,601	14,538	2	Lans.-K.C.	3,872	8
Studley Southwest ('45)	32-8-26W	80	15,529	95,881	4	Lans.-K.C.	3,758	26
Wessel ('53)	27-6-29W	480	12,023	90,529	8	Lans.-K.C.	3,985	4
Wessel North ('53)	16-6-29W	180	8,335	33,297	5	Lans.-K.C.	4,081	4
Total Sheridan County		3,160	401,997	4,614,133	75			
STAFFORD COUNTY								
Ahnert ('41)	26-22-13W		no report	47,473		Arbuckle	3,784	4
Bart-Staff* ('51)	4-21-14W	120	28,633	205,632	3	Arbuckle	3,572	40
Bayer ('51)	16-21-14W	640	98,950	126,680	13	Lans.-K.C.	3,543	4
						Viola	3,702	10
						Simpson	3,736	13
Bedford ('40)	21-23-12W	640	42,631	1,739,883	10	Arbuckle	3,778	9
Brenn ('54)	19-23-13W	640	76,239	128,909	10	Arbuckle	3,859	36
Brock ('44)	12-23-12W	600	16,209	417,575	8	Lans.-K.C.	3,651	6
Byron ('51)	9-21-12W	40	1,154	27,907	1	Arbuckle	3,680	4
Byron Southeast ('51)	10-21-12W	160	5,887	48,771	1	Arbuckle	3,459	37
Centerview ('54)	28-24-13W	40	9,127	27,071	1	Arbuckle	3,500	3
Cephas ('53)	10-25-14W	320	50,931	284,363	13	Arbuckle	4,188	5
Cephas North ('54)	35-24-14W	40	8,010	25,413	2	Viola	4,114	8
Chase-Silica* ('31)	32-19-9W	640	77,536	439,578	16	Lans.-K.C.	3,794	35
Clarksburg ('55)	36-22-13W	80	4,023	10,966	2	Arbuckle	3,383	10
Cleveland ('53)	21-23-14W	80	4,573	27,827	2	Lans.-K.C.	3,576	6
Cleveland South ('53)	28-23-14W		no report	783		Lans.-K.C.	3,690	7
Cochlin ('51)	19-22-11W	80	5,360	38,117	2	Lans.-K.C.	3,703	7
Crissman ('52)	16-23-14W	400	29,655	222,899	11	Arbuckle	3,659	4
						Lans.-K.C.	3,664	8
						Simpson	3,984	16
Crissman North ('52)	9-23-14W		no report	1,807		Arbuckle	4,006	6
Curtis ('42)	6-22-13W	780	109,878	1,219,325	25	Lans.-K.C.	3,669	8
						Lans.-K.C.	3,514	7
Dell ('50)	7-21-13W	160	5,808	107,196	3	Arbuckle	3,593	13
Dell East ('51)	5-21-13W	320	60,823	487,789	14	Lans.-K.C.	3,446	30
						Arbuckle	3,471	8

Dell Northeast ('51)	5-21-13W	80	4,312	23,079	2	Lans.-K.C. Arbuckle	3,438 3,612	36
Diamond ('53)	8-22-13W		no report	9,172			3,612	3
Dillwin ('56)	16-24-14W	640	89,334	89,334	19	Lans.-K.C. Arbuckle	3,426 4,295	27 6
Drach ('37)	12-22-13W	1,500	6,245,280	6,245,507	45	Arbuckle	3,690	12
Duggan ('51)	30-21-11W	360	13,204	164,216	5	Lans.-K.C. Penn. congl. Simpson	3,312 3,479 3,505	6 6 8
Farmington ('43)	34-24-15W	700	25,815	1,177,021	12	Arbuckle "Kinderhook"	3,514	
Farmington Northeast ('55)	26-24-15W	200	25,202	27,546	4	Simpson Arbuckle	4,378 4,417	6 16
Farmington Northwest ('56)	29-24-15W	160	3,423	3,423	3	Arbuckle	4,416	12
Fischer ('38)	31-21-12W		Combined with Gates			Lans.-K.C. "Kinderhook"	3,904 4,272	8 10
Fischer Northwest ('48)	36-21-13W		Combined with Gates					
Frey ('50)	7-21-14W	700	80,856	729,240	12	Arbuckle	3,717	7
Gates ('33)	27-21-13W	6,300	837,338	8,728,643	154	Lans.-K.C. Penn. congl. Viola	3,530 3,643 3,635	39 39
Gates North ('56)	22-21-13W	80	2,994	2,994	3	Arbuckle	3,679	37
German Valley ('51)	4-22-12W	80	2,108	42,355	2	Arbuckle	3,634	4
Glen ('54)	14-23-14W	40	4,757	18,404	1	Arbuckle	3,648	2
Gray ('46)	11-24-13W	80	2,404	53,195	2	Lans.-K.C.	3,651	6
Green Ridge ('53)	30-23-14W	40	3,546	13,589	1	Lans.-K.C.	3,672	30
Green Valley ('53)	2-23-14W	40	2,590	22,145	1	Lans.-K.C.	3,788	31
Grow ('49)	16-21-13W	640	25,586	440,781	11	Lans.-K.C. Arbuckle	3,640 3,463	40 35
Grunder ('43)	11-25-15W		no report	24,727			3,705	
Hahn ('53)	21-22-13W	40	906	14,651	1	Lans.-K.C.	3,945	15
Happy Valley ('52)	15-23-13W	40	3,516	12,887	1	Lans.-K.C.	3,610	5
Happy Valley Northeast ('55)	11-23-13W	200	22,563	31,866	4	Arbuckle	3,810	35
Harter ('50)	30-24-13W	80	5,661	85,172	4	Arbuckle Lans.-K.C. Simpson	3,857 3,767 4,167	10 40
Harter North ('56)	19-24-13W	80	10,451	10,451	2	Arbuckle	4,181	
Hazel ('42)	21-21-13W	640	92,884	882,289	23	Lans.-K.C.	3,785	5
					1	Lans.-K.C.	3,380	
Hazel West ('50)	20-21-13W	640	13,858	992,661	2	Arbuckle Lans.-K.C. Arbuckle	3,692 3,488 3,673	9 6 5

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.			Pro- ducing abn., wells 1956	Producing zone, ft.			Thick- ness	Aver. grav.
		Area, acres	during 1956	to end, 1956		Name	Depth			
Helene ('52)	16-22-12W		no report	24,495	1	Arbuckle	3,685		10	
Heyen ('43)	24-22-12W	400	50,568	630,400	12	Arbuckle	3,652		2	
Hickman ('51)	27-21-14W	640	77,593	852,062	22	Lans.-K.C.	3,522		10	37
Hickman South ('52)	34-21-14W	40	8,688	36,124	1	Simpson			6	
Hudson ('52)	33-22-12W		no report	none	1	Lans.-K.C.	3,567		8	37
Hufford ('48)	33-21-13W	400	87,219	940,469	16	Lans.-K.C.	3,495		5	
					2	Lans.-K.C.	3,499		7	
Jordan ('36)	15-25-14W	380	51,130	955,147	10	Arbuckle	3,755		7	
Kachelman ('50)	7-25-13W	120	15,218	33,929	4	Lans.-K.C.	3,722		5	
					2	Lans.-K.C.	3,946			
						Viola	4,075			
Kelly ('48)	35-23-12W		no report	5,204		Arbuckle	4,294			
Kenilworth ('47)	15-22-13W	400	30,494	486,583	10	Arbuckle	3,870		27	34
						Lans.-K.C.	3,505			
Kipp ('37)	27-25-14W	300	9,660	678,673	5	Arbuckle	3,808		79	
Kipp North ('54)	23-25-14W	80	15,126	27,264	2	Lans.-K.C.	3,827		10	32
Kipp Northeast ('46)	23-25-14W	120	15,031	245,908	3	Lans.-K.C.	3,748		10	32
Knoche ('51)	8-24-12W		Abandoned during 1956			Lans.-K.C.	3,844		11	
Knoche South ('56)	17-24-12W	40	279	279	1	Viola	3,810		2	
Koelsch ('52)	24-24-14W	400	47,455	235,160	10	Viola	3,884		8	35
Koelsch Southeast ('52)	25-24-14W	360	46,587	459,036	13	Lans.-K.C.	3,750		4	41
					1	Simpson	4,181		4	
Kowalsky* ('41)	32-20-11W	200	40,573	128,141	6	Arbuckle	4,187			50
Kowalsky Southwest ('50)	6-21-11W	320	30,453	204,351	9	Lans.-K.C.	3,279		23	
						Simpson	3,398			
Krankenbergl ('56)	19-22-12W	40	4,059	4,059	1	Arbuckle	3,424		5	
Leesburgh ('38)	12-25-13W	740	31,703	2,605,830	14	Simpson	3,711		24	
Leiss ('56)	23-25-13W	80	12,209	12,209	2	Simpson	4,060		10	
Leo ('50)	7-21-13W	120	8,195	86,006	3	Arbuckle	4,153		7	
Lincoln ('51)	29-21-14W	160	26,914	188,015	4	Lans.-K.C.	4,215		4	
Lincoln Northwest ('52)	29-21-14W		Combined with Bayer			Arbuckle	3,475		8	
McCandless ('44)	30-25-13W	380	32,145	990,767	9	Lans.-K.C.	3,636			
					2	Lans.-K.C.	3,543			
							3,863			

McGinty ('50)	13-21-14W	40	42,781	6	Simpson	4,251	16
McGinty Northwest ('51)	14-21-14W	40	460	1	Lans.-K.C.	3,503	10
Macksville East ('54)	14-24-15W	80	3,043	1	Lans.-K.C.	3,483	5
Max ('38)	35-21-12W	5,000	10,761	2	Viola	4,126	20
			7,082,656	90	Lans.-K.C.	3,356	16
					Simpson	3,615	2
Max North ('55)	27-21-12W	40	947	1	Arbuckle	3,570	7
Max South ('50)	15-22-12W		no report		Arbuckle	3,628	2
Merle ('49)	32-23-13W	380	9,695	13	Lans.-K.C.	3,320	24
Moody ('56)	7-25-14W	120	8,767	3	Lans.-K.C.	3,669	10
Mopac ('54)	30-24-11W	80	32,854	6	Mississippian	4,168	14
Mt. View ('52)	29-22-13W	80	9,896	2	Viola	3,908	5
					Lans.-K.C.	3,641	8
					Arbuckle	3,858	
Mueller ('38)	29-21-12W	4,600	533,721	95	Lans.-K.C.	3,356	8
			6,622,370		Arbuckle	3,594	
Mueller West ('49)	24-21-13W	40	2,404	1	Arbuckle	3,658	11
Nellie ('48)	23-22-14W		no report		Lans.-K.C.	3,698	35
Neola ('48)	15-25-11W	80	1,654	2	Viola	3,921	4
Newell ('53)	7-25-11W	160	9,070	3	Lans.-K.C.	3,537	3
					Viola	3,913	3
North Star ('52)	27-24-12W	600	35,174	8	Viola	3,915	16
					Simpson	4,063	9
North Star North ('53)	21-24-12W	40	no runs	1	Arbuckle	4,101	40
O'Connor ('48)	8-24-15W	40	1,961	1	Lans.-K.C.	3,768	29
Oscar ('49)	24-22-14W	340	12,826	7	Lans.-K.C.	3,503	35
					Viola	3,777	7
Oscar North ('51)	14-22-14W	420	107,416	12	Arbuckle	3,798	9
Oscar South ('53)	26-22-14W	220	25,805	5	Arbuckle	3,780	3
			15,169	4	Lans.-K.C.	3,580	2
Oscar West ('52)	22-22-14W	900	148,813	23	Arbuckle	3,817	2
Pleasant Grove ('52)	26-22-12W	200	15,058	6	Lans.-K.C.	3,593	8
Pleasant Grove South ('55)	35-22-12W		no report		Lans.-K.C.	3,462	8
Prairie Home ('49)	2-21-13W		no report		Arbuckle	3,511	3
Prairie Home South ('53)	11-21-13W	40	2,377	1	Arbuckle	3,514	3
Pritchard* ('44)	34-20-14W	400	60,937	10	Lans.-K.C.	3,395	3
					Lans.-K.C.	3,483	
					Arbuckle	3,579	4
Pritchard South ('51)	3-21-14W		Combined with Pritchard				
Pritchard Southeast* ('53)	2-21-14W		Combined with Pritchard				
Pundsack ('47)	19-21-13W	1,800	118,651	22	Lans.-K.C.	3,575	8
			72,186	19	Arbuckle	3,735	8

