

STATE GEOLOGICAL SURVEY OF KANSAS

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BULLETIN 112

**OIL AND GAS DEVELOPMENTS IN KANSAS
DURING 1954**

By

**W. A. VER WIEBE, E. D. GOEBEL, A. L. HORNBAKER,
AND J. M. JEWETT**



*Printed by Authority of the State of Kansas
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**UNIVERSITY OF KANSAS PUBLICATIONS
SEPTEMBER, 1955**

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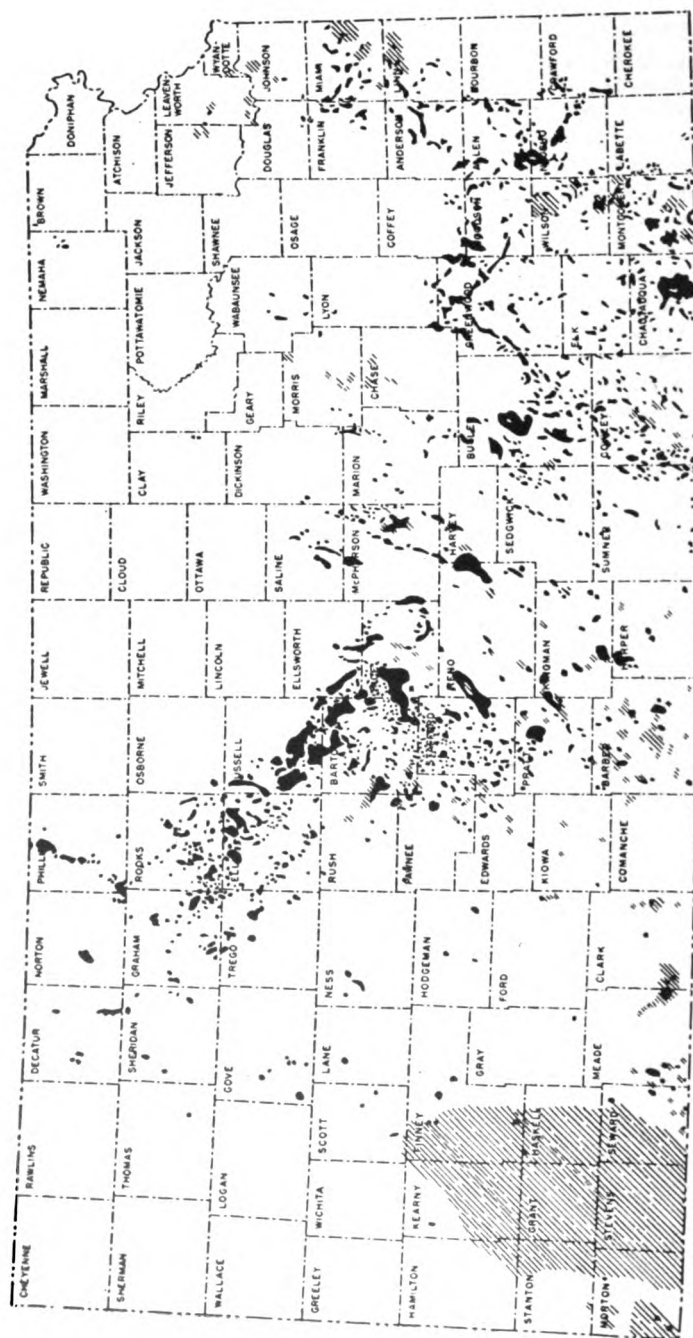


FIG. 1.—Index map of Kansas showing oil and gas producing areas.

OIL AND GAS DEVELOPMENTS IN KANSAS DURING 1954

By

W. A. VER WIEBE, E. D. GOEBEL, A. L. HORNBAKER, AND
J. M. JEWETT

ABSTRACT

Kansas oil production in 1954 totaled 118,309,260 barrels, a new high in annual production. In value the 1954 output of crude oil increased to \$333,632,113 from \$307,632,164 in the preceding year, partly because of price but mostly because of increased production.

Natural gas production in Kansas totaled 405.8 billion cubic feet (14.65 psia); the Hugoton Gas Area produced 346.7 billion cubic feet, 85.4 percent of the State's total.

During the year 122 new oil pools and 22 new gas pools were discovered; 2 previously abandoned oil pools and 2 gas pools were revived.

The discovery of new oil pools in Morton, Harper, Haskell, Kingman, and Sedgwick Counties highlighted the year's exploration. The continued development of the Greenwood Gas Area in Morton County was significant.

In 1954, 4,768 wells were recorded drilled in 93 Kansas counties in connection with the petroleum industry. Of the recorded completions, 2,326 were oil wells, 362 were gas wells, 1,876 were dry holes, and 204 were salt-water disposal wells or wells used as input wells in connection with secondary recovery operations. Of the 1,876 dry holes, 509 were wildcats. Estimates of wells not specifically reported bring the total number of wells drilled in the State during the year to 8,514.

As in 1953, Barton County, with a production of 16,353,520 barrels, was the largest oil-producing county. Russell and Ellis Counties, ranked second and third, each produced more than 11 million barrels. The Trapp field of Russell and Barton Counties was again the top-ranking field of the State with production of 5.4 million barrels of oil in 1954. The State's top six oil fields—Trapp, Kraft-Prusa, Hall-Gurney, Chase-Silica, El Dorado, and Bemis-Shutts—accounted for 21 percent of the total annual production.

In 1954, Kansas produced 193.8 million gallons of natural gas liquids valued at more than 11.7 million dollars. Proved reserves of natural gas liquids are more than 175 million barrels.

The proved reserves of Kansas crude oil at the end of the year were 978.5 million barrels, or 7.1 percent greater than last year's estimated reserves. Proved reserves of natural gas are about 15.8 trillion cubic feet.

Production from secondary recovery projects in Kansas accounted for 10,148,676 barrels of oil during 1954. A total of 5,852 producing wells and 4,339 injection wells was reported during the year. Greenwood County, which had 4,035,352 barrels, led all other counties in the amount of oil produced by secondary recovery methods.

INTRODUCTION

During 1954 several new records were established in the Kansas petroleum industry. New highs were established in crude oil production, proved reserves of liquid hydrocarbons, value of crude oil production, and value of natural gas production. Because of an increase in production of crude oil and increases in prices of both crude oil and natural gas the dollar value of these resources exceeded all previous records.

Eighty Kansas counties have produced or are producing oil or gas. No additions were made to this total during 1954; however, significant new developments occurred during 1954. Stimulating the development in southwestern Kansas was the discovery of Morrowan oil production (Morton County) below the Greenwood Gas Area, and the finding of Topeka limestone and Toronto limestone gas production (Seward County) and Mississippian oil production (Haskell County) below the Hugoton Gas Area. The first Arbuckle oil production was reported from Scott County. There was continued development in the Greenwood Gas Area, Kansas's second largest gas field.

Highlighting the 1954 activity along with these developments was the discovery of sizable Mississippian oil fields in Harper and Kingman Counties, and in southeastern Sedgwick County. Continued development in Pawnee and Pratt Counties was significant.

In some eastern Kansas counties the continued success of hydraulic fracturing was a factor in the revival of drilling and the increases in production figures. In Cowley and Sumner Counties several new "Bartlesville" and "Layton" zones were opened.

Stafford County, which had 15 oil pools, led all other counties in number of new pool discoveries. Other counties with a large number of new pool discoveries are: Barton 12 oil and 1 gas; Ellis 10 oil; and Harper 7 oil and 2 gas.

Crude oil production reached a new high in spite of fluctuations in the prorated monthly allowables which were due to the lack of market demand and the accumulation of an excessive amount of crude above ground.

Natural gas production decreased 3.5 percent from the 1953 high, and the production of natural gas liquids decreased 8.4

percent. Proved reserves of natural gas declined only 0.2 percent, but proved reserves of natural gas liquids declined 1.4 percent. Kansas consumption of natural gas (as a percentage of the production) rose to a new high of 66.4 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 considered "oil and gas territory."

A condensed petroleum data table (Table 2) shows at a glance the trends of the 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.—Production of crude oil in Kansas during 1954, 118,309 thousand barrels, is 3,919 thousand barrels more than the 1953 figure and represents a new high in total annual oil production. The 8.5 percent increase in value of crude oil from 307.6 million dollars to 333.6 million dollars is due to two factors: an increase in oil production and an increase in the average price of crude from \$2.689 per barrel in 1953 to \$2.82 per barrel during 1954.

Natural gas production during 1954 decreased 3.5 percent from the previous high year (1953) to 405.8 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 \$37,680,408 in 1953 to \$44,642,618 in 1954, an 18.5 percent rise in the value which is accounted for entirely through an increase in the estimated average price paid by the pipe-line companies during the calendar year. 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 85 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. The estimated price of gas during 1953 was 9.5 cents per thousand cubic feet (16.4 psia first 6 months and 14.65 psia second 6 months).

TABLE 2.—Petroleum data table showing percentage changes for Kansas and the United States, 1953-1954

	Kansas figures 1953	Kansas figures 1954	Kansas percentage change	United States percentage change
1. Crude oil production (barrels)	114,390,176 ¹	118,309,260 ¹	+ 3.4	—2.4
2. Value of crude oil produced	\$307,632,164	\$333,632,113	+ 8.5	.....
3. Kansas crude production as percentage of U.S. total	4.8	5.2	+ 8.3	.....
4. Average price of crude	\$2.689	\$2.82	.....	.....
5. Rank of Kansas among oil-producing states	5th	5th	.....	.....
6. Proved reserves of liquid hydrocarbon (at year end), M barrels	1,091,068 ²	1,153,646 ²	+ 5.7	+1.2
7. Ratio of proved liquid hydrocarbon reserves to current annual production	9.5:1	9.8:1	+ 3.2	.....
8. Oil producing area of "western Kansas" counties (acres) ³	650,262	702,540	+ 8.0	.....
9. Natural gas production, M cu. ft.	420,588,383 ⁴	405,841,987 ⁴	— 3.5	—2.0
10. Value of natural gas produced	\$37,680,408 ⁵	\$44,642,618 ⁵	+18.5	.....
11. Production of natural gasoline and LPG (natural gas liquids), gallons	211,656,648 ⁶	193,782,488 ⁶	— 8.4	—0.6
12. Value of natural gasoline and LPG	\$13,047,307 ⁷	\$11,765,670 ⁷	— 9.8	.....
13. Proved reserves of natural gas, millions of cubic feet	15,787,602 ⁸	15,788,332 ⁸	— 0.2	+0.1
14. Ratio of proved natural gas reserves to current annual production	37.4:1	38.8:1	+ 3.7	.....
15. Gas producing area of western Kansas ⁹ (acres)	2,611,530	2,617,280	+ 0.2	.....
16. New oil and gas pools discovered	187 ¹⁰	144 ¹⁰	.....	.....
17. Recorded well completions in Kansas	2,273	2,326	.....	.....
Oil ¹	380	363	.....	.....
Gas ²	2,151	1,876	.....	.....
Dry	343	204	.....	.....
Salt-water disposal ³	667	3,746 ¹⁰	.....	.....
Unrecorded, estimated	.....	.....	.....	.....
Total recorded and estimated	5,814	8,514	.....	.....
Wildcats and discovery wells (included in above total)	688	653	.....	.....

¹ Figures supplied by Kansas Corporation Commission, Conservation Division.
² Figures from American Petroleum Institute and American Gas Association, 1954. Barrels have 42 U.S. gallons and gas is based at 14.65 psia at 60° F.
³ The petroleum area of "western Kansas" is taken to include all producing counties west of the Cowley-Butler-Marion-Dickinson County tier.
⁴ Figures supplied by Kansas Corporation Commission, base 14.65 psia.
⁵ 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. The estimate for 1953 was 9.5 cents per M cubic feet (16.4 psia, first 6 months and 14.65 psia, second 6 months).
⁶ This aggregate figure is based on unit values of the several products that reflect wholesale prices at the plant.
⁷ Omitting revived pools.
⁸ Includes pool wells and new discoveries.
⁹ Includes salt-water disposal and recorded secondary recovery input wells.
¹⁰ Counties for which number of wells drilled in 1954, are all or in part estimated include Allen, Anderson, Bourbon, Chautauque, Coffey, Crawford, Elk, Franklin, Greenwood, Labette, Linn, Miami, Montgomery, Neosho, Wilson, and Woodson.

TABLE 3.—*Largest oil-producing counties in Kansas during 1954*

Rank	County	Producing wells	Producing acreage	Total production, barrels
1	Barton	3,183	113,830	16,353,520
2	Russell	3,044	78,120	11,195,338
3	Ellis	1,861	60,540	11,366,975
4	Butler	3,433	65,430	8,757,870
5	Rice	1,796	69,360	7,578,134
6	Rooks	1,243	43,260	7,190,986
7	Stafford	1,312	58,140	7,148,225

In the general gas production table (Table 57), in which individual pool data are given, all the 1954 production and cumulative figures for the entire State for the first time are calculated at the same pressure base of 14.65 pounds per square inch absolute.

Kansas production of natural gas liquids during 1954, 193.8 million gallons, was 17.9 million gallons less than the record year of 1953. The value of natural gas liquids dropped to \$11,765,670; there was no change in the price structure of these products (natural gasoline, propane, butane, and liquefied petroleum gases).

The total value of Kansas raw products of the petroleum industry (crude oil, natural gas, and natural gas liquids) produced in 1954 was 390.2 million dollars, which was a new record, exceeding 1953, the previous high year, by almost 32 million dollars.

Production of carbon black was reported as 54,328,515 pounds valued at \$3,014,326. Carbon black production in Kansas has been decreasing steadily during the past few years.

Barton County continued to be the largest oil producer in the State. Table 3 shows the seven largest producing counties during 1954. No change in rank among these seven counties occurred during the year. In individual field production (Table 4) the Trapp field of Russell and Barton Counties maintained the

TABLE 4.—*Largest oil-producing fields in Kansas during 1954*

Rank	Pool	Age, years	County	Total production, barrels
1	Trapp	19	Russell-Barton	5,409,869
2	Kraft-Prusa	18	Barton-Ellsworth	4,681,172
3	Hall-Gurney	24	Russell-Barton	4,547,924
4	Chase-Silica	24	Rice-Barton-Stafford	4,114,824
5	El Dorado	39	Butler	3,833,188
6	Bemis-Shutts	20	Ellis	3,372,377

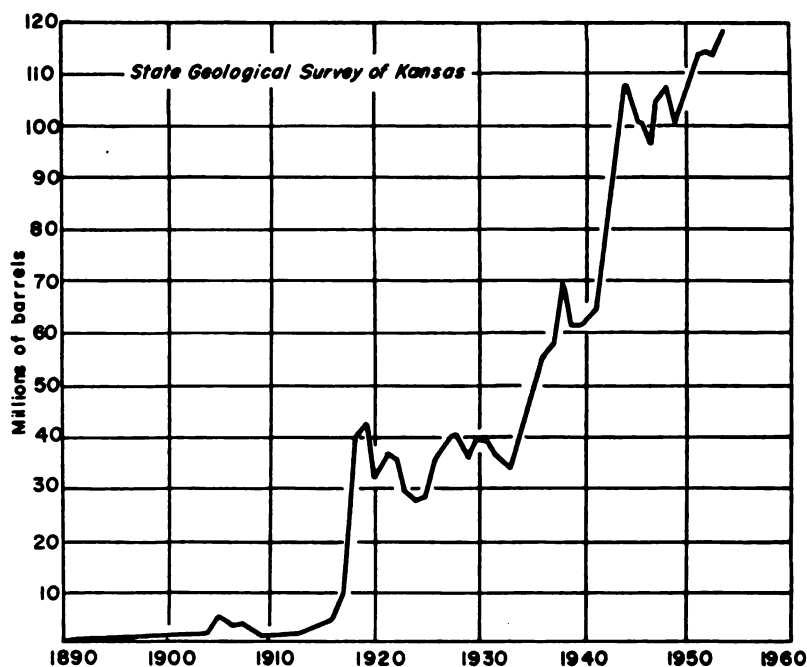


FIG. 2.—Annual oil production in Kansas from 1890 to 1954.

top position. The Hall-Gurney field (third in 1954) of Russell and Barton Counties exchanged rank with the Chase-Silica field (fourth in 1954) of Rice, Barton, and Stafford Counties. Annual oil production since 1890 is shown graphically in Figure 2.

During 1954, almost 25 million barrels of oil was imported into Kansas, and almost 55 million barrels was exported. Approximately 88 million barrels of oil was refined and used in Kansas. A summary of oil produced, imported, used, and exported during 1954 is given in Table 5.

Separate detailed production tables for oil and gas are given in this bulletin (Tables 56 and 57). Each includes in alphabetical order all counties in the State which have oil or gas production. The listing of each county shows both current and known cumulative production, producing area, name of pools (alphabetically arranged), discovery year, producing zones, and reported number of producing wells. 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

TABLE 5.—Summary of oil produced, imported, used, and exported in 1954
(From the Conservation Division, Kansas Corporation Commission)

	Barrels of oil
Produced	118,309,260
Imported	24,966,516
Total	143,275,776
Exported	54,968,489
Refined and used in Kansas	88,307,287
Total	143,275,776

county lines every effort has been made to divide accurately the respective productions on the basis of the output of the leases themselves. All figures are compiled with reasonable diligence; however, 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 12 gives the 1954 gas production and cumulative production for each of the nine Hugoton gas-producing counties. The number of wells now producing and the year in which gas was first discovered are given in Table 57. 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.

Owing to the fact that the gravity of oil varies rather widely from pool to pool, it is not practical to assign dollar value to oil production from the various counties.

Reserves.—Kansas proved reserves of liquid hydrocarbons (crude oil plus natural gas liquids) as of December 31, 1954, were 1,153.7 million barrels, an increase of 5.7 percent; nationally, reserves increased 1.2 percent. Kansas proved reserves of crude oil were 978.5 million barrels (API-AGA, 1954, p. 9) at the end of 1954, an increase of 7.1 percent; nationally reserves increased 2.1 percent.

Proved reserves of natural gas in Kansas at the end of 1954 were estimated by the Reserves Committee of the American Gas Association to be 15,758 billion cubic feet, a decrease of about 0.2 percent. Kansas proved reserves of natural gas liquids, 175 million barrels, decreased by 1.4 percent. 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 pools or the producing oil and gas area (the two overlap in some cases) has been calculated and shown as accurately as reasonably possible. Pool 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 drawing areas of many of the reservoirs extend considerably beyond the limits as indicated. However, 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, it has been desirable to omit from the map (Pl. 1) the boundaries of the old fields as they were drawn many years ago, because they contain very large areas that are not producing at the present time. Only areas that were producing oil during 1954 are shown on the map and assigned acre areas in Table 56. 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 limits and significance of boundaries of the old fields, most of the areas of which are now unproductive, are shown.

New pools.—During 1954, 122 new oil pools and 23 new gas pools (one is both oil and gas) were discovered in Kansas. Four previously abandoned pools, two oil and two gas, were revived during the year. Of the 124 new and revived oil pools, the discovery wells of 7 were carried on the scout reports as dry and abandoned; 12 of the new oil and gas pools were combined with other pools. Stafford County had 15 new oil pools discovered, Barton County 12 oil and 1 gas, Ellis County 10 oil, and Harper County 7 oil and 3 gas, one of which was a revived pool.

The new pool discoveries are listed in Table 6. The number of new oil and gas pools, 144, discovered during 1954 is 43 less than the high set in 1953. The total of Kansas counties which have in the past or are at present producing commercial quantities of oil or gas or both is 80.

Table 7 summarizes new oil and/or gas zones discovered in old producing fields during 1954; 41 new zones were named. Data similar to those presented for new pool discoveries are given.

TABLE 6.—New oil and gas pools discovered in Kansas during 1954

County, field, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production per day, bbls.
Barber County					
Gudeman NW NE 10-35-10W	Aurora Gasoline Co. No. 1 Gudeman	Viola	5,152-5,162	Nov.	593
Hardtner NE SE 31-34-12W	Aurora Gasoline Co. and Barbour Drig. Co. No. 1 Rathgeber	Mississippian	4,782-4,788	Oct.	13,500,000 cu. ft. gas
Little Bear Creek SW NW 12-32-12W	Frank Purcell and J.A. Mull No. 1 Lake	"Doug. sand"	3,808-3,824	Sept.	10,000,000 cu. ft. gas
McClure SW SW 6-33-11W	Barbara Oil Co. and R. C. Patton No. 1 McClure	"Doug. sand"	3,548-3,571	Sept.	3,300,000 cu. ft. gas
Mease NE SW 27-30-11W	Aylward Drig. Co. et al. No. 1 Mease	"Doug. sand"	3,759-3,769	Oct.	5,000,000 cu. ft. gas
Medicine Lodge North NE NE 25-32-13W	Anschutz Drig. Co., Inc. No. 1 Lonker	Mississippian	4,480-4,493	Nov.	161
Medicine Lodge Southwest NW SW 6-34-13W	Imperial Drig. Co., Inc. No. 1 Ott "A"	Mississippian	4,889-4,895	Aug.	1,846,000 cu. ft. gas
Rhodes East NW NE 23-33-11W	Frank Purcell and J. A. Mull No. 1 Burns	Mississippian	4,579-4,585	Oct.	20 (15% wtr.)
Rhodes North SE SW 4-33-11W	Musgrove Petroleum Corp. No. 1 Early (Now part of the Rhodes field)	Mississippian	4,423-4,438	July	8,256,000 cu. ft. gas
Salt Fork NE NE 11-35-15W	The Chicago Corp. No. 1 Davis Ranch	Mississippian	4,982-5,003	Oct.	32
Whelan East SE SE 21-31-11W	Orville H. Parker No. 1 Chain	"Doug. sand"	3,746-3,753	Oct.	2,422,000 cu. ft. gas
Whelan Southwest NW NW 11-32-12W	Harms-Burt Drig. Co. No. 1 Smith	Mississippian	4,299-4,240	Sept.	93
Barton County					
Bissell Point SE SE 10-19-13W	Schermerhorn Oil Corp. No. 1 Bissell Point	Lans.-K.C.	3,276-3,281	Nov.	172
Carroll North SE NE 17-17-14W	Coppinger Drig., Inc. No. 1 Boyle	Arbuckle Reagan	3,450-3,459	Oct.	25
Cladin SE SW 3-18-11W	Francis Raymond No. 1 Simmons	Lans.-K.C.	3,044-3,048	Nov.	25
Clarence Northwest NE NW 35-19-15W	H & H Drig. Co. No. 1 Button	Pre-Cambrian	3,531-3,543	Jan.	25
Clarence South SE SE 2-20-15W	Schermerhorn Oil Corp. No. 1 Mull "A" **	Penn. basal congl.	3,606-3,636	April	3,500,000 cu. ft. gas
Hoisington East NW SE 23-17-13W	E. K. Carey Drig. Co. No. 1 Munns	Arbuckle	3,338-3,343	April	240
Hoisington Southwest SW SE 20-17-13W	The Darby Oil Co. No. 1 Alice Hull	Arbuckle	3,363-3,384	Dec.	50
James NW SE 20-19-12W	Lewis Drig. Co. No. 1 Welsh	Lans.-K.C.	3,278-3,284	April	326
Jettie SE NW 27-20-14W	Phillips Petroleum Co. No. 1 Jettie "A"	Simpson	3,534-3,540	Aug.	2,565
Sandrock Southeast SW NE 34-20-13W	Rocket Drig. Co. No. 1 McDonald	Lans.-K.C.	3,262-3,280?	Nov.	Oil
South Bend NE NW 9-20-13W	Schermerhorn Oil Corp. and Thunderbird Drig. Co. No. 1 Hart	Lans.-K.C.	3,317-3,325	Dec.	190
Sunny Valley Northeast SE SE 6-20-12W	V. E. Autry et al. No. 1 Dodge	Arbuckle	3,422-3,434	March	24
Sunny Valley Southwest NE NE 23-20-13W	Harms-Burt Drig. Co. No. 1 Murphy	Lans.-K.C.	3,336-3,341	Nov.	190
Butler County					
Pierce Northwest NW NW 21-25-4E	E. H. Adair Oil Co. No. 1 Corfman	Mississippian	2,569-2,583	March	20

TABLE 6.—New oil and gas pools discovered in Kansas during 1954, continued

County, field, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production per day, bbls.
Clark County					
Harper Ranch North NW SE 22-33-21W	Sinclair Oil & Gas Co. No. 1 Combrink	Morrowan	5,318-5,336 5,350-5,360	Nov.	8,000,000 cu. ft. gas
Morrison Northeast SE SE 10-32-21W	Shamrock Oil & Gas Corp. No. 1 Stephens	Morrowan	5,193-5,207	Dec.	14,000,000 cu. ft. gas & 42
Cowley County					
Arkansas City Southwest SW SE 35-34-3E	Martin & Cash Drig. Co. No. 1 Putnam	"Hoover sand"	1,981-1,987	March	25
Church SE SW 13-31-6E	The Saco Oil Co. No. 1 Church	Mississippian	2,935-2,947	July	13
Hittle North SW NW 15-31-4E	Aladdin Petroleum Corp. No. 1 Summers (Now part of the David field)	"Bartlesville"	3,014-3,020	April	25
Nitsche SE SE 24-32-6E	Royal Oil & Gas Corp. No. 1 Nitsche	"Layton"	2,209-2,216	Jan.	D & A
Quarry NW SW 28-34-5E	Orville H. Parker No. 1 Dunn**	"Cleveland"	2,684-2,702	June	25
Rainbow Bend Southwest NW NE 31-33-3E	K. T. Wiedemann No. 1 Hanson**	Mississippian	3,356-3,374	June	11
Decatur County					
Pollnow Northwest NW SE 31-2-29W	Sauvage & Dunn Drig. Co. Inc. No. 1 Pollnow	Lans.-K.C.	3,772 (top)	Sept.	D & A
Dickinson County					
Ash Grove SW SW 5-15-1E	Donald T. Ingling No. 1 Wilson "A"	Mississippian	2,569-2,572	Sept.	20
Edwards County					
McCarty (revived) NE NW 31-25-17W	Sherrod & Apperson No. 1 Huff (31-25-17W)*	Penn. basal congl.	4,528-4,538	May	3,286,000 cu. ft. gas
Sturgeon SE NW 33-26-18W	Graham-Messman-Rinehart Oil Co. No. 1 Sturgeon	Viola	4,721-4,726	Sept.	35
Wokaty SE NE 25-25-17W	Cities Service Oil Co. No. 1 Wokaty	Penn. basal congl.	4,390-4,405	May	2,850,000 cu. ft. gas
Ellis County					
Dinges NE NE 9-15-18W	Frontier Oil Co. No. 1 Dinges	Arbuckle	3,624-3,636	July	53
Eagle Creek NW NW 11-11-20W	The Veeder Supply & Development Co. No. 1 Irvin	Lans.-K.C.	3,368-3,380	Sept.	1,961
Erbert Southeast NE SE 28-12-20W	D. R. Lauck Oil Co., Inc. No. 1 Raynesford	Penn. basal congl.	3,857 (top)	June	Oil
Hadley (revived) SW SW 20-11-17W	Walters Drig. Co. No. 1 Hadley "A"	Arbuckle	3,474 (top)	March	25
Herman NW NE 28-13-20W	Mallonee Drig. Co., Inc. No. 1 Herman	Arbuckle	3,865-3,871	Dec.	199
Koblitz Northwest SE NW 15-12-18W	Petroleum, Inc. No. 1 Baker "A"	Arbuckle	3,730-3,735	April	182
Leiker Southeast SW SE 14-15-18W	Frontier Oil Co. No. 1 Witt	Arbuckle	3,547-3,551	Aug.	160
Nicholson South SE NW 31-11-20W	Stanolind Oil and Gas Co. No. 1 Huck (Now part of the Nicholson field)	Arbuckle	3,823-3,828	May	213
Walter Southeast SE SE 13-12-18W	Birmingham-Bartlett Drig. Co. No. 1 Walter	Arbuckle	3,658-3,662	Aug.	199

Younger South SE NW 8-14-17W	Transit Corp. and Davis Bros. No. 1 Lang	Arbuckle	3,546-3,553	Oct.	125
Ellsworth County					
Green Garden SE NW 1-17-9W	The El Dorado Refg. Co. No. 1 Brown	Larfs.-K.C.	3,046-3,050	July	215
Ford County					
Pleasant Valley South SW NE 14-28-21W	W. J. Coppinger No. 1 Vice	Mississippian	5,056-5,074	March	7,600,000 cu. ft. gas
Graham County					
Happy SW NW 21-10-23W	Imperial Drlg. Co., Inc. No. 1 Brown "A"	Lans.-K.C.	3,804-3,809	April	2,805
Happy Southeast NW NE 28-10-23W	E. W. Wickizer No. 1 Wickizer (Now part of the Happy field)	Lans.-K.C.	3,842-3,848	May	315
Holley SW SW 3-9-24W	Empire Drlg. Co. No. 1 Keith	Lans.-K.C.	3,900-3,906	Nov.	1,736
Hoof NE SW 9-10-23W	Imperial Drlg. Co., Inc. No. 1 Hoof "A"	Lans.-K.C.	3,865-3,869	Dec.	3,000
Noah Southwest SE NW 33-10-21W	Petroleum, Inc. No. 1 Noah	Marmaton	3,756-3,764	Oct.	103
Prairie Glen NE SW 25-10-23W	Petroleum, Inc. No. 1 McCall "B"	Lans.-K.C.	3,596-3,600	Nov.	200
Sand Creek NW NW 27-8-21W	Schermerhorn Oil Corp. No. 1 Newell	Lans.-K.C.	3,387-3,393	Oct.	166
Schmied Northeast SW SW 10-8-25W	Wentworth Oil & Development Co., Inc. No. 1 Walts	Lans.-K.C.	3,867-3,892	Sept.	175
Van NE NE 14-9-22W	Nat'l. Coop. Ref. Assn. No. 2 Van Loenen	Arbuckle	3,871-3,875	Sept.	114
Greenwood County					
Ly-Green NW NE 5-22-11E	White & Ellis Drlg. Co. No. 1 Curry	"Bartlesville"	1,858-1,871	Sept.	25
Harper County					
Anthony NE SW 31-33-6W	Gulf Oil Corp. No. 1 Rife	Mississippian	4,486-4,502	Sept.	208,000 cu. ft. gas
Banner SW SW 27-32-7W	Musgrove Petro. Corp., No. 1 Moldenhauer	Viola-Simp- son	4,833-4,839	Aug.	3,000
Berg SW SE 29-32-7W	Beardmore Drlg. Co., Inc. No. 1 Berg	Viola	4,758-4,764	March	134
Dusenbury NE NW 3-32-9W	Earl F. Wakefield et al. No. 1 Dusenbury	Mississippian	4,465-4,500	July	25
Dusenbury North NE NW 34-31-9W	Earl F. Wakefield No. 2 Dusenbury	Mississippian	4,422-4,428	Nov.	25
Grabs East NW SE 9-31-8W	Frank Purcell No. 1 Culver (Now part of the Grabs field)	Mississippian	4,398-4,411	Feb.	33
Grabs Northeast NE NW 8-31-8W	Purcell & Mull Drlg. Co. No. 1 Dickson (Now part of the Grabs field)	Mississippian	4,442-4,445	April	78
Grabs South NW NE 25-31-9W	The Carter Oil Co. No. 1 Antrim	Mississippian	4,397-4,403	April	298
Grabs West SE SE 14-31-9W	S. A. Berwick No. 1 Morris (Now part of the Grabs field)	Mississippian	4,398-4,404	Sept.	921
Haskell County					
Pleasant Prairie NE SW 4-27-34W	Helmerich & Payne, Inc. No. 16 Jones	Mississippian	5,041 (top)	May	167
Kingman County					
Banta SW SW 34-30-8W	Frank Purcell No. 1 Banta (Now part of the Spivey field)	Mississippian	4,380 (top)	Feb.	Temp. abd.
Banta Northeast NW NE 34-30-8W	Pickrell Drlg. Co. No. 1 Boyle "B" (Now part of the Spivey field)	Mississippian	4,288 (top)	March	D & A

TABLE 6.—New oil and gas pools discovered in Kansas during 1954, continued

County, field, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production per day, bbls.
Broadway West NE NW 19-28-5W	Greenland Drlg. Co. No. 1 Viney	Mississippian	3,884-3,890	Nov.	127
Kingman (revived) SE NE 16-27-7W	Heathman-Seeligson Drlg. Co. No. 1 Wooldridge (16-27-7W)*	Mississippian	3,824-3,830	Nov.	1,000,000 cu. ft. gas
Orsemus South SW NW 31-29-5W	The Texas Co. No. 1 Callison	Viola	4,483 (top)	April	Oil
Rosedale SE SE 32-29-6W	M. B. Armer & Mid- states Oil Corp. No. 1 Davis	Lans.-K.C.	3,691-3,696	May	144
Spivey East NW SW 19-30-7W	Pickrell Drlg. Co. No. 1 "B" Tjaden (Now part of the Spivey field)	Mississippian	4,210-4,240	Aug.	205
Spivey Northwest SW SE 9-30-8W	Petroleum, Inc. No. 1 Evans "A"	Mississippian	4,156-4,180	Sept.	3,500,000 cu. ft. gas
Willowdale SW SW 11-29-9W	Aylward Drlg. Co. No. 1 Amsden	Viola	4,502-4,506	May	265
Zenda SW SW 36-29-9W	Rupp-Ferguson Oil Co. No. 1 Hartshorn	Mississippian	4,161-4,170	Nov.	7,600,000 cu. ft. gas
Kiowa County					
Johannsen SE SE 13-28-19W	Aladdin Petro. Corp. No. 1 Johannsen	Mississippian	4,864-4,890	Sept.	1,000,000 cu. ft. gas
Marion County					
Durham South NE SW 3-19-2E	Anderson-Prichard Oil Corp. No. 1 Hett	Simpson	3,039-3,041	Nov.	43
Youk S½ S½ 20-18-2E	Anderson-Prichard Oil Corp. No. 2 Youk	Viola	3,017-3,020	Dec.	25
Meade County					
Bond NW SE 32-33-30W	The Ohio Oil Co. No. 1 Bond	Atokan	5,619-5-631	Aug.	129
Ness County					
Aldrich Northeast SW SE 23-17-25W	Barnett Oil Co. No. 1 Shearer	Mississippian	4,398-4,405	Aug.	66
Norton County					
Ray North NW SW 13-5-21W	Murfen Drlg. Co. No. 1 Baird	Arbuckle	3,544 (top)	May	D & A
Pawnee County					
Garfield Northeast NW NW 3-23-17W	Clark Knight Drlg. Co. & N.C.R.A. No. 1 Hutchinson Estate	Mississippian	4,150-4,158	Sept.	1,413
Garfield Southwest SE NW 30-23-17W	Coppinger Drlg., Inc. No. 1 Rawlins **	Misener	4,347 (top)	Aug.	D & A
Jab SW SW 35-22-17W	The Derby Oil Co. & Honaker Drlg. Co. No. 1 Boyd	Penn. basal congl.	4,152-4,158	Oct.	3,500,000 cu. ft. gas
Jay NW SW 3-23-15W	Atlantic Refg. Co. No. 1 Jay T. Smith	Simpson	4,025-4,039	Sept.	146
Lovett NW NW 35-22-15W	R. W. Rine Drlg. Co. No. 1 Lovett	Lans.-K.C.	3,682-3,690	Nov.	54
Shiley NE NE 14-20-20W	Cities Service Oil Co. No. 1 Risse	Penn. basal congl.	4,173-4,180	March	506
Shiley East NW NW 18-20-19W	Natl. Coop. Ref. Assn. No. 1 Eckert	Penn. basal sand (Cherokee)	4,223-4,225	Sept.	91
Sweeney West SE SE 6-21-15W	Graham-Messman-Rine- hart Oil Co. No. 1 Dufford (Now part of the Sweeney field)	Arbuckle	3,831-3,835	March	5,000,000 cu. ft. gas & 168

Phillips County					
Mont-Sol	Sohio Petroleum Co.	Lans.-K.C.	3,255-3,265	Jan.	408
SE SE 1-4-19W	No. 1 Krause				
Wolf Creek	Jones, Shelburne &	Lans.-K.C.	3,212-3,214	Dec.	20
NE SW 16-4-19W	Farmer, Inc. No. 1 Bales				
Pratt County					
Cairo North	Graham-Messman-Rine-	Viola	4,314-4,318	Jan.	195
SE NE 6-28-11W	hart Oil Co. No. 1-A				
	Bucklin				
Chance North	A. G. Hill	Simpson	4,421-4,427	March	168
SE NW 21-26-13W	No. 1 Dodson				
Chance Northwest	H. L. Moore	Simpson	4,422-4,430	Feb.	163
SE NW 29-26-13W	No. 1 Williams				
Coats North	Lario Oil & Gas Co.	Simpson	4,584-4,600	April	104
SW SE 12-29-14W	No. 1 Shriver Estate				
Earl	Lario Oil & Gas Co.	Simpson	4,520-4,534	June	1,258
SW SE 36-28-14W	& Sinclair Oil Co. No. 1				
	Earl Moore				
Fitzsimmons South	Sterling Drlg. Co.	Simpson	4,435-4,445	Sept.	1,117
SW SE 31-27-13W	No. 1 Elliott				
Lion Northeast	Graham-Messman-Rine-	Lans.-K.C.	3,796-3,799	March	355
SE NW 21-27-11W	hart Oil Co. & Buffalo				
	Oil Co. No. 1 Lion "A"				
Tatlock	Anschutz Drlg. Co.	Lans.-K.C.	3,925-3,929	Oct.	455
NE NW 28-26-15W	No. 1 Tatlock				
Reno County					
Grove	Schermerhorn Oil Corp.	Mississippian	3,884-3,895	June	23
NE NW 12-25-10W	No. 1 Morris				
Rice County					
Bushon	Lario Oil & Gas Co.	Arbuckle	3,281-3,289	Sept.	43
SW SE 11-18-10W	No. 1 Shonyo				
Crawford Southeast	The Derby Oil Co.	Penn.	3,276-3,282	April	20
NE NW 20-18-6W	No. 1 Wolf "A"	basal congl.			
Raymond East	Petroleum, Inc.	Simpson	3,306-3,314	March	25
NW SW 25-20-10W	No. 1 Malone "C"				
Rooks County					
Alphin Northwest	Heathman-Seeligson Drlg.	Arbuckle	3,736-3,742	Jan.	232
NW NE 32-10-20W	Co. No. 1 H. L. Wait				
Dopita Southeast	Murfin Drlg. Co.	Lans.-K.C.	3,335-3,340	Sept.	203
NW SE 5-9-17W	No. 1 Fike				
Nutsch	Francis Oil & Gas, Inc.	Arbuckle	3,840-3,848	Sept.	433
S $\frac{1}{2}$ NE 3-10-20W	No. 1 Nutsch "B"				
Rush County					
Rush Center North-	Imperial Drlg. Co.,	Arbuckle	3,783-3,788	July	523
east SW SE 10-18-18W	Inc. No. 1 Krug				
Ryan East	Tatlock Oil Co.	Arbuckle	3,648-3,651	Jan.	532,000
SW SE 36-19-16W	No. 1 Peterson				cu. ft. gas
					(shut-in)
Webs	Republic Natural Gas	Penn. basal	4,202-4,212	Dec.	3,000
NE NE 16-19-20W	Co. No. 1 Webs "C"	sand			
Russell County					
Eulert West	The Carter Oil Co.	Lans.-K.C.	2,948-2,954	Feb.	64
SW NE 34-11-15W	No. 2 O. C. Eulert				
Steinert (revived)	Lohmann-Johnson Drlg.	Lans.-K.C.	3,141-3,144	May	10
SE SW 21-15-15W	Co., Inc. No. 1 Steinert				
	(21-15-15W)*				
Scott County					
Grigston	H & H Drlg. Co.	Arbuckle	5,050-5,054	Nov.	153
NW NE 10-19-31W	No. 1 Rush				

TABLE 6.—New oil and gas pools discovered in Kansas during 1954, concluded

County, field, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production per day, bbls.
Sedgwick County					
Gladys SE SW 30-28-1E	Beardmore Drlg. Co. No. 1 Tyson	Mississippian	3,176-3,185	Oct.	123
Seward County					
Blue Bell Northwest NW NW 20-34-31W	Lansekan Co., Inc. No. 1 Good "B"	Mississippian	5,947-5,965	March	1,700,000 cu. ft. gas
Holt NW NE 28-32-34W	Cities Service Oil Co. No. 1 Holt "B"	Topeka	3,820 (top)	March	27,800,000 cu. ft. gas
Wide Awake N½ NE 4-35-34W	Panhandle Eastern Pipe Line Co. No.1-4 Boles**	Toronto	4,410-4,426	June	9,998,000 cu. ft. gas
Stafford County					
Brenn NE SW 19-23-13W	Heathman-Seeligson Drlg. Co. No. 1 Brenn	Lans.-K.C.	3,651-3,657	May	153
Centerview NW SW 28-24-13W	Natural Gas and Oil Corp. No. 1 Van Lieu	Arbuckle	4,188-4,193	Feb.	116
Cephas North SW SW 35-24-14W	Deep Rock Oil Corp. No. 1 Bowker	Lans.-K.C.	3,794-3,803	Oct.	138
Glen SW SE 14-23-14W	Natural Gas and Oil Corp. No. 1 Glen Crissman	Lans.-K.C.	3,651-3,657	Jan.	143
Kennil NW SE 4-23-13W	Welch & Olsson Oil Co. No. 1 Green	Arbuckle	3,860 (top)	Sept.	D & A
Kipp North SW NW 23-25-14W	Deep Rock Oil Corp. No. 1 Tanner	Lans.-K.C.	3,748-3,758	Sept.	208
Macksville East NE NE 14-24-15W	Greenland Drlg. Co. No. 1 Isern	Viola	4,126-4,146	June	324
Mopac NE NW 30-24-11W	Cooperative Ref. Assn. No. 1 McMillan "A"	Viola	3,908-3,913	Sept.	32
Radke East SW SE 24-23-14W	Harms-Burt Drlg. Co. No. 1 Radke	Lans.-K.C.	3,676-3,680	Oct.	161
Rattlesnake South- east NE SE 13-24-14W	Natural Gas and Oil Corp. No. 1 Harrison	Lans.-K.C.	3,758-3,764	March	412
Saterlee NE NW 31-24-14W	Gulf Oil Corp. No. 1 Saterlee	Penn. basal congl.	4,166-4,179	Aug.	45
Seevers SE SE 6-25-13W	Westpan Hydro-Carbon Co. No. 1 Seevers	Lans.-K.C.	3,893-3,942	June	14
Shepherd North SW NE 9-22-11W	Republic Natural Gas Co. No. 1 Fair	Penn. basal congl.	3,446-3,454	April	75
Sutton NE SW 21-22-14W	Natural Gas and Oil Corp. & Amerada Petro. Corp. No. 1 Sutton "A"	Lans.-K.C.	3,638-3,641	Sept.	66
Widener SE NE 26-21-12W	M. L. Friedman & V.E. Autry No. 1 Widener	Arbuckle	3,574-3,581	April	88
Stanton County					
Sparks C NE 34-30-42W	J. M. Huber Corp. No. 1 Sparks	Morrowan (Keyes)	5,254-5,258	July	16,000,000 cu. ft. gas
Sumner County					
Ashton NW NW 19-34-2E	Orville H. Parker No. 2 Miller	"Cleveland"	3,210-3,232	July	50
Ashton East SE NE 20-34-2E	Capitt Drlg., Inc. No. 1 Schiferdecker	Mississippian	3,517-3,532	Sept.	7
Ashton Southwest NW SE 24-34-1E	Ashton Oil Co. No. 1 Wolf (Now part of the Ashton field)	"Cleveland"	3,191-3-208	July	20
Chicaskia NW SE 5-33-8W	Beardmore Drlg. Co., Inc. No. 1 Muhlenbruch	Lans.-K.C.	3,415-3,423	June	63

Gerberding NE NE 6-34-4W	Time Petroleum Co. No. 1 Gerberding	Simpson	4,710-4,715	July	25
Murphy Southwest SW NE 13-35-2E	Martin & Cash Drig. Co. No. 1 Smith	"Cleveland"	3,150 (top)	Feb.	20
Padgett West NW SE 21-34-2E	Greenland Drig. Co. No. 1 Hills	"Layton"	2,829-2,837	June	26
South Haven SW NW 2-35-1W	Herndon Drig. Co. No. 1 Yearout	Simpson	4,189-4,194	May	925
Trego County					
Hixson East SW SW 16-11-22W	Stanolind Oil and Gas Co. No. 1 Scott	Arbuckle	3,939 (top)	Sept.	39
Spaulding South NE SE 1-11-21W	Magnolia Petroleum Co. No. 1 Spaulding	Lans.-K.C.	3,538-3,542	May	5

* Location of original discovery well.

** Old well worked over.

Abandoned and combined pools.—Only one oil pool, the Hart pool in Stafford County, was officially abandoned during 1954 by the Kansas Nomenclature Committee. Twenty-six oil or gas pools were combined with other pools or fields. As has been the custom of the Survey, the outline of an abandoned pool is omitted from the maps in this bulletin.

Wells drilled during 1954.—There were 4,768 wells recorded as being drilled in the State during 1954. 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 3,746 such unreported wells were drilled in 1954. Of the reported tests 2,326 were oil wells, 362 were gas wells, 1,876 were dry and abandoned holes, and 204 were salt-water disposal or input wells drilled in connection with secondary recovery operations. New pool discoveries and pool revivals accounted for 148 of the oil and gas wells; 509 of the dry holes were dry wildcat tests.

Eight Kansas counties had more than 200 wells recorded drilled in 1954. For the first time in many years, Cowley County, which had 337, led all others. Following in order were Ellis (303), Barton (297), Graham (251), Rooks (244), Stafford (243), Russell (220), and Butler (213). These eight counties accounted for 44 percent of the total number of recorded wells drilled in the State during 1954.

Test wells drilled within 1½ miles of the outside boundaries of producing pools are called extension wells and are not shown on county maps in this bulletin. Test wells resulting in dry holes drilled outside this 1½ mile limit are classed as "wildcat wells" and are shown by symbols on the maps. Dry wildcat tables for

counties having four or more such tests during 1954 are included in the county write-ups.

The various tops of the 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 sources of information have been used to determine the tops of the formations. These include the Kansas Sample Log Service,

TABLE 7.—New oil or gas zones in old producing fields, 1954

County, field, and location of discovery well	Discovery well	Producing zone	Production depth, feet	Month of discovery	Initial production per day, bbls.
Barton County					
Clarence NW SW 36-19-15W	Schermerhorn Oil Corp. No. 1 Merten "A"	Reagan	3,534-3,550	May	198
Great Bend Townsite SE SE 21-19-13W	Honaker Drilg. Co. No. 2 Esfeld "A"	Lans.-K.C.	3,196-3,226	Feb.	353
Koopman NE NE 23-19-13W	Hanlon-Boyle, Inc. No. 1 Koopman**	Lans.-K.C.	3,220-3,223	May	597
Cowley County					
Estes SE NW 12-32-6E	Paul McNab No. 1 Estes	"Layton"	2,190-2,203	July	25
Gibson SE NE 32-34-3E	Aladdin Petroleum Corp. No. 10 Bird-Drennen	Arbuckle	3,780-3,791	Feb.	258
Gibson SE SW 32-34-3E	The Texas Co. No. 1 Williams**	Simpson	3,774-3,780	June	18
Gibson NW NW 33-34-3E	Gross Drilg. Co. No. 1 Lawson**	"Cleveland"	2,984-2,986	April	11
Ellis County					
Burnett SE NE 23-11-18W	The Derby Oil Co. No. 1 Lynn "E" **	Simpson	3,603-3,613	June	361
Catharine South SW NE 22-13-17W	L. J. Williamson No. 1 Von Lintel	Lans.-K.C.	3,292-3,304	Aug.	209
Degenhart NE SE 16-15-17W	The Bay Petroleum Corp. No. 1 Roth	Arbuckle	3,521-3,531	Feb.	116
Lelker East NE NE 14-15-18W	Wood River Oil & Refg. Co., Inc. No. 4 Dechant	Lans.-K.C.	3,321-3,329	Aug.	3,000
Schmeidler SE SW 29-12-17W	Glenn R. Nye Drilg. Co. No. 1 Schmidt**	Lans.-K.C.	3,389-3,395	July	10
Sessin NE SW 10-11-19W	Okmar Oil Co. No. 3 Albert	Lans.-K.C.	3,291-3,298	March	80
Gove County					
Gove NW NW 25-13-30W	Petroleum Management, Inc. No. 1 Moore	Lans.-K.C.	4,122-4,132	Dec.	153
McPherson County					
Lively SW NW 22-19-2W	National Associated Petro. Co. No. 1 Anderson "A"	Lans.-K.C.	2,324-2,336	June	70
Marion County					
Antelope North SE SW 28-18-4E	B D & W Co. No. 1 Holub	Mississippian	2,401-2,407	Dec.	50
Lehigh North SE NE 22-19-1E	Anderson-Prichard Oil Corp. No. 1 Schroeder	Viola	3,225-3,229	Oct.	90

Pawnee County

Garfield NE SW 17-23-17W	Hilton Drig. Co. No. 1 Hutchinson "C"	Mississippian	4,279-4,284	Jan.	105
Garfield Southwest NW NE 31-23-17W	Coppinger Drig., Inc. No. 1 Wurm	Mississippian	4,317 (top)	Dec.	D & A
Hearn NW SE 35-23-15W	Natural Gas and Oil Corp. & Sinclair Oil & Gas Co. No. 2 Hearn	Simpson	4,106-4,112	April	3,500,000 cu. ft. gas

Pratt County

Chance East NW SW 35-26-13W	R. W. Rine Drig. Co. No. 1 Briggeman "B" **	Lans.-K.C.	3,984-3,992	April	265
Coats North NE SW 12-29-14W	Lario Oil & Gas Co. No. 1 Moffat "A"	Marmaton	4,342-4,352	June	82
Frisbie Northeast SE SE 4-26-13W	Skelly Oil Co. No. 4 S. F. Chance	Viola	4,170-4,187	June	138
Juka-Carmi SW NW 31-26-12W	Skelly Oil Co. No. 1 Honeman**	Mississippian	4,112-4,136	March	25
Juka-Carmi Northwest NW NW 26-26-13W	Amerada Petroleum Corp. No. 1 Hoener	Simpson	4,276-4,292	June	37

Rice County

Frederick SE NE 10-18-9W	The Lotus Oil Co. No. 1 Schroeder	Simpson	3,280-3,290	Nov.	25
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Rooks County

Dorr South SW SW 21-9-16W	Harold Krueger & Transit Corp. No. 1 Anderson	Lans.-K.C.	3,233-3,243	April	40
Laura SE SW 24-10-21W	Anderson-Prichard Oil Corp. No. 1 Atcheson	Lans.-K.C.	3,619-3,625	April	90
Northampton SE SW 27-9-20W	Nadel & Gussman No. 19 Hinkhouse	Lans.-K.C.	3,596-3,600	April	454
Northampton South- east SE NE 35-9-20W	Francis Oil & Gas, Inc. No. 4 Wilson "C"	Lans.-K.C.	3,678-3,690	April	130

Russell County

Heim SW NE 22-14-12W	Lewis Mai No. 1 Miller	Arbuckle	3,238-3,243	Dec.	25
Heim NW SW 22-14-12W	Shelley-Miller Drig., Inc. No. 1 Herbel	Lans.-K.C.	2,897-2,925	Dec.	78

Stafford County

Hazel West NW SW 16-21-13W	Western Rig Co., Inc. No. 1 Grow**	Lans.-K.C.	3,488-3,494	Sept.	104
Kowalsky Southwest NE NE 7-21-11W	Duke & Wood Drig. Co. No. 1 Schlochtermeler	Simpson	3,398-3,421	Oct.	40
Newell NW NW 7-25-11W	Natl. Coop. Ref. Assn. No. 2 Newell	Lans.-K.C.	3,537-3,540	June	25
Oscar South NW SE 26-22-14W	Petroleum, Inc. No. 2 Smith "J"	Lans.-K.C.	3,580-3,585	Feb.	372
Rose Valley SW SW 36-25-13W	M. B. Armer No. 2 Walters	Viola	4,137-4,150	April	75
Shepherd North SE SW 4-22-11W	Republic Natural Gas Co. No. 1 Fair "B"	Lans.-K.C.	3,297-3,302	June	338

Sumner County

Dyal SE SE 5-35-2E	Capitt Drig., Inc. No. 1 Phillip	"Cleveland"	3,095-3,110	Feb.	40
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Thomas County

Mingo SW SW 19-9-32W	Phillips Petroleum Co. No. 1 Keller "A"	Marmaton	4,414 (top)	Sept.	256
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Trego County

Groff SE SE 27-14-21W	Amerada Petroleum Corp. No. 1 Wanamaker**	Lans.-K.C.	3,493-3,503	July	48
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** Old well worked over.

Independent Oil and Gas Service, drillers logs, and other sources within the Survey.

As pool 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 1954 completions are those which have been finished within the year and which have been drilled to completion in one operation. Old wells worked over, although they came in as producers, are not counted as 1954 completions. The 1954 wells abandoned as dry and then converted to salt-water disposal use have sometimes 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 the 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 1954 and locations of secondary recovery projects.

Developments in eastern Kansas in 1954 were intensified by the searching for shallow reservoir rocks in which commercial wells can be completed by hydraulic fracturing methods. Some fields that were opened, joining of fields, and field extensions in several counties are particularly significant.

A very significant amount of oil is produced in eastern Kansas by secondary recovery methods, especially water flooding. In 1954 the total oil production by secondary recovery methods, including an estimate of those projects not reporting specifically, was more than 11.2 million barrels. Data on secondary recovery operations are listed in Table 1.

Acknowledgments.—T. A. Morgan, J. P. Roberts, D. C. Lilley, and H. A. Beverlin of the Conservation Division of the State Corporation Commission have for a long time cooperated

to the fullest extent with the Geological Survey. Without their cooperation this report would not be possible.

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: A. J. Becker; Marvin E. Boyer; Cities Service Oil Company; Continental Oil Company; Cooperative Refinery Association; The El Dorado Refining Company; Virgil Gamble; Joplin Refining Company; Anderson-Prichard Oil Corporation; Kansas City Testing Laboratory; Joe Maclaskey; W. L. Maclaskey; M.F.A. Oil Company; Sinclair Oil and Refining Company; Sinclair Oil & Gas Company; Skelly Oil Company; Skiles Oil Corporation; Standard Oil Purchasing Company; Stekoll Petroleum Company; and White Eagle Purchasing Company, Inc.

Thanks are given to the various members of the Kansas Nomenclature Committee, Kansas-Oklahoma Division of the Mid-Continent Oil and Gas Association, for giving us 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 people and companies have contributed also to gas production figures for the year.

Many people engaged in various phases of the petroleum industry in Kansas have been generous in giving us data that have been used in this report. Here should be listed Virgil Cole, Mack C. Colt, John A. Edwards, Lee Garrett, Thomas W. Lee, William McHugh, J. H. Page, Carl L. Pate, W. L. Stryker, Charles W. Studt, Joe Svoboda, Albert Sweeney of the Interstate Oil Compact Commission, Bufford Welch, Harvel White, and Earl A. Whitworth.

Special thanks are due to Laughlin-Simmons and Company of Tulsa, Oklahoma, for permission to publish certain well elevations and to J. D. Davies of the Kansas Sample Log Service for permission to use data on some rank wildcat tests drilled during the year. We wish to acknowledge also the Independent Oil and Gas Service's scouting service, which has been most helpful.

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

W. R. Atkinson did much of the checking necessary in this statistical report.

SECONDARY RECOVERY

Repressuring of oil-bearing rocks by injection of water, air, or 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 of northern Greenwood County in May 1935. Pointing up the significance of 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 11.2 million barrels in 1954, accounting for about 9.5 percent of the State's total production this year. The reported production for 1954 totaled 10,148,676 barrels, and the 11.2 million barrel figure 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 173 projects listed reported a total of 5,852 wells producing oil by secondary recovery methods and 4,339 wells which were utilized as input wells for injection of a repressuring medium. Of the total projects reporting, 154 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 1954, 43 projects in Greenwood County accounted for more than 4 million barrels of oil. Twenty-four projects in Butler County, the second largest producer of oil by secondary recovery methods, accounted for more than 2.6 million barrels. These two counties accounted for more than half the oil produced through repressuring projects in Kansas.

TABLE 8.—Data on seven counties producing oil by secondary recovery in 1954

County	Number of projects, 1954	Total oil production, 1954, bbls.	Est. secondary recovery oil production, 1954, bbls.	Percent of total production
Allen	11	828,390	521,799	63.0
Anderson	5	746,648	625,918	83.8
Butler	24	8,757,870	2,624,811	29.9
Franklin-Miami	14	1,139,648	785,945	69.0
Greenwood	43	6,141,476	4,035,302	65.7
Neosho	9	617,628	390,014	63.1

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 three main ones are sandstones of the Douglas group, Arbuckle dolomite, and produced water from the "Bartlesville sand." Principal sources of fresh water are shallow ground-water reservoirs, lakes, streams, and municipal water supplies. When 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 adding lime, chlorine, 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 comes 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 is based on the consideration of the greatest good to the

greatest mass of people and on economic investment values. Considering these bases, Kansas, ranking sixth 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 State's natural resource within the State's borders, arguing that exportation of our natural gas is depleting our reserves. As indicated in Figure 3, a significant portion of our annual gas production is being exported; however, it is to be noted that the State's consumption as a percentage of the total product, which includes domestic production and imports (Table 9), is now 66.4 percent, the highest it has been in recent years. Both domestic and industrial use of Kansas natural gas within the State has risen over the past few years.

Production and use.—The amounts of natural gas produced from the principal Kansas fields during 1954 are shown by county in Table 57. Production in the "eastern Kansas" fields, which had their peak production about 50 years ago, was less than 1 percent, while production from the Hugoton Gas Area in southwestern Kansas was more than 85 percent of the State's total for 1954.

Table 9 and Figure 3, showing some statistics on Kansas natural gas from 1951 through 1954, reveal some important

TABLE 9.—Statistical summary of Kansas natural gas production and use, 1951-1954*

	Millions of M cu. ft. at 14.65 psia				Percentage change 1953-1954
	1951	1952	1953	1954	
Natural gas produced in Kansas	407.1	408.7	420.6	405.8	— 3.5
Imported from outside the State	47.8	67.2	48.2	65.5	+35.9
Total to account for	454.9	475.9	468.8	471.3	+ 0.5
Gas consumed in Kansas during year					
Domestic	95.2	101.9	102.0	104.2	+ 2.2
Industrial, misc., and losses	131.0	138.9	141.0	156.2	+10.8
Carbon black	17.4	15.6	10.9	8.9	—18.3
Total Kansas consumption	243.4	256.4	253.9	269.3	+ 6.1
(Consumption as pct. of prod.)	(59.8)	(62.7)	(60.4)	(66.4)	+ 9.9
Exported from State	211.5	219.5	214.9	202.0	— 6.0
Total	459.9	475.9	468.8	471.3	— 0.5

* Figures provided by Conservation Division, Kansas Corporation Commission.

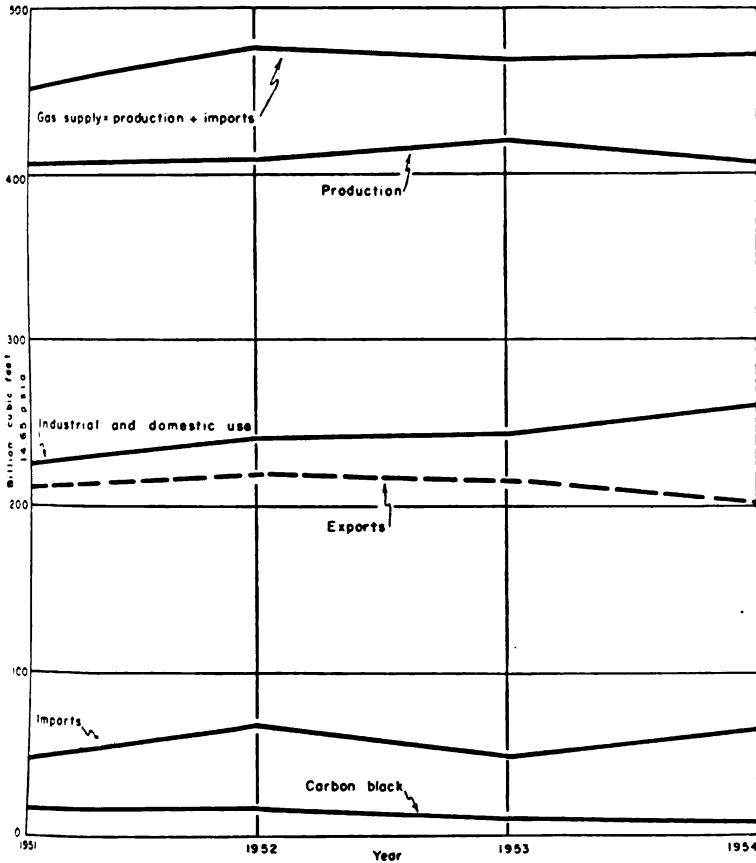


FIG. 3.—Use and disposition of Kansas natural gas.

trends. The production of natural gas from 1951 through 1953 showed annual increases. During 1954, importation from outside the State increased about 36 percent and exportation of natural gas decreased a little more than 6 percent. Total Kansas domestic and industrial consumption, omitting carbon black, is at an all-time high. The use of natural gas in the carbon black industry in Kansas is supplemented by the use of natural gas liquids. Production of carbon black dropped about 18 percent during 1954. About 43 percent of our total gas production (produced and imported) was exported during 1954. This percentage of exportation of natural gas is believed to be a smaller proportion than most Kansans realize.

New developments.—Twenty-three new gas pools (22 gas, 1 oil and gas) were discovered in Kansas during 1954. Seven of these new gas pools were discovered in Barber County with production from either the "Douglas sand" or Mississippian rocks. Topeka limestone and Toronto limestone gas production was found below the gas-bearing Chase group rocks of the Hugoton Gas Area in Seward County. Additional gas reserves in Morrowan rocks in Stanton County were discovered.

Twenty-six gas wells were completed in the Greenwood Area, which is now limited by definition to gas-producing rocks of the Lansing-Kansas City group and younger. During 1954, 20.7 billion cubic feet of gas was produced from 50 wells in the Greenwood Area, now the second largest gas field in the State.

The ordering of a new minimum base price of 11 cents per thousand cubic feet at 14.65 psia for Kansas natural gas from the Hugoton Gas Area effective January 1, 1954, is an important boost to the State's income from this natural resource.

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 10. It is significant to the State's economy that production from the Kansas portion of the field has increased from about 33 million cubic feet annually in 1939 to a high of 387 million cubic feet in 1953. Production during 1954 was more than 346 million cubic feet.

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

TABLE 10.—Production from the Kansas part of the Hugoton Gas Area

Year	M cu. ft. gas (14.65 psia)	Year	M cu. ft. gas (14.65 psia)
1939	32,424,301	1947	157,663,036
1940	37,083,797	1948	185,872,594
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

TABLE 11.—Gas wells drilled in Hugoton Gas Area by counties since 1948

	1947	1948	1949	1950	1951	1952	1953	1954	
	Cumu- lative	Drilled	Drilled	Drilled	Drilled	Drilled	Drilled	Drilled	Cumu- lative
Finney	66	20	76	47	19	49	73	72	422
Grant	269	65	89	36	68	29	6	5	567
Hamilton	2	2	2	1	8	8	10	4	37
Haskell	127	44	42	39	33	30	27	39	381
Kearny	155	49	71	51	56	75	72	44	573
Morton	61	25	6	52	62	27	31	14	278
Seward	26	22	41	91	51	10	19	42	302
Stanton	94	31	9	17	25	7	27	24	234
Stevens	470	75	77	63	16	17	4	20	742
	1,270	333	413	397	338	252	269	268	3,540

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 close of 1954, there were 3,346 producing gas wells and the area of the Kansas part of the Hugoton Gas Area was about 2,524,000 acres. It includes two entire counties (Stevens and Grant) and parts of seven others (Finney, Hamilton, Haskell, Kearny, Morton, Seward, and Stanton). Revised figures on the number of wells drilled each year since 1948, and the cumulatives are given in Table 11.

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 total county cumulatives have been prepared for this bulletin. These data are given in Table 12.