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducing wells	Producing zone, ft.		Aver. grav.
		Area, acres	during 1956	to end, 1956	Name	Depth	
Pundsack North ('50)	18-21-13W	160	10,930	98,341	3 Lans.-K.C.	3,494	8
Pundsack Northwest ('50)	24-21-14W		no report	5,031	Arbuckle	3,674	7
Radium ('53)	7-22-14W	40	no runs	1,043	Lans.-K.C.	3,512	
					Lans.-K.C.	3,476	
					Viola	3,775	
Radium Townsite ('53)	5-22-14W	500	63,426	160,563	9 Viola	3,754	12
					Arbuckle	3,852	20
Radke ('53)	25-23-14W	40	2,348	13,436	1 Lans.-K.C.	3,688	12
Radke East ('54)	24-23-14W	40	3,570	9,629	1 Lans.-K.C.	3,676	4
Rattlesnake ('38)	13-24-14W	160	5,088	210,729	3 Lans.-K.C.	3,608	48
Rattlesnake East ('56)	7-24-13W	200	26,364	26,364	4 Lans.-K.C.	3,694	6
					Mississippian	3,880	4
Rattlesnake Southeast ('54)	13-24-14W	80	16,546	49,432	2 Lans.-K.C.	3,758	6
Rattlesnake Southwest ('50)	14-24-14W	40	9,157	93,879	1 Lans.-K.C.	3,760	34
Rattlesnake West ('44)	11-24-14W	240	9,590	167,155	4 Lans.-K.C.	3,759	7
					Mississippian	4,025	
Richardson ('30)	36-22-12W	1,580	392,338	13,512,032	66 Lans.-K.C.	3,264	62
			no report	186,258	Arbuckle	3,537	20
Richland ('44)	27-24-14W				Mississippian	4,032	15
Riley ('40)	28-23-11W	40	1,936	145,209	1 Arbuckle	4,232	15
Rose Valley ('52)	36-25-13W	80	5,737	34,615	2 Lans.-K.C.	3,323	6
					Lans.-K.C.	3,824	13
Rothgarn ('43)	10-21-13W	600	15,491	338,834	8 Viola	4,137	5
					Lans.-K.C.	3,369	37
					Arbuckle	3,569	
Rothgarn Southeast ('50)	14-21-13W	200	6,056	97,105	1 Lans.-K.C.	3,378	7
			20,740		4 Arbuckle	3,544	32
St. John ('35)	23-24-13W	840	44,575	2,737,137	14 Lans.-K.C.	3,588	12
					Arbuckle	4,075	37
St. John North ('52)	20-23-13W	40	1,458	25,097	1 Lans.-K.C.	3,603	33.2
St. John Northwest ('52)	20-23-13W	120	27,739	62,633	4 Lans.-K.C.	3,644	6
			1,509		1 Arbuckle	3,956	5
St. John Townsite ('44)	33-23-13W	400	10,929	441,808	8 Lans.-K.C.	3,919	5
					Arbuckle	3,480	32
Sandago ('47)	12-21-12W	240	6,371	163,119	5 Arbuckle	3,481	5
Sand Hills ('44)	19-21-11W	80	6,263	69,189	2 Simpson		

Saterlee ('54)	31-24-14W	no report	2,566	Arbuckle	3,548	10	36
Saundra ('46)	14-21-12W	860	22,876	Penn. congl. Lans.-K.C.	4,166 3,282	13	35
Seevers ('54)	6-25-13W	80	12,512	Arbuckle	3,546	18	
Seevers Northwest ('56)	6-25-13W	160	16,014	Lans.-K.C. Lans.-K.C.	3,593 3,826	49	30
Shaeffer ('41)	3-21-13W	640	80,535	Arbuckle	4,192	4	
			581,294	Lans.-K.C. Penn. congl. Simpson	3,404 3,519 3,536		
Shepherd ('51)	16-22-11W	300	26,765	Arbuckle	3,546	4	
Shepherd North ('54)	9-22-11W	120	11,721	Arbuckle	3,548	35	40
			44,837	Lans.-K.C.	3,237	5	40
Shepherd Northwest ('56)	8-22-11W	40	3,087	Penn. congl.	3,446	8	
Shepherd South ('53)	21-22-11W	80	4,429	Simpson	3,528	8	40
Silver Bell ('49)	10-22-13W	200	22,717	Arbuckle	3,602	11	40
			93,423	Lans.-K.C.	3,498		30
Sittner ('37)	33-21-12W	480	24,185	Arbuckle	3,774	11	
			750,204	Lans.-K.C.	3,278	36	
Slade ('53)	23-25-12W	no report	3,739	Arbuckle	3,600	9	
Sleeper ('51)	22-22-11W	no report	14,756	Lans.-K.C.	3,819	5	
Smallwood ('51)	2-22-14W	840	91,546	Penn. congl.	3,581	9	
			787,267	Lans.-K.C.	3,474	29	32
Snider ('36)	3-21-11W	80	18,780	Arbuckle	3,576	11	
Snider South ('38)	16-21-11W	500	77,458	Simpson	3,362	26	
			7,553	Simpson	3,402	6	34
Spangenberg ('43)	21-22-12W	no report	84,508	Arbuckle	3,691	6	
Stafford ('40)	15-24-12W	1,000	30,165	Arbuckle	3,836	14	
			3,637,533	Viola	3,945	10	
Starr ('50)	4-21-14W	Combined with Pritchard	11,097	Arbuckle			
Strobel ('52)	9-22-14W	160	86,094	Lans.-K.C.	3,659	4	37
			36,937	Arbuckle	3,864	8	
Strobel Northwest ('52)	8-22-14W	80	4,573	Simpson	3,852	2	
			452	Arbuckle	3,874		
Sutton ('54)	21-22-14W	40	12,786	Lans.-K.C.	3,638	3	34
Syms East ('47)	21-21-12W	40	1,826	Arbuckle	3,585	10	37
Syms Southeast ('52)	27-21-12W	80	10,430	Arbuckle	3,565	5	
Taylor ('52)	15-21-14W	120	9,641	Lans.-K.C.	3,482	5	
			23,322	Simpson	3,588	4	36
Taylorville ('53)	29-25-12W	40	2,871	Viola	4,006	15	37
Van Lieu ('43)	20-24-13W	40	no runs	Arbuckle	4,069	11	

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abn. wells 1956	Producing zone, ft.		
			during 1956	to end, 1956		Name	Depth	Thick- ness
Van Winkle ('50)	23-21-14W	40	810	14,511	1	Lans.-K.C.	3,570	4
Van Winkle Southeast ('50)	26-21-14W	80	8,501	75,145	2	Lans.-K.C.	3,569	8
Wendelburg ('51)	19-23-11W	40	1,243	18,366	1	Arbuckle	3,729	4
White Cloud ('56)	28-22-11W	160	16,549	16,549	4	Arbuckle	3,636	2
Widener ('54)	26-21-12W	240	28,558	89,230	7	Arbuckle	3,574	7
Wood ('53)	33-22-14W	120	10,962	45,031	3	Simpson	3,932	50
Zenith-Peace Creek* ('37)	23-24-11W	400	255,682	39,279,513	137	Arbuckle	3,935	28
Pools or fields abandoned				66,092		Lans.-K.C.	3,481	
Total Stafford County		53,360	6,231,825	120,908,569	1,400	Viola	3,860	
STANTON COUNTY								
Sparks ('54)	34-30-42W	80	786	786	3	Morrowan	5,254	
SUMNER COUNTY								
Alton ('49)	10-35-2W		no report	12,148		Simpson	4,711	
Anness ('37)	2-30-4W		no report	154,772		Simpson	4,394	10
Anson ('48)	35-30-2W	300	49,493	197,393	15	Lans.-K.C.	3,264	13
Ashton ('54)	19-34-2E	160	8,483	32,700	5	Mississippian	3,742	22
Beatie ('56)	21-31-2W	40	5,716	5,716	1	"Cleveland"	3,210	13
Bellman ('45)	15-30-1E	80	6,283	314,281	2	Simpson	4,189	3
Bitter Creek ('53)	1-35-1E	200	51,120	153,658	10	Simpson	3,798	5
Caldwell ('29)	17-35-3W	160	26,609	1,614,599	4	"Stalnaker"	2,353	13
Caldwell Northwest ('52)	8-35-3W	40	2,982	56,372	1	Mississippian	3,500	15
Chicaskia ('54)	5-33-3W		no report	6,118		Simpson	4,765	19
Churchill ('26)	25-31-2E	720	44,781	19,800,290	17	Simpson	4,835	20
Corbin ('48)	23-34-2W		no report	37,286		Lans.-K.C.	3,415	39
Fall Creek ('50)	3-35-3W	800	240,222	1,877,308	24	"Stalnaker"	2,820	40
Gerberding ('54)	6-34-4W	80	23,143	45,595	3	Arbuckle	2,632	25
Guelph ('51)	6-35-1E	160	83,114	1,090,570	10	Simpson	4,475	24
			123,843		15	Simpson	4,746	50
						Simpson	4,710	46
						Lans.-K.C.	3,028	35
						Simpson	3,854	45

Kerschen ('55)	17-31-3W	260	8,152	92,677	1	Arbuckle	3,959	
Latta ('27)	9-30-2W	540	78,261	1,426,591	14	Lans.-K.C.	3,267	14
Latta Northwest ('56)	5-30-2W	40	7,288	7,288	1	Lans.-K.C.	3,042	4
Lee ('51)	33-32-2E	160	9,602	92,327	4	Kansas City	3,172	8
Margaret ('46)	36-32-2E	no report	no report	108,423		Mississippian	3,349	
Meek ('56)	10-35-1E	no report	no report	none		Arbuckle	3,474	18
Metz ('51)	7-32-2E	40	2,197	54,576	1	"Cleveland"	3,228	6
						Simpson	3,735	4
Murphy* ('33)	7-35-2E	2,000	577,035	1,447,109	129	Arbuckle	3,773	37
						"Layton"	2,808	
Norris ('55)	3-34-2E	40	3,715	5,566	1	"Bartlesville"	3,472	10
O'Hara ('55)	18-32-1W	80	23,526	31,823	3	"Layton"	2,785	3
Oxford ('27)	14-32-2E	800	73,013	16,489,366	28	Lans.-K.C.	3,256	8
					2	"Hoover"	1,930	
						"Stalnakar"	2,020	16
Oxford West ('26)	17-32-2E	280	28,379	804,088	7	"Layton"	2,510	20
						Arbuckle	2,850	5
Padgett ('25)	12-34-2E	5,400	186,788	2,928,460	72	Simpson	3,681	31
					3	Arbuckle	3,095	
						"Cleveland"	3,187	8
Padgett West ('54)	21-34-2E	80	726	9,584	2	Marmaton	3,424	16
						"Bartlesville"	3,474	
Perth ('45)	12-33-2W	560	69,687	1,023,969	11	Mississippian	3,744	8
Portland ('50)	16-34-1E	360	38,062	417,106	5	Simpson	2,829	34
						"Layton"	3,519	
Portland South ('56)	28-34-1E	80	44,737	3,411	5	Mississippian	4,264	14
Rainbow Bend* ('25)	24-33-2E	no report	no report	453,000	2	"Layton"	3,030	4
Rainbow Bend West* ('25)	24-33-2E	Combined with Rainbow Bend	Combined with Rainbow Bend	137,284	9	Simpson	4,002	
Rutter ('26)	21-33-2E	300	26,018	137,284	1	"Layton"	3,040	
						Arbuckle	3,268	10
Slate Creek ('52)	9-33-2E	40	3,902	34,924	1	"Bartlesville"	3,283	12
Slick-Carson* ('24)	19-32-3E	See Cowley County	See Cowley County	134,723	5	Mississippian	2,804	
Souh Haven ('54)	2-35-1W	200	54,925	1,911,685	89	Lans.-K.C.	3,124	5
State Line ('53)	14-35-2E	3,500	462,624	1,911,685	89	"Bartlesville"	4,189	37
						Simpson	3,158	
						"Cleveland"	3,443	
Tate ('50)	31-32-2E	no report	no report	3,171	1	Mississippian	3,726	27
Val Verde ('45)	23-33-2E	40	339	8,163	1	Simpson	3,280	15
Wellington ('29)	33-31-1W	3,000	334,800	9,001,930	138	"Bartlesville"	3,655	40
						"Chat"		

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Area, acres	Oil production, bbls.		Pro- ducing abn., wells 1956	Producing zone, ft.		
			during 1956	to end, 1956		Name	Depth	Thick- ness
Wellington Northeast ('55)	27-31-1W	340	136,878	165,572	17	Mississippian	3,659	5
Zoglmann ('51)	8-31-1W		no report	16,253		Simpson	4,036	4
Zyba ('37)	7-30-1E	560	28,874	486,562	7	Simpson	3,866	3
Zyba Southwest ('44)	22-30-1W	600	124,123	1,266,344	13	Simpson	3,918	12
Pools or fields abandoned				129,806				
Total Sumner County		22,000	3,044,872	64,190,537	685			10
THOMAS COUNTY								
Kindig ('56)	30-8-32W	40	7,707	7,707	1	Cherokee	4,595	31
Mingo ('52)	19-9-32W	80	3,052	- 16,365	2	Marmaton	4,414	
						Mississippian	4,680	
Total Thomas County		120	10,759	24,072	3			
TREGO COUNTY								
Adair ('53)	21-12-21W	40	2,833	15,822	1	Marmaton	3,879	5
Adair Southwest ('56)	28-12-21W	40	3,002	3,002	1	Marmaton	3,856	10
Cotton ('45)	15-12-21W	40	2,469	41,083	1	Arbuckle	3,958	34
Cotton East ('47)	14-12-21W	40	3,961	53,595	1	Arbuckle	3,942	6
Coulson ('54)	11-15-22W	40	no runs	427	1	Cherokee	4,175	
Diebolt* ('53)	33-10-23W	640	174,275	304,413	13	Lans.-K.C.	3,779	6
Ellis* ('42)	31-12-20W	1,200	51,665	537,412	12	Arb.-Reagan	3,832	8
Ellis Northwest ('44)	26-12-21W	160	11,649	222,938	4	Arbuckle	3,925	2
Ellis South* ('52)	12-13-21W		Combined with Ellis			Arbuckle	3,822	15
Groff ('52)	26-14-21W	1,200	17,626	396,798	2	Lans.-K.C.	3,493	10
			126,541		19	Penn. congl.	3,822	10
			Combined with Groff			Penn. congl.	3,824	4
Groff Southeast ('55)	35-14-21W		no report	none		Marmaton	3,818	8
Hixson ('53)	19-11-22W		no runs	1,578	1	Arbuckle	3,939	
Hixson East ('54)	16-11-22W	40	no runs	1,578	1	Marmaton	3,800	10
Homburg ('55)	11-13-21W	40	3,851	5,591	1	Marmaton	3,937	4
Kroeger ('56)	36-13-21W	40	2,572	2,572	1	Arbuckle	3,937	
Kutina ('53)	29-15-21W	80	25,323	29,920	3	Mississippian	4,151	
Locker ('53)	5-14-21W		no report	8,107	1	Penn. congl.	4,029	11
Newcomer ('56)	12-12-23W	500	75,188	75,188	16	Lans.-K.C.	3,733	3
Newcomer Northwest ('56)	2-12-23W	320	18,719	18,719	8	Lans.-K.C.	3,763	5

Nieden ('52)	16-12-23W	80	1,853	24,138	2	Mississippian	3,850	7	36
Ogallah ('51)	26-12-22W	3,900	585,746	3,019,021	78	Arbuckle	3,961	24	
Page Creek ('56)	28-15-22W	40	4,495	4,495	1	Cherokee	4,260	5	
Rhoden ('56)	24-12-23W	200	9,279	9,279	5	Lans.-K.C.	3,764	6	
Ridgeway ('52)	26-12-21W	460	42,547	222,829	9	Lans.-K.C.	3,633	13	36
Spaulding* ('53)	1-11-21W		Now called Trico			Arbuckle	3,886		
Spaulding South ('54)	1-11-21W	40	672	2,695	1	Lans.-K.C.	3,573	7	
Spring Creek ('51)	32-12-21W	40	1,372	4,339	1	Lans.-K.C.	3,538	4	
Sunny Slope ('52)	21-14-21W	640	42,217	309,146	12	Arbuckle	3,904	4	38
Trico* ('51)	30-10-20W	900	162,276	243,649	23	Marmaton	3,848	14	39
Wakeeney ('34)	14-11-23W	640	12,744	883,476	5	Lans.-K.C.	3,573	7	
Wakeeney East ('49)	13-11-23W		no report	11,904		Arbuckle	3,638	7	
Walz ('50)	12-11-21W	780	87,017	492,476	16	Lans.-K.C.	3,619	8	
White Southwest* ('53)	35-10-21W		Now called Trico			Lans.-K.C.	3,576	9	
Pools or fields abandoned				51,206		Lans.-K.C.	3,428	9	
Total Trego County		12,040	1,469,972	7,000,818	243	Arbuckle	3,666	11	
				51,206	6	Arbuckle	3,688	7	
WABAUNSEE COUNTY									
Davis Ranch ('49)	33-13-10E	640	254,228	1,818,436	18	"Hunton"	2,929	15	
Mill Creek ('50)	2-13-10E	160	24,658	206,841	4	Viola	3,201	4	
Newbury ('50)	11-11-11E	240	23,716	227,115	6	Viola	2,923	4	
Wheat ('51)	10-15-11E	20	3,259	16,732	1	Simpson	2,501	4	
Woodbury ('51)	11-15-10E	40	17,977	63,880	2	Viola	3,230	4	
Total Wabaunsee County		1,100	323,838	2,340,603	31		3,328	5	
				recorded					
WILSON COUNTY									
Altoona ('03)	10-29-16E	300	5,957		101	"Squirrel"	650		
a		300	3,774		7	"Bartlesville"	900		
b		600	3,092						
c		1,500	15,241						
d		40	838						
e		40	593						
f		300	2,106						
g		480	5,960						
Altoona East	29-17E				30	"Bartlesville"	900		

TABLE 65.—Oil production in Kansas during 1956, continued

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducting add., wells 1956	Producing zone, ft.		Aver. grav.
		Area, acres	during 1956		Name	Depth	
Benedict	28-15E	80	1,003	37	"Bartlesville"	1,000	
a		640	12,047				
Buffalo* ('24)	27-16E	10	106	85	1 "Bartlesville"	1,025	
a		200	8,998		Cherokee	1,150	
b		700	17,119				
c		600	9,129				
d		10	72				
e		10	25				
f		40	1,109	4	Cherokee		
g		40	1,145	21	"Burgess"	1,050	
Coyville West	27-13E						
Fredonia ('90)	29-15E						
a		40	1,250				
b		10	300				
c		600	5,893				
d		10	40				
e		10	60				
f		10	316				
g		10	201				
Humboldt-Chanute*	28-17E			11	1 "Bartlesville"	850	
a		10	131				
b		40	1,834				
Neodesha*	30-16E			185	2 "Bartlesville"	950	
a		40	729				
b		100	1,802				
c		400	26,738				
d		10	580				
e		10	30				
f		40	1,372				
g		200	1,798				
h		6,200	36,725				
i		10	209				
Neodesha East	30-17E			4	1 Cherokee		
"Stryker"	28-13E	200	677	1			
Vilas ('05)	27-17E	40	75	9	"Bartlesville"	1,000	
"Wiggins"	28-17E	400	3,041		"Bartlesville"	850	
			Combined with Altoona				

Miscellaneous		40	671	4		
Total Wilson County		14,320	172,836	492	15	
WOODSON COUNTY						
Annabelle ('56)	32-25-15E	20	454	2	"Squirrel"	1,173
Big Sandy ('23)	23-26-14E	900	47,188	54	"Bartlesville"	1,230
Buffalo* ('24)	26-16E			63	"Bartlesville"	950
a		20	272		Cherokee	1,150
b		500	64,684			
Evans* ('38)	21-23-15E	400	2,219	5	Mississippian	1,540
"Gordon" ('54)	13-24-15E	600	21,989	21	"Squirrel"	1,080
Halligan	30-26-17E	320	5,064	18	Mississippian	1,635
Hoagland ('29)	2-24-14E	Combined with Winterscheid			1	"Bartlesville"
Humboldt-Chanute*	25-17E	900	5,058	38		900
a		200	6,179			
b		40	572			
c		900	2,240			
d		30	2,073	3	Mississippian	1,417
McWherter ('55)	35-26-13E	Now called Neosho Falls-Leroy			1	"Squirrel"
Neosho Falls* ('28)	23-16E			88	"Squirrel"	950
Neosho Falls-Leroy* ('05)	35-22-16E	400	28,138		Mississippian	965
a		1,200	13,411			1,200
b		400	5,133			
c		900	52,009	84		
Perry	26-17E	600	1,504	6	Mississippian	1,190
Piqua ('38)	22-24-17E			98	"Bartlesville"	1,500
Quincy* ('32)	14-25-13E	1,200	193,160			
a		40	769			
b		1,000	99,877	49	"Bartlesville"	1,139
Rose East ('54)	16-26-16E	600	40,224	18		
Silver City ('46)	19-23-15E	10	402	1	Cherokee	1,525
Stange		40	828	2	Mississippian	
Steele ('52)	20-23-15E		no report			
Stephenson		40	445	3	"Peru"	1,000
Toronto*				53	"Bartlesville"	1,700
Vernon	23-16E	900	29,716		"Squirrel"	1,068
a		10	1,451		Mississippian	1,420
b		100	3,958			
c						

TABLE 65.—Oil production in Kansas during 1956, concluded

Field name and year of discovery	Discovery well location	Oil production, bbls.		Pro- ducting wells 1956	Producing zone, ft.		Aver. grav.
		Area, acres	during 1956		Name	Depth	
Virgil North* ('20)	22-23-13E	60	8,756	39	"Bartlesville"	1,585	
Weide ('37)	31-23-15E	640	60,643		Mississippian	1,840	
Winterscheid*	23-14E		Combined with Winterscheid	363	Mississippian	1,570	15
a		12,000	275,627		"Bartlesville"	1,630	
b		10	603		Mississippian	1,750	
Wissman ('36)	3-24-15E	1,500	3,479	17	Mississippian	1,520	
Yates Center	28-25-15E	640	17,950	37	Mississippian	1,480	
a		120	1,426				
b		100	1,179	9			
Miscellaneous							
Total Woodson County		27,340	998,680	1,071			
			8,523,373	14			
			recorded				

* Field extends into adjacent county or counties.