The production area of the Hugoton Gas Area has been limited by the Kansas Nomenclature Committee to gas produced from formations in the Chase group of the Permian System. The lateral stratigraphic or structural features of the gas-producing area are not clearly marked, so that the outline of the producing area changes with each new well drilled on the borders. Plate 2 shows the approximate boundaries of the Hugoton Gas Area as outlined at the end of 1954 by wells having been reported with initial daily capacities of 1 million cubic feet or more. Gas wells drilled previous to 1954 are not shown on Plate

TABLE 12.—County production and cumulatives, Hugoton Gas Area*

County	Cumulative production to end of 1953, M cu. ft.	1954 produc- tion, M cu. ft.	Cumulative production to end of 1954, M cu. ft.
Finney	151,748,079	28,048,734	179,796,813
Grant	537,002,364	75,765,639	612,768,003
Hamilton	8,349,827	4,436,105	12,785,932
Haskell	192,850,837	25,528,913	218,379,750
Kearny	346,563,888	61,466,542	408,030,430
Morton	159,748,135	24,867,522	184,615,657
Seward	109,027,095	19,585,230	128,612,325
Stanton	61,090,254	13,780,190	74,870,444
Stevens	1,174,319,764	93,253,317	1,267,573,081
Total	2,740,700,243	346,732,192	3,087,432,435

* Base 14.65 psia.

2. The porosity of the rocks of the Chase group in the Hugoton Gas Area seems to control productivity.

Wells with initial capacities of less than 1 million cubic feet per day after acidization may not be saved by the larger companies, those 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 one 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. The spacing accounts for the fact that the surface evidences of a huge gas reservoir are few.

Gas from the Hugoton Gas Area is of rather high quality as indicated by Table 13. It yields about 0.5 gallons of natural gasoline condensate per thousand cubic feet, and has a heating value of roughly 1,000 B.t.u. per cubic foot. The majority of the State's

TABLE 13.—Average analysis of natural gas 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 plants are within the borders of the Hugoton Gas Area as are the State's three carbon black plants.

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

Natural gasoline and liquefied petroleum gas production.—There were 15 natural gasoline plants reported operating in Kansas at the close of 1954, two fewer than the previous year. The Cities Service Oil Company plant at Arkansas City in Cowley County reported no production, and the A. R. Jones Oil and

TABLE 14.—*Natural gasoline and LPG processed in 1954**
(From the Conservation Division, Kansas Corporation Commission)

	Natural gas.	Butane	Propane	LPG	Total
Cities Service Oil Company					
Burrton, Reno Co.	70,658	.....	27,514	72,133	170,305
Wichita, Sedgwick Co.	460,346	.....	158,714	119,000	738,060
Colorado Interstate Gas Co.					
Lakin, Kearny Co.	78,144	.....	.....	.....	78,144
Deerfield Petroleum, Inc.					
Deerfield, Kearny Co.	106,866	.....	21,266	28,475	156,607
Drillers Gas Company					
Cheney, Sedgwick Co.	17,568	.....	.....	7,130	24,698
Dunn-Mar Oil & Gas Company					
Otis, Rush Co.	41,633	.....	.....	3,465	45,098
Hugoton Production Company					
Ulysses, Grant Co.	180,799	112,720	142,477	.....	435,996
A. R. Jones Oil & Oper. Co.					
Pawnee Rock, Barton Co.	857	(Drip from wash plant. Shut down 6-30-54)			857
Kansas Power & Light Company					
Medicine Lodge, Barber Co.	49,607	.....	.....	.....	49,607
Magnolia Petroleum Company					
Ulysses, Grant Co.	156,118	94,307	67,575	9,559	327,559
Northern Natural Gas Company					
Holcomb, Finney Co.	79,909	.....	.....	.....	79,909
Sublette, Haskell Co.	313,391	.....	.....	.....	313,391
Panhandle Eastern Pipe Line Co.					
Liberal, Seward Co.	447,215	101,313	100,725	.....	649,253
Skelly Oil Company					
Cunningham, Kingman Co.	47,429	3,946	.....	50,869	102,244
Stanolind Oil & Gas Company					
Ulysses, Grant Co.	433,167	557,167	386,272	.....	1,376,726
The Texas Company					
Atlanta, Cowley Co.	37,891	.....	.....	27,524	65,415
Totals	2,521,598	869,573	904,543	318,155	4,613,869
1954 daily average in barrels	.....	.....	.....	.....	12,640
1953 daily average in barrels	.....	.....	.....	.....	13,897

* Figures in 42-gallon barrels.

TABLE 15.—*Production and estimated value of natural gas liquids in Kansas, 1954**

	Barrels	Gallons	Unit price	Value
Natural gasoline	2,521,598	105,907,116	\$2.95	\$ 7,438,714
Propane	904,543	37,990,806	\$0.05	\$ 1,899,540
Butane	869,573	36,522,066	\$0.05	\$ 1,826,103
LPG	318,155	13,362,510	\$0.045	\$ 601,313
Totals	4,613,869	193,782,498		\$11,765,670

* Production figures supplied by Kansas Corporation Commission; average unit values at point of production have been obtained from sources considered to be reliable.

Operating Company operations in Barton County shut down June 30, 1954.

The daily average production of natural gasoline and LPG in 1954, as reported by the Conservation Division of the Kansas Corporation Commission, was 12,640 barrels. A breakdown of type of production and producing plants is given in Table 14. The State's output during 1954, broken down into four main products, together with estimated values at the plants, is shown in Table 15. Production from Kansas plants for the last 12 years is shown in Table 16.

The use of LPG with natural gas in the processing of carbon black has declined steadily over the past 3 years until it is now negligible. Only 1,237 barrels was reported used for carbon black during 1954.

Low-cost temporary storage is one of the larger problems facing the expanding LPG industry. This problem, created by the seasonal demand for the product, has been partially answered by the experiments that have been in progress over the past few years. These consist of injecting LPG into wholly or partially depleted salt-water, gas, or distillate sands. Recently, and especially in Kansas, storage has been in underground cavities washed out of the salt beds.

Reserves of natural gas and natural gas liquids.—During 1954 proved reserves of natural gas in Kansas (as estimated by the Reserves Committee of Am. Petroleum Institute and Am. Gas Assn.) decreased 0.2 percent, while the natural gas reserves for the nation increased 0.1 percent. There are 15.8 trillion cubic feet of natural gas estimated to be in reserve in the State as of January 1, 1955. Hydrocarbon liquids contained in the proved reserves of gas are more than 175 million barrels, a decrease of 1.4 percent. Estimate figures are given in Table 17.

TABLE 16.—*Kansas production of natural gasoline and allied products, 1943-1954**

Year	Production, M gals.	Year	Production, M gals.
1943	85,206	1949	113,807
1944	69,834	1950	155,233
1945	72,637	1951	182,932
1946	82,591	1952	196,462
1947	99,195	1953	211,657
1948	107,563	1954	193,783

* Figures from 1943 through 1948 from World Oil (1951, p. 154). Figures for 1949 through 1954 supplied by Kansas Corporation Commission.

Two important features of the reserve picture in Kansas at the end of 1954 are: (1) new discoveries and extensions of proved areas are being made about as rapidly as 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 gasolines for motor vehicles and fuels for industrial and domestic use.

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 figures in Table 17 (API and AGA, 1954, p. 6) and other reserve figures used in this bulletin conform to the policy on

TABLE 17.—*Kansas proved reserves of natural gas and natural gas liquids, December 31, 1954 (American Petroleum Institute and American Gas Association, 1954)*

	Reserves* as of 12-31-53	Extensions and revisions 1954	New dis- coveries 1954	Production during 1954	Proved reserves 12-31-54	Nonassociated, associated, and dissolved	Changes in reserves during 1954	Percent- age change 1953-1954
Natural gas liquids	177,728	285	2,448	5,264	175,197	.....	— 2,531	—1.4
Natural gas	15,787,602	179,140	233,601	452,779	15,758,332	15,706,370	—29,270	—0.2

* 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.

reserves of the Reserves Committee of API and AGA 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 above 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 the country have been maintained and increased for many years by current new developments in spite of high annual consumption.

MAPS

Figure 1 is an index map of the State showing in a general way the oil and gas producing areas. The Hugoton Gas Area (southwestern Kansas) is shown on Plate 2 which is in the pocket on the back cover. Most of the other "western" Kansas counties having oil or gas production are shown on Figures 4 through 16 grouped together on the succeeding pages. Plate 1 shows areas of production in eastern Kansas counties. The line between "eastern" and "western" Kansas is the 6th principal meridian which passes through Wichita. Harvey, Sedgwick, and Sumner Counties, which cross this line, are considered as western counties.

For western Kansas the entire area designated as a field is shown on the map. In eastern Kansas only the part of the field producing oil during 1954 is 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. Another important difference is that gas-producing areas in western Kansas are shown, but they are not shown on the eastern Kansas map.

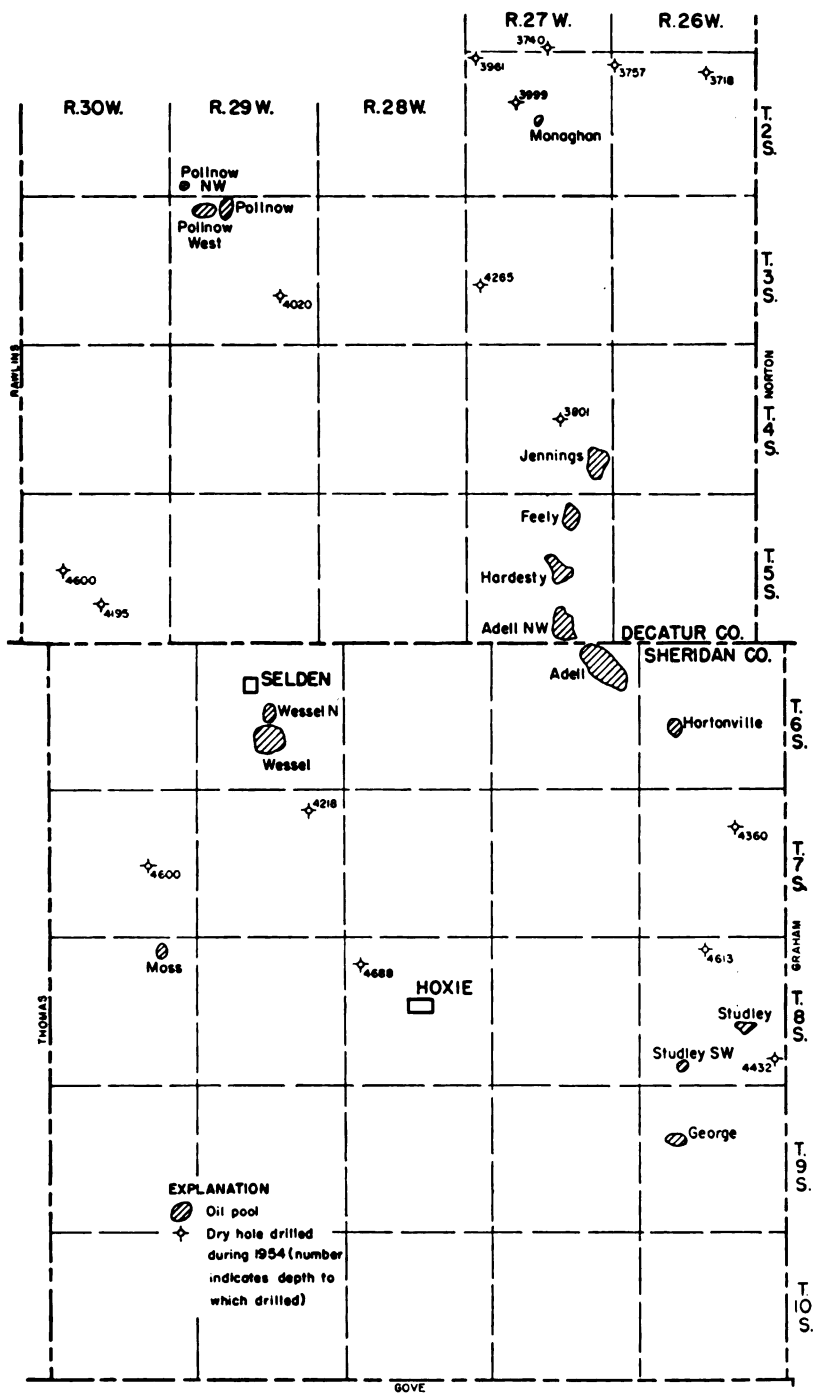


FIG. 4.—Map of Decatur and Sheridan Counties.

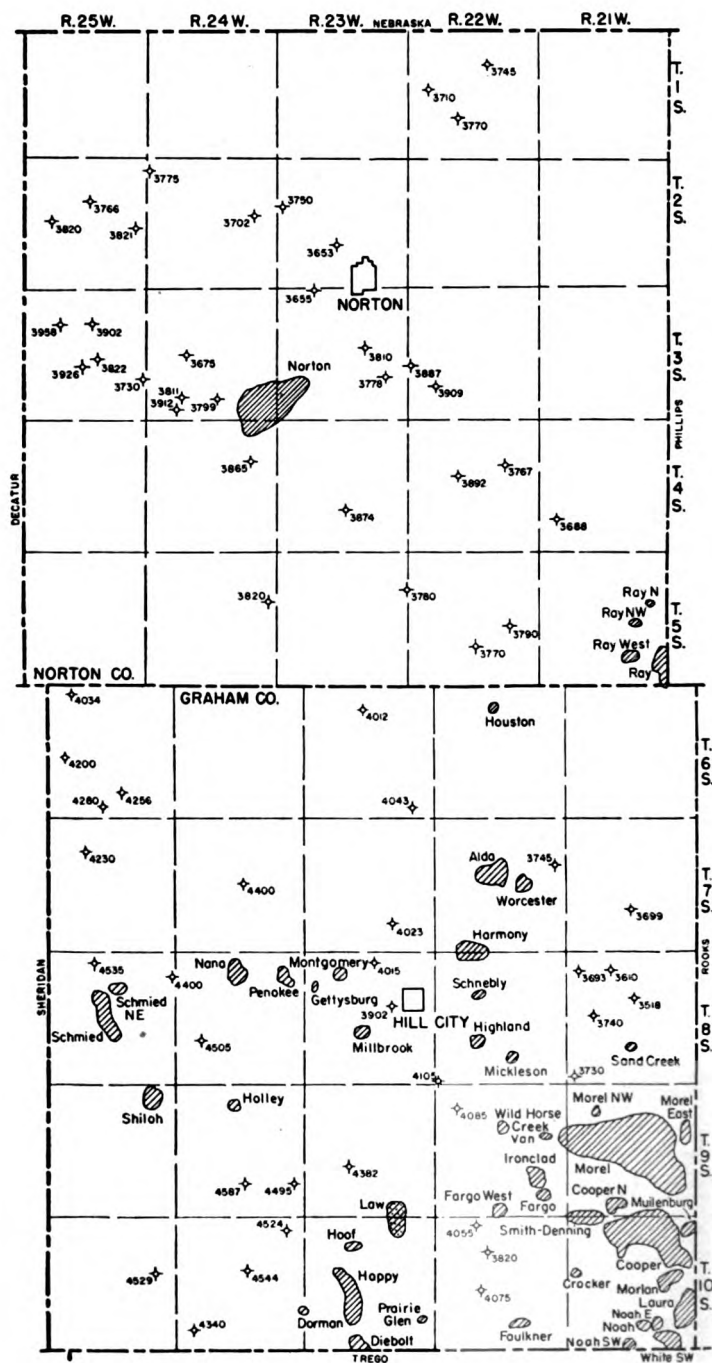
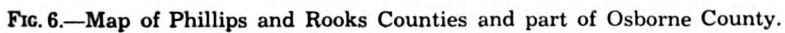
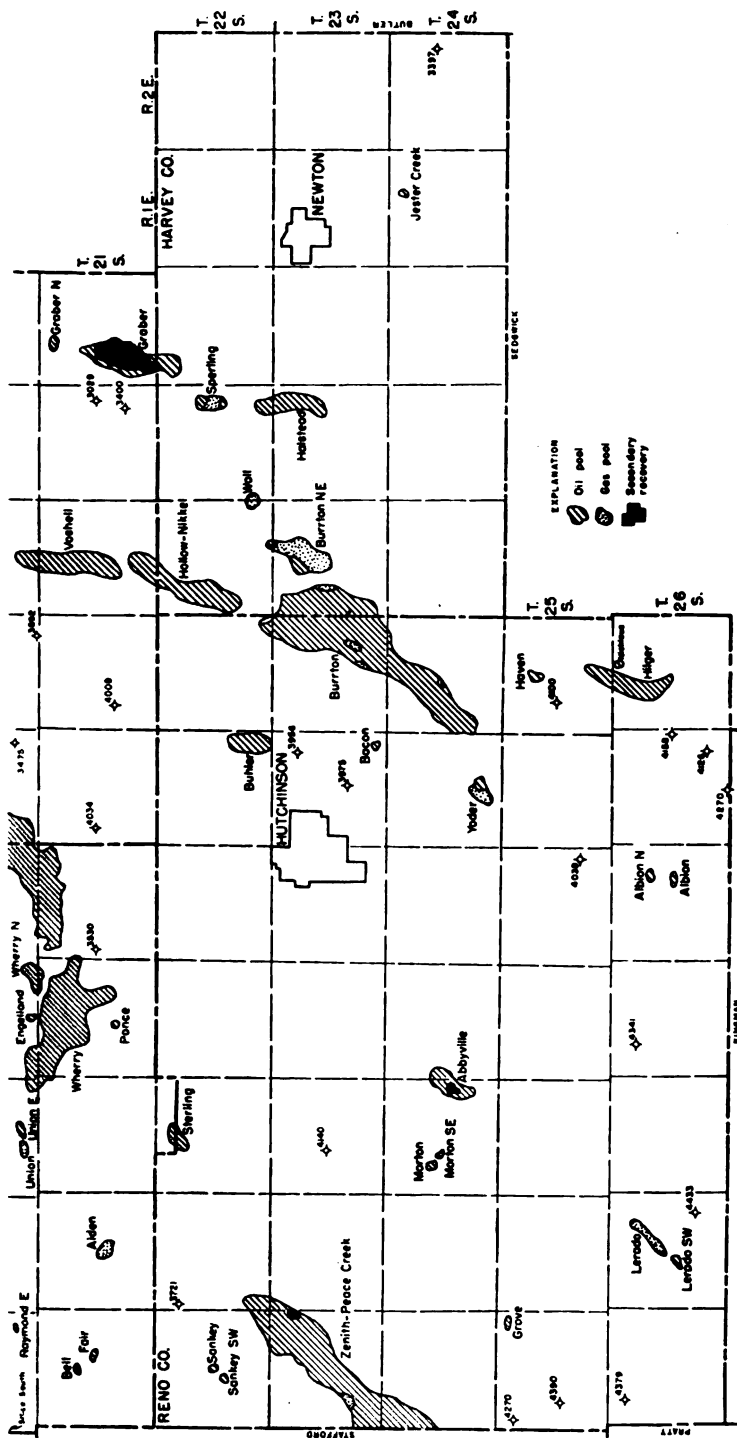


FIG. 5.—Map of Graham and Norton Counties.





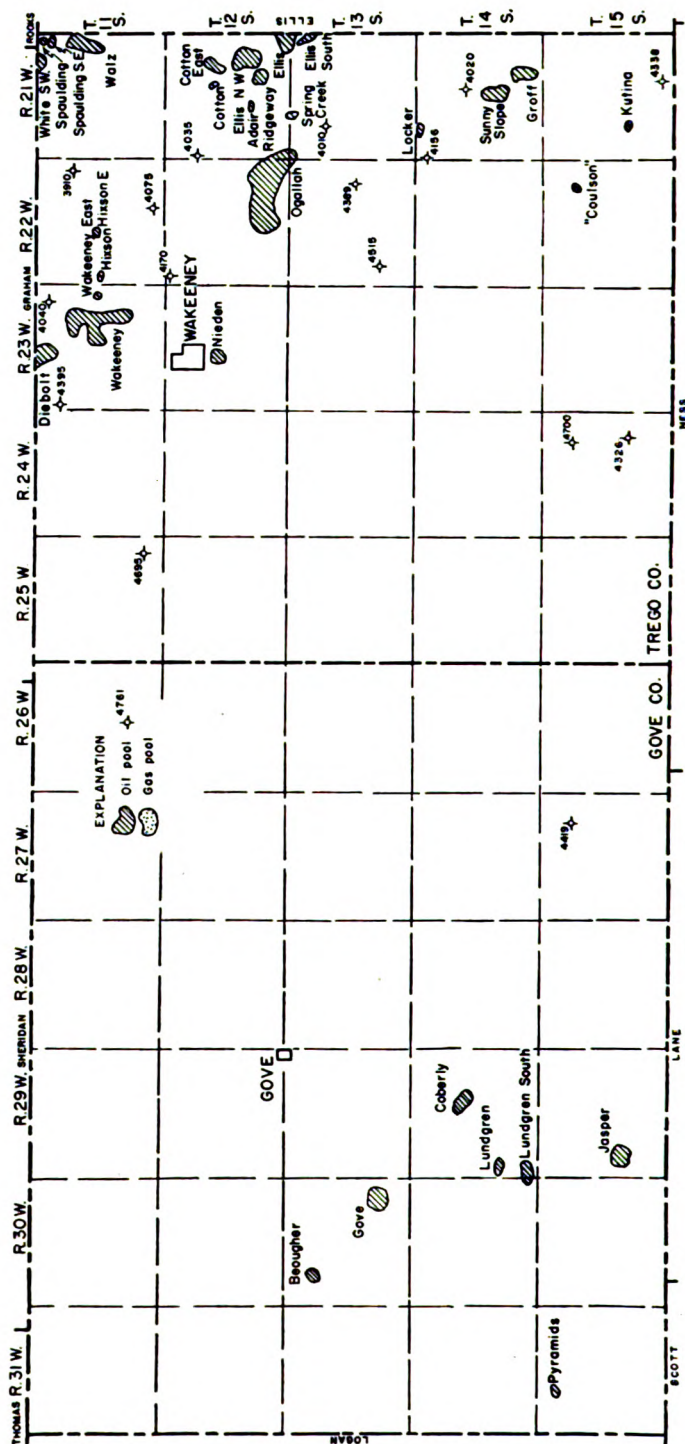


FIG. 10.—Map of Gove and Trego Counties.



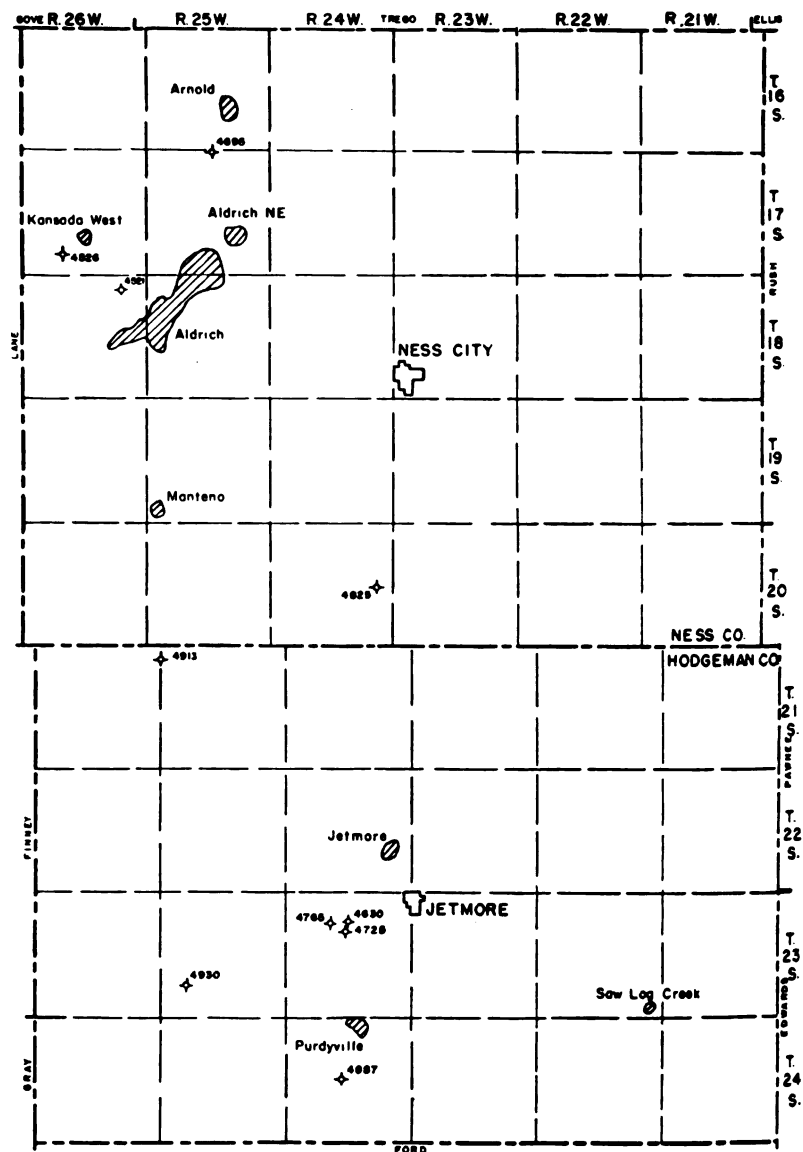


FIG. 12.—Map of Hodgeman and Ness Counties.

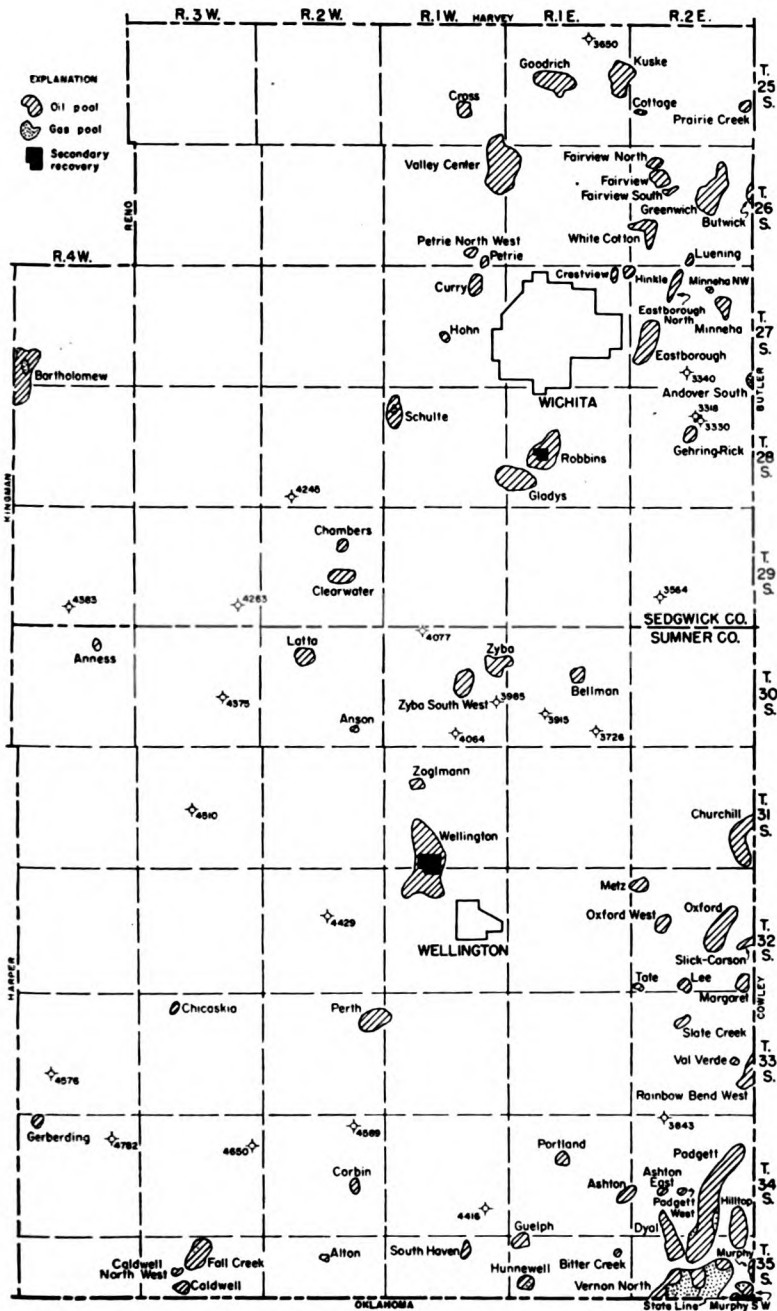


FIG. 13.—Map of Sedgwick and Sumner Counties.

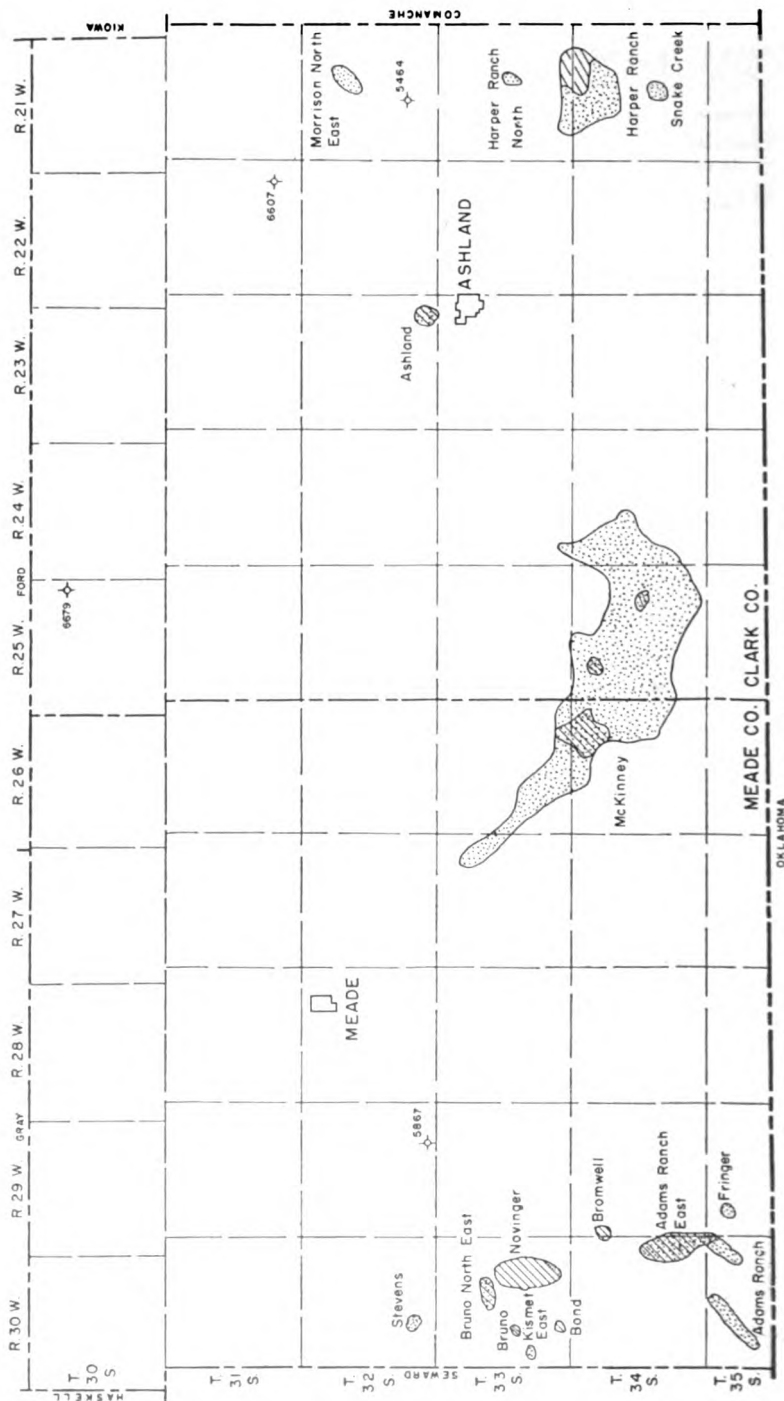


Fig. 14.—Map of Clark and Meade Counties.

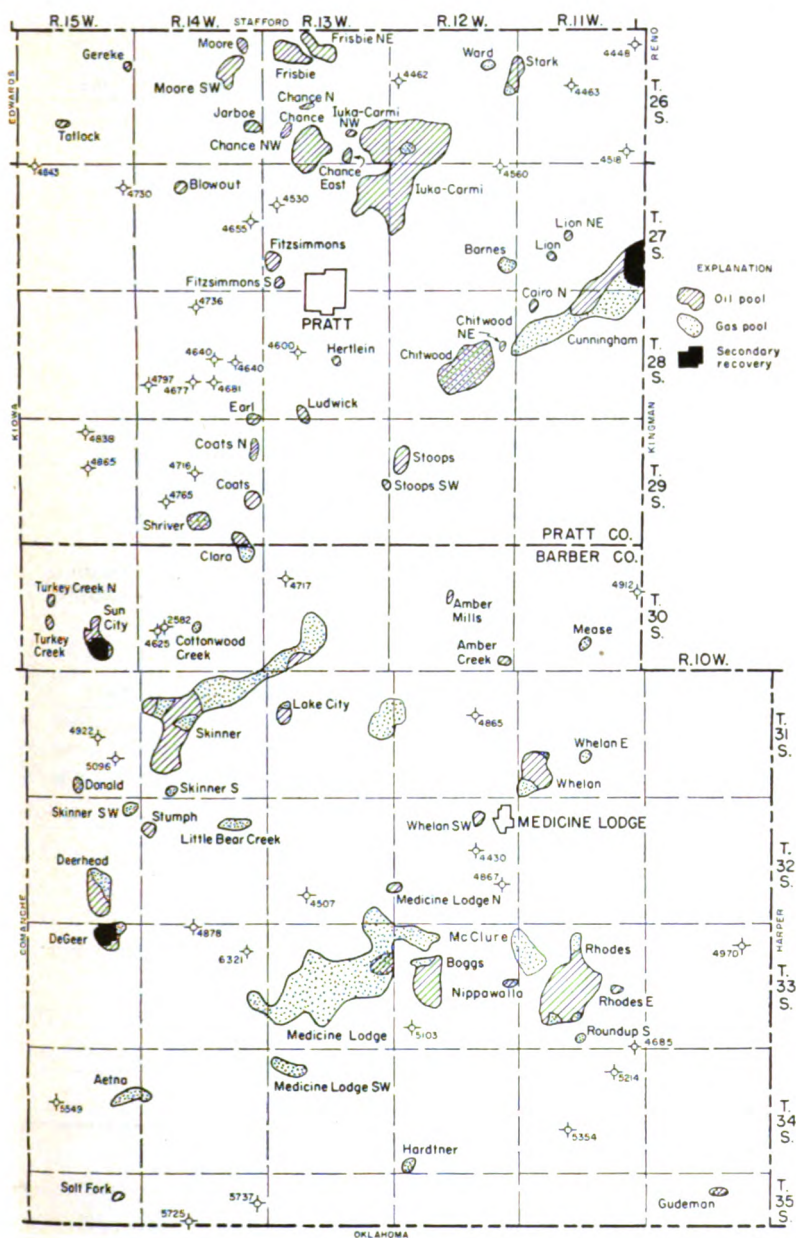


FIG. 15.—Map of Barber and Pratt Counties.

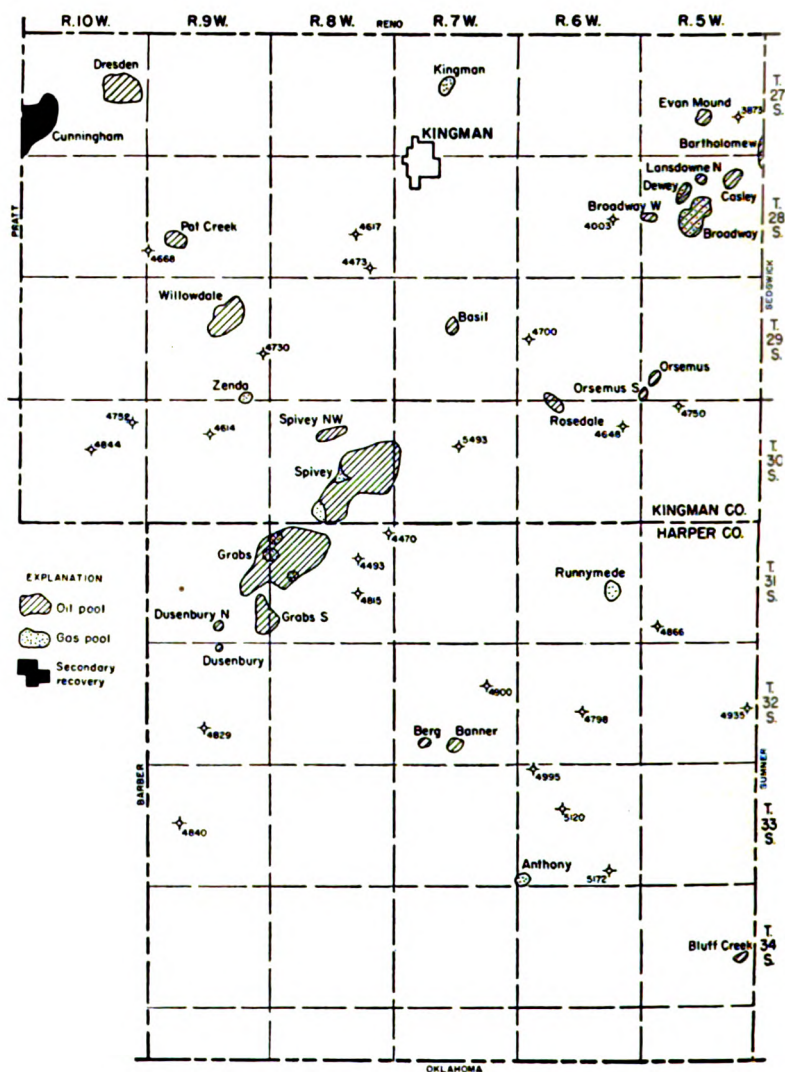


FIG. 16.—Map of Harper and Kingman Counties.

ALLEN COUNTY

(Map Pl. 1)

The 1954 production: oil from 35 areas in 10 fields 828,390 barrels including approximately 521,799 barrels from secondary recovery operations, gas 317,715 thousand cubic feet. Wells drilled in 1954 (estimated): oil 228, dry 48, input and/or salt-water disposal 65, total 341.

Developments during 1954.—Allen County's oil production increased more than 35 percent over 1953. The greatest reported drilling activity was in the large Humboldt-Chanute field and mostly in connection with water-flooding operations.

Oil production in Allen County fields in 1954 is listed in Table 56. Gas production is listed in Table 57. Locations of areas from which oil was produced in 1954 and locations of secondary recovery projects are shown on Plate 1. Secondary recovery data are listed in Table 1.

ANDERSON COUNTY

(Map Pl. 1)

The 1954 production: oil from 16 areas in 9 fields 746,648 barrels including 625,918 barrels from secondary recovery projects, gas none. Wells drilled in 1954 (estimated): oil 168, dry 30, input and/or salt-water disposal 43, total 241.

Developments during 1954.—Anderson County's oil production increased more than 14 percent over that of 1953. Most of the drilling activity was in connection with secondary recovery operations. No wildcat wells were reported.

Oil production in Anderson County in 1954 is listed in Table 56. Locations of areas from which oil was produced in 1954 and of secondary recovery projects are shown on Plate 1. Data on secondary recovery projects are listed in Table 1.

BARBER COUNTY

(Map Fig. 15)

The 1954 production from 34 pools: oil 1,372,244 barrels, gas 8,970,191 thousand cubic feet. Wells drilled in 1954: oil 55, gas 19, dry 41, total 115 including 19 dry wildcats. New pools discovered 12, combined 4. Secondary recovery projects 2.

Developments during 1954.—Oil production in Barber County increased more than 175,000 barrels during 1954. Gas production also showed a gain. The increase in oil production came mostly from the **Rhodes** field. Drilling activity more than doubled the preceding year's figure.

Of the new pools five are oil pools and seven are gas pools. The new oil pools are named **Gudeman**, **Medicine Lodge North**, **Rhodes East**, **Salt Fork**, and **Whelan Southwest**. In all except the **Gudeman** oil production is from the Mississippian chert zone. In the **Gudeman** pool production is from the Viola limestone. The new gas pools are the **Hardtner**, **Little Bear Creek**, **McClure**, **Mease**, **Medicine Lodge Southwest**, **Rhodes North**, and **Whelan East**. Four of these are in a sandstone in the Douglas group while the other three are in the Mississippian chert zone.

Before the close of the year the new **Rhodes North** pool was joined to the **Rhodes** field, as were the **Gerlane** and **Roundup** pools. The **Skinner North** pool was combined with the **Skinner** pool.

The most promising new oil pool is the **Gudeman**, 4 miles east of Kiowa in sec. 10, T. 35 S., R. 10 W. The discovery well, drilled by the Aurora Gasoline Company on the Gudeman farm, tested all zones including the Arbuckle dolomite. A good show of oil was found 6 feet below the top of the Viola limestone at 5,158 feet depth. When the test was plugged back to this formation and perforated between 5,153 and 5,162 it flowed 10 barrels of oil per hour. An official production test resulted in an assignment of 593 barrels of 41 degree gravity oil per day. This well is important because it flows naturally, because it has such a high initial potential, and because it is 9 miles from any other production.

A total of 45 new Mississippian oil wells were added to the **Rhodes**, Barber County's largest oil field, during 1954. Two new gas wells and only 2 dry holes were completed in the field.

The repressuring project operated by the Great Lakes Carbon Corporation in the **Sun City** field reported no new developments. A secondary recovery permit was issued to the Lion Oil Company for use in the **DeGeer** field. Data on these projects are given in Table 1.

Eleven of the 19 dry wildcat tests drilled in the county during the year reported shows of oil and/or gas. Data on the significant

marker zones encountered in drilling these wildcats are given in Table 18. The locations of these dry wildcats and of producing fields are shown on Figure 15. Data on the new pools are given in Table 6. Oil production is given in Table 56 and gas production in Table 57.

TABLE 18.—*Dry wildcat tests drilled in Barber County during 1954*

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Viola, feet	Depth to top of Arbuckle, feet	Total depth, feet
Pickrell Drlg. et al. No. 1 Dolbow	NE NE NE 13-30-11W	3,865	4,663	4,847	4,912
Anschutz Drlg. Co. No. 1 Knackstedt	NE NE SE 7-30-13W	3,905	4,503	4,682	4,717
W. J. Coppinger No. 1 McLain	Cen. N½ NE NE 30-30-14W	3,912	4,454	4,602	4,625
Graham-Messman-Rine- hart No. 1 Updegraff	NE NE NE 15-31-12W	3,832	4,638	4,827	4,865
Rupp-Ferguson Oil Co. No. 1 Dickerson	NE NE NE 22-31-15W	3,972	4,621	4,874	4,922
Herndon Drlg. & Flynn Oil No. 1 Dickerson	NE NE NE 26-31-15W	4,037	4,841	5,070	5,096
Musgrove Petroleum Corp. No. 1 "A" Gillespie	NE NW SE 15-32-12W	3,794	4,349**	.....	4,430
R. C. Patton Co. et al. No. 1 G. L. Bloom	NW NW NW 25-32-12W	3,780	4,630	4,832	4,867
Helmerich & Payne, Inc. No. 1 Hopkins	NE SW SE 29-32-13W	3,917	4,407**	.....	4,507
Mayfair Minerals, Inc. No. 1 Garner	NE NE NW 11-33-10W	3,951	4,716	4,938	4,970
Rupp-Ferguson Oil Co. No. 1 Powell	SW SW SW 36-33-11W	4,157	4,581**	.....	4,685
Rupp-Ferguson Oil Co. No. 1 Hall	NE NW NE 31-33-12W	3,874	4,796	5,068	5,103
E. H. Adair et al. No. 1 Allen	Cen. NW NW 4-33-14 W	4,172	4,735**	.....	4,878
Sohio Petroleum Co. No. 1 Angell	SE SE SE 11-33-14W	4,178	5,006	5,267	5,321
Rupp-Ferguson Oil Co. No. 1 Koontz	NW NW NE 11-34-11W	4,150	4,880	5,176	5,214
Natl. Coop. Ref. Assn. No. 1 Wiley	NW NW NW 28-34-11W	4,248	5,036	5,320	5,354
*Barbara Oil Co. No. 1 Brach	NE NE SW 17-34-15W	4,127	5,103	5,412	5,549
W. J. Coppinger No. 1 Sternberger	NW NW SE 12-35-14W	4,231	5,366	5,677	5,737
*City Products Corp. No. 1 Wolgamott	S½ SW NW 16-35-14W	4,168	5,364	5,672	5,725

* 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.

BARTON COUNTY

(Map Fig. 9)

The 1954 production from 138 pools: oil 16,353,520 barrels, gas 2,170,509 thousand cubic feet. Wells drilled in 1954: oil 180, gas 1, dry 116, total 297 including 12 dry wildcats. New pools discovered 13, combined 2.

Developments during 1954.—Drilling activity declined 31 per cent from the previous year. Oil and gas production declined only slightly. Barton County remained the State's leading oil-producing county.

Exploration in Barton County resulted in the discovery of 13 new pools; 12 yield oil and 1 is a gas pool. Of the new oil pools 6 are in the Lansing-Kansas City group. These are the **Bissell Point, Claflin, James, Sandrocks Southeast, South Bend, and Sunny Valley Southwest**. The Arbuckle dolomite is the produc-

TABLE 19.—Dry wildcat tests drilled in Barton County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Shelley-Miller Drlg., Inc. No. 1 Nuss	SW SW NW 9-16-14W	3,159	3,415	3,440
*J. J. Lynn No. 1 Kingston	NW NW SE 34-16-14W	3,212	3,477	3,505
Schermerhorn Oil Corp. No. 1 Hester	SW SW NW 35-16-15W	3,276	3,548	3,580
*Lohmann-Johnson Drlg. Co., Inc. No. 1 Beran	NW SW NE 24-17-12W	3,071	3,365	3,390
J. J. Lynn No. 1 Schneider	NE NE SE 19-18-14W	3,257	3,534	3,583
Shelley-Miller Drlg., Inc. No. 1 Held	NE NE SE 5-19-12W	3,107	3,379	3,420
Leon F. Huff No. 1 Chadwick	SE SE NE 3-19-14W	3,241	3,530	3,560
Helmerich & Payne, Inc. No. 1 Button	SW SW NW 23-19-15W	3,258	3,572	3,614
*Shelley-Miller Drlg., Inc. No. 1 Russell	NE NW NE 24-19-15W	3,230	3,543	3,579
*The El Dorado Refg. Co. No. 1 Gagelman	NE NE NW 25-19-15W	3,236	3,577	3,590
Harry Gore No. 1 Carroll	SW SW NE 2-20-13W	3,190	3,441	3,505
Schermerhorn Oil Corp. No. 1 Stoskopf	NE SE NW 2-20-14W	3,220	3,572	3,585

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

ing zone in the **Carroll North**, **Hoisington East**, **Hoisington Southwest**, and **Sunny Valley Northeast**, and the Simpson sandstone the producing zone in the **Jettie** pool. In the **Clarence Northwest** pool, oil was found in crevices in Pre-Cambrian quartzite at depths of 3,531 to 3,543 feet. In the new gas pool, the **Clarence South**, gas is produced from a thin sandstone within the Pennsylvanian basal conglomerate at a depth of 3,606 feet. Data on the new pools are given in Table 6.

Three new oil zones were discovered in old producing fields during 1954. The nomenclature committee lists them as the Reagan sandstone in the **Clarence** pool and the Lansing limestone in the **Great Bend Townsite** and **Koopman** pools. Table 7 gives data regarding these new producing zones.

During the year two pools having the same producing zones were declared common reservoirs and were combined with other pools. These are the **Hammer North** combined with the **Cheyenne View** and **Bieberle** pool with the **St. Peter**.

Of the 12 dry wildcat tests drilled during the year, only 3 reported shows of oil. Data on the important marker zones in these dry wildcat tests are given in Table 19. Their locations are shown on Figure 9.

A total of 33 old wells were either drilled deeper or worked over during 1954, resulting in 24 oil, 1 gas, 4 dry, and 4 salt-water disposal wells.

Barton County oil fields with more than 10 new wells each during 1954 are **Boyd** 13, **Chase-Silica** 18, **Great Bend Townsite** 12, **Kraft-Prusa** 11, **Odin** 16, and **St. Peter** 14.

The oil production statistics by fields are given in Table 56 and gas production in Table 57. The oil and gas fields are shown on Figure 9.

BOURBON COUNTY

(Map Pl. 1)

The 1954 production: oil from 8 areas in 3 fields 62,382 barrels including secondary recovery production, gas none. Wells drilled in 1954 (estimated): oil 67, dry 15, total 82.

Developments during 1954.—An increase of 64 percent in oil production over that of 1953 took place. Drilling activity was

mostly in the **Bronson-Xenia** and **Davis-Bronson** areas in the western part of the county.

Oil production in Bourbon County is reported in Table 56. Locations of areas from which oil was produced in 1954 and locations of water-flooding projects in the county are shown on Plate 1. Data on Bourbon County's only secondary recovery project are listed in Table 1.

BROWN COUNTY

(Map Pl. 1)

The 1954 production from 1 field: oil 2,196 barrels, gas none.

Developments during 1954.—Production of 2,916 barrels of oil was reported from the **Livengood** field. No production was reported the previous year. Without any oil that may have been produced in 1953, the field's reported cumulative production at the end of 1954 stood at 86,330 barrels of oil (Table 56).

The location of the **Livengood** oil field is shown on Plate 1.

BUTLER COUNTY

(Map Pl. 1)

The 1954 production from 52 fields: oil 8,757,870 barrels including approximately 2,794,256 barrels from secondary recovery operations, gas none reported. Wells drilled in 1954: oil 138, dry 72, input and/or salt-water disposal 45, total 256 including 16 dry wildcats. New pools discovered 1, combined 3.

Developments during 1954.—The **Pierce Northwest**, a Mississippian limestone pool, was discovered in March by the E. H. Adair Oil Company No. 1 Corfman well, sec. 21, T. 25 S., R. 4 E. Initial daily production was reported as 20 barrels of oil. During the year 9 additional oil wells and 1 dry hole were drilled in the field. The field's yield during the year was 19,056 barrels of oil.

Oil production in Butler County was nearly 2 percent greater in 1954 than in 1953. Of the total production, 3,833,188 barrels of oil came from the **El Dorado** field, whose cumulative production has reached nearly 220 million barrels. Reported drilling in the field during the year included 30 new oil wells, 4 dry holes, 2 repressuring wells, and 2 disposal wells. The county's second field, the **Augusta**, yielded 475,991 barrels of oil; 24 new oil wells and 4 dry holes were reported in the field during the year. Other

fields with a significant number of new oil wells are: **Fox-Bush 9**, **Mt. Tabor 9**, **Muddy Creek 13**, and **Snowden-McSweeney 6**.

During the year the **Hartenbower**, **Hartenbower South**, and **Semisich** pools were combined with the **Snowden-McSweeney**.

Oil production in the various Butler County fields is listed in Table 56. Locations of areas from which oil was produced in 1954 and of secondary recovery projects are shown on Plate 1. Data on water-flooding operations are listed in Table 1. Data on the

TABLE 20.—Dry wildcat tests drilled in Butler County during 1954

Company and farm	Location	Depth to top of K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Beaumont Petro. Co. No. 1 Shields	NW NE SW 34-23-5E	2,022	2,647**	2,685
*Barker et al. No. 1 Wiebe	SW SE N W 31-23-6E	1,940	2,409**	2,425
*Coop. Ref. Assn. No. 1 "A" Lembka	NE NE NE 13-24-6E	2,059	2,756	3,303
*Eckland Drlg. No. 1 Cheney	SE SW NW 7-25-3E	.....	2,774	2,782
*Rex & Morris Drlg. Co. et al. No. 1 Smith	SW SW NW 13-25-7E	2,040	2,765	2,798
*Allan & Brooks No. 1 Reddington	NE SW SW 28-26-4E	2,134	2,613	2,865
*E. H. Adair Oil Co. No. 1 Brooks	NE NE NE 30-26-4E	2,188	2,957†	2,971
Gramehart-Miller Oil Co. No. 1 Clark	NW NW SW 1-26-6E	2,096	2,776	2,810
*J. P. Gaty No. 1 James	NE SE NE 5-27-3E	2,341	2,819	3,240
*J. P. Gaty et al. No. 1 Lauck	W½ SW SW 28-27-3E	2,323	2,781	3,146
*Rex & Morris Drlg. Co. No. 1 Davis	SE SE SE 1-27-4E	2,122	2,640	2,993
*Salina Drlg. Corp., Inc. No. 1 Branson	NE NE SW 6-28-4E	2,166	2,664	2,945
Kewanee Oil Co. No. 1 Baughman	SW SE SW 25-28-6E	2,182	2,861	2,920
Fortier & Wright Drlg. Co. et al. No. 1 Singer	NW NW SW 36-28-6E	2,170	2,849	2,908
*Rains & Williamson Oil Co. No. 1 Ramp	NW NW SW 29-28-7E	2,130	2,828	2,878
*Augusta Oil Co. No. 1 Bolan	SE NW NW 9-29-7E	2,090	2,805	2,840

* 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.

† Depth to the top of the Simpson, feet.

new pool are listed in Table 6, and data on dry wildcat wells drilled in the county in 1954 are given in Table 20.

CHASE COUNTY

(Map Pl. 1)

The 1954 production from 2 fields: oil 32,983 barrels including production from 1 secondary recovery project, gas 52,929 thousand cubic feet. Wells drilled in 1954 (reported): 1 dry wildcat.

Developments during 1954.—Oil production increased substantially over that of 1953, when 30,584 barrels was reported. No 1954 production was reported from the **Bazaar** field. The gas produced in the county was consumed in Cottonwood Falls, Elm-dale, and Strong City.

The Evans and Yearout No. 4 Crosby, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 22 S., R. 9 E., an extension wildcat well northwest of the **Teeter** field, was abandoned as a dry hole late in the year, at a total depth of 2,421 feet. The top of the "first Bartlesville" was logged at 2,343 feet, and the top of the "second Bartlesville" at 2,370 feet. No pool wells were reported in the county.

Oil production statistics for 1954 in Chase County are listed in Table 56. Gas production is listed in Table 57. Locations of areas from which oil was produced in 1954 and of the dry wildcat well are shown on Plate 1. Data on the secondary recovery project are given in Table 1.

CHAUTAUQUA COUNTY

(Map Pl. 1)

The 1954 production: oil from 44 areas in 18 fields 952,603 barrels including approximately 24,380 barrels from secondary recovery operations, gas 198,623 thousand cubic feet. Wells drilled in 1954 (estimated): oil 755, dry 147, input and/or salt-water disposal 247, total 1,149 including 4 dry wildcats.

Developments during 1954.—Oil production in Chautauqua County was nearly 15 percent higher than in 1953, and drilling activity was increased greatly. Drilling took place mostly in the established fields. Four wildcat wells were reported. The M. K. Carnahan No. 1 Harry Austin, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ (?) sec. 30, T. 32 S., R. 12 E., was abandoned at a total depth of 895 feet. The Bruenger et al. No. 1 Anderson was drilled to a total depth of 1,784 feet in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33 T. 32 S., R. 13 E. The

La Salle Petroleum No. 3 Eggen, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 33 S., R. 10 E., had a total depth of 2,041 feet. The R. E. Mendenhall et al. No. 1 Gardner, NE $\frac{1}{4}$ sec. 8, T. 33 S., R. 13 E., was abandoned at a depth of 2,128 feet.

Data on oil production in Chautauqua County in 1954 are listed in Table 56. Gas production is listed in Table 57. Data on secondary recovery projects are included in Table 1. Locations of areas from which oil was produced in 1954 and of secondary recovery projects are shown on Plate 1.

CHEYENNE COUNTY

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

Exploration during 1954.—Only one dry wildcat was drilled in Cheyenne County during 1954. A. J. Hammer drilled this unsuccessful Mississippian test in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T. 2 S., R. 39 W. in August. From an elevation of 3,285 feet above sea level, the following tops were reported: Stone Corral dolomite, 2,720 feet; Lansing-Kansas City group, 3,770 feet; and Mississippian rocks, 4,510 feet depth. The hole was drilled 210 feet into the Mississippian rocks before abandonment.

CLARK COUNTY

(Map Fig. 14)

The 1954 production from 6 fields: oil 135,970 barrels, gas 757,358 thousand cubic feet. Wells drilled in 1954: oil 17, gas 5, dry 6, total 28 including 3 dry wildcats. New pools discovered 2.

Developments during 1954.—Production of oil from Clark County during 1954 was almost 5 times the previous year's figure, owing mainly to more than 119,000 barrels of oil produced from the **Harper Ranch** field, where 17 new Morrowan oil wells were completed this year. Gas production from the county increased slightly over last year.

Two new discoveries were made in Clark County during 1954. The Sinclair Oil and Gas Company No. 1 Combrink well in the Cen. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 33 S., R. 21 W. found a new gas pool in Morrowan rocks from 5,318 to 5,336 and 5,350 to 5,360 feet depth. The new pool was named **Harper Ranch North**; an initial potential of 8 million cubic feet of gas per day was assigned the

discovery well. The other new pool was discovered by the Shamrock Oil and Gas Corporation No. 1 Stephens well, Cen. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 32 S., R. 21 W. Production of 14 million cubic feet of gas and 42 barrels of distillate per day is from Morrowan rocks from 5,193 to 5,207 feet depth.

Three wildcat wells were drilled in the county during 1954. Two of these were rank wildcats; the third, the Shamrock Oil and Gas Corporation No. 1 Randel "D" in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 32 S., R. 21 W., was drilled about 2 miles southeast of the abandoned **Morrison** field. In this test to the Mississippian, several unsuccessful drill-stem tests were taken. Important marker zones are the Lansing-Kansas City group topped at 4,540 and Mississippian rocks at 5,360 feet depth. Total depth was 5,464 feet.

The Shell Oil Company rank wildcat was on the Stratton lease in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 30 S., R. 25 W., in the northwesternmost township in the county. Important marker zones are Stone Corral dolomite, 1,475; Topeka limestone, 3,877; Lansing-Kansas City group, 4,500; Mississippian rocks, 5,285; Viola limestone, 6,397; Simpson group, 6,532; and Arbuckle dolomite, 6,573 feet depth. Total depth was 6,679 feet.

The Texas Company drilled an Arbuckle test on the Moore farm in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 31 S., R. 22 W., to a total depth of 6,607 feet. Although considerable testing was done, the well was not commercial. Tops reported are: Stone Corral dolomite, 1,019; Lansing-Kansas City group, 4,352; Mississippian rocks, 5,090; Viola limestone, 6,164; Simpson group, 6,310; and Arbuckle dolomite, 6,450 feet depth.

Oil production for the county is given in Table 56 and gas production in Table 57. The locations of the dry wildcat tests and the areas of production are shown on Figure 14.

COFFEY COUNTY

(Map Pl. 1)

The 1954 production: oil from 15 areas in 10 fields 214,172 barrels, gas 9,551 thousand cubic feet. Wells drilled in 1954 (estimated): oil 170, dry 34, total 204 including 4 (reported) dry wildcats.

Developments during 1954.—Coffey County's oil production was more than 100 percent greater than in 1953. The **Leroy** field,

TABLE 21.—Dry wildcat tests drilled in Coffey County during 1954

Company and farm	Location	Depth to base of K.C., feet	Depth to top of "Squirrel sand," feet	Depth to top of Mississippian, feet	Total depth, feet
*Woltz No. 1 Strawn	SW SW SW 36-20-14E	890	1,190	1,573	1,610
*Anderson-Prichard Oil Corp. No. 1 A. G. Hildebrand	SE SE SE 24-22-16E	621	992	1,278	1,285
*Ale Oil Co. No. 1 Kimbwerlin	CSL SW 17-22-17E	.....	.....	.....	1,075
*Anderson-Prichard Oil Corp. No. 1 Botham	NW SW NW 19-22-17E	612	983	.....	1,060

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

opened in 1905 but abandoned for many years previous to its revival in 1951, accounted for 90,410 barrels of oil. The 1953 production was 8,484 barrels and, in each of the two previous years the yield was slightly more than 1,000 barrels of oil. This remarkable revival of an oil field is due to the use of hydraulic fracturing in a large number of wells. New producing areas have been added beyond the officially defined limits of the **Leroy** and **Leroy North** fields (Pl. 1).

Locations of areas in Coffey County from which oil was produced in 1954 and of reported dry wildcat wells drilled during the year are shown on Plate 1. Data on the wildcat wells are listed in Table 21. Oil production statistics are listed in Table 56. Gas production is listed in Table 57.

COMANCHE COUNTY

The 1954 production from 1 field: oil 264 barrels, gas none reported. Wells drilled in 1954: dry 7 including 5 dry wildcats.

Developments during 1954.—The first reported oil production from within the county's borders amounted to 264 barrels from the **Robbins Ranch** pool, discovered in 1953.

Efforts to enlarge the **Robbins Ranch** gas pool were unsuccessful. The Barbara Oil Company drilled a Mississippian test on the ranch in sec. 14, and F. K. Johnson drilled one in sec. 15, T. 31 S., R. 16 W.

Four of the five dry wildcat tests were drilled near the southern border of the State. Three of the five tests penetrated Arbuckle dolomite and the others stopped after entering Missis-

TABLE 22.—Dry wildcat tests drilled in Comanche County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Rupp-Ferguson Oil Co. No. 1 Brinkman	NW NW NW 32-31-18W	2,161	4,508	5,161**	5,261
Graham-Messman-Rinehart No. 1 Jackson	NW NW NW 28-34-17W	1,812	4,498	6,294	6,500
Champlin Refg. Co. No. 1 McMoran	NE SW NE 16-35-16W	1,899	4,584	6,124	6,208
Eason Oil No. 1 O'Connell	Cen. NW SW 10-35-17W	1,964	4,760	6,720	6,815
Falcon Seaboard Drlg. Co. No. 1 Alexander	Cen. NE NE 5-35-20W	1,766	4,516	5,530**	5,650

* 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.

Mississippian rocks. Considerable testing was done in all these rank wildcats. Depths to the tops of some important marker zones penetrated in drilling these wildcat tests are given in Table 22.

The **Robbins Ranch** field is listed in Tables 56 and 57.

COWLEY COUNTY

(Map Pl. 1)

The 1954 production: oil from 71 fields 4,363,797 barrels including approximately 596,633 barrels from secondary recovery operations, gas 635,037 thousand cubic feet. Wells drilled in 1954 (reported): oil 200, dry 134, salt-water disposal 3, total 337 including 21 dry wildcats. New pools discovered 6, combined 1.

Developments during 1954.—Six new oil pools were named in Cowley County in 1954 (Table 6). The **Arkansas City Southwest**, a "Hoover sand" pool, was found by the Martin and Cash Drilling Company No. 1 Putnam well, SW¼ SE¼ sec. 35, T. 34 S., R. 3 E. The reservoir was reached at a depth of 1,981 feet. Production amounting to 25 barrels of oil per day was established. The **Church** field was opened by the Saco Oil Company No. 1 Church well, SE¼ SW¼ sec. 13, T. 31 S., R. 6 E., which was completed in July with an established daily production of 13 barrels of oil in Mississippian limestone between depths of 2,935 and 2,947 feet. The L. C. Smitherman No. 1 Henderson well, NW¼ SW¼ SE¼ sec. 34, T. 31 S., R. 6 E., opened the "**Henderson**" field. The field is not listed by the Nomenclature Committee. The discovery well was completed in September with an estab-

TABLE 23.—Dry wildcat tests drilled in Cowley County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Earl F. Wakefield No. 1 Parkerson	NE NW NW 35-30-5E	1,334	2,277	.....	2,929
*J. Boris Kramer No. 1 Gentry	NW NE NW 31-31-4E	1,137	2,396	2,994	3,005
E. H. Adair Oil Co. No. 1 Shiftet	NW NW NE 31-31-5E	1,231	2,370	2,976	2,996
*Rex & Morris Drlg. Co. et al. No. 1 Kielhorn	SW SW SW 21-31-7E	1,250	2,036	2,776	2,822
Rex & Morris Drlg. Co. No. 1 Ferguson	NE NE NE 19-31-8E	1,421	1,914	2,757	2,810
*Rex & Morris Drlg. Co. No. 1 C. E. Kielhorn	NE NE NW 29-31-8E	1,487	2,082	2,820	2,865
Kriswell Drlg. Co. No. 1 Jarvis	SW SW SW 7-32-8E	1,264	2,050	2,689	2,709
*Gough Davis No. 1 Walker	SE SE SW 8-32-8E	1,321	2,085	2,694	2,739
*Gough Davis No. 1 Jarvis	NE NE NE 19-32-8E	1,249	1,780**	.....	1,870
*Kirkpatrick No. 1 Jarvis	NW Lot 2 30-32-8E	1,255	2,106	2,729	2,760
Smitherman-Cohen Drlg. Co. et al. No. 1 Miller	SE SE SE 3-33-4E	1,115	2,495	3,037	3,092
*Smitherman-Cohen Drlg. Co. No. 1 Sherard	SE SE SE 4-33-4E	1,117	2,533	3,083	3,130
*Carl Perry et al. No. 1 Gross	NE NE NW 23-33-5E	1,169	2,427	3,022	3,040
*Rex & Morris Drlg. Co. No. 1 Airport	NW NW SW 31-33-5E	1,114	2,580	3,126	3,162
Stearns Drlg. Co. et al. No. 1 Brown	NW NW NW 36-33-5E	1,167	2,550	3,099	3,125
*Saffa Oil Co. No. 1 Jarvis	NE NE NE 27-33-7E	1,388	2,355	2,965	2,979
*O. A. Sutton No. 1 Webb	SE NE SE 11-34-7E	1,242	2,365	2,783	2,845
*Orville H. Parker No. 1 Wilson	SE SE NW 25-34-7E	1,223	2,233	2,755	2,810
Gaylord Swan No. 1 Briscoe	SE NE SE 17-34-8E	1,280	2,135	2,714	2,767
*Mid-Continent Petro. Corp. No. 1 Chas. Olsen "A"	SE SE NW 13-35-6E	1,251	2,133**	2,984	3,018
*Rex & Morris Drlg. Co. et al. No. 1 Baird	NE NE NW 17-35-5E	1,150	2,330**	3,137	3,171

* 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 "Layton," feet.

lished initial daily production of 17 barrels of oil from the "Layton sand" at a depth of 2,212 feet. No production was reported. The **Hittle North** pool (later joined to the **David**) was opened by the Aladdin Petroleum Company No. 1 Summers well, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 31 S., R. 4 E., in April. "Bartlesville" production was found between depths of 3,014 and 3,020 feet. Initial daily production was reported at 25 barrels of oil. An old well worked over, the Orville H. Parker No. 1 Dunn, NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 34 S., R. 5 E., opened the **Quarry** field in June. Initial daily production of 25 barrels of oil was established in the "Cleveland sand" between depths of 2,684 and 2,702 feet. The field is adjacent to the **Rahn Southwest** (Pl. 1). The **Rainbow Bend Southwest** field was opened when the K. T. Wiedemann No. 1 Hanson well, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 33 S., R. 3 E., was worked over. Production of 11 barrels of oil per day was established in Mississippian limestone between depths of 3,356 and 3,374 feet. The **Nitsche** field was named on the basis of the Royal Oil and Gas Corporation No. 1 Nitsche well, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 32 S., R. 6 E., which was abandoned in January.