** Corrected cumulative.

TABLE 66.—Gas production in Kansas during 1956

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu.ft.**		Producing zone, ft.		
			during 1956	to end, 1956	No. wells	Name	Depth
ALLEN COUNTY							
Humboldt-Chanute*	26-18E	500	45,102		20	"Squirrel"	740
Miscellaneous		800	90,563		46	"Bartlesville"	850
Total Allen County		1,300	135,665		66		
BARBER COUNTY							
Aetna ('35)	13-34-15W	500	300,712	2,262,321†	4	Mississippian	4,850
Aetna Northeast ('56)	9-34-14W		Included with Aetna			Viola	5,215
Blunk ('56)	30-34-13W	40	38,797	38,797	1	Mississippian	4,693
Blunk South ('56)	1-35-14W	40	15,433	15,433	1	Mississippian	4,727
Boggs ('47)	8-33-12W	Now called Medicine Lodge-Boggs				Mississippian	4,821
Boggs Southwest ('55)	30-33-12W	3,600	9,601,182	9,601,182	24	Simpson	4,824
Canema ('56)	24-33-11W		no report	none		Mississippian	4,456
Clara ('44)	2-30-14W		no report	803,532		Mississippian	4,553
						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		no report	none		"Miss. lime"	4,697
Driftwood ('56)	1-34-13W	Combined with Boggs Southwest				Mississippian	4,635
Elsae ('56)	27-32-14W	100	107,732	107,732	2	Mississippian	4,662
Elwood ('56)	34-34-13W	100	140,215	140,215	2	"Elgin"	3,662
Farley ('56)	32-34-14W		no report	none		Mississippian	4,742
Forsyth ('55)	17-32-12W	40	51,651	51,651	1	Mississippian	4,436
Goemann ('55)	29-32-10W		no report	none		Mississippian	4,433
Hardtner ('54)	31-34-12W	5,200	17,525,934	19,469,037	38	Cherokee	4,791
						Mississippian	4,782
ILS ('56)	9-31-11W	40	13,289	13,289	1	Simpson	4,865
Lake City ('45)	7-31-13W		Included with Skinner			Viola	4,435
Little Bear Creek ('54)	12-32-14W	80	231,233	753,471	2	"Douglas sand"	3,808
						Viola	4,670
McGuire ('56)	24-32-11W		no report	none		Mississippian	4,403
Mease ('54)	27-30-11W	40	28,238	28,238	1	"Douglas sand"	3,759
Medicine Lodge ('27)	13-33-13W	Now called Medicine Lodge-Boggs					
Medicine Lodge North ('54)	25-32-13W	40	13,627	13,627	1	Mississippian	4,480
Medicine Lodge-Boggs ('27)	13-33-13W	13,000	12,439,437	219,016,200	70	"Douglas sand"	3,812
						Mississippian	4,480
						Simpson	4,860
Medicine Lodge Southwest ('54)	6-34-13W	600	779,335	1,133,067	5	Mississippian	4,889
Medicine Lodge West* ('56)	16-33-14W		Abandoned during 1956			Mississippian	4,632
Moffett ('55)	9-30-15W	40	9,926	9,926	1	Penn. congl.	4,566
Nippawalla ('51)	13-33-12W	1,400	2,688,558	4,146,998	18	"Douglas sand"	3,659
						Mississippian	4,541
Nurse ('53)	23-31-13W	400	94,758	94,758	4	"Douglas sand"	3,599
Rhodes ('54)	4-33-11W	6,400	4,826,222	4,928,455	22	"Douglas sand"	3,548
						Mississippian	4,551
Roundup South ('53)	33-33-11W		no report	none		Mississippian	4,457
Salt Fork ('54)	3-35-15W		no report	none		Marmaton	4,780
Sharon ('55)	13-32-10W	640	331,579	331,579	9	Mississippian	4,355
Sharon Northwest ('56)	11-32-10W	600	299,661	299,661	4	Mississippian	4,347
Skinner ('43)	29-31-14W	3,600	576,449	26,714,243	10	"Douglas sand"	4,023
						Simpson	4,422
						Viola	4,630
Traffas ('55)	6-33-10W		no report	none		Mississippian	4,590
Whelan ('34)	32-31-11W	Included with Medicine Lodge-Boggs				Douglas	3,598
						"Chat"	4,355
Whelan East ('54)	2-31-11W		no report	none		"Douglas sand"	3,746
Total Barber County		36,500	50,113,968	292,009,987†	221		
BARTON COUNTY							
Adolph ('47)	16-20-15W		no report	none		Arbuckle	3,734
Ash Creek* ('48)	31-20-15W		no report			Arbuckle	3,769
Behrens ('44)	6-20-15W		no report				

TABLE 66.—Gas production in Kansas during 1956, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu.ft.**		Producing zone, ft.		
			during 1956	to end, 1956	No. wells	Name	Depth
Behrens Northeast ('55)	29-19-15W		no report	none		Arbuckle	3,639
Bergtal ('41)	22-20-15W		no report	896,604		Arbuckle	3,689
Clarence South ('54)	2-20-15W		no report	none		Penn. congl.	3,606
Converse ('53)	20-20-15W		no report	none		Arbuckle	3,783
Dundee ('45)	29-20-14W		no report	2,021,092		Arbuckle	3,607
Eberhardt ('35)	14-19-11W		no report	398,567			
Heizer Southwest ('52)	21-19-14W	100	82,460	714,618	1	Penn. congl.	3,496
Krier ('44)	30-16-11W	160	41,634	832,550	2		
Otis-Albert* ('30)	11-18-16W		Within Kraft-Prusa field Included with Rush County			Neva Reagan	3,507
Pawnee Rock* ('36)	19 & 20-15 & 16 W	100	120,000†		3†		
Rick* ('41)	11-19-11W		no report	403,810		Arbuckle	3,355
Unruh ('45)	24-20-15W	400	251,573	14,321,668	5	Arbuckle	3,641
Miscellaneous			130,942		1†		
Total Barton County		760	626,609†	22,375,314 recorded	12†		
BUTLER COUNTY							
Andover South*	31-27-3E		no report			"Stalnakker"	2,006
Miscellaneous		80	1,414		1†		
CHASE COUNTY							
Altamus	26-18-8E		no report				
Davis ('29)	18-8E	640	34,065		20	L. Permian	350-400
Elmdale	19-7E	300	16,793		8	L. Permian	500
						Wabaunsee	800
Hymer	18-7E		no report				
Lipps	32-18-7E		Included with Elmdale				
Neva	19-7E		no report				
Total Chase County		940	50,858		28		
CHAUTAUQUA COUNTY							
Hewins Northwest ('56)	27-34-9E		no report	none		Mississippian	2,072
Miscellaneous		400	198,534		12		
CHEROKEE COUNTY							
Miscellaneous		40	2,521		1		
CLARK COUNTY							
Ashland ('51)	35-32-23W	15,000	157,624	1,705,104	3		
Cavalry Creek ('55)	3-31-21W	100	146,252	146,252	2	Mississippian	5,195
Harper Ranch ('53)	9-34-21W		no report	none		Morrowan	5,437
Harper Ranch North ('54)	22-33-21W		no report	none		Morrowan	5,318
McKinney* ('50)	2-34-26W	3,840	453,293	1,339,951	6	Mississippian	5,762
Morrison Northeast ('54)	10-32-21W		no report	none		Morrowan	5,193
Snake Creek ('52)	21-34-21W		no report	none		Morrowan	5,452
Total Clark County		18,940	757,169	3,191,307	11		
COFFEY COUNTY							
Crandall ('53)	6-23-16E		no report			Mississippian	1,022
"Gridley"	22-14E	60	7,152		3		
COMANCHE COUNTY							
Beals ('55)	5-34-17W		no report	none		Lans.-K.C.	4,393
Robbins Ranch ('53)	23-31-16W	120	183,113	324,864	2	Simpson	5,670
						Mississippian	4,915
COWLEY COUNTY							
Brown West ('51)	14-31-7E		no report			Douglas	1,568
Burden ('26)	31-31-6E		no report			"Layton"	2,220
						"Bartlesville"	2,900
"Cambridge Southeast"	31-7E		no report				
Estes	32-6E	100	128,722		3†	Douglas	1,568
Frog Hollow ('37)	32-5E		no report			"Bartlesville"	3,000
Gibson ('41)	34-3E	400	50,238		4	"Bartlesville"	3,300
Mansur ('49)	31-7E	150	90,477		1†	"Layton"	2,170
New Salem ('49)	21-31-5E	80	118,223		1		

Rauckman ('56)	18-34-3E		no report		"Bartlesville"	3,358
School Creek North ('53)	10-32-7E		no report		"Layton"	2,114
Tisdale	32-5E	40	47,188		1†	
Trees ('34)	30-4E		no report		"Bartlesville"	2,975
Wiebe ('53)	28-31-6E		Combined with Burden		"Layton"	2,220
Wilmot-Floral	31-5E		no report		"Cattleman sand"	2,880
Winfield	32-4E		no report		"Peacock"	1,400
Miscellaneous		40	58,288		1†	
Total Cowley County		810	493,136		11†	

CRAWFORD COUNTY

McCune	30-22E	400	29,228		18	"Bartlesville"	300
St. Paul-Walnut	29-21E	300	6,717†		6	"Bartlesville"	
Miscellaneous		100	4,702		7		
Total Crawford County		800	40,647†		31		

EDWARDS COUNTY

Belpre ('42)	8-25-16W	700	347,737	8,081,472	9	Lans.-K.C.	3,800
Bradbridge* ('48)	6-24-15W		no report	none		Arbuckle	4,020
Edstaff ('55)	12-25-16W		no report	none		Penn. congl.	4,202
Embry ('55)	23-24-16W	700	379,321	569,703	3	Mississippian	4,231
						"Kinderhook"	4,292
McCarty ('54)	31-25-17W		no report	none		Penn. congl.	4,528
Trousdale South ('56)	33-26-16W		no report	none		Cherokee	4,472
Wokaty ('54)	25-25-17W		no report	none		Penn. congl.	4,390
Total Edwards County		1,400	727,058	8,651,175	12		

ELK COUNTY

Adams (revived) ('56)	29-29-13E		no report			"Burgess"	1,680
Bush-Denton ('20)	4-30-9E		no report				
Longton ('02)		100	20,000†		2	Kansas City	660
Miscellaneous		300	205,135		14		
Total Elk County		400	225,135†		16		

ELLSWORTH COUNTY

Stoltenberg ('47)	18-17-9W		no report	443,891		Shawnee	2,728
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FINNEY COUNTY

Hugoton Gas Area* ('32)	16-25-34W	349,500	38,048,847	251,859,378	456	Chase group	2,200
Nunn ('38)	27-21-34W		no report	146,075			
Total Finney County		349,500	38,048,847	252,005,453	456		

FORD COUNTY

Helmerts ('53)	25-28-21W		no report	none		Mississippian	5,024
Pleasant Valley ('38)	34-27-21W	1,200	429,619		4	Mississippian	4,954
Pleasant Valley South ('54)	14-28-21W		Combined with Pleasant Valley			Mississippian	5,056

GRAHAM COUNTY

Law ('51)	34-9-23W		no report	12,656			
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GRANT COUNTY

Hugoton Gas Area* ('30)	12-29-38W	377,500	77,166,752	774,393,100	572	Chase group	2,200
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HAMILTON COUNTY

Hugoton Gas Area* ('46)	12-26-39W	33,700	4,297,064	22,279,381	35	Chase group	2,200
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HARPER COUNTY

Grabs ('49)	7-31-8W		Now called Spivey-Grabs			Mississippian	4,385
Grabs Northwest ('55)	15-31-9W		Combined with Spivey-Grabs			Mississippian	4,416
Grabs South ('54)	25- 31-9W		Combined with Spivey-Grabs			Mississippian	4,335
Runnymede ('53)	23-31-6W		no report	none		Simpson	4,648
Spivey-Grabs* ('49)	13-31-9W	4,200	2,590,594	4,139,824	30	Mississippian	4,400
Spivey Southeast ('55)	1-31-8W		Combined with Spivey-Grabs			Mississippian	4,380

HARVEY COUNTY

Burrton* ('30)	23-23-4W	880	206,417		11	Mississippian	3,298
Burrton North ('56)	32-22-3W		Includes Reno County			Mississippian	3,280
			Included with Burrton				

TABLE 66.—Gas production in Kansas during 1956, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu.ft.**		No. wells	Producing zone, ft.		
			during 1956	to end, 1956		Name	Depth	
Burrton Northeast ('42)	3-23-3W	640	Included with Burrton		2	Mississippian	3,226	
Graber* ('55)	22-1W		104,736	141,997		Mississippian	2,958	
Sperling ('35)	23-22-2W		no report	7,513,363		"Chat"	2,955	
Wall ('51)	25-22-3W		no report	none		Mississippian	3,150	
Total Harvey County		1,520	401,153	8,999,727 recorded	13			
HASKELL COUNTY								
Hugoton Gas Area* ('31)	29-30-34W	278,800	31,391,477	282,539,659	430	Chase group	2,200	
JEFFERSON COUNTY								
McLouth	No longer productive; used for gas storage only							
JOHNSON COUNTY								
Miscellaneous		300	51,253		19			
KEARNY COUNTY								
Hugoton Gas Area* ('37)	32-25-35W	411,000	63,479,195	531,032,728	601	Chase group	2,200	
KINGMAN COUNTY								
Basil ('53)	16-29-7W	120	94,743	94,743	3	Mississippian	4,150	
Bertholf ('55)	3-30-8W	320	Combined with Spivey-Grabs		8	Mississippian	4,201	
Broadway ('48)	21-28-5W		251,923	2,020,553		Mississippian		
Cunningham* ('31)	7-28-11W	Included with Pratt County					Arbuckle	4,094
						Viola	4,278	
Dewey ('50)	9-28-5W	1,200	266,516	2,993,507	6	Mississippian	3,801	
Dresden ('51)	13-27-10W	80	no report	3,870	2	Mississippian	4,084	
Gilchrist ('55)	15-30-7W		no report	none		Mississippian	4,408	
Goetz ('56)	29-29-9W		309,874	309,874		Viola	4,408	
Kingman ('54)	16-27-7W		no report	none		Mississippian	3,824	
Rochester ('54)	32-30-9W	40	Combined with Spivey-Grabs		1	Mississippian	4,325	
Settle ('56)	18-29-7W		2,416	2,416		Mississippian	4,110	
Spivey ('51)	27-30-8W	5,000	Now called Spivey-Grabs		50	Mississippian	4,297	
Spivey-Grabs* ('49)	13-31-9W		5,882,639	6,988,284		Mississippian	4,205	
Spivey Northwest ('54)	9-30-8W		Combined with Spivey-Grabs			Mississippian	4,156	
Spivey West ('55)	17-30-8W		Combined with Spivey-Grabs			Mississippian	4,172	
Sunny View ('55)	26-30-9W	160	Combined with Spivey-Grabs		1	Mississippian	4,350	
Trenton ('55)	27-29-7W		52,677	104,053		Mississippian	4,117	
Zenda ('54)	36-29-9W	Combined with Spivey-Grabs				Mississippian	4,161	
Total Kingman County		6,920	6,860,788	13,656,345 recorded	71			
KIOWA COUNTY								
Alford ('44)	14-30-19W	160	no report		3	Spergen	5,040	
Brenham ('47)	29-28-17W		no report			"Miss. chert"	4,841	
Greenburg ('56)	35-27-18W		no report	none		"Kinderhook"	4,742	
Greensburg Northeast ('56)	17-27-17W		no report	none		Mississippian	4,675	
Hardy ('56)	23-28-18W	160	no report	none	3	Mississippian	4,804	
Haviland ('55)	17-28-16W		58,946	63,907†		"Kinderhook"	4,761	
Johannsen ('54)	13-28-19W		no report	none		Mississippian	4,864	
Kane ('56)	12-30-18W		no report	none		Mississippian	4,908	
Nichols ('55)	20-29-18W	3,800	2,221,287	2,221,287	7	Mississippian	4,997	
Wellsford ('55)	15-28-16W	40	117,280	117,280	1	Marmaton	4,680	
Miscellaneous				81,521		Mississippian	4,729	
Total Kiowa County		4,000	2,397,523	2,484,005†	11			
LABETTE COUNTY								
Coffeyville-Cherryvale*	32-17E	400	no report		40			
Southern Labette Co.			84,392					
Valeda	34-18E	10	350		1			
Miscellaneous		200	5,890		3			
Total Labette County		610	90,632		44			

LEAVENWORTH COUNTY							
Linwood ('20)	12-21E		no report			"Squirrel"	600
Roberts-Maywood*	11-22E		16,355		7	Knobtown	400
LINN COUNTY							
LaCygne-Cadmus	20-24E	80	12,874†		8†		
McPHERSON COUNTY							
Coons ('40)	13-19-1W		no report			"Chat"	2,897
Doles Park ('47)	12-19-1W		no report			"Chat"	2,843
Graber North ('51)	4-21-1W		no report	none		Mississippian	2,955
McPherson ('26)	29-18-2W		no report			Lans.-K.C.	2,340
						"Chat"	2,967
						Viola	3,140
						"Chat"	2,935
Ritz-Canton ('29)	12-20-2W	1,400	375,280		14		
MARION COUNTY							
Lehigh North ('53)	23-19-1E		no report			Mississippian	2,770
Propp ('26)	8-19-4E		no report			Mississippian	
Miscellaneous		200	134,289		4		
MEADE COUNTY							
Adams Ranch ('45)	8-35-30W	400	40,957	572,007	2	Morrowan	5,708
						Mississippian	5,850
Angell ('56)	30-32-29W		no report	none		Morrowan	5,608
Bond ('54)	32-33-30W		no report	none		Mississippian	5,860
Bruno Northeast ('53)	16-33-30W		no report	none		Morrowan	5,721
Fincham ('56)	14-35-27W		no report	none		Mississippian	6,275
Horace ('56)	9-34-29W		no report	none		Morrowan	5,815
Kismet East ('53)	30-33-30W	640	460,542	460,542	2	Morrowan	5,645
Leslie ('55)	3-33-30W		Combined with Stevens				
McKinney* ('50)	2-34-26W	7,800	2,730,140	12,264,656	18	Mississippian	5,762
Novinger Northwest ('53)	15-33-30W	700	247,381	247,381	3	Morrowan	5,718
			Includes Novinger				
Plains ('56)	17-32-30W		no report	none		Morrowan	5,611
Sanders ('56)	13-32-29W		no report	none		Mississippian	5,550
Singley ('55)	20-33-29W	1,000	778,390	778,390	5	Morrowan	5,803
Singley South ('56)	32-33-29W		no report	none		Morrowan	5,810
Stevens ('52)	32-32-30W	920	3,129,289	3,129,289	7	Morrowan	5,560
						Mississippian	5,713
Total Meade County		11,460	7,386,699	17,452,265	37		
MIAMI COUNTY							
Louisburg	17-25E		no report				
Miscellaneous		160	30,528		12		
MONTGOMERY COUNTY							
"Cavert"			no report				
Coffeyville-Cherryvale* ('02)	33-17E		no report			"Bartlesville"	
Neode-ha South			no report				
Miscellaneous		380	460,627†		67		
MORRIS COUNTY							
Veal ('55)	30-17-7E		no report			Ireland sand	1,234
Miscellaneous		200	39,862		17		
MORTON COUNTY							
Boehm ('51)	14-33-42W	2,400	2,153,662	6,090,065	6	Morrowan	4,872
Elkhart ('55)	11-35-43W	640	126,010	201,256	1	Morrowan	4,558
Greenwood Gas Area ('51)	14-33-42W	98,280	35,432,972	83,182,535	200	Wabaunsee	2,777
						Shawnee	3,069
						Lans.-K.C.	3,534
Hugoton Gas Area* ('30)	24-34-40W	201,480	25,320,554	240,406,155	293	Chase group	2,200
Ritchfield ('48)	17-32-40W	3,200	1,515,702	2,660,387	4	Atokan	4,990
						Morrowan	5,397
Sparks*	34-30-42W	12,000	Included with Stanton County			(Keyes)	5,254
Taloga ('55)	34-34-42W	1,200	8,883,580	9,199,397	15	Morrowan	4,428
						Cherokee	3,894
Miscellaneous			52,372				
Total Morton County		319,200	73,484,852	341,792,167	519		