New producing oil zones were found in several Cowley County fields (Table 7). "Layton sand" production was established in the **Estes** field, in which former gas production was from a sandstone in the upper part of the Pleasanton group at a depth of about 2,500 feet. The oil-producing zone is between 2,190 and 2,203 feet. The discovery well was drilled in July. Reported production for the remainder of the year is 5,095 barrels of oil. Three new producing zones were found in the **Gibson** field, in which "Bartlesville sand" production was discovered in 1941. The Aladdin Petroleum Corporation No. 1 Baird-Drennen well, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 34 S., R. 3 E., found initial daily production of 258 barrels in the Arbuckle dolomite at 3,780 feet in February. The worked-over The Texas Company No. 1 Williams well, in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, established Simpson production amounting to 18 barrels a day in June. The producing zone is between 3,774 and 3,780 feet. "Cleveland sand" production, in a zone between 2,984 and 2,986 feet, was established in June when the Gross Drilling Company No. 1 Lawson well, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 34 S., R. 3 E., was worked over. The daily production of the well was reported to be 11 barrels of oil.

In addition to field openers 21 dry wildcat wells were reported in Cowley County. Data on these wells are listed in Table 23.

Drilling was active in the previously established fields. Fields having large numbers of new wells include **Burden East**, 9 oil wells and 2 dry holes; **Cabin Valley**, 13 oil wells, 1 dry hole, and 1 salt-water disposal well; **David**, 53 oil wells, 11 dry holes, and 1 salt-water disposal well; **Geuda Springs**, 7 oil wells and 6 dry holes; **Harvey**, 32 oil wells and 12 dry holes; **School Creek North**, 14 oil wells and 3 dry holes; **Trees**, 7 oil wells and 4 dry holes; and **Winfield** 24 oil wells, 7 dry holes, and 1 salt-water disposal well.

Oil production in Cowley County in 1954 increased more than 36 percent over that of 1953. Oil production in the various Cowley County fields is listed in Table 56. Gas production is listed in Table 57. Secondary recovery data are given in Table 1. Locations of areas from which oil was produced in 1954, of secondary recovery operations, and of dry wildcat wells drilled in 1954 are shown on Plate 1.

CRAWFORD COUNTY

(Map Pl. 1)

The 1954 production: oil 58,016 barrels from 7 fields including approximately 4,493 barrels from secondary recovery projects, gas (estimated) 44,541 thousand cubic feet. Wells drilled in 1954 (estimated): oil 45, dry 16, input 20, total 81.

Developments during 1954.—Oil production in Crawford County showed an increase of about 6 percent over 1953 when 55,008 barrels was reported.

Oil production in Crawford County fields is listed in Table 56 and gas in Table 57. Locations of areas from which oil was produced in 1954 and of secondary recovery projects are shown on Plate 1. Secondary recovery data are listed in Table 1.

DECATUR COUNTY

(Map Fig. 4)

The 1954 production from 8 pools: oil 348,048 barrels, gas none. **Wells drilled in 1954:** oil 10, dry 23, total 33 including 10 dry wildcats. **New pools discovered 1.**

Developments during 1954.—Oil production from Decatur County increased almost 100,000 barrels over the previous year. This was due mostly to the doubling of production in the **Jennings** pool and the successful development of additional wells in the **Pollnow West** pool.

One new pool was named in Decatur County during 1954, the **Pollnow Northwest**. The Sauvage & Dunn Drilling Company completed the discovery well in the NW¼ SE¼ sec. 31, T. 2 S., R. 29 W., in September. The Lansing-Kansas City group of rocks was found at 3,772 feet depth. A porous zone within the limestone from 3,800 to 3,804 feet depth yielded 12 barrels of oil per day on a swabbing test. Later testing found water and at present the well is considered as temporarily abandoned.

Three new oil wells were completed in the **Jennings** pool, 2 in the **Feely**, 2 in the **Pollnow West**, 2 in the **Monaghan**, and 1 in the **Hardesty**. Of the dry wildcat tests, only 2 reported shows of oil. The Henderson Oil Company unsuccessfully reworked the

TABLE 24.—*Dry wildcat tests drilled in Decatur County during 1954*

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. No. 1 Metcalf	SW SW SW 34-1-27W	2,509	3,326	3,697**	3,740
*Jones, Shelburne & Farmer, Inc. No. 1 Eckhart	SE SE SE 3-2-26W	2,516	3,356	3,664**	3,718
C-G Drlg. Co. No. 1 Schwab	NW NW SW 6-2-26W	2,568	3,362	3,690**	3,757
*Franco Central Oil Co. No. 1 Uehlin	NE SW NW 6-2-27W	2,562	3,401	3,850	3,961
*Jones, Shelburne & Farmer, Inc. No. 1 Fortin	NE NE NE 17-2-27W	2,598	3,504	3,934	3,999
H. E. Zoller et al. No. 1 Monaghan	NW NW SE 19-3-27W	2,641	3,726	4,221	4,265
*Sauvage & Dunn Drlg. Co., Inc. No. 1 Sauvage	N½ NE NW 26-3-29W	2,754	3,900	.....	4,020
R. W. Shields No. 1 Coleman	SW SE SE 15-4-27W	2,614	3,591	3,783†	3,801
The Derby Oil Co. et al. No. 1 Skiles	SE SE SW 17-5-30W	2,915	3,965	4,578	4,600
B-R-G No. 1 Addleman	NE NE SE 28-5-30W	2,889	3,956	4,166†	4,195

* 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 granite wash, feet.

† Depth to the base of the Kansas City, feet.

well originally drilled in 1952 by E. K. Carey on the Wachen-
dofer lease in sec. 35, T. 5 S., R. 29 W.

The tops of some of the important marker zones of the 10 dry
wildcat tests are given in Table 24. The locations of the dry
wildcat tests and the various producing pools are shown on
Figure 4. The new pool is described in Table 6, and production
from the various Decatur County oil pools is given in Table 56.

DICKINSON COUNTY

(Map. Pl. 1)

The 1954 production from 5 fields: oil 105,606 barrels, gas none.
Wells drilled in 1954 (reported): oil 8, dry 13, total 21 including 4
dry wildcats. New pools discovered 1.

Developments during 1954.—Oil production in Dickinson
County was slightly greater in 1954 than in 1953 when 102,474
barrels was reported.

The **Ash Grove** pool was opened in July by the Donald T.
Ingling No. 1 Wilson "A" well, SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 15
S., R. 1 E. Production amounting to 20 barrels of oil per day was
found in topmost Mississippian limestone in a zone between
2,569 and 2,572 feet depth. Three additional oil wells and 3 dry
holes were drilled in the field later in the year. Two dry holes
were reported drilled in the **Bonaccord** field, 3 oil wells and 1
dry hole in the **Lost Springs** field, 1 dry hole in the **Lost Springs**
North, and 1 oil well in the **Lost Springs Northeast**. A dry hole
was drilled in each of secs. 31 and 32, T. 16 S., R. 1 E., in the area
adjacent to the **Fanska** field, Marion County. Both wells were
drilled through the "chat" into the top of Mississippian limestone.

TABLE 25.—Dry wildcat tests drilled in Dickinson County during 1954

Company and farm	Location	Surface eleva- tion, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mis- sissippian, feet	Total depth, feet
Henry W. Pieper et al. No. 1 Flora	NE SE SW 11-13-1E	1,237	1,749	2,367	3,208
Donald T. Ingling et al. No. 1 Bogart	SE SE SW 33-15-1E	1,341	1,987	2,628	2,657
Fincher & West No. 1 Jones	SW SW SE 10-16-1E	1,311	1,960	2,595	2,628
Lance C. Hill No. 1 Woods	NW NW NE 16-16-1E	1,383	2,042	2,668	2,682

Oil production in the Dickinson County fields is listed in Table 56. Dry wildcat wells drilled in the county in 1954 are listed in Table 25. Locations of areas from which oil was produced and of dry wildcat wells drilled in the county in 1954 are shown on Plate 1.

DONIPHAN COUNTY

(Map Pl. 1)

The Geological Survey has records of 8 wells in Doniphan County drilled in previous years. The latest of these was drilled in 1944.

Exploration during 1954.—During 1954, one well was drilled in Doniphan County. This is the Gordon Curtis et al. No. 1 Frazer well, NW¼ NW¼ NW¼ sec. 14, T. 2 S., R. 19 E. The well was abandoned at a total depth of 2,280 feet in October. Tops were reported as follows: Lansing, 635 feet; Mississippian, 1,846 feet; and "Hunton," 2,253 feet. The location of this well is shown on Plate 1.

DOUGLAS COUNTY

(Map Pl. 1)

The 1954 production from 1 field: oil 13,748 barrels, gas none reported.

Developments during 1954.—Oil production in Douglas County is from the **Baldwin** field in the southeast part of the county. Small unrecorded amounts of gas were produced and consumed locally in the **Eudora** and **Lawrence** areas. No drilling was reported in the county during the year.

Locations of areas in the **Baldwin** field from which oil was produced in 1954 are shown on Plate 1. The county's oil production is listed in Table 56.

EDWARDS COUNTY

(Map Fig. 11)

The 1954 production from 7 pools: oil 79,349 barrels, gas 164,116 thousand cubic feet. Wells drilled in 1954: oil 2, gas 5, dry 12, total 19 including 7 dry wildcats. New pools discovered 2, revived 1.

Developments during 1954.—Oil production from Edwards County during 1954 was 2½ times last year's production, mostly

TABLE 26.—Dry wildcat tests drilled in Edwards County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Viola, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Twin Oil Corp. et al. No. 1 Bogerd	NE NE NE 10-24-18W	3,882	4,516	4,801	4,840
Natural Gas & Oil Corp. No. 1 Fox	SW NW NE 35-24-18W	3,984	4,698	5,008	5,044
*Braden Drlg. Co. No. 1 Mayhew	NW SE SE 33-25-16W	3,907	4,524	4,791	4,801
Twin Oil Corp. No. 1 Britton	SW SW NW 9-25-17W	3,949	4,573	4,835	4,876
Gramehart-Miller Oil Co. No. 1 Butler	NE NE SW 35-25-18W	4,065	4,761	5,011	5,074
Aurora & Anschutz No. 1 Fisher	NE NE NE 35-26-17W	4,040	4,674	4,921	4,962
Gramehart-Miller Oil Co. No. 1 "B" Newsom	S½ NE SE 11-26-18W	4,011	4,617	4,802	4,824

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

because of the successful completion of two additional Lansing-Kansas City wells in the **Enlow** pool. The **Enlow** pool alone accounted for more than 56,000 barrels of oil during the year.

Two new pools were named during the year, and the **McCarty** gas pool was revived. Sherrod and Apperson revived the **McCarty** pool when they found commercial quantities of gas in the Pennsylvanian basal conglomerate from depths of 4,528 to 4,538 feet on the Huff property in sec. 31, T. 25 S., R. 17 W. Sherrod and Apperson completed three other gas wells in the pool during the year, each with initial potentials of about 3,000,000 cubic feet of gas per day.

The 35 barrels of oil per day **Sturgeon** pool was discovered by the Graham-Messman-Rinehart Oil Company in their initial test on the Sturgeon lease in sec. 33, T. 26 S., R. 18W. Production is from the Viola from 4,721 to 4,726 feet depth.

The Cities Service Oil Company discovered the **Wokaty** gas pool in sec. 25, T. 25 S., R. 17 W., in testing to the Arbuckle on the Wokaty farm in April. An initial potential of 2.8 million cubic feet of gas per day was assigned the Pennsylvanian basal conglomerate at depths of 4,390 to 4,405 feet.

Increased production from Edwards County during 1954 resulted in an increase in exploration. During the year seven dry wildcat tests were drilled, and three old dry wildcat tests were

worked over. Three of the seven new tests reported shows of oil or gas. Table 26 lists the tops to marker zones encountered in drilling these tests.

The locations of the dry wildcat tests and the various producing pools of the county are shown on Figure 11. The new and revived pools are listed in Table 6. Oil production statistics are given in Table 56 and gas in Table 57.

ELK COUNTY

(Map Pl. 1)

The 1954 production from 26 fields: oil 285,036 barrels, gas 368,995 thousand cubic feet. Wells drilled in 1954 (estimated): oil 87, dry 38, input and/or disposal 35, total 160 including 2 dry wildcats.

Developments during 1954.—Elk County's reported oil production was nearly 67 percent greater in 1954 than in 1953.

An Arbuckle test well, the Cree and Archer Drilling Company No. 1 Stotts Ranch, was drilled in the old Adams gas field in the NW¼ NE¼ SW¼ sec. 29, T. 29 S., R. 13 E. The top of Mississippian limestone was reached at 1,725 feet and the top of Arbuckle limestone at 2,027 feet. "Live oil" was reported at 2,028½ feet. The well was drilled to 2,030 feet and 3 gallons of oil per hour was bailed.

Two dry wildcat wells were reported drilled in Elk County in 1954. The Franco-Central Oil Company No. 1 Youngmeyer well, NE¼ NE¼ SW¼ sec. 36, T. 28 S., R. 8 E., was abandoned at a total depth of 2,737 feet. Tops were reported as follows: Kansas City, 1,855; "Cherokee," 2,340; and Mississippian limestone, 2,638 feet. The F. W. Strait-Harry Keener No. 1 Criger well, Cen. S½ SW¼ SW¼ sec. 15, T. 29 S., R. 10 E., was drilled to a total depth of 2,151 feet. Locations of the two wells are shown on Plate 1.

Oil production in Elk County fields is listed in Table 56 and gas in Table 57. Locations of areas from which oil was produced in 1954 are shown on Plate 1.

ELLIS COUNTY

(Map Fig. 8)

The 1954 production from 96 pools: oil 11,366,975 barrels, gas none, Wells drilled in 1954: oil 146, dry 151, salt-water disposal 6,

total 303 including 21 dry wildcats. New pools discovered 9, combined 3, revived 1. Secondary recovery projects 2.

Developments during 1954.—Oil production from Ellis County's prolific fields amounted to 200,000 barrels more than for 1953. Because of this the county maintained its position in third place among the top oil-producing counties of Kansas. The drilling pace dropped off considerably from that of 1953; however, nine new oil fields and six new producing zones in old fields were discovered during 1954.

The new pools in alphabetical order are the **Dinges**, **Eagle Creek**, **Erbert Southeast**, **Herman**, **Koblitz Northwest**, **Leiker Southeast**, **Nicholson South**, **Walter Southeast**, and **Younger South**. The revived pool is the **Hadley**. In the **Eagle Creek** production is from Lansing-Kansas City rocks, in the **Erbert Southeast** from the Pennsylvanian basal conglomerate, and in the other new pools from the Arbuckle dolomite. Significant facts about the new pools such as company and farm name, location, depth to producing zone, and the assigned initial potential are listed in Table 6.

The new producing zones in established fields are the **Burnett** (Simpson), **Catharine South** (Lansing-Kansas City), **Degenhart** (Arbuckle), **Leiker East** (Lansing-Kansas City), **Schmeidler** (Lansing-Kansas City), and **Sessin** (Lansing-Kansas City). Information similar to that given for the new pools is given for these new producing zones in Table 7.

Because of the proximity of similarly producing pools the Kansas Nomenclature Committee combined the following pools during 1954: the **Jensen** with the **Koblitz**; the **Nicholson South** with the **Nicholson**; and the **Rome** with the **Sugarloaf Southeast**.

Ellis County oil pools having 10 or more new oil wells completed this year are the **Bemis-Shutts 14**, **Nicholson 10**, **Sugarloaf Southeast 13**, **Ubert Northwest 12**, and **Wheatland Southwest 10**.

Of 14 old wells reported worked over in the county during the year, 11 were made into producing oil wells, 2 were declared dry, and 1 was converted into a salt-water disposal well.

The 21 dry wildcat tests that resulted from the exploration for new reserves in the county during 1954 are listed in Table 27. Only 2 of these tests reported shows of oil, although considerable drill-stem testing was done in the drilling of the holes.

TABLE 27.—*Dry wildcat tests drilled in Ellis County during 1954*

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Murfin Drlg. Co. et al. No. 1 Matheson	NE NE SW 24-11-16W	3,001	3,304**	3,455
*Heathman-Seeligson Drlg. Co. No. 1 "C" Chrisler	N½ NE SW 32-11-16W	3,134	3,459	3,476
*Jones, Shelburne & Farmer, Inc. No. 1 Mohler	NE NE SW 1-11-19W	3,349	3,686	3,710
*Pam-Kar Drlg. Co., Inc. No. 1 Davis-Howard	SW SW SE 23-11-20W	3,407	3,696**	3,780
*The El Dorado Refg. Co. No. 1 Davis-Howard	SE NW SE 24-11-20W	3,265	3,587	3,605
Transit Corp. et al. No. 1 Homburg	SE SE SW 34-11-20W	3,491	3,936	3,965
*Nadel & Gussman No. 1 Chrisler	SE SE NW 5-12-16W	3,082	3,401**	3,450
*Isern Drlg. Co. et al. No. 1 Windholz	SW SW NW 8-12-16W	3,121	3,408**	3,480
*Kantor Oil Co. No. 1 Hagen	NE NE NW 7-12-19W	3,546	3,843**	3,893
*Pam-Kar & Fain Porter No. 1 Shutts	SW SW NE 6-13-19W	3,497	3,809**	3,870
Transit Corp. et al. No. 1 Niernberger	SE SE SW 11-13-20W	3,426	3,788	3,815
The Texas Co. No. 1 J. J. Brungardt	SW NW NE 30-14-16W	3,215	3,456	3,473
Franco Central Oil Co. No. 1 Lang	SW SW NW 12-14-17W	3,238	3,592	3,607
Morrison Drlg. Co., Inc. et al. No. 1 Schumacher	SE SE SE 1-14-18W	3,343	3,668	3,682
Transit Corp. No. 1 Orth	SE SE NW 3-14-19W	3,452	3,834	3,900
Great Lakes Carbon Corp. No. 1 Dinkel	SE SE SW 13-14-20W	3,422	3,779	3,828
The Derby Oil Co. No. 1 Philip	NW NW NE 3-15-17W	3,231	3,541	3,557
*Flynn Oil Co. No. 1 Klaus	NE NE SW 19-15-18W	3,295	3,630	3,635
C-G Drlg. Co. No. 1 Werth	SE SE NE 33-15-18W	3,246	3,537	3,546
Herndon Drlg. Co. No. 1 Younger	NE NE SE 6-15-19W	3,372	3,750	3,756
Deep Rock Oil Corp. No. 1 W. C. Wann et al.	NE NE NW 11-15-20W	3,336	3,682**	3,711

* 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 Pennsylvanian basal conglomerate, feet.

The Texas Company received a secondary recovery permit during the year on a lease in the **Karlin** pool. No secondary recovery production was reported. The Stanolind Oil and Gas Company reported secondary recovery production of more than 24,000 barrels of oil from their project in the **Fairport** field, which extends into Russell County (Table 1).

The locations of the dry wildcat tests and of the 96 Ellis County producing pools are shown on Figure 8. Ellis County production statistics by pools are given in Table 56.

ELLSWORTH COUNTY

(Map Fig. 7)

The 1954 production from 16 pools: oil 3,167,852 barrels, gas none reported. Wells drilled in 1954: oil 17, dry 23, salt-water disposal 2, total 42 including 4 dry wildcats. New pools discovered 1.

Developments during 1954.—Both oil production and explorational activity were less than during the previous year. Oil production declined 10 percent and drilling declined to 42 wells from 52 wells in 1953. No gas production was reported from the county this year.

The El Dorado Refining Company discovered the one new oil pool in Ellsworth County during 1954. It is the **Green Garden** pool located in sec. 1, T. 17 S., R. 9 W., on the Brown lease, about a mile north of the **Lorraine** field. An initial potential of 215 barrels of oil per day from the Lansing-Kansas City group from 3,046 to 3,050 feet depth was assigned the discovery well. The Simpson rocks from 3,244 to 3,249 feet in this discovery well were

TABLE 28.—Dry wildcat tests drilled in Ellsworth County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Penn. basal congl., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Donald T. Ingling et al. No. 1 Hughes	SE SE NW 21-15-6W	2,645	3,202	3,691	3,772
*Shelley-Miller Drig., Inc. No. 1 Jelinek	SE SE NW 29-15-8W	2,534	2,905	2,947	3,025
*U. G. Kropp No. 1 Kropp	NW NW NE 30-15-8W	2,586	2,946	2,983	3,012
*Shelley-Miller Drig., Inc. No. 1 Prochaska	SE SE SE 10-16-8W	2,570	2,968	3,014	3,025

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

perforated following a show of oil during the drilling. Further testing was unsuccessful and the hole was plugged back to the Lansing-Kansas City pay zone.

New oil wells were completed in the following fields: **Bloomer**, 2; **Heiken**, 4; **Geneseo-Edwards**, 6; **Maes**, 3; and **Stoltenberg**, 1.

Only four dry wildcats were drilled in the county during 1954. Of these the Shelley-Miller Drilling, Inc. No. 1 Prochaska, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 16 S., R. 8 W., reported a show of oil and gas in Lansing-Kansas City rocks. Data on the tops of marker zones of the dry wildcat tests are tabulated in Table 28.

The locations of the dry wildcat tests and the various oil pools are given in Figure 7. The new pool is described in Table 6. Data on the oil production are given in Table 56, and the inactive gas area is listed in Table 57.

FINNEY COUNTY

(Map Pl. 2)

The 1954 production: oil from 9 pools 220,210 barrels, gas (all from the Hugoton Gas Area) 28,048,734 thousand cubic feet. Wells drilled in 1954: oil 7, gas 72, dry 6, total 85 including 1 dry wildcat.

Developments during 1954.—Both oil and gas production from the Finney County pools decreased slightly from the high figure set the previous year.

The seven oil wells are extension wells in the Mississippian **Finnup** pool. One dry hole was completed in the field development program in this pool. The gas well drilled within the geographical limits of the **Finnup** pool, the W. L. Hartman No. 1 Adams in sec. 27, T. 22 S., R. 33 W., produces from the Chase group of rocks, which makes it by definition a **Hugoton Gas Area** well.

There were 72 new Chase group gas wells added to Finney County's portion of the large **Hugoton Gas Area** during 1954. Gas production for 1954, from 378 wells, totaled 28,048,734 thousand cubic feet. Cumulative production from this part of the field is more than 179,796 million cubic feet of gas.

Continental Oil Company et al. drilled a dry wildcat test on the V. K. Tate lease in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 25 S., R. 31 W., to a total depth of 5,170 feet before abandonment in April. Drilling from an elevation of 2,864 feet above sea level

the following marker zones were encountered: Neva limestone, 3,130; Topeka limestone, 3,666; Heebner shale, 3,992; Lansing group, 4,050; Ste. Genevieve limestone, 4,845; and St. Louis limestone, 4,924 feet depth.

A **Hugoton** gas well completed by The Texas Company on the Kisner farm in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 22 S., R. 33 W. was drilled to St. Louis (Mississippian) rocks, reached at 4,909 feet depth. Other significant marker zones encountered in drilling the test from an elevation of 2,889 feet above sea level are: Heebner shale, 3,888; Lansing group, 3,938; and Ste. Genevieve limestone, 4,787 feet depth. The total depth reported is 4,952 feet.

Mississippian rocks were logged at 4,666 feet depth in the Morris Mizel No. 1 Manns, a Chase group gas well in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 22 S., R. 33 W. Before plugging back to Chase group gas production, the test encountered the top of the Lansing group at 3,828 feet and the Marmaton group at 4,325 feet depth. The test was drilled from an elevation of 2,873 feet above sea level.

The 1954 **Hugoton** gas wells, the oil pools, and the dry wild-cat test are shown on Plate 2. Oil production is given in Table 56, and gas production in Table 57. Historical data on the **Hugoton Gas Area** are given in the chapter on natural gas.

FORD COUNTY

The 1954 production from 3 pools: oil 639 barrels, gas 97,257 thousand cubic feet. Wells drilled in 1954: gas 2, dry 1, total 3. New pools discovered 1.

Developments during 1954.—The first Ford County pool, the **Pleasant Valley**, was discovered by the Sinclair Oil Company in 1938. The pool was abandoned and then revived in 1950 by R. G. Clay. The new gas pool discovered this year, the **Pleasant Valley South**, was opened by the W. J. Coppinger No. 1 Vice well in sec. 14, T. 28 S., R. 21 W. The Mississippian rocks were encountered at 5,022 feet depth, and 34 feet deeper, a porous zone from 5,056 to 5,074 feet depth was assigned an initial potential of 7.6 million cubic feet of gas per day. Later in the year, W. J. Coppinger drilled a successful offset well in sec. 11 on the Kirkpatrick farm; production is from the same zone. The second

well was given an initial potential of 3.8 million cubic feet of gas per day. Coppinger's test to the west in sec. 15 on the Davis farm was unsuccessful, finding the Mississippian rocks nonproductive; it was abandoned at 5,229 feet depth.

Data on oil production from Ford County are given in Table 56, and gas production in Table 57. A description of the new pool is given in Table 6.

FRANKLIN COUNTY

(Map Pl. 1)

The 1954 production: oil from 13 areas in 2 fields 453,895 barrels including approximately 323,623 barrels from secondary recovery projects, gas none. Wells drilled in 1954 (estimated): oil 62, input 33, dry 14, total 109.

Developments during 1954.—Franklin County's oil production was almost 6 percent less in 1954 than in 1953. Most of the drilling was done in connection with water-flooding activities in the eastern part of the county.

Data on water-flooding projects in Franklin County are listed in Table 1. The approximate production of secondary recovery oil includes Franklin County's production from projects which straddle the Franklin-Miami County line. Oil production in the various areas is listed in Table 56. Locations of areas from which oil was produced in 1954 and of secondary recovery projects are shown on Plate 1.

GOVE COUNTY

(Map Fig. 10)

The 1954 production from 7 pools: oil 27,849 barrels, gas none. Wells drilled in 1954: oil 1, dry 2, total 3 including 2 dry wildcats.

Developments during 1954.—Oil production from Gove County during 1954 was about 21 percent less than that reported during 1953. Drilling activity declined from 7 wells in 1953 to only 3 wells during 1954.

In spite of the decline in drilling activity, a new producing zone, the Lansing-Kansas City, was named in the Gove pool. O. A. Sutton and Petroleum Management, Inc. reported this new find on the Ada L. Moore property in the NW¼ NW¼ NW¼ sec. 25, T. 13 S., R. 30 W. At 4,122 feet depth shows of oil encouraged

testing. After the well had been drilled to the Arbuckle dolomite, it was plugged back and the casing perforated opposite the new zone from 4,122 to 4,132 feet depth. An official rating of 153 barrels of oil per day was given the well.

The Virginia Drilling Company completed an unsuccessful test on the Neher farm in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 11 S., R. 26 W., 1 $\frac{1}{2}$ miles east of Quinter and 14 miles from the nearest production. Important tops are as follows: Heebner shale, 3,891; Lansing group, 3,927; Mississippian rocks, 4,533; Viola limestone, 4,657; and Arbuckle dolomite, 4,735 feet depth. Total depth was reported as 4,761 feet. The other dry wildcat drilled in Gove County during 1954 was drilled by Petroleum, Inc. on the Garvey farm in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 15 S., R. 27 W., 12 miles west of Jerome and 16 miles east of the Lundgren pool. Important tops are as follows: Stone Corral dolomite, 1,275; Heebner shale, 3,617; Lansing group, 3,654; Marmaton group, 3,977; Pennsylvanian basal conglomerate, 4,241; and Mississippian rocks, 4,269; total depth was 4,419 feet.

The locations of these two wildcat tests and the producing areas are shown on Figure 10. Oil production by pools is given in Table 56.

GRAHAM COUNTY

(Map Fig. 5)

The 1954 production from 44 pools: oil 3,875,926 barrels, gas none reported. Wells drilled in 1954: oil 145, dry 105, salt-water disposal 1, total 251 including 33 dry wildcats. New pools discovered 9, combined 3.

Developments during 1954.—Oil production from Graham County increased about 15 percent over the 1953 figure and the number of new wells was double that of the previous year. Nine new oil pools were named during the year.

The new Graham County oil pools are: Happy, Happy Southeast, Holley, Hoof, Noah Southwest, Prairie Glen, Sand Creek, Schmied Northeast, and Van. Seven of the new producing areas were named as Lansing-Kansas City producers, while the Noah Southwest reported new production from the Marmaton group, and the Van from the Arbuckle dolomite. All discovery wells were assigned initial potentials of more than 100 barrels of oil

per day, and three of the seven were more than 1,000 barrels of oil per day. Data on the operators making these discoveries, their locations, depths to the new producing zones, and thicknesses of the producing zones are given in Table 6.

Before the close of the year, the new **Happy Southeast** Lansing-Kansas City pool was combined with the new **Happy** pool. Other pool combinations include the **White** with the **Laura** pool, which extends into Rooks County, and the **Wakeeney Northwest** pool of Trego County has been combined with the **Diebolt** pool.

Of 33 dry wildcat tests drilled during the year, only 6 reported shows of oil. Perhaps the most encouraging show of oil was found in the Cooperative Refinery Association No. 1 Andregg "A" test in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 8 S., R. 21 W., in the Arbuckle dolomite, where 10 gallons of water and 17 gallons of oil per hour were recovered. Further testing resulted in an increase in water so abandonment followed. Pertinent data on the locations and marker zones encountered during drilling of these dry wildcat tests are given in Table 29.

Among the pools adding large numbers of new wells during the year are: **Cooper**, 15 oil and 10 dry; **Happy**, 31 oil and 3 dry; **Laura**, 15 oil and 4 dry; **Nana**, 19 oil and 4 dry; **Schmied**, 20 oil and 9 dry; and **White Southwest**, 13 oil and 4 dry.

TABLE 29.—Dry wildcat tests drilled in Graham County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Trans-Era Petro., Inc. No. 1 Schock	NE NE NW 9-6-23W	2,428	3,610	3,977	4,012
*Jones, Shelburne & Farmer, Inc. No. 1 Casey	NE NE SE 35-6-23W	2,411	3,673	4,008	4,043
*Natl. Coop. Ref. Assn. No. 1 Bangle	NW NW SW 5-6-25W	2,480	3,571	4,014	4,034
Trans-Era Petro., Inc. et al. No. 1 Bradley-Selms	SW NW NE 19-6-25W	2,602	3,697	4,172	4,200
*Jones, Shelburne & Farmer, Inc. No. 1 "B" Hickert	SE SE SW 27-6-25W	2,566	3,704	4,230	4,256
Petroleum, Inc. No. 1 Carver	SE SE NW 33-6-25W	2,568	3,717	4,240	4,280
Trans-Era Petro., Inc. et al. No. 1 "B" Sayer	NE NE NE 28-7-21W	2,087	3,342	3,649	3,699
*Jones, Shelburne & Farmer, Inc. No. 1 Worcester	NW NW NE 13-7-22W	2,153	3,401	3,715	3,745
Trans-Era Petro., Inc. et al. No. 1 "B" Morris	SW SW SW 26-7-23W	2,304	3,576	3,973	4,023

Empire Drlg. Co. No. 1 Zohner	SW SW SW 15-7-24W	2,504	3,802	4,380	4,400
Benson-Montin et al. No. 1 Abernathy	NW NW SE 8-7-25W	2,531	3,686	4,207	4,230
*Anschutz Drlg. Co. No. 1 Kenyon	SE SE SE 5-8-21W	2,064	3,262	3,569	3,610
Anschutz Drlg. Co. No. 1 Gosselin	SW SW SE 6-8-21W	2,118	3,540	3,643	3,693
Trans-Era Petro., Inc. et al. No. 1 "C" Sayer	NW NW NW 15-8-21W	2,006	3,222	3,498	3,518
Bennett & Roberts Drlg. Co. No. 1 Kenyon	SW SW SW 17-8-21W	2,085	3,315	3,638	3,740
*Cooperative Ref. Assn. No. 1 "A" Andregg	NE SE SW 31-8-21W	2,143	3,358	3,694	3,730
Bennett & Roberts Drlg. Co. No. 1 Heffelfinger	SW SW SW 31-8-22W	2,349	3,644	4,054	4,105
*Jones, Shelburne & Farmer, Inc. No. 1 Moore	SW SW NW 3-8-23W	2,310	3,602	3,992	4,015
Don E. Pratt et al. No. 1 Legere	SE SE NE 15-8-23W	2,140	3,423	3,812	3,902
Natl. Coop. Ref. Assn. et al. No. 1 Ralph Keith	NW NW NW 29-8-24W	2,394	3,733	4,487	4,505
Trans-Era Petro., Inc. et al. No. 1 Hulburt	NE NE SE 5-8-25W	2,387	3,704	4,510	4,535
*Heathman-Seeligson Drlg. Co. No. 1 "A" Sanger	NE NE NE 12-8-25W	2,374	3,708	.....	4,400
C-G Drlg. Co. No. 1 Gustafson	NE NE NE 7-9-22W	2,317	3,803	4,064	4,085
*Imperial Drlg. Co., Inc. No. 1 Gick	S½ NE SE 20-9-23W	2,442	3,787	4,352	4,382
*Lohmann-Johnson Drlg. Co., Inc. et al. No. 1 Pettwett Heirs	SE SE NW 25-9-24W	2,501	3,850	4,475	4,495
*Imperial Drlg. Co., Inc. No. 1 Moore	NW NW SW 27-9-24W	2,512	3,851	4,577	4,587
*Birmingham-Bartlett Drlg. Co. No. 1 "A" Drexler	N½ S½ NE 5-10-22W	2,345	3,611	.....	4,055
*Barnett Drlg., Inc. No. 1 Griffith	NW NW SW 9-10-22W	2,285	3,570	.....	3,820
Aurora Gasoline Co. No. 1 C. Dreiling	SE SE NE 20-10-22W	2,325	3,605	4,045	4,075
*Imperial Drlg. Co., Inc. No. 1 Gano	NW NW SW 1-10-24W	2,461	3,801	4,494	4,524
*Mid-Continent Petro. Corp. No. 1 F. A. Herman	NW NW SW 15-10-24W	2,473	3,815	4,486	4,544
*Wick Petroleum Co. No. 1 Lowenstein	NE NW NE 31-10-24W	2,471	3,813	.....	4,340
Anschutz Drlg. Co. No. 1 Knoll	SE SE NE 14-10-25W	2,470	3,765	4,470	4,529

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

The only salt-water disposal well reported drilled was in the **Smith-Denning** pool. The disposal well was put down by D. G. Hansen on fee land in sec. 6, T. 10 S., R. 21 W., to a total depth of 4,350 feet. The Arbuckle dolomite was topped at 3,917 feet, so more than 433 feet of Arbuckle was penetrated in the test.

The locations of the new pools and of the dry wildcat tests are shown on Figure 5. Oil production by pools is given in Table 56.

GRANT COUNTY

(Map Pl. 2)

The 1954 production from the Grant County portion of the **Hugoton Gas Area**: gas 75,765,639 thousand cubic feet. Wells drilled in 1954: total 5 (all gas).

Developments during 1954.—Practically all the drilling locations, based on the present spacing of wells of one to a section of land, have been occupied in Grant County. Because of this, it is not surprising that only 5 new wells were drilled in the county during 1954. During 1954, the 565 producing gas wells accounted for 75,765,639 thousand cubic feet of gas. This brings the total cumulative production for the county, which has produced since 1930, to more than 612,768 million cubic feet of gas.

The Columbian Fuel Corporation No. 2 A. G. English "A" **Hugoton** gas well in sec. 2, T. 29 S., R. 36 W., was drilled into the Mississippian rocks before being plugged back to the gas-bearing Chase group. The Lansing group was logged at 4,117 feet, the Marmaton group at 4,748 feet, and Chesteran (Mississippian) rocks at 5,557 feet depth. Total depth of the hole is 5,685 feet.

The five new Grant County gas wells are shown on Plate 2. Grant County's large share of the production from the **Hugoton Gas Area** is reported in detail in Table 57. Early history of the **Hugoton Gas Area** is discussed in the chapter on natural gas.

GRAY COUNTY

The 1954 production from 1 pool: none reported. Wells drilled in 1954: total 2 dry wildcats.

Developments during 1954.—During 1954, two dry wildcat tests were made in Gray County. No production was reported

from the United Producing Company's **Jumbo** oil pool. The discovery well, the No. 1 Salmon, was reworked in March and declared dry and abandoned.

The Continental Oil Company No. 1 Laird wildcat test in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 26 S., R. 30 W. was drilled to a total depth of 5,120 feet. Tops on this test as reported by the Kansas Sample Log Service are: Hollenberg limestone, 2,620; Fort Riley limestone, 2,810; Neva limestone, 3,190; Topeka limestone, 3,715; Lansing limestone, 4,144; and Ste. Genevieve limestone, 4,976 feet depth.

The United Producing Company completed a dry exploratory hole on the Leese farm in the Cen. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 27 S., R. 28 W., at a total depth of 5,385. Important tops reported in drilling are: Stone Corral dolomite, 1,760; Hollenberg limestone, 2,670; Neva limestone, 3,267; Topeka limestone, 3,832; Lansing limestone, 4,370; and Ste. Genevieve limestone, 5,160 feet depth.

GREELEY COUNTY

Test wells have been drilled in Greeley County from time to time but as yet no producing pool has been found.

Exploration during 1954.—During 1954, four attempts at finding new production were made in Greeley County. The Cities Service Oil Company made the first exploratory test on the Sells farm in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 18 S., R. 40 W., to a total depth of 5,320 feet. From an elevation of 3,612 feet above sea level the following tops were logged: Dakota sandstone, 1,080; Morrison formation 1,480; Stone Corral dolomite, 2,598; Lansing group, 4,311; and Ste. Genevieve limestone, 5,148 feet depth. No shows were reported. The location of this well is shown on Plate 2.

Two tests were drilled in the NW $\frac{1}{4}$ sec. 5, T. 17 S., R. 42 W., on the Hiebert farm by the United Producing Company. The No. 2 test stopped in the Dakota sandstone at 1,272 feet depth. The No. 1 test penetrated the Arbuckle dolomite to a total depth of 5,925 feet. The following tops were reported: Dakota sandstone, 1,260; Lansing group, 4,326; Ste. Genevieve limestone, 5,190; Viola limestone, 5,758; and Arbuckle dolomite, 5,824 feet depth.

The United Carbon Company drilled its dry wildcat test late in December to a total depth of 5,515 feet before abandon-

ment. The test is located in the Cen. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 17 S., R. 41 W. Drilling from an elevation of 3,741 feet above sea level the following marker zones were logged: Dakota sandstone, 1,165; Morrison formation, 1,510; Stone Corral dolomite, 2,690; Lansing group, 4,185; and Ste. Genevieve limestone, 5,290 feet depth.

GREENWOOD COUNTY

(Map Pl. 1)

The 1954 production from 47 fields: oil 6,141,476 barrels including approximately 4,204,746 barrels from secondary recovery operations, gas none. Wells drilled in 1954 (estimated): oil 230, dry 66, input and water-supply 76, total 372 including 13 (reported) dry wildcats. New pools discovered 1.

TABLE 30.—Dry wildcat tests drilled in Greenwood County during 1954

Company and farm	Location	Depth to top of "Bartlesville," feet	Depth to top of Mississippian, feet	Total depth, feet
*A. R. Jones No. 1 Rawlings	SW NE SW 32-22-12E	2,382**	1,907	2,552
*Bedell-Catt Drlg. Co. No. 1 E. R. South	NW NW SE 36-23-10E	1,960	.....	2,073
*Edwards No. 1 Edwards	NW NE NE 2-24-10E	2,330	.....	2,355
*R. Parks No. 1 Marlin	SW SW NE 22-25-10E	1,971	2,122	2,158
*Broiles No. 1 Sanitor	SE NE NW 1-25-11E	.....	1,814	1,849
*Wayne Cox No. 1 Smith Ranch	Cen. NW 18-25-11E	1,665	2,012	2,026
*Wayne Cox No. 2 Smith Ranch	SW SW NE 18-25-11E	1,664	.....	1,736
*E. H. Adair Oil Co. No. 1 Houston	NE NW SW 7-26-9E	2,356	.....	2,410
Bedell-Catt Drlg. Co. No. 1 Hodgson	SE SE SW 23-26-12E	2,036**	1,796	3,110
*Bedell-Catt Drlg. Co. No. 1 Johnson	SE SW NE 26-26-12E	.....	1,688	1,755
*Bedell-Catt Drlg. Co. No. 1 Lilley	SW SW NW 34-27-9E	.....	2,510	2,590
*Natl. Coop. Ref. Assn. et al. No. 1 Mast	SW SW NE 15-27-12E	2,110**	1,740	2,118
*Crow & McLane No. 1 Blanke	SE NE SW 11-28-10E	.....	2,491	2,528

* 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.

Developments during 1954.—Greenwood County's oil production in 1954 was up nearly 9 percent over that of 1953. The county retained top place, as it has for several years, in number of secondary recovery projects and in amount of oil produced by water-flooding methods. The secondary recovery figure above includes production from projects extending across county lines.

Drilling activity was mostly in connection with secondary recovery projects; 13 dry wildcat wells were reported (Table 30). A "Bartlesville sand" pool, the **Ly-Green**, was discovered in September by the White and Ellis Drilling Company No. 1 Curry well, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 22 S., R. 11 E. Production amounting to 25 barrels of oil per day was reached in a zone between depths of 1,858 and 1,871 feet. Two additional oil wells were reported in the field. The greatest drilling activity reported in the county was in the **Thrall-Aagard** field, where 27 oil wells and 7 dry holes were reported. Ten new oil wells were reported in the **Polhamus** field; 8 in the **Beaumont**; and 7 in the **Sallyards**.

Oil production in the various Greenwood County fields is listed in Table 56. Data on secondary recovery projects are listed in Table 1. Data on dry wildcat wells drilled in 1954 are listed in Table 30. Plate 1 shows locations of areas from which oil was produced in 1954 and of secondary recovery projects in the county. The newly discovered pool is listed in Table 6.

HAMILTON COUNTY

(Map Pl. 2)

The 1954 production from the Hamilton County portion of the Hugoton Gas Area: gas 4,436,105 thousand cubic feet. Wells drilled in 1954: gas 4, dry 3, total 7 including 2 dry wildcats.

Developments during 1954.—Four new Hugoton gas wells were completed during 1954 in Hamilton County's portion of the large **Hugoton Gas Area**. The A. Thornbrough Nos. 1 and 2 U.S.A. wells in secs. 13 and 25, T. 25 S., R. 39 W. were rated at a little more than 3 million cubic feet of gas per day. The Stanolind Oil and Gas Company's two new wells, the No. 1 Miller in sec. 22 and the No. 1 Stucky "B" in sec. 15, T. 26 S., R. 39 W., were rated at more than 10 million cubic feet of gas per day. A. Thornbrough's test on the McDonald lease in sec. 12, T. 25 S., R. 39 W.,

found the Chase group, the producing zone of the **Hugoton Gas Area**, nonproductive and was abandoned at 2,450 feet depth.

Two dry wildcats were drilled in the county during the year. The Carter Oil Company drilled a Mississippian test in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 24 S., R. 41 W., about 3 miles south of Syracuse, on the Overton ranch. The test was drilled from an elevation above sea level of 3,267 feet. The Stone Corral dolomite was logged at 1,814 feet, the Topeka limestone at 3,180 feet, the Lansing group at 3,656 feet, and the Ste. Genevieve limestone (Mississippian) at 5,142 feet depth. No shows of oil or gas were indicated on the scout ticket, and the hole was abandoned at a total depth of 5,300 feet.

The United Producing Company completed their test to the Mississippian rocks on the Rector lease in the Cen. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 25 S., R. 40 W. at a total depth of 5,543 feet. From a reported elevation of 3,346 feet above sea level the following tops were logged: Stone Corral dolomite, 1,960; Topeka limestone, 3,408; Lansing group, 3,872; and Mississippian rocks, 5,352 feet depth.

The new Hamilton County gas wells and dry holes are shown on Plate 2. Production, the active area, and producing zones are given in Table 57. Historical data on the **Hugoton Gas Area** are given in the chapter on natural gas.

HARPER COUNTY

(Map Fig. 16)

The 1954 production from 9 pools: oil 152,568 barrels, gas 185,904 thousand cubic feet. Wells drilled in 1954: oil 45, gas 2, dry 23, salt-water disposal 1, total 71 including 12 dry wildcats. New pools discovered 9, combined 4.

Developments during 1954.—The successful exploration in Harper County during 1954 made it one of the more active spots in the State. Production from 8 producing wells during 1953 was a little more than 21,000 barrels. The production of more than 152,000 barrels during 1954 was from 54 active wells. The number of new wells drilled during the year was 71, which is more than 7 times last year's figure.

Exploration near the Mississippian **Grabs** oil pool resulted in the naming of six new Mississippian oil pools, the **Dusenbury**,

Dusenbury North, Grabs East, Grabs Northeast, Grabs South, and Grabs West. The **Anthony** pool, the new **Mississippian** gas pool, is also in the **Grabs** area. The **Viola** limestone was named the producing zone in the new **Berg** oil pool, and **Viola-Simpson** rocks the producing zone in the new **Banner** oil pool. Before the close of the year, the **Grabs East, Grabs Northeast, Grabs Southeast, and Grabs West** pools were combined with the **Grabs** pool. Data on the new pools are given in Table 6.

After consolidation, 33 new **Mississippian** oil wells had been added to the **Grabs** pool during 1954; only 4 dry holes were completed. The **Grabs South** pool had 7 new wells added during the year and only 1 dry hole.

Half of the dry wildcat tests drilled during the year reported shows of oil or gas, and most of the tests penetrated the **Simpson**

TABLE 31.—Dry wildcat tests drilled in Harper County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Trans-Era & Aurora Gasoline No. 1 Wedman	NE NE NE 31-31-5W	1,344	3,597	4,837	4,866
*N. Appleman Co. et al. No. 1 McIntire	NE NE SE 1-31-8W	1,646	3,884	4,397**	4,470
Beardmore Drlg. Co. et al. No. 1 Williams	SE SW SW 11-31-8W	1,637	3,905	4,424**	4,493
Trans-Era Petro., Inc. et al. No. 1 Thompson	NE SW SW 23-31-8W	1,553	3,853	4,757†	4,815
R. W. Rine Drlg. Co. No. 1 Schon	NE SE NW 24-32-5W	1,265	3,556	4,884	4,935
*E. H. Adair Oil Co. et al. No. 1 Robinson	SW SW NW 22-32-6W	1,384	3,746	4,776†	4,798
Musgrove Petro. Corp. No. 1 Bebermeyer	NW NW NE 14-32-7W	1,421	3,783	4,883	4,900
Beardmore Drlg. Co. et al. No. 1 Blick	NE NE NE 28-32-9W	1,476	3,944	4,810†	4,829
Musgrove Petro. Corp. No. 1 Hayter	NE NE NE 6-33-6W	1,343	3,806	4,940	4,995
Musgrove Petro. Corp. No. 1 "B" Wilson	NW NW NW 16-33-6W	1,336	3,830	5,062	5,120
Cities Service Oil Co. No. 1 Hoopes	NW NE NE 35-33-6W	1,259	3,745	5,057	5,172
K & E Drlg., Inc. et al. No. 1 Crisfield Townsite	SW SE SE 17-33-9W	1,371	4,008	4,809†	4,840

* 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.

† Depth to the top of the Simpson, feet.

group of rocks. The elevations above sea level and depths to some important marker zones are given in Table 31.

The locations of the producing areas as of January 1, 1955, and dry wildcat tests drilled in Harper County during 1954 are shown on Figure 16. Oil production by pools is given in Table 56, and gas production in Table 57.

HARVEY COUNTY

(Map Fig. 7)

The 1954 production from 8 pools: oil 163,482 barrels, gas 420,483 thousand cubic feet. Wells drilled in 1954: oil 8, dry 7, total 15 including 1 dry wildcat.

Developments during 1954.—Oil production in Harvey County increased about 5 percent over last year's figure, but gas production declined about 3 percent. Drilling activity decreased 2 wells from the 17 drilled in 1953.

Five Mississippian extension oil wells were completed in the Harvey County portion of the **Burrtown** pool. Three extension wells and four dry holes were drilled in an effort to extend the **Sperling** pool.

Only one rank wildcat was drilled in the county during 1954. The Herndon Drilling Company completed an Arbuckle test on the Worthington lease in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 24 S., R. 2 E. in September at a total depth of 3,387 feet. Tops of important marker zones as reported by the Kansas Sample Log Service are: Heebner shale, 1,893; Lansing group, 2,145; Mississippian rocks, 2,828; "Kinderhook" shale, 3,059; "Hunton" limestone, 3,165; Maquoketa shale, 3,213; Viola limestone, 3,223; Simpson group, 3,250; and Arbuckle dolomite, 3,322. No shows of oil were reported on the scout ticket.

Figure 7 shows the producing pools and the location of the dry wildcat test drilled this year. Oil production statistics are given in Table 56, and gas in Table 57.

HASKELL COUNTY

(Map Pl. 2)

The 1954 production: oil from 1 pool 1,394 barrels, gas (all from the Hugoton Gas Area) 25,528,913 thousand cubic feet. Wells drilled in 1954: oil 1, gas 39, dry 4, total 44 including 2 dry wildcats.

Developments during 1954.—During 1954 the first oil well was completed in Haskell County. It was the discovery well of the **Pleasant Prairie** pool, the Helmerich and Payne No. 16 J. W. Jones in the Cen. W $\frac{1}{2}$ sec. 4, T. 27 S., R. 34 W., in the north-western part of the county. An initial potential of 167 barrels of oil per day was assigned from Mississippian rocks, which were topped at 5,041 feet depth. The discovery well was drilled from an elevation of 1,986 feet above sea level and the following tops were logged: Stone Corral dolomite, 1,850; Ft. Riley limestone, 2,752; Lansing group, 3,970; and Morrowan rocks, 4,962 feet depth.

Routine development of the productive Chase group of rocks in the **Hugoton Gas Area** added 39 new gas wells and 2 dry holes to the field. During 1954, the 361 producing gas wells accounted for a total of 25,528,913 thousand cubic feet of gas, bringing the cumulative production of gas from the county to more than 218,379 million cubic feet.

Because they were drilled into Mississippian rocks two of the dry holes drilled in the county during the year are properly designated as wildcat wells, although they are geographically close to the Chase group gas wells of the **Hugoton Gas Area**. Bennett and Roberts completed a Mississippian test on the Boatwright lease in sec. 13, T. 29 S., R. 32 W. to a total depth of 5,435 feet before abandonment. From an elevation above sea level of 2,891 feet, the Lansing group was encountered at 4,283 feet and Chesteran rocks (Mississippian) at 5,190 feet depth. The Cities Service Oil Company No. 1 Ellsaesser "A" dry hole in sec. 8, T. 30 S., R. 31 W. was drilled to a total depth of 5,510 feet. Drilling from an elevation of 2,848 feet above sea level the samples indicate that the Lansing was encountered at 4,313 feet and the Ste. Genevieve limestone (Mississippian) at 5,462 feet depth.

The discovery well of Haskell County's first oil pool is described in Table 6. The new oil pool, the new gas wells, and the dry holes are shown on Plate 2. Oil production is given in Table 56, and gas production in Table 57. Historical data on the **Hugoton Gas Area** are given in the chapter on natural gas.

HODGEMAN COUNTY

(Map Fig. 12)

The 1954 production from 3 pools: oil 140,039 barrels. Wells drilled in 1954: dry 6 (all wildcats).

TABLE 32.—Dry wildcat tests drilled in Hodgeman County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*Bennett & Roberts Drlg. Co. No. 1 McVickers	SW SW NW 6-21-25W	2,401	3,808	4,412	4,913
Armer Drlg. Co., Inc. No. 1 "B" Smalley	SW SW NW 9-23-24W	2,399	4,002	4,674	4,765
Armer Drlg. Co., Inc. No. 2 "A" Smalley	S½ SE NE 9-23-24W	2,375	3,971	4,618	4,630
Armer Drlg. Co., Inc. No. 1 "C" Smalley	SE NE SE 9-23-24W	2,375	3,981	4,622	4,725
Bennett & Roberts Drlg. Co. No. 1 Williams	SW SW NW 28-23-25W	2,546	4,107	4,780	4,930
Continental & Sinclair No. 1 Northrup	SW SW SE 16-24-23W	2,366	4,011	4,684	4,887

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

Developments during 1954.—Oil production declined only slightly during 1954. Drilling during 1954 consisted of six dry wildcat tests, three of which were in sec. 9, T. 23 S., R. 24 W. on the Smalley lease.

The Bennett and Roberts test on the McVickers lease in the SW¼ SW¼ NW¼ sec. 6, T. 21 S., R. 25 W. penetrated Simpson rocks at 4,905 feet depth according to the sample log prepared by the Kansas Sample Log Service. Other tops reported are: Heebner shale, 3,730; Pennsylvanian basal conglomerate, 4,402; Misener sand, 4,695; and Viola limestone, 4,711 feet depth. The hole was abandoned at a total depth of 4,913 feet.

Data on the other tests, all to Mississippian rocks, drilled during the year are tabulated in Table 32.

No shows of oil were reported in any of the tests. The locations of the producing areas and of the dry wildcat tests are shown on Figure 12. The production from Hodgeman County's three producing pools is given in Table 56.

JACKSON COUNTY

(Map Pl. 1)

Test wells have been drilled in Jackson County from time to time but as yet no producing oil or gas pool has been found. The Geological Survey has records of 12 test wells drilled in the county previous to 1954.

Exploration during 1954.—The Thomas and Lutz No. 1 Robson well, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 8 S., R. 16 E., was abandoned as a dry hole in May 1954. The total depth of the well is 3,078 feet. Tops were logged as follows: Oread limestone, 575 feet; Lansing, 860; Kansas City, 1,218; Mississippian, 2,078; "Hunton," 2,520; Viola, 2,833; Kinderhookian, 2,269; Maquoketa, 2,765; and Arbuckle, 3,052 feet. The location of the well is shown on Plate 1.

JEFFERSON COUNTY

(Map Pl. 1)

The 1954 production: oil none reported, gas 29,940 thousand cubic feet.

Developments during 1954.—Neither drilling nor oil production was reported in Jefferson County in 1954. The gas produced in the McLouth area was consumed in McLouth. Gas production is listed in Table 57.

JOHNSON COUNTY

(Map Pl. 1)

The 1954 production: oil 6,037 barrels, gas 20,324 thousand cubic feet.

Developments during 1954.—A few wells were drilled in the southwest part of Johnson County and for the first time in several years oil production was reported officially. This production was in the old Gardner oil and gas field and in the "Mignot" area (Pl. 1). Producing zones are relatively shallow Pennsylvanian sandstones. Oil production is listed in Table 56, gas in Table 57.

KEARNY COUNTY

(Map Pl. 2)

The 1954 production: oil from 1 pool 31,298 barrels, gas (all from the Hugoton Gas Area) 61,466,542 thousand cubic feet. Wells drilled in 1954: gas 44, dry 4, total 48.

Developments during 1954.—During 1954, 44 more of the locations for Chase group gas wells in the Kearny County portion of the Hugoton Gas Area were drilled successfully. Four attempts at extending the northwestern boundary of the Hugoton Gas

Area were unsuccessful. No deep drilling was done in the county during 1954. Production from the 3 producing oil wells in the **Patterson** pool was slightly less than that reported in 1953.

The 522 producing gas wells in Kearny County produced more than 61,466 million cubic feet of gas during 1954, bringing the cumulative total for the county to more than 408,030 million cubic feet of gas since its discovery there in 1937.

Among the 44 new gas wells, initial potentials ranged from less than 1 million to more than 11 million cubic feet of gas per day. Average producing capacity of the new wells is less than 4 million cubic feet per day. The largest new well is the **Walter Kuhn** No. 1 Moyer in sec. 7, T. 22 S., R. 35 W.

The new Kearny County gas wells and dry holes are shown on Plate 2. Gas production and the active area are reported in Table 57, oil production in Table 56. Historical data on the **Hugoton Gas Area** are given in the chapter on natural gas.

KINGMAN COUNTY

(Map Fig. 16)

The 1954 production from 19 pools: oil 850,639 barrels, gas 1,196,443 thousand cubic feet. Wells drilled in 1954: oil 81, gas 6, dry 27, total 114 including 13 dry wildcats. New pools discovered 9, revived 1, combined 5. Secondary recovery projects 1.

Developments during 1954.—The number of wells drilled in Kingman County increased from 44 in 1953 to 114 in 1954. Oil production increased from the previous year by more than 37 percent. Only gas production showed a slight decline.

Nine new pools were named in Kingman County during 1954, and one, the **Kingman**, was revived by a successful Mississippian test. Six of the new pools had the Mississippian named as the producing zone. These are the **Banta**, **Banta Northeast**, **Broadway West**, **Spivey East**, **Spivey Northwest** (gas), and **Zenda** (gas). The **Banta**, **Banta Northeast**, and **Spivey East** were combined with the **Spivey** pool before the close of the year. In the new **Rosedale** pool production is from the Lansing rocks, and in the **Orsemus South** and the **Willowdale** from the Viola limestone. Data on the discoverers, producing zones, locations, and initial production of the various new Kingman County pools are given in Table 6.

Another significant development in the county during the year was the successful completion of 20 Viola producing wells in the **Willowdale** pool, where only 2 dry holes were completed. In the **Spivey** pool 40 new wells, including pool consolidations, and 3 dry holes were completed.

During the year, the **Artesian Valley** pool, in which 7 new oil wells were added, was combined with the **Dresden** pool. The **Spivey South**, discovered in 1953, was combined with the **Spivey**.

Five of the 13 dry wildcat tests drilled during the year reported shows of oil or gas. Perhaps the most interesting test from a stratigraphic viewpoint is the Phillips Petroleum Company test on the Rago farm in the NW¼ NW¼ NW¼ sec. 15,

TABLE 33.—Dry wildcat tests drilled in Kingman County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
F. Kirk Johnson No. 1 Bonjour	NW NW NE 26-27-5W	1,469	2,960	3,766**	3,873
*Greenland Drlg. Co. et al. No. 1 McHenry	SW SE SE 14-28-6W	1,479	3,080	3,944**	4,003
*Petroleum, Inc. No. 1 Dillon	SW SW SW 23-28-8W	1,625	3,384	4,574	4,617
Ute Royalty Corp. No. 1 Biggs	NE NE SE 35-28-8W	1,611	3,340	4,452†	4,473
*Berwick Drlg. & Aurora Gasoline No. 1 Murphy	SW SW NW 30-28-9W	1,725	3,604	4,618	4,668
*Aurora Gasoline & Berwick Drlg. No. 1 Albrecht	SW SW SE 18-29-6W	1,566	3,269	4,652	4,700
*Trans-Era Petro., Inc. et al. No. 1 Miller	N½ NE SE 24-29-9W	1,645	3,520	4,682	4,730
Earl F. Wakefield No. 1 Esther Snyder	NE NE NE 5-30-5W	1,508	3,553††	4,713	4,750
Pickrell Drlg. Co. et al. No. 1 Stevenson	NW NW NW 12-30-6W	1,433	3,225	4,622	4,648
Phillips Petro. Co. No. 1 Rago	NW NW NW 15-30-7W	1,442	3,254	4,619	5,493
Purcell-Mull Drlg. Co., Inc. No. 1 Whitmer	SW SW NW 10-30-9W	1,699	3,633	4,290**	4,614
Aurora Gasoline Co. et al. No. 1 Swingle	NW NW NE 12-30-10W	1,702	3,672	4,714	4,752
Aurora Gasoline Co. No. 1 Campbell Heirs	NE NE SW 15-30-10W	1,759	3,773	4,810	4,844

* 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.

† Depth to the top of the Simpson, feet.

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

T. 30 S., R. 7 W., where 838 feet of Arbuckle dolomite was penetrated. The Kansas Sample Log Service logged the following tops: Lansing rocks, 3,250; Mississippian rocks, 4,088; "Kinderhook" shale, 4,346; Simpson group, 4,503; Arbuckle dolomite, 4,619; and Pre-Cambrian rocks, 5,468 feet. Total depth was reported as 5,492 feet.

Pertinent data on the locations and marker zones encountered in drilling these dry wildcat tests are given in Table 33. The locations of the dry wildcat tests and the producing pools of Kingman County are shown on Figure 16.

Oil production statistics are given in Table 56, and gas in Table 57. Data on the **Cunningham** field secondary recovery project, which extends into Kingman County from Pratt County, are given in Table 1.

KIOWA COUNTY

The 1954 production from 3 pools: oil 2,990 barrels, gas none reported. Wells drilled in 1954: gas 1, dry 2, total 3 including 2 dry wildcats. New pools discovered 1.

Developments during 1954.—Although only three tests were attempted in Kiowa County during 1954, one was successful in finding new reserves. The Aladdin Petroleum Corporation discovered a small gas pool in Mississippian rocks on the **Johannsen** farm in sec. 13, T. 28 S., R. 19 W. The new **Johannsen** pool produces from depths of 4,864 to 4,890 feet. No production was reported from the new pool during 1954.

Oil production from Kiowa County dropped to about half the previous year's figure.

Two rank wildcats were completed in 1954. The Aurora Gasoline Company et al. No. 1 Clarkson test in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 27 S., R. 16 W. was drilled to a total depth of 4,950 feet. From an elevation of 2,098 feet above sea level, the following tops were logged: Fort Riley limestone, 2,435; Heebner shale, 3,918; Lansing group, 4,095; Mississippian rocks, 4,592; Viola limestone 4,708; Simpson rocks, 4,812; and Arbuckle dolomite, 4,912.

The other dry wildcat test in Kiowa County during 1954 was put down by the Northern Natural Gas Company on the **Mulinville** lease in the Cen. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 28 S., R. 19 W. to a total depth of 5,577 feet. From an elevation of 2,309 feet

above sea level, this test found the Stone Corral dolomite at 1,215 feet, the Lansing group at 4,300 feet, Mississippian (Warsaw) rocks at 4,910 feet, the Viola limestone at 5,340 feet, Simpson rocks at 5,472 feet, and the Arbuckle dolomite at 5,493 feet depth. Both dry wildcat tests reported slight shows of oil or gas.

Data on the oil production from Kiowa County's producing pools are given in Table 56, and similar data for gas production are given in Table 57. Significant facts on the new gas discovery are given in Table 6.

LABETTE COUNTY

(Map Pl. 1)

The 1954 production: oil from 20 areas in 9 fields 80,931 barrels, gas 26,787 thousand cubic feet. Wells drilled in 1954 (estimated): total 178.

Developments during 1954.—Oil production in Labette County was 64 percent greater in 1954 than in 1953. Data on production in the various fields are listed in Table 56. Gas production is listed in Table 57. Water-flooding data are listed in Table 1. Locations of areas from which oil was produced in 1954 and of water-flooding projects are shown on Plate 1.