TABLE 66.—Gas production in Kansas during 1956, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu.ft.**		Producing zone, ft.		
			during 1956	to end, 1956	No. wells	Name	Depth
NEOSHO COUNTY							
Earlton	28-18E		no report				
Miscellaneous		200	236,264		72†		
PAWNEE COUNTY							
Ash Creek* ('48)	31-20-15W		no report			Arbuckle	3,769
Benson ('45)	30-23-15W	1,300	1,731,799		13	Arbuckle	4,048
			Includes Zook				
Evers ('51)	36-21-16W		no report	850,468		Arbuckle	3,908
Evers South ('56)	12-22-16W		no report	none		Arbuckle	3,920
Garfield ('54)	35-22-17W		no report	none		Penn. congl.	4,152
Hearn ('53)	35-23-15W		no report	none		Lans.-K.C.	3,833
						Simpson	4,106
Hearn North ('55)	23-23-15W		no report	none		Simpson	4,084
Larned ('49)	28-21-16W		no report			Arbuckle	3,877
Pawnee Rock* ('36)	19 & 20-15 & 16W	700	2,700,000†		21†	Arbuckle	3,832
Ryan*	35-19-16W	100	140,000†		3†	Reagan	3,507
Shady ('45)	34-22-16W		no report	3,992,596		Arbuckle	4,063
Shady North ('55)	14-22-16W		no report	none		Arbuckle	4,013
Sweeney ('53)	8-21-15W	240	36,416		3	Penn. congl.	3,727
						Arbuckle	3,792
Zook ('42)	16-23-16W		Included with Benson			Arbuckle	4,066
Total Pawnee County		2,340	4,608,215†	31,812,623 recorded	40†		
PRATT COUNTY							
Barnes ('52)	25-27-12W		no report	none		Simpson	4,328
Carver-Robbins ('55)	21-27-15W		no report	none		Penn. congl.	4,472
Chance ('46)	4-27-13W	40	3,000		1		
Chitwood ('43)	23-28-12W		no report	10,089,528		Viola	4,340
Coats West ('55)	24-29-14W		no report	none		Lans.-K.C.	4,216
Cullison ('56)	25-28-15W		no report	none		Mississippian	4,543
Cunningham* ('31)	7-28-11W	8,000	509,095		31	Lans.-K.C.	
			371,429		5	Viola	4,278
			45,661		1	Arbuckle	4,094
Iuka-Carmi ('42)	29-26-12W	600	429,051	3,648,793	5	Viola	4,122
Lion ('53)	29-27-11W		no report	none		Viola	4,323
Shriver ('49)	27-29-14W		no report	104,191			
Stark ('41)	13-26-12W		no report			Viola	4,121
Ward ('41)	11-26-12W		no report			Viola	4,129
Total Pratt County		8,640	1,358,236	17,339,802 recorded	43		
RENO COUNTY							
Burrtan* ('30)	23-23-4W		Included with Harvey County			Mississippian	3,298
Lerado ('37)	10-26-9W	200	453,879	2,815,736	4	Viola	4,128
Yoder ('35)	34-24-5W	100	21,821		1	"Chat"	3,402
Zenith-Peace Creek* ('37)	23-24-11W		no report			Viola	3,860
Total Reno County		300	475,700	3,052,208 recorded	5		
RICE COUNTY							
Alden ('37)	22-21-9W		no report	15,449,656		Misener	3,317
Bredfelt ('48)	7-18-9W	40	165,890	165,890	1	Arbuckle	3,226
Chase-Silica ('36)	6-19-9W		no report	1,835,285		Arbuckle	3,192
Humphreys ('56)	3-21-8W		no report	none		Penn. congl.	3,272
Lyons ('88)	35-19-8W	40	50,869	14,096,212	1	Simpson	3,290
						Arbuckle	3,277
Lyons Southwest ('55)	22-20-8W		no report	none		Penn. congl.	3,251
Orth ('33)	27-18-10W		no report			Lans.-K.C.	2,906
Quivira ('47)	36-19-9W		no report	236,477		Tarkio	2,117
Sterling ('51)	4-22-8W	100	25,104	110,174	2	Mississippian	3,385
Union ('50)	28-20-8W	640	561,444		8	Penn. congl.	3,275
Miscellaneous		40	850		1†		
Total Rice County		860	804,157	33,375,547 recorded	13†		

RUSH COUNTY							
Lohrey ('56)	35-17-17W		no report	none		Penn. congl.	3,563
Otis-Albert* ('30)	11-18-16W	6,000	903,428		22	Neva	
Reichel ('53)	23-17-17W	200	538,460	1,381,781	4	Lans.-K.C.	3,330
Rothe ('55)	31-17-16W		no report	none		Lans.-K.C.	3,446
Ryan*	35-19-16W	1,200	1,106,400†		15†	Reagan	3,507
Ryan East ('54)	36-19-16W		no report	none		Arbuckle	3,648
Total Rush County		7,400	2,548,288†		41†		
RUSSELL COUNTY							
Miscellaneous		80	22,768		2		
SCOTT COUNTY							
Keystone ('50)	25-18-32W		no report	45,122			
SEDGWICK COUNTY							
Bartholomew ('46)	30-27-4W	600	104,485		11	"Miss. lime."	3,732
Derby ('37)	32-28-2E		No longer productive; used for			gas storage only.	
						"Stalnaker"	2,215
						Lans.-K.C.	2,228
Gladys South ('56)	5-29-1E	40	73,344	73,344	1	Mississippian	3,194
Schulte ('49)	7-28-1W	200	no report	1,287,655	1	Mississippian	3,349
Total Sedgwick County		840	177,829	2,055,328 recorded	13		
SEWARD COUNTY							
Blue Bell ('53)	33-34-31W		no report	none		Mississippian	5,959
Blue Bell Northwest ('54)	20-34-31W		no report	none		Mississippian (Chesteran)	5,947
Hawks ('52)	18-35-31W		no report	none		Morrowan	5,927
Hoit ('54)	28-32-34W		no report	none		Topeka	3,820
Hugoton Gas Area* ('22)	3-35-34W	234,460	24,894,277	176,841,238	324	Chase group	2,200
Kismet Northwest ('53)	10-33-31W		no report	none		Morrowan	5,584
Liberal-Light ('51)	11-35-32W	2,400	2,988,349	20,093,345	11	Morrowan	5,906
Liberal Southeast ('47)	15-35-33W	1,100	1,745,904	15,453,165	5	Penn. sand.	6,202
Masoni ('55)	5-33-31W	640	10,112	10,112	1	Toronto	4,270
Plains West ('56)	16-32-31W		no report	none		Morrowan	5,600
Shuck ('55)	20-33-34W		no report	none		Morrowan	5,987
Thirty-one ('53)	18-31-31W	400	194,171	492,637	1	Morrowan	5,448
Wide Awake ('54)	4-35-34W	400	92,510	245,997	1	Toronto	4,410
						Mississippian	6,168
Total Seward County		239,400	29,925,323	213,136,494	343		
STAFFORD COUNTY							
Bradbridge* ('48)	6-24-15W		no report	none		Arbuckle	4,020
Farmington ('48)	27-24-15W		Included with Macksville			Mississippian	4,207
Farmington North ('56)	23-24-15W		no report	none		"Kinderhook"	4,120
Farmington Northwest ('56)	30-24-15W		no report	none		"Kinderhook"	4,272
Farmington West ('52)	6-25-15W		no report	none		Penn. sand.	4,164
Gates ('50)	26-21-13W		no report	266,956		Lans.-K.C.	3,473
Hill ('52)	11-23-12W		no report	none		Lans.-K.C.	3,447
Knoche ('51)	8-24-12W		no report	1,208,546		Viola	3,810
Macksville ('47)	3-24-15W	640	1,031,013	9,759,791	11	Lans.-K.C.	
O'Connor ('47)	16-24-15W		no report	none		Arbuckle	4,061
Rattlesnake East ('56)	7-24-13W		no report	none		Mississippian	3,880
Zenith-Peace Creek ('37)	23-24-11W		no report	none		Viola	3,860
Miscellaneous		40	132		1		
Total Stafford County		680	1,091,145	10,983,950	12		
STANTON COUNTY							
Hugoton Gas Area* ('44)	32-30-39W	169,500	15,136,779	105,446,108	235	Chase group	2,200
Sparks* ('54)	34-30-42W	3,200	1,779,406	1,779,406	12	Morrowan (Keyes)	52,254
			Includes Morton County				
Total Stanton County		172,700	16,916,185	107,225,514	247		
STEVENS COUNTY							
Hanke ('56)	6-35-36W	640	no report	none		Morrowan	6,267
Hugoton Gas Area* ('27)	31-33-37W	600,000	102,139,834	1,478,766,620	727	Chase group	2,200
Panoma ('56)	12-31-38W		no report	none		Council Grove	2,843
Total Stevens County		600,640	102,139,834	1,478,766,620	727		

TABLE 66.—Gas production in Kansas during 1956, concluded

Pool or field name and year of discovery	Location of discovery well	Area, acres	Gas production, M cu.ft.**		Producing zone, ft.			
			during 1956	to end, 1956	No. wells	Name	Depth	
SUMNER COUNTY								
Bitter Creek ('53)	1-35-1E		no report	none		"Stalnaker"	3,364	
Fall Creek ('50)	3-35-3W		no report			Simpson	4,746	
Padgett ('24)	23-34-2E		no report			"Miss. lime"	3,474	
State Line ('53)	15-35-2E		no report	none		Marmaton	3,187	
Wellington ('29)	33-31-1W		No longer productive; used for gas storage only				"Bartlesville"	3,446
Miscellaneous		10,000	2,690,841		26	"Chat"	3,655	
WALLACE COUNTY								
Sexson ('56)	19-13-42W		no report	none		Morrowan	5,008	
WILSON COUNTY								
Altoona-Earlton	29-16E		no report					
Neodesha*	30-16E		no report					
Miscellaneous		700	280,135†		60†			
WOODSON COUNTY								
Gordon ('54)	13-24-15E					"Squirrel"	1,080	
Vernon	23-16E	120	56,192		8			
Miscellaneous		200	147,000†		8†			
Total Woodson County		320	203,192†		16†			
WYANDOTTE COUNTY								
Roberts-Maywood*	11-23E	40	1,688		1	"Peru"		
						"Squirrel"		

* Field extends into adjacent county or counties.

** All figures at base of 14.65 psia.

† Corrected cumulative.

‡ Estimated.