LANE COUNTY

The 1954 production from 1 pool: oil 2,150 barrels, gas none. Wells drilled in 1954: dry 2 (both wildcats).

Developments during 1954.—The discovery of oil in Lane County in 1952 prompted the search for additional pools during 1954. One exploratory test was drilled by the Natural Gas and Oil Company on the Reifschneider lease in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 19 S., R. 27 W., 12 miles southeast of Dighton. From an elevation of 2,692 feet above sea level the following tops were logged: Heebner shale, 3,953; Lansing group, 3,998; Marmaton group, 4,410; and Mississippian rocks, 4,621 feet. The total depth is 4,790 feet. There were no shows of oil or gas.

The Cities Service Oil Company drilled a test on the Murphy lease in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 20 S., R. 28 W., 18 miles Southeast of the North Fork pool. From an elevation of 2,742 feet above sea level the test found the following marker beds: Stone Corral dolomite, 2,105; Herington limestone, 2,758; Heeb-

ner shale, 4,007; Lansing group, 4,051; Marmaton group, 4,468; Mississippian rocks, 4,667; Viola limestone, 5,046; Simpson group, 5,177; and Arbuckle dolomite, 5,182 feet depth. The total depth is 5,250 feet.

Data on oil production for the county are reported in Table 56.

LEAVENWORTH COUNTY

(Map Pl. 1)

The 1954 production: oil none reported, gas 4,973 thousand cubic feet.

Developments during 1954.—No oil production for Leavenworth County was reported. Gas production in the **Roberts-Maywood** and **Linwood** areas is listed in Table 57.

LINCOLN COUNTY

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

Exploration during 1954.—During 1954 one wildcat test was drilled on the Rhudy farm by the Inland Oil Company in the NW¼ NW¼ NW¼ sec. 30, T. 11 S., R. 7 W. From an elevation of 1,595 feet above sea level this hole found the following marker beds: Heebner shale, 2,576; Lansing group, 2,600; Marmaton group, 3,008; "Cherokee," 3,090; Pennsylvanian basal conglomerate, 3,286; Mississippian rocks, 3,293; Misener sandstone, 3,565; "Hunton" dolomite, 3,572; Viola limestone, 3,746; Simpson group, 3,885; and Arbuckle dolomite, 3,978 feet depth. The total depth is 4,005 feet. A small show of oil was found in a drill-stem test taken from 3,948 to 3,961 feet in the Simpson rocks.

LINN COUNTY

(Map Pl. 1)

The 1954 production: oil from 14 areas in 4 fields 87,505 barrels including approximately 64,979 barrels from secondary recovery projects, gas (estimated) 16,792 thousand cubic feet. Wells drilled in 1954 (estimated): oil 42, input 13, dry 15, total 70.

Developments during 1954.—Oil production in Linn County was nearly 20 percent greater in 1954 than in 1953. The increase is due to hydraulic fracturing and expanded water-flooding ac-

tivities. Oil was produced for the first time, or at least for many years, in the old **Critzer** gas-producing area.

Oil production in the several Linn County areas is listed in Table 56, and gas in Table 57. Water-flooding data are listed in Table 1. Locations of areas from which oil was produced in 1954 and of secondary recovery projects are shown on Plate 1.

LOGAN COUNTY

Exploratory test holes have been drilled in Logan County from time to time, but so far no oil or gas pool has been found.

Exploration during 1954.—During 1954, a deep dry wildcat test was drilled in Logan County on the Christy lease in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 14 S., R. 32 W., about 18 miles southeast of Russell Springs. The Continental Oil Company drilled this test from an elevation of 2,668 feet above sea level to a total depth of 4,980 feet. The following marker beds were encountered in drilling: Heebner shale, 3,619; Lansing group, 3,658; Marmaton group, 4,026; Mississippian rocks, 4,346; and Arbuckle dolomite, 4,900 feet depth. A drill-stem test at 4,257 feet depth, near the base of the Pennsylvanian rocks, recovered only water.

Two shallow dry holes were reported drilled in T. 34 S., R. 34 W. in March by the Wycoff Brothers Oil Company. In the No. 1 Newcomb test, total depth 965 feet, in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, the Codell zone was encountered at 900 feet depth. The other test was completed on the Kough farm in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18. A total depth of 1,020 feet was reported. No tops were reported.

LYON COUNTY

(Map Pl. 1)

The 1954 production from 8 fields: oil 383,426 barrels including approximately 131,826 barrels from secondary recovery projects, gas none. Wells drilled in 1954 (reported): oil 21, dry 8, salt-water disposal 1, total 30 including 3 dry wildcats.

Developments during 1954.—Oil production in Lyon County in 1954 was nearly 46 percent greater than in 1953, due principally to increased production in the **Bradfield** area. In these two fields, 8 new oil wells were added to the **Bradfield** and 11 were added to the **Bradfield Northwest** field. One dry hole was re-

ported in each field. The **Bradfield**, a Viola limestone pool discovered in 1922, was abandoned for many years and revived in 1952. The **Bradfield Northwest** was discovered in 1953.

Three dry wildcat wells were reported in Lyon County in 1954. The L. K. Jones No. 1 Baker well, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 20 S., R. 13 E., was abandoned at a total depth of 1,761 feet. The top of Kansas City limestone was logged at 959 feet; base of the Kansas City group at 1,075 feet; and top of Mississippian limestone at 1,730 feet. The Nemaha Oil Company No. 1 Jones well, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 21 S., R. 10 E., was abandoned in September at a total depth of 2,901 feet. Tops were logged as follows: Lansing, 1,286; Kansas City, 1,452; Mississippian, 2,333; Kinderhookian, 2,666; Simpson, 2,847; and Arbuckle, 2,891 feet depth. The Nemaha Oil Company No. 1 Rathke test, Cen. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 21 S., R. 10 E., was abandoned in September in the Arbuckle at a total depth of 2,770 feet. Tops were recorded as follows: Lansing group, 1,142; Kansas City group, 1,333; "Bartlesville sand," 2,042; Mississippian rocks, 2,158; Viola limestone, 2,594; Simpson group, 2,670; and Arbuckle group, 2,719 feet depth.

Oil production in the various Lyon County fields is listed in Table 56. Data on secondary recovery operations are listed in Table 1. Locations of areas from which oil was produced in 1954, of water-flooding projects, and of dry wildcat wells drilled in 1954 are shown on Plate 1.

McPHERSON COUNTY

(Map Fig. 7)

The 1954 production from 37 pools: oil 4,021,567 barrels including production from secondary recovery projects, gas 154,084 thousand cubic feet. Wells drilled in 1954: oil 104, dry 64, salt-water disposal 1, total 169 including 19 dry wildcats.

Developments during 1954.—Oil production from McPherson County increased by about 20 percent, mostly because of concentrated development in the Lively pool, where 46 new Mississippian oil wells and 4 dry holes were completed. The Lansing-Kansas City was named by the Nomenclature Committee as a new producing zone in the Lively pool, with the discovery of a 70 barrels of oil per day well on the Anderson "A" lease by the

National Associated Petroleum Company in sec. 22, T. 19 S., R. 2 W. Additional data on this new zone are given in Table 7.

A total of 169 new wells were drilled during the year, almost double last year's total. Pool wells include 20 oil wells and 2 dry holes in the **Ritz-Canton** field; 7 oil wells and 2 dry holes in the

TABLE 34.—Dry wildcat tests drilled in McPherson County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippi, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Seneca Oil Co. No. 1 A. J. Johnson	NW NW SW 2-17-1W	1,362	2,082	2,704	.....	2,755
*Petroleum, Inc. No. 1 Nelson	NW SE SW 33-17-3W	1,439	2,369	3,024	3,713	3,739
*Dozier Oil Co. No. 1 Sand	NE NE NW 9-18-2W	1,454	2,312	2,999	3,683	3,695
*Rupp-Ferguson Oil Co. No. 1 Larson	SE SE NW 15-18-4W	1,474	2,468	3,111	3,734	3,757
Trans-Era Petro., Inc. et al. No. 1 John Myers	SE SE SE 8-18-5W	1,589	2,704	3,369	3,869	3,969
*Musgrove Petro. Corp. No. 1 Miller	SW SW SW 19-19-3W	1,503	2,516	3,150	3,815	3,865
Durbin Bond et al. No. 1 Durland	SW SW NE 5-19-5W	1,590	2,749	3,396	3,886	3,921
*J. S. Cling et al. No. 1 Neel	SW NE SW 8-19-5W	1,690	2,854	3,522	.....	3,552
*W. L. Hartman No. 1 Root	NE NE SE 16-19-5W	1,624	2,790	3,401	.....	3,475
*Trans-Era Petro., Inc. No. 1 Raleigh	NE NE NW 22-19-5W	1,598	2,781	3,448	.....	3,475
*J. B. Allison No. 1 Allison	NW NW SW 35-19-5W	1,604	2,772	3,430	4,022	4,042
*Musgrove Petro. Corp. No. 1 D. W. Koehn	NE SE SE 8-20-2W	1,495	2,314	2,974	.....	3,005
*Anschutz Drlg. Co. No. 1 Campbell	NW NW NW 5-20-4W	1,524	2,662	3,307	3,951	3,966
*Rex & Morris Drlg. Co. et al. No. 1 Krieg	SE SE SE 35-20-4W	1,473	2,586	3,247	3,872	3,892
*United Drlg., Inc. No. 1 Thiessen	NW SW SW 25-20-5W	1,565	2,803	3,421	.....	3,475
*Shelley-Miller Drlg., Inc. No. 1 Rupp	SW SW SW 13-21-2W	1,497	2,319	2,959	.....	3,029
*Stelbar Oil Corp., Inc. No. 1 Kutnick	SE SE NW 26-21-2W	1,475	2,326	2,972	.....	3,400
*Rupp-Ferguson Oil Co. No. 1 Kornelson	SW SW SW 20-21-4W	1,509	2,670	3,351	3,988	4,008
*D. B. Mitchell et al. No. 1 Neufeld	S½ S½ SE 18-21-5W	1,541	2,812	3,436	3,982	4,034

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

Groveland South; 8 oil wells and 2 dry holes in the **McPherson**; and 8 oil wells and 6 dry holes in the **Windom** pool.

Of 19 dry wildcat tests, only 2 specifically reported shows of oil or gas. Pertinent data on these dry wildcats are tabulated in Table 34.

The Frank Jones No. 2 Opal Russell salt-water disposal well in sec. 23, T. 19 S., R. 2 W. reported the Arbuckle dolomite topped at 3,472 feet depth and penetrated to a total depth of 3,950 feet. a minimum thickness of 478 feet.

Five secondary recovery projects reported operations in McPherson County during 1954. According to the survey of projects now active, more than 500,000 barrels of the county's production is now classified as secondary recovery production. Data on these developments are given in Table 1.

Oil production statistics by pools for McPherson County are given in Table 56, and similar figures for gas are given in Table 57. The locations of the producing areas, dry wildcat tests, and secondary recovery projects are shown on Figure 7.

MARION COUNTY

(Map Pl. 1)

The 1954 production from 19 fields: oil 724,777 barrels, gas 123,735 thousand cubic feet. Wells drilled in 1954 (reported): oil 30, dry 32, salt-water disposal 1, total 63 including 12 dry wildcats. New pools discovered 2.

Developments during 1954.—Two oil pools were opened in Marion County in 1954 (Table 6). The Anderson-Prichard Oil Corporation No. 1 Hett well, NE¼ SW¼ sec. 3, T. 19 S., R. 2 E., is the discovery well of the **Durham South**, a Simpson pool. The well was completed as a 43 barrels per day oil well in November. The producing zone is between depths of 3,039 and 3,041 feet. The **Youk**, a Viola limestone pool, was discovered by the Anderson-Prichard Oil Corporation No. 2 Youk well, S½ S½ sec. 20, T. 18 S., R. 2 E., in December. The well was rated at 25 barrels of oil per day. The producing zone is between depths of 3,017 and 3,020 feet.

Marion County's oil production showed an increase of more than 6 percent during 1954. Oil production statistics in the various Marion County fields are listed in Table 56. Gas production

TABLE 35.—Dry wildcat tests drilled in Marion County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Mississippi, feet	Depth to top of Viola, feet	Total depth, feet
Anderson-Prichard Oil Corp. No. 1 "B" Scully	NE NE SW 2-18-2E	2,027	2,610	3,100	3,152
*Stanolind Oil & Gas Co. et al. No. 1 Bina	SW SW SE 13-18-5E	1,590	2,251**	2,135	2,283
*Dieter Petro. Co. et al. No. 1 Duerksen	NE SE NE 16-19-1E	2,212	2,801	3,263	3,362
Carter Oil Co. No. 1 E. B. Schroeder	NW SE SE 19-19-2E	2,078	2,668	3,109	3,300
*Russell Maguire No. 1 Loveless	Cent. E½ E½ E½ 2-19-4E	1,780	2,330	.....	2,384
*C. H. Spoor No. 1 Zeiger	SW SW SW 22-19-4E	1,760	2,285	2,585	2,765
*Beaumont Petro. Co. No. 1 Anderson	NE NE SW 2-30-3E	1,825	2,375	2,671	2,700
*Roland Jones No. 1 Grosse	SE SW SW 14-20-3E	1,865	2,410	2,684	2,696
*J. P. Gaty et al. No. 1 Fulkerson	NW SW SW 2-20-4E	1,749	2,230	2,528	2,530
*J. P. Gaty et al. No. 1 Hauser	S½ SE NW 3-20-4E	1,760	2,271	2,550	2,580
*Charles Carlock No. 1 Unger	W½ SE NE 8-21-3E	1,953	2,515	.....	2,525
*E. H. Adair Oil Co. No. 1 Hale	NE NE NE 33-21-3E	1,963	2,540	2,884	2,955

*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.

is listed in Table 57. Data regarding the 12 dry wildcat wells drilled in the county in 1954 are listed in Table 35. Locations of areas from which oil was produced in 1954 are shown on Plate 1.

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 well was drilled in 1954. The location of this well is shown on Plate 1.

Exploration during 1954.—Early in 1954 the Fred Noren et al. No. 1 Halle well, SE¼ NE¼ NW¼ sec. 13, T. 2 S., R. 6. E., was abandoned at a total depth of 1,930 feet. A complete log of the well is not available; the "Hunton" limestone was logged at 1,512 feet depth.

The Geological Survey has records of 21 wells drilled in Marshall County previous to 1954.

MEADE COUNTY

(Map Fig. 14)

The 1954 production from 11 pools: oil 529,008 barrels, gas 3,482,799 thousand cubic feet. Wells drilled in 1954: oil 3, gas 2, dry 6, total 11 including 1 dry wildcat. New pools discovered 1.

Developments during 1954.—Although drilling activity declined to a total of 11 wells during 1954, oil production from Meade County increased about 12 percent, gas production showed an increase of about 17 percent, and one new oil pool was named.

The Ohio Oil Company discovered the **Bond** oil pool in their first test on the Bond ranch in the NW¼ NW¼ SE¼ sec. 32, T. 33 S., R. 30 W., which is the same township location as the large **Novinger** pool. An initial potential of 129 barrels of oil per day was assigned from Atokan rocks from 5,619 to 5,631 feet depth.

Two extension oil wells and one dry hole were added to the **Novinger** field, two gas wells and one dry hole to the **McKinney**, and three dry holes in the **Bruno Northeast** pool.

Only one dry wildcat test was attempted in the county during the year. The Skelly Oil Company drilled this unsuccessful test on the L. T. Gum property in the Cen. NW¼ SW¼ sec. 35, T. 32 S., R. 29 W. to a total depth of 5,867 feet depth, ending in Mississippian rocks. From an elevation of 2,659 feet above sea level pertinent marker zones encountered in the drilling were: Heebner shale, 4,440; Lansing group, 4,580; and Mississippian (Ches-teran) rocks, 5,687 feet depth.

The locations of the producing areas and the dry wildcat test are shown on Figure 14. The new pool is described in Table 6. Oil production is given in Table 56, and gas production in Table 57.

MIAMI COUNTY

(Map Pl. 1)

The 1954 production: oil from 28 areas in 4 fields 685,753 barrels including approximately 462,322 barrels from secondary recovery

operations, gas 36,383 thousand cubic feet. Wells drilled in 1954 (estimated): 522.

Developments during 1954.—Oil production in Miami County was nearly 17 percent greater in 1954 than in 1953. Drilling was especially active in the **Louisburg** field where producing zones range in depth from about 270 to 600 feet, and where more than 42,000 barrels of oil was produced. Other drilling in the county principally was in connection with water-flooding operations.

Oil production in the various Miami County areas is listed in Table 56 and gas in Table 57. Water-flooding statistics are listed in Table 1. Plate 1 shows the locations of areas from which oil was produced in the county in 1954 and locations of secondary recovery projects.

MONTGOMERY COUNTY

(Map Pl. 1)

The 1954 production: oil from 57 areas in 8 fields 922,153 barrels including approximately 256,385 barrels from secondary recovery operations, gas 473,878 thousand cubic feet. Wells drilled in 1954 (estimated): oil 423, dry 106, input 137, total 666 including 1 dry wildcat.

Developments during 1954.—Oil production in Montgomery County in 1954 was about 27 percent greater than in 1953. A large part of the production came from water-flooding projects and much of the drilling was in connection with these projects. Hydraulic fracturing, as in the previous year, contributed materially to the drilling activity and to the total production of oil.

A dry wildcat well, the Stephens and Crissell No. 1 Uitts, NE cor. NE¼ sec. 18, T. 32 S., R. 16 E., was drilled in the county. The well, which was drilled into Pre-Cambrian rocks, had a total depth of 2,334 feet.

Oil production in the various Montgomery County areas is listed in Table 56 and gas in Table 57. Data on secondary recovery operations are listed in Table 1. Plate 1 shows locations of areas from which oil was produced in 1954 and locations of secondary recovery projects.

MORRIS COUNTY

(Map Pl. 1)

The 1954 production: oil from 5 fields 38,403 barrels, gas 48,966 thousand cubic feet. Wells drilled in 1954 (reported): oil 5, dry 4, total 9 including 2 dry wildcats.

Developments during 1954.—Reported oil production in Morris County in 1954 was slightly less than in 1953. Two dry wildcat wells were reported. The C. R. Atkinson et al. No. 1 Peterson well, NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 16 S., R. 5 E., was abandoned at a depth of 2,268 feet. The top of the Mississippian limestone was recorded at 2,198 feet. The William Grunerwald et al. No. 1 Swenson well, NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 17 S., R. 8 E., was drilled to a total depth of 3,165 feet. Tops were recorded as follows: Mississippian limestone, 2,458; Kinderhookian rocks, 2,694; "Hunton" limestone, 2,845; and Viola limestone, 2,981 feet depth. Among the wells reported in the county, five new oil wells were added to the **John Creek**, a Viola limestone field discovered in 1953.

Oil production in the Morris County fields is listed in Table 56 and gas production is listed in Table 57. Locations of areas from which oil was produced in 1954 and of the wildcat wells are shown on Plate 1.

MORTON COUNTY

(Map Pl. 2)

The 1954 production from 7 pools: oil 24,545 barrels, gas 47,822,615 thousand cubic feet. Wells drilled in 1954: oil 5, gas 42, dry 4, total 51.

Developments during 1954.—Although the total number of new wells drilled in Morton County during 1954 was 37 less than the high of 88 set in 1953, gas production increased considerably, and oil production was reported for the first time.

In September 1954 the Kansas Nomenclature Committee reconsidered the entire **Greenwood** area. Gas production from Lansing-Kansas City and younger rocks is now designated as from the **Greenwood Area**. The previous **Greenwood** field was divided into the **Boehm** pool, restricted to production below Lansing-Kansas City rocks (Morrowan only in 1954) and the **Greenwood Area** (in 1954 gas only) for production from Lansing-

Kansas City and younger rocks. The previous **Greenwood South** field was divided into the **Interstate** (oil only in 1954) pool which is restricted to production from rocks older than Lansing-Kansas City and the **Greenwood Area** for production from Lansing-Kansas City and younger rocks. This decision rescinded an earlier order combining the original **Greenwood** and **Greenwood South** fields.

Gas production from Morton County was almost double that for 1953. More than 20,656 million cubic feet of gas from 50 wells was reported from the **Greenwood Area**, and the 263 Chase group wells in the **Hugoton Gas Area** of Morton County reported 24,867 million cubic feet of gas production. Smaller amounts of gas were reported from the **Boehm** and **Richfield** fields.

All 5 of the new oil wells were drilled in sec. 29, T. 34 S., R. 43 W. on Federal land in the **Interstate** pool. Routine development drilling in the various Morton County fields added 2 gas wells and 1 dry hole to the **Dreyer** field, 26 gas wells and 1 dry hole to the **Greenwood Area**, 14 gas wells and 1 dry hole to the **Hugoton Gas Area**, and 1 dry hole to the **Richfield** field.

The new Morton County oil and gas wells are shown on Plate 2. Gas production is listed in Table 57 and oil production in Table 56.

NEMAHA COUNTY

(Map Pl. 1)

The 1954 production from 3 fields: oil 37,570 barrels.

Developments during 1954.—Reported oil production in Nemaha County in 1954 was slightly less than in 1953. No drilling was reported.

Oil production in the Nemaha County fields is listed in Table 56. Locations of the areas from which oil was produced are shown on Plate 1.

NEOSHO COUNTY

(Map Pl. 1)

The 1954 production: oil from 29 areas in 10 fields 617,628 barrels including 390,014 barrels from secondary recovery operations, gas 172,282 thousand cubic feet. Wells drilled in 1954 (estimated): oil 193, dry 54, input and water-supply 72, total 319.

Developments during 1954.—Oil production in Neosho County in 1954 showed a slight increase over 1953. The greatest reported drilling activity was in the large **Humboldt-Chanute** field in which 11 oil wells, 3 gas wells, 6 dry holes, and 4 repressuring wells were reported. Hydraulic fracturing was used on a smaller scale than in the previous year but contributed materially to the drilling activity, which principally was in connection with the county's wide-spread secondary recovery operations.

Oil production in the various Neosho County areas is listed in Table 56, gas in Table 57. Data on water-flooding operations are listed in Table 1. Locations of areas from which oil was produced in 1954 and of water-flooding projects are shown on Plate 1.

NESS COUNTY

(Map Fig. 12)

The 1954 production from 5 pools: oil 262,818 barrels, gas none. Wells drilled in 1954: oil 5, dry 6, total 11 including 4 dry wildcats. New pools discovered 1.

Developments during 1954.—Production of oil in Ness County during 1954 was slightly less than that of 1953; drilling declined by two wells.

One exploratory test was successful in finding a new oil pool. The **Aldrich Northeast** pool was discovered by the Barnett Oil Company No. 1 Shearer well in the SW¼ SW¼ SE¼ sec. 23, T. 17 S., R. 25 W. Production is from the Warsaw limestone (Mississippian) from 4,398 to 4,405 feet. Total depth of the well

TABLE 36.—Dry wildcat tests drilled in Ness County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Total depth, feet
*F. K. Johnson No. 1 Moelenkamp	NW NW NW 3-17-25W	2,539	3,891	4,506	4,695
*J. S. Mull et al. No. 1 Caster	NE NE NE 32-17-26W	2,574	3,941	4,506	4,526
*W. Gruenerwald No. 1 Everett	SE SE SE 2-18-26W	2,566	3,920	4,505	4,521
*North American Petro. Co. No. 1 Lahner	NW NW NW 24-20-24W	2,275	3,723	4,365	4,825

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

is also 4,405 feet. The initial potential of the well was reported as 66 barrels of oil per day. Before the close of the year two successful offset wells in the pool were completed by the Magnolia Petroleum Company.

Four dry wildcat tests were drilled in the county during the year. Significant information concerning the tops encountered in drilling these tests is given in Table 36. All the dry wildcat tests reported shows of oil or gas; one, the North American Petroleum Company No. 1 Lahner test in sec. 24, T. 20 S., R. 24 W., penetrated Arbuckle rocks at 4,778 feet depth before abandonment at 4,825 feet.

Two oil wells, one dry hole, and one temporarily abandoned well were drilled in the Aldrich pool during the year.

The new oil pool is described in Table 6. The locations of the various Ness County pools and the 1954 dry wildcat tests are shown on Figure 12. Oil production is tabulated by pools in Table 56.

NORTON COUNTY

(Map Fig. 5)

The 1954 production from 5 pools: oil 755,743 barrels, gas none. Wells drilled in 1954: oil 80, dry 44, total 124 including 33 dry wildcats. New pools discovered 1.

Developments during 1954.—Oil production from Norton County during 1954 was more than 7 times that of the previous year. This increase was due entirely to the rapid development of the Norton oil field, where 79 new oil wells and only 8 dry holes were completed during 1954. The only other oil well completion during the year was an extension well in the Ray Northwest pool.

The Murfin Drilling Company No. 1 Baird well in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 5 S., R. 21 W. was named as the discovery well of the Ray North pool; however, good initial recovery from the well decreased and the water ratio increased until the well was declared dry and abandoned because of lack of commercial production. Additional data on the well are given in Table 6.

The 33 dry wildcat tests were widely scattered over the county. Tops of the Lansing group and Arbuckle dolomite (where present) in these dry wildcat tests are given in Table 37.

TABLE 37.—Dry wildcat tests drilled in Norton County during 1954

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. No. 1 Gramzow	NE NE SW 10-1-22W	2,331	3,400	3,695	3,745
*Jones, Shelburne & Farmer, Inc. No. 1 Keene	NE NE SE 18-1-22W	2,395	3,434	3,704**	3,710
*Jones, Shelburne & Farmer, Inc. No. 1 McClland	NW NW NW 28-1-22W	2,358	3,437	3,688	3,770
Jones, Shelburne & Farmer, Inc. No. 1 Anderson "B"	NW NW NW 18-2-23W	2,451	3,458	3,709	3,750
Empire Drlg. Co. No. 1 Kohfield	SE SE SW 21-2-23W	2,365	3,410	3,630	3,653
Jones, Shelburne & Farmer, Inc. No. 1 Coler	NW NW SW 6-2-24W	2,513	3,462	3,772**	3,775
*Jones, Shelburne & Farmer, Inc. No. 1 Sheldon	SE SE NE 14-2-24W	2,417	3,414	3,672	3,702
*Jones, Shelburne & Farmer, Inc. No. 1 Hansen	SE SE SE 9-2-25W	2,524	3,449	3,765**	3,766
*Jones, Shelburne & Farmer, Inc. No. 1 Bolliger	SW SW SW 17-2-25W	2,497	3,443	3,781	3,820
*Jones, Shelburne & Farmer, Inc. No. 1 Bishop	NE NE NW 24-2-25W	2,499	3,446	3,790**	3,821
*Jones, Shelburne & Farmer, Inc. No. 1 Harper	SW SW NW 19-3-22W	2,452	3,576	3,824	3,887
*Petroleum, Inc. No. 1 Allen	SE SE NE 30-3-22W	2,417	3,572	3,814	3,909
*Jones, Shelburne & Farmer, Inc. No. 1 Coleman	NW NW NE 5-3-23W	2,361	3,411	3,644**	3,655
C-G Drlg. et al. No. 1 Horesky	NE NE SE 15-3-23W	2,428	3,514	3,737	3,810
*Jones, Shelburne & Farmer, Inc. No. 1 Stewart	NE NE NE 26-3-23W	2,401	3,505	3,758**	3,778
Trans-Era Petro., Inc. No. 1 King	SW SW SE 17-3-24W	2,402	3,410	3,671**	3,675
*Jones, Shelburne & Farmer, Inc. No. 1 Brown	SW SW SW 27-3-24W	2,453	3,495	3,767**	3,799
Jones, Shelburne & Farmer, Inc. No. 1 Ankenman	SW SW SE 29-3-24W	2,402	3,438	3,789**	3,811
Harry Gore No. 1 Brunson	NW NW SW 32-3-24W	2,469	3,515	3,808	3,912
Henderson Oil Co. et al. No. 1 Leichter	SW SW NE 8-3-25W	2,540	3,526	3,898	3,958
Peel-Hardman Oil Producers No. 1 Mizell	SW SW NW 10-3-25W	2,510	3,497	3,875	3,902
*Sauvage & Dunn Drlg. Co., Inc. No. 1 Collins	NE NE SW 21-3-25W	2,479	3,483	3,828	3,926
*Jones, Shelburne & Farmer, Inc. No. 1 Brunk	NW NW NW 22-3-25W	2,397	3,392	3,732	3,822
Trans-Era Petro., Inc. No. 1 Humphrey	N $\frac{1}{2}$ NE NE 25-3-25W	2,340	3,365	3,718**	3,730

Natl. Coop. Ref. Assn. No. 1 Stone	NW SE NE 30-4-21W	2,151	3,382	3,619	3,688
*Jones, Shelburne & Farmer, Inc. No. 1 Fisher	SW SE SW 11-4-22W	2,238	3,475	3,757	3,767
*Jones, Shelburne & Farmer, Inc. No. 1 Wiles	SW SW NW 16-4-22W	2,365	3,566	3,843	3,892
Sohio Petro. Co. No. 1 Schaudler	NE NE NE 28-4-23W	2,300	3,462	3,807	3,874
The Texas Co. No. 1 M. B. Reed	SE NE SW 11-4-24W	2,452	3,535	3,820	3,865
Trans-Era Petro., Inc. et al. No. 1 McKinley	NE NE NW 23-5-22W	2,227	3,462	3,755	3,790
*Peel-Hardman Oil Pro- ducers No. 1 Voss	NE NE NE 28-5-22W	2,208	3,427	3,714	3,770
Empire Drlg. & Harry Gore No. 1 Magill	NE NE SE 12-5-23W	2,228	3,421	3,765	3,780
Empire Drlg. Co. No. 1 Breeden Est.	NE NE NW 13-5-24W	2,292	3,442	3,759	3,820

* 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 granite, feet.

Additional data on the Norton oil field are given by Merriam and Goebel (1954). Figure 5 shows the locations of the Norton County oil fields and the 1954 dry wildcat tests. Production statistics by pools are given in Table 56.

OSAGE COUNTY

(Map Pl. 1)

Test wells have been drilled in Osage County from time to time but no commercial oil or gas pool has been found. The Geological Survey has records of 69 wells drilled in the county previous to 1954.

Exploration during 1954.—One test well was drilled in Osage County in 1954. It is the Barbara Oil Company No. 1 Ramshaw well, SW¼ NW¼ NE¼ sec. 15, T. 16 S., R. 17 E., which was abandoned at a total depth of 1,960 feet. The following tops were reported: Kansas City limestone, 566; Ft. Scott limestone, 914; "Cherokee" shale, 1,009; Mississippian limestone, 1,474; Kinderhookian rocks, 1,725; Chattanooga shale, 1,756; Viola limestone, 1,786; Simpson group, 1,848; and Arbuckle rocks, 1,929 feet. The location of the well is shown on Plate 1.

OSBORNE COUNTY

(Map Fig. 6)

The 1954 production from 1 pool: oil 90,155 barrels. Wells drilled in 1954: total 2 (dry wildcats).

Developments during 1954.—Two attempts were made during 1954 to find additional oil production in Osborne County. One of the exploratory tests was drilled by Markan, Inc. on the Enochs farm in the Cen. S. line SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 8 S., R. 13 W. From an elevation of 1,842 feet above sea level the following marker beds were reported: Topeka limestone, 2,772; Heebner shale, 3,053; Lansing group, 3,092; Mississippian rocks, 3,690; Viola limestone, 3,882; Simpson group, 4,027; and Arbuckle dolomite, 4,077 feet. There were no shows of oil or gas and the test was abandoned at 4,162 feet depth.

The second wildcat test is located on the La Rosh farm in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 8 S., R. 14 W. It was drilled by the Texas and Pacific Coal and Oil Company to a total depth of 3,740 feet. From an elevation of 1,790 feet above sea level the following marker beds were found: Stone Corral dolomite, 1,008; Heebner shale, 2,939; Lansing group, 3,005; Pennsylvanian basal conglomerate, 3,470; Viola limestone, 3,522; Simpson group, 3,637; and Arbuckle dolomite, 3,686 feet depth. A drill-stem test from 3,030 to 3,048 feet depth in the Lansing rocks recovered only water.

Osborne County's only oil-producing pool, the **Ruggles**, is shown on Figure 6. Oil production is reported in Table 56.

OTTAWA COUNTY

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

Exploration during 1954.—During 1954 one dry wildcat test was drilled in Ottawa County, about 5 miles north of Minneapolis. The test was drilled by Stearns Drilling Company et al. on the Gooch farm in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 10 S., R. 3 W., to a total depth of 3,847 feet. The test, drilled from an elevation of 1,331 feet above sea level, logged the following tops: Ft. Riley limestone, 742; Neva limestone, 1,120; Heebner shale, 2,092; Lansing group, 2,217; Mississippian rocks, 2,894; "Kinderhook"

shale, 3,157; Viola limestone, 3,550; Simpson group, 3,655; and Arbuckle dolomite, 3,745 feet depth. No shows of oil or gas were reported.

PAWNEE COUNTY

(Map Fig. 11)

The 1954 production from 28 pools: oil 1,512,658 barrels, gas 3,934,660 thousand cubic feet. Wells drilled in 1954: oil 76, gas 11, dry 64, salt-water disposal 2, total 153 including 29 dry wildcats. New pools discovered 8, combined 3.

Developments during 1954.—A 36 percent increase in oil production over the 1953 figure was reported for Pawnee County oil fields during 1954. Gas production showed an increase of a little more than 25 percent. The total number of wells drilled was only 4 less than in 1953.

Eight new oil or gas pools were named by the Kansas Nomenclature Committee during 1954. The oil pools are: **Garfield North-east**, Mississippian; **Garfield Southwest**, Misener; **Jay**, Simpson; **Lovett**, Lansing-Kansas City; **Shiley**, Pennsylvanian basal conglomerate; and **Shiley East**, Pennsylvanian basal conglomerate. The **Jab** pool is a new Pennsylvanian basal conglomerate gas pool, and the **Sweeney West**, which was combined later in the year with the **Sweeney** pool, has both oil and gas production from Arbuckle dolomite. Data on the discoverers, locations of discovery wells, thicknesses of producing zones, and initial potentials are tabulated for these new pools in Table 6.

Three new producing zones in old fields were named also during the year. Two of these are the Mississippian from 4,279 to 4,284 feet depth in the **Garfield** oil field and the Simpson group from 4,106 to 4,112 feet depth in the **Hearn** gas field. Mississippian rocks were named as a new zone in the **Garfield Southwest** pool; however, the discovery well of the zone was abandoned without production. Additional data on these developments are given in Table 7.

During the year, 36 extension oil wells, 1 dry hole, and 1 old well worked over and completed as an oil well were added to the **Garfield** field. Other pools adding 5 or more new wells were the **Benson**, 6 oil and 2 dry; the **Larned**, 9 oil, 3 dry, and 1 salt-water disposal well; the **Shiley**, 5 oil and 3 dry; the **Shady South-**

TABLE 38.—Dry wildcat tests drilled in Pawnee County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Coppinger Drlg. et al. No. 1 Hagerman	SW SW SE 6-20-17W	2,181	3,609	4,021	4,070
*Imperial Drlg. Co., Inc. No. 1 Conard	NE NE NW 30-20-17W	2,149	3,604	4,010	4,077
*Imperial Drlg. Co., Inc. No. 1 Black	SW NW SW 11-20-18W	2,157	3,591	4,024	4,064
Musgrove Petro. Corp. No. 1 Fox	NE NE SE 19-20-18W	2,203	3,674	4,163	4,215
Carl Todd Drlg. Co. No. 1 Ideker	Cen E½ SE SW 13-20-19W	2,176	3,642	4,152	4,260
Musgrove Petro. Corp. No. 1 "A" Geo. Johnson	SE SE NW 34-20-19W	2,235	3,807	4,499**	4,530
*Republic Natural Gas Co. et al. No. 1 Harms-Spruill	NE SW SW 15-20-20W	2,218	3,707	4,404**	4,506
*Natural Gas & Oil et al. No. 1 Scharitz-Weber	NE SE SW 26-21-15W	1,964	3,472	3,869	3,910
Trans-Era Petro., Inc. No. 1 De Roo	SE SE NW 17-21-16W	2,002	3,465	3,798	3,850
Amerada Petro. Corp. No. 1 Minor	SW SE SE 25-21-17W	2,066	3,548	3,917	4,342
Thos. Allan et al. No. 1 Hays	SW SW SE 28-21-17W	2,033	3,515	3,919	3,970
K & E Drlg., Inc. et al. No. 1 Gore Estate	NW NW NE 30-21-17W	2,069	3,538	3,926	4,016
Sterling Drlg. Co. et al. No. 1 Darnall	NE NE SE 29-21-18W	2,077	3,665	4,152	4,202
*Welch & Olsson Oil Co. et al. No. 1 Steffen	SE NW SE 8-21-20W	2,116	3,654	4,534	4,558
*Welch & Olsson Oil Co. et al. No. 1 Bryant	SW SE NW 11-21-20W	2,138	3,665	4,435	4,500
Loffland Bros. et al. No. 1 Compton	SW SW SW 10-22-15W	1,995	3,531	3,963	3,989
*Natural Gas & Oil Corp. No. 1 Wesley	SW SE SW 11-22-15W	1,978	3,519	3,980	4,015
Musgrove Petro. Corp. No. 1 "C" Smith	SW SW SE 17-22-15W	1,998	3,541	4,020	4,065
*Petroleum, Inc. et al. No. 1 Ackerman	NE SW SW 24-22-15W	1,981	3,551	4,035	4,065
Carl Todd Drlg. Co. No. 1 Buster	SE SE NE 10-22-16W	2,015	3,589	4,056	4,105
Gulf Oil Corp. No. 1 State Hospital	SE SE SW 1-22-17W	2,019	3,543	3,919	3,956
Gulf Oil Corp. No. 1 Wm. J. Haeger	NE NE NE 13-22-17W	2,022	3,600	4,104	4,155
*Graham-Messman-Rinehart Oil Co. No. 1 "A" Higgins	NE NE SW 19-22-18W	2,110	3,775	4,651	4,699
*Coppinger Drlg., Inc. et al. No. 1 Grant	SE SE NE 27-22-18W	2,089	3,796	4,637	4,685

Natural Gas & Oil et al. No. 1 McComas	NE SW SW 1-23-15W	1,991	3,590	4,046	4,086
Buick Drlg., Inc. et al. No. 1 Wurm	NE NE SW 12-23-16W	2,029	3,638	4,156	4,186
*Coppinger Drlg., Inc. et al. No. 1 Martin	SW SW NE 12-23-17W	2,078	3,714	.....	4,380
*Bay Petroleum Corp. No. 1 Carpenter	NW SE NE 25-23-17W	2,077	3,763	4,462	4,500
J. J. Lynn et al. No. 1 W. R. McClaren et al.	SE SE NE 27-23-18W	2,104	3,862	.....	4,496

* 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.

west, 2 oil, 3 gas, and 2 dry holes; and the **Sweeney**, 5 oil, 6 gas, and 3 dry.

In addition to the new **Sweeney West** pool, the **Sweeney Southwest** and **Torrance** pools were combined with the **Sweeney** during 1954.

Of the 29 dry wildcat tests completed during 1954, only 6 specifically reported shows of oil or gas, although many drill-stem tests were taken. Data on the tops to the important marker zones encountered in drilling are given in Table 38, along with the locations and operating companies.

Locations of Pawnee County's dry wildcat tests and producing areas are shown on Figure 11. Oil production data are given in Table 56, and gas production in Table 57.

PHILLIPS COUNTY

(Map Fig. 6)

The 1954 production from 17 pools: oil 2,062,673 barrels. Wells drilled in 1954: oil 8, dry 6, total 14 including 4 dry wildcats. New pools discovered 2.

Developments during 1954.—Although total oil production from Phillips County was slightly less than last year, and two fewer wells were drilled, two oil pools were discovered.

The **Mont-Sol** Lansing-Kansas City pool was discovered by the Sohio Petroleum Company No. 1 Krause well in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 4 S., R. 19 W. An initial potential of 408 barrels of oil per day from depths of 3,255 to 3,265 feet was given the discovery well. Offset drilling and development resulted in four additional oil wells and one dry hole being completed in the pool during the year.

TABLE 39.—Dry wildcat tests drilled in Phillips County during 1954

Company and farm	Location	Depth to top of Topeka, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*J. J. Lynn No. 1 Marklein	NE SW NW 33-3-19W	2,090	3,308	3,622	3,672
Russell Cobb, Jr. No. 1 Jacobs	NW SE NW 16-3-20W	3,331	3,576	3,875	3,900
Natl. Coop. Ref. Assn. No. 1 Becker	SW SW SW 29-4-20W	3,040	3,277	3,575	3,660
*D. G. Hansen & C-G Drlg. Co. No. 1 Fox	SE SE SE 17-5-19W	3,124	3,370	3,643	3,695

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

The Wolf Creek pool was named by the Kansas Nomenclature Committee when the discovery well, the Jones, Shelburne and Farmer, Inc. No. 1 Bales, was assigned an initial potential of 20 barrels of oil per day. Production is from the Lansing-Kansas City group of rocks from 3,212 to 3,214 feet depth. Additional pertinent data on these discovery wells are given in Table 6.

The other two oil wells drilled in the county during the year were completed by the Cities Service Oil Company on their Templeton lease in sec. 14, T. 5 S., R. 20 W., in the Hansen pool.

The depths to the top of the Topeka limestone, Lansing-Kansas City group, and the Arbuckle dolomite in the four dry wildcats drilled during the year are compiled in Table 39. The locations of dry wildcat tests, their total depths, and the locations of the various Phillips County producing areas are shown in Figure 6.

Statistical data on the oil production from the Phillips County oil pools are given in Table 56.

PRATT COUNTY

(Map Fig. 15)

The 1954 production from 34 pools: oil 2,882,565 barrels including production from 1 secondary recovery project, gas 1,182,714 thousand cubic feet. Wells drilled in 1954: oil 47, gas 1, dry 45, salt-water disposal 3, total 96 including 20 dry wildcats. New pools discovered 8.

Developments during 1954.—Oil production showed a slight gain over the total figure reported in 1953. Gas production de-

clined slightly, and 96 wells were drilled in 1954 compared to 131 in 1953; however 8 new pools were discovered. The discovery well of each of these was rated at more than 100 barrels of oil per day.

TABLE 40.—*Dry wildcat tests drilled in Pratt County during 1954*

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Viola, feet	Depth to top of Simpson, feet	Depth to top of Arbuckle, feet	Total depth, feet
Deep Rock Oil Corp. No. 1 Slater	SW SW NE 1-26-11W	3,544	4,219	4,314	4,396	4,448
Natural Gas & Oil Corp. No. 1 Shriver	SW SE NW 16-26-11W	3,617	4,245	4,336	4,409	4,463
Trans-Era Petro., Inc. et al. No. 1 Martin	SW SW NW 36-26-11W	3,602	4,297	4,385	4,468	4,518
*Natural Gas & Oil Corp. No. 1 Webb	SE NW NW 18-26-12W	3,726	4,200	4,306	4,415	4,462
Cooperative Refinery Assn. No. 1 Montgomery	NW NW NW 1-27-12W	3,679	4,332	4,430	4,515	4,560
A. G. Hill No. 1 Watson	SW SW SE 7-27-13W	3,861	4,374	4,409	4,510	4,530
Lario Oil & Gas Co. No. 1 Moon	SW NE SW 13-27-14W	3,893	4,373	4,522	4,613	4,655
Musgrove Petro. Corp. No. 1 Tatlock	NE NE NE 6-27-15W	3,985	4,537	4,708	4,799	4,843
*Rooney-Siegfried et al. No. 1 Ward	NE NE NW 12-27-15W	3,959	4,548	4,591	4,678	4,730
Sinclair Oil & Gas Co. No. 1 Frank Smith	SE NE SW 17-28-13W	3,858	4,382	4,456	4,569	4,600
Lario Oil & Gas Co. No. 1 Patterson	SE NW SE 4-28-14W	3,973	4,543	4,610	4,710	4,736
Lario Oil & Gas Co. et al. No. 1 Woolfolk	SW SW SE 15-28-14W	3,940	4,461	4,506	4,590	4,640
*R. W. Rine Drlg. Co. No. 1 Baker	NE NE NW 23-28-14W	3,914	4,440	4,504	4,607	4,640
*Musgrove Petro. Corp. No. 1 Thompson	NE NE NW 27-28-14W	3,929	4,444	4,549	4,624	4,681
Cooperative Refinery Assn. No. 1 Spines	NE NE NW 28-28-14W	3,961	4,470	4,569	4,639	4,677
Lario Oil & Gas Co. No. 1 "B" Eubank Estate	NE SE NW 30-28-14W	4,046	4,546	4,668	4,762	4,797
Musgrove Petro. Corp. No. 1 Schrepel	SW SW SW 20-29-14W	4,077	4,595	4,658	4,735	4,765
Lario Oil & Gas Co. No. 1 Schrepel	NW NW SE 16-29-14W	4,032	4,522	4,591	4,690	4,716
Rupp-Ferguson Oil Co. No. 1 Brown	SW SW NE 3-29-15W	4,046	4,586	4,702	4,808	4,838
Skelly Oil Co. No. 1 C. D. Hogard	NE SE NW 15-29-15W	4,018	4,614	4,698	4,809	4,865

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

The new pools are the **Cairo North**, in the Viola limestone; the **Chance North**, **Chance Northwest**, **Coats North**, **Earl**, and **Fitzsimmons South**, in Simpson rocks; and the **Lion Northeast** and **Tatlock**, which are Lansing-Kansas City pools. In the **Cairo North** pool 2 oil wells and 1 dry hole were completed during the year. Among the other new pools, **Chance North** had 2 oil wells; **Chance Northwest**, 4 oil wells and 1 dry hole; **Coats North**, 2 oil wells and 2 dry holes; **Earl**, 4 oil wells; **Fitzsimmons South**, 2 oil wells; **Lion Northeast**, 1 oil well and 2 dry holes; and **Tatlock**, only the discovery well.

Five new producing zones in the old fields were named in Pratt County during 1954. These are the Lansing-Kansas City in the **Chance East** field, the Marmaton in the **Coats North**, the Mississippian in the **Iuka-Carmi**, the Viola limestone in the **Frishie Northeast**, and the Simpson in the **Iuka-Carmi Northwest**. Additional data on these developments are given in Table 7.

The **Iuka-Carmi** field had the largest number of extension oil wells drilled during the year: 15 oil, 7 dry, and 7 oil resulting from the reworking of old holes.

Wildcat drilling was wide spread throughout the county, and many exceptionally good shows of oil or gas were reported. Data on the depths to the marker zones are given in Table 40.

Additional data on the discovery wells of Pratt County's new oil pools are given in Table 6. The locations of the new pools, old producing areas, and the dry wildcat tests are shown on Figure 15. Oil production by fields is given in Table 56, and Table 57 contains similar data for gas production.

RAWLINS COUNTY

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

Exploration during 1954.—Three attempts were made in 1954 to find commercial quantities of oil in Rawlins County. One of the exploratory tests is located about 7 miles north of McDonald on the Kacirek farm in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 2 S., R. 36 W. The test was drilled by the Ashland Oil and Refining Company in August to a total depth of 5,072 feet. Marker beds encountered in drilling from an elevation of 3,367 feet above sea level are: Dakota formation, 2,255; Stone Corral dolomite, 3,245;

Topeka limestone, 4,225; Lansing group, 4,372; Marmaton group, 4,601, "Cherokee" rocks, 4,835; Mississippian rocks, 4,997; and Arbuckle dolomite, 5,007 feet depth. Shows of oil were reported from the Topeka limestone and the Lansing group. Further tests were unsuccessful, and the hole was abandoned and reported as dry.

Another exploratory test was drilled earlier in the year by the B-R-G Drilling Company on the Hamilton lease in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 5 S., R. 31 W. to a total depth of 4,655 feet. Drilling from an elevation of 2,937 feet above sea level, the test found the Heebner shale at 3,904 feet, the Lansing group at 3,953 feet, Mississippian rocks at 4,504 feet, and the Arbuckle dolomite (?) at 4,615 feet depth. No shows of oil were reported.

A wildcat test for which no tops were reported was listed on the scout reports as being drilled by the Columbian Fuel Corporation on the Sloko property in the Cen. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 1 S., R. 31 W. An elevation of 2,930 feet above sea level and a total depth of 2,520 feet were reported.

RENO COUNTY

(Map Fig. 7)

The 1954 production from 18 pools: oil 1,403,319 barrels including production from secondary recovery projects, gas 364,866 thousand cubic feet. Wells drilled in 1954: oil 16, dry 21, total 37 including 15 dry wildcats. New pools discovered 1.

Developments during 1954.—Although two fewer wells were attempted in Reno County during 1954 than in 1953, total oil production was up about 7 percent. Gas production decreased almost 20 percent.

Exploration resulted in the naming of one new pool in Reno County during 1954. The **Grove** pool was opened by the Schermerhorn Oil Corporation No. 1 Morris well, a 23-barrels of oil per day well in the N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 25 S., R. 10 W. The producing zone, the Mississippian, is from 3,884 to 3,895 feet depth. An offset well to the north in sec. 1 was unsuccessful.

Four extension oil wells and 1 dry hole were completed in the **Buhler** pool, 1 oil well in the **Burrton** pool, 1 oil well in the **Nicklaus** pool, 1 oil well and 2 dry holes in the **Sankey Southwest** pool, and 8 oil wells in the **Sterling** pool.

Of the 37 wells attempted, 15 were dry wildcats. Of these exploratory holes, only 2 specifically reported shows of oil or gas, but in most considerable drill-stem testing took place during the drilling. Tops to marker beds in these tests are given in Table 41.

The new pool is described in Table 6. The locations of the county's producing pools and dry wildcat tests are shown on Figure 7. Oil production is reported in Table 56, and similar information on gas production is given in Table 57. Data on secondary recovery projects are given in Table 1.

TABLE 41.—Dry wildcat tests drilled in Reno County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Globe Oil & Refg. Co. No. 1 "B" Marilyn Drake	SE NW NW 7-22-9W	3,103	3,522**	3,684	3,721
*Gramehart-Miller Oil Co. No. 1 Teter	SW SE NE 11-23-5W	2,784	3,453	3,948§	3,956
*Brooks Pierce et al. No. 1 C. F. Swanson	SE SE SE 21-23-5W	2,718	3,390	3,956	3,975
Iron Drlg. Co. No. 1 C. C. Ramsey	SW SW SW 16-23-8W	3,200	3,698	4,103	4,140
*Midstates Oil Corp. et al. No. 1 Oehlert	NW SE SW 17-25-4W	2,762	3,515	4,068	4,100
Rupp-Ferguson Oil Co. No. 1 Rogers	NE NE NW 25-25-6W	2,799	3,487	4,003	4,038
Schermerhorn Oil Corp. No. 1 Brownlee	SE SE SW 6-25-10W	3,445	3,895	4,236	4,270
Schermerhorn Oil Corp. No. 1 David Nies	SE NW NW 20-25-10W	3,504	3,953	4,334	4,390
*Trans-Era Petro., Inc. et al. No. 1 Bender	SW SW SE 13-26-5W	2,846	3,592	4,137	4,158
*Trans-Era Petro., Inc. et al. No. 1 Knoblauch	SE SE SE 26-26-5W	2,818	3,578	4,104	4,126
*Stearns Petro., Inc. No. 1 Bergkamp	SE SE SE 33-26-5W	2,977	3,713	4,258	4,270
*Greenland Drlg. Co. et al. No. 1 Collinwood	NW NW NE 8-26-7W	3,242	3,851	4,323	4,341
*Harms-Burt et al. No. 1 Jones	NE NE SE 26-26-9W	3,360	3,944	4,384	4,433
*Rupp-Ferguson Oil Co. No. 1 Hickman	SW SW SW 5-26-10W	3,510	3,973	4,202**	4,379

* 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.

RICE COUNTY

(Map Fig. 7)

The 1954 production from 56 pools: oil 7,578,134 barrels including production from secondary recovery projects, gas 509,802 thousand cubic feet. Wells drilled in 1954: oil 108, gas 2, dry 48, salt-water disposal 3, total 161 including 4 dry wildcats. New pools discovered 3.

Developments during 1954.—Although oil production from Rice County decreased by 10 percent from 1953 and the total number of new wells drilled decreased by 15 percent, the county maintained its place as the fifth largest producing county in the State.

Three new oil pools were discovered in Rice County during 1954. The **Bushton** pool was named when the Lario Oil and Gas Company found Arbuckle production on the Shonyo lease in sec. 11, T. 18 S., R. 10 W. The Pennsylvanian basal conglomerate is the producing zone in the new **Crawford Southeast** pool, discovered by The Derby Oil Company on the Wolf lease in sec. 20, T. 18 S., R. 6 W. In the new **Raymond East** pool, discovered by Petroleum, Inc. in sec. 25, T. 20 S., R. 10 W., the Simpson group was named as the producing zone. Data on the initial potentials, thicknesses of producing zones, and spot locations for the discovery wells of these new pools are given in Table 6.

The Simpson rocks from 3,280 to 3,290 feet depth were named as a new producing zone in an old producing field, the **Frederick**, when The Lotus Oil Company No. 1 Schroeder well in sec. 10,

TABLE 42.—Dry wildcat tests drilled in Rice County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Penn. basal congl., feet	Depth to top of Mississippian, feet	Total depth, feet
*Heathman-Seeligson Drlg. Co. No. 1 Kasperek	NW SE NW 13-18-6W	2,804	3,290	3,422	3,440
*Virginia Drlg. Co., Inc. et al. No. 1 Froning	SE NE SW 15-18-8W	2,908	3,290	3,399**	3,424
*Amerada Petro. Corp. No. 1 Helen Kottmann	NE NE NW 23-20-9W	2,887	3,220	3,384†	3,395
*Bennett & Gould No. 1 Johnson	NE NE NW 19-21-6W	.....	3,450	3,509	3,530

* 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 Arbuckle, feet.

T. 18 S., R. 9 W. was given an initial potential of 25 barrels of oil per day. Additional data on this development are given in Table 7.

Routine drilling added 15 oil wells, 1 salt-water disposal well, and 12 dry holes to the Rice County part of the **Chase-Silica** pool. In the **Crawford** pool, 6 oil wells and 2 dry holes were completed; in the **Geneseo-Edwards** pool, 30 new oil wells, 5 dry holes, and 1 salt-water disposal well were added and 7 old wells were worked over and made into producing wells. The **Welch-Bornholdt** pool added 43 new oil wells, 1 salt-water disposal well, and 3 dry holes during the year.

Of the four dry wildcat tests, only the Amerada Petroleum Corporation No. 1 Helen Kottmann test in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 20 S., R. 9 W. reported penetrating the Arbuckle dolomite. Pertinent data on the tops logged in drilling these tests are given in Table 42.

New developments in Rice County's secondary recovery activities are given in Table 1.

Oil production statistics are given in Table 56, gas production in Table 57. Locations of Rice County producing areas and dry wildcat tests are shown on Figure 7.

ROOKS COUNTY

(Map Fig. 6)

The 1954 production from 92 pools: oil 7,190,986 barrels, gas none. Wells drilled in 1954: oil 123, dry 117, salt-water disposal 4, total 244 including 11 dry wildcats. New pools discovered 3, combined 1. Secondary recovery projects 1.

Developments during 1954.—Oil production from Rooks County increased about 175,000 barrels, but the number of wells drilled decreased. Three new oil pools were named during the year.

The **Allphin Northwest** pool was discovered by the Heathman-Seeligson Drilling Company No. 1 H. L. Wait well in sec. 32, T. 10 S., R. 20 W. The Arbuckle dolomite was named the producing zone from depths of 3,736 to 3,742 feet. In the new **Dopita Southeast** pool, discovered by the Murfin Drilling Company on the Fike lease in sec. 5, T. 9 S., R. 17 W., the producing zone is the Lansing-Kansas City group of rocks from depths of 3,335

to 3,340 feet. The **Nutsch** pool was discovered by the Francis Oil and Gas, Inc. No. 1 Nutsch well in sec. 3, T. 10 S., R. 20 W. The Arbuckle dolomite, from 3,840 to 3,848 feet depth, is the producing zone. Additional pertinent data on the discovery wells of these new pools are given in Table 6.

During 1954, in four old pools in Rooks County the Lansing-Kansas City group of rocks was named as the new producing zone. These pools are the **Dorr South**, **Laura**, **Northampton**, and **Northampton Southeast**. Information on the locations of the discovery wells, the initial potentials, and the thicknesses of the new producing zones are given in Table 7.

During the year, the **White** pool of Graham County was combined with the **Laura** pool, which extends into Graham County from Rooks County.

TABLE 43.—Dry wildcat tests drilled in Rooks County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Morrison Drlg. Co., Inc. No. 1 N. H. Home	NW SE SW 14-6-18W	3,202	3,558	3,575
Isern Drlg. Co. et al. No. 1 C. F. Jones	NE NE NW 27-6-19W	3,296	3,588**	3,618
*Jones, Shelburne & Farmer, Inc. No. 1 Nichols	NE NW SW 19-6-20W	3,498	3,806	3,896
*Jones, Shelburne & Farmer, Inc. No. 1 Attaberry	SE SE NW 22-6-20W	3,434	3,740	3,772
Murfin Drlg. Co. et al. No. 1 R. O. Brown	NW NW SW 5-7-18W	3,142	3,459	3,510
Alkay Oil Co. No. 1 Houston	NE NE NW 12-8-17W	3,058	3,410	3,436
*Powell Drlg. Co. No. 1 Baxa	NW NW SE 23-9-17W	3,272	3,613	3,625
Lohmann-Johnson Drlg. Co., Inc. No. 1 Ida Westhusin	SW NW NW 27-9-17W	3,265	3,646	3,690
J. F. Darby Oil Co. No. 1 Van Dyke	NE NW SE 14-9-18W	3,328	3,628	3,647
*The Veeder Supply & Development Co. No. 1 Garvert	NE NE SE 26-9-18W	3,349	3,646	3,694
*Jones, Shelburne & Farmer, Inc. No. 1 Baldwin	NE NE NE 11-9-20W	3,358	3,655	3,716

* 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 granite, feet.

Routine drilling in the older Rooks County pools added 6 oil wells, 5 dry holes, and 1 salt-water disposal well to the **Dopita East** pool; 11 oil wells and 4 dry holes to the **Dopita**; 12 oil wells and 4 dry holes to the **Elm Creek**; 9 oil wells and 4 dry holes to the **Jelinek**; 6 oil wells and 1 dry hole to the **Lone Star**; 7 oil wells and 2 dry holes to the **Lynd**; and 14 oil wells, 6 dry holes, 2 salt-water disposal wells, and 1 old well worked over into a producing oil well in the **Marcotte**.

Although wildcatting in Rooks County declined somewhat from the activity during 1953, several tests were made. Of the 11 dry wildcat tests, only 1, the Isern Drilling Company et al. No. 1 Jones in sec. 27, T. 6 S., R. 19 W., reported penetrating Pre-Cambrian rocks. Marker zones logged in drilling the dry wildcat tests are given in Table 43.

The locations of the dry wildcat tests, their total depths, and the locations of the various Rooks County producing pools are shown on Figure 6. Oil production statistics are given in Table 56. Data on the one secondary recovery project are given in Table 1.

RUSH COUNTY

(Map Fig. 8)

The 1954 production from 11 pools: oil 298,932 barrels, gas 1,668,333 thousand cubic feet (estimated). Wells drilled in 1954: oil 12, gas 2, dry 26, total 40 including 14 dry wildcats. New pools discovered 3.

Developments during 1954.—Both oil and gas production from the Rush County fields showed an appreciable increase over last year, but the total number of new wells declined to 40 from 47 in 1953. Three new pools were discovered and 14 dry wildcat wells were drilled during the year.

Two of the new pools are oil pools, and the third, **Ryan East**, is a shut-in gas pool. The Imperial Drilling Company, Inc. No. 1 Krug well discovered the **Rush Center Northeast** pool in July in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 18 S., R. 18 W. The new production comes from depths of 3,783 to 3,788 feet in the Arbuckle dolomite. An initial potential of 523 barrels of oil per day was assigned the discovery well. The **Webs** pool was discovered late in the year by the Republic Natural Gas Company No. 1 Eva Webs "C" well

in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T. 19 S., R. 20 W. An initial potential of 3,000 barrels of oil per day was assigned the discovery well in a zone of sand in basal Pennsylvanian rocks from depths of 4,202 to 4,212 feet. Arbuckle gas production was discovered in the Tatlock Oil Company No. 1 Peterson well in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 19 S., R. 16 W. Production from the **Ryan East** pool is from depths of 3,648 to 3,651 feet. Additional data on these new discoveries are given in Table 6 .

Fourteen widely scattered dry wildcat tests were drilled in Rush County during the year. Pertinent data regarding these tests are given in Table 44. In most of the tests the Arbuckle

TABLE 44.—Dry wildcat tests drilled in Rush County during 1954

Company and farm	Location	Depth to top of anhydrite, feet	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Nat'l. Assoc. Petro. Co. No. 1 "A" Shade	SE SE NW 5-16-16W	1,004	3,187	3,496	3,657
Great Lakes Carbon Corp. No. 1 Fitzpatrick	NW NW SE 2-16-17W	1,080	3,255	3,559	3,589
Loffland Bros. No. 1 Sherwood	SW SW SE 25-16-17W	1,110	3,282	3,552	3,602
Fleming & Woodman Drlg. Co. et al. No. 1 Holzmeister	NE NE NW 27-16-17W	1,170	3,334	3,600	3,650
*Bay Petro. Corp. et al. No. 1 Dechant	SE SE SE 20-16-18W	.....	3,274	3,573**	3,576
Lee Phillips Oil Co. No. 1 Herrman	NW NW SW 23-16-18W	1,175	3,313	3,621**	3,642
*D. R. Lauck Oil Co., Inc. No. 1 Holopirek	SE SE SE 20-18-17W	1,095	3,375	3,744	3,796
Lion Oil Co. No. 1 Snyder	NW NW SE 25-18-20W	1,310	3,574	4,101	4,131
Sohio Petro. Co. et al. No. 1 Webs	NE NE SE 29-18-20W	1,379	3,686	4,608	4,661
*Coppinger Drlg., Inc. No. 1 U. Smith	SW SW SE 18-19-18W	.....	3,633	4,157	4,200
*Harms-Burt No. 1 Schroeter	SE SE NE 25-19-18W	1,348	3,571	3,939	3,964
*Imperial Drlg. Co., Inc. No. 1 Brannon	NW NW SE 26-19-18W	.....	3,601	4,040	4,090
*Virginia Drlg. Co., Inc. No. 1 L. E. Murphy	SE SE SE 12-19-20W	.....	3,716	4,448†	4,475
Aurora Gasoline Co. et al. No. 1 Anderson	SE SE NE 26-19-20W	1,380	3,761	4,502	4,542

* 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 granite, feet.

† Depth to the top of the Viola, feet.

dolomite was the objective; however, in some parts of the county it is absent and the basal sands were tested. In the western part of the county the Viola limestone and Simpson group are present above the Arbuckle dolomite.

Routine drilling in the older fields in the county added 5 oil wells, 4 dry holes, and 1 old well worked over into an oil well to the **Otis-Albert** field; 1 gas well and 1 dry hole to the **Reichel** field; 3 oil wells and 5 dry holes to the **Rush Center** field; and 1 oil well to the **Ryan** field.

Oil production from the various Rush County pools is given in Table 56 and from the gas pools in Table 57. The Rush County pools and dry wildcat tests are shown on Figure 8.

RUSSELL COUNTY

(Map Fig. 9)

The 1954 production from 33 pools: oil 11,195,338 barrels including production from secondary recovery projects, gas 45,876 thousand cubic feet. Wells drilled in 1954: oil 144, gas 2, dry 67, salt-water disposal 7, total 220 including 6 dry wildcats. New pools discovered 1, combined 1, revived 1.

Developments during 1954.—Although drilling activity and total oil production dropped off from the previous year, one new pool was discovered, one pool was revived, and Russell County remained the State's second largest oil producer.

The new pool is the **Eulert West** discovered by the Carter Oil Company No. 2 O. C. Eulert well in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 11 S., R. 15 W. Production of 64 barrels of oil per day was assigned from Lansing-Kansas City rocks from 2,948 to 2,954 feet depth. The **Steinert** pool was revived by the Lohmann-Johnson Drilling Company, Inc. well on the Steinert lease in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 15 S., R. 15 W. An initial potential of 10 barrels of oil per day was assigned from the Lansing-Kansas City group from 3,141 to 3,144 feet depth.

During the year enough new wells were drilled between the **Atherton** and **Russell** pools to warrant their combination. The field is now known as the **Russell** field.

The Lansing-Kansas City group and the Arbuckle dolomite were named as new producing zones in the **Heim** field during 1954. In the Shelley-Miller Drilling, Inc. No. 1 Herbel well in

sec. 22, T. 14 S., R. 12 W., the Lansing-Kansas City rocks were rated at 78 barrels of oil per day. The Lewis Mai No. 1 Miller well in the same section was rated at 10 barrels of oil per day from the Arbuckle dolomite.

Routine drilling in old fields added 16 oil wells and 9 dry holes to the **Gorham** field; 77 oil wells, 22 dry holes, 1 gas well, and 2 salt-water disposal wells to the **Hall-Gurney** field; 15 oil wells, 5 dry holes, and 1 gas well to the **Russell** field; and 24 oil wells, 9 dry holes, and 4 salt-water disposal wells to the **Trapp** field.

Twenty-nine old wells were worked over during the year. Of these 22 were oil wells, 3 were declared dry, and 4 were converted into salt-water disposal wells.

The decline in drilling activity in the county during the year is reflected in only 6 dry wildcats completed. Data on the pertinent marker beds encountered in the drilling of these tests are given in Table 45.

The new and revived pools are described in Table 6. Locations of producing areas and dry wildcat tests are shown on Figure 9. Oil production by pools is given in Table 56, and miscellaneous gas production is reported in Table 57. Data on the secondary recovery projects in the county are given in Table 1.

TABLE 45.—Dry wildcat tests drilled in Russell County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Arbuckle, feet	Total depth, feet
Nadel & Gussman No. 1 Elasser	SW SW SW 14-12-15W	2,856	3,198	3,230
*The Veeder Supply & Development Co. No. 1 Machin	NW NW NW 9-13-14W	2,963	3,246	3,250
*H. T. Manning No. 1 Michaelis	NW NE SE 17-13-15W	3,034	3,302	3,317
*Shelley-Miller Drlg., Inc. No. 1 Hoch	SW SW SE 13-15-11W	2,955	.....	3,325
The Texas Company No. 1 L. E. Mai	SE SW NW 17-15-14W	3,081	3,337	3,360
Berry & Fick No. 1 Witt	NW NW NW 7-15-15W	3,140	3,438	3,467

* 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 Fig. 7)

The 1954 production from 11 pools: oil 1,429,923 barrels. Wells drilled in 1954: oil 16, dry 16, total 32 including 6 dry wildcats.

Developments during 1954.—The total production from Saline County showed a decline of about 87,000 barrels, and drilling activity decreased from 102 wells in 1953 to only 32 in 1954.

Two oil wells and 1 dry hole were completed in the **Gypsum Creek** field, 1 dry hole in the **Bachofer**, 1 oil and 2 dry in the **Hunter**, 1 dry in the **Hunter North**, 1 dry in the **Olsson**, 2 oil and 2 dry in the **Salemsborg**, 2 oil and 1 dry in the **Salina**, 1 dry in the **Swenson**, and 9 oil wells in the **Smolan**.

Arbuckle dolomite was penetrated in four of the six dry wildcat tests in the county during 1954. The Donald T. Ingling No. 1 Weisgerber test, sec. 2, T. 16 S., R. 1 W., and the Musgrove Petroleum Corporation No. 1 Everhart test, sec. 3, T. 16 S., R. 1 W., were stopped when the Mississippian rocks were penetrated. None of the dry wildcat tests specifically reported shows of oil. Additional data on the dry wildcat tests are given in Table 46.

Oil production by pools is given in Table 56. Locations of oil pools and dry wildcat tests are shown on Figure 7.

TABLE 46.—Dry wildcat tests drilled in Saline County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
*Berry & Fick et al. No. 1 Sailors	NE NW SW 14-14-2W	1,958	2,608	3,380	3,400
*C. U. Bay et al. No. 1 R. B. Johnson	NE NE SE 11-14-4W	2,281	2,965	3,789	3,805
*Doley Oil Co. No. 1 Schrader	SW SW NE 7-15-4W	2,390	3,055	3,816	3,836
*Donald T. Ingling No. 1 Weisgerber	SE NE SE 2-16-1W	2,006	2,651	.....	2,671
*Musgrove Petro. Corp. No. 1 Everhart	SW SW SE 3-16-1W	1,963	2,614	.....	2,680
*S. B. Smith, Jr. No. 1 Blomberg	SE SE NW 22-16-4W	2,390	3,040	3,737	3,767

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

SCOTT COUNTY

(Map Pl. 2)

The 1954 production from 3 pools: oil 48,208 barrels, gas none reported. Wells drilled in 1954: oil 1. New pools discovered 1.

Developments during 1954.—The one well completed in Scott County during 1954 is the discovery well of the **Grigston** pool. The Kansas Nomenclature Committee designated the Arbuckle dolomite from depths of 5,050 to 5,054 feet depth as the producing zone. A sample log or electric log of the well was not available. According to scout information, drilling from an elevation of 2,942 feet above sea level, the following tops were logged: Ft. Riley limestone, 2,925; Heebner shale, 3,901; Lansing group, 3,940; base of the Kansas City group, 4,308; Marmaton group, 4,340; Mississippian rocks, 4,555; Viola limestone, 4,968; and Arbuckle dolomite, 5,043 feet depth. The total depth is 5,078 feet. Additional data on the new pool are given in Table 6.

Oil production statistics for Scott County are given in Table 56. The inactive gas area of the **Keystone** pool is described in Table 57. Part of Scott County is shown on Plate 2.

SEDGWICK COUNTY

(Map Fig. 13)

The 1954 production from 32 pools: oil 1,077,915 barrels including production from secondary recovery projects, gas 429,957 thousand cubic feet. Wells drilled in 1954: oil 29, dry 42, salt-water disposal 2, total 73 including 8 dry wildcats. New pools discovered 1, combined 1.

Developments during 1954.—Oil production from Sedgwick County was slightly more than in 1953; gas production declined appreciably. The increase to 73 wells drilled in 1954 was due to the new discovery, the **Gladys** pool.

The discovery well of the **Gladys** pool is in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 28 S., R. 1 E., about a mile from the southern edge of the **Robbins** field. The Beardmore Drilling Company completed the 123 barrels of oil per day well in their first test on the Tyson lease in October. Production is from Mississippian rocks, which in the discovery well are from 3,176 to 3,185 feet depth. The good recovery from the discovery well encouraged the rapid development of the field.

During the year, the **Kuske North** pool was combined with the **Kuske** pool, in effect reviving the pool which was discovered in 1929 and abandoned in 1946.

Routine drilling added 1 oil well and 1 dry hole in the **East-borough North** pool; 2 oil wells and 2 dry holes in the **Greenwich** pool; 16 oil wells, 11 dry holes, and 1 salt-water disposal well in the **Kuske** pool; and 5 oil wells and 2 dry holes in the **Minneha** pool.

Depths to tops of significant marker beds encountered in drilling the 8 dry wildcats are listed in Table 47. Of these, 3 reported shows of oil or gas, and all but 2 penetrated Arbuckle dolomite.

Additional data on the discovery well of the **Gladys** pool are given in Table 6. Data on secondary recovery projects in the county are given in Table 1. Locations of oil and gas pools, new dry wildcat tests, and secondary recovery projects are shown on Figure 13. Oil production is given in Table 56, and gas in Table 57.

TABLE 47.—Dry wildcat tests drilled in Sedgwick County during 1954

Company and farm	Location	Depth to top of K.C., feet	Depth to top of Mississippian, feet	Depth to top of Arbuckle, feet	Total depth, feet
Barnett Drig., Inc. et al. No. 1 Pelz	SE SE NW 32-28-2W	3,040	3,656	4,207	4,245
Rupp-Ferguson Oil Co. No. 1 Pauly	SE SE SE 26-29-3W	3,055	3,671	4,233	4,265
The Texas Co. No. 1 Casner	NW NE NE 33-29-4W	3,310	3,935	4,356**	4,383
*Champlin Refg. Co. No. 1 Goering	NE NE SE 3-25-1E	2,571	3,055	3,630	3,650
*J. P. Gaty et al. No. 1 Dotts	NE NW NE 33-27-2E	2,472	2,940	3,336	3,340
J. P. Gaty No. 2 Bierman	N½ SE NE 9-28-2E	2,494	2,946	3,312	3,318
*J. P. Gaty No. 1 Bierman	NW SW NW 10-28-2E	2,515	2,982	3,315**	3,330
*J. P. Gaty No. 1 Heidrick	E½ NE SW 29-29-2E	2,608	3,115	3,561	3,564

* 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.

SEWARD COUNTY

(Map Pl. 2)

The 1954 production from 13 pools: oil 46,068 barrels, gas 26,095,598 thousand cubic feet. Wells drilled in 1954: oil 1, gas 44, dry 9, total 54 including 4 dry wildcats. New pools discovered 3.

Developments during 1954.—Oil and gas production was less during 1954 than during 1953; however 54 wells were drilled during 1954 as compared to 33 during 1953. Three new gas pools were discovered.

The **Blue Bell Northwest**, a Mississippian gas pool, was discovered in March by the Lansekan Company, Inc. No. 1 Good "B" well in the Cen. NW¼ NW¼ sec. 20, T. 34 S., R. 31 W. Production comes from Chesteran rocks from depths of 5,947 to 5,965 feet. The discovery well was rated at 1.7 million cubic feet of gas per day. Before the well was plugged back to the pay zone, the hole was drilled through the Ste. Genevieve limestone, logged at 6,226 feet, and the St. Louis limestone, logged at 6,395 feet depth. Total depth of the hole was 6,456 feet.

The **Holt** gas pool discovery during 1954 is especially significant because it indicates gas production from beneath the **Hugoton Gas Area**, which is limited by definition to gas production from the Chase group of rocks. The producing zone in the **Holt** pool was designated as the Topeka limestone, the top of which was logged at 3,820 feet depth in the discovery well. The best showing of gas was reported from depths of 4,180 to 4,200 feet, just below the Heebner shale. The discovery well of the new **Holt** pool was drilled by the Cities Service Oil Company on the Holt lease in the Cen. NW¼ NE¼ sec. 28, T. 32 S., R. 34 W. An

TABLE 48.—Dry wildcat tests drilled in Seward County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Morrowan, feet	Depth to top of Mississippian, feet	Total depth, feet
Vickers Exploration, Ltd. No. 1 Alexander	Cen. SW NE 14-33-32W	4,482	5,668	5,823	6,106
Mid-Continent Petro. Corp. No. 1 Price Davies	Cen. SE NE 23-34-32W	4,573	5,837	6,036	6,250
Armer Drig. Co., Inc. No. 1 Warden	Cen. NW 25-34-33W	4,500	5,840	5,996	6,146
Aladdin Petro. Corp. No. 1 Colvin	Cen. NE NW 15-35-31W	4,658	6,006	6,306	6,462

initial potential of 27.8 million cubic feet of gas per day was assigned the well. Before being plugged back the discovery well was drilled into Mississippian rocks; the top of the Ste. Genevieve limestone was logged at 6,268 feet depth.

The third new pool is the **Wide Awake**, discovered by the Panhandle Eastern Pipe Line Company in reworking an old hole in the Cen. N $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 4, T. 35 S., R. 34 W. The Toronto limestone from depths of 4,410 to 4,426 feet was named as the producing zone. An initial potential of almost 10 million cubic feet of gas per day was given the discovery well.

Routine development of the Chase group of rocks in the **Hugoton Gas Area** resulted in the completion of 42 additional gas wells and 2 dry holes. Three of the new gas wells were drilled deeper than the Chase group. These are the Northern Pump Company No. 1 Satterfield, sec. 13, T. 31 S., R. 32 W., which logged the Mississippian at 5,470 feet; the Northern Natural Gas Company No. 1 Collingwood, sec. 4, T. 32 S., R. 32 W., which logged the Marmaton at 4,984 feet; and the Northern Natural Gas Company No. 1 G. Jones, sec. 9, T. 32 S., R. 32 W., which logged the Mississippian at 5,649 feet depth.

A considerable number of drill-stem tests were taken on the four dry wildcat tests completed in the county during 1954. Data on the depths to the marker zones encountered during the drilling are given in Table 48.

Additional data on the three new gas pools are given in Table 6. New Seward County wells and dry wildcat tests are shown on Plate 2. Gas production by pools is given in Table 57, and oil production in Table 56. Historical data on the **Hugoton Gas Area** are given in the chapter on natural gas.

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 Geological Survey has records of 29 Shawnee County test wells drilled previous to 1954.

Exploration during 1954.—In April 1954 the Musgrove Petroleum Corporation No. 1 Heiland well, NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 10 S., R. 13 E., was abandoned at a total depth of 3,329

feet. The following tops were reported: Lansing limestone, 1,146; Mississippian limestone, 2,241; Kinderhookian rocks, 2,475; "Hunton" limestone, 2,731; Maquoketa shale, 3,024; Viola limestone, 3,100; Simpson, 3,198; St. Peter sandstone, 3,232; Arbuckle, 3,298; and Pre-Cambrian granite, 3,320 feet. The location of the well is shown on Plate 1.

SHERIDAN COUNTY

(Map Fig. 4)

The 1954 production from 8 pools: oil 381,802 barrels. Wells drilled in 1954: oil 5, dry 11, total 16 including 6 dry wildcat tests.

Developments during 1954.—The wells in Sheridan County's oil-producing pools during 1954 maintained approximately the same amount of production reported for 1953. Twelve fewer attempts at finding new reserves were made in 1954 than in 1953.

The pools to which extension oil wells were added during the year are the **Wessel**, 1 oil well and 1 dry hole, and the **Wessel North**, 4 oil wells and 2 dry holes. One old well, the Westpan-Hydrocarbon Company No. 3 Wessel in sec. 27, T. 6 S., R. 29 W., completed as a dry hole in 1953 in the Wessel pool, was reworked this year and recompleted as a 14 barrels of oil per day well.

Two of the dry wildcat tests in Sheridan County during 1954 were deep tests. In the Virginia Drilling Company No. 1 Gulick in sec. 4, T. 8 S., R. 26 W., the Viola limestone was reported at

TABLE 49.—Dry wildcat tests drilled in Sheridan County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K. C., feet	Depth to top of Mississippian, feet	Total depth, feet
Natl. Coop. Ref. Assn. No. 1 Teagarden	NE NW SE 10-7-26W	2,597	3,814	4,326	4,360
*Peel-Hardman Oil Producers No. 1 Vaughn	SE SE SW 2-7-29W	2,834	2,981	4,202**	4,218
*W. W. Sauvage No. 1 Boggs	NE NE NE 22-7-30W	2,912	3,999	4,542	4,600
Virginia Drilg. Co., Inc. No. 1 Gulick	NE NE SW 4-8-26W	2,567	3,778	4,365	4,613
*Jones, Shelburne & Farmer, Inc. No. 1 Fox	SE SE SW 25-8-26W	2,537	3,839	4,377	4,432
Cities Service Oil Co. No. 1 "B" James	NE NE NW 7-8-28W	2,778	3,937	4,486	4,688

* 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 base of the Kansas City, feet.

4,494 feet and the Arbuckle dolomite at 4,550 feet. In the Cities Service Oil Company No. 1 James B well in sec. 7, T. 8 S., R. 28 W. the Viola limestone was reported at 4,624 feet and the Arbuckle dolomite at 4,673 feet depth. Data on depths to the tops of other marker beds encountered in drilling the six dry wildcats are given in Table 49.

The locations of the producing areas and dry wildcat tests are shown on Figure 4. Oil production from the various Sheridan County pools is given in Table 56.

SMITH COUNTY

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

Exploration during 1954.—Two exploratory wells were drilled in 1954 in the hope of finding an oil pool. One of these tests was drilled on the Bates farm by the Bennett & Roberts Drilling Company in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 1 S., R. 15 W. From an elevation of 2,112 feet above sea level this test found the Heebner shale at 3,238, the Lansing group at 3,280, the Marmaton group at 3,535, Mississippian rocks at 3,860, the Viola limestone at 3,904, the Simpson group at 4,104, and the Arbuckle dolomite at 4,150 feet depth. A drill-stem test between the depths of 3,860 and 3,867 feet in the top layers of the Mississippian rocks recovered only water. The hole was abandoned at a total depth of 4,205 feet.

The second test was located on the Harbinger farm 2 miles north of Lebanon in the S $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 2 S., R. 11 W. Drilling from an elevation of 1,907 feet above sea level Charles Lasky found the Lansing group at 2,995, Mississippian rocks at 3,705, the "Hunton" limestone at 3,831, the Viola limestone at 4,010, the Simpson group at 4,168, and the Arbuckle dolomite at 4,202 feet depth. A drill-stem test from 3,705 to 3,720 feet depth recovered only water. The test was abandoned at 4,250 feet depth as a dry hole.

STAFFORD COUNTY

(Map Fig. 11)

The 1954 production from 149 pools: oil 7,148,225 barrels, gas 1,129,016 thousand cubic feet. Wells drilled in 1954: oil 109, gas 1,

dry 131, salt-water disposal 2, total 243 including 11 dry wildcats.
New pools discovered 15, abandoned 1.

Developments during 1954.—The number of wells drilled during 1954 was 243 compared with a total of 400 drilled in 1953. Gas production declined slightly, but oil production increased 4 percent and 15 new oil pools were named.

The new pools are the **Brenn, Centerview, Cephas North, Glen, Kennil, Kipp North, Macksville East, Mopac, Radke East, Rattlesnake Southeast, Saterlee, Seevers, Shepherd North, Sutton, and Widener**. The Lansing-Kansas City group was named as the producing strata in the **Brenn, Cephas North, Glen, Kipp North, Radke East, Rattlesnake Southeast, Seevers, and Sutton** pools. In the **Saterlee and Shepherd North**, the Pennsylvanian basal conglomerate is the producing zone. The **Viola** limestone is the producing zone in the **Macksville East and Mopac** pools, and the **Arbuckle dolomite** in the **Centerview, Kennil, and Wide-**

TABLE 50.—Dry wildcat tests drilled in Stafford County during 1954

Company and farm	Location	Depth to top of Lans.-K.C., feet	Depth to top of Penn. basal congl., feet	Depth to top of Arbuckle, feet	Total depth, feet
*Petroleum, Inc. No. 1 "C" Hamilton	SW SW NE 2-22-11W	3,132	3,444**	3,524	3,552
Natural Gas & Oil Corp. No. 1 Tuggle	SW SW NW 17-22-13W	3,438	3,726**	3,839	3,876
Natural Gas & Oil Corp. & Amerada No. 1 Carr	NE NW SE 19-22-14W	3,538	3,895**	4,021	4,051
*Iron Drlg. Co. No. 1 D. B. McMillan	NE NE NE 31-22-14W	3,550	3,908	4,054	4,100
Heathman-Seeligson Drlg. Co. No. 1 Prescott	NE NE SW 18-23-14W	3,613	3,938	4,075	4,125
Lee Phillips Oil Co. No. 1 Hohner	SW SW SW 31-23-14W	3,674	4,023	4,123	4,160
*Producers Pipe & Supply Co. No. 1 Brown	SE SE NE 35-23-14W	3,618	3,960	4,130	4,155
Natural Gas & Oil Corp. et al. No. 1 Suiter	SE NW SE 7-24-14W	3,684	4,037	4,235	4,265
*Glickman Oil Co. No. 1 McCune	SE SE NE 4-25-12W	3,557	3,900	4,146	4,170
Natl. Coop. Ref. Assn. No. 1 Jenkins	NE NE NE 15-25-12W	3,548	3,924	4,176	4,225
*Hilton Drlg. Co., Inc. No. 1 Wilson	NE NW SE 34-25-13W	3,711	4,100	4,336	4,390

* 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.

ner pools. Initial potentials assigned these discovery wells ranged from 14 to 412 barrels of oil per day. The discovery well of the **Kennil** pool, the Welch & Olsson Oil Company No. 1 Green in sec. 4, T. 23 S., R. 13 W., was carried on the scout reports as a dry hole. No production was reported from the lease. Additional data on the 15 new pools are given in Table 6.

Five old fields added new producing zones and one new pool added an additional producing zone during 1954. The new producing zones are the Lansing-Kansas City group in the **Hazel West**, **Newell**, and **Oscar South** fields, the Simpson group in the **Kowalsky Southwest** field, and the Viola limestone in the **Rose Valley** field. The **Shepherd North**, discovered in 1954, added the Lansing-Kansas City as a producing zone. Additional data on these developments are given in Table 7.

In the continued development of Stafford County's oil fields, 5 oil wells and 1 dry hole were completed in the **Chase-Silica** field, 18 oil wells and 5 dry holes in the **Gates** field, 6 oil wells and 2 dry holes in the **Mueller** field, 5 oil wells in the **North Star** field, and 5 oil wells and 3 dry holes in the **Pundsack** field. In the newly discovered **Widener** pool, 7 oil wells and 2 dry holes were completed during 1954.

The **Hart**, an Arbuckle dolomite pool discovered in 1949, was abandoned this year; cumulative production was 14,204 barrels of oil.

Production from six Stafford County fields was more than 300,000 barrels of oil each during 1954. They are the **Fischer Northwest**, **Gates**, **Max**, **Mueller**, **Pundsack**, and **Richardson**. Nine of the 16 old wells worked over in the county during the year were made into oil producers, 1 gas, 4 dry, and 2 salt-water disposal wells.

Only 1 of the 11 dry wildcat tests specifically reported shows of oil or gas. This is the National Cooperative Refinery Association No. 1 Jenkins test in sec. 15, T. 25 S., R. 12 W. Tops to important marker beds encountered in drilling these tests are given in Table 50.

Locations of producing areas and dry wildcat tests are shown on Figure 11. Oil production by pools is given in Table 56, gas production in Table 57.

STANTON COUNTY

(Map Pl. 2)

The 1954 production: gas 13,780,190 thousand cubic feet, all from the Hugoton Gas Area. Wells drilled in 1954: gas 25, dry 7, total 32 including 3 dry wildcats. New pools discovered 1.

Developments during 1954.—The J. M. Huber Corporation No. 1 Sparks test in the Cen. NE $\frac{1}{4}$ sec. 34, T. 30 S., R. 42 W., about 10 miles west of the **Hugoton Gas Area**, resulted in the naming of the new **Sparks** gas pool, which produces from Morrowan rocks from depths of 5,254 to 5,258 feet. An initial potential of 16 million cubic feet of gas per day was assigned the well. Drilling from an elevation of 3,508 feet above sea level, the following tops were logged: Lansing group, 3,442; Marmaton group, 4,120; Morrowan rocks, 4,902; Ste. Genevieve limestone (Mississippian), 5,343; and St. Louis limestone (Mississippian), 5,470 feet depth. Total depth of the hole is 5,554 feet.

Routine drilling in the development of the Stanton County part of the **Hugoton Gas Area** added 24 new Chase group gas wells and 4 dry holes. Most of these new wells and dry holes were concentrated along the western edge of the **Hugoton Gas Area**, approximately through the center of the county in a north south direction. The 1954 gas production from the 230 producing wells was more than 13,780 million cubic feet and brought Stanton County's cumulative production to more than 74,870 million cubic feet of gas.

Three wildcat tests were attempted in the western half of Stanton County during 1954. The J. M. Huber Corporation drilled their rank wildcat test on the Walkemeyer lease in the Cen. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 28 S., R. 42 W. to a total depth of 5,768 feet. Drilling from an elevation of 3,520 feet above sea level the following marker beds were logged: Stone Corral dolomite, 1,660; Topeka limestone, 3,310; Lansing group, 3,804; Morrowan rocks, 5,122; and Mississippian rocks, 5,560 feet depth. Although several drill-stem tests were taken, no shows of oil were reported on the scout ticket.

Another rank wildcat was drilled by the J. M. Huber Corporation on the Kilgore property in the Cen. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 30 S., R. 42 W. to a total depth of 5,627 feet before abandonment. From the reported elevation of 3,540 feet above sea level, the

following tops were logged: Stone Corral dolomite, 1,485; Lansing group, 3,464; Morrowan rocks, 4,936; and Mississippian rocks, 5,420 feet depth.

A semi-wildcat test was drilled along the western edge of the **Hugoton Gas Area** by the United Producing Company on the Littrell lease in the Cen. SW¼ NE¼ sec. 6, T. 30 S., R. 40 W. to a total depth of 3,895 feet. From an elevation of 3,340 feet above sea level, the Topeka limestone was logged at 3,160 and the Lansing group at 3,765 feet depth. No shows of oil were reported.

The new **Sparks** pool is described in Table 6. Stanton County's new gas wells and dry holes are shown on Plate 2. Gas production, the active area, and the producing zones are listed in Table 57. Historical data on the **Hugoton Gas Area** are given in the chapter on natural gas.

STEVENS COUNTY

(Map Pl. 2)

The 1954 production: gas 93,253,317 thousand cubic feet, all from the Hugoton Gas Area. Wells drilled in 1954: gas 20.

Developments during 1954.—Twenty new Chase group gas wells were completed in Stevens County during 1954, as compared with only four the previous year. Total gas production from the **Hugoton Gas Area**, which covers the entire county, declined 10 percent from the high set in 1953.

Of the new holes drilled in the county during the year, the Hugoton Production Company No. 1 Spikes well in the Cen. SE¼ NE¼ sec. 16, T. 31 S., R. 38 W. was drilled below the usual Chase group production of the **Hugoton Gas Area**. Drilling from an elevation of 3,078 feet above sea level, the following marker beds were reported: Heebner shale, 3,921; Lansing group, 4,011; Morrowan rocks, 5,260; Mississippian rocks, 5,654; Viola limestone, 6,666; Simpson group, 6,752; and Arbuckle dolomite, 6,811 feet depth. The total depth was 7,013 feet. The hole was plugged back to the Chase group and was assigned the lowest initial potential of the 20 new wells drilled in 1954. Another Hugoton Production Company well, the No. 1-10 Keefer in sec. 10, T. 31 S., R. 38 W., was rated as having the highest potential, more than 56 million cubic feet of gas per day.

The 716 **Hugoton** gas wells in Stevens County accounted for more than 93 billion cubic feet of gas during the year, bringing the cumulative gas production in the county since the discovery of commercial quantities in 1927 to more than 1,267 billion cubic feet.

Stevens County gas production is given in Table 57, and the new wells are shown on Plate 2. Historical data on the **Hugoton Gas Area** are included in the chapter on natural gas.

SUMNER COUNTY

(Map Fig. 13)

The 1954 production from 43 pools: oil 1,894,757 barrels including production from secondary recovery projects, gas 87,417 thousand cubic feet. Wells drilled in 1954: oil 96, dry 45, salt-water disposal 1, total 142 including 14 dry wildcats. New pools discovered 8, combined 1.

Developments during 1954.—All phases of the petroleum industry in Sumner County showed increases during 1954 when compared with 1953. Oil production was up 14 percent, gas production amounted to 87 million cubic feet (none was reported in 1953), and 96 wells were completed as compared to 82 the previous year.

Eight new oil pools were discovered in the county during the year. These are the **Ashton**, **Ashton East**, **Ashton Southwest**, **Chicaskia**, **Gerberding**, **Murphy Southwest**, **Padgett West**, and **South Haven**. In the **Padgett West** pool production is from the "Layton sand," in the **Ashton**, **Ashton Southwest**, and **Murphy Southwest** production is from the "Cleveland sand," and in the **Ashton East** production is from Mississippian rocks. The new **Chicaskia** well produces from the Lansing-Kansas City group, and in the **Gerberding** and **South Haven** production is from the Simpson group. Before the close of the year the **Ashton Southwest** was combined with the **Ashton** field. Data on the locations of the discovery wells, discoverers, thicknesses of producing zones, and initial potentials of these new pools are given in Table 6.

In the **Dyal** field, the "Cleveland sand" was added as a new producing zone during 1954. The **Dyal** field was discovered in 1953, with production from the "Bartlesville sand." Additional data on the new "Cleveland" production are given in Table 7.

Routine development in Sumner County added 3 oil wells, 1 old well worked over for an oil producer, and 1 dry hole in the **Ashton** pool; 5 oil wells in the **Bitter Creek** pool, 8 oil wells, 7 dry holes, and 1 old well worked over into an oil producer in the **Dyal** field; 5 oil wells and 1 old well reworked into an oil well in the **Murphy Southwest** pool; 6 oil wells and 2 dry holes in the **South Haven** pool; and 10 oil wells, 1 old well worked over for a gas well, and 2 dry holes in the **Vernon North** field. The big development in the drilling activity of Sumner County was the 41 extension oil wells and only 2 dry holes in the **Hilltop** field.

Several good shows of oil were reported in the Simpson group in the 14 dry wildcat tests drilled in 1954. Data on the tops to marker beds in these tests are given in Table 51.

TABLE 51.—Dry wildcat tests drilled in Sumner County during 1954

Company and farm	Location	Depth to top of "Stalnaker," feet	Depth to top of Mississippian, feet	Depth to top of Simpson, feet	Total depth, feet
Sun Oil Co. No. 1 Matthews	NE NE NE 5-30-1W	2,575	3,559	3,966	4,077
Sherrod & Apperson No. 1 Parker	NE SE SW 24-30-1W	2,525	3,473	3,880	3,985
*Morris Mizel No. 1 Nixon	E½ NE NW 34-30-1W	2,625	3,575	3,960	4,064
Sun Oil Co. No. 1 Freund	NW NW SW 23-30-3W	2,859	3,792	4,251	4,375
Gulf Oil Corp. No. 1 Alderdice	NE NE NW 21-31-3W	3,050	3,968	4,391	4,510
Champlin Refg. Co. No. 1 Esther Allen	SW NW NW 15-32-2W	2,900	3,867	4,304	4,429
E. H. Adair Oil Co. No. 1 Shobe	NW NW NE 29-33-4W	3,158	4,147	4,564	4,576
Herndon Drlg. Co. No. 1 Smith	SE NE SE 26-34-1W	2,767	3,874	4,236	4,416
Tom Berry No. 1 Mason	NE NE SW 2-34-2W	2,940	4,065	4,498	4,589
Time Petro. Co. No. 1 Clink	SW SW NE 12-34-3W	.....	4,191	4,629	4,650
Helmerich & Payne, Inc. No. 1 Detrich	NW NW NE 11-34-4W	.....	4,296	4,737	4,782
*Derby Oil Co. No. 1 Foltz	NE SW NE 29-30-1E	2,461	3,397	3,837	3,915
*Beaumont Petro. Co. No. 1 Paxton	NW NW NW 35-30-1E	.....	3,311	3,676	3,726
Salina Drlg. Corp., Inc. No. 1 Canfield	NW NW NE 5-34-2E	2,388	3,448	3,754	3,843

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

Locations of producing areas and dry wildcat tests are shown on Figure 13. Oil production is given in Table 56 and gas production in Table 57. Data on the secondary recovery activity are given in Table 1.

THOMAS COUNTY

The 1954 production from 1 pool: oil 4,575 barrels. Wells drilled in 1954: oil 1, dry 6 (all wildcats), total 7.

Developments during 1954.—The one new oil well in Thomas County during 1954 is the discovery well of a new producing zone in the old Mingo field. The Phillips Petroleum Company No. 1 Keller "A" well in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 9 S., R. 32 W. produces from the Marmaton group between depths of 4,484 and 4,494 feet. An initial potential of 256 barrels of oil per day was assigned the well. Before plugging back to the Marmaton group the hole was drilled into Mississippian rocks, found dry and logged at 4,680 feet depth. Additional data on this new development are given in Table 7.

Of the six dry wildcat tests drilled in the county during the year, The Derby Oil Company et al. No. 1 Nickel test in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 6 S., R. 35 W. reported the best shows of oil. All the tests penetrated at least to the Mississippian rocks. Data on the operators, farms, locations, and depths to significant

TABLE 52.—Dry wildcat tests drilled in Thomas County during 1954

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 Derby Oil Co. et al. No. 1 Nickel	SE SE SE 16-6-35W	3,241	4,112	4,768	4,973
The Derby Oil Co. et al. No. 1 Hills	SE SE SW 22-7-34W	3,219	4,182	4,854	5,017
The Derby Oil Co. et al. No. 1 Schielke	NW NW NW 17-8-34W	3,242	4,121	4,720	4,931
*Mack & Proctor et al. No. 1 Nelson	NE NE NW 19-9-31W	3,040	4,080	4,656	4,778
Bennett & Roberts Drlg. Co. No. 1 Franz	NW NW SW 13-9-33W	3,101	4,090	4,715	4,810
The Derby Oil Co. et al. No. 1 Kistler	SE SE SE 34-9-34W	3,251	4,178	4,804	4,960

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

marker beds encountered in drilling these dry wildcat tests are given in Table 52.

Oil production, the producing zones, and the number of producing wells of the **Mingo** field are given in Table 56.

TREGO COUNTY

(Map Fig. 10)

The 1954 production from 23 pools: oil 1,027,685 barrels. Wells drilled in 1954: oil 20, dry 33, total 53 including 16 dry wildcats. New pools discovered 2, combined 1.

Developments during 1954.—Total oil production from Trego County during 1954 was slightly less than that of 1953. The number of wells drilled declined from 79 in 1953 to 53 this year.

Two new pools were named by the Kansas Nomenclature Committee in Trego County. The **Hixson East** pool was discovered by the Stanolind Oil and Gas Company No. 1 Scott well in the NW¼ SW¼ SW¼ sec. 16, T. 11 S., R. 22 W. An initial potential of 39 barrels of oil per day was given the Arbuckle dolomite in September; however the well was worked over in December and declared dry and abandoned. Production of 1,578 barrels of oil was reported from the pool during 1954.

The **Spaulding South** pool was discovered by the Magnolia Petroleum Company No. 1 Spaulding well in the SW¼ NE¼ SE¼ sec. 1, T. 11 S., R. 21 W. in May. An initial potential of 5 barrels of oil per day from the Lansing-Kansas City group from 3,538 to 3,542 feet depth was given the discovery well.

The Braden Drilling Company et al. No. 1 Coulson well in the NW¼ SW¼ SE¼ sec. 11, T. 15 S., R. 22 W. was not named by the Nomenclature Committee as a discovery well of a new pool, although it is a considerable distance from old production and 729 barrels of oil were reported produced from the well during 1954. The production is carried in Table 56 under "**Coulson.**"

During the year, the **Diebolt** pool of Graham County and the **Wakeeney Northwest** pool of Trego County were combined; the pool, which now extends across the county line, is called **Diebolt**. Nine extension oil wells and one dry hole were completed in the Trego County portion of **Diebolt** during 1954.

The Amerada Petroleum Corporation No. 1 Wanamaker, an old well worked over during 1954 in sec. 27, T. 14 S., R. 21 W., was named the discovery well of Lansing-Kansas City production in the old Groff field. Additional data on the development are given in Table 7.

Routine development in Trego County fields includes the addition of 3 oil wells, 2 oil wells resulting from reworking old holes, and 2 dry holes in the Groff field; 1 oil well and 2 dry

TABLE 53.—Dry wildcat tests drilled in Trego County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lansing, feet	Depth to top of Arbuckle, feet	Total depth, feet
Continental Oil Co. et al. No. 1 E. W. Larue	SE SE NW 12-11-22W	2,158	3,440	3,858	3,910
The Veeder Supply & Development Co. et al. No. 1. Stieben	SE SE NW 34-11-22W	2,336	3,623	4,041	4,075
Herman Geo. Kaiser et al. No. 1 Howat	NW NW SW 1-11-23W	2,268	3,543	3,986	4,040
*Walters Drlg. Co. No. 1 Walker	SW SW SW 6-11-23W	2,296	3,660	4,372	4,395
*Virginia Drlg. Co., Inc. No. 1 Schimkowitsch	NW NW NW 36-11-25W	2,529	3,887	4,650	4,695
*Berry & Fick No. 1 Hillman	SW SW NW 7-12-21W	2,320	3,626	4,011	4,035
Stanolind Oil & Gas Co. No. 1 F. B. Rinker	SE NE NW 6-12-22W	2,427	3,686	4,169	4,170
*Iron Drlg. Co. No. 1 Glass	NE SW SW 8-13-21W	2,228	3,557	3937**	4,010
Continental Oil Co. No. 1 Caskey	SW SE SE 14-13-22W	2,281	3,651	4,359	4,389
Branine-Gould et al. No. 1 Schemm	NE SE NE 30-13-22W	2,386	3,776	4,435	4,515
*Gabbert-Jones Drlg. Co. No. 1 Kastner	SW SW NW 6-14-21W	2,304	3,677	4,107**	4,156
Schafer Drlg. Co. No. 1 Nicholson	NW NW NW 15-14-21W	2,197	3,559	3,967	4,020
*Heathman-Seeligson Drlg. Co. No. 1 Unrein	SW SW NE 34-15-21W	2,337	3,748	4,329†	4,338
Sohio Petro. Co. No. 1 Stowe	NE NE SW 11-15-24W	2,328	3,689	4,580	4,700
*Howard Lipp & Powell No. 1 Young	NW NE NE 26-15-24W	2,329	3,678	.....	4,326

* 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 Pennsylvanian basal conglomerate, feet.

† Depth to the top of the Viola, feet.

TABLE 54.—Dry wildcat tests drilled in Wabaunsee County during 1954

Company and farm	Location	Surface elevation, feet	Depth to top of Lans.-K.C., feet	Depth to top of "Hunton," feet	Depth to top of Viola, feet	Total depth, feet
Musgrove Petro. Corp. No. 1 Palenske	SE SW SE 20-12-10E	1,081	1,272	2,727	3,046	3,280
Musgrove Petro. Corp. No. 1 Zeckser	NE NW SE 23-12-10E	1,150	1,296	2,804	3,099	3,330
Musgrove Petro. Corp. No. 1 Langley	NE NE NE 13-13-10E	1,207	1,363	2,895	3,128	3,336
Sohio Petro. Co. No. 1 Ashburn	SE NE SE 29-14-10E	1,450	1,602	3,143	3,343	3,492

holes in the **Ogallah** field; 1 oil well in the **Sunny Slope** field; and 2 oil wells each in the **Walz** and **White Southwest** fields.

During the year, 16 wildcat tests were drilled more than 1½ miles from existing production. Few shows of oil were reported. Depths to the tops of some marker beds, locations of the holes, and allied data for these tests are given in Table 53.

Additional data on the two new Trego County oil pools are given in Table 6. Oil production by pools is given in Table 56. The oil pools and dry wildcat tests are shown on Figure 10.

WABAUNSEE COUNTY

(Map Pl. 1)

The 1954 production from 5 fields: oil 182,015 barrels. Wells drilled in 1954 (reported): 4 dry wildcats.

Developments during 1954.—Reported oil production in Wabaunsee County in 1954 was 67 percent less than in 1953. As in previous years the **Davis Ranch** continued to be the county's most prolific field but production dropped from 470,556 barrels in 1953 to 110,195 barrels this year.

Four dry wildcat wells were drilled in 1954. They are listed in Table 54, and their locations are shown on Plate 1.

Oil production statistics are listed in Table 56. Locations of areas from which oil was produced in 1954 are shown on Plate 1.

WALLACE COUNTY

Wildcat wells have been drilled in Wallace County from time to time, but so far no producing pool has been discovered.

Exploration during 1954.—During 1954, a dry wildcat test was drilled in Wallace County by the States Oil Company on the Hill lease in the Cen. NW¼ SE¼ sec. 36, T. 11 S., R. 42 W., about 10 miles northwest of Sharon Springs. The exploratory hole was drilled from an elevation of 3,811 feet above sea level. The following tops of marker beds were logged: Lansing group, 4,260; Morrowan rocks, 5,004; and Mississippian rocks, 5,136 feet depth. The total depth was 5,230 feet. No shows of oil or gas were reported.

WICHITA COUNTY

(Map Pl. 2)

Wildcat wells have been drilled in Wichita County from time to time, but so far no producing pool has been discovered.

Exploration during 1954.—Only one rank wildcat was drilled in Wichita County during 1954. Rooney, Siegfried, and Thomas drilled on the Smith lease in the NW¼ NW¼ NE¼ sec. 22, T. 20 S., R. 36 W., about a mile northwest of Lydia. From an elevation of 3,235 feet above sea level the following tops of marker beds were logged by the Kansas Sample Log Service: Dakota formation, 560; Stone Corral dolomite, 2,295; Ft. Riley limestone, 2,948; Lansing group, 4,009; and Mississippian rocks 5,090 feet depth. No shows of oil or gas were reported and the test was abandoned at a total depth of 5,126 feet. The location of the test is shown on Plate 2.

WILSON COUNTY

(Map Pl. 1)

The 1954 production: oil from 53 areas in 14 fields 186,514 barrels, gas (estimated) 175,517 thousand cubic feet. Wells drilled in 1954 (estimated): oil 192, gas (reported) 2, dry 96, total 290 including 5 (reported) dry wildcats.

Developments during 1954.—Reported oil production in Wilson County was nearly 165 percent greater than in 1953. Drilling was active and new wells were added to several fields. Hydraulic fracturing added materially to the county's total production.

Five dry wildcat wells were reported in Wilson County (Table 55).

TABLE 55.—Dry wildcat tests drilled in Wilson County during 1954

Company and farm	Location	Depth to top of Mississippian, feet	Total depth, feet
V. C. Strasson	Cen. N½ NE NE	1,506	1,524
No. 1 Huffman	36-27-13E		
Ward A. McGinnis	NW NE SW	1,394	1,418
No. 1 Ed Herman	3-27-14E		
Ward A. McGinnis	NW NE NW (?)	1,476	1,525
No. 1 Bollinger	5-27-14E		
C. L. Siebel	SW NE NW	.....	997
No. 1 Marie Anderson	4-27-17E		
H. and P. Drlg. Co.	Cen. SE SW	1,365	1,386
No. 1 Stoehr	5-28-14E		

Oil production statistics from Wilson County fields are listed in Table 56 and gas in Table 57. Locations of areas that produced oil in 1954 are shown on Plate 1.

WOODSON COUNTY

(Map Pl. 1)

The 1954 production: oil from 35 areas in 20 fields 755,411 barrels including production from secondary recovery projects, gas 51,158 thousand cubic feet. Wells drilled in 1954 (estimated): oil 128, gas 1, dry 52, input 32, total 212 including 2 (reported) dry wildcats.

Developments during 1954.—Oil production in Woodson County was nearly 10 percent more in 1954 than in 1953.

Two wildcat wells were reported in Woodson County. The Barnett and Schroeder et al. No. 1 Eades test in the SE¼ SE¼ sec. 7, T. 25 S., R. 15 E., was abandoned at a total depth of 1,575 feet. The L. Moline et al. No. 1 Neil Toedman well, SE¼ NE¼ sec. 21, T. 26 S., R. 16 E., was drilled to 1,305 feet.

Reported field wells include: 1 dry hole in the **Batesville** field; 2 oil wells and 1 dry hole in the **Big Sandy** field; 1 oil well in the **Buffalo** field; 2 oil wells in the **Hoagland** field; 1 dry hole and 2 input wells in the **Leroy** field; 2 oil wells and 1 dry hole in the **Perry** field; 3 oil wells and 1 dry hole in the **Piqua** field; 3 oil wells and 1 dry hole in the **Quincy** field; 2 oil wells in the **Rose** field; 1 oil well in the **Stephenson** field; 5 oil wells and 1 dry hole in the **Toronto**; 5 oil wells in the **Virgil North** field; 1 dry hole in the **Weide** field; 13 oil wells and 3 dry holes in the **Winterscheid** field. Data on secondary recovery operations in Woodson County

are listed in Table 1. Oil production is listed in Table 56 and gas in Table 57. Locations of areas from which oil was produced in 1954, of water-flood projects, and of the reported dry wildcat wells are shown on Plate 1.

WYANDOTTE COUNTY

(Map Pl. 1)

The 1954 production: gas 4,244 thousand cubic feet.

Developments during 1954.—No drilling was reported in Wyandotte county during 1954. The reported gas production is from the **Roberts-Maywood** field which extends into Leavenworth County. The county's gas production is listed in Table 57.

TABLE 56.—Oil production in Kansas during 1954

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
ALLEN COUNTY							
Bronson-Xenia*	17-25-21E	1,900	238,904		157	"Bartlesville"	700
Colony West* (1922)	15-23-18E	980			54	"Squirrel"	820
a			3,553				
b			1,762				
Davis-Bronson*	24-21E	700			60	"Bartlesville"	720
a			460				
b			18,092				
c			536				
Elsmore Shoestring (1908)	5-26-21E	1,600	72,042		100	"Bartlesville"	650
Elsmore West (1911)	12-26-20E	800			22	"Bartlesville"	775
a			5,182				
b			236				
c			516				
d			30				
Humboldt-Chanute*	26-18E	13,600			696	"Bartlesville"	850
a			4,802				
b			411				
c			177,081				
d			137,039				
e			4,428				
f			20,458				
Iola	24-18E				174	"Bartlesville"	850
a		2,400	105,087				
b		240	6,863				
c		10	41				
d		160	1,233				
e		20	345				
f		10	78				
g		60	671				
h		40	235				
i		20	28				
j		10	4,539				
Moran (1903)	25-20E	1,280			38	"Bartlesville"	820
a			11,550				
b			351				
c			2,178				
d			642				
Neosho Falls* (1928)	29-23-17E	640			11	"Squirrel"	950
a			5,948			Mississippian	1,200
b			72				
Seibert	5-26-20E	480			7	"Bartlesville"	680
a			1,901				
b			1,070				
Miscellaneous			26				
Total Allen County		22,790	828,390	16,855,637	1,319	recorded	
ANDERSON COUNTY							
Bush City Shoestring (1921)	28-20-21E	2,750			866	"Squirrel"	620
a			482,099				
b			1,461				

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Centerville* (1920)	10-21-22E	640	106,795		68	"Squirrel"	480
Colony-Welda (1916)	4-23-19E	1,460			193	"Bartlesville"	720
a			5,782			"Weiser"	600
b			2,663			"Squirrel"	780
c			62,543				
d			77				
Colony West* (1922)	15-23-18E	1,000	29,707		66	"Squirrel"	825
Garnett Shoestring (1904)	32-20-20E	1,280			182	"Squirrel"	700
a			13,165			"Garnett"	800
b			2,461				
c			114				
Greeley		160	604		5		
Kincaid (1921)	10-23-21E	840			76	"Bartlesville"	750
a			18,793				
b			16,778				
Northcott		20	74		1		
Selma (1929)	9-22-21E	320	3,476		19	"Bartlesville"	700
Miscellaneous			56				
Total Anderson County		8,470	746,648	16,310,737 recorded	1,476		

BARBER COUNTY

Amber Creek (1952)	36-30-12W	40	310	1,167	1	Mississippian	4,296
Amber Mills (1951)	15-30-12W		no report	none		Viola	4,480
Boggs (1946)	17-33-12W	1,200	353,669	2,339,056	33	Simpson	4,806
Clara* (1948)	36-29-14W	40	9,506	64,004	1	Simpson	4,472
Deerhead (1943)	22-32-15W	400	82,198	799,038	10	Viola	4,950
DeGeer (1948)	2-33-15W	640	8,237	747,476	17	Viola	5,176
Donald (1946)	33-31-15W	80	366	1,892	2	Mississippian	4,697
Gerlane (1950)	29-33-11W	Combined with Rhodes					
Gudeman (1954)	10-35-10W	40	1,086	1,086	1	Viola	5,152
Lake City (1937)	7-31-13W	180	2,783	307,865	1	Viola	4,435
						Simpson	4,530
						Arbuckle	4,607
Medicine Lodge (1937)	13-33-13W	300	2,864	48,567	7	Misener	4,845
Medicine Lodge North (1954)	25-32-13W	80	1,662	1,662	2	Mississippian	4,490
Nippawalla (1951)	13-33-12W	40	91	91	1	"Douglas sd."	3,659
Rhodes (1949)	15-33-11W	4,200	538,163	1,432,318	80	Mississippian	4,551
			4,442		1	Viola	4,803
			620	620	1	Mississippian	4,579
Rhodes East (1954)	23-33-11W	40	620				
Rhodes North (1954)	4-33-11W	Combined with Rhodes					
Roundup (1953)	28-33-11W	Combined with Rhodes					
Salt Fork (1954)	11-35-15W	40	1,143	1,143	1	Mississippian	4,932
Skinner (1943)	29-31-14W	2,000	79,790	1,821,390	19	Viola	4,626
						Simpson	4,422
Stumph (1952)	7-32-14W	120	19,577	40,443	3	Simpson	4,963
Sun City (1941)	35-30-15W	640	18,714	1,546,360	13	Lans.-K. C.	4,344
Turkey Creek (1943)	20-30-15W	40	789	55,138	1	Lans.-K. C.	4,345
						Simpson	4,438
Turkey Creek North (1952)	17-30-15W	40	3,493	7,527	1	Penn. coagl.	4,541
Whelan (1934)	32-31-11W	1,300	241,054	3,040,175	29	"Chat"	4,355

Whelan Southwest (1954)	11-32-12W	40	1,687	1,687	1	Mississippian	4,229
Pools or fields abandoned				3,270			
Total Barber County		11,500	1,372,244	12,304,717	224		

BARTON COUNTY

Ainsworth South (1937)	10-17-13W	1,900	168,128	4,075,307	60	Lans. -K. C.	3,170
						Arbuckle	3,390
Alefs (1952)	14-19-14W	100	6,535	42,455	2	Lans. -K. C.	3,334
						Arbuckle	3,474
Ameh (1951)	19-18-11W	80	4,010	36,899	2	Lans. -K. C.	3,103
Ames (1943)	22-18-11W	1,000	112,219	1,534,668	32	Lans. -K. C.	3,042
						Arbuckle	3,348
Ames Northwest (1947)	9-18-11W	80	6,554	37,514	2	Lans. -K. C.	3,106
						Arbuckle	3,312
Anton (1950)	28-19-11W	700	127,000	340,583	16	Lans. -K. C.	3,216
			67,107		9	Arbuckle	3,342
Ash Creek* (1947)	31-20-15W	80	465	471,716	2	Arbuckle	3,787
Azman (1949)	19-17-14W	120	11,021	122,886	3	Arbuckle	3,400
Barrett (1943)	36-16-14W	800	20,048	202,056	8	Lans. -K. C.	3,355
						Arbuckle	3,463
Bart-Staff* (1951)	4-21-14W	500	113,069	364,205	13	Lans. -K. C.	
						Arbuckle	3,572
Batchman (1950)	19-20-12W	120	8,394	44,503	3	Arbuckle	3,459
Beaver (1934)	16-16-12W	2,200	142,945	3,683,626	50	Oread	2,885
						Toronto	2,938
						Arbuckle	3,348
						Reagan	3,335
Beaver North* (1937)	4-16-12W	400	22,841	675,875	9	Arbuckle	3,316
Beaver South (1945)	27-16-12W	1,500	74,551	692,413	25	"Booy"	
						Arbuckle	3,359
Behrens (1944)	6-20-15W	900	21,230	589,449	18	Arbuckle	3,719
Bergtal (1941)	22-20-15W		no report	2,364		Arbuckle	
Bergtal South (1951)	27-20-15W		no report	108		Arbuckle	3,675
Bernard (1950)	10-19-11W	320	32,123	223,407	13	Shawnee	2,803
						Lans. -K. C.	3,224
						Arbuckle	
Bieberle (1952)	4-19-11W	Combined with St. Peter					
Bissal Point (1954)	10-19-13W	40	860	860	1	Lans. -K. C.	3,276
Blood Creek (1950)	9-18-13W		no report	2,077		Lans. -K. C.	3,078
Bloomer* (1936)	36-17-11W	1,200	269,907	11,114,626	63	Lans. -K. C.	3,044
						Arbuckle	3,257
Boyd (1942)	4-18-14W	3,900	32,786	6,429,651	7	Lans. -K. C.	3,177
			694,769		116	Arbuckle	3,438
						Pre-Cambrian	3,311
Buckbee (1949)	14-20-12W	40	2,571	20,209	1	Arbuckle	3,352
Buckbee South (1953)	23-20-12W	40	667	667	1	Arbuckle	3,373
Buckbee Southwest (1952)	15-20-12W	500	70,637	103,903	11	Arbuckle	3,373
Capitol View (1950)	9-17-14W	40	2,036	14,373	1	Lans. -K. C.	3,230
Carroll (1944)	21-17-14W	2,400	322,876	2,471,154	60	Lans. -K. C.	3,109
						Arbuckle	3,356
Carroll North (1954)	17-17-14W	40	1,742	1,742	1	Arbuckle	3,450
Carroll Southwest (1947)	32-17-14W	80	3,691	55,704	4	Lans. -K. C.	3,193
Chase-Silica* (1931)	32-19-9W	16,850	1,695,880	56,029,986	412	Lans. -K. C.	2,955
						Arbuckle	3,328
Cheyenne View (1949)	12-19-12W	2,480	365,862	2,602,301	113	Lans. -K. C.	3,152
						Arbuckle	3,390
						Penn. basal	
						congl.	3,393
Claffin (1954)	3-18-11W	40	964	964	1	Lans. -K. C.	3,044

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Clarence (1953)	35-19-15W	40	2,414	2,414	1	Lans. -K. C.	3,291
						Reagan	3,534
Clarence Northwest (1954)	35-19-15W	40	9,614	9,614	1	Pre-Cambrian	3,531
Davidson* (1930)	4-16-11W	80	4,495	249,556	2	Lans. -K. C.	3,016
						"Booy"	3,317
						Arbuckle	3,314
Dundee (1945)	29-20-14W		no runs	13,745	2	Arbuckle	3,507
Eberhardt (1935)	14-19-11W	320	13,564	450,170	7	Lans. -K. C.	3,194
Ellinwood North (1937)	33-19-11W	80	10,824	100,430	2	Lans. -K. C.	3,090
						Arbuckle	3,328
Esfeld (1947)	15-16-11W		no report	7,875		Arbuckle	3,343
Ess (1953)	13-19-14W	80	11,807	18,413	2	Lans. -K. C.	3,326
Fleske (1953)	3-20-15W	40	1,063	2,878	1	Lans. -K. C.	3,470
Fort Zarah (1950)	30-19-12W	3,200	270,931	2,849,701	45	Lans. -K. C.	3,157
			440,877		69	Arbuckle	3,384
Fort Zarah North (1951)	19-19-12W	200	11,909	81,779	3	Lans. -K. C.	3,205
Frank (1952)	7-19-12W	120	4,469	13,033	3	Lans. -K. C.	3,322
Fransen (1949)	6-20-12W		no report	295		Lans. -K. C.	3,196
Great Bend Airport (1952)	26-19-14W	760	70,182	292,460	16	Lans. -K. C.	3,320
						Arbuckle	3,473
Great Bend East (1951)	34-19-13W		no report	1,153		Lans. -K. C.	3,234
Great Bend Southwest (1952)	25-19-14W	180	13,194	68,279	4	Lans. -K. C.	3,322
Great Bend West (1951)	23-19-14W	120	12,847	64,173	3	Lans. -K. C.	3,332
Great Bend Townsite (1953)	21-19-13W	300	42,191	81,614	6	Lans. -K. C.	3,196
			36,993		6	Arbuckle	3,441
Hagan (1938)	20-20-11W	120	11,031	444,727	5	Arbuckle	3,323
Hall-Gurney* (1931)	30-14-13W	600	231,422	1,602,948	15	Shawnee	
						Lans. -K. C.	3,066
						"Booy"	
						Arbuckle	
Hammeke (1950)	17-19-11W	160	10,039	89,848	4	Lans. -K. C.	3,055
Hammeke Southeast (1950)	17-19-11W	120	7,547	65,443	3	Lans. -K. C.	3,089
Hammer (1940)	35-19-12W	1,000	281,782	1,107,655	34	Lans. -K. C.	3,088
						Arbuckle	3,348
Hammer North (1949)	23-19-12W	Combined with Cheyenne View					
Hampel (1953)	34-17-15W		no report	none		Arbuckle	3,544
Harrison (1942)	18-20-13W		no report	4,160		Arbuckle	3,520
Hawkins (1952)	3-19-13W	200	26,124	47,906	5	Lans. -K. C.	3,158
						Arbuckle	3,393
Hawkins Northwest (1953)	33-18-13W	40	2,689	3,782	1	Arbuckle	3,428
Heizer (1935)	16-19-14W	40	1,893	50,679	1	Lans. -K. C.	3,228
Heizer Northeast (1952)	15-19-14W	40	403	6,905	1	Lans. -K. C.	3,353
Heizer Southwest (1952)	21-19-14W	160	20,421	23,701	4	Lans. -K. C.	3,379
						Arbuckle	3,552
Hiss (1936)	31-20-13W	320	48,129	671,418	8	Lans. -K. C.	3,270
Hiss East (1952)	33-20-13W	80	15,680	36,392	2	Lans. -K. C.	3,383
						Arbuckle	3,549
Hiss Northeast (1953)	29-20-13W	80	27,413	36,634	2	Lans. -K. C.	3,326
Hiss South (1950)	31-20-13W	120	18,159	80,794	3	Arbuckle	3,542
Hiss Southeast (1948)	32-20-13W	320	13,092	181,004	8	Lans. -K. C.	3,414
						Arbuckle	3,545
Holsington (1938)	21-17-13W	640	74,362	1,402,034	35	Lans. -K. C.	3,222
						Arbuckle	3,440

Holsington East (1954)	23-17-13W	120	15,768	15,768	3	Arbuckle	3,338
Holsington Southwest (1954)	20-17-13W		no report	none		Arbuckle	3,363
Homestead (1948)	22-18-13W		no report	12,720		Arbuckle	3,310
James (1954)	20-19-12W	40	4,081	4,081	1	Lans.-K. C.	3,278
Jettie (1954)	27-20-14W	40	3,943	3,943	1	Simpson	3,534
Klepper (1951)	2-19-11W	640	23,019	122,580	8	Lans.-K. C.	3,220
Klug (1946)	28-17-13W	80	2,709	43,985	2	Arbuckle	3,414
Klug North (1948)	27-17-13W	120	16,806	120,972	3	Arbuckle	3,377
Koopman (1953)	23-19-13W	40	10,530	13,523	1	Lans.-K. C.	3,220
						Arbuckle	3,398
Kowalsky* (1941)	32-20-11W	1,400	204,509	1,134,663	37	Lans.-K. C.	3,185
						Arbuckle	3,378
Kraft-Prusa* (1937)	10-17-11W	26,100	4,608,168	75,716,044	787	Shawnee	2,885
						Douglas	2,997
						Lans.-K. C.	3,160
						Arbuckle	3,281
						Reagan	3,310
						Gorham	3,335
						Pre-Cambrian	
Kraft-Prusa Northeast (1941)	36-16-11W	260	20,083	361,197	7	Lans.-K. C.	3,250
						Arbuckle	3,351
Kramp (1952)	7-19-11W	320	46,172	86,503	7	Lans.-K. C.	3,243
			11,393		2	Arbuckle	3,351
Lake Barton (1948)	21-18-13W		no report	6,861		Arbuckle	3,372
Lanterman (1934)	15-19-11W	900	18,428	939,868	12	Lans.-K. C.	3,109
						Arbuckle	3,235
Larkin (1951)	10-17-14W	200	14,292	89,416	5	Lans.-K. C.	3,280
Leoville (1950)	7-17-14W	700	143,977	640,159	24	Lans.-K. C.	3,267
						Arbuckle	3,464
Liberty (1952)	23-20-14W	40	2,420	6,833	1	Lans.-K. C.	3,341
Mary Ida* (1950)	31-18-10W	400	73,576	321,587	11	Lans.-K. C.	3,033
						Arbuckle	3,272
Mary Ida North (1952)	25-18-11W	40	2,122	5,293	1	Arbuckle	3,304
McCauley (1949)	34-17-13W		no report	16,733		Lans.-K. C.	3,276
Meadowside (1949)	24-18-11W	360	13,195	198,326	2	Lans.-K. C.	3,079
			33,313		9	Arbuckle	3,284
Merten Northeast (1946)	36-18-15W	40	416	17,637	1	Arbuckle	3,494
Merten Southeast (1949)	12-19-15W	40	1,565	26,438	1	Reagan	3,567
Moses (1953)	13-20-14W	40	3,153	3,478	1	Lans.-K. C.	3,322
Odin (1948)	3-17-12W	100	44,537	166,436	9	Arbuckle	3,321
Otis-Albert* (1935)	30-18-15W	7,400	379,483	5,052,311	119	Reagan	3,601
Pawnee Rock* (1936)	13-20-16W	400	5,948	221,354	4	Arbuckle	3,832
Pawnee Rock East (1941)	17-20-15W		no runs	26,408	1	Arbuckle	3,814
Peach (1952)	25-16-14W		no runs	1,810	1	Lans.-K. C.	3,373
Pendergast (1953)	27-19-15W	40	2,498	4,888	1	Lans.-K. C.	3,397
						Arbuckle	3,596
Prairie View (1950)	20-19-11W	360	46,445	250,281	8	Lans.-K. C.	3,080
Pritchard (1944)	34-20-14W	1,600	33,931	2,302,221	7	Lans.-K. C.	3,253
			17,289		2	Marmaton	3,625
			169,022		26	Arbuckle	3,455
Pritchard Southeast* (1953)	2-21-14W	120	27,314	31,404	3	Arbuckle	3,472
Putnam (1951)	7-17-13W	160	9,483	58,032	4	Lans.-K. C.	3,286
Putnam West (1951)	1-17-14W	80	8,329	33,514	2	Lans.-K. C.	3,225
Red Brick (1953)	23-19-13W		no report	328		Lans.-K. C.	3,240
Redwing (1950)	31-17-12W	320	28,668	148,054	9	Lans.-K. C.	3,083
						Arbuckle	3,335
Redwing South (1952)	6-18-12W	40	2,303	8,686	1	Arbuckle	3,325
Reif South (1950)	31-16-12W	80	4,676	30,717	3	Lans.-K. C.	3,172
Rick* (1936)	1-19-11W	900	45,171	1,091,940	20	Lans.-K. C.	3,106
						Arbuckle	3,355
Roesler* (1943)	14-18-11W	1,400	228,361	832,642	30	Arbuckle	3,291

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Rolling Green (1948)	36-20-13W		no runs	16,333	1	Lans.-K.C.	3,257
Rolling Green East (1949)	30-20-12W		no report	7,955		Arbuckle	3,491
Rowland (1949)	32-17-13W	40	956	10,560	1	Arbuckle	3,323
Rusco (1950)	8-19-12W		no report	7,582		Arbuckle	3,417
St. Peter (1944)	5-19-11W	1,200	268,309	483,720	34	Lans.-K.C.	3,121
						Arbuckle	3,387
Sandford (1951)	25-17-14W	120	6,721	34,186	3	Arbuckle	3,375
Sandrock (1951)	21-20-13W	800	94,816	190,136	13	Lans.-K.C.	3,412
Sandrock Southeast (1954)	34-20-13W	40	313	313	1	Lans.-K.C.	3,262
Silica South* (1955)	24-20-11W	3,000	1,086,223	23,626,612	143	Lans.-K.C.	3,035
						Arbuckle	3,268
South Bend (1954)	9-20-13W	40	464	464	1	Lans.-K.C.	3,317
Sunflower (1949)	8-17-12W		no report	1,969		Arbuckle	3,376
Sunnyside (1953)	33-20-11W		no report	none		Lans.-K.C.	3,186
Sunny Valley (1949)	7-20-12W	160	16,471	297,776	5	Lans.-K.C.	3,230
Sunny Valley Northeast (1954)	6-20-12W	160	25,584	25,584	6	Arbuckle	3,422
Sunny Valley Southwest (1954)	23-20-13W	40	817	817	1	Lans.-K.C.	3,336
Trapp* (1936)	23-15-14W	12,860	2,221,451	49,444,571	400	Shawnee	2,889
						Dodge	2,966
						Lans.-K.C.	3,062
						Arbuckle	3,252
Underwood (1950)	15-17-13W	80	948	9,904	2	Lans.-K.C.	3,173
						Arbuckle	3,342
Unruh (1945)	24-20-15W	460	23,963	186,098	9	Arbuckle	3,341
Walnut Creek (1952)	8-19-13W	40	1,077	5,522	1	Lans.-K.C.	3,347
Wearne (1951)	4-20-12W		no runs	6,126	1	Arbuckle	3,384
Weikert (1953)	36-18-12W	120	17,125	29,382	3	Lans.-K.C.	3,169
Werner-Robl (1951)	30-19-11W	1,500	45,152	181,587	11	Lans.-K.C.	3,106
						Arbuckle	3,364
Workman (1944)	33-20-12W	200	63,986	126,221	8	Arbuckle	3,407
Zimmer (1953)	28-19-15W		no report	none		Arbuckle	3,631
Pools or fields abandoned				155,557			
Total Barton County		113,830	16,353,520	267,139,672	3,183		
BOURBON COUNTY							
Bronson-Xenia*	17-25-21E				46	"Bartlesville"	665
a		320	458				
b		640	8,774				
c		640	5,710				
Davis-Bronson*	23-21E				50	"Bartlesville"	560
a		320	3,455				
b		10	59				
c		640	18,491				
Hepler* (1917)	27-22E				26	"Bartlesville"	
a		640	23,877				
b		80	1,558				
Total Bourbon County		3,290	62,382	798,354	122		
				recorded			
BROWN COUNTY							
Livengood (1944)	3-1-15E	40	2,196	86,320	1+	"Hunton"	
				recorded			