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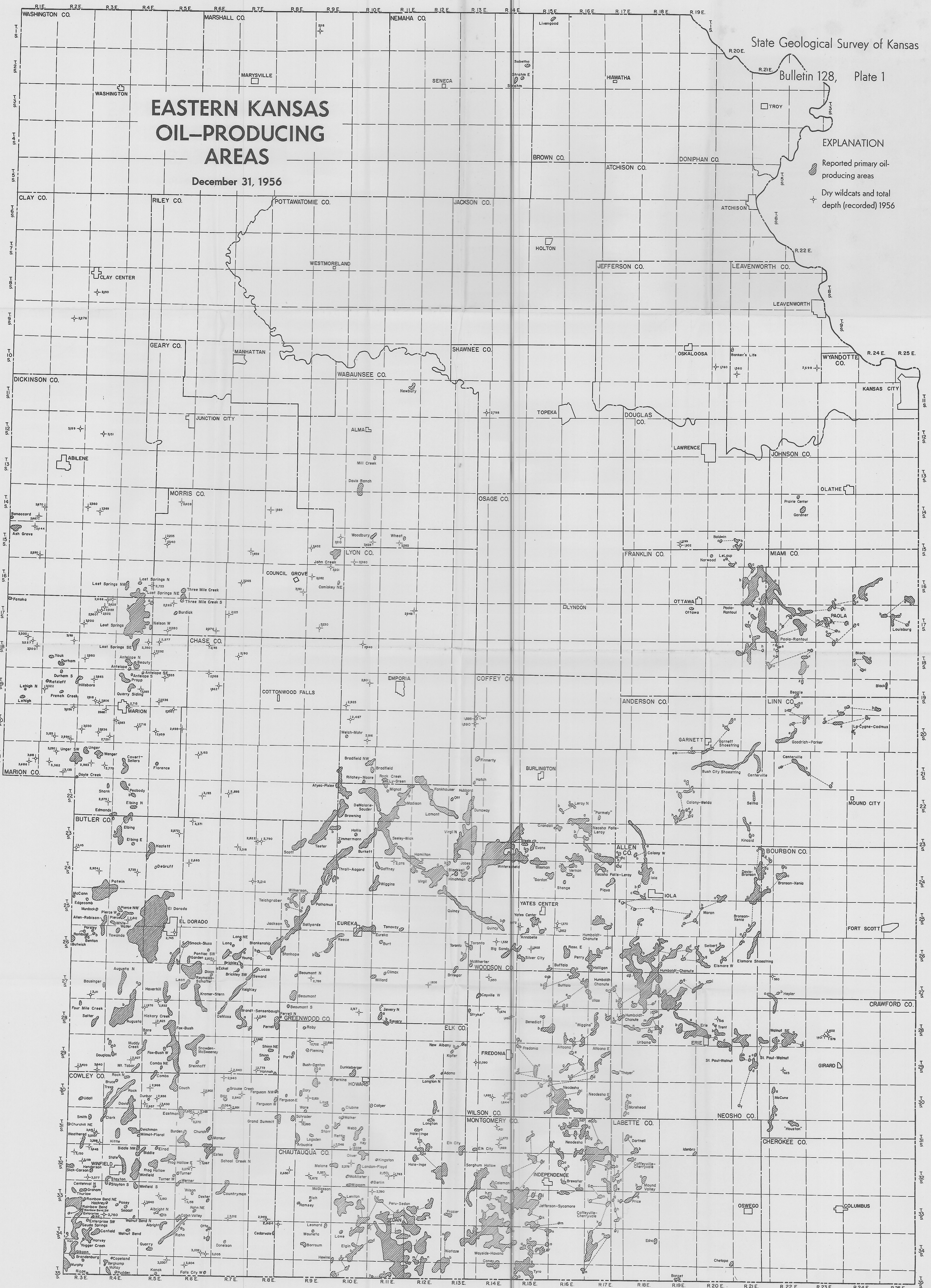
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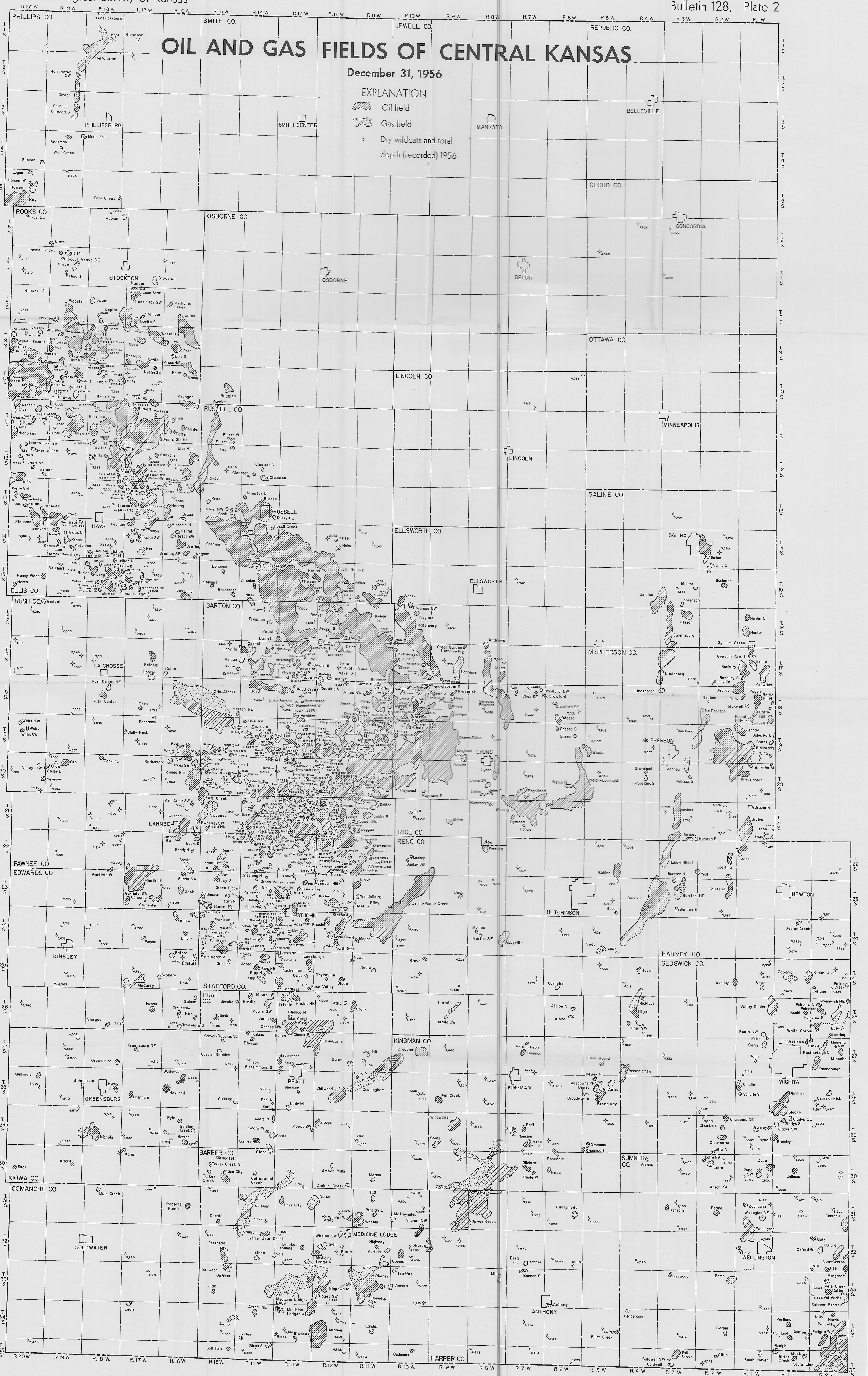
EASTERN KANSAS OIL-PRODUCING AREAS

December 31, 1956

EXPLANATION

- Reported primary oil-producing areas
- Dry wildcats and total depth (recorded) 1956





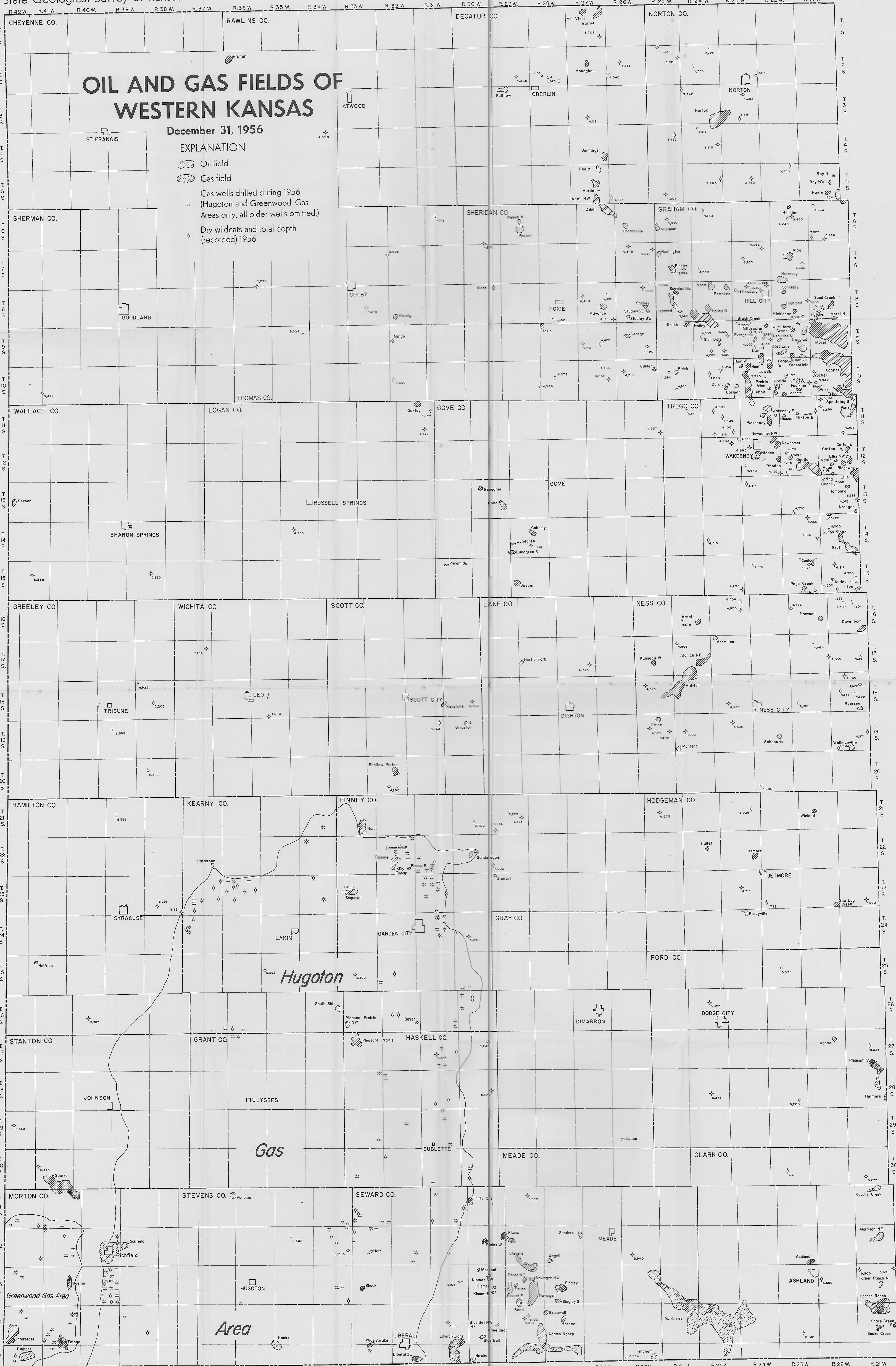


OIL AND GAS FIELDS OF WESTERN KANSAS

December 31, 1956

EXPLANATION

-  Oil field
-  Gas field
- ☆ Gas wells drilled during 1956
(Hugoton and Greenwood Gas Areas only, all older wells omitted.)
- ◆ Dry wildcats and total depth
(recorded) 1956



No.	Field	Operator	Project	Location	Cooperative or unitized	Year started	Total developed acres	Producing formation	Thickness of producing zone, feet	Average depth to producing zone, feet	Flowing	Active wells						Source of water	Average bbl. water injected per well per day	Cumulative secondary oil recovered per acre, bbl.	Production attributable to secondary recovery in 1956, bbl.	No.				
												Pumping	Total	No. producing wells drilled in 1956	No. active injection wells, 1956	No. injection wells drilled in 1956	Medium of injection									
124	do	Kirkpatrick and McGuire	Refiners Oil-Morris-McGinnis	20,21-23-9E	No	1951	92	do	36	2,550	0	5	5	0	4	2	do									
125	do	Shelly Oil Co.	Hartley Water Flood	2-23-9E	No	1944	30	do	45	2,350	0	2	2	0	1	0	do	Douglas sand	255	479	20,172	124				
126	Thrall-Aagard	Arkansas Fuel Oil Corp.	E. Marshall Lease	31-23-10E;	No	1944	94	do	37	2,300	0	9	9	0	6	0	do	Salt water sand	300	6,260	8,190	125				
127	do	do	Martindell-Teeter	6-24-10E	No	1948	372	do	50	2,500	0	42	42	1	37	0	do	Douglas sand	173	5,003	22,359	126				
128	do	do	Olson-Anderson	11-24-9E	Unit.	1944	98	do	42	2,200	0	8	8	0	3	0	do	Douglas and Arbuckle	125	5,176	130,206	127				
129	do	Phillips Petro. Co.	Asgard Unit	14,23-24-9E	Unit.	1937	48	do	40	2,100	0	2	2	-	1	-	do	Douglas	206	7,133	12,391	128				
130	do	do	Cartwright	36-23-9S;11-24-9E;31-23-10E	Unit.	1952	172	do	35	2,200	0	21	21	1	14	0	do	Douglas and produced	-	4,060	196,600	129				
131	do	do	Gard Block	10S;6-24-10E				do	70	2,150	0	13	13	-	4	-	do	Arbuckle and produced	330	-	-	130				
132	do	do	Lewis and Cannon	14,26-24-9E	Unit.	1938	110	do	23	2,300	0	10	10	0	8	0	do	Douglas and produced	-	-	-	131				
133	do	Sinclair Oil and Gas Co.	Thrall-McKee Consolidated	11,12-24-9E	Unit.	1945	80	do	50	2,300	0	59	79	0	57	0	do	do	150	8,220	48,600	132				
134	Virgil	Alf. M. Landon	Hamilton Leases Water Flood	28,29,30,32, 35-23-10E	Unit.	1949	644	do	31	2,300	20	59	79	0	57	0	do	do	188	4,570	170,912	133				
Totals												24	1,065	1,089	25	707	18	Estimated additional secondary recovery production					-	1,500	134	
GREENWOOD and WOODSON COUNTIES																										
135	Quincy	Delhi-Taylor Oil Corp.	South Quincy	10,14,15,23-25-13E	Coop.	1948	200	"Bartlesville"	20	1,500	0	22	22	-	17	-	Salt water	Arbuckle	-	-	-	135				
LABETTE COUNTY																										
136	Price	Veeder Supply and Development Co.	Labette Flood	7,8-33-18E	No	1952	30	do	10	-	0	14	14	-	10	-	Fresh water	Shallow and return	-	-	-	136				
Totals												0	14	14	-	10	-	Estimated additional secondary recovery production					-	35,600	136	
LINN COUNTY																										
137	Goodrich-Parker	General American Oil Co. of Texas	Goodrich	19,20,29,30-20-22E	No	1944	210	"Squirrel"	50	570	83	16	99	0	99	0	Salt water	Arbuckle	15	1,761	29,224	137				
138	LaOygne-Cadmus	do	LaOygne	2,3-20-23E;34, No 35,36-13-23E	No	1942	81	"Peru"	20	250	20	30	50	0	48	0	do	Wilcox	19	1,608	14,339	138				
Totals												103	48	149	0	147	0	Estimated additional secondary recovery production					19	1,608	19,500	138
LYON COUNTY																										
139	Atyeo-Pixlee	Barbara Oil Co.	Jones Water Flood	30-21-10E	Coop.	1948	50	"Bartlesville"	30	2,200	0	5	5	0	3	0	Salt water	Arbuckle and "Bartlesville"	299	2,700	14,182	139				
140	Fankhauser	W. M. Michaelis	Jack-Childers	32-21-12E	Coop.	1956	-	do	40	1,900	0	4	4	3	1	0	do	Douglas and produced	300	-	0	140				
141	do	Phillips Petro. Co.	Lauck Unit	32,33-21-12E	Unit.	1945	-	do	26	1,950	-	-	-	-	-	-	do	do	-	2,912	6,500	141				
Totals												0	9	9	3	1	0	Estimated additional secondary recovery production					-	706,000	141	
MOPHERSON COUNTY																										
142	Graber	Cities Service Oil Co.	Graber	31,32-21-1W	Coop.	1952	30	"Banton"	25	3,285	0	4	4	0	1	0	Fresh water	Shallow sand	60	2,791	13,175	142				
143	do	Continental Oil Co.	Graber Pool Water Flood	20,29,32-21-1W	Coop.	1947	1,400	do	16	3,200	0	56	56	-	21	0	Salt and fresh	"Huntton", Kansas City	-	-	-	143				
144	Ritz-Canton	John Jay Darrah	Edwin B. Koehn	34-19-2W	-	1954	90	Mississippian lime	150	2,350	0	6	6	-	1	0	Salt water	Mississippian lime	-	-	-	144				
Totals												0	62	62	0	22	0	Estimated additional secondary recovery production					-	-	13,175	144
MEADE COUNTY																										
145	Novinger	Columbian Fuel Co.	Novinger Unit	22,23,26,27, 34,35-33-30W	Unit.	1956	1,429	Marmaton	15	5,300	12	18	30	0	3	0	Fresh water	Fresh water sand	1,750	-	-	145				
MIAMI COUNTY																										
146	Block	Dimertine	Block Oil Field Territory	16,21-16-24E	Coop.	1947	40	"Squirrel"	50	515	-	-	-	-	4	-	Fresh water	Pond	-	-	-	146				
147	Paola-Rantoul	Ambassador Oil Co.	Klein	28-16-21E	Coop.	1948	40	do	10	625	2	17	19	5	20	3	Salt water	Pennsylvanian lime	-	-	-	147				
148	do	W. M. Dary	Alvord and Minden Farms	11-17-22E	No	1953	20	do	20	650	0	18	18	1	16	3	do	Mississippian lime	211	1,204	8	148				
149	do	do	Robert L. Nicholson	11-17-22E	No	1956	8	"Bartlesville"	10	600	0	8	8	0	3	3	do	do	8	-	-	149				
150	do	J. W. Everhart	Big Lake Development	15,16,20,21, 28-16-24E	Coop.	1953	266	"Peru"	35	400	0	41	141	7	75	28	do	Arbuckle	105	775	94,000	150				
151	do	General American Oil Co. of Texas	NYK No. 2 and Seaborn	22,23,26,27-18-22E	No	1944	287	do	20	350	104	1	105	0	99	0	do	do	33	1,181	20,588	151				
152	do	do	Producers	15,16,21,22, 26,27-17-22E	No	1945	627	do	14	350	175	3	178	0	196	0	do	do	33	913	51,397	152				
153	do	J. C. Hart	Hart-Buster	10-17-22E	-	1956	80	"Squirrel"	30	700	0	35	35	1	12	8	-	do	do	25	-	25	153			
154	do	Maracampo Oil Corp.	Units 1, 2, and 3	11,13,14,23,24, 26,26,35-16-21E; 31-16-22E;5,5,8, 9-17-22E	Unit.	1948	500	do	30	600	40	65	125	-	-	-	Salt water	Hertha limestone	30	4,000	-	154				
155	Wellsville-Shoestring	C. P. Weisner	Phillips Unit	24-16-21E	No	1956	140	do	12	670	0	10	10	2	2	2	do	Maracampo Oil Co.	17	0	0	155				
Totals												321	318	639	15	426	17	Estimated additional secondary recovery production					-	282,761	155	
MONTGOMERY COUNTY																										
156	Caney	Alpine Oil and Gas Corp.	Roper	3-35-14E	No	1952	20	"Bartlesville"	14	1,250	0	10	10	0	3	0	Salt water	Big Salt and return	27	-	-	156				
157	Coffeyville-Cherryvale	Atlantic Refining Co.	Coffeyville	17,19,20, 30-34-17E	No	1954	9	do	20	600	0	42	42	1	8	0	Fresh and produced	River	60	1,200	-	157				
158	do	E. W. Hayes	Raney	7-34-17E	-	1946	60	"Peru"	20	330	0	22	22	-	24	-	Salt and fresh	Formation and City of Coffeyville	-	-	-	158				
159	do	do	Recker Field	9,10-34-17E	No	1948	60	do	20	320	0	20	20	-	20	-	Salt water	Arbuckle and formation	-	-	-	159				
160	do	Layton Oil Co.	Labette Oil Co. Flood	2-32-17E	No	1955	10	"Bartlesville"	12	700	0	20	20	-	6	0	do	Mississippian	27	46	-	160				
161	do	do	Herdoo Flood	10-32-17E	No	1953	100	do	17	725	0	20	20	4	27	4	do	Arbuckle and Drum Creek	51	1,316	49,103	161				
162	Jefferson-Sycamore	W. E. Butler	Schaub, Frost, Benson, Provorse and Jackson	11,14-33-15E	-	1955	50	do	25	1,109	0	7	7	-	6	-	Fresh water	City of Independence	-	-	-	162				
163	do	Kirkpatrick and McGuire	Speed Recovery, Inc.	22-33-15E	No	1952	12	do	20	1,153	0	4	4	0	1	0	do	Arbuckle	86	-	-	163				
164	Needesha	Layton Oil Co.	Omega Oil Co., Inc.	12-31-16E	No	1952	55	do	12	915	0	5	15	1	12	0	Salt water	Formation and well	50	1,002	7,565	164				
165	do	do	Alpine Oil Co. and Gas Co.	16-31-16E	Unit.	1956	20	"Weiser sand"	18	500	0	5	5	2	1	1	Salt and fresh	Big Salt and return	30	-	2,500	165				
166	Wayside-Havana	do	Fee No. 2	34-33-14E	No	1949	20	"Wayside sand"	18	700	0	8	8	0	2	0	Salt water	Wells and return	13	1,315	-	166				
167	do	Consolidated Gas, Oil and Manufacturing Co.	Bell Nos. 1 and 2	10,11-34-14E	No	1944	47	do	22	637	6	15	19	0	12	0	Salt and fresh	do	17	2,685	8,980	167				
168	do	do	Planagan Nos. 1 and 2	10,11-34-14E	No	1942	105	do	22	680	0	21	21	4	16	3	do	do	23	481	12,012	168				
169	do	do	Havener	33-33-14E	No	1955	75	do	22	656	0	16	16	0	11	0	do	do	10	2,391	3,817	169				
170	do	do	Shinn	11-34-14E	No	1945	40	do	22	656	0	16	16	0	11	0	do	do	20	1,119	-	170				
171	do	Forest Oil Corp.	Flood No. 3lood																							

No.	Field	Operator	Project	Location	Cooperative or unitized	Year started	Total developed acres	Producing formation	Thickness of producing zone, feet	Average depth to producing zone, feet	Active wells					Source of water	Average bbl. water injected per well per day	Cumulative secondary oil recovered per acre developed	Production attributable to secondary recovery in 1956, bbl.	No.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
											Flowing	Pumping	Total	No. producing in 1956	No. active in 1956						No. infilling in 1956	Medium of injection																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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1	Bronson-Xenia	Maak G. Colt	K. B. Project and K. B. Project South	22,27,28, 33-24-21E	No	1951	200	"Bartlesville"	18	700	0	129	129	30	107	30	Salt water	Arbuckle	35	4,085	162,400	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
2	do	D and C Oil Co.	Heston Lease	33-24-21E	-	1955	-	do	12	695	0	10	10	3	7	3	-	Arbuckle and return	17	-	-	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
3	do	Southeastern Co.	Southeastern Co.	33-24-21E	Part.	1955	15	do	15	760	0	8	8	-	4	-	Salt water	Arbuckle	-	-	6,855	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
4	Elmore Shoestring	Fess and Hoyt	Elmore Shoestring	5,4,10-26-21E	Unit.	1941	180	do	20	660	0	58	58	-	54	-	Fresh and salt water	Arbuckle and stream	-	-	-	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
5	do	Parlock Bros.	Trant and Gray Farms	16-26-21E	-	1944	-	do	28	700	0	9	9	-	-	-	do	-	-	-	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
6	Elmore West	Bartels Oil and Gas Co.	Young and Newby	32-26-21E	Coop.	-	100	do	22	730	0	12	12	0	0	0	do	-	-	-	6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
7	Humboldt-Chanute	C and M Oil Co.	Humboldt-Chanute	18,19,26-20E	Coop.	1953	40	do	15	700	0	17	17	-	10	-	Fresh water	Mississippian	-	-	-	7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
8	do	Gamble, Wright and Crumley	Wolf-Tebay Lease	24-26-17E	Coop.	1953	160	do	30	840	0	20	20	-	8	-	Stream and well	-	-	-	8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
9	do	General American Oil Co. of Texas	Matson	16,17,18,19, 20-26-18E	No	1958	322	do	30	800	13	13	152	0	147	0	Fresh water	"Omaha line"	11	-	-	9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
10	do	E. F. Gidley	Diamond	16-26-19E	No	1952	15	do	10	860	0	10	10	0	5	0	Salt water	Mississippi limestone	40	-	12,000	10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
11	do	Weiner Petroleum Co.	Humboldt Water Flood	18,14,23,24-26-18E	No	1942	371	do	25	825	0	214	214	11	129	9	do	do	17	1,718	62,100	11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
12	do	C. A. Willis	Hoepker	26-26-18E	-	1953	80	do	15	830	0	32	32	-	4	-	-	"Omaha line"	-	-	-	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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