BUTLER COUNTY

Allen-Robison (1943)	1-26-3E	640	34,850		33	Mississippian	2,700
Augusta (1914)	21-28-4E			38,137,049	188	Lansing	1,700
a		40	1,683			Kansas City	2,000
b		5,800	474,308			Marmaton	2,200
						Ordovician	2,445
						Arbuckle	2,500
Augusta North (1914)	28-27-4E	1,280	140,308	14,816,798	68	Lansing	1,650
						Kansas City	1,950
						Ordovician	2,380
						Arbuckle	2,410
Bare (1952)	31-28-5E	160	329	2,657	1	"Bartlesville"	2,778
Bausinger (1929)	24-27-3E	40	2,881		2	"Wilcox"	3,050
Benton (1925)	26-3E				1	Miss. "chat"	2,965
a		40	1,840				
b		40	1,773				
Blankenship* (1921)	26-8E			2,917,628	110	"Bartlesville"	2,650
a		1,100	553,237				
b		40	742				
c		160	7,902				
Brandt-Sensenbaugh (1925)	22-28-7E			1,886,749	35	Miss. "chat"	2,692
a		1,280	42,947				
b		120	4,408				
Brickley (1951)	2-27-7E	320	13,598	82,432	3	"Bartlesville"	2,636
Brickley Southwest (1952)	3-27-7E	160	1,493	6,776	2	"Bartlesville"	2,699
Butwick* (1949)	7-26-3E	320	5,523	84,458	6	Mississippian	2,850
Burwick Northeast (1949)	7-26-3E		no report	4,269		Miss. "chat"	2,820
Combs* (1947)	5-30-5E	320	8,961		5	"Bartlesville"	2,820
						Mississippian	2,850
Combs Northeast (1948)	27-29-5E		no report	26,087	3	"Bartlesville"	2,810
DeMoss (1934)	8-28-7E	500	18,529		21	"Bartlesville"	2,650
						"Burgess"	2,680
Dixon (1946)	12-27-6E	40	1,521	12,800	1	Kansas City	2,160
						Mississippian	
Douglass (1916)	21-29-4E	400	6,844		9	Lans. -K. C.	1,790
						Ordovician	3,000
Eckel (1940)	7-27-7E	400	1,876	61,477	3	Lans. -K. C.	2,190
Edgecomb (1951)	9-25-3E	160	3,587	12,830	2	Mississippian	2,759
Edmonds		20	432				
Elbing* (1918)	18-23-4E				81	Kansas City	2,120
a		500	34,932			Mississippian	2,400
b		640	376,330			Viola	2,530
c		160	916				
Elbing East (1950)	27-23-4E	160	3,562	28,951	4	Lans. -K. C.	1,799
El Dorado (1915)	29-25-5E	21,000	3,833,188	219,058,974	1,825	Lansing	1,700
						Kansas City	2,000
						Viola	2,500
						Simpson	2,510
						Arbuckle	2,550
Ferrell (1939)	28-28-8E	640	132,717	1,369,191	35	Mississippian	2,647
Four Mile Creek (1951)	5-28-3E	320	30,717	154,780	9	Simpson	3,069
Fox-Bush (1917)	24-29-5E	4,500	544,896	3,550,909	93	"Bartlesville"	2,730
Fox-Bush West (1953)	15-29-5E	320	14,591	14,591	3	"Bartlesville"	2,837
Garden (1925)	32-26-6E	320	12,880		26	"Bartlesville"	2,760
Guyot (1948)	5-29-5E		no report	11,890		"Bartlesville"	2,800
Hannah (1936)	29-8E	160	3,512	21,131	2	Kansas City	2,120
Hartenbower (1950)	16-29-6E		Combined with Snowden-McSweeney				
Hartenbower South (1951)	16-29-6E		Combined with Snowden-McSweeney				
Haverhill (1927)	34-27-5E	750	43,706	4,431,444	55	"Bartlesville"	2,700
Hazlett	24-5E	1,600	160,215	1,232,568	81	Mississippian	2,480

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Hickory Creek (1946)	11-28-5E	320	34,291	913,814	25	"Bartlesville"	2,685
Joseph (1947)	18-24-5E	10	135	4,364	1	Mississippian	2,700
Keighley (1925)	22-27-7E	800	29,731		15	Miss. "chat"	2,491
						"Bartlesville"	2,650
						Simpson	3,148
Kramer-Stern (1926)	3-28-6E	1,750	220,399		69	Lans. -K. C.	
						Simpson	3,020
						Arbuckle	3,040
Leon (1922)	19-27-6E	640	32,296	2,516,852	23	Miss. "chat"	2,660
						"Bartlesville"	
						Viola	3,050
Long (1949)	15-26-7E	160	2,577	17,358	2	Mississippian	2,780
Long Northeast (1953)	11-26-7E	160	3,396	3,396	2	Mississippian	2,753
Lucas (1946)	6-27-8E	480	11,211		5	"Bartlesville"	2,680
McCullough (1929)	1-28-6E		no report	491,666		"Wilcox"	3,169
Mt. Tabor (1953)	36-29-4E	640	57,828	59,796	11	"Bartlesville"	2,757
Muddy Creek (1950)	13,29-4E	950	175,759	412,122	31	"Bartlesville"	2,813
Murdock (1952)	23-25-3E		no report	2,105		Mississippian	2,709
Parsley (1949)	3-26-3E	160	9,535	102,911	6	Mississippian	2,700
Pettit (1926)	17-28-6E		no report			"Wilcox"	3,190
Pierce (1926)	28-25-4E	640	76,621		32	Miss. "chat"	2,550
Pierce Northwest (1954)	21-25-4E	320	19,056	19,056	2	Mississippian	2,569
Pierce West (1951)	20-25-4E	40	3,990	20,948	3	Mississippian	2,515
Potwin (1917)	31-24-4E	3,200	181,864	8,060,708	123	Kansas City	2,550
						Mississippian	2,660
Reynolds-Schaffer (1922)	9-27-6E	3,200	164,970		77	Kansas City	2,375
						Mississippian	2,780
						Viola	3,141
Rombold (1949)	4-26-3E	160	5,688	35,160	2	Mississippian	2,770
Salter (1946)	23-28-3E	480	90,830	1,265,695	24	Simpson	3,000
Semisch (1947)	4-29-6E		Combined with Snowden-McSweeney				
Seward (1926)	27-27-7E	320	16,766	1,105,084	13	"Bartlesville"	2,650
Shinn (1946)	19-29-8E			599,610	13	Mississippian	2,766
a		40	2,662				
b		160	51,089				
Smock-Sluss (1917)	2-27-5E				57	"Bartlesville"	2,700
a		1,800	74,875			Viola	3,000
b		40	1,103				
c		320	37,168				
Snowden-McSweeney (1930)	34-28-6E	1,800	524,548		93	Lans. -K. C.	2,060
						"Peru"	2,404
						"Bartlesville"	2,810
						Mississippian	2,833
Steinhoff (1926)	28-29-6E	160	1,314		2	Mississippian	2,803
Towanda (1948)	5-26-4E	320	286,181	1,680,740	34	Mississippian	2,460
						Viola	2,460
Whitewater (1949)	32-25-4E	480	36,062	302,603	13	Viola	2,625
Whitewater North (1951)	29-25-4E		no report	6,135		Viola	2,700
Womack (1947)	19-28-6E		no report			"Bartlesville"	2,620
						Kansas City	2,190
Young (1920)	27-26-7E				45	Mississippian	2,650
a		950	67,027				
b		480	17,109				
Total Butler County		65,430	8,757,870	397,205,760	3,432		
				recorded			

CHASE COUNTY

Atyeo* (1925)	30-21-10E	40	6,299	2	"Bartlesville"	2,250
Bazaar (1951)	36-20-8E		no report		Lans.-K. C.	1,823
Teeter* (1920)	16-23-9E	640	26,684	21	"Bartlesville"	2,500
Total Chase County		680	32,983	23		
				237,823		
				recorded		

CHAUTAUQUA COUNTY

Borroum (1926)	20-34-9E	160	3,236	6	Marmaton	1,780
Brown-Sturgis	33-11E		no report			
Elgin	34-10E			218	"Peru"	1,520
a		900	8,610			
b		10	414			
c		900	23,483			
d		640	7,031			
e		640	10,465			
Frazier	33-13E			5	"Peru"	1,520
a		10	205			
b		20	438			
c		160	3,465			
Hale-Inge* (1907)	32-12E			49	"Peru"	1,160
a		320	2,201			
b		1,280	24,770			
Hoover	32-13E	10	206	1		
Hylton	32-9E		no report			
Kingston (1926)	18-32-11E	160	594	2	Miss. "chat"	1,850
					Arbuckle	2,176
Landon-Floyd (1936)	23-32-10E	640	18,249	27	Mississippian	2,000
Leniton	33-10E	40	980	2		
Lowe	34-10E	10	307	1		
McAllister (1925)	28-32-10E	80	7,866	5		
McGlasson (1947)	11-33-9E		no report			
Malone	18-32-10E	20	737	1	Ordovician	2,340
Niotaze	34-13E			43	"Redd"	690
a		120	1,363		"Peru"	825
b		900	11,075			
Oliver (1935)	32-11E	900	14,407	18		
Peru-Sedan (1900)	34-11E			1,900	"Peru"	1,200
a		480	20,327		Mississippian	2,000
b		640	34,242			
c		20	379			
d		4,350	82,919			
e		11,500	401,428			
f		900	38,350			
g		1,600	44,730			
h		80	1,337			
i		320	7,390			
j		80	938			
k		80	674			
l		160	2,115			
m		2,700	132,501			
n		20	214			
o		80	670			
p		640	27,909			
q		400	558			
r		80	4,891			
"Start"	32-13E	160	542	2		
Wameta	34-9E	120	1,360	1	"Peru"	1,670
					Mississippian	2,100

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Wayside-Havana* (1904)	34-13E				21	"Wayside"	575
a		20	462			"Weiser"	700
b		240	5,140			"Bartlesville"	1,200
Wiggam	34-32-10E	80	2,936		6	"Weiser"	1,500
Miscellaneous			489		1		
Total Chautauqua County		32,670	952,603	44,898,295 recorded	2,309		
CHEYENNE COUNTY							
Judy (1951)	26-1-39W		no report	none		Marmaton	4,497
CLARK COUNTY							
Ashland (1951)	35-32-23W	160	16,218	62,619	3	Lans.-K.C.	4,673
						Viola	6,526
Harper Ranch (1953)	9-34-21W	3,600	119,096	119,096	20	Morrowan	5,437
McKinney* (1950)	2-34-26W	100	656	1,360	2	Mississippian	5,762
Morrison Northeast (1954)	10-32-21W		no report	none		Morrowan	5,193
Total Clark County		3,860	135,970	183,075	25		
CLAY COUNTY							
Wakefield (1951)	21-9-4E		no report	none		Mississippian	1,904
Wakefield Northeast (1951)	15-9-4E		no report	none		Mississippian	1,793
COFFEY COUNTY							
Dunaway* (1922)	34-22-13E	600	24,817		19	"Burgess"	1,850
						Mississippian	1,878
						Ordovician	2,200
Evans	23-15E	40	254		2		
Finnerty (1953)	12-21-13E	80	21,236		4	"Burgess"	1,728
"Lawrence"		20	537		1		
Leroy (1905)	35-22-16E				102		
a		320	4,826				
b		640	59,946				
c		900	18,073				
d		160	7,565				
Leroy North	22-16E				11		
a		320	15,620				
b		160	1,219				
"Parmely"		120	1,126		3		
Van Noy (1917)	7-23-15E	900	8,308		25	"Peru"	1,170
						Mississippian	1,540
Virgil North* (1920)	22-23-13E	200	36,459		76	"Bartlesville"	1,585
						Mississippian	1,838
Winterscheid* (1920)	23-14E	480	13,391		18	"Bartlesville"	1,630
						Mississippian	1,750
Miscellaneous			795		6		
Total Coffey County		4,940	214,172	1,596,701 recorded	267		

COMANCHE COUNTY

Robbins Ranch (1953)	23-31-16W	100	264	264	1	Mississippian	4,915
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COWLEY COUNTY

Arkansas City Southwest (1954)	35-34-3E	20	402	402	1	"Hoover"	1,981
Arkansas City West (1952)	23-34-3E	40	6,836	20,445	4	"Bartlesville"	3,291
Bergkamp (1952)	6-35-4E	480	71,461	275,595	16	"Bartlesville"	3,202
Bergkamp Northwest (1952)	6-35-4E		no report	619		"Bartlesville"	3,208
Biddle (1922)	7-32-5E				14	Kansas City	2,000
a		120	5,644			"Stalnaker"	2,300
b		120	5,248				
Bogner (1952)	24-31-5E		no report	1,450		Mississippian	2,999
Box (1948)	28-30-7E	240	19,137	182,552	11	Mississippian	2,840
Brown (1922)	13, 31-7E		no report	246,000		Kansas City	2,100
Bruce (1950)	9-30-4E	40	4,681	35,617	2	Arbuckle	3,306
Burden (1926)	31-31-6E	640	22,924		32	"Bartlesville"	2,900
Burden East (1953)	33-31-6E	580	241,599	303,126	27	"Layton"	2,194
Cabin Valley (1952)	31-33-6E	640	108,793	146,414	20	"Layton"	2,188
Canfield (1952)	13-34-3E	900	53,828	150,308	17	"Layton"	2,551
						"Bartlesville"	3,375
						Lans. -K. C.	2,839
Cedarvale (1953)	9-34-8E	80	838	1,654	1	Mississippian	2,365
Centennial (1953)	12-33-3E	80	1,518	3,531	1	"Bartlesville"	3,267
Centennial North (1953)	1-33-3E	160	4,793	5,130	2	"Bartlesville"	3,256
Church (1954)	13-31-6E	160	4,479	4,479	2	Mississippian	2,935
Clark (1914)	6-31-4E	320	34,242		9	"Bartlesville"	2,840
Clover	31-7E	80	1,219	20,574	2	Kansas City	2,200
						Mississippian	2,800
Combs* (1947)	5-30-5E	320	25,475	382,346	6	"Bartlesville"	2,823
						Mississippian	2,850
Copeland (1952)	5-35-4E		no report	117		Mississippian	3,211
Couch (1937)	13-30-5E	1,200	87,150	2,030,836	54	"Bartlesville"	2,800
Countryman (1925)	4-33-7E	640	10,142		11	"Layton"	1,950
						Mississippian	2,870
David (1935)	35-30-4E			2,249,140	102	"Bartlesville"	2,900
a		1,400	567,399			Arbuckle	3,463
b		40	1,289				
Deichman (1941)	24-31-4E	640	20,307	20,307	29	"Bartlesville"	2,900
						Mississippian	3,000
Dexter (1914)	33-6E		no report			Mississippian	2,750
Doane (1947)	36-33-6E		no report	12,420		Mississippian	2,878
						Arbuckle	3,140
Dutch Creek (1952)	35-31-4E		no report	486		"Bartlesville"	2,924
Eastman (1924)	5-31-6E	640	42,040		26	"Bartlesville"	2,890
Elrod	4-32-5E	120	5,267		1	"Layton"	2,411
Enterprise (1948)	35-33-3E		no report			"Bartlesville"	3,285
Enterprise Northeast (1952)	35-33-3E	160	7,597	29,334	3	"Bartlesville"	3,335
Enterprise Southwest (1953)	3-34-3E	80	1,510	2,998		"Bartlesville"	3,360
Estes (1954)	12-32-6E	160	5,095	5,095	3	"Layton"	2,190
Falls City (1916)	35-7E		no report	1,272,687		"Layton"	2,000
Ferguson Northwest (1950)	16-30-8E	240	6,134	25,109	3	Kansas City	2,200
Ferguson West (1934)	21-30-8E	40	725		3	Kansas City	2,180
Frog Hollow (1937)	20-32-5E	640	122,706	4,515,256	45	"Bartlesville"	3,000
Frog Hollow East (1941)	15-32-5E	320	10,760	278,677	6	"Bartlesville"	3,000
Gauda Springs	5-34-3E	400	189,574	998,444	57	"Bartlesville"	3,300
						Miss. "chat"	3,345
						"Cleveland"	2,984
Gibson (1941)	29-34-3E	1,650	507,140	1,472,091	82	"Bartlesville"	3,350
						Mississippian	3,400
						Simpson	3,774
						Arbuckle	3,780

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Graham (1924)	3-33-3E	500	8,028	2,804,266	9	"Layton" Arbuckle	2,550 3,518
Grand Summit* (1926)	4-31-8E	20	865		1	Kansas City	2,000
Grouse Creek (1951)	16-30-7E	20	1,529	6,071	1	Mississippian	2,890
Harvey (1952)	23-34-3E	1,600	347,186	850,915	80	"Layton" "Bartlesville"	2,574 3,276
Henderson (1942)	26-32-3E	80	648	133,245	2	Kansas City Arbuckle	2,690 3,419
Hittle (1926)	28-31-4E	900	150,304	9,317,950	39	Kansas City Arbuckle	2,400 3,280
Hittle North (1954)	15-31-4E	Combined with David					
Jarvis	13-33-5E		no report				
McKay (1951)	17-35-4E	640	63,834	288,663	19	"Bartlesville"	3,314
Mansur (1949)	25-31-6E	320	6,759	80,647	6	"Layton"	2,170
Millett (1945)?	31-34-3E	20	214		1		
Murphy* (1933)	7-35-3E	640	85,853		29	"Bartlesville" Miss. "chat"	3,450 3,500
Nigger Creek (1951)	22-34-3E	80	1,321	5,433	2	"Bartlesville"	3,281
Nitche (1954)	24-32-6E		no report	none		"Layton"	2,209
Otto (1927)	25-34-6E				6	Miss. "chat"	3,017
a		40	1,966				
b		80	4,663				
"Priest"	7-33-6E		no report	98			
Quarry (1954)	28-34-5E	240	4,544	4,544	2	"Cleveland"	2,684
Rahn (1939)	13-34-5E	640	210,091	1,671,228	45	"Bartlesville"	2,900
Rahn Northeast (1949)	27-33-6E	80	6,871	64,449	5	"Bartlesville"	2,902
Rahn Southwest (1943)	28-34-5E	20	801	4,591	2	"Bartlesville"	3,019
Rainbow Bend (1923)	20-33-3E	1,600	233,914	16,154,246	102	"Burgess"	3,200
Rainbow Bend Northeast (1945)	15-33-3E	120	8,085	49,369	4	"Bartlesville"	3,213
Rainbow Bend Southwest (1954)	31-33-3E	80	1,087	1,087	1	Mississippian	3,356
Rainbow Bend West*	19-33-3E	160	32,994		8	"Burgess" Arbuckle	3,200 3,550
Rock (1923)	15-30-4E	2,000	338,239	3,961,455	70	"Bartlesville"	2,800
Rock North (1937)	3-30-4E	160	27,147	184,009	6	"Bartlesville"	2,800
School Creek (1947)	15-32-7E	40	1,458	27,677	2	"Bartlesville"	2,900
School Creek North (1953)	10-32-7E	320	81,253	81,253	14	"Layton"	2,114
Seacat (1944)	26-33-4E	160	10,926	38,621	5	Mississippian	3,100
Silver Creek (1953)	12-32-5E	160	11,011	13,860	6	"Bartlesville"	3,050
Slick-Carson* (1924)	19-32-3E	240	48,955	3,647,456	18	"Layton" "Bartlesville"	2,600 3,150
						Arbuckle	3,450
Smith (1917)	31-3E	160	4,688		2	"Bartlesville"	3,050
State (1926)	15-32-4E	750	40,684		13	"Layton" Arbuckle	2,400 3,300
Stayton (1949)	32-32-4E	640	22,224	109,920	11	"Bartlesville"	3,100
Stayton South (1953)	5-33-4E	160	12,256	20,457	2	"Bartlesville"	3,166
Thurlow (1927)	8-33-3E	160	9,796		9	Simpson	3,500
Trees (1935)	19-30-4E	640	39,622		21	"Bartlesville"	2,875
Turner (1937)	30-32-6E	40	3,239	287,701	2	"Layton"	2,233
Turner North (1948)	18-32-6E		no report	469		"Layton"	
Turner West (1952)	25-32-5E	20	1,612	5,795	1	Mississippian	3,054
Udall	30-3E	160	24,960		4	Arbuckle	2,850
Walnut Bend	11-34-4E	40	3,273		3		

Weathered (1935)	28-31-3E	640	40,041	2,775,974	20	"Stalnaker"	2,080
						Lans.-K.C.	2,480
						Mississippian	3,020
						Arbuckle	3,250
Winfield (1914)	32-5E	2,000	245,095		82	Admire	600
						"Peacock"	1,400
						"Layton"	2,300
						"Bartlesville"	3,050
						Arbuckle	3,300
						"Hoover"	1,400
Winfield South (1945)	1-33-4E	320	27,710	55,607	9		
Miscellaneous			99		1		
Total Cowley County		30,080	4,363,797	78,825,053 recorded	1,257		

CRAWFORD COUNTY

Fair Oak	33-28-22E	640	6,008		14	"Bartlesville"	400
Hepler* (1917)	27-22E				5	"Bartlesville"	
a		10	57				
b		160	256				
"Houston"	3-31-22E	160	3,042		9		
McCune (1929)	30-22E				236	"Bartlesville"	
a		640	10,207				
b		2,000	23,804				
"Steimel"	35-29-21E	40	214		1		
St. Paul-Walnut*	28-21E	480	1,790		5	"Bartlesville"	425
Walnut Southeast	28-22E				49	"Bartlesville"	400
a		1,200	9,378				
b		120	1,012				
c		80	1,231				
d		80	473				
Miscellaneous			544		4		
Total Crawford County		5,610	58,016	665,023 recorded	323		

DECATUR COUNTY

Adell Northwest (1952)	34-5-27W	640	115,897	334,220	13	Lans.-K.C.	3,664
Feely (1952)	2-5-27W	200	31,721	76,019	5	Lans.-K.C.	3,590
Hardesty (1952)	22-5-27W	560	43,593	103,353	6	Lans.-K.C.	3,642
Jennings (1951)	25-4-27W	860	91,009	182,026	16	Wabaunsee	3,156
						Lans.-K.C.	3,478
Monaghan (1952)	15-2-27W	120	18,963	24,355	3	Lans.-K.C.	3,514
Pollnow (1953)	4-3-29W	40	9,128	15,308	1	Lans.-K.C.	3,734
Pollnow Northwest (1954)	31-2-29W		no report	none		Lans.-K.C.	3,772
Pollnow West (1953)	5-3-29W	160	37,737	38,683	4	Lans.-K.C.	3,744
Total Decatur County		2,580	348,048	773,964	48		

DICKINSON COUNTY

Ash Grove (1954)	5-15-1E	160	7,377	7,413	4	Mississippian	2,569
Bonaccord (1943)	30-14-1E	40	1,471	36,452	5	"Burgess"	2,483
Lost Springs*	16-4E	720	86,948		22	Miss. "chat"	2,300
Lost Springs North (1946)	22-16-4E	40	2,736	102,733	11	Miss. "chat"	2,300
Lost Springs Northeast (1947)	26-16-4E	160	7,074	25,241	19	Miss. "chat"	2,300
Total Dickinson County		1,120	105,606	904,265 recorded	61		

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
DOUGLAS COUNTY							
Baldwin* (1919)	12-15-20E				18	"Squirrel"	800
a		120	771				
b		200	12,977				
Total Douglas County		320	13,748		18		
EDWARDS COUNTY							
Bradbridge (1948)	2-24-16W	120	15,315	94,842	3	Arbuckle	4,020
Embry (1953)	23-24-16W	80	6,202	9,393	2	Lans.-K. C.	3,789
Enlow (1953)	9-24-16W	280	56,492	59,305	6	Lans.-K. C.	3,736
Sturgeon (1954)	33-26-18W	40	1,340	1,340	1	Viola	4,721
Pools or fields abandoned				102,496			
Total Edwards County		520	79,349	267,376	12		
ELK COUNTY							
Bush-Denton (1920)	4-30-9E	900	25,239		30	"Stalnaker"	1,060
						"Peru"	2,135
						"Burgess"	2,300
"Clubine"	30-10E	40	2,706		3		
Collyer (1924)	30-30-11E	160	8,223		9	Kansas City	1,286
						Fort Scott	1,518
Dory	18-30-9E	120	1,751		1	Mississippian	2,570
Dunkleberger (1920)	34-29-10E	480	65,629		18	Kansas City	1,300
						Mississippian	1,970
Elk City	31-13E	240	895		2		
Ferguson East	23-30-8E	20	840		1	Ordovician	2,900
Fleming (1950)	8-29-9E	20	384		1	Abruckle	2,656
Grand Summit*	3-31-8E	240	7,367		4	Kansas City	2,000
Hale-Inge* (1907)	31-12E				10	"Peru"	1,160
a		20	144				
b		20	770				
c		480	4,292				
d		320	2,922				
"Kinzey"	31-13E	240	727		1		
Kipfer	29-13E		2,000		2		
Logsdan	31-9E	80	1,086		2		
Longton	31-12E	160	5,879		6		
Longton North	29-12E	160	694		1		
Love	30-9E	160	2,340		2	Mississippian	2,370
Moline (1928)	9-31-10E		no report			"Burgess"	2,000
						Mississippian	2,030
New Albany	29-13E	900	21,887		14	"Wayside"	560
"Newbecker"	31-9E	20	555		2		
Oak Valley	31-13E		no report				
"Perkins"	1-30-9E	160	2,153		2		
Porter (1923)	29-8E	240	58,536		5	Kansas City	2,050
						Arbuckle	3,000
Rettig	31-10E	40	4,874		7		
Schrader (1928)	12-31-8E	480	31,101		4	Kansas City	1,520
Severy* (1922)	8-28-11E	10	253		1	Kansas City	1,200
Starr (1937)	12-31-9E	120	2,677		1	Mississippian	2,330

Walker (1927)	5-31-10E	80	1,102	1	Kansas City	1,550
					Mississippian	2,225
Webb (1925)	23-31-10E	640	29,961	62	Kansas City	1,300
					Fort Scott	1,650
					Mississippian	1,975
					Arbuckle	2,300
Miscellaneous			971	4		
Total Elk County		6,550	285,036	14,346,802	196	
				recorded		

ELLIS COUNTY

Antonino (1947)	27-14-19W	160	11,450	108,753	4	Arbuckle	3,712
						Basal sandstone	3,726
Antonino Townsite (1949)	2-15-19W		no runs	32,470	1	Abruckle	3,697
Antonino Townsite East (1952)	1-15-19W		no report	14,074		Lans.-K.C.	3,344
						Arbuckle	3,634
Beeching (1943)	34-15-16W	500	11,789	251,954	6	Lans.-K.C.	3,156
Bemis-Shutts (1935)	16-11-17W	15,300	3,372,377	78,344,152	566	Arbuckle	3,380
Bielman (1952)	24-15-18W	200	19,733	36,726	6	Arbuckle	3,496
Blue Hill (1937)	14-12-16W	1,200	113,748	2,248,777	29	Topeka	3,030
						Lans.-K.C.	3,072
						Gorham	3,348
						Arbuckle	3,360
Braun (1953)	34-13-16W	120	21,182	23,035	3	Penn. congl.	3,459
Brungardt* (1952)	35-10-17W	200	31,466	86,638	7	Lans.-K.C.	3,194
Burnett* (1937)	1-11-18W	7,000	2,043,639	45,935,679	275	Shawnee	2,967
						Lans.-K.C.	3,093
						Simpson	3,603
						Arbuckle	3,570
Burnett Northwest* (1946)	3-11-18W	800	229,166	2,670,753	28	Lans.-K.C.	3,450
						Arbuckle	3,617
Burnett Southwest (1946)	22-11-18W	1,600	462,603	4,366,671	81	Shawnee	3,074
						Lans.-K.C.	3,207
						Simpson	3,582
						Arbuckle	3,633
Canyons (1948)	11-12-17W		no runs	8,566	1	Lans.-K.C.	3,361
Catharine (1936)	3-13-17W	400	48,101	891,371	7	Lans.-K.C.	3,262
			53,649		7	Abruckle	3,516
Catharine Northwest (1944)	4-13-17W	380	41,481	576,904	11	Lans.-K.C.	
						Arbuckle	3,590
Catharine South (1946)	15-13-17W	760	170,051	1,339,142	26	Lans.-K.C.	3,292
						Arbuckle	3,555
Catharine Townsite (1949)	9-13-17W	40	4,330	27,289	1	Arbuckle	3,585
Chrialer (1949)	22-11-16W	40	4,552	32,501	1	Lans.-K.C.	3,100
Cochran (1953)	8-11-18W	40	12,129	19,750	1	Lans.-K.C.	3,328
Degenhart (1953)	15-15-17W	200	22,441	32,545	5	Lans.-K.C.	3,417
			6,005		1	Arbuckle	3,521
Dinges (1954)	9-15-18W	40	4,085	4,085	1	Arbuckle	3,624
Dinkel (1953)	23-13-17W	40	2,642	3,116	1	Lans.-K.C.	3,430
Drelling (1949)	21-14-16W	640	101,398	562,710	23	Lans.-K.C.	3,120
						Arbuckle	3,367
Drelling Southeast (1953)	27-14-16W	500	26,162	115,032	3	Lans.-K.C.	3,072
			60,213		7	Arbuckle	3,327
Eagle Creek (1954)	11-11-20W	40	2,775	2,775	1	Lans.-K.C.	3,368
Ellis* (1942)	31-12-20W	1,000	83,559	1,066,848	17	Arbuckle	3,832
Ellis Northeast (1953)	32-12-20W	40	584	1,146	1	Arbuckle	3,853
Ellis South* (1952)	12-13-21W	40	6,104	8,443	1	Arbuckle	3,822
Emmeram (1937)	4-13-16W	160	15,155	268,824	5	Lans.-K.C.	3,262
Emmeram Northeast (1949)	27-12-16W	1,200	111,300	493,241	24	Lans.-K.C.	3,272
						Arbuckle	3,541

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Emmeram Townsite (1952)	6-13-16W	80	9,270	25,627	2	Lans.-K.C.	3,291
						Arbuckle	3,520
Erbert (1953)	20-12-20W	40	5,388	10,450	1	Lans.-K.C.	3,527
						Arbuckle	3,906
Erbert Southeast (1954)	28-12-20W	40	1,215	1,215	1	Penn. congl.	3,857
Experiment (1952)	8-14-18W	40	1,884	8,027	1	Arbuckle	3,675
Fairport* (1923)	8-12-15W	1,000	197,080	3,311,361	42	Lans.-K.C.	2,950
						Gorham	3,211
						Arbuckle	3,312
						Reagan	3,350
Fort Hays State College (1950)	1-14-10W		no runs	1,203	1	Arbuckle	3,806
Glinther (1952)	17-11-1	80	12,906	35,848	2	Lans.-K.C.	3,439
						Arbuckle	3,554
Hadley (revived) (1954)	20-11-17W	40	3,151	61,713	1	Arbuckle	3,474
Herl (1951)	28-14-17W	540	24,457	109,620	7	Lans.-K.C.	3,382
						Penn. congl.	3,453
						Arbuckle	3,476
Herman (1954)	28-13-20W	40	382	382	1	Arbuckle	3,865
Hertel (1952)	16-14-16W	40	2,045	13,695	1	Lans.-K.C.	3,134
Hertel Southwest (1952)	17-14-16W	40	544	7,622	1	Lans.-K.C.	3,215
Herzog (1940)	30-13-16W	460	5,438	1,315,644	1	Lans.-K.C.	3,232
			84,229		11	Arbuckle	3,450
Holy Cross (1953)	26-12-18W	120	25,328	43,088	4	Lans.-K.C.	3,423
Irvin (1946)	6-14-19W	2,080	2,342	1,134,948	1	Lans.-K.C.	3,553
			321,789		43	Arbuckle	3,860
Irvin South (1951)	7-14-19W	120	17,860	27,936	3	Arbuckle	3,837
Jacob (1951)	6-11-19W	40	2,065	11,191	1	Lans.-K.C.	3,542
Jensen (1952)	26-12-18W	Combined with Koblitz					
Karlin (1951)	14-13-17W	320	42,450	189,961	6	Lans.-K.C.	3,348
Koblitz (1937)	23-12-18W	1,700	360,049	2,080,417	51	Lans.-K.C.	3,434
						Arbuckle	3,694
Koblitz Northwest (1954)	15-12-18W	120	11,813	11,813	3	Arbuckle	3,730
Kraus (1936)	22-14-19W		no runs	130,486	1	"Sooy"	3,735
						Arbuckle	3,732
Kraus North (1953)	16-14-19W		no report	none		Arbuckle	3,801
Krueger* (1948)	35-10-16W	640	128,167	863,110	20	Lans.-K.C.	3,552
Leiker (1943)	14-15-18W	800	79,837	242,017	1	Lans.-K.C.	3,292
			7,463		1	Penn. congl.	3,582
			2,893		9	Arbuckle	3,591
Leiker East (1953)	12-15-18W	700	75,794	87,782	11	Lans.-K.C.	3,321
						Arbuckle	3,576
Leiker Southeast (1954)	14-15-18W	80	7,119	7,119	2	Arbuckle	3,547
Lookout Hollow (1950)	31-14-18W		no runs	1,080	1	Lans.-K.C.	
						Arbuckle	3,629
Mendota (1951)	5-11-20W	200	18,686	52,139	6	Lans.-K.C.	3,530
						Arbuckle	3,668
Nicholson (1945)	30-11-20W	800	83,728	440,921	16	Arbuckle	3,842
Nicholson North (1952)	19-11-20W	40	3,053	15,281	1	Lans.-K.C.	3,610
Nicholson South (1954)	31-11-20W	Combined with Nicholson					
Penny-Wann (1936)	13-15-20W	80	8,415	184,161	2	"Sooy"	3,653
Pleasant (1944)	2-14-20W	1,000	121,693	1,429,941	17	Arbuckle	3,833
						Reagan	3,877
						Marmaton	3,805
						Penn. congl.	

Pleasant Northwest (1952)	27-13-20W	480	104,606	185,162	13	Arbuckle	3,814
Pleasant Ridge (1950)	20-12-17W	800	2,000	729,511	2	Lans.-K.C.	3,408
			107,423		16	Arbuckle	3,683
Pleasant Ridge Southwest (1951)	19-12-17W	40	9,176	32,314	1	Arbuckle	3,673
Polifka (1948)	7-13-17W	540	41,916	97,588	6	Arbuckle	3,640
Raynesford (1952)	17-13-20W	40	8,135	21,063	1	Lans.-K.C.	3,535
						Penn. congl.	3,870
Raynesford East (1952)	16-13-20W	40	8,043	18,759	1	Arbuckle	3,861
Reed (1949)	5-13-17W	80	10,730	20,008	2	Lans.-K.C.	3,424
						Arbuckle	3,596
Reichert (1953)	9-15-19W		no runs	492	1	Lans.-K.C.	3,423
Riverview (1943)	19-11-18W	1,020	119,619	1,977,357	23	Arbuckle	3,610
Rome (1952)	27-13-17W	Combined with Sugarloaf Southeast					
Ruder (1935)	17-15-18W	640	39,751	1,272,637	9	Lans.-K.C.	3,422
						Arbuckle	3,572
Schmeidler (1944)	28-12-17W	1,000	102,176	639,151	25	Lans.-K.C.	3,389
						Arbuckle	3,625
Schmeidler Northwest (1953)	20-12-17W	160	18,667	22,075	4	Lans.-K.C.	3,510
						Arbuckle	3,696
Schoenchen (1946)	21-15-18W	1,000	88,539	1,013,369	19	Arbuckle	3,569
Sessin (1952)	15-11-19W	600	7,884	307,145	1	Lans.-K.C.	3,291
			115,696		11	Arbuckle	3,499
Solomon (1936)	28-11-19W	3,500	632,002	2,230,061	96	Arbuckle	3,629
Sugarloaf (1941)	17-13-17W	400	58,652	653,949	14	Lans.-K.C.	3,391
						Arbuckle	3,645
Sugarloaf Southeast (1941)	28-13-17W	960	42,322	725,679	9	Lans.-K.C.	3,312
			286,247		35	Arbuckle	3,520
Sunnydale (1952)	1-14-20W		no report	1,030		Arbuckle	3,850
Sweet William (1950)	10-12-20W	40	2,474	14,121	1	Lans.-K.C.	3,700
						Arbuckle	3,908
Toulon (1935)	3-14-17W	600	24,207	533,748	7	Lans.-K.C.	3,298
						Arbuckle	3,512
Turkville (1953)	11-11-17W	160	23,764	33,078	4	Lans.-K.C.	3,165
						Arbuckle	3,359
Ubert (1936)	12-13-18W	80	8,384	308,725	2	Lans.-K.C.	
						Arbuckle	3,707
Ubert North (1951)	31-12-17W	260	46,310	126,685	7	Arbuckle	3,600
Ubert Northwest (1952)	1-13-18W	600	129,343	177,197	14	Arbuckle	3,592
Victoria North (1953)	6-14-16W	80	3,556	8,306	2	Arbuckle	3,471
Walter (1936)	2-12-18W	1,800	294,858	6,273,093	61	Topeka	3,160
						Lans.-K.C.	
						Arbuckle	3,619
Walter Southeast (1954)	13-12-18W	40	3,812	3,812	1	Arbuckle	3,658
Warren (1949)	12-11-20W	40	5,262	43,184	1	Lans.-K.C.	3,458
Weisner (1952)	36-12-20W		no runs	1,509	1	Penn. congl.	3,863
Wheatland (1949)	18-15-17W	500	87,036	176,224	14	Lans.-K.C.	3,307
						Arbuckle	3,571
Wheatland Northwest (1953)	12-15-18W	80	8,510	13,568	2	Arbuckle	3,566
Wheatland Southwest (1953)	19-15-17W	500	9,284	122,135	1	Lans.-K.C.	3,252
			93,276		14	Arbuckle	3,554
Younger (1944)	6-14-17W	500	58,971	356,367	12	Arbuckle	3,574
Younger South (1954)	8-14-17W	40	1,942	1,942	1	Arbuckle	3,546
Pools or fields abandoned				167,820			
Total Ellis County		60,540	11,366,975	169,738,638	1,861		

ELLSWORTH COUNTY

Andrews (1952)	4-17-8W	500	30,114	62,118	5	Arbuckle	3,302
Bloomer* (1936)	36-17-11W	2,900	482,505	13,569,312	96	Lans.-K.C.	3,044
						Arbuckle	3,257

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Geneseo-Edwards* (1934)	25-18-8W	3,680	924,516	16,453,262	143	Simpson Arbuckle	3,157 3,278
Green Garden (1954)	1-17-9W	40	4,667	4,667	1	Lans.-K. C.	3,046
Heiken (1930)	25-17-10W	800	15,867	290,684	2	Lans.-K. C.	2,974
			114,428		16	Penn. congl.	3,226
			3,519		2	Arbuckle	3,269
Heiken North (1942)	24-17-10W	80	6,615	189,637	2	Arbuckle	3,212
Kraft-Prusa* (1937)	10-17-11W	800	73,004	1,078,644	14	Shawnee	2,865
						Lans.-K. C.	3,160
						Gorham	3,335
						Arbuckle	3,281
						Reagan	3,310
Kraft-Prusa East (1944)	18-17-10W	40	2,402	13,723	1	Arbuckle	3,309
Lorraine (1934)	13-17-9W	2,000	84,808	10,733,457	34	Lans.-K. C.	3,060
						Arbuckle	3,200
Lorraine North (1953)	12-17-9W	80	26,758	33,851	2	Lans.-K. C.	3,066
Maes (1952)	26-17-8W	760	209,329	538,030	21	Arbuckle	3,341
Palacky (1949)	31-16-10W	80	2,727	31,173	2	Lans.-K. C.	3,148
						Arbuckle	3,390
Stoltenberg (1931)	22-16-10W	13,200	1,135,888	37,248,702	335	Lans.-K. C.	3,260
						Arbuckle	3,333
Vacek (1944)	32-15-10W	640	29,937	299,846	7	Arbuckle	3,315
West (1951)	20-17-10W	80	6,392	24,424	2	Arbuckle	3,287
Wilkens Southeast (1942)	32-17-9W	300	14,376	453,525	6	Arbuckle	3,220
Total Ellsworth County		25,980	3,167,852	81,025,055	691		

FINNEY COUNTY

Beyer (1952)	24-26-33W	40	4,376	17,539	1	Lans.-K. C.	4,398
Damme (1951)	21-22-33W	400	64,048	185,205	8	Mississippian	4,626
Damme Northeast (1953)	16-22-33W	40	7,750	12,047	1	Mississippian	4,639
Finnup (1953)	34-22-33W	320	30,397	36,632	8	Mississippian	4,766
Finnup East (1953)	25-22-33W	40	5,381	5,636	1	Marmaton	4,442
Nunn (1938)	27-21-34W	1,300	103,800	2,093,181	28	Kansas City Marmaton	
						"Cherokee"	4,550
						"Miss. lime"	4,654
Sonderegger (1952)	21-22-31W	40	845	5,438	1	Mississippian	4,737
Stewart (1952)	6-23-30W	40	3,613	11,906	1	Mississippian	4,710
Total Finney County		2,220	220,210	2,367,584	49		

FORD COUNTY

Pleasant Valley (1950)	34-27-21W	40	639	13,509	1		
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FRANKLIN COUNTY

Baldwin*	15-20E	160	2,014		1		
LeLoup	15-20E	40	447		1	"Squirrel"	750
Paola-Rantoul* (1860)	17-21E				414	"Knobtown"	300
a		3,200	240,616			Hepler	400
b		320	35,233			"Prue"	500
c		640	17,405			"Squirrel"	600
d		20	228			"Bartlesville"	700

e	2,600	114,729		
f	240	2,575		
g	320	2,863		
h	10	112		
i	1,800	37,323		
j	10	70		
k	20	280		
Total Franklin County	9,380	453,895	9,518,465	416
			recorded	

GOVE COUNTY

Beougher (1952)	8-13-30W		no runs	652	1	Lans.-K.C.	4,079
Coberly (1951)	15-14-29W	80	14,434	53,655	2	Marmaton	4,287
Gove (1951)	26-13-30W		no runs	3,977	2	Lans.-K.C.	4,122
						Mississippian	4,547
Jasper (1951)	30-15-29W		no report	740		Lans.-K.C.	3,670
Lundgren (1952)	30-14-29W	80	726	4,454	2	Mississippian	4,306
Lundgren South (1952)	31-14-29W	360	12,689	41,587	4	Mississippian	4,277
Pyramids (1952)	9-15-31W		no runs	4,387	1	Marmaton	4,280
Total Gove County		520	27,849	109,452	12		

GRAHAM COUNTY

Alda (1944)	15-7-22W	700	20,093	63,127	4	Lans.-K.C.	3,518
Cooper (1950)	11-10-21W	4,980	856,303	3,975,838	112	Lans.-K.C.	3,528
						Arbuckle	3,841
Cooper North (1953)	33-9-21W	300	18,491	26,673	7	Arbuckle	3,905
Crocker (1951)	18-10-21W	40	4,505	19,140	1	Arbuckle	3,916
Diebolt* (1953)	33-10-23W	160	25,866	28,513	4	Lans.-K.C.	3,779
Dorman (1952)	30-10-23W	40	3,820	12,283	1	Lans.-K.C.	3,921
Fargo (1950)	26-9-22W	120	9,265	58,359	3	Lans.-K.C.	3,622
Fargo West (1951)	34-9-22W	80	676	3,001	2	Lans.-K.C.	3,755
Faulkner (1945)	27-10-22W	160	7,924	198,793	4	Lans.-K.C.	3,629
Gettysburg (1941)	7-8-23W	80	4,286	66,747	2	Lans.-K.C.	3,725
Happy (1954)	21-10-23W	1,300	122,265	122,265	34	Lans.-K.C.	3,804
Happy Southeast (1954)	28-10-23W		Combined with Happy				
Harmony (1951)	32-7-22W	700	66,612	151,757	9	Lans.-K.C.	3,597
Highland (1951)	20-8-22W	40	2,314	10,417	1	Lans.-K.C.	3,616
Holley (1954)	3-9-24W	300	2,453	2,453	3	Lans.-K.C.	3,900
Hoof (1954)	9-10-23W	80	1,643	1,643	2	Lans.-K.C.	3,865
Houston (1947)	9-6-22W		no runs	19,516	1	Lans.-K.C.	3,506
Ironclad (1950)	23-9-22W	700	53,156	197,529	10	Lans.-K.C.	3,756
Laura* (1950)	30-10-20W	1,200	134,308	179,671	19	Arbuckle	3,706
Law (1951)	34-9-23W	900	115,825	538,428	14	Lans.-K.C.	3,922
			17,504		2	Penn. congl.	4,120
Mickleson (1952)	27-8-22W	120	18,030	31,583	3	Lans.-K.C.	3,502
						Arbuckle	3,759
Millbrook (1951)	21-8-23W	40	2,074	15,796	1	Lans.-K.C.	3,761
Montgomery (1953)	8-8-23W		no runs	316	1	Lans.-K.C.	3,504
Morel (1938)	15-9-21W	6,400	1,621,294	18,253,158	208	"Sooy"	3,712
						Arbuckle	3,718
Morel East (1949)	13-9-21W	300	28,997	282,206	5	Arbuckle	3,729
Morel Northwest (1953)	7-9-21W	200	58,054	72,228	7	Arbuckle	3,786
Morlan (1949)	23-10-21W	400	70,639	373,076	11	Arbuckle	3,778
Mullenburg* (1949)	1-10-21W	80	3,720	26,298	2	Arbuckle	3,839
Nana (1953)	4-8-24W	700	98,676	99,162	20	Lans.-K.C.	3,738
Noah (1952)	27-10-21W	160	29,621	66,382	4	Lans.-K.C.	3,651
						Arbuckle	3,786
Noah East (1953)	26-10-21W	160	37,556	42,133	4	Arbuckle	3,703
Noah Southwest (1954)	33-10-21W	40	843	843	1	Marmaton	3,756

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Penokee (1940)	11-8-24W	130	17,531	234,848	5	Lans. -K. C.	3,750
Prairie Glen (1954)	25-10-23W	40	669	669	1	Lans. -K. C.	3,596
Ray* (1949)	32-5-20W	40	93	1,240	1	Lans. -K. C.	3,297
						Arbuckle	3,575
						Reagan	3,540
Sand Creek (1954)	27-8-21W	40	589	589	1	Lans. -K. C.	3,387
Schmied (1952)	21-8-25W	1,280	175,723	234,793	28	Lans. -K. C.	3,740
Schmied Northeast (1954)	10-8-25W	80	4,073	4,073	2	Lans. -K. C.	3,867
Schnebly (1952)	8-8-22W	80	6,968	17,779	2	Lans. -K. C.	3,507
Shiloh (1951)	1-9-25W	40	9,691	31,695	1	Lans. -K. C.	4,013
Smith-Denning (1950)	5-10-21W	900	92,923	433,693	17	Lans. -K. C.	3,530
						Arbuckle	3,819
Van (1954)	14-9-22W	40	1,806	1,806	1	Arbuckle	3,871
White (1952)	25-10-21W	Combined with Laura					
White Southwest* (1953)	35-10-21W	500	126,738	154,062	19	Arbuckle	3,688
Wild Horse Creek (1950)	16-9-22W		no runs	10,095	1	Arbuckle	3,944
Worcester (1951)	23-7-22W	40	2,309	11,301	1	Arbuckle	3,792
Pools or fields abandoned				12,765			
Total Graham County		23,690	3,875,926	26,088,742	582		

GRAY COUNTY

Jumbo (1953)	29-29-27W		no report	none		Cherokee?	5,103
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GREENWOOD COUNTY

Atyeo* (1925)	30-21-10E	320	187,338		19	"Bartlesville"	2,250
Beaumont (1920)	27-8E	640	77,761		36	"Peru"	1,830
						Mississippian	2,445
						Arbuckle	2,740
Beaumont North	27-9E	20	335		1	Mississippian	2,477
						Ordovician	2,800
Beaumont South (1935)	2-28-8E	80	7,874		5	Mississippian	2,500
Blackwell (1925)	16-24-13E	320	30,589		8	Mississippian	1,650
Blankenship* (1921)	26-8E	160	65,507		11	"Bartlesville"	2,650
Brinegar	26-13E	320	5,412		5	"New Albany"	427
Brinegar North	26-13E				3		
a		10	262				
b		40	1,951				
Browning (1924)	22-10E	1,600	102,499		94	"Bartlesville"	2,314
Burkett (1923)	24-23-10E	1,600	204,674		87	"Bartlesville"	2,000
Burt (1949)	8-26-11E	160	2,028		3	Mississippian	1,945
Climax (1925)	27-11E	160	3,828		1	Mississippian	1,900
DeMalorie-Souder (1924)	22-10E	2,700	306,706		141	"Bartlesville"	2,150
Dunaway* (1922)	34-22-13E	1,600	63,141		69	Mississippian	1,800
Eureka	31-25-11E				60	Fort Scott	1,750
a		160	1,834			Mississippian	2,000
b		1,280	53,407				
Fankhouser* (1926)	4-22-12E	900	122,562		37	"Bartlesville"	1,850
Gaffney (1926)	18-24-11E	160	9,319		3	"Bartlesville"	1,850
Gilroy (1928)	12-25-12E		no report			Mississippian	1,600
Hamilton (1925)	7-24-12E				83	"Bartlesville"	1,650
a		2,000	105,697			Mississippian	1,800
b		240	569				

Hinchman (1927)	17-24-13E	480	13,496	10	Mississippian	1,615
Hollis (1927)	16-23-10E	240	2,156	2	"Bartlesville"	2,150
Honey Creek (1950)	32-26-11E		no report		Mississippian	1,871
Hubbard	22-13E	40	850	1		
Jackson	25-8E			2	"Bartlesville"	
a		10	159			
b		120	3,952			
Jobs	24-13E	160	4,610	5		
Lamont (1926)	29-22-13E	2,200	233,832	79	"Bartlesville"	1,700
Ly-Green* (1954)	5-22-11E	40	352	2	"Bartlesville"	1,858
Madison	14-22-11E			103	"Bartlesville"	1,800
a		240	4,543			
b		640	452,451			
Morris (1950)	28-24-13E		no report			
Ott	7-22-13E	20	1,948	1		
Parks	24-10E		no report			
Pixlee (1923)	7-22-10E	920	30,835	26	"Bartlesville"	2,350
Polhamus (1922)	25-9E	1,100	233,718		Mississippian	2,400
Quincy* (1926)	31-24-12E	1,280	43,123	45	"Bartlesville"	2,180
				121	"Bartlesville"	1,500
					Mississippian	1,720
Reece	24-26-9E			23	Kansas City	1,380
a		900	17,809		Mississippian	2,100
b		80	652			
Sallyards	25-8E			140	"Bartlesville"	2,350
a		1,800	204,291			
b		320	50,961			
Scott (1925)	24-23-8E	900	112,852	38	"Bartlesville"	2,525
Seeley-Wick (1922)	28-23-11E			308	"Bartlesville"	1,930
a		2,700	536,363			
b		1,900	1,134,245			
Severy*	8-28-11E			5	Kansas City	1,200
a		480	8,390			
b		160	2,792			
Severy North	27-11E	320	740	1		
Stanhope	15-26-8E	240	29,237	10	Mississippian	2,450
Teeter* (1920)	16-23-9E			173	"Bartlesville"	2,400
a		2,000	157,298			
b		320	8,200			
Teichgraber (1939)	25-8E			21	"Bartlesville"	2,750
a		240	1,300			
b		640	16,883			
c		40	468			
Thrall-Aagard (1921)	14-24-9E			297	"Bartlesville"	2,170
a		2,700	846,700			
b		640	147,839			
c		320	6,704			
d		40	698			
Tonovay	25-11E	440	10,251	6		
Tonovay North			no report			
Tonovay West (1950)	33-25-11E		no report		Mississippian	1,948
Toronto (1913)	16-26-13E			3	"Peru"	1,000
a		80	1,287		"Bartlesville"	1,700
b		80	2,649			
Tucker			no report			
Verdigris (1953)	2-24-12E		no report		Mississippian	1,784
Virgil (1916)	14-24-12E	3,600	139,633	149	"Bartlesville"	1,550
					Mississippian	1,700
Virgil North* (1920)	22-23-13E	5,500	262,845	369	"Bartlesville"	1,585
					Mississippian	1,840
Wiggins (1925)	30-24-11E	1,280	32,788	53	"Bartlesville"	1,860

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Wilkerson (1926)	6-25-9E		no report			"Bartlesville"	2,200
Willard	7-27-11E	240	25,853		14	Miss. "chat"	1,900
Zimmermann (1953)	19-23-10E	80	2,298	7,228	2	"Bartlesville"	2,296
Miscellaneous			132		2		
Total Greenwood County		50,000	6,141,476	196,323,700	2,697		
recorded							
HARPER COUNTY							
Banner (1954)	27-32-7W	80	6,978	6,978	2	Viola	4,833
Berg (1954)	29-32-7W	40	1,909	1,909	1	Viola	4,758
Bluff Creek (1952)	24-34-5W		no runs	1,284	1	Lans.-K. C.	3,938
Dusenbury (1954)	3-32-9W	40	745	745	1	Mississippian	4,465
Dusenbury North (1954)	34-31-9W		no report	none		Mississippian	4,422
Grabs (1949)	13-31-9W	4,000	115,381	169,161	42	Mississippian	4,400
Grabs East (1954)	9-31-8W		Combined with Grabs				
Grabs Northeast (1954)	8-31-8W		Combined with Grabs				
Grabs South (1954)	25-31-9W	700	27,555	27,555	7	Mississippian	4,397
Grabs West (1954)	14-31-9W		Combined with Grabs				
Total Harper County		4,860	152,568	207,632	54		
HARVEY COUNTY							
Burrton* (1931)	1-23-4W		Included with Reno Co.			Mississippian	3,266
Burrton Northeast (1942)	3-23-3W	200	155	7,917	2	"Hunton"	3,533
						"Chat"	3,224
Graber* (1934)	32-21-1W	100	2,840	154,299	1	Mississippian	3,269
						Misener	3,323
						"Hunton"	3,274
Halstead (1929)	36-22-2W	1,200	23,629	1,963,639	10	"Chat"	3,005
Hollow-Nikkel* (1931)	30-22-3W	2,000	118,667	21,038,500	38	"Chat"	3,195
			Includes McPherson Co. production			"Hunton"	3,507
						Simpson	3,500
Jester Creek (1949)	3-24-1E		no report	1,202		Lans.-K. C.	2,657
Sperling (1935)	23-22-2W	400	18,191	629,313	8	"Hunton"	3,279
Pools or fields abandoned				123,238			
Total Harvey County		3,900	163,482	23,918,108	59		
HASKELL COUNTY							
Pleasant Prairie (1954)	2-27-34W	40	1,394	1,394	1	Mississippian	5,041
HODGEMAN COUNTY							
Jetmore (1950)	24-22-24W	80	7,509	64,856	2	Mississippian	4,590
Purdyville (1951)	3-24-24W	640	124,054	418,208	8	Penn. cong.	4,651
						Mississippian	4,663
Saw Log Creek (1953)	36-23-22W	40	8,476	15,024	1	Marmaton	4,284
Total Hodgeman County		760	140,039	498,088	11		
JEFFERSON COUNTY							
McLouth (1939)	4-10-20E		no report			McLouth	1,450
						Mississippian	1,550

McLouth North (1941)	29-9-20E	no report	McLouth	1,450
			Mississippian	1,500

JOHNSON COUNTY

Gardner	14-22E	480	4,083	8
Dallas	13-13-24E	no report		
"Mignot"		240	1,910	4
Miscellaneous			44	1
Total Johnson County		720	6,037	13

KEARNY COUNTY

Patterson (1941)	23-22-38W	120	31,298	445,999	3	"Patterson sand"	4,748
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KINGMAN COUNTY

Artesian Valley (1952)	22-27-10W	Combined with Dresden					
Banta (1954)	34-30-8W	Combined with Spivey					
Banta Northeast (1954)	34-30-8W	Combined with Spivey					
Bartholomew* (1948)	30-27-4W	240	2,344	64,019	6	"Miss. lime"	3,732
Basil (1953)	16-29-7W	160	9,181	66,463	1	Lans. -K. C.	3,727
			21,020		3	Viola	4,511
Broadway (1950)	21-28-5W	1,200	158,431	808,477	29	Mississippian	3,833
Broadway West (1954)	19-28-5W	40	1,131	1,131	1	Mississippian	3,884
Casley (1952)	11-28-5W	360	52,132	76,437	9	Mississippian	3,794
Cunningham* (1931)	7-28-11W	800	57,307	3,162,288	37	Lans. -K. C.	3,600
Dewey (1950)	9-28-5W	600	64,387	289,338	9	Mississippian	3,801
Dresden (1951)	13-27-10W	1,120	142,671	686,271	33	Lans. -K. C.	3,806
						Mississippian	4,002
						Viola	4,270
Evan Mound (1951)	22-27-5W	40	4,335	19,229	1	Mississippian	3,800
Lansdowne North (1951)	4-28-5W	40	2,875	20,858	1	Mississippian	3,814
Orsemus (1953)	30-29-5W	120	21,400	25,106	3	Viola	4,455
						Simpson	4,468
Orsemus South (1954)	31-29-5W	40	450	450	1	Viola	4,483
Pat Creek (1946)	20-28-9W	160	17,920	172,989	4	Viola	4,406
						Simpson	4,475
Rosedale (1954)	32-29-6W	120	16,369	16,369	3	Lans. -K. C.	3,691
Spivey (1951)	23-30-8W	3,300	207,281	252,350	46	Mississippian	4,205
Spivey East (1954)	19-30-7W	Combined with Spivey					
Spivey Northwest (1954)	9-30-8W	40	1,018	1,018	1	Mississippian	4,156
Spivey South (1953)	27-30-8W	Combined with Spivey					
Willowdale (1954)	11-29-9W	800	70,387	70,387	20	Viola	4,502
Pools or fields abandoned				27,000			
Total Kingman County		9,180	850,639	5,760,180	208		

KIOWA COUNTY

Brenham (1947)	29-28-17W		no runs	179	1	"Miss. chert" 4,821
Exel (1948)	20-30-20W	40	2,990	48,223	1	"Miss. lime" 5,126
Total Kiowa County		40	2,990	48,412	2	

LABETTE COUNTY

Altamont	33-19E		no report			
Banzet	35-19E	10	137		4	
Chetopa	36-34-20E		no report			
Coffeyville-Cherryvale*	32-17E				39	"Wayside" 400
a		480	1,236			Fort Scott 600

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
b		320	1,010			"Bartlesville"	1,000
c		160	561				
d		400	2,087				
e		80	470				
f		480	20,417				
g		40	340				
h		160	1,032				
Dartnell	31-17E				7		
a		320	3,075				
b		160	640				
Dennis	31-18E	10	57		1		
Edna	34-18E	320	5,020		5		
Ideenbro		10	59		1		
Lake Creek	35-19E	40	2,546		2		
Mound Valley	32-18E				14	"U. Bartlesville"	630
a		480	3,563			"L. Bartlesville"	700
b		160	13,430			Mississippian	900
c		20	75			"Bartlesville"	600
Price (1917)	33-18E				24		
a		320	18,240				
b		480	6,486				
Miscellaneous			450		3		
Total Labette County		4,450	80,931	492,639 recorded	100		
LANE COUNTY							
North Fork (1952)	19-17-29W	80	2,150	10,974	2	Lans.-K. C. Marmaton	4,333 4,400
LEAVENWORTH COUNTY							
Ackerland (1941)	12-10-20E		no report			McLouth	1,370
Banker's Life (1941)	3-10-20E		no report			McLouth	1,450
Total Leavenworth County				81,050 recorded			
LINN COUNTY							
Centerville* (1920)	10-21-22E				111	"Squirrel"	480
a		1,280	15,984			"Bartlesville"	720
b		10	56				
c		80	839				
Critzer	22-22E	10	140		1		
Goodrich-Parker (1922)	25-20-21E				81	"Squirrel"	600
a		320	896			"Bartlesville"	700
b		240	476				
c		900	6,568				
d		10	56				
e		9,000	33,328				
LaCygne-Cadmus	20-24E					Bandera	150
a		240	16,504			Labette	200

b	10	56		
c	40	392		
d	640	12,156		
e	10	54		
Total Linn County	12,790	87,505	845,254	273
			recorded	

LYON COUNTY

Ayco* (1925)	30-21-10E	800	128,887	57	"Bartlesville"	2,200
Bradfield	24-21-10E	480	123,613	20+	Viola	2,500
Bradfield Northwest (1953)	13-21-10E	160	87,060	17+	Viola	2,522
Bushong (1950)	26-16-10E		no report	1	"Hunton"	2,950
Fankhouser* (1926)	4-22-12E	720	30,657	63	"Bartlesville"	1,850
Ly-Green* (1954)	5-22-11E	240	1,570	1	"Bartlesville"	1,858
Ritchey-Moore	34-21-10E	80	5,285	1		
Rock Creek (1947)	32-21-11E	240	2,975	4	"Bartlesville"	1,900
Welch-Mohr (1953)	30-20-10E	160	3,379	1	"Bartlesville"	2,293
Total Lyon County		2,880	383,426	6,772,602	165	
				recorded		

McPHERSON COUNTY

Battle Hill (1945)	24-18-1W	40	2,271	48,024	1	"Chat"	2,825
Battle Hill North (1948)	13-18-1W	40	9,306	73,037	1	"Miss. lime"	2,811
Bitikofer (1940)	1-20-1W	160	2,402	218,252	4	"Chat"	2,885
Bitikofer North (1946)	25-19-1W		no report	9,043		"Miss. lime"	2,892
Bonaville (1949)	33-17-2W		no runs	16,153	2	Simpson	3,557
Burk (1948)	7-18-1W	120	9,957	102,501	3	Mississippian	2,781
Canton North (1936)	26-18-1W	540	28,872	674,145	12	"Chat"	2,803
Chindberg (1929)	18-19-2W	500	20,541	1,815,435	11	Lans.-K. C.	2,363
						"Chat"	3,007
Coons (1940)	13-19-1W	80	2,531	10,427	2		
Crowther (1942)	26-17-1W	1,500	115,627	3,103,421	41	"Chat"	2,778
Georob (1947)	31-17-1W	1,500	275,017	2,144,464	42	"Chat"	2,665
Graber* (1934)	32-21-1W	2,300	612,256	11,923,348	106	Misener	3,323
						"Hunton"	3,274
Graber North (1951)	4-21-1W	40	1,378	1,378	1	Mississippian	2,955
Groveland (1953)	10-20-4W	40	7,159	12,147	1	Viola	3,728
Groveland South (1953)	14-20-4W	300	62,112	63,306	8	Viola	3,719
Gypsum Creek* (1944)	4-17-1W	500	23,891	425,079	15	"Chat"	2,619
Gypsum Creek South (1953)	9-17-1W	40	788	3,215	1	Mississippian	2,627
Henne (1940)	21-17-1W	800	48,498	1,511,758	15	"Chat"	2,658
Hollow-Nikkel* (1931)	30-22-3W		Included with Harvey County			"Chat"	3,195
						"Hunton"	3,507
						Simpson	3,500
Jenday (1944)	1-19-2W	1,000	36,895	880,648	27	"Chat"	2,984
Johnson (1932)	35-19-3W	960	45,597	3,415,201	10	"Chat"	3,032
Johnson South (1950)	11-20-3W		no report	8,153		Mississippian	3,043
Lindborg (1938)	8-17-3W	5,400	389,950	7,643,561	102	Viola	3,352
						Simpson	3,360
Lively (1953)	28-19-2W	2,000	498,258	568,935	79	Lans.-K. C.	2,324
						"Miss. lime"	2,955
McPherson (1926)	29-18-2W	1,700	79,138	1,657,136	37	Lans.-K. C.	2,340
						"Chat"	2,967
						Viola	3,140
Maxwell (1948)	17-18-1W	160	5,244	35,295	4	"Miss. lime"	2,846
Paden (1943)	10-18-1W	640	187,564	2,827,498	42	"Chat"	2,752
						Viola	3,153
Paden South (1950)	21-18-1W	300	28,447	69,267	8	Mississippian	2,765
Reuben (1949)	17-18-2W	80	2,934	25,335	2	Simpson	3,675

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Ritz-Canton (1929)	1-20-2W	13,500	755,231	43,933,295	195	"Chat"	2,935
						Viola	3,412
Roxbury (1938)	18-17-1W	1,000	71,811	3,153,556	29	"Chat"	2,684
						Simpson	3,278
Roxbury South (1942)	30-17-1W	240	7,850	330,076	4	"Chat"	2,656
Roxbury Southeast (1943)	20-17-1W	240	11,994	104,599	4	"Chat"	2,665
Voshell (1929)	9-21-3W	3,200	246,181	28,777,368	57	"Chat"	3,095
						Viola	3,301
Welch-Bornholdt* (1924)	35-20-6W	3,200	370,684	12,363,846	102	"Chat"	3,370
Windom (1953)	30-19-5W	300	61,183	61,183	9	Mississippian	3,409
Total McPherson County		42,420	4,021,567	128,010,085	977		
MARION COUNTY							
Antelope (1947)	33-18-4E		no report			Miss. "chat"	2,380
Antelope North (1948)	28-18-4E	160	21,652		4	Kansas City	1,840
						Mississippian	2,401
						Mississippian	2,269
Biscuit Hill (1952)	33-21-4E		no report			Mississippian	2,269
Cedar Creek (1950)	31-20-5E		no report	2,182	1	Viola	2,563
Covert-Sellers (1920)	28-21-4E	800	83,497		43	Viola	2,400
Durham (1953)	34-18-2E	160	27,170	45,561	3	Viola	2,899
Durham South (1954)	3-19-2E	240	1,644	1,657	1	Simpson	3,039
Edmonds (1953)	31-22-4E	640	43,550	55,738	10	Mississippian	2,471
Elbing* (1918)	18-23-4E	160	4,974		6	Kansas City	2,120
						Mississippian	2,400
						Viola	2,530
Elbing East*	27-23-4E		no report				
Elbing North (1947)	27-22-4E	240	5,722	69,230	4	Miss. "chat"	2,439
Fanska (1943)	6-17-1E		no report		6	Miss. "chat"	2,680
Florence (1920)	18-21-5E	640	2,345		5	Viola	2,300
Hillsboro (1928)	7-19-3E	640	21,802		9	Mississippian	2,470
						Viola	2,820
Lehigh (1946)	27-19-1E	160	5,154	93,683	4	Mississippian	2,800
Lehigh North (1953)	23-19-1E	80	1,637	1,637	1	Viola	3,225
Lost Springs* (1926)	22-17-4E	5,200	311,781		182	Mississippian	2,365
Lost Springs East (1942)	35-17-4E	120	2,470		3	Miss. "chat"	2,350
Lost Springs Southeast (1948)	10-18-4E	480	6,811	19,799	4	Mississippian	2,345
Nelson West* (1953)	30-17-5E	120	627		1	Mississippian	2,297
Peabody (1920)	9-22-4E				22	Viola	2,500
a		700	26,435				
b		20	134				
c		480	20,290				
Propp	19-4E	320	8,141	35,624	7		
Quarry Siding (1953)	16-19-4E	160	6,939		3	Mississippian	2,302
Shank (1952)	12-22-3E	160	18,482	62,193	6	Mississippian	2,474
Wenger (1947)	11-21-4E	640	103,520	782,320	26	"Hunton"	2,770
Youk (1954)	20-18-2E		no report	none		Viola	3,017
Total Marion County		12,320	724,777	33,310,229	351	recorded	
MEADE COUNTY							
Adams Ranch (1948)	8-35-30W		no runs	1,362	1		

Adams Ranch East (1947)	36-34-30W	180	13,082	61,291	4	Marmaton	5,346
Bond (1954)	32-33-30W	40	3,749	3,749	1	Atokan	5,619
Bromwell (1952)	7-34-29W		no runs	2,878	1	Morrowan	5,901
Bruno (1953)	20-33-30W	40	13,946	22,493	1	Morrowan	5,656
Bruno Northeast (1953)	16-33-30W	40	11,730	16,409	1	Morrowan	5,721
Kismet East (1953)	30-33-30W		no report	none		Morrowan	5,645
McKinney* (1950)	2-34-26W	1,200	21,945	45,273	14	Mississippian	5,762
Novinger (1951)	26-33-30W	2,300	429,535	1,088,353	31	Marmaton	5,270
			18,771		2	Morrowan	5,765
			16,250		1	Mississippian	5,803
Total Meade County		3,800	529,008	1,241,808	57		

MIAMI COUNTY

Beagle	19-22E	120	713		2		
Block	18-24E				6	"Squirrel" (?)	
a		40	365				
b		120	728				
Louisburg	17-25E				88	Knobtown	270
a		640	29,708			"Peru"	430
b		160	437			"Squirrel"	600
c		640	12,009				
d		10	87				
Paola-Rantoul* (1860)	17-23E				1,038	Knobtown	300
a		3,400	321,146			Hepler	400
b		500	8,620			"Peru"	500
c		320	521			"Squirrel"	600
d		1,800	123,662			"Bartlesville"	700
e		1,600	11,671				
f		1,900	86,625				
g		480	36,563				
h		40	111				
i		80	420				
j		1,600	16,216				
k		320	878				
l		240	530				
m		20	86				
n		20	280				
o		240	511				
p		1,200	30,122				
q		160	2,150				
r		10	21				
s			361				
t		20	210				
u		160	420				
Miscellaneous			582		7		
Total Miami County		16,040	685,753	15,217,464	1,141	recorded	

MONTGOMERY COUNTY

Brewster	32-16E				15	"Bartlesville"	900
a		240	1,910			Arbuckle	
b		80	166				
c		750	24,335				
Caney	35-14E				32	"Bartlesville"	1,320
a		40	295				
b		640	10,566				
Coffeyville-Cherryvale* (1902)	33-17E				375	"Wayside"	400
a		3,500	47,373			Fort Scott	600
b		240	438			"Bartlesville"	1,000

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
c		40	149			Arbuckle	1,300
d		640	11,651				
e		240	2,779				
f		40	389				
g		640	37,765				
h		320	2,282				
i		160	1,122				
j		40	360				
k		3,400	24,039				
l		320	7,935				
m		10	36				
n		40	228				
Coleman (1921)	28-32-14E	640	4,369		15	Arbuckle	1,700
Elk City	31-13E	320	1,624		5		
Jefferson-Sycamore (1903)	18-33-15E				612	"Weiser"	800
a		20	336			"Bartlesville"	1,200
b		10	129				
c		320	122,539				
d		320	2,328				
e		640	2,050				
f		100	392				
g		240	3,000				
h		320	8,655				
i		320	13,798				
j		8,000	239,253				
k		240	5,712				
l		160	1,526				
m		10	77				
n		160	831				
o		120	758				
p		160	2,834				
q		480	228				
r		1,280	47,945				
s		160	417				
Neodesha*	31-16E				39	"Bartlesville"	950
a		640	2,634				
b		320	798				
c		640	19,150				
d		480	1,250				
e		40	419				
Sorghum Hollow	32-14E				68	"Weiser"	800
a		2,000	75,691				
b		240	2,809				
Tyro (1904)	13-35-14E				69	"Bartlesville"	1,250
a		40	362				
b		2,600	17,118				
c		160	1,294				
Wayside-Havana* (1904)	34-14E				827	"Wayside"	575
a		160	5,210			"Weiser"	700
b		320	1,662			"Bartlesville"	1,200
c		160	299				
d		8,400	151,011				
e		160	1,168				

f	160	4,867		
g	120	1,659		
Miscellaneous		<u>2,133</u>		<u>13</u>
Total Montgomery County	42,540	922,153	42,709,027	2,070
			recorded	

MORRIS COUNTY

Burdick (1949)	15-17-5E	120	2,977	26,311	3	Mississippian	2,220
John Creek (1953)	26-15-9E	160	2,479	2,479	7	Viola	3,090
Nelson (1928)	30-17-5E		no report			Mississippian	2,295
Nelson West (1953)	30-17-5E	120	688	688	1	Mississippian	2,297
Three Mile Creek (1950)	26-16-5E	240	8,617	82,611	4	Mississippian	2,208
Three Mile Creek South (1950)	35-16-5E	<u>320</u>	<u>23,642</u>	<u>106,318</u>	<u>8</u>	Mississippian	2,183
Total Morris County		960	38,403	218,407	24		

MORTON COUNTY

Boehm (1951)	14-33-42W	120	5,187	5,187	3	Morrowan	
Interstate (1954)	29-34-43W	300	19,358	19,358	7	Morrowan	4,170
Richfield (1948)	17-32-40W		no runs	829	1	Basal Penn. (Atokan)	4,990
Total Morton County		420	24,545	25,374	11		

NEMAHA COUNTY

Sabetha (1950)	13-2-14E	160	9,959	47,618	2	"Hunton"	2,826
Strahm (1948)	27-2-14E				4	"Hunton"	2,879
a		120	450	126,662		Viola	3,559
b		160	23,720				
Strahm East (1953)	26-2-14E	<u>80</u>	<u>3,441</u>	<u>7,195</u>	<u>1</u>	"Hunton"	2,826
Total Nemaha County		520	37,570	181,475	7		
				recorded			

NEOSHO COUNTY

Erie (1903)	28-20E				204	"Bartlesville"	650
a		3,800	75,756				
b		480	2,796				
"Graham"		80	268		1		
Humboldt-Chamute*	27-18E				958	"Bartlesville"	700
a		120	2,301				
b		240	961				
c		8,000	444,968				
d		320	4,212				
e		320	314				
f		480	14,194				
g		480	4,652				
h		320	2,267				
i		160	1,081				
j		240	1,234				
k		640	14,169				
l		10	59				
m		640	6,675				
n		240	2,234				
Kimball	27-21E	20	2,872		5		
Morehead	30-30-18E	480	9,867		10	"Bartlesville"	850
St. Paul-Walnut*	29-21E				70	"Bartlesville"	550
a		1,280	8,584				
b		640	1,337				
c		20	297				

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
d		640	2,971				
e		20	236				
Thayer	29-17E	640	5,208		10		
Trent	28-21E				10		
a		480	2,903				
b		40	802				
Urbana	28-18E				12	"Bartlesville"	750
a		320	3,010				
b		40	655				
Miscellaneous			745		5		
Total Neosho County		21,190	617,628	22,982,588 recorded	1,285		
NESS COUNTY							
Aldrich (1929)	7-18-25W	5,200	231,233	3,149,105	42	"Warsaw"	4,428
Aldrich Northeast (1954)	23-17-25W	180	7,580	7,580	4	Mississippian	4,398
Arnold (1943)	22-16-25W	300	24,005	374,599	5	Fort Scott	4,436
						"Warsaw"	4,528
Kansada West (1950)	28-17-26W		no report	none		Mississippian	4,438
Manteno (1945)	31-19-25W		no runs	56,158	2	"Warsaw"	4,549
Pools or fields abandoned				7,581			
Total Ness County		5,660	262,818	3,595,023	53		
NORTON COUNTY							
Norton (1953)	36-3-24W	2,180	688,853	730,547	106	Arbuckle Reagan	3,778
Ray* (1940)	32-5-20W	340	36,638	319,712	6	Lans.-K.C.	3,297
						Arbuckle	3,575
						Reagan	3,540
Ray North (1954)	13-5-21W		no report	none		Arbuckle	3,544
Ray Northwest (1953)	22-5-21W	80	5,445	5,601	2	Arbuckle	3,605
Ray West (1945)	26-5-21W	200	24,807	155,875	5	Arbuckle	3,650
Pools or fields abandoned				32,054			
Total Norton County		2,800	755,743	1,243,789	119		
OSBORNE COUNTY							
Ruggles (1952)	23-10-15W	640	90,155	246,170	12	Shawnee	2,986
						Lans.-K.C.	3,024
						Penn. cong.	3,394
PAWNEE COUNTY							
Ash Creek* (1947)	31-20-15W		no runs	240,495	1	Arbuckle	3,787
Ash Creek Southwest (1947)	11-21-16W	40	4,478	107,321	1	Arbuckle	3,779
Benson (1945)	30-23-15W	1,800	153,834	527,349	24	Lans.-K.C.	3,853
Conkling (1953)	4-20-18W		no report	none		Arbuckle	4,020
Dunes (1953)	22-22-15W	680	75,292	125,185	8	Arbuckle	3,956
Dunes Southwest (1953)	33-22-15W	40	9,063	15,268	1	Lans.-K.C.	3,728
Evers (1951)	1-22-16W	400		169,385	-	Lans.-K.C.	3,525
			16,396		2	Penn. cong.	3,814
			29,401		4	Simpson	3,861
			25,907		3	Arbuckle	3,908

Evers Northeast (1953)	31-21-15W	80	3,240	6,626	2	Arbuckle	3,915
Garfield (1947)	17-23-17W	3,200	157,641	165,453	43	Penn.-Miss. contact	4,279
						Kinderhookian	4,276
Garfield Northeast (1954)	3-23-17W	160	3,942	3,942	4	Mississippian	4,150
Garfield Southwest (1954)	30-23-17W		no report	none		Mississippian	4,317
						Misener	4,347
Hearn (1953)	35-23-15W	40	3,592	3,592	1	Lans.-K. C.	3,833
Jay (1954)	3-23-15W	80	4,181	4,181	2	Simpson	4,025
Larned (1949)	28-21-16W	2,600	548,917	945,175	55	Arbuckle	3,877
Lovett (1954)	35-22-15W	40	1,650	1,650	1	Lans.-K. C.	3,682
Oro (1953)	9-20-19W	340	48,337	87,523	8	Penn. congl.	4,204
Oro West (1953)	8-20-19W	40	1,767	3,891	1	Penn. congl.	4,124
Pawnee Rock* (1936)	13-20-16W	3,000	301,316	3,657,275	60	Arbuckle	3,832
Rutherford (1946)	8-20-16W	300	16,900	282,935	6	Arbuckle	3,815
Ryan* (1945)	35-19-16W	420	29,166	513,844	8	Arbuckle	3,656
Ryan Southeast (1945)	12-20-16W	300	14,265	316,750	9	Arbuckle	3,688
Shady (1948)	35-22-16W		no runs	6,038	2	Arbuckle	4,067
Shady Southwest (1953)	3-23-16W	120	24,989	26,047	3	Lans.-K. C.	3,705
Shiley (1954)	14-20-20W	200	28,591	28,591	5	Penn. congl.	4,173
Shiley East (1954)	18-20-19W	80	3,021	3,021	2	"Cherokee"	4,223
Sweeney (1953)	8-21-15W	300	6,772	6,772	6	Arbuckle	3,831
Sweeney West (1954)	6-21-15W		Combined with Sweeney				
Total Pawnee County		14,260	1,512,658	7,255,325	262		

PHILLIPS COUNTY

Beckman (1951)	3-4-19W	40	2,238	7,519	1	Lans.-K. C.	3,201
Bow Creek (1939)	25-5-18W	120	5,499	73,016	3	Lans.-K. C.	3,111
Dayton (1941)	36-2-19W	1,540	51,437	1,108,829	17	Lans.-K. C.	3,430
Fredericksburg (1952)	4-1-18W	40	2,858	9,157	1	Lans.-K. C.	3,457
Glenwood (1951)	21-1-17W	40	3,477	16,187	1	Lans.-K. C.	3,597
Hansen (1943)	14-5-20W	1,100	212,735	2,371,781	36	Lans.-K. C.	3,363
						Arbuckle	3,530
Hansen West (1952)	15-5-20W	40	6,353	16,794	1	Arbuckle	3,543
Huffstutter (1949)	6-2-18W	3,600	357,586	3,003,143	131	Lans.-K. C.	3,444
Huffstutter Southwest (1951)	23-2-19W	200	28,250	97,492	5	Lans.-K. C.	3,458
Kent (1951)	22-1-18W		no report	1,472		Lans.-K. C.	3,432
Logan (1945)	3-5-20W	420	32,287	411,016	12	Lans.-K. C.	3,149
						Arbuckle	3,381
Mont Sol (1954)	1-4-19W	200	30,846	30,846	5	Lans.-K. C.	3,255
Ray* (1940)	32-5-20W	4,000	1,257,762	16,915,565	148	Lans.-K. C.	3,297
						Arbuckle	3,575
						Reagan	3,540
Slinker (1951)	25-4-20W	200	25,395	85,051	5	Lans.-K. C.	3,215
Stuttgart (1950)	14-3-19W	600	41,373	228,319	12	Lans.-K. C.	3,146
Stuttgart South (1951)	23-3-19W	40	4,122	17,410	1	Lans.-K. C.	3,291
Wolf Creek (1954)	16-4-19W	40	455	455	1	Lans.-K. C.	3,212
Pools or fields abandoned				1,596			
Total Phillips County		12,220	2,062,673	24,395,648	380		

PRATT COUNTY

Blowout (1952)	8-27-14W	40	2,111	6,345	1	Lans.-K. C.	3,929
Cairo North (1954)	6-28-11W	80	16,140	16,140	2	Viola	4,314
Chance (1946)	4-27-13W	1,600	492,604	2,610,860	75	Mississippian	4,254
						Simpson	4,380
						Arbuckle	4,432
						Viola	4,250

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Chance East (1952)	34-26-13W	300	6,862 437 40,528 635	93,446	1 1 5 2	Lans. -K. C. Mississippian Viola Arbuckle	3,984 4,138 4,261
Chance North (1954)	21-26-13W	80	6,387	6,387	2	Simpson	4,421
Chance Northwest (1954)	29-26-13W	120	25,191	25,191	3	Simpson	4,422
Chitwood (1943)	23-28-12W	1,580	5,632 13,142 332,162 3,776	7,712,280	3 11 50 4	Lans. -K. C. Viola Simpson Arbuckle	3,947 4,396
Chitwood Northeast (1950)	13-28-12W		no report	3,678	4	Viola	4,330
Clara* (1948)	36-29-14W	140	11,742	175,379	5	Simpson	4,472
Coats (1944)	24-29-14W	400	11,970	412,255	8	Simpson Arbuckle	4,402
Coats North (1954)	12-29-14W	80	26,803	26,803	2	Marmaton Simpson	4,342 4,584
Cunningham* (1931)	7-28-11W	3,200	105,985	4,722,571	69	Lans. -K. C.	3,390
Earl (1954)	36-28-14W	200	21,648	21,648	4	Simpson	4,520
Fitzsimmons (1953)	30-27-13W	120	27,287	44,338	3	Lans. -K. C.	4,056
Fitzsimmons South (1954)	31-27-13W	80	4,453	4,453	2	Simpson	4,435
Frisbie (1943)	5-26-13W	400	24,410	363,963	5	Lans. -K. C.	3,947
Frisbie Northeast (1948)	4-26-13W	380	58,996	226,924	13	Lans. -K. C. Viola Simpson	3,788 4,170 4,274
Gereke (1953)	12-26-15W	40	14,225	16,435	1	Viola	4,376
Hertlein (1953)	22-28-13W		no runs	307	1	Lans. -K. C.	3,924
Iuka-Carmi (1937)	11-27-13W	8,780	47,475 3,771 35,203 1,115,650 232,667	15,168,907	17 1 5 156 55	Lans. -K. C. Mississippian Viola Simpson Arbuckle	4,104 4,112 4,195 4,292 4,354
Iuka-Carmi Northwest (1953)	26-26-13W	400	1,363 5,056 28,378	39,497	1 1 4	Viola Simpson Arbuckle	4,217 4,276 4,358
Jarboe (1952)	25-26-14W	40	211	1,267	1	Lans. -K. C.	3,834
Lion (1953)	29-27-11W		no report	none		Viola	4,323
Lion Northeast (1954)	21-27-11W	40	7,373	7,373	1	Lans. -K. C.	3,796
Ludwick (1944)	4-29-13W	40	2,681	33,204	1	Simpson	4,490
Moore (1949)	1-26-14W	400	17,707 31,346	98,895	2 5	Viola Simpson	4,234 4,348
Moore Southwest (1953)	11-26-14W	500	1,570 40,252 9,121	70,017	1 7 1	Lans. -K. C. Kinderhookian Simpson	3,846 4,246 4,364
Shriver (1944)	33-29-14W	400	39,243	717,379	7	Simpson	4,557
Stark (1941)	18-26-11W	300	5,541	854,500	6	Lans. -K. C. Viola	3,601 4,121
Stoops (1946)	7-29-12W	80	2,293	90,047	2	Viola	4,446
Stoops Southwest (1946)	24-29-13W	40	1,056	16,368	1	Viola	4,483
Tatlock (1954)	28-26-15W	40	1,482	1,482	1	Lans. -K. C.	3,925
Total Pratt County		19,900	2,882,565	33,588,339	549		

RENO COUNTY

Abbyville (1927)	24-24-8W	1,040	22,546	875,121	15	Lans. -K. C.	3,540
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Albion (1948)	14-26-6W	100	1,435	26,927	3	Lans. -K. C.	3,342
						"Chat"	3,654
Albion North (1950)	14-26-6W		no runs	767	1	Viola	3,997
Bacon (1953)	36-23-5W	40	6,276	8,417	1	Mississippian	3,382
Buhler (1938)	25-22-5W	1,200	126,930	1,134,636	18	Viola	3,890
						Simpson	3,897
Burrtown* (1931)	1-23-4W	11,200	922,609	49,091,296	330	Mississippian	3,266
			Includes Harvey County production			"Hunton"	3,583
Grove (1954)	12-25-10W	40	739	739	1	Mississippian	3,884
Raven (1951)	9-25-4W	80	5,984	19,726	2	Simpson	3,977
Hilger (1934)	16-26-4W	900	40,152	4,744,262	15	Viola	4,062
Lerado Southwest (1944)	21-26-9W	40	3,484	134,003	1	Viola	4,177
Morton (1942)	17-24-8W	40	2,345	45,034	1	Lans. -K. C.	3,180
Morton Southeast (1951)	16-24-8W	40	2,097	9,127	1	Lans. -K. C.	3,423
Nicklaus (1952)	3-26-4W	120	18,414	40,103	3	Lans. -K. C.	3,249
Sankey (1951)	22-22-10W	80	3,354	25,418	2	Lans. -K. C.	3,187
Sankey Southwest (1952)	21-22-10W	40	8,922	16,373	1	Viola	3,548
Sterling* (1951)	4-22-8W	360	22,432	22,432	7	Mississippian	3,385
Yoder (1935)	34-24-5W		no runs	93,285	3	"Chat"	3,450
Zenith-Peace Creek* (1941)	21-23-10W	8,300	215,590	18,075,929	109	Viola	3,773
Pools or fields abandoned				<u>2,590,055</u>			
Total Reno County		<u>23,620</u>	<u>1,403,319</u>	<u>76,953,650</u>	<u>514</u>		

RICE COUNTY

Bell (1953)	9-21-10W	160	29,822	55,313	4	Arbuckle	3,391
Bingham (1952)	35-19-9W	80	9,149	17,457	2	Arbuckle	3,332
Bloomer* (1936)	36-17-11W	1,500	598,194	14,388,653	80	Lans. -K. C.	3,044
						Arbuckle	3,257
Bowman North (1948)	16-19-10W		no runs	13,629	1	Arbuckle	3,331
Bredfeldt (1948)	7-18-9W	120	5,381	88,687	3	Arbuckle	3,226
Bredfeldt West (1939)	12-18-10W		no runs	60,191	1	Arbuckle	3,260
Buadton (1954)	11-18-10W	40	392	392	1	Arbuckle	3,281
Calf Creek (1950)	28-18-10W	200	23,637	129,781	5	Pre-Cambrian	3,143
Calf Creek North (1952)	28-18-10W	40	3,084	8,314	1	Arbuckle	3,248
Chase-Silica* (1931)	32-19-9W	34,000	2,359,968	98,936,243	751	Lans. -K. C.	2,942
						"Wilcox"	3,260
						Arbuckle	3,252
						Lans. -K. C.	3,050
Click (1952)	3-18-7W		no report	5,938		Lans. -K. C.	3,065
Click Southeast (1947)	11-18-7W	80	6,887	43,129	2	Penn. congl.	3,194
Crawford (1953)	12-18-7W	320	34,520	36,074	8	Penn. congl.	3,276
Crawford Southeast (1954)	20-18-6W	40	2,466	2,466	1	Conglomerate	3,348
Engelland (1949)	34-20-7W	40	1,147	10,391	1	Penn. congl.	3,358
Fair (1952)	15-21-10W	40	1,213	4,129	19	Arbuckle	3,222
Farmer (1952)	24-18-10W	600	120,985	240,594	2	Penn. congl.	3,213
Frederick (1951)	10-18-9W	80	4,913	21,375		Simpson	3,280
Galt (1952)	8-18-7W	200	19,692	64,919	5	Arbuckle	3,193
Geneseo-Edwards* (1934)	25-18-8W	6,900	2,020,605	36,491,363	297	Lans. -K. C.	2,787
						Penn. congl.	3,432
						Arbuckle	3,118
Glen Sharrald (1950)	20-18-10W	120	3,730	31,029	3	Mississippian	3,388
Green (1953)	14-19-6W		no report	618	7	Lans. -K. C.	3,000
Heinz (1938)	8-18-10W	300	13,591	310,289		Arbuckle	3,254
						Lans. -K. C.	3,068
Irl (1950)	4-19-10W	700	48,416	174,369		Arbuckle	3,308
						"Sooy"	3,240
Keller (1943)	3-19-9W		no runs	42,983	1	Lans. -K. C.	3,226
Lyons (1949)	14-20-8W	40	2,797	72,477		Arbuckle	3,277
						Misener	3,315
						Penn. congl.	

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Mary Ida* (1950)	31-18-10W	640	104,128	481,852	16	Lans.-K. C.	3,033
						Arbuckle	3,272
Munyon (1950)	34-18-10W	120	6,852	43,718	3	"Sooy"	3,270
						Arbuckle	3,275
Munyon East (1953)	34-18-10W	40	1,539	5,234	1	Arbuckle	3,274
Munyon South (1951)	3-19-10W	200	33,741	83,099	5	Arbuckle	3,300
Odessa (1949)	32-18-6W	400	41,997	274,284	11	Lans.-K. C.	3,092
Odessa South (1949)	9-19-6W	120	9,309	44,429	3	Lans.-K. C.	3,069
Orth (1932)	27-18-10W	1,600	161,002	2,851,176	54	Shawnee	
						Lans.-K. C.	2,915
						"Sooy"	3,187
						Pre-Cambrian	3,240
Orth West (1944)	21-18-10W	600	49,964	607,465	17	Shawnee	2,688
						Arbuckle	3,235
Ponce (1936)	28-21-7W	40	2,320	65,343	1	"Sooy"	3,388
Prosper (1948)	6-18-9W		no runs	10,256	1	Arbuckle	3,232
Prosper East (1950)	5-18-9W	200	21,439	172,712	5	Arbuckle	3,222
Raymond (1929)	21-20-10W	2,800	256,816	13,845,699	81	Wabaunsee	2,285
						Lans.-K. C.	3,130
						Arbuckle	3,330
Raymond East (1954)	25-20-10W	40	2,929	2,929	1	Simpson	3,306
Rick* (1936)	1-19-11W	40	2,087	56,672	1	Lans.-K. C.	3,106
						Arbuckle	3,355
Rick Southeast (1947)	18-19-10W	100	11,007	91,477	3	Lans.-K. C.	3,026
						Arbuckle	3,334
Rickard (1935)	22-18-9W	40	4,376	197,855	1	Arbuckle	3,324
Ringwald (1949)	32-18-10W	500	72,988	510,770	9	Lans.-K. C.	2,947
			24,087		4	Pre-Cambrian	3,072
Roesler* (1943)	14-18-11W	400	21,880	119,759	6	Arbuckle	3,291
Silica South* (1935)	24-20-11W	460	102,731	1,338,630	15	Lans.-K. C.	3,035
						Arbuckle	3,268
Staatz (1953)	15-18-9W	80	14,618	16,810	2	Penn. congl.	3,247
Sterling* (1951)	4-22-8W	200	12,701	24,393	5	Mississippian	3,385
Union East (1950)	27-20-8W	280	5,500	56,918	7	"Sooy"	3,305
Volkland (1943)	27-18-9W	400	29,864	703,242	7	Arbuckle	3,221
Welch-Bornholdt* (1924)	35-20-6W	6,300	1,038,618	13,000,386	242	"Chat"	3,370
Welch North (1937)	23-20-6W	160	7,517	115,327	4	"Chat"	3,334
Wherry (1933)	11-21-7W	7,000	170,896	11,520,967	69	"Sooy"	3,358
Wherry North (1947)	35-20-7W	1,000	56,639	566,455	16	"Sooy"	3,423
Pools or fields abandoned				284,228			
Total Rice County		69,360	7,578,134	198,343,888	1,796		
ROOKS COUNTY							
Allphin (1953)	33-10-20W	160	11,709	18,450	4	Arbuckle	3,729
Allphin Northwest (1954)	32-10-20W	200	23,166	23,166	6	Arbuckle	3,736
Amboy (1950)	16-10-20W	160	8,337	71,262	4	Arbuckle	3,813
Annon (1951)	27-10-20W	120	24,024	76,938	3	Arbuckle	3,711
Barry (1942)	11-9-19W	1,900	117,413	7,156,383	17	Lans.-K. C.	
			413,704		50	Arbuckle	3,435
Barry East (1947)	6-9-18W	400	2,659	611,177	1	Lans.-K. C.	3,280
			55,367		9	Arbuckle	3,489
Barry Southeast (1946)	13-9-19W	700	145,370	1,625,226	27	Arbuckle	3,479

Bassett (1951)	20-10-20W	40	568	3,288	1	Arbuckle	3,749
Baum (1942)	10-10-16W	40	2,036	22,779	1	Lans.-K. C.	3,057
Baumgarten (1950)	25-9-19W	1,880	16,001	329,310	2	Lans.-K. C.	3,401
			118,558		19	Arbuckle	3,621
Belmont (1949)	28-7-19W	40	1,973	13,218	1	Lans.-K. C.	3,337
Berland East (1953)	20-10-19W	40	1,633	1,633	1	Arbuckle	3,778
Berland South (1951)	31-10-19W		no report	16,854		Lans.-K. C.	3,480
Berland Southeast (1953)	29-10-19W	200	32,577	33,538	5	Arbuckle	3,755
Berland Southwest (1949)	26-10-20W	440	32,749	265,652	12	Arbuckle	3,728
Brungardt* (1952)	35-10-17W	500	45,346	136,035	12	Lans.-K. C.	3,194
						Penn. congl.	3,449
						Arbuckle	3,644
Brungardt Northwest (1953)	34-10-17W	40	8,695	9,377	1	Arbuckle	3,477
Burnett* (1937)	1-11-18W	700	125,844	1,436,959	24	Lans.-K. C.	3,093
						Arbuckle	3,570
Burnett Northwest* (1946)	3-11-18W	280	37,488	406,098	7	Lans.-K. C.	3,450
						Arbuckle	3,617
Chandler West (1951)	15-9-19W	40	1,385	6,696	1	"Dodge"	
						(Shawnee)	3,248
Colby (1953)	27-10-17W		no report	1,462		Lans.-K. C.	3,384
Dancer (1952)	4-8-17W	40	1,276	8,680	1	Lans.-K. C.	3,140
Dopita (1934)	31-8-17W	1,300	129,882	1,076,734	32	Lans.-K. C.	3,212
						Arbuckle	3,409
Dopita East (1952)	29-8-17W	400	78,006	89,886	9	Lans.-K. C.	3,304
						Arbuckle	3,421
Dopita Southeast (1954)	5-9-17W	120	4,835	4,835	3	Lans.-K. C.	3,335
Dorr (1942)	20-9-16W	800	103,688	876,344	23	Lans.-K. C.	3,230
Dorr South (1953)	20-9-16W	80	14,427	16,260	2	Toronto	3,178
						Lans.-K. C.	3,233
Elm Creek (1951)	19-8-17W	920	217,062	347,967	28	Arbuckle	3,400
Fehnel (1952)	16-10-19W	80	13,965	34,082	2	Lans.-K. C.	3,480
Fimesy (1947)	14-10-18W	80	4,899	32,598	2	Lans.-K. C.	3,419
Genoung (1953)	31-9-17W	80	9,016	18,997	2	Lans.-K. C.	3,281
						Penn. congl.	3,524
Glick (1947)	30-9-19W	280	47,535	217,653	7	Arbuckle	3,578
Gra-Rook (1948)	30-9-20W	800	169,709	1,013,751	20	Penn. congl.	3,810
						Arbuckle	3,869
Grover (1950)	22-7-19W	400	26,797	119,161	9	Lans.-K. C.	3,272
						Arbuckle	3,408
Hayden (1949)	31-8-19W	360	62,968	494,645	13	Lans.-K. C.	3,289
						Arbuckle	3,513
Hillside (1952)	12-8-20W	40	2,488	9,996	1	Shawnee	3,206
Jelinek (1947)	23-9-19W	1,700	17,220	3,284,697	2	Lans.-K. C.	3,220
			519,867		73	Arbuckle	3,537
Kern (1950)	28-9-20W	200	45,757	234,134	5	Arbuckle	3,855
Krueger* (1948)	35-10-16W	380	84,293	435,047	12	Lans.-K. C.	3,552
						Arbuckle	
Kruse (1951)	3-10-16W	440	53,552	221,282	11	Lans.-K. C.	3,094
Kruse Northwest (1953)	34-9-16W	120	10,710	15,321	3	Lans.-K. C.	3,200
Laton (1927)	11-9-16W	4,100	177,291	4,455,813	103	Lans.-K. C.	3,228
Laura* (1950)	30-10-20W	80	10,558	32,711	2	Lans.-K. C.	3,619
						Arbuckle	3,706
Laura Southeast (1952)	30-10-20W	600	5,083	134,566	1	Lans.-K. C.	3,543
			60,191		9	Arbuckle	3,667
Locust Grove (1949)	8-7-19W	40	2,639	21,666	1	Arbuckle	3,450
Locust Grove Southeast (1951)	9-7-19W		no report	4,525		Arbuckle	3,400
Lone Star (1948)	4-8-17W	860	92,875	243,998	19	Arbuckle	3,382
Lone Star Southwest (1951)	8-8-17W	80	4,350	20,180	2	Arbuckle	3,299
Lynd (1951)	32-9-19W	500	83,898	267,632	16	Arbuckle	3,750
Lynd Southwest (1952)	5-10-19W	40	1,072	4,808	1	Arbuckle	3,759
McClellan (1945)	9-9-19W	40	4,305	63,018	1	Lans.-K. C.	3,343

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
McHale (1948)	8-9-18W	400	44,977	390,937	9	Lans. -K. C.	3,436
						Arbuckle	3,494
McHale South (1949)	17-9-18W		no report	4,663		Arbuckle	3,615
Marc (1948)	18-9-19W	80	1,214	17,679	2	Lans. -K. C.	3,370
Marcotte (1943)	15-10-20W	6,400	120,645	9,456,117	21	Lans. -K. C.	3,596
			1,590,831		211	Arbuckle	3,752
Marcotte North (1950)	31-9-19W	240	30,066	105,995	6	Arbuckle	3,770
Marcotte South (1951)	22-10-20W	80	13,969	41,264	2	Arbuckle	3,719
Marcotte Southwest (1951)	21-10-20W	160	17,848	54,802	4	Arbuckle	3,743
Mayhew (1951)	24-9-19W	80	3,846	20,022	2	Arbuckle	3,613
Medicine Creek (1952)	18-8-16W	120	4,893	19,580	3	Lans. -K. C.	3,054
Mt. Ayr (1952)	13-10-18W	120	3,006	8,281	3	Lans. -K. C.	3,554
						Penn. congl.	3,648
Muilenburg* (1949)	1-10-21W	120	18,864	18,864	3	Arbuckle	3,839
Nettle (1948)	34-9-17W	700	173,428	747,692	20	Lans. -K. C.	3,243
						Simpson	3,499
						Arbuckle	3,513
Northampton (1948)	26-9-20W	1,200	7,075	2,714,143	1	Lans. -K. C.	3,596
			403,269		47	Arbuckle	3,803
Northampton Southeast (1953)	35-9-20W	160	7,350	54,085	1	Lans. -K. C.	3,678
			44,223		6	Arbuckle	3,775
Nutsch (1954)	3-10-20W	40	5,608	5,608	1	Arbuckle	3,840
Nyra (1946)	16-9-17W	400	20,583	185,674	11	Lans. -K. C.	3,429
						Arbuckle	3,501
Palco (1943)	5-10-20W	1,100	296,870	2,075,110	43	Arbuckle	3,824
Palco Southeast (1949)	3-10-20W	680	82,328	468,716	14	Lans. -K. C.	3,728
						Arbuckle	3,827
Palco Southwest (1951)	7-10-20W	200	12,004	73,861	4	Arbuckle	3,858
Palco Townsite (1945)	20-9-20W	80	3,739	32,807	2	Arbuckle	3,847
Paradise Creek (1947)	21-9-18W	1,100	178,164	2,122,329	35	Lans. -K. C.	3,400
						Arbuckle	3,576
Paradise Creek West (1953)	20-9-18W	160	47,022	51,410	4	Arbuckle	3,594
Plainville (1948)	31-9-17W	80	5,472	26,163	2	Lans. -K. C.	3,477
						Arbuckle	3,613
Ray Southeast (1942)	9-6-20W	40	2,855	81,986	1	Reagan	3,600
Riffe (1951)	4-7-19W	120	9,363	33,108	3	Lans. -K. C.	3,230
Slate (1951)	31-6-19W	120	7,157	21,243	3	Lans. -K. C.	3,291
						Arbuckle	3,545
Stamper (1950)	28-8-17W		no report	910		Marmaton	3,394
Stockton (1937)	35-7-17W	400	27,031	164,124	9	Shawnee	2,692
						Lans. -K. C.	3,180
Sweet (1951)	18-8-18W		no report	4,738		Arbuckle	3,423
Vohs (1945)	14-10-19W	940	185,487	1,948,480	22	Lans. -K. C.	3,365
Vohs Northwest (1947)	9-10-19W	80	16,906	115,043	2	Lans. -K. C.	3,446
						Arbuckle	3,738
Vohs South (1947)	23-10-19W		no report	12,524		Lans. -K. C.	3,303
Webster (1946)	27-8-19W	1,800	180,438	2,443,990	55	Arbuckle	3,403
Westhusin (1936)	11-9-17W	1,500	124,155	2,217,406	38	Lans. -K. C.	3,231
						Arbuckle	3,408
Whisman (1950)	9-9-20W		no report	none		Lans. -K. C.	3,427
Williams (1953)	9-10-18W	240	40,686	147,374	6	Lans. -K. C.	3,459
			18,982			Simpson	3,717
			28,365			Arbuckle	3,733

Williams Northwest (1953)	6-10-18W	40	4,525	9,033	1	Lans. -K. C.	3,409
Williams Southeast (1953)	16-10-18W	200	18,165	19,907	4	Lans. -K. C.	3,444
Yobe (1949)	4-9-18W	40	4,139	40,714	1	Lans. -K. C.	3,266
Zurich (1935)	26-10-19W	800	31,733	384,052	9	Shawnee	3,087
						Lans. -K. C.	3,340
Zurich Southwest (1952)	34-10-19W	40	4,707	11,981	1	Lans. -K. C.	3,385
Zurich Townsite (1944)	27-9-19W	360	42,182	436,687	8	Arbuckle	3,647
Pools or fields abandoned				145,112			
Total Rooks County		43,260	7,190,986	52,990,702	1,243		

RUSH COUNTY

Chilly Knob (1953)	18-19-17W		no report	none		Arbuckle	3,928
Hungry Hollow (1951)	6-16-17W		no report	2,429		Lans. -K. C.	3,344
Otis-Albert* (1934)	10-18-16W	2,200	101,780	4,914,338	39	Reagan	3,527
Rush Center (1947)	16-18-18W	900	76,558	137,574	12	Arbuckle	3,836
Rush Center Northeast (1954)	10-18-18W	80	7,117	7,117	2	Arbuckle	3,783
Ryan* (1945)	35-19-16W	2,300	110,877	1,853,322	63	Arbuckle	3,656
Timken (1952)	28-18-17W		no report	1,297		Arbuckle	3,729
Webs (1954)	16-19-20W	40	790	790	1	Penn. basal sand	4,202
Weitzel (1947)	1-16-20W	40	1,810	40,396	1	Gorham	3,674
Pools or fields abandoned				60,590			
Total Rush County		5,560	298,932	7,017,853	118		

RUSSELL COUNTY

Atherton (1953)	30-13-14W		Combined with Russell				
Atherton North (1945)	7-13-14W	40	3,958	75,814	1	Arbuckle	3,195
Beaver North* (1937)	4-16-12W	40	4,074	67,460	1	Arbuckle	3,316
Beisel (1944)	15-14-12W		no report	18,617		Arbuckle	3,266
Boxberger (1935)	36-15-15W	100	3,051	235,035	2	Lans. -K. C.	3,147
Claussen (1944)	27-12-14W	200	16,185	82,613	5	Lans. -K. C.	2,855
Claussen North (1949)	22-12-14W		no report	9,730		Lans. -K. C.	2,956
Claussen West (1949)	29-12-14W		no report	1,217		Lans. -K. C.	2,841
Coal Creek (1951)	22-15-11W		no report	none		Penn. congl.	3,178
Cook (1950)	26-13-15W	220	9,029	74,411	6	Lans. -K. C.	3,051
						Arbuckle	3,314
Davidson* (1930)	4-16-11W	160	12,193	218,835	4	Lans. -K. C.	3,016
						"Sooy"	3,317
						Arbuckle	3,314
Dillner Northwest (1947)	27-13-15W		no runs	9,640	1	Arbuckle	3,318
Donovan (1935)	10-15-15W	120	8,001	236,751	3	Lans. -K. C.	3,193
Dubuque (1935)	34-15-12W	750	67,315	1,104,969	19	Lans. -K. C.	3,275
						Arbuckle	3,330
Eulert (1949)	35-11-15W	540	123,260	813,897	17	Arbuckle	3,316
Eulert West (1954)	34-11-15W	40	8,264	8,264	1	Lans. -K. C.	2,984
Fairport* (1923)	8-12-15W	4,000	632,052	22,574,787	161	Lans. -K. C.	2,950
						"Sooy"	3,137
						Gorham	3,211
						Arbuckle	3,312
						Simpson	3,316
						Reagan	3,350
Fay (1952)	2-12-15W	40	3,105	9,854	1	Arbuckle	3,238
Fossil Creek (1953)	11-14-14W		no report	none		"Langdon"	2,341
Gorham (1926)	32-13-15W	15,800	1,747,560	57,523,088	447	Shawnee	2,765
						Lans. -K. C.	2,908
						Gorham	3,152
						Arbuckle	3,289
						Reagan	3,299

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Hall-Gurney (1931)	30-14-13W	29,000	4,316,502	63,503,782	1,223	Tarkio Wabaunsee Topeka Oread Lans.-K.C. Gorham Arbuckle Pre-Cambrian	1,985 2,400 2,675 2,813 2,985 3,165 3,192 3,156
Heim (1953)	21-14-12W	240	25,244	27,387	6	Lans.-K.C. Penn. congl. Arbuckle	2,897 3,189 3,238
Janne (1943)	24-15-12W	300	13,631	236,469	5	Lans.-K.C. Arbuckle	3,319
Jerry (1942)	4-15-14W	40	2,157	62,673	1	Wabaunsee Lans.-K.C. Arbuckle	2,985
Meier (1948)	30-15-12W	60	28,336	162,604	3	Arbuckle	3,325
Ney (1948)	31-15-12W	240	42,191	253,690	6	Lans.-K.C. Arbuckle	3,240 3,350
Parker (1948)	18-15-12W	340	31,568	295,866	7	Shawnee Arbuckle	2,957 3,259
Russell (1934)	22-13-14W	5,300	897,596	14,333,969	181	Lans.-K.C. Arbuckle	3,195 3,280
Russell East (1949)	25-13-14W	100	2,434	32,744	3	Arbuckle	3,273
Steinert (revived) (1954)	21-15-15W	40	1,189	40,899	1	Lans.-K.C.	3,141
Strecker (1943)	21-15-14W	100	3,272	54,363	2	Arbuckle	3,342
Trapp* (1936)	23-15-14W	25,000	3,188,418	95,680,046	935	Tarkio Shawnee "Dodge" Lans.-K.C. Arbuckle	2,359 2,889 2,966 3,062 3,252
Trapp East (1949)	14-15-13W	80	4,753	49,736	2	Lans.-K.C. Arbuckle	3,146 3,277
Pools or fields abandoned Total Russell County		78,120	11,195,338	312,582 258,111,792	3,044		
SALINE COUNTY							
Bachofer (1951)	15-15-2W	160	11,542	37,745	4	Mississippian	2,799
Gypsum Creek* (1944)	4-17-1W	760	148,849	266,408	17	Mississippian	2,619
Hunter (1943)	20-16-1W	840	58,195	1,165,539	19	"Char"	2,681
Hunter North (1948)	8-16-1W	300	33,467	214,306	7	"Miss. lime"	2,674
Mentor (1944)	13-15-3W	120	5,084	36,514	3	Viola	3,258
Olsson (1929)	10-16-3W	860	42,842	510,487	14	Viola	3,303
Salemsborg (1952)	5-16-3W	4,200	262,381	565,316	54	Viola	3,381
Salina (1943)	30-14-2W	1,400	56,971	955,753	23	Viola	3,223
Salina South (1946)	32-14-2W	300	17,154	176,743	7	Viola	3,246
Smolan (1950)	19-15-3W	3,400	789,930	2,795,041	114	Viola	3,386
Swenson (1950)	34-15-3W	80	3,508	26,248	2	Viola	3,353
Pools or fields abandoned Total Saline County		12,420	1,429,923	11,285 6,761,385	263		

SCOTT COUNTY

Grigston (1954)	10-19-31W	40	2,704	2,704	1	Arbuckle	5,050
Keystone (1950)	25-18-32W	120	27,599	127,109	3	Lans.-K.C.	4,001
Shallow Water (1935)	15-20-33W	900	17,905	1,864,471	8	Marmaton	4,286
						"Miss. lime"	4,660
						Ste. Genevieve	4,670
Total Scott County		1,060	48,208	1,994,284	12		

SEDGWICK COUNTY

Bartholomew* (1948)	30-27-4W	1,700	275,314	2,011,733	60	"Miss. lime"	3,732
Butwick* (1949)	7-26-3E	See Butler County		1,939		Mississippian	2,860
Chambers (1948)	10-29-2W	120	11,159	64,184	3	"Miss. lime"	3,540
Clearwater (1944)	22-29-2W	200	9,454	126,705	4	Lans.-K.C.	2,913
Cottage (1953)	19-25-2E	80	310	559	2	"Burgess"	3,004
Crestview (1952)	1-27-1E	no report		none		"Burgess"	2,982
Cross (1929)	27-25-1W	40	2,525	87,119	1	Lans.-K.C.	2,690
Curry (1947)	11-27-1W	440	37,900	499,050	15	Lans.-K.C.	2,715
						Simpson	3,400
Eastborough (1929)	19-27-2E	580	46,211	8,975,488	14	"Chat"	2,956
						Viola	3,238
Eastborough North (1952)	8-27-2E	80	7,606	24,359	2	Arbuckle	3,376
Fairview (1948)	8-26-2E	560	33,235	331,603	8	Lans.-K.C.	2,500
						"Burgess"	2,960
						Mississippian	2,991
Fairview North (1948)	5-26-2E	80	9,435	117,283	2	"Burgess"	2,971
Fairview South (1950)	17-26-2E	no runs		10,553	1	"Burgess"	2,945
Gehring-Rick (1952)	16-28-2E	80	3,030	7,704	2	Mississippian	2,950
Gladys (1954)	30-28-1E	700	8,285	8,285	9	Mississippian	3,176
Goodrich (1928)	16-25-1E	780	80,925	4,800,098	24	Lans.-K.C.	2,614
						"Chat"	3,010
						Kinderhookian	3,334
						Arbuckle	3,339
Greenwich (1929)	14-26-2E	700	113,584	11,648,841	25	"Chat"	2,885
						Viola	3,321
Hinkle (1946)	1-27-1E	no report		10,153		"Burgess"	2,980
Hohm (1945)	22-27-1W	200	15,278	123,681	5	Lans.-K.C.	2,779
Kuske (revived) (1954)	24-25-1E	900	193,924	412,313	32	"Burgess"	3,016
Kuske North (1951)	13-25-1E	Combined with Kuske					
Luening (1951)	33-26-2E	80	3,212	12,637	2	Simpson	3,338
Minneha (1951)	11-27-2E	160	24,431	32,880	6	Arbuckle	3,247
Minneha Northwest (1951)	10-27-2E	no report		2,798		Simpson	3,300
Petrie (1945)	36-26-1W	40	8,975	110,212	1	Viola	3,387
Petrie Northwest (1951)	35-26-1W	40	4,330	35,050	1	Viola	3,445
Prairie Creek (1952)	25-25-2E	no runs		350	1	Mississippian	2,812
Robbins (1929)	20-28-1E	860	81,483	4,136,083	42	"Miss. lime"	3,090
Schulte (1947)	7-28-1W	200	3,856	198,150	6	Mississippian	3,349
						Simpson	3,658
Valley Center (1928)	1-26-1W	1,500	63,046	22,092,650	25	Lans.-K.C.	2,860
						Kinderhookian	3,380
						Viola	3,366
White Cotton (1948)	30-26-2E	600	40,407	509,249	14	"Burgess"	2,957
Pools or fields abandoned				71,393			
Total Sedgwick County		11,780	1,077,915	56,463,102	307		

SEWARD COUNTY

Kismet (1948)	23-33-31W	no report		16,103		Marmaton	5,095
Kismet South (1952)	26-33-31W	40	4,082	17,661	1	Mississippian	5,770

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Kneeland (1951)	23-34-31W	40	1,372	5,362	1	Marmaton	5,332
Liberal-Light (1951)	11-35-32W	2,400	14,475	134,982	1	Lans.-K.C.	5,103
			21,558		6	Morrowan	6,005
Liberal Southeast (1947)	15-35-33W	120	4,266	72,800	3	Penn. ss.	6,202
Thirty-One (1953)	18-31-31W	40	315	315	1	Morrowan	5,448
Total Seward County		2,640	46,068	247,223	13		
SHERIDAN COUNTY							
Adell (1944)	11-6-27W	1,200	286,407	3,260,741	38	Lans.-K.C.	3,755
George (1952)	17-9-26W	80	5,540	26,673	2	Lans.-K.C.	4,023
Hortonville (1953)	20-6-26W	80	9,150	17,304	2	Lans.-K.C.	3,789
Moss (1952)	2-8-30W	40	150	799	1	Lans.-K.C.	4,033
Studley (1943)	23-8-26W	340	15,732	412,195	6	Lans.-K.C.	3,810
Studley Southwest (1945)	32-8-26W	80	8,322	61,703	2	Lans.-K.C.	3,758
Wessel (1953)	27-6-29W	540	42,220	64,140	9	Lans.-K.C.	3,985
Wessel North (1953)	16-6-29W	200	14,281	14,782	5	Lans.-K.C.	4,081
Total Sheridan County		2,560	381,802	3,858,337	65		
STAFFORD COUNTY							
Ahnert (1941)	26-22-13W		no runs	47,473	1	Arbuckle	3,784
Bart-Staff* (1951)	4-21-14W	120	26,663	147,960	3	Arbuckle	3,572
Bayer (1951)	16-21-14W		no report	1,505		Lans.-K.C.	3,543
Bedford (1940)	21-23-12W	860	44,847	1,649,596	15	Arbuckle	3,859
Brenn (1954)	19-23-13W	120	8,427	8,427	3	Lans.-K.C.	3,651
Brock (1944)	12-23-12W	640	21,984	382,401	10	Arbuckle	3,680
Byron (1951)	9-21-12W	40	2,847	24,440	1	Arbuckle	3,459
Byron Southeast (1951)	10-21-12W	160	7,891	35,797	4	Arbuckle	3,500
Centerview (1954)	28-24-13W	40	8,817	8,817	1	Arbuckle	4,188
Cephas (1953)	10-25-14W	600	106,773	155,219	15	Viola	4,114
Cephas North (1954)	35-24-14W	40	2,331	2,331	1	Lans.-K.C.	3,794
Chase-Silica* (1931)	32-19-9W	500	58,976	296,086	15	Arbuckle	3,383
Cleveland (1953)	21-23-14W	80	14,361	16,428	2	Lans.-K.C.	3,690
Cleveland South (1953)	28-23-14W	40	568	783	1	Lans.-K.C.	3,703
Cochlin (1951)	19-22-11W	80	8,157	27,219	2	Arbuckle	3,659
Crissman (1952)	16-23-14W	400	43,788	152,670	7	Lans.-K.C.	3,664
			23,267		4	Simpson	3,984
			-		-	Arbuckle	4,006
Crissman North (1952)	9-23-14W		no runs	1,807	1	Lans.-K.C.	3,669
Curtis (1942)	6-22-13W	1,300	55,063	964,268	7	Lans.-K.C.	3,514
			113,870		17	Arbuckle	3,693
Dell (1950)	7-21-13W	160	6,198	94,420	4	Lans.-K.C.	3,446
Dell East (1951)	5-21-13W	500	63,922	344,827	8	Lans.-K.C.	3,471
			57,616		7	Arbuckle	
Dell Northeast (1951)	5-21-13W	80	4,796	14,652	2	Lans.-K.C.	3,438
						Arbuckle	3,612
Diamond (1953)	8-22-13W	40	1,989	8,955	1	Lans.-K.C.	3,426
Drach (1937)	12-22-13W	2,700	292,746	5,738,913	53	Arbuckle	3,690
Drach West (1938)	14-22-13W	200	35,919	165,672	5	Lans.-K.C.	3,519
						Arbuckle	
Duggan (1951)	30-21-11W	540	16,699	137,092	8	Lans.-K.C.	3,312
						Penn. congl.	3,479
						Simpson	3,505
						Arbuckle	3,514

Farmington (1943)	34-24-15W	940	34,009	1,125,376	15	Kinderhookian	
						Arbuckle	4,417
Fischer (1938)	31-21-12W	260	18,139	408,646	7	Arbuckle	3,641
Fischer Northwest (1948)	36-21-13W	1,240	106,935	2,116,675	12	Lans.-K.C.	3,464
			231,583		28	Arbuckle	3,639
Frey (1950)	7-21-14W	700	101,039	554,572	12	Arbuckle	3,717
Gates (1933)	27-21-13W	5,900	718,925	4,242,861	108	Lans.-K.C.	3,530
						Penn. congl.	3,643
						Viola	3,635
						Arbuckle	3,679
German Valley (1951)	4-22-12W	80	8,060	34,938	2	Arbuckle	3,648
Glen (1954)	14-23-14W	40	7,796	7,796	1	Lans.-K.C.	3,651
Gray (1946)	11-24-13W	120	2,751	48,416	3	Lans.-K.C.	3,672
Green Ridge (1953)	30-23-14W	40	4,505	6,418	1	Lans.-K.C.	3,788
Green Valley (1953)	2-23-14W	80	5,967	16,328	2	Lans.-K.C.	3,640
Grow (1949)	16-21-13W	640	40,169	385,377	13	Lans.-K.C.	3,463
						Arbuckle	3,705
Grunder (1943)	11-25-15W	40	832	24,727	1	Lans.-K.C.	3,945
Hahn (1953)	21-22-13W	80	5,705	8,156	2	Lans.-K.C.	3,610
Happy Valley (1952)	15-23-13W	40	1,883	7,642	1	Arbuckle	3,810
Hart (1949)	36-22-14W	Abandoned during 1954				Arbuckle	3,830
Harter (1950)	30-24-13W	80	4,329	74,788	4	Lans.-K.C.	3,767
						Simpson	4,167
						Arbuckle	4,181
Hazel (1942)	21-21-13W	960	91,084	686,945	25	Lans.-K.C.	3,380
						Arbuckle	3,692
Hazel West (1950)	20-21-13W	1,100	172,775	662,465	24	Lans.-K.C.	3,488
						Arbuckle	3,673
Helene (1952)	16-22-12W	120	6,700	22,617	3	Arbuckle	3,685
Heyen (1943)	24-22-12W	700	32,094	579,461	14	Arbuckle	3,652
Hickman (1951)	27-21-14W	760	118,119	668,199	19	Lans.-K.C.	3,522
			30,509		4	Simpson	
Hickman South (1952)	34-21-14W	40	9,249	18,374	1	Lans.-K.C.	3,567
Hudson (1952)	33-22-12W		no report	none		Lans.-K.C.	3,495
Hufford (1948)	33-21-13W	480	73,384	734,815	8	Lans.-K.C.	3,499
			58,782		8	Arbuckle	3,755
Jordan (1936)	15-25-14W	380	60,759	868,626	9	Lans.-K.C.	3,722
Kachelman (1950)	7-25-13W	40	320	2,188	1	Viola	4,075
Kelly (1948)	35-23-12W		no report	5,204		Arbuckle	3,870
Kenilworth (1947)	15-22-13W	400	38,539	418,995	11	Lans.-K.C.	3,505
						Arbuckle	3,808
						Arbuckle	3,860
Kennil (1954)	4-23-13W		no report	none		Lans.-K.C.	3,827
Kipp (1937)	27-25-14W	300	19,064	659,383	6	Lans.-K.C.	3,748
Kipp North (1954)	23-25-14W	40	2,644	2,644	1	Lans.-K.C.	3,844
Kipp Northeast (1946)	23-25-14W	120	19,808	214,448	3	Viola	3,810
Knoche (1951)	8-24-12W		no runs	992	2	Lans.-K.C.	3,750
Koelsch (1952)	24-24-14W	440	69,456	127,407	9	Simpson	4,181
Koelsch Southeast (1952)	25-24-14W	600	5,102	302,709	1	Arbuckle	4,187
			168,281		17	Lans.-K.C.	3,279
Kowalsky* (1941)	32-20-11W	200	29,683	49,298	5	Simpson	3,398
Kowalsky Southwest (1950)	6-21-11W	200	23,533	145,943	5	Arbuckle	3,424
						Simpson	4,060
Leesburgh (1938)	12-25-13W	740	45,855	2,541,463	15	Arbuckle	4,153
						Lans.-K.C.	3,475
Leo (1950)	7-21-13W	80	11,098	69,279	3	Arbuckle	3,636
						Lans.-K.C.	3,543
Lincoln (1951)	29-21-14W	160	36,555	129,631	4	Arbuckle	3,778
Lincoln Northwest (1952)	29-21-14W	80	4,091	18,076	2	Lans.-K.C.	3,863
McCandless (1944)	30-25-13W	380	59,245	837,211	9	Simpson	4,251
			46,603		6	Lans.-K.C.	3,503
McGinty (1950)	13-21-14W	40	1,013	10,761	1		

TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
McGinty Northwest (1951)	14-21-14W	40	3,682	24,742	1	Lans. -K. C.	3,483
Macksville East (1954)	14-24-15W	80	11,132	11,132	2	Viola	4,126
Max (1938)	35-21-12W	4,460	61,238	6,136,521	14	Lans. -K. C.	3,356
			5,160		1	Simpson	3,615
			414,947		71	Arbuckle	3,570
Max South (1950)	15-22-12W	80	1,989	9,282	2	Lans. -K. C.	3,320
Merle (1949)	32-23-13W	380	16-274	299,287	13	Lans. -K. C.	3,669
Mopac (1954)	30-24-11W	80	4,130	4,130	2	Viola	3,908
Mt. View (1952)	29-22-13W	80	13,009	30,346	2	Lans. -K. C.	3,641
Mueller (1938)	29-21-12W	4,600	26,229	5,533,920	5	Lans. -K. C.	3,356
			583,401		91	Arbuckle	3,594
Mueller West (1949)	24-21-13W	120	5,451	28,634	3	Arbuckle	3,658
Nellie (1948)	28-22-14W		no runs	21,542	2	Lans. -K. C.	3,696
Neola (1948)	15-25-11W	80	2,442	29,606	2	Viola	3,921
Newell (1953)	7-25-11W	160	17,590	19,990	1	Lans. -K. C.	3,537
					3	Viola	3,913
North Star (1952)	27-24-12W	640	67,612	193,890	8	Viola	3,915
			16,966		2	Simpson	4,063
North Star North (1953)	21-24-12W	40	434	1,309	1	Arbuckle	4,101
O'Connor (1948)	8-24-15W	120	2,679	23,336	3	Lans. -K. C.	3,768
Oscar (1949)	24-22-14W	340	12,786	149,499	8	Lans. -K. C.	3,503
						Viola	3,777
						Arbuckle	3,798
Oscar North (1951)	14-22-14W	420	109,394	274,727	12	Arbuckle	3,780
Oscar South (1953)	26-22-14W	160	11,099	37,265	1	Lans. -K. C.	3,580
			26,166		3	Arbuckle	3,817
Oscar West (1952)	22-22-14W	900	198,667	379,251	22	Lans. -K. C.	3,593
Pleasant Grove (1952)	26-22-12W	200	46,663	93,712	6	Lans. -K. C.	3,462
Prairie Home (1949)	2-21-13W		no report	14,940	1	Arbuckle	3,514
Prairie Home South (1953)	11-21-13W	40	7,486	14,332	1	Lans. -K. C.	3,395
Pritchard South (1951)	3-21-14W	40	2,157	12,424	1	Lans. -K. C.	3,483
Pritchard Southeast* (1953)	2-21-14W	80	22,171	30,013	2	Arbuckle	3,472
Pundsack (1947)	19-21-13W	1,800	138,575	969,739	18	Lans. -K. C.	3,575
			152,645		23	Arbuckle	3,735
Pundsack North (1950)	18-21-13W	160	10,479	75,609	4	Arbuckle	3,674
Pundsack Northwest (1950)	24-21-14W		no report	5,031		Lans. -K. C.	3,512
Radium (1953)	7-22-14W		no runs	1,043	1	Lans. -K. C.	3,476
						Viola	3,775
Radium Townsite (1953)	5-22-14W	80	36,050	47,876	2	Arbuckle	3,852
Radke (1953)	25-23-14W	40	3,486	8,226	1	Lans. -K. C.	3,688
Radke East (1954)	24-23-14W	40	1,529	1,529	1	Lans. -K. C.	3,676
Rattlesnake (1938)	13-24-14W	160	9,733	197,977	4	Lans. -K. C.	3,608
Rattlesnake Southeast (1954)	13-24-14W	80	14,479	14,479	2	Lans. -K. C.	3,758
Rattlesnake Southwest (1950)	14-24-14W	80	9,695	75,533	2	Lans. -K. C.	3,760
Rattlesnake West (1944)	11-24-14W	240	15,365	145,673	7	Lans. -K. C.	3,759
						Mississippian	4,025
Richardson (1930)	36-22-12W	1,560	451,525	12,717,962	71	Lans. -K. C.	3,264
						Arbuckle	3,537
Richland (1944)	27-24-14W		no report	186,258		Mississippian	4,032
						Arbuckle	4,232
Riley (1940)	28-23-11W	80	1,735	141,448	2	Lans. -K. C.	3,323
Rose Valley (1952)	36-25-13W	80	10,388	22,373	2	Lans. -K. C.	3,824
						Viola	4,137

Rothgarn (1943)	10-21-13W	600	15,503	311,781	10	Lans.-K.C.	3,369
						Arbuckle	3,569
Rothgarn Southeast (1950)	14-21-13W	200	10,625	132,934	1	Lans.-K.C.	3,378
			33,953		4	Arbuckle	3,544
R. John (1935)	23-24-13W	840	51,028	2,650,861	16	Lans.-K.C.	3,588
						Arbuckle	4,075
R. John North (1952)	20-23-13W	40	8,952	20,223	1	Lans.-K.C.	3,603
R. John Northwest (1952)	20-23-13W	40	4,051	13,364	1	Lans.-K.C.	3,644
R. John Townsite (1944)	33-23-13W	400	15,647	417,394	10	Lans.-K.C.	
						Arbuckle	3,919
Sandago (1947)	12-21-12W	240	8,467	149,342	5	Arbuckle	3,480
Sand Hills (1944)	19-21-11W	40	3,539	60,128	1	Arbuckle	3,548
Saterlee (1954)	31-24-14W	40	2,153	2,153	1	Penn. congl.	4,166
Saudra (1946)	14-21-12W	860	34,917	254,129	11	Lans.-K.C.	3,282
						Arbuckle	3,546
Seevers (1954)	6-25-13W	80	5,694	5,694	2	Lans.-K.C.	3,893
Shaeffer (1941)	3-21-13W	300	70,623	426,213	7	Lans.-K.C.	3,404
						Arbuckle	3,546
Shepherd (1951)	16-22-11W	320	57,275	224,660	9	Arbuckle	3,548
Shepherd North (1954)	9-22-11W	80	13,872	13,872	2	Lans.-K.C.	3,297
						Penn. congl.	3,446
Shepherd South (1953)	21-22-11W	80	9,456	17,900	2	Arbuckle	3,602
Silver Bell (1948)	10-22-13W	200	9,751	63,793	3	Lans.-K.C.	3,498
						Arbuckle	3,774
Sittner (1937)	33-21-12W	480	30,093	706,511	14	Lans.-K.C.	3,278
						Arbuckle	3,600
Slade (1953)	23-25-12W	40	2,609	3,584	1	Lans.-K.C.	3,819
Sleeper (1951)	22-22-11W		no runs	14,796	2	Penn. congl.	3,581
Smallwood (1951)	2-22-14W	900	114,844	549,276	16	Lans.-K.C.	3,474
			35,689		6	Arbuckle	3,576
Snider (1936)	3-21-11W	80	18,161	480,435	2	Simpson	3,362
Snider South (1938)	16-21-11W	500	78,359	1,346,306	9	Simpson	3,402
			8,446		1	Arbuckle	
Spangenberg (1943)	21-22-12W	40	1,660	84,508	1	Arbuckle	3,691
Stafford (1940)	15-24-12W	1,000	74,359	3,558,308	27	Viola	3,836
						Arbuckle	3,945
Starr (1950)	4-21-14W	120	41,048	50,803	3	Arbuckle	3,579
Strobel (1952)	9-22-14W	160	25,364	58,166	4	Lans.-K.C.	3,659
						Arbuckle	3,864
Strobel Northwest (1952)	8-22-14W	80	8,004	26,954	2	Simpson	3,852
						Arbuckle	3,874
Sutton (1954)	21-22-14W	40	3,865	3,865	1	Lans.-K.C.	3,638
Syms East (1947)	21-21-12W	80	2,025	14,324	2	Arbuckle	3,565
Syms Southeast (1952)	27-21-12W	120	16,445	34,488	3	Arbuckle	3,565
Taylor (1952)	15-21-14W	40	1,426	15,301	1	Simpson	3,688
Taylorville (1953)	29-25-12W	40	9,087	13,131	1	Viola	4,006
Van Liew (1943)	20-24-13W	120	1,550	206,063	3	Arbuckle	4,069
Van Winkle (1950)	23-21-14W	40	1,424	12,419	1	Lans.-K.C.	3,570
Van Winkle Southeast (1950)	26-21-14W	80	9,807	59,459	2	Lans.-K.C.	3,569
Wendelburg (1951)	19-23-11W	40	2,128	15,574	1	Arbuckle	3,729
Widener (1954)	26-21-12W	240	29,127	29,127	7	Arbuckle	3,574
Wood (1953)	33-22-14W	120	19,208	23,265	3	Simpson	3,932
						Arbuckle	3,965
Zenith-Peace Creek* (1937)	23-24-11W	4,000	155,866	20,648,163	71	Lans.-K.C.	3,481
						Viola	3,860
Pools or fields abandoned				65,100			
Total Stafford County		58,140	7,148,225	90,036,561	1,312		

SUMNER COUNTY

Alton (1949)	10-35-2W		no report	12,148		Simpson	4,711
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TABLE 56.—Oil production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
Anness (1937)	2-30-4W		no runs	154,772	1	Simpson	4,394
Anson (1948)	35-30-2W	120	24,584	127,211	5	Lans.-K. C. "Miss. lime"	3,264 3,742
Ashton (1954)	19-34-2E	80	7,970	7,970	2	"Cleveland"	3,191
Ashton East (1954)	20-34-2E	40	492	492	1	Mississippian	3,517
Ashton Southwest (1954)	24-34-1E	Combined with Ashton					
Bellman (1945)	15-30-1E	160	9,690	300,693	4	Simpson	3,798
Bitter Creek (1953)	1-35-1E	200	33,468	34,116	7	Mississippian	3,500
Caldwell (1929)	17-35-3W	160	34,709	1,556,802	4	Simpson	4,765
Caldwell Northwest (1952)	8-35-3W	80	18,859	43,641	2	Simpson	4,835
Chicaskia (1954)	5-33-3W	40	4,076	4,076	1	Lans.-K. C.	3,415
Churchill (1926)	25-31-2E	720	44,127	19,708,478	16	"Stalnaker"	1,820
						Arbuckle	2,632
Corbin (1948)	23-34-2W		no report	37,286		Simpson	4,475
Dyal (1953)	4-35-2E	900	29,871	42,730	8	"Cleveland"	3,095
						"Bartlesville"	3,424
Fall Creek (1950)	3-35-3W	800	269,217	1,405,648	24	Simpson	4,746
Gerberding (1954)	6-34-4W	40	3,242	3,242	1	Simpson	4,710
Guelph (1951)	6-35-1E	780	86,617	658,432	10	Lans.-K. C.	3,028
			127,507		15	Simpson	3,854
			9,077		1	Arbuckle	3,969
Hilltop (1953)	26-34-2E	1,600	142,999	146,440	46	"Layton"	2,808
						"Bartlesville"	3,472
Hunnell (1952)	18-35-1E	40	202	2,839	1	Mississippian	3,602
Latta (1927)	9-30-2W	540	43,400	1,331,635	11	Lans.-K. C.	3,042
Lee (1951)	33-32-2E	300	14,938	71,494	6	Mississippian	3,349
Margaret (1946)	36-32-2E		no report	108,423		Arbuckle	3,474
Metz (1951)	7-32-2E	80	19,244	48,887	2	Simpson	3,735
						Arbuckle	3,773
Murphy* (1933)	7-35-3E		See Cowley County				
Murphy Southwest (1954)	13-35-2E	360	10,692	10,692	6	"Cleveland"	3,150
Oxford (1927)	14-32-2E	800	102,685	16,332,430	28	"Hoover"	1,930
						"Stalnaker"	2,020
						"Layton"	2,510
						Arbuckle	2,890
Oxford West (1926)	17-32-2E	280	25,055	745,771	7	Simpson	3,681
						Arbuckle	
Padgett (1925)	12-34-2E	2,700	87,094	2,551,147	44	"Miss. lime"	3,474
						Simpson	3,744
Padgett West (1954)	21-34-2E	80	4,003	4,003	2	"Layton"	2,829
Perth (1945)	12-33-2W	560	74,869	882,740	11	"Wilcox"	4,264
Portland (1950)	16-34-1E	360	40,729	250,078	5	"Layton"	3,030
			45,569		5	Simpson	4,002
Rainbow Bend West* (1925)	24-33-2E		no report	453,000		Arbuckle	
Slate Creek (1952)	9-33-2E	40	8,007	22,740	1	Lans.-K. C.	2,804
Slick-Carson* (1924)	19-32-3E		See Cowley County			"Bartlesville"	3,124
South Haven (1954)	2-35-1W	200	24,706	24,706	5	Simpson	4,189
State Line (1953)	14-35-2E	160	27,593	32,969	5	"Cleveland"	3,158
Tate (1950)	31-32-2E		no report	3,171		Simpson	3,726
Val Verde (1945)	23-33-2E	40	1,157	7,246	1	"Bartlesville"	3,280
Vernon North (1930)	15-35-2E	2,200	129,921	1,108,840	35	"Miss. lime"	3,443
Wellington (1929)	33-31-1W	3,000	215,547	8,344,127	141	"Chat"	3,655
Zoglmann (1951)	8-31-1W	40	385	16,253	1	Simpson	4,036

Zyba (1937)	7-30-1E	560	35,075	424,514	7	Simpson	3,866
Zyba Southwest (1944)	22-30-1W	600	137,381	1,007,413	14	Simpson	3,918
Pools or fields abandoned				126,475			
Total Sumner County		18,660	1,894,757	58,155,770	486		

THOMAS COUNTY

Mingo (1952)	19-9-32W	80	4,575	7,130	2	Marmaton	4,414
						Mississippian	4,680

TREGO COUNTY

Adair (1953)	21-12-21W	40	5,211	9,095	1	Marmaton	3,879
Cotton (1945)	15-12-21W	40	2,526	36,078	1	Arbuckle	3,958
Cotton East (1947)	14-12-21W	40	4,843	51,105	1	Arbuckle	3,942
"Coulson" (1954)	11-15-22W	40	427	427	1		
Diebolt* (1953)	33-10-23W	640	67,982	87,226	12	Lans.-K.C.	3,779
Ellis* (1942)	31-12-20W	460	39,996	422,533	6	Arbuckle	3,832
Ellis Northwest (1944)	26-12-21W	160	11,363	197,823	4	Arbuckle	3,925
Ellis South* (1952)	12-13-21W	40	8,034	18,503	1	Arbuckle	3,822
Groff (1952)	26-14-21W	700	74,948	148,515	2	Lans.-K.C.	3,493
					10	Penn. congl.	3,822
Hixson (1953)	19-11-22W		no report	none		Marmaton	3,818
Hixson East (1954)	16-11-22W	40	1,578	1,578	1	Arbuckle	3,939
Kutina (1953)	29-15-21W		no report	none		Mississippian	4,151
Locker (1953)	5-14-21W	40	5,558	6,845	1	Penn. congl.	4,029
Nieden (1952)	16-12-23W	80	5,424	18,564	2	Mississippian	3,850
Ogallah (1951)	26-12-22W	3,800	576,686	1,868,467	72	Arbuckle	3,961
Ridgeway (1952)	26-12-21W	460	39,156	137,025	8	Lans.-K.C.	3,693
						Arbuckle	3,896
Spaulding (1953)	1-11-21W	40	4,515	8,878	1	Lans.-K.C.	3,573
Spaulding South (1954)	1-11-21W	40	1,045	1,045	1	Lans.-K.C.	3,538
Spring Creek (1951)	32-12-21W		no runs	340	1	Arbuckle	3,904
Sunny Slope (1952)	21-14-21W	680	85,549	204,784	13	Marmaton	3,848
Wakeeney (1934)	14-11-23W	600	16,059	856,261	5	Lans.-K.C.	3,619
Wakeeney East (1949)	13-11-23W		no runs	11,904	1	Lans.-K.C.	3,576
Wakeeney Northwest (1953)	4-11-23W		Combined with Diebolt				
Walz (1950)	12-11-21W	780	74,334	315,405	13	Lans.-K.C.	3,428
						Arbuckle	3,666
White Southwest* (1953)	35-10-21W	80	2,451	2,451	2	Arbuckle	3,688
Pools or fields abandoned				51,206			
Total Trego County		8,800	1,027,685	4,454,058	160		

WABAUNSEE COUNTY

Davis Ranch (1949)	33-13-10E	640	110,195	1,475,971	18	"Hunton"	2,929
						Viola	3,201
Mill Creek (1950)	2-13-10E	160	32,723	156,671	4	Viola	2,923
Newbury (1950)	11-11-11E	240	33,973	177,055	6	Viola	2,901
Wheat (1951)	10-15-11E	240	813	11,078	1	Simpson	3,230
Woodbury (1951)	11-15-10E	160	4,311	35,070	2	Viola	3,328
Total Wabaunsee County		1,440	182,015	1,863,444	31		
				recorded			

WILSON COUNTY

Altoona (1903)	10-29-16E				47	"Squirrel"	650
a		320	3,961			"Bartlesville"	900
b		240	1,321				
c		320	3,044				
d		40	141				

TABLE 56.—Oil Production in Kansas during 1954, concluded

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, bbls.	Cumulative production to end of 1954, bbls.	No. producing wells	Producing zone	Depth to producing zone, feet
e		320	2,110				
f		40	140				
g		160	538				
h		20	132				
i		240	3,734				
j		40	589				
k		10	137				
Altoona East	29-17E	480	8,810		29	"Bartlesville"	900
Benedict	28-15E				32	"Bartlesville"	1,000
a		10	24				
b		10	148				
c		40	1,025				
d		900	23,850				
e		40	218				
Buffalo* (1924)	27-16E				84	"Bartlesville"	1,025
a		320	12,066			"Cherokee"	1,150
b		160	896				
c		1,280	24,973				
d		640	12,467				
e		10	94				
f		10	240				
g		10	178				
h		20	253				
i		40	436				
Buxton	20-30-14E		no report				
Fall River	28-13E	20	196		1		
Fredonia (1890)	29-15E				35	"Burgess"	1,050
a		160	2,425				
b		10	105				
c		160	413				
d		160	534				
e		480	5,616				
f		320	2,257				
g		20	200				
h		80	843				
i		40	327				
"Harvey"	27-13E	320	1,804		2		
Humboldt-Chanute*	28-17E	320	2,842		6	"Bartlesville"	850
Neodesha*	30-16E				125	"Bartlesville"	950
a		160	839				
b		240	1,295				
c		480	2,050				
d		640	9,331				
e		40	208				
f		640	2,041				
g		4,500	31,264				
h		160	447				
i		480	2,330				
Neodesha East	30-17E	320	618		6		
"Stryker"		160	1,402		2		
Vilas (1905)	27-17E				16	"Bartlesville"	1,000
a		640	3,931				
b		10	36				
c		160	2,197				

"Wiggins"	28-17E	480	8,533	41	"Bartlesville"	850
Miscellaneous			905	5		
Total Wilson County		17,440	186,514	5,600,098	431	
				recorded		

WOODSON COUNTY

Batesville (1934)	34-25-14E		no report		"Bartlesville"	1,450
Big Sandy (1923)	23-26-14E	900	26,939	21	"Bartlesville"	1,230
Buffalo* (1924)	26-16E			15	"Bartlesville"	950
a		20	442		"Cherokee"	1,150
b		640	31,359			
Evans* (1938)	21-23-15E	480	2,052	5	Mississippian	1,540
"Gordon"		640	7,225	1		
Halligan	30-26-17E	320	4,346	8		
Hoagland (1929)	2-24-14E	1,280	19,596	33	Mississippian	1,635
Humboldt-Chanute*	25-17E			37	"Bartlesville"	900
a		640	6,762			
b		480	7,603			
c		320	9,925			
Jobes	24-13E		no report			
"McGregor"		80	1,131	2		
Neosho Falls* (1928)	23-16E			93	"Squirrel"	950
a		480	39,733		Mississippian	1,200
b		40	602			
c		1,280	9,727			
d		480	5,951			
Perry	26-17E	900	36,293	31		
Piqua (1938)	22-24-17E	480	2,137	8	Mississippian	1,190
Quincy* (1932)	14-25-13E	1,280	217,864	196	"Bartlesville"	1,500
Rose	7-26-16E		no report			
Silver City (1946)	19-23-15E		no report			
Stange		160	1,148	3		
Steele (1952)	20-23-15E	80	927	3	Mississippian	1,525
Stephenson		10	77	1		
Toronto		80	619	1		
Vernon	23-16E			19	Mississippian	1,420
a		160	1,141			
b		40	419			
c		480	10,539			
d		320	3,723			
e		80	1,035			
f		120	1,695			
Virgil North* (1920)	22-23-13E	640	22,737	20	"Bartlesville"	1,585
					Mississippian	1,840
Weide (1937)	31-23-15E			26	Mississippian	1,570
a		40	1,138			
b		600	11,279			
Winterscheid*	23-14E	9,000	247,873	314	"Bartlesville"	1,630
					Mississippian	1,750
Wissman (1936)	3-24-15E	640	4,105	13	Mississippian	1,520
Yates Center	28-25-15E			22	Mississippian	1,480
a		640	15,699			
b		80	155			
c		160	1,359			
Miscellaneous			56	2		
Total Woodson County		24,070	755,411	6,662,929	874	
				recorded		

* Field extends into adjacent county or counties.

§ Corrected cumulative.

TABLE 57.—Gas production in Kansas during 1954

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, M cu. ft.	Cumulative production to end of 1954, M cu. ft.	No. producing wells	Producing zone	Depth to producing zone, feet
ALLEN COUNTY							
Humboldt-Chanute*	26-18E	900	129,830		24	"Squirrel" "Bartlesville"	740 850
Miscellaneous		<u>1,200</u>	<u>187,885</u>		<u>62</u>		
Total Allen County		2,100	317,715		86		
BARBER COUNTY							
Aetna (1935)	13-34-15W	500	302,174	1,841,951 est.	4	Mississippian Viola	4,850 5,215
Boggs (1947)	8-33-12W		Included with Whelan			Simpson	4,824
Clara (1944)	2-30-14W		no report	803,532		Simpson Viola	4,435 4,509
						Arbuckle	4,540
Cottonwood Creek (1948)	21-30-14W		no report	none		Simpson	4,582
Deerhead (1942)	26-32-15W		no report	1,896,083 est.		Viola	4,931
DeGeer (1948)	2-33-15W		no report	140,442		Mississippian Viola	4,902 5,176
						"Miss. lime"	4,697
Donald (1946)	33-31-15W		no report	none		Mississippian	4,782
Hardtner (1954)	31-34-12W		no report	none			
Lake City (1945)	7-31-13W		Included with Skinner				
Little Bear Creek (1954)	12-32-14W		no report	none		"Douglas sd."	3,808
McClure (1954)	6-33-11W		Included with Nippawalla			"Douglas sd."	3,548
Mease (1954)	27-30-11W		no report	none		"Douglas sd."	3,759
Medicine Lodge (1927)	13-33-13W	7,500	5,232,931	170,992,771	41	"Douglas sd." "Chat"	3,812 4,455
						Simpson	4,860
						Mississippian	4,889
Medicine Lodge Southwest (1954)	6-34-13W		no report	none			
Nippawalla (1951)	13-33-12W	2,000	379,394	379,394	9	"Douglas sd."	3,659
Nurse (1953)	23-31-13W		no report	none		"Douglas sd."	3,599
Rhodes North (1954)	4-33-11W	Combined with Rhodes					
Roundup (1953)	28-33-11W	Combined with Rhodes					
Roundup South (1953)	33-33-11W		no report	none		Mississippian	4,457
Skinner (1943)	29-31-14W	5,500	338,237	25,789,522	10	Viola Simpson	4,630 4,422
Skinner North	17-31-14W	Combined with Skinner					
Skinner South (1944)	32-31-14W		Included with Skinner			"Douglas sd."	4,023
Skinner Southwest (1953)	1-32-15W		no report	none		"Douglas sd."	4,082
Whelan (1934)	32-31-11W	800	2,717,455	27,832,603	16	Douglas "Chat"	3,598 4,355
						"Douglas sd."	3,746
Whelan East (1954)	21-31-11W		no report	none			
Total Barber County		16,300	8,970,191	229,476,298	80		
BARTON COUNTY							
Adolph (1947)	16-20-15W		no report	none		Arbuckle	3,734
Ash Creek* (1948)	31-20-15W		no report			Arbuckle	3,769
Behrens (1944)	6-20-15W		no report				
Bergtal (1941)	22-20-15W		no report	896,604		Arbuckle	3,689
Clarence South (1954)	2-20-15W		no report	none		Penn. congl.	3,606
Converse (1953)	20-20-15W		no report	none		Arbuckle	3,783

Dundee (1945)	29-20-14W		no report	2,021,092		Arbuckle	3,607
Eberhardt (1935)	14-19-11W		no report	398,567			
Heizer Southwest (1952)	21-19-14W	100	223,209	468,113	1	Penn. congl.	3,496
Krier (1944)	30-16-11W	160	88,370	739,427	2		
			within Kraft-Prusa field				
Otis-Albert* (1930)	11-18-16W	5,000	873,981		12	Neva Reagan	3,507
Pawnee Rock* (1936)	19&20-15&16W	100	70,000 est.		1		
Rick* (1941)	11-19-11W		no report	403,810		Arbuckle	3,355
Unruh (1945)	24-20-15W	400	845,074	13,661,935	5	Arbuckle	3,641
Miscellaneous			69,875		1		
Total Barton County		5,760	2,170,509	20,891,764	22		

BUTLER COUNTY

Andover South*	31-27-3E		no report			"Stalnaker"	2,006
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CHASE COUNTY

Altamus	26-18-8E		no report				
Davis (1929)	18-8E		no report			L. Permian	350-400
Elmdale	19-7E	300	13,713		7	L. Permian	500
						Wabaunsee	800
Hymer	18-7E		no report				
Lipps	32-18-7E		Included with Elmdale				
Neva	19-7E		no report				
Miscellaneous		700	39,216		21		
Total Chase County		1,000	52,929		28		

CHAUTAUQUA COUNTY

Miscellaneous		1,200	198,623		20		
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CLARK COUNTY

Ashland (1951)	35-32-23W	1,500	406,995	1,317,555	3		
Harper Ranch (1953)	9-34-21W		no report	none		Morrowan	5,437
Harper Ranch North (1954)	22-33-21W		no report	none		Morrowan	5,318
McKinney* (1950)	2-34-26W	6,000	350,363	433,241	6	Mississippian	5,762
Morrison Northeast (1954)	10-32-21W		no report	none		Morrowan	5,193
Snake Creek (1952)	21-34-21W		no report	none		Morrowan	5,452
Total Clark County		7,500	757,358	1,750,796	9		

COFFEY COUNTY

"Gridley"		80	9,551		2		
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COMANCHE COUNTY

Robbins Ranch (1953)	23-31-16W		no report	none		Mississippian	4,915
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COWLEY COUNTY

Brown West (1951)	14-31-7E		no report				
"Cambridge Southeast"		40	36,256		1		
Estes			no report			Douglas	1,568
Frog Hollow	32-5E		no report				
Gibson	34-3E	400	354,665		5		
New Salem (1949)	21-31-5E	80	204,636		2		
School Creek North (1953)	10-32-7E		no report			"Layton"	2,114
Trees	30-4E	80	39,480		2		

TABLE 57.—Gas production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, M cu. ft.	Cumulative production to end of 1954, M cu. ft.	No. producing wells	Producing zone	Depth to producing zone, feet
Tisdale	32-5E		no report				
Wiebe (1953)	28-31-6E		no report			"Layton"	2,220
Willmot-Floral	31-5E		no report				
Winfield			no report				
Total Cowley County		600	635,037		10		
CRAWFORD COUNTY							
McCune		400	35,025		19		
Walnut		300	6,717		6		
Miscellaneous		60	2,799 est.		3 est.		
Total Crawford County		760	44,541 est.		25 est.		
DOUGLAS COUNTY							
Eudora			no report				
Lawrence			no report				
EDWARDS COUNTY							
Belpre (1942)	8-25-16W	160	164,118	7,539,178	4	Lans.-K.C.	3,800
Bradbridge* (1948)	6-24-15W		no report	none		Arbuckle	4,020
McCarty (revived) (1954)	31-25-17W		no report	none		Penn. congl.	4,528
Wokaty (1954)	25-25-17W		no report	none		Penn. congl.	4,390
Total Edwards County		160	164,118	7,539,178	4		
ELK COUNTY							
Bush-Denton (1920)	4-30-9E	100	36,237		4		
Longton		100	26,867		4		
Shrader			Included with Miscellaneous				
Miscellaneous		400	305,891		23		
Total Elk County		600	368,995		31		
ELLSWORTH COUNTY							
Stoltenberg (1947)	18-17-9W		no report	443,891	2	Shawnee	2,728
FINNEY COUNTY							
Hugoton* (1932)	16-25-34W	315,000	28,048,734	179,796,813	378	Chase group	2,200
Nunn (1938)	27-21-34W		no report	146,075			
Total Finney County		315,000	28,048,734	179,942,888	378		
FORD COUNTY							
Helmets (1953)	25-28-21W		no report	none		Mississippian	5,024
Pleasant Valley (1938)	34-27-21W		no report	none		Mississippian	4,954
Pleasant Valley South (1954)	14-28-21W		no report	none		Mississippian	5,056
Miscellaneous		80	97,257		2		
GRAHAM COUNTY							
Law (1951)	34-9-23W		no report	12,656			

GRANT COUNTY

Hugoton* (1930)	12-29-38W	375,000	75,765,639	612,768,003	565	Chase group	2,200
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HAMILTON COUNTY

Hugoton* (1946)	12-26-39W	28,000	4,436,105	12,785,932	29	Chase group	2,200
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HARPER COUNTY

Anthony (1954)	31-33-6W		no report	none		Mississippian	4,486
Grabs (1949)	7-31-8W	300	185,904	490,463	6	Mississippian	4,385
Grabs Southeast (1950)	17-31-8W	Combined with Grabs					
Runnymede (1953)	23-31-6W		no report	none		Simpson	4,648
Total Harper County		300	185,904	490,463	6		

HARVEY COUNTY

Burrton* (1930)	23-23-4W	800	372,752		13	Mississippian	3,298
			Includes Reno County production				
Burrton Northeast (1942)	3-23-3W		Included with Burrton			Mississippian	3,226
Sperling (1935)	23-22-2W	250	47,731	7,505,775	1	"Chat"	2,955
Wall (1951)	25-22-3W		no report	none		Mississippian	3,150
Total Harvey County		1,050	420,483	8,263,592	14		

HASKELL COUNTY

Hugoton* (1931)	29-30-34W	250,000	25,528,913	218,379,750	361	Chase group	2,200
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JEFFERSON COUNTY

McLouth		300	29,940		1+	est.	
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JOHNSON COUNTY

Miscellaneous		300	20,324		21		
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KEARNY COUNTY

Hugoton* (1937)	32-25-35W	397,000	61,466,542	408,030,430	522	Chase group	2,200
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KINGMAN COUNTY

Artesian Valley (1952)	22-27-10W		no report	3,870			
Broadway (1948)	21-28-5W	300	335,054	1,403,199	7	Mississippian?	
Cunningham* (1931)	7-28-11W	800	350,495 est.		13	Arbuckle	4,094
						Viola	4,278
Dewey (1950)	9-28-5W	1,200	455,214	2,393,702	7		
Kingman (revied) (1954)	16-27-7W		no report	none		Mississippian	3,824
Spivey (1951)	27-30-8W	1,200	55,680	55,680	6	Mississippian	4,297
Spivey Northwest (1954)	9-30-8W	800	no report	none		Mississippian	4,156
Zenda (1954)	36-29-9W		no report	none		Mississippian	4,161
Total Kingman County		3,500	1,196,443	4,996,496	33		

KIOWA COUNTY

Alford (1944)	14-30-19W		no report			Spergen	5,040
Brenham (1947)	29-28-17W		no report			"Miss. chert"	4,841
Johansen (1954)	13-28-19W		no report			Mississippian	4,864
Miscellaneous			no report	81,521			

TABLE 57.—Gas production in Kansas during 1954, continued

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, M cu. ft.	Cumulative production to end of 1954, M cu. ft.	No. producing wells	Producing zone	Depth to producing zone, feet
LABETTE COUNTY							
Coffeyville-Cherryvale*	32-17E	120	5,597 est.		3 est.		
Valeda		10	350		1		
Miscellaneous		200	20,840		3		
Total Labette County		330	26,787 est.		7 est.		
LEAVENWORTH COUNTY							
Linwood			no report				
Roberts-Maywood*		80	4,973		2		
LINN COUNTY							
LaCygne-Cadmus	20-24E	80	16,792		11 est.		
McPHERSON COUNTY							
Coons (1940)	13-19-1W		no report			"Chat"	2,897
Doles Park (1947)	12-19-1W		no report			"Chat"	2,843
Graber North (1951)	4-21-1W		no report	none		Mississippian	2,955
McPherson (1926)	29-18-2W		no report			Lans.-K.C.	2,340
						"Chat"	2,967
						Viola	3,140
Ritz-Canton (1929)	12-20-2W		no report			"Chat"	2,935
Miscellaneous			154,084		1		
MARION COUNTY							
Lehigh North (1953)	23-19-1E		no report	none		Mississippian	2,770
Propp	8-19-4E		no report				
Miscellaneous		120	123,735 est.		3 est.		
MEADE COUNTY							
Adams Ranch (1945)	8-35-30W	400	91,179	477,870	1	Morrowan	5,708
						Mississippian	5,850
Adams Ranch East (1947)	36-34-30W		no report	none		Morrowan	5,874
						Mississippian	5,094
Bruno Northeast (1953)	16-33-30W		no report	none		Morrowan	5,721
Fringer (1952)	7-35-29W		no report	none		Morrowan	5,780
Kismet East (1953)	30-33-30W		no report	none		Morrowan	5,645
McKinney* (1950)	2-34-26W	7,600	3,391,620	6,806,635	12	Mississippian	5,762
Stevens (1952)	32-32-30W		no report	none		Morrowan	5,560
Total Meade County		8,000	3,482,799	7,284,505	13		
MIAMI COUNTY							
Louisburg		40	8,956		4		
Miscellaneous		160	27,427		10		
Total Miami County		200	36,383		14		

MONTGOMERY COUNTY

"Cavert"		40	31,616		1+ est.
Coffeyville-Cherryvale* (1902)	33-17E	40	11,195		4
Neodesha South		80	17,031		10
Miscellaneous		200	414,036		63
Total Montgomery County		360	473,878		77

MORRIS COUNTY

Miscellaneous		200	48,966		18
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MORTON COUNTY

Boehm (1951)	14-33-42W	2,400	1,959,664	1,959,664	4	Morrowan	4,872
Dreyer (1953)	5-32-43W		no report	none		Wabaunsee	2,812
						Shawnee	3,136
Greenwood (1951)	14-33-42W	29,800	20,656,595	20,733,848	50	Wabaunsee	2,777
						Shawnee	3,069
Greenwood South (1953)	19-34-43W	Renamed Interstate; oil production only					
Hugoton* (1930)	24-34-40W	190,000	24,867,622	184,615,657	263	Chase group	2,200
Richfield (1948)	17-32-40W	1,200	338,834	1,019,129	2	Basal Penn. (Atokan)	4,990
						Morrowan	5,397
Westola (1953)	5-32-42W		no report	none		Lans.-K.C.	3,534
Total Morton County		223,400	47,822,615	208,328,298	319		

NEOSHO COUNTY

Earlton		40	1,251		1
Miscellaneous		160	171,031		60
Total Neosho County		200	172,282		61

PAWNEE COUNTY

Ash Creek* (1948)	31-20-15W		no report			Arbuckle	3,769
Benson (1945)	30-23-15W	1,500	1,834,354		15	Arbuckle	4,048
			Includes Zook				
Evers (1951)	36-21-16W	60	2,689	850,468	1	Arbuckle	3,908
Hearn (1953)	35-23-15W		no report	none		Lans.-K.C.	3,833
						Simpson	4,106
Jab (1954)	35-22-17W		no report	none		Penn. congl.	4,152
Larned (1949)	28-21-16W		no report			Arbuckle	3,877
Pawnee Rock* (1936)	19&20-15&16W	600	1,578,000 est.		16		
Ryan*	35-19-16W	100	90,000 est.		2		
Shady (1945)	34-22-16W	150	58,791	3,992,596	1	Arbuckle	4,063
Sweeney (1953)	8-21-15W	240	370,826		4?	Arbuckle	3,792
Sweeney Southwest (1953)	7-21-15W	Combined with Sweeney					
Sweeney West (1954)	6-21-15W	Combined with Sweeney					
Torrance (1947)	19-21-15W	Combined with Sweeney					
Zook (1942)	16-23-16W		Included with Benson			Arbuckle	4,066
Total Pawnee County		2,650	3,934,660	22,459,930	39		

PRATT COUNTY

Barnes (1952)	25-27-12W		no report	none		Simpson	4,328
Chitwood (1943)	23-28-12W	300	190,312	10,089,598	3	Viola	4,340
Cunningham* (1931)	7-28-11W	1,500	770,990 est.		15	Viola	4,278
			Includes Cairo			Arbuckle	4,094
Inka-Carmi (1942)	29-26-12W	300	221,412	2,795,636	4	Viola	4,122

TABLE 57.—Gas production in Kansas during 1954, concluded

Pool or field name and year of discovery	Location of discovery well	Area, acres	1954 production, M cu. ft.	Cumulative production to end of 1954, M cu. ft.	No. producing wells	Producing zone	Depth to producing zone, feet
Lion (1953)	29-27-11W		no report	none		Viola	4,323
Shriver (1949)	27-29-14W		no report	104,191			
Stark (1941)	13-26-12W		no report			Viola	4,121
Ward (1941)	11-26-12W		no report			Viola	4,129
Total Pratt County		2,100	1,182,714	14,656,523	22		
RENO COUNTY							
Burrton* (1930)	23-23-4W		Included with Harvey County			Mississippian	3,298
Lerado (1937)	10-26-9W	200	301,450	1,936,129	4		
Yoder (1935)	34-24-5W	100	63,416		1	"Char"	3,402
Zenith-Peace Creek* (1937)	23-24-11W		no report			Viola	3,860
		300	364,866	2,122,694	5		
RICE COUNTY							
Alden (1937)	22-21-9W		no report	15,449,656		Misener	3,317
Chase-Silica (1936)	6-19-9W		no report	1,835,285		Arbuckle	3,192
Lyons (1888)	35-19-8W	100	65,663	13,871,092	1	Simpson	3,290
						Arbuckle	3,277
Orth (1933)	27-18-10W	160	38,876		1	Lans.-K.C.	2,906
Quivira (1947)	36-19-9W		no report	236,477		Tarkio	2,117
Sterling (1951)	4-22-8W	300	38,390	38,390	3	Mississippian	3,385
Union (1950)	28-20-8W		366,873		5	Penn. cong.	3,275
Total Rice County		560	509,802	31,912,258	10		
RUSH COUNTY							
Otis-Albert* (1930)	11-18-16W	6,500	445,160		26	Neva	
Reichel (1953)	23-17-17W	200	413,173	413,173	3	Lans.-K.C.	3,330
Ryan*	35-19-16W	300	810,000 est.		11	Reagan	3,507
Ryan East (1954)	36-19-16W		no report	none		Arbuckle	3,648
Total Rush County		7,000	1,668,333		40		
RUSSELL COUNTY							
Miscellaneous		40	45,876		1		
SCOTT COUNTY							
Keystone (1950)	25-18-32W		no report	45,122			
SEDGWICK COUNTY							
Andover South* (1950)	36-27-2E		no report	none		"Stalnaker"	2,006
Bartholomew (1946)	30-27-4W	600	306,071		11	"Miss. lime"	3,732
Derby (1937)	32-28-2E		No longer productive; used for gas storage only			"Stalnaker"	2,215
						Lans.-K.C.	2,228
Schulte (1949)	7-28-1W	200	123,886	1,243,034	3		
Total Sedgwick County		800	429,967	1,677,856	14		

SEWARD COUNTY

Blue Bell (1953)	33-34-31W		no report	none		Mississippian	5,959
Blue Bell Northwest (1954)	20-34-31W		no report	none		Mississippian (Chesteran)	5,947
Hawks (1952)	18-35-31W		no report	none		Morrowan	5,927
Holt (1954)	28-32-34W		no report	none		Topeka	3,820
Hugoton* (1922)	3-35-34W	212,000	19,585,230	128,612,325	284	Chase group	2,200
Kismet Northwest (1953)	10-33-31W		no report	none		Morrowan	5,584
Liberal-Light (1951)	11-35-32W	1,200	5,042,021	12,987,736	8	Morrowan	5,906
Liberal Southeast (1947)	15-35-33W	1,100	1,359,966	11,207,769	5	Penn. ss.	6,202
Thirty-One (1953)	18-31-31W	400	102,521	102,521	1	Morrowan	5,448
Wide Awake (1954)	4-35-43W	400	5,860	5,860	1	Toronto	4,410
Total Seward County		215,100	26,095,598	152,916,211	299		

STAFFORD COUNTY

Bradbridge* (1948)	6-24-15W		no report	none	Arbuckle	4,020	
Farmington (1948)	27-24-15W	Included with Macksville	774,387		Mississippian	4,207	
Farmington West (1952)	6-25-15W		no report	none	Penn. sand	4,164	
Gates (1950)	26-21-13W		no report	266,956	Lans.-K.C.	3,473	
Hill (1952)	11-23-12W		no report	none	Lans.-K.C.	3,447	
Knoche (1951)	8-24-12W	300	251,475	1,208,546	3	Viola	3,810
Macksville (1947)	3-24-15W	360	877,541	6,788,621	6	Lans.-K.C.	
O'Connor (1947)	16-24-15W		no report	none	Arbuckle	4,061	
Zenith-Peace Creek* (1937)	23-24-11W		no report		Viola	3,860	
Total Stafford County		660	1,129,016	9,038,510	9		

STANTON COUNTY

Hugoton* (1944)	32-30-39W	160,000	13,780,190	74,870,444	230	Chase group	2,200
Sparks (1954)	34-30-42W		no report	none		Morrowan (Keyes)	5,254

STEVENS COUNTY

Hugoton* (1927)	31-33-37W	597,000	93,253,317	1,267,573,081	716	Chase group	2,200
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SUMNER COUNTY

Fall Creek (1950)	3-35-3W		no report			Simpson	4,746
Padgett (1924)	23-34-2E		no report			"Miss. lime"	3,474
Vernon North (1915)	15-35-2E		no report				
Wellington (1929)	33-31-1W		No longer productive; used for gas storage only			"Chat"	3,655
Miscellaneous			87,417		3		

WILSON COUNTY

Altoona-Earleton		400	92,698		29		
Neodesha*	30-16E	300	27,523		11		
Miscellaneous		300	55,296 est.		29 est.		
Total Wilson County		1,000	175,517 est.		69 est.		

WOODSON COUNTY

Vernon		80	51,158		2		
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WYANDOTTE COUNTY

Roberts-Maywood*	11-23E	80	4,244		2		
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* Field extends into adjacent county or counties.

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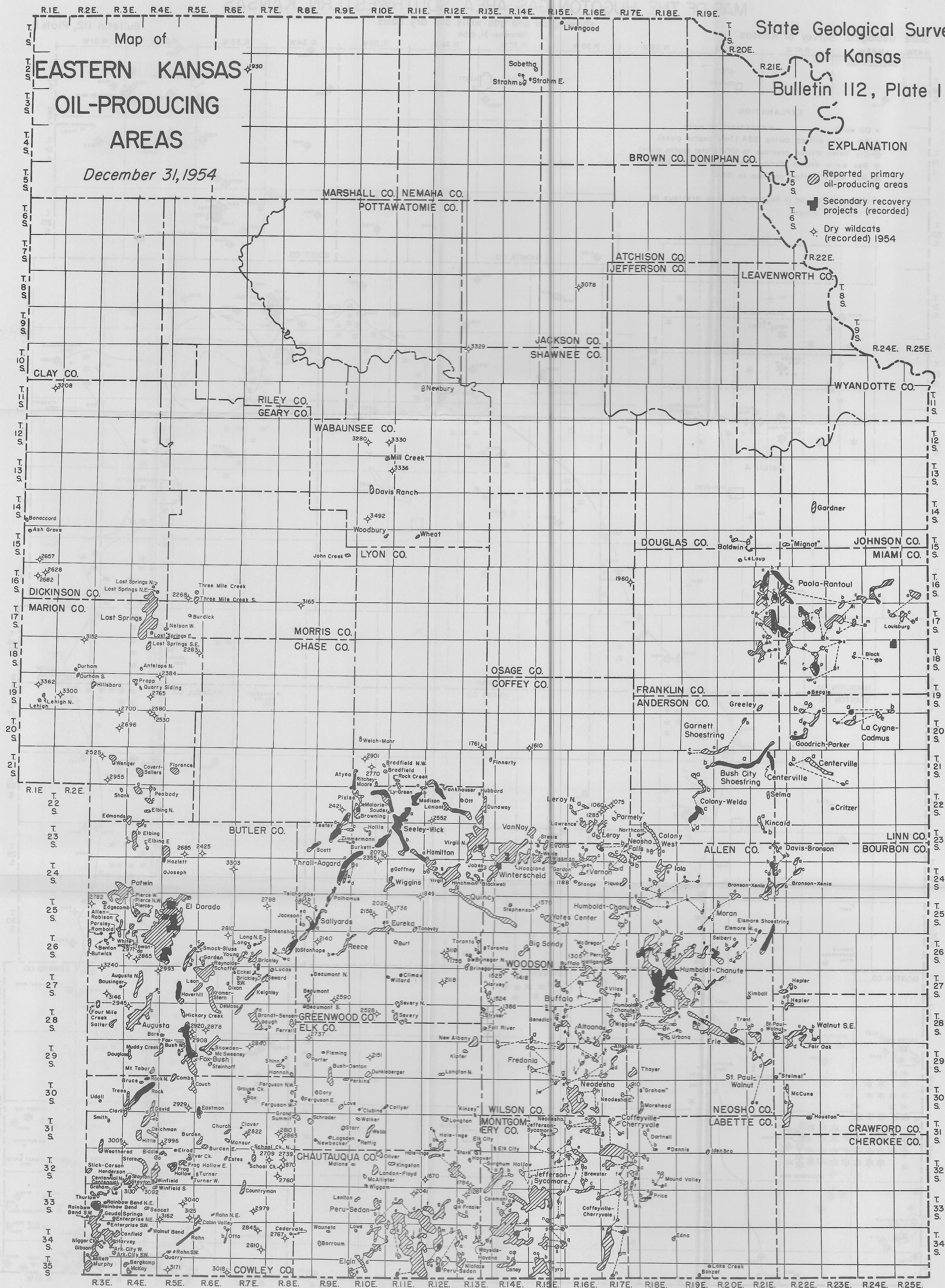
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State Geological Survey
of Kansas
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EXPLANATION

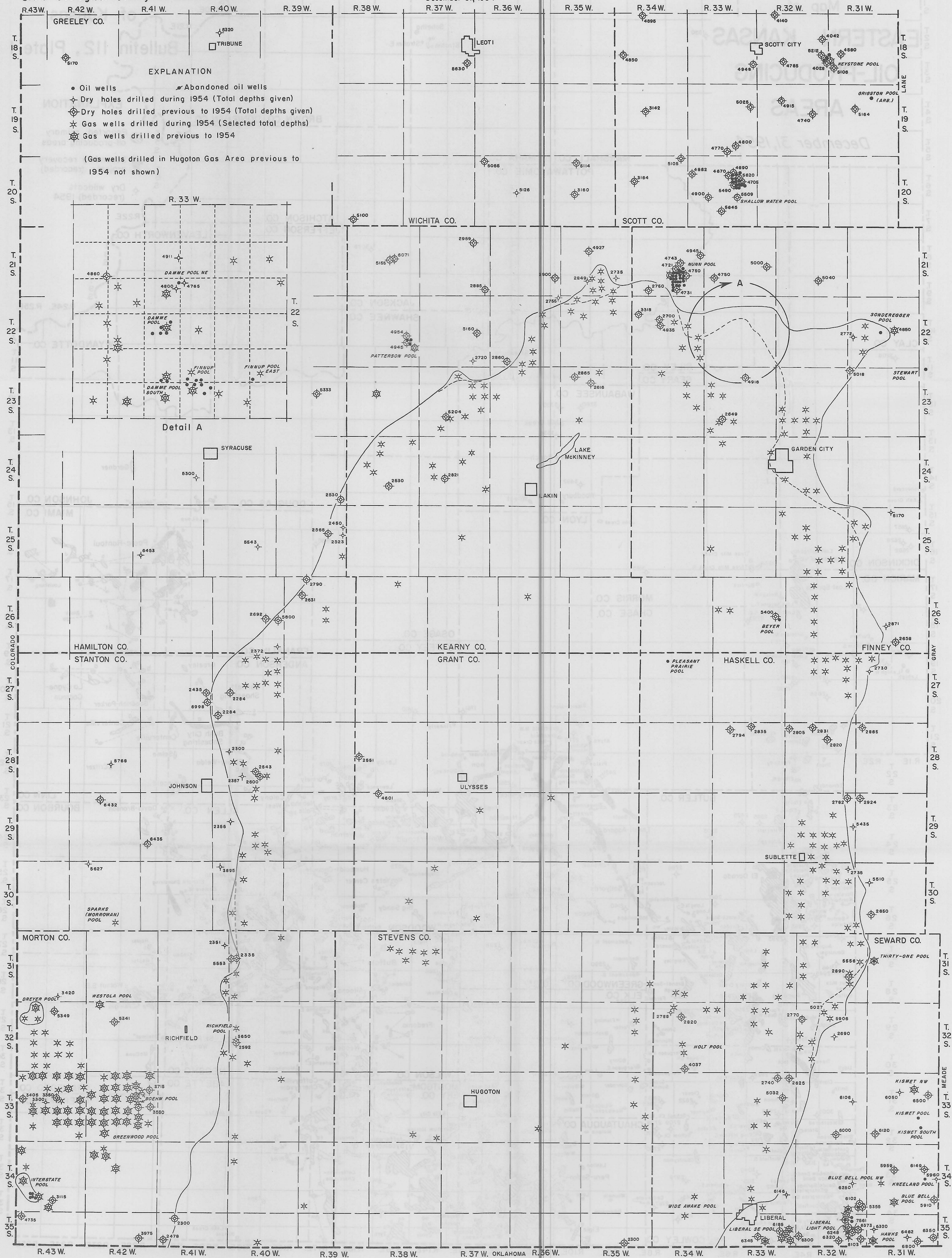
-  Reported primary oil-producing areas
-  Secondary recovery projects (recorded)
-  Dry wildcats (recorded) 1954



showing oil and gas wells and dry holes

December 31, 1954

Bulletin 112, Plate 2



No.	Field	Operator	Project	Location	Cooperative or unitized	Year started	Total developed acres	Possible additional acres	Producing formation	Thickness of zone, feet	Average depth to producing zone, feet	Active wells			No. producing wells drilled in 1954	No. active injection wells, 1954	No. injection wells drilled in 1954	Medium of injection	Source of water	Average bbls. water injected per well per day	Cumulative oil recovery per developed acre, bbls.	Production attributable to secondary recovery in 1954, bbls.	No.
												Flowing	Pumping	Total									
GREENWOOD COUNTY, continued																							
96	do	do	McGilvray	8,9,16,17-23-11E Unit.	1948	307	0	do	37	1,950		0	29	29	0	13	0	do					
97	do	do	Seelye-Wick	28,33-22-11E Unit.	1943	253	0	do	37	1,950		0	23	23	0	17	0	do	Produced Douglas	430	1,510	*	96
98	do	do	do	4-23-11E														do	120	2,220	*	97	
99	do	do	do	29,32-22-11E Unit.	1937	286	0	do	47	1,950		0	32	32	0	24	0	do	do	220	7,420	*	98
100	do	do	do	33-22-11E Unit.	1943	94	0	do	30	2,000		0	6	6	0	6	0	do	do	180	2,590	*	99
101	Tester	Skelly Oil Co.	Wick Water Flood	22,27,34-22-11E	Coop. 1943	570	0	do	20	1,975		0	32	32	0	20	0	do	1,000'	286	1,510	260,044	100
		Cities Service Oil Co.	Tester	10,11,14,15, 16-23-9E	Coop. 1947	760	240	do	37	2,470		0	46	46	0	35	0	do	Arbuckle and produced	243	487	59,172	101
102	do	Kirkpatrick and McGuire	Refiners Oil Corp. Morris McGinnis	20,21-23-9E	No 1951	62	-	do	36	2,850		0	5	5	0	2	0	do	Douglas	364	156	6,823	102
103	do	Skelly Oil Co.	Hartley Flood (Shambaugh)	2-23-9E	- 1944	30	0	do	45	2,350		0	2	2	0	1	0	do	Salt water sand	448	26,027	3,304	103
104	Thrall-Aagard	Arkansas Fuel Oil Corp.	E. Marshall Lease	1-24-9E	No 1944	84	0	do	37	2,800		0	10	10	0	5	0	do	1,200' salt water sand	217	4,417	32,074	104
105	do	Ohio Oil Co.	Martindell-Tester	6-24-10E	No 1948	366	0	do	50	2,500		0	41	41	0	37	1	do	Arbuckle	148	4,475	*	105
106	do	do	do	31-23-10E																			
107	do	do	do	11-24-9E	Unit. 1944	98	0	do	42	2,300		0	8	8	0	5	0	do	Douglas	512	6,823	*	106
108	do	Phillips Petro. Co.	Aagard	14-24-9E	Unit. 1937	48	0	do	40	2,100		0	4	4	0	1	0	do	Produced Douglas	450	7,880	*	107
109	do	do	do	7-24-10E, 1-24-9E, 36-23-9E	Unit. 1952	153	0	do	36	2,200		0	18	18	0	14	0	do	Produced Arbuckle	280	2,450	*	108
110	do	do	do	14,22,23-24-9E	Unit. 1938	110	0	do	70	2,150		0	13	13	0	4	0	do	Produced Douglas	350	8,460	*	109
111	do	do	do	11,12-24-9E	Unit. 1945	80	0	do	50	2,300		0	11	11	0	8	0	do	do	180	7,320	*	110
112	Virgil	Sinclair Oil and Gas Co.	Thrall-Moises Consolidated Water Flood	28,29,30,32,33-25-10E	Unit. 1949	644	0	do	31	2,300		15	63	78	0	62	0	Fresh and salt water	Douglas and surface pond	203	3,252	*	111
113	Virgil North	Sauder and Sauder Kelly Oil Co.	Schlottorbeck Lovett McNeil-Shambaugh-Dehlinger	10-24-12E 22,27-23-13E	No 1954	30	50	"Miss. lime"	10	1,745		0	2	2	0	1	0	Salt water	Return and Douglas "Bartlesville" and "Mississippi lime"	300	-	2,200	112
Totals							10,437					18	1,045	1,063	13	749	9		Estimated additional secondary recovery production			30,000 4,035,302	113
LABETTE COUNTY																							
114	Price	Veeder Supply and Development Co.	Labette Flood	7,8-33-18E	Unit. 1952	30	0	"Bartlesville"	10-20	-		0	16	16	2	7	0	Salt water	Shallow and return water	50	-	*	114
LINN COUNTY																							
115	Goodrich-Parker	General American Oil Co.	Goodrich	19,20,29,30-20-22E	No 1944	209	10	"Squirrel"	30	570		66	33	99	3	98	0	Salt water	Arbuckle	12	1,481	31,296	115
116	LaCygne-Cadmus	do	LaCygne	2,3-20-23E, 34, 86,86-19-23E	No 1942	81	0	"Peru"	20	250		15	34	49	0	46	0	do	"Wilcox sand"	16	1,233	16,683	116
Totals							290					81	67	148	3	144	0		Estimated additional secondary recovery production			17,000 64,979	
LYON COUNTY																							
117	Atycos	Barbara Oil Co.	Jones Water Flood	30-21-10E	No 1948	50	0	"Bartlesville"	25	2,300		0	5	5	0	2	0	Salt water	Arbuckle	400	2,150	*	117
118	do	Ohio Oil Co.	Atycos	30,31-21-10E	No 1947	280	0	do	35	2,200		0	34	34	0	24	0	do	do	208	4,939	*	118
119	Fankhauser	Phillips Petro. Co.	Laurel	82,83-21-12E	Unit. 1945	100	0	do	25	1,950		0	7	7	0	7	0	do	Douglas and produced	190	2,730	*	119
Totals							430					0	46	46	0	53	0					131,826	
McPHERSON COUNTY																							
120	Graber	Cities Service Oil Co.	Graber	31,32-21-1W	Coop. 1952	30	0	"Hunton"	25	3,285		0	4	4	0	1	0	Fresh water	Shallow water sand	102	1,870	15,162	120
121	do	Continental Oil Co.	do	20,21,28,29,30, 31-21-1W	Coop. 1947	1,400	0	do	16	3,200		0	56	56	0	20	0	Fresh and produced water	"Hunton," Lansing, fresh water wells	280	1,900	543,945	121
122	Gypsum Creek	Geo. Hess	Buckeye	5-17-1W	- 1953	160	0	"Chat"	10	2,800		0	2	2	-	1	-	-	do	80	-	-	122
123	Lively	do	Clayton Unruh	4-20-2W	- 1954	320	80	Miss. "chat"	10	2,980		0	4	4	4	1	-	-	do	60	-	-	123
124	do	John Jay Darrah	Edwin B. Koehn	34-19-2W	- 1954	80	70	"Miss. lime"	100-200	2,960		0	6	6	3	1	1	Salt water	"Mississippi lime"	100-160	-	-	124
Totals							2,000					0	72	72	7	24	1					559,097	
MIAMI COUNTY																							
125	Louisburg	The Spearow Co.	Spearow	14-18-22E	- 1951	-	-	"Peru"	-	-		-	-	-	-	-	-	Air	-	-	-	-	125
126	Paola-Rantoul	J.Wm. Everhart	J.Wm. Everhart Big Lake Development	20-16-24E	Coop. 1953	180	180	do	-	40		-	26	26	9	41	22	Salt water	Arbuckle	80	247	12,824	126
127	do	General American Oil Co.	N. Y. K. No. 2 and Sea-born	22,23,26,27-18-22E	No 1944	287	0	do	20	350		103	2	105	0	99	0	do	do	28	1,027	26,661	127
128	do	do	Producers	15,16,21,22,26, 27-17-22E	No 1945	627	0	do	14	350		175	3	178	1	136	0	do	do	27	746	56,597	128
129	do	Hart-Buston	Travis-Blook	10-17-22E	-	-	-	"Squirrel"	55	500-650		-	40	40	4	1	0	-	-	-	-	-	129
130	do	Henderson and Yoltom	Grimes	26,33-16-24E	- 1953	40	-	"Peru"	15	400		-	4	4	0	2	0	-	-	-	-	-	130
131	do	Maracaibo Oil Corp.	Flood No. 1	23,25,26,36-16-21E, 31-16-22E	Unit. 1947	147	-	"Squirrel"	30	670		94	20	114	0	95	0	Air	do	12,000	30	1,250	131
132	do	do	Flood No. 2	5,6,8,9-17-22E	Unit. 1949	153	-	do	30	870		48	54	102	0	90	0	do	do	-	-	-	132
Totals							1,414					420	148	568	14	524	22		Estimated additional secondary recovery production			300,000 397,322	
MIAMI AND FRANKLIN COUNTIES																							
133	Paola-Rantoul	Maracaibo Oil Corp.	Flood No. 3	3,10,11,13,14, 24-16-21E	Unit. 1951	145	50	"Squirrel"	30	650		0	73	73	8	75	17	Salt water	Arbuckle	-	-	-	133
134	do	do	Group 7	10,15,22,25,26, 55-17-21E	Unit. 1943	681	0	do	25	650		120	25	145	0	170	0	Fresh water	Stream	-	-	-	134
Totals							826					120	98	218	8	245	17		Estimated secondary recovery production			130,000	
MONTGOMERY COUNTY																							
135	Caney	Alpine Oil and Gas Corp.	Roper	3-35-14E	No 1953	10	180	"Bartlesville"	11.4	1,288		2	9	11	0	3	0	Salt water	Return	22	-	-	135
136	Coffeyville-Cherryvale	E. W. Hayes	Plute-McGuggin	7-34-17E	No 1946	td																	

No.	Field	Operator	Project	Location	Cooperative or unitized	Year started	Total developed acres	Possible additional acres	Producing formation	Thickness of producing zone, feet	Average depth to producing zone, feet	Active wells			No. producing wells drilled in 1954	No. active injection wells, 1954	No. injection wells drilled in 1954	Medium of injection	Source of water	Average bbls. water injected per well per day	Cumulative secondary oil recovery per acre developed as of Dec. 31, 1954	Production attributable to secondary recovery in 1954, bbls.	No.
												Flooding	Pumping	Total									
ALLEN COUNTY																							
1	Bronson-Xenia	Maack C. Colt	K. B. Project	27,28-24-21E	No	1951	150	200	"Bartlesville"	18	700	0	70	70	25	59	16	Salt water	Arbuckle	35	2,680	213,000	1
2	Davis-Bronson	do	M-T Project	3,10,15-24-21E	No	1937	200	0	do	54	630	87	56	93	4	85	1	do	do	60	5,400	23,650	2
3	Elmore Shoestring	Fees and Hoyt	Elmore Shoestring	34-25-21E	Unit.	1941	180	10	do	20	650	0	68	68	6	59	4	Fresh and salt water	Stream	28	2,840	65,576	3
4	do	Paylock Bros.	Traut and Gray Farms	167-26-21E	-	1944	-	-	do	28	700	-	-	-	0	-	0	Salt water	-	-	-	-	4
5	Elmore West	Eureka Oil & Gas Co., Inc.	Young and Newby	32-25-21E	Coop.	-	100 est.	900	do	20	730	-	14	14	0	3	0	do	Mississippian	20	-	-	5
6	Humboldt-Chamute	C and M Oil Co.	Wedin, Knox, Fewins	18,19-28-20E	No	1953	60	400	do	17	700	0	19	19	2	7	4	Fresh water	Stream and shallow wells	40	568	17,380	6
7	do	Gamble, Wright and Crumley	Wolf-Tebay Lease	24-26-17E;	Coop.	1953	180	240	do	50	840	-	23	23	0	8	1	Salt water	"Osage lime"	125	-	-	7
8	do	General American Oil Co.	Matsam	16,17,18,19,20-26-18E	No	1938	319	0	do	30	800	134	20	154	4	144	0	Fresh water	Neosho River	11	3,547	69,855	8
9	do	E. F. Gidley	Diamond	16-26-19E	-	1953	12	100	do	10	70	-	13	13	4	5	0	Salt water	Mississippian	20	-	-	9
10	do	Humboldt Petro. Co.	Humboldt Water Flood	13,14,23,24-26-18E	No	1942	585	2,000	do	25	825	0	135	135	5	130	11	do	do	10	1,200	39,000	10
11	do	C. A. Willis	Hoepker	26-26-18E	-	1953	60	60	do	15	850	-	12	12	2	4	0	-	"Osage lime"	20	-	-	11
Totals												171	430	601	52	604	37	Estimated additional secondary recovery production			74,500	521,799	
ANDERSON COUNTY																							
12	Bush City Shoestring	Deep Rock Oil Corp.	Salmon Oil Corp.	7,8,15,16-21-20E	-	1949	371	-	"Squirrel"	20	800	81	35	116	0	113	0	Salt water	Arbuckle and Mississippian	32	932	130,938	12
13	do	General American Oil Co.	Reed, Connolly, Loriaux	4,5,7,8,18-21-21E; 12,13,14-21-20E	No	1939	985	0	do	30	820	402	17	419	4	386	0	do	Arbuckle	25	1,958	190,636	13
14	do	Maracaibo Oil Corp.	Starit Lease	8,9,16,17-21-20E	-	1953	80	0	do	15	780	-	-	-	10	35	6	do	do	-	1,000	-	14
15	Centerville	Schermhorn Oil Corp.	Centerville Flood, Kemler, South Unit, North Unit No. 1	4,10,15,22-21-21E	Unit.	1947	345	0	"Bartlesville"	15	728	73	7	80	9	49	0	do	Mississippian	48	1,264	109,000	15
16	Colony-Welda	W. S. Fees	Stouffer-North Hyde	27,28,33-22-19E	Unit.	1949	360	0	"Squirrel"	15	800	0	66	66	4	36	0	do	Arbuckle	16	29,382	44,084	16
16a	Colony-Welda	W. S. Fees	Stouffer-North Hyde	22-28-19E	No	1947	20	0	do	15	800	0	13	13	0	7	0	do	do	16	5,110	4,412	16a
Totals												556	165	714	27	628	6	Estimated additional secondary recovery production			479,080	680,330	
BARBER COUNTY																							
17	DeGeer	Lion Oil Co.	DeGeer Unit	2,3-33-15W	Unit.	1954	920	0	Viola limestone	25	5,200	0	8	8	0	1	0	Salt water	Viola	360.6	0	0	17
18	Sun City	Great Lakes Carbon Corp.	Sun City	26,27,28,34,35-30-15W	Unit.	1952	240	0	Massy zone	6	4,360	-	7	7	0	0	0	Water	Stream	-	-	-	18
Totals												0	15	15	0	1	0						
BOURBON COUNTY																							
19	Bronson-Xenia	A. B. McClimans	Gugler Lease	8-24-22E	No	1952	5	60	"Bartlesville"	12	530	0	2	8	3	Shut down	0	Fresh and salt water	Stream and salt water	-	-	est. 2,000	19
BUTLER COUNTY																							
20	Blankenship	Franco-Central Oil Co.	Hughes	9-26-3E	No.	1951	80	0	"Bartlesville"	37	2,500	-	15	15	0	12	0	Salt water	Douglas sand	306	-	63,245	20
21	do	L. A. Seidenfeld	Sallyards Flood	9,16-26-3E	Coop.	1954	80	0	do	40	2,584	-	6	6	0	1	0	do	"Bartlesville" and Arbuckle (buy it)	-	-	56,366	21
22	do	Sohio Petro. Co.	do	9,16,17-26-3E	No	1949	157	0	do	41	2,500	0	18	18	2	16	2	do	Arbuckle	200	3,670	117,000	22
23	El Dorado	Cities Service Oil Co.	El Dorado Shallow-Atkins	19,20,21,28,29,30-25-3E	Coop.	1951	802	859	"El Dorado"	18	650	0	131	131	7	52	2	do	Arbuckle and produced	154	663	597,139	23
24	do	do	El Dorado Shallow-Pierpont	23,24,30,31,32,33-25-3E; 5,6-26-3E	No	1947	1,191	224	"El Dorado"	10	650	0	141	141	0	85	12	do	do	132	450	205,528	24
25	do	do	Finney	4,9-26-3E	Coop.	1950	123	70	Simpson	24	2,470	0	6	6	0	3	0	do	Arbuckle	127	91	9,510	25
26	do	do	Koogler	17,18,19,20-26-3E	Coop.	1948	1,214	265	Viola-Simpson	60	2,550	0	151	161	18	72	3	do	Arbuckle and produced	315	2,804	856,070	26
27	do	do	Wilson Water Flood	8,9-25-3E	Coop.	1954	400	0	"El Dorado"	10	700	0	75	75	5	21	15	do	Produced	182	25	9,954	27
28	do	Magnolia Petro. Co.	Koogler No. 6	21,29,30-26-3E	Coop.	1951	170	300	Simpson	-	2,600	0	58	58	0	11	0	do	Produced and Arbuckle	248	-	442,403	28
29	do	Musgrove and Milliken	-	2-25-3E	Coop.	1953	40	-	"Peru"	10	2,240	-	1	1	-	1	-	Pump	100	-	-	29	
30	do	Skelly Oil Co.	Hazlett Water Flood	19-25-3E	Coop.	1954	120	0	700' sand	5	700	0	11	11	4	6	6	Salt water	Viola limestone	9	16	1,920	30
31	do	do	Page Flood	9-26-3E	Coop.	1950	30	0	"Wilcox sand"	30	2,550	0	3	3	0	1	0	do	-	216	1,066	6,384	31
32	do	Stelbar Oil Corp.	Stones Lease	2-26-3E	-	1953	-	-	"Peru"	40	2,150	-	4	4	0	1	0	do	Water sand	100	-	-	32
33	do	The Texas Co.	El Dorado Flood	17-25-3E	Coop.	1954	40	-	Indian Cave	14.1	700	0	2	2	0	3	2	do	Produced (Arbuckle & Viola)	175	-	5,710	33
34	Fox-Bush	Magnolia Petro. Co.	North Fox-Bush	25,24,25,26,35-26-3E	Unit.	1951	156	528	"Bartlesville"	40	2,760	0	43	43	0	15	0	do	Arbuckle, Kansas City, and Douglas	413	-	332,426	34
35	do	Morrison Producing Co.	North Fox-Bush Unit	1,2,11,12-29-3E; 35,36-28-3E	Unit.	1942	906	964	do	31	2,800	0	19	19	6	7	2	do	350' water wells	450	1,036	-	35
36	Haverhill	Cities Service Oil Co.	Haverhill Unit	15,22,27,34-27-3E	Unit.	1953	160	0	do	30	2,700	0	25	25	0	6	0	do	Arbuckle and produced	150	17	2,677	36
37	Hazlett	Rex and Morris Drlg. Co.	Classen	6-24-3E	Coop.	1953	160	-	Mies. "ohat"	15	2,450	-	16	16	-	-	-	do	-	-	-	0	37
38	Smock-Sluss	Beren et al.	Smock	2-27-3E	Unit.	1953	40	120	"Bartlesville"	50-60	2,700	-	2	2	0	1	0	do	320' water well	200-250	-	-	38
39	do	Burton Oil Prod.	Falkenburg	8-26-3E	No	1953	200	280	do	20	2,700	0	6	6	0	2	0	-	"Bartlesville"	600	-	-	39
40	do	L. A. Seidenfeld	R. S. Sluss Farm	26-26-3E	No	1952	40	0	do	35	2,750	-	1	1	0	1	0	Salt water	do	12	905	8,715	40
41	do	Skelly Oil Co.	Sluss Lease Flood	26-26-3E	-	1953	30	0	do	40	2,710	0	2	2	0	2	0	do	950' sand	182	-	13,462	41
42	do	The Texas Co.	Smock	2-27-3E	-	1951	60	-	do	25	2,875	-	6	6	0	1	0	do	"Bartlesville" (produced)	130	-	4,222	42
43	Snowden-McSweeney	Rex and Morris Drlg. Co.	Wunsch Lease	6-29-3E	Coop.	1953	160	40	do	30	2,800	-	13	13	-	1	-	Recycled formation water (salt)	do	50	-	-	43
Totals												0	755	755	42	321	45	Estimated additional secondary recovery production			2,624,611		
BUTLER AND GREENWOOD COUNTIES																							
44	Blankenship	Tide Water Associated Oil Co.	Blankenship	9,10,16,17,21-26-3E; 35,36-25-3E	Coop.	1949	634	600	"Bartlesville"	36	2,450	0	51	51	5	49	4	Salt water	Arbuckle	132	2,045.30	338,869	44
CHASE COUNTY																							
45	Teeter	Glenwood Oil Co.	Leedy	25,36-22-3E	-	1953	80	100	"Bartlesville"	10	2,500	-	6	6	0	5	0	Salt water	Douglas	100	0</